EMISSIONS DATA FROM TWO SOW BARNS AND ONE SWINE FARROWING ROOM IN OKLAHOMA

Final Report for Site OK4B

of the

National Air Emissions Monitoring Study

Submitted to

John Thorne, Executive Director
Agricultural Air Research Council
C/O Crowell and Moring, LLP
1001 Pennsylvania Avenue, NW
Washington, DC 20004

and

Bill Schrock, Environmental Engineer
U.S. EPA Office of Air Quality Planning and Standards
Mail Code E143-03, 4930 Page Road
Durham, NC 27703

by

Albert J. Heber, Professor and NAEMS Science Advisor
Agricultural and Biological Engineering, Purdue University
225 S. University St., West Lafayette, IN 47907
Phone: 765-494-1214 Email: heber@purdue.edu.

July 2, 2010

ED_004549_00015840-00001

Contributors

Kenneth D. Casey, Alfred P. Caramanica, Kelley J. Mickey
Texas Agrilife Research
Texas A&M System
Amarillo, TX 79106

Erin L. Cortus
Agricultural and Biosystems Engineering
South Dakota State University
Box 2120
Brookings, SD 57007

Albert J. Heber, Juan Carlos Ramirez, Ji-Qin Ni, Claude Diehl, Changhe Xiao, Bill W. Bogan, Lilong Chai, Ilker Kilic
Agricultural and Biological Engineering
Purdue University
225 S. University St.
West Lafayette, IN 47907

Teng T. Lim
Agricultural Systems Management
University of Missouri
220 Agricultural Engineering Building
Columbia, MO 65211

Acknowledgments

This project was supported by the National Pork Board and the Agricultural Air Research Council.

Citation

Cortus, E.L., K. D. Casey, A. P. Caramanica, K. J. Mickey and A.J. Heber. 2010. National Air Emissions Monitoring Study: Emissions Data from Two Sow Barns and One Swine Farrowing Room in Oklahoma- Site OK4B. Final Report. Purdue University, West Lafayette, IN, July 2.

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1. INTRODUCTION AND OBJECTIVES

1.1. Overview of NAEMS

The primary goals of the National Air Emissions Monitoring Study (NAEMS) were to: 1) quantify aerial pollutant emissions from dairy, pork, egg, and broiler production facilities, 2) provide reliable data for developing and validating emissions models for livestock and poultry production and for comparison with government regulatory thresholds, and 3) promote a national consensus on methods and procedures for measuring emissions from livestock operations. Emissions measurements were conducted at a total of 15 different barn monitoring sites and ten open source sites in the continental US.

The NAEMS was managed by Purdue University, in its role as Independent Research Contractor (IRC) to the Agricultural Air Research Council (AARC). Purdue selected equipment and methods in consultation with the U.S. EPA, and subcontracted with other universities to operate the monitoring sites. Texas Agrilife Research (TAR), part of the Texas A&M System, maintained and calibrated equipment, collected samples, and conducted all other on-site activities. Purdue provided rapid feedback (generally within 2-4 business days) to catch aberrations in the data, and later conducted final processing of the data. Both TAR and Purdue participated in reviews of the analyzed data.

The overall objective of this report is to present the quality-assured measurements of ammonia (NH_3), hydrogen sulfide (H_2S), particulate matter (PM) and volatile organic compounds (VOCs) from two sow barns and one farrowing room at the Oklahoma swine breeding and gestating facility. The specific objectives of the report are to:

1. Describe the farm, and the monitored buildings,
2. Describe the monitoring methods and quality assurance, and
3. Present tabulated daily averages of emissions.

2. CONFINED ANIMAL FEEDING OPERATION

2.1. Farm

This 2,800-hd gestation and farrowing farm (OK4B) was located in Oklahoma and consisted of three barns built in 1994 (**Figure 1**). The area was sparsely populated and suited for irrigated and dryland crop production.

There were farrow-to-finish swine farms 2 km north, 3 km east, and 4 km southwest of this farm, respectively. There was also a sow farm approximately 4 km southwest of the farm. These four farms were the closest identifiable livestock facilities.

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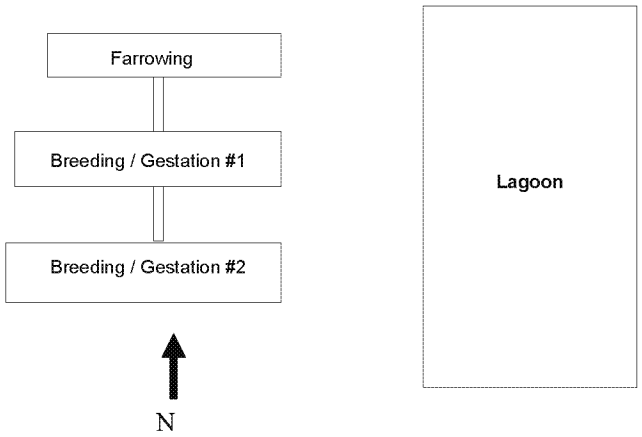

Figure 1. Farm layout showing the barns and lagoon.

2.2. Monitored Buildings

The two gestation barns and one farrowing barn were all orientated east-west with a roof slope of 4:12. Each gestation barn was 128 m long x 18 m wide, and the farrowing barn was 108 m long x 20 m wide. The farrowing barn contained sixteen rooms. The distance between the barns was 21 m. Well water was metered to the buildings and dispensed to the sows by trough and piglets by nipples.

All of the ventilation fans were manufactured by Multi Fan Systems Ltd. (Stourbridge, West Midlands, United Kingdom). The fan controllers were Airstream Ventilation Systems (Assumption, IL). The gestation barns were tunnel-ventilated with large fans located at the east end of the barns. Ventilation air entered through cooling cells in the west end wall, and through curtains in the sidewalls. There were 13 wall ventilation fans in each barn. There was one medium 90-cm variable-speed minimum-ventilation fan in each of the north and south side walls, at the lengthwise midpoint of the barns. These two fans were manually shut off during summer to maximize the tunnel effect, but ran continuously during the rest of the year. There was also one 120-cm second-stage fan located in each side wall near the east end wall. The remaining nine fans were all 120-cm diameters and located in the east end wall. All of the 120 cm fans were single-speed fans. **Figure 2** and Table 1 describe the fan stage assignments and naming convention used for the fans in the gestation barns.

The primary fan control system was based on six stages. While the stage 1 fans are variable-speed, the low speed setting was not used (confirmed with fan speed measurements). Also, the farm manually turned these fans off during the summer months. Fan 7 in both gestation barns is operated using a separate control system, and considered part of the emergency stage (Table 1).

Each of the sixteen rooms in the farrowing barn was cross-ventilated. Ventilation air entered the barn through the north sidewall through a common hallway. Air was cooled in hot weather by evaporative pads in the outer wall that admitted air into the common hallway. There were two small 90-cm variable speed fans in the south sidewall of each of the 16 farrowing rooms. The first and second stage fans were on the west and east sides, respectively, in each room. During the early part of 2008, the heat lamps in the farrowing rooms were replaced with heat pads.

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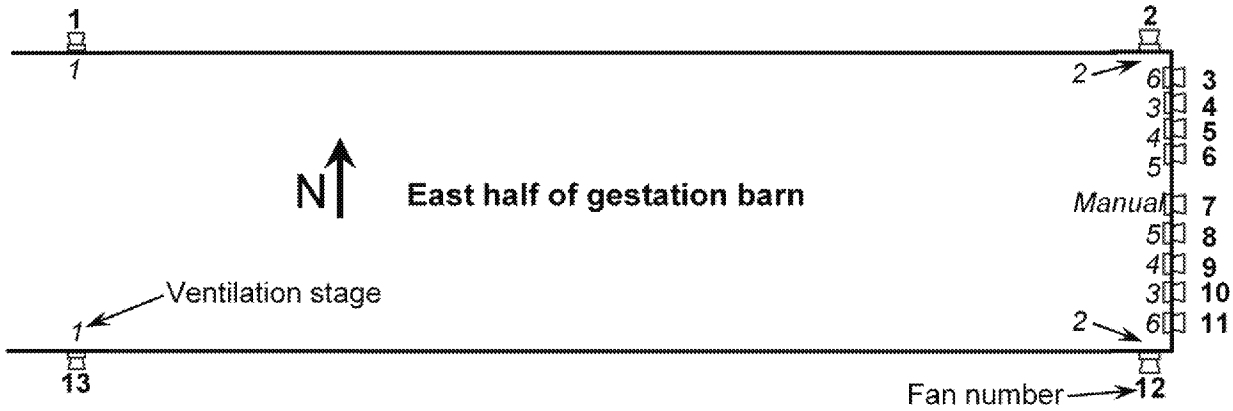

Figure 2. Fan number (outside barn) and fan stage (inside barn) of gestation barns 1 and 2.

Table 1. Fan numbers and ventilation stages for gestation barns 1 and 2.

Stage	Quantity	ID of fans
1	2	1, 13 low speed
1	2	1, 13 high speed
2	2+2=4	1, **2**, **12**, 13
3	4+2=6	1, 2, **4**, **10**, 12, 13
4	6+2=8	1, 2, 4, **5**, **9**, 10, 12, 13
5	8+2=10	1, 2, 4, 5, **6**, **8**, 9, 10, 12, 13
6	10+2=12	1, 2, **3**, 4, 5, 6, 8, 9, 10, **11**, 12, 13
Independent Emergency	12+1=13	1, 2, 3, 4, 5, 6, **7**, 8, 9, 10, 11, 12, 13

Notes: Fans 1 and 13 are manually turned off during summer. Stage 2 in the above table is effectively Stage 1 during this period. Stage 7 (fan 7) is an independently-controlled Emergency Stage.

The gestation barns had concrete slatted floors, and the farrowing barn had a woven wire floor. Manure on the floor was cleaned daily. Standard barn procedure was that manure from the barns was transferred once a week from the two gestation barns and every three weeks from the farrowing barn by pull-plug to a lagoon, which was located to the east of the barns. The lagoon and the barns were separated by a drainage swale. Wastewater from the two gestation barns combined into one pipe and entered into the lagoon through one inlet. Wastewater from the farrowing barn entered the lagoon through a separate inlet. The clay-lined lagoon, oriented north-south, was 119 m wide and 193 m long.

The following site operational procedures were observed or provided by the farm personnel:

- Gestation barn pits were emptied weekly on Wednesday or Thursday. Between five and ten pit plugs were pulled at a time in each barn, and thus the barns were completely emptied over a period of two days. There were approximately 26 plugs in each gestation barn;
- Farrowing room pits were emptied approximately every 21 days (batch length) following power washing of the room. There were four plugs in each farrowing room;

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- The manure pit plugs in the farrowing rooms and gestation barns were pulled and left unplugged for 15-20 minutes. Pits were allowed to empty, the plugs replaced, and recharge water was pumped into the pits. The manager stated approximately 0.3 m of recharge water was pumped into each pit;
- The recharge water pump was on a relay located in the main hallway of the facility. The recharge pump was turned on manually, and shut down via an automatic timer. The timer setting was determined by the number of pits needing refill; and
- There was a half-day turnaround between batches in the farrowing rooms. The piglets were removed from the barns and the sows returned to either Barn 1 or Barn 2 between 7:00 and 8:00. After cleaning, between 13:00 and 14:00, the 24 crates were filled with sows, and over the next 24 hours the sows farrowed an average of 12 piglets per sow.

The farm had a capacity of 1,200 breeding and gestation sows in each of two gestation units, and 384 farrowing sows in one farrowing unit.

Only 2 feed rations were fed at the site; a lactating sow ration in the farrowing barn, and a gestating sow ration in the gestation barns.

2.3. Significant Events and Modifications

Several storms passed over the site over the course of the monitoring period. In general, in the event of a power failure, a back-up generator at the site responded immediately.

The on-site farm management changed three times between July 2007 and July 2009.

The farrowing barn ventilation control system failed on 3/1/09 and full ventilation control was restored on 3/2/09. The ventilation failure resulted in 8 sows and 10 piglets lost in total for the farrowing barn, though there were no losses in the monitored farrowing room.

A water line break occurred in June 2008.

Otherwise, the animal genetics, manure management practices and general farm procedures were consistent from July 2007 to July 2009.

3. MONITORING AND SAMPLING METHODS

3.1. General Approach

Equipment installation and preliminary testing took place between 5/30/07 and 7/18/09. The site setup and equipment installation followed the approved Site Monitoring Plan (SMP) for the OK4B site. The NAEMS Quality Assurance Project Plan (QAPP) and instrument or method-specific Standard Operating Procedures (SOPs) also provided guidance.

The monitoring period began on 7/19/07 and concluded on 7/19/09. Target pollutants for this site were NH_3, H_2S, PM (PM_{10}, TSP, and $PM_{2.5}$), and VOCs. Appendix A lists the target pollutants, and all measured supporting variables and metadata monitored at the site. The monitoring schemes for the two gestation barns (B1 and B2) and farrowing barn are shown in **Figure 3**.

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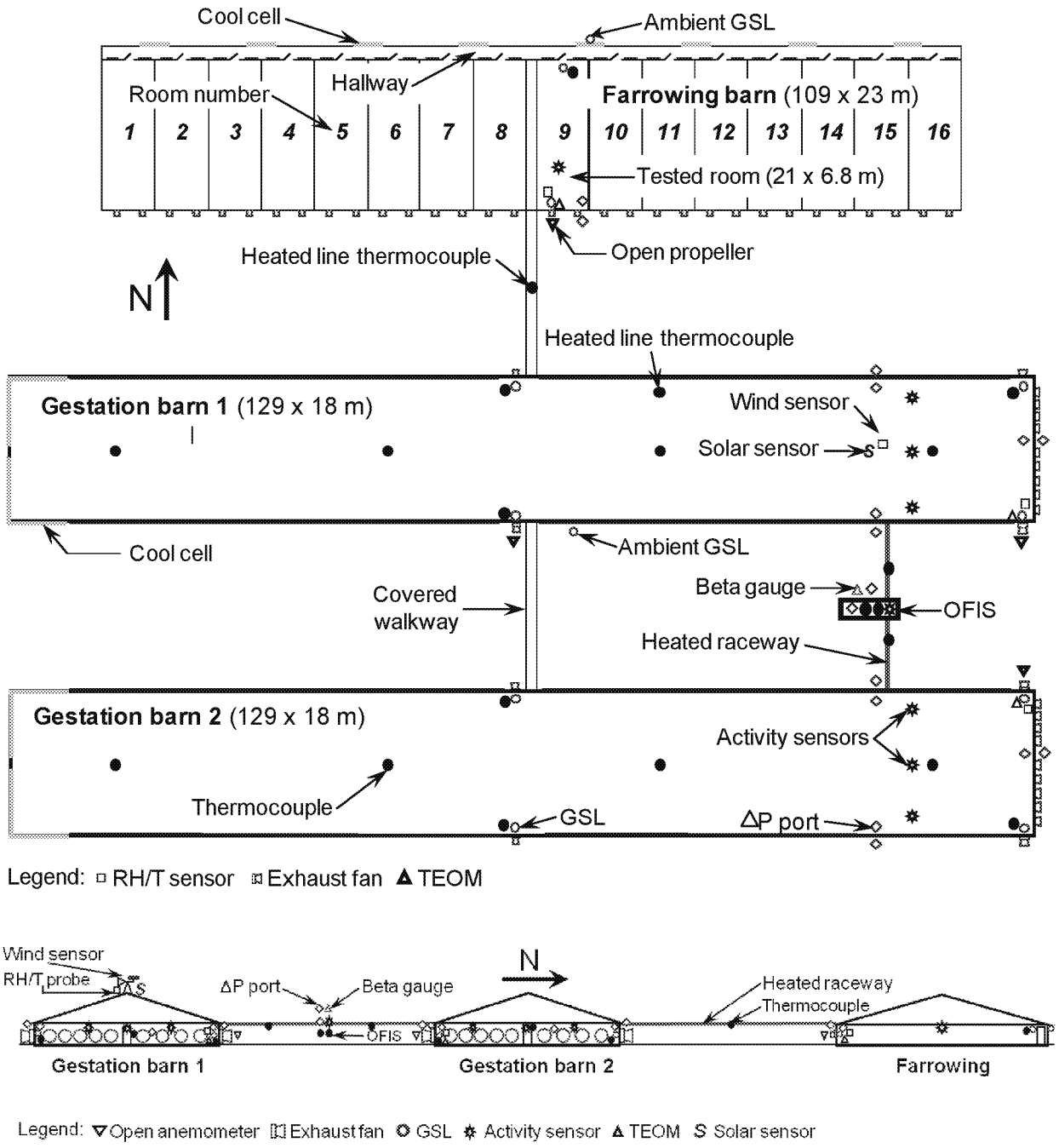

Figure 3. Overhead and endwall view of sensor and air sampling locations.

The farrowing room was power washed every three weeks, between cycles. In order to protect the instrumentation, it was necessary to temporarily remove it from the room, and replace it after the washing was completed. Farrowing room 9 (B3) is considered representative of the remaining rooms in the farrowing barn. Table 2 lists the major equipment.

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Table 2. Major instrumentation.

Analyzer/Instrument	Serial number
INNOVA 1412 Multi-gas analyzer	710-201
TEI 450i H_2S analyzer	0709220677
Environics 4040 dilutor	3921
TEOM 1 (Barn 1)	265140701
TEOM 2 (Barn 2)	265030701
TEOM 3 (Farrowing Room 9)	265230702
TEI FH 62C14 (Beta Gauge)	E-1285

3.2. Instrument Shelter

The on-farm instrument shelter (OFIS) was located between the two gestation barns (**Figure 3**). Sampling tubes and cables extended from this OFIS to B1, B2 and B3. Two heated raceways, each 10 m in length, were set up between the two gestation barns and the OFIS to avoid condensation inside the sampling tubing during cold weather. Another heated raceway 20 m long was set up inside the hallway between the farrowing barn and the gestation barn 1.

The OFIS was supplied with 120 VAC (50 A) + 120 VAC (50A) electric power by the farm. A copper ground rod was installed at the location of the OFIS, and connected to the OFIS ground. The HVAC system of the OFIS maintained inside temperatures within the operating range for the analyzers, and created a positive pressure with a filtered outside air intake to minimize entry of unfiltered outside air. The temperature and differential static pressure in the OFIS were monitored with a thermocouple near the HVAC system and a pressure sensor. One set of gas analyzers (Table 2) in the OFIS measured gas concentrations as the gas sampling system (GSS) sequenced through all the gas sampling locations (GSLs). Vacuum pumps and controllers for the PM monitors were located in the OFIS. A personal computer collected all site monitoring data using a data acquisition and control program AirDAC.

3.3. Data Acquisition and Control System

The data acquisition and control system consisted of a personal computer, custom software (AirDAC) written in a commercial programming language (LabVIEW, National Instruments, Austin, TX), distributed I/O hardware (National Instruments FieldPoint modules), and Universal Serial Bus (USB) devices by National Instrument (NI) and Measurement Computing (MC, Norton, MA). The NI FieldPoint (FP) modules and MC USB devices (Table 3) were selected and configured to acquire data for all the on-line measurement variables (Appendix A).

The 16-channel NI FP-DO-401 digital output module was used to control: 1) sequential switching of multiple gas sampling lines, 2) the raceway heating system, and 3) gas sampling system cooling fan. Serial communication (RS232) was used to acquire data from the multi-gas monitor and calibration variables (calibration time, gas concentration, etc.) from the gas diluter. Voltage or current analog signals from various analyzers and sensors were connected to FP-AI-112 modules. Type T thermocouples were connected to FP-TC-120 modules. Digital signals from relays were connected to the MC USB DIO96H device. Voltage pulses from proximity sensors used to measure fan rotational speed were detected by the MC USB 4303 Counter.

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Table 3. Data acquisition hardware configuration for OK4B.

Manufacturer & model	I/O type	# units	# channels/unit	Notes
NI FP-AI-112	Analog input	4	16	Single-ended, 16-bit. Only used 3 units.
NI FP-TC-120	Thermocouple	3	8	
NI FP-DO-401	Digital output	2	16	2 A at 10-30 VDC
MC USB 4303 counter	Count input	3	10	
MC USB DIO 96H	Digital input	1	96	

AirDAC averaged the signals (after conversion to engineering units) over 15-s and 60-s intervals and recorded the means into two separate computer files. All real-time data were displayed in tabular and graphic forms for on-site or remote (pcAnywhere, Symantec, Mountain View, CA) viewing (Ni et al., 2009; Ni and Heber, 2010). Measurement alarms, data collection notifications, data files, graphs and statistics of the daily data sets, and modified configuration and fieldnote files were automatically emailed to several recipients after midnight.

3.4. Monitoring and Recording Farm and Building Operations

3.4.1. Animal Husbandry and Building Systems

Infrared motion sensors (activity sensors) were situated to monitor movement of animals and workers in the barns, and researcher presence in the OFIS.

The producer provided monthly farm records of the number of piglets born and weaned, the gilts brought on site, culled sows and sow mortalities, and total water consumption. From the average number of piglets born and weaned between July 2007 and July 2009, the average piglet mortality rate was calculated and applied to all batches. The sow inventory in each gestation barns was calculated from the total number of sows on site, minus the farrowing barn sow capacity, divided in two.

Relays that controlled the heaters in B1 and B2, and the space heater and heat lamps/heat pads in B3 were monitored using auxiliary contacts in 5-VDC circuits in conjunction with the digital inputs of the data acquisition system. A relay to monitor the recharge pump operation between the barns and the lagoon was also installed on 5/16/18. The operation-time signal provided by the relay is not specific to a particular barn.

3.4.2. Environmental

Weather data was collected using a solar radiation shielded capacitance-type relative humidity and temperature probe (RH/T) (Model RHT-WM, Novus Automation, Porto Alegre, Brazil), a pyranometer (Model LI-200SL, LI-COR, Lincoln, NE) and a cup anemometer (Wind Sentry, RM Young, Traverse City, MI), which were mounted on B1, about 2 m from the east end of the barn.

For the building environment conditions, RH/T probes were located at the inlet to Fan 12 in B1, Fan 2 in Barn 2, and Fan 1 in B3, which were considered the primary representative exhaust fans (PREFs) for the respective barns. Four Type T thermocouples (TCs) measured temperatures

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along the length of each of the two gestation barns, and at the inlet to B3. A TC was added on 5/16/08 to provide a secondary temperature measurement at the exhaust of B3. Thermocouples were also placed inside each heated raceway, at the center and return registers of the AC system, and in the PM pump enclosure.

3.4.3. Building Airflow

Fan operation in the gestation barns was monitored using auxiliary contacts of fan stage relays in 5-VDC circuits, in conjunction with digital inputs to the data acquisition system, for stages 2 through 6 (Table 1).

Fan rotational speed was monitored using a magnetic Hall-effect sensors (speed sensor) installed on each fan. The speed sensors were mounted to detect the rotational speed in revolutions per minute (rpm) of either the fan shaft or the fan pulley. The digital signal from the speed sensor was converted into a frequency measurement with a counter module in the data acquisition system. Back-up speed sensors were added to both farrowing room fans on 7/16/08.

Static pressure was measured across the north, east and south walls of each barn with differential static pressure sensors (Model 260, Setra Systems, Boxborough, MA). Static pressure in the OFIS was measured with the same type of sensor, to ensure that positive pressure was maintained.

Impeller anemometers were placed downstream of Fan 12 in B1 and Fan 2 in B2, and upstream of Fan 1 in B3. Fan 13 in B1 was also equipped with an impeller anemometer downstream. The impeller anemometers provided a back-up indication of fan operation, and at least one of each fan model-type was monitored and considered representative for other operating fans of the same type.

In-situ airflow measurements were conducted with a 137-cm field-portable fan tester (Fan Assessment Numeration System or FANS, University of Kentucky, Lexington, KY), which was described by Gates et al. (2004), were collected for two easily accessible fans, however, the measurement unit did not fit inside the barn to access upstream measurements for the remaining fans, and the unit did not seal properly downstream of the remaining fans because of the fan shrouds. Therefore, the traverse method was adopted for all other *in-situ* fan airflow measurements.

A four-sided foam board shroud was placed against the inlet to each fan and secured to the fan housing frame with duct tape. Ports in each side of the shroud were used for traverses by a hot-wire anemometer (VelociCalc Plus, Model 8385A, TSI Incorporated, Shoreview MN). To apply this method, it was necessary to divide the air stream cross-section into multiple sections of equal area. The large and medium fans in the gestation barns were divided into 25 equal cross-sectional squares, and the small fans in B3 were divided into 16 equal cross-sectional squares. Air velocity was measured at the center of each section. The fan airflow capacity was determined by multiplying the mean traverse velocity by the cross-sectional area of the measured airflow (Henderson and Perry, 1976).

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In-field airflow measurements were collected during three periods at one or more differential pressures (Table 4). The field data was used to develop equations that would calculate airflow as a function of differential pressure and fan rotational speed, and to assess the uncertainty in airflow predictions.

Table 4. In-field fan airflow test activity (* indicates a measurement for a single dP; * indicates a measurement for three dP settings)**

Barn	Fan ID	Period 1 4/15/08 – 6/16/08	Period 2 9/24/08 – 11/13/08	Period 3 4/8/09 – 7/23/09
Gestation 1	1	***	***	
	2	***	*** ***	
	3	***		*
	4	***		*
	5	***	***	
	6	***		*
	7	***	***	
	8	***	***	
	9	***		*
	10	***		*
	11	***		*
	12	***		*
	13	***	***	
Gestation 2	1	***		
	2	***	***	
	3	***		*
	4	***		*
	5	***	***	
	6	***	***	
	7	***		*
	8	***	***	
	9	***		*
	10	***		*
	11	***		*
	12	***		*
	13	***		
Farrowing 9	1	***		
	2	***		

The airflow curves of the large (Model 4E125Q-S3C, Multifan, Stourbridge, West Midlands, United Kingdom), medium (Model 6E63Q System 1, Multifan, Stourbridge, West Midlands, United Kingdom) and small (Model BA8E92 S-4, Multifan, Stourbridge, West Midlands, United Kingdom) fans were obtained from the Bioenvironmental and Structural Systems (BESS) Lab at the University of Illinois at Urbana-Champaign (BESS, 1996a; 1996b; 1996c). Each performance record consisted of airflow (Q1) measured at several static pressures (P1), and at a

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relatively constant speed (N1 = 555, 755 and 1034 rpm for large, medium and small fans, respectively).

For each fan type, the BESS fan curve was adjusted to the mean speed (N2) of the fan tests. The mean speeds were 511, 781 and 1100 rpm for large, medium and small fan types, respectively. The new, speed-indexed baseline curves were derived using the first ($Q_2 = Q_1(N_2/N_1)$) and second ($\Delta P_2 = \Delta P_1(N_2/N_1)^{0.5}$) fan laws, where Q_2 is the speed-adjusted BESS fan curve at speed N_2. The speed-corrected airflow prediction model is $Q_4 = (a\Delta P_4 + b)\cdot(N_4/N_2)\cdot Q_2$, where ΔP_4 and N_4 are measured fan static pressure and speed. For a given test using the portable tester, the model is $Q_4 = (a\cdot\Delta P_3 + b)\cdot(N_3/N_2)\cdot Q_2$, where ΔP_3 and N_3 are the measured fan static pressure and speed during the fan test, and the fan degradation factor $k = a\cdot\Delta P_3 + b$. The values for the coefficients a and b were those which minimized the sum of square differences between Q_4 and Q_3 for all the valid fan tests within a speed regime. The resulting fan models are shown in Table 5.

Table 5. Fan airflow models.

Fan type	Reference speed (N_2)	Polynomial coef. of $Q_2=f(\Delta P_2)$ at speed N_2				Coefficients of k	
		a3	a2	a1	a0	b1	b0
Large	555	7.94-06	-2.74E-05	7.04E-02	9.61E+00	3.47E-03	9.81E-01
Medium	755	-2.14E-06	-4.02E-04	2.06E-02	4.70E+00	-2.28E-03	8.54E-01
Small	1100	-1.16E-07	-3.78E-05	7.46E-03	3.15E+00	3.80E-03	1.38E+00

Gestation barn fans were assigned to a sampling stream based on their proximity to the four sampling locations in each barn. Fan 7 was equidistant from two sampling streams in both gestation barns and assigned to GSL-C in B1 and GSL-B in B2 (Table 7). The airflow for each stream was calculated by summing the individual airflows for all fans in the stream. In B3, the individual airflows through the two fans were summed together in one stream.

3.4.4. Biomaterials Sampling Methods and Schedule

All analyses of biomaterials were performed by an independent laboratory (Midwest Laboratories, Omaha, NE).

Water characteristics were evaluated based on analyses of two samples of the water provided to the animals.

For six consecutive weeks, feed samples were collected from feed bins in the farrowing room (1 sample/wk) and one of the gestation barns (1 sample/wk). The feed samples were analyzed for total nitrogen and dry matter content by MidWest Labs.

In B3, six full depth profile and four surface layer samples were collected once per cycle (approximately 21 days) between 8/25/08 and 7/13/09. At the time of manure sampling, manure depth was measured and recorded. Due to the amount of time taken to refill the pits with recharge water, measurement of recharge water depth did not occur routinely (timer controlled pit recharge was not always completed while site engineer was able to be on-site).

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In the gestation barns, samples were collected during the scheduled site visit on a Monday or Tuesday, prior to routine emptying of the pits on Wednesday and Thursday, every three weeks between 8/25/08 and 7/13/09. At the time of manure sampling, manure depth was measured and recorded. Twelve full depth profile and 12 surface layer samples were taken from each gestation barn every sampling period.

The full depth profile samples were analyzed for total nitrogen and total solids, and the surface layer samples were analyzed for total solids, ammonia and pH by MidWest Labs.

3.5. Particulate Matter Monitoring

Real-time PM monitors (TEOM Model 1400a, Thermo Fisher Scientific, Waltham, MA) continuously sampled exhaust PM. A TEOM was placed upstream of Fan 12 in B1, Fan 2 in B2, and Fan 1 in B3. These fans were considered the primary representative exhaust fan (PREF) for the respective barns.

A beta attenuation PM monitor (Beta Gauge Model FH62C-14, Thermo Fisher Scientific, Franklin, MA) continuously measured inlet PM concentration. The Beta Gauge was located in the OFIS, with the inlet extending 1.8-m through and above the roof of the OFIS. The sampling location of this inlet PM monitor was very close to the ventilation inlet air that flowed through side baffles, and the possible contaminant sources (the closest exhaust fan and the lagoon), were more than 23 and 70 m away, respectively.

At any one time, the sampled PM size class was either PM_{10}, $PM_{2.5}$ or TSP at all three TEOMs and the Beta Gauge. The $PM_{2.5}$ size class was measured in September 2007, and January and July 2008 for 14 to 22 d each time (Table 6). The TSP inlet heads were placed on the TEOMs for ten, 7-20 d periods. The PM_{10} concentration was measured at all other times.

3.6. Continuous Gas Sampling and Monitoring

Air samples for continuous gas measurements were collected from multiple gas sampling probes with a custom-designed GSS. Each probe was connected to the GSS with Teflon tubing. Tubular raceways between the OFIS and the monitored buildings protected the sampling lines and data signal cables. The sampling lines were wrapped with insulation and heated inside the raceways and at other locations vulnerable to cold air to prevent condensation inside the tubes.

Exhaust gas concentrations were sampled at the inlet of the four sidewall fans for each of the gestation barns (the first- and second-stage fans for these barns), and one first-stage fan in B3. Sampling probes were located about 0.5 m directly in front of the fan at the same height as the fan hub. One inlet gas concentration was sampled at the south side of the gestation barn 1, about midpoint along the length of the barn. Another inlet gas concentration was sampled 3 m away from the air inlet of the north sidewall of the farrowing barn. The gas concentration was also sampled at the air inlet inside the north sidewall of the farrowing barn in the common hallway. Thus, there were a total of 12 gas-sampling locations at the site (Table 7). The lagoon could have caused the inlet concentrations to be higher at times (i.e. when the wind blew from easterly directions), but the objective of quantifying the net emission rate was still met by measuring the

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inlet and exhaust concentrations. It was not necessary to differentiate the contribution of lagoon emission and barn exhaust fans to the inlet air.

Table 6. Sampling schedule for PM10, TSP and PM2.5.

Time and Day (m/d/y)		Test Duration (d)		
Start	Stop	PM_{10}	TSP	$PM_{2.5}$
7/20/07	8/8/07		19.5	
8/8/07	9/6/07	28.9		
9/6/07	9/11/07	5.2†		
9/6/07	9/11/07			5.0‡
9/11/07	9/28/07			16.8
9/28/07	10/22/07			24.1†
9/28/07	10/22/07	24.1‡		
10/22/07	11/6/07	15.0		
11/6/07	11/13/07		6.9	
11/13/07	1/15/08	62.9		
1/15/08	1/31/08			16.0
1/31/08	2/7/08		6.7	
2/7/08	4/7/08	59.9		
4/7/08	4/14/08		7.0	
4/14/08	6/25/08	71.9		
6/25/08	7/16/08		20.7	
7/16/08	7/24/08	8.0		
7/24/08	8/7/08			14.0
8/7/08	9/12/08	35.8		
9/12/08	9/24/08		11.8	
9/24/08	12/3/08	70.0		
12/3/08	12/12/08		9.0	
12/12/08	2/5/09	54.9		
2/5/09	2/18/09		13.0	
2/18/09	4/8/09	49.0		
4/8/09	4/15/09		6.8	
4/15/09	6/10/09	55.8		
6/10/09	6/18/09		8.0	
6/18/09	7/24/09	35.5		
	Total	576.7	109.3	75.9

†Only B3; ‡All except B3

One set of gas analyzers in the OFIS was used to sequence through all the GSLs. Hydrogen sulfide was measured with a fluorescence H_2S analyzer (Model 450i, Thermo Fisher Scientific, Waltham, MA). Concentrations of NH_3 and CO_2 were measured with a photoacoustic infrared multi-gas monitor (INNOVA Model 1412, LumaSense Technologies, Ballerup, Denmark).

Each exhaust location was sampled individually for 10 min. The two inlet locations were monitored at least twice daily, originally with a 20-min sampling period. In August 2007, the inlet sampling period was increased to 60 min. The B1 and B2 inlet gas sampling time was

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decreased to 30 min in March 2009 with confirmation by a statistical analysis that 30 min was sufficient for this inlet location.

Table 7. Analyte sampling locations.

Analyte	Barn/Room	Sampling Location*	Qty
NH_3 H_2S	B1, B2	GSL-A: 0.5-m directly in front of the inlet of Fan 1 (north wall, center of barn)	2
	B1, B2	GSL-B: 0.5-m directly in front of the inlet of Fan 13 (south wall, center of barn)	2
	B1, B2	GSL-C: 0.5-m directly in front of the inlet of Fan 12 (southeast corner)	2
	B1, B2	GSL-D: 0.5-m directly in front of the inlet of Fan 2 (northeast corner)	2
	B3	**B3 Inlet**: 3 m north of the north air inlet of B3	1
	B3	B3 Hallway: north air inlet to B3	1
	B3	GSL-E: 0.5-m directly in front of the inlet of Fan 1	1
	B1,B2,B3	**B1 and B2 Inlet**: South wall of gestation barn 1, near midpoint of barn	1
$PM_{2.5}$ PM_{10} TSP)	B1	TEOM located upstream of Fan 12 (southeast corner)	1
	B2	TEOM located upstream of Fan 2 (northeast corner)	1
	B3	TEOM located upstream of Fan 1	1
	B1,B2,B3	**Inlet**: 1.8 m above the roof of the OFIS	1
VOC	B1	Upstream of Fan 12 (southeast corner)	1
	B2	Upstream of Fan 2 (northeast corner)	1
	B3	Upstream of Fan 1	1

*Gas sampling probes were located at fan hub height, suspended from the ceiling.

3.7. VOC Sampling

Grab samples of VOC were collected at the PREFs (Table 7), using methodology based on methods TO-15 and TO-16. Sampling was conducted with 6-L stainless-steel canisters (TO-Can, Restek Corp, Bellefonte, PA), equipped with ¼″ bellows valves (Swagelok SS4H) and 207-kPa vacuum gauges. Sampling trains contained flow controllers (Veriflo Model 423XL, Parker-Hannifin Corp., Richmond, CA) with 2- to 4-sccm critical orifices and 7-µm in-line stainless steel filters. Flow controllers were pre-set to a constant flow rate of 3.4 mL/min. Canister sampling was conducted for 24 h, and canister pressures were recorded at the beginning and end of the sampling periods for the calculation of total sample volumes. Sampling was conducted five times between 4/8/09 and 7/15/09, with duplicate samples collected at each location. All canisters were cleaned and passed QC before sample collection.

Canister samples were analyzed at Purdue University's Trace Contaminant Laboratory. The canisters were pressurized to +207 kPa with ultrapure N2, and transferred to TDS tubes (Carbotrap 300, Supelco, Bellefonte, PA). The pressurized canisters initially yielded sample flows of 50 mL min^{-1} during sample transfer to tubes. Canister heating was introduced when a canister pressure decreased to 13.8 kPa to ensure maximal transfer of nonvolatile components.

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Samples were analyzed on a thermodesorption-gas chromatograph-mass spectrometer (TDS-GC-MS), consisting of a gas chromatograph (Model 6890, Agilent Technologies, Palo Alto, CA) coupled with a Model 5795 mass spectrometer detector (Agilent Model 5795) and equipped with a thermal desorption system (Model TDS-G, Gerstel, Baltimore, MD) and a cooled injection system (Gerstel CIS). The GC-MS passed a leak check prior to analyzing each set of samples. Compounds were separated on a 60 m x 0.25 mm x 1 μm column. The detector utilized the full scan mode covering masses from 27-270 Daltons in 8 scans/s. The MS quad hold temperature was 150°C, and the MS source hold temperature was 230°C. The analytical results were analyzed by ChemStation, and all integrations were manually checked. This method used an external standard compound for instrument monitoring and QA to avoid losses of low-molecular-weight analytes that would occur when purging solvent used with internal standard(s). All TDS tubes were cleaned with a tube conditioning system (Gerstel TC-2 TDS) for 3.5 h at 350°C prior to each use.

Response curves were generated at both the beginning and the end of the VOC analysis period. The response curves of all chemical standards reach good linearity as 55% of the response curves had $R^2 > 99\%$ and over 98% had $R^2 > 95\%$. Toluene was used as an external standard that was analyzed during each batch of samples to assure quality. The relative bias and standard deviation of 97 toluene checks were -4.3% and 18.8%, respectively. The uncertainty of the mean of duplicate field samples was calculated as 27%, based on the toluene checks.

3.8. Documentation of Quality Assurance

3.8.1. Oversight, Maintenance, and Calibration

Texas AgriLife Research personnel visited the site at least weekly. A total of 117 person and 124 person visits were made during years 1 and 2 of the monitoring period. Remote checks of the system were conducted each work day by the site personnel.

The Science Advisor audited the site on 8/16/07. The Environmental Protection Agency (EPA) conducted site audits on 9/17/08 and 6/26/09.

Various site maintenance and calibration activities were conducted by site personnel (Appendix B). Specific quality assurance tests of the GSS, gas analyzers and other sensors are discussed below.

3.8.2. Gas Sampling System

Two types of GSS leak tests were conducted. The first test examined GSS integrity, by briefly creating a "dead head" against the pump by closing all solenoid valves, while measuring exhaust airflow with a portable rotameter, and recording the leakage flow with the GSS mass flow meter. The second test consisted of monitoring GSS flow and pressure after manually setting AirDAC to sample from a particular GSL and plugging the GSL's gas sampling probe. Preliminary tests indicated that GSS flow under dead-head conditions that were 10% or less (<0.4 L/min) of the normal GSS flow rate of 4.0 L/min was indicative of leak-free operation under normal GSS manifold vacuums of -4,000 to -10,000 Pa. Leak tests of the GSS were conducted at least quarterly. Systematic checking of individual sampling lines was conducted on 2/6/08 8/7/08 and

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5/19/09. Data was only invalidated when leaks occurred away from the sampling location. If gas sampling probe filter maintenance eliminated a leak, no data was invalidated since leakage air would be the same as sampled air.

3.8.3. Gas Analyzers

Gas measurements were evaluated using multipoint calibrations and zero and span checks (Appendix C). The gas concentration data output by the analyzers was adjusted to correct for bias introduced by the gas sampling and measurement system.

3.8.3.1. Correction of Ammonia Concentrations

A multipoint calibration (MPC) was conducted through the challenge line five times using purified air (Cat. # AIO.OCE-T, CEM zero-grade, Praxair, Indianapolis, IN) and three span concentrations ranging from 6.0 to 40 ppm NH_3. Each MPC was conducted with replication (Table 8). The NH_3 was delivered using a 6-port gas dilutor (Model 4040, Environics, Tolland, CT). The R^2 values of each MPC exceeded 0.998, indicating linearity of instrument response to standard gas between 0 and 40 ppm.

Table 8. Multipoint calibration record and results for the NH_3 measurements.

Date	# points	Span concentration, ppm		R^2
		Minimum	Maximum	
9/6/07	4	14.0	40.0	0.9995
9/10/07	4	14.0	40.0	0.9993
7/29/08	4	14.0	40.0	0.9995
2/18/09	4	14.0	40.0	0.9994
5/18/09	4	6.0	17.5	0.9979

Precision checks were conducted periodically using zero and span gases (Z/S checks), delivered via the dilutor through the challenge line, and responses were recorded to monitor changes in system performance over time. Span checks prior to 5/28/09 were conducted with 40 ppm of NH_3; for the remainder of the study span checks were conducted with 17.5 ppm of NH_3 (Appendix C).

The average response of the analyzer to the zero and span gas applications was assessed, and the results were combined based on changes to the instrument or GSS to create linear correction model (Table 9). The model was used to correct instrument readout data. The measurement accuracy was assessed based on model-corrected zero and span checks (Table 9).

Table 9. Concentration correction and measurement accuracy for ammonia.

Start/end dates	# of checks		Linear model	Accuracy, % of span			
				Bias		Precision	
	Zero	Span		z	s	z	s
7/15/07-7/24/09	102	101	y = 1.024(x - 0.036)	0.0	0.0	0.3	1.4

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3.8.3.2. Correction of Hydrogen Sulfide Concentrations

A MPC was conducted through the challenge line nine times using purified air (Cat. # AIO.OCE-T, Praxair CEM zero air) and three or four span concentrations (Cat. # NI-HSR1E-AS, Praxair EPA Protocol Standard). Each MPC was conducted with replication (Table 10). The H_2S was delivered using a 6-port dilutor (Model 040, Environics, Tolland, CT). The R^2 values of each MPC exceeded 0.999, indicating excellent linearity of instrument response to standard gas between 0 and 3240 ppb.

Table 10. Multipoint calibration record and results for the H_2S measurements.

Date	# points	Span Concentration, ppb		R^2
		Minimum	Maximum	
8/20/07	4	600	1800	0.9999
9/4/07	4	600	1800	0.9999
11/13/07	4	1080	3240	0.9999
2/7/08	4	1080	3240	0.9999
4/21/08	4	1080	3240	0.9997
6/25/08	4	1080	3240	0.9999
9/4/08	4	1080	3240	0.9999
4/24/09	5	540	3240	0.9997
7/10/09	4	400	1200	0.9999

Precision checks were conducted periodically (Table 11) using zero gas and span gases (Z/S checks), delivered via the dilutor through the challenge line, and responses were recorded to monitor changes in system performance over time. Span checks were typically conducted with 1150, 1800, or 3240 ppb of H_2S (Appendix C).

The average response of the analyzer to the zero and span gas applications was assessed, and the results were combined based on changes to the instrument or GSS to create linear correction models (Table 11). The models were used to correct instrument readout data. The measurement accuracy was assessed based on model-corrected zero and span checks (Table 11).

Table 11. Concentration correction and measurement accuracy for H_2S.

Start/end dates	# of checks		Linear model	Measurement accuracy relative to span, %			
				Bias		Precision	
	Zero	Span		z	s	z	s
7/20/07-8/2/07	2	2	y = 0.930(x – 2.750)	0.0	0.0	0.0	0.2
8/2/07-11/13/07	19	19	y = 0.949(x - 0.700)	0.0	0.0	0.0	3.5
11/13/07-2/7/08	11	11	y = 0.943(x – 2.465)	0.0	0.0	0.0	2.6
2/7/08-4/21/08	13	7	y = 1.011(x – 1.307)	0.0	0.0	0.0	2.1
4/21/08-6/25/08	6	6	y = 1.040(x – 1.519)	0.0	0.0	0.0	2.0
6/25/08-9/4/08	9	9	y = 1.019(x – 3.365)	0.0	0.0	0.0	1.0
9/4/08-4/23/09	33	17	y = 1.032(x – 1.819)	0.0	0.0	0.0	1.7
4/23/09-7/10/09	10	10	y = 0.998(x – 3.578)	0.0	0.0	0.0	1.3
7/10/09-7/24/09	2	2	y = 0.990(x +0.919)	0.0	0.1	0.0	0.2

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3.8.3.3. Noise Tests

Analyzer noise tests were conducted to assess the minimum detection limit (MDL) of the gas measurements on 7/22/09. The analyzers measured CEM zero air (Praxair Cat. # AIO.OCE-T CEM) continuously for 60 min. The MDL was calculated as the t-statistic times the standard deviation of the data collected during the equilibrated period (Table 12).

Table 12. Summary data for gas analyzer noise tests.

Concentration	Statistical variable				Duration, min	T_{dew}, °C
	Min	Max	SD	MDL		
NH_3, ppm	-0.02	0.24	0.06	0.14	59	-50.3
H_2S, ppb	0.2	3.8	0.9	2.3	26	-49.4

3.8.4. Particulate Matter Monitors

The quality of the exhaust PM data was assessed through periodic mass verifications and flow and leak checks of the TEOMs (Table 13, Table 14, and Table 15). The B1, B2, and B3 TEOMs met or exceeded the mass verification criteria (Ko actual within ±2.5% of Ko audit).

Table 13. Quality assurance tests of Barn 1 TEOM.

Date	Time since last test, d	Mass error, %	TEOM flows, L/min		Leak test flows, L/min	
			Main	Total	Main	Auxiliary
7/10/07	0	-0.06				
8/29/07	50	-0.05	2.89	16.68	0.05	0.12
10/10/07	42	-0.04	3.05	16.58	0.05	0.14
12/10/07	61	0.02	2.97	16.42	0.05	0.15
2/7/08	59	0.13	3.30	16.75	0.01	0.14
2/18/08	11		3.01	16.88		
4/15/08	57	-0.46	2.93	16.49	0.03	0.27
4/21/08	6		2.97	16.45		
6/2/08	42	-0.41	2.94	16.34	0.04	0.28
6/11/08	9		2.92	16.54		
8/7/08	57	-0.09	2.93	16.41	0.07	0.32
8/19/08	12		3.03	16.79		
10/9/08	51	-0.93	2.99	16.61	0.05	0.30
1/2/09	85		3.02	16.71		
2/11/09	40		3.00	16.17	0.03	0.41
4/9/09	8	-1.33	2.99	16.46	0.03	0.40
6/18/09	70	2.20	2.96	16.33	0.02	0.36
7/21/09	33	2.00	3.14	16.46	0.01	0.35

The criteria for total and main flows were 16.67±1.0 and 3.0±0.2 L/min, respectively, and were met on all dates except 2/7/08 in B1.

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Leakage criteria were total flow ≤ 0.62 L/min and main flow ≤ 0.15 L/min, respectively. All leak and flow tests of all TEOMs were acceptable on all dates.

Mass verifications and flow calibrations of the ambient PM monitor were conducted periodically (Table 16). The mass verification criteria of <5% and total flow check criteria of <4% were met on all dates.

Table 14. Quality assurance tests of Barn 2 TEOM.

Date	Time since last test, d	Mass error, %	TEOM flows, L/min		Leak test flows, L/min	
			Main	Total	Main	Auxiliary
7/10/07	0	0.64				
8/29/07	50	0.50	3.16	16.76	0.01	0.03
10/10/07	42	0.17	3.08	16.59	0.03	0.08
12/10/07	61	-0.08	2.96	16.94	0.03	0.06
2/7/08	59	-0.55	3.20	16.75	0.02	0.09
2/18/08	11		3.09	17.60		
4/15/08	57	-0.11	2.98	16.62	0.02	0.16
4/21/08	6		3.01	16.63		
6/2/08	42	-1.32	2.96	16.95	0.02	0.19
6/11/08	9		2.99	16.49		
8/7/08	57	0.17	3.02	17.51	0.02	-0.31
10/9/08	63	-1.66	2.98	16.98	0.01	-0.26
2/11/09	125		3.01	16.63	0.02	-0.18
4/9/09	57	-1.03	2.96	16.72	0.02	-0.22
6/18/09	70	1.86	2.97	16.71	0.02	0.27
7/21/09	33	1.79	3.07	16.30	0.00	-0.25

The TEOM measurements were also evaluated based on collocated measurements of the three TEOMs in June 2008 and July 2009. In July 2008, the TEOM units were collocated immediately east of the OFIS. All three PM types were evaluated in July 2009, with each PM type sampled for 24 h. The three TEOM units were collocated within the OFIS and 2-m stainless steel sample extension tubes were used to penetrate through the ceiling of the OFIS, extending the sample inlets to a height of approximately 1.5 m above the roof line. The relative percent difference between the hourly averages for each TEOM to the average measurement of the three TEOMs was calculated and presented in Table 17. Hourly averages less than 3 μg m^{-3} of PM_{10} and $PM_{2.5}$, and less than 20 μg m^{-3} of TSP were less than the minimum valid concentration and thus excluded from the analysis. The differences in average PM_{10}, TSP and $PM_{2.5}$ concentrations over the collocation periods were 1.3 to 7.3%, 0.9 to 8.6% and 3.8 to 28.5%. The nominal differences between TEOMs would result in considerably smaller percent differences under exhaust conditions compared to ambient conditions.

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Table 15. Quality assurance tests of B3 TEOM.

Date	Time since last test, d	Mass error, %	TEOM flows, L/min		Leak test flows, L/min	
			Main	Total	Main	Auxiliary
7/10/07	0	0.05				
8/29/07	50	-0.08	3.10	16.86		
10/17/07	49	-0.55	3.05	16.47	0.07	0.30
12/10/07	54	-1.14	3.05	16.10	0.02	0.12
2/7/08	59	-0.21	2.94	16.68	0.02	0.13
2/18/08	11		3.10	16.86		
4/15/08	57	-0.55	2.99	16.66	0.03	0.00
4/21/08	6		2.97	16.51		
6/2/08	42	-0.75	2.81	16.43	0.01	-0.04
6/11/08	9		3.09	16.51		
8/19/08	69	0.08	2.93	16.51	0.02	-0.07
8/22/08	3		2.97	16.41		
10/9/08	48	-1.14	2.98	16.45	0.03	-0.06
12/16/08	68		2.94	16.50	0.21	0.04
1/5/09	20		2.95	16.68	-0.13	-0.08
2/11/09	37		3.01	16.29	0.03	0.00
4/9/09	57	-1.19	2.92	15.92	0.04	-0.01
6/18/09	70	1.46	2.97	16.42	0.04	0.00
7/21/09	33	1.97	3.09	16.33	0.01	-0.05

Table 16. Ambient PM monitoring quality assurance parameters.

Date	Time since last test, d	Mass verification, %	Total flow check, %
7/3/07	0	0.60	
7/12/07	9		1.76
10/10/07	90		1.73
2/7/08	120	0.10	3.05
8/14/08	189	0.42	0.56
11/4/08	82	0.50	
11/17/08	13		1.03
4/15/09	149		0.31
4/30/09	15	1.30	
5/28/09	28	0.04	
6/4/09	7	1.20	
7/15/09	41		1.19
7/20/09	5		0.28
7/24/09	4	0.10	

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Table 17. TEOM collocation test results.

PM type	Average concentration, µg/m^3			Difference, %		
	Barn 1	Barn 2	Far 9	Barn 1	Barn 2	Far 9
PM_{10}	35	40	37	-6.0	7.3	-1.3
TSP	30	35	33	-8.6	8.3	0.9
$PM_{2.5}$	8	13	11	-23.5	28.5	3.8

3.9. Data Analysis

3.9.1. Software

All emission data processing was conducted using custom software (CAPECAB, Fibre Recovery Systems, Inc., Calgary, AB). Data was carefully inspected and validated. If a datum was invalid for a known reason, the datum was marked (flagged) invalid and all calculations dependent on that datum were also invalid unless a substitution datum was identified. All periods of invalid data that were longer than one day are listed in Appendix D.

If the QA/QC checks described above indicated a measurement bias, the data was corrected prior to calculating emissions. The CAPECAB program provided a robust method to inspect data, invalidate if necessary, and implement various corrections over specified time periods.

3.9.2. Data Substitution, Validation, Correction and Uncertainty

3.9.2.1. Pressure

The static pressure sensor measurements were adjusted based on both multipoint calibrations performed on 8/17/07 (except for the B3 sensor) and 3/7/08, and time-weighted average zero offsets during the interim periods (Table 18). The B3 sensor was replaced on 4/9/09.

Table 18. Static pressure sensor zero offsets.

Sensor Location	Start/end dates	# of zero checks	Offset
B1 N Wall	7/20/07-3/7/08	1	0.050
	3/7/08-7/24/09	8	-0.172
B1 E Wall	7/20/07-3/7/08	1	-0.600
	3/7/08-7/24/09	7	-0.763
B1 S Wall	7/20/07-3/7/08	1	-0.013
	3/7/08-7/24/09	7	-0.468
B2 N Wall	7/20/07-3/7/08	1	0.124
	3/7/08-7/24/09	7	-0.178
B2 E Wall	7/20/07-3/7/08	1	-0.108
	3/7/08-7/24/09	8	-0.309
B2 S Wall	7/20/07-3/7/08	1	-0.101
	3/7/08-7/24/09	7	-0.426
B3 S Wall	7/20/07-4/9/09	4	-0.927
	4/9/09-7/24/09	2	-2.700

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The average static pressures for each building were determined using data from all properly-operating sensors among the north, east, and south ΔP sensors.

3.9.2.2. Environmental Sensors

The average exhaust temperature for each gestation barn was the mean of the RH/T probe temperature measurement and the thermocouple measurements at Fans 1, 13, 2 (Barn 1) and 12 (Barn 2). In B3, the average exhaust temperature was the mean of the RH/T probe temperature measurement and exhaust TC measurement (after installation on 5/16/08). The B3 RH/T probe measurements were invalid from 7/19/07 to 8/20/07. The B3 inlet TC measurement was a substitute measurement for the exhaust conditions during this time to facilitate B3 emission calculations. Between 8/20/07 and 8/29/07, the B3 RH/T signal connections were reversed, but the data was valid after signal conditioning corrections.

The solar sensor signal was collocated with a reference solar sensor between 11/6/07 and 12/12/08. The collocated reference sensor confirmed the linear output by the solar sensor. Ground noise influenced the offset of the sensor, thus the solar sensor signal was corrected using variable offsets required to correct for non-zero readings during nighttime hours.

3.9.2.3. Fan Operation

With the exception of the farrowing room fans and the emergency stage in the gestation barns, there were always at least two functional sensors per fan stage or a corresponding stage relay signal for every speed sensor signal. After 7/16/08, duplicate sensors were also installed on the farrowing room fans. On the occasions when speed sensors failed (Appendix D), airflow calculations were facilitated by substitutions of operation data from other signals of the same stage.

Low-level noise was filtered out by setting operational status to "off" (0%) if the average speed was less than 100 rpm.

3.9.2.4. Gas Concentrations

Table 19 describes the time specified in the data processing software for gas concentration measurements to stabilize based on gas and sampling location, and the maximum interval for interpolating between two valid concentration measurements for a sampling location.

Table 19. Gas concentration data validation and interpolation requirements.

Gas	Exhaust and B3 Hallway Sampling Locations		B1/B2 Ambient Sampling Location*		B3 Ambient Sampling Location	
	EP, min	MII, min	EP, min	MII, min	EP, min	MII, min
NH_3	7	300	45/15	3000	45	3000
H_2S	5	300	30/15	3000	30	3000

* Prior to 3/9/09, a longer stabilizing time was required. EP = Equilibration period; MII = maximum interpolation interval.

Gas and water vapor concentrations, and sample relative humidity, temperature, pressure, flow rate, and flow direction were invalidated during all gas analyzer MPCs and Z/S checks.

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Gas concentration data were invalidated between 8/8/07 and 8/14/07 because a digital output module failure resulted in invalid gas sampling system-related data. Gas concentration data was also invalidated between 4/29/08 and 5/5/08 because of high analyte concentrations detected during Z/S checks, and subsequent repair of the gas sampling system pump.

Standard gas concentrations were calculated on dry and moist bases with Eqns. 3-1 and 3-2, respectively.

$$C'' = \frac{C'}{(1-W)} \tag{3-1}$$

and

$$C' = \frac{P' \cdot c \cdot M}{R \cdot (273 + T')} \tag{3-2}$$

where:

C''	Dry standard mass concentration, dry basis (mg $d^{-1}sm^3$ or µg $d^{-1}sm^3$)
C'	Standard mass concentration, moist-air basis (mg sm^{-3} or µg sm^{-3})
P'	Standard pressure (1 atm)
T'	Standard temperature (20°C)
c	Volumetric concentration of gas (ppm or ppb)
M	Molecular weight of gas (g mol^{-1})
R	Universal Gas Constant (0.08206 L atm mol^{-1} $°K^{-1}$)
W	Humidity ratio

3.9.2.5. PM Concentrations

Prior to 2/18/08, the TEOM flow rates were erroneously internally adjusted to 16.7 L min^{-1} based on standard conditions (20°C and 1 atm). The PM data was acceptable, however, because the TEOM flow rate factors were periodically verified prior to this date and the flow factor adjusted to compensate for the flow setting, maintaining the flow within the the required 15.7 to 17.7 L min^{-1} range. The TEOM settings were changed on 2/19/08 to adjust the flow to 16.7 L min^{-1} based on actual rather than standard air density.

The TEOMs were configured to output the PM concentration data at 25°C and atmospheric pressure until 2/18/08, at which time they were reconfigured to output the PM data at standard conditions (20°C, 1 atm). All PM concentration data prior to 2/18/08 was corrected to standard conditions.

Dry standard PM concentrations were obtained by dividing raw concentrations by one minus the air humidity ratio.

A flow error due to a faulty ambient temperature sensor resulted in the invalidation of 3 d of B1 PM data. A faulty control cable, board and battery resulted in the invalidation of 51 d of B2 PM

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data total. A faulty cable and a tapered element repair resulted in the invalidation of 76 d, and a leak in the main line negated 4 d of B3 TEOM data.

3.9.3. Emission Calculations

3.9.3.1. Particulate Matter

PM emissions were calculated with Eqn. 3-3.

$$E = \left(Q_O \cdot P_O \cdot \left(\frac{273+20}{273+T_O} \right) \right) \cdot c'_O - c'_i \tag{3-3}$$

Where:

E	Net PM emission rate (µg s^{-1})
Q_0	Exhaust airflow rate at To (m^3 s^{-1})
P_0	Pressure of exhaust air (atm)
C_0'	PM concentration of exhaust air (µg m^{-3})
C_i'	Ambient PM concentration (µg m^{-3})
T_0	Temperature of exhaust air (°C)

3.9.3.2. Gases

Stream-specific gas emissions were determined as follows:

$$E = Q_O \cdot \frac{P_O \cdot M}{R \cdot (273 + T_O)} \cdot (c_O - c_i) \tag{3-4}$$

Where:

E	Stream or barn emission rate (mg s^{-1} or µg s^{-1})
Q_O	Stream or barn outlet moist airflow rate at To (m^3 s^{-1})
P_O	Exhaust air pressure (atm)
M	Gas molecular weight (g mol^{-1})
R	Universal Gas Constant (0.08206 L atm/mol^{-1} °K^{-1})
T_O	Exhaust air temperature (°C)
c_o	Exhaust air concentration (ppm or ppb)
c_i	Ambient or ventilation air inlet concentration (ppm or ppb)

Building emissions were the summation of the stream emissions. If the interpolated stream concentration was invalid for one stream in a barn, the average of the other two stream concentrations was substituted in the emission calculation. Building emission was divided by variables (barn inventory, feed consumption) or constants (floor area) to normalize emissions to site-specific characteristics.

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3.9.3.3. Volatile Organic Compounds

The total VOC concentration was multiplied by building airflow for the 24-h canister sampling period to yield an average emission rate. If two samples were successfully collected for a building at one sampling event, the average concentration was used in the calculation.

4. RESULTS

4.1. Farm Production Information

The farm production information, including inventory, animal mass and density are presented in (Table E2). The average sow mass in both the gestation and farrowing barns was estimated at 200 kg. The piglet mass was assumed to increase linearly from 2 kg at birth to 8 kg at weaning.

The monitoring period extended across 33 farrowing room batches

4.2. Characteristics of Biomaterials

The summarized results of lab analyses of the various biomaterials are available in Appendix F. The solids content was higher in the loadout samples compared to the surface samples for the gestation barns, but the difference was negligible for B3. The total nitrogen in the loadout samples and the NH_3 content and pH of the surface samples was generally higher in the gestation barns compared to B3.

The measured nitrate/nitrite nitrogen content of the two water samples ranged from 1.8 to 2.0 mg/L, and the total nitrogen was 13.2 mg/L in the second sample. The total sulfur content of the first sample was 72.8 mg/L, and phosphorus was not detected.

The total nitrogen content of the gestation diet was between 1.89 and 2.28% wet basis. The nitrogen content of the sow diet in the farrowing rooms was a percentage point higher, between 3.04 and 3.34% wet basis.

4.3. Environmental Conditions

4.3.1. Ambient Conditions

According to historical climatic information daytime average high temperatures ranges from 12°C in the winter to 29°C in the summer. Average overnight lows range from 4°C in winter to 23°C in summer. Typical prevailing winds for the region are from the south and southwest except for the spring when the winds are from the north.

Table E1shows the daily average outdoor temperature, relative humidity, wind speed, wind direction, solar radiation and barometric pressure. The ADM temperature was 15°C, comparable to the annual average for the area. The DM wind speed ranged from 1.9 to 11.2 m s^{-1} (6.8 to 40.3 km h^{-1}), and the ADM was 5.0 m/s (17.9 km h^{-1}), higher than the monthly averages for the area (Table 20).

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Table 20. Monthly averages for weather in the area*.

	Temperature*,°C			Wind Speed**	Wind Direction**
Month	**High**	**Low**	**Mean**	**km/h**	
January	12	4	8	13	SW
February	13	4	8	14	SW
March	16	7	11	16	SW
April	20	11	16	16	N
May	24	16	20	15	N
June	28	20	24	14	N
July	29	23	26	13	SSW
August	29	22	26	12	SSW
September	27	21	24	13	SSW
October	23	15	19	13	S
November	18	10	14	13	S
December	14	6	10	13	S
Annual Average	21	13	17		

* http://www.weather.com/weather/wxclimatology/monthly/USTX0029

4.3.2. Barn Conditions

The environmental conditions in B1, B2 and B3 are shown in Table E3. The average exhaust temperatures in B1, B2 and B3 were maintained below 30°C, despite ambient temperatures rising above this point, likely aided by the cool cells (Figure 4).

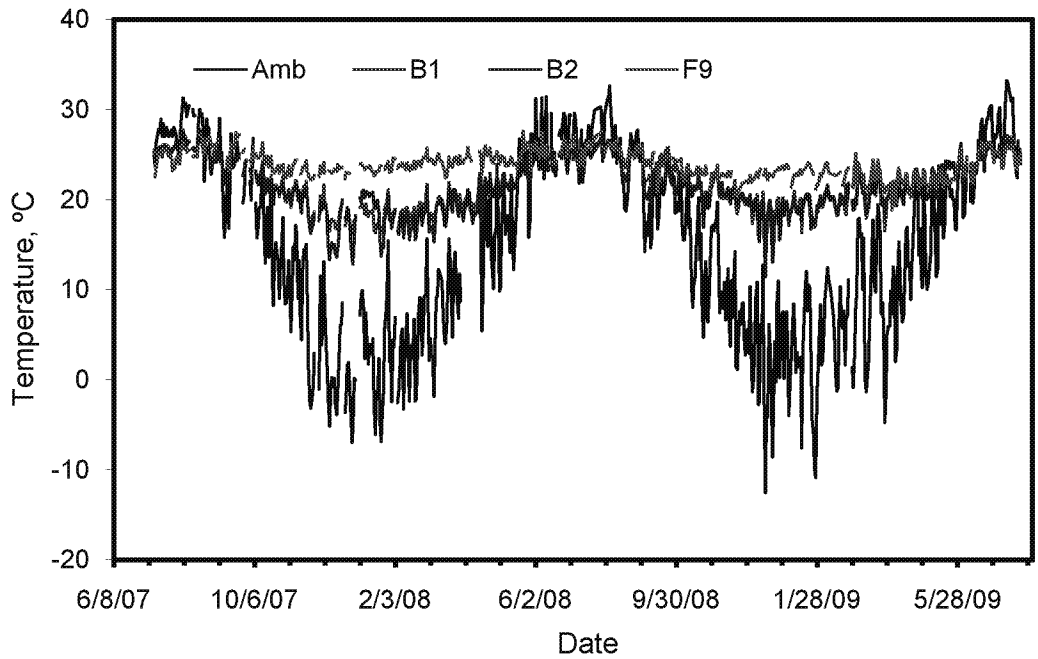

Figure 4. Ambient and average exhaust temperatures.

4.3.3. Ventilation Rate

The median static pressure differential was -15±5 Pa in the gestation barns, and -30±5 Pa in the farrowing room. The fraction of time that the pressure was positive ranged from 1.6 to 4.8%. Most of the positive pressures were likely wind-induced.

Figure 5 demonstrates an increasing airflow rate with temperature. The dry standard ventilation rates of B1 and B2 ranged from approximately 7 $m^3 s^{-1}$ in winter to 65 $m^3 s^{-1}$ during the summer. The dry standard ventilation rate of B3 ranged from approximately 0.6 $m^3 s^{-1}$ in winter to 6 $m^3 s^{-1}$ during the summer.

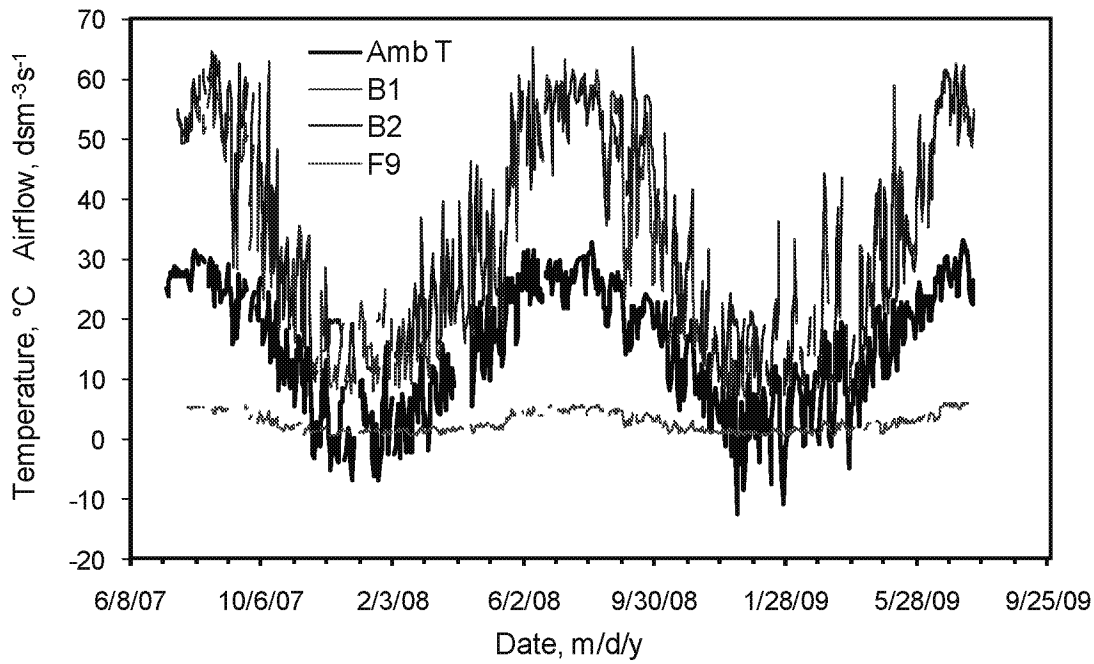

Figure 5. Daily mean ambient temperature (T) and dry standard airflow rates.

4.4. Particulate Matter Concentration and Emission

4.4.1. PM_{10}

The DM inlet PM_{10} concentration ranged from 5 to 133 μg dsm^{-3}, whereas the DM B1, B2 and B3 PM_{10} exhaust concentrations ranged from 44 to 440, 53 to 582 and from 23 to 977 μg dsm^{-3}, respectively (Table E4).

The ADM (±SD) inlet, B1, B2 and B3 PM_{10} concentrations were 29±18, 224±82, 273±100 and 305±184 μg dsm^{-3}, respectively (Table E4).

The overall mean (±SD) PM_{10} emission rates were 345±123 g d^{-1} (295±105 mg $d^{-1}hd^{-1}$) for B1, 494±152 g d^{-1} (421±129 mg $d^{-1}hd^{-1}$) for B2 and 40±25 g d^{-1} (1690±1050 mg $d^{-1}hd^{-1}$) for B3 (Figure 6). The ADM PM_{10} emissions increased with piglet age with each batch in the farrowing room.

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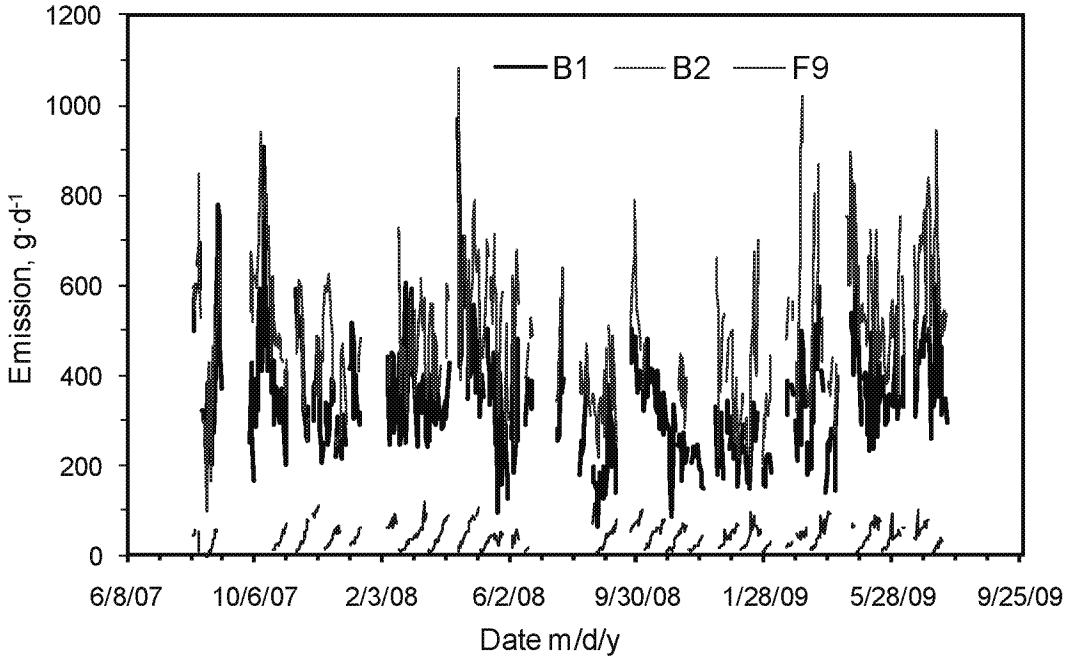

Figure 6. Daily mean PM_{10} emission rates.

4.4.2. $PM_{2.5}$

Daily mean concentrations of $PM_{2.5}$ ranged from 3 to 17 µg dsm^{-3} in the inlet air (n=47 d), 7 to 79 µg dsm^{-3} in B1 and B2 exhaust air (n= 46 d) and from -12 to 114 µg dsm^{-3} in B3 exhaust air (n= 32 d) (Table E4).

The ADM (±SD) inlet, B1, B2 and B3 exhaust concentrations were 9±3, 22±8, 32±18 and 38±26 µg dsm^{-3}, respectively (Table E4).

The overall mean (±SD) $PM_{2.5}$ emission rates were 28±20 g d^{-1} (24±17 mg $d^{-1}hd^{-1}$) from B1, 49±38 g d^{-1} (42±33 mg $d^{-1}hd^{-1}$) from B2, and 5±5 g d^{-1} (217±187 mg $d^{-1}hd^{-1}$) from B3 (Figure 7).

4.4.3. TSP

Data from the ten TSP measurement periods are shown in Table E4. Daily mean TSP concentrations ranged from 7 to 91 µg dsm^{-3} in the inlet air (n=106 d), 58 to 1010 µg dsm^{-3} in B1 exhaust air (n=106 d), 82 to 932 µg dsm^{-3} in B2 exhaust air (n=99 d) and from 73 to 2210 µg dsm^{-3} in B3 exhaust air (n=80 d).

The ADM (±SD) inlet, and B1, B2 and B3 exhaust concentrations were 27±16, 381±294 366±249 and 769±634 µg dsm^{-3}, respectively Table E4.

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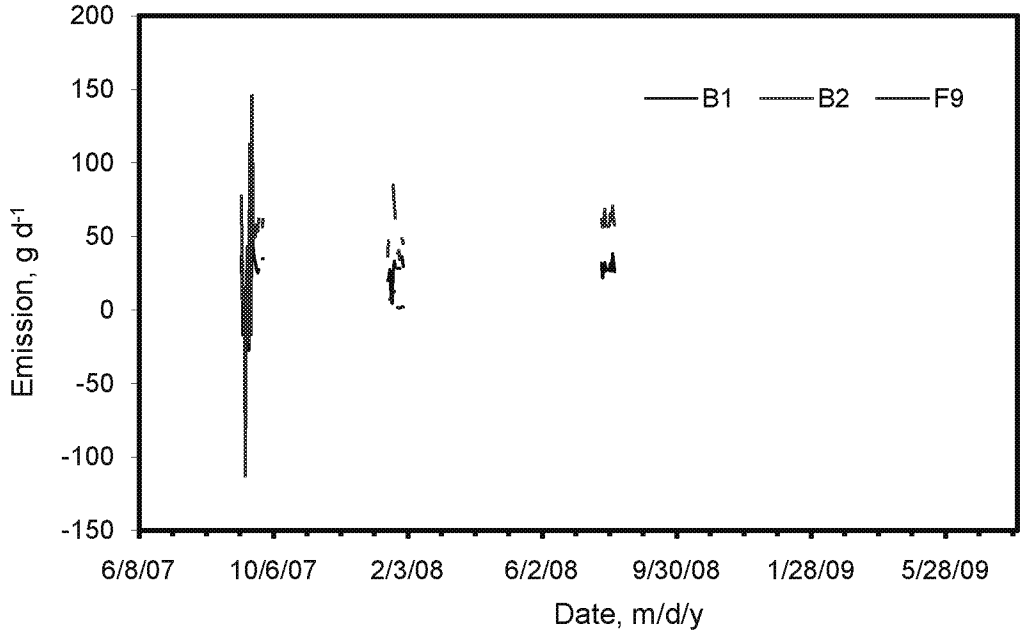

Figure 7. Daily mean $PM_{2.5}$ emission rates.

The ADM TSP emissions ranged from 216 to 1550 g d^{-1} in the B1 and B2 and 19 to 296 g d^{-1} in B3 (Figure 8). Emission rates are shown in Figure 8. The overall mean TSP emission rates were 630±277 g d^{-1} (539±236 mg $d^{-1}hd^{-1}$) for B1 (n= 88 d), 787±302 g d^{-1} (674±256 mg $d^{-1}hd^{-1}$) for B2 (n= 81 d) and 117±72 g d^{-1} (4860±3010 mg $d^{-1}hd^{-1}$) for B3 (n= 65 d).

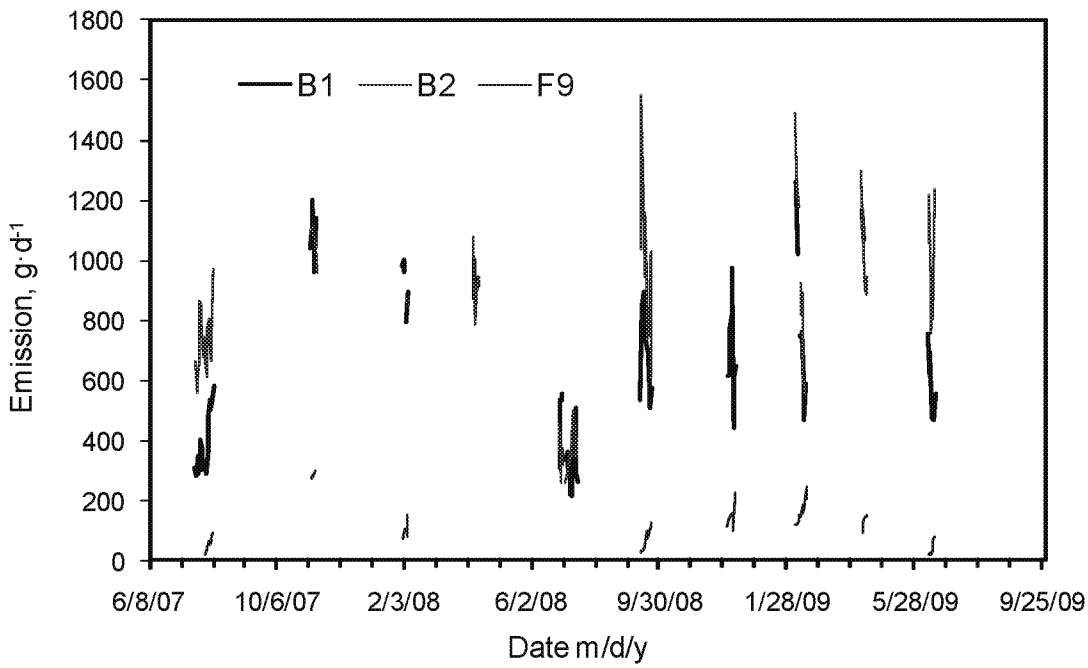

Figure 8. Daily mean TSP emission rates.

4.5. VOC Concentrations and Emissions

The 20 most prevalent VOCs detected in the canister samples accounted for 88.8% of the total quantified mass (Table 21). The most prevalent compound was pentane, which accounted for 29.6% of the total mass.

Table 21. Average concentration of 20 most prevalent VOCs.

Compound	Conc., ng/m3	% of total	Cum %
Acetaldehyde	5.76E+04	10.91%	10.91
2-Butanone	4.28E+04	8.71%	19.62
Acetic acid	3.85E+04	7.84%	27.46
iso-Propanol	3.21E+04	6.55%	34.01
4-Methyl-phenol	2.87E+04	5.84%	39.85
Propanoic acid	2.44E+04	4.97%	44.82
Pentane	2.34E+04	4.77%	49.59
Pentanal	1.83E+04	3.73%	53.33
Phenol	1.76E+04	3.58%	56.90
Butanal	1.73E+04	3.52%	60.42
2,3-Butanedione	1.66E+04	3.39%	63.81
Dimethyl sulfide	1.60E+04	3.27%	67.08
Hexanal	1.50E+04	3.05%	70.13
Nonanal	1.24E+04	2.52%	72.65
Heptanal	1.23E+04	2.51%	75.17
Octanal	1.23E+04	2.50%	77.67
1-Butanol	1.00E+04	2.05%	79.71
2-Pentanone	7.58E+03	1.54%	81.26
Ethyl acetate	6.70E+03	1.36%	82.62
Butanoic acid	6.53E+03	1.33%	83.95

Concentrations of total VOC in exhaust air ranged from 3.9 to 14.4 mg m^{-3} in H10 and from 4.3 to 18.4 mg m^{-3} in H12 (Table 22). The mean (±SD) total VOC concentrations were 0.54±0.31, 0.88±0.35 and 0.59±0.21 mg m^{-3} in B1, B2 and B3, respectively.

Table 22. Emission of total VOC for each sampling day.

Date	# Canisters			Concentration, mg m^{-3}			Airflow, m^3 s^{-1}			Emission, kg d^{-1}		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
04/08/09	2	2	2	0.48	1.03	0.45	39.2	35.4	N/A	1.63	3.14	N/A
05/18/09	2	2	2	0.16	0.77	0.30	44.6	44.6	3.35	0.62	2.98	0.09
06/09/09	2	2	2	0.45	0.37	0.45	55.2	52.9	5.14	2.15	1.71	0.20
06/25/09	0	2	2	N/A	0.53	0.59	N/A	69.6	6.61	N/A	3.17	0.34
07/16/09	2	0	1	0.32	N/A	0.42	58.5	N/A	6.74	1.60	N/A	0.25
Mean	1.6	1.6	1.8	0.35	0.68	0.44	49.4	50.6	5.46	1.50	2.75	0.22

Total VOC emissions (ng s^{-1}) during each sampling period were determined by multiplying the mean building airflow rate (m^3 s^{-1}) by the total mass (ng m^{-3}) and converting to kg d^{-1}. The VOC

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emission rate from B1 and B2 ranged from 2.31 to 3.33 kg d^{-1}, and from 2.78 to 4.48 kg d^{-1}, respectively. The VOC emission rate from B3 ranged from 0.09 to 0.50 kg d^{-1}. The mean VOC emission rates from B1, B2 and B3 were 2.23±0.99 kg d^{-1}, 3.63±0.87 kg d^{-1}, and 0.29±0.18 kg d^{-1}, respectively (Table 22).

4.6. Hydrogen Sulfide Concentration and Emissions

Daily mean inlet and exhaust H_2S concentrations for the entire test are provided in Table E7. The average daily mean (±SD) H_2S concentrations were approximately 8±6 (n=715) ppb in the inlet air, 292±174 (n=675) 287±173 (n=676) and 423±452 (n=654) ppb in the exhausts of B1, B2 and B3, respectively.

Daily mean H_2S emissions from B1, B2 and B3 are tabulated in Table E8 and plotted in Figure 9 for the entire test period.

The ADM (±SD) H_2S emission rates from B1, B2 and B3 were 864±227 (n=621), 885±206 (n=591) and 91±75 (n=584) g d^{-1}, respectively.

The ADM (±SD) sow-specific H_2S emission rates from B1, B2 and B3 were 738±193, 756±175 and 3780±3130 mg $d^{-1}hd^{-1}$, respectively.

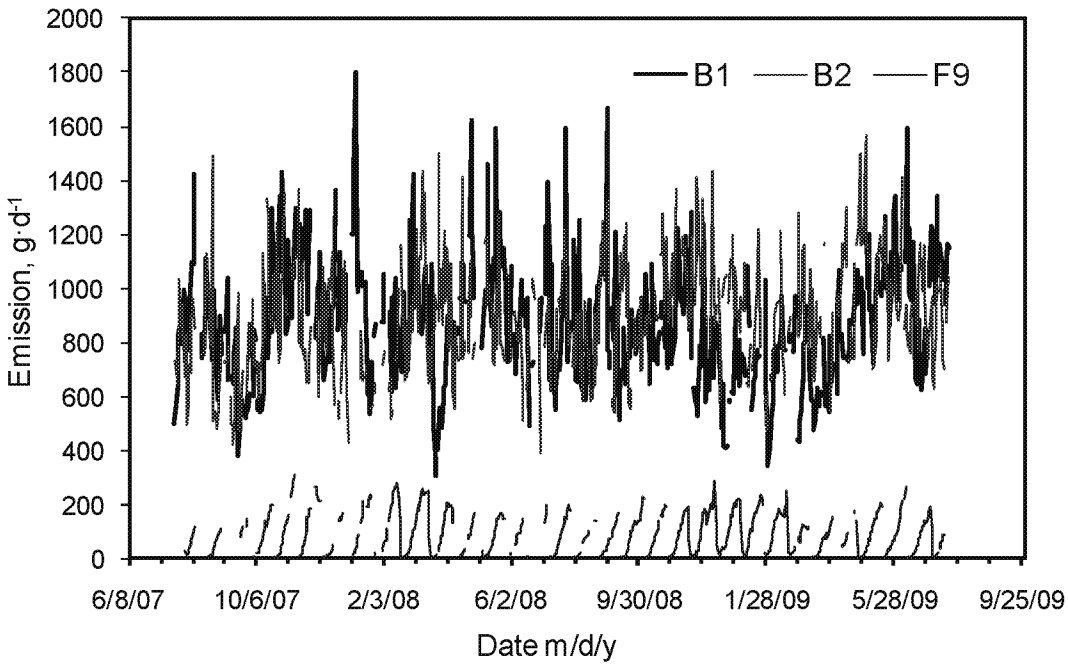

Figure 9. Daily mean H2S emission rates.

4.7. Ammonia Concentration and Emissions

Daily mean inlet and exhaust NH_3 concentrations for the entire test are provided in Table E5. The ADM (±SD) NH_3 concentrations were approximately 0.3±0.2 (n=705) ppm in the inlet air, and 6.9±3.4 (n=667), 7.2±3.9 (n=666) and 4.3±2.2 (n=640) ppm in the exhausts of B1, B2 and B3, respectively.

Daily mean NH_3 emissions from B1, B2 and B3 are tabulated in Table E6 and plotted in Figure 10 for the entire test period. The NH_3 emission rates exhibited an increasing trend corresponding to piglet age in the farrowing room, and higher emission rates occurred during the summer months.

The ADM (±SD) NH_3 emission rates from B1, B2 and B3 were 10.8±2.2 (n=612), 11.3±1.5 (n=581) kg d^{-1} and 458±144 (n=571) g d^{-1}, respectively.

The ADM (±SD) sow-specific NH_3 emission rates from B1, B2 and B3 were 9.25±1.85 (n=612), 9.61±1.28 (n=581) and 19.1±6.0 (n=565) g d^{-1} hd^{-1}, respectively.

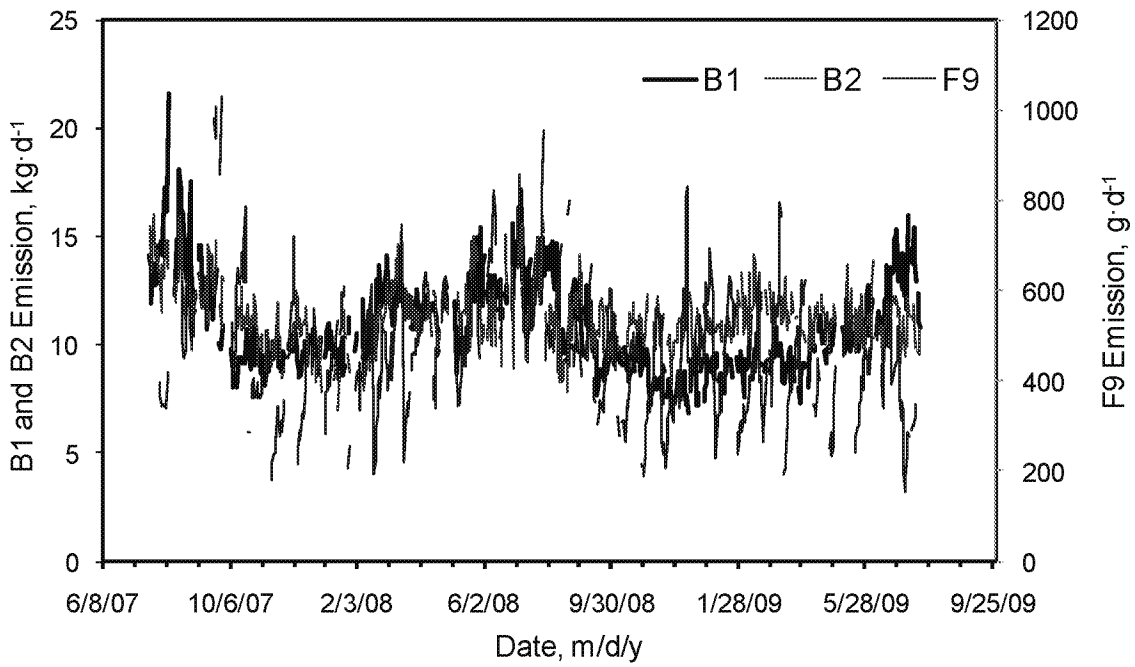

Figure 10. Daily mean NH_3 emission rates.

4.8. Emission Data Completeness

Daily completeness data is given in Table E12, and summarized in Table 23. The number of complete data days (>75% valid required for reporting a daily mean) were calculated for emission measurements conducted from 7/19/07 to 7/19/09. The NH_3 and H_2S emission rate

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completeness values represent more than 75% of the monitoring period. The quantity of $PM_{2.5}$ and TSP emissions data for B3 was reduced by TEOM failures.

Table 23. Emissions data completeness.

Location	Days with >75% valid emission data				
	NH_3	H_2S	PM_{10}	$PM_{2.5}$	TSP
B1	612	621	495	43	88
B2	581	591	435	42	81
B3	571	584	431	11	65

4.9. Reconciliation with Data Quality Objectives

The data quality objectives prior to the study were to measure gas and PM emissions from mechanically-ventilated buildings with total relative uncertainties of 27% and 32%, respectively.

4.9.1. Airflow

The overall average airflows for B1, B2 and B3 were 32.0 ± 17.0 $dsm^3 s^{-1}$ (n=645), 33.9 ± 16.8 $dsm^3 s^{-1}$ (n=618), and 2.48 ± 1.54 $dsm^3 s^{-1}$ (n=588), respectively. An average of one small and four large fans operated in barns 1 and 2 at which condition the airflow measurement uncertainty was 11.9%, based on the fan models.

An average of one of two fans operated in the farrowing room. The airflow uncertainty in the farrowing room with one fan operating was 28%, based on the fan models.

4.9.2. Gas Emissions

The bias and precision of NH_3 concentration measurements were derived from the NH_3 zero/span checks as compared with the NH_3 correction models (Table 9). The bias and precision of NH_3 measurements were 0.0% and 1.7%, respectively.

The bias and precision of H_2S concentration measurements were derived from the H_2S zero and span checks as compared with the H_2S correction models (Table 11). The bias and precision of H_2S measurements were 0.0% and 2.0%, respectively.

Based on these measurement errors calculated for concentrations and airflows, the uncertainties of NH_3 and H_2S emissions from the gestation barns were 12.7 and 12.9%, respectively. The uncertainties of NH_3 and H_2S emissions from the farrowing room were 28.4% and 28.4%, respectively.

4.9.3. PM Emissions

The precision of PM_{10}, TSP and $PM_{2.5}$ concentration measurements were 5.0, 5.8, and 17.7% based on collocation tests of the three TEOMs in ambient air (Table 17). The relative biases of the TEOMs were -0.1, 0.7, and -0.2% for B1, B2 and B3. (Table 13, Table 14, and Table 15). The uncertainties of PM_{10}, TSP and $PM_{2.5}$ emissions from B1 were 15.9, 16.9, and 37.5%, respectively. The uncertainties of PM_{10}, TSP and $PM_{2.5}$ emissions from B2 were 15.9, 16.9, and 37.5%, respectively. The uncertainties of PM_{10}, TSP and $PM_{2.5}$ emissions from B3 were 29.9, 30.4 and 45.2%, respectively.

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5. SUMMARY

The emissions of NH_3, H_2S, PM_{10}, TSP, $PM_{2.5}$ and VOCs from two 1200-sow gestation barns (B1 and B2) and a room (B3) in a 16-room farrowing barn at a breeding and gestation facility in Oklahoma were measured during a two-year monitoring study. Manure was flushed weekly and the manure pits recharged in the gestation barns, and between batches in the farrowing rooms. The buildings were tunnel-ventilated with single-speed fans.

The overall average emission rates from B1 were 10.8 kg d^{-1} of NH_3, 864 g d^{-1} of H_2S, 345 g d^{-1} of PM_{10}, 28 g d^{-1} of $PM_{2.5}$, 630 g d^{-1} of TSP, and 2.23 kg d^{-1} of total VOC. The overall average emission rates from B2 were 11.3 kg d^{-1} of NH_3, 885 g d^{-1} of H_2S, 494 g d^{-1} of PM_{10}, 49 g d^{-1} of $PM_{2.5}$, 787 g d^{-1} of TSP, and 3.63 kg d^{-1} of total VOC. The overall average emission rates from B3 were 548 g d^{-1} of NH_3, 97 g d^{-1} of H_2S, 40 g d^{-1} of PM_{10}, 5 g d^{-1} of $PM_{2.5}$, 117 g d^{-1} of TSP, and 0.29 kg d^{-1} of total VOC.

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7. DEFINITIONS AND ACRONYMS

AirDAC	Air Data Acquisition and Control – computer program
ADM	Average daily mean
B1	Gestation Barn 1
B2	Gestation Barn 2
BESS	Bioenvironmental and Structural Systems lab at University of Illinois
CAI	California Analytical Instruments
CAPECAB	Calculations of Air Pollutant Emissions from Confined Animal Buildings
CO_2	Carbon dioxide
CH_4	Methane
DM	Daily mean
ΔP	Differential pressure
B3	Farrowing Room 9
FANS	Fan Airflow Numeration System
GC-MS	Gas chromatograph mass spectrometer
GSL	Gas sampling location(s)
GSS	Gas sampling system
H_2S	Hydrogen sulfide
MDL	Minimum detection limit
MPC	Multipoint calibration
MS	Mass spectrometer
n	Number or count
NAEMS	National Air Emissions Monitoring Study
NH_3	Ammonia
NMHC	Non-methane hydrocarbons
QA	Quality assurance
QAPP	Quality Assurance Project Plan
QC	Quality control
OFIS	On farm instrument shelter
PM	Particulate matter
PREF	Primary representative exhaust fan
RH/T	Relative humidity/temperature
RH	Relative humidity
SD	Standard deviation
T_{dew}	Dew point temperature
TAR	Texas Agrilife Research
TDS	Thermal desorption system
TEOM	Tapered element oscillating microbalance
TSP	Total suspended particulate
VOC	Volatile organic compounds
Z/S	Zero/span

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APPENDIX A. MEASUREMENT VARIABLES.

Table A1. Site measurement variables, instruments and sensors, and digital controls.

Data Col#	Data file heading	Instrument, sensor, controller	Sensor location	Monitoring/control location	Range / target	DAC hardware
1	Date & time	---				---
2	Smpl loc#	---				---
3	Cal gas #	Environics	Rack	12 gas smpl locations	0-7 gas #	---
4	Cal gas, ppm	Environics	Rack	12 gas smpl locations	From 0	---
5	NH3, ppm	Innova 1412	Rack	12 gas smpl locations	From 0.2	---
6	CO2, ppm	Innova 1412	Rack	12 gas smpl locations	From 3.4	---
7	Reserved	Innova 1412				---
8	Reserved	Innova 1412				---
9	Reserved	Innova 1412				---
10	WV. Tdew	Innova 1412	Rack	12 gas smpl locations	Not available	---
11	H2S, ppb	H2S analyzer	Rack	12 gas smpl locations	0-2000	FP-AI-112-1
12	SO2, ppb	H2S analyzer	Rack	12 gas smpl locations	0-2000	FP-AI-112-1
13	Smpl P, Pa	Setra 209 P	GSS	12 gas smpl locations	0-14.7 psiv	FP-AI-112-1
14	Smpl Q, L/m	Mass flow	GSS	12 gas smpl locations	0-10	FP-AI-112-1
15	Smpl RH, %	Humitter 50Y	GSS	12 gas smpl locations	0-100	FP-AI-112-1
16	Smpl T, C	Humitter 50Y	GSS	12 gas smpl locations	-40 to 60	FP-AI-112-1
17	Smpl dir, %t	Flow direction	GSS	12 gas smpl locations	-0.065 - 0.065 V	FP-AI-112-1
18	GSS T, C	AD 592D T	GSS	GSS	0-70 deg C	FP-AI-112-1
19	B1 PM, ug/m3	TEOM #1	B1	B1 Fan 12	-1000-9000	FP-AI-112-1
20	B1 Filter, %	TEOM #1	B1	B1 Fan 12	0-140%	FP-AI-112-1
21	B1 Atm P, Pa	TEOM #1	B1	B1 Fan 12	0.8-1.3 atm	FP-AI-112-1
22	B2 PM, ug/m3	TEOM #2	B2	B2 Fan 2	-1000-9000	FP-AI-112-1
23	B2 Filter, %	TEOM #2	B2	B2 Fan 2	0-140%	FP-AI-112-1
24	B3 PM, ug/m3	TEOM #3	B3	B3 Fan 1	-1000-9000	FP-AI-112-1
25	B3 Filter, %	TEOM #3	B3	B3 Fan 1	0-140%	FP-AI-112-1
26	Amb PM, ug/m3	Beta Gage	Amb	1.8 m above OFIS	-1000-9000	FP-AI-112-1
27	Reserved					
28	B1N dP, Pa	Setra 260 P #1	OFIS	B1 N wall	-100 to 100	FP-AI-112-2
29	B1E dP, Pa	Setra 260 P #2	OFIS	B1 E wall	-100 to 100	FP-AI-112-2
30	B1S dP, Pa	Setra 260 P #3	OFIS	B1 S wall	-100 to 100	FP-AI-112-2
31	B2N dP, Pa	Setra 260 P #4	OFIS	B2 N wall	-100 to 100	FP-AI-112-2

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Data Col#	Data file heading	Instrument, sensor, controller	Sensor location	Monitoring/control location	Range / target	DAC hardware
32	B2E dP, Pa	Setra 260 P #5	OFIS	B2 E wall	-100 to 100	FP-AI-112-2
33	B2S dP, Pa	Setra 260 P #6	OFIS	B2 S wall	-100 to 100	FP-AI-112-2
34	B3S dP, Pa	Setra 260 P #7	Barn	B3 S wall	-100 to 100	FP-AI-112-2
35	OFIS dP, Pa	Setra 260 P #8	OFIS	OFIS wall	-100 to 100	FP-AI-112-2
36	Wind D, deg	05103-5 Wind Monitor	Roof	Roof top tower	0-360	FP-AI-112-2
37	Wind V, m/s	05103-5 Wind Monitor	Roof	Roof top tower	0-50	FP-AI-112-2
38	Solar, W/m2	Solar sensor	Roof	Roof top tower	0-1500	FP-AI-112-2
39	Amb RH, %	NOVUS RHT-WM #1	Roof	Roof top tower	0-100	FP-AI-112-2
40	Amb T, C	NOVUS RHT-WM #1	Roof	Roof top tower	-30 - 50	FP-AI-112-2
41	B1F12 RH, %	NOVUS RHT-WM #2	B1 F12	B1 Fan 12	0-1	FP-AI-112-2
42	B1F12 T, C	NOVUS RHT-WM #2	B1 F12	B1 Fan 12	0 - 50	FP-AI-112-2
43	B2F2 RH, %	NOVUS RHT-WM #3	B2 F2	B2 Fan 2	0-100	FP-AI-112-3
44	B2F2 T, C	NOVUS RHT-WM #3	B2 F2	B2 Fan 2	0 - 50	FP-AI-112-3
45	B3F1 RH, %	NOVUS RHT-WM #4	Far 9 F1	B3 Fan 1	0-100	FP-AI-112-3
46	B3F1 T, C	NOVUS RHT-WM #4	Far 9 F1	B3 Fan 1	0 - 50	FP-AI-112-3
47	B1N Act , V	Activity #1	B1 N	B1 N side	0 to 2	FP-AI-112-3
48	B1Mid Act , V	Activity #2	B1 Mid	B1 Middle	0 to 2	FP-AI-112-3
49	B1S Act , V	Activity #3	B1 S	B1 S side	0 to 2	FP-AI-112-3
50	B2N Act , V	Activity #4	B2 N	B2 N side	0 to 2	FP-AI-112-3
51	B2Mid Act , V	Activity #5	B2 Mid	B2 Middle	0 to 2	FP-AI-112-3
52	B2S Act , V	Activity #6	B2 S	B2 S side	0 to 2	FP-AI-112-3
53	B3 Act , V	Activity #7	B3	B3 Middle	0 to 2	FP-AI-112-3
54	OFIS Act , V	Activity #8	OFIS	OFIS	0 to 2	FP-AI-112-3
55	B1 F12 V, m/s	RMY Anemometer	B1 F12	B1 F12	-17 to 17	FP-AI-112-3
56	B1 F13 V, m/s	RMY Anemometer	B1 F13	B1 F13	-17 to 17	FP-AI-112-3
57	B2 F2 V, m/s	RMY Anemometer	B2 F2	B2 F2	-17 to 17	FP-AI-112-3
58	B3 F1 V, m/s	RMY Anemometer	B3 F1	B3 F1	-17 to 17	FP-AI-112-3
59	B1W T, C	TC T type	B1 W	B1 W end	-270 to 390	FP-TC-120-1
60	B1MidW T, C	TC T type	B1 WC	B1 W of middle of barn	-270 to 390	FP-TC-120-1
61	B1MidE T, C	TC T type	B1 EC	B1 E of middle of barn	-270 to 390	FP-TC-120-1
62	B1E T, C	TC T type	B1 E	B1 E end	-270 to 390	FP-TC-120-1
63	B1F1 T, C	TC T type	B1 F1	B1 Fan 1	-270 to 390	FP-TC-120-1
64	B1F13 T, C	TC T type	B1 F13	B1 Fan 13	-270 to 390	FP-TC-120-1
65	B1F2 T, C	TC T type	B1 F2	B1 Fan 2	-270 to 390	FP-TC-120-1

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Data Col#	Data file heading	Instrument, sensor, controller	Sensor location	Monitoring/control location	Range / target	DAC hardware
66	B2W T, C	TC T type	B2 W	B2 W end	-270 to 390	FP-TC-120-1
67	B2MidW T, C	TC T type	B2 WC	B2 W of middle of barn	-270 to 390	FP-TC-120-2
68	B2MidE T, C	TC T type	B2 EC	B2 E of middle of barn	-270 to 390	FP-TC-120-2
69	B2E T, C	TC T type	B2 E	B2 E end	-270 to 390	FP-TC-120-2
70	B2F1 T, C	TC T type	B2 F1	B2 Fan 1	-270 to 390	FP-TC-120-2
71	B2F13 T, C	TC T type	B2 F13	B2 Fan 13	-270 to 390	FP-TC-120-2
72	B2F12 T, C	TC T type	B2 F12	B2 Fan 12	-270 to 390	FP-TC-120-2
73	B3Inlet T, C	TC T type	R9 Inlet	Farrrowing Room 9 Inlet	-270 to 390	FP-TC-120-2
74	Hall HT T, C	TC T type	Hall HT	Raceway B1 to Farrowing	-270 to 390	FP-TC-120-2
75	B1 HT T, C	TC T type	B1 HT	Raceway within B1	-270 to 390	FP-TC-120-3
76	RwyB1 T T, C	TC T type	Rwy B1 HT	Raceway OFIS to B1	-270 to 390	FP-TC-120-3
77	B3 F1 T, C	TC T type	B3 Inlet	B3 F1	-270 to 390	FP-TC-120-3
78	RwyB2 T, C	TC T type	Rwy B2 T	Raceway OFIS to B2	-270 to 390	FP-TC-120-3
79	OFIS HT T, C	TC T type	OFIS	OFIS Raceway	-270 to 390	FP-TC-120-3
80	AC Ctr Reg T, C	TC T type	AC Ctr Reg	AC Center Register	-270 to 390	FP-TC-120-3
81	AC Rtn Reg T, C	TC T type	AC Rtn Reg	AC Return Register	-270 to 390	FP-TC-120-3
82	TEOM Pumps T, C	TC T type	Cmpt	TEOM pump compt	-270 to 390	FP-TC-120-3
83	B1F1, rpm	Fan speed sensor	B1F1	Fan shaft or support	0 to 5000	USB-4303-1
84	B1F2, rpm	Fan speed sensor	B1F2	Fan shaft or support	0 to 5000	USB-4303-1
85	B1F3, rpm	Fan speed sensor	B1F3	Fan shaft or support	0 to 5000	USB-4303-1
86	B1F4, rpm	Fan speed sensor	B1F4	Fan shaft or support	0 to 5000	USB-4303-1
87	B1F5, rpm	Fan speed sensor	B1F5	Fan shaft or support	0 to 5000	USB-4303-1
88	B1F6, rpm	Fan speed sensor	B1F6	Fan shaft or support	0 to 5000	USB-4303-1
89	B1F7, rpm	Fan speed sensor	B1F7	Fan shaft or support	0 to 5000	USB-4303-1
90	B1F8, rpm	Fan speed sensor	B1F8	Fan shaft or support	0 to 5000	USB-4303-1
91	B1F9, rpm	Fan speed sensor	B1F9	Fan shaft or support	0 to 5000	USB-4303-1
92	B1F10, rpm	Fan speed sensor	B1F10	Fan shaft or support	0 to 5000	USB-4303-1
93	B1F11, rpm	Fan speed sensor	B1F11	Fan shaft or support	0 to 5000	USB-4303-2
94	B1F12, rpm	Fan speed sensor	B1F12	Fan shaft or support	0 to 5000	USB-4303-2
95	B1F13, rpm	Fan speed sensor	B1F13	Fan shaft or support	0 to 5000	USB-4303-2
96	B2F1, rpm	Fan speed sensor	B2F1	Fan shaft or support	0 to 5000	USB-4303-2
97	B2F2, rpm	Fan speed sensor	B2F2	Fan shaft or support	0 to 5000	USB-4303-2
98	B2F3, rpm	Fan speed sensor	B2F3	Fan shaft or support	0 to 5000	USB-4303-2
99	B2F4, rpm	Fan speed sensor	B2F4	Fan shaft or support	0 to 5000	USB-4303-2

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Data Col#	Data file heading	Instrument, sensor, controller	Sensor location	Monitoring/control location	Range / target	DAC hardware
100	B2F5, rpm	Fan speed sensor	B2F5	Fan shaft or support	0 to 5000	USB-4303-2
101	B2F6, rpm	Fan speed sensor	B2F6	Fan shaft or support	0 to 5000	USB-4303-2
102	B2F7, rpm	Fan speed sensor	B2F7	Fan shaft or support	0 to 5000	USB-4303-2
103	B2F8, rpm	Fan speed sensor	B2F8	Fan shaft or support	0 to 5000	USB-4303-3
104	B2F9, rpm	Fan speed sensor	B2F9	Fan shaft or support	0 to 5000	USB-4303-3
105	B2F10, rpm	Fan speed sensor	B2F10	Fan shaft or support	0 to 5000	USB-4303-3
106	B2F11, rpm	Fan speed sensor	B2F11	Fan shaft or support	0 to 5000	USB-4303-3
107	B2F12, rpm	Fan speed sensor	B2F12	Fan shaft or support	0 to 5000	USB-4303-3
108	B2F13, rpm	Fan speed sensor	B2F13	Fan shaft or support	0 to 5000	USB-4303-3
109	FarF1_1, rpm	Fan speed sensor	FarF1	Fan shaft or support	0 to 5000	USB-4303-3
110	FarF2_1, rpm	Fan speed sensor	FarF2	Fan shaft or support	0 to 5000	USB-4303-3
111	FarF1_2, rpm	Fan speed sensor	FarF1	Fan shaft or support	0 to 5000	USB-4303-3
112	FarF2_2, rpm	Fan speed sensor	FarF2	Fan shaft or support	0 to 5000	USB-4303-3
113	B1Fstg2, R1 %t	Barn controller	B1Fstg1	Barn control cabinet	0-100%t	DIO 96H/50
114	B1Fstg3, R2 %t	Barn controller	B1Fstg2	Barn control cabinet	0-100%t	DIO 96H/50
115	B1Fstg4, R3 %t	Barn controller	B1Fstg3	Barn control cabinet	0-100%t	DIO 96H/50
116	B1Fstg5, R4 %t	Barn controller	B1Fstg4	Barn control cabinet	0-100%t	DIO 96H/50
117	B1Fstg6, R5 %t	Barn controller	B1Fstg5	Barn control cabinet	0-100%t	DIO 96H/50
118	B1 Heater, R6 %t	Barn controller	B1Fstg6	Barn control cabinet	0-100%t	DIO 96H/50
119	B2Fstg2, R1 %t	Barn controller	B2Fstg1	Barn control cabinet	0-100%t	DIO 96H/50
120	B2Fstg3, R2 %t	Barn controller	B2Fstg2	Barn control cabinet	0-100%t	DIO 96H/50
121	B2Fstg4, R3 %t	Barn controller	B2Fstg3	Barn control cabinet	0-100%t	DIO 96H/50
122	B2Fstg5, R4 %t	Barn controller	B2Fstg4	Barn control cabinet	0-100%t	DIO 96H/50
123	B2Fstg6, R5 %t	Barn controller	B2Fstg5	Barn control cabinet	0-100%t	DIO 96H/50
124	B2 Heater, R6 %t	Barn controller	B2Fstg6	Barn control cabinet	0-100%t	DIO 96H/50
125	B3 R1, %t	Barn controller	Non-functioning	Barn control cabinet	0-100%t	DIO 96H/50
126	B3 R2, %t	Barn controller	Non-functioning	Barn control cabinet	0-100%t	DIO 96H/50
127	B3 R3, %t	Barn controller	B3 Space Heater	Barn control cabinet	0-100%t	DIO 96H/50
128	B3 R4, %t	Barn controller	B3 Heat Lamps	Barn control cabinet	0-100%t	DIO 96H/50
129	Rec Pump, %t	Barn controller	Rec Pump	Barn control cabinet	0-100%t	DIO 96H/50
		Solenoid #1	GSS	Amb (middle of B1 S side)	On/off control	FP-DO-401-1
		Solenoid #2	GSS	B2 Fan 1	On/off control	FP-DO-401-1
		Solenoid #3	GSS	B1 Fan 1	On/off control	FP-DO-401-1
		Solenoid #4	GSS	B2 Fan 2	On/off control	FP-DO-401-1

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Data Col#	Data file heading	Instrument, sensor, controller	Sensor location	Monitoring/control location	Range / target	DAC hardware
		Solenoid #5	GSS	B1 Fan 2	DO control	FP-DO-401-1
		Solenoid #6	GSS	B2 Fan 12	DO control	FP-DO-401-1
		Solenoid #7	GSS	B1 Fan 12	DO control	FP-DO-401-1
		Solenoid #8	GSS	B2 Fan 13	DO control	FP-DO-401-1
		Solenoid #9	GSS	B1 Fan 13	DO control	FP-DO-401-1
		Solenoid #10	GSS	B3 Inlet to room	DO control	FP-DO-401-1
		Solenoid #11	GSS	B3 N wall	DO control	FP-DO-401-1
		Solenoid #12	GSS	B3 Fan 1	DO control	FP-DO-401-1
		Cooling Fan	GSS	GSS fan	DO control	FP-DO-401-1
		Solid State Relay	Hall HT	Raceway B1 to Farrowing	DO control	FP-DO-401-1
		Solid State Relay	B1 HT	Raceway within B1	DO control	FP-DO-401-1
		Solid State Relay	Rwy B1 HT	Raceway OFIS to B1	DO control	FP-DO-401-1
		Solid State Relay	Rwy B2 HT	Raceway OFIS to B2	DO control	FP-DO-401-2
		Solid State Relay	OFIS HT	OFIS Raceway	On/off control	FP-DO-401-2

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APPENDIX B. RECORD OF MAINTENANCE AND CALIBRATION.

Maintenance and Calibration Tasks	
Category	**Times Completed**
Environment Sensing and Other	
Clean RH/T probe	7
Calibration check of RH/T probe	13
Calibration check of thermocouples	11
Performance check of weather station	3
Direction verification of wind indicator	3
Clean solar sensor	23
Check solar sensor with collocated sensor	56
Clean motion sensors	24
Air Flow Measurement System	
Fan test events	3
Zero check of pressure sensors (ΔP)	15
Multipoint calibration of pressures sensors (ΔP)	4
Drift & accuracy check of anemometer(s)	7
Particulate Matter Measurement System	
Clean TOEM screens	21
Check/clean TEOM inlet head(s)	22
Replace TEOM filters	44
Verify TEOM mass transducer calibration	14
Leak test of TEOM	17
Verify TEOM flow rate & MFC accuracy	22
Change TEOM in-line filters	3
Check/clean Beta Gauge inlet head	27
Check Beta Gauge airflow	6
Validate Beta Gauge mass w/foil set	4
Calibrate Beta Gauge mass & airflow	2
Gas Measurement System	
Clean/replace GSS membrane filters	25
Leak check of GSS	13
Calibration check of all lines	5
Replace GSS filters	1
Calibrate GSS pressure and flow sensors	9
Flow calibration/check MFC flow of Environics Dilutor	2
Precision check of Multigas Analyzer	104
Multipoint calibration of Multigas Analyzer	11
Precision check of TEC 450I	104
Multipoint calibration of TEC 450I	12

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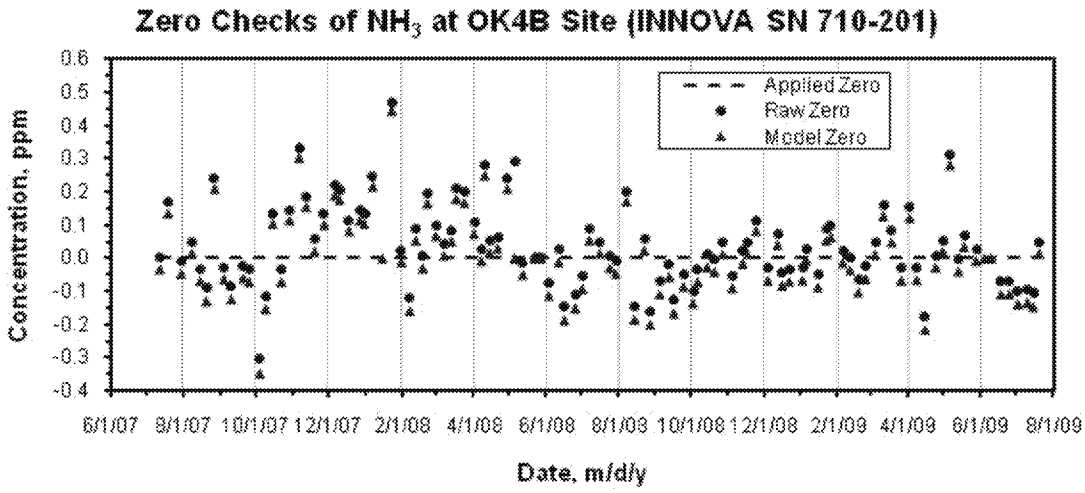
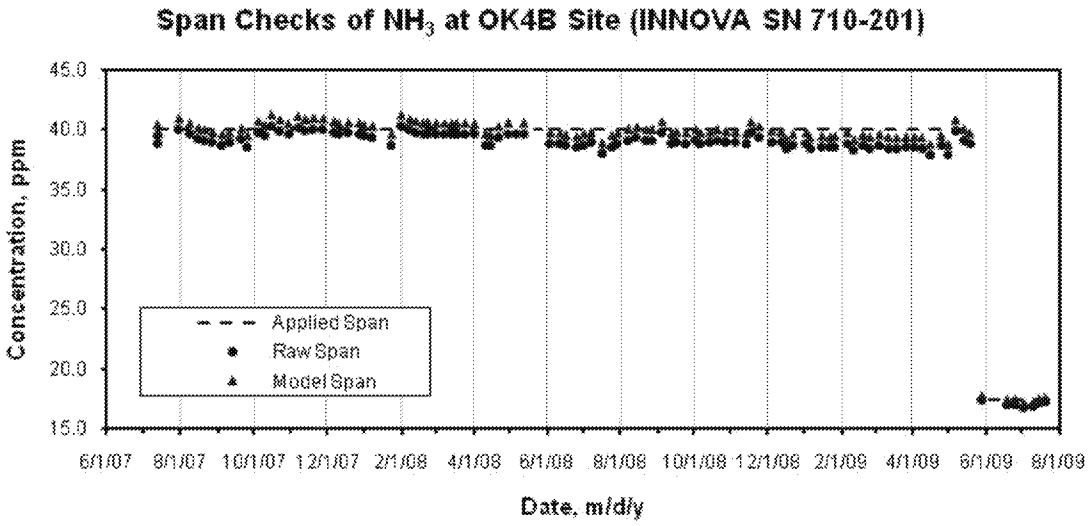
APPENDIX C. GAS ANALYZER CALIBRATIONS.

AMMONIA





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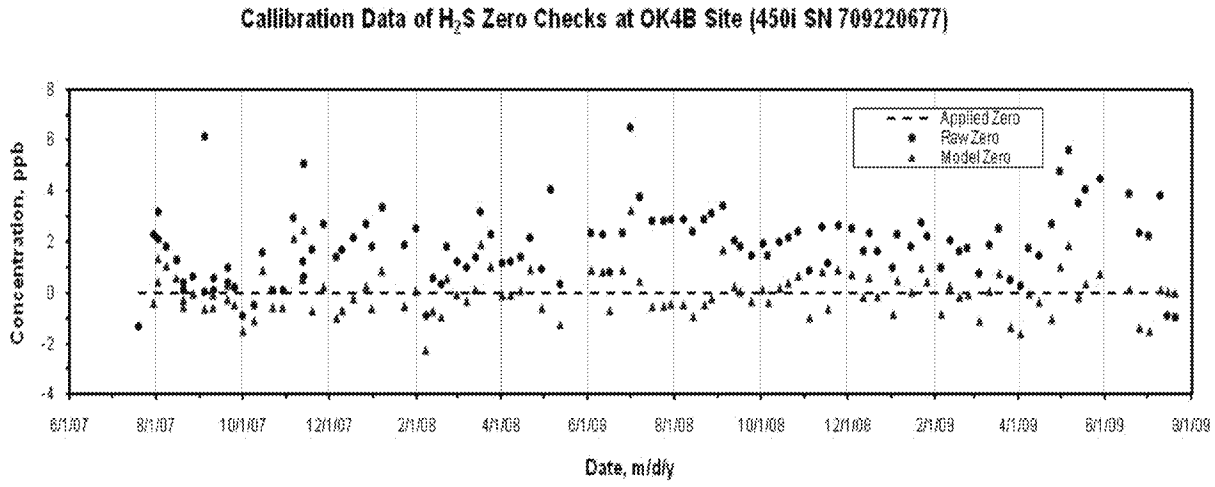
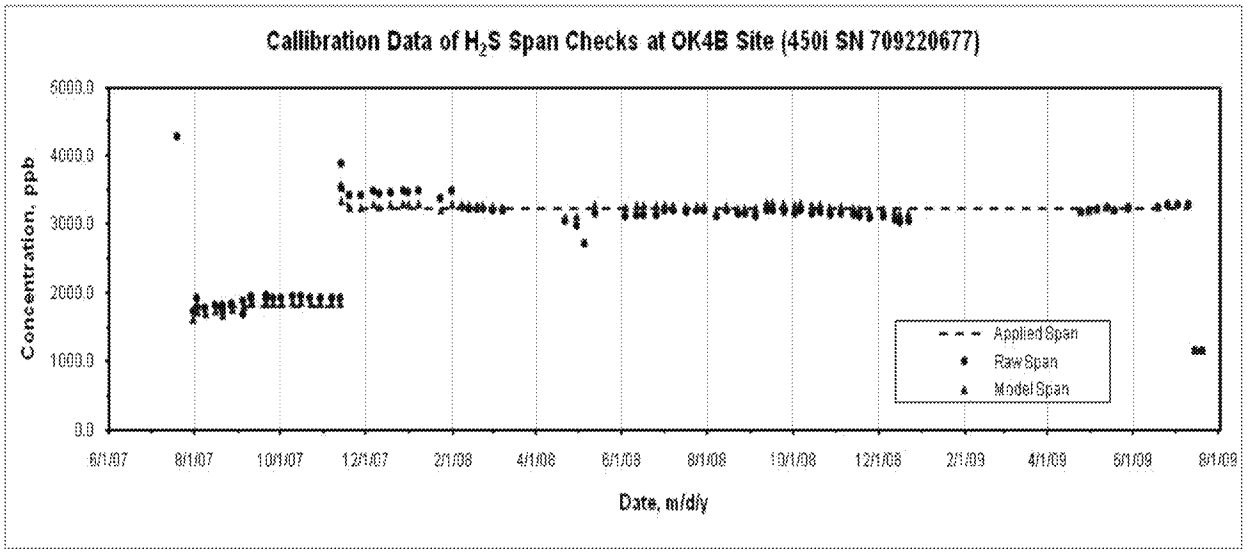
HYDROGEN SULFIDE





APPENDIX D. MAJOR DATA INVALIDATIONS.

Variable	Start time	End time	Min	Comment
Cal gas #	5/28/09 11:19	6/18/09 8:44	30086	Off-FN indicate Environics offline for recalibration
Cal gas conc	5/28/09 11:19	6/18/09 8:44	30086	Off-FN indicate Environics offline for recalibration
AirDAC NH3	1/27/08 6:13	1/31/08 12:35	6142	Low Flow
AirDAC NH3	5/2/09 12:41	5/6/09 9:04	5544	Failure-FN indicate failure of filter carousel drive wheel
AirDAC CO2	1/27/08 6:13	1/31/08 12:35	6142	Low Flow
AirDAC CO2	5/2/09 12:41	5/6/09 9:04	5544	Failure-FN indicate failure of filter carousel drive wheel
WV	1/27/08 6:13	1/31/08 12:35	6142	Low Flow
WV	5/2/09 12:41	5/6/09 9:04	5544	Failure-FN indicate failure of filter carousel drive wheel
AirDAC H2S	1/27/08 6:13	1/31/08 12:35	6142	Low Flow
AirDAC SO2	1/27/08 6:13	1/31/08 12:35	6142	Low Flow
Smpl P	1/27/08 6:13	1/31/08 12:35	6142	Low Flow
Smpl Q	12/31/07 22:22	2/18/08 4:21	69480	Off
Smpl Q	12/31/07 22:22	2/18/08 4:21	69479	Off
Smpl Q	1/27/08 6:13	1/31/08 12:35	6142	Low Flow
Smpl RH	1/27/08 6:13	1/31/08 12:35	6142	Low Flow
Smpl RH	6/21/08 7:41	8/14/08 13:02	78082	Failure-sensor signals do not agree with other measurements
Smpl RH	8/27/08 11:46	10/14/08 13:55	69250	Off-sensor removed from GSS
Smpl RH	8/14/08 9:05	8/27/08 12:48	18944	Off-FN indicate sensor removed from GSS
Smpl RH	8/27/08 11:46	10/14/08 13:55	69250	Off-sensor removed from GSS
Smpl T	1/27/08 6:13	1/31/08 12:35	6142	Low Flow
Smpl T	6/21/08 7:41	8/14/08 13:02	78082	Failure-sensor signals do not agree with other measurements
Smpl T	8/27/08 11:46	10/14/08 13:55	69250	Off-sensor removed from GSS
Smpl T	8/14/08 9:05	8/27/08 12:48	18944	Off-FN indicate sensor removed from GSS
Smpl T	8/27/08 11:46	10/14/08 13:55	69250	Off-sensor removed from GSS
Smpl dir	1/27/08 6:13	1/31/08 12:35	6142	Low Flow
B1 PM	8/16/08 1:23	8/19/08 9:32	4810	Systematic Error-FN indicate problem with temperature sensor
B1 PM	7/20/09 6:22	7/24/09 0:14	5393	Off-TEOM offline for collocation tests and site shutdown
B1 PM	4/15/09 13:26	4/17/09 11:36	2771	DAQ-FN indicate problem with analog output
B1PM_download	10/17/07 12:03	12/1/07 20:19	65297	DAQ-Download data not available

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Variable	Start time	End time	Min	Comment
B1PM_download	5/22/08 9:33	6/5/08 7:20	20028	DAQ-Downloaded data not available
B1PM_download	4/2/08 9:22	4/3/08 11:34	1573	DAQ-Download data not available
B1 Filter	8/16/08 1:23	8/19/08 9:32	4810	Systematic Error-FN indicate problem with temperature sensor
B1 Filter	7/20/09 6:22	7/24/09 0:14	5393	Off-TEOM offline for collocation tests and site shutdown
B1 Filter	4/15/09 13:26	4/17/09 11:36	2771	DAQ-FN indicate problem with analog output
B2 PM	3/30/08 18:48	4/3/08 15:35	5567	Systematic Error-FN indicate a problem with the control cable
B2 PM	3/30/08 18:48	4/3/08 15:35	5568	Systematic Error-FN indicate a problem with the control cable
B2 PM	11/20/08 12:31	12/12/08 7:03	31353	Failure-FN indicate CPU board failure
B2 PM	10/15/08 21:01	11/4/08 9:47	28127	Failure-FN indicate control unit had faulty RAM chip
B2 PM	10/11/08 14:36	10/14/08 10:44	4089	Off-FN indicate sensor removed for repairs
B2 PM	11/18/08 15:51	11/20/08 13:29	2739	Failure-FN indicate CPU board needed replacement
B2 PM	7/20/09 6:22	7/24/09 0:14	5393	Off-TEOM offline for collocation tests and site shutdown
B2 Filter	3/30/08 18:48	4/3/08 15:35	5567	Systematic Error-FN indicate a problem with the control cable
B2 Filter	3/30/08 18:48	4/3/08 15:35	5568	Systematic Error-FN indicate a problem with the control cable
B2 Filter	11/20/08 12:31	12/12/08 7:03	31353	Failure-FN indicate CPU board failure
B2 Filter	10/15/08 21:01	11/4/08 9:47	28127	Failure-FN indicate control unit had faulty RAM chip
B2 Filter	10/11/08 14:36	10/14/08 10:44	4089	Off-FN indicate sensor removed for repairs
B2 Filter	11/18/08 15:51	11/20/08 13:29	2739	Failure-FN indicate CPU board needed replacement
B2 Filter	7/20/09 6:22	7/24/09 0:14	5393	Off-TEOM offline for collocation tests and site shutdown
B3 PM	1/23/08 11:45	1/24/08 12:52	1507	Off-FN indicate B3 sensors and instrument removed for room cleaning
B3 PM	6/25/08 14:22	7/2/08 13:18	10017	Failure-FN indicate cable problem and tapered element problem
B3 PM	7/2/08 11:15	8/19/08 11:43	69149	Off-FN indicate sensor offline while being repaired by manufacturer
B3 PM	12/12/08 16:34	12/16/08 10:34	5401	Low Flow-FN indicate leak in main line
B3 PM	7/20/09 6:22	7/24/09 0:14	5393	Off-TEOM offline for collocation tests and site shutdown
B3 Filter	1/23/08 11:45	1/24/08 12:52	1507	Off-FN indicate B3 sensors and instrument removed for room cleaning
B3 Filter	6/17/08 17:59	9/24/08 15:56	142438	Off-FN indicate sensor offline while DAQ channel used for another measurement
B3 Filter	6/16/08 11:09	6/17/08 19:33	1945	Off-FN indicate sensor offline while DAQ channel used for another measurement
B3 Filter	12/12/08 16:34	12/16/08 10:34	5401	Low Flow-FN indicate leak in main line

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Variable	Start time	End time	Min	Comment
B3 Filter	7/20/09 6:22	7/24/09 0:14	5393	Off-TEOM offline for collocation tests and site shutdown
Amb PM	6/11/08 8:55	6/16/08 11:38	7364	DAQ
Sol Radn 2	4/3/08 16:27	4/14/08 17:53	15927	Missing Data
Sol Radn 2	4/3/08 16:23	4/14/08 17:42	15920	Off
Sol Radn 2	4/3/08 16:10	4/14/08 17:28	15919	Missing Data
Sol Radn 2	4/16/08 13:13	4/21/08 10:13	7021	Off
Sol Radn 2	4/16/08 13:13	4/21/08 10:13	7021	Missing Data
Sol Radn 2	4/16/08 13:46	4/21/08 10:29	7004	Missing Data-Sensor not installed
Sol Radn 2	12/12/08 11:51	1/1/09 0:24	28114	Off-FN indicate second solar sensor removed - ghost signal of sensor 1
Sol Radn 2	12/12/08 11:51	1/1/09 0:24	28114	Off-FN indicate second solar sensor removed - ghost signal of sensor 1
B1N dP	4/18/09 15:57	4/19/09 18:00	1564	Systematic Error-sensor shows periodic instability
B2E dP	3/26/09 20:43	3/28/09 9:50	2228	Systematic Error-sensor likely temporarily plugged
B3S dP	4/10/08 6:41	4/14/08 13:36	6176	Systematic Error-Error detected in multiple farrowing room signals-not sure of cause
B3S dP	8/17/08 9:11	8/19/08 12:10	3060	Failure-FN indicate sensor lost calibration
B3S dP	8/16/08 1:06	8/16/08 18:59	1074	Systematic Error-sensor varying more than normal-sensor soon fails
B3S dP	4/2/09 6:09	4/9/09 7:18	10150	Failure-FN indicate sensor analog output failure
B3S dP	7/22/09 10:58	7/24/09 0:12	2235	Off-FN indicate sensor removed for site shutdown
OFIS dP	8/19/08 12:02	8/27/08 9:32	11371	Off-FN indicate sensor offline while being used as replacement in B3
OFIS dP	4/9/09 9:26	7/10/09 15:32	132847	Off-FN indicate sensor offline and used as replacement elsewhere
Solar	4/3/08 16:34	4/14/08 17:32	15899	Systematic Error-Solar sensor signal was unstable when second sensor was removed
Solar	4/16/08 14:42	4/21/08 10:22	6941	Systematic Error-Signal error results when second solar sensor not connected
Solar	12/12/08 12:01	12/16/08 12:55	5815	Systematic Error-signal unstable after second sensor disconnected-fixed using jumper wire
Amb RH	3/31/08 3:32	4/14/08 17:15	20983	Failure-FN indicate sensor failure
Amb RH	3/31/08 3:32	4/14/08 17:15	20984	Failure-FN indicate sensor failure
Amb RH	7/20/09 7:01	7/24/09 0:14	5354	Off-FN indicate sensors offline for site shutdown
Amb T	3/31/08 3:32	4/14/08 17:15	20983	Failure-FN indicate sensor failure
Amb T	3/31/08 3:32	4/14/08 17:15	20984	Failure-FN indicate sensor failure
Amb T	7/20/09 7:01	7/24/09 0:14	5354	Off-FN indicate sensors offline for site shutdown
B1F12 RH	7/21/08 12:55	7/24/08 9:19	4105	Failure-FN indicate sensor chip failure
B1F12 RH	7/20/09 7:01	7/24/09 0:14	5354	Off-FN indicate sensors offline for site shutdown
B1F12 T	7/21/08 12:55	7/24/08 9:19	4105	Failure-FN indicate sensor chip failure
B1F12 T	7/20/09 7:01	7/24/09 0:14	5354	Off-FN indicate sensors offline for site shutdown
B2F2 RH	1/20/08 9:42	1/23/08 12:38	4496	Systematic Error-Rh and T signals from this signal are flatlining periodically
B2F2 RH	7/3/08 10:54	7/7/08 6:44	5511	Failure-FN indicate sensor chip failed
B2F2 RH	7/20/09 7:01	7/24/09 0:14	5354	Off-FN indicate sensors offline for site shutdown

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Variable	Start time	End time	Min	Comment
B2F2 RH	4/18/09 16:33	4/20/09 13:29	2697	Failure-FN indicate sensor chip failure
B2F2 T	1/20/08 9:42	1/23/08 12:38	4496	Systematic Error-Rh and T signals from this signal are flatlining periodically
B2F2 T	7/3/08 10:54	7/7/08 6:44	5511	Failure-FN indicate sensor chip failed
B2F2 T	7/20/09 7:01	7/24/09 0:14	5354	Off-FN indicate sensors offline for site shutdown
B2F2 T	4/18/09 16:33	4/20/09 13:29	2697	Failure-FN indicate sensor chip failure
B3F1 RH	1/23/08 11:45	1/24/08 12:52	1507	Off-FN indicate B3 sensors and instrument removed for room cleaning
B3F1 RH	4/9/08 8:31	4/14/08 14:06	7536	Systematic Error
B3F1 RH	10/27/08 14:47	11/4/08 13:21	11435	Systematic Error-dewpoint comparison suggests problem with sensor following reinstallation
B3F1 RH	4/16/09 9:43	4/20/09 13:07	5965	DAQ-FN indicate signals offline because of short in RPM sensor
B3F1 RH	7/20/09 7:01	7/24/09 0:14	5354	Off-FN indicate sensors offline for site shutdown
B3F1 T	1/23/08 11:45	1/24/08 12:52	1507	Off-FN indicate B3 sensors and instrument removed for room cleaning
B3F1 T	4/9/08 8:31	4/14/08 14:06	7536	Systematic Error
B3F1 T	4/16/09 9:43	4/20/09 13:07	5965	DAQ-FN indicate signals offline because of short in RPM sensor
B3F1 T	7/20/09 7:01	7/24/09 0:14	5354	Off-FN indicate sensors offline for site shutdown
B1N Act	7/21/09 7:51	7/24/09 0:03	3853	Off-FN indicate in-barn activity sensors disconnected for site shutdown
B1Mid Act	7/21/09 7:51	7/24/09 0:03	3853	Off-FN indicate in-barn activity sensors disconnected for site shutdown
B1S Act	6/26/09 10:38	7/21/09 7:01	35784	Systematic Error-signal is outside of the normal range and not showing normal variation
B1S Act	7/21/09 7:51	7/24/09 0:03	3853	Off-FN indicate in-barn activity sensors disconnected for site shutdown
B2N Act	7/21/09 7:51	7/24/09 0:03	3853	Off-FN indicate in-barn activity sensors disconnected for site shutdown
B2Mid Act	7/21/09 7:51	7/24/09 0:03	3853	Off-FN indicate in-barn activity sensors disconnected for site shutdown
B2S Act	6/21/08 14:05	6/26/08 11:19	7035	Systematic Error-FN indicate problem with sensor - sensor replaced on 6/26
B2S Act	4/4/08 13:12	4/6/08 13:14	2883	Systematic Error-signal is not showing typical pattern - likely a problem with sensor
B2S Act	7/17/08 15:42	7/24/08 12:38	9897	DAQ-FN indicate power connection problem
B2S Act	7/21/09 7:51	7/24/09 0:03	3853	Off-FN indicate in-barn activity sensors disconnected for site shutdown
B3 Act	1/23/08 11:45	1/24/08 12:52	1507	Off-FN indicate B3 sensors and instrument removed for room cleaning
B3 Act	4/9/08 8:31	4/14/08 14:06	7536	Systematic Error
B3 Act	4/16/09 9:43	4/20/09 13:07	5965	DAQ-FN indicate signals offline because of short in RPM sensor
B3 Act	7/21/09 7:51	7/24/09 0:03	3853	Off-FN indicate in-barn activity sensors disconnected for site shutdown
B1 F12	2/22/08 11:29	2/29/08 15:11	10302	Off
B1 F12	9/24/08 11:47	10/2/08 8:44	11338	Off-FN indicate sensor removed for repairs
B1 F12	9/24/08 11:47	10/2/08 8:44	11338	Off-FN indicate sensor removed for repairs
B1 F12	11/17/08 11:47	11/20/08 14:34	4488	Failure-FN indicate anemometer sent back to manufacturer for repair
B1 F12	7/21/09 9:34	7/24/09 0:03	3750	Off-FN indicate sensor removed for site shutdown
B1 F13	5/28/09 7:31	6/4/09 10:46	10276	Off-FN indicate sensor offline and replaced with different sensor unit
B1 F13	7/21/09 9:54	7/24/09 0:03	3730	Off-FN indicate sensor removed for site shutdown
B2 F2	11/24/08	12/3/08 11:28	12819	Failure-FN indicate anemometer removed for repair

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Variable	Start time	End time	Min	Comment
	13:50			
B2 F2	11/19/08 21:02	11/24/08 13:57	6776	Systematic Error-Anemometer starting to show degraded status and is eventually removed for repair
B2 F2	7/21/09 9:38	7/24/09 0:03	3746	Off-FN indicate sensor removed for site shutdown
B3 F1	2/22/08 13:12	2/29/08 11:08	9956	Off-FN indicate anemometer removed for testing
B3 F1	1/23/08 11:45	1/24/08 12:52	1507	Off-FN indicate sensors and instruments removed for room cleaning
B3 F1	7/21/09 9:38	7/24/09 0:03	3746	Off-FN indicate sensor removed for site shutdown
B1W T	9/9/08 17:52	9/12/08 10:03	3852	Systematic Error-frequent step changes in signal were resolved by repairing the sensor tip
B1W T	7/22/09 10:11	7/24/09 0:02	2272	Sampling Elsewhere-FN indicate TCs secured up against ceiling for site shutdown
B1MidW T	7/22/09 10:11	7/24/09 0:02	2272	Sampling Elsewhere-FN indicate TCs secured up against ceiling for site shutdown
B1MidE T	7/22/09 10:11	7/24/09 0:02	2272	Sampling Elsewhere-FN indicate TCs secured up against ceiling for site shutdown
B1E T	7/22/09 10:11	7/24/09 0:02	2272	Sampling Elsewhere-FN indicate TCs secured up against ceiling for site shutdown
B1F1 T	7/22/09 10:11	7/24/09 0:02	2272	Sampling Elsewhere-FN indicate TCs secured up against ceiling for site shutdown
B1F13 T	1/17/08 14:46	1/18/08 15:35	1489	DAQ This is a test of CC6 8
B1F13 T	7/22/09 10:11	7/24/09 0:02	2272	Sampling Elsewhere-FN indicate TCs secured up against ceiling for site shutdown
B1F2 T	7/22/09 10:11	7/24/09 0:02	2272	Sampling Elsewhere-FN indicate TCs secured up against ceiling for site shutdown
B2W T	7/22/09 10:11	7/24/09 0:02	2272	Sampling Elsewhere-FN indicate TCs secured up against ceiling for site shutdown
B2MidW T	7/22/09 10:11	7/24/09 0:02	2272	Sampling Elsewhere-FN indicate TCs secured up against ceiling for site shutdown
B2MidE T	7/22/09 10:11	7/24/09 0:02	2272	Sampling Elsewhere-FN indicate TCs secured up against ceiling for site shutdown
B2E T	7/22/09 10:11	7/24/09 0:02	2272	Sampling Elsewhere-FN indicate TCs secured up against ceiling for site shutdown
B2F1 T	7/22/09 10:11	7/24/09 0:02	2272	Sampling Elsewhere-FN indicate TCs secured up against ceiling for site shutdown
B2F13 T	7/22/09 10:11	7/24/09 0:02	2272	Sampling Elsewhere-FN indicate TCs secured up against ceiling for site shutdown
B2F12 T	9/17/08 6:01	9/21/08 23:16	6796	Systematic Error-TC temporarily shwoing poor signal
B2F12 T	7/22/09 10:11	7/24/09 0:02	2272	Sampling Elsewhere-FN indicate TCs secured up against ceiling for site shutdown
B3Inlet T	7/22/09 10:11	7/24/09 0:02	2272	Sampling Elsewhere-FN indicate TCs secured up against ceiling for site shutdown
B1 HT	2/20/09 22:12	2/24/09 13:08	5217	DAQ-TC module offline as a result of storm
RwyB1_1 T	2/20/09 22:12	2/24/09 13:08	5217	DAQ-TC module offline as a result of storm
Rwy B2 T	2/20/09 22:12	2/24/09 13:08	5217	DAQ-TC module offline as a result of storm
OFIS HT T	2/20/09 22:12	2/24/09 13:08	5217	DAQ-TC module offline as a result of storm
AC Ctr Reg T	2/20/09 22:12	2/24/09 13:08	5217	DAQ-TC module offline as a result of storm
AC Rtn Reg T	2/20/09 22:12	2/24/09 13:08	5217	DAQ-TC module offline as a result of storm
TEOM Pumps T	2/20/09 22:12	2/24/09 13:08	5217	DAQ-TC module offline as a result of storm
B2F6	6/19/08 6:35	6/25/08 15:31	9177	Failure-FN indicate sensor failed and was replaced on 6/25
B2F6	8/6/08 15:28	8/8/08 12:13	2686	DAQ-FN indicate wiring repaired
B2F6	7/3/09 9:01	7/8/09 22:14	7994	DAQ-FN indicate signal likely affected by loose wire
FarF1	4/9/08 8:31	4/14/08 14:06	7536	Systematic Error-Error detected in multiple farrowing room signals-not sure of cause
FarF1	6/11/09 13:50	6/25/09 12:15	20066	Failure-FN indicate sensor failure
FarF1	7/16/09 13:15	7/24/09 0:10	10736	Systematic Error-error in signals - unsure of exact cause

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Variable	Start time	End time	Min	Comment
FarF1	4/16/09 9:43	4/20/09 13:07	5965	DAQ-FN indicate signals offline because of short in RPM sensor
FarF1	6/10/09 10:13	6/11/09 14:29	1697	Systematic Error-FN indicate magnet missing
FarF2	4/9/08 8:31	4/14/08 14:06	7536	Systematic Error-Error detected in multiple farrowing room signals-not sure of cause
FarF2	6/20/08 18:04	6/25/08 14:16	6973	Failure-FN indicate sensor failure-sensor replaced on 6/25
FarF2	6/29/08 5:25	7/1/08 12:13	3289	Failure-FN indicate sensor failure
FarF2	7/1/08 12:11	7/2/08 9:33	1283	Systematic Error-FN indicate magnet missing-fan turned off at 9:25 on 7/2 for magnet replacement
FarF2	7/16/09 13:15	7/24/09 0:10	10736	Systematic Error-error in signals - unsure of exact cause
FarF2	4/16/09 9:43	4/20/09 13:07	5965	DAQ-FN indicate signals offline because of short in RPM sensor
FarF1_2	7/16/09 13:15	7/24/09 0:10	10736	Systematic Error-error in signals - unsure of exact cause
FarF1_2	4/16/09 9:43	4/20/09 13:07	5965	DAQ-FN indicate signals offline because of short in RPM sensor
FarF1_2	6/10/09 10:13	6/11/09 14:29	1697	Systematic Error-FN indicate magnet missing
FarF2_2	7/16/09 13:15	7/24/09 0:10	10736	Systematic Error-error in signals - unsure of exact cause
FarF2_2	4/16/09 9:43	4/20/09 13:07	5965	DAQ-FN indicate signals offline because of short in RPM sensor
B1Fstg2	5/5/08 12:01	7/1/08 1:10	81430	Sampling Elsewhere
B1Fstg2	5/5/08 11:01	10/16/08 10:46	236146	Systematic Error-flagged SEW in error for part of period-fan stage does not reflect fan operation
B1Fstg2	5/5/08 12:01	7/1/08 1:10	81430	Sampling Elsewhere
B1Fstg2	5/5/08 11:01	10/16/08 10:46	236146	Systematic Error-flagged SEW in error for part of period-fan stage does not reflect fan operation
B1Fstg2	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
B1Fstg3	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
B1Fstg4	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
B1Fstg5	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
B1Fstg6	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
B1Heater	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
B2Fstg2	5/5/08 12:01	7/1/08 1:10	81430	Sampling Elsewhere
B2Fstg2	5/5/08 11:01	10/16/08 10:46	236146	Systematic Error-flagged SEW in error for part of period-fan stage does not reflect fan operation
B2Fstg2	5/5/08 12:01	7/1/08 1:10	81430	Sampling Elsewhere
B2Fstg2	5/5/08 11:01	10/16/08 10:46	236146	Systematic Error-flagged SEW in error for part of period-fan stage does not reflect fan operation
B2Fstg2	10/22/08 2:16	10/25/08 10:13	4798	Systematic Error-fan stage signal does not reflect fan operation
B2Fstg2	10/26/08 20:09	10/29/08 9:48	3700	Systematic Error-fan stage signal does not reflect fan operation
B2Fstg2	10/17/08 1:46	10/18/08 5:25	1660	Systematic Error-stage signal does not reflect fan operation
B2Fstg2	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up

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Variable	Start time	End time	Min	Comment
B2Fstg3	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
B2Fstg4	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
B2Fstg5	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
B2Fstg6	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
B2Heater	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
B3 R1	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
B3 R2	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
B3 R3	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
B3 R4	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
RecPumpRelay	6/26/09 14:20	6/29/09 8:33	3974	DAQ-USB and DIO96H problem encountered and signals were mixed up
B3TC	1/23/08 11:45	1/24/08 12:52	1507	Off-FN indicate B3 sensors and instrument removed for room cleaning
B3TC	2/20/09 22:12	2/24/09 13:08	5217	DAQ-TC module offline as a result of storm
B3TC	7/22/09 7:13	7/24/09 0:03	2451	Sampling Elsewhere-FN indicate TC secured against ceiling for site shutdown

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APPENDIX E. DAILY MEANS.

Table E1. Daily means (SD) of weather parameters

Table E1. Daily means (SD) of weather parameters at Site OK4B for July, 2007

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12	25.0 (4.6)	70.0 (14.9)	5.00 (2.15)	123 (59)		90.8 (0.2)
13	23.7 (3.8)	67.0 (15.2)	2.77 (1.35)	87 (91)		91.1 (0.1)
14	26.3 (6.5)	56.9 (21.5)	2.68 (1.36)	199 (62)	325 (361)	90.8 (0.1)
15	27.1 (5.8)	55.0 (20.0)	3.07 (1.60)	175 (47)		90.7 (0.1)
16	27.8 (4.8)	50.0 (15.6)	6.27 (2.19)	162 (34)		90.6 (0.1)
17	27.4 (5.8)	53.1 (17.5)	5.39 (2.62)	163 (21)		90.6 (0.1)
18	28.9 (5.8)	46.2 (16.4)	5.06 (1.67)	187 (20)		90.5 (0.2)
19	27.0 (4.1)	50.9 (10.2)	5.80 (1.69)	184 (32)		90.4 (0.1)
20	28.4 (4.3)	53.4 (13.7)	3.69 (1.44)	182 (43)	287 (367)	90.7 (0.1)
21	27.0 (4.1)	58.1 (14.9)	5.32 (2.19)	155 (19)	321 (368)	90.9 (0.1)
22	27.6 (4.7)	58.3 (17.2)	4.34 (1.44)	164 (19)	273 (353)	91.0 (0.1)
23	28.0 (5.5)	52.9 (15.7)	3.23 (1.89)	176 (51)	286 (362)	90.8 (0.2)
24	27.1 (4.7)	60.2 (17.9)	3.51 (2.08)	137 (46)	315 (365)	90.7 (0.1)
25	27.0 (4.6)	55.7 (17.7)	5.72 (2.45)	158 (21)	295 (349)	90.5 (0.1)
26	27.3 (5.1)	49.5 (14.8)	5.50 (2.02)	167 (25)	320 (360)	90.5 (0.1)
27	27.7 (5.9)	51.5 (16.9)	3.40 (1.49)	153 (61)	307 (366)	90.6 (0.1)
28	27.0 (4.8)	56.8 (15.9)	3.07 (1.69)	143 (43)	317 (368)	90.5 (0.1)
29	28.0 (4.9)	51.5 (15.9)	3.35 (1.64)	171 (37)	288 (368)	90.5 (0.1)
30	27.6 (4.9)	55.2 (19.1)	3.90 (2.12)	181 (67)	290 (360)	90.5 (0.1)
31	27.1 (4.1)	62.1 (15.8)	6.03 (3.59)	146 (35)	263 (337)	90.5 (0.1)
Mean	27.1	55.7	4.36	162	299	90.7
n	20	20	20	20	13	20
SD	1.1	5.7	1.18	25	19	0.2
Min	23.7	46.2	2.68	87	263	90.4
Max	28.9	70.0	6.27	199	325	91.1

ED_004549_00015840-00054

Table E1. Daily means (SD) of weather parameters at Site OK4B for August, 2007

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	26.1 (4.2)	67.7 (15.4)	4.39 (2.30)	145 (38)	192 (285)	90.5 (0.1)
2	24.7 (2.7)	74.2 (10.7)	2.67 (1.64)	84 (96)	182 (289)	90.9 (0.1)
3	25.2 (4.1)	66.6 (16.8)	3.94 (2.60)	166 (65)	275 (347)	90.9 (0.1)
4	28.5 (5.5)	56.0 (18.2)	6.24 (2.34)	184 (18)	309 (361)	90.5 (0.2)
5	29.9 (4.8)	52.8 (12.7)	5.13 (1.37)	184 (32)	280 (339)	90.3 (0.2)
6	31.3 (5.4)	48.8 (17.0)	5.34 (1.77)	180 (22)	304 (361)	90.1 (0.2)
7	30.3 (5.2)	46.9 (14.3)	4.30 (2.01)	206 (44)	311 (364)	90.1 (0.1)
8	30.7 (5.6)	47.4 (17.2)	2.81 (0.93)	277 (93)	317 (360)	90.1 (0.1)
9	29.2 (5.9)	48.5 (16.0)	3.39 (1.55)	45 (104)	256 (335)	90.5 (0.1)
10	29.9 (6.1)	43.0 (16.4)	4.27 (2.34)	172 (27)	308 (355)	90.6 (0.2)
11	30.4 (6.4)	40.1 (14.0)	4.94 (1.74)	172 (26)	310 (360)	90.6 (0.1)
12						
13						
14	30.0 (6.0)	35.4 (12.5)	5.00 (2.06)	200 (20)	311 (355)	90.7 (0.2)
15	29.3 (6.2)	34.2 (9.2)	4.90 (2.02)	196 (24)	304 (357)	90.5 (0.1)
16	29.3 (6.0)	41.1 (12.2)	2.72 (1.10)	222 (72)	307 (337)	90.7 (0.1)
17						
18	25.3 (3.6)	67.6 (16.4)	5.24 (2.92)	152 (34)	272 (339)	90.6 (0.2)
19	28.4 (4.9)	61.8 (18.0)	3.27 (1.54)	149 (61)	294 (345)	90.2 (0.2)
20	30.0 (5.5)	59.0 (19.6)	5.90 (3.81)	148 (31)	287 (342)	90.0 (0.1)
21	29.2 (4.6)	56.4 (17.6)	7.17 (1.88)	159 (26)	292 (343)	90.4 (0.1)
22	29.5 (3.6)	47.6 (14.2)	8.40 (2.81)	176 (19)		90.2 (0.2)
23	27.8 (5.4)	54.7 (17.4)	6.81 (2.47)	200 (52)	251 (324)	90.0 (0.1)
24	22.0 (1.1)	83.2 (4.1)	3.79 (1.86)	40 (92)	111 (161)	90.4 (0.1)
25	24.3 (3.8)	76.8 (14.1)	4.96 (2.13)	103 (85)	160 (223)	90.7 (0.1)
26	28.9 (6.1)	51.7 (23.3)	5.67 (2.09)	185 (18)	287 (347)	90.4 (0.1)
27	27.8 (5.3)	49.3 (16.2)	6.11 (2.43)	185 (23)	294 (347)	90.5 (0.1)
28	27.9 (4.5)	50.5 (14.5)	5.31 (2.01)	178 (31)	223 (305)	90.5 (0.1)
29	23.5 (2.0)	71.9 (8.3)	3.73 (1.69)	9 (122)	147 (200)	91.2 (0.2)
30	22.8 (3.0)	73.6 (12.6)	3.07 (0.95)	74 (40)	132 (204)	91.4 (0.2)
31	24.0 (4.6)	62.3 (18.1)	3.97 (2.38)	122 (32)	261 (326)	91.1 (0.1)
Mean	27.7	56.1	4.77	163	258	90.5
n	28	28	28	28	27	28
SD	2.6	12.7	1.39	59	61	0.3
Min	22.0	34.2	2.67	9	111	90.0
Max	31.3	83.2	8.40	277	317	91.4

ED_004549_00015840-00055

Table E1. Daily means (SD) of weather parameters at Site OK4B for September, 2007

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	24.2 (5.4)	55.9 (16.2)	4.29 (1.91)	154 (25)	276 (337)	91.0 (0.1)
2	24.9 (6.4)	47.9 (16.1)	4.10 (2.01)	166 (39)	283 (340)	91.0 (0.1)
3	24.1 (5.9)	48.4 (17.9)	4.22 (1.98)	169 (26)	283 (341)	90.9 (0.2)
4	25.0 (5.2)	56.9 (18.9)	5.00 (2.36)	168 (27)	257 (325)	90.4 (0.3)
5	25.9 (5.3)	57.9 (16.6)	6.74 (2.71)	155 (24)	267 (327)	90.0 (0.2)
6	29.0 (5.8)	43.8 (16.2)	3.43 (1.51)	200 (52)	239 (324)	89.9 (0.1)
7	25.0 (3.2)	57.7 (16.7)	5.95 (2.59)	58 (108)	159 (199)	90.6 (0.2)
8	25.2 (4.0)	67.5 (15.7)	3.03 (1.76)	70 (74)	222 (306)	90.6 (0.1)
9	19.4 (2.7)	71.6 (7.8)	4.60 (2.11)	56 (116)	100 (135)	91.1 (0.2)
10	15.8 (2.5)	80.5 (4.1)	4.75 (2.19)	29 (135)		91.2 (0.2)
11	17.3 (8.0)	52.3 (26.7)	2.90 (1.10)	218 (91)		91.2 (0.2)
12	20.4 (6.2)	52.0 (14.1)	5.15 (2.51)	155 (18)	237 (311)	90.7 (0.2)
13	23.2 (6.6)	57.9 (16.7)	3.20 (1.70)	185 (59)	228 (320)	90.4 (0.1)
14	16.8 (3.3)	52.1 (12.9)	6.28 (1.41)	50 (66)	123 (157)	91.2 (0.2)
15	21.9 (6.4)	53.9 (9.7)	6.79 (1.53)	161 (25)	211 (301)	91.0 (0.4)
16	27.3 (5.4)	45.3 (16.3)	6.64 (1.72)	195 (21)	248 (310)	90.5 (0.2)
17	23.5 (4.3)	62.5 (12.5)	6.37 (3.19)	177 (35)	202 (307)	90.2 (0.2)
18	24.5 (5.2)	53.9 (27.2)	3.87 (1.33)	228 (97)	253 (319)	90.4 (0.1)
19	23.9 (5.0)	67.0 (18.2)	5.81 (3.01)	131 (44)	197 (283)	90.7 (0.1)
20	24.7 (4.4)	65.6 (16.9)	5.71 (1.93)	171 (15)	233 (308)	90.6 (0.2)
21	26.4 (5.0)	53.7 (20.6)	5.78 (1.93)	209 (102)	243 (312)	90.2 (0.1)
22	24.7 (5.0)	61.3 (15.0)	6.33 (2.36)	97 (51)	204 (283)	90.6 (0.1)
23	25.1 (3.6)	56.7 (10.6)	7.47 (2.46)	157 (17)	214 (287)	90.3 (0.2)
24						
25						
26	19.6 (6.8)	48.5 (14.8)	3.29 (1.52)	222 (82)	217 (290)	90.7 (0.2)
27	20.5 (6.7)	55.3 (14.8)	4.28 (1.59)	33 (127)	215 (293)	90.8 (0.1)
28	23.5 (4.6)	64.6 (18.3)	6.66 (2.63)	160 (15)	191 (280)	90.7 (0.3)
29	24.3 (3.7)	59.0 (12.6)	8.18 (2.39)	166 (20)	204 (278)	90.4 (0.2)
30						
Mean	23.2	57.4	5.22	156	220	90.6
n	27	27	27	27	25	27
SD	3.2	8.2	1.43	59	44	0.4
Min	15.8	43.8	2.90	29	100	89.9
Max	29.0	80.5	8.18	228	283	91.2

ED_004549_00015840-00056

Table E1. Daily means (SD) of weather parameters at Site OK4B for October, 2007

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1						
2	22.0 (4.3)	44.1 (22.4)	5.98 (1.54)	318 (124)	220 (299)	90.4 (0.2)
3	19.9 (6.9)	37.8 (11.5)	4.44 (2.07)	176 (62)	225 (295)	90.4 (0.3)
4	25.2 (6.1)	51.3 (28.7)	4.86 (1.84)	186 (25)	219 (294)	89.8 (0.1)
5	26.8 (4.6)	48.7 (11.4)	7.71 (2.72)	166 (21)	197 (276)	90.0 (0.1)
6						
7	19.6 (3.4)	56.5 (11.6)	4.87 (1.38)	332 (118)	153 (231)	90.3 (0.2)
8	15.7 (6.3)	51.8 (22.1)	2.93 (0.90)	328 (113)	219 (289)	91.1 (0.2)
9	17.1 (7.5)	42.3 (18.3)	3.45 (1.21)	196 (58)	211 (283)	91.3 (0.2)
10	19.0 (6.6)	46.1 (8.1)	4.70 (2.20)	144 (39)	162 (232)	90.8 (0.3)
11	19.2 (4.0)	59.8 (8.4)	5.89 (2.31)	123 (26)	182 (249)	90.4 (0.1)
12	22.0 (5.3)	62.5 (13.2)	6.29 (2.69)	163 (17)	167 (254)	89.9 (0.3)
13	24.3 (4.1)	56.2 (15.1)	6.34 (2.69)	179 (34)	168 (255)	89.4 (0.2)
14	16.3 (3.6)	64.8 (14.8)	5.63 (1.41)	318 (52)	132 (231)	89.9 (0.3)
15	12.9 (3.9)	51.5 (14.9)	4.57 (1.87)	307 (92)	201 (275)	90.3 (0.1)
16	17.6 (7.7)	48.4 (19.1)	6.59 (3.17)	163 (41)	195 (269)	89.7 (0.4)
17	19.1 (4.4)	48.6 (24.1)	6.61 (2.34)	221 (46)	190 (273)	88.7 (0.3)
18	13.6 (4.4)	40.5 (16.4)	6.00 (3.07)	289 (30)	174 (259)	89.5 (0.4)
19	14.4 (8.7)	32.8 (15.3)	4.14 (1.17)	226 (38)	199 (270)	90.2 (0.2)
20	22.6 (8.2)	22.9 (11.1)	6.71 (2.81)	212 (17)	198 (271)	89.2 (0.4)
21	10.9 (4.0)	54.3 (12.5)	7.17 (1.89)	326 (53)	66 (121)	90.2 (0.7)
22	8.2 (3.8)	42.4 (13.7)	6.28 (2.01)	310 (22)	190 (264)	91.5 (0.1)
23	13.6 (7.0)	36.1 (6.8)	5.64 (1.73)	308 (26)	187 (254)	91.3 (0.1)
24	15.2 (4.9)	44.1 (10.2)	3.43 (1.26)	354 (131)	185 (253)	91.6 (0.2)
25	14.1 (5.6)	41.1 (13.3)	2.99 (1.18)	126 (48)		90.8 (0.3)
26	13.0 (7.2)	38.8 (12.0)	3.08 (1.22)	163 (63)	184 (252)	90.7 (0.3)
27	9.0 (4.1)	48.8 (11.9)	4.18 (1.26)	13 (140)	174 (240)	92.0 (0.2)
28	12.3 (6.9)	48.7 (15.3)	3.90 (2.04)	161 (40)	150 (217)	91.9 (0.2)
29	14.7 (8.1)	45.2 (17.5)	3.81 (1.44)	193 (31)	171 (240)	91.4 (0.3)
30	18.0 (7.0)	29.5 (14.5)	5.64 (2.67)	193 (20)	180 (249)	90.5 (0.3)
31	11.1 (2.9)	35.6 (10.2)	7.33 (3.42)	341 (132)	157 (228)	91.2 (0.5)
Mean	16.8	45.9	5.21	223	181	90.5
n	29	29	29	29	28	29
SD	4.7	9.5	1.38	84	32	0.8
Min	8.2	22.9	2.93	13	66	88.7
Max	26.8	64.8	7.71	354	225	92.0

ED_004549_00015840-00057

Table E1. Daily means (SD) of weather parameters at Site OK4B for November, 2007

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	8.4 (6.1)	35.8 (9.3)	4.31 (2.07)	193 (49)	168 (238)	91.1 (0.4)
2	8.5 (4.7)	41.1 (11.3)	6.40 (3.97)	345 (140)	166 (238)	91.0 (0.4)
3	9.7 (7.3)	44.3 (9.8)	3.91 (2.16)	229 (50)	163 (235)	91.3 (0.3)
4	13.2 (9.9)	36.3 (19.8)	2.73 (1.00)	245 (48)	168 (242)	90.6 (0.3)
5	9.7 (3.9)	35.9 (8.6)	7.07 (3.62)	335 (145)	158 (231)	91.0 (0.5)
6	5.3 (5.2)	44.2 (12.9)	4.15 (1.79)	160 (86)	134 (215)	91.6 (0.2)
7	10.0 (8.0)	36.2 (11.5)	3.60 (1.31)	190 (25)	159 (233)	90.9 (0.3)
8	14.7 (8.9)	29.4 (12.8)	2.90 (1.58)	332 (112)	160 (228)	90.4 (0.1)
9	13.3 (8.1)	35.2 (13.7)	3.48 (1.37)	174 (83)	158 (224)	90.6 (0.1)
10	17.1 (6.0)	58.8 (23.7)	4.58 (2.30)	191 (24)	123 (195)	90.1 (0.3)
11	16.1 (8.4)	39.6 (20.6)	2.90 (0.98)	218 (44)	150 (223)	89.8 (0.1)
12	9.0 (3.9)	52.3 (12.2)	5.03 (2.29)	311 (88)	78 (125)	90.8 (0.4)
13	13.2 (9.8)	42.5 (17.6)	4.43 (2.90)	214 (52)	137 (214)	90.2 (0.5)
14	7.0 (4.1)	34.9 (11.0)	7.06 (3.24)	326 (65)	151 (215)	91.2 (0.6)
15	4.4 (7.4)	33.5 (12.6)	4.71 (2.29)	222 (43)	151 (219)	91.4 (0.6)
16	12.3 (8.9)	28.9 (11.5)	3.30 (1.54)	248 (94)	135 (211)	90.0 (0.1)
17	14.4 (7.5)	29.7 (7.6)	2.58 (1.19)	350 (118)	130 (210)	90.2 (0.1)
18	14.2 (7.8)	35.1 (14.5)	2.36 (0.79)	235 (94)	127 (199)	90.4 (0.1)
19	15.0 (8.2)	34.0 (16.5)	3.63 (1.44)	206 (16)	118 (199)	90.2 (0.2)
20	9.5 (5.6)	42.2 (15.5)	6.18 (2.98)	309 (126)	136 (209)	89.9 (0.3)
21	1.1 (2.4)	57.1 (6.7)	7.08 (2.99)	338 (74)	85 (152)	91.1 (0.4)
22	-2.5 (4.9)	60.7 (14.1)	2.39 (0.76)	195 (81)	124 (191)	91.7 (0.1)
23	-3.2 (1.4)	79.3 (10.6)	5.74 (2.85)	153 (16)	39 (70)	91.1 (0.3)
24	-2.2 (2.8)	76.8 (11.5)	3.42 (1.23)	265 (95)	138 (217)	90.9 (0.1)
25	-0.7 (6.1)	66.1 (15.2)	2.93 (1.00)	222 (43)	133 (211)	90.3 (0.2)
26	2.9 (3.6)	64.5 (10.7)	3.59 (1.29)	355 (147)	98 (171)	91.0 (0.4)
27						
28						
29						
30	-1.1 (0.7)	62.6 (3.2)	5.39 (1.89)	38 (132)	54 (91)	90.9 (0.3)
Mean	8.1	45.8	4.29	248	131	90.7
n	27	27	27	27	27	27
SD	6.2	14.4	1.46	75	34	0.5
Min	-3.2	28.9	2.36	38	39	89.8
Max	17.1	79.3	7.08	355	168	91.7

ED_004549_00015840-00058

Table E1. Daily means (SD) of weather parameters at Site OK4B for December, 2007

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	11.5 (8.4)	61.9 (22.3)	8.41 (3.31)	185 (34)	61 (123)	89.4 (0.4)
2	3.8 (5.4)	54.0 (16.2)	4.70 (2.71)	316 (113)	134 (197)	91.0 (0.8)
3	5.1 (7.0)	49.8 (17.2)	4.90 (2.11)	212 (16)	132 (196)	91.4 (0.4)
4	13.1 (7.4)	33.2 (11.6)	3.86 (1.11)	269 (39)	127 (196)	90.5 (0.3)
5	7.7 (3.5)	55.2 (7.2)	5.03 (1.55)	31 (124)	106 (184)	90.5 (0.2)
6	3.9 (3.8)	65.9 (8.4)	4.78 (1.58)	112 (68)		89.9 (0.2)
7	0.6 (0.5)	86.4 (3.6)	4.98 (1.25)		23 (32)	90.0 (0.1)
8	-2.6 (1.8)	90.1 (1.0)			25 (37)	90.7 (0.2)
9	-5.2 (1.5)	82.6 (3.0)			74 (114)	91.2 (0.1)
10	-0.7 (2.5)	88.3 (4.4)			36 (64)	90.6 (0.3)
11	0.2 (1.4)	86.6 (4.1)	4.21 (1.67)		33 (53)	90.7 (0.4)
12	-0.8 (2.2)	79.0 (5.4)	2.59 (1.06)		73 (126)	90.9 (0.3)
13	0.1 (3.9)	72.6 (14.1)	3.90 (1.04)	8 (130)	128 (188)	90.9 (0.1)
14	-2.7 (1.0)	87.9 (1.3)		30 (129)	13 (17)	90.5 (0.2)
15	-3.9 (2.7)	74.0 (10.4)		301 (25)	125 (193)	90.8 (0.2)
16	-0.9 (7.3)	61.1 (13.9)	2.44 (0.94)	246 (86)	132 (194)	90.9 (0.0)
17	2.0 (6.5)	62.2 (15.0)	3.44 (1.81)	203 (28)	132 (193)	90.2 (0.3)
18	6.0 (4.9)	51.1 (15.7)	3.29 (1.39)	301 (103)	128 (190)	90.5 (0.3)
19	6.1 (6.6)	55.2 (17.3)	3.23 (1.26)	213 (88)	135 (197)	90.0 (0.3)
20	8.5 (5.3)	49.3 (15.0)	4.18 (1.21)	191 (56)		89.8 (0.3)
21						
22	-3.7 (2.7)	70.7 (13.9)	7.44 (3.28)	302 (50)	103 (171)	90.6 (0.4)
23	-2.4 (6.2)	65.1 (11.4)	2.18 (0.80)	276 (73)	96 (151)	90.8 (0.2)
24	1.6 (5.2)	60.2 (15.9)	4.96 (2.38)	227 (40)	130 (192)	90.7 (0.4)
25	1.9 (1.8)	68.1 (10.4)	5.96 (1.94)	282 (70)	97 (159)	89.9 (0.3)
26	-0.2 (3.0)	68.3 (12.7)	3.88 (1.80)	344 (106)	132 (193)	90.3 (0.2)
27	-3.6 (0.7)	86.7 (2.6)	4.27 (1.75)	74 (93)	18 (25)	89.9 (0.1)
28	-7.0 (3.1)	77.4 (7.2)	2.96 (1.19)	268 (48)	118 (178)	90.4 (0.2)
29	-5.5 (6.0)	65.8 (13.9)	2.49 (1.39)	261 (41)	118 (184)	90.2 (0.1)
30	0.1 (7.3)	58.0 (13.7)	4.23 (1.46)	237 (35)	134 (196)	89.9 (0.2)
31	-0.1 (3.0)	55.0 (14.1)	4.96 (1.97)	298 (27)	92 (149)	90.9 (0.6)
Mean	1.1	67.4	4.29	271	95	90.5
n	30	30	25	24	28	30
SD	4.9	14.1	1.44	95	42	0.5
Min	-7.0	33.2	2.18	8	13	89.4
Max	13.1	90.1	8.41	344	135	91.4

ED_004549_00015840-00059

Table E1. Daily means (SD) of weather parameters at Site OK4B for January, 2008

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1						
2	-2.8 (6.1)	55.6 (14.5)	4.47 (1.94)	215 (49)	129 (192)	92.4 (0.4)
3						
4	7.1 (5.9)	50.7 (14.2)	3.75 (0.92)	240 (37)	88 (133)	90.0 (0.1)
5	9.5 (7.7)	54.3 (18.8)	6.92 (3.03)	227 (11)	64 (103)	89.4 (0.2)
6	9.9 (4.9)	55.2 (12.4)	4.41 (2.27)	294 (108)	78 (116)	89.4 (0.1)
7	8.0 (4.2)	61.6 (15.2)	6.56 (1.75)	295 (119)	104 (182)	89.5 (0.1)
8	2.3 (3.4)	61.9 (18.0)	4.92 (2.01)	286 (65)	138 (202)	90.5 (0.3)
9	7.4 (6.2)	46.3 (17.2)	6.88 (2.51)	208 (44)	132 (203)	89.5 (0.4)
10	3.9 (3.2)	58.1 (16.9)	5.23 (2.43)	282 (57)	140 (202)	90.0 (0.2)
11	1.7 (3.7)	62.5 (9.6)	2.51 (1.07)			89.9 (0.1)
12	3.9 (4.9)	52.9 (16.7)	4.34 (1.14)	312 (18)	141 (204)	90.5 (0.2)
13	2.9 (6.1)	55.8 (19.7)	2.28 (0.86)	319 (122)	141 (205)	91.0 (0.2)
14	3.0 (6.5)	50.9 (18.2)	3.40 (1.21)	278 (28)	138 (204)	91.3 (0.1)
15	4.5 (6.8)	44.0 (17.5)	6.12 (2.41)	204 (23)	113 (183)	89.9 (0.6)
16	-3.1 (4.0)	73.6 (8.3)	8.17 (3.36)	322 (32)	51 (77)	90.2 (0.5)
17	-6.1 (6.3)	49.9 (19.7)	3.70 (1.85)	239 (46)	149 (213)	90.5 (0.2)
18	-1.4 (2.9)	57.0 (10.2)	4.03 (2.04)	341 (136)	138 (209)	90.8 (0.3)
19	-1.6 (4.1)	63.0 (19.2)	3.70 (2.47)	204 (47)	147 (213)	91.1 (0.3)
20	2.3 (6.6)	47.3 (19.2)	5.84 (2.27)	178 (18)	149 (214)	90.3 (0.3)
21	-4.6 (3.1)	67.4 (10.2)	4.81 (1.08)	331 (106)	80 (125)	90.5 (0.3)
22	-6.9 (5.1)	59.6 (13.3)	2.49 (0.96)	268 (62)	154 (218)	91.2 (0.3)
23	-3.5 (5.0)	55.9 (11.4)	4.96 (3.16)	327 (136)	149 (216)	90.8 (0.2)
24	-1.6 (5.5)	47.7 (15.5)	6.26 (3.23)	191 (57)		91.0 (0.2)
25	5.7 (7.5)	44.1 (22.4)	5.87 (2.02)	245 (52)	158 (224)	90.5 (0.1)
26	7.4 (6.7)	31.7 (12.4)	3.53 (1.10)	263 (72)	161 (227)	90.9 (0.1)
27	9.3 (10.3)	34.9 (15.0)	6.08 (3.41)	214 (22)	142 (203)	90.2 (0.5)
28	15.4 (4.6)	37.1 (12.9)	9.55 (5.00)	219 (16)	145 (206)	88.9 (0.3)
29	2.0 (4.8)	43.2 (16.4)	6.84 (3.08)	251 (73)	164 (234)	89.6 (0.7)
30	4.2 (5.9)	34.9 (11.6)	6.04 (3.01)	276 (111)	140 (221)	89.3 (0.2)
31	-2.5 (5.1)	46.2 (16.1)	6.09 (2.71)	313 (85)	162 (232)	90.4 (0.3)
Mean	2.6	51.8	5.16	262	129	90.3
n	29	29	29	28	27	29
SD	5.3	9.9	1.69	47	31	0.7
Min	-6.9	31.7	2.28	178	51	88.9
Max	15.4	73.6	9.55	341	164	92.4

ED_004549_00015840-00060

Table E1. Daily means (SD) of weather parameters at Site OK4B for February, 2008

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	4.4 (9.9)	36.1 (16.4)	5.29 (2.66)	221 (86)	120 (173)	89.6 (0.4)
2	3.6 (4.6)	44.4 (11.9)	4.95 (1.25)	19 (115)	160 (228)	90.2 (0.2)
3	6.9 (7.4)	45.1 (20.6)	4.02 (1.76)	201 (73)	114 (176)	89.4 (0.4)
4						
5	-2.6 (2.0)	83.9 (3.3)	6.36 (1.33)	335 (130)	43 (67)	90.1 (0.3)
6	-1.3 (6.9)	63.4 (11.8)	3.91 (1.22)	231 (81)	161 (238)	90.0 (0.3)
7	1.5 (4.0)	51.9 (18.8)	5.19 (2.45)	269 (67)	183 (250)	90.1 (0.4)
8	4.7 (4.2)	45.5 (15.0)	4.52 (2.32)	312 (101)	169 (244)	89.9 (0.3)
9	5.6 (7.8)	41.8 (19.4)	2.55 (1.08)	231 (87)	186 (254)	90.7 (0.2)
10	-3.3 (3.2)	75.7 (17.4)	3.64 (2.02)	29 (107)	37 (47)	91.2 (0.2)
11	2.0 (8.2)	64.6 (17.9)	3.43 (2.40)	298 (118)	173 (252)	90.2 (0.3)
12	4.4 (4.5)	55.9 (19.6)	4.57 (1.41)	303 (32)	152 (222)	91.0 (0.5)
13	7.3 (9.4)	45.2 (22.0)	5.46 (2.53)	207 (37)	188 (256)	90.7 (0.7)
14	4.0 (4.2)	56.4 (13.7)	6.56 (2.17)	326 (128)	86 (119)	90.8 (0.8)
15	-2.4 (3.7)	64.0 (11.8)	2.74 (1.15)	18 (147)	113 (150)	92.1 (0.1)
16	3.5 (3.6)	74.4 (10.3)	2.30 (1.23)	1 (108)	61 (97)	90.7 (0.7)
17	3.8 (2.5)	60.9 (11.5)	7.10 (2.18)	319 (59)	145 (232)	90.8 (0.5)
18	2.4 (6.8)	48.5 (19.5)	4.43 (2.28)	281 (76)	199 (270)	91.5 (0.1)
19	6.7 (7.4)	46.7 (14.5)	2.01 (0.85)	214 (72)	173 (231)	91.4 (0.3)
20	-2.4 (2.4)	66.8 (9.9)	6.03 (2.55)	45 (108)	67 (91)	91.4 (0.2)
21	-2.1 (2.9)	63.8 (6.8)	2.27 (1.28)	85 (77)	139 (212)	91.0 (0.2)
22	3.7 (7.4)	59.6 (20.3)	3.14 (1.25)	185 (71)	204 (274)	90.9 (0.1)
23	7.4 (4.9)	63.9 (16.9)	6.17 (2.04)	171 (89)	176 (271)	90.7 (0.4)
24	9.1 (8.9)	54.5 (25.0)	4.40 (2.03)	211 (49)	184 (270)	91.3 (0.4)
25	8.9 (3.7)	53.1 (9.0)	7.07 (3.05)	292 (62)	132 (175)	90.9 (0.6)
26	2.7 (4.6)	50.5 (21.3)	4.48 (2.10)	321 (91)	220 (289)	92.3 (0.2)
27	6.1 (7.0)	40.5 (13.2)	3.15 (0.96)	279 (89)	208 (285)	91.7 (0.3)
28	9.2 (7.3)	43.6 (15.8)	4.64 (2.86)	307 (111)	206 (285)	90.9 (0.2)
29	9.4 (6.2)	49.6 (16.1)	3.83 (1.45)	255 (106)	217 (286)	92.0 (0.2)
Mean	3.7	55.4	4.44	285	151	90.8
n	28	28	28	28	28	28
SD	3.8	11.5	1.44	105	52	0.7
Min	-3.3	36.1	2.01	1	37	89.4
Max	9.4	83.9	7.10	335	220	92.3

ED_004549_00015840-00061

Table E1. Daily means (SD) of weather parameters at Site OK4B for March, 2008

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	15.6 (7.6)	34.0 (16.7)	7.49 (2.44)	210 (11)	226 (296)	91.1 (0.6)
2	9.2 (5.3)	65.3 (13.6)	8.49 (3.82)	288 (91)	125 (207)	90.4 (0.5)
3	2.1 (3.3)	54.6 (16.5)	7.11 (2.90)	333 (79)	167 (242)	91.6 (0.2)
4	4.5 (9.3)	46.8 (20.0)	4.67 (2.38)	189 (56)	229 (301)	90.6 (0.4)
5	2.6 (2.5)	56.4 (12.9)	6.94 (2.80)	353 (162)	185 (257)	91.3 (0.4)
6	2.5 (3.9)	40.6 (11.6)	2.64 (1.34)	349 (145)	191 (256)	91.7 (0.1)
7	-1.9 (2.9)	60.5 (12.6)	4.65 (1.63)	347 (134)	156 (228)	91.8 (0.1)
8	3.1 (8.5)	46.8 (14.2)	2.50 (1.00)	192 (52)	174 (238)	91.1 (0.2)
9	9.0 (5.0)	37.4 (11.2)	3.74 (1.92)	4 (145)	242 (310)	91.7 (0.3)
10	9.3 (7.2)	38.6 (14.5)	2.88 (0.88)	207 (86)	235 (315)	92.2 (0.2)
11	12.2 (7.8)	37.4 (15.9)	4.51 (1.29)	221 (24)	247 (314)	91.6 (0.3)
12	11.8 (7.4)	33.1 (14.9)	4.92 (1.78)	31 (100)	196 (250)	90.8 (0.2)
13	11.3 (5.2)	39.4 (15.7)	4.69 (1.74)	18 (135)	225 (302)	90.5 (0.2)
14	10.9 (5.4)	43.0 (15.0)	4.39 (2.36)	310 (119)	194 (272)	90.1 (0.2)
15	6.9 (4.2)	57.5 (15.3)	5.30 (2.18)	38 (127)	237 (320)	91.0 (0.2)
16	4.4 (1.7)	73.8 (3.0)	7.97 (1.43)	80 (15)	41 (53)	91.0 (0.2)
17	4.0 (0.9)	86.2 (2.8)	5.67 (2.17)	349 (130)	47 (66)	90.9 (0.2)
18	6.2 (4.6)	59.0 (22.7)	6.07 (3.71)	329 (121)	216 (273)	91.2 (0.2)
19	10.9 (9.0)	36.0 (22.9)	3.42 (1.16)	249 (53)	266 (331)	91.5 (0.1)
20	15.6 (8.7)	23.0 (12.4)	7.21 (3.70)	212 (29)	267 (332)	90.9 (0.3)
21	12.8 (4.8)	31.9 (11.3)	4.01 (1.71)	345 (125)	266 (330)	91.6 (0.2)
22	8.3 (3.5)	46.6 (9.9)	5.94 (2.47)	35 (102)	156 (242)	92.2 (0.2)
23	4.7 (4.3)	54.1 (15.2)	3.66 (1.36)	350 (102)	247 (324)	92.6 (0.3)
24	12.3 (8.5)	43.1 (24.6)	6.04 (1.55)	201 (24)	274 (339)	91.3 (0.5)
25	14.1 (6.6)	32.4 (12.6)	6.21 (1.77)	18 (116)	278 (341)	91.0 (0.2)
26	11.4 (7.5)	49.6 (13.6)	3.36 (1.42)	28 (127)	224 (292)	90.8 (0.3)
27	8.7 (3.4)	62.1 (13.1)	6.25 (2.19)	347 (138)	197 (270)	90.6 (0.3)
28	6.8 (4.6)	57.1 (22.0)	5.63 (2.08)	43 (114)	200 (260)	91.6 (0.1)
29	11.7 (8.9)	58.2 (22.2)	5.61 (2.60)	162 (41)	263 (338)	90.9 (0.4)
30	8.7 (2.5)	78.3 (7.2)	5.87 (2.12)	322 (125)	138 (183)	90.8 (0.2)
31			5.45 (2.32)	354 (145)	258 (334)	90.8 (0.3)
Mean	8.3	49.4	5.27	341	205	91.2
n	30	30	31	31	31	31
SD	4.3	14.6	1.54	128	59	0.6
Min	-1.9	23.0	2.50	4	41	90.1
Max	15.6	86.2	8.49	354	278	92.6

ED_004549_00015840-00062

Table E1. Daily means (SD) of weather parameters at Site OK4B for April, 2008

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1			5.53 (2.07)	37 (120)	287 (351)	92.1 (0.2)
2			7.00 (2.06)	139 (22)	230 (303)	91.4 (0.4)
3			6.81 (2.78)	331 (124)		90.8 (0.3)
4			2.98 (1.19)	331 (113)		91.4 (0.2)
5			6.69 (2.92)	195 (24)		90.3 (0.4)
6			5.37 (2.67)	12 (133)		90.8 (0.4)
7			9.10 (3.23)	65 (29)		90.8 (0.2)
8			5.13 (1.86)	20 (137)		91.2 (0.1)
9			5.26 (1.82)	89 (33)		90.7 (0.4)
10			7.59 (3.84)	271 (76)		89.7 (0.5)
11			6.66 (2.31)	304 (55)		91.3 (0.3)
12			7.23 (2.47)	308 (73)		92.0 (0.1)
13			5.31 (1.76)	315 (107)		92.4 (0.1)
14			5.89 (3.64)	189 (43)		91.6 (0.4)
15	22.0 (8.2)	23.2 (12.7)	9.62 (3.19)	181 (29)	319 (375)	90.5 (0.5)
16	18.0 (2.8)	41.7 (10.2)	7.85 (2.48)	30 (119)		90.3 (0.2)
17	5.4 (2.6)	80.6 (7.8)	9.17 (3.59)	334 (80)		91.0 (0.4)
18	11.3 (9.3)	44.6 (31.0)	4.17 (1.66)	273 (62)		91.2 (0.2)
19	18.1 (8.0)	24.3 (12.3)	3.40 (1.51)	127 (56)		90.8 (0.2)
20	21.9 (7.0)	14.0 (7.8)	5.22 (2.43)	196 (27)		90.1 (0.2)
21	16.0 (5.2)	32.3 (14.6)	5.32 (2.46)	359 (141)		90.7 (0.2)
22	14.8 (6.6)	54.6 (22.0)	6.19 (1.48)	32 (136)	276 (352)	91.4 (0.2)
23	15.5 (3.8)	79.9 (11.6)	6.23 (4.87)	101 (62)	137 (262)	91.0 (0.3)
24	22.9 (7.1)	42.4 (37.1)	5.22 (2.61)	207 (48)	324 (380)	90.2 (0.2)
25	13.6 (4.5)	39.6 (22.1)	5.75 (2.25)	332 (109)	323 (376)	91.2 (0.3)
26	11.9 (6.5)	43.0 (19.6)	7.36 (4.67)	29 (124)	263 (307)	91.5 (0.3)
27	10.1 (5.6)	38.1 (23.5)	4.67 (2.09)	306 (84)	329 (376)	92.2 (0.3)
28	16.1 (8.5)	21.1 (14.4)	4.22 (1.68)	199 (84)	307 (357)	91.5 (0.2)
29	16.7 (9.7)	43.0 (28.7)	4.11 (2.04)	70 (98)	305 (360)	90.8 (0.3)
30	23.9 (8.8)	12.0 (9.2)	7.39 (3.18)	212 (12)	321 (375)	89.6 (0.3)
Mean	16.1	39.7	6.08	348	285	91.0
n	16	16	30	30	12	30
SD	4.9	19.2	1.62	115	53	0.7
Min	5.4	12.0	2.98	12	137	89.6
Max	23.9	80.6	9.62	359	329	92.4

ED_004549_00015840-00063

Table E1. Daily means (SD) of weather parameters at Site OK4B for May, 2008

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	17.6 (5.7)	29.4 (15.3)	7.76 (3.49)	272 (65)	270 (352)	89.7 (0.3)
2	9.8 (6.1)	41.0 (20.2)	7.69 (3.99)	286 (44)	273 (328)	90.7 (0.5)
3	10.2 (6.0)	29.8 (15.0)	4.44 (1.96)	9 (117)	341 (385)	91.7 (0.2)
4	17.3 (8.9)	30.2 (10.7)	5.48 (2.43)	163 (43)	328 (382)	91.3 (0.2)
5	19.9 (6.3)	55.7 (16.9)	6.99 (2.95)	141 (53)	293 (367)	91.2 (0.2)
6	21.9 (5.8)	63.7 (21.2)	7.19 (2.04)	169 (44)	315 (379)	90.6 (0.4)
7	16.1 (2.1)	79.3 (11.2)	5.61 (2.81)	27 (132)	77 (122)	90.4 (0.2)
8	17.4 (7.2)	66.3 (27.2)	5.50 (3.73)	229 (87)	296 (377)	90.4 (0.4)
9	18.2 (6.0)	53.4 (21.8)	5.95 (2.69)	181 (95)	322 (359)	90.8 (0.2)
10	16.8 (4.3)	44.8 (15.7)	8.32 (3.02)	303 (77)	326 (373)	90.8 (0.6)
11	14.1 (7.1)	39.8 (20.7)	5.22 (3.09)	203 (74)	345 (385)	91.5 (0.4)
12	22.7 (8.8)	27.6 (18.1)	7.90 (2.54)	184 (23)	336 (375)	90.1 (0.4)
13	16.5 (3.4)	51.7 (10.5)	6.69 (1.96)	338 (134)	313 (379)	90.8 (0.4)
14	12.2 (2.9)	74.8 (13.2)	3.09 (1.63)	60 (110)	135 (214)	91.4 (0.1)
15	14.7 (3.9)	65.0 (21.1)	4.57 (2.38)	338 (117)	247 (328)	91.6 (0.2)
16	17.6 (6.6)	42.2 (22.2)	3.80 (1.60)	304 (63)	300 (360)	91.8 (0.2)
17	20.6 (5.9)	37.9 (18.2)	6.20 (2.65)	331 (127)	338 (387)	91.3 (0.1)
18	22.9 (8.1)	31.5 (16.6)	2.77 (1.27)	260 (88)	335 (379)	91.0 (0.3)
19	26.7 (7.1)	27.7 (13.7)	4.28 (2.23)	357 (119)	337 (387)	90.5 (0.1)
20	22.9 (4.4)	42.2 (14.8)	5.87 (1.28)	66 (70)	334 (372)	91.1 (0.2)
21	23.0 (4.9)	47.5 (11.7)	8.98 (3.64)	143 (26)	315 (362)	89.9 (0.5)
22	26.8 (4.4)	37.6 (20.9)	9.64 (3.15)	165 (38)	300 (361)	89.2 (0.2)
23	25.5 (5.6)	47.4 (27.2)	7.08 (3.37)	158 (68)	302 (365)	89.9 (0.2)
24	22.8 (7.0)	28.9 (15.1)	4.86 (2.41)	193 (36)	358 (391)	90.8 (0.1)
25	24.6 (5.3)	44.8 (11.9)	7.49 (4.02)	176 (26)	209 (314)	90.7 (0.2)
26	25.5 (5.9)	50.2 (20.9)	5.66 (2.90)	164 (37)	335 (368)	90.5 (0.2)
27	15.8 (2.4)	77.6 (10.8)	7.04 (2.75)	356 (160)	197 (268)	91.3 (0.4)
28	17.5 (6.0)	74.4 (17.4)	6.06 (1.90)	94 (111)	219 (285)	91.8 (0.2)
29	27.3 (5.1)	49.4 (20.2)	8.45 (3.13)	173 (19)	310 (363)	91.0 (0.3)
30	26.3 (5.7)	40.1 (19.2)	6.52 (2.13)	62 (102)	355 (386)	90.9 (0.1)
31	24.6 (5.5)	56.8 (12.9)	6.73 (1.99)	47 (115)	320 (366)	91.1 (0.1)
Mean	19.9	48.0	6.25	173	293	90.8
n	31	31	31	31	31	31
SD	4.9	15.3	1.64	101	64	0.6
Min	9.8	27.6	2.77	9	77	89.2
Max	27.3	79.3	9.64	357	358	91.8

ED_004549_00015840-00064

Table E1. Daily means (SD) of weather parameters at Site OK4B for June, 2008

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	25.4 (4.6)	63.2 (17.3)	7.05 (1.75)	72 (31)	292 (354)	91.2 (0.1)
2	31.2 (9.2)	39.6 (36.1)	6.30 (2.79)	199 (60)	321 (378)	90.4 (0.4)
3	26.4 (4.2)	44.1 (15.8)	4.90 (1.81)	339 (113)	296 (361)	
4	26.7 (8.9)	40.5 (33.6)	5.00 (3.06)	226 (88)	352 (400)	
5	25.2 (4.2)	34.3 (17.9)	9.60 (4.53)	235 (47)	323 (359)	89.4 (0.3)
6	24.7 (7.6)	32.4 (21.8)	5.49 (2.57)	193 (46)	362 (388)	90.5 (0.2)
7	31.3 (5.1)	38.7 (14.4)	9.27 (2.91)	182 (24)	335 (378)	90.3 (0.2)
8	24.9 (3.9)	45.0 (7.3)	7.53 (2.95)	355 (137)	340 (376)	90.6 (0.3)
9	22.3 (5.4)	38.2 (18.0)	4.48 (2.56)	74 (112)	348 (395)	91.2 (0.1)
10	26.8 (7.6)	48.1 (20.7)	8.37 (4.59)	171 (26)	326 (377)	90.7 (0.4)
11	31.4 (6.8)	26.0 (16.3)	10.70 (3.72)	212 (83)	356 (390)	90.0 (0.2)
12	24.1 (6.6)	30.5 (12.3)	5.77 (3.46)	16 (142)	357 (389)	90.8 (0.1)
13	24.6 (4.9)	29.6 (8.8)	5.29 (2.55)	44 (123)	361 (389)	91.4 (0.2)
14						
15	29.6 (6.3)	36.7 (17.8)	4.82 (2.42)	196 (86)	357 (383)	90.8 (0.1)
16	23.7 (2.9)	57.7 (7.6)	7.60 (3.28)	65 (27)	225 (290)	91.3 (0.2)
17	23.1 (3.6)	61.3 (12.6)	6.07 (1.81)	136 (46)	159 (225)	91.6 (0.2)
18	25.2 (7.5)	54.9 (22.2)	6.38 (3.64)	151 (39)	315 (372)	91.2 (0.3)
19	22.6 (3.3)	59.0 (11.7)	7.37 (4.34)	142 (76)	212 (317)	91.3 (0.1)
20	24.1 (7.2)	56.6 (24.6)	3.80 (2.71)	7 (117)		91.7 (0.1)
21						
22	27.1 (6.7)	46.2 (21.2)	4.29 (2.12)	181 (54)	315 (380)	91.5 (0.3)
23	27.7 (6.5)	40.5 (18.7)	6.93 (2.15)	203 (58)	319 (386)	91.2 (0.1)
24	26.7 (5.3)	49.9 (17.1)	4.54 (2.35)	164 (44)	281 (371)	91.4 (0.1)
25	28.4 (5.8)	46.6 (17.7)	5.70 (2.21)	175 (39)	322 (372)	91.3 (0.1)
26	29.6 (5.4)	43.3 (16.3)	6.29 (1.91)	167 (22)	287 (361)	90.9 (0.3)
27	29.2 (5.3)	42.1 (13.9)	4.33 (1.90)	71 (80)	319 (360)	90.7 (0.1)
28	25.0 (2.7)	57.1 (19.1)	6.56 (3.22)	33 (78)	283 (358)	91.6 (0.3)
29	24.0 (5.3)	43.7 (16.0)	2.84 (1.30)	36 (125)	330 (362)	92.1 (0.2)
30	27.6 (5.4)	39.0 (16.4)	4.04 (1.66)	192 (23)	308 (370)	91.8 (0.2)
Mean	26.4	44.5	6.12	149	311	91.0
n	28	28	28	28	27	26
SD	2.6	9.9	1.83	87	47	0.6
Min	22.3	26.0	2.84	7	159	89.4
Max	31.4	63.2	10.70	355	362	92.1

ED_004549_00015840-00065

Table E1. Daily means (SD) of weather parameters at Site OK4B for July, 2008

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	29.4 (5.0)	34.1 (12.2)	5.83 (1.72)	196 (25)	336 (378)	91.2 (0.2)
2	29.3 (6.3)	41.7 (18.6)	6.65 (3.00)	199 (41)	344 (377)	91.0 (0.1)
3						
4	26.5 (5.9)	55.0 (21.0)	4.49 (2.00)	151 (34)	318 (374)	91.4 (0.2)
5	29.6 (5.6)	41.9 (17.5)	5.65 (1.87)	181 (22)	340 (375)	91.0 (0.2)
6	28.7 (4.8)	42.9 (14.3)	6.31 (2.62)	179 (23)	315 (361)	90.9 (0.1)
7	26.6 (4.7)	55.6 (18.3)	5.79 (1.84)	199 (38)	262 (340)	91.0 (0.1)
8	24.4 (3.0)	67.5 (14.8)	3.66 (1.69)	212 (48)	170 (234)	91.3 (0.1)
9	21.8 (0.5)	86.1 (2.6)	2.74 (1.22)	180 (44)	65 (75)	91.6 (0.1)
10	24.4 (3.8)	74.3 (17.6)	6.21 (2.02)	166 (36)	266 (349)	91.3 (0.2)
11	27.7 (4.5)	59.3 (16.3)	6.49 (2.80)	194 (19)	248 (319)	90.9 (0.1)
12	21.9 (2.3)	56.8 (7.2)	7.42 (3.89)	13 (126)	114 (129)	91.5 (0.4)
13	23.7 (4.7)	56.2 (19.8)	3.15 (1.62)	71 (110)	334 (368)	91.7 (0.2)
14	26.1 (4.6)	65.4 (18.2)	4.88 (1.65)	162 (21)	299 (358)	91.3 (0.2)
15	26.6 (4.5)	59.4 (16.8)	4.87 (1.93)	168 (25)	328 (373)	91.4 (0.1)
16	26.2 (3.8)	64.7 (14.5)	4.99 (1.79)	147 (26)	237 (321)	91.5 (0.1)
17	28.2 (4.8)	52.7 (17.6)	5.20 (1.78)	176 (16)	300 (364)	91.3 (0.2)
18	27.8 (3.8)	55.9 (14.3)	3.62 (1.52)	177 (86)	230 (326)	91.2 (0.1)
19	26.1 (4.4)	61.3 (20.3)	4.32 (2.39)	197 (21)	249 (327)	91.3 (0.1)
20	27.9 (6.1)	45.6 (18.7)	4.24 (1.87)	202 (22)	329 (369)	91.5 (0.1)
21	28.9 (5.7)	39.7 (15.3)	4.82 (2.26)	183 (29)	326 (371)	91.2 (0.1)
22	29.8 (5.7)	40.0 (14.1)	3.71 (1.82)	172 (29)	330 (371)	91.2 (0.1)
23	30.0 (5.8)	37.1 (13.5)	5.09 (2.00)	183 (31)	321 (367)	91.2 (0.1)
24	30.0 (5.6)	40.0 (13.5)	5.66 (1.88)	184 (27)	325 (365)	91.2 (0.1)
25	30.1 (5.5)	43.7 (14.4)	3.73 (2.03)	203 (60)	289 (367)	91.5 (0.1)
26	30.2 (5.1)	44.1 (15.5)	4.00 (1.76)	204 (26)	319 (364)	91.4 (0.2)
27	30.3 (5.1)	45.8 (14.5)	4.53 (1.95)	183 (38)	287 (360)	91.0 (0.2)
28	29.8 (4.9)	52.5 (15.5)	4.70 (2.49)	169 (58)	254 (334)	90.6 (0.2)
29	24.2 (3.0)	74.5 (12.8)	3.90 (1.56)	336 (137)	200 (276)	90.9 (0.1)
30	26.5 (5.8)	57.8 (23.6)	2.66 (1.09)	3 (127)	325 (364)	91.1 (0.1)
31	29.6 (7.5)	37.5 (22.5)	3.35 (1.60)	191 (53)	327 (369)	91.0 (0.1)
Mean	27.4	53.0	4.76	181	280	91.2
n	30	30	30	30	30	30
SD	2.5	12.5	1.18	58	67	0.2
Min	21.8	34.1	2.66	3	65	90.6
Max	30.3	86.1	7.42	336	344	91.7

ED_004549_00015840-00066

Table E1. Daily means (SD) of weather parameters at Site OK4B for August, 2008

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	30.4 (7.2)	34.9 (17.3)	3.77 (1.40)	186 (40)	326 (367)	91.2 (0.1)
2	31.1 (6.0)	35.8 (15.7)	4.71 (1.64)	193 (29)	327 (368)	91.1 (0.1)
3	31.2 (5.5)	33.8 (11.8)	6.00 (2.34)	190 (24)	321 (364)	91.0 (0.1)
4	32.6 (5.7)	24.3 (9.2)	5.67 (2.21)	195 (25)	320 (362)	91.1 (0.1)
5	29.6 (5.4)	39.4 (12.6)	3.51 (2.26)	359 (114)	251 (347)	91.5 (0.1)
6	28.1 (5.0)	51.1 (17.6)	5.39 (2.37)	125 (65)	277 (344)	91.6 (0.1)
7	25.7 (3.7)	64.4 (13.8)	5.74 (2.89)	59 (84)	188 (254)	91.6 (0.1)
8	25.2 (3.2)	72.1 (14.5)	5.88 (1.71)	115 (26)	181 (266)	91.4 (0.2)
9	28.2 (5.4)	56.1 (19.8)	4.77 (1.98)	226 (82)	231 (327)	90.8 (0.2)
10	24.0 (2.2)	76.6 (10.6)	5.34 (1.67)	44 (87)	118 (195)	91.2 (0.1)
11	25.1 (3.7)	66.5 (17.5)	2.98 (1.32)	19 (136)	243 (323)	91.1 (0.1)
12	25.6 (5.5)	63.3 (23.5)	4.07 (1.97)	124 (68)	256 (342)	91.1 (0.1)
13	26.8 (4.8)	48.7 (11.6)	3.85 (1.86)	205 (79)	284 (345)	91.2 (0.1)
14	24.7 (5.3)	51.0 (14.0)	4.99 (3.08)	105 (84)	283 (351)	91.2 (0.1)
15	21.9 (3.7)	68.1 (15.1)	5.38 (2.31)	51 (110)	192 (265)	91.6 (0.1)
16	21.6 (2.6)	72.7 (13.6)	3.87 (1.85)	91 (40)	142 (255)	91.9 (0.1)
17	19.0 (0.8)	85.2 (4.1)	3.13 (1.89)	111 (38)	56 (84)	91.6 (0.1)
18	18.7 (2.0)	85.7 (8.6)	3.54 (1.73)	53 (99)	96 (192)	91.4 (0.1)
19	19.8 (2.4)	81.2 (10.4)	3.79 (1.44)	68 (86)	135 (199)	91.5 (0.1)
20	21.2 (3.0)	75.4 (13.1)	2.71 (1.12)	122 (26)	180 (262)	91.3 (0.1)
21	24.6 (5.4)	68.8 (18.9)	4.28 (1.82)	160 (25)	290 (348)	90.9 (0.2)
22	27.3 (5.4)	59.6 (19.3)	4.58 (7.21)	157 (23)	293 (346)	90.9 (0.2)
23	26.7 (4.7)	62.1 (16.3)	2.59 (1.18)	188 (56)	283 (338)	91.6 (0.1)
24	26.4 (4.7)	60.6 (17.1)	3.38 (1.66)	153 (49)	285 (344)	91.6 (0.1)
25	24.6 (3.5)	69.7 (17.0)	5.80 (3.09)	118 (27)	258 (333)	91.3 (0.2)
26	26.1 (5.6)	59.0 (19.7)	5.65 (1.75)	162 (22)	268 (333)	90.8 (0.2)
27	27.5 (5.6)	52.0 (17.2)	4.00 (1.52)	195 (23)	249 (308)	90.8 (0.1)
28	27.7 (5.6)	52.7 (17.3)	3.64 (1.89)	216 (90)	256 (310)	90.9 (0.1)
29	25.0 (5.0)	59.8 (10.1)	4.60 (1.41)	62 (84)	261 (324)	91.5 (0.1)
30	24.6 (4.5)	59.3 (15.9)	4.34 (1.62)	172 (41)	267 (330)	91.5 (0.1)
31	25.0 (3.9)	63.6 (16.0)	6.17 (2.54)	169 (18)	217 (295)	91.2 (0.2)
Mean	25.7	59.8	4.45	136	237	91.3
n	31	31	31	31	31	31
SD	3.4	14.9	1.03	69	69	0.3
Min	18.7	24.3	2.59	19	56	90.8
Max	32.6	85.7	6.17	359	327	91.9

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Table E1. Daily means (SD) of weather parameters at Site OK4B for September, 2008

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	26.2 (4.4)	56.6 (16.2)	7.09 (2.18)	160 (15)	259 (323)	90.9 (0.1)
2	20.0 (1.9)	65.1 (10.0)	6.99 (3.14)	21 (136)	111 (145)	91.5 (0.3)
3	14.2 (1.5)	74.6 (13.0)	4.29 (1.80)	1 (158)	112 (145)	91.7 (0.2)
4	17.5 (5.2)	65.3 (18.0)	2.50 (0.98)	16 (137)	269 (335)	91.3 (0.1)
5	16.0 (2.5)	77.5 (7.2)	4.67 (2.13)	57 (56)	91 (156)	91.3 (0.2)
6	16.2 (3.4)	80.4 (11.6)	4.32 (2.17)	69 (78)	127 (172)	91.4 (0.1)
7	19.5 (4.5)	73.9 (14.2)	3.58 (1.21)	110 (50)	153 (231)	91.5 (0.2)
8	14.6 (2.8)	82.7 (6.1)	4.81 (2.51)	351 (138)	103 (180)	91.6 (0.3)
9	15.9 (4.4)	80.2 (13.5)	3.99 (1.81)	124 (74)	147 (221)	91.6 (0.3)
10	22.2 (5.0)	70.9 (17.6)	6.18 (2.15)	171 (19)	233 (301)	91.0 (0.2)
11	22.1 (2.5)	79.0 (11.0)	3.71 (1.52)	165 (55)	90 (123)	91.1 (0.1)
12	20.5 (2.6)	85.5 (10.2)	3.21 (1.09)	40 (106)	118 (180)	90.9 (0.1)
13	21.4 (4.6)	62.9 (28.0)	3.34 (1.38)	333 (109)	250 (323)	90.9 (0.1)
14	16.7 (3.0)	51.9 (17.1)	4.84 (1.95)	341 (132)	256 (316)	91.9 (0.3)
15	18.2 (5.4)	51.1 (13.5)	2.66 (1.21)	158 (83)	242 (301)	92.3 (0.1)
16	20.7 (6.5)	56.0 (19.3)	3.33 (1.54)	164 (30)	253 (314)	92.0 (0.2)
17	21.7 (6.3)	51.8 (22.6)	4.47 (1.94)	167 (27)	254 (317)	91.8 (0.1)
18	20.7 (4.9)	48.2 (18.4)	5.29 (2.02)	151 (16)	227 (303)	91.7 (0.1)
19	20.5 (5.3)	55.2 (20.3)	4.39 (1.25)	162 (23)	186 (255)	91.6 (0.1)
20	21.1 (6.4)	53.8 (20.3)	4.15 (2.09)	159 (31)	246 (312)	91.6 (0.1)
21	23.0 (5.5)	52.6 (17.5)	6.26 (2.40)	163 (17)	235 (302)	91.5 (0.1)
22	24.2 (4.9)	47.3 (16.7)	7.28 (1.90)	168 (18)	238 (302)	91.4 (0.1)
23	24.0 (5.6)	48.7 (15.7)	4.34 (1.72)	194 (26)	216 (285)	91.6 (0.1)
24	23.3 (5.0)	53.0 (14.5)	4.38 (2.72)	166 (28)	176 (246)	92.0 (0.1)
25	23.2 (5.2)	50.1 (15.3)	4.85 (1.70)	171 (21)	232 (297)	91.9 (0.2)
26	23.1 (6.5)	45.2 (18.7)	4.07 (1.36)	191 (25)	238 (304)	91.6 (0.1)
27	22.3 (6.9)	42.3 (15.0)	2.88 (1.26)	252 (104)	234 (299)	91.6 (0.1)
28	22.5 (6.4)	40.7 (16.2)	3.00 (1.02)	197 (46)	231 (298)	91.8 (0.1)
29	18.5 (4.0)	41.8 (16.5)	4.89 (2.33)	347 (145)	227 (292)	92.1 (0.2)
30	18.6 (7.1)	39.2 (10.0)	2.96 (1.56)	150 (92)	225 (291)	92.0 (0.2)
Mean	20.3	59.5	4.42	146	199	91.6
n	30	30	30	30	30	30
SD	3.0	13.9	1.27	91	58	0.4
Min	14.2	39.2	2.50	1	90	90.9
Max	26.2	85.5	7.28	351	269	92.3

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Table E1. Daily means (SD) of weather parameters at Site OK4B for October, 2008

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	19.7 (7.0)	41.3 (17.6)	3.07 (0.90)	324 (116)	226 (295)	91.8 (0.1)
2	18.7 (6.4)	47.3 (15.6)	5.42 (2.17)	127 (36)	212 (284)	91.3 (0.3)
3	21.1 (5.6)	47.0 (15.0)	3.84 (1.41)	148 (52)	210 (284)	90.9 (0.1)
4	22.8 (6.2)	40.6 (12.5)	6.42 (3.19)	173 (23)	200 (275)	90.7 (0.2)
5	17.0 (1.6)	80.2 (11.7)	7.28 (1.98)	159 (17)	23 (33)	90.7 (0.1)
6	15.5 (2.1)	81.2 (11.0)	4.23 (2.44)	309 (93)	110 (171)	91.0 (0.4)
7	15.5 (6.1)	58.1 (24.7)	3.08 (0.98)	305 (89)	222 (288)	91.9 (0.2)
8	17.6 (7.2)	59.0 (20.0)	3.35 (1.20)	90 (93)	220 (287)	91.3 (0.1)
9	20.2 (5.4)	49.9 (18.0)	7.26 (3.65)	150 (19)	212 (279)	90.9 (0.2)
10	22.9 (6.5)	42.8 (18.3)	7.77 (2.06)	173 (24)	214 (283)	90.5 (0.1)
11	16.8 (2.8)	81.5 (7.9)	6.61 (2.95)	138 (65)	28 (40)	91.0 (0.2)
12	17.8 (0.6)	92.1 (1.0)	10.40 (3.33)	145 (22)	11 (20)	90.9 (0.1)
13	10.3 (2.3)	79.1 (8.0)	6.37 (1.84)	338 (102)	60 (91)	92.0 (0.3)
14	8.0 (1.1)	86.9 (6.0)	4.67 (1.61)	346 (156)	15 (23)	92.0 (0.2)
15	10.5 (3.2)	78.7 (12.3)	3.42 (1.78)	346 (135)	186 (263)	92.2 (0.2)
16	11.3 (4.9)	74.1 (15.6)	3.35 (1.63)	203 (44)	200 (267)	92.2 (0.2)
17	14.9 (5.3)	58.6 (20.8)	3.22 (1.72)	322 (117)	200 (267)	92.2 (0.1)
18	16.8 (7.0)	61.3 (18.9)	4.34 (1.71)	193 (31)	195 (263)	91.9 (0.3)
19	20.2 (6.4)	46.0 (22.7)	3.97 (1.78)	252 (79)	197 (264)	91.4 (0.1)
20	13.3 (1.5)	77.3 (9.1)	4.89 (1.62)	359 (161)	85 (154)	92.1 (0.2)
21	16.2 (4.3)	77.8 (15.0)	4.95 (2.61)	150 (60)	135 (224)	91.3 (0.4)
22	8.2 (1.7)	59.9 (16.9)	8.22 (2.73)	306 (44)	115 (176)	91.8 (0.2)
23	4.7 (1.3)	60.1 (13.3)	7.02 (2.12)	285 (14)	54 (82)	91.5 (0.1)
24	7.6 (7.1)	56.8 (22.7)	2.63 (1.15)	292 (107)	169 (231)	91.4 (0.1)
25	13.1 (8.2)	49.7 (23.3)	4.35 (1.99)	223 (23)	186 (254)	91.3 (0.2)
26	10.0 (3.3)	51.5 (11.7)	6.18 (3.06)	345 (154)	164 (222)	92.4 (0.7)
27	6.4 (6.4)	54.0 (21.9)	3.09 (1.22)	177 (87)	179 (249)	93.1 (0.3)
28	9.3 (6.7)	55.9 (18.5)	2.08 (0.84)	68 (79)	173 (243)	92.5 (0.2)
29	13.6 (8.2)	51.7 (22.9)	2.77 (0.82)	192 (70)	175 (246)	91.9 (0.2)
30	16.9 (8.0)	49.3 (25.1)	2.24 (0.91)	246 (99)	171 (242)	91.7 (0.2)
31	17.1 (6.4)	38.4 (15.3)	2.97 (1.21)	20 (121)	169 (238)	92.4 (0.1)
Mean	14.6	60.9	4.82	232	152	91.6
n	31	31	31	31	31	31
SD	4.9	15.2	2.01	92	68	0.6
Min	4.7	38.4	2.08	20	11	90.5
Max	22.9	92.1	10.40	359	226	93.1

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Table E1. Daily means (SD) of weather parameters at Site OK4B for November, 2008

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	16.5 (6.6)	48.0 (13.1)	3.42 (2.09)	184 (65)	160 (228)	92.1 (0.2)
2	17.2 (7.4)	49.3 (25.7)	3.64 (1.61)	179 (21)	162 (231)	91.3 (0.2)
3	17.7 (4.1)	56.6 (13.7)	5.37 (1.53)	172 (28)	130 (190)	91.0 (0.1)
4	19.7 (5.4)	58.4 (24.0)	6.64 (2.19)	179 (20)	152 (223)	90.5 (0.3)
5	14.4 (4.8)	49.2 (22.9)	6.67 (2.75)	241 (60)	106 (172)	90.2 (0.3)
6	7.4 (5.9)	42.9 (23.3)	3.86 (1.19)	292 (90)	156 (233)	91.3 (0.3)
7	8.9 (6.8)	33.8 (18.9)	4.75 (1.90)	271 (34)	160 (233)	91.5 (0.1)
8	9.7 (6.1)	49.1 (15.7)	3.49 (1.00)	315 (104)	151 (225)	91.5 (0.1)
9	7.9 (6.0)	58.1 (17.9)	6.30 (2.03)	114 (30)	150 (222)	91.0 (0.3)
10	10.8 (4.0)	63.9 (18.5)	6.06 (2.36)	162 (71)	96 (176)	90.4 (0.2)
11	6.6 (3.9)	69.7 (13.1)	4.03 (1.74)	311 (107)	145 (214)	91.0 (0.2)
12	8.5 (6.6)	64.3 (21.8)	2.79 (1.06)	238 (40)	133 (204)	91.1 (0.1)
13	12.3 (6.8)	51.9 (22.1)	4.94 (1.81)	225 (52)	116 (187)	90.4 (0.3)
14	6.6 (2.7)	55.1 (17.8)	6.11 (2.69)	321 (76)	82 (131)	91.6 (0.7)
15	3.7 (4.6)	42.8 (14.5)	4.07 (1.54)	277 (44)	150 (219)	92.5 (0.2)
16	11.0 (8.9)	35.7 (17.6)	2.72 (1.19)	243 (49)	147 (214)	91.9 (0.1)
17	6.9 (3.8)	58.1 (13.9)	4.30 (1.90)	37 (120)		92.4 (0.3)
18	11.0 (8.5)	52.4 (24.4)	4.48 (1.47)	187 (24)	144 (210)	92.3 (0.4)
19	14.2 (7.3)	37.7 (14.7)	4.80 (1.08)	324 (126)	146 (212)	91.6 (0.2)
20	1.4 (2.5)	65.6 (8.2)	7.74 (3.32)	358 (166)	56 (86)	93.0 (0.3)
21	1.1 (5.1)	56.0 (13.0)	5.75 (2.27)	159 (33)	137 (204)	92.3 (0.5)
22	4.8 (7.9)	52.5 (19.1)	2.14 (0.96)	122 (93)	139 (208)	91.8 (0.1)
23	7.5 (7.1)	47.2 (21.2)	4.46 (2.84)	294 (92)	128 (198)	91.4 (0.4)
24	6.1 (5.8)	51.1 (16.1)	3.98 (1.05)	258 (42)	138 (204)	92.3 (0.2)
25	8.4 (7.4)	37.5 (16.3)	3.11 (1.61)	284 (98)	141 (212)	91.5 (0.2)
26	8.5 (6.4)	32.5 (12.9)	3.25 (0.98)	330 (113)	134 (200)	91.5 (0.1)
27	4.3 (2.3)	57.1 (13.5)	5.15 (2.98)	342 (144)	69 (133)	91.6 (0.1)
28	2.7 (1.0)	86.2 (2.7)	2.63 (0.89)	64 (77)	24 (41)	91.2 (0.2)
29	5.2 (3.2)	62.1 (19.0)	6.22 (2.30)	295 (24)	105 (174)	90.8 (0.1)
30	5.6 (2.2)	45.2 (10.9)	7.14 (2.08)	310 (43)	99 (169)	90.9 (0.2)
Mean	8.9	52.3	4.67	265	126	91.5
n	30	30	30	30	29	30
SD	4.8	11.4	1.45	83	33	0.7
Min	1.1	32.5	2.14	37	24	90.2
Max	19.7	86.2	7.74	358	162	93.0

ED_004549_00015840-00070

Table E1. Daily means (SD) of weather parameters at Site OK4B for December, 2008

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	2.9 (4.3)	57.2 (16.6)	3.83 (1.91)	277 (59)	127 (190)	91.5 (0.2)
2	10.3 (9.2)	47.1 (25.0)	3.63 (1.25)	220 (30)	110 (182)	90.5 (0.3)
3	2.3 (4.6)	50.6 (11.0)	7.34 (3.75)	340 (109)	96 (167)	91.6 (0.8)
4	-1.4 (0.9)	47.7 (7.5)	4.01 (2.27)	95 (40)	34 (56)	92.6 (0.2)
5	0.1 (4.6)	49.4 (16.6)	4.85 (2.80)	198 (43)	126 (191)	91.9 (0.6)
6	5.2 (6.7)	48.1 (14.2)	2.62 (1.01)	271 (91)	97 (157)	91.7 (0.2)
7	9.2 (6.7)	37.5 (13.7)	3.98 (1.80)	194 (25)	115 (177)	91.0 (0.4)
8	10.8 (6.0)	43.0 (16.1)	5.43 (2.73)	265 (102)	109 (178)	89.8 (0.2)
9	-2.8 (3.2)	78.7 (7.8)	7.17 (2.84)	336 (91)	68 (122)	91.5 (0.7)
10	-2.5 (7.5)	67.5 (13.6)	2.67 (1.13)	257 (49)	124 (188)	92.0 (0.2)
11	6.1 (6.5)	60.5 (18.9)	3.26 (1.07)	295 (43)	123 (188)	91.8 (0.1)
12	4.6 (4.1)	65.3 (13.9)	5.51 (3.05)	170 (96)		91.5 (0.7)
13	12.7 (4.5)	41.4 (11.0)	7.69 (2.71)	208 (15)		89.5 (0.3)
14	-2.8 (9.6)	50.4 (9.9)	7.58 (1.95)	321 (103)		90.5 (1.0)
15	-12.6 (1.4)	51.5 (2.6)	4.61 (1.08)	43 (132)		92.4 (0.2)
16	-4.2 (7.8)	53.5 (19.6)	5.87 (1.75)	130 (79)		91.1 (0.4)
17	-4.2 (3.3)	80.3 (10.4)	2.22 (1.19)	68 (56)	66 (120)	91.3 (0.1)
18	6.1 (8.7)	58.7 (26.0)	5.73 (4.34)	172 (66)	86 (145)	90.8 (0.4)
19	4.0 (4.2)	47.5 (12.4)	4.62 (2.76)	183 (85)	114 (171)	91.1 (0.3)
20	-1.6 (4.8)	40.5 (11.4)	5.33 (2.09)	341 (145)	122 (187)	91.4 (0.4)
21	-8.6 (3.2)	54.3 (14.2)	2.61 (1.27)	57 (104)	98 (158)	92.6 (0.2)
22	-3.5 (3.8)	42.0 (10.3)	8.27 (2.46)	171 (21)	33 (52)	91.2 (0.8)
23	4.2 (7.6)	47.5 (13.7)	7.02 (3.26)	226 (71)	100 (172)	89.9 (0.3)
24	-0.3 (7.2)	49.3 (27.9)	3.76 (1.58)	211 (58)	121 (188)	91.3 (0.2)
25	8.6 (4.7)	44.1 (7.6)	5.03 (1.89)	189 (20)	79 (129)	90.7 (0.4)
26	10.9 (5.1)	45.8 (16.4)	5.91 (3.23)	214 (43)	84 (137)	90.0 (0.2)
27	0.2 (2.9)	42.5 (13.2)	5.76 (1.79)	292 (67)	102 (172)	90.9 (0.3)
28	3.1 (8.5)	40.4 (19.1)	3.10 (0.82)	232 (25)	125 (189)	91.6 (0.2)
29	7.3 (7.5)	39.3 (14.4)	4.19 (2.14)	222 (85)	126 (189)	91.8 (0.2)
30	7.5 (8.2)	40.4 (15.9)	5.43 (3.00)	314 (126)	121 (187)	91.4 (0.5)
31	0.1 (5.5)	50.4 (14.9)	4.67 (2.15)	201 (75)	127 (191)	92.0 (0.7)
Mean	2.3	50.7	4.96	231	101	91.2
n	31	31	31	31	26	31
SD	5.9	10.5	1.62	80	27	0.8
Min	-12.6	37.5	2.22	43	33	89.5
Max	12.7	80.3	8.27	341	127	92.6

ED_004549_00015840-00071

Table E1. Daily means (SD) of weather parameters at Site OK4B for January, 2009

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	5.4 (6.8)	40.9 (16.1)	4.09 (1.97)	68 (104)	120 (180)	90.6 (0.2)
2	7.5 (9.3)	42.1 (18.5)	2.38 (1.09)	200 (51)	129 (188)	90.3 (0.3)
3	4.3 (6.4)	45.9 (12.5)	6.22 (3.06)	290 (96)	132 (191)	90.2 (0.7)
4	-4.0 (2.1)	41.2 (10.8)	4.91 (1.78)	15 (149)	86 (126)	92.1 (0.2)
5	-0.3 (6.1)	35.2 (12.2)	4.62 (2.65)	190 (29)	132 (191)	90.8 (0.9)
6	2.1 (4.9)	37.3 (11.0)	5.18 (1.60)	306 (59)	131 (194)	90.2 (0.3)
7	5.4 (10.0)	37.2 (16.6)	3.69 (1.29)	271 (33)	132 (190)	90.3 (0.2)
8	8.4 (7.8)	41.3 (14.9)	3.98 (1.18)	220 (54)	137 (193)	90.9 (0.2)
9	5.9 (5.8)	53.7 (14.5)	7.34 (4.09)	308 (98)	131 (187)	90.8 (0.7)
10	0.8 (6.1)	47.7 (19.5)	3.49 (1.72)	289 (67)	142 (199)	92.2 (0.1)
11	3.0 (7.0)	40.3 (14.5)	3.27 (1.02)	233 (90)	138 (198)	92.0 (0.3)
12	1.4 (3.7)	47.3 (9.5)	6.29 (3.28)	300 (44)	79 (114)	91.9 (0.5)
13	2.0 (8.5)	44.1 (21.8)	4.24 (2.11)	231 (23)	130 (193)	91.8 (0.4)
14	2.5 (5.4)	50.7 (12.8)	5.93 (2.51)	12 (127)	128 (183)	92.0 (0.3)
15	-7.6 (1.9)	60.3 (7.4)	3.92 (1.12)	95 (31)	87 (124)	92.9 (0.1)
16	3.4 (10.0)	48.7 (19.4)	2.96 (1.24)	238 (48)	145 (202)	92.2 (0.3)
17	7.0 (5.5)	34.3 (11.9)	5.30 (1.72)	304 (69)	147 (205)	91.9 (0.2)
18	10.0 (7.0)	25.7 (13.2)	6.20 (1.87)	295 (11)	144 (204)	92.0 (0.3)
19	12.0 (5.0)	22.5 (8.2)	6.20 (2.38)	319 (72)	145 (206)	91.7 (0.2)
20	7.6 (5.6)	33.3 (12.0)	4.07 (1.12)	282 (41)	150 (210)	92.0 (0.3)
21	10.5 (8.2)	20.2 (9.9)	3.42 (1.19)	260 (51)	159 (219)	91.4 (0.2)
22	10.2 (8.8)	21.3 (9.3)	3.45 (1.67)	266 (68)	150 (218)	90.9 (0.1)
23	3.1 (5.0)	40.6 (11.3)	8.37 (3.70)	355 (136)	119 (179)	91.7 (0.6)
24	-4.6 (3.2)	56.6 (13.7)	5.50 (1.77)	88 (84)	145 (210)	92.2 (0.5)
25	-6.0 (3.2)	49.0 (9.0)	6.66 (1.67)	74 (18)	136 (189)	91.4 (0.2)
26	-9.9 (0.9)	75.1 (9.1)	6.19 (1.06)	51 (71)	41 (57)	91.7 (0.1)
27	-10.9 (1.6)	76.7 (4.9)	3.80 (1.88)	332 (114)	108 (151)	91.8 (0.2)
28	-1.5 (9.8)	50.4 (25.0)	2.93 (1.37)	280 (110)	161 (226)	91.4 (0.1)
29	0.8 (5.3)	45.3 (16.3)	3.14 (1.02)	288 (61)	109 (166)	92.0 (0.2)
30	4.8 (9.3)	36.9 (18.3)	3.72 (1.31)	288 (49)	164 (227)	92.1 (0.1)
31	8.3 (8.4)	26.9 (13.9)	4.88 (2.65)	226 (25)	169 (233)	91.1 (0.5)
Mean	2.6	42.9	4.72	290	130	91.5
n	31	31	31	31	31	31
SD	5.9	13.1	1.44	99	27	0.7
Min	-10.9	20.2	2.38	12	41	90.2
Max	12.0	76.7	8.37	355	169	92.9

ED_004549_00015840-00072

Table E1. Daily means (SD) of weather parameters at Site OK4B for February, 2009

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	1.6 (3.6)	37.2 (14.8)	6.42 (2.76)	348 (155)	134 (203)	91.5 (0.5)
2	2.1 (8.1)	33.4 (13.5)	3.04 (1.28)	295 (107)	166 (233)	91.9 (0.2)
3	5.7 (7.6)	35.5 (9.7)	3.28 (1.56)	279 (91)	166 (231)	92.1 (0.2)
4	9.0 (9.0)	35.8 (20.0)	3.92 (1.73)	222 (16)	173 (238)	92.2 (0.2)
5	10.7 (9.0)	25.2 (13.4)	3.08 (1.23)	231 (33)	179 (245)	91.5 (0.2)
6	12.4 (9.9)	20.5 (11.4)	5.75 (3.91)	224 (21)	164 (237)	90.8 (0.2)
7	11.1 (6.4)	24.9 (6.4)	5.43 (2.12)	33 (111)	147 (216)	91.4 (0.2)
8	10.5 (2.8)	66.7 (16.0)	7.82 (1.66)	106 (41)	46 (74)	91.1 (0.5)
9	9.6 (4.6)	53.4 (25.9)	9.20 (4.35)	216 (26)	185 (251)	89.9 (0.2)
10	8.5 (6.0)	44.5 (20.0)	4.28 (2.43)	229 (46)	178 (248)	90.0 (0.2)
11	7.2 (4.3)	47.1 (16.5)	4.85 (2.77)	269 (73)	189 (254)	90.9 (0.4)
12	4.4 (4.9)	52.8 (16.5)	5.42 (2.04)	49 (111)	138 (206)	91.2 (0.2)
13	0.7 (2.9)	69.7 (16.0)	6.53 (2.64)	345 (135)	190 (257)	91.2 (0.4)
14	-1.3 (3.5)	65.7 (15.0)	4.34 (1.56)	89 (54)	159 (242)	91.5 (0.2)
15	-0.9 (5.5)	58.9 (16.8)	3.08 (1.21)	57 (120)	192 (263)	92.0 (0.2)
16	6.6 (6.4)	51.8 (12.1)	6.53 (2.56)	184 (24)	190 (260)	91.4 (0.4)
17	10.3 (7.8)	43.0 (31.9)	7.73 (4.35)	232 (24)	195 (264)	90.2 (0.3)
18	6.1 (5.2)	39.3 (13.3)	4.61 (1.06)	335 (135)	176 (258)	91.0 (0.4)
19	5.7 (6.6)	47.2 (22.4)	3.24 (1.60)	272 (82)	182 (255)	91.9 (0.1)
20	7.6 (8.9)	34.1 (21.3)	4.29 (4.17)	245 (70)	202 (274)	91.1 (0.4)
21	1.6 (5.1)	36.2 (16.4)	4.35 (2.81)	299 (75)	206 (274)	92.2 (0.2)
22	6.6 (9.0)	30.8 (14.0)	3.29 (1.50)	191 (77)	186 (258)	91.9 (0.2)
23	7.1 (5.3)	31.6 (10.0)	2.80 (1.10)	64 (108)	144 (197)	91.5 (0.2)
24	11.1 (7.3)	34.2 (10.3)	3.12 (1.47)	62 (105)	209 (275)	91.0 (0.1)
25						
26						
27	1.3 (5.1)	50.9 (15.2)	4.53 (3.06)	34 (106)	219 (285)	91.3 (0.3)
28	-0.9 (4.0)	49.7 (18.7)	4.65 (2.20)	334 (121)	224 (290)	92.6 (0.2)
Mean	5.9	43.1	4.83	290	175	91.4
n	26	26	26	26	26	26
SD	4.1	12.9	1.67	104	34	0.7
Min	-1.3	20.5	2.80	33	46	89.9
Max	12.4	69.7	9.20	348	224	92.6

ED_004549_00015840-00073

Table E1. Daily means (SD) of weather parameters at Site OK4B for March, 2009

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	2.3 (7.9)	36.4 (17.0)	4.22 (1.86)	198 (71)	205 (266)	92.5 (0.4)
2	7.9 (6.7)	29.3 (9.0)	3.63 (1.71)	124 (37)	185 (260)	91.5 (0.2)
3	9.5 (6.4)	35.3 (10.4)	3.16 (1.02)	130 (48)	139 (196)	91.1 (0.1)
4	17.7 (9.2)	26.9 (14.4)	6.06 (3.75)	223 (32)	200 (277)	90.7 (0.2)
5	17.9 (7.4)	18.7 (13.7)	6.83 (3.27)	232 (34)	203 (272)	90.6 (0.1)
6	15.9 (7.4)	22.9 (6.6)	5.06 (2.29)	161 (72)	183 (260)	90.9 (0.3)
7	16.2 (5.8)	37.0 (17.2)	6.50 (3.23)	267 (98)	171 (267)	90.4 (0.2)
8	10.0 (8.5)	39.9 (31.5)	4.15 (1.69)	208 (49)	241 (311)	90.9 (0.2)
9	15.7 (5.0)	33.2 (8.8)	7.90 (3.84)	215 (30)	139 (206)	90.5 (0.2)
10	0.1 (3.0)	60.6 (21.3)	5.17 (3.06)	6 (159)	172 (245)	91.1 (0.5)
11	-1.4 (4.0)	37.9 (12.6)	4.86 (2.25)	68 (79)	235 (292)	92.4 (0.2)
12	0.1 (4.7)	57.6 (12.4)	5.44 (1.40)	108 (22)	202 (257)	92.0 (0.2)
13	1.9 (1.7)	78.6 (8.0)	3.02 (2.38)	70 (97)	73 (101)	91.9 (0.1)
14	6.8 (4.7)	62.4 (18.2)	2.79 (1.40)	170 (29)	224 (307)	91.2 (0.3)
15	10.5 (8.2)	51.0 (30.6)	1.94 (1.20)	172 (42)	256 (321)	90.8 (0.1)
16	14.8 (8.8)	25.6 (15.2)	2.06 (1.25)	209 (66)	260 (324)	91.4 (0.1)
17	17.7 (9.3)	26.9 (17.5)	2.17 (1.13)	201 (90)	260 (325)	91.3 (0.2)
18	10.7 (4.6)	45.1 (11.3)	6.72 (3.13)	349 (144)	230 (309)	91.6 (0.3)
19	9.7 (6.0)	47.4 (14.0)	4.94 (1.55)	56 (120)	228 (293)	92.1 (0.2)
20	14.3 (6.4)	65.5 (18.2)	5.08 (1.74)	154 (30)	181 (266)	91.4 (0.3)
21	19.4 (6.1)	47.6 (16.1)	4.81 (2.66)	181 (42)	252 (321)	91.2 (0.1)
22	18.3 (3.6)	57.9 (11.7)	8.81 (2.70)	170 (21)	111 (137)	90.6 (0.4)
23	16.5 (4.8)	37.4 (27.6)	8.90 (2.88)	222 (58)	271 (334)	89.7 (0.2)
24	7.3 (5.4)	41.1 (23.0)	5.45 (3.43)	314 (100)	246 (309)	90.8 (0.2)
25	8.5 (6.0)	29.0 (10.9)	4.05 (2.70)	319 (113)	217 (303)	90.6 (0.3)
26	6.0 (4.8)	65.9 (11.9)	7.36 (4.36)	58 (53)	154 (253)	90.2 (0.2)
27	-4.8 (1.6)	88.6 (1.4)	10.40 (2.28)	341 (111)	125 (171)	90.9 (0.2)
28	-1.3 (4.9)	71.3 (8.1)	7.23 (2.81)	295 (18)	291 (360)	90.8 (0.1)
29	5.0 (5.2)	63.3 (9.8)	3.96 (1.79)	184 (45)	251 (333)	90.2 (0.5)
30	5.9 (2.5)	59.2 (5.5)	5.63 (3.29)	289 (70)	247 (315)	90.0 (0.5)
31	5.9 (5.9)	43.2 (18.9)	5.01 (2.15)	282 (87)	290 (351)	90.7 (0.3)
Mean	9.2	46.5	5.27	199	208	91.0
n	31	31	31	31	31	31
SD	6.7	17.2	2.05	87	53	0.7
Min	-4.8	18.7	1.94	6	73	89.7
Max	19.4	88.6	10.40	349	291	92.5

ED_004549_00015840-00074

Table E1. Daily means (SD) of weather parameters at Site OK4B for April, 2009

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	9.8 (6.9)	50.2 (19.6)	3.75 (2.19)	307 (101)	195 (272)	89.6 (0.3)
2	7.3 (4.1)	53.5 (18.6)	5.41 (3.27)	334 (106)		90.5 (0.2)
3	12.5 (8.5)	43.6 (19.6)	8.08 (3.38)	154 (26)	291 (352)	89.8 (0.4)
4	11.6 (5.3)	37.3 (11.9)	11.20 (3.72)	259 (53)	282 (347)	89.8 (0.6)
5	2.0 (3.3)	48.9 (12.6)	10.00 (3.04)	324 (73)	294 (351)	92.0 (0.4)
6	3.2 (5.4)	44.9 (20.9)	5.52 (2.41)	319 (97)	301 (359)	92.5 (0.2)
7	11.6 (11.6)	31.9 (23.7)	3.31 (1.58)	264 (99)	309 (368)	91.4 (0.5)
8	15.3 (7.6)	28.7 (13.3)	6.17 (2.89)	91 (101)	274 (341)	90.5 (0.5)
9	11.5 (4.5)	41.6 (14.9)	7.99 (4.18)	293 (74)	248 (313)	89.8 (0.5)
10	8.2 (5.0)	53.4 (16.7)	4.44 (1.87)	32 (130)	299 (354)	91.5 (0.2)
11	6.4 (2.7)	74.0 (12.3)	5.06 (2.97)	107 (30)	80 (156)	91.4 (0.2)
12	7.1 (1.2)	88.8 (2.3)	4.97 (1.60)	33 (137)	40 (65)	90.7 (0.2)
13	10.8 (5.0)	68.6 (17.6)	4.12 (1.55)	323 (98)	256 (342)	91.1 (0.1)
14	16.5 (6.8)	49.5 (20.1)	5.83 (2.54)	174 (29)	302 (355)	90.8 (0.2)
15	16.9 (3.3)	48.6 (6.9)	8.39 (3.20)	148 (17)	202 (279)	90.7 (0.1)
16	12.6 (0.9)	81.0 (8.6)	9.42 (1.83)	126 (23)	57 (101)	91.0 (0.1)
17	12.9 (3.3)	68.4 (22.5)	5.85 (2.93)	128 (46)	204 (322)	91.1 (0.1)
18	8.9 (3.2)	75.8 (11.2)	3.85 (1.75)	303 (80)	163 (258)	91.1 (0.2)
19	12.4 (4.3)	57.6 (21.1)	6.59 (2.97)	315 (75)	309 (369)	91.9 (0.1)
20	15.3 (6.7)	46.8 (20.5)	3.47 (1.67)	277 (89)	301 (363)	91.7 (0.1)
21	19.0 (7.1)	44.0 (20.3)	2.80 (1.16)	309 (107)	322 (371)	91.4 (0.2)
22	21.7 (6.3)	40.6 (16.2)	2.40 (1.68)	99 (101)	322 (370)	90.9 (0.2)
23	20.3 (7.2)	52.6 (19.2)	2.28 (1.11)	132 (95)	302 (359)	90.6 (0.2)
24	22.0 (7.1)	35.9 (17.5)	4.40 (1.90)	195 (24)	308 (369)	90.3 (0.1)
25	13.8 (4.2)	55.6 (14.2)	6.05 (1.65)	22 (131)	270 (345)	90.7 (0.3)
26	16.8 (7.6)	57.5 (31.6)	4.56 (2.85)	264 (95)	280 (342)	90.3 (0.2)
27	11.4 (3.1)	65.2 (10.6)	7.06 (1.95)	15 (151)	226 (293)	91.5 (0.4)
28	10.2 (3.6)	84.3 (3.7)	6.47 (1.53)	109 (35)	87 (134)	91.8 (0.2)
29	20.7 (5.1)	71.1 (18.0)	5.57 (1.79)	160 (34)	253 (349)	90.9 (0.3)
30	18.3 (2.8)	71.4 (12.2)	5.94 (2.10)	52 (113)	270 (322)	91.0 (0.2)
Mean	12.9	55.7	5.70	351	243	90.9
n	30	30	30	30	29	30
SD	5.1	15.6	2.17	106	81	0.7
Min	2.0	28.7	2.28	15	40	89.6
Max	22.0	88.8	11.20	334	322	92.5

ED_004549_00015840-00075

Table E1. Daily means (SD) of weather parameters at Site OK4B for May, 2009

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	11.9 (1.3)	80.1 (10.2)	7.69 (1.96)	30 (53)	71 (93)	91.5 (0.2)
2	10.0 (0.9)	79.0 (4.6)	4.84 (1.28)	62 (30)	61 (82)	91.3 (0.3)
3	10.8 (2.8)	78.1 (11.9)	3.31 (0.99)	49 (99)	145 (188)	91.3 (0.1)
4	12.1 (3.6)	80.3 (11.5)	4.75 (2.46)	158 (33)	209 (336)	91.2 (0.2)
5	13.7 (2.9)	84.6 (7.1)	3.49 (1.05)	117 (35)	130 (202)	90.9 (0.2)
6	20.4 (6.4)	63.3 (28.4)	3.83 (1.78)	154 (87)	324 (377)	90.9 (0.1)
7	23.0 (6.6)	59.0 (23.6)	4.91 (1.95)	98 (93)	336 (379)	90.5 (0.2)
8	20.2 (3.8)	51.1 (22.0)	9.03 (3.09)	18 (119)	329 (378)	90.8 (0.4)
9	15.1 (3.7)	44.2 (12.7)	4.55 (1.10)	55 (87)	237 (312)	91.7 (0.1)
10	11.4 (1.3)	77.3 (4.0)	5.20 (2.26)	71 (34)	57 (61)	91.8 (0.1)
11	12.2 (2.3)	78.2 (9.6)	4.72 (2.00)	114 (43)	132 (198)	91.7 (0.3)
12	21.7 (7.6)	63.4 (24.5)	6.98 (1.55)	175 (20)	280 (369)	90.4 (0.5)
13	21.8 (4.8)	39.9 (16.3)	7.56 (3.04)	355 (131)	314 (363)	90.5 (0.5)
14	17.2 (3.5)	45.1 (19.3)	5.59 (2.29)	104 (97)	286 (329)	91.4 (0.4)
15	22.8 (4.7)	54.9 (26.2)	6.86 (3.19)	348 (113)	319 (367)	90.9 (0.3)
16	15.7 (3.4)	49.3 (12.0)	6.15 (2.32)	55 (44)	305 (365)	92.2 (0.2)
17	17.1 (6.6)	52.1 (15.9)	4.84 (1.92)	169 (20)	335 (373)	92.0 (0.3)
18	21.6 (8.0)	44.2 (16.7)	5.09 (1.89)	182 (23)	343 (379)	91.7 (0.2)
19	22.7 (6.3)	40.4 (14.4)	6.82 (2.62)	173 (22)	343 (380)	91.5 (0.2)
20	21.5 (5.5)	40.2 (14.8)	6.57 (1.85)	171 (22)	307 (357)	91.3 (0.2)
21	21.7 (5.5)	48.5 (18.3)	4.77 (1.42)	164 (21)	321 (377)	91.3 (0.1)
22	20.3 (4.4)	54.3 (15.2)	3.36 (1.90)	133 (70)	248 (299)	91.5 (0.1)
23	21.1 (5.0)	58.8 (18.3)	3.44 (2.65)	146 (32)	300 (368)	91.4 (0.1)
24	20.0 (4.5)	66.4 (14.4)	3.75 (2.89)	158 (63)	267 (334)	91.2 (0.2)
25	20.0 (5.5)	67.5 (20.3)	3.95 (3.15)	148 (72)	295 (373)	90.7 (0.2)
26	16.8 (2.7)	71.7 (12.0)	6.01 (2.38)	313 (73)	290 (351)	91.0 (0.2)
27	16.6 (5.1)	55.3 (22.2)	3.92 (1.60)	326 (117)	346 (389)	91.3 (0.1)
28	21.0 (6.1)	42.9 (19.8)	2.45 (1.74)	339 (127)	354 (386)	91.4 (0.1)
29	23.6 (7.2)	39.1 (20.3)	2.76 (1.01)	224 (70)	353 (384)	91.6 (0.1)
30	25.3 (7.6)	34.3 (18.0)	4.01 (1.72)	202 (33)	343 (392)	91.3 (0.2)
31	26.2 (6.1)	31.5 (11.5)	3.61 (1.63)	201 (37)	332 (389)	90.9 (0.2)
Mean	18.6	57.3	4.99	123	268	91.3
n	31	31	31	31	31	31
SD	4.5	15.4	1.57	93	91	0.4
Min	10.0	31.5	2.45	18	57	90.4
Max	26.2	84.6	9.03	355	354	92.2

ED_004549_00015840-00076

Table E1. Daily means (SD) of weather parameters at Site OK4B for June, 2009

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	23.6 (4.9)	44.3 (13.8)	4.02 (2.56)	188 (66)	263 (345)	90.8 (0.1)
2	18.0 (2.7)	75.6 (10.8)	4.30 (2.09)	321 (119)	172 (223)	91.3 (0.3)
3	18.3 (3.7)	63.2 (18.3)	4.92 (1.97)	28 (139)	292 (357)	91.9 (0.1)
4	20.9 (6.3)	53.8 (16.1)	3.42 (1.66)	168 (51)	327 (375)	91.5 (0.2)
5	23.9 (6.6)	53.3 (19.5)	4.88 (2.69)	176 (38)	279 (356)	91.0 (0.3)
6						
7						
8	19.8 (6.5)	51.6 (18.9)	4.51 (1.59)	39 (124)	316 (357)	91.0 (0.1)
9	23.8 (5.6)	49.7 (25.9)	4.16 (3.04)	205 (82)	211 (268)	90.7 (0.1)
10	19.6 (3.2)	68.2 (17.9)	4.83 (2.44)	281 (104)	135 (209)	90.7 (0.2)
11	20.3 (4.7)	67.3 (16.6)	4.00 (1.49)	23 (121)	262 (324)	90.9 (0.1)
12	23.6 (4.2)	57.8 (18.1)	4.33 (2.17)	49 (84)	324 (380)	91.0 (0.1)
13	22.9 (4.4)	66.0 (14.8)	6.98 (2.09)	74 (54)	210 (275)	91.3 (0.2)
14	23.7 (5.2)	65.6 (22.7)	5.50 (2.02)	139 (58)	218 (291)	91.0 (0.2)
15	26.6 (5.6)	57.4 (19.8)	5.62 (2.30)	190 (31)	332 (371)	90.7 (0.2)
16	26.0 (5.5)	58.7 (18.8)	5.16 (1.59)	40 (126)	347 (377)	90.8 (0.2)
17	28.3 (6.4)	42.6 (27.6)	5.52 (2.26)	178 (51)	234 (317)	90.8 (0.1)
18	28.9 (6.2)	46.4 (20.5)	5.78 (2.39)	182 (27)	292 (348)	90.6 (0.2)
19	26.4 (3.2)	45.7 (11.7)	3.66 (1.48)	193 (59)	252 (287)	90.7 (0.2)
20	23.1 (2.2)	79.9 (9.4)	3.45 (2.63)	155 (65)	164 (228)	90.7 (0.2)
21	27.8 (5.3)	53.8 (22.3)	4.57 (2.00)	202 (25)	346 (377)	90.6 (0.1)
22	28.9 (6.2)	50.1 (20.2)	4.04 (1.53)	182 (34)	335 (378)	90.8 (0.1)
23	28.9 (5.3)	48.2 (18.2)	3.36 (1.76)	174 (22)	336 (380)	91.1 (0.1)
24	30.0 (5.4)	44.9 (16.3)	3.33 (1.12)	189 (34)	327 (371)	91.3 (0.1)
25	30.3 (5.6)	41.3 (14.5)	4.12 (2.07)	177 (34)	340 (373)	91.2 (0.1)
26	30.4 (5.2)	38.1 (11.9)	5.29 (2.38)	172 (23)	327 (365)	91.0 (0.2)
27	26.8 (3.0)	46.7 (8.4)	5.82 (2.84)	350 (133)	276 (344)	91.2 (0.2)
28	25.5 (5.5)	46.7 (22.4)	3.31 (1.77)	80 (101)	316 (370)	91.6 (0.2)
29	27.2 (6.0)	45.7 (17.4)	3.36 (2.62)	187 (54)	318 (369)	91.1 (0.2)
30	26.9 (5.8)	54.9 (21.1)	2.86 (2.00)	64 (99)	331 (374)	91.1 (0.1)
Mean	25.0	54.2	4.47	158	282	91.0
n	28	28	28	28	28	28
SD	3.6	10.4	0.97	82	60	0.3
Min	18.0	38.1	2.86	23	135	90.6
Max	30.4	79.9	6.98	350	347	91.9

ED_004549_00015840-00077

Table E1. Daily means (SD) of weather parameters at Site OK4B for July, 2009

Day	Temp, °C	RH, %	Wind spd, m/s	Wind dir, °	Solar, W/m^2	Atm P, kPa
1	27.5 (6.5)	43.9 (19.1)	3.37 (1.17)	174 (74)	344 (374)	91.2 (0.1)
2	29.5 (6.3)	35.8 (15.1)	4.53 (1.20)	200 (29)	343 (373)	91.3 (0.1)
3	30.2 (5.0)	38.7 (9.5)	4.75 (2.18)	199 (25)	279 (355)	91.2 (0.2)
4	26.8 (3.1)	61.1 (14.5)	5.41 (2.49)	16 (132)	283 (326)	91.3 (0.2)
5	23.8 (3.3)	62.1 (12.9)	3.98 (1.39)	45 (79)	273 (344)	91.6 (0.1)
6	24.2 (3.9)	60.1 (13.5)	4.38 (2.08)	128 (49)	269 (346)	91.4 (0.2)
7	27.0 (6.8)	56.5 (23.0)	2.99 (1.43)	177 (59)	319 (375)	90.9 (0.2)
8	30.8 (6.3)	43.8 (21.4)	3.21 (2.08)	131 (77)	341 (376)	90.7 (0.1)
9	33.2 (8.1)	30.8 (21.3)	3.48 (1.40)	218 (71)	348 (384)	90.8 (0.1)
10	33.0 (6.1)	30.1 (12.6)	6.14 (3.07)	231 (72)	286 (374)	91.2 (0.1)
11	32.2 (6.7)	30.9 (17.1)	3.87 (2.11)	211 (65)	339 (374)	91.6 (0.1)
12	31.5 (7.0)	31.1 (13.9)	4.66 (1.87)	219 (21)	341 (375)	91.5 (0.2)
13	30.9 (6.7)	42.2 (21.7)	3.20 (1.70)	197 (86)	334 (371)	91.2 (0.2)
14	31.3 (6.3)	34.9 (13.3)	6.16 (3.06)	192 (41)	320 (382)	90.9 (0.1)
15	27.3 (5.7)	56.7 (17.3)	5.35 (3.15)	76 (89)	276 (358)	91.4 (0.2)
16	25.2 (5.3)	64.3 (17.3)	3.51 (2.88)	159 (80)	255 (338)	91.5 (0.1)
17	23.0 (3.7)	67.8 (15.2)	5.31 (3.26)	93 (66)	222 (292)	91.9 (0.1)
18	22.4 (4.2)	67.6 (15.8)	3.12 (2.11)	74 (93)	167 (259)	92.0 (0.1)
19	26.5 (5.3)	52.7 (18.9)	4.35 (2.51)	172 (63)	321 (369)	91.6 (0.3)
20			3.23 (2.10)	136 (96)	321 (369)	
21			5.38 (1.92)	20 (126)	283 (338)	91.5 (0.1)
22			4.60 (1.56)	148 (33)	314 (357)	91.6 (0.1)
23			3.98 (1.94)	192 (45)	340 (367)	91.5 (0.2)
24						
25						
26						
27						
28						
29						
30						
31						
Mean	28.2	48.0	4.30	162	301	91.4
n	19	19	23	23	23	22
SD	3.4	13.4	0.96	64	44	0.3
Min	22.4	30.1	2.99	16	167	90.7
Max	33.2	67.8	6.16	231	348	92.0

ED_004549_00015840-00078

Table E2. Animal characteristics

Table E2. Daily means of animal characteristics at Site OK4B for July, 2007

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,140	200	1,140	200				
2	1,140	200	1,140	200				
3	1,140	200	1,140	200				
4	1,140	200	1,140	200				
5	1,140	200	1,140	200				
6	1,140	200	1,140	200				
7	1,140	200	1,140	200				
8	1,140	200	1,140	200				
9	1,140	200	1,140	200				
10	1,140	200	1,140	200	24	239	200	2.34
11	1,140	200	1,140	200	24	286	200	2.71
12	1,140	200	1,140	200	24	283	200	3.05
13	1,140	200	1,140	200	24	281	200	3.30
14	1,140	200	1,140	200	24	279	200	3.55
15	1,140	200	1,140	200	24	276	200	3.80
16	1,140	200	1,140	200	24	274	200	4.07
17	1,140	200	1,140	200	24	272	200	4.40
18	1,140	200	1,140	200	24	269	200	4.74
19	1,140	200	1,140	200	24	267	200	5.05
20	1,140	200	1,140	200	24	264	200	5.30
21	1,140	200	1,140	200	24	262	200	5.55
22	1,140	200	1,140	200	24	260	200	5.80
23	1,140	200	1,140	200	24	257	200	6.07
24	1,140	200	1,140	200	24	255	200	6.40
25	1,140	200	1,140	200	24	252	200	6.74
26	1,140	200	1,140	200	24	250	200	7.05
27	1,140	200	1,140	200	24	248	200	7.30
28	1,140	200	1,140	200	24	245	200	7.55
29	1,150	200	1,150	200	24	243	200	7.80
30	1,150	200	1,150	200	18	100	175	4.40
31	1,150	200	1,150	200	24	239	200	2.34
Mean	1,140	200	1,140	200	24	255	199	4.97
n	31	31	31	31	22	22	22	22
SD	3	0	3	0	1	37	5	1.68
Min	1,140	200	1,140	200	18	100	175	2.34
Max	1,150	200	1,150	200	24	286	200	7.80

ED_004549_00015840-00079

Table E2. Daily means of animal characteristics at Site OK4B for August, 2007

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,150	200	1,150	200	24	286	200	2.71
2	1,150	200	1,150	200	24	283	200	3.05
3	1,150	200	1,150	200	24	281	200	3.30
4	1,150	200	1,150	200	24	279	200	3.55
5	1,150	200	1,150	200	24	276	200	3.80
6	1,150	200	1,150	200	24	274	200	4.07
7	1,150	200	1,150	200	24	272	200	4.40
8	1,150	200	1,150	200	24	269	200	4.74
9	1,150	200	1,150	200	24	267	200	5.05
10	1,150	200	1,150	200	24	264	200	5.30
11	1,150	200	1,150	200	24	262	200	5.55
12	1,150	200	1,150	200	24	260	200	5.80
13	1,150	200	1,150	200	24	257	200	6.07
14	1,150	200	1,150	200	24	255	200	6.40
15	1,150	200	1,150	200	24	252	200	6.74
16	1,150	200	1,150	200	24	250	200	7.05
17	1,150	200	1,150	200	24	248	200	7.30
18	1,150	200	1,150	200	24	245	200	7.55
19	1,150	200	1,150	200	24	243	200	7.80
20	1,150	200	1,150	200	18	100	175	4.40
21	1,150	200	1,150	200	24	239	200	2.34
22	1,150	200	1,150	200	24	286	200	2.71
23	1,150	200	1,150	200	24	283	200	3.05
24	1,150	200	1,150	200	24	281	200	3.30
25	1,150	200	1,150	200	24	279	200	3.55
26	1,150	200	1,150	200	24	276	200	3.80
27	1,150	200	1,150	200	24	274	200	4.07
28	1,150	200	1,150	200	24	272	200	4.40
29	1,150	200	1,150	200	24	269	200	4.74
30	1,150	200	1,150	200	24	267	200	5.05
31	1,150	200	1,150	200	24	264	200	5.30
Mean	1,150	200	1,150	200	24	262	199	4.74
n	31	31	31	31	31	31	31	31
SD	1	0	1	0	1	32	4	1.50
Min	1,150	200	1,150	200	18	100	175	2.34
Max	1,150	200	1,150	200	24	286	200	7.80

ED_004549_00015840-00080

Table E2. Daily means of animal characteristics at Site OK4B for September, 2007

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,150	200	1,150	200	24	262	200	5.55
2	1,150	200	1,150	200	24	260	200	5.80
3	1,150	200	1,150	200	24	257	200	6.07
4	1,150	200	1,150	200	24	255	200	6.40
5	1,150	200	1,150	200	24	252	200	6.74
6	1,150	200	1,150	200	24	250	200	7.05
7	1,150	200	1,150	200	24	248	200	7.30
8	1,150	200	1,150	200	24	245	200	7.55
9	1,150	200	1,150	200	24	243	200	7.80
10	1,150	200	1,150	200	18	100	175	4.40
11	1,150	200	1,150	200	24	239	200	2.34
12	1,150	200	1,150	200	24	286	200	2.71
13	1,150	200	1,150	200	24	283	200	3.05
14	1,150	200	1,150	200	24	281	200	3.30
15	1,150	200	1,150	200	24	279	200	3.55
16	1,150	200	1,150	200	24	276	200	3.80
17	1,150	200	1,150	200	24	274	200	4.07
18	1,150	200	1,150	200	24	272	200	4.40
19	1,150	200	1,150	200	24	269	200	4.74
20	1,150	200	1,150	200	24	267	200	5.05
21	1,150	200	1,150	200	24	264	200	5.30
22	1,150	200	1,150	200	24	262	200	5.55
23	1,150	200	1,150	200	24	260	200	5.80
24	1,150	200	1,150	200	24	257	200	6.07
25	1,150	200	1,150	200	24	255	200	6.40
26	1,150	200	1,150	200	24	252	200	6.74
27	1,150	200	1,150	200	24	250	200	7.05
28	1,150	200	1,150	200	24	248	200	7.30
29	1,150	200	1,150	200	24	245	200	7.55
30	1,150	200	1,150	200	24	243	200	7.80
Mean	1,150	200	1,150	200	24	254	199	5.57
n	30	30	30	30	30	30	30	30
SD	0	0	0	0	1	31	4	1.59
Min	1,150	200	1,150	200	18	100	175	2.34
Max	1,150	200	1,150	200	24	286	200	7.80

ED_004549_00015840-00081

Table E2. Daily means of animal characteristics at Site OK4B for October, 2007

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,150	200	1,150	200	18	100	175	4.40
2	1,150	200	1,150	200	24	239	200	2.34
3	1,150	200	1,150	200	24	286	200	2.71
4	1,150	200	1,150	200	24	283	200	3.05
5	1,150	200	1,150	200	24	281	200	3.30
6	1,150	200	1,150	200	24	279	200	3.55
7	1,150	200	1,150	200	24	276	200	3.80
8	1,150	200	1,150	200	24	274	200	4.07
9	1,150	200	1,150	200	24	272	200	4.40
10	1,150	200	1,150	200	24	269	200	4.74
11	1,150	200	1,150	200	24	267	200	5.05
12	1,150	200	1,150	200	24	264	200	5.30
13	1,150	200	1,150	200	24	262	200	5.55
14	1,150	200	1,150	200	24	260	200	5.80
15	1,150	200	1,150	200	24	257	200	6.07
16	1,150	200	1,150	200	24	255	200	6.40
17	1,150	200	1,150	200	24	252	200	6.74
18	1,150	200	1,150	200	24	250	200	7.05
19	1,150	200	1,150	200	24	248	200	7.30
20	1,150	200	1,150	200	24	245	200	7.55
21	1,150	200	1,150	200	24	243	200	7.80
22	1,150	200	1,150	200	18	100	175	4.40
23	1,150	200	1,150	200	24	239	200	2.34
24	1,150	200	1,150	200	24	286	200	2.71
25	1,150	200	1,150	200	24	284	200	3.05
26	1,150	200	1,150	200	24	281	200	3.30
27	1,150	200	1,150	200	24	279	200	3.55
28	1,150	200	1,150	200	24	277	200	3.80
29	1,150	200	1,150	200	24	275	200	4.07
30	1,150	200	1,150	200	24	272	200	4.40
31	1,150	200	1,150	200	24	270	200	4.74
Mean	1,150	200	1,150	200	24	256	198	4.62
n	31	31	31	31	31	31	31	31
SD	2	0	2	0	1	43	6	1.56
Min	1,150	200	1,150	200	18	100	175	2.34
Max	1,150	200	1,150	200	24	286	200	7.80

ED_004549_00015840-00082

Table E2. Daily means of animal characteristics at Site OK4B for November, 2007

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,160	200	1,160	200	24	268	200	5.05
2	1,160	200	1,160	200	24	265	200	5.30
3	1,160	200	1,160	200	24	263	200	5.55
4	1,160	200	1,160	200	24	261	200	5.80
5	1,160	200	1,160	200	24	259	200	6.07
6	1,160	200	1,160	200	24	256	200	6.40
7	1,160	200	1,160	200	24	254	200	6.74
8	1,160	200	1,160	200	24	252	200	7.04
9	1,160	200	1,160	200	24	250	200	7.24
10	1,160	200	1,160	200	24	247	200	7.44
11	1,160	200	1,160	200	24	245	200	7.64
12	1,160	200	1,160	200	24	243	200	7.84
13	1,160	200	1,160	200	18	100	175	4.40
14	1,160	200	1,160	200	24	239	200	2.34
15	1,160	200	1,160	200	24	286	200	2.71
16	1,160	200	1,160	200	24	284	200	3.05
17	1,160	200	1,160	200	24	282	200	3.30
18	1,160	200	1,160	200	24	280	200	3.55
19	1,160	200	1,160	200	24	278	200	3.80
20	1,160	200	1,160	200	24	276	200	4.07
21	1,160	200	1,160	200	24	274	200	4.40
22	1,160	200	1,160	200	24	272	200	4.74
23	1,160	200	1,160	200	24	270	200	5.05
24	1,160	200	1,160	200	24	267	200	5.30
25	1,160	200	1,160	200	24	265	200	5.55
26	1,160	200	1,160	200	24	263	200	5.80
27	1,160	200	1,160	200	24	261	200	6.07
28	1,160	200	1,160	200	24	259	200	6.40
29	1,160	200	1,160	200	24	257	200	6.74
30	1,160	200	1,160	200	24	255	200	7.02
Mean	1,160	200	1,160	200	24	258	199	5.41
n	30	30	30	30	30	30	30	30
SD	2	0	2	0	1	32	4	1.50
Min	1,160	200	1,160	200	18	100	175	2.34
Max	1,160	200	1,160	200	24	286	200	7.84

ED_004549_00015840-00083

Table E2. Daily means of animal characteristics at Site OK4B for December, 2007

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,160	200	1,160	200	24	253	200	7.17
2	1,160	200	1,160	200	24	251	200	7.32
3	1,160	200	1,160	200	24	249	200	7.46
4	1,160	200	1,160	200	24	247	200	7.60
5	1,160	200	1,160	200	24	245	200	7.74
6	1,160	200	1,160	200	24	243	200	7.89
7	1,160	200	1,160	200	18	100	175	4.40
8	1,160	200	1,160	200	24	239	200	2.34
9	1,160	200	1,160	200	24	286	200	2.71
10	1,160	200	1,160	200	24	283	200	3.05
11	1,160	200	1,160	200	24	281	200	3.30
12	1,160	200	1,160	200	24	278	200	3.55
13	1,160	200	1,160	200	24	276	200	3.80
14	1,160	200	1,160	200	24	273	200	4.07
15	1,160	200	1,160	200	24	271	200	4.40
16	1,160	200	1,160	200	24	268	200	4.74
17	1,160	200	1,160	200	24	266	200	5.05
18	1,160	200	1,160	200	24	263	200	5.30
19	1,160	200	1,160	200	24	261	200	5.55
20	1,160	200	1,160	200	24	258	200	5.80
21	1,160	200	1,160	200	24	256	200	6.07
22	1,160	200	1,160	200	24	253	200	6.40
23	1,160	200	1,160	200	24	251	200	6.74
24	1,160	200	1,160	200	24	248	200	7.07
25	1,160	200	1,160	200	24	246	200	7.40
26	1,160	200	1,160	200	24	243	200	7.74
27	1,160	200	1,160	200	18	100	175	4.39
28	1,160	200	1,160	200	24	239	200	2.34
29	1,160	200	1,160	200	24	286	200	2.71
30	1,160	200	1,160	200	24	285	200	3.05
31	1,160	200	1,160	200	24	283	200	3.30
Mean	1,160	200	1,160	200	24	251	198	5.18
n	31	31	31	31	31	31	31	31
SD	1	0	1	0	1	42	6	1.85
Min	1,160	200	1,160	200	18	100	175	2.34
Max	1,160	200	1,160	200	24	286	200	7.89

ED_004549_00015840-00084

Table E2. Daily means of animal characteristics at Site OK4B for January, 2008

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,160	200	1,160	200	24	281	200	3.55
2	1,160	200	1,160	200	24	279	200	3.80
3	1,160	200	1,160	200	24	278	200	4.07
4	1,160	200	1,160	200	24	276	200	4.40
5	1,160	200	1,160	200	24	274	200	4.74
6	1,160	200	1,160	200	24	272	200	5.05
7	1,160	200	1,160	200	24	271	200	5.30
8	1,160	200	1,160	200	24	269	200	5.55
9	1,160	200	1,160	200	24	267	200	5.80
10	1,160	200	1,160	200	24	265	200	6.07
11	1,160	200	1,160	200	24	264	200	6.40
12	1,160	200	1,160	200	24	262	200	6.74
13	1,160	200	1,160	200	24	260	200	7.01
14	1,160	200	1,160	200	24	258	200	7.11
15	1,160	200	1,160	200	24	256	200	7.20
16	1,160	200	1,160	200	24	255	200	7.29
17	1,160	200	1,160	200	24	253	200	7.38
18	1,170	200	1,170	200	24	251	200	7.47
19	1,170	200	1,170	200	24	249	200	7.56
20	1,170	200	1,170	200	24	248	200	7.66
21	1,170	200	1,170	200	24	246	200	7.75
22	1,170	200	1,170	200	24	244	200	7.84
23	1,170	200	1,170	200	24	242	200	7.93
24	1,170	200	1,170	200	18	100	175	4.41
25	1,170	200	1,170	200	24	239	200	2.34
26	1,170	200	1,170	200	24	286	200	2.71
27	1,170	200	1,170	200	24	284	200	3.05
28	1,170	200	1,170	200	24	282	200	3.30
29	1,170	200	1,170	200	24	280	200	3.55
30	1,170	200	1,170	200	24	278	200	3.80
31	1,170	200	1,170	200	24	276	200	4.07
Mean	1,160	200	1,160	200	24	260	199	5.51
n	31	31	31	31	31	31	31	31
SD	3	0	3	0	1	32	4	1.76
Min	1,160	200	1,160	200	18	100	175	2.34
Max	1,170	200	1,170	200	24	286	200	7.93

ED_004549_00015840-00085

Table E2. Daily means of animal characteristics at Site OK4B for February, 2008

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,170	200	1,170	200	24	274	200	4.40
2	1,170	200	1,170	200	24	272	200	4.74
3	1,170	200	1,170	200	24	270	200	5.05
4	1,170	200	1,170	200	24	268	200	5.30
5	1,170	200	1,170	200	24	266	200	5.55
6	1,170	200	1,170	200	24	264	200	5.80
7	1,170	200	1,170	200	24	262	200	6.07
8	1,170	200	1,170	200	24	260	200	6.40
9	1,170	200	1,170	200	24	258	200	6.74
10	1,170	200	1,170	200	24	256	200	7.02
11	1,170	200	1,170	200	24	254	200	7.15
12	1,170	200	1,170	200	24	252	200	7.28
13	1,170	200	1,170	200	24	250	200	7.40
14	1,170	200	1,170	200	24	249	200	7.53
15	1,170	200	1,170	200	24	247	200	7.65
16	1,170	200	1,170	200	24	245	200	7.78
17	1,170	200	1,170	200	24	243	200	7.90
18	1,180	200	1,180	200	18	100	175	4.40
19	1,180	200	1,180	200	24	239	200	2.34
20	1,180	200	1,180	200	24	286	200	2.71
21	1,180	200	1,180	200	24	285	200	3.05
22	1,180	200	1,180	200	24	283	200	3.30
23	1,180	200	1,180	200	24	281	200	3.55
24	1,180	200	1,180	200	24	279	200	3.80
25	1,180	200	1,180	200	24	278	200	4.07
26	1,180	200	1,180	200	24	276	200	4.40
27	1,180	200	1,180	200	24	274	200	4.74
28	1,180	200	1,180	200	24	272	200	5.05
29	1,180	200	1,180	200	24	271	200	5.30
Mean	1,170	200	1,170	200	24	259	199	5.40
n	29	29	29	29	29	29	29	29
SD	3	0	3	0	1	33	5	1.62
Min	1,170	200	1,170	200	18	100	175	2.34
Max	1,180	200	1,180	200	24	286	200	7.90

ED_004549_00015840-00086

Table E2. Daily means of animal characteristics at Site OK4B for March, 2008

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,180	200	1,180	200	24	269	200	5.55
2	1,180	200	1,180	200	24	267	200	5.80
3	1,180	200	1,180	200	24	265	200	6.07
4	1,180	200	1,180	200	24	264	200	6.40
5	1,180	200	1,180	200	24	262	200	6.74
6	1,180	200	1,180	200	24	260	200	7.01
7	1,180	200	1,180	200	24	258	200	7.11
8	1,180	200	1,180	200	24	256	200	7.20
9	1,180	200	1,180	200	24	255	200	7.29
10	1,180	200	1,180	200	24	253	200	7.38
11	1,180	200	1,180	200	24	251	200	7.47
12	1,180	200	1,180	200	24	249	200	7.56
13	1,180	200	1,180	200	24	248	200	7.66
14	1,180	200	1,180	200	24	246	200	7.75
15	1,180	200	1,180	200	24	244	200	7.84
16	1,180	200	1,180	200	24	242	200	7.93
17	1,180	200	1,180	200	18	100	175	4.41
18	1,180	200	1,180	200	24	239	200	2.34
19	1,180	200	1,180	200	24	286	200	2.71
20	1,180	200	1,180	200	24	284	200	3.05
21	1,180	200	1,180	200	24	282	200	3.30
22	1,180	200	1,180	200	24	280	200	3.55
23	1,180	200	1,180	200	24	278	200	3.80
24	1,190	200	1,190	200	24	276	200	4.07
25	1,190	200	1,190	200	24	274	200	4.40
26	1,190	200	1,190	200	24	272	200	4.74
27	1,190	200	1,190	200	24	270	200	5.05
28	1,190	200	1,190	200	24	267	200	5.30
29	1,190	200	1,190	200	24	265	200	5.55
30	1,190	200	1,190	200	24	263	200	5.80
31	1,190	200	1,190	200	24	261	200	6.07
Mean	1,180	200	1,180	200	24	258	199	5.71
n	31	31	31	31	31	31	31	31
SD	2	0	2	0	1	31	4	1.67
Min	1,180	200	1,180	200	18	100	175	2.34
Max	1,190	200	1,190	200	24	286	200	7.93

ED_004549_00015840-00087

Table E2. Daily means of animal characteristics at Site OK4B for April, 2008

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,190	200	1,190	200	24	259	200	6.40
2	1,190	200	1,190	200	24	257	200	6.74
3	1,190	200	1,190	200	24	255	200	7.02
4	1,190	200	1,190	200	24	253	200	7.17
5	1,190	200	1,190	200	24	251	200	7.32
6	1,190	200	1,190	200	24	249	200	7.46
7	1,190	200	1,190	200	24	247	200	7.60
8	1,190	200	1,190	200	24	245	200	7.74
9	1,190	200	1,190	200	24	243	200	7.89
10	1,190	200	1,190	200	18	100	175	4.40
11	1,190	200	1,190	200	24	239	200	2.34
12	1,190	200	1,190	200	24	286	200	2.71
13	1,190	200	1,190	200	24	284	200	3.05
14	1,190	200	1,190	200	24	282	200	3.30
15	1,190	200	1,190	200	24	280	200	3.55
16	1,190	200	1,190	200	24	278	200	3.80
17	1,190	200	1,190	200	24	276	200	4.07
18	1,190	200	1,190	200	24	274	200	4.40
19	1,190	200	1,190	200	24	272	200	4.74
20	1,190	200	1,190	200	24	270	200	5.05
21	1,190	200	1,190	200	24	268	200	5.30
22	1,190	200	1,190	200	24	266	200	5.55
23	1,190	200	1,190	200	24	264	200	5.80
24	1,190	200	1,190	200	24	262	200	6.07
25	1,190	200	1,190	200	24	260	200	6.40
26	1,190	200	1,190	200	24	258	200	6.74
27	1,190	200	1,190	200	24	256	200	7.02
28	1,190	200	1,190	200	24	254	200	7.15
29	1,190	200	1,190	200	24	252	200	7.28
30	1,190	200	1,190	200	24	250	200	7.40
Mean	1,190	200	1,190	200	24	257	199	5.72
n	30	30	30	30	30	30	30	30
SD	0	0	0	0	1	32	4	1.67
Min	1,190	200	1,190	200	18	100	175	2.34
Max	1,190	200	1,190	200	24	286	200	7.89

ED_004549_00015840-00088

Table E2. Daily means of animal characteristics at Site OK4B for May, 2008

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,190	200	1,190	200	24	249	200	7.53
2	1,190	200	1,190	200	24	247	200	7.65
3	1,190	200	1,190	200	24	245	200	7.78
4	1,190	200	1,190	200	24	243	200	7.90
5	1,190	200	1,190	200	18	100	175	4.40
6	1,190	200	1,190	200	24	239	200	2.34
7	1,190	200	1,190	200	24	286	200	2.71
8	1,190	200	1,190	200	24	284	200	3.05
9	1,190	200	1,190	200	24	281	200	3.30
10	1,190	200	1,190	200	24	279	200	3.55
11	1,190	200	1,190	200	24	277	200	3.80
12	1,190	200	1,190	200	24	275	200	4.07
13	1,190	200	1,190	200	24	272	200	4.40
14	1,190	200	1,190	200	24	270	200	4.74
15	1,190	200	1,190	200	24	268	200	5.05
16	1,190	200	1,190	200	24	265	200	5.30
17	1,190	200	1,190	200	24	263	200	5.55
18	1,190	200	1,190	200	24	261	200	5.80
19	1,190	200	1,190	200	24	259	200	6.07
20	1,190	200	1,190	200	24	256	200	6.40
21	1,190	200	1,190	200	24	254	200	6.74
22	1,190	200	1,190	200	24	252	200	7.04
23	1,190	200	1,190	200	24	250	200	7.24
24	1,190	200	1,190	200	24	247	200	7.44
25	1,200	200	1,200	200	24	245	200	7.64
26	1,200	200	1,200	200	24	243	200	7.84
27	1,200	200	1,200	200	18	100	175	4.40
28	1,200	200	1,200	200	24	239	200	2.34
29	1,200	200	1,200	200	24	286	200	2.71
30	1,200	200	1,200	200	24	283	200	3.05
31	1,200	200	1,200	200	24	281	200	3.30
Mean	1,190	200	1,190	200	24	252	198	5.20
n	31	31	31	31	31	31	31	31
SD	3	0	3	0	1	43	6	1.88
Min	1,190	200	1,190	200	18	100	175	2.34
Max	1,200	200	1,200	200	24	286	200	7.90

ED_004549_00015840-00089

Table E2. Daily means of animal characteristics at Site OK4B for June, 2008

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,200	200	1,200	200	24	278	200	3.55
2	1,200	200	1,200	200	24	276	200	3.80
3	1,190	200	1,190	200	24	273	200	4.07
4	1,190	200	1,190	200	24	271	200	4.40
5	1,190	200	1,190	200	24	268	200	4.74
6	1,190	200	1,190	200	24	266	200	5.05
7	1,190	200	1,190	200	24	263	200	5.30
8	1,190	200	1,190	200	24	261	200	5.55
9	1,190	200	1,190	200	24	258	200	5.80
10	1,190	200	1,190	200	24	256	200	6.07
11	1,190	200	1,190	200	24	253	200	6.40
12	1,190	200	1,190	200	24	251	200	6.74
13	1,180	200	1,180	200	24	248	200	7.07
14	1,180	200	1,180	200	24	246	200	7.40
15	1,180	200	1,180	200	24	243	200	7.74
16	1,180	200	1,180	200	18	100	175	4.39
17	1,180	200	1,180	200	24	239	200	2.34
18	1,180	200	1,180	200	24	286	200	2.71
19	1,180	200	1,180	200	24	283	200	3.05
20	1,180	200	1,180	200	24	281	200	3.30
21	1,180	200	1,180	200	24	279	200	3.55
22	1,170	200	1,170	200	24	276	200	3.80
23	1,170	200	1,170	200	24	274	200	4.07
24	1,170	200	1,170	200	24	272	200	4.40
25	1,170	200	1,170	200	24	269	200	4.74
26	1,170	200	1,170	200	24	267	200	5.05
27	1,170	200	1,170	200	24	264	200	5.30
28	1,170	200	1,170	200	24	262	200	5.55
29	1,170	200	1,170	200	24	260	200	5.80
30	1,170	200	1,170	200	24	257	200	6.07
Mean	1,180	200	1,180	200	24	259	199	4.93
n	30	30	30	30	30	30	30	30
SD	9	0	9	0	1	32	4	1.36
Min	1,170	200	1,170	200	18	100	175	2.34
Max	1,200	200	1,200	200	24	286	200	7.74

ED_004549_00015840-00090

Table E2. Daily means of animal characteristics at Site OK4B for July, 2008

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,170	200	1,170	200	24	255	200	6.40
2	1,170	200	1,170	200	24	252	200	6.74
3	1,170	200	1,170	200	24	250	200	7.05
4	1,170	200	1,170	200	24	248	200	7.30
5	1,170	200	1,170	200	24	245	200	7.55
6	1,170	200	1,170	200	24	243	200	7.80
7	1,170	200	1,170	200	18	100	175	4.40
8	1,170	200	1,170	200	24	239	200	2.34
9	1,170	200	1,170	200	24	286	200	2.71
10	1,170	200	1,170	200	24	284	200	3.05
11	1,170	200	1,170	200	24	281	200	3.30
12	1,170	200	1,170	200	24	279	200	3.55
13	1,170	200	1,170	200	24	277	200	3.80
14	1,170	200	1,170	200	24	275	200	4.07
15	1,170	200	1,170	200	24	272	200	4.40
16	1,170	200	1,170	200	24	270	200	4.74
17	1,170	200	1,170	200	24	268	200	5.05
18	1,170	200	1,170	200	24	265	200	5.30
19	1,170	200	1,170	200	24	263	200	5.55
20	1,170	200	1,170	200	24	261	200	5.80
21	1,170	200	1,170	200	24	259	200	6.07
22	1,170	200	1,170	200	24	256	200	6.40
23	1,170	200	1,170	200	24	254	200	6.74
24	1,170	200	1,170	200	24	252	200	7.04
25	1,170	200	1,170	200	24	250	200	7.24
26	1,170	200	1,170	200	24	247	200	7.44
27	1,170	200	1,170	200	24	245	200	7.64
28	1,170	200	1,170	200	24	243	200	7.84
29	1,170	200	1,170	200	18	100	175	4.40
30	1,170	200	1,170	200	24	239	200	2.34
31	1,170	200	1,170	200	24	286	200	2.71
Mean	1,170	200	1,170	200	24	250	198	5.38
n	31	31	31	31	31	31	31	31
SD	1	0	1	0	1	42	6	1.78
Min	1,170	200	1,170	200	18	100	175	2.34
Max	1,170	200	1,170	200	24	286	200	7.84

ED_004549_00015840-00091

Table E2. Daily means of animal characteristics at Site OK4B for August, 2008

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,170	200	1,170	200	24	284	200	3.05
2	1,170	200	1,170	200	24	282	200	3.30
3	1,170	200	1,170	200	24	280	200	3.55
4	1,170	200	1,170	200	24	278	200	3.80
5	1,170	200	1,170	200	24	276	200	4.07
6	1,170	200	1,170	200	24	274	200	4.40
7	1,170	200	1,170	200	24	272	200	4.74
8	1,170	200	1,170	200	24	270	200	5.05
9	1,170	200	1,170	200	24	267	200	5.30
10	1,170	200	1,170	200	24	265	200	5.55
11	1,170	200	1,170	200	24	263	200	5.80
12	1,170	200	1,170	200	24	261	200	6.07
13	1,170	200	1,170	200	24	259	200	6.40
14	1,170	200	1,170	200	24	257	200	6.74
15	1,170	200	1,170	200	24	255	200	7.02
16	1,170	200	1,170	200	24	253	200	7.17
17	1,180	200	1,180	200	24	251	200	7.32
18	1,180	200	1,180	200	24	249	200	7.46
19	1,180	200	1,180	200	24	247	200	7.60
20	1,180	200	1,180	200	24	245	200	7.74
21	1,180	200	1,180	200	24	243	200	7.89
22	1,180	200	1,180	200	18	100	175	4.40
23	1,180	200	1,180	200	24	239	200	2.34
24	1,180	200	1,180	200	24	286	200	2.71
25	1,180	200	1,180	200	24	283	200	3.05
26	1,180	200	1,180	200	24	281	200	3.30
27	1,180	200	1,180	200	24	279	200	3.55
28	1,180	200	1,180	200	24	276	200	3.80
29	1,180	200	1,180	200	24	274	200	4.07
30	1,180	200	1,180	200	24	272	200	4.40
31	1,180	200	1,180	200	24	269	200	4.74
Mean	1,170	200	1,170	200	24	261	199	5.04
n	31	31	31	31	31	31	31	31
SD	2	0	2	0	1	32	4	1.66
Min	1,170	200	1,170	200	18	100	175	2.34
Max	1,180	200	1,180	200	24	286	200	7.89

ED_004549_00015840-00092

Table E2. Daily means of animal characteristics at Site OK4B for September, 2008

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,180	200	1,180	200	24	267	200	5.05
2	1,180	200	1,180	200	24	264	200	5.30
3	1,180	200	1,180	200	24	262	200	5.55
4	1,180	200	1,180	200	24	260	200	5.80
5	1,180	200	1,180	200	24	257	200	6.07
6	1,180	200	1,180	200	24	255	200	6.40
7	1,180	200	1,180	200	24	252	200	6.74
8	1,180	200	1,180	200	24	250	200	7.05
9	1,180	200	1,180	200	24	248	200	7.30
10	1,180	200	1,180	200	24	245	200	7.55
11	1,180	200	1,180	200	24	243	200	7.80
12	1,180	200	1,180	200	18	100	175	4.40
13	1,180	200	1,180	200	24	239	200	2.34
14	1,180	200	1,180	200	24	286	200	2.71
15	1,180	200	1,180	200	24	284	200	3.05
16	1,180	200	1,180	200	24	282	200	3.30
17	1,180	200	1,180	200	24	280	200	3.55
18	1,180	200	1,180	200	24	278	200	3.80
19	1,180	200	1,180	200	24	276	200	4.07
20	1,180	200	1,180	200	24	274	200	4.40
21	1,180	200	1,180	200	24	272	200	4.74
22	1,180	200	1,180	200	24	270	200	5.05
23	1,180	200	1,180	200	24	267	200	5.30
24	1,180	200	1,180	200	24	265	200	5.55
25	1,170	200	1,170	200	24	263	200	5.80
26	1,170	200	1,170	200	24	261	200	6.07
27	1,170	200	1,170	200	24	259	200	6.40
28	1,170	200	1,170	200	24	257	200	6.74
29	1,170	200	1,170	200	24	255	200	7.02
30	1,170	200	1,170	200	24	253	200	7.17
Mean	1,180	200	1,180	200	24	257	199	5.40
n	30	30	30	30	30	30	30	30
SD	1	0	1	0	1	32	4	1.49
Min	1,170	200	1,170	200	18	100	175	2.34
Max	1,180	200	1,180	200	24	286	200	7.80

ED_004549_00015840-00093

Table E2. Daily means of animal characteristics at Site OK4B for October, 2008

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,170	200	1,170	200	24	251	200	7.32
2	1,170	200	1,170	200	24	249	200	7.46
3	1,170	200	1,170	200	24	247	200	7.60
4	1,170	200	1,170	200	24	245	200	7.74
5	1,170	200	1,170	200	24	243	200	7.89
6	1,170	200	1,170	200	18	100	175	4.40
7	1,170	200	1,170	200	24	239	200	2.34
8	1,170	200	1,170	200	24	286	200	2.71
9	1,170	200	1,170	200	24	283	200	3.05
10	1,170	200	1,170	200	24	281	200	3.30
11	1,170	200	1,170	200	24	279	200	3.55
12	1,170	200	1,170	200	24	276	200	3.80
13	1,170	200	1,170	200	24	274	200	4.07
14	1,170	200	1,170	200	24	272	200	4.40
15	1,170	200	1,170	200	24	269	200	4.74
16	1,170	200	1,170	200	24	267	200	5.05
17	1,170	200	1,170	200	24	264	200	5.30
18	1,160	200	1,160	200	24	262	200	5.55
19	1,160	200	1,160	200	24	260	200	5.80
20	1,160	200	1,160	200	24	257	200	6.07
21	1,160	200	1,160	200	24	255	200	6.40
22	1,160	200	1,160	200	24	252	200	6.74
23	1,160	200	1,160	200	24	250	200	7.05
24	1,160	200	1,160	200	24	248	200	7.30
25	1,160	200	1,160	200	24	245	200	7.55
26	1,160	200	1,160	200	24	243	200	7.80
27	1,160	200	1,160	200	18	100	175	4.40
28	1,160	200	1,160	200	24	239	200	2.34
29	1,160	200	1,160	200	24	286	200	2.71
30	1,160	200	1,160	200	24	283	200	3.05
31	1,160	200	1,160	200	24	281	200	3.30
Mean	1,170	200	1,170	200	24	251	198	5.19
n	31	31	31	31	31	31	31	31
SD	5	0	5	0	1	42	6	1.86
Min	1,160	200	1,160	200	18	100	175	2.34
Max	1,170	200	1,170	200	24	286	200	7.89

ED_004549_00015840-00094

Table E2. Daily means of animal characteristics at Site OK4B for November, 2008

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,160	200	1,160	200	24	279	200	3.55
2	1,160	200	1,160	200	24	276	200	3.80
3	1,160	200	1,160	200	24	274	200	4.07
4	1,160	200	1,160	200	24	272	200	4.40
5	1,160	200	1,160	200	24	269	200	4.74
6	1,160	200	1,160	200	24	267	200	5.05
7	1,160	200	1,160	200	24	264	200	5.30
8	1,160	200	1,160	200	24	262	200	5.55
9	1,160	200	1,160	200	24	260	200	5.80
10	1,160	200	1,160	200	24	257	200	6.07
11	1,160	200	1,160	200	24	255	200	6.40
12	1,160	200	1,160	200	24	252	200	6.74
13	1,160	200	1,160	200	24	250	200	7.05
14	1,160	200	1,160	200	24	248	200	7.30
15	1,160	200	1,160	200	24	245	200	7.55
16	1,160	200	1,160	200	24	243	200	7.80
17	1,160	200	1,160	200	18	100	175	4.40
18	1,160	200	1,160	200	24	239	200	2.34
19	1,160	200	1,160	200	24	286	200	2.71
20	1,160	200	1,160	200	24	284	200	3.05
21	1,160	200	1,160	200	24	282	200	3.30
22	1,160	200	1,160	200	24	280	200	3.55
23	1,160	200	1,160	200	24	278	200	3.80
24	1,160	200	1,160	200	24	276	200	4.07
25	1,160	200	1,160	200	24	274	200	4.40
26	1,160	200	1,160	200	24	272	200	4.74
27	1,160	200	1,160	200	24	270	200	5.05
28	1,160	200	1,160	200	24	268	200	5.30
29	1,160	200	1,160	200	24	266	200	5.55
30	1,160	200	1,160	200	24	264	200	5.80
Mean	1,160	200	1,160	200	24	260	199	4.97
n	30	30	30	30	30	30	30	30
SD	1	0	1	0	1	32	4	1.43
Min	1,160	200	1,160	200	18	100	175	2.34
Max	1,160	200	1,160	200	24	286	200	7.80

ED_004549_00015840-00095

Table E2. Daily means of animal characteristics at Site OK4B for December, 2008

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,160	200	1,160	200	24	262	200	6.07
2	1,160	200	1,160	200	24	260	200	6.40
3	1,160	200	1,160	200	24	258	200	6.74
4	1,160	200	1,160	200	24	256	200	7.02
5	1,160	200	1,160	200	24	254	200	7.15
6	1,160	200	1,160	200	24	252	200	7.28
7	1,160	200	1,160	200	24	250	200	7.40
8	1,160	200	1,160	200	24	249	200	7.53
9	1,160	200	1,160	200	24	247	200	7.65
10	1,160	200	1,160	200	24	245	200	7.78
11	1,160	200	1,160	200	24	243	200	7.90
12	1,160	200	1,160	200	18	100	175	4.40
13	1,160	200	1,160	200	24	239	200	2.34
14	1,160	200	1,160	200	24	286	200	2.71
15	1,160	200	1,160	200	24	284	200	3.05
16	1,160	200	1,160	200	24	282	200	3.30
17	1,160	200	1,160	200	24	280	200	3.55
18	1,160	200	1,160	200	24	278	200	3.80
19	1,160	200	1,160	200	24	276	200	4.07
20	1,160	200	1,160	200	24	274	200	4.40
21	1,160	200	1,160	200	24	272	200	4.74
22	1,160	200	1,160	200	24	270	200	5.05
23	1,160	200	1,160	200	24	267	200	5.30
24	1,160	200	1,160	200	24	265	200	5.55
25	1,160	200	1,160	200	24	263	200	5.80
26	1,160	200	1,160	200	24	261	200	6.07
27	1,160	200	1,160	200	24	259	200	6.40
28	1,160	200	1,160	200	24	257	200	6.74
29	1,160	200	1,160	200	24	255	200	7.02
30	1,160	200	1,160	200	24	253	200	7.17
31	1,160	200	1,160	200	24	251	200	7.32
Mean	1,160	200	1,160	200	24	256	199	5.73
n	31	31	31	31	31	31	31	31
SD	1	0	1	0	1	31	4	1.65
Min	1,160	200	1,160	200	18	100	175	2.34
Max	1,160	200	1,160	200	24	286	200	7.90

ED_004549_00015840-00096

Table E2. Daily means of animal characteristics at Site OK4B for January, 2009

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,160	200	1,160	200	24	249	200	7.46
2	1,160	200	1,160	200	24	247	200	7.60
3	1,160	200	1,160	200	24	245	200	7.74
4	1,160	200	1,160	200	24	243	200	7.89
5	1,160	200	1,160	200	18	100	175	4.40
6	1,170	200	1,170	200	24	239	200	2.34
7	1,170	200	1,170	200	24	286	200	2.71
8	1,170	200	1,170	200	24	283	200	3.05
9	1,170	200	1,170	200	24	281	200	3.30
10	1,170	200	1,170	200	24	279	200	3.55
11	1,170	200	1,170	200	24	276	200	3.80
12	1,170	200	1,170	200	24	274	200	4.07
13	1,170	200	1,170	200	24	272	200	4.40
14	1,170	200	1,170	200	24	269	200	4.74
15	1,170	200	1,170	200	24	267	200	5.05
16	1,170	200	1,170	200	24	264	200	5.30
17	1,170	200	1,170	200	24	262	200	5.55
18	1,170	200	1,170	200	24	260	200	5.80
19	1,170	200	1,170	200	24	257	200	6.07
20	1,170	200	1,170	200	24	255	200	6.40
21	1,170	200	1,170	200	24	252	200	6.74
22	1,170	200	1,170	200	24	250	200	7.05
23	1,170	200	1,170	200	24	248	200	7.30
24	1,170	200	1,170	200	24	245	200	7.55
25	1,170	200	1,170	200	24	243	200	7.80
26	1,170	200	1,170	200	18	100	175	4.40
27	1,170	200	1,170	200	24	239	200	2.34
28	1,170	200	1,170	200	24	286	200	2.71
29	1,170	200	1,170	200	24	284	200	3.05
30	1,170	200	1,170	200	24	282	200	3.30
31	1,170	200	1,170	200	24	280	200	3.55
Mean	1,170	200	1,170	200	24	252	198	5.07
n	31	31	31	31	31	31	31	31
SD	2	0	2	0	1	43	6	1.84
Min	1,160	200	1,160	200	18	100	175	2.34
Max	1,170	200	1,170	200	24	286	200	7.89

ED_004549_00015840-00097

Table E2. Daily means of animal characteristics at Site OK4B for February, 2009

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,170	200	1,170	200	24	277	200	3.80
2	1,170	200	1,170	200	24	275	200	4.07
3	1,170	200	1,170	200	24	273	200	4.40
4	1,170	200	1,170	200	24	271	200	4.74
5	1,170	200	1,170	200	24	269	200	5.05
6	1,170	200	1,170	200	24	267	200	5.30
7	1,170	200	1,170	200	24	264	200	5.55
8	1,170	200	1,170	200	24	262	200	5.80
9	1,170	200	1,170	200	24	260	200	6.07
10	1,170	200	1,170	200	24	258	200	6.40
11	1,170	200	1,170	200	24	256	200	6.74
12	1,170	200	1,170	200	24	254	200	7.03
13	1,170	200	1,170	200	24	251	200	7.20
14	1,170	200	1,170	200	24	249	200	7.37
15	1,170	200	1,170	200	24	247	200	7.53
16	1,170	200	1,170	200	24	245	200	7.70
17	1,180	200	1,180	200	24	243	200	7.87
18	1,180	200	1,180	200	18	100	175	4.40
19	1,180	200	1,180	200	24	239	200	2.34
20	1,180	200	1,180	200	24	286	200	2.71
21	1,180	200	1,180	200	24	283	200	3.05
22	1,180	200	1,180	200	24	281	200	3.30
23	1,180	200	1,180	200	24	279	200	3.55
24	1,180	200	1,180	200	24	276	200	3.80
25	1,180	200	1,180	200	24	274	200	4.07
26	1,180	200	1,180	200	24	272	200	4.40
27	1,180	200	1,180	200	24	269	200	4.74
28	1,180	200	1,180	200	24	267	200	5.05
Mean	1,170	200	1,170	200	24	259	199	5.14
n	28	28	28	28	28	28	28	28
SD	3	0	3	0	1	33	5	1.58
Min	1,170	200	1,170	200	18	100	175	2.34
Max	1,180	200	1,180	200	24	286	200	7.87

ED_004549_00015840-00098

Table E2. Daily means of animal characteristics at Site OK4B for March, 2009

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,180	200	1,180	200	24	264	200	5.30
2	1,180	200	1,180	200	24	262	200	5.55
3	1,180	200	1,180	200	24	260	200	5.80
4	1,180	200	1,180	200	24	257	200	6.07
5	1,180	200	1,180	200	24	255	200	6.40
6	1,180	200	1,180	200	24	252	200	6.74
7	1,180	200	1,180	200	24	250	200	7.05
8	1,180	200	1,180	200	24	248	200	7.30
9	1,180	200	1,180	200	24	245	200	7.55
10	1,180	200	1,180	200	24	243	200	7.80
11	1,180	200	1,180	200	18	100	175	4.40
12	1,180	200	1,180	200	24	239	200	2.34
13	1,180	200	1,180	200	24	286	200	2.71
14	1,180	200	1,180	200	24	284	200	3.05
15	1,180	200	1,180	200	24	281	200	3.30
16	1,180	200	1,180	200	24	279	200	3.55
17	1,180	200	1,180	200	24	277	200	3.80
18	1,180	200	1,180	200	24	275	200	4.07
19	1,180	200	1,180	200	24	272	200	4.40
20	1,180	200	1,180	200	24	270	200	4.74
21	1,180	200	1,180	200	24	268	200	5.05
22	1,180	200	1,180	200	24	265	200	5.30
23	1,180	200	1,180	200	24	263	200	5.55
24	1,180	200	1,180	200	24	261	200	5.80
25	1,180	200	1,180	200	24	259	200	6.07
26	1,180	200	1,180	200	24	256	200	6.40
27	1,180	200	1,180	200	24	254	200	6.74
28	1,190	200	1,190	200	24	252	200	7.04
29	1,190	200	1,190	200	24	250	200	7.24
30	1,190	200	1,190	200	24	247	200	7.44
31	1,190	200	1,190	200	24	245	200	7.64
Mean	1,180	200	1,180	200	24	255	199	5.56
n	31	31	31	31	31	31	31	31
SD	2	0	2	0	1	31	4	1.56
Min	1,180	200	1,180	200	18	100	175	2.34
Max	1,190	200	1,190	200	24	286	200	7.80

ED_004549_00015840-00099

Table E2. Daily means of animal characteristics at Site OK4B for April, 2009

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,190	200	1,190	200	24	243	200	7.84
2	1,190	200	1,190	200	18	100	175	4.40
3	1,190	200	1,190	200	24	239	200	2.34
4	1,190	200	1,190	200	24	286	200	2.71
5	1,180	200	1,180	200	24	284	200	3.05
6	1,180	200	1,180	200	24	281	200	3.30
7	1,180	200	1,180	200	24	279	200	3.55
8	1,180	200	1,180	200	24	277	200	3.80
9	1,180	200	1,180	200	24	275	200	4.07
10	1,180	200	1,180	200	24	272	200	4.40
11	1,180	200	1,180	200	24	270	200	4.74
12	1,180	200	1,180	200	24	268	200	5.05
13	1,180	200	1,180	200	24	265	200	5.30
14	1,180	200	1,180	200	24	263	200	5.55
15	1,180	200	1,180	200	24	261	200	5.80
16	1,180	200	1,180	200	24	259	200	6.07
17	1,180	200	1,180	200	24	256	200	6.40
18	1,180	200	1,180	200	24	254	200	6.74
19	1,180	200	1,180	200	24	252	200	7.04
20	1,180	200	1,180	200	24	250	200	7.24
21	1,180	200	1,180	200	24	247	200	7.44
22	1,180	200	1,180	200	24	245	200	7.64
23	1,180	200	1,180	200	24	243	200	7.84
24	1,180	200	1,180	200	18	100	175	4.40
25	1,180	200	1,180	200	24	239	200	2.34
26	1,180	200	1,180	200	24	286	200	2.71
27	1,180	200	1,180	200	24	284	200	3.05
28	1,180	200	1,180	200	24	282	200	3.30
29	1,180	200	1,180	200	24	280	200	3.55
30	1,180	200	1,180	200	24	278	200	3.80
Mean	1,180	200	1,180	200	24	254	198	4.85
n	30	30	30	30	30	30	30	30
SD	2	0	2	0	2	44	6	1.75
Min	1,180	200	1,180	200	18	100	175	2.34
Max	1,190	200	1,190	200	24	286	200	7.84

ED_004549_00015840-00100

Table E2. Daily means of animal characteristics at Site OK4B for May, 2009

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,180	200	1,180	200	24	276	200	4.07
2	1,180	200	1,180	200	24	274	200	4.40
3	1,180	200	1,180	200	24	272	200	4.74
4	1,180	200	1,180	200	24	270	200	5.05
5	1,180	200	1,180	200	24	267	200	5.30
6	1,180	200	1,180	200	24	265	200	5.55
7	1,180	200	1,180	200	24	263	200	5.80
8	1,180	200	1,180	200	24	261	200	6.07
9	1,180	200	1,180	200	24	259	200	6.40
10	1,180	200	1,180	200	24	257	200	6.74
11	1,180	200	1,180	200	24	255	200	7.02
12	1,180	200	1,180	200	24	253	200	7.17
13	1,180	200	1,180	200	24	251	200	7.32
14	1,180	200	1,180	200	24	249	200	7.46
15	1,180	200	1,180	200	24	247	200	7.60
16	1,180	200	1,180	200	24	245	200	7.74
17	1,180	200	1,180	200	24	243	200	7.89
18	1,180	200	1,180	200	18	100	175	4.40
19	1,180	200	1,180	200	24	239	200	2.34
20	1,180	200	1,180	200	24	286	200	2.71
21	1,180	200	1,180	200	24	284	200	3.05
22	1,180	200	1,180	200	24	282	200	3.30
23	1,180	200	1,180	200	24	280	200	3.55
24	1,180	200	1,180	200	24	277	200	3.80
25	1,180	200	1,180	200	24	275	200	4.07
26	1,170	200	1,170	200	24	273	200	4.40
27	1,170	200	1,170	200	24	271	200	4.74
28	1,170	200	1,170	200	24	269	200	5.05
29	1,170	200	1,170	200	24	267	200	5.30
30	1,170	200	1,170	200	24	264	200	5.55
31	1,170	200	1,170	200	24	262	200	5.80
Mean	1,180	200	1,180	200	24	259	199	5.30
n	31	31	31	31	31	31	31	31
SD	1	0	1	0	1	32	4	1.54
Min	1,170	200	1,170	200	18	100	175	2.34
Max	1,180	200	1,180	200	24	286	200	7.89

ED_004549_00015840-00101

Table E2. Daily means of animal characteristics at Site OK4B for June, 2009

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,170	200	1,170	200	24	260	200	6.07
2	1,170	200	1,170	200	24	258	200	6.40
3	1,170	200	1,170	200	24	256	200	6.74
4	1,170	200	1,170	200	24	254	200	7.03
5	1,180	200	1,180	200	24	251	200	7.20
6	1,180	200	1,180	200	24	249	200	7.37
7	1,180	200	1,180	200	24	247	200	7.53
8	1,180	200	1,180	200	24	245	200	7.70
9	1,180	200	1,180	200	24	243	200	7.87
10	1,180	200	1,180	200	18	100	175	4.40
11	1,180	200	1,180	200	24	239	200	2.34
12	1,180	200	1,180	200	24	286	200	2.71
13	1,180	200	1,180	200	24	284	200	3.05
14	1,180	200	1,180	200	24	282	200	3.30
15	1,180	200	1,180	200	24	280	200	3.55
16	1,180	200	1,180	200	24	277	200	3.80
17	1,180	200	1,180	200	24	275	200	4.07
18	1,180	200	1,180	200	24	273	200	4.40
19	1,180	200	1,180	200	24	271	200	4.74
20	1,180	200	1,180	200	24	269	200	5.05
21	1,180	200	1,180	200	24	267	200	5.30
22	1,180	200	1,180	200	24	264	200	5.55
23	1,180	200	1,180	200	24	262	200	5.80
24	1,180	200	1,180	200	24	260	200	6.07
25	1,180	200	1,180	200	24	258	200	6.40
26	1,180	200	1,180	200	24	256	200	6.74
27	1,180	200	1,180	200	24	254	200	7.03
28	1,180	200	1,180	200	24	251	200	7.20
29	1,180	200	1,180	200	24	249	200	7.37
30	1,180	200	1,180	200	24	247	200	7.53
Mean	1,180	200	1,180	200	24	256	199	5.68
n	30	30	30	30	30	30	30	30
SD	2	0	2	0	1	32	4	1.65
Min	1,170	200	1,170	200	18	100	175	2.34
Max	1,180	200	1,180	200	24	286	200	7.87

ED_004549_00015840-00102

Table E2. Daily means of animal characteristics at Site OK4B for July, 2009

Day	Barn 1		Barn 2		Farrowing room 9			
	Inv., hd	Mass, kg	Inv., hd	Mass, kg	Sow inv.	Piglet inv.	Sow mass, kg	Piglet mass, kg
1	1,180	200	1,180	200	24	245	200	7.70
2	1,180	200	1,180	200	24	243	200	7.87
3	1,180	200	1,180	200	18	100	175	4.40
4	1,180	200	1,180	200	24	239	200	2.34
5	1,180	200	1,180	200	24	285	200	2.71
6	1,180	200	1,180	200	24	282	200	3.05
7	1,180	200	1,180	200	24	279	200	3.30
8	1,180	200	1,180	200	24	276	200	3.55
9	1,180	200	1,180	200	24	273	200	3.80
10	1,180	200	1,180	200	24	270	200	4.07
11	1,180	200	1,180	200	24	267	200	4.40
12	1,180	200	1,180	200	24	264	200	4.74
13	1,180	200	1,180	200	24	261	200	5.05
14	1,180	200	1,180	200	24	258	200	5.30
15	1,180	200	1,180	200	24	255	200	5.55
16	1,180	200	1,180	200	24	252	200	5.80
17	1,190	200	1,190	200	24	249	200	6.07
18	1,190	200	1,190	200	24	246	200	6.40
19	1,190	200	1,190	200	24	243	200	6.74
20	1,190	200	1,190	200				
21	1,190	200	1,190	200				
22	1,190	200	1,190	200				
23	1,190	200	1,190	200				
24								
25								
26								
27								
28								
29								
30								
31								
Mean	1,180	200	1,180	200	24	252	199	4.89
n	23	23	23	23	19	19	19	19
SD	2	0	2	0	1	38	6	1.57
Min	1,180	200	1,180	200	18	100	175	2.34
Max	1,190	200	1,190	200	24	285	200	7.87

ED_004549_00015840-00103

Table E3. Environmental parameters.

Table E3. Daily means (SD) of environmental parameters at Site OK4B for July, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12	25.5 (1.9)	70.9 (3.4)	-22.0 (6.8)		24.8 (2.1)	73.7 (3.3)	-21.0 (5.7)				-47.1 (9.1)	
13	24.4 (1.0)	69.2 (2.1)	-15.7 (1.9)		23.6 (1.2)	72.4 (2.2)	-14.8 (3.6)		22.5 (1.3)		-39.7 (11.3)	
14	25.1 (1.8)	64.7 (5.4)	-19.4 (9.6)		24.4 (2.3)	68.5 (5.5)	-17.3 (7.2)		23.5 (2.2)		-42.5 (12.3)	
15	25.6 (1.7)	64.5 (6.3)	-22.1 (8.2)		25.2 (2.2)	67.7 (6.5)	-19.4 (6.9)		24.5 (1.8)		-46.7 (10.2)	
16	25.6 (1.5)	63.3 (4.8)	-21.0 (6.5)		25.4 (2.1)	68.0 (4.2)	-22.5 (5.2)		25.1 (1.2)		-53.1 (4.9)	
17	25.8 (2.0)	63.0 (3.7)	-22.1 (7.2)		25.5 (2.4)	69.1 (4.4)	-20.7 (7.4)		25.0 (2.1)		-49.6 (10.3)	
18	25.9 (1.8)	60.3 (5.3)	-22.0 (6.7)		25.8 (2.3)	66.3 (4.9)	-21.4 (7.7)		25.4 (1.6)		-52.5 (4.9)	
19	25.2 (1.5)	63.8 (2.5)	-20.1 (7.9)		24.7 (1.8)	68.8 (2.9)	-19.4 (5.3)		25.1 (1.2)		-51.3 (3.9)	
20	26.1 (1.6)	67.2 (4.3)	-24.8 (6.3)		25.8 (1.7)	70.1 (4.0)	-22.6 (5.3)		25.7 (1.0)		-51.0 (2.3)	
21	26.0 (1.5)	67.6 (3.5)	-24.7 (6.1)	53.1 (5.1)	25.7 (1.8)	71.2 (3.2)	-23.0 (4.8)	53.9 (5.7)	25.4 (1.4)		-52.3 (3.4)	
22	26.1 (1.5)	68.2 (3.8)	-25.5 (6.0)	54.3 (5.4)	25.9 (1.9)	71.7 (3.7)	-23.1 (4.8)	55.0 (6.1)	25.6 (1.5)		-51.3 (3.2)	
23	26.0 (1.6)	64.9 (3.7)	-23.6 (6.9)	52.7 (6.7)	25.5 (1.9)	69.4 (3.8)	-20.8 (6.5)	52.1 (8.3)	25.5 (1.6)		-50.1 (3.1)	
24	25.9 (1.5)	68.7 (3.9)	-23.1 (6.2)	52.5 (7.0)	25.4 (1.8)	72.4 (3.8)	-22.1 (4.5)	53.2 (6.1)	25.0 (1.3)		-48.9 (3.4)	
25	25.6 (1.4)	66.3 (4.5)	-23.8 (6.4)	52.5 (5.2)	25.6 (1.8)	70.3 (4.1)	-21.6 (5.8)	51.6 (6.8)	24.7 (1.1)		-52.0 (5.0)	
26	25.6 (1.6)	61.9 (3.4)	-21.1 (7.3)	50.3 (6.4)	25.3 (2.1)	67.6 (4.0)	-19.4 (7.1)	49.3 (8.6)	25.0 (2.8)		-48.4 (6.4)	
27	25.6 (1.7)	63.5 (3.4)	-21.4 (7.2)	51.1 (8.2)	25.2 (2.0)	67.6 (4.4)	-18.6 (6.8)	49.1 (9.3)	24.5 (3.5)		-37.0 (10.5)	
28	25.7 (1.6)	66.6 (3.3)	-22.6 (6.5)	51.8 (6.7)	25.3 (1.9)	70.3 (3.8)	-19.4 (5.3)	49.5 (7.3)	23.2 (1.3)		-46.1 (8.7)	
29	25.9 (1.5)	64.6 (3.8)	-23.5 (6.2)	52.6 (5.6)	25.7 (2.0)	66.9 (4.0)	-21.7 (4.9)	53.7 (5.8)	23.6 (1.1)		-49.2 (5.6)	
30	25.9 (1.2)	66.1 (5.7)	-23.7 (5.7)	52.1 (5.4)	25.8 (1.6)	68.5 (5.3)	-20.8 (2.9)	51.7 (3.6)	23.4 (1.4)		-47.1 (9.7)	
31	26.3 (1.4)	69.5 (3.7)	-24.8 (4.4)	52.6 (4.5)	26.4 (1.5)	71.8 (3.2)	-21.8 (4.2)	49.5 (5.4)	24.5 (0.9)		-51.0 (5.6)	
Mean	25.7	65.7	-22.3	52.3	25.3	69.6	-20.6	51.7	24.6		-48.3	
n	20.0	20.0	20.0	11.0	20.0	20.0	20.0	11.0	19.0	0.0	20.0	0.0
SD	0.4	2.7	2.2	1.0	0.6	2.0	2.0	2.0	0.9		4.2	
Min	24.4	60.3	-25.5	50.3	23.6	66.3	-23.1	49.1	22.5		-53.1	
Max	26.3	70.9	-15.7	54.3	26.4	73.7	-14.8	55.0	25.7		-37.0	

ED_004549_00015840-00104

Table E3. Daily means (SD) of environmental parameters at Site OK4B for August, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	26.0 (1.5)	71.6 (3.8)	-25.4 (3.9)	53.9 (4.0)	26.0 (1.5)	72.6 (2.1)	-21.1 (2.7)	52.6 (3.1)	24.7 (1.0)		-50.5 (4.0)	
2	25.7 (1.1)	73.5 (2.0)	-23.1 (5.2)	51.2 (4.6)	25.2 (1.2)	74.5 (1.5)	-21.3 (2.9)	54.2 (2.9)	24.4 (0.8)		-48.5 (3.7)	
3	25.5 (1.4)	70.0 (2.8)	-22.7 (6.8)	51.5 (6.7)	25.2 (1.7)	72.3 (3.1)	-21.0 (4.1)	52.1 (4.2)	23.9 (1.5)		-45.8 (11.2)	
4	26.6 (1.8)	67.3 (4.7)	-23.1 (5.2)	55.5 (6.5)	26.4 (1.9)	70.1 (3.1)	-24.0 (6.9)	57.8 (7.3)	25.3 (1.4)		-53.4 (4.4)	
5	27.3 (1.8)	68.1 (3.4)	-26.7 (5.6)	56.7 (4.4)	27.0 (2.0)	70.7 (2.2)	-25.2 (4.1)	59.5 (2.8)	26.1 (1.3)		-52.2 (2.5)	
6	27.7 (1.6)	65.5 (6.2)	-28.1 (2.9)	57.9 (3.4)	27.4 (1.7)	69.7 (4.4)	-26.0 (3.7)	59.9 (3.6)	26.4 (1.1)		-52.2 (3.9)	
7	27.1 (1.5)	63.9 (5.7)	-23.5 (4.8)	55.3 (6.3)	26.5 (1.6)	67.9 (4.0)	-22.7 (4.5)	56.8 (6.7)	25.7 (1.2)		-50.8 (3.7)	
8	26.9 (1.5)	65.2 (5.9)	-23.7 (1.0)	54.0 (0.9)	26.4 (1.5)	66.6 (5.0)	-22.4 (1.0)	55.7 (1.0)	25.8 (0.9)		-49.9 (2.8)	
9	26.5 (2.0)	62.7 (5.4)	-22.6 (6.1)	53.6 (6.8)	25.9 (2.2)	65.0 (4.0)	-23.0 (4.0)	56.9 (5.7)	25.2 (1.7)		-49.0 (5.7)	
10	26.5 (2.1)	59.5 (4.5)	-22.4 (6.6)	52.9 (6.5)	26.4 (2.2)	62.4 (2.7)	-24.1 (6.0)	56.7 (6.3)	25.5 (1.5)		-51.8 (3.2)	
11	26.5 (2.2)	57.9 (4.5)	-23.9 (6.8)	55.4 (8.5)	26.4 (2.2)	61.1 (4.0)	-26.4 (4.5)	60.7 (5.5)	25.5 (1.4)		-52.3 (3.3)	
12												
13												
14	25.7 (2.0)	54.8 (5.1)	-20.6 (7.2)	53.9 (8.8)	25.6 (1.6)	59.6 (7.0)	-26.0 (4.8)	61.5 (5.6)	24.8 (1.4)		-51.5 (4.0)	
15	25.6 (2.1)	52.8 (3.4)	-20.0 (9.5)	50.9 (11.5)	25.5 (2.0)	55.5 (7.0)	-25.3 (5.7)	59.5 (6.0)	24.7 (1.4)		-51.3 (4.7)	
16	25.8 (1.9)	58.0 (3.9)	-22.5 (8.7)	52.0 (8.7)	25.3 (1.7)	60.9 (5.6)	-25.3 (6.0)	57.6 (6.2)	24.9 (1.6)		-48.8 (5.8)	
17												
18	25.5 (1.2)	69.6 (3.9)	-25.7 (5.8)	55.1 (4.7)	25.1 (1.6)	74.1 (2.3)	-27.5 (3.5)	60.1 (3.3)	24.7 (0.8)		-51.8 (5.5)	
19	26.8 (1.9)	69.8 (5.0)	-28.3 (3.0)	57.6 (2.7)	26.4 (1.8)	74.1 (4.1)	-27.4 (3.2)	59.6 (3.1)	25.9 (1.4)		-51.2 (3.4)	
20	27.8 (1.9)	68.7 (6.8)	-30.1 (2.3)	57.9 (3.4)	27.6 (2.3)	74.5 (5.9)	-29.0 (3.3)	60.7 (2.3)			-52.3 (8.3)	
21	26.8 (1.6)	67.4 (6.6)	-30.2 (2.4)	60.3 (1.5)	26.9 (1.7)	74.1 (4.4)	-30.4 (2.2)	62.6 (1.7)	27.2 (1.2)	74.7 (4.6)	-56.2 (2.7)	4.96 (0.09)
22	26.1 (1.4)	63.1 (6.1)	-26.5 (3.7)	60.8 (3.3)	26.6 (1.6)	68.0 (9.7)	-34.1 (4.7)	64.7 (3.8)	26.6 (0.9)	70.6 (5.0)	-57.3 (4.7)	4.95 (0.18)
23	25.6 (1.9)	65.3 (4.7)	-22.2 (4.9)	58.2 (7.5)	26.2 (2.2)	68.4 (6.0)	-26.8 (5.6)	63.6 (7.7)	26.3 (1.4)	71.5 (4.7)	-50.3 (11.1)	4.72 (0.78)
24	24.1 (0.6)	73.5 (1.7)	-21.4 (4.2)	51.9 (3.8)	23.9 (0.7)	76.6 (1.4)	-22.2 (4.2)	55.4 (6.2)	25.1 (0.7)	78.1 (2.0)	-40.8 (9.6)	4.36 (1.08)
25	25.1 (1.5)	73.6 (2.2)	-24.2 (6.8)	54.6 (7.5)	24.7 (1.7)	78.7 (2.0)	-24.5 (5.6)	56.5 (6.8)	26.0 (1.4)	78.0 (2.9)	-44.8 (12.5)	4.43 (0.92)
26	25.8 (1.9)	63.7 (8.3)	-24.4 (3.5)	58.2 (5.7)	25.7 (1.9)	69.5 (6.0)	-28.7 (3.7)	63.9 (4.0)	26.8 (1.4)	68.9 (6.2)	-53.2 (5.4)	5.13 (0.16)
27	25.2 (1.7)	61.9 (4.9)	-23.7 (5.7)	56.8 (6.8)	25.4 (1.6)	66.6 (4.0)	-26.5 (5.6)	60.5 (6.8)	26.6 (1.3)	65.1 (3.8)	-52.7 (6.5)	5.08 (0.37)
28	25.2 (1.5)	64.4 (4.0)	-24.1 (5.9)	56.3 (5.8)	25.5 (1.3)	67.4 (3.2)	-28.4 (2.7)	63.0 (3.2)	27.1 (1.0)	65.8 (2.8)	-52.9 (4.5)	5.19 (0.17)
29	24.3 (0.9)	71.7 (1.2)	-25.0 (3.8)	54.8 (3.1)	24.4 (0.9)	71.8 (2.3)	-26.0 (4.1)	59.6 (4.8)	26.6 (1.1)	71.2 (3.6)	-49.0 (3.3)	5.38 (0.14)
30	23.8 (0.8)	69.8 (2.9)	-21.4 (5.5)	52.8 (5.6)	23.5 (1.0)	71.3 (4.1)	-21.4 (5.7)	53.9 (7.7)	25.8 (1.1)	71.4 (5.4)	-44.3 (5.5)	5.34 (0.41)
31	24.2 (1.3)	61.9 (5.8)	-20.7 (8.8)	50.2 (11.9)	24.0 (1.8)	67.2 (4.7)	-21.8 (8.0)	52.4 (10.6)	26.1 (1.5)	66.4 (5.6)	-44.1 (10.6)	4.71 (0.99)
Mean	25.9	65.5	-24.2	55.0	25.8	69.0	-25.3	58.5	25.7	71.1	-50.3	4.93
n	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	27.0	11.0	28.0	11.0
SD	1.0	5.5	2.7	2.8	1.0	5.4	3.1	3.5	0.8	4.3	3.6	0.33
Min	23.8	52.8	-30.2	50.2	23.5	55.5	-34.1	52.1	23.9	65.1	-57.3	4.36
Max	27.8	73.6	-20.0	60.8	27.6	78.7	-21.0	64.7	27.2	78.1	-40.8	5.38

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Table E3. Daily means (SD) of environmental parameters at Site OK4B for September, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	25.3 (2.9)	51.4 (7.9)	-18.5 (8.3)	48.8 (12.3)	24.2 (2.0)	62.8 (5.3)	-25.2 (7.5)	50.9 (13.2)	26.1 (1.5)	63.4 (5.5)	-44.0 (12.4)	4.68 (0.99)
2	25.5 (3.0)	46.0 (7.7)	-17.7 (8.5)	48.4 (13.5)	24.2 (1.9)	58.1 (3.9)	-24.3 (7.8)	49.6 (14.2)	25.9 (1.7)	58.7 (4.5)	-42.5 (11.6)	4.76 (1.01)
3	24.4 (2.4)	50.0 (8.2)	-17.2 (8.3)	46.3 (12.5)	24.2 (1.9)	57.1 (4.2)	-23.9 (7.8)	49.6 (15.2)	25.7 (1.6)	56.6 (4.4)	-40.9 (12.4)	4.68 (1.12)
4	24.2 (1.3)	62.2 (3.1)	-19.5 (6.6)	49.5 (8.2)	24.5 (1.7)	65.9 (3.4)	-24.1 (7.2)	54.4 (10.1)	26.4 (1.5)	64.7 (3.8)	-45.1 (9.9)	4.99 (0.80)
5	24.9 (1.7)	63.9 (3.6)	-22.1 (6.5)	51.3 (7.6)	25.2 (2.0)	67.4 (2.4)	-24.0 (6.4)	53.6 (7.7)	26.8 (1.4)	68.1 (2.5)	-48.3 (11.0)	4.96 (0.70)
6	25.0 (1.6)	60.9 (6.3)	-23.2 (6.5)	53.8 (7.9)	25.5 (1.5)	61.8 (4.7)	-25.1 (4.8)	57.9 (6.1)			-47.4 (2.9)	
7	24.0 (0.6)	66.4 (5.8)	-22.1 (4.0)	53.4 (5.6)	24.5 (0.9)	65.0 (6.0)	-24.6 (3.4)	59.7 (5.5)			-43.2 (6.7)	
8	24.8 (1.1)	70.4 (3.4)	-22.8 (6.5)	53.6 (7.7)	24.8 (1.2)	71.8 (1.8)	-23.5 (5.4)	56.4 (7.1)			-44.1 (5.5)	
9	23.1 (0.4)	62.8 (6.7)	-13.0 (5.3)	38.9 (8.5)	22.9 (0.7)	63.0 (5.4)	-21.1 (7.0)	43.6 (11.8)			-29.8 (12.3)	
10	22.2 (0.9)	60.2 (4.4)	-8.2 (3.9)		21.7 (0.8)	63.8 (5.9)	-11.0 (5.4)	28.5 (8.7)				
11	21.8 (1.6)	48.2 (6.3)	-8.2 (5.3)		21.8 (1.9)	48.2 (8.8)	-13.1 (8.9)	34.3 (17.5)				
12	23.0 (1.1)	52.8 (4.4)	-13.8 (8.1)	34.6 (13.6)	23.3 (1.9)	52.6 (5.3)	-19.0 (10.3)	42.6 (19.2)	23.7 (1.2)	53.9 (4.9)	-35.0 (14.7)	
13	23.7 (1.4)	60.4 (4.5)	-17.3 (10.5)	41.9 (14.7)	23.6 (2.0)	62.3 (3.7)	-20.7 (8.3)	47.5 (16.0)	24.7 (1.7)	63.1 (3.4)	-41.9 (12.8)	
14	22.6 (0.5)	47.0 (5.2)	-9.4 (4.3)	28.4 (7.9)	21.9 (0.7)	47.0 (6.3)	-13.8 (6.2)	33.4 (13.1)	23.2 (0.3)	48.5 (5.7)	-38.1 (19.1)	
15	23.9 (1.5)	57.3 (11.4)	-18.5 (10.0)	41.6 (16.4)	23.9 (2.0)	58.9 (12.6)	-24.2 (9.1)	46.7 (18.8)	24.9 (1.7)	59.0 (10.8)	-49.8 (10.6)	
16	24.2 (1.5)	59.6 (4.9)	-19.3 (7.2)	52.2 (8.7)	24.9 (1.4)	60.9 (4.1)	-26.2 (5.5)	62.7 (4.4)	26.2 (1.1)	59.8 (5.0)	-47.2 (9.2)	
17	23.8 (1.5)	64.0 (2.3)	-18.6 (7.4)	47.5 (7.9)	24.1 (1.9)	66.2 (5.0)	-27.3 (9.0)	57.5 (8.3)	25.8 (1.4)	64.3 (4.2)	-45.2 (11.5)	
18	23.6 (0.9)	59.5 (10.7)	-16.8 (5.9)	46.3 (8.8)	23.7 (1.4)	60.4 (13.5)	-19.6 (5.7)	52.0 (8.0)	25.7 (1.3)	58.4 (12.9)	-38.1 (8.8)	
19	24.3 (1.4)	66.3 (4.0)	-20.6 (8.5)	47.5 (11.1)	24.1 (1.9)	69.7 (3.7)	-23.2 (7.2)	52.5 (9.0)	25.9 (1.5)	67.6 (4.0)	-53.9 (19.4)	
20	24.4 (1.2)	68.0 (3.3)	-22.7 (7.0)	49.4 (7.7)	24.4 (1.7)	71.4 (2.4)	-26.6 (6.9)	57.2 (8.6)	27.4 (2.2)	65.2 (5.3)	-42.4 (9.6)	
21	24.4 (1.2)	64.3 (5.8)	-22.0 (6.6)	52.7 (7.7)	24.3 (1.4)	65.0 (5.9)	-25.1 (3.6)	60.3 (4.2)	26.8 (1.1)	61.7 (5.8)	-43.7 (4.3)	5.56 (0.16)
22	24.6 (1.4)	65.5 (3.5)	-21.9 (8.3)	49.6 (10.0)	24.6 (2.0)	68.6 (2.0)	-24.7 (6.4)	54.9 (9.8)	27.0 (1.4)	63.5 (2.9)	-50.3 (13.3)	4.82 (1.04)
23	24.5 (1.2)	63.9 (2.3)	-23.1 (6.9)	50.6 (7.0)	25.0 (1.4)	65.6 (3.5)	-28.3 (4.1)	59.3 (3.2)	27.2 (1.0)	60.8 (3.2)	-48.8 (8.8)	5.10 (0.54)
24												
25												
26	22.8 (1.1)	49.6 (7.0)	-9.8 (6.6)	31.7 (13.5)	22.6 (1.7)	49.9 (9.1)	-15.5 (9.1)	39.0 (19.1)	25.2 (1.4)	49.4 (6.5)	-39.4 (15.9)	3.30 (1.64)
27	23.1 (0.8)	55.4 (6.8)	-12.9 (6.8)	34.4 (13.8)	23.3 (1.5)	54.6 (6.4)	-17.6 (9.1)	43.1 (20.1)	25.6 (1.4)	54.0 (5.2)	-43.5 (12.3)	4.00 (1.58)
28	23.9 (1.1)	64.6 (2.8)	-19.7 (8.6)	44.6 (10.4)	24.1 (1.7)	67.9 (3.4)	-24.5 (9.3)	52.3 (11.2)			-50.7 (14.3)	
29	24.0 (1.0)	63.7 (2.1)	-20.9 (6.4)	48.9 (8.4)	24.4 (1.1)	66.4 (2.6)	-28.4 (8.1)	57.6 (7.8)			-48.0 (11.6)	
30												
Mean	23.9	59.4	-17.8	45.8	23.9	61.9	-22.4	50.3	25.8	60.0	-44.0	4.68
n	27.0	27.0	27.0	25.0	27.0	27.0	27.0	27.0	19.0	19.0	25.0	10.0
SD	0.9	6.8	4.7	7.0	1.0	6.7	4.6	8.7	1.1	5.5	5.3	0.60
Min	21.8	46.0	-23.2	28.4	21.7	47.0	-28.4	28.5	23.2	48.5	-53.9	3.30
Max	25.5	70.4	-8.2	53.8	25.5	71.8	-11.0	62.7	27.4	68.1	-29.8	5.56

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Table E3. Daily means (SD) of environmental parameters at Site OK4B for October, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1												
2	23.3 (0.9)	50.2 (14.3)	-13.6 (7.1)	41.2 (11.9)	23.4 (1.3)	50.2 (15.7)	-16.4 (6.1)	47.2 (12.1)	24.3 (1.1)	52.7 (14.5)	-25.3 (9.5)	3.39 (1.21)
3	22.5 (1.1)	44.0 (5.1)	-10.3 (5.9)	31.4 (12.4)	22.9 (1.7)	44.5 (6.3)	-17.0 (10.4)	41.0 (19.5)	24.0 (1.2)	48.1 (6.3)	-25.9 (12.8)	2.48 (1.36)
4	23.5 (0.8)	57.2 (9.2)	-15.4 (5.9)	43.2 (9.2)	23.7 (1.3)	59.3 (11.3)	-21.0 (5.5)	53.5 (9.2)	24.7 (1.0)	61.5 (12.3)	-30.9 (8.2)	3.53 (0.85)
5	24.5 (1.7)	60.9 (3.4)	-22.0 (7.7)	49.6 (9.0)	25.4 (1.7)	62.7 (5.6)	-28.7 (5.1)	59.4 (5.2)	26.0 (1.1)	62.9 (6.7)	-45.5 (12.0)	4.53 (0.90)
6												
7	23.0 (0.6)	53.0 (6.5)	-10.1 (4.8)	34.1 (9.7)	23.2 (1.4)	51.6 (6.0)	-20.3 (7.9)	46.0 (16.3)	25.1 (1.0)	51.8 (6.6)	-36.2 (9.2)	3.76 (1.38)
8	22.0 (1.1)	45.2 (5.6)	-6.3 (3.9)	23.1 (8.6)	22.0 (1.6)	44.2 (7.9)	-12.5 (8.9)	30.8 (17.4)	24.6 (1.1)	43.9 (9.2)	-27.9 (15.5)	2.62 (1.72)
9	21.6 (1.5)	45.4 (5.8)	-6.5 (4.5)	23.1 (9.1)	21.9 (2.0)	43.6 (6.6)	-12.1 (9.2)	32.3 (17.5)	24.6 (1.4)	42.3 (7.0)	-27.4 (15.0)	2.74 (1.67)
10	22.6 (1.4)	47.1 (5.1)	-12.9 (8.1)	33.3 (15.7)	22.7 (2.0)	47.8 (6.4)	-19.3 (11.0)	40.8 (20.7)	24.6 (1.2)	48.5 (5.6)	-31.1 (13.4)	3.09 (1.66)
11	22.8 (1.1)	54.0 (3.6)	-15.4 (8.0)	39.6 (14.2)	22.8 (1.8)	55.6 (3.6)	-25.7 (7.8)	46.9 (16.5)	24.9 (1.4)	55.2 (4.4)	-44.9 (11.5)	3.32 (1.29)
12	23.5 (1.3)	59.9 (3.9)	-18.9 (9.8)	45.9 (16.0)	23.5 (2.0)	62.7 (2.6)	-28.3 (5.1)	53.7 (17.7)	25.7 (1.5)	61.4 (4.2)	-48.9 (11.3)	3.94 (1.42)
13	23.7 (1.3)	59.7 (4.8)	-22.4 (5.9)	55.2 (6.3)	24.1 (1.4)	61.3 (3.7)	-24.8 (5.1)	63.0 (6.2)	26.3 (0.9)	61.1 (4.6)	-46.6 (10.8)	4.58 (1.02)
14	22.2 (0.9)	52.3 (5.8)	-12.2 (4.6)	33.9 (11.9)	21.9 (1.5)	54.2 (7.5)	-26.8 (8.5)	39.0 (14.9)	24.4 (0.9)	53.3 (6.5)	-29.6 (12.1)	2.99 (1.22)
15	21.6 (1.0)	44.4 (9.2)	-11.0 (5.7)	25.3 (12.2)	20.6 (1.8)	47.7 (8.7)	-25.7 (9.8)	28.9 (11.2)	23.9 (0.8)	45.1 (5.6)	-24.0 (14.2)	2.08 (0.93)
16	22.1 (1.3)	46.2 (8.3)	-15.6 (6.4)	36.6 (17.8)	21.7 (2.1)	50.1 (7.3)	-22.2 (7.4)	42.3 (20.8)	24.8 (1.6)	46.0 (7.2)	-34.5 (15.0)	3.11 (1.56)
17	22.3 (0.9)	45.1 (12.2)	-12.9 (5.0)	41.3 (13.8)	22.1 (0.9)	49.3 (11.3)	-11.8 (5.7)	40.9 (13.8)	24.8 (1.4)	46.8 (12.7)	-39.2 (14.5)	3.38 (1.33)
18	21.0 (1.3)	39.1 (11.1)	-14.0 (6.6)	27.7 (12.0)	20.8 (1.4)	40.7 (9.9)	-16.5 (8.1)	28.3 (11.7)	23.6 (0.9)	40.7 (8.0)	-27.1 (16.2)	2.24 (0.93)
19	21.0 (1.9)	38.2 (11.0)	-12.2 (6.6)	31.1 (16.0)	20.9 (1.9)	39.3 (9.9)	-12.9 (8.1)	32.3 (18.9)	24.1 (1.9)	35.7 (7.6)	-28.8 (14.0)	3.01 (1.70)
20	22.7 (1.8)	34.4 (5.9)	-17.0 (7.0)	46.7 (20.3)	22.1 (1.9)	38.9 (5.7)	-19.3 (6.2)	48.1 (20.4)	24.8 (1.5)	38.0 (7.5)	-33.4 (13.0)	3.60 (1.58)
21	21.0 (1.0)	45.6 (6.4)	-20.8 (8.0)	23.0 (9.3)	20.2 (1.3)	47.9 (7.3)	-24.0 (9.5)	22.5 (9.4)	23.1 (0.8)	46.0 (6.2)	-11.4 (11.0)	1.97 (1.23)
22	20.3 (1.2)	44.5 (10.7)	-17.4 (7.8)	18.1 (7.4)	19.4 (1.5)	44.9 (8.6)	-23.8 (10.6)	19.2 (7.3)			-7.4 (8.9)	
23	21.5 (2.3)	40.3 (8.6)	-18.7 (9.3)	28.9 (14.0)	20.9 (2.5)	41.5 (6.5)	-21.5 (10.5)	29.5 (15.4)	22.9 (1.0)	39.5 (4.0)	-13.5 (9.0)	1.80 (1.05)
24	21.6 (1.7)	42.2 (7.4)	-19.7 (7.0)	31.8 (14.1)	21.3 (2.1)	44.2 (6.0)	-20.5 (11.1)	29.5 (12.6)	23.2 (0.9)	44.4 (5.7)	-16.2 (9.9)	1.57 (0.86)
25	21.4 (2.0)	39.2 (8.6)	-17.9 (6.0)	29.7 (15.3)	21.3 (1.5)	42.8 (6.9)	-12.0 (6.0)	26.1 (13.8)	23.5 (0.6)	42.5 (6.8)	-17.9 (10.5)	1.57 (0.94)
26	21.3 (2.3)	39.9 (9.7)	-16.9 (6.3)	28.3 (16.1)	21.1 (1.8)	44.6 (8.7)	-12.4 (7.0)	25.5 (15.3)	23.8 (1.4)	41.0 (7.4)	-19.8 (11.7)	1.71 (1.01)
27	20.3 (1.3)	44.0 (8.7)	-17.4 (7.6)	20.8 (8.3)	20.6 (1.3)	46.2 (8.8)	-17.1 (10.1)	19.8 (9.2)	22.9 (0.4)	43.2 (4.4)	-14.4 (10.4)	1.37 (0.74)
28	21.0 (1.8)	45.2 (9.8)	-15.5 (7.2)	26.2 (14.9)	20.8 (1.6)	47.3 (9.1)	-13.8 (7.9)	24.1 (13.5)	23.3 (1.1)	42.8 (5.5)	-24.0 (11.5)	1.91 (0.86)
29	21.8 (2.3)	43.2 (10.8)	-15.1 (7.1)	30.1 (16.7)	21.1 (1.8)	47.6 (8.2)	-13.9 (7.0)	29.0 (15.7)	23.8 (1.8)	41.9 (6.2)	-26.8 (10.0)	2.20 (0.82)
30	22.5 (1.9)	36.5 (9.7)	-13.8 (5.4)	33.6 (15.8)	21.8 (1.3)	40.7 (8.7)	-13.4 (6.4)	32.5 (15.7)	23.9 (1.6)	37.3 (7.3)	-30.5 (9.0)	2.33 (0.59)
31	20.8 (1.0)	38.0 (7.4)	-23.0 (8.7)	23.3 (7.0)	21.1 (0.9)	40.4 (8.0)	-12.8 (8.0)	19.0 (5.9)	22.6 (0.4)	39.6 (4.0)	-13.4 (8.8)	1.71 (0.62)
Mean	22.0	46.0	-15.3	33.0	21.9	48.0	-18.8	36.2	24.2	46.9	-27.7	2.73
n	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	28.0	28.0	29.0	28.0
SD	1.0	7.1	4.2	9.1	1.3	6.8	5.4	12.0	0.9	7.7	10.7	0.89
Min	20.3	34.4	-23.0	18.1	19.4	38.9	-28.7	19.0	22.6	35.7	-48.9	1.37
Max	24.5	60.9	-6.3	55.2	25.4	62.7	-11.8	63.0	26.3	62.9	-7.4	4.58

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Table E3. Daily means (SD) of environmental parameters at Site OK4B for November, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	19.8 (1.5)	40.8 (10.0)	-17.9 (9.1)	20.3 (9.5)	20.1 (1.2)	43.7 (11.4)	-9.4 (6.3)	18.3 (10.8)	22.7 (0.7)	39.5 (4.2)	-23.6 (12.5)	1.69 (0.67)
2	19.7 (1.5)	41.5 (9.3)	-19.7 (8.1)	20.9 (9.7)	20.1 (1.3)	44.1 (8.9)	-9.4 (6.9)		22.4 (0.4)	41.3 (3.8)	-17.4 (7.7)	1.66 (0.64)
3	20.1 (1.9)	43.3 (9.2)	-16.0 (9.1)	23.4 (13.8)	20.3 (1.8)	45.3 (8.7)	-11.2 (8.7)	21.7 (14.0)	22.9 (0.9)	42.6 (3.4)	-23.8 (12.0)	1.88 (0.75)
4	21.1 (3.0)	38.6 (13.5)	-19.8 (8.3)	30.0 (18.7)	20.8 (1.9)	43.1 (11.1)	-12.2 (7.9)	24.4 (14.7)	23.7 (1.8)	38.2 (8.0)	-22.7 (9.7)	2.09 (0.87)
5	20.2 (1.5)	39.0 (4.7)	-21.7 (8.7)	22.3 (9.6)	20.3 (1.6)	41.9 (3.4)	-14.3 (8.0)	18.8 (8.9)	22.6 (0.4)	41.1 (2.3)	-16.5 (7.9)	1.69 (0.62)
6	19.1 (1.4)	44.0 (10.1)	-18.9 (11.1)	16.0 (8.6)	19.4 (1.8)	44.8 (9.6)	-12.2 (8.7)		22.6 (0.5)	43.6 (3.6)	-20.6 (9.1)	
7	20.0 (2.5)	39.5 (11.0)	-17.8 (8.1)	24.2 (15.1)	20.2 (1.9)	42.7 (9.6)	-11.1 (7.2)		23.2 (1.2)	40.7 (6.0)	-23.0 (9.8)	
8	21.3 (2.8)	36.8 (10.4)	-18.9 (7.4)	30.4 (18.3)	20.8 (2.2)	39.0 (9.0)	-13.6 (7.5)	27.2 (16.6)	23.9 (2.0)	37.3 (7.1)	-24.4 (9.7)	2.13 (0.81)
9	21.1 (2.7)	37.7 (9.9)	-20.9 (8.3)	30.9 (16.9)	21.0 (2.4)	40.1 (8.5)	-15.1 (7.2)	27.5 (16.9)	24.0 (1.9)	38.7 (6.7)	-26.2 (10.4)	2.25 (0.92)
10	22.1 (2.1)	49.2 (9.3)	-21.8 (6.6)	35.7 (15.9)	21.7 (1.6)	51.9 (7.5)	-17.5 (8.4)	32.8 (15.5)	24.4 (2.2)	50.4 (10.2)	-33.0 (9.9)	2.69 (0.96)
11	21.9 (2.8)	40.1 (12.9)	-21.9 (6.3)	33.6 (16.8)	21.4 (2.3)	42.4 (11.1)	-17.4 (6.7)	30.6 (16.7)	24.4 (2.4)	40.4 (9.4)	-28.3 (9.2)	2.65 (1.11)
12	20.0 (1.3)	46.3 (7.0)	-21.0 (7.5)	20.5 (7.1)	19.9 (1.4)	48.6 (7.1)	-17.1 (8.8)	17.8 (7.3)			-17.6 (7.1)	
13	21.0 (2.6)	43.4 (10.7)	-14.8 (8.2)	29.7 (19.2)	20.7 (2.1)	45.7 (8.9)	-10.6 (7.6)	25.6 (17.1)			-18.6 (9.7)	
14	19.5 (1.1)	40.5 (7.4)	-22.5 (9.7)	18.6 (7.2)	19.5 (1.5)	41.8 (6.8)	-20.0 (11.1)	16.7 (6.6)	22.8 (0.4)	40.8 (3.9)	-2.7 (4.6)	0.68 (0.50)
15	18.9 (1.7)	40.2 (10.7)	-15.1 (9.0)	16.9 (8.8)	18.5 (2.2)	41.4 (9.6)	-13.0 (10.1)	14.9 (8.0)	22.9 (0.7)	42.9 (5.1)	-10.2 (7.7)	0.82 (0.60)
16	20.8 (2.5)	37.0 (12.1)	-16.5 (8.2)	29.0 (16.5)	20.7 (2.8)	36.3 (11.5)	-12.8 (8.5)	26.9 (18.1)	23.6 (0.6)	37.3 (8.3)	-15.4 (11.0)	1.41 (0.97)
17	21.4 (2.6)	35.0 (9.6)	-19.4 (7.8)	32.3 (17.8)	20.4 (3.1)	36.6 (7.8)	-19.0 (6.2)	30.9 (15.2)	23.5 (0.9)	39.3 (7.3)	-15.8 (12.0)	1.44 (0.99)
18	21.4 (2.9)	36.6 (11.7)	-21.5 (8.3)	32.7 (18.5)	20.3 (3.3)	38.7 (9.9)	-19.3 (6.3)	30.3 (14.6)	23.8 (1.1)	41.4 (9.3)	-18.0 (11.1)	1.59 (1.01)
19	22.0 (3.4)	35.7 (13.0)	-22.4 (6.0)	34.0 (19.9)	21.1 (3.7)	37.9 (12.1)	-18.1 (7.3)	32.4 (18.7)	24.3 (2.1)	37.1 (10.0)	-23.6 (13.6)	2.10 (1.37)
20	20.1 (1.8)	41.0 (8.7)	-18.8 (6.8)	23.7 (13.2)	20.2 (1.7)	42.8 (7.6)	-13.2 (7.8)	22.0 (13.7)	23.1 (0.8)	40.3 (6.0)	-18.0 (14.3)	1.50 (0.83)
21	18.2 (0.9)	49.9 (6.1)	-16.3 (8.5)	11.8 (4.6)	18.0 (1.2)	50.5 (6.5)	-14.3 (9.3)	11.7 (5.2)	22.7 (0.4)	42.3 (2.1)	-4.8 (6.8)	1.05 (0.71)
22	17.3 (1.4)	50.6 (10.9)	-13.7 (8.9)	12.6 (5.5)	16.8 (2.2)	48.9 (8.7)	-10.0 (8.9)	11.0 (5.6)	22.3 (0.4)	44.0 (2.1)	-14.6 (7.7)	1.24 (0.68)
23	16.7 (0.8)	58.6 (6.0)	-12.5 (4.9)	9.9 (3.8)	16.2 (1.8)	54.5 (6.6)	-6.7 (3.1)		22.1 (0.3)	49.7 (3.0)	-21.2 (9.6)	1.28 (0.67)
24	17.8 (1.0)	58.0 (7.1)	-10.5 (7.7)	10.3 (4.8)	16.9 (1.8)	55.0 (6.4)	-8.8 (7.3)	9.5 (4.5)	22.4 (0.6)	49.0 (2.5)	-13.8 (8.6)	1.17 (0.70)
25	18.3 (1.1)	55.4 (11.1)	-12.1 (10.0)	11.6 (6.1)	17.2 (2.0)	53.0 (8.7)	-9.3 (8.2)	10.7 (5.1)	22.3 (0.5)	47.0 (3.7)	-16.4 (7.8)	1.34 (0.68)
26	18.6 (1.1)	53.1 (7.2)	-15.4 (10.2)	13.5 (7.0)	18.4 (1.5)	53.5 (6.3)	-9.4 (7.2)	11.2 (5.7)	22.7 (0.3)	49.8 (1.9)	-14.7 (9.0)	1.25 (0.68)
27												
28												
29												
30	17.6 (0.3)	52.6 (6.1)	-11.3 (7.4)	10.2 (5.3)	17.8 (0.9)	53.7 (8.7)	-7.0 (5.8)	9.1 (4.2)	22.5 (0.3)	49.2 (2.4)	-15.7 (8.0)	1.30 (0.68)
Mean	19.8	43.9	-17.7	22.4	19.6	45.1	-13.0	20.9	23.1	42.6	-18.5	1.61
n	27.0	27.0	27.0	27.0	27.0	27.0	27.0	23.0	25.0	25.0	27.0	23.0
SD	1.5	6.9	3.6	8.4	1.5	5.6	3.8	7.9	0.7	4.2	6.5	0.51
Min	16.7	35.0	-22.5	9.9	16.2	36.3	-20.0	9.1	22.1	37.1	-33.0	0.68
Max	22.1	58.6	-10.5	35.7	21.7	55.0	-6.7	32.8	24.4	50.4	-2.7	2.69

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Table E3. Daily means (SD) of environmental parameters at Site OK4B for December, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	20.4 (2.5)	51.1 (11.4)	-35.2 (16.7)	24.7 (11.0)	19.8 (2.3)	53.1 (11.6)	-11.5 (9.5)		23.7 (1.1)	52.1 (7.4)	-39.2 (18.2)	1.92 (0.57)
2	18.7 (1.1)	48.3 (9.2)	-22.1 (12.6)	17.4 (8.3)	19.4 (1.1)	50.2 (9.2)	-14.2 (11.5)	14.6 (7.2)	22.9 (0.6)	45.6 (3.0)	-19.4 (9.1)	1.64 (0.60)
3	19.0 (1.7)	47.7 (10.9)	-20.1 (14.3)	17.9 (9.3)	19.1 (1.7)	48.5 (10.1)	-10.1 (8.0)	14.9 (8.5)	23.1 (0.7)	44.5 (4.3)	-27.1 (12.7)	1.77 (0.56)
4	21.6 (3.7)	38.6 (11.3)	-33.8 (16.9)	24.7 (9.6)	19.7 (3.2)	39.8 (9.3)	-17.6 (6.4)	28.5 (14.2)	24.1 (1.9)	40.6 (5.8)	-34.4 (18.6)	2.00 (0.49)
5	19.2 (1.2)	48.4 (4.3)	-26.2 (12.1)	19.6 (7.6)	19.4 (1.3)	48.5 (5.0)	-17.8 (8.4)	17.8 (6.7)	22.9 (0.5)	49.9 (3.3)	-22.9 (5.4)	1.80 (0.40)
6	19.1 (1.3)	51.3 (7.4)	-22.7 (13.2)	17.7 (9.1)	19.4 (1.4)	52.0 (7.8)	-10.3 (6.2)	14.9 (6.9)			-25.3 (8.2)	
7	18.0 (0.3)	61.8 (4.9)	-11.9 (7.7)	10.8 (5.6)	16.9 (1.7)	61.3 (6.5)	-14.7 (8.4)	15.9 (6.0)			-19.1 (14.5)	
8	17.2 (0.9)	61.9 (6.0)	-10.3 (6.0)	9.1 (4.0)	14.6 (1.2)	62.8 (4.1)	-21.8 (0.9)	19.8 (0.3)	23.2 (0.3)	50.2 (3.2)	-8.1 (5.1)	0.64 (0.46)
9	16.5 (0.8)	59.7 (6.4)	-8.9 (4.5)	8.5 (2.9)	13.3 (1.6)	59.6 (3.9)	-22.5 (0.8)	19.5 (0.3)	23.2 (0.3)	48.1 (2.7)	-7.1 (5.1)	0.66 (0.47)
10	17.5 (1.1)	62.6 (5.6)	-10.7 (7.1)	9.2 (4.4)	14.8 (1.6)	62.2 (3.8)	-21.7 (1.2)	19.4 (0.3)	23.0 (0.3)	53.5 (3.1)	-10.5 (5.0)	0.64 (0.46)
11	17.8 (0.7)	60.8 (5.2)	-12.7 (8.1)		15.2 (1.0)	64.1 (5.1)	-22.7 (1.2)	19.1 (0.4)	22.9 (0.4)	52.6 (3.2)	-6.4 (5.1)	0.64 (0.47)
12	17.6 (1.1)	57.6 (6.2)	-9.7 (7.1)	9.6 (4.8)	14.6 (1.7)	61.7 (5.4)	-21.2 (1.4)	19.5 (0.3)	23.0 (0.4)	52.8 (2.3)	-8.3 (4.9)	0.66 (0.43)
13	17.6 (1.3)	54.2 (7.6)	-14.0 (10.4)	12.1 (6.8)	15.0 (2.5)	56.8 (5.7)	-20.6 (2.0)	19.8 (0.5)	23.4 (0.6)	51.2 (1.7)	-7.7 (5.4)	0.64 (0.46)
14	16.8 (0.9)	60.4 (6.2)	-8.4 (4.8)	8.3 (3.5)	14.0 (1.5)	63.1 (4.2)	-21.0 (1.3)	19.8 (0.5)	23.3 (0.7)	52.3 (2.2)	-8.5 (5.7)	0.68 (0.49)
15	16.8 (1.1)	56.7 (7.8)	-11.7 (5.7)	10.1 (3.4)	13.6 (2.2)	57.4 (4.0)	-22.4 (2.6)	19.3 (0.7)	23.1 (0.6)	46.4 (2.5)	-4.9 (6.8)	0.74 (0.54)
16	17.4 (1.6)	52.8 (10.1)	-15.3 (10.4)	13.3 (6.0)	14.7 (3.7)	54.1 (7.4)	-20.4 (1.9)	19.8 (0.4)	23.9 (0.5)	44.8 (3.3)	-12.9 (7.6)	1.03 (0.66)
17	18.0 (1.6)	52.1 (8.0)	-14.5 (10.9)	13.4 (7.7)	16.0 (2.5)	53.9 (6.8)	-19.9 (2.4)	19.5 (0.6)	23.6 (0.2)	47.6 (2.5)	-14.7 (8.5)	1.06 (0.66)
18	18.9 (1.7)	46.5 (10.3)	-20.6 (15.2)	16.6 (9.1)	18.4 (2.4)	49.6 (8.3)	-16.1 (7.4)	17.5 (5.8)	23.4 (0.4)	44.6 (2.4)	-16.2 (8.2)	1.30 (0.66)
19	19.2 (2.5)	46.9 (10.7)	-23.1 (16.0)	17.5 (9.5)	19.4 (1.8)	49.9 (10.5)	-9.1 (6.5)	15.2 (9.8)	23.6 (0.5)	45.8 (3.5)	-18.8 (10.7)	1.34 (0.69)
20	19.7 (1.9)	45.2 (7.3)	-24.6 (14.9)	19.2 (9.7)	20.0 (1.3)	47.5 (7.6)	-8.8 (5.1)		23.5 (0.5)	44.7 (3.1)	-24.2 (11.6)	1.58 (0.60)
21												
22	17.0 (0.9)	53.4 (6.7)	-12.3 (6.6)	9.5 (3.7)	18.0 (0.9)	56.8 (6.8)	-9.9 (8.4)	8.2 (2.8)	22.3 (0.5)	44.9 (3.8)	-6.4 (11.0)	1.21 (0.67)
23	17.3 (1.5)	53.6 (7.5)	-12.6 (6.9)	11.9 (4.6)	17.7 (1.2)	59.0 (8.4)	-6.8 (4.5)	9.6 (3.6)	23.0 (0.3)	45.8 (2.4)	-15.3 (8.0)	1.23 (0.67)
24	18.1 (1.4)	49.5 (7.9)	-12.2 (9.1)	12.4 (7.0)	19.1 (2.0)	55.6 (10.5)	-4.4 (3.9)		23.0 (0.4)	46.1 (3.3)	-18.0 (8.3)	1.38 (0.69)
25	18.2 (0.8)	52.3 (5.6)	-13.7 (7.6)	11.0 (5.4)	18.8 (1.0)	60.0 (7.5)	-9.1 (5.6)	10.1 (3.8)	22.9 (0.3)	48.3 (1.6)	-10.6 (8.3)	1.06 (0.67)
26	17.6 (1.2)	52.5 (7.3)	-12.7 (7.0)	10.9 (4.9)	17.7 (1.6)	58.5 (8.4)	-13.5 (6.9)	13.2 (5.3)	22.9 (0.3)	49.4 (2.8)	-12.2 (9.2)	1.02 (0.66)
27	16.1 (0.8)	59.1 (6.1)	-8.5 (4.9)	7.6 (2.6)	15.3 (1.0)	61.2 (5.9)	-23.4 (1.5)	19.4 (0.4)			-16.5 (9.6)	
28	16.2 (0.8)	57.2 (6.6)	-10.9 (4.8)	10.6 (3.4)	13.6 (2.2)	58.8 (4.5)	-22.2 (1.4)	19.4 (0.3)			-14.2 (8.0)	
29	17.0 (1.3)	56.4 (9.5)	-9.0 (5.3)	9.6 (3.4)	12.8 (2.7)	58.5 (6.7)	-22.1 (1.3)	19.4 (0.4)			-14.5 (8.0)	
30	17.7 (1.8)	52.7 (8.2)	-14.8 (8.8)	13.5 (5.7)	15.7 (3.8)	53.8 (6.6)	-15.6 (7.1)	15.9 (5.3)			-18.2 (8.3)	
31	17.7 (1.0)	51.3 (5.6)	-11.2 (7.4)	10.5 (5.0)	18.2 (1.4)	55.5 (7.0)	-8.9 (5.8)	9.4 (4.1)			-14.4 (21.7)	
Mean	18.0	53.4	-15.8	13.4	16.8	55.8	-16.0	17.0	23.2	47.9	-15.9	1.16
n	30.0	30.0	30.0	29.0	30.0	30.0	30.0	27.0	23.0	23.0	30.0	23.0
SD	1.2	5.6	7.1	4.6	2.3	5.6	5.8	4.3	0.4	3.4	8.1	0.45
Min	16.1	38.6	-35.2	7.6	12.8	39.8	-23.4	8.2	22.3	40.6	-39.2	0.64
Max	21.6	62.6	-8.4	24.7	20.0	64.1	-4.4	28.5	24.1	53.5	-4.9	2.00

ED_004549_00015840-00109

Table E3. Daily means (SD) of environmental parameters at Site OK4B for January, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1												
2	17.3 (1.3)	50.9 (10.0)	-12.3 (5.7)	11.8 (4.3)	17.8 (1.6)	55.4 (8.2)	-7.7 (6.5)	9.3 (4.4)	23.0 (0.8)	48.1 (3.2)	-10.0 (5.6)	0.65 (0.46)
3												
4	19.1 (2.0)	47.4 (8.2)	-21.5 (14.1)	18.1 (8.6)	20.2 (1.1)	53.6 (8.8)	-3.9 (4.1)	14.3 (9.2)	23.9 (0.5)	51.8 (5.0)	-11.6 (8.2)	0.83 (0.60)
5	19.2 (1.6)	49.0 (9.8)	-28.5 (15.1)	22.8 (9.8)	19.6 (1.2)	52.3 (10.8)	-0.3 (7.4)		24.0 (0.2)	50.5 (5.0)	-12.6 (9.0)	1.10 (0.69)
6	19.5 (1.7)	49.0 (6.1)	-30.4 (10.7)	23.0 (6.4)	20.9 (0.8)	50.9 (7.1)	-3.3 (6.7)		23.8 (0.4)	48.6 (3.3)	-17.9 (12.4)	1.19 (0.71)
7	19.3 (1.7)	51.8 (7.5)	-24.8 (12.8)	20.0 (8.6)	21.0 (0.7)	55.6 (5.0)	-2.1 (5.2)		23.6 (0.4)	48.6 (3.7)	-16.7 (9.9)	1.27 (0.67)
8	18.3 (0.9)	52.4 (9.1)	-15.9 (9.8)	13.5 (7.0)	20.2 (0.9)	58.7 (7.7)	-6.1 (4.3)	10.7 (4.2)	23.3 (0.3)	46.9 (2.6)	-12.6 (8.9)	1.06 (0.66)
9	19.5 (1.9)	44.5 (10.1)	-23.9 (14.3)	19.7 (9.6)	20.9 (0.9)	51.9 (13.8)	-2.0 (5.2)		23.5 (0.5)	43.9 (4.9)	-23.1 (14.2)	1.43 (0.68)
10	18.6 (0.8)	50.4 (7.8)	-17.7 (10.2)	15.7 (7.7)	20.8 (1.0)	55.3 (8.0)	-4.5 (3.9)	11.1 (4.6)	23.6 (0.3)	48.2 (2.2)	-13.3 (9.1)	1.17 (0.68)
11	18.1 (0.9)	50.3 (7.4)	-12.6 (8.9)	11.8 (6.6)	20.6 (1.2)	56.3 (7.1)	-3.6 (5.3)		23.5 (0.2)	48.3 (2.0)	-16.0 (8.7)	1.15 (0.66)
12	18.7 (1.4)	47.1 (9.7)	-19.3 (13.0)	15.4 (8.1)	20.3 (1.2)	53.2 (10.0)	-5.5 (4.1)	11.5 (5.7)	23.7 (0.3)	46.7 (2.9)	-15.2 (8.3)	1.23 (0.66)
13	18.6 (1.8)	47.0 (10.9)	-19.0 (16.1)	15.2 (9.2)	20.7 (1.0)	55.6 (11.6)	-3.1 (3.3)	11.8 (6.2)	23.5 (0.3)	47.2 (3.3)	-18.3 (9.2)	1.28 (0.67)
14	18.5 (1.6)	45.7 (10.8)	-17.1 (14.6)	15.3 (9.5)	20.6 (1.3)	55.7 (11.7)	-2.4 (2.6)	11.4 (5.9)	23.1 (0.4)	44.8 (2.9)	-19.4 (9.7)	1.39 (0.66)
15	18.8 (1.7)	44.1 (10.9)	-18.1 (14.1)	16.0 (9.7)	20.8 (0.8)	54.1 (14.0)	-1.6 (4.0)		23.1 (0.5)	43.2 (3.9)	-24.2 (12.0)	1.51 (0.63)
16	16.6 (1.3)	55.5 (5.9)	-14.5 (8.6)	9.7 (4.0)	19.2 (1.3)	60.9 (6.9)	-9.4 (4.5)	7.9 (2.5)	22.6 (0.3)	48.5 (3.1)	-3.4 (8.0)	
17	16.3 (1.5)	52.4 (12.0)	-11.1 (5.4)	11.5 (4.0)	19.0 (1.4)	64.1 (9.4)	-2.7 (3.2)	9.2 (3.5)	22.8 (0.4)	43.4 (3.3)	-16.8 (8.1)	
18	17.2 (1.2)	50.2 (6.9)	-15.3 (7.7)	13.3 (5.2)	19.7 (1.0)		-2.6 (2.4)		23.1 (0.3)	47.3 (2.1)	-16.0 (8.5)	1.20 (0.67)
19	17.0 (1.4)	50.6 (9.6)	-10.7 (7.3)	10.8 (5.1)	19.9 (1.5)	60.0 (9.9)	-2.3 (3.4)		23.1 (0.4)	48.4 (3.2)	-17.4 (8.3)	1.25 (0.67)
20	17.8 (1.8)	46.7 (10.5)	-17.5 (11.8)	14.0 (7.3)	18.6 (1.0)		-8.7 (5.8)		23.2 (0.3)	45.8 (3.9)	-24.7 (10.5)	1.46 (0.62)
21	16.5 (0.8)	53.2 (7.4)	-10.2 (5.4)	9.3 (3.4)	15.7 (1.8)		-19.8 (2.7)	19.5 (0.5)	23.7 (0.7)	49.2 (4.7)	-17.7 (11.0)	1.29 (0.67)
22	16.3 (1.3)	53.2 (10.6)	-12.4 (5.4)	11.5 (3.8)	13.7 (3.5)		-20.8 (3.2)	20.0 (0.9)	23.7 (0.5)	48.0 (5.1)	-19.4 (10.2)	1.44 (0.68)
23	16.6 (1.3)	51.7 (9.2)	-14.9 (7.5)	12.0 (4.4)	14.9 (3.3)		-21.5 (2.2)	20.9 (2.4)			-14.1 (8.1)	
24	17.0 (1.3)	46.2 (7.9)	-15.2 (7.3)		14.6 (2.9)	49.1 (4.1)	-20.6 (3.5)				-15.4 (6.8)	
25	19.1 (2.3)	42.5 (12.7)	-15.9 (14.1)	20.0 (11.2)	17.8 (3.0)	46.7 (12.6)	-19.2 (12.6)	18.9 (7.6)	23.3 (1.2)	44.6 (6.4)	-10.3 (6.8)	0.74 (0.58)
26	19.3 (1.9)	39.1 (11.1)	-16.1 (8.5)	18.7 (10.9)	18.3 (3.4)	42.3 (12.0)	-27.4 (15.5)	20.0 (7.5)	23.7 (1.0)	43.2 (5.1)	-10.8 (8.4)	0.83 (0.58)
27	19.8 (2.4)	40.5 (13.7)	-13.2 (8.8)	25.0 (17.3)	18.6 (3.9)	44.1 (14.0)	-34.0 (21.1)	22.7 (9.3)	23.9 (0.8)	43.7 (7.2)	-20.0 (13.9)	1.25 (0.74)
28	21.1 (1.5)	39.4 (9.3)	-15.2 (13.7)		20.6 (1.5)	41.9 (10.2)	-15.4 (22.4)		24.2 (0.7)	44.7 (8.4)	-18.2 (9.3)	1.60 (0.82)
29	18.4 (1.3)	45.2 (8.9)	-15.1 (7.8)	14.1 (6.4)	17.7 (1.9)	50.3 (10.0)	-10.4 (9.2)	14.2 (0.9)	23.0 (0.5)	46.8 (4.2)	-6.3 (7.2)	0.75 (0.55)
30	18.5 (1.9)	40.5 (8.8)	-15.8 (9.6)	15.9 (9.7)	18.0 (2.2)	45.6 (8.7)	-12.4 (4.7)	16.4 (4.8)	23.0 (0.5)	43.4 (5.0)	-14.1 (10.4)	1.06 (0.68)
31	16.8 (1.8)	46.1 (10.0)	-11.7 (6.4)	9.8 (4.0)	16.9 (1.7)	54.8 (10.3)	-16.7 (4.1)	14.0 (0.8)	23.1 (1.5)	44.0 (2.3)	-4.4 (6.9)	0.71 (0.51)
Mean	18.2	47.7	-16.8	15.3	18.9	52.9	-10.0	14.7	23.4	46.6	-15.2	1.15
n	29.0	29.0	29.0	27.0	29.0	24.0	29.0	18.0	27.0	27.0	29.0	25.0
SD	1.2	4.4	4.9	4.3	2.1	5.6	8.8	4.5	0.4	2.4	5.2	0.26
Min	16.3	39.1	-30.4	9.3	13.7	41.9	-34.0	7.9	22.6	43.2	-24.7	0.65
Max	21.1	55.5	-10.2	25.0	21.0	64.1	-0.3	22.7	24.2	51.8	-3.4	1.60

ED_004549_00015840-00110

Table E3. Daily means (SD) of environmental parameters at Site OK4B for February, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	18.2 (2.4)	42.9 (12.1)	-10.8 (7.5)	16.1 (10.3)	17.7 (2.6)	44.5 (12.8)	-8.2 (6.3)		24.6 (0.6)	43.1 (7.3)	-17.2 (13.5)	1.08 (0.71)
2	18.8 (1.3)	43.4 (9.1)	-15.7 (9.7)	14.5 (8.3)	18.2 (1.9)	46.4 (8.5)	-12.9 (3.6)	15.9 (4.0)	24.6 (0.3)	45.3 (3.5)	-15.1 (11.0)	1.04 (0.67)
3	18.9 (1.5)	43.9 (10.8)	-18.3 (10.2)	18.5 (9.6)	18.8 (1.2)	44.8 (11.9)	-9.3 (4.6)	19.8 (6.4)	24.5 (0.3)	44.8 (4.6)	-22.9 (12.5)	1.36 (0.67)
4												
5	16.7 (1.1)	58.3 (5.2)	-10.8 (5.4)	8.9 (3.1)	16.5 (0.8)	63.8 (6.5)	-17.8 (3.3)	13.5 (1.2)	23.4 (0.5)	52.4 (1.9)	-6.8 (7.8)	0.81 (0.57)
6	16.9 (1.6)	56.0 (8.6)	-13.6 (6.2)	12.5 (3.8)	16.1 (2.2)	59.4 (8.5)	-13.4 (3.2)	14.2 (1.7)	23.8 (0.5)	47.6 (4.1)	-18.3 (8.6)	1.30 (0.66)
7	18.1 (1.2)	48.6 (9.7)	-13.9 (8.0)	12.2 (6.1)	17.5 (2.0)	53.2 (8.6)	-13.9 (5.3)	14.5 (1.4)	23.9 (0.3)	47.2 (3.3)	-16.9 (11.2)	1.27 (0.69)
8	18.6 (1.4)	44.7 (10.1)	-15.9 (10.2)	14.8 (7.7)	18.3 (2.0)	49.3 (9.0)	-14.5 (5.1)	15.5 (3.3)	23.6 (0.4)	45.4 (3.7)	-19.3 (9.7)	1.36 (0.67)
9	18.8 (2.2)	43.2 (12.9)	-15.7 (9.6)	18.1 (11.4)	18.2 (2.3)	45.8 (12.6)	-12.0 (4.8)	18.7 (7.0)	24.1 (1.2)	44.2 (4.4)	-27.2 (13.7)	1.52 (0.64)
10	16.6 (1.1)	55.7 (8.9)	-8.8 (5.1)	8.6 (3.0)	15.7 (0.9)	61.9 (10.2)	-13.9 (1.4)	14.2 (0.5)	23.7 (0.2)	49.9 (4.1)	-18.2 (8.3)	1.22 (0.68)
11	18.0 (2.3)	52.1 (11.0)	-17.5 (9.3)	16.8 (9.0)	16.9 (3.1)	56.5 (10.7)	-13.5 (4.2)	16.6 (4.9)	23.6 (0.5)	48.1 (3.0)	-24.3 (13.8)	1.39 (0.68)
12	19.0 (1.3)	50.8 (9.7)	-14.3 (7.7)	13.3 (5.9)	17.7 (2.1)	53.6 (9.9)	-15.9 (3.7)	15.5 (3.3)	23.3 (0.3)	47.9 (3.2)	-18.5 (9.0)	1.33 (0.67)
13	19.1 (2.1)	43.4 (12.3)	-14.9 (10.6)	19.8 (12.3)	18.6 (2.5)	47.6 (13.7)	-11.8 (5.5)		24.1 (1.1)	44.6 (4.8)	-35.0 (20.7)	1.63 (0.59)
14	18.6 (0.9)	49.6 (7.4)	-16.3 (8.2)	14.1 (5.9)	17.9 (1.7)	54.0 (8.2)	-15.9 (4.6)	14.6 (1.7)	23.7 (0.5)	48.3 (3.5)	-16.7 (10.3)	1.31 (0.66)
15	16.8 (1.4)	53.9 (8.5)	-9.8 (5.1)	9.8 (3.6)	15.5 (1.4)	60.4 (7.5)	-15.3 (2.1)	14.6 (0.8)	23.2 (0.2)	49.0 (2.8)	-17.5 (9.3)	1.22 (0.67)
16	18.0 (0.8)	58.6 (7.8)	-15.8 (9.4)	13.8 (6.0)	16.8 (1.6)	63.1 (5.9)	-14.2 (2.7)	14.7 (1.7)	23.4 (0.2)	52.3 (4.1)	-20.0 (7.8)	1.45 (0.62)
17	18.4 (0.9)	54.2 (6.8)	-18.4 (10.4)	13.8 (6.1)	16.7 (1.6)	57.3 (5.2)	-23.6 (7.3)	15.8 (3.4)	23.8 (0.4)	51.1 (2.7)	-9.6 (8.4)	1.10 (0.69)
18	18.2 (2.0)	49.1 (10.6)	-13.1 (8.7)	13.9 (7.4)	16.9 (2.1)	53.0 (11.8)	-20.6 (7.3)	19.2 (4.8)	23.4 (0.8)	47.5 (4.9)	-11.3 (7.8)	0.89 (0.62)
19	19.1 (1.9)	47.7 (10.9)	-17.0 (9.5)	18.4 (10.0)	18.1 (2.7)	48.3 (8.0)	-19.4 (6.3)	21.5 (6.2)	24.2 (0.8)	45.3 (4.1)	-10.7 (7.6)	0.69 (0.60)
20	16.6 (1.0)	55.4 (7.1)	-10.1 (6.3)	9.2 (4.3)	15.5 (0.7)	62.5 (8.4)	-14.6 (2.6)	13.7 (1.3)	23.4 (0.3)	50.3 (2.7)	-8.7 (6.8)	0.57 (0.57)
21	16.7 (1.5)	54.2 (8.2)	-11.2 (7.3)	10.6 (5.0)	16.0 (1.5)	59.8 (7.9)	-14.4 (1.5)	14.4 (0.8)	23.6 (0.4)	50.3 (2.5)	-8.7 (6.0)	0.60 (0.52)
22	18.5 (2.5)	48.9 (11.6)	-17.2 (11.0)	17.2 (10.2)	17.7 (2.9)	53.2 (11.8)	-16.8 (5.7)	18.9 (7.2)	24.1 (0.8)	49.8 (4.2)	-12.8 (8.4)	0.79 (0.60)
23	19.3 (1.6)	52.2 (8.5)	-20.5 (9.2)	19.6 (9.9)	18.5 (2.2)	54.7 (7.7)	-15.8 (5.0)	19.5 (8.8)	24.2 (0.5)	53.2 (4.8)	-15.0 (8.8)	0.81 (0.60)
24	19.7 (2.0)	47.7 (12.6)	-16.2 (9.6)	23.3 (12.8)	18.3 (3.1)	51.3 (13.5)	-14.2 (5.3)	25.9 (13.6)	24.0 (0.9)	49.0 (6.7)	-18.3 (12.7)	1.00 (0.65)
25	19.6 (1.2)	49.2 (4.7)	-21.6 (8.0)	20.1 (6.9)	19.0 (1.9)	51.8 (4.2)	-18.6 (11.3)	18.5 (4.9)	23.6 (0.4)	51.4 (3.6)	-5.7 (6.6)	0.69 (0.46)
26	18.2 (1.1)	49.0 (11.7)	-14.0 (9.1)	12.8 (6.3)	17.1 (2.3)	52.6 (11.7)	-16.0 (5.2)	14.8 (4.4)	24.3 (0.7)	47.9 (4.9)	-8.6 (7.4)	0.78 (0.57)
27	18.9 (2.1)	43.4 (10.8)	-16.4 (9.4)	18.3 (10.4)	18.2 (3.0)	46.0 (10.3)	-17.5 (5.7)	19.5 (8.2)	24.7 (0.5)	44.9 (5.3)	-18.8 (12.4)	1.17 (0.71)
28	19.6 (2.2)	43.1 (11.7)	-17.0 (8.0)	23.7 (15.2)	18.4 (3.0)	47.8 (11.2)	-16.2 (5.5)	23.9 (14.2)	24.6 (0.6)	44.0 (7.0)	-24.9 (17.6)	1.41 (0.76)
29	19.7 (1.8)	45.9 (10.3)	-16.3 (8.4)	21.9 (10.9)	18.7 (3.0)	48.6 (10.5)	-16.6 (5.9)	22.5 (11.2)	24.6 (0.9)	45.7 (4.5)	-28.2 (18.0)	1.47 (0.69)
Mean	18.3	49.5	-15.0	15.5	17.5	53.3	-15.2	17.3	23.9	47.9	-17.0	1.12
n	28.0	28.0	28.0	28.0	28.0	28.0	28.0	26.0	28.0	28.0	28.0	28.0
SD	1.0	4.9	3.1	4.2	1.0	5.9	3.1	3.4	0.5	2.8	6.9	0.30
Min	16.6	42.9	-21.6	8.6	15.5	44.5	-23.6	13.5	23.2	43.1	-35.0	0.57
Max	19.7	58.6	-8.8	23.7	19.0	63.8	-8.2	25.9	24.7	53.2	-5.7	1.63

ED_004549_00015840-00111

Table E3. Daily means (SD) of environmental parameters at Site OK4B for March, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	21.7 (3.0)	37.3 (13.0)	-17.2 (7.4)	36.9 (20.8)	21.3 (3.3)	38.9 (12.7)	-15.9 (7.4)	36.5 (21.0)	25.7 (1.9)	39.3 (8.6)	-40.3 (20.6)	1.90 (0.62)
2	19.1 (2.8)	51.3 (6.0)	-26.0 (11.1)	25.0 (6.2)	19.2 (2.0)	54.2 (6.7)	-23.1 (9.5)	21.3 (7.0)	24.3 (0.5)	50.5 (4.8)	-18.5 (17.1)	1.56 (0.59)
3	17.0 (1.7)	48.8 (6.9)	-12.7 (9.4)	13.8 (6.0)	16.4 (1.5)	54.5 (9.3)	-26.1 (6.6)	17.8 (4.1)	24.2 (0.3)	47.4 (2.8)	-7.9 (7.7)	0.92 (0.63)
4	18.5 (2.6)	45.7 (12.9)	-16.3 (9.6)	17.8 (10.0)	17.0 (3.6)	47.4 (11.4)	-22.2 (6.3)	23.2 (8.2)	24.5 (0.6)	44.5 (5.2)	-26.0 (16.6)	1.38 (0.69)
5	18.1 (1.0)	49.7 (9.1)	-17.5 (10.6)	13.7 (6.6)	16.7 (1.9)	54.2 (8.5)	-22.2 (7.1)	16.1 (3.7)	24.4 (0.3)	48.5 (3.2)	-11.9 (8.1)	1.02 (0.66)
6	18.3 (1.5)	44.6 (9.1)	-14.9 (8.9)	13.6 (6.7)	17.0 (2.4)	46.6 (9.5)	-23.2 (10.2)	17.4 (4.6)	24.3 (0.3)	45.4 (3.2)	-18.2 (9.4)	1.23 (0.68)
7	16.8 (1.3)	51.4 (8.8)	-11.0 (6.4)	10.1 (3.9)	15.3 (1.3)	55.5 (7.7)	-23.4 (6.3)	18.1 (3.4)	23.9 (0.3)	48.2 (2.8)	-14.1 (8.5)	1.11 (0.68)
8	17.3 (2.9)	46.7 (12.0)	-19.3 (12.5)	16.9 (8.9)	16.6 (3.9)	46.6 (9.6)	-30.5 (9.2)	22.6 (3.5)	23.9 (0.5)	45.9 (3.3)	-23.7 (11.4)	1.48 (0.64)
9	19.3 (1.8)	41.0 (9.8)	-18.5 (8.7)	21.3 (10.5)	19.2 (3.4)	41.4 (8.4)	-37.7 (9.6)	24.9 (4.0)	24.2 (0.9)	43.2 (4.2)	-28.6 (13.6)	1.70 (0.53)
10	19.6 (2.1)	40.3 (11.7)	-17.1 (10.5)	22.5 (12.8)	19.5 (3.9)	41.0 (9.7)	-29.6 (13.5)	26.7 (6.0)	24.8 (1.4)	42.5 (6.3)	-38.9 (23.1)	1.79 (0.56)
11	20.2 (2.6)	39.1 (12.1)	-16.6 (8.6)	28.5 (17.5)	19.5 (3.5)	41.4 (10.3)	-23.1 (10.1)	30.8 (9.5)	25.1 (1.6)	41.0 (6.8)	-36.9 (18.9)	1.99 (0.53)
12	20.3 (2.3)	37.7 (11.7)	-18.8 (8.9)	27.6 (15.6)	19.6 (3.1)	39.5 (10.3)	-23.9 (9.5)	28.8 (8.5)	24.4 (1.1)	39.8 (5.9)	-33.7 (16.2)	1.96 (0.47)
13	20.0 (1.6)	40.9 (10.4)	-18.8 (8.7)	25.0 (11.4)	19.9 (2.7)	42.9 (10.5)	-20.6 (9.6)	23.9 (6.9)	24.2 (1.2)	41.8 (6.3)	-37.3 (19.3)	1.90 (0.44)
14	19.9 (1.8)	43.1 (8.1)	-17.7 (8.8)	23.0 (10.4)	19.0 (3.0)	44.5 (8.3)	-24.6 (8.3)	26.2 (9.1)	24.2 (1.1)	44.0 (5.3)	-33.0 (20.0)	1.81 (0.61)
15	19.4 (1.7)	47.3 (10.2)	-23.2 (10.5)	20.1 (9.1)	18.7 (2.8)	50.0 (10.2)	-27.9 (10.5)	20.9 (7.4)	23.6 (0.6)	48.5 (3.1)	-22.4 (10.4)	1.61 (0.57)
16	18.1 (0.4)	59.2 (3.2)	-15.8 (7.7)	14.0 (5.0)	17.1 (0.3)	61.2 (3.1)	-19.9 (7.5)	15.9 (3.9)	23.2 (0.2)	54.0 (2.3)	-22.7 (7.7)	1.56 (0.59)
17	18.2 (0.5)	63.1 (3.3)	-16.1 (8.7)	13.3 (5.4)	17.0 (0.7)	66.9 (3.3)	-18.7 (6.3)	15.8 (4.1)	22.4 (0.8)	58.1 (6.1)	-8.8 (8.5)	0.92 (0.64)
18	18.7 (1.3)	49.8 (11.5)	-22.3 (14.2)	17.4 (8.7)	18.0 (2.4)	53.6 (10.9)	-22.1 (8.8)	17.2 (4.6)	22.5 (0.4)	49.6 (4.9)	-5.2 (5.2)	0.64 (0.47)
19	19.9 (2.4)	39.0 (14.8)	-16.5 (10.2)	26.0 (16.5)	19.5 (3.6)	42.7 (15.8)	-17.4 (7.4)	25.1 (12.1)	23.5 (1.3)	40.6 (10.6)	-19.7 (16.1)	1.27 (0.82)
20	21.9 (3.5)	31.2 (13.8)	-19.1 (9.1)	39.7 (25.2)	21.6 (4.1)	34.5 (13.6)	-18.3 (8.7)	38.6 (23.3)	24.7 (2.2)	35.5 (11.6)	-30.5 (21.9)	1.61 (0.89)
21	20.7 (1.5)	35.3 (9.7)	-22.3 (7.4)	29.0 (12.6)	20.5 (2.1)	38.4 (9.7)	-26.7 (10.4)	30.2 (14.0)	23.9 (0.7)	40.5 (8.1)	-21.7 (16.2)	1.34 (0.77)
22	19.5 (1.3)	44.0 (7.4)	-23.5 (9.0)	20.7 (7.4)	18.9 (1.9)	47.5 (7.7)	-26.9 (12.3)	20.4 (6.5)	23.6 (0.3)	50.0 (4.7)	-12.0 (7.7)	0.87 (0.62)
23	19.0 (1.6)	45.3 (10.8)	-22.5 (12.6)	18.7 (8.8)	18.6 (2.5)	49.7 (11.2)	-18.7 (10.4)	18.8 (6.0)	23.6 (0.4)	50.4 (5.7)	-13.4 (9.6)	0.95 (0.66)
24	20.8 (2.6)	40.3 (15.3)	-20.3 (11.6)	31.2 (18.6)	21.1 (2.4)	42.5 (14.3)	-17.6 (10.8)	32.0 (19.6)	24.5 (1.4)	43.5 (11.2)	-29.5 (20.8)	1.58 (0.85)
25	21.1 (2.5)	36.6 (9.1)	-22.3 (8.2)	33.3 (16.2)	20.9 (3.0)	39.6 (8.6)	-21.6 (7.8)	31.9 (15.2)	24.7 (1.2)	41.1 (6.2)	-32.2 (20.2)	1.73 (0.73)
26	20.5 (2.2)	44.6 (8.7)	-20.7 (8.7)	29.0 (15.9)	19.9 (3.3)	48.3 (9.7)	-22.8 (9.4)	29.0 (14.7)	24.6 (1.2)	47.0 (4.5)	-30.0 (19.6)	1.64 (0.75)
27	19.6 (1.4)	49.3 (4.2)	-23.6 (10.0)	21.4 (7.8)	18.9 (2.1)	54.6 (5.0)	-28.1 (11.7)	21.6 (6.9)	24.0 (0.4)	51.4 (2.3)	-20.0 (11.2)	1.46 (0.64)
28	19.2 (1.3)	47.4 (10.7)	-21.9 (10.3)	18.8 (7.7)	18.1 (2.4)	52.6 (12.1)	-25.5 (10.6)	20.0 (6.4)	23.9 (0.4)	49.7 (4.5)	-19.4 (11.0)	1.37 (0.68)
29	20.5 (2.4)	48.1 (10.8)	-21.3 (11.2)	29.4 (16.5)	19.4 (4.0)	50.6 (12.4)	-25.3 (10.2)	33.3 (18.1)	24.9 (1.5)	49.2 (7.1)	-39.4 (21.9)	1.77 (0.67)
30	19.6 (0.8)	56.3 (3.6)	-27.3 (9.4)	21.5 (5.5)	18.6 (1.2)	60.7 (4.5)	-32.6 (10.5)	22.0 (4.9)	24.0 (0.2)	57.4 (1.5)	-19.1 (9.4)	1.54 (0.60)
31	19.6 (1.3)	52.0 (9.2)	-23.4 (9.2)	21.3 (8.6)	18.7 (2.4)	58.6 (9.1)	-28.0 (10.2)	21.8 (7.0)	24.1 (0.5)	54.6 (3.8)	-22.9 (11.5)	1.54 (0.61)
Mean	19.4	45.4	-19.5	22.6	18.8	48.4	-24.0	24.2	24.1	46.5	-23.8	1.46
n	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
SD	1.2	7.0	3.7	7.1	1.5	7.7	4.7	6.2	0.7	5.4	9.8	0.35
Min	16.8	31.2	-27.3	10.1	15.3	34.5	-37.7	15.8	22.4	35.5	-40.3	0.64
Max	21.9	63.1	-11.0	39.7	21.6	66.9	-15.9	38.6	25.7	58.1	-5.2	1.99

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Table E3. Daily means (SD) of environmental parameters at Site OK4B for April, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	19.0 (1.6)	45.5 (11.5)	-21.8 (11.9)	19.1 (9.4)	17.6 (2.9)	50.9 (12.0)	-25.4 (11.2)	20.0 (7.4)	24.0 (0.5)	49.6 (3.8)	-20.0 (11.4)	1.40 (0.69)
2	19.7 (1.9)	49.5 (8.3)	-22.5 (10.2)	24.7 (13.6)	18.6 (2.9)	52.3 (8.4)	-21.9 (8.0)	24.0 (12.9)	24.5 (1.0)	51.7 (3.7)	-38.3 (21.7)	1.70 (0.57)
3	20.1 (1.6)	52.7 (7.9)	-21.9 (8.5)	23.0 (8.3)	19.5 (2.2)	58.0 (6.8)	-26.7 (10.8)	23.5 (9.6)	24.5 (0.8)	55.0 (4.3)	-26.8 (14.1)	1.73 (0.61)
4	20.1 (1.8)	44.8 (14.8)	-19.8 (9.5)	24.5 (12.2)	19.3 (3.2)	49.5 (15.9)	-27.0 (10.8)	25.4 (11.6)	24.7 (1.1)	49.1 (9.6)	-34.3 (20.9)	1.72 (0.59)
5	21.0 (2.2)	35.5 (11.4)	-19.3 (11.1)	36.0 (18.2)	21.1 (3.6)	37.4 (13.5)	-22.4 (9.4)	39.7 (22.5)	25.8 (1.9)	40.2 (9.9)	-43.0 (18.2)	2.05 (0.51)
6	20.8 (1.5)	33.5 (7.8)	-24.6 (9.1)	30.2 (12.4)	20.3 (2.3)	35.2 (6.9)	-29.6 (10.9)	30.0 (12.9)	24.8 (1.0)	41.1 (6.0)	-30.8 (17.2)	1.86 (0.53)
7	19.7 (1.7)	44.2 (6.4)	-22.1 (9.0)	20.9 (7.5)	18.8 (2.5)	47.6 (6.8)	-22.1 (7.7)	21.8 (10.0)	24.7 (0.9)	49.6 (4.0)	-31.3 (17.5)	1.71 (0.59)
8	19.6 (1.6)	50.8 (8.3)	-23.3 (8.9)	20.8 (8.2)	18.6 (2.3)	55.0 (8.6)	-26.6 (9.6)	20.3 (6.8)	24.2 (0.4)	55.1 (4.1)	-20.9 (10.6)	1.60 (0.59)
9	18.5 (0.6)	62.0 (3.0)	-18.7 (8.0)	16.3 (5.4)	17.3 (0.7)	66.9 (3.1)	-18.3 (6.7)	15.9 (3.7)			-20.1 (8.0)	
10	19.1 (1.1)	56.3 (7.0)	-15.4 (16.2)		18.1 (1.4)	63.3 (5.5)	-24.3 (8.4)	18.2 (4.5)				
11	19.5 (1.3)	47.9 (6.6)	-15.9 (13.6)		18.2 (2.2)	52.8 (8.5)	-27.6 (11.1)	19.3 (5.0)				
12	19.4 (1.5)	45.0 (10.5)	-21.8 (10.1)	20.1 (8.0)	18.6 (2.6)	48.2 (10.8)	-30.0 (10.8)	19.9 (5.2)				
13	19.5 (1.6)	43.5 (12.1)	-21.5 (10.7)	21.4 (9.5)	18.5 (2.7)	47.7 (12.9)	-28.1 (11.4)	20.9 (7.1)				
14	20.9 (2.4)	40.3 (10.4)	-19.7 (10.7)	32.3 (17.7)	20.9 (4.8)	41.1 (14.1)	-23.7 (8.7)	37.2 (21.7)				
15	22.6 (2.1)	37.8 (5.3)	-21.0 (8.8)	42.4 (17.5)	22.9 (3.2)	38.1 (6.3)	-31.3 (7.2)	46.1 (19.8)	25.4 (2.1)	34.6 (6.4)	-48.0 (20.7)	2.05 (0.66)
16	22.4 (1.1)	43.1 (5.6)	-20.7 (8.1)	38.6 (9.2)	22.4 (1.4)	45.0 (5.9)	-22.6 (11.1)	40.0 (10.4)	24.6 (0.9)	41.7 (5.2)	-45.8 (10.5)	2.18 (0.22)
17	18.4 (0.8)	58.3 (4.4)	-25.4 (11.5)	17.4 (5.9)	17.6 (1.3)	64.3 (6.1)	-27.0 (9.5)	18.2 (4.8)	22.8 (0.5)	50.5 (1.8)	-2.5 (7.8)	0.84 (0.62)
18	20.2 (2.6)	42.2 (15.4)	-16.5 (10.7)	29.0 (17.4)	19.3 (3.4)	47.6 (17.6)	-19.3 (8.9)	30.4 (16.5)	24.3 (1.3)	36.8 (10.7)	-30.7 (19.4)	1.72 (0.78)
19	21.4 (2.5)	37.3 (7.4)	-22.2 (7.9)	36.3 (15.1)	21.4 (3.1)	38.2 (8.7)	-21.9 (8.8)	38.1 (17.5)	25.6 (2.5)	31.4 (8.2)	-43.3 (21.2)	2.07 (0.81)
20	22.3 (2.0)	31.8 (5.9)	-20.6 (9.2)	41.2 (12.9)	22.4 (2.7)	31.8 (5.8)	-24.3 (9.4)	45.6 (16.2)	26.0 (2.3)	27.4 (6.2)	-51.9 (13.6)	2.33 (0.45)
21	21.3 (1.8)	39.6 (6.8)	-23.9 (7.9)	35.1 (12.9)	21.2 (2.8)	39.0 (7.7)	-26.9 (8.6)	38.3 (15.5)	25.0 (1.7)	34.4 (5.6)	-39.4 (18.3)	2.12 (0.49)
22	21.1 (1.8)	49.3 (8.4)	-23.6 (8.0)	33.3 (13.2)	20.9 (2.6)	51.9 (9.4)	-26.6 (9.7)	34.4 (14.7)	24.9 (1.7)	43.8 (6.5)	-39.7 (18.1)	2.03 (0.46)
23	20.3 (2.1)	65.3 (5.6)	-16.1 (13.0)		21.0 (1.7)	64.8 (4.0)	-31.2 (6.4)	31.4 (11.0)	25.0 (1.3)	58.6 (4.9)	-47.2 (15.4)	2.04 (0.16)
24	22.5 (1.9)	52.1 (18.3)	-12.1 (10.2)	43.2 (9.3)	22.7 (1.9)	52.4 (15.9)	-22.9 (13.0)	42.5 (12.1)	25.7 (1.4)	50.5 (12.5)	-42.1 (14.7)	2.42 (0.42)
25	21.4 (1.1)	40.3 (12.6)	-15.5 (5.8)	29.1 (12.0)	21.0 (1.1)	41.0 (10.7)	-16.5 (7.3)	28.9 (11.4)	24.3 (0.7)	37.8 (10.2)	-24.0 (9.4)	2.22 (0.54)
26	20.7 (1.4)	44.4 (10.5)	-16.4 (7.1)	25.5 (13.4)	20.8 (1.5)	44.2 (9.3)	-12.9 (8.0)		24.1 (0.9)	39.5 (7.7)	-20.6 (13.2)	2.07 (0.66)
27	20.4 (1.1)	42.7 (13.1)	-13.3 (7.3)	22.3 (10.6)	20.3 (1.0)	42.4 (10.9)	-11.4 (6.6)	22.2 (10.1)	24.0 (0.6)	37.6 (8.1)	-21.9 (10.5)	1.83 (0.64)
28	21.2 (1.7)	38.8 (8.1)	-12.3 (5.6)	28.2 (12.9)	21.0 (2.0)	39.1 (6.7)	-11.7 (6.7)	29.2 (12.8)	24.7 (1.2)	34.7 (6.6)	-26.3 (8.0)	2.18 (0.62)
29	21.7 (1.8)	46.7 (10.7)	-14.4 (5.9)	30.1 (14.4)	21.7 (2.1)	46.7 (8.7)	-15.4 (6.2)	30.5 (12.9)	24.8 (1.2)	42.7 (6.8)	-29.8 (7.0)	2.31 (0.53)
30	22.4 (1.6)	36.4 (4.1)	-13.0 (5.4)	38.0 (13.2)	22.6 (1.7)	38.4 (5.7)	-11.3 (6.0)	37.7 (14.1)	25.3 (1.0)	36.6 (7.3)	-30.2 (6.1)	2.53 (0.44)
Mean	20.6	45.3	-19.2	28.8	20.1	47.7	-22.9	29.3	24.7	42.9	-32.4	1.95
n	30.0	30.0	30.0	27.0	30.0	30.0	30.0	29.0	24.0	24.0	25.0	24.0
SD	1.2	8.0	3.9	7.9	1.7	9.2	5.8	8.9	0.7	8.2	11.4	0.36
Min	18.4	31.8	-25.4	16.3	17.3	31.8	-31.3	15.9	22.8	27.4	-51.9	0.84
Max	22.6	65.3	-12.1	43.2	22.9	66.9	-11.3	46.1	26.0	58.6	-2.5	2.53

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Table E3. Daily means (SD) of environmental parameters at Site OK4B for May, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	21.9 (1.2)	37.6 (7.4)	-12.4 (6.3)	33.8 (12.2)	21.8 (1.3)	40.5 (8.3)	-14.2 (9.6)	32.5 (11.5)	24.8 (1.0)	37.3 (7.4)	-25.3 (19.3)	2.42 (0.54)
2	20.6 (1.0)	42.7 (11.0)	-13.2 (8.0)	20.7 (11.7)	20.2 (1.4)	44.3 (8.5)	-16.6 (9.4)	21.0 (10.3)	23.9 (0.8)	38.6 (6.4)	-10.5 (18.1)	
3	20.9 (1.1)	39.4 (11.1)	-12.7 (6.5)	21.9 (10.9)	20.5 (1.9)	39.1 (10.7)	-17.2 (8.9)	23.6 (10.6)	24.2 (0.7)	36.2 (6.2)	-20.3 (10.7)	1.84 (0.68)
4	21.6 (1.4)	43.5 (5.9)	-13.8 (5.7)	32.4 (14.6)	21.5 (2.0)	45.4 (5.1)	-14.8 (6.1)	33.3 (14.6)	24.9 (1.1)	42.3 (5.0)	-28.8 (7.9)	2.32 (0.61)
5	22.7 (1.3)	57.0 (6.0)	-20.3 (8.9)	37.7 (15.1)	22.8 (1.7)	59.7 (6.7)	-20.0 (10.6)	40.0 (15.7)			-34.2 (12.1)	
6	22.9 (0.9)	65.3 (2.3)	-17.2 (8.1)	41.7 (15.0)	22.9 (1.2)	69.7 (3.7)	-18.7 (9.1)	39.8 (16.9)	24.7 (1.4)	68.1 (3.4)	-43.6 (10.7)	2.22 (0.25)
7	22.0 (0.7)	61.9 (3.2)	-11.2 (5.5)	25.2 (6.0)	21.6 (0.6)	66.1 (3.9)	-7.8 (9.2)		23.7 (0.3)	65.4 (4.3)	-29.5 (10.8)	1.72 (0.58)
8	21.5 (1.2)	58.4 (4.3)	-7.3 (6.8)	27.7 (12.1)	21.7 (1.0)	62.7 (6.1)	-9.2 (6.6)	25.6 (12.8)	23.7 (1.1)	60.1 (6.1)	-29.4 (21.8)	1.59 (0.87)
9	21.3 (1.5)	54.8 (2.4)	-7.9 (7.8)		21.7 (1.0)	59.4 (2.9)	-10.3 (4.8)	24.0 (6.9)	24.1 (1.1)	53.6 (6.5)	-39.6 (22.5)	1.84 (0.82)
10	21.4 (0.7)	47.2 (6.8)	-11.1 (4.6)	28.7 (8.0)	21.0 (0.7)	52.4 (7.0)	-9.4 (4.6)	25.3 (6.9)	23.8 (0.8)	45.5 (9.2)	-22.8 (14.1)	2.07 (0.81)
11	22.0 (0.8)	42.6 (5.0)	-9.4 (5.8)	20.1 (6.1)	21.3 (0.9)	47.4 (4.8)	-9.7 (6.6)	19.7 (5.8)	24.3 (1.2)	40.3 (7.6)	-34.2 (20.1)	1.70 (0.82)
12	22.3 (1.1)	45.8 (6.9)	-12.9 (7.8)	32.4 (14.9)	22.5 (1.4)	49.5 (7.1)	-14.4 (8.0)	34.5 (18.0)	24.7 (0.8)	43.7 (3.9)	-32.9 (10.0)	2.21 (0.83)
13	22.1 (0.7)	50.5 (2.9)	-12.7 (5.4)	24.6 (6.7)	22.0 (0.5)	55.2 (3.2)	-8.5 (5.0)	21.9 (7.4)	24.3 (0.7)	46.8 (3.6)	-23.4 (9.8)	2.40 (0.88)
14	21.2 (1.0)	53.6 (3.2)	-7.3 (4.8)	18.7 (5.2)	21.3 (1.0)	57.8 (3.4)	-6.2 (4.4)		23.8 (0.3)	54.9 (3.1)	-30.1 (14.2)	1.65 (0.73)
15	21.5 (1.0)	52.6 (5.9)	-9.8 (6.1)	24.6 (9.9)	21.5 (0.8)	55.2 (5.0)	-6.7 (4.6)	26.0 (11.7)	24.0 (0.6)	52.6 (7.6)	-24.6 (11.0)	2.19 (0.92)
16	21.5 (1.0)	47.6 (3.6)	-8.8 (6.6)	27.6 (10.0)	21.3 (1.2)	52.3 (2.8)	-5.9 (3.1)	23.7 (7.5)	24.0 (0.8)	44.8 (7.1)	-25.1 (10.1)	2.42 (1.12)
17	22.4 (1.0)	48.3 (3.2)	-13.4 (9.1)	32.7 (12.8)	22.1 (0.9)	52.4 (4.0)	-8.7 (5.3)	30.3 (10.8)	23.4 (0.7)	48.1 (5.3)	-26.6 (9.9)	2.69 (0.83)
18	23.2 (1.8)	45.1 (4.6)	-14.4 (11.4)	37.1 (16.8)	22.8 (1.7)	49.8 (4.3)	-13.0 (9.9)	35.8 (17.3)	24.1 (1.2)	45.5 (4.6)	-34.7 (9.1)	2.84 (1.05)
19	24.6 (2.5)	47.0 (7.1)	-20.1 (10.7)	45.2 (15.0)	24.4 (2.6)	51.3 (6.5)	-17.6 (10.2)	45.2 (16.6)	24.5 (1.1)	50.1 (7.9)	-37.5 (11.2)	3.54 (1.01)
20	23.1 (0.8)	53.7 (4.0)	-14.9 (6.4)	39.2 (11.4)	22.6 (1.1)	59.5 (3.5)	-12.9 (7.4)	38.9 (13.4)	24.2 (0.9)	51.8 (5.5)	-34.5 (7.6)	3.25 (0.71)
21	23.4 (1.2)	56.5 (6.0)	-22.4 (9.3)	45.9 (14.0)	23.5 (1.5)	61.8 (6.2)	-22.9 (11.5)	44.6 (14.9)	25.3 (1.6)	53.0 (5.6)	-56.4 (14.4)	3.87 (1.09)
22	23.9 (1.2)	54.8 (9.5)	-23.5 (8.1)	55.9 (10.3)	24.3 (1.7)	58.0 (11.6)	-27.1 (9.5)	57.7 (9.6)	27.6 (2.4)	44.1 (12.7)	-59.7 (7.8)	4.77 (0.43)
23	24.1 (1.5)	58.2 (12.6)	-22.6 (8.8)	53.5 (10.5)	24.2 (1.9)	60.7 (13.8)	-23.4 (9.2)	53.9 (11.3)	26.2 (1.3)	54.9 (13.7)	-56.3 (9.0)	4.55 (1.00)
24	22.9 (0.8)	43.5 (3.8)	-14.2 (8.3)	41.9 (17.4)	22.8 (1.2)	45.6 (3.2)	-12.9 (8.4)	44.4 (15.5)	25.3 (1.6)	38.7 (6.4)	-49.9 (9.9)	3.81 (1.44)
25	23.9 (1.8)		-20.4 (8.5)	50.0 (12.1)	24.2 (2.1)	58.5 (8.4)	-22.3 (10.5)	51.5 (14.4)	25.7 (1.5)		-63.1 (10.1)	4.03 (1.27)
26	24.3 (1.7)	60.1 (3.4)	-22.2 (7.2)	52.2 (8.6)	24.7 (2.4)	62.2 (3.8)	-22.0 (8.1)	53.0 (11.6)	26.4 (1.9)	56.9 (6.6)	-59.4 (14.6)	4.35 (1.25)
27	22.0 (0.5)	59.1 (5.9)	-13.2 (6.0)	32.9 (11.1)	22.0 (0.6)	62.6 (5.6)	-7.0 (4.7)				-49.6 (26.1)	
28	22.8 (0.8)	61.8 (3.6)	-14.8 (9.4)	34.9 (18.2)	22.5 (1.1)	64.3 (4.3)	-11.4 (10.2)		23.2 (1.2)	63.4 (2.7)	-49.4 (26.0)	2.59 (1.44)
29	24.6 (1.6)	63.7 (5.2)	-27.4 (4.1)	59.3 (3.3)	25.0 (2.1)	65.7 (6.0)	-31.1 (7.9)	60.5 (6.4)	25.7 (1.9)	64.6 (7.1)		
30	23.9 (1.3)	56.8 (5.5)	-21.9 (7.2)	54.1 (8.9)	23.7 (1.5)	58.6 (6.3)	-20.4 (5.9)	54.2 (9.7)	26.1 (1.6)	50.9 (7.7)		
31	24.4 (1.8)	64.3 (5.3)	-21.4 (6.7)	51.4 (11.4)	24.2 (1.9)	66.4 (6.0)	-18.5 (6.4)	51.8 (11.6)	26.0 (2.0)	61.4 (4.0)		
Mean	22.6	52.5	-15.3	36.8	22.5	55.9	-14.9	37.5	24.7	50.5	-36.8	2.76
n	31.0	30.0	31.0	30.0	31.0	31.0	31.0	27.0	29.0	28.0	28.0	25.0
SD	1.2	7.7	5.4	11.7	1.3	7.8	6.5	12.5	1.0	8.9	13.6	0.96
Min	20.6	37.6	-27.4	18.7	20.2	39.1	-31.1	19.7	23.2	36.2	-63.1	1.59
Max	24.6	65.3	-7.3	59.3	25.0	69.7	-5.9	60.5	27.6	68.1	-10.5	4.77

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Table E3. Daily means (SD) of environmental parameters at Site OK4B for June, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	24.8 (1.4)	69.3 (3.3)	-24.0 (3.0)	58.0 (6.2)	24.6 (1.5)	71.6 (2.9)	-21.3 (4.1)	56.0 (7.3)	25.4 (0.9)	70.4 (2.8)	-57.6 (9.8)	4.57 (1.07)
2	26.3 (2.9)	53.6 (16.6)	-22.4 (4.9)	57.8 (9.8)	26.6 (3.4)	55.1 (17.7)	-20.6 (5.0)	57.5 (11.9)	26.4 (2.0)	57.7 (14.9)	-51.6 (12.5)	4.24 (1.22)
3	24.6 (1.7)	59.5 (10.1)	-23.4 (6.8)		24.4 (1.8)	62.0 (10.1)	-21.4 (6.4)		25.8 (1.4)	57.5 (12.1)	-46.2 (9.4)	
4	24.2 (2.1)	51.3 (11.6)	-18.0 (8.6)		24.2 (2.5)	54.1 (11.5)	-15.0 (7.5)		25.4 (1.5)	50.5 (11.9)	-54.1 (10.7)	
5	23.3 (1.1)	50.6 (9.8)	-15.4 (8.6)	57.0 (9.7)	23.4 (1.1)	52.2 (11.2)	-14.3 (7.6)	51.1 (9.2)	24.8 (1.1)	49.0 (8.0)	-35.6 (15.9)	4.28 (0.96)
6	23.5 (1.3)	48.1 (4.6)	-17.4 (10.7)	46.3 (16.3)	23.4 (1.7)	49.4 (4.6)	-17.7 (11.1)	45.5 (17.3)	25.1 (1.4)	44.3 (6.8)	-40.1 (15.4)	3.91 (1.53)
7	26.5 (2.2)	62.2 (7.1)	-25.4 (4.6)	59.1 (5.0)	27.1 (2.9)	63.2 (8.5)	-30.7 (8.4)	59.5 (5.2)	27.4 (1.3)	62.8 (8.1)	-58.1 (4.5)	4.96 (0.18)
8	24.1 (1.1)	60.1 (5.8)	-25.5 (5.1)	56.9 (6.9)	24.0 (1.1)	61.8 (5.8)	-21.7 (7.7)	57.2 (8.9)	25.6 (1.2)	56.9 (6.9)	-39.1 (16.2)	5.05 (0.81)
9	23.1 (1.0)	48.5 (3.8)	-17.6 (7.7)	43.9 (12.9)	22.5 (1.0)	51.3 (3.6)	-14.1 (6.4)	41.5 (10.2)	24.6 (1.3)	45.6 (6.6)	-35.0 (11.6)	3.78 (1.37)
10	24.8 (2.4)	60.7 (3.8)	-22.5 (10.6)	49.3 (14.4)	25.1 (2.9)	62.9 (4.7)	-22.5 (10.8)	47.7 (15.3)	25.8 (2.1)	62.0 (4.2)	-51.1 (16.6)	4.09 (1.04)
11	25.8 (2.2)	50.9 (13.0)	-25.0 (5.5)	62.1 (7.1)	26.2 (2.7)	52.3 (14.2)	-24.7 (9.1)	65.1 (7.9)	26.0 (1.0)	53.5 (8.6)	-42.7 (17.7)	5.27 (0.61)
12	23.4 (1.2)	47.9 (4.6)	-19.9 (8.1)	47.0 (13.2)	23.2 (1.2)	49.5 (4.7)	-14.5 (7.7)	44.9 (13.0)	24.9 (1.7)	42.6 (5.5)	-33.1 (15.1)	4.41 (1.44)
13	23.7 (1.3)	46.1 (4.4)	-21.5 (6.3)	52.5 (9.2)	23.3 (1.2)	49.0 (4.3)	-16.1 (5.4)	47.2 (8.7)	25.0 (1.5)	42.2 (4.5)	-35.2 (9.9)	4.73 (1.16)
14												
15	25.4 (1.8)	57.6 (5.1)	-24.3 (5.7)	56.7 (7.4)	25.3 (2.0)	56.8 (8.6)	-20.4 (3.1)	55.7 (6.0)	26.3 (1.4)	56.8 (5.2)	-46.1 (5.8)	5.29 (0.47)
16	24.2 (1.1)	64.0 (4.7)	-21.1 (4.9)	51.1 (6.6)	23.9 (1.2)	66.6 (5.5)	-17.2 (3.7)	49.0 (6.5)			-41.0 (12.4)	
17	23.7 (0.8)	65.2 (4.6)	-23.1 (5.4)	54.4 (7.3)	23.6 (1.1)	68.1 (4.1)	-21.0 (5.9)	51.6 (9.0)	23.9 (1.4)	66.4 (4.6)	-38.9 (8.4)	4.04 (1.12)
18	24.7 (2.3)	61.5 (3.2)	-21.3 (9.5)	49.7 (14.3)	24.5 (2.4)	65.0 (3.8)	-19.0 (9.5)	46.9 (15.1)	24.5 (1.9)	65.0 (2.9)	-38.1 (15.7)	3.78 (1.40)
19	23.6 (1.1)	62.1 (3.3)	-18.9 (5.8)	49.1 (8.0)	23.3 (1.2)	65.7 (4.0)	-18.6 (5.7)	49.2 (8.3)	23.9 (1.1)	62.8 (4.9)	-34.4 (10.1)	3.79 (1.12)
20	23.9 (1.8)	61.9 (1.6)	-18.3 (9.8)	46.1 (16.3)	23.3 (2.2)	65.9 (2.3)	-15.4 (8.9)	46.8 (14.4)	24.2 (1.9)	63.2 (4.6)	-31.8 (16.0)	3.76 (1.78)
21												
22	24.8 (2.2)	61.4 (4.4)	-21.7 (8.1)	54.4 (11.5)	24.9 (2.6)	61.8 (6.1)	-18.8 (7.7)	54.3 (12.8)	25.1 (1.6)	59.3 (4.9)	-41.6 (11.1)	
23	24.9 (2.5)	57.8 (3.2)	-24.1 (6.4)	60.6 (4.8)	25.3 (2.6)	59.4 (3.4)	-17.0 (8.3)	55.3 (5.6)	25.2 (1.6)	55.8 (3.4)	-40.8 (15.5)	
24	24.6 (1.6)	63.6 (2.5)	-25.1 (5.8)	58.6 (5.9)	24.5 (1.7)	68.7 (2.7)	-20.2 (8.4)	55.6 (8.3)	25.3 (1.5)	61.2 (2.9)	-42.8 (10.5)	
25	25.5 (2.0)	63.0 (3.3)	-25.6 (6.7)	58.0 (6.1)	25.5 (2.2)	67.0 (2.7)	-23.1 (7.2)	57.1 (8.7)	26.0 (1.7)	62.1 (3.5)	-45.2 (10.0)	
26	25.8 (2.1)	63.2 (4.7)	-27.9 (3.3)	59.8 (3.0)	25.8 (2.2)	67.3 (4.9)	-26.3 (5.7)	59.0 (7.1)	26.6 (1.3)	61.1 (3.4)	-50.6 (4.2)	5.25 (0.18)
27	25.8 (2.1)	62.0 (4.1)	-25.4 (5.0)	58.2 (5.8)	25.3 (2.1)	65.6 (4.8)	-21.8 (4.6)	55.7 (6.5)	26.5 (1.4)	58.7 (4.0)	-46.7 (3.7)	5.36 (0.25)
28	24.4 (1.0)	66.5 (5.3)	-24.4 (4.6)	55.3 (5.8)	24.0 (1.0)	70.3 (5.4)	-18.4 (3.7)	53.6 (5.7)	25.5 (0.8)	63.1 (7.9)	-43.3 (5.8)	5.44 (0.39)
29	23.4 (1.2)	55.5 (1.8)	-17.6 (8.2)	47.3 (11.6)	22.9 (1.1)	58.8 (2.3)	-13.8 (5.5)	43.8 (8.6)	24.8 (1.3)	51.4 (4.5)	-36.7 (10.2)	
30	24.8 (1.6)	57.2 (4.0)	-21.7 (6.9)	54.6 (8.5)	24.3 (1.8)	61.1 (4.8)	-20.8 (6.7)	55.1 (9.3)	25.7 (1.3)	55.8 (5.2)	-44.0 (8.9)	
Mean	24.6	58.3	-22.1	54.0	24.4	60.8	-19.5	52.4	25.4	56.9	-42.9	4.53
n	28.0	28.0	28.0	26.0	28.0	28.0	28.0	26.0	27.0	27.0	28.0	19.0
SD	0.9	6.2	3.1	5.1	1.1	6.8	3.9	5.6	0.8	7.3	7.1	0.60
Min	23.1	46.1	-27.9	43.9	22.5	49.0	-30.7	41.5	23.9	42.2	-58.1	3.76
Max	26.5	69.3	-15.4	62.1	27.1	71.6	-13.8	65.1	27.4	70.4	-31.8	5.44

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Table E3. Daily means (SD) of environmental parameters at Site OK4B for July, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	25.1 (1.8)	57.6 (4.0)	-22.8 (6.9)	57.8 (7.9)	24.8 (1.8)	61.6 (3.9)	-20.2 (6.0)	56.5 (6.8)	26.2 (0.9)	54.5 (5.8)	-47.9 (5.0)	
2	25.6 (2.2)	60.6 (4.9)	-24.0 (3.0)	59.7 (5.3)	25.4 (2.2)	64.1 (5.1)	-20.7 (6.5)	59.7 (7.5)	26.6 (1.6)	60.4 (5.9)	-47.1 (7.2)	
3												
4	25.0 (2.0)	64.8 (3.2)	-23.5 (8.7)	53.5 (11.0)	24.4 (2.4)		-21.7 (8.8)	52.9 (13.0)	26.0 (1.8)	67.7 (2.8)	-44.0 (8.7)	4.50 (1.05)
5	25.9 (2.0)	61.5 (4.8)	-27.0 (3.5)	59.0 (3.2)	25.3 (2.5)		-24.4 (5.5)	56.8 (6.9)	27.1 (1.0)	62.3 (3.4)	-44.9 (9.5)	4.77 (0.81)
6	25.5 (1.7)	62.0 (3.7)	-25.8 (6.8)	57.2 (6.7)	25.1 (2.2)		-24.6 (7.1)	55.0 (8.0)	26.8 (0.8)	62.4 (3.5)	-45.0 (9.6)	4.64 (0.84)
7	24.9 (1.8)	67.1 (4.6)	-25.2 (2.7)	59.7 (3.8)	24.6 (2.1)		-24.7 (6.4)	58.8 (7.0)			-41.8 (10.5)	
8	24.0 (1.1)	71.9 (2.7)	-25.4 (3.6)	59.2 (3.2)	23.7 (0.9)	72.8 (2.3)	-18.0 (4.7)	52.8 (5.5)	24.2 (0.9)	73.2 (3.6)	-38.2 (7.6)	4.79 (1.04)
9	23.5 (0.7)	76.4 (1.4)	-23.4 (0.8)	55.3 (0.7)	23.1 (0.6)	78.1 (1.7)	-18.5 (3.0)	51.2 (3.5)	23.6 (0.3)	79.5 (1.5)	-31.4 (5.0)	4.14 (0.98)
10	24.4 (1.4)	74.3 (3.0)	-24.1 (4.6)	57.5 (7.1)	23.9 (1.5)	77.2 (3.1)	-25.8 (6.1)	56.8 (11.6)	24.3 (1.2)	78.6 (4.0)	-41.3 (11.4)	4.51 (1.03)
11	25.6 (1.9)	70.8 (3.3)	-24.8 (3.1)	61.5 (4.4)	25.0 (1.9)	73.3 (4.0)	-25.4 (3.8)	63.1 (6.0)	25.5 (1.3)	74.1 (2.1)	-46.6 (8.9)	4.98 (0.70)
12	23.3 (0.8)	60.2 (7.9)	-21.2 (6.8)	51.4 (8.4)	22.6 (0.6)	59.9 (9.7)	-16.5 (7.1)	50.8 (10.2)	23.7 (0.9)	58.6 (8.9)	-27.2 (15.9)	4.42 (1.02)
13	23.5 (1.2)	61.8 (5.7)	-20.1 (8.1)	50.4 (10.8)	22.9 (1.4)	61.5 (6.3)	-17.9 (8.0)	49.2 (11.6)	24.1 (1.5)	60.7 (7.3)	-36.2 (11.1)	4.36 (1.27)
14	25.2 (1.9)	70.7 (2.9)	-25.7 (6.1)	57.0 (7.0)	24.7 (2.0)	73.2 (2.9)	-24.1 (6.0)	57.3 (8.3)	25.5 (1.7)	73.0 (2.9)	-43.1 (10.8)	4.67 (0.96)
15	25.2 (1.8)	68.8 (3.5)	-26.9 (4.3)	58.4 (4.3)	24.9 (2.1)	71.2 (3.6)	-24.3 (5.0)	58.2 (6.2)	26.1 (1.5)	68.3 (3.6)	-46.7 (7.4)	5.10 (0.67)
16	25.3 (1.8)	71.4 (2.9)	-28.3 (3.1)	59.5 (2.9)	25.0 (1.8)	74.1 (3.4)	-25.5 (4.7)	59.3 (5.9)	26.2 (1.5)	70.4 (4.6)	-44.4 (7.0)	5.26 (0.59)
17	25.7 (1.9)	67.3 (4.4)	-27.9 (2.6)	60.2 (2.7)	25.2 (2.1)	70.6 (5.1)	-26.7 (4.2)	61.4 (5.2)	26.5 (1.3)	67.0 (3.3)	-48.3 (5.1)	5.37 (0.19)
18	25.5 (1.6)	69.8 (3.5)	-29.1 (1.6)	61.5 (1.5)	25.1 (1.6)	73.2 (4.0)	-24.8 (3.4)	59.9 (5.6)	26.4 (1.1)	69.0 (2.6)	-47.4 (2.9)	5.45 (0.13)
19	24.9 (1.4)	69.4 (5.6)	-25.7 (3.1)	59.8 (3.8)	24.6 (1.6)	73.3 (6.8)	-23.4 (4.5)	60.1 (6.7)	25.9 (1.0)	69.4 (4.8)	-46.7 (5.8)	5.33 (0.31)
20	25.1 (2.0)	61.4 (4.3)	-23.3 (5.9)	56.9 (7.3)	24.9 (2.2)	62.7 (5.2)	-21.0 (6.6)	56.9 (9.4)	25.9 (1.4)	61.0 (3.5)	-44.2 (9.3)	4.98 (0.84)
21	25.1 (1.9)		-23.9 (6.3)	55.9 (7.3)	25.5 (2.4)	60.3 (3.9)	-22.4 (6.8)	56.4 (9.2)	26.4 (1.5)	57.5 (4.0)	-46.2 (7.2)	5.20 (0.58)
22	25.4 (2.3)		-26.2 (6.0)	56.7 (6.0)	26.0 (2.6)	61.9 (4.4)	-22.9 (6.7)	56.3 (8.8)	26.9 (1.5)	58.6 (3.9)	-48.0 (3.4)	5.39 (0.12)
23	25.5 (2.3)		-25.9 (6.5)	57.1 (6.3)	26.1 (2.7)	59.6 (4.2)	-23.3 (7.0)	57.5 (8.3)	26.8 (1.5)	57.5 (2.9)	-47.9 (5.0)	5.33 (0.28)
24	25.9 (2.5)		-27.1 (4.1)	59.6 (3.9)	26.2 (2.5)	61.9 (4.6)	-24.2 (5.1)	59.7 (7.0)	27.1 (1.6)	59.5 (3.6)	-47.9 (5.4)	5.24 (0.56)
25	26.2 (2.2)	61.1 (5.1)	-27.5 (2.6)	59.7 (3.2)	25.9 (2.3)	64.5 (4.4)	-21.6 (3.4)	57.2 (4.6)	27.2 (1.6)	62.7 (4.2)	-46.5 (3.0)	5.47 (0.12)
26	26.4 (2.1)	61.9 (5.6)	-28.0 (2.3)	60.1 (2.6)	26.3 (2.3)	65.0 (5.3)	-22.9 (2.9)	58.7 (3.6)	27.2 (1.5)	64.1 (4.0)	-46.9 (4.4)	5.46 (0.19)
27	26.7 (2.1)	62.7 (5.6)	-27.8 (2.3)	60.0 (3.1)	26.6 (2.1)	65.6 (4.9)	-22.5 (3.2)	57.6 (3.9)	27.3 (1.4)	65.5 (3.6)	-48.3 (2.8)	5.41 (0.15)
28	27.0 (2.1)	66.0 (5.4)	-29.3 (1.7)	60.5 (1.8)	26.8 (2.2)	69.1 (4.4)	-26.0 (3.5)	61.0 (4.7)	27.5 (1.6)	69.4 (4.4)	-47.4 (6.6)	5.40 (0.26)
29	24.6 (1.3)	73.7 (2.7)	-29.1 (4.3)	59.2 (3.0)	24.5 (1.2)	75.8 (2.0)	-22.3 (3.4)	56.0 (3.8)			-28.1 (10.0)	
30	25.0 (2.2)	64.9 (7.7)	-24.1 (7.2)	54.9 (7.5)	24.7 (2.2)	67.7 (7.3)	-20.8 (6.6)	54.2 (9.1)	25.8 (0.9)	65.8 (6.2)	-32.0 (16.2)	3.97 (1.80)
31	25.6 (2.7)	52.6 (7.8)	-22.5 (8.1)	53.8 (8.9)	25.5 (3.0)	55.1 (8.8)	-19.2 (6.4)	52.4 (8.3)	25.1 (2.2)	57.6 (7.9)	-38.8 (11.7)	4.59 (1.14)
Mean	25.2	65.8	-25.5	57.8	25.0	67.4	-22.5	56.8	26.0	65.3	-43.0	4.95
n	30.0	26.0	30.0	30.0	30.0	26.0	30.0	30.0	28.0	28.0	30.0	26.0
SD	0.9	5.6	2.3	2.8	1.0	6.3	2.6	3.3	1.1	6.5	6.1	0.44
Min	23.3	52.6	-29.3	50.4	22.6	55.1	-26.7	49.2	23.6	54.5	-48.3	3.97
Max	27.0	76.4	-20.1	61.5	26.8	78.1	-16.5	63.1	27.5	79.5	-27.2	5.47

ED_004549_00015840-00116

Table E3. Daily means (SD) of environmental parameters at Site OK4B for August, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	26.0 (2.9)	52.2 (6.2)	-23.6 (7.6)	55.7 (7.9)	25.9 (3.0)	54.2 (6.2)	-21.1 (6.3)	55.2 (7.8)	25.8 (2.2)	55.7 (5.2)	-40.6 (10.3)	4.92 (0.98)
2	26.3 (2.5)	56.2 (6.7)	-26.5 (4.0)	59.0 (4.3)	26.3 (2.7)	58.8 (6.6)	-22.2 (3.9)	57.1 (4.5)	26.0 (1.5)	59.4 (3.8)	-45.7 (6.2)	5.32 (0.47)
3	26.3 (2.3)	55.3 (5.1)	-25.1 (4.9)	58.8 (5.8)	26.6 (2.6)	57.5 (5.5)	-22.9 (5.2)	57.7 (5.6)	26.0 (1.5)	58.6 (4.7)	-48.1 (5.1)	5.37 (0.32)
4	26.3 (2.4)	48.9 (5.1)	-24.1 (5.8)	58.9 (7.4)	26.6 (2.6)	51.2 (5.4)	-21.3 (4.3)	58.4 (5.5)	26.3 (1.7)	51.8 (5.8)	-45.6 (7.5)	5.28 (0.61)
5	25.7 (2.1)	58.2 (6.5)	-26.1 (5.9)	57.1 (6.5)	25.6 (2.0)	60.9 (6.1)	-21.1 (4.0)	54.9 (6.2)	26.1 (1.5)	58.9 (7.9)	-44.8 (6.7)	5.37 (0.55)
6	25.6 (2.1)	63.8 (6.0)	-27.1 (3.0)	58.9 (3.2)	25.7 (2.1)	66.9 (6.1)	-25.3 (4.2)	58.3 (5.7)	25.9 (1.3)	65.6 (3.7)	-47.6 (4.5)	5.28 (0.37)
7	24.9 (1.5)	70.2 (2.8)	-26.4 (3.3)	57.7 (4.1)	24.7 (1.3)	72.4 (2.5)	-21.7 (2.7)	57.6 (5.3)	25.5 (1.0)	70.9 (2.4)	-43.7 (7.9)	5.10 (0.78)
8	25.3 (1.7)	73.4 (4.5)	-28.5 (1.7)	61.5 (2.3)	25.1 (1.5)	75.4 (3.7)	-25.3 (4.0)	57.2 (5.6)	25.8 (0.9)	74.6 (3.2)	-45.9 (6.6)	5.18 (0.49)
9	26.5 (3.0)	66.7 (8.9)	-27.5 (2.5)	61.1 (3.1)	25.6 (2.0)	69.4 (6.6)	-21.5 (2.0)	57.9 (4.3)	26.5 (1.3)	68.5 (3.2)	-46.8 (2.6)	5.48 (0.12)
10	24.4 (0.9)	75.0 (2.3)	-27.8 (3.0)	59.4 (2.4)	24.3 (0.9)	75.9 (1.8)	-21.0 (2.8)	55.7 (4.9)	25.5 (0.6)	74.0 (3.1)	-45.4 (4.2)	5.49 (0.24)
11	24.6 (1.4)	70.3 (4.6)	-26.5 (3.1)	57.3 (3.1)	24.5 (1.4)	72.3 (3.9)	-22.4 (3.8)	56.7 (5.5)	25.4 (1.0)	71.0 (4.2)	-42.0 (6.8)	5.17 (0.71)
12	24.5 (1.8)	67.1 (6.9)	-22.0 (7.6)	53.7 (8.0)	24.5 (1.9)	69.6 (7.3)	-19.5 (5.5)	51.7 (6.6)	25.4 (1.4)	69.0 (6.9)	-39.7 (9.6)	4.70 (0.95)
13	24.6 (1.7)	62.1 (2.7)	-23.4 (8.1)	54.7 (7.9)	24.7 (1.8)	64.2 (3.4)	-19.9 (5.7)	53.7 (7.1)	25.9 (1.4)	61.8 (4.2)	-42.9 (8.8)	4.99 (0.85)
14	23.9 (1.5)	60.0 (4.5)	-19.1 (8.0)	48.5 (9.4)	23.8 (1.9)	60.2 (3.1)	-17.9 (6.9)	48.4 (9.1)	25.2 (1.4)	58.4 (3.2)	-41.4 (9.4)	4.61 (1.06)
15	23.0 (0.8)	66.3 (2.3)	-17.1 (6.0)	49.4 (7.7)	22.7 (1.2)	67.1 (2.7)	-13.8 (6.1)	42.3 (5.9)	24.5 (1.0)	64.5 (4.6)		
16	22.9 (0.7)	68.2 (2.6)	-17.0 (4.3)	47.1 (6.3)	22.9 (0.7)	68.6 (1.6)	-12.9 (3.5)	40.5 (5.2)	24.4 (0.9)	67.1 (6.3)		
17	22.3 (0.6)	69.6 (1.8)	-12.4 (3.0)	39.9 (4.8)	22.3 (0.5)	70.4 (1.6)	-11.3 (5.6)	35.5 (6.6)	23.5 (0.4)	71.7 (1.5)		
18	22.3 (0.6)	69.5 (2.5)	-10.5 (4.6)		22.0 (0.6)	72.2 (1.2)	-9.0 (4.6)		23.6 (0.5)	71.4 (2.4)		
19	22.5 (0.7)	69.5 (1.7)	-14.1 (6.4)	42.0 (9.9)	22.6 (0.8)	71.4 (1.5)	-10.6 (4.1)	36.5 (5.9)	24.0 (0.8)	69.8 (3.0)		
20	22.9 (0.9)	69.0 (1.6)	-18.1 (8.8)	46.7 (11.4)	23.1 (1.2)	69.8 (1.1)	-12.5 (5.3)	39.7 (8.3)	24.7 (1.1)	67.2 (4.3)	-39.1 (8.4)	3.94 (1.23)
21	24.3 (1.9)	70.4 (2.6)	-22.1 (9.9)	50.6 (12.7)	24.6 (2.0)	71.6 (2.5)	-19.4 (9.0)	49.2 (13.0)	25.7 (1.6)	71.0 (2.4)	-44.1 (10.1)	4.42 (1.20)
22	25.4 (2.0)	68.3 (4.7)	-27.9 (3.4)	57.4 (2.8)	25.6 (2.2)	70.5 (4.1)	-22.7 (6.0)	54.4 (8.3)			-44.3 (11.4)	
23	25.1 (1.6)	70.0 (3.1)	-27.5 (3.3)	58.0 (2.9)	25.1 (1.6)	71.7 (2.9)	-19.6 (5.2)	52.6 (7.5)	25.3 (1.4)	71.8 (2.8)	-44.3 (10.3)	4.66 (0.96)
24	25.1 (1.7)	68.0 (4.9)	-26.8 (5.5)	56.8 (5.4)	25.2 (1.8)	70.1 (3.5)	-20.1 (5.9)	52.0 (7.8)	25.2 (1.3)	70.0 (3.1)	-46.0 (10.1)	4.76 (0.90)
25	24.6 (1.2)	70.8 (4.0)	-24.9 (4.9)	54.7 (6.1)	24.7 (1.3)	73.1 (2.4)	-21.3 (5.2)	49.3 (7.2)	24.5 (1.0)	73.7 (4.5)	-42.3 (12.0)	4.30 (1.02)
26	24.8 (1.9)	66.4 (3.6)	-24.5 (7.5)	54.2 (9.2)	25.2 (1.9)	67.9 (2.5)	-21.1 (8.1)	50.4 (12.1)	25.0 (1.8)	69.3 (3.5)	-46.3 (10.5)	4.29 (1.17)
27	25.2 (1.8)	64.2 (3.7)	-24.0 (5.5)	56.6 (6.6)	25.7 (1.6)	66.1 (3.7)	-15.4 (8.2)	46.9 (13.7)	25.9 (1.5)	64.2 (3.5)	-45.9 (9.2)	4.79 (0.94)
28	25.4 (1.8)	64.6 (5.0)	-25.0 (6.0)	56.6 (6.0)	25.7 (1.5)	66.0 (3.2)	-14.7 (7.5)	47.2 (11.2)	26.1 (1.5)	64.1 (4.5)	-46.6 (7.8)	4.93 (0.81)
29	24.8 (1.9)	64.3 (3.9)	-23.9 (6.2)	55.0 (7.9)	25.1 (1.7)	65.4 (4.9)	-16.6 (8.1)	46.3 (11.8)	25.4 (1.6)	64.3 (3.7)	-42.7 (11.5)	4.52 (1.04)
30	24.2 (1.3)	64.2 (3.8)	-22.3 (7.9)	52.6 (8.9)	24.2 (1.6)	66.7 (3.2)	-20.2 (6.4)	52.3 (8.5)	25.2 (1.3)	63.4 (2.4)	-45.0 (9.7)	4.53 (1.10)
31	24.5 (1.2)	68.1 (2.6)	-22.6 (6.5)	53.1 (7.2)	24.4 (1.6)	71.0 (2.6)	-26.4 (6.2)	57.2 (4.9)	25.5 (1.1)	67.1 (2.8)	-48.2 (10.4)	4.66 (0.87)
Mean	24.6	65.5	-23.0	54.4	24.7	67.4	-19.0	51.1	25.3	66.3	-44.4	4.88
n	31.0	31.0	31.0	30.0	31.0	31.0	31.0	30.0	30.0	30.0	26.0	25.0
SD	1.2	6.0	4.7	5.3	1.2	5.9	4.4	6.6	0.7	5.7	2.4	0.41
Min	22.3	48.9	-28.5	39.9	22.0	51.2	-26.4	35.5	23.5	51.8	-48.2	3.94
Max	26.5	75.0	-10.5	61.5	26.6	75.9	-9.0	58.4	26.5	74.6	-39.1	5.49

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Table E3. Daily means (SD) of environmental parameters at Site OK4B for September, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	24.9 (1.4)	65.1 (3.3)	-23.5 (5.6)	53.4 (7.2)	25.0 (1.9)	68.3 (2.8)	-26.2 (4.4)	56.1 (3.7)	25.9 (1.2)	64.4 (2.0)	-50.0 (10.0)	4.68 (0.83)
2	22.7 (0.8)	58.7 (5.6)	-16.8 (4.9)	45.0 (7.0)	22.7 (0.8)	60.3 (5.9)	-15.0 (5.2)	46.1 (5.6)	24.2 (0.7)	57.4 (5.8)	-28.0 (11.7)	3.77 (1.00)
3	21.7 (0.6)	53.1 (5.2)	-7.5 (4.3)	23.2 (6.6)	20.2 (0.9)	58.6 (5.7)	-7.9 (6.2)		23.7 (0.2)	56.4 (4.7)	-17.7 (8.3)	1.83 (0.75)
4	22.2 (0.9)	54.0 (2.4)	-10.3 (6.9)	31.5 (13.9)	20.5 (1.7)	58.8 (2.1)	-14.3 (8.7)	43.0 (15.3)	24.4 (1.0)	52.8 (5.7)	-28.9 (16.0)	2.93 (1.68)
5	22.2 (0.6)	57.1 (4.7)	-9.8 (6.6)	28.7 (12.4)	20.1 (1.3)	63.5 (4.2)	-11.4 (6.3)	40.6 (11.4)	23.8 (0.4)	59.3 (3.6)	-24.6 (7.7)	2.30 (0.81)
6	22.2 (0.6)	59.2 (2.7)	-9.7 (4.9)	28.2 (10.1)	20.0 (1.2)	65.8 (2.5)	-12.9 (6.5)	41.6 (11.5)	23.9 (0.5)	60.7 (2.7)	-26.9 (9.2)	2.40 (0.99)
7	22.7 (0.9)	62.9 (3.3)	-14.9 (7.8)	39.1 (14.2)	21.3 (1.8)	68.3 (2.3)	-18.0 (7.5)	48.7 (11.5)	24.4 (0.9)	62.4 (2.9)	-34.9 (12.5)	3.32 (1.43)
8	21.7 (0.8)	58.3 (3.2)	-7.7 (4.9)	25.6 (9.9)	19.6 (1.3)	65.2 (2.9)	-10.4 (6.4)	39.1 (8.7)	23.5 (0.4)	60.6 (2.5)	-19.1 (11.9)	2.16 (0.87)
9	22.0 (0.8)	60.0 (2.7)	-10.0 (7.3)	28.4 (13.6)	20.0 (1.7)	66.5 (3.6)	-13.1 (9.6)	41.2 (15.0)	24.0 (0.8)	60.1 (3.5)	-26.1 (15.3)	2.59 (1.46)
10	23.3 (1.5)	66.2 (3.0)	-20.3 (10.7)	47.8 (13.6)	23.0 (2.6)	71.0 (3.8)	-22.3 (6.7)	53.9 (9.7)	25.1 (1.5)	65.4 (2.9)	-42.4 (11.8)	4.07 (1.27)
11	23.3 (1.0)	72.7 (2.5)	-21.4 (6.2)	52.4 (6.9)	22.8 (1.5)	77.2 (2.5)	-26.0 (3.8)	65.1 (1.7)	25.2 (1.0)	70.6 (3.7)	-38.9 (9.5)	4.36 (1.09)
12	22.9 (1.3)	72.1 (3.9)	-18.6 (6.4)	49.3 (9.0)	21.9 (1.5)	76.5 (4.0)	-22.9 (5.3)	56.8 (3.9)			-32.1 (11.4)	
13	24.1 (2.7)	53.5 (16.5)	-17.1 (9.5)	46.1 (13.3)	21.9 (2.5)	59.0 (17.7)	-22.4 (4.9)	56.4 (6.1)	22.2 (1.6)	65.3 (14.1)	-31.7 (6.9)	4.00 (1.30)
14	22.3 (0.9)	42.9 (8.2)	-13.1 (8.1)	33.7 (14.9)	20.1 (1.4)	48.1 (8.0)	-13.6 (7.5)	43.3 (11.6)	20.8 (1.1)	49.8 (9.5)	-18.8 (11.2)	2.88 (1.42)
15	23.1 (1.8)	44.0 (6.0)	-13.6 (10.8)	36.8 (19.6)	20.5 (1.7)	54.2 (3.7)	-14.0 (9.2)	43.7 (14.6)	22.2 (1.7)	51.2 (6.0)	-23.7 (14.8)	2.53 (1.57)
16	24.7 (3.0)	46.0 (8.9)	-17.3 (11.1)	41.9 (19.6)	21.1 (2.5)	60.5 (3.5)	-17.2 (8.5)	47.0 (13.4)	23.7 (1.4)	57.3 (3.9)	-26.8 (16.0)	2.83 (1.64)
17	25.0 (3.4)	43.2 (11.0)	-18.9 (10.2)	45.4 (16.7)	22.4 (3.0)	55.4 (6.6)	-19.0 (7.6)	50.7 (11.7)	23.9 (1.3)	55.9 (5.7)	-28.9 (14.7)	2.90 (1.44)
18	24.2 (2.5)	41.4 (9.2)	-18.4 (10.3)	44.2 (17.3)	21.5 (2.4)	53.3 (5.5)	-19.2 (7.8)	49.1 (12.0)	23.7 (1.3)	52.0 (7.3)	-28.3 (14.8)	2.75 (1.43)
19	24.1 (2.5)	45.6 (9.2)	-17.6 (10.1)	43.1 (17.3)	21.4 (2.5)	57.7 (6.3)	-18.3 (7.1)	49.1 (12.1)	23.7 (1.1)	54.3 (5.5)	-29.2 (12.6)	2.88 (1.39)
20	25.0 (3.1)	44.4 (9.0)	-18.6 (11.0)	43.9 (19.1)	21.8 (3.2)	57.7 (5.1)	-17.9 (8.7)	49.0 (13.9)	24.2 (1.2)	54.0 (3.9)	-31.4 (16.2)	3.26 (1.68)
21	25.5 (3.2)	46.3 (8.5)	-21.4 (10.4)	49.6 (15.0)	23.3 (3.6)	57.2 (8.2)	-22.8 (6.8)	53.7 (9.1)	24.5 (1.2)	56.6 (3.6)	-41.7 (13.9)	3.85 (1.32)
22	25.7 (3.0)	45.1 (9.0)	-24.6 (7.5)	54.5 (9.9)	25.0 (3.6)	53.6 (8.6)	-28.3 (4.9)	57.0 (4.2)	24.7 (1.3)	55.0 (5.4)	-43.7 (11.9)	4.06 (1.09)
23	25.8 (3.5)	45.3 (8.3)	-21.2 (7.9)	54.2 (12.4)	23.8 (2.9)	58.7 (4.1)	-23.6 (4.2)	57.3 (6.1)	24.9 (1.3)	56.8 (3.6)	-40.2 (10.4)	4.10 (1.23)
24	24.4 (2.5)	53.6 (5.7)	-18.8 (9.5)	47.3 (12.3)	22.8 (2.5)	62.4 (2.9)	-23.4 (6.1)	56.8 (7.7)	24.7 (1.2)	58.9 (3.6)	-40.9 (12.4)	3.97 (1.18)
25	23.1 (1.1)	55.8 (3.2)	-17.2 (8.3)	45.8 (11.2)	22.2 (2.0)	61.3 (3.5)	-24.5 (5.6)	56.9 (7.5)	24.6 (1.2)	56.3 (4.3)	-39.3 (11.6)	3.92 (1.21)
26	23.1 (1.2)	51.2 (3.9)	-12.1 (7.4)	39.4 (12.3)	21.7 (2.1)	57.4 (5.0)	-21.1 (7.1)	55.7 (9.5)	24.6 (1.3)	52.5 (4.8)	-36.9 (11.5)	3.79 (1.29)
27	23.7 (1.0)	48.7 (4.3)	-9.5 (8.4)	34.7 (13.6)	21.5 (2.3)	53.4 (4.4)	-19.8 (10.0)	49.0 (10.9)	24.6 (1.2)	49.7 (5.0)	-31.7 (14.2)	3.59 (1.65)
28	23.6 (0.9)	46.9 (3.8)	-7.4 (6.6)	33.1 (10.5)	21.6 (2.1)	52.2 (4.1)	-19.4 (10.3)	48.3 (10.5)	24.4 (1.3)	48.6 (5.0)	-32.9 (13.8)	3.56 (1.52)
29	23.2 (0.6)	43.4 (5.5)	-5.3 (5.1)	25.6 (8.9)	20.4 (1.6)	47.1 (8.0)	-14.7 (8.4)	45.8 (11.2)	24.0 (1.1)	43.4 (8.5)	-25.3 (12.0)	2.99 (1.59)
30	23.7 (0.7)	45.0 (5.7)	-5.7 (5.3)	26.3 (11.0)	20.6 (2.0)	47.3 (7.3)	-15.2 (11.8)	44.6 (18.0)	24.4 (1.1)	45.7 (5.4)	-26.4 (17.0)	2.88 (1.83)
Mean	23.5	52.7	-14.9	39.9	21.7	59.9	-18.5	49.8	24.1	56.3	-31.6	3.28
n	30.0	30.0	30.0	30.0	30.0	30.0	30.0	29.0	29.0	29.0	30.0	29.0
SD	1.2	8.8	5.5	9.5	1.4	7.5	5.1	6.4	1.0	6.0	7.8	0.72
Min	21.7	41.4	-24.6	23.2	19.6	47.1	-28.3	39.1	20.8	43.4	-50.0	1.83
Max	25.8	72.7	-5.3	54.5	25.0	77.2	-7.9	65.1	25.9	70.6	-17.7	4.68

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Table E3. Daily means (SD) of environmental parameters at Site OK4B for October, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	23.5 (1.5)	43.4 (4.7)	-10.2 (10.3)	36.3 (17.0)	21.2 (1.9)	48.4 (5.8)	-11.1 (9.9)	42.3 (13.6)	24.2 (1.2)	45.8 (5.7)	-26.6 (13.7)	3.03 (1.70)
2	22.3 (0.8)	47.1 (3.8)	-12.3 (7.6)	32.6 (13.8)	22.3 (1.2)	50.2 (5.5)	-12.5 (8.7)	33.8 (14.7)	24.3 (1.1)	47.8 (5.2)	-31.3 (16.5)	3.06 (1.69)
3	22.6 (1.1)	49.2 (2.6)	-13.1 (7.4)	37.6 (13.0)	22.5 (1.1)	52.5 (3.7)	-11.8 (7.6)	38.8 (11.7)	24.2 (1.4)	49.8 (4.5)	-33.7 (12.1)	3.64 (1.39)
4	22.8 (1.1)	50.3 (3.6)	-15.3 (7.7)	39.6 (12.1)	23.0 (1.4)	53.6 (4.4)	-18.3 (12.2)	41.6 (14.1)	24.5 (1.5)	49.5 (4.1)	-39.1 (12.8)	4.01 (1.37)
5	21.8 (0.6)	60.8 (5.2)	-10.6 (5.4)	30.8 (9.2)	21.5 (0.5)	64.6 (5.2)	-13.8 (7.0)		23.1 (0.4)	64.4 (5.5)	-31.7 (4.7)	2.72 (0.33)
6	21.6 (0.7)	58.8 (4.7)	-8.3 (5.6)	27.1 (9.4)	21.4 (0.7)	62.2 (5.8)	-6.7 (5.7)	27.2 (11.5)	21.9 (0.7)	65.1 (6.3)	-16.6 (12.6)	
7	21.5 (1.1)	48.5 (6.2)	-5.7 (4.4)	24.7 (11.2)	21.7 (1.3)	49.7 (5.6)	-6.4 (6.9)	28.7 (15.4)	22.2 (1.1)	49.3 (10.0)	-16.0 (12.8)	1.96 (1.49)
8	21.8 (1.2)	52.1 (3.4)	-9.9 (7.5)	31.3 (15.6)	22.3 (2.1)	53.8 (3.8)	-10.7 (10.4)	36.3 (20.5)	22.6 (1.4)	54.9 (6.1)	-19.1 (14.1)	2.07 (1.44)
9	22.5 (0.8)	49.8 (4.4)	-16.2 (9.3)	35.6 (13.6)	23.5 (2.2)	50.4 (5.0)	-17.2 (12.4)		23.4 (1.1)	52.3 (7.2)	-30.8 (18.1)	2.54 (1.45)
10	22.6 (1.0)	49.8 (5.8)	-15.2 (6.8)	42.0 (12.8)	23.9 (3.6)	48.7 (11.0)	-20.3 (7.9)	51.0 (15.9)	23.7 (1.1)	51.2 (4.0)	-33.9 (13.8)	2.91 (1.29)
11	21.9 (0.5)	62.6 (6.3)	-12.8 (6.5)	30.9 (9.3)	21.6 (0.6)	66.0 (6.3)	-13.8 (8.7)	32.3 (11.1)	23.1 (0.4)	65.1 (5.8)	-30.6 (13.0)	2.20 (0.74)
12	21.7 (0.5)	72.9 (2.5)	-12.7 (11.5)		21.3 (0.5)	75.4 (2.2)	-15.2 (10.9)		23.2 (0.2)	73.2 (1.8)	-43.8 (17.5)	2.39 (0.25)
13	20.9 (1.0)	55.0 (5.5)	-6.0 (2.3)	16.3 (3.6)	20.3 (0.8)	57.0 (6.2)	-3.8 (2.7)		22.7 (0.6)	57.8 (4.1)	-10.9 (13.9)	1.23 (0.91)
14	20.6 (1.2)	54.3 (5.0)	-4.3 (1.2)	15.7 (0.3)	20.5 (1.4)	53.1 (5.1)	-2.8 (1.0)		22.7 (0.3)	58.2 (1.7)	-10.8 (9.0)	1.02 (0.82)
15	20.9 (0.9)	51.7 (3.8)	-4.7 (3.1)	18.5 (5.5)	21.5 (1.4)	52.9 (3.8)	-4.2 (3.7)	18.3 (5.3)	22.8 (0.4)	57.0 (2.9)	-19.5 (14.5)	1.37 (0.88)
16	21.0 (0.8)	50.3 (4.8)	-12.8 (11.7)	24.1 (9.9)	21.3 (0.8)	53.7 (5.0)	-12.5 (10.9)	24.8 (12.2)	22.8 (0.6)	54.6 (3.2)	-24.7 (17.5)	1.55 (0.92)
17	21.2 (1.0)	50.4 (8.1)	-12.2 (6.0)	28.5 (12.8)	21.1 (1.7)	52.2 (8.0)	-13.8 (6.0)	32.4 (15.0)	23.3 (0.8)	50.7 (7.0)	-26.5 (15.0)	2.03 (1.03)
18	21.3 (1.1)	54.0 (4.9)	-14.0 (6.9)	34.3 (16.3)	21.6 (2.4)	57.1 (5.0)	-16.8 (7.1)	38.9 (18.6)	23.6 (1.1)	53.5 (5.0)	-37.7 (20.1)	2.60 (1.57)
19	22.1 (1.3)	47.7 (7.2)	-13.9 (9.5)	37.7 (16.1)	22.9 (2.1)	49.8 (7.9)	-14.4 (8.4)	40.5 (16.3)	23.6 (1.2)	50.2 (7.1)	-36.9 (10.0)	2.89 (1.28)
20	21.2 (0.7)	55.1 (4.3)	-12.9 (9.8)	24.9 (9.0)	21.2 (0.6)	58.2 (5.1)	-11.9 (8.3)	24.4 (4.0)	22.8 (0.4)	57.9 (3.2)	-38.8 (15.8)	2.02 (0.53)
21	21.4 (0.8)	61.2 (4.0)	-14.3 (5.0)	33.1 (12.4)	21.9 (1.0)	63.3 (3.2)	-13.9 (6.1)	34.1 (15.3)	23.4 (0.9)	61.0 (4.4)	-41.4 (13.5)	2.69 (1.15)
22	20.5 (0.6)	50.6 (7.5)	-14.1 (8.1)	15.8 (6.1)	19.7 (1.7)	53.2 (7.2)	-22.1 (7.0)	17.5 (4.9)	22.8 (0.3)	51.2 (4.4)	-11.6 (12.5)	1.23 (0.76)
23	20.0 (0.7)	53.6 (3.8)	-6.3 (6.8)		16.9 (1.1)	55.5 (5.1)	-21.3 (3.1)	19.5 (0.7)	22.9 (0.3)	51.0 (2.1)	-7.2 (6.8)	1.02 (0.52)
24	20.1 (1.2)	48.6 (12.9)	-8.6 (5.6)	17.5 (10.1)	18.6 (2.5)	50.6 (10.4)	-16.2 (5.9)	22.1 (5.0)	22.7 (0.4)	49.8 (6.4)	-19.9 (13.6)	1.39 (0.74)
25	20.8 (1.0)	47.0 (10.0)	-7.8 (5.2)	24.0 (12.4)	20.3 (2.7)	47.4 (10.0)	-12.4 (6.3)	29.1 (14.5)	23.7 (1.3)	45.1 (9.4)	-20.9 (11.7)	1.88 (1.00)
26	20.8 (1.0)	45.6 (6.4)	-11.4 (6.2)	18.8 (7.6)	20.8 (1.7)	48.6 (5.6)	-14.9 (7.0)	19.3 (5.7)	22.8 (0.2)	47.8 (3.6)	-14.3 (9.1)	1.34 (0.73)
27	20.0 (1.2)	46.6 (12.6)	-9.8 (9.3)	16.5 (9.7)	19.0 (2.3)	48.1 (10.2)	-17.2 (6.8)	21.7 (6.7)			-19.5 (19.0)	
28	20.4 (1.1)	48.4 (10.7)	-8.2 (5.2)	18.8 (10.7)	19.2 (2.5)	48.7 (9.2)	-18.0 (6.4)	23.9 (6.6)	20.8 (1.5)		-15.2 (10.7)	1.04 (0.55)
29	21.0 (1.3)	47.7 (10.0)	-9.9 (5.5)	24.1 (12.6)	20.4 (2.8)	49.1 (9.8)	-15.0 (5.4)	29.4 (13.2)	21.5 (2.0)		-22.9 (14.6)	1.57 (0.95)
30	21.4 (1.3)	48.4 (8.5)	-11.5 (5.4)	28.1 (13.0)	22.1 (2.2)	49.0 (9.4)	-10.3 (6.0)	28.2 (13.1)	22.9 (1.3)		-25.9 (17.5)	1.52 (0.84)
31	21.6 (1.1)	42.9 (7.2)	-11.0 (5.1)	28.1 (11.6)	22.2 (1.9)	43.7 (7.3)	-11.8 (6.0)	30.7 (14.8)	22.8 (1.4)		-24.2 (13.2)	1.72 (1.05)
Mean	21.4	51.8	-10.8	27.4	21.2	53.8	-13.3	30.3	23.0	54.4	-25.2	2.09
n	31.0	31.0	31.0	29.0	31.0	31.0	31.0	26.0	30.0	26.0	31.0	29.0
SD	0.8	6.2	3.2	7.8	1.5	6.6	4.8	8.4	0.8	6.7	9.9	0.79
Min	20.0	42.9	-16.2	15.7	16.9	43.7	-22.1	17.5	20.8	45.1	-43.8	1.02
Max	23.5	72.9	-4.3	42.0	23.9	75.4	-2.8	51.0	24.5	73.2	-7.2	4.01

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Table E3. Daily means (SD) of environmental parameters at Site OK4B for November, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	22.4 (2.6)	44.0 (8.3)	-15.5 (9.5)	33.4 (19.3)	22.9 (2.7)	46.6 (7.7)	-12.7 (7.3)	30.0 (15.9)	22.7 (1.3)		-29.6 (15.6)	1.90 (0.91)
2	22.8 (2.9)	41.8 (14.0)	-15.1 (8.6)	35.2 (19.8)	23.0 (3.1)	44.8 (13.7)	-13.6 (7.0)	31.2 (16.2)	22.7 (1.2)		-31.8 (13.8)	2.00 (0.91)
3	22.6 (1.6)	47.9 (7.0)	-12.4 (6.9)	34.3 (13.9)	22.5 (1.8)	51.5 (6.6)	-14.6 (6.2)	33.7 (13.2)	23.0 (1.4)		-41.9 (8.5)	2.34 (0.49)
4	23.3 (2.1)	50.2 (11.3)	-15.5 (7.5)	41.7 (17.7)	23.4 (2.5)	52.0 (12.1)	-14.9 (7.9)	40.5 (16.8)	23.8 (2.1)		-38.6 (11.6)	2.81 (0.97)
5	21.3 (1.0)	43.3 (12.8)	-6.7 (6.1)	26.6 (13.5)	21.4 (0.9)	45.9 (11.6)	-6.6 (7.2)		22.1 (0.7)	45.7 (12.1)	-24.5 (13.8)	2.18 (0.77)
6	20.2 (0.9)	43.0 (12.8)	-6.5 (5.4)	15.4 (7.8)	20.5 (1.1)	44.6 (12.1)	-9.4 (8.0)	17.3 (9.3)	22.5 (0.3)	41.6 (7.4)	-16.4 (12.6)	1.33 (0.70)
7	20.2 (1.1)	38.5 (13.6)	-6.7 (5.9)	19.1 (12.0)	21.0 (1.1)	42.3 (12.9)	-2.8 (4.5)		22.6 (0.6)	40.9 (8.9)	-24.8 (18.9)	1.44 (0.74)
8	20.5 (1.1)	43.5 (9.7)	-7.7 (5.2)	19.9 (11.8)	21.9 (1.6)	48.8 (11.4)	-4.4 (6.2)		22.9 (0.5)	45.4 (5.5)	-28.9 (21.3)	1.45 (0.73)
9	20.1 (1.0)	47.4 (10.0)	-10.4 (6.4)	17.2 (9.7)	20.4 (1.2)	49.3 (8.8)	-12.4 (8.5)	16.1 (9.0)	22.7 (0.5)	49.5 (4.3)	-30.4 (19.2)	1.37 (0.64)
10	20.7 (0.9)	50.4 (8.8)	-10.0 (7.1)	18.5 (8.2)	20.4 (1.0)	52.2 (9.0)	-12.4 (8.8)	18.7 (7.8)	22.7 (0.7)	51.4 (6.9)	-36.6 (23.6)	1.59 (0.70)
11	20.4 (1.0)	51.5 (7.7)	-8.3 (6.2)	14.4 (6.7)	20.4 (0.9)	53.6 (6.4)	-13.2 (10.3)	14.9 (7.8)	22.5 (0.3)	52.0 (2.8)	-18.5 (12.4)	1.26 (0.68)
12	20.1 (1.1)	50.9 (10.5)	-7.5 (5.7)	17.6 (11.0)	20.8 (1.0)	51.7 (9.3)	-7.7 (7.7)	17.7 (11.5)	22.5 (0.6)	49.9 (5.9)	-29.8 (20.9)	1.51 (0.77)
13	20.6 (1.1)	46.8 (10.4)	-9.3 (6.1)	22.2 (13.4)	21.3 (1.3)	48.6 (10.9)	-10.0 (8.5)	26.2 (16.4)	23.1 (1.1)	46.2 (7.6)	-33.6 (18.8)	1.76 (0.74)
14	20.1 (0.8)	48.9 (8.1)	-11.3 (7.4)	13.7 (6.0)	20.4 (0.7)	50.3 (7.8)	-14.4 (9.6)	13.7 (5.7)	22.6 (0.2)	49.6 (3.3)	-13.9 (11.3)	1.15 (0.61)
15	19.5 (1.3)	45.4 (12.0)	-6.7 (5.8)	12.3 (6.4)	19.7 (1.2)	46.0 (9.6)	-9.5 (8.9)	12.5 (6.6)	22.5 (0.4)	45.7 (4.7)	-13.5 (8.8)	1.04 (0.56)
16	20.5 (1.9)	38.7 (13.8)	-8.0 (5.6)	23.5 (15.9)	21.1 (1.7)	40.6 (12.6)	-7.9 (6.8)	24.6 (16.3)	23.1 (1.1)	40.7 (8.0)	-28.6 (19.2)	1.56 (0.81)
17	20.1 (0.8)	47.4 (8.5)	-8.6 (5.8)	14.8 (6.8)	20.9 (1.0)	50.3 (7.8)	-11.8 (8.8)	17.3 (9.2)			-18.7 (20.2)	
18	20.6 (2.1)	44.4 (13.6)	-9.6 (6.8)	24.4 (18.5)	21.4 (1.8)	47.0 (12.4)	-10.6 (8.0)	24.0 (16.0)	21.5 (1.1)	43.0 (6.9)	-23.6 (16.0)	1.28 (0.81)
19	21.9 (2.5)	38.1 (11.7)	-13.9 (9.1)	31.5 (20.6)	22.1 (2.4)	40.8 (10.5)	-13.7 (8.6)	31.2 (19.8)	21.9 (1.5)	40.4 (7.4)	-23.6 (17.9)	1.44 (0.78)
20	19.1 (1.2)	49.7 (7.1)	-8.7 (4.9)		19.7 (1.0)	55.1 (7.8)	-8.5 (6.1)		20.5 (0.4)	45.3 (2.4)	-9.1 (6.2)	0.85 (0.57)
21	18.4 (1.8)	46.8 (8.4)	-8.2 (5.2)	10.0 (5.4)	19.3 (1.6)	50.9 (8.3)	-8.9 (7.6)		20.6 (0.4)	46.1 (2.4)	-16.4 (8.6)	0.82 (0.58)
22	19.2 (2.1)	45.4 (11.7)	-5.7 (4.4)	13.3 (7.9)	19.9 (1.9)	48.3 (11.2)	-8.8 (8.6)	14.5 (10.1)	21.0 (0.9)	44.2 (4.0)	-17.3 (11.2)	1.02 (0.60)
23	20.0 (1.3)	43.2 (12.6)	-8.0 (5.5)	16.5 (11.0)	20.3 (1.2)	47.2 (12.7)	-7.6 (6.2)	15.4 (10.2)	21.1 (0.9)	44.5 (6.4)	-18.0 (12.1)	1.16 (0.56)
24	20.0 (1.0)	44.5 (10.4)	-7.4 (6.2)	14.4 (8.8)	20.5 (1.1)	47.1 (9.9)	-8.2 (8.5)	14.8 (9.6)	21.4 (0.8)	46.1 (5.7)	-18.2 (12.8)	1.08 (0.68)
25	20.2 (1.2)	41.5 (10.7)	-6.5 (5.3)	17.1 (11.1)	20.7 (1.4)	43.2 (10.7)	-7.6 (7.3)	18.7 (11.7)	21.8 (1.1)	41.7 (8.1)	-24.2 (19.8)	1.17 (0.73)
26	20.0 (1.1)	39.3 (10.8)	-7.3 (5.0)	17.1 (11.1)	20.5 (1.4)	40.9 (9.8)	-7.7 (5.6)	15.4 (8.9)	21.8 (0.9)	39.2 (6.3)	-24.1 (17.8)	1.23 (0.69)
27	19.6 (0.6)	48.7 (6.8)	-7.8 (6.1)	11.3 (5.8)	20.1 (0.9)	51.2 (7.0)	-7.0 (5.1)	10.7 (3.6)	21.9 (0.4)	46.9 (2.7)	-13.7 (7.5)	0.94 (0.45)
28	19.4 (0.4)	58.2 (6.3)	-6.5 (5.5)	10.2 (5.4)	20.1 (0.4)	59.2 (5.9)	-4.1 (3.3)	9.5 (3.4)	22.0 (0.2)	53.4 (1.4)	-16.4 (8.6)	0.96 (0.52)
29	20.1 (0.9)	50.4 (9.0)	-7.3 (5.7)	11.3 (6.0)	19.7 (0.9)	52.3 (6.2)	-10.5 (6.6)	11.2 (4.5)	22.0 (0.4)	48.0 (3.9)	-12.0 (9.3)	1.02 (0.59)
30	20.0 (0.9)	46.3 (7.3)	-8.9 (6.6)	11.9 (5.9)	19.4 (0.9)	46.9 (7.9)	-13.3 (7.3)	10.7 (4.0)	21.8 (0.4)	45.3 (2.8)	-8.5 (6.7)	0.96 (0.41)
Mean	20.5	45.9	-9.1	19.6	20.9	48.3	-9.8	19.6	22.2	45.7	-22.8	1.40
n	30.0	30.0	30.0	29.0	30.0	30.0	30.0	25.0	29.0	25.0	30.0	29.0
SD	1.1	4.4	2.8	8.3	1.1	4.3	3.2	8.1	0.8	3.7	8.6	0.47
Min	18.4	38.1	-15.5	10.0	19.3	40.6	-14.9	9.5	20.5	39.2	-41.9	0.82
Max	23.3	58.2	-5.7	41.7	23.4	59.2	-2.8	40.5	23.8	53.4	-8.5	2.81

ED_004549_00015840-00120

Table E3. Daily means (SD) of environmental parameters at Site OK4B for December, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	19.3 (1.1)	48.4 (10.9)	-7.3 (5.5)	11.6 (6.1)	19.6 (1.5)	49.7 (8.8)	-7.9 (5.4)	10.9 (5.3)	21.9 (0.7)	47.2 (3.6)	-15.8 (10.2)	1.08 (0.50)
2	20.2 (2.1)	42.6 (13.9)	-8.8 (5.5)	22.5 (15.1)	20.5 (2.1)	46.4 (12.2)	-7.2 (6.1)	21.2 (14.3)	22.7 (1.1)	43.1 (8.2)	-34.1 (21.6)	1.56 (0.71)
3	19.1 (1.5)	45.7 (8.0)	-11.4 (7.2)	11.0 (5.4)	19.3 (1.2)	51.5 (9.0)	-11.3 (8.1)	11.9 (5.6)	21.9 (0.6)	46.5 (3.4)	-10.6 (9.5)	0.98 (0.56)
4	17.3 (1.5)	48.2 (8.7)	-5.3 (3.2)	8.4 (3.6)	18.5 (1.5)	53.9 (8.5)	-3.6 (1.7)		22.2 (0.2)	49.9 (2.1)	-14.4 (10.7)	0.84 (0.68)
5	18.3 (1.8)	45.8 (9.1)	-4.8 (4.5)	9.8 (5.1)	19.3 (1.3)	51.8 (9.1)	-5.4 (6.0)		22.2 (0.2)	48.4 (3.7)	-17.1 (12.1)	0.99 (0.73)
6	19.4 (1.6)	45.1 (10.4)	-6.0 (5.1)	13.1 (6.9)	20.0 (1.7)	47.5 (9.3)	-7.4 (6.5)	13.4 (7.6)	22.5 (0.5)	46.3 (3.8)	-23.3 (16.6)	1.29 (0.80)
7	19.9 (1.3)	40.0 (9.9)	-7.1 (5.1)	18.3 (11.4)	19.8 (1.6)	43.0 (9.6)	-10.2 (7.7)	20.3 (10.9)	22.8 (0.7)	42.8 (5.1)	-34.1 (21.9)	1.50 (0.78)
8	20.5 (1.4)	40.9 (10.0)	-10.2 (5.8)	22.5 (14.4)	19.3 (2.2)	45.4 (7.0)	-15.1 (7.8)	24.4 (10.2)	23.0 (0.9)	42.9 (5.3)	-32.9 (24.2)	1.59 (0.83)
9	17.6 (1.1)	53.2 (6.2)	-8.1 (3.9)	7.1 (1.1)	16.0 (1.8)	59.4 (6.0)	-24.4 (2.3)	18.9 (1.0)	22.4 (0.6)	52.3 (3.8)	-9.6 (14.0)	0.81 (0.68)
10	18.5 (1.4)	51.6 (8.0)	-5.1 (5.3)	9.7 (5.1)	15.3 (3.5)	55.3 (6.9)	-21.4 (3.5)	20.3 (1.2)	23.1 (0.5)	51.4 (2.8)	-25.4 (18.8)	1.19 (0.78)
11	19.6 (1.6)	48.5 (9.4)	-6.0 (4.9)	13.1 (7.0)	18.5 (2.5)	50.3 (7.5)	-21.2 (3.2)	22.3 (5.0)	23.4 (0.6)	49.9 (3.1)	-38.1 (23.2)	1.50 (0.73)
12	19.4 (0.9)	50.3 (8.4)	-10.1 (6.8)	11.6 (5.9)	17.9 (1.7)	53.2 (6.1)	-21.7 (2.9)	18.9 (1.6)			-23.8 (17.0)	
13	20.8 (1.0)	41.5 (8.9)	-7.7 (6.3)		19.8 (1.8)	44.5 (7.9)	-13.0 (9.7)		22.7 (0.5)	48.9 (7.2)	-30.3 (21.1)	1.17 (0.76)
14	18.3 (1.6)	45.1 (4.5)	-9.5 (5.6)	11.3 (6.4)	15.6 (3.2)	51.1 (6.3)	-21.9 (3.9)	18.9 (0.9)	22.8 (0.7)	43.8 (4.7)	-11.6 (12.3)	0.67 (0.57)
15	16.2 (0.7)	52.5 (7.0)	-4.3 (1.5)	7.1 (0.1)	11.4 (1.7)	56.4 (6.1)	-22.7 (1.6)	19.9 (0.4)	23.4 (0.5)	45.2 (4.2)	-12.1 (11.9)	0.59 (0.59)
16	17.7 (1.9)	47.3 (8.1)	-6.0 (4.1)	9.5 (5.1)	15.5 (3.7)	49.7 (6.8)	-16.1 (9.1)	17.0 (4.5)	22.6 (0.9)	49.0 (5.1)	-16.1 (10.4)	0.68 (0.47)
17	17.8 (1.7)	54.1 (6.8)	-4.4 (3.0)	7.8 (2.9)	18.4 (1.3)	55.8 (7.0)	-2.8 (2.0)	7.3 (1.4)	22.1 (0.7)	55.6 (2.7)	-14.6 (10.8)	0.72 (0.47)
18	19.0 (1.8)	50.1 (12.8)	-5.9 (6.7)	16.2 (10.3)	19.6 (1.6)	51.2 (10.2)	-3.7 (8.3)		22.9 (0.5)	49.4 (7.6)	-29.8 (23.8)	1.17 (0.76)
19	19.4 (0.8)	44.8 (9.3)	-8.8 (7.4)	12.6 (6.3)	19.9 (1.0)	50.5 (9.4)	-7.8 (8.7)	11.0 (5.8)	22.7 (0.3)	46.9 (3.4)	-24.0 (17.9)	0.97 (0.70)
20	18.9 (1.5)	44.2 (7.9)	-6.4 (4.8)	9.0 (4.3)	16.9 (2.6)	47.9 (6.7)	-16.9 (8.9)	16.9 (4.7)	22.7 (0.3)	46.9 (3.4)	-14.2 (13.5)	0.72 (0.61)
21	17.3 (0.9)	48.4 (9.0)	-3.8 (1.1)	7.2 (0.0)	13.0 (2.6)	52.9 (7.3)	-22.0 (1.3)	19.8 (0.3)	22.5 (0.4)	53.0 (2.5)	-14.8 (13.5)	0.69 (0.63)
22	16.7 (0.7)	44.1 (6.7)	-7.2 (3.6)	7.0 (0.1)	14.2 (2.3)	51.6 (4.6)	-23.1 (4.0)		22.6 (0.3)	51.6 (2.6)	-26.5 (15.9)	0.91 (0.68)
23	18.7 (1.8)	42.7 (10.5)	-4.3 (6.8)		18.2 (2.4)	50.2 (8.7)	-6.6 (8.4)		23.1 (0.5)	47.7 (4.6)	-25.7 (19.2)	1.13 (0.78)
24	18.3 (1.8)	44.3 (12.7)	-7.0 (5.2)	10.8 (5.8)	18.0 (2.0)	47.5 (11.4)	-12.3 (9.9)	14.1 (6.3)	23.1 (0.4)	49.8 (6.1)	-18.3 (14.5)	0.89 (0.63)
25	19.8 (1.2)	44.2 (7.1)	-8.6 (6.1)	15.2 (7.4)	18.0 (2.0)	47.5 (5.8)	-18.0 (7.0)	18.9 (1.1)	23.2 (0.2)	48.2 (3.0)	-30.6 (18.9)	1.27 (0.76)
26	20.2 (0.8)	44.7 (10.2)	-6.5 (7.1)		18.8 (1.9)	47.0 (9.4)	-12.4 (9.8)		23.5 (0.5)	47.5 (5.7)	-38.8 (25.7)	1.40 (0.73)
27	19.0 (1.3)	44.4 (8.6)	-7.1 (5.0)	9.4 (4.7)	15.5 (1.4)	48.1 (6.1)	-23.4 (2.5)	18.8 (0.7)	23.3 (0.4)	49.6 (2.9)	-11.5 (11.8)	0.76 (0.60)
28	19.0 (1.9)	43.3 (12.5)	-5.9 (5.3)	12.6 (7.4)	16.3 (3.4)	43.5 (10.4)	-22.6 (5.3)	21.1 (4.2)	23.4 (0.4)	47.6 (7.2)	-22.2 (17.9)	1.08 (0.77)
29	19.6 (1.2)	41.7 (11.0)	-7.1 (5.1)	16.4 (11.2)	18.7 (2.6)	43.0 (8.3)	-14.5 (7.6)	20.8 (8.8)	23.6 (0.6)	46.2 (6.0)	-33.6 (26.6)	1.27 (0.76)
30	20.2 (1.9)	39.9 (11.4)	-9.1 (6.4)	18.9 (14.9)	20.0 (1.9)	43.0 (9.3)	-8.1 (7.3)	17.5 (14.9)	23.7 (0.7)	45.4 (7.8)	-32.1 (27.1)	1.26 (0.79)
31	18.5 (1.4)	46.1 (11.5)	-8.0 (5.8)	10.3 (5.4)	18.2 (1.8)	49.7 (8.6)	-9.5 (7.1)	10.3 (5.0)	23.3 (0.3)	52.2 (3.9)	-21.8 (16.4)	0.99 (0.73)
Mean	18.9	45.9	-7.0	12.1	17.7	49.6	-14.0	17.3	22.8	48.2	-22.8	1.06
n	31.0	31.0	31.0	28.0	31.0	31.0	31.0	24.0	30.0	30.0	31.0	30.0
SD	1.1	3.8	1.9	4.3	2.2	4.1	6.9	4.3	0.5	3.1	8.7	0.29
Min	16.2	39.9	-11.4	7.0	11.4	43.0	-24.4	7.3	21.9	42.8	-38.8	0.59
Max	20.8	54.1	-3.8	22.5	20.5	59.4	-2.8	24.4	23.7	55.6	-9.6	1.59

ED_004549_00015840-00121

Table E3. Daily means (SD) of environmental parameters at Site OK4B for January, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	19.3 (1.3)	42.5 (12.3)	-7.1 (5.1)	15.3 (10.4)	19.3 (1.7)	43.9 (10.7)	-7.5 (7.1)	12.5 (8.8)	23.6 (0.3)	47.4 (6.1)	-25.2 (18.5)	1.16 (0.77)
2	19.8 (1.8)	41.6 (13.1)	-8.3 (5.5)	18.6 (14.8)	19.8 (2.1)	44.1 (10.9)	-8.1 (6.7)	18.5 (15.1)	23.9 (0.8)	47.1 (7.3)	-37.4 (28.6)	1.32 (0.76)
3	19.3 (1.7)	42.8 (9.8)	-9.1 (6.6)	14.3 (10.6)	19.2 (1.8)	46.4 (8.7)	-10.0 (8.1)	14.2 (10.1)	23.8 (0.4)	49.3 (4.6)	-18.9 (18.4)	1.05 (0.74)
4	17.5 (1.5)	45.0 (9.0)	-5.1 (1.3)	7.1 (0.1)	17.1 (1.5)	48.2 (9.4)	-5.3 (2.8)	7.5 (1.8)	23.4 (0.3)	52.0 (2.6)	-12.2 (12.9)	0.77 (0.66)
5	18.3 (1.5)	43.6 (10.4)	-5.6 (4.8)	9.6 (5.1)	18.6 (1.6)	46.4 (8.9)	-7.6 (6.4)	9.7 (4.7)			-14.4 (13.0)	
6	18.7 (1.6)	42.7 (9.8)	-7.7 (5.6)	11.0 (5.8)	18.5 (1.6)	43.5 (7.8)	-11.7 (9.3)	10.9 (5.3)	21.3 (0.4)	44.2 (7.2)	-7.5 (11.9)	0.63 (0.64)
7	19.1 (2.1)	41.0 (12.7)	-5.7 (4.7)	16.6 (12.0)	19.3 (2.2)	42.7 (11.1)	-6.1 (5.9)	16.9 (12.3)	21.9 (0.9)	42.8 (6.6)	-13.7 (14.0)	0.76 (0.71)
8	20.5 (1.6)	43.1 (12.0)	-5.0 (4.7)	18.6 (12.3)	20.2 (1.4)	45.1 (9.5)	-8.3 (7.0)	18.8 (12.1)	22.6 (0.7)	42.5 (6.4)	-25.9 (23.5)	1.07 (0.79)
9	20.9 (1.8)	52.7 (11.8)	-10.0 (9.8)		19.8 (1.0)	51.5 (7.0)	-10.0 (8.6)		22.8 (0.4)	47.4 (6.0)	-11.0 (12.2)	0.81 (0.64)
10	18.6 (1.8)	46.5 (12.5)	-7.0 (5.2)	10.7 (5.8)	18.8 (1.5)	48.9 (9.8)	-9.1 (8.3)	10.9 (5.9)	22.6 (0.8)	46.7 (3.8)	-13.5 (13.8)	0.79 (0.67)
11	18.9 (1.8)	44.2 (12.2)	-6.6 (5.0)	12.4 (6.6)	19.2 (1.7)	45.4 (11.8)	-11.2 (12.0)	13.0 (8.1)	22.9 (0.4)	46.0 (5.5)	-18.7 (15.1)	0.94 (0.69)
12	18.6 (1.4)	49.6 (8.6)	-7.6 (5.8)	9.0 (4.3)	18.4 (1.3)	49.1 (8.4)	-11.3 (9.7)	9.9 (4.7)	22.6 (0.4)	48.2 (3.1)	-9.2 (10.6)	0.74 (0.53)
13	19.9 (2.6)	52.9 (13.4)	-1.9 (3.5)		18.8 (2.1)	58.6 (16.2)	-5.2 (7.7)	11.0 (6.8)	23.1 (0.5)	47.5 (7.0)	-19.5 (16.5)	1.00 (0.73)
14	20.1 (2.5)	50.1 (10.6)	-7.2 (7.4)		18.5 (2.1)	51.6 (7.1)	-8.9 (8.8)		23.3 (0.3)	48.8 (3.2)	-19.3 (15.2)	0.94 (0.70)
15	16.3 (1.3)	53.3 (7.0)	-4.3 (1.5)	7.3 (1.3)	17.6 (1.4)	52.6 (6.2)	-3.5 (1.4)	7.2 (0.5)	22.8 (0.3)	52.9 (3.4)	-15.6 (12.3)	0.79 (0.65)
16	19.1 (1.9)	46.3 (13.0)	-5.5 (4.9)	14.7 (9.9)	19.7 (1.8)	48.1 (10.6)	-7.5 (9.9)	16.8 (10.9)	23.2 (0.8)	44.2 (5.0)	-34.5 (20.8)	1.46 (0.74)
17	19.8 (1.3)	40.6 (9.6)	-8.7 (6.9)	15.5 (9.0)	20.0 (1.1)	43.1 (8.5)	-12.9 (11.7)	15.9 (8.9)	23.3 (0.5)	41.4 (3.5)	-27.2 (17.2)	1.35 (0.75)
18	20.2 (1.4)	36.3 (13.6)	-7.8 (6.1)	21.6 (14.6)	20.2 (1.5)	38.1 (11.7)	-12.9 (9.4)	20.3 (13.0)	23.4 (0.6)	36.7 (6.3)	-36.7 (22.8)	1.56 (0.72)
19	20.5 (1.2)	33.4 (10.6)	-11.8 (6.0)	23.3 (13.6)	20.6 (1.3)	36.8 (7.6)	-14.8 (8.3)	22.2 (13.0)	23.7 (0.5)	36.4 (6.1)	-37.0 (24.2)	1.56 (0.74)
20	20.1 (1.1)	40.2 (11.3)	-6.9 (5.8)	16.5 (9.7)	20.0 (1.2)	41.3 (9.2)	-11.6 (10.6)	17.0 (10.3)	23.8 (0.5)	42.6 (5.3)	-29.0 (21.9)	1.28 (0.77)
21	20.6 (1.7)	33.4 (13.0)	-8.2 (5.8)	22.1 (15.7)	20.4 (1.7)	36.6 (9.9)	-10.0 (7.0)	20.8 (15.6)	24.1 (1.0)	37.9 (8.4)	-40.6 (30.4)	1.43 (0.73)
22	20.3 (1.8)	33.9 (12.0)	-8.9 (6.2)	22.0 (15.7)	18.8 (2.6)	32.9 (10.1)	-28.9 (21.5)	36.3 (24.9)	23.9 (0.9)	38.3 (8.0)	-42.3 (31.3)	1.43 (0.74)
23	18.9 (1.7)	42.8 (5.1)	-10.7 (6.4)		16.7 (3.0)	46.7 (9.4)	-23.1 (24.1)		23.4 (0.4)	47.8 (3.9)	-21.3 (18.6)	1.04 (0.74)
24	18.0 (1.6)	49.9 (9.2)	-5.2 (2.8)	7.4 (1.8)	18.1 (1.5)	50.7 (8.9)	-6.0 (5.1)	8.3 (3.4)	23.1 (0.3)	51.7 (2.8)	-19.0 (14.5)	0.90 (0.70)
25	17.5 (1.4)	48.9 (6.0)	-5.0 (1.5)		17.6 (1.4)	51.9 (8.8)	-3.9 (3.7)		22.8 (0.3)	52.8 (2.3)	-18.8 (13.4)	0.90 (0.70)
26	16.9 (1.2)	56.4 (6.8)	-4.8 (1.4)		17.4 (0.9)	58.5 (8.7)	-2.2 (1.7)				-10.8 (11.7)	
27	17.2 (0.8)	56.4 (6.3)	-4.3 (1.5)	7.1 (0.0)	17.4 (0.8)	56.5 (6.6)	-3.7 (1.4)	7.1 (0.3)	21.1 (0.3)	46.2 (4.1)	-9.4 (12.7)	0.65 (0.65)
28	19.3 (1.9)	46.1 (13.2)	-4.8 (4.6)	9.9 (5.0)	19.2 (1.6)	47.5 (12.6)	-8.9 (11.9)	13.3 (8.6)	21.7 (0.9)	46.5 (3.6)	-11.1 (12.3)	0.65 (0.64)
29	18.6 (1.9)	47.0 (11.2)	-4.8 (3.2)	9.0 (3.2)	19.0 (1.6)	49.0 (10.6)	-6.6 (6.5)	10.6 (5.6)	21.6 (0.5)	49.7 (5.5)	-9.9 (11.7)	0.65 (0.65)
30	19.4 (2.3)	41.3 (13.2)	-3.7 (3.0)	13.7 (9.3)	19.7 (2.1)	42.8 (11.4)	-7.1 (7.9)	16.3 (10.7)	22.2 (1.1)	44.6 (7.8)	-18.9 (17.6)	0.98 (0.79)
31	20.0 (1.8)	35.6 (13.9)	-3.6 (3.7)	15.9 (12.1)	20.4 (1.5)	38.4 (12.5)	-4.0 (5.8)		22.9 (0.6)	42.1 (9.8)	-28.4 (26.7)	1.13 (0.78)
Mean	19.1	44.5	-6.5	14.0	19.0	46.4	-9.3	14.6	22.9	45.6	-21.2	1.03
n	31.0	31.0	31.0	25.0	31.0	31.0	31.0	25.0	29.0	29.0	31.0	29.0
SD	1.2	6.2	2.2	5.0	1.0	6.1	5.4	6.2	0.8	4.5	10.1	0.29
Min	16.3	33.4	-11.8	7.1	16.7	32.9	-28.9	7.1	21.1	36.4	-42.3	0.63
Max	20.9	56.4	-1.9	23.3	20.6	58.6	-2.2	36.3	24.1	52.9	-7.5	1.56

ED_004549_00015840-00122

Table E3. Daily means (SD) of environmental parameters at Site OK4B for February, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	19.1 (1.3)	41.5 (9.9)	-7.5 (3.4)	9.0 (3.1)	19.7 (1.2)	45.6 (10.1)	-7.5 (5.8)	11.6 (6.2)	22.5 (0.6)	45.6 (2.8)	-10.2 (11.9)	0.68 (0.62)
2	19.2 (2.3)	40.3 (12.9)	-4.9 (3.6)	11.0 (6.2)	19.4 (2.0)	42.9 (10.9)	-8.9 (10.1)	13.8 (9.0)	22.9 (0.7)	44.5 (6.9)	-16.9 (15.1)	0.90 (0.73)
3	19.7 (1.8)	40.2 (12.5)	-5.0 (3.2)	14.2 (9.6)	20.0 (1.5)	44.0 (8.9)	-9.1 (10.0)	14.8 (9.4)	23.3 (0.6)	43.2 (5.3)	-26.2 (20.2)	1.18 (0.76)
4	20.3 (1.9)	38.5 (16.5)	-5.4 (4.1)	19.6 (14.6)	20.7 (1.5)	41.6 (13.2)	-6.2 (6.6)	21.4 (17.0)	23.7 (1.0)	41.6 (8.7)	-34.6 (28.9)	1.38 (0.84)
5	20.9 (1.9)	34.4 (14.5)	-6.6 (5.0)	22.0 (15.9)	21.0 (1.8)	38.2 (12.0)	-8.6 (7.3)	23.9 (16.6)	24.1 (1.3)	39.1 (9.0)	-40.6 (33.1)	1.33 (0.75)
6	21.5 (2.8)	31.0 (14.6)	-9.4 (7.9)	33.3 (28.3)	21.6 (2.7)	34.2 (14.0)	-8.7 (7.8)	32.1 (28.4)	24.0 (1.6)	35.8 (10.8)	-26.0 (14.1)	1.77 (1.09)
7	20.7 (1.1)	35.9 (9.3)	-9.1 (6.2)	21.4 (13.1)	20.4 (1.5)	37.7 (8.5)	-12.3 (7.7)	22.7 (12.2)	23.0 (0.6)	39.6 (4.5)	-29.1 (20.2)	1.51 (0.83)
8	20.5 (0.6)	53.7 (6.9)	-12.4 (5.6)	19.3 (4.5)	19.9 (0.9)	55.6 (7.2)	-19.4 (7.7)	21.2 (3.9)	22.9 (0.3)	55.0 (6.6)	-34.9 (16.1)	1.63 (0.68)
9	20.2 (0.6)	46.7 (13.8)	-3.1 (9.4)		19.9 (0.8)	50.1 (12.0)	-4.0 (11.7)		22.8 (0.3)	49.0 (8.1)	-22.0 (13.3)	1.54 (0.85)
10	20.1 (0.9)	43.4 (11.6)	-5.0 (6.5)	14.5 (10.1)	20.3 (1.1)	45.1 (11.6)	-8.4 (10.3)	15.3 (9.4)	22.8 (0.5)	44.9 (7.2)	-25.3 (18.5)	1.42 (0.83)
11	20.3 (1.0)	43.7 (11.2)	-8.3 (5.5)	13.7 (7.3)	20.3 (1.3)	47.1 (10.2)	-15.3 (9.5)	15.2 (8.0)	22.8 (0.6)	47.0 (5.0)	-16.2 (17.6)	1.20 (0.82)
12	19.4 (0.9)	46.9 (8.9)	-7.7 (5.7)	12.0 (6.7)	19.9 (0.8)	49.5 (8.4)	-9.8 (9.1)	14.2 (7.5)	22.7 (0.3)	49.2 (2.8)	-18.1 (13.7)	1.13 (0.79)
13	18.9 (1.7)	49.9 (9.6)	-7.4 (6.1)	9.3 (4.7)	19.0 (1.0)	54.5 (7.4)	-10.3 (10.1)	11.3 (5.3)	22.7 (0.3)	51.9 (2.7)	-8.4 (11.1)	0.90 (0.74)
14	18.2 (2.1)	50.3 (9.2)	-6.8 (5.1)	9.0 (4.4)	18.3 (1.5)	51.6 (8.4)	-8.0 (7.9)	10.5 (5.3)	22.7 (0.3)	51.6 (2.5)	-13.5 (10.6)	0.94 (0.74)
15	18.4 (2.1)	48.0 (10.3)	-7.7 (6.0)	10.5 (5.7)	18.3 (2.2)	49.3 (9.4)	-9.6 (9.7)	11.4 (6.6)	22.8 (0.5)	50.0 (2.5)	-12.9 (10.9)	0.96 (0.77)
16	19.2 (1.9)	46.8 (8.3)	-5.9 (6.2)		19.5 (1.7)	49.9 (8.0)	-9.3 (6.0)		22.9 (0.4)	50.0 (2.5)	-28.6 (20.2)	1.46 (0.81)
17	20.4 (1.3)	39.2 (17.0)	-2.3 (6.7)		20.6 (1.1)	44.5 (16.5)	-1.8 (8.7)		23.0 (0.7)	43.7 (10.3)	-16.4 (11.1)	1.75 (1.05)
18	20.1 (1.1)	40.9 (8.9)	-8.2 (5.9)	14.0 (6.9)	20.4 (1.2)	43.0 (8.6)	-12.5 (10.0)	15.6 (9.1)			-9.4 (10.5)	
19	19.4 (1.8)	43.9 (12.6)	-6.6 (5.2)	13.9 (7.4)	20.1 (1.5)	45.5 (10.7)	-9.4 (8.6)	15.2 (8.8)	21.5 (0.8)	48.3 (7.4)	-9.2 (7.8)	0.82 (0.52)
20	19.5 (1.8)	39.0 (13.7)	-7.8 (6.8)	17.9 (12.0)	20.1 (1.8)	41.5 (12.5)	-8.5 (8.3)	20.2 (12.8)	22.0 (1.0)	41.7 (10.5)	-17.0 (18.0)	1.10 (0.73)
21	18.6 (2.0)	40.9 (12.1)			19.6 (2.3)	50.0 (9.9)			22.5 (0.9)	43.0 (3.5)	-5.4 (8.4)	0.68 (0.68)
22	18.3 (3.8)	39.8 (14.5)			21.6 (1.9)	43.4 (14.7)			23.1 (1.1)	39.2 (7.3)	-20.2 (19.0)	1.08 (0.86)
23	20.2 (0.9)	39.9 (9.9)	-8.7 (5.5)	13.8 (6.9)	20.0 (1.1)	41.6 (9.3)	-12.4 (10.5)	15.9 (7.7)	23.3 (0.6)	41.6 (4.4)	-20.3 (16.3)	1.09 (0.80)
24	21.1 (1.5)	39.7 (10.6)	-10.0 (6.0)	22.3 (15.7)	21.8 (1.6)	42.4 (9.8)	-8.9 (6.5)	21.8 (15.9)	23.5 (0.9)	41.1 (5.9)	-27.0 (19.0)	1.57 (0.98)
25												
26												
27	19.7 (1.4)	43.3 (11.1)	-8.7 (5.9)	11.5 (6.3)	19.9 (1.4)	46.7 (9.5)	-10.1 (9.5)	13.5 (7.1)	21.6 (0.4)	46.0 (3.9)	-16.9 (14.1)	1.07 (0.76)
28	18.8 (1.9)	44.9 (10.5)	-7.0 (5.3)	8.5 (3.8)	18.8 (1.1)	47.7 (8.6)	-8.0 (5.6)	9.6 (3.1)	21.3 (0.4)	47.7 (3.7)	-8.1 (8.7)	0.85 (0.60)
Mean	19.7	42.4	-7.2	15.3	20.0	45.5	-9.5	16.7	22.8	45.2	-19.7	1.20
n	26.0	26.0	24.0	21.0	26.0	26.0	24.0	21.0	25.0	25.0	26.0	25.0
SD	0.9	5.0	2.2	5.9	0.9	5.0	3.4	5.4	0.7	4.6	9.1	0.32
Min	18.2	31.0	-12.4	8.5	18.3	34.2	-19.4	9.6	21.3	35.8	-40.6	0.68
Max	21.5	53.7	-2.3	33.3	21.8	55.6	-1.8	32.1	24.1	55.0	-5.4	1.77

ED_004549_00015840-00123

Table E3. Daily means (SD) of environmental parameters at Site OK4B for March, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	19.2 (2.1)	41.2 (12.0)	-8.7 (6.6)	12.2 (6.5)	18.9 (1.9)	41.9 (10.3)	-12.7 (11.4)	13.8 (7.9)	23.6 (3.8)	52.8 (13.5)	-15.8 (18.7)	0.84 (0.87)
2	20.1 (1.5)	37.2 (11.0)	-8.9 (5.0)	17.6 (11.5)	20.1 (1.7)	40.1 (9.1)	-11.7 (7.4)	19.5 (11.5)	25.1 (4.2)	53.3 (21.5)	-32.9 (29.0)	1.46 (1.17)
3	20.5 (1.0)	39.4 (9.8)	-9.5 (6.0)	18.8 (11.1)	19.5 (2.0)	40.7 (7.4)	-15.9 (6.5)	22.8 (7.8)	21.6 (0.9)	41.9 (5.3)	-37.3 (21.2)	1.79 (0.81)
4	23.2 (3.6)	32.8 (13.4)	-12.8 (8.2)	42.5 (27.7)	23.1 (3.6)	34.8 (12.4)	-12.5 (8.2)	43.0 (29.3)	24.1 (3.0)	35.7 (9.3)	-48.2 (25.8)	2.80 (1.47)
5	22.8 (2.7)	26.7 (13.6)	-12.5 (7.0)	42.5 (24.9)	22.7 (2.8)	28.8 (12.6)	-10.1 (7.4)	44.3 (26.3)	23.7 (2.5)	30.0 (10.0)	-50.3 (19.3)	2.92 (1.24)
6	22.0 (2.1)	33.2 (9.2)	-14.6 (6.6)	35.6 (19.5)	22.0 (2.4)	34.1 (8.2)	-16.0 (8.7)	38.0 (19.9)	23.2 (1.9)	35.4 (5.4)	-50.7 (23.0)	2.56 (1.19)
7	21.7 (1.3)	35.3 (6.3)	-7.6 (6.6)	34.7 (15.7)	21.7 (1.6)	38.1 (5.8)	-5.6 (6.7)		22.9 (1.2)	40.1 (4.8)	-47.4 (20.2)	2.55 (0.82)
8	20.9 (1.3)	37.7 (16.9)	-9.9 (6.7)	22.7 (15.2)	20.7 (1.9)	39.4 (15.7)	-13.0 (8.5)	23.7 (15.1)	22.2 (1.2)	38.7 (10.5)	-33.5 (19.4)	1.90 (0.88)
9	21.5 (1.2)	37.6 (4.0)	-5.2 (5.7)		21.2 (1.3)	40.2 (4.1)	-8.4 (10.2)		22.8 (1.6)	41.7 (3.3)	-42.6 (19.6)	2.48 (0.76)
10	19.2 (1.1)	47.9 (10.4)	-8.8 (6.3)	10.4 (5.4)	19.5 (0.8)	49.4 (9.6)	-7.6 (6.8)	10.9 (5.6)	21.2 (0.3)	48.6 (2.8)	-11.8 (10.5)	1.22 (0.84)
11	17.9 (1.8)	43.4 (9.2)	-7.5 (5.2)	9.3 (4.9)	18.4 (1.2)	45.3 (9.1)	-8.2 (7.6)	10.4 (5.5)			-17.4 (15.3)	
12	18.5 (1.7)	49.6 (8.9)	-7.9 (5.9)	10.4 (5.6)	19.0 (1.5)	50.0 (7.5)	-8.7 (6.0)	10.5 (4.3)	20.0 (1.5)	49.8 (3.8)	-10.6 (4.2)	0.63 (0.34)
13	19.0 (0.8)	55.7 (6.8)	-6.9 (5.7)	9.5 (4.8)	19.6 (0.5)	57.4 (7.1)	-5.8 (5.8)	9.9 (4.8)	21.4 (0.7)	51.5 (3.3)	-7.5 (5.6)	0.55 (0.55)
14	20.3 (1.2)	47.6 (10.3)	-10.9 (7.1)	15.6 (8.2)	20.6 (1.3)	48.4 (9.6)	-15.7 (11.4)	17.0 (9.1)	21.8 (0.7)	49.4 (5.1)	-13.8 (11.7)	0.71 (0.67)
15	20.8 (1.5)	42.6 (15.7)	-10.7 (5.8)	23.5 (15.4)	20.9 (2.0)	43.1 (13.3)	-10.6 (7.9)	21.3 (13.6)	22.3 (1.0)	43.4 (10.1)	-20.8 (15.1)	1.32 (1.00)
16	22.1 (2.7)	33.3 (15.0)	-14.5 (9.1)	32.7 (22.0)	22.0 (2.8)	35.0 (12.8)	-13.3 (8.4)	32.5 (22.5)	23.5 (1.9)	35.6 (11.6)	-25.9 (15.1)	1.86 (1.11)
17	23.4 (3.7)	32.1 (14.4)	-17.0 (9.9)	37.9 (22.6)	23.3 (3.7)	34.5 (14.0)	-17.1 (9.3)	38.5 (23.7)	24.4 (2.7)	33.8 (10.4)	-34.3 (18.2)	2.57 (1.64)
18	20.8 (1.0)	42.9 (6.9)	-14.5 (7.0)	23.2 (11.3)	20.7 (1.3)	44.3 (7.6)	-14.7 (8.7)		22.3 (0.5)	43.9 (4.0)	-25.6 (18.3)	1.63 (0.91)
19	20.4 (1.2)	44.7 (10.0)	-11.0 (5.6)	20.4 (10.4)	20.6 (1.4)	45.7 (8.1)	-13.2 (7.3)	21.4 (10.2)	22.2 (0.8)	45.6 (4.5)	-31.8 (22.1)	1.51 (0.79)
20	21.7 (1.6)	53.1 (7.5)	-12.4 (5.4)	29.0 (14.3)	21.5 (2.0)	53.3 (6.6)	-15.7 (7.6)	30.1 (14.0)	22.9 (1.3)	54.5 (4.1)	-39.9 (18.8)	2.10 (0.85)
21	23.6 (2.7)	44.2 (9.9)	-17.4 (8.2)	42.2 (19.2)	23.5 (3.0)	46.3 (9.2)	-21.1 (8.3)	43.7 (20.4)	24.4 (2.5)	48.1 (7.8)	-52.4 (14.1)	3.10 (1.23)
22	22.6 (1.3)	50.3 (5.1)	-14.0 (8.2)	37.4 (12.0)	22.6 (1.2)	53.0 (5.2)	-19.4 (9.3)		23.5 (1.3)	55.2 (4.6)	-59.6 (16.2)	2.73 (0.84)
23	21.8 (1.3)	37.2 (16.1)	-5.4 (7.0)		21.9 (1.3)	40.6 (15.3)	-5.0 (8.7)		23.2 (1.4)	42.1 (16.4)	-48.7 (22.9)	2.56 (0.74)
24	20.2 (0.8)	43.0 (12.7)	-8.9 (6.7)	15.1 (7.0)	19.4 (1.7)	42.2 (10.7)	-17.2 (8.4)	18.8 (5.4)	21.4 (0.4)	43.2 (7.9)	-25.7 (16.2)	1.63 (0.83)
25	20.3 (0.9)	39.7 (12.1)	-8.7 (6.7)	17.7 (10.8)	20.2 (1.3)	40.8 (9.8)	-9.6 (7.7)	17.1 (9.1)	21.7 (1.0)	41.3 (6.7)	-41.0 (26.0)	1.64 (0.73)
26	20.0 (0.9)	52.4 (6.8)	-11.1 (6.4)		19.7 (1.4)	53.3 (6.2)	-11.8 (9.0)		21.3 (0.5)	52.4 (3.1)	-32.6 (19.1)	1.62 (0.74)
27	16.5 (1.3)	59.6 (5.5)	-14.5 (6.8)	7.4 (2.6)	18.1 (0.9)	61.1 (6.3)	-14.5 (4.3)		20.7 (0.4)	56.6 (3.0)	-2.7 (5.7)	0.74 (0.45)
28	18.4 (2.1)	60.4 (9.4)	-7.7 (4.0)	8.2 (2.6)	19.2 (0.8)	51.9 (4.6)	-10.8 (5.8)		21.1 (0.7)	56.5 (2.8)	-12.2 (14.6)	0.93 (0.77)
29	19.9 (1.5)	55.4 (8.2)	-9.8 (6.3)	12.8 (5.1)	20.2 (1.3)	51.8 (6.5)	-11.6 (10.1)	11.8 (4.5)	21.5 (0.5)	55.5 (2.4)	-38.4 (22.5)	1.49 (0.72)
30	20.2 (0.9)	54.2 (8.0)	-11.4 (7.0)	13.0 (5.4)	20.4 (0.9)	50.6 (6.3)	-13.6 (9.1)	12.9 (5.8)	21.5 (0.6)	53.1 (2.4)	-31.5 (29.0)	1.49 (0.77)
31	20.4 (1.5)	47.2 (12.8)	-5.3 (4.9)	12.7 (5.7)	20.8 (1.5)	44.3 (11.0)	-10.4 (8.3)	13.8 (7.2)	21.6 (0.7)	47.1 (5.2)	-26.5 (19.8)	1.57 (0.81)
Mean	20.6	43.8	-10.5	22.0	20.7	44.5	-12.3	22.9	22.4	45.9	-31.3	1.76
n	31.0	31.0	31.0	28.0	31.0	31.0	31.0	23.0	30.0	30.0	31.0	30.0
SD	1.6	8.5	3.2	11.5	1.4	7.4	3.9	11.5	1.2	7.4	14.8	0.72
Min	16.5	26.7	-17.4	7.4	18.1	28.8	-21.1	9.9	20.0	30.0	-59.6	0.55
Max	23.6	60.4	-5.2	42.5	23.5	61.1	-5.0	44.3	25.1	56.6	-2.7	3.10

ED_004549_00015840-00124

Table E3. Daily means (SD) of environmental parameters at Site OK4B for April, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	20.8 (1.3)	47.8 (13.7)	-7.7 (5.4)	16.9 (8.4)	21.4 (1.2)	46.5 (10.8)	-8.0 (6.6)	17.1 (8.1)	21.8 (1.0)	49.2 (6.5)	-40.3 (22.2)	1.88 (0.71)
2	20.3 (1.1)	48.4 (9.8)	-10.1 (6.0)		20.7 (1.1)	46.7 (9.9)	-18.0 (9.7)	16.7 (7.1)	18.8 (3.8)			
3	21.2 (1.8)	45.1 (13.9)	-12.5 (6.6)		21.8 (1.9)	42.9 (11.1)	-15.7 (8.9)		22.0 (1.6)	44.3 (7.5)		
4	20.5 (1.1)	39.2 (6.9)	-6.1 (11.7)		20.6 (1.2)	39.6 (5.5)	-10.7 (12.8)		22.0 (0.8)	41.4 (4.4)		
5	19.3 (1.5)	49.8 (9.9)	-10.5 (5.6)	8.3 (3.9)	19.3 (1.1)	48.2 (7.3)	-18.2 (9.0)	9.8 (4.6)	19.5 (0.3)	44.5 (3.9)		
6	19.3 (1.7)	46.7 (13.0)	-12.6 (8.1)	15.3 (5.6)	19.9 (1.1)	45.7 (10.1)	-12.7 (10.0)	12.7 (6.0)	21.3 (1.1)	49.2 (6.6)		
7	20.4 (3.7)	36.5 (15.5)	-16.0 (7.7)	32.1 (17.4)	21.7 (2.6)	36.1 (15.1)	-10.7 (8.0)	28.6 (20.0)	22.9 (1.8)	38.3 (12.3)		
8	22.5 (2.5)	35.1 (13.2)	-14.6 (9.1)	31.2 (19.7)	22.5 (2.5)	36.2 (11.0)	-17.2 (8.1)	30.6 (16.7)	23.5 (1.3)	38.1 (7.8)		
9	20.4 (0.9)	40.4 (7.6)	-9.2 (9.3)		21.0 (0.8)	42.6 (6.4)	-11.7 (7.7)	18.3 (7.0)	22.4 (0.7)	42.5 (4.4)		
10	20.5 (1.1)	46.1 (10.4)	-11.1 (6.4)	18.6 (9.0)	21.1 (1.4)	46.3 (9.6)	-13.3 (8.3)	18.5 (9.1)	22.3 (0.4)	45.6 (5.5)	-24.3 (18.9)	1.45 (0.86)
11	19.9 (0.8)	56.3 (5.6)	-13.1 (8.6)	15.0 (6.2)	19.9 (1.0)	55.7 (5.6)	-14.7 (9.6)	15.9 (6.9)	21.8 (0.3)	51.2 (3.4)	-30.7 (12.6)	1.54 (0.70)
12	19.9 (0.6)	61.9 (3.1)	-12.3 (6.5)		19.4 (0.9)	63.8 (3.3)	-12.5 (5.8)	15.5 (4.4)	21.6 (0.2)	56.1 (1.6)	-28.7 (10.5)	1.71 (0.64)
13	20.8 (1.0)	54.2 (8.4)	-10.3 (6.0)		21.0 (1.4)	56.8 (7.6)	-10.0 (6.4)	18.8 (8.1)	22.1 (0.9)	52.4 (3.2)	-37.8 (17.6)	2.02 (0.72)
14	21.9 (1.7)	47.8 (9.7)	-12.3 (5.5)	30.4 (13.9)	22.8 (2.0)	49.5 (11.6)	-13.5 (7.7)	31.0 (17.8)	22.9 (2.0)	48.4 (6.0)	-45.5 (12.5)	2.72 (1.03)
15	22.4 (1.2)	45.5 (4.8)	-15.2 (5.7)	30.3 (10.6)	22.4 (1.2)	47.1 (4.2)	-19.9 (7.0)		22.7 (1.4)	49.1 (2.8)	-53.9 (12.0)	2.68 (0.49)
16	21.4 (0.8)	58.9 (4.2)	-15.5 (8.0)	22.1 (3.6)	21.1 (0.7)	59.9 (5.1)	-19.9 (8.6)	23.7 (4.2)	20.8 (0.6)		-54.6 (10.3)	
17	21.2 (1.0)	55.3 (11.4)	-10.2 (13.4)	24.6 (8.5)	21.0 (1.3)	55.7 (9.2)	-16.7 (11.0)	25.9 (7.6)	20.7 (1.2)		-42.5 (13.2)	
18	20.4 (1.0)	55.7 (6.1)	-12.6 (7.1)		20.4 (1.2)		-17.9 (9.2)	18.6 (7.2)	20.2 (0.5)		-26.4 (16.0)	
19	21.0 (0.9)	49.3 (10.7)	-12.4 (7.3)		20.3 (1.1)		-19.0 (11.0)	24.6 (9.4)	20.5 (0.9)		-27.3 (19.1)	
20	21.4 (1.3)	47.8 (8.3)	-10.1 (5.4)	27.8 (12.1)	21.5 (2.2)		-12.4 (6.9)	31.9 (14.8)	22.2 (2.1)		-33.0 (15.6)	
21	22.7 (2.1)	44.4 (10.4)	-14.7 (7.7)	37.4 (17.0)	23.1 (3.0)	42.9 (11.3)	-18.0 (7.2)	41.0 (19.0)	23.3 (2.1)	47.7 (7.4)	-35.0 (12.5)	3.06 (1.21)
22	23.2 (1.4)	47.1 (5.2)	-13.3 (7.0)	36.3 (13.2)	22.6 (0.8)	52.4 (4.5)	-8.4 (6.0)	32.1 (8.0)	22.8 (1.8)	56.8 (4.3)	-36.1 (9.1)	2.92 (0.41)
23	22.7 (2.2)	52.6 (6.1)	-18.8 (7.0)	38.7 (13.6)	23.4 (1.4)	54.0 (5.1)	-9.8 (8.0)	40.8 (15.1)	22.9 (1.8)	62.5 (3.9)	-29.7 (7.3)	2.81 (0.58)
24	22.8 (1.6)	45.5 (6.4)	-14.5 (6.3)	37.0 (10.7)	22.7 (2.4)	45.5 (7.4)	-23.0 (9.4)	43.1 (15.4)	21.0 (2.2)		-23.8 (15.3)	2.64 (1.27)
25	21.3 (1.0)	46.1 (6.6)	-18.3 (8.3)	30.1 (9.0)	21.5 (1.4)	47.5 (7.1)	-22.7 (10.9)	29.8 (9.5)	22.2 (0.6)	52.7 (5.1)	-10.9 (10.4)	1.07 (0.83)
26	21.6 (1.6)	49.2 (12.3)	-15.9 (7.8)	33.4 (13.5)	22.1 (1.9)	49.4 (13.8)	-18.0 (10.7)	32.4 (13.8)	22.3 (0.5)	57.7 (8.0)	-14.6 (9.9)	1.40 (0.82)
27	20.6 (1.0)	50.7 (5.4)	-21.9 (7.5)	25.3 (6.9)	20.9 (1.2)	52.4 (5.4)	-28.2 (7.5)	26.2 (7.4)	21.6 (0.6)	53.9 (3.8)	-7.3 (9.7)	0.92 (0.80)
28	20.1 (1.0)	60.8 (2.6)	-20.6 (6.1)	21.3 (5.4)	20.2 (0.8)	63.4 (4.0)	-25.5 (9.3)	21.7 (4.6)	21.7 (0.3)	62.8 (3.0)	-13.7 (9.1)	0.84 (0.75)
29	23.2 (1.7)	63.5 (3.3)	-16.3 (5.7)	38.8 (9.6)	23.3 (1.9)	66.6 (3.1)	-24.2 (9.2)	41.9 (11.8)	23.0 (1.3)	74.4 (3.1)	-32.1 (12.1)	2.29 (0.71)
30	22.5 (1.4)	60.2 (4.5)	-17.9 (5.7)	38.1 (8.9)	22.9 (1.5)	62.0 (4.9)	-22.6 (9.8)	38.6 (9.7)	22.3 (0.5)	71.7 (1.9)	-25.5 (5.8)	2.43 (0.39)
Mean	21.2	49.6	-13.5	27.7	21.4	50.2	-16.4	26.1	21.9	51.8	-30.6	2.02
n	30.0	30.0	30.0	22.0	30.0	27.0	30.0	27.0	30.0	23.0	22.0	17.0
SD	1.1	7.1	3.6	8.7	1.2	8.1	5.2	9.4	1.1	9.3	12.2	0.71
Min	19.3	35.1	-21.9	8.3	19.3	36.1	-28.2	9.8	18.8	38.1	-54.6	0.84
Max	23.2	63.5	-6.1	38.8	23.4	66.6	-8.0	43.1	23.5	74.4	-7.3	3.06

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Table E3. Daily means (SD) of environmental parameters at Site OK4B for May, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	20.6 (0.8)	59.4 (5.9)	-24.1 (4.9)		20.6 (0.6)	62.7 (6.1)	-29.8 (7.5)	25.9 (4.5)	21.7 (0.3)	62.9 (7.4)	-24.3 (11.2)	1.68 (0.70)
2	20.0 (1.0)	58.7 (2.6)	-21.6 (6.3)	20.8 (2.6)	20.0 (0.6)	60.5 (2.5)	-22.2 (6.0)	21.3 (2.8)	21.7 (0.3)	58.4 (1.7)	-25.8 (11.9)	1.46 (0.74)
3	20.3 (1.2)	56.8 (6.9)	-21.6 (5.9)	23.5 (6.3)	20.5 (1.5)	58.9 (6.7)	-28.2 (10.7)	24.0 (5.0)	21.6 (0.3)	58.9 (2.1)	-23.4 (10.1)	1.64 (0.76)
4	20.6 (1.3)	59.3 (5.6)	-19.8 (7.4)	23.6 (7.4)	20.7 (1.4)	62.7 (5.7)	-20.8 (6.6)	24.8 (8.0)	21.4 (0.5)	62.1 (2.5)	-30.7 (11.2)	1.98 (0.76)
5	21.3 (0.9)	63.0 (3.0)	-18.4 (5.8)	27.1 (8.8)	21.5 (1.1)	65.3 (2.9)	-22.7 (9.5)	25.6 (6.1)	21.2 (0.5)	69.0 (3.5)	-34.4 (4.5)	2.36 (0.33)
6	23.0 (1.6)	58.0 (6.5)	-15.8 (4.3)	38.1 (12.0)	23.3 (1.7)	60.5 (8.1)	-19.7 (7.7)	38.7 (14.1)	22.4 (1.6)	70.0 (4.8)	-35.0 (7.4)	2.69 (0.24)
7	23.5 (1.8)	60.3 (6.4)	-25.6 (7.0)	54.4 (19.0)	23.2 (1.9)	66.1 (9.2)	-22.6 (7.4)	44.4 (11.7)	23.1 (1.6)	72.9 (4.4)	-41.9 (11.1)	3.36 (0.78)
8	22.0 (1.5)	53.1 (12.9)	-33.0 (8.8)	59.0 (9.1)	23.1 (1.3)	54.2 (13.6)	-13.2 (8.7)		22.3 (1.1)	64.8 (11.9)	-31.4 (9.9)	3.08 (0.38)
9	20.7 (1.9)	42.0 (5.7)	-29.7 (16.3)	35.3 (8.9)	21.8 (1.2)	44.2 (5.6)	-23.2 (8.8)	29.8 (10.3)	21.2 (0.7)	49.7 (3.7)	-31.2 (7.6)	2.56 (0.31)
10	20.1 (0.8)	57.8 (2.7)	-25.0 (6.4)	23.1 (3.7)	20.2 (0.5)	60.8 (3.2)	-27.1 (8.8)	22.9 (4.5)	21.5 (0.4)	61.3 (2.1)	-52.2 (8.9)	2.06 (0.14)
11	20.7 (1.1)	58.0 (5.4)	-25.6 (6.2)	25.0 (4.8)	21.0 (1.0)	60.7 (4.7)	-29.4 (8.6)	26.5 (6.1)	21.2 (0.4)	63.3 (3.5)	-39.0 (8.2)	2.34 (0.37)
12	23.5 (2.1)	60.4 (7.4)	-22.6 (7.5)	42.2 (15.3)	23.7 (2.1)	65.8 (7.5)	-23.3 (7.5)	38.5 (12.5)	23.2 (2.2)	72.2 (5.0)	-49.9 (17.4)	3.16 (0.79)
13	23.4 (1.6)	46.4 (9.4)	-19.7 (6.1)	45.4 (10.1)	23.5 (1.4)	49.1 (10.7)	-13.4 (8.0)	42.2 (9.3)	22.9 (1.5)	58.4 (11.5)	-36.7 (12.5)	3.41 (0.72)
14	22.4 (1.7)	42.9 (9.5)	-24.4 (8.4)	35.4 (9.8)	22.8 (1.6)	46.1 (8.8)	-25.1 (10.7)	33.2 (11.3)	22.0 (0.9)	54.6 (13.0)	-37.9 (8.6)	2.67 (0.25)
15	23.8 (1.3)	56.6 (11.0)	-18.1 (6.8)	44.5 (9.0)	23.9 (1.1)	60.0 (11.9)	-15.4 (10.4)	42.0 (7.7)	23.3 (1.3)	70.2 (9.3)	-41.2 (10.4)	3.48 (0.80)
16	22.6 (0.9)	43.6 (6.2)	-29.6 (13.7)	27.6 (9.5)	23.2 (1.0)	47.2 (6.8)	-33.9 (18.6)	25.9 (11.7)	21.3 (0.6)	55.6 (3.0)	-31.1 (6.2)	2.72 (0.29)
17	22.7 (1.3)	48.3 (5.4)	-24.8 (12.6)	28.8 (12.4)	23.1 (1.5)	52.0 (5.8)	-25.4 (13.8)	28.2 (13.6)	22.3 (1.1)	59.5 (5.2)	-35.9 (10.0)	2.47 (0.64)
18	23.5 (1.7)	49.9 (3.9)	-26.2 (13.0)	36.6 (14.6)	24.3 (2.2)	54.0 (5.0)	-26.5 (12.7)	37.0 (16.8)	22.0 (3.3)	59.3 (9.4)	-38.2 (21.0)	3.16 (1.44)
19	23.6 (1.6)	48.3 (5.4)	-20.8 (9.9)	37.4 (10.7)	24.2 (1.8)	52.2 (5.9)	-24.4 (12.5)	35.2 (11.8)	22.0 (1.7)	62.4 (5.2)	-38.5 (11.5)	2.63 (0.52)
20	23.4 (1.5)	46.1 (4.1)	-21.3 (10.3)	35.8 (11.3)	23.9 (1.5)	48.7 (4.7)	-23.5 (13.8)	33.6 (11.2)	21.7 (1.1)	60.8 (3.8)	-35.1 (10.7)	2.53 (0.34)
21	23.5 (1.2)	51.1 (4.1)	-19.7 (10.3)	34.4 (9.5)	24.2 (1.5)	55.0 (3.7)	-23.4 (15.1)	32.7 (11.0)	22.0 (1.5)	65.5 (3.9)	-36.3 (8.5)	2.74 (0.43)
22	23.4 (1.1)	52.3 (4.3)	-21.1 (10.1)	33.0 (9.5)	23.7 (1.2)	56.2 (4.2)	-24.3 (15.2)	31.4 (11.0)	21.7 (1.1)	67.4 (2.7)	-34.8 (8.3)	2.72 (0.36)
23	23.7 (1.3)	56.0 (3.1)	-22.3 (10.0)	32.4 (9.5)	24.1 (1.4)	60.3 (3.5)	-27.1 (15.2)	31.2 (11.6)	22.3 (1.7)	70.6 (3.6)	-38.5 (7.5)	2.94 (0.49)
24	23.5 (1.3)	59.3 (2.5)	-21.5 (10.9)	32.1 (9.4)	23.7 (1.3)	64.0 (3.2)	-25.3 (14.6)	30.6 (10.7)	22.2 (1.5)	73.7 (3.5)	-35.5 (8.9)	2.79 (0.34)
25	23.7 (1.4)	59.4 (2.7)	-24.2 (10.9)	30.2 (9.5)	24.1 (1.6)	65.6 (2.5)	-28.6 (15.8)	29.3 (12.3)	22.3 (1.8)	74.2 (3.1)	-38.6 (13.8)	3.17 (0.71)
26	22.6 (0.8)	57.0 (5.2)	-33.0 (17.8)	31.6 (13.2)	22.8 (0.7)	62.2 (5.7)	-34.9 (21.1)	27.9 (13.5)	22.1 (1.2)	68.3 (8.6)	-42.5 (22.4)	2.73 (0.45)
27	22.4 (1.1)	49.5 (8.6)	-40.5 (17.8)	32.9 (16.1)	22.7 (1.2)	49.9 (9.5)	-44.1 (21.4)	30.8 (17.2)	22.9 (1.6)	52.6 (10.4)	-52.2 (14.7)	2.88 (1.06)
28	22.8 (1.3)	49.0 (5.6)	-32.1 (19.6)	37.5 (15.1)	23.0 (1.0)	50.4 (5.3)	-34.1 (21.0)	39.4 (17.8)	23.7 (1.7)	53.1 (6.9)	-48.5 (15.0)	2.92 (0.90)
29	23.4 (1.0)	48.6 (4.6)	-32.8 (17.2)	42.7 (16.3)	23.3 (1.3)	52.0 (3.8)	-32.9 (17.9)	44.1 (17.7)	24.3 (1.9)	54.9 (4.7)	-54.5 (14.8)	3.28 (1.02)
30	23.7 (1.1)	47.1 (4.0)	-31.2 (13.3)	48.2 (16.2)	23.8 (1.4)	50.9 (3.7)	-29.6 (14.9)	49.2 (18.1)	24.7 (1.7)	53.3 (5.4)	-63.4 (14.9)	3.44 (0.99)
31	24.0 (1.0)	46.2 (3.3)	-25.2 (8.6)	53.4 (9.8)	24.1 (1.3)	51.0 (4.5)	-23.0 (10.1)	54.0 (12.2)	25.6 (2.2)	51.9 (6.3)	-45.9 (11.0)	2.90 (0.47)
Mean	22.5	53.0	-24.9	35.7	22.8	56.4	-25.7	33.3	22.4	62.3	-38.9	2.71
n	31.0	31.0	31.0	30.0	31.0	31.0	31.0	30.0	31.0	31.0	31.0	31.0
SD	1.3	6.0	5.4	9.5	1.3	6.4	6.3	8.0	1.1	7.1	8.9	0.52
Min	20.0	42.0	-40.5	20.8	20.0	44.2	-44.1	21.3	21.2	49.7	-63.4	1.46
Max	24.0	63.0	-15.8	59.0	24.3	66.1	-13.2	54.0	25.6	74.2	-23.4	3.48

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Table E3. Daily means (SD) of environmental parameters at Site OK4B for June, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	23.5 (1.1)	52.7 (4.0)	-18.0 (7.4)	46.7 (7.9)	23.7 (1.3)	56.4 (6.7)	-18.9 (8.4)	47.9 (10.1)	24.4 (1.6)	59.5 (5.6)	-50.2 (15.3)	3.45 (0.71)
2	22.5 (0.7)	61.8 (3.8)	-10.4 (5.7)	36.4 (10.3)	22.0 (0.7)	67.4 (4.3)	-10.4 (5.5)	37.6 (7.7)	22.7 (1.1)	70.9 (3.8)	-37.4 (10.5)	3.12 (0.57)
3	22.1 (0.6)	56.9 (3.9)	-18.0 (10.6)	37.1 (10.7)	22.2 (0.7)	61.8 (4.7)	-10.0 (5.5)	37.6 (11.1)	22.6 (1.1)	64.8 (6.1)	-37.7 (14.1)	3.40 (1.03)
4	22.5 (1.2)	57.4 (3.6)	-27.4 (11.9)	41.1 (14.8)	23.2 (1.9)	56.6 (5.8)	-27.9 (14.8)	42.0 (18.9)	23.5 (2.2)	63.2 (3.7)	-33.1 (14.2)	3.83 (1.23)
5	23.3 (1.5)	61.3 (2.5)	-24.1 (10.5)	47.8 (14.3)	24.7 (2.3)	57.4 (4.9)	-24.0 (12.8)	49.3 (18.1)	24.6 (2.6)	66.4 (4.7)	-42.6 (10.5)	4.01 (1.15)
6												
7												
8	22.4 (1.0)	52.8 (3.1)	-27.9 (13.6)	39.6 (14.0)	22.9 (0.8)	56.6 (4.5)	-15.2 (9.1)	35.2 (13.3)	23.8 (2.2)	56.5 (5.4)	-35.5 (20.0)	2.85 (0.63)
9	23.1 (1.3)	55.3 (10.0)	-20.5 (8.0)	49.3 (10.1)	23.5 (1.3)	60.3 (11.0)	-15.1 (6.8)	47.7 (13.4)	24.1 (1.3)	63.8 (10.3)	-42.7 (12.9)	4.23 (1.12)
10	22.5 (1.0)	60.3 (7.9)	-16.8 (8.6)	41.6 (10.0)	22.3 (1.1)	65.1 (9.2)	-16.1 (10.1)	40.2 (10.7)	21.7 (2.0)	68.4 (11.5)	-32.1 (17.4)	
11	23.1 (1.1)	60.7 (2.6)	-26.3 (9.1)	40.3 (13.5)	23.1 (1.2)	65.9 (2.8)	-27.8 (13.7)	40.0 (14.3)	22.6 (1.9)	69.5 (5.5)	-32.4 (11.2)	
12	23.9 (1.1)	61.0 (3.9)	-21.9 (7.6)	49.2 (9.6)	23.6 (1.4)	67.2 (3.6)	-18.9 (7.1)	50.0 (9.6)	23.5 (1.7)	68.6 (8.0)	-37.1 (10.6)	4.40 (1.06)
13	24.0 (1.2)	64.7 (4.6)	-18.7 (10.5)	47.7 (10.8)	23.5 (1.5)	71.8 (3.8)	-19.3 (7.3)	47.6 (11.0)	23.4 (1.5)	74.0 (3.9)	-34.2 (12.6)	3.99 (1.07)
14	24.0 (1.1)	65.5 (4.9)	-24.1 (8.8)	51.3 (11.6)	23.7 (1.3)	71.8 (4.4)	-21.9 (8.5)	49.0 (12.1)	23.9 (1.9)	74.3 (7.2)	-36.8 (9.0)	3.01 (0.47)
15	24.9 (1.6)	66.4 (4.2)	-26.1 (6.2)	56.1 (6.7)	24.8 (1.7)	72.7 (3.3)	-23.7 (7.3)	55.0 (8.9)	25.4 (1.9)	74.0 (4.0)	-35.9 (5.5)	3.12 (0.64)
16	24.9 (1.5)	66.7 (2.8)	-25.9 (6.0)	54.9 (7.7)	24.6 (1.5)	72.4 (2.0)	-22.8 (6.6)	54.3 (10.6)	25.5 (2.1)	72.5 (4.0)	-32.0 (8.9)	3.50 (0.94)
17	24.5 (0.9)	57.6 (9.9)	-25.2 (4.9)	56.4 (6.5)	24.4 (1.2)	63.7 (8.9)	-24.0 (5.4)	56.5 (7.7)	25.9 (1.4)	62.2 (10.1)	-34.4 (6.5)	3.19 (0.68)
18	25.5 (1.7)	62.6 (4.3)	-27.0 (7.1)	55.1 (6.7)	25.3 (1.9)	70.1 (3.7)	-26.7 (8.1)	55.9 (9.1)	26.4 (1.7)	68.5 (3.8)	-43.5 (12.6)	4.05 (1.25)
19	24.6 (0.7)	59.0 (4.7)	-27.8 (4.2)	57.0 (3.6)	24.5 (0.8)	64.3 (4.9)	-24.5 (4.7)	56.2 (4.5)	25.5 (0.9)	63.9 (5.1)	-48.4 (3.2)	5.33 (0.12)
20	24.5 (0.7)	74.8 (2.4)	-29.1 (3.0)	57.6 (2.8)	24.2 (0.8)	80.2 (3.1)	-25.9 (6.1)	55.3 (6.2)	25.1 (1.0)	80.9 (3.4)	-48.6 (3.0)	5.31 (0.10)
21	25.1 (1.5)	67.6 (7.0)	-28.1 (2.5)	59.7 (3.3)	24.9 (1.4)	74.0 (6.3)	-24.8 (4.5)	58.4 (5.1)	26.2 (1.3)	72.4 (7.1)	-49.2 (3.3)	5.29 (0.14)
22	25.7 (1.8)	65.1 (5.1)	-27.2 (4.8)	57.6 (5.5)	25.5 (2.0)	71.9 (4.8)	-27.5 (4.9)	58.8 (5.0)	26.4 (1.8)	71.8 (5.2)	-43.8 (5.7)	5.50 (0.23)
23	25.6 (1.4)	64.6 (3.5)	-29.3 (1.5)	60.6 (1.9)	25.6 (1.8)	70.6 (3.2)	-28.8 (2.7)	61.3 (2.9)	26.1 (1.4)	72.3 (3.7)	-37.5 (2.3)	5.77 (0.13)
24	26.0 (1.7)	64.5 (3.5)	-27.5 (2.8)	60.2 (2.6)	25.9 (1.7)	70.3 (2.5)	-28.3 (2.7)	61.5 (2.6)	26.4 (1.6)	72.1 (3.3)	-37.2 (3.0)	5.78 (0.15)
25	26.3 (1.6)	61.6 (2.4)	-28.0 (2.2)	61.2 (2.3)	26.1 (1.8)	67.2 (3.0)	-28.5 (3.3)	60.5 (2.7)	26.4 (1.8)	69.7 (3.8)	-38.0 (3.5)	5.65 (0.46)
26	26.2 (1.6)	59.2 (2.6)	-27.8 (3.1)	60.8 (2.4)	26.2 (1.9)	65.7 (3.4)	-29.7 (4.1)	60.5 (3.7)	26.2 (1.7)	68.0 (3.3)	-39.9 (3.1)	5.66 (0.17)
27	25.4 (1.2)	61.7 (3.6)	-25.9 (4.0)	58.3 (4.1)	25.0 (0.9)	65.5 (4.7)	-25.6 (3.7)	59.8 (3.1)	25.1 (0.8)	70.5 (4.4)	-31.3 (5.2)	6.04 (0.18)
28	24.4 (1.4)	55.7 (7.1)	-20.7 (7.9)	52.1 (11.4)	24.1 (1.7)	60.9 (8.0)	-22.2 (7.1)	54.0 (9.4)	24.2 (1.2)	64.8 (7.9)	-36.6 (10.5)	5.35 (1.03)
29	25.1 (1.8)	59.1 (7.3)	-23.0 (7.3)	56.4 (7.3)	24.7 (1.9)	65.0 (8.7)	-24.2 (6.6)	57.1 (6.0)	25.3 (1.7)	66.3 (9.0)	-36.2 (4.2)	5.80 (0.17)
30	25.3 (1.8)	64.8 (6.5)	-24.0 (6.3)		24.8 (1.8)	71.3 (7.2)	-23.4 (6.5)	55.8 (8.3)	25.3 (1.7)	73.3 (6.2)	-34.5 (6.8)	5.59 (0.69)
Mean	24.3	61.5	-24.2	51.6	24.3	66.6	-22.7	51.6	24.7	68.7	-38.5	4.51
n	28.0	28.0	28.0	27.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	26.0
SD	1.2	4.8	4.5	7.8	1.1	5.9	5.3	7.9	1.4	5.1	5.4	1.07
Min	22.1	52.7	-29.3	36.4	22.0	56.4	-29.7	35.2	21.7	56.5	-50.2	2.85
Max	26.3	74.8	-10.4	61.2	26.2	80.2	-10.0	61.5	26.4	80.9	-31.3	6.04

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Table E3. Daily means (SD) of environmental parameters at Site OK4B for July, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$	T, °C	RH, %	ΔP, Pa	Q, $dsm^3 s^{-1}$
1	25.0 (1.6)	57.6 (3.9)	-23.5 (7.7)	55.9 (9.8)	24.7 (1.8)	63.5 (4.0)	-23.3 (8.0)	54.3 (9.5)	25.1 (1.6)	66.4 (3.8)	-32.5 (9.6)	5.38 (0.89)
2	25.2 (1.5)	56.2 (4.2)	-24.3 (5.7)	58.5 (6.3)	25.2 (1.7)	61.3 (4.3)	-25.8 (6.0)	59.4 (5.4)	25.4 (1.5)	64.6 (4.4)	-36.7 (4.2)	5.80 (0.17)
3	26.1 (1.6)	60.1 (4.7)	-24.9 (4.1)	60.7 (5.8)	26.0 (1.5)	66.4 (6.1)	-27.5 (4.3)	62.0 (4.5)	24.7 (1.7)	70.9 (6.8)	-34.4 (7.6)	5.58 (0.69)
4	26.0 (1.0)	69.9 (4.2)	-27.9 (1.1)	62.6 (1.5)	25.6 (1.0)	74.6 (4.7)	-27.2 (3.0)	61.8 (2.4)	24.7 (1.0)	82.8 (4.5)	-32.5 (5.0)	5.99 (0.19)
5	24.7 (0.9)	63.4 (3.1)	-23.1 (5.0)	57.9 (7.6)	24.4 (1.1)	68.2 (3.8)	-21.8 (3.7)	55.5 (6.2)	23.4 (0.7)	75.7 (3.9)	-28.4 (9.6)	5.29 (1.04)
6	24.6 (1.4)	64.2 (2.8)	-22.5 (6.2)	55.9 (8.7)	24.4 (1.5)	71.1 (6.1)	-20.3 (6.3)	49.0 (7.4)	23.5 (1.2)	75.9 (2.8)	-28.7 (10.4)	5.15 (1.04)
7	25.3 (2.0)	66.0 (3.6)	-21.8 (9.0)	53.9 (12.8)	25.0 (2.0)	72.4 (4.0)	-21.4 (9.2)	52.0 (12.0)	24.6 (2.0)	77.2 (3.8)	-28.7 (11.2)	5.00 (1.10)
8	26.5 (1.7)	61.9 (7.0)	-27.5 (2.2)	61.3 (2.4)	26.3 (1.7)	67.0 (6.8)	-26.2 (3.7)	57.7 (3.9)	25.6 (1.8)	73.2 (7.7)	-36.1 (3.6)	5.73 (0.13)
9	26.7 (2.0)	53.7 (6.4)	-25.2 (4.2)	59.5 (5.2)	26.4 (2.0)	58.9 (5.3)	-26.1 (4.7)	58.6 (4.6)	25.7 (1.9)	65.5 (6.3)	-36.9 (3.2)	5.75 (0.12)
10	27.1 (1.8)	55.8 (6.0)	-22.6 (6.2)	56.9 (9.5)	26.7 (2.0)	62.3 (4.9)	-24.9 (3.1)	62.1 (5.2)	26.0 (1.8)	68.7 (5.4)	-33.8 (6.1)	5.64 (0.63)
11	26.6 (1.6)	54.2 (6.7)	-20.2 (7.2)	53.0 (10.2)	26.1 (1.6)	61.5 (6.1)	-25.7 (5.3)	59.4 (6.3)	25.6 (1.8)	66.4 (6.9)	-36.6 (4.2)	5.89 (0.17)
12	26.5 (1.5)	53.2 (4.2)	-19.3 (6.2)	54.1 (10.3)	26.0 (1.6)	60.3 (4.9)	-22.9 (4.3)	57.4 (5.2)	25.6 (1.8)	65.0 (5.0)	-36.7 (3.7)	5.85 (0.19)
13	26.9 (1.6)	60.6 (6.0)	-21.0 (6.0)	53.7 (8.4)	26.4 (1.7)	67.1 (5.1)	-26.0 (5.2)	55.7 (5.4)	26.1 (1.9)	71.7 (6.2)	-36.2 (3.2)	5.81 (0.17)
14	26.7 (1.7)	57.2 (5.1)	-18.6 (6.2)	54.2 (11.4)	26.3 (1.8)	64.5 (5.4)	-27.7 (4.4)	55.1 (5.1)	25.7 (1.8)	69.5 (4.9)	-34.3 (4.3)	5.88 (0.18)
15	26.3 (1.7)	65.3 (3.2)	-19.9 (6.5)	50.6 (7.9)	25.7 (2.1)	70.6 (3.5)	-24.2 (3.4)	51.6 (3.4)	25.3 (1.8)	74.5 (3.5)	-34.3 (3.3)	5.90 (0.18)
16	25.3 (1.8)	67.7 (2.4)	-19.4 (7.3)	50.9 (11.2)	24.7 (2.0)	74.0 (2.9)	-21.4 (5.6)	53.5 (6.8)	24.1 (1.9)		-31.8 (4.6)	
17	24.2 (1.4)	67.5 (4.0)	-19.0 (6.1)	50.7 (9.5)	23.9 (1.6)	72.7 (4.0)	-20.2 (7.2)	50.9 (8.3)	23.5 (1.1)	76.3 (4.3)	-28.4 (10.4)	
18	23.8 (1.2)	65.9 (2.3)	-18.2 (8.6)	48.7 (13.2)	23.5 (1.4)	71.0 (3.1)	-19.3 (7.9)	50.0 (11.3)	23.4 (1.2)	75.1 (3.1)	-33.8 (17.5)	
19	24.8 (1.6)	65.2 (2.8)	-23.3 (8.6)	54.9 (11.3)	25.1 (1.8)	69.5 (1.8)	-24.2 (9.0)	53.8 (10.0)	24.7 (1.4)	73.1 (2.1)	-31.6 (13.0)	
20	25.6 (1.4)		-26.9 (3.1)		25.6 (1.5)		-25.1 (5.3)		25.0 (1.3)		-36.5 (2.6)	
21	24.6 (0.7)		-27.4 (2.9)	61.3 (3.4)	24.6 (0.9)		-24.5 (3.0)	58.0 (3.1)	23.9 (0.5)		-32.6 (4.1)	
22			-24.7 (5.4)				-25.3 (5.9)					
23												
24												
25												
26												
27												
28												
29												
30												
31												
Mean	25.7	61.4	-22.8	55.8	25.4	67.2	-24.1	55.9	24.8	71.8	-33.4	5.64
n	21.0	19.0	22.0	20.0	21.0	19.0	22.0	20.0	21.0	18.0	21.0	15.0
SD	0.9	5.2	3.0	3.9	0.9	4.8	2.4	3.9	0.9	4.9	2.9	0.29
Min	23.8	53.2	-27.9	48.7	23.5	58.9	-27.7	49.0	23.4	64.6	-36.9	5.00
Max	27.1	69.9	-18.2	62.6	26.7	74.6	-19.3	62.1	26.1	82.8	-28.4	5.99

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Table E4. PM concentrations.

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for August, 2007.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1									29 (13)	92 (67)	164 (88)	116 (124)
2									29 (9)	110 (35)	194 (55)	124 (51)
3									22 (21)	135 (67)	204 (76)	175 (53)
4									24 (7)	139 (53)	179 (80)	142 (37)
5									27 (11)	133 (67)	158 (76)	153 (47)
6									26 (13)	135 (54)	166 (80)	193 (76)
7									35 (19)	166 (105)	240 (129)	235 (89)
8												
9	44 (17)	160 (97)	171 (100)									
10	28 (13)	157 (68)	157 (88)									
11	29 (7)	165 (100)	139 (101)									
12												
13												
14	41 (24)	189 (113)	203 (209)									
15	39 (16)	217 (127)	169 (145)	54 (153)								
16	47 (22)	182 (132)	155 (137)									
17												
18	15 (6)	85 (54)	74 (51)									
19	16 (11)	81 (52)	76 (55)									
20	34 (8)	114 (183)	117 (240)									
21	30 (11)	86 (35)	78 (44)	31 (35)								
22	54 (72)	99 (63)	73 (87)	44 (94)								
23	32 (57)	111 (60)	101 (65)	39 (52)								
24	25 (8)	91 (42)	92 (42)	46 (26)								
25	22 (10)	74 (55)	74 (57)	52 (32)								
26	35 (64)	79 (62)	67 (68)	51 (74)								
27	16 (8)	100 (74)	109 (91)	70 (76)								
28	17 (7)	88 (54)	100 (78)	87 (70)								
29	29 (18)	89 (53)	113 (83)	114 (47)								
30	24 (9)	121 (74)	135 (91)	142 (50)								
31	29 (10)	175 (134)	155 (105)	168 (62)								
Mean	30	123	118	75					27	130	187	163
n	20	20	20	12	0	0	0	0	7	7	7	7
SD	11	43	39	42					4	22	27	39
Min	15	74	67	31					22	92	158	116
Max	54	217	203	168					35	166	240	235

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Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for July, 2007.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12									31 (17)	101 (47)	188 (104)	172 (83)
13									25 (15)	112 (52)	217 (95)	206 (112)
14									19 (11)	143 (116)	271 (462)	196 (130)
15									22 (8)	119 (105)	203 (119)	204 (114)
16									19 (8)	110 (53)	166 (86)	232 (126)
17									21 (8)	120 (75)	186 (115)	272 (145)
18									26 (11)	133 (58)	209 (162)	251 (123)
19									25 (9)	134 (81)	195 (65)	
20									27 (7)	94 (34)	175 (60)	325 (110)
21									17 (6)	87 (35)	165 (61)	336 (100)
22									21 (12)	83 (32)	141 (53)	337 (99)
23									32 (17)	113 (60)	176 (84)	375 (127)
24									34 (10)	102 (74)	181 (73)	401 (136)
25									24 (12)	100 (41)	227 (117)	440 (162)
26									20 (7)	117 (61)	232 (127)	
27									32 (26)	122 (78)	231 (120)	
28									26 (9)	97 (57)	198 (145)	
29									29 (26)	102 (53)	195 (100)	
30									28 (10)	104 (59)	194 (97)	
31									32 (22)	104 (64)	185 (108)	73 (87)
Mean									25	110	197	273
n	0	0	0	0	0	0	0	0	20	20	20	14
SD									5	15	28	98
Min									17	83	141	73
Max									34	143	271	440

ED_004549_00015840-00130

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for September, 2007.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	35 (21)	230 (180)	186 (169)	176 (73)								
2	30 (14)	249 (185)	197 (193)									
3	38 (36)	260 (233)	234 (227)									
4	32 (9)	147 (122)	155 (141)									
5	24 (13)	118 (98)	153 (117)									
6												
7					10 (6)	18 (74)	26 (131)					
8					8 (5)	13 (65)	18 (66)					
9					7 (4)	7 (131)	9 (93)					
10					7 (5)	8 (146)	11 (85)					
11					5 (4)	18 (241)	14 (280)					
12					7 (4)	29 (145)	29 (166)					
13					7 (4)	22 (108)	24 (105)					
14					5 (4)	10 (224)	9 (123)					
15					12 (6)	45 (125)	52 (131)					
16					11 (4)	9 (93)	9 (127)					
17					9 (5)	32 (64)	37 (44)					
18					7 (5)	18 (5)	19 (5)					
19					8 (4)	17 (7)	19 (6)					
20					7 (4)	16 (3)	19 (4)					
21					7 (4)	13 (4)	18 (4)					
22					11 (5)	18 (5)	23 (5)					
23					17 (5)	23 (6)	29 (7)					
24												
25												
26					7 (5)	25 (17)	30 (14)					
27					10 (4)	27 (16)	32 (13)					
28												
29	29 (10)	90 (43)	132 (69)									
30												
Mean	31	182	176		9	19	22					
n	6	6	6	1	19	19	19	0	0	0	0	0
SD	5	67	34		3	9	11					
Min	24	90	132		5	7	9					
Max	38	260	234		17	45	52					

ED_004549_00015840-00131

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for October, 2007.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1												
2	32 (25)	123 (101)	184 (118)					-12 (127)				
3	38 (16)	262 (225)	313 (232)					18 (102)				
4	19 (8)	97 (89)	161 (112)					14 (77)				
5	29 (17)	74 (53)	131 (94)					11 (43)				
6												
7	32 (13)	144 (82)	202 (80)					9 (27)				
8	29 (23)	272 (191)	330 (219)					14 (33)				
9	37 (25)	262 (228)	345 (282)					21 (104)				
10	31 (12)	260 (211)	308 (233)					26 (64)				
11	32 (13)	247 (172)	288 (169)					29 (42)				
12	25 (8)	198 (156)	233 (154)					32 (31)				
13	27 (8)	116 (51)	171 (108)					28 (34)				
14	16 (7)	226 (128)	258 (142)					32 (34)				
15	22 (16)	407 (655)	364 (257)					41 (42)				
16	38 (27)	279 (217)	336 (226)					44 (90)				
17	29 (34)	192 (155)	253 (151)					31 (94)				
18	47 (38)	288 (194)	358 (119)					47 (55)				
19	41 (27)	281 (250)	364 (201)					45 (88)				
20	48 (61)	241 (291)	261 (171)					41 (120)				
21	26 (16)	311 (248)	283 (144)					87 (59)				
22	22 (10)	282 (273)	295 (125)									
23	26 (16)	260 (255)	305 (147)	116 (71)								
24	31 (20)	240 (215)	289 (159)	133 (56)								
25	41 (23)	201 (199)	279 (170)	155 (77)								
26	36 (10)	253 (259)	318 (216)	200 (71)								
27	37 (14)	266 (268)	335 (157)	241 (73)								
28	39 (17)	243 (332)	325 (239)	191 (83)								
29	43 (39)	219 (307)	296 (208)	188 (118)								
30	52 (42)	223 (323)	296 (271)	203 (151)								
31	96 (88)	306 (307)	359 (290)	325 (140)								
Mean	35	234	284	195				29				
n	29	29	29	9	0	0	0	19	0	0	0	0
SD	14	70	62	59				20				
Min	16	74	131	116				-12				
Max	96	407	364	325				87				

ED_004549_00015840-00132

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for November, 2007.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	47 (32)	269 (241)	381 (404)	385 (163)								
2	81 (61)	293 (260)	387 (299)	465 (186)								
3	52 (25)	260 (269)	344 (296)	366 (189)								
4	42 (22)	216 (382)	302 (403)	378 (277)								
5	74 (42)	315 (298)	360 (271)	514 (228)								
6												
7									50 (25)	719 (395)	786 (313)	1690 (786)
8									68 (27)	691 (445)	654 (329)	1540 (633)
9									68 (36)	709 (473)	683 (379)	1560 (811)
10									37 (8)	471 (340)	519 (350)	1280 (591)
11									41 (24)	502 (381)	552 (347)	1410 (779)
12									51 (23)	732 (332)	689 (330)	
13												
14	81 ###	440 (156)	438 (171)	155 (74)								
15	52 (39)	402 (124)	426 (168)	200 (97)								
16	55 (25)	363 (219)	388 (210)	186 (100)								
17	39 (26)	303 (204)	329 (210)	173 (101)								
18	49 (42)	300 (182)	317 (193)	265 (104)								
19	45 (35)	308 (190)	334 (187)	248 (117)								
20	54 (30)	358 (167)	390 (217)	289 (117)								
21	36 (15)	363 (160)	389 (180)	287 (112)								
22	38 (34)	336 (210)	385 (284)	344 (156)								
23	25 (17)	321 (183)	401 (288)	459 (191)								
24	20 (7)	337 (184)	322 (195)	536 (249)								
25	14 (7)	305 (231)	334 (235)	636 (295)								
26	18 (13)	305 (172)	338 (254)	642 (285)								
27												
28												
29												
30	25 (10)	349 (113)	337 (136)	781 (314)								
Mean	45	323	363	385					53	637	647	1500
n	19	19	19	19	0	0	0	0	6	6	6	5
SD	19	50	37	172					12	108	89	142
Min	14	216	302	155					37	471	519	1280
Max	81	440	438	781					68	732	786	1690

ED_004549_00015840-00133

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for December, 2007.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	22 (27)	238 (144)	236 (127)	535 (256)								
2	21 (14)	290 (116)	346 (175)	645 (284)								
3	22 (17)	296 (155)	352 (223)	657 (315)								
4	25 (13)	276 (151)	271 (171)	571 (347)								
5	25 (17)	296 (177)	336 (162)	711 (383)								
6	20 (8)	286 (135)	330 (219)									
7	15 (9)	302 (145)	322 (176)									
8	9 (5)	288 (182)	272 (131)									
9	7 (4)	286 (179)	261 (113)									
10	14 (6)	325 (147)	320 (122)									
11	5 (4)	377 (106)	362 (109)	201 (58)								
12	9 (5)	355 (126)	362 (131)	252 (68)								
13	11 (8)	351 (129)	352 (131)	304 (64)								
14	8 (6)	336 (141)	372 (127)	404 (103)								
15	16 (9)	331 (182)	388 (165)	327 (98)								
16	14 (10)	301 (155)	333 (142)	316 (125)								
17	11 (8)	305 (144)	324 (157)	340 (148)								
18	11 (7)	297 (168)	334 (147)	349 (149)								
19	12 (7)	284 (144)	364 (269)	391 (155)								
20	10 (7)	235 (137)	308 (230)	398 (145)								
21												
22	37 (48)	296 (189)	397 (319)	503 (277)								
23	12 (5)	302 (171)	361 (389)	539 (276)								
24	10 (7)	297 (174)	370 (351)	523 (292)								
25	7 (5)	297 (199)	362 (471)	506 (258)								
26	10 (8)	271 (195)	293 (426)	559 (280)								
27	6 (5)	307 (166)	269 (128)									
28	10 (6)	289 (92)	290 (63)									
29	11 (7)	304 (140)	276 (88)									
30	6 (5)	277 (103)	284 (100)									
31	8 (4)	274 (106)	359 (156)									
Mean	13	299	327	452								
n	30	30	30	20	0	0	0	0	0	0	0	0
SD	7	30	41	139								
Min	5	235	236	201								
Max	37	377	397	711								

ED_004549_00015840-00134

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for January, 2008.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1												
2	10 (5)	239 (110)	358 (130)	261 (112)								
3												
4	18 (10)	293 (132)	408 (241)	302 (107)								
5	15 (11)	268 (156)	337 (218)	297 (131)								
6	12 (7)	276 (136)	376 (247)	288 (88)								
7	7 (7)	293 (89)	438 (172)	259 (94)								
8	5 (4)	276 (95)	440 (157)	274 (89)								
9	13 (9)	285 (122)	474 (243)	304 (128)								
10	8 (6)	290 (104)	515 (224)	373 (176)								
11	12 (6)	330 (125)	569 (351)	399 (149)								
12	8 (5)	267 (119)	439 (306)	434 (136)								
13	12 (9)	272 (152)	527 (360)	510 (195)								
14	17 (9)	286 (140)	582 (357)	502 (197)								
15												
16					6 (4)	22 (98)	64 (27)	52 (103)				
17					5 (5)	27 (92)	65 (28)	50 (146)				
18					5 (4)	27 (63)	79 (37)	55 (115)				
19					5 (4)	20 (67)	77 (38)	64 (106)				
20					5 (4)	24 (90)	65 (40)	53 (99)				
21					12 (5)	36 (82)	62 (21)	114 (156)				
22					9 (5)	36 (74)	50 (18)	104 (151)				
23					8 (6)	31 (79)	43 (25)					
24					5 (3)							
25					6 (5)	29 (13)	32 (13)	34 (23)				
26					3 (3)	26 (14)	29 (20)	24 (14)				
27					4 (5)	24 (16)	27 (15)	26 (33)				
28					13 (20)	32 (22)	39 (27)	30 (21)				
29					5 (7)	34 (18)	48 (24)	39 (17)				
30					4 (4)	29 (14)	36 (15)	29 (15)				
31												
Mean	11	281	455	350	6	28	51	52				
n	12	12	12	12	15	14	14	13	0	0	0	0
SD	4	21	77	88	3	5	17	27				
Min	5	239	337	259	3	20	27	24				
Max	18	330	582	510	13	36	79	114				

ED_004549_00015840-00135

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for February, 2008.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1									20 (12)	875 (449)	820 (312)	840 (331)
2									15 (8)	911 (463)	801 (385)	827 (327)
3									18 (11)	784 (501)	675 (307)	880 (401)
4												
5									25 (23)	1010 (431)	765 (364)	1150 (621)
6									11 (6)	815 (464)	704 (380)	1330 (586)
7												
8	13 (6)	367 (127)		488 (157)								
9	13 (6)	320 (171)	286 (91)	466 (177)								
10	11 (6)	327 (135)	318 (122)	576 (223)								
11	19 (10)	312 (114)	326 (122)	615 (236)								
12	9 (6)	343 (139)		590 (248)								
13	20 (10)	324 (136)	330 (129)	625 (258)								
14	20 (6)	364 (143)	402 (216)	569 (353)								
15	20 (8)	342 (144)		685 (286)								
16	12 (6)	291 (166)		714 (290)								
17	9 (5)	291 (151)	322 (145)	707 (416)								
18	12 (6)	331 (140)										
19	19 (7)	337 (132)	410 (157)	189 (102)								
20	13 (5)	306 (111)	313 (142)	194 (91)								
21	23 (7)	325 (116)	321 (137)	194 (91)								
22	26 (11)	323 (140)	316 (120)	203 (94)								
23	21 (8)	297 (138)	291 (158)	191 (118)								
24	15 (12)	273 (165)	243 (115)	148 (74)								
25	47 (61)	381 (169)	315 (148)	232 (91)								
26	20 (12)	301 (229)	280 (196)	354 (104)								
27	27 (13)	312 (174)	263 (134)	340 (138)								
28	45 (53)	308 (175)	288 (133)	270 (144)								
29	21 (7)	314 (148)	306 (134)	285 (129)								
Mean	20	322	313	411					18	878	753	1010
n	22	22	17	21	0	0	0	0	5	5	5	5
SD	10	26	41	197					5	78	56	200
Min	9	273	243	148					11	784	675	827
Max	47	381	410	714					25	1010	820	1330

ED_004549_00015840-00136

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for March, 2008.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	25 (16)	255 (132)	264 (141)	249 (144)								
2	94 ###	377 (117)	303 (97)	328 (113)								
3	14 (8)	373 (171)	295 (95)	437 (166)								
4	18 (9)	305 (119)	310 (147)	405 (176)								
5	19 (8)	301 (145)	273 (140)	450 (169)								
6	19 (11)	303 (149)	297 (126)	427 (169)								
7	21 (10)	298 (141)	299 (130)	412 (171)								
8	18 (6)	265 (177)	294 (173)	358 (124)								
9	24 (11)	257 (175)	272 (171)	357 (156)								
10	30 (11)	257 (186)	283 (178)	380 (230)								
11	29 (31)	223 (188)	283 (156)	380 (212)								
12	34 (16)	244 (183)	257 (178)	370 (305)								
13	27 (8)	256 (192)	301 (137)	482 (227)								
14	33 (18)	259 (121)	299 (131)	793 (882)								
15	23 (7)	240 (110)	271 (97)	557 (316)								
16	23 (5)	237 (97)	262 (107)	659 (311)								
17	12 (7)	215 (100)	274 (102)									
18	15 (6)	214 (82)	281 (120)	183 (119)								
19	19 (11)	193 (147)	272 (136)	142 (141)								
20	38 (22)	214 (148)	270 (174)	121 (145)								
21	30 (19)	230 (160)	275 (154)	157 (129)								
22	28 (10)	250 (153)	249 (146)	203 (119)								
23	21 (12)	224 (127)	243 (122)	256 (119)								
24	21 (7)	192 (183)	274 (191)	270 (138)								
25	36 (15)	230 (167)	254 (176)	281 (120)								
26	52 (10)	228 (150)	247 (130)	275 (120)								
27	44 (20)	254 (158)	249 (140)	287 (99)								
28	25 (9)	233 (179)	240 (146)	353 (134)								
29	31 (6)	201 (197)	225 (170)	369 (186)								
30	21 (12)	196 (145)	227 (125)	375 (134)								
31	14 (9)	189 (129)		416 (171)								
Mean	28	249	271	358								
n	31	31	30	30	0	0	0	0	0	0	0	0
SD	15	46	23	143								
Min	12	189	225	121								
Max	94	377	310	793								

ED_004549_00015840-00137

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for April, 2008.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	21 (11)	234 (161)		532 (216)								
2	34 (9)	213 (101)		558 (234)								
3	30 (15)	222 (69)		541 (220)								
4	24 (17)	206 (174)	243 (97)	570 (216)								
5	31 (12)	191 (130)	257 (143)	507 (236)								
6	34 (20)	227 (162)	270 (145)	600 (279)								
7												
8									38 (16)	661 (347)	676 (296)	2070 (1530)
9									13 (10)	587 (277)	562 (303)	1820 (942)
10									8 (6)	604 (326)	503 (207)	
11									10 (5)	656 (432)	568 (274)	262 (219)
12									19 (11)	611 (365)	550 (249)	246 (267)
13									16 (9)	601 (368)	569 (272)	239 (217)
14												
15	87 ###	396 (374)	397 (309)	158 (83)								
16	69 (21)	314 (152)	281 (128)	179 (55)								
17	79 ###	350 (159)	318 (131)	275 (51)								
18	24 (18)	260 (148)	255 (121)	241 (117)								
19	50 (37)	277 (210)	255 (169)	216 (139)								
20	36 (12)	251 (227)	233 (193)	196 (194)								
21	46 (18)	318 (203)	285 (125)	292 (145)								
22	41 (14)	265 (165)	255 (151)	342 (154)								
23	59 ###	206 (206)	248 (133)	333 (156)								
24	31 (11)	129 (226)	157 (208)	277 (224)								
25	26 (25)	292 (213)	349 (263)	423 (212)								
26	86 ###	351 (304)	397 (268)	510 (275)								
27	17 (10)	269 (259)	376 (269)	520 (297)								
28	27 (11)	304 (399)	349 (372)	481 (480)								
29	39 (15)	273 (208)	372 (215)	493 (264)								
30	49 (17)	253 (129)	344 (212)	415 (292)								
Mean	43	264	297	394					17	620	571	928
n	22	22	19	22	0	0	0	0	6	6	6	5
SD	20	59	64	142					10	28	52	835
Min	17	129	157	158					8	587	503	239
Max	87	396	397	600					38	661	676	2070

ED_004549_00015840-00138

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for May, 2008.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	101 (110)	305 (143)	374 (189)	458 (204)								
2	123 (233)	345 (143)	507 (214)	653 (249)								
3	30 (12)	288 (138)	394 (209)	620 (356)								
4	38 (8)	246 (163)	318 (226)	560 (318)								
5	36 (12)	224 (150)	279 (194)									
6	22 (11)	147 (112)	176 (140)	60 (63)								
7	19 (14)	208 (109)	237 (128)	83 (86)								
8	42 (115)	238 (180)	300 (234)	115 (122)								
9	14 (8)	243 (185)	279 (220)	120 (166)								
10	49 (67)	258 (206)	280 (210)	151 (159)								
11	15 (7)	345 (300)	412 (327)	208 (212)								
12	42 (33)	321 (284)	373 (296)	202 (220)								
13	32 (11)	272 (214)	397 (164)	185 (131)								
14	27 (17)	303 (263)	383 (153)	302 (159)								
15	27 (34)	224 (226)	328 (153)	256 (172)								
16	22 (13)	240 (201)	361 (181)	262 (151)								
17	40 (31)	217 (160)	275 (164)	230 (94)								
18	50 (40)	230 (185)	277 (213)	239 (142)								
19	32 (13)	185 (151)	262 (233)	199 (120)								
20	67 (129)	146 (84)	252 (133)	187 (95)								
21	45 (11)	157 (115)	230 (187)	188 (169)								
22	70 (37)	108 (79)	169 (272)	157 (108)								
23	76 (47)	106 (65)	159 (149)	140 (118)								
24	32 (31)	205 (193)	259 (255)	227 (208)								
25	81 (177)	188 (439)	202 (204)	193 (177)								
26	62 (33)	104 (75)	194 (136)	196 (133)								
27	21 (11)	147 (77)	234 (140)									
28	12 (7)	177 (149)	225 (215)	84 (51)								
29	36 (21)	93 (172)	86 (85)	64 (15)								
30	29 (9)	89 (87)	151 (152)	89 (34)								
31	45 (36)	101 (96)	159 (147)	84 (38)								
Mean	43	208	275	225								
n	31	31	31	29	0	0	0	0	0	0	0	0
SD	25	75	93	155								
Min	12	89	86	60								
Max	123	345	507	653								

ED_004549_00015840-00139

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for June, 2008.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	32 (16)	58 (41)	97 (81)	59 (17)								
2	37 (25)											
3	56 (28)											
4	45 (32)											
5	133 (147)	185 (65)	216 (79)	171 (66)								
6	22 (16)	238 (204)	249 (210)	184 (115)								
7	81 (50)	121 (58)	130 (53)	141 (52)								
8	86 (126)	123 (72)	163 (104)	169 (89)								
9	29 (12)	185 (143)	242 (146)	234 (153)								
10	45 (55)	134 (109)	183 (128)	159 (95)								
11		136 (112)	171 (155)	185 (111)								
12		191 (164)	247 (185)	219 (195)								
13		160 (125)	238 (170)	170 (198)								
14												
15		100 (86)	164 (115)	143 (128)								
16		106 (71)	152 (115)									
17	30 (11)	97 (76)	127 (104)	53 (73)								
18	42 (81)	133 (109)	175 (186)	75 (71)								
19	23 (18)	106 (75)	114 (81)	62 (86)								
20	19 (6)	150 (135)	164 (128)	81 (96)								
21												
22	23 (12)	110 (100)	140 (117)	86 (97)								
23	27 (34)	101 (73)	132 (120)	92 (87)								
24	26 (13)	94 (66)	133 (94)	97 (89)								
25												
26									50 (29)	144 (52)	188 (89)	
27										151 (66)	166 (64)	
28									52 (34)	116 (36)	173 (208)	
29									44 (12)	200 (142)	115 (30)	
30									29 (11)	152 (80)	112 (35)	
Mean	44	133	170	132					44	153	151	
n	17	19	19	18	0	0	0	0	4	5	5	0
SD	29	42	46	56					9	27	31	
Min	19	58	97	53					29	116	112	
Max	133	238	249	234					52	200	188	

ED_004549_00015840-00140

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for July, 2008.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1									31 (12)	152 (69)	107 (39)	
2									50 (81)		101 (49)	
3												
4									39 (20)	125 (95)	96 (35)	
5									23 (7)	91 (42)	82 (29)	
6									22 (7)	100 (55)	84 (40)	
7									24 (12)	85 (50)	90 (33)	
8									12 (8)	68 (35)	95 (34)	
9									12 (6)	58 (28)	94 (30)	
10									14 (5)	60 (37)	86 (28)	
11									13 (6)	67 (32)	105 (32)	
12									59 (125)	154 (85)	142 (53)	
13									22 (7)	155 (120)	108 (47)	
14									18 (6)	80 (64)	91 (30)	
15									17 (7)	71 (41)	100 (39)	
16												
17	48 (68)	101 (25)	112 (36)									
18	38 (14)	86 (23)	109 (27)									
19	26 (12)	78 (20)	108 (33)									
20	36 (32)	103 (54)	145 (74)									
21	22 (9)	141 (248)	145 (68)									
22	28 (9)	106 (51)	150 (62)									
23	39 (15)	123 (63)	173 (70)									
24												
25					10 (5)	16 (4)	23 (3)					
26					12 (5)	17 (3)	24 (3)					
27					12 (5)	17 (4)	24 (4)					
28					9 (5)	15 (5)	22 (4)					
29					9 (6)	15 (5)	22 (3)					
30					10 (6)	16 (7)	22 (5)					
31					14 (11)	20 (5)	26 (4)					
Mean	34	105	135		11	17	23		25	97	99	
n	7	7	7	0	7	7	7	0	14	13	14	0
SD	8	20	23		2	1	2		14	35	14	
Min	22	78	108		9	15	22		12	58	82	
Max	48	141	173		14	20	26		59	155	142	

ED_004549_00015840-00141

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for August, 2008.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1					14 (9)	20 (6)	26 (6)					
2					12 (5)	18 (4)	25 (5)					
3					13 (4)	18 (4)	25 (4)					
4					9 (5)	16 (4)	23 (4)					
5					14 (7)	21 (7)	27 (7)					
6					12 (5)	17 (5)	23 (4)					
7												
8	22 (9)	55 (15)	96 (27)									
9	25 (11)	73 (26)	112 (36)									
10	19 (11)	62 (18)	95 (28)									
11	19 (13)	69 (20)	94 (34)									
12	19 (10)	81 (36)	102 (40)									
13	12 (5)	89 (49)	120 (65)									
14	26 (18)	129 (93)	147 (81)									
15	15 (6)	117 (81)	130 (67)									
16	22 (9)		125 (51)									
17	23 (12)		122 (49)									
18	20 (12)		119 (51)									
19	36 (7)		145 (60)									
20	30 (19)	86 (44)	144 (69)	219 (98)								
21	33 (16)	79 (52)	130 (79)	339 (493)								
22	24 (12)	58 (24)	96 (45)									
23	27 (9)	58 (30)	98 (54)	49 (24)								
24	26 (9)	58 (36)	91 (64)	47 (25)								
25	44 (40)	57 (31)	97 (47)	48 (25)								
26	31 (14)	72 (48)	121 (79)	55 (25)								
27	28 (8)	68 (37)	130 (88)	63 (21)								
28	36 (19)	69 (43)	129 (91)	82 (48)								
29	43 (14)	75 (57)	137 (118)	82 (44)								
30	19 (9)	68 (59)	116 (72)	86 (39)								
31	28 (12)	60 (28)	82 (40)	89 (43)								
Mean	26	74	116	105	12	18	25					
n	24	20	24	11	6	6	6	0	0	0	0	0
SD	8	19	19	87	2	2	2					
Min	12	55	82	47	9	16	23					
Max	44	129	147	339	14	21	27					

ED_004549_00015840-00142

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for September, 2008.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	35 (8)	70 (36)	112 (58)	154 (195)								
2	43 (29)	97 (52)	161 (96)	165 (67)								
3	12 (6)	205 (92)	202 (105)	271 (115)								
4	19 (11)	185 (148)	178 (115)	265 (171)								
5	27 (11)	177 (91)	151 (60)	274 (110)								
6	16 (7)	156 (98)	134 (56)	266 (129)								
7	25 (11)	104 (79)	111 (52)	206 (110)								
8	18 (11)	157 (60)	169 (45)	325 (144)								
9	13 (10)	169 (122)	145 (84)	356 (194)								
10	18 (8)	92 (85)	100 (57)	183 (133)								
11	11 (7)	44 (29)	53 (20)	216 (176)								
12												
13									23 (18)	165 (75)	236 (110)	90 (39)
14									19 (7)	377 (220)	440 (160)	143 (52)
15									32 (13)	486 (440)	457 (301)	206 (88)
16									28 (15)	407 (395)	300 (192)	257 (123)
17									24 (12)	292 (278)	329 (256)	266 (128)
18									26 (9)	306 (301)	274 (201)	438 (161)
19									29 (11)	286 (254)	230 (170)	348 (183)
20									28 (11)	326 (337)	241 (208)	385 (241)
21									36 (10)	204 (185)	215 (138)	340 (237)
22									39 (12)	161 (136)	246 (146)	366 (241)
23									41 (59)	186 (154)	176 (158)	416 (263)
24												
25	41 (24)	171 (105)	151 (66)	214 (108)								
26	33 (16)	208 (122)	171 (79)	259 (134)								
27	47 (24)	292 (230)	217 (127)	300 (201)								
28	34 (15)	279 (202)	214 (119)	292 (166)								
29	68 (45)	363 (203)	277 (98)	382 (202)								
30	64 (26)	384 (283)	282 (214)	463 (311)								
Mean	31	185	166	270					30	291	286	296
n	17	17	17	17	0	0	0	0	11	11	11	11
SD	17	94	58	78					6	101	86	108
Min	11	44	53	154					19	161	176	90
Max	68	384	282	463					41	486	457	438

ED_004549_00015840-00143

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for October, 2008.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	75 (29)	315 (264)	276 (164)	441 (288)								
2	56 (22)	269 (223)	309 (234)	416 (376)								
3	47 (25)	205 (172)	235 (167)	390 (289)								
4	56 (29)	207 (186)	218 (183)	358 (352)								
5	23 (14)	165 (106)	158 (97)	456 (251)								
6	14 (9)	178 (113)	191 (106)									
7	19 (20)	235 (252)	268 (199)	86 (34)								
8	21 (10)	223 (231)	242 (220)	104 (43)								
9	27 (18)	197 (174)	228 (204)	133 (52)								
10	27 (10)	187 (127)	186 (125)	148 (58)								
11	21 (8)	164 (75)		130 (83)								
12	14 (8)	95 (40)		86 (35)								
13	10 (6)	285 (114)		311 (144)								
14	7 (5)	307 (133)		419 (149)								
15	11 (7)	286 (132)	350 (148)	411 (151)								
16	10 (6)	242 (166)		428 (193)								
17	17 (11)	204 (161)		352 (206)								
18	14 (6)	168 (143)		334 (243)								
19	17 (11)	152 (152)		300 (300)								
20	24 (11)	232 (130)		362 (163)								
21	26 (23)	153 (158)		313 (147)								
22	15 (11)	238 (129)		543 (203)								
23	12 (6)	278 (213)		530 (255)								
24	16 (11)	260 (318)		650 (263)								
25	18 (10)	212 (277)		536 (295)								
26	20 (5)	254 (220)		660 (251)								
27	41 (41)	281 (193)										
28	29 (13)	267 (138)		129 (94)								
29	39 (18)	223 (138)		119 (91)								
30	36 (20)	202 (132)		157 (221)								
31	52 (82)	206 (140)		169 (89)								
Mean	26	222	242	327								
n	31	31	11	29	0	0	0	0	0	0	0	0
SD	16	51	54	169								
Min	7	95	158	86								
Max	75	315	350	660								

ED_004549_00015840-00144

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for November, 2008.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	71 (116)	199 (156)		190 (152)								
2	117 (154)	187 (145)		156 (254)								
3	92 (109)	192 (141)		157 (94)								
4	43 (41)	144 (141)		126 (92)								
5	35 (25)	188 (168)	297 (203)	239 (100)								
6	31 (23)	260 (154)	385 (207)	382 (137)								
7		244 (226)	420 (293)	438 (180)								
8	32 (22)	228 (191)	421 (386)	395 (152)								
9	23 (12)	224 (166)	323 (214)	474 (216)								
10	21 (9)	205 (173)	293 (246)	378 (183)								
11	11 (7)	203 (147)	300 (205)	505 (198)								
12	22 (15)	187 (200)	305 (245)	517 (223)								
13	24 (15)	199 (141)	291 (186)	486 (253)								
14	22 (16)	241 (75)	324 (91)	657 (261)								
15	16 (10)	229 (113)	289 (128)	591 (243)								
16	18 (9)	180 (131)	255 (141)	501 (210)								
17	20 (11)	211 (98)	310 (121)									
18	16 (7)			124 (66)								
19	26 (17)	223 (165)		116 (59)								
20	17 (8)	298 (148)		138 (50)								
21	21 (12)	273 (158)		150 (70)								
22	26 (10)	267 (172)		144 (66)								
23	25 (10)	244 (193)		182 (97)								
24	21 (13)	250 (180)		228 (71)								
25	34 (21)	243 (250)		256 (105)								
26	32 (15)	243 (231)		254 (110)								
27	24 (14)	273 (183)		279 (117)								
28	9 (7)	226 (185)		281 (128)								
29	8 (7)	215 (194)		396 (200)								
30	17 (13)	203 (216)		419 (199)								
Mean	30	223	324	316								
n	29	29	13	29	0	0	0	0	0	0	0	0
SD	24	33	50	157								
Min	8	144	255	116								
Max	117	298	421	657								

ED_004549_00015840-00145

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for December, 2008.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	12 (9)	204 (239)		480 (252)								
2	13 (7)	176 (261)		379 (257)								
3												
4									11 (7)	810 (331)		1540 (612)
5									20 (11)	761 (299)		1530 (636)
6									23 (12)	778 (470)		1360 (592)
7									22 (9)	660 (442)		1170 (641)
8									21 (15)	680 (476)		1150 (678)
9									74 (86)	799 (520)		1480 (992)
10									14 (8)	751 (513)		1830 (831)
11									11 (8)	683 (619)		1690 (1110)
12												
13	15 (9)	298 (155)	344 (164)									
14	21 (10)	313 (134)	424 (152)									
15	16 (5)	294 (107)	355 (121)									
16	22 (9)	300 (229)	377 (145)									
17	16 (8)	305 (149)	360 (210)	246 (65)								
18	31 (20)	267 (199)	316 (206)	215 (60)								
19	15 (11)	314 (188)	399 (273)	264 (80)								
20	14 (10)	323 (240)	396 (245)	341 (125)								
21	14 (8)	285 (200)	326 (163)	420 (128)								
22	56 (70)	281 (160)	368 (192)	643 (586)								
23	30 (19)	293 (143)	381 (157)	379 (143)								
24	15 (8)	308 (136)	360 (154)	445 (204)								
25	14 (6)	282 (133)	306 (153)	378 (162)								
26	20 (21)	267 (125)	314 (137)	389 (143)								
27	13 (11)	295 (172)	321 (152)	536 (181)								
28	9 (7)	271 (148)	281 (142)	555 (206)								
29	16 (11)	276 (171)	313 (172)	531 (223)								
30	27 (17)	277 (189)	335 (210)	520 (234)								
31	20 (10)	274 (198)	321 (215)	658 (260)								
Mean	20	281	347	434					25	740		1470
n	21	21	19	17	0	0	0	0	8	8	0	8
SD	10	34	36	126					19	54		222
Min	9	176	281	215					11	660		1150
Max	56	323	424	658					74	810		1830

ED_004549_00015840-00146

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for January, 2009.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	20 (8)	254 (220)	304 (254)	535 (326)								
2	24 (10)	275 (345)	331 (216)	623 (324)								
3	31 (44)	276 (248)	338 (123)	801 (309)								
4	9 (10)	248 (182)	332 (120)	977 (373)								
5	20 (11)	283 (177)	348 (160)									
6	24 (12)	274 (104)	347 (161)	259 (95)								
7	22 (9)	248 (107)	320 (200)	270 (106)								
8	34 (22)	299 (154)	324 (205)	218 (108)								
9	94 (121)	364 (223)	370 (217)	317 (101)								
10	18 (13)	239 (129)	316 (249)	281 (98)								
11	20 (14)	255 (133)	331 (252)	292 (133)								
12	71 (137)	264 (175)	343 (232)	360 (169)								
13	27 (11)	352 (189)	292 (320)	424 (190)								
14	23 (17)	313 (247)	339 (284)	457 (177)								
15	12 (6)	249 (129)	364 (254)	693 (466)								
16	27 (13)	254 (89)	384 (148)	724 (627)								
17	20 (11)	278 (117)	408 (144)	496 (194)								
18	19 (14)	253 (143)	350 (184)	433 (206)								
19	52 (43)	277 (148)	426 (183)	682 (719)								
20	23 (19)	275 (145)	373 (207)	596 (273)								
21	24 (13)	243 (180)	317 (234)	548 (266)								
22	28 (11)	257 (174)	323 (232)	500 (306)								
23	32 (16)	319 (120)	328 (130)	489 (205)								
24	13 (5)	258 (135)	378 (184)	617 (218)								
25	18 (6)	262 (109)	355 (184)	740 (246)								
26	31 (17)	276 (120)	357 (171)									
27	16 (9)	267 (141)	348 (174)	162 (47)								
28	19 (8)	260 (157)	346 (187)	168 (61)								
29	17 (13)	240 (221)	336 (235)	196 (94)								
30	25 (17)	253 (209)	359 (269)	223 (74)								
31	33 (27)	256 (242)	344 (334)	247 (88)								
Mean	27	272	346	460								
n	31	31	31	29	0	0	0	0	0	0	0	0
SD	17	30	28	211								
Min	9	239	292	162								
Max	94	364	426	977								

ED_004549_00015840-00147

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for February, 2009.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	13 (6)	287 (229)	355 (275)	315 (90)								
2	23 (12)	267 (257)	341 (270)	294 (138)								
3	28 (10)	255 (278)	349 (313)	269 (118)								
4	30 (12)	210 (338)	328 (367)	288 (178)								
5												
6									57 (54)	755 (521)	788 (435)	1020 (568)
7									26 (10)	766 (521)	766 (427)	975 (504)
8									20 (8)	677 (419)	669 (379)	964 (445)
9									22 (31)	625 (370)	694 (329)	1180 (559)
10									13 (7)	669 (459)	744 (356)	1230 (632)
11									16 (12)	722 (383)	734 (405)	1400 (724)
12									12 (7)	755 (310)	723 (301)	1830 (711)
13									15 (13)	781 (336)	653 (263)	1940 (796)
14									8 (7)	679 (384)	630 (279)	2120 (823)
15									15 (7)	720 (451)	622 (354)	2210 (920)
16									28 (28)	640 (392)	636 (335)	1870 (1010)
17									86 (167)	605 (490)	703 (391)	1490 (972)
18												
19	25 (17)	355 (136)	417 (174)	286 (144)								
20	27 (18)	299 (180)	402 (181)	357 (161)								
21	20 (23)	282 (167)	493 (218)	347 (89)								
22	24 (8)	258 (154)	444 (272)	278 (126)								
23	33 (12)	369 (189)	433 (215)	361 (139)								
24	39 (21)	312 (247)	457 (292)	306 (202)								
25												
26												
27	23 (17)	331 (214)	426 (251)	530 (238)								
28	19 (10)	303 (225)	416 (263)	623 (258)								
Mean	25	294	405	354					26	699	697	1520
n	12	12	12	12	0	0	0	0	12	12	12	12
SD	7	43	49	105					22	56	53	438
Min	13	210	328	269					8	605	622	964
Max	39	369	493	623					86	781	788	2210

ED_004549_00015840-00148

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for March, 2009.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	21 (12)	313 (219)	401 (252)	847 (612)								
2	27 (15)	307 (306)	368 (299)									
3	40 (18)	307 (294)	400 (292)	404 (270)								
4	80 (103)	270 (284)	432 (298)	293 (227)								
5	38 (14)	257 (167)	407 (224)	271 (182)								
6	63 (25)	277 (189)	424 (249)	341 (235)								
7	60 (79)	233 (114)	363 (206)	248 (126)								
8	17 (10)	255 (186)	390 (221)	370 (211)								
9	69 (126)	282 (192)	378 (207)	316 (197)								
10	30 (21)	287 (182)	413 (208)	558 (284)								
11	18 (12)	245 (152)	409 (199)									
12	18 (10)	260 (181)	434 (173)	261 (114)								
13	9 (6)	247 (172)	388 (167)	242 (130)								
14	14 (8)	266 (154)	385 (171)	240 (82)								
15	10 (7)	238 (179)	347 (172)	171 (83)								
16	26 (16)	263 (262)	374 (237)	195 (122)								
17	35 (21)	270 (268)	327 (223)	161 (119)								
18	49 (15)	343 (216)	408 (209)	252 (110)								
19	28 (9)	310 (141)	373 (185)	298 (125)								
20	33 (9)	255 (152)	331 (189)	272 (144)								
21	22 (9)	251 (208)	288 (167)	205 (141)								
22	29 (11)	249 (217)	270 (138)	204 (99)								
23	61 (59)	255 (184)	321 (160)	470 (619)								
24	83 (72)	421 (197)	415 (196)	482 (224)								
25	52 (23)	364 (250)	383 (241)	500 (248)								
26	29 (12)	340 (196)	355 (191)	578 (217)								
27	111 (99)	317 (226)	361 (242)	825 (313)								
28	16 (12)	288 (238)	384 (210)	903 (357)								
29	14 (6)	272 (248)	414 (242)	776 (320)								
30	20 (10)	265 (291)	376 (230)	707 (276)								
31	12 (6)	274 (410)	374 (339)	665 (348)								
Mean	37	283	377	416								
n	31	31	31	29	0	0	0	0	0	0	0	0
SD	25	41	39	221								
Min	9	233	270	161								
Max	111	421	434	903								

ED_004549_00015840-00149

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for April, 2009.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	17 (9)	266 (264)	370 (331)	606 (408)								
2	11 (10)	251 (223)	334 (156)									
3	19 (12)	234 (123)	328 (182)	120 (89)								
4	74 (54)	293 (137)	373 (164)	141 (55)								
5	64 (61)	253 (110)	388 (177)	167 (65)								
6	18 (9)	267 (142)	401 (175)	342 (74)								
7	22 (11)	217 (149)	315 (238)	254 (141)								
8												
9									91 (146)	893 (424)	932 (388)	830 (431)
10									19 (10)	834 (384)	794 (340)	830 (381)
11									25 (16)	853 (381)	835 (393)	943 (301)
12									11 (9)	719 (277)	657 (355)	943 (331)
13									7 (6)	683 (379)	601 (329)	857 (371)
14									11 (6)	538 (466)	522 (423)	705 (409)
15												
16	20 (10)		395 (162)	356 (141)								
17	18 (7)		364 (150)	351 (224)								
18	9 (6)	313 (137)	420 (203)	437 (145)								
19	17 (32)	284 (130)	333 (158)	351 (142)								
20	16 (10)	292 (182)	395 (197)	340 (174)								
21	16 (10)	234 (202)	297 (199)	321 (245)								
22	31 (17)	226 (203)	316 (214)	279 (197)								
23	30 (12)	185 (146)	316 (291)	305 (264)								
24	28 (8)	219 (154)	278 (162)									
25	33 (12)	294 (136)	328 (143)	146 (63)								
26	27 (14)	235 (132)	296 (164)	125 (78)								
27	25 (15)	292 (131)	328 (138)	136 (60)								
28	10 (7)	236 (99)	282 (136)	154 (90)								
29	21 (11)	122 (79)	190 (113)	102 (36)								
30	22 (14)	140 (75)	205 (89)	95 (30)								
Mean	25	243	330	256					27	753	724	851
n	22	20	22	20	0	0	0	0	6	6	6	6
SD	15	49	58	132					29	122	142	81
Min	9	122	190	95					7	538	522	705
Max	74	313	420	606					91	893	932	943

ED_004549_00015840-00150

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for May, 2009.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	19 (7)	203 (73)	253 (89)	131 (52)								
2	13 (6)	234 (128)	302 (117)	232 (83)								
3	12 (8)	218 (102)	282 (156)	226 (88)								
4	10 (5)	202 (109)	275 (160)	232 (110)								
5	19 (7)	184 (115)	249 (143)	211 (99)								
6	20 (11)	146 (141)	203 (118)	162 (76)								
7	25 (9)	140 (115)	216 (136)	173 (72)								
8	28 (9)	81 (118)	234 (110)	193 (93)								
9	23 (18)	190 (117)	327 (136)	309 (140)								
10	11 (5)	211 (124)	281 (107)	433 (177)								
11	16 (8)	188 (112)	266 (89)	380 (194)								
12	19 (16)	114 (217)	164 (145)	258 (269)								
13	47 (32)	171 (103)	204 (143)	333 (180)								
14	36 (14)	216 (118)	311 (153)	395 (170)								
15	37 (16)	114 (55)	171 (138)	224 (85)								
16	29 (13)	230 (128)	308 (215)	387 (144)								
17	17 (14)	197 (144)	278 (245)	376 (191)								
18	19 (21)	184 (142)	232 (228)									
19	23 (8)	175 (137)	231 (188)	60 (39)								
20	29 (13)	188 (126)	245 (168)	89 (30)								
21	30 (12)	175 (117)	241 (158)	92 (25)								
22	37 (16)	185 (152)	229 (144)	98 (33)								
23	27 (11)	156 (115)	210 (123)	79 (32)								
24	18 (25)	155 (119)	199 (125)	89 (40)								
25	16 (9)	158 (107)	203 (131)	92 (42)								
26	8 (5)	171 (221)	226 (137)	125 (60)								
27	15 (13)	187 (146)	265 (173)	171 (89)								
28	27 (12)	174 (169)	247 (211)	273 (349)								
29	23 (11)	160 (170)	223 (208)	355 (515)								
30	20 (12)	139 (161)	174 (178)	143 (119)								
31	21 (11)	113 (122)	154 (173)	171 (167)								
Mean	22	173	239	216								
n	31	31	31	30	0	0	0	0	0	0	0	0
SD	9	35	44	109								
Min	8	81	154	60								
Max	47	234	327	433								

ED_004549_00015840-00151

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for June, 2009.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	30 (16)	145 (155)	174 (156)	179 (139)								
2	14 (7)	205 (194)	161 (109)	166 (97)								
3	23 (10)	143 (140)	164 (158)	190 (115)								
4	32 (14)	170 (145)	241 (174)	222 (124)								
5	27 (15)	140 (120)	239 (121)	170 (103)								
6												
7												
8	24 (18)	199 (151)	302 (219)	276 (147)								
9	31 (15)	122 (85)	163 (127)	207 (141)								
10												
11									14 (9)	309 (291)	380 (221)	102 (72)
12									25 (9)	183 (93)	319 (109)	76 (27)
13									19 (14)	194 (142)	264 (161)	86 (40)
14									23 (16)	162 (149)	228 (166)	98 (34)
15									19 (10)	122 (65)	211 (114)	131 (41)
16									24 (12)	131 (76)	213 (116)	242 (78)
17									29 (18)	144 (71)	281 (172)	311 (122)
18												
19	32 (22)	140 (70)	177 (83)	111 (36)								
20	7 (6)	71 (27)	93 (37)	79 (29)								
21	13 (12)	89 (31)	107 (49)	117 (48)								
22	20 (11)	109 (51)	140 (65)	233 (284)								
23	27 (13)	109 (43)	151 (62)	115 (43)								
24	29 (21)	117 (76)	163 (155)	130 (61)								
25	30 (13)	114 (46)	161 (57)	147 (47)								
26	34 (16)	126 (52)	172 (83)	154 (46)								
27	40 (14)	129 (49)	175 (63)	156 (47)								
28	48 (53)	178 (118)	222 (97)	199 (78)								
29	32 (30)	142 (86)	182 (123)	175 (68)								
30	30 (16)	102 (50)	146 (76)	162 (79)								
Mean	27	134	175	168					22	178	271	149
n	19	19	19	19	0	0	0	0	7	7	7	7
SD	9	34	47	47					5	59	58	84
Min	7	71	93	79					14	122	211	76
Max	48	205	302	276					29	309	380	311

ED_004549_00015840-00152

Table E4. Daily means (SD) of particulate matter concentrations at Site OK4B for July, 2009.

Day	PM10 concentration, mg/dsm^3				PM2.5 concentration, mg/dsm^3				TSP concentration, mg/dsm^3			
	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9	Inlet	Barn 1	Barn 2	Farrowing rm 9
	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
1	35 (24)	146 (102)	211 (119)	205 (139)								
2	23 (14)	122 (74)	193 (104)	180 (96)								
3	35 (29)	135 (74)	180 (104)									
4	24 (7)	82 (43)	115 (49)	23 (28)								
5	17 (8)	106 (57)	159 (61)	25 (30)								
6	34 (24)	119 (75)	201 (110)	42 (29)								
7	20 (13)	104 (72)	174 (125)	46 (42)								
8	27 (12)	94 (59)	170 (105)	43 (42)								
9	21 (7)	139 (134)	175 (100)	57 (44)								
10	24 (13)	135 (126)	199 (162)	54 (62)								
11	19 (7)	122 (94)	134 (144)	52 (66)								
12	22 (17)	137 (111)	161 (146)	77 (58)								
13	30 (8)	111 (79)	140 (123)	77 (53)								
14	34 (12)	147 (114)	145 (144)	106 (69)								
15	36 (36)	110 (85)	141 (100)	88 (44)								
16	17 (13)	104 (56)	136 (63)	90 (42)								
17	21 (8)	102 (44)	150 (53)	108 (43)								
18	20 (8)	117 (73)	148 (72)	130 (63)								
19	13 (6)	84 (48)	135 (62)	111 (50)								
20	30 (29)											
21	29 (12)											
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Mean	25	117	161	84								
n	21	19	19	18	0	0	0	0	0	0	0	0
SD	7	19	26	49								
Min	13	82	115	23								
Max	36	147	211	205								

ED_004549_00015840-00153

Table E5. NH_3 Concentrations

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for August, 2007. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.9 (0.4)	0.7 (0.3)	3.9 (0.8)	2.8 (0.6)	3.8 (1.0)	2.7 (0.7)	0.9 (0.2)	0.6 (0.1)		2.0 (0.2)	
2	1.2 (0.3)	0.9 (0.3)	4.4 (1.4)	3.2 (1.0)	3.6 (1.1)	2.5 (0.8)	1.0 (0.2)	0.7 (0.1)		2.0 (0.3)	
3	0.6 (0.1)	0.4 (0.1)	3.9 (0.9)	2.8 (0.7)	3.7 (1.0)	2.7 (0.7)	0.7 (0.1)	0.5 (0.1)		1.9 (0.1)	
4	0.5 (0.0)	0.3 (0.0)	3.6 (0.6)	2.6 (0.4)	3.1 (0.7)	2.3 (0.5)	0.7 (0.1)	0.5 (0.1)		1.8 (0.1)	
5	0.5 (0.0)	0.4 (0.0)	4.0 (1.0)	2.9 (0.7)	3.3 (0.7)	2.3 (0.5)	0.7 (0.1)	0.5 (0.1)		1.8 (0.2)	
6	0.5 (0.1)	0.3 (0.1)	3.9 (1.0)	2.8 (0.7)	3.4 (0.7)	2.4 (0.5)	0.7 (0.1)	0.5 (0.1)		1.8 (0.1)	
7	0.4 (0.1)	0.3 (0.1)	3.9 (0.8)	2.8 (0.6)	3.4 (0.8)	2.4 (0.5)	0.7 (0.1)	0.5 (0.1)		1.9 (0.2)	
8	0.4 (0.1)	0.3 (0.1)	4.6 (1.3)	3.3 (1.0)	3.4 (0.8)	2.4 (0.6)	0.6 (0.1)	0.5 (0.1)		1.9 (0.1)	
9											
10											
11											
12											
13											
14											
15	0.1 (0.0)	0.1 (0.0)	2.8 (0.3)	2.0 (0.2)	2.4 (0.5)	1.7 (0.4)	0.1 (0.0)	0.1 (0.0)	3.5 (0.3)	2.2 (0.1)	
16	0.3 (0.1)	0.2 (0.1)	3.5 (0.9)	2.5 (0.7)	3.1 (0.7)	2.2 (0.5)	0.2 (0.0)	0.2 (0.0)	3.6 (0.6)	2.2 (0.3)	
17	0.2 (0.0)						0.4 (0.0)				
18	0.4 (0.3)	0.3 (0.2)	4.8 (1.7)	3.4 (1.2)	3.9 (1.0)	2.8 (0.7)	0.5 (0.1)	0.3 (0.1)	4.3 (0.5)	2.2 (0.2)	
19	0.5 (0.2)	0.3 (0.1)	5.6 (1.9)	4.1 (1.4)	4.2 (0.8)	3.0 (0.6)	0.6 (0.1)	0.4 (0.1)	5.1 (0.4)	2.4 (0.3)	
20	0.5 (0.2)	0.3 (0.1)	5.2 (0.9)	3.8 (0.7)	4.7 (0.8)	3.4 (0.6)	0.5 (0.1)	0.4 (0.1)	4.9 (1.2)	2.6 (0.5)	
21	0.5 (0.4)	0.3 (0.3)	4.8 (0.9)	3.4 (0.6)	4.3 (0.8)	3.1 (0.6)	0.4 (0.1)	0.3 (0.1)	4.1 (0.2)	2.4 (0.2)	1.7 (0.1)
22	0.2 (0.1)	0.1 (0.1)	4.6 (0.9)	3.1 (0.5)	3.6 (0.8)	2.5 (0.6)	0.3 (0.1)	0.2 (0.0)	3.8 (0.3)	1.9 (0.3)	1.4 (0.2)
23	0.2 (0.1)	0.2 (0.1)	4.1 (0.8)	3.0 (0.6)	3.3 (0.7)	2.4 (0.5)	0.3 (0.1)	0.2 (0.1)	3.6 (0.3)	1.9 (0.3)	1.4 (0.2)
24	0.7 (0.3)	0.5 (0.2)	5.1 (1.8)	3.7 (1.3)	3.9 (1.0)	2.8 (0.7)	0.4 (0.1)	0.3 (0.1)	3.6 (0.3)	2.2 (0.3)	1.6 (0.2)
25	0.7 (0.3)	0.5 (0.2)	4.6 (1.3)	3.3 (0.9)	4.3 (1.1)	3.1 (0.8)	0.5 (0.1)	0.4 (0.1)	4.4 (0.5)	2.4 (0.3)	1.8 (0.2)
26	0.2 (0.1)	0.1 (0.1)	4.3 (0.8)	3.1 (0.6)	3.5 (0.7)	2.5 (0.5)	0.3 (0.1)	0.2 (0.0)	4.2 (0.4)	2.2 (0.2)	1.6 (0.2)
27	0.2 (0.1)	0.1 (0.0)	4.3 (0.9)	3.1 (0.6)	3.7 (0.7)	2.7 (0.5)	0.2 (0.1)	0.2 (0.0)	2.3 (1.5)	2.2 (0.3)	1.6 (0.2)
28	0.2 (0.0)	0.1 (0.0)	4.4 (1.1)	3.2 (0.8)	3.3 (0.7)	2.4 (0.5)	0.3 (0.1)	0.2 (0.0)	0.8 (0.1)	2.0 (0.2)	1.4 (0.1)
29	0.3 (0.1)	0.2 (0.0)	5.5 (1.8)	4.0 (1.4)	3.7 (1.2)	2.6 (0.9)	0.4 (0.0)	0.3 (0.0)	0.9 (0.2)	1.9 (0.3)	
30	0.7 (0.2)	0.5 (0.2)	5.0 (1.4)	3.6 (1.0)	3.7 (1.0)	2.6 (0.7)	0.5 (0.2)	0.4 (0.1)	0.9 (0.2)	2.0 (0.3)	1.4 (0.2)
31	0.5 (0.2)	0.4 (0.1)	4.5 (1.4)	3.3 (1.0)	3.9 (1.0)	2.8 (0.7)	0.5 (0.2)	0.4 (0.1)	1.1 (0.3)	2.3 (0.3)	1.7 (0.2)
Mean	0.5	0.3	4.4	3.2	3.6	2.6	0.5	0.4	3.2	2.1	1.5
n	25	24	24	24	24	24	25	24	16	24	10
SD	0.3	0.2	0.6	0.5	0.5	0.3	0.2	0.2	1.4	0.2	0.1
Min	0.1	0.1	2.8	2.0	2.4	1.7	0.1	0.1	0.8	1.8	1.4
Max	1.2	0.9	5.6	4.1	4.7	3.4	1.0	0.7	5.1	2.6	1.8

ED_004549_00015840-00154

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for July, 2007. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20	0.6 (0.2)	0.4 (0.1)	3.4 (1.0)	2.3 (0.7)	3.6 (0.9)	2.5 (0.6)	0.7 (0.1)	0.5 (0.1)		2.1 (0.2)	
21	0.5 (0.1)	0.4 (0.1)	3.7 (1.2)	2.6 (0.8)	4.0 (1.1)	2.9 (0.8)	0.8 (0.1)	0.5 (0.1)		2.1 (0.3)	
22	0.5 (0.1)	0.4 (0.1)	3.6 (1.1)	2.6 (0.8)	3.9 (1.0)	2.8 (0.7)	0.7 (0.1)	0.5 (0.1)		2.0 (0.2)	
23	0.8 (0.4)	0.6 (0.3)	3.5 (0.8)	2.5 (0.6)	4.1 (0.9)	3.0 (0.6)	0.8 (0.2)	0.5 (0.1)		2.4 (0.3)	
24	0.7 (0.2)	0.5 (0.1)	3.8 (1.0)	2.7 (0.7)	4.1 (0.9)	3.0 (0.6)	0.9 (0.2)	0.7 (0.1)		2.6 (0.2)	
25	0.5 (0.1)	0.3 (0.0)	3.8 (0.9)	2.7 (0.6)	4.6 (1.1)	3.3 (0.8)	0.7 (0.1)	0.5 (0.1)		2.3 (0.2)	
26	0.4 (0.0)	0.3 (0.0)	3.6 (1.0)	2.6 (0.7)	4.6 (1.0)	3.3 (0.7)	0.6 (0.1)	0.4 (0.1)		1.9 (0.4)	
27	0.8 (0.3)	0.5 (0.2)	3.9 (1.0)	2.8 (0.7)	4.6 (0.9)	3.3 (0.6)	0.7 (0.1)	0.5 (0.1)		2.1 (0.5)	
28	0.7 (0.2)	0.5 (0.1)	3.7 (0.9)	2.6 (0.7)	4.2 (1.1)	3.0 (0.8)	0.7 (0.1)	0.5 (0.1)		1.4 (0.2)	
29	0.4 (0.1)	0.3 (0.0)	3.5 (0.8)	2.5 (0.6)	3.6 (0.8)	2.6 (0.6)	0.6 (0.2)	0.4 (0.1)		1.2 (0.1)	
30	0.4 (0.1)	0.3 (0.0)	3.8 (0.7)	2.7 (0.5)	3.7 (0.8)	2.7 (0.6)	0.6 (0.1)	0.5 (0.1)		1.5 (0.3)	
31	0.7 (0.2)	0.5 (0.2)	4.0 (0.9)	2.9 (0.6)	4.0 (0.9)	2.9 (0.7)	0.9 (0.1)	0.6 (0.1)		2.1 (0.4)	
Mean	0.6	0.4	3.7	2.6	4.1	2.9	0.7	0.5		2.0	
n	12	12	12	12	12	12	12	12	0	12	0
SD	0.1	0.1	0.2	0.1	0.3	0.3	0.1	0.1		0.4	
Min	0.4	0.3	3.4	2.3	3.6	2.5	0.6	0.4		1.2	
Max	0.8	0.6	4.0	2.9	4.6	3.3	0.9	0.7		2.6	

ED_004549_00015840-00155

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for September, 2007. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.2 (0.0)	0.2 (0.0)	4.0 (1.0)	2.9 (0.8)	4.2 (1.2)	3.0 (0.9)	0.3 (0.0)	0.2 (0.0)	0.8 (0.1)	2.0 (0.2)	1.5 (0.2)
2	0.2 (0.0)	0.2 (0.0)	4.5 (1.6)	3.3 (1.2)	4.3 (1.4)	3.1 (1.0)	0.2 (0.0)	0.2 (0.0)	0.8 (0.1)	2.1 (0.2)	1.5 (0.2)
3	0.1 (0.0)	0.1 (0.0)	4.7 (1.8)	3.3 (1.3)	4.7 (2.1)	3.3 (1.5)	0.2 (0.1)	0.1 (0.0)	0.7 (0.1)	2.2 (0.4)	1.6 (0.3)
4	0.2 (0.0)	0.1 (0.0)					0.3 (0.0)	0.2 (0.0)			
5	0.2 (0.0)	0.2 (0.0)					0.3 (0.1)	0.2 (0.0)			
6	0.2 (0.0)	0.1 (0.0)	4.3 (1.0)	3.1 (0.7)	3.7 (1.0)	2.7 (0.7)	0.3 (0.1)	0.2 (0.1)	0.7 (0.1)	3.4 (0.8)	
7	0.6 (0.4)	0.4 (0.3)	5.0 (0.7)	3.6 (0.5)	4.1 (0.9)	2.9 (0.7)	0.3 (0.2)	0.2 (0.1)	0.8 (0.1)	4.5 (0.6)	
8	0.8 (0.4)	0.6 (0.3)	5.4 (1.8)	3.9 (1.3)	4.4 (0.9)	3.2 (0.7)	0.4 (0.1)	0.3 (0.1)	1.0 (0.1)	5.0 (0.8)	
9	0.6 (0.3)	0.4 (0.2)	5.8 (1.3)	4.1 (0.9)	5.4 (2.0)	3.9 (1.4)	0.3 (0.2)	0.2 (0.1)	0.8 (0.2)	5.9 (0.8)	
10	0.7 (0.4)	0.5 (0.3)					0.3 (0.1)	0.2 (0.1)			
11	0.2 (0.1)	0.1 (0.1)	7.6 (3.0)	5.5 (2.1)	7.6 (4.4)	5.5 (3.1)	0.2 (0.0)	0.1 (0.0)	1.7 (1.2)		
12	0.1 (0.0)	0.1 (0.0)	6.7 (3.0)	4.9 (2.2)	6.4 (3.2)	4.6 (2.3)	0.2 (0.0)	0.2 (0.0)	1.1 (0.8)	2.7 (1.4)	1.9 (1.0)
13	0.2 (0.1)	0.2 (0.1)	5.4 (1.9)	3.9 (1.4)	5.3 (2.2)	3.8 (1.5)	0.2 (0.1)	0.2 (0.0)	0.8 (0.1)	2.4 (0.9)	1.7 (0.7)
14	0.5 (0.3)	0.3 (0.2)	6.8 (1.7)	4.9 (1.2)	6.6 (2.1)	4.7 (1.5)	0.1 (0.0)	0.1 (0.0)	0.8 (0.5)	3.1 (0.9)	2.2 (0.7)
15	0.2 (0.1)	0.1 (0.1)	5.9 (1.9)	4.2 (1.4)	6.2 (2.2)	4.5 (1.5)	0.2 (0.0)	0.2 (0.0)	0.9 (0.5)	2.5 (0.9)	1.8 (0.6)
16	0.1 (0.1)	0.1 (0.0)	4.2 (0.9)	3.0 (0.6)	3.8 (0.8)	2.7 (0.6)	0.2 (0.1)	0.1 (0.0)	0.6 (0.1)	1.7 (0.2)	1.2 (0.1)
17	0.2 (0.0)	0.1 (0.0)	4.9 (1.0)	3.5 (0.7)	4.3 (1.1)	3.1 (0.8)	0.3 (0.1)	0.2 (0.1)	0.7 (0.2)	2.3 (0.5)	1.7 (0.4)
18	0.2 (0.1)	0.1 (0.1)	5.0 (1.0)	3.6 (0.7)	4.3 (1.2)	3.1 (0.9)	0.3 (0.2)	0.2 (0.1)	0.7 (0.2)	2.9 (0.3)	2.1 (0.2)
19	0.6 (0.4)	0.4 (0.3)	4.8 (1.5)	3.5 (1.1)	4.7 (1.0)	3.4 (0.7)	0.4 (0.2)	0.3 (0.1)	0.9 (0.2)	3.2 (0.3)	2.3 (0.2)
20	0.3 (0.0)	0.2 (0.0)	4.1 (0.9)	2.9 (0.7)	4.3 (1.3)	2.8 (0.9)	0.3 (0.0)	0.2 (0.0)	0.8 (0.1)	3.2 (0.2)	2.4 (0.1)
21	0.2 (0.2)	0.2 (0.1)	4.2 (0.8)	3.1 (0.6)	3.7 (1.0)	2.7 (0.7)	0.2 (0.1)	0.1 (0.1)	0.7 (0.1)	3.0 (0.3)	2.2 (0.2)
22	0.3 (0.1)	0.2 (0.1)	4.6 (1.3)	3.3 (0.9)	4.6 (1.3)	3.3 (1.0)	0.3 (0.0)	0.2 (0.0)	0.8 (0.2)	3.4 (0.4)	2.5 (0.3)
23	0.2 (0.0)	0.1 (0.0)	4.5 (1.1)	3.2 (0.8)	4.3 (1.0)	3.1 (0.7)	0.3 (0.0)	0.2 (0.0)	0.7 (0.1)	3.5 (0.3)	2.5 (0.2)
24	0.1 (0.0)						0.3 (0.0)				
25	0.2 (0.2)						0.2 (0.2)				
26	0.1 (0.1)	0.1 (0.0)	6.4 (3.4)	4.6 (2.4)	6.6 (3.3)	4.7 (2.4)	0.2 (0.1)	0.1 (0.1)	1.1 (0.8)	5.1 (1.9)	3.7 (1.3)
27	0.5 (0.4)	0.4 (0.3)	6.0 (2.6)	4.3 (1.8)	5.9 (2.8)	4.3 (2.0)	0.2 (0.1)	0.2 (0.1)	0.8 (0.3)	5.1 (1.7)	3.6 (1.2)
28	0.2 (0.1)	0.1 (0.0)	4.2 (1.0)	3.0 (0.7)	4.4 (1.2)	3.1 (0.9)	0.2 (0.1)	0.2 (0.0)	0.7 (0.1)	3.8 (0.5)	
29	0.2 (0.0)	0.1 (0.0)	3.7 (0.6)	2.7 (0.4)	3.9 (0.8)	2.8 (0.6)	0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	3.8 (0.3)	
30											
Mean	0.3	0.2	5.1	3.7	4.9	3.5	0.3	0.2	0.8	3.3	2.1
n	29	27	24	24	24	24	29	27	24	23	17
SD	0.2	0.1	1.0	0.7	1.1	0.8	0.1	0.0	0.2	1.1	0.7
Min	0.1	0.1	3.7	2.7	3.7	2.7	0.1	0.1	0.6	1.7	1.2
Max	0.8	0.6	7.6	5.5	7.6	5.5	0.4	0.3	1.7	5.9	3.7

ED_004549_00015840-00156

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for October, 2007. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1											
2											
3											
4											
5	0.1 (0.0)	0.1 (0.0)	3.9 (1.0)	2.8 (0.7)	3.2 (0.6)	2.3 (0.4)	0.2 (0.0)	0.1 (0.0)	0.7 (0.1)	2.1 (0.2)	1.5 (0.1)
6	0.2 (0.0)						0.2 (0.0)				
7	0.2 (0.1)	0.1 (0.1)	5.1 (1.2)	3.6 (0.8)	4.4 (1.6)	3.2 (1.2)	0.1 (0.1)	0.1 (0.0)	0.6 (0.1)	2.6 (0.5)	1.9 (0.4)
8	0.2 (0.2)	0.2 (0.2)	7.1 (2.4)	5.1 (1.7)	7.5 (3.8)	5.4 (2.7)	0.1 (0.0)	0.1 (0.0)	1.1 (0.7)	3.6 (1.2)	2.6 (0.8)
9	0.1 (0.1)	0.1 (0.0)	6.6 (2.3)	4.7 (1.7)	7.8 (4.0)	5.6 (2.9)	0.1 (0.0)	0.1 (0.0)	1.5 (1.1)	3.3 (1.0)	2.3 (0.7)
10	0.2 (0.2)	0.2 (0.1)	5.0 (2.3)	3.7 (1.6)	5.8 (4.1)	4.3 (3.0)	0.2 (0.1)	0.2 (0.1)	0.9 (0.7)	2.7 (0.7)	2.0 (0.5)
11	0.5 (0.4)	0.3 (0.3)	4.0 (1.7)	2.9 (1.2)	3.8 (1.1)	2.7 (0.8)	0.3 (0.1)	0.2 (0.1)	0.7 (0.2)	2.6 (0.3)	1.9 (0.2)
12	0.2 (0.0)	0.1 (0.0)	3.2 (1.9)	2.3 (1.4)	3.9 (2.2)	2.8 (1.6)	0.2 (0.0)	0.2 (0.0)	0.6 (0.2)	2.8 (0.8)	2.0 (0.6)
13	0.1 (0.0)	0.1 (0.0)	2.0 (0.4)	1.4 (0.3)	2.3 (0.5)	1.7 (0.4)	0.2 (0.0)	0.1 (0.0)	0.5 (0.1)	2.5 (0.3)	1.8 (0.2)
14	0.1 (0.0)	0.1 (0.0)	4.3 (1.6)	3.1 (1.2)	4.7 (1.5)	3.4 (1.1)	0.1 (0.0)	0.1 (0.0)	0.5 (0.2)	3.7 (0.7)	2.6 (0.5)
15	0.1 (0.1)	0.1 (0.1)	6.2 (3.0)	4.4 (2.1)	7.6 (2.2)	5.5 (1.6)	0.1 (0.0)	0.1 (0.0)	1.2 (0.5)		
16	0.2 (0.2)	0.1 (0.1)	5.2 (3.6)	3.7 (2.6)	5.9 (3.5)	4.2 (2.5)	0.2 (0.1)	0.2 (0.1)	0.9 (0.6)	3.8 (1.0)	2.7 (0.7)
17	0.0 (0.1)	0.0 (0.0)	3.4 (1.4)	2.5 (1.0)	4.2 (1.5)	3.0 (1.1)	0.1 (0.1)	0.1 (0.1)	0.5 (0.2)	3.5 (0.7)	2.5 (0.5)
18	0.1 (0.1)	0.1 (0.1)	5.5 (2.0)	3.9 (1.4)	6.8 (2.7)	4.9 (1.9)	0.0 (0.0)	0.0 (0.0)	1.1 (0.7)	4.7 (1.0)	3.4 (0.7)
19	0.2 (0.2)	0.1 (0.1)	6.2 (3.8)	4.4 (2.7)	7.4 (4.8)	5.3 (3.4)	0.1 (0.0)	0.1 (0.0)	1.8 (1.7)	4.5 (1.3)	3.2 (0.9)
20	0.0 (0.0)	0.0 (0.0)	3.3 (1.9)	2.3 (1.3)	4.2 (2.6)	3.0 (1.8)	0.0 (0.0)	0.0 (0.0)	0.5 (0.4)	3.7 (0.6)	2.7 (0.4)
21	0.0 (0.0)	0.0 (0.0)	7.8 (2.2)	5.6 (1.6)	8.1 (2.0)	5.8 (1.4)	0.1 (0.0)	0.1 (0.0)	0.9 (0.4)	6.0 (1.8)	4.3 (1.3)
22	0.1 (0.1)	0.1 (0.1)	9.3 (3.1)	6.6 (2.2)	9.6 (2.5)	6.9 (1.8)	0.1 (0.0)	0.1 (0.0)	1.3 (0.5)		
23	0.2 (0.1)	0.1 (0.1)	6.8 (3.8)	4.8 (2.7)	7.9 (4.1)	5.6 (2.9)	0.1 (0.0)	0.1 (0.0)	1.0 (0.6)	3.6 (1.6)	2.5 (1.1)
24	0.2 (0.1)	0.1 (0.1)	5.4 (2.1)	3.9 (1.5)	6.3 (2.3)	4.5 (1.7)	0.1 (0.0)	0.1 (0.0)	1.2 (0.7)	3.7 (1.4)	2.7 (1.0)
25	0.3 (0.1)	0.2 (0.0)	5.5 (2.4)	3.9 (1.7)	7.4 (3.0)	5.3 (2.1)	0.2 (0.1)	0.1 (0.0)	1.7 (1.2)		
26	0.2 (0.1)	0.1 (0.1)	6.4 (3.1)	4.6 (2.2)	8.8 (3.9)	6.3 (2.8)	0.1 (0.0)	0.1 (0.0)	1.8 (1.4)	4.7 (2.1)	3.3 (1.5)
27	0.1 (0.0)	0.1 (0.0)	8.2 (1.8)	5.8 (1.3)	9.8 (3.0)	7.0 (2.1)	0.1 (0.0)	0.1 (0.0)	1.4 (0.7)	5.1 (1.1)	3.6 (0.8)
28	0.3 (0.1)	0.2 (0.1)	7.7 (3.1)	5.5 (2.2)	8.8 (3.6)	6.3 (2.5)	0.2 (0.1)	0.1 (0.0)	1.6 (1.2)	4.2 (1.6)	3.0 (1.1)
29	0.1 (0.1)	0.1 (0.1)	6.4 (3.3)	4.6 (2.4)	8.3 (3.9)	5.9 (2.8)	0.1 (0.0)	0.1 (0.0)	0.7 (0.4)	3.1 (1.1)	2.2 (0.8)
30	0.1 (0.0)	0.0 (0.0)	5.6 (2.6)	4.0 (1.9)	6.7 (2.9)	4.8 (2.0)	0.1 (0.0)	0.0 (0.0)	0.5 (0.1)	2.8 (0.9)	2.0 (0.6)
31	0.0 (0.0)	0.0 (0.0)	7.3 (1.9)	5.2 (1.4)	8.0 (1.7)	5.7 (1.2)	0.1 (0.0)	0.0 (0.0)	0.6 (0.2)	4.0 (0.7)	2.9 (0.5)
Mean	0.2	0.1	5.7	4.1	6.5	4.7	0.1	0.1	1.0	3.6	2.6
n	27	26	26	26	26	26	27	26	26	23	23
SD	0.1	0.1	1.7	1.2	2.0	1.5	0.1	0.0	0.4	0.9	0.7
Min	0.0	0.0	2.0	1.4	2.3	1.7	0.0	0.0	0.5	2.1	1.5
Max	0.5	0.3	9.3	6.6	9.8	7.0	0.3	0.2	1.8	6.0	4.3

ED_004549_00015840-00157

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for November, 2007. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.2 (0.2)	0.2 (0.1)	8.5 (3.9)	6.0 (2.8)	9.1 (2.8)	6.5 (2.0)	0.1 (0.0)	0.1 (0.0)	1.2 (0.7)	3.8 (1.0)	2.7 (0.7)
2	0.1 (0.0)	0.1 (0.0)	7.9 (2.6)	5.6 (1.9)	9.6 (2.9)	6.8 (2.0)	0.1 (0.1)	0.1 (0.0)	0.9 (0.6)	3.9 (0.8)	2.8 (0.6)
3	0.2 (0.1)	0.1 (0.0)	7.7 (3.8)	5.5 (2.7)	9.3 (3.7)	6.6 (2.7)	0.1 (0.0)	0.1 (0.0)	0.8 (0.3)	3.5 (1.0)	2.5 (0.7)
4	0.2 (0.1)	0.1 (0.1)	6.5 (3.8)	4.6 (2.7)	8.9 (4.3)	6.3 (3.1)	0.1 (0.1)	0.1 (0.0)	1.0 (0.7)	3.3 (1.1)	2.4 (0.8)
5	0.1 (0.1)	0.0 (0.0)	7.4 (2.7)	5.3 (1.9)	8.8 (2.3)	6.3 (1.6)	0.1 (0.0)	0.0 (0.0)	0.9 (0.6)	4.2 (0.8)	3.0 (0.6)
6	0.1 (0.0)	0.1 (0.0)	9.3 (3.2)	6.9 (2.1)	9.8 (3.2)	7.3 (2.1)	0.1 (0.0)	0.1 (0.0)	1.3 (0.8)	4.4 (0.7)	3.2 (0.5)
7	0.1 (0.0)	0.1 (0.0)	7.5 (3.5)	5.4 (2.5)	8.5 (3.4)	6.1 (2.5)	0.1 (0.0)	0.1 (0.0)	0.7 (0.4)	3.7 (0.9)	2.6 (0.6)
8	0.2 (0.1)	0.2 (0.1)	6.1 (3.8)	4.3 (2.7)	6.8 (3.5)	4.9 (2.5)	0.1 (0.0)	0.1 (0.0)	1.0 (0.9)	3.4 (1.1)	2.4 (0.8)
9	0.2 (0.1)	0.1 (0.1)	5.6 (3.0)	4.0 (2.2)	7.4 (3.5)	5.3 (2.5)	0.2 (0.1)	0.1 (0.1)	0.8 (0.5)	3.5 (1.1)	2.5 (0.8)
10	0.1 (0.1)	0.1 (0.0)	5.2 (2.6)	3.7 (1.8)	6.0 (2.7)	4.3 (1.9)	0.2 (0.1)	0.1 (0.1)	0.6 (0.2)	3.0 (1.0)	2.2 (0.7)
11	0.1 (0.1)	0.1 (0.1)	5.0 (2.9)	3.6 (2.1)	6.6 (3.0)	4.7 (2.1)	0.1 (0.0)	0.1 (0.0)	0.5 (0.2)	3.3 (1.1)	2.3 (0.8)
12	0.2 (0.1)	0.1 (0.1)	8.1 (2.3)	5.8 (1.6)	9.2 (2.2)	6.6 (1.6)	0.1 (0.0)	0.0 (0.0)			
13	0.2 (0.1)	0.1 (0.1)					0.1 (0.0)	0.1 (0.0)			
14	0.1 (0.1)	0.1 (0.0)	8.2 (2.1)	5.9 (1.5)	8.9 (1.6)	6.3 (1.1)	0.1 (0.0)	0.0 (0.0)	1.2 (0.4)	4.3 (0.5)	3.1 (0.4)
15	0.2 (0.1)	0.1 (0.1)	8.9 (1.7)	6.4 (1.2)	9.8 (1.9)	7.0 (1.3)	0.1 (0.0)	0.1 (0.0)	2.4 (0.4)	4.6 (0.7)	3.3 (0.5)
16	0.2 (0.1)	0.1 (0.0)	7.3 (4.2)	5.2 (3.0)	8.1 (4.4)	5.8 (3.2)	0.1 (0.0)	0.1 (0.0)	1.7 (1.0)	3.9 (1.7)	2.8 (1.2)
17	0.3 (0.2)	0.2 (0.1)	6.1 (3.3)	4.4 (2.4)	5.9 (2.4)	4.2 (1.7)	0.1 (0.0)	0.1 (0.0)	1.2 (0.7)	3.7 (1.5)	2.7 (1.1)
18	0.3 (0.1)	0.2 (0.1)	6.0 (3.2)	4.3 (2.3)	6.3 (2.4)	4.5 (1.7)	0.1 (0.0)	0.0 (0.0)	1.8 (1.5)	3.9 (1.8)	2.8 (1.3)
19	0.1 (0.1)	0.1 (0.0)	5.7 (3.3)	4.1 (2.3)	6.6 (3.1)	4.7 (2.2)	0.1 (0.0)	0.1 (0.0)	1.3 (1.1)	3.7 (1.5)	2.6 (1.1)
20	0.1 (0.1)	0.1 (0.0)	7.9 (2.7)	5.6 (1.9)	9.2 (3.5)	6.6 (2.5)	0.1 (0.0)	0.0 (0.0)	1.1 (0.7)	3.9 (1.1)	2.8 (0.8)
21	0.0 (0.0)	0.0 (0.0)	10.8 (1.5)	7.7 (1.1)	12.5 (1.4)	8.9 (1.0)	0.1 (0.0)	0.1 (0.0)	1.3 (0.4)	4.5 (0.5)	3.2 (0.4)
22	0.1 (0.0)	0.1 (0.0)	10.9 (1.1)	7.7 (0.8)	11.5 (1.3)	8.2 (0.9)	0.1 (0.1)	0.1 (0.0)	1.9 (0.5)	3.8 (0.5)	2.7 (0.4)
23	0.1 (0.1)	0.1 (0.1)	11.7 (1.4)	8.4 (1.0)	11.7 (1.8)	8.3 (1.3)	0.1 (0.0)	0.1 (0.0)	1.6 (0.6)	4.1 (0.3)	2.9 (0.2)
24	0.3 (0.1)	0.2 (0.1)	13.2 (2.8)	9.5 (2.0)	11.2 (1.3)	8.0 (0.9)	0.1 (0.0)	0.1 (0.0)	1.4 (0.3)	4.2 (0.6)	3.0 (0.4)
25	0.3 (0.1)	0.2 (0.0)	13.6 (3.0)	9.7 (2.1)	11.4 (1.2)	8.1 (0.9)	0.2 (0.0)	0.1 (0.0)	1.8 (0.7)	4.2 (0.6)	3.0 (0.4)
26	0.1 (0.0)	0.1 (0.0)	10.6 (1.4)	7.6 (1.0)	10.5 (0.7)	7.5 (0.5)	0.1 (0.0)	0.1 (0.0)	1.5 (0.6)	4.9 (0.6)	3.5 (0.4)
27	0.6 (0.1)						0.3 (0.1)				
28	0.3 (0.2)						0.1 (0.1)				
29	0.5 (0.2)						0.1 (0.0)				
30	0.1 (0.0)	0.1 (0.0)	12.7 (1.2)	9.1 (0.9)	13.0 (1.2)	9.3 (0.8)	0.1 (0.0)	0.1 (0.0)	1.6 (0.5)	5.7 (0.4)	4.1 (0.3)
Mean	0.2	0.1	8.4	6.0	9.1	6.5	0.1	0.1	1.3	4.0	2.8
n	30	27	26	26	26	26	30	27	25	25	25
SD	0.1	0.1	2.5	1.8	2.0	1.4	0.1	0.0	0.4	0.6	0.4
Min	0.0	0.0	5.0	3.6	5.9	4.2	0.1	0.0	0.5	3.0	2.2
Max	0.6	0.2	13.6	9.7	13.0	9.3	0.3	0.1	2.4	5.7	4.1

ED_004549_00015840-00158

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for December, 2007. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.1 (0.1)	0.1 (0.1)	7.3 (3.4)	5.2 (2.5)	8.4 (3.7)	6.0 (2.7)	0.2 (0.1)	0.1 (0.0)	0.9 (0.5)	4.2 (1.0)	3.0 (0.7)
2	0.2 (0.2)	0.1 (0.1)	10.3 (2.5)	7.4 (1.8)	11.6 (2.3)	8.3 (1.7)	0.1 (0.0)	0.1 (0.0)	1.1 (0.6)	5.3 (1.0)	3.8 (0.7)
3	0.2 (0.1)	0.2 (0.1)	10.0 (3.4)	7.1 (2.4)	11.4 (3.7)	8.1 (2.6)	0.1 (0.0)	0.1 (0.0)	0.8 (0.3)	5.5 (1.0)	4.0 (0.7)
4	0.1 (0.1)	0.1 (0.1)	7.4 (3.0)	5.3 (2.2)	6.6 (2.7)	4.7 (1.9)	0.1 (0.0)	0.1 (0.0)	0.7 (0.3)	4.9 (1.2)	3.5 (0.8)
5	0.3 (0.1)	0.2 (0.1)	9.6 (1.6)	6.8 (1.1)	10.0 (1.7)	7.2 (1.2)	0.1 (0.0)	0.1 (0.0)	0.7 (0.2)	6.6 (1.3)	4.8 (1.0)
6	0.1 (0.0)	0.1 (0.0)	10.9 (2.9)	7.8 (2.1)	11.7 (2.2)	8.3 (1.6)	0.2 (0.0)	0.1 (0.0)	1.1 (0.5)	8.4 (0.5)	
7	0.2 (0.1)	0.2 (0.1)	13.6 (1.3)	9.7 (0.9)	12.5 (2.3)	8.9 (1.7)	0.2 (0.0)	0.1 (0.0)	2.4 (1.2)	5.9 (2.5)	
8	0.1 (0.0)	0.0 (0.0)	12.9 (1.6)	9.2 (1.1)	9.6 (1.2)	6.8 (0.9)	0.2 (0.0)	0.1 (0.0)	3.8 (0.7)	5.5 (0.5)	4.0 (0.4)
9	0.0 (0.0)	0.0 (0.0)	12.3 (0.9)	8.8 (0.7)	8.8 (0.9)	6.2 (0.6)	0.1 (0.0)	0.1 (0.0)	2.9 (1.1)	6.1 (0.6)	4.4 (0.4)
10	0.1 (0.0)	0.1 (0.0)	11.9 (1.2)	8.5 (0.9)	9.2 (1.1)	6.5 (0.8)	0.2 (0.0)	0.1 (0.0)	5.3 (0.4)	7.0 (2.2)	5.0 (1.5)
11	0.1 (0.0)	0.1 (0.0)	12.0 (1.2)	8.6 (0.9)	8.5 (0.9)	6.1 (0.6)	0.2 (0.0)	0.1 (0.0)	2.9 (1.0)	7.0 (0.7)	5.0 (0.5)
12	0.2 (0.0)	0.1 (0.0)	11.9 (1.3)	8.5 (0.9)	8.4 (1.1)	6.0 (0.8)	0.2 (0.1)	0.2 (0.0)	3.7 (0.8)	7.8 (0.7)	5.6 (0.5)
13	0.2 (0.0)	0.1 (0.0)	11.4 (1.9)	8.2 (1.3)	8.7 (1.2)	6.2 (0.9)	0.1 (0.0)	0.1 (0.0)	3.7 (0.9)	8.3 (0.6)	5.9 (0.4)
14	0.2 (0.1)	0.1 (0.1)	13.7 (0.9)	9.8 (0.7)	8.8 (0.9)	6.3 (0.6)	0.2 (0.0)	0.1 (0.0)	4.2 (1.2)	8.2 (0.7)	5.9 (0.5)
15	0.3 (0.2)	0.2 (0.1)	13.1 (1.1)	9.3 (0.8)	9.2 (1.1)	6.5 (0.8)	0.1 (0.0)	0.1 (0.0)	2.0 (0.5)	7.1 (1.0)	5.1 (0.7)
16	0.4 (0.0)	0.3 (0.0)	12.2 (1.3)	8.7 (0.9)	9.3 (0.9)	6.6 (0.6)	0.2 (0.1)	0.1 (0.0)	2.5 (0.7)	6.4 (0.7)	4.6 (0.5)
17	0.3 (0.1)	0.2 (0.0)	11.6 (3.1)	8.3 (2.2)	10.1 (1.2)	7.2 (0.8)	0.1 (0.0)	0.1 (0.0)	2.5 (1.0)	7.2 (0.8)	5.1 (0.6)
18	0.3 (0.1)	0.2 (0.1)	10.2 (2.8)	7.3 (2.0)	10.1 (2.5)	7.2 (1.8)	0.2 (0.1)	0.2 (0.1)	1.8 (0.7)		
19	0.1 (0.0)	0.1 (0.0)	10.8 (2.6)	7.7 (1.8)	10.6 (3.0)	7.6 (2.2)	0.1 (0.0)	0.1 (0.0)	1.7 (0.8)	5.4 (1.2)	3.9 (0.9)
20	0.2 (0.1)	0.1 (0.1)					0.1 (0.1)	0.1 (0.0)			
21	0.5 (0.3)						0.2 (0.0)				
22	0.2 (0.1)	0.1 (0.1)	13.3 (1.4)	9.5 (1.0)	14.3 (0.8)	10.2 (0.6)	0.1 (0.0)	0.1 (0.0)	1.2 (0.3)	6.0 (0.8)	4.3 (0.6)
23	0.2 (0.1)	0.2 (0.1)	13.3 (1.3)	9.5 (0.9)	15.1 (2.2)	10.8 (1.6)	0.2 (0.0)	0.1 (0.0)	1.9 (0.5)	6.6 (0.9)	4.7 (0.7)
24	0.3 (0.2)	0.2 (0.1)	12.2 (1.5)	8.7 (1.1)	13.6 (0.9)	9.7 (0.7)	0.2 (0.0)	0.1 (0.0)	1.9 (0.8)	6.9 (1.1)	4.9 (0.8)
25	0.2 (0.1)	0.1 (0.1)	12.3 (1.2)	8.8 (0.8)	12.7 (1.6)	9.1 (1.1)	0.2 (0.0)	0.1 (0.0)	2.2 (0.9)	7.7 (0.7)	5.5 (0.5)
26	0.2 (0.0)	0.1 (0.0)	11.3 (1.2)	8.1 (0.8)	11.3 (1.7)	8.1 (1.2)	0.1 (0.0)	0.1 (0.0)	2.5 (0.7)	8.5 (1.4)	6.1 (1.0)
27	0.2 (0.1)	0.1 (0.1)	12.4 (1.8)	8.8 (1.3)	8.7 (0.7)	6.2 (0.5)	0.1 (0.0)	0.1 (0.0)			
28	0.3 (0.1)	0.2 (0.0)	11.9 (1.7)	8.5 (1.2)	8.6 (0.9)	6.2 (0.7)	0.1 (0.0)	0.1 (0.0)	3.0 (1.2)	7.9 (1.3)	
29	0.3 (0.1)	0.2 (0.0)	13.9 (2.1)	9.9 (1.5)	8.8 (1.1)	6.3 (0.8)	0.1 (0.0)	0.1 (0.0)	3.0 (1.4)	8.3 (1.2)	
30	0.2 (0.1)	0.2 (0.1)	12.7 (1.4)	9.1 (1.0)	9.5 (1.3)	6.8 (1.0)	0.1 (0.0)	0.1 (0.0)	2.2 (1.1)	8.4 (2.1)	
31	0.3 (0.2)	0.2 (0.1)	12.3 (3.4)		11.8 (2.5)		0.1 (0.0)	0.1 (0.0)		5.8 (4.5)	
Mean	0.2	0.1	11.7	8.3	10.3	7.3	0.1	0.1	2.3	6.8	4.7
n	31	30	29	28	29	28	31	30	27	27	21
SD	0.1	0.1	1.6	1.2	2.0	1.4	0.0	0.0	1.1	1.2	0.8
Min	0.0	0.0	7.3	5.2	6.6	4.7	0.1	0.1	0.7	4.2	3.0
Max	0.5	0.3	13.9	9.9	15.1	10.8	0.2	0.2	5.3	8.5	6.1

ED_004549_00015840-00159

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for January, 2008. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.3 (0.2)						0.1 (0.0)				
2	0.2 (0.1)	0.1 (0.1)	12.0 (1.5)	8.6 (1.1)	12.3 (1.5)	8.8 (1.1)	0.1 (0.0)	0.1 (0.0)	3.9 (0.9)	5.1 (0.5)	3.7 (0.4)
3	0.2 (0.1)						0.1 (0.0)				
4	0.3 (0.1)	0.2 (0.1)	9.5 (2.8)	6.8 (2.0)	11.0 (3.2)	7.9 (2.3)	0.1 (0.0)	0.1 (0.0)	3.3 (1.2)	6.0 (1.1)	4.3 (0.8)
5	0.2 (0.1)	0.1 (0.1)	8.3 (3.6)	5.9 (2.5)	9.1 (4.7)	6.5 (3.4)	0.2 (0.1)	0.2 (0.1)	2.1 (1.2)	6.4 (1.7)	4.5 (1.2)
6	0.2 (0.0)	0.1 (0.0)	8.0 (2.1)	5.7 (1.5)	10.2 (3.7)	7.3 (2.7)	0.2 (0.1)	0.1 (0.0)	2.1 (1.1)	5.7 (1.1)	4.1 (0.8)
7	0.1 (0.0)	0.1 (0.0)	9.8 (1.9)	7.0 (1.3)	12.4 (3.3)	8.9 (2.3)	0.2 (0.0)	0.1 (0.0)		5.7 (0.6)	4.1 (0.4)
8	0.2 (0.1)	0.1 (0.1)	11.3 (1.5)	8.0 (1.1)	13.3 (1.9)	9.5 (1.4)	0.2 (0.0)	0.1 (0.0)	2.0 (0.5)	6.2 (1.0)	4.4 (0.7)
9	0.1 (0.1)	0.1 (0.0)	9.8 (2.9)	7.0 (2.0)	12.3 (5.6)	8.8 (4.1)	0.2 (0.0)	0.1 (0.0)	1.9 (1.0)	5.6 (0.9)	4.0 (0.6)
10	0.1 (0.0)	0.1 (0.0)	10.3 (1.9)	7.3 (1.4)	12.7 (1.6)	9.1 (1.1)	0.1 (0.1)	0.1 (0.0)	1.7 (0.4)	6.0 (0.8)	4.3 (0.6)
11	0.1 (0.0)	0.1 (0.0)					0.1 (0.0)	0.1 (0.0)			
12	0.2 (0.0)	0.1 (0.0)	11.0 (2.0)	7.8 (1.4)	12.2 (1.9)	8.8 (1.4)	0.1 (0.0)	0.1 (0.0)	1.5 (0.4)	5.9 (0.5)	4.2 (0.4)
13	0.3 (0.1)	0.2 (0.1)	10.4 (2.6)	7.4 (1.9)	12.7 (2.3)	9.1 (1.6)	0.1 (0.0)	0.1 (0.0)	1.8 (0.7)	5.6 (0.6)	4.0 (0.4)
14	0.4 (0.2)	0.3 (0.1)	10.2 (2.0)	7.3 (1.4)	12.7 (2.1)	9.1 (1.5)	0.1 (0.0)	0.1 (0.0)	1.6 (0.6)	5.9 (0.5)	4.2 (0.4)
15	0.2 (0.1)	0.1 (0.1)	10.5 (2.3)	7.5 (1.6)	13.1 (4.6)	9.4 (3.3)	0.1 (0.0)	0.1 (0.0)	1.8 (0.9)	5.9 (0.7)	4.2 (0.6)
16	0.2 (0.1)	0.1 (0.1)	11.3 (1.0)	8.1 (0.7)	14.6 (1.0)	10.4 (0.7)	0.1 (0.0)	0.1 (0.0)	1.5 (0.4)	6.7 (1.0)	4.8 (0.7)
17	0.1 (0.1)	0.1 (0.1)	12.8 (1.6)	9.1 (1.2)	16.1 (1.9)	11.5 (1.3)	0.1 (0.0)	0.1 (0.0)	1.8 (0.8)	6.2 (0.9)	4.5 (0.6)
18	0.2 (0.0)	0.1 (0.0)	11.4 (1.6)	8.2 (1.2)	15.5 (1.9)		0.1 (0.0)	0.1 (0.0)	2.4 (0.8)	7.0 (0.7)	5.0 (0.5)
19	0.3 (0.1)	0.2 (0.0)	12.5 (1.5)	8.9 (1.1)	15.4 (2.6)	11.1 (1.9)	0.1 (0.0)	0.1 (0.0)	2.2 (0.5)	6.9 (0.4)	4.9 (0.3)
20	0.2 (0.1)	0.1 (0.1)	11.7 (1.6)	8.4 (1.2)	11.5 (4.1)		0.2 (0.0)	0.1 (0.0)	2.0 (1.2)	6.8 (0.5)	4.8 (0.4)
21	0.1 (0.0)	0.1 (0.0)	12.0 (1.3)	8.5 (0.9)	9.1 (1.3)		0.1 (0.0)	0.1 (0.0)	1.7 (0.4)	7.5 (0.6)	5.4 (0.5)
22	0.2 (0.0)	0.1 (0.0)	12.0 (1.8)	8.5 (1.3)	8.5 (1.1)		0.1 (0.0)	0.1 (0.0)	1.7 (0.8)	7.0 (0.6)	5.0 (0.5)
23	0.1 (0.0)	0.1 (0.0)	11.1 (1.2)	7.9 (0.8)	7.7 (1.3)		0.1 (0.0)	0.1 (0.0)		7.0 (0.4)	
24	0.2 (0.1)	0.1 (0.1)					0.1 (0.0)	0.1 (0.0)			
25	0.1 (0.0)	0.1 (0.0)	10.8 (3.0)	7.7 (2.1)	9.2 (1.8)	6.5 (1.3)	0.1 (0.0)	0.1 (0.0)	2.6 (0.9)	4.7 (0.7)	3.3 (0.5)
26	0.2 (0.1)	0.1 (0.0)	9.9 (3.3)	7.0 (2.3)	8.4 (2.4)	6.0 (1.7)	0.1 (0.0)	0.1 (0.0)	1.9 (0.6)	5.3 (0.8)	3.8 (0.6)
27											
28											
29											
30											
31											
Mean	0.2	0.1	10.7	7.7	11.8	8.8	0.1	0.1	2.1	6.1	4.4
n	26	24	22	22	22	17	26	24	20	22	21
SD	0.1	0.0	1.2	0.9	2.4	1.5	0.0	0.0	0.6	0.7	0.5
Min	0.1	0.1	8.0	5.7	7.7	6.0	0.1	0.1	1.5	4.7	3.3
Max	0.4	0.3	12.8	9.1	16.1	11.5	0.2	0.2	3.9	7.5	5.4

ED_004549_00015840-00160

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for February, 2008. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.2 (0.1)	0.2 (0.1)	10.4 (3.8)	7.4 (2.7)	8.4 (2.7)	6.0 (1.9)	0.1 (0.1)	0.1 (0.0)	2.7 (1.7)	6.5 (1.5)	4.7 (1.1)
2	0.1 (0.1)	0.1 (0.0)	10.8 (1.9)	7.7 (1.4)	9.1 (1.5)	6.5 (1.1)	0.1 (0.0)	0.1 (0.0)	2.3 (0.8)	6.4 (1.1)	4.6 (0.8)
3	0.3 (0.2)	0.2 (0.1)	9.2 (2.7)	6.6 (1.9)	7.8 (2.0)	5.6 (1.5)	0.2 (0.1)	0.1 (0.0)	1.5 (1.0)	5.4 (1.0)	3.9 (0.7)
4	0.2 (0.2)						0.1 (0.0)				
5	0.1 (0.1)	0.1 (0.1)	12.1 (1.4)	8.6 (1.0)	11.0 (1.4)	7.9 (1.0)	0.1 (0.0)	0.1 (0.0)	1.6 (0.5)	7.0 (0.9)	5.0 (0.6)
6	0.3 (0.1)	0.2 (0.1)	14.0 (3.4)	10.0 (2.5)			0.2 (0.1)	0.1 (0.0)	1.7 (0.5)	5.7 (0.8)	4.1 (0.5)
7	0.2 (0.1)	0.1 (0.0)					0.0 (0.0)	0.0 (0.0)			
8	0.2 (0.1)	0.1 (0.1)	12.6 (1.9)	9.0 (1.4)	9.9 (1.6)	7.0 (1.2)	0.1 (0.0)	0.1 (0.0)	1.3 (0.8)	5.5 (0.4)	3.9 (0.3)
9	0.2 (0.1)	0.1 (0.1)	9.7 (3.1)	7.0 (2.2)	7.6 (1.8)	5.4 (1.3)	0.1 (0.0)	0.0 (0.0)	1.3 (0.9)	5.3 (0.7)	3.8 (0.5)
10	0.1 (0.0)	0.1 (0.0)	12.6 (1.2)	9.0 (0.8)	9.5 (1.5)	6.8 (1.1)	0.0 (0.0)	0.0 (0.0)	2.2 (0.8)	6.5 (0.9)	4.6 (0.7)
11	0.1 (0.0)	0.1 (0.0)	10.5 (2.6)	7.5 (1.8)	9.3 (1.7)	6.7 (1.2)	0.1 (0.0)	0.1 (0.0)	1.8 (1.0)	6.3 (0.9)	4.5 (0.7)
12	0.4 (0.1)	0.3 (0.1)	11.8 (2.0)	8.5 (1.4)	9.4 (1.3)	6.7 (0.9)	0.1 (0.0)	0.1 (0.0)	1.5 (0.5)	7.0 (0.7)	5.0 (0.5)
13	0.2 (0.2)	0.2 (0.2)	9.5 (3.9)	6.7 (2.8)	8.0 (2.7)	5.7 (1.9)	0.1 (0.0)	0.0 (0.0)	1.1 (0.7)	5.8 (1.1)	4.1 (0.8)
14	0.0 (0.0)	0.0 (0.0)	10.6 (1.4)	7.6 (1.0)	10.5 (1.8)	7.5 (1.3)	0.1 (0.0)	0.0 (0.0)	1.6 (0.5)	6.7 (0.8)	4.8 (0.6)
15	0.1 (0.0)	0.0 (0.0)	12.4 (1.8)	8.8 (1.3)	11.4 (1.4)	8.1 (1.0)	0.1 (0.0)	0.0 (0.0)	2.3 (0.7)	7.8 (1.3)	5.6 (0.9)
16	0.2 (0.1)	0.1 (0.1)	11.7 (1.4)	8.4 (1.0)	10.9 (1.2)	7.8 (0.8)	0.1 (0.0)	0.1 (0.0)	1.5 (0.5)	7.0 (0.6)	5.0 (0.4)
17	0.2 (0.1)	0.1 (0.1)	12.0 (0.9)	8.6 (0.7)	10.5 (0.8)	7.5 (0.6)	0.1 (0.0)	0.1 (0.0)	1.3 (0.3)	7.7 (0.7)	5.5 (0.5)
18	0.4 (0.1)	0.3 (0.1)	11.2 (1.9)	8.0 (1.3)	8.9 (1.6)	6.3 (1.2)	0.0 (0.0)	0.0 (0.0)	2.0 (0.5)	4.8 (2.6)	3.8 (1.9)
19	0.1 (0.1)	0.1 (0.1)	10.2 (2.7)	7.3 (2.0)	8.7 (0.9)	6.2 (0.6)	0.1 (0.0)	0.0 (0.0)	2.7 (0.7)	4.7 (0.8)	3.4 (0.6)
20	0.1 (0.0)	0.1 (0.0)	13.3 (2.1)	9.5 (1.5)	12.1 (1.6)	8.6 (1.2)	0.1 (0.0)	0.1 (0.0)	4.7 (1.2)	6.3 (0.6)	4.5 (0.4)
21	0.1 (0.1)	0.1 (0.0)	13.4 (2.0)	9.6 (1.4)	12.4 (1.7)	8.8 (1.2)	0.1 (0.0)	0.0 (0.0)	5.1 (0.5)	7.9 (0.5)	5.6 (0.3)
22	0.4 (0.3)	0.3 (0.2)	12.6 (2.8)	9.0 (2.0)	10.8 (1.9)	7.7 (1.4)	0.1 (0.0)	0.1 (0.0)	4.4 (1.0)	8.4 (0.6)	6.0 (0.4)
23	0.2 (0.1)	0.1 (0.1)	11.6 (2.2)	8.3 (1.6)	10.6 (2.7)	7.6 (1.9)	0.2 (0.0)	0.1 (0.0)	4.9 (1.5)	8.4 (1.1)	6.0 (0.8)
24	0.2 (0.1)	0.2 (0.1)	10.6 (4.9)	7.6 (3.5)	8.7 (3.2)	6.2 (2.3)	0.2 (0.0)	0.1 (0.0)	3.1 (1.8)	7.5 (1.6)	5.4 (1.2)
25	0.2 (0.1)	0.1 (0.1)	10.7 (2.0)	7.7 (1.4)	10.5 (1.4)	7.5 (1.0)	0.1 (0.0)	0.1 (0.0)	2.9 (1.5)	8.5 (1.4)	6.1 (1.0)
26	0.3 (0.2)	0.2 (0.1)	14.0 (2.7)	10.0 (1.9)	12.8 (1.5)	9.1 (1.1)	0.1 (0.0)	0.1 (0.0)	2.6 (0.6)	9.1 (0.7)	6.5 (0.5)
27	0.5 (0.2)	0.3 (0.1)	11.5 (3.6)	8.2 (2.6)	10.4 (2.8)	7.4 (2.0)	0.1 (0.1)	0.1 (0.0)	2.1 (1.4)	8.0 (1.8)	5.8 (1.3)
28	0.3 (0.1)	0.2 (0.1)	9.9 (3.8)	7.1 (2.7)	9.1 (3.0)	6.5 (2.1)	0.1 (0.1)	0.1 (0.0)	2.5 (1.8)	6.9 (2.2)	4.9 (1.6)
29	0.5 (0.3)	0.4 (0.2)	10.4 (3.8)	7.6 (2.7)	9.6 (3.2)	7.0 (2.2)	0.1 (0.0)	0.1 (0.0)	1.8 (1.1)	6.1 (1.8)	4.4 (1.3)
Mean	0.2	0.2	11.5	8.2	9.9	7.1	0.1	0.1	2.4	6.8	4.9
n	29	28	27	27	26	26	29	28	27	27	27
SD	0.1	0.1	1.3	0.9	1.4	1.0	0.0	0.0	1.1	1.2	0.8
Min	0.0	0.0	9.2	6.6	7.6	5.4	0.0	0.0	1.1	4.7	3.4
Max	0.5	0.4	14.0	10.0	12.8	9.1	0.2	0.1	5.1	9.1	6.5

ED_004549_00015840-00161

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for March, 2008. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.0 (0.0)	0.0 (0.0)	6.9 (3.7)	4.9 (2.7)	7.0 (4.2)	5.0 (3.0)	0.1 (0.0)	0.1 (0.0)	1.0 (0.9)	4.4 (2.0)	3.1 (1.4)
2	0.1 (0.0)	0.0 (0.0)	9.0 (1.4)	6.4 (1.0)	10.4 (2.5)	7.4 (1.7)	0.1 (0.0)	0.1 (0.0)	0.8 (0.2)	4.8 (0.9)	3.5 (0.7)
3	0.1 (0.1)	0.1 (0.1)	13.3 (1.2)	9.5 (0.8)	11.8 (2.8)	8.4 (2.0)	0.1 (0.0)	0.1 (0.0)	1.9 (0.9)	6.8 (0.6)	4.8 (0.4)
4	0.2 (0.1)	0.1 (0.1)	12.1 (4.1)	8.6 (2.9)	9.2 (2.1)	6.6 (1.5)	0.1 (0.0)	0.1 (0.0)	2.1 (1.4)	5.8 (1.7)	4.1 (1.2)
5	0.1 (0.1)	0.1 (0.0)	13.6 (1.5)	9.7 (1.0)	12.8 (1.1)	9.1 (0.8)	0.1 (0.0)	0.1 (0.0)	2.2 (0.6)	6.7 (0.5)	4.8 (0.4)
6	0.2 (0.2)	0.1 (0.2)	13.5 (2.7)	9.6 (1.9)	12.9 (1.4)	9.2 (1.0)	0.1 (0.0)	0.1 (0.0)	2.5 (1.0)	6.9 (0.8)	4.9 (0.6)
7	0.6 (0.2)	0.4 (0.2)	15.0 (2.0)	10.7 (1.4)	12.7 (1.7)	9.1 (1.2)	0.1 (0.0)	0.1 (0.0)	1.8 (0.3)		
8	0.3 (0.1)	0.2 (0.1)	12.4 (4.0)	8.8 (2.8)	9.9 (2.0)	7.1 (1.4)	0.1 (0.0)	0.1 (0.0)	2.1 (1.4)	5.9 (1.4)	4.2 (1.0)
9	0.2 (0.1)	0.2 (0.1)	10.1 (3.7)	7.2 (2.6)	8.8 (2.2)	6.3 (1.5)	0.1 (0.0)	0.1 (0.0)	1.1 (0.7)	5.0 (1.0)	3.6 (0.7)
10	0.1 (0.0)	0.1 (0.0)	9.9 (4.5)	7.0 (3.2)	8.4 (1.7)	6.0 (1.2)	0.1 (0.0)	0.1 (0.0)	1.3 (0.8)	5.3 (1.1)	3.8 (0.8)
11	0.1 (0.1)	0.1 (0.1)	8.6 (4.3)	6.1 (3.1)	7.7 (2.7)	5.5 (1.9)	0.1 (0.1)	0.1 (0.0)	0.9 (0.5)	4.8 (1.1)	3.5 (0.8)
12	0.2 (0.1)	0.1 (0.1)	9.2 (4.5)	6.5 (3.2)	8.0 (2.6)	5.7 (1.9)	0.1 (0.0)	0.1 (0.0)	0.8 (0.4)	4.9 (1.0)	3.5 (0.7)
13	0.4 (0.1)	0.3 (0.0)	9.8 (3.8)	7.0 (2.7)	10.7 (3.9)	7.6 (2.8)	0.3 (0.1)	0.2 (0.1)		5.3 (0.9)	3.8 (0.7)
14	0.2 (0.1)	0.1 (0.0)	9.4 (3.4)	6.7 (2.5)	9.0 (2.8)	6.4 (2.0)	0.1 (0.0)	0.1 (0.0)	1.2 (0.6)	5.6 (1.0)	4.0 (0.7)
15	0.3 (0.1)	0.2 (0.1)	11.5 (3.2)	8.2 (2.3)	11.1 (2.1)	7.9 (1.5)	0.2 (0.0)	0.1 (0.0)	1.5 (0.6)	6.8 (0.9)	4.9 (0.6)
16	0.4 (0.1)	0.3 (0.0)	15.7 (1.2)	11.2 (0.8)	13.9 (1.0)	9.9 (0.7)	0.2 (0.0)	0.2 (0.0)	1.8 (0.6)	8.0 (0.4)	5.7 (0.3)
17	0.3 (0.1)	0.2 (0.1)	15.1 (1.0)	10.8 (0.7)	13.2 (1.6)	9.4 (1.2)	0.2 (0.0)	0.1 (0.0)	2.1 (0.4)	5.5 (1.6)	4.3 (0.9)
18	0.4 (0.2)	0.3 (0.1)	12.1 (3.7)	8.6 (2.7)	12.1 (2.0)	8.6 (1.4)	0.2 (0.1)	0.1 (0.0)	2.2 (0.7)	5.8 (0.7)	4.1 (0.5)
19	0.4 (0.3)	0.3 (0.2)	9.7 (5.2)	6.9 (3.7)	9.5 (4.1)	6.7 (2.9)	0.2 (0.0)	0.1 (0.0)	1.8 (1.0)	4.8 (1.9)	3.5 (1.4)
20	0.1 (0.1)	0.1 (0.0)	7.4 (5.1)	5.2 (3.6)	7.3 (4.9)	5.2 (3.5)	0.1 (0.1)	0.1 (0.1)	1.8 (1.8)	4.3 (2.3)	3.0 (1.7)
21	0.2 (0.1)	0.1 (0.1)	7.7 (3.6)	5.5 (2.6)	7.3 (3.1)	5.2 (2.2)	0.1 (0.0)	0.0 (0.0)	1.9 (1.2)	5.1 (1.9)	3.6 (1.4)
22	0.1 (0.0)	0.1 (0.0)	10.1 (2.2)	7.2 (1.6)	10.2 (2.1)	7.3 (1.5)	0.1 (0.0)	0.1 (0.0)	3.6 (1.4)	6.4 (0.9)	4.6 (0.6)
23	0.2 (0.0)	0.1 (0.0)	10.9 (3.3)	7.8 (2.4)	10.9 (1.8)	7.8 (1.3)	0.2 (0.0)	0.1 (0.0)	3.6 (1.5)	6.8 (0.9)	4.9 (0.6)
24	0.1 (0.1)	0.1 (0.0)					0.1 (0.0)	0.1 (0.0)			
25	0.2 (0.0)	0.1 (0.0)	6.2 (3.7)	4.4 (2.6)	7.3 (3.7)	5.2 (2.6)	0.1 (0.1)	0.1 (0.0)	1.3 (0.9)	4.7 (1.7)	3.3 (1.3)
26	0.4 (0.3)	0.3 (0.2)	7.8 (4.4)	5.6 (3.1)	7.5 (3.5)	5.4 (2.5)	0.2 (0.1)	0.2 (0.1)	1.2 (0.8)	5.5 (1.9)	3.9 (1.4)
27	0.4 (0.2)	0.3 (0.1)	9.0 (2.4)	6.5 (1.7)	9.4 (2.0)	6.7 (1.4)	0.2 (0.0)	0.1 (0.0)	1.4 (0.5)	5.5 (1.1)	4.0 (0.8)
28	0.3 (0.1)	0.2 (0.1)	11.2 (3.2)	8.0 (2.3)	10.5 (2.0)	7.5 (1.5)	0.2 (0.1)	0.1 (0.1)	1.7 (0.7)	5.8 (0.8)	4.2 (0.6)
29	0.2 (0.1)	0.2 (0.1)	8.8 (5.9)	6.3 (4.2)	6.8 (3.5)	4.9 (2.5)	0.2 (0.1)	0.2 (0.1)	1.5 (1.0)	4.9 (1.7)	3.5 (1.2)
30	0.2 (0.0)	0.1 (0.0)	9.4 (1.9)	6.7 (1.4)	8.2 (1.7)	5.8 (1.2)	0.2 (0.0)	0.1 (0.0)	1.2 (0.5)	5.4 (0.7)	3.9 (0.5)
31	0.2 (0.1)		10.5 (2.9)	7.5 (2.1)	9.0 (2.2)	6.4 (1.6)	0.2 (0.0)		1.5 (0.6)	5.4 (0.8)	3.9 (0.6)
Mean	0.2	0.2	10.5	7.5	9.8	7.0	0.1	0.1	1.7	5.6	4.0
n	31	30	30	30	30	30	31	30	29	29	29
SD	0.1	0.1	2.4	1.7	2.0	1.5	0.1	0.0	0.7	0.9	0.6
Min	0.0	0.0	6.2	4.4	6.8	4.9	0.1	0.0	0.8	4.3	3.0
Max	0.6	0.4	15.7	11.2	13.9	9.9	0.3	0.2	3.6	8.0	5.7

ED_004549_00015840-00162

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for April, 2008. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.5 (0.2)		11.4 (4.1)	8.3 (2.9)	10.1 (2.8)	7.2 (2.0)	0.2 (0.1)		1.7 (0.9)	5.7 (0.8)	4.1 (0.6)
2	0.3 (0.1)		9.2 (3.9)	6.6 (2.8)	8.4 (2.7)	6.0 (2.0)	0.2 (0.0)		1.6 (0.9)	5.1 (0.9)	3.7 (0.7)
3	0.3 (0.1)		8.8 (2.7)	6.4 (1.9)	8.7 (2.5)	6.3 (1.8)	0.2 (0.1)		1.3 (0.3)	5.2 (0.9)	3.8 (0.6)
4	0.2 (0.1)		8.8 (3.9)	6.3 (2.8)	7.9 (3.2)	5.6 (2.3)	0.2 (0.0)		1.3 (0.7)	5.5 (1.1)	4.0 (0.8)
5	0.0 (0.1)		6.0 (3.3)	4.3 (2.4)	6.1 (3.6)	4.4 (2.6)	0.1 (0.1)		0.7 (0.5)	4.6 (1.5)	3.3 (1.1)
6	0.1 (0.0)		7.1 (2.6)	5.1 (1.9)	7.3 (2.5)	5.2 (1.8)	0.1 (0.0)		0.9 (0.5)	5.6 (1.0)	4.0 (0.7)
7	0.2 (0.0)		9.4 (3.4)	6.7 (2.4)	9.0 (2.9)	6.4 (2.0)	0.1 (0.0)		1.2 (0.5)	6.4 (1.3)	4.6 (0.9)
8	0.4 (0.2)		10.7 (3.3)	7.6 (2.3)	9.9 (2.9)	7.1 (2.1)	0.2 (0.0)		1.4 (0.6)	6.6 (1.8)	4.7 (1.3)
9	0.7 (0.2)		12.3 (0.8)	8.8 (0.6)	12.3 (0.6)	8.8 (0.5)	0.3 (0.0)		1.8 (0.3)	6.1 (0.3)	
10	0.6 (0.2)		10.3 (2.1)	7.4 (1.6)	11.7 (0.8)	8.4 (0.6)	0.2 (0.1)		1.8 (0.4)	5.4 (1.0)	
11	0.3 (0.2)		9.7 (2.0)	6.9 (1.5)	10.4 (1.6)	7.4 (1.2)	0.2 (0.0)		1.8 (0.3)	6.2 (0.6)	
12	0.1 (0.0)		10.1 (3.1)	7.2 (2.2)	10.5 (1.9)	7.5 (1.4)	0.2 (0.0)		1.6 (0.7)	6.0 (1.0)	
13	0.1 (0.0)		9.9 (3.8)	7.1 (2.7)	9.8 (3.0)	7.0 (2.1)	0.2 (0.0)		2.0 (0.9)	5.8 (1.4)	
14	0.0 (0.0)						0.2 (0.0)				
15	0.0 (0.0)	0.0 (0.0)	4.7 (2.7)	3.3 (1.9)	4.3 (2.5)	3.1 (1.8)	0.1 (0.0)	0.1 (0.0)	0.8 (0.7)	3.2 (1.3)	2.3 (0.9)
16	0.1 (0.0)	0.1 (0.0)	4.5 (1.6)	3.2 (1.1)	5.1 (2.0)	3.6 (1.4)	0.1 (0.0)	0.1 (0.0)	0.6 (0.1)	3.1 (0.5)	2.2 (0.4)
17	0.2 (0.1)	0.1 (0.1)	11.0 (2.6)	7.9 (1.9)	11.5 (2.3)	8.2 (1.7)	0.2 (0.0)	0.1 (0.0)	1.7 (0.6)	6.7 (1.1)	4.8 (0.8)
18	0.3 (0.2)	0.2 (0.1)	7.9 (4.6)	5.6 (3.3)	7.9 (3.9)	5.7 (2.8)	0.1 (0.0)	0.1 (0.0)	1.3 (1.0)	5.4 (2.3)	3.9 (1.7)
19	0.6 (0.2)	0.4 (0.1)	6.1 (3.3)	4.4 (2.3)	5.9 (3.4)	4.2 (2.4)	0.2 (0.1)	0.2 (0.0)	0.9 (0.7)	4.3 (1.7)	3.1 (1.2)
20	0.1 (0.2)	0.1 (0.1)	4.3 (1.7)	3.1 (1.2)	4.1 (1.9)	2.9 (1.4)	0.1 (0.1)	0.1 (0.1)	0.5 (0.2)	3.5 (0.9)	2.5 (0.7)
21	0.2 (0.0)	0.1 (0.0)	6.2 (3.0)	4.4 (2.1)	5.5 (2.8)	3.9 (2.0)	0.1 (0.0)	0.1 (0.0)			
22	0.3 (0.1)	0.2 (0.1)	6.4 (2.9)	4.6 (2.1)	6.3 (3.0)	4.5 (2.2)	0.2 (0.1)	0.2 (0.1)	0.8 (0.3)	4.7 (1.2)	3.4 (0.9)
23	0.6 (0.1)	0.4 (0.1)	5.6 (2.5)	4.0 (1.8)	6.1 (1.8)	4.4 (1.3)	0.4 (0.1)	0.3 (0.0)	0.8 (0.1)	4.6 (0.5)	3.3 (0.4)
24	0.2 (0.2)	0.1 (0.1)	4.3 (1.7)	3.1 (1.3)	4.3 (1.8)	3.1 (1.3)	0.1 (0.1)	0.1 (0.1)	0.7 (0.2)	4.0 (0.6)	2.9 (0.4)
25	0.2 (0.1)	0.1 (0.1)	7.7 (3.0)	5.5 (2.2)	7.9 (3.0)	5.6 (2.2)	0.2 (0.1)	0.1 (0.1)	0.7 (0.2)	5.0 (1.4)	3.6 (1.0)
26	0.2 (0.1)	0.1 (0.1)	9.2 (3.6)	6.6 (2.6)	9.4 (3.6)	6.7 (2.6)	0.2 (0.1)	0.2 (0.1)	0.8 (0.4)	5.3 (1.7)	3.8 (1.2)
27	0.2 (0.1)	0.2 (0.1)	10.2 (4.3)	7.3 (3.1)	10.2 (4.1)	7.3 (2.9)	0.1 (0.0)	0.1 (0.0)	1.0 (0.6)	6.1 (1.7)	4.4 (1.2)
28	0.4 (0.3)	0.3 (0.2)	7.9 (4.3)	5.6 (3.1)	7.6 (3.7)	5.4 (2.7)	0.2 (0.1)	0.1 (0.1)	0.8 (0.4)	5.0 (1.4)	3.6 (1.0)
29											
30											
Mean	0.3	0.2	8.1	5.8	8.1	5.8	0.2	0.1	1.2	5.2	3.6
n	28	14	27	27	27	27	28	14	26	26	21
SD	0.2	0.1	2.3	1.7	2.4	1.7	0.1	0.1	0.5	1.0	0.7
Min	0.0	0.0	4.3	3.1	4.1	2.9	0.1	0.1	0.5	3.1	2.2
Max	0.7	0.4	12.3	8.8	12.3	8.8	0.4	0.3	2.0	6.7	4.8

ED_004549_00015840-00163

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for May, 2008. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1											
2											
3											
4											
5											
6	0.3 (0.2)	0.2 (0.1)	4.2 (1.7)	3.0 (1.2)	4.3 (1.6)	3.1 (1.2)	0.3 (0.0)	0.2 (0.0)	0.7 (0.1)	3.5 (0.6)	2.5 (0.5)
7	0.6 (0.3)	0.4 (0.2)	4.8 (1.1)	3.5 (0.8)	5.6 (1.2)	4.0 (0.9)	0.3 (0.1)	0.2 (0.1)	1.1 (0.7)	3.9 (0.6)	2.8 (0.4)
8	0.2 (0.1)	0.1 (0.1)	5.2 (1.9)	3.8 (1.4)	6.3 (2.0)	4.5 (1.4)	0.2 (0.1)	0.2 (0.1)	1.7 (1.2)	4.2 (1.5)	3.0 (1.0)
9	0.1 (0.0)	0.1 (0.0)	4.8 (1.2)	3.4 (0.8)	5.5 (1.7)	4.0 (1.2)	0.1 (0.0)	0.1 (0.0)	1.3 (1.1)	3.7 (1.4)	2.7 (1.0)
10	0.0 (0.0)	0.0 (0.0)	4.9 (1.8)	3.5 (1.3)	4.9 (1.1)	3.5 (0.8)	0.1 (0.0)	0.1 (0.0)	0.6 (0.5)	3.4 (1.1)	2.4 (0.8)
11	0.1 (0.0)	0.0 (0.0)	6.2 (1.6)	4.4 (1.2)	6.9 (1.8)	4.9 (1.3)	0.0 (0.0)	0.0 (0.0)	1.4 (1.0)	4.5 (1.5)	3.2 (1.1)
12	0.0 (0.0)	0.0 (0.0)	4.4 (1.6)	3.1 (1.1)	4.8 (2.1)	3.4 (1.5)	0.1 (0.0)	0.0 (0.0)	1.0 (0.8)	3.6 (1.0)	2.6 (0.7)
13	0.0 (0.0)	0.0 (0.0)	5.1 (1.1)	3.7 (0.8)	6.6 (1.4)	4.7 (1.0)	0.1 (0.0)	0.1 (0.0)	0.7 (0.4)	3.7 (0.8)	2.6 (0.5)
14	0.3 (0.1)	0.2 (0.1)	6.5 (1.3)	4.7 (1.0)	7.9 (1.3)	5.6 (1.0)	0.2 (0.1)	0.1 (0.0)	1.6 (0.8)	4.6 (0.7)	3.3 (0.5)
15	0.1 (0.0)	0.1 (0.0)	5.3 (1.6)	3.8 (1.1)	6.5 (1.6)	4.7 (1.1)	0.1 (0.1)	0.1 (0.1)	1.1 (0.8)	3.7 (1.2)	2.7 (0.8)
16	0.0 (0.0)	0.0 (0.0)	4.9 (1.5)	3.5 (1.1)	6.1 (1.9)	4.4 (1.4)	0.1 (0.0)	0.1 (0.0)	0.9 (0.8)	3.6 (1.3)	2.6 (0.9)
17	0.1 (0.0)	0.0 (0.0)	4.4 (1.1)	3.2 (0.8)	5.2 (1.4)	3.7 (1.0)	0.1 (0.0)	0.1 (0.0)	0.6 (0.3)	3.1 (0.9)	2.2 (0.6)
18	0.1 (0.0)	0.0 (0.0)	4.1 (1.2)	2.9 (0.9)	4.4 (1.7)	3.1 (1.2)	0.0 (0.0)	0.0 (0.0)	0.6 (0.4)	3.3 (0.8)	2.4 (0.6)
19	0.1 (0.1)	0.1 (0.1)	4.0 (1.2)	2.9 (0.9)	3.8 (1.5)	2.7 (1.1)	0.1 (0.0)	0.1 (0.0)	0.6 (0.1)	2.6 (0.6)	1.9 (0.4)
20	0.7 (0.2)	0.5 (0.2)	4.1 (0.7)	2.9 (0.5)	3.7 (0.9)	2.7 (0.7)	0.2 (0.1)	0.1 (0.1)	0.5 (0.1)	2.8 (0.3)	2.0 (0.2)
21	0.2 (0.2)	0.2 (0.1)	4.0 (1.0)	2.8 (0.7)	3.8 (0.9)	2.7 (0.7)	0.3 (0.1)	0.2 (0.1)	0.6 (0.1)	2.7 (0.8)	1.9 (0.5)
22	0.2 (0.2)	0.2 (0.1)	3.3 (0.8)	2.4 (0.5)	3.0 (0.8)	2.2 (0.6)	0.1 (0.1)	0.1 (0.1)	0.5 (0.1)	2.3 (0.5)	1.6 (0.3)
23	0.2 (0.1)	0.2 (0.1)	3.5 (0.8)	2.5 (0.6)	3.1 (0.6)	2.2 (0.4)	0.2 (0.2)	0.2 (0.1)	0.6 (0.2)	2.9 (0.9)	2.1 (0.7)
24	0.1 (0.1)	0.1 (0.1)	4.2 (2.0)	3.0 (1.4)	4.1 (2.4)	2.9 (1.7)	0.1 (0.0)	0.1 (0.0)	0.4 (0.1)	3.3 (1.3)	2.4 (1.0)
25	0.1 (0.0)	0.1 (0.0)	3.6 (0.7)		3.2 (0.8)	2.3 (0.6)	0.2 (0.0)	0.1 (0.0)	0.5 (0.1)	2.7 (0.6)	
26	0.1 (0.0)	0.1 (0.0)	3.2 (0.5)	2.3 (0.3)	3.0 (0.8)	2.2 (0.6)	0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	2.6 (0.6)	1.9 (0.5)
27	0.2 (0.1)	0.2 (0.0)	5.0 (1.5)	3.6 (1.1)	4.9 (1.2)	3.5 (0.9)	0.2 (0.1)	0.1 (0.1)	1.5 (1.3)		
28	0.2 (0.0)	0.1 (0.0)	5.7 (2.4)	4.1 (1.7)	5.1 (2.5)	3.6 (1.8)	0.2 (0.0)	0.1 (0.0)	1.2 (0.7)	3.9 (1.7)	2.8 (1.2)
29	0.1 (0.0)	0.1 (0.0)	3.0 (0.8)	2.2 (0.6)	2.3 (0.5)	1.7 (0.4)	0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	2.3 (0.2)	1.7 (0.2)
30	0.4 (0.3)	0.3 (0.2)	3.1 (1.0)	2.3 (0.7)	2.6 (0.8)	1.9 (0.6)	0.2 (0.1)	0.2 (0.0)	0.5 (0.1)	3.0 (0.5)	2.1 (0.4)
31	0.8 (0.3)	0.6 (0.2)	3.2 (0.4)	2.3 (0.3)	3.0 (0.5)	2.2 (0.4)	0.3 (0.1)	0.2 (0.1)	0.6 (0.1)	3.4 (0.4)	2.5 (0.3)
Mean	0.2	0.2	4.4	3.2	4.6	3.3	0.2	0.1	0.8	3.3	2.4
n	26	26	26	25	26	26	26	26	26	25	24
SD	0.2	0.1	0.9	0.7	1.5	1.0	0.1	0.1	0.4	0.6	0.4
Min	0.0	0.0	3.0	2.2	2.3	1.7	0.0	0.0	0.4	2.3	1.6
Max	0.8	0.6	6.5	4.7	7.9	5.6	0.3	0.2	1.7	4.6	3.3

ED_004549_00015840-00164

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for June, 2008. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.9 (0.2)	0.7 (0.1)	3.5 (0.7)	2.5 (0.5)	3.0 (0.6)	2.2 (0.5)	0.5 (0.1)	0.3 (0.1)	0.8 (0.1)	2.7 (0.3)	1.9 (0.2)
2	0.3 (0.4)	0.3 (0.3)	3.0 (1.1)	2.2 (0.9)	2.6 (1.1)	1.9 (0.9)	0.3 (0.2)	0.2 (0.2)	0.6 (0.3)	2.5 (0.6)	1.8 (0.5)
3	0.9 (0.4)		2.8 (0.5)		2.3 (0.4)		0.1 (0.1)		0.6 (0.2)		
4	0.2 (0.3)		3.2 (1.5)		3.3 (1.5)		0.1 (0.1)		0.4 (0.1)	3.1 (0.9)	
5	0.0 (0.0)	0.0 (0.0)	2.4 (0.8)	1.8 (0.6)	2.2 (0.7)	1.6 (0.5)	0.1 (0.0)	0.1 (0.0)	0.4 (0.1)	2.5 (0.3)	1.8 (0.2)
6	0.0 (0.0)	0.0 (0.0)	3.6 (1.7)	2.6 (1.2)	3.2 (1.5)	2.3 (1.1)	0.1 (0.0)	0.0 (0.0)	0.6 (0.6)	3.1 (1.2)	2.2 (0.9)
7	0.1 (0.0)	0.1 (0.0)	2.7 (0.4)	1.9 (0.3)	2.4 (0.4)	1.8 (0.3)	0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	2.4 (0.2)	1.7 (0.1)
8	0.1 (0.1)	0.1 (0.0)	3.0 (0.5)	2.1 (0.4)	2.5 (0.6)	1.8 (0.4)	0.1 (0.1)	0.1 (0.0)	0.4 (0.1)	2.4 (0.2)	1.7 (0.2)
9	0.1 (0.0)	0.0 (0.0)	3.7 (1.4)	2.6 (1.0)	3.0 (1.0)	2.2 (0.7)	0.1 (0.0)	0.1 (0.0)	0.4 (0.2)	3.2 (0.7)	2.3 (0.5)
10	0.2 (0.0)	0.1 (0.0)	3.1 (0.8)	2.2 (0.6)	2.9 (0.6)	2.1 (0.4)	0.1 (0.1)	0.1 (0.0)	0.6 (0.1)	2.9 (0.5)	2.1 (0.4)
11	0.2 (0.1)	0.1 (0.1)	2.6 (0.8)	1.9 (0.6)	2.4 (0.7)	1.7 (0.5)	0.1 (0.0)	0.1 (0.0)	0.4 (0.1)	2.7 (0.2)	1.9 (0.1)
12	0.1 (0.1)	0.1 (0.0)	3.4 (1.2)	2.4 (0.9)	3.0 (1.3)	2.2 (0.9)	0.0 (0.0)	0.0 (0.0)	0.4 (0.1)	3.0 (0.6)	2.1 (0.4)
13	0.2 (0.1)	0.2 (0.1)	3.1 (0.8)	2.2 (0.6)	2.6 (0.8)	1.9 (0.6)	0.2 (0.2)	0.1 (0.1)	0.5 (0.1)	2.7 (0.3)	1.9 (0.2)
14	0.1 (0.1)						0.4 (0.0)				
15	0.2 (0.2)	0.1 (0.1)	2.9 (0.6)	2.1 (0.4)	2.6 (0.6)	1.9 (0.4)	0.3 (0.1)	0.2 (0.1)	0.5 (0.1)	3.2 (0.6)	2.3 (0.4)
16	0.7 (0.1)	0.5 (0.1)	3.4 (0.5)	2.4 (0.4)	2.8 (0.7)	2.0 (0.5)	0.3 (0.0)	0.2 (0.0)	0.7 (0.1)	2.8 (0.7)	
17	0.3 (0.1)	0.2 (0.1)	3.1 (0.9)	2.2 (0.7)	2.6 (0.7)	1.9 (0.5)	0.3 (0.0)	0.2 (0.0)	0.7 (0.1)	2.8 (0.5)	2.0 (0.4)
18	0.4 (0.2)	0.3 (0.2)	3.2 (1.0)	2.3 (0.7)	3.3 (0.9)	2.3 (0.7)	0.3 (0.1)	0.2 (0.0)	0.8 (0.4)	2.9 (1.0)	2.1 (0.7)
19	0.7 (0.2)	0.5 (0.1)	3.1 (0.7)	2.3 (0.5)	2.7 (0.5)	1.9 (0.4)	0.3 (0.1)	0.2 (0.1)	0.5 (0.1)	2.5 (0.4)	1.8 (0.3)
20	0.4 (0.1)	0.3 (0.1)	3.6 (1.0)	2.6 (0.7)	3.4 (0.7)	2.5 (0.5)	0.3 (0.1)	0.2 (0.0)			
21	0.5 (0.0)						0.8 (0.2)				
22	0.2 (0.1)	0.1 (0.1)	2.9 (0.9)	2.1 (0.6)	3.2 (0.8)	2.3 (0.6)	0.3 (0.2)	0.2 (0.2)	0.6 (0.1)	2.4 (0.6)	1.7 (0.4)
23	0.2 (0.2)	0.2 (0.2)	2.5 (0.4)	1.8 (0.3)	2.9 (0.5)	2.1 (0.4)	0.1 (0.0)	0.1 (0.0)	0.5 (0.1)	2.2 (0.2)	1.6 (0.1)
24	0.6 (0.3)	0.5 (0.2)	3.1 (0.8)	2.3 (0.6)	3.2 (0.7)	2.3 (0.5)	0.4 (0.3)	0.3 (0.2)	0.6 (0.1)	2.3 (0.4)	1.7 (0.3)
25	0.5 (0.2)	0.3 (0.1)					0.3 (0.2)	0.2 (0.1)			
26	0.7 (0.1)	0.5 (0.1)					0.2 (0.0)	0.2 (0.0)			
27	1.1 (0.3)	0.8 (0.2)					0.2 (0.0)	0.1 (0.0)			
28	0.3 (0.1)	0.2 (0.1)	3.7 (1.0)	2.7 (0.7)	3.3 (1.1)	2.4 (0.8)	0.2 (0.1)	0.2 (0.0)	0.6 (0.1)	2.1 (0.2)	1.5 (0.2)
29	0.9 (0.3)	0.7 (0.2)	3.8 (0.7)	2.7 (0.5)	3.3 (0.9)	2.4 (0.6)	0.1 (0.0)	0.1 (0.0)	0.6 (0.2)	2.7 (0.5)	1.9 (0.3)
30	0.2 (0.2)	0.1 (0.1)	3.3 (0.7)	2.4 (0.5)	2.6 (0.8)	1.9 (0.6)	0.2 (0.0)	0.1 (0.0)	0.5 (0.1)	2.3 (0.4)	1.6 (0.3)
Mean	0.4	0.3	3.2	2.3	2.9	2.1	0.2	0.2	0.6	2.7	1.9
n	30	26	25	23	25	23	30	26	24	23	21
SD	0.3	0.2	0.4	0.3	0.4	0.2	0.2	0.1	0.1	0.3	0.2
Min	0.0	0.0	2.4	1.8	2.2	1.6	0.0	0.0	0.4	2.1	1.5
Max	1.1	0.8	3.8	2.7	3.4	2.5	0.8	0.3	0.8	3.2	2.3

ED_004549_00015840-00165

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for July, 2008. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.1 (0.0)	0.1 (0.0)					0.2 (0.0)	0.1 (0.0)			
2	0.4 (0.2)	0.3 (0.1)	3.2 (1.0)	2.3 (0.7)	2.5 (0.7)	1.8 (0.5)	0.2 (0.0)	0.1 (0.0)	0.5 (0.1)	2.6 (0.3)	1.9 (0.2)
3	0.8 (0.2)						0.3 (0.2)				
4	0.7 (0.5)	0.5 (0.4)	3.7 (1.2)	2.6 (0.8)	3.5 (1.2)		0.5 (0.3)	0.4 (0.2)	0.8 (0.2)	3.1 (0.6)	2.2 (0.4)
5	0.2 (0.0)	0.1 (0.0)	3.3 (0.7)	2.4 (0.5)	3.0 (0.7)		0.2 (0.1)	0.2 (0.1)	0.6 (0.1)	3.0 (0.3)	2.2 (0.2)
6	0.2 (0.1)	0.1 (0.0)	3.2 (0.7)	2.3 (0.5)	3.1 (0.7)		0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	3.2 (0.4)	2.3 (0.3)
7	0.2 (0.0)	0.1 (0.0)	3.5 (1.1)	2.5 (0.8)	3.1 (1.0)		0.3 (0.0)	0.2 (0.0)	0.6 (0.1)	2.7 (0.6)	
8	0.3 (0.1)	0.2 (0.0)	3.1 (0.7)	2.2 (0.5)	3.0 (0.8)	2.2 (0.6)	0.3 (0.0)	0.2 (0.0)	0.7 (0.2)	2.5 (0.5)	1.8 (0.4)
9	0.5 (0.2)	0.3 (0.1)	3.2 (1.0)	2.3 (0.7)	2.8 (0.7)	2.0 (0.5)	0.4 (0.0)	0.3 (0.0)	0.7 (0.1)	2.6 (0.2)	1.8 (0.1)
10	0.3 (0.0)	0.2 (0.0)	3.1 (1.3)	2.2 (0.9)	2.7 (1.0)	1.9 (0.7)	0.4 (0.0)	0.3 (0.0)	0.8 (0.1)	2.3 (0.4)	1.7 (0.3)
11	0.3 (0.0)	0.2 (0.0)	2.6 (0.8)	1.9 (0.6)	2.2 (0.5)	1.6 (0.4)	0.3 (0.0)	0.2 (0.0)	0.7 (0.1)	1.9 (0.2)	1.4 (0.1)
12	0.1 (0.1)	0.1 (0.0)	2.8 (0.5)	2.0 (0.3)	2.4 (0.6)	1.8 (0.4)	0.1 (0.1)	0.1 (0.0)	0.4 (0.1)	1.9 (0.2)	1.4 (0.2)
13	0.4 (0.2)	0.3 (0.1)	3.1 (0.8)	2.2 (0.6)	2.6 (0.9)	1.9 (0.6)	0.3 (0.1)	0.2 (0.0)	0.6 (0.1)	2.2 (0.5)	1.6 (0.4)
14	0.3 (0.0)	0.2 (0.0)	3.1 (1.0)	2.3 (0.7)	2.6 (0.8)	1.9 (0.6)	0.4 (0.0)	0.3 (0.0)	0.7 (0.1)	2.1 (0.4)	1.5 (0.3)
15	0.2 (0.0)	0.2 (0.0)	3.0 (0.9)	2.2 (0.7)	2.4 (0.6)	1.7 (0.5)	0.3 (0.1)	0.2 (0.0)	0.7 (0.1)	2.0 (0.2)	1.4 (0.2)
16	0.4 (0.2)	0.3 (0.1)	2.9 (0.9)		2.3 (0.7)	1.7 (0.5)	0.2 (0.0)	0.2 (0.0)		2.1 (0.5)	1.5 (0.3)
17	0.2 (0.0)	0.1 (0.0)	2.7 (0.8)	2.0 (0.6)	2.4 (0.7)	1.8 (0.5)	0.3 (0.0)	0.2 (0.0)	0.6 (0.1)	1.8 (0.2)	1.3 (0.1)
18	0.5 (0.1)	0.4 (0.1)	2.6 (0.5)	1.9 (0.4)	2.5 (0.4)	1.8 (0.3)	0.5 (0.1)	0.3 (0.1)	0.7 (0.1)	2.0 (0.2)	1.5 (0.1)
19	0.2 (0.1)	0.1 (0.1)	2.8 (0.7)	2.0 (0.5)	2.6 (0.7)	1.9 (0.5)	0.4 (0.0)	0.3 (0.0)	0.6 (0.1)	2.1 (0.3)	1.5 (0.2)
20	0.2 (0.0)	0.1 (0.0)	2.9 (0.7)	2.1 (0.5)	2.8 (0.7)	2.0 (0.5)	0.2 (0.1)	0.2 (0.0)	0.5 (0.1)	2.2 (0.4)	1.6 (0.3)
21	0.1 (0.0)	0.1 (0.0)	3.0 (0.6)		2.8 (0.6)	2.0 (0.5)	0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	2.0 (0.2)	1.4 (0.1)
22	0.2 (0.0)	0.1 (0.0)	3.2 (0.7)		3.0 (0.9)	2.2 (0.6)	0.2 (0.0)	0.2 (0.0)	0.7 (0.1)	2.1 (0.3)	1.5 (0.2)
23	0.1 (0.1)	0.1 (0.0)	3.0 (0.7)		2.7 (0.8)	2.0 (0.6)	0.2 (0.0)	0.1 (0.0)	0.5 (0.1)	2.2 (0.2)	1.6 (0.2)
24	0.3 (0.1)	0.2 (0.1)	3.0 (0.5)		2.4 (0.4)	1.7 (0.3)	0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	2.3 (0.2)	1.7 (0.2)
25	0.6 (0.5)	0.4 (0.3)	3.0 (0.6)	2.2 (0.4)	2.7 (0.7)	2.0 (0.5)	0.4 (0.1)	0.3 (0.1)	0.7 (0.2)	2.5 (0.4)	1.8 (0.3)
26	0.3 (0.3)	0.2 (0.2)	2.8 (0.4)	2.0 (0.3)	2.9 (0.5)	2.1 (0.4)	0.3 (0.1)	0.2 (0.0)	0.6 (0.1)	2.4 (0.2)	1.7 (0.1)
27	0.2 (0.1)	0.2 (0.0)	3.3 (0.9)	2.4 (0.6)	3.3 (0.8)	2.4 (0.6)	0.3 (0.1)	0.2 (0.0)	0.8 (0.1)	2.7 (0.2)	1.9 (0.2)
28	0.9 (0.6)	0.7 (0.5)	3.4 (0.8)	2.4 (0.6)	3.4 (0.9)	2.4 (0.6)	0.4 (0.0)	0.3 (0.0)	0.9 (0.1)	3.3 (0.5)	2.4 (0.4)
29	1.0 (0.5)	0.7 (0.4)	3.0 (0.6)				0.4 (0.0)	0.3 (0.0)			
30	0.5 (0.2)	0.4 (0.1)	3.5 (0.6)	2.5 (0.4)	2.9 (0.9)	2.1 (0.6)	0.3 (0.1)	0.2 (0.1)	1.3 (1.0)	2.2 (0.6)	1.6 (0.5)
31	0.2 (0.1)	0.1 (0.0)	3.5 (0.8)	2.5 (0.6)	2.6 (0.9)	1.8 (0.7)	0.2 (0.0)	0.2 (0.0)	0.6 (0.1)	2.1 (0.5)	1.5 (0.3)
Mean	0.3	0.2	3.1	2.2	2.8	1.9	0.3	0.2	0.7	2.4	1.7
n	31	30	29	23	28	24	31	30	27	28	27
SD	0.2	0.2	0.3	0.2	0.3	0.2	0.1	0.1	0.2	0.4	0.3
Min	0.1	0.1	2.6	1.9	2.2	1.6	0.1	0.1	0.4	1.8	1.3
Max	1.0	0.7	3.7	2.6	3.5	2.4	0.5	0.4	1.3	3.3	2.4

ED_004549_00015840-00166

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for August, 2008. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.1 (0.0)	0.1 (0.0)	3.1 (0.7)	2.3 (0.5)	2.3 (0.6)	1.7 (0.4)	0.2 (0.0)	0.1 (0.0)	0.6 (0.0)	2.0 (0.5)	1.4 (0.3)
2	0.2 (0.0)	0.1 (0.0)	2.9 (0.7)	2.1 (0.5)	2.4 (0.4)	1.7 (0.3)	0.2 (0.1)	0.1 (0.0)	0.6 (0.1)	1.6 (0.1)	1.1 (0.1)
3	0.1 (0.0)	0.1 (0.0)	3.1 (1.0)	2.2 (0.7)	2.5 (0.5)	1.8 (0.3)	0.1 (0.0)	0.1 (0.0)	0.6 (0.1)	1.5 (0.2)	1.1 (0.1)
4	0.1 (0.0)	0.1 (0.0)	3.0 (1.0)	2.2 (0.7)	2.3 (0.6)	1.7 (0.4)	0.1 (0.0)	0.1 (0.0)	0.5 (0.1)	1.7 (0.3)	1.2 (0.2)
5	0.3 (0.1)	0.2 (0.0)	3.3 (0.9)	2.4 (0.6)	2.6 (0.6)	1.9 (0.4)	0.3 (0.0)	0.2 (0.0)	0.6 (0.1)	1.7 (0.2)	1.2 (0.2)
6	0.3 (0.1)	0.2 (0.0)	3.1 (1.0)	2.2 (0.7)	2.7 (0.7)	1.9 (0.5)	0.3 (0.1)	0.2 (0.1)	0.6 (0.1)	1.8 (0.2)	1.3 (0.1)
7	0.8 (0.2)	0.6 (0.1)	3.1 (0.8)	2.3 (0.6)	2.6 (0.7)	1.9 (0.5)	0.5 (0.1)	0.4 (0.1)			
8	1.0 (0.1)	0.7 (0.1)	2.9 (1.2)	2.1 (0.8)	3.6 (1.8)	2.6 (1.3)	0.7 (0.2)	0.5 (0.1)			
9	0.3 (0.1)	0.2 (0.1)	2.9 (0.6)	2.1 (0.5)	2.4 (0.6)	1.7 (0.4)	0.3 (0.0)	0.2 (0.0)	0.6 (0.0)	1.9 (0.2)	1.4 (0.1)
10	0.6 (0.3)	0.5 (0.2)	3.1 (0.7)	2.2 (0.5)	2.8 (0.9)	2.0 (0.6)	0.3 (0.0)	0.2 (0.0)	0.6 (0.1)	2.2 (0.3)	1.6 (0.2)
11	0.8 (0.3)	0.6 (0.2)	3.0 (0.5)	2.2 (0.4)	2.7 (0.8)	1.9 (0.6)	0.4 (0.2)	0.3 (0.1)	0.6 (0.1)	2.4 (0.2)	1.7 (0.1)
12	1.1 (0.5)	0.8 (0.3)	2.8 (0.9)	2.0 (0.6)	2.8 (0.8)	2.0 (0.6)	0.6 (0.1)	0.4 (0.1)	0.7 (0.2)	2.6 (0.2)	1.9 (0.2)
13	0.2 (0.0)	0.1 (0.0)	2.3 (0.6)	1.7 (0.4)	2.5 (0.9)	1.8 (0.6)	0.2 (0.1)	0.1 (0.0)	0.5 (0.1)	2.4 (0.2)	1.7 (0.1)
14	0.6 (0.2)	0.4 (0.2)	3.2 (1.2)	2.3 (0.8)	2.9 (1.0)	2.1 (0.7)	0.3 (0.1)	0.2 (0.1)		2.8 (0.3)	2.0 (0.2)
15	0.7 (0.2)	0.5 (0.2)	3.0 (0.8)	2.2 (0.5)	3.0 (0.6)	2.2 (0.4)	0.4 (0.1)	0.3 (0.1)	0.6 (0.1)	2.8 (0.3)	2.0 (0.2)
16	0.7 (0.2)	0.5 (0.1)	3.3 (0.8)	2.3 (0.6)	3.1 (0.7)	2.2 (0.5)	0.4 (0.1)	0.3 (0.0)	0.7 (0.1)	2.9 (0.2)	2.1 (0.2)
17	0.3 (0.1)	0.2 (0.1)	3.2 (0.6)	2.3 (0.4)	3.5 (0.7)	2.5 (0.5)	0.4 (0.1)	0.3 (0.0)	0.7 (0.2)	3.2 (0.3)	2.3 (0.2)
18	0.6 (0.1)	0.4 (0.1)	3.5 (0.7)	2.5 (0.5)	3.5 (0.9)	2.5 (0.6)	0.3 (0.1)	0.2 (0.1)	0.9 (0.4)	3.4 (0.3)	2.5 (0.2)
19	0.9 (0.1)	0.7 (0.1)	3.4 (0.9)	2.4 (0.6)	3.3 (0.7)	2.4 (0.5)	0.3 (0.1)	0.2 (0.0)	0.6 (0.1)	3.5 (0.2)	2.5 (0.1)
20	0.8 (0.3)	0.6 (0.2)	3.1 (0.8)	2.2 (0.6)	3.4 (0.8)	2.5 (0.6)	0.4 (0.1)	0.3 (0.1)	0.7 (0.1)	3.6 (0.3)	2.6 (0.2)
21	0.4 (0.2)	0.3 (0.1)	2.8 (0.9)	2.0 (0.6)	3.1 (0.9)	2.3 (0.6)	0.4 (0.1)	0.3 (0.1)	0.7 (0.2)	3.4 (0.4)	2.4 (0.3)
22	0.2 (0.0)	0.2 (0.0)	2.5 (0.5)	1.8 (0.4)	2.7 (0.6)	1.9 (0.4)	0.3 (0.0)	0.2 (0.0)	0.6 (0.1)	2.1 (0.8)	
23	0.9 (0.6)	0.6 (0.4)	2.8 (0.6)	2.0 (0.4)	2.9 (0.7)	2.1 (0.5)	0.3 (0.0)	0.2 (0.0)	0.6 (0.1)	1.9 (0.4)	1.4 (0.3)
24	0.4 (0.3)	0.3 (0.2)	2.7 (0.6)	2.0 (0.4)	2.9 (0.8)	2.1 (0.6)	0.5 (0.1)	0.3 (0.1)	0.7 (0.2)	2.1 (0.2)	1.5 (0.1)
25	0.3 (0.1)	0.2 (0.0)	3.1 (0.7)	2.2 (0.5)	3.1 (0.9)	2.3 (0.6)	0.5 (0.2)	0.3 (0.1)	0.8 (0.1)	2.2 (0.4)	1.6 (0.3)
26	0.2 (0.0)	0.2 (0.0)	3.1 (1.0)	2.2 (0.7)	3.1 (1.1)	2.3 (0.8)	0.2 (0.0)	0.2 (0.0)	0.6 (0.1)	2.0 (0.5)	1.4 (0.3)
27	0.2 (0.0)	0.1 (0.0)	2.8 (0.4)	2.0 (0.3)	3.1 (0.9)	2.2 (0.6)	0.2 (0.0)	0.2 (0.0)		1.8 (0.1)	1.3 (0.1)
28	0.2 (0.0)	0.1 (0.0)	2.9 (0.4)	2.1 (0.3)	3.2 (0.7)	2.3 (0.5)	0.2 (0.0)	0.1 (0.0)	0.5 (0.1)	2.0 (0.1)	1.4 (0.1)
29	0.5 (0.2)	0.4 (0.1)	3.0 (0.8)	2.1 (0.6)	3.4 (1.0)	2.4 (0.7)	0.2 (0.1)	0.1 (0.0)	0.6 (0.2)	1.9 (0.2)	1.4 (0.1)
30	0.2 (0.1)	0.2 (0.0)	2.9 (0.7)	2.1 (0.5)	3.0 (0.9)	2.1 (0.7)	0.2 (0.0)	0.2 (0.0)	0.6 (0.2)	2.0 (0.4)	1.4 (0.3)
31	0.2 (0.0)	0.1 (0.0)	2.9 (0.4)	2.1 (0.3)	2.7 (0.5)	2.0 (0.4)	0.2 (0.0)	0.2 (0.0)	0.5 (0.1)	1.8 (0.2)	1.3 (0.1)
Mean	0.5	0.3	3.0	2.2	2.9	2.1	0.3	0.2	0.6	2.3	1.7
n	31	31	31	31	31	31	31	31	27	29	28
SD	0.3	0.2	0.2	0.2	0.4	0.3	0.1	0.1	0.1	0.6	0.4
Min	0.1	0.1	2.3	1.7	2.3	1.7	0.1	0.1	0.5	1.5	1.1
Max	1.1	0.8	3.5	2.5	3.6	2.6	0.7	0.5	0.9	3.6	2.6

ED_004549_00015840-00167

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for September, 2008. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.2 (0.0)	0.1 (0.0)	3.1 (0.9)	2.2 (0.6)	3.0 (0.9)	2.2 (0.6)	0.2 (0.0)	0.1 (0.0)	0.5 (0.1)	1.8 (0.2)	1.3 (0.2)
2	0.2 (0.0)	0.1 (0.0)	3.0 (0.9)	2.1 (0.6)	3.0 (0.7)	2.2 (0.5)	0.1 (0.0)	0.0 (0.0)	0.4 (0.1)	1.9 (0.3)	1.4 (0.2)
3	0.1 (0.0)	0.1 (0.0)	5.1 (1.0)	3.6 (0.7)	4.1 (1.1)	3.0 (0.8)	0.1 (0.0)	0.0 (0.0)	0.8 (0.3)	3.8 (0.6)	2.7 (0.4)
4	0.6 (0.3)	0.4 (0.2)					0.2 (0.1)	0.1 (0.1)			
5	0.5 (0.3)	0.3 (0.2)	5.2 (1.2)	3.7 (0.9)	3.2 (0.4)	2.3 (0.3)	0.2 (0.1)	0.1 (0.1)	0.8 (0.4)	3.7 (0.8)	2.6 (0.5)
6	0.5 (0.1)	0.3 (0.1)	5.2 (1.7)	3.7 (1.2)	3.3 (0.9)	2.4 (0.6)	0.2 (0.1)	0.1 (0.1)	0.8 (0.4)	3.5 (1.0)	2.5 (0.7)
7	0.7 (0.3)	0.5 (0.2)	4.4 (1.5)	3.2 (1.1)	2.9 (0.7)	2.1 (0.5)	0.3 (0.1)	0.2 (0.0)	0.6 (0.1)	3.0 (0.8)	2.2 (0.6)
8	0.4 (0.3)	0.3 (0.2)	6.0 (1.7)	4.3 (1.2)	3.8 (0.7)	2.7 (0.5)	0.1 (0.1)	0.1 (0.0)	1.0 (0.4)	4.1 (1.2)	3.0 (0.9)
9	0.3 (0.1)	0.2 (0.1)	5.4 (2.4)	3.9 (1.7)	3.7 (1.4)	2.7 (1.0)	0.2 (0.0)	0.1 (0.0)	0.9 (0.4)	4.2 (1.4)	3.0 (1.0)
10	0.2 (0.0)	0.1 (0.0)	3.3 (1.4)	2.4 (1.0)	2.9 (0.8)	2.1 (0.6)	0.2 (0.0)	0.1 (0.0)	0.5 (0.1)	2.8 (0.5)	2.0 (0.4)
11	0.3 (0.1)	0.2 (0.0)	2.8 (0.9)	2.0 (0.7)	2.0 (0.6)	1.4 (0.4)	0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	2.7 (0.3)	1.9 (0.2)
12	0.5 (0.1)	0.3 (0.1)	2.9 (0.7)	2.1 (0.5)	2.4 (0.4)	1.7 (0.3)	0.3 (0.1)	0.2 (0.1)		2.3 (0.5)	
13	0.2 (0.2)	0.2 (0.1)	2.8 (0.8)	2.0 (0.6)	2.2 (0.6)	1.6 (0.4)	0.2 (0.1)	0.1 (0.1)	0.4 (0.2)	1.9 (0.3)	1.3 (0.2)
14	0.1 (0.0)	0.0 (0.0)	4.0 (1.3)	2.9 (0.9)	3.2 (0.8)	2.3 (0.6)	0.0 (0.0)	0.0 (0.0)	0.4 (0.2)	2.3 (0.7)	1.7 (0.5)
15	0.4 (0.3)	0.3 (0.2)	4.3 (2.5)	3.0 (1.8)	3.5 (1.4)	2.5 (1.0)	0.1 (0.0)	0.1 (0.0)	0.9 (0.6)	3.1 (1.5)	2.2 (1.1)
16	0.2 (0.2)	0.1 (0.1)	3.5 (1.8)	2.5 (1.3)	3.0 (0.8)	2.1 (0.6)	0.2 (0.1)	0.1 (0.0)	0.9 (0.6)		
17	0.1 (0.1)	0.1 (0.0)	2.6 (1.4)	1.9 (1.0)	2.7 (0.9)	1.9 (0.6)	0.2 (0.1)	0.1 (0.0)	0.6 (0.4)	2.1 (0.8)	1.5 (0.6)
18	0.1 (0.0)	0.1 (0.0)	2.9 (1.6)	2.1 (1.2)	2.7 (0.9)	2.0 (0.7)	0.1 (0.0)	0.1 (0.0)	0.7 (0.5)	2.2 (0.8)	1.5 (0.6)
19	0.1 (0.1)	0.1 (0.0)	2.9 (1.4)	2.1 (1.0)	2.6 (1.0)	1.9 (0.7)	0.2 (0.1)	0.1 (0.1)	0.6 (0.4)	2.3 (0.7)	1.6 (0.5)
20	0.1 (0.1)	0.1 (0.0)	3.3 (1.9)	2.4 (1.4)	3.1 (1.0)	2.2 (0.7)	0.2 (0.1)	0.1 (0.1)	0.8 (0.5)	2.3 (0.9)	1.7 (0.7)
21	0.1 (0.0)	0.1 (0.0)	2.5 (1.1)	1.8 (0.8)	2.7 (0.9)	1.9 (0.6)	0.1 (0.0)	0.0 (0.0)	0.4 (0.1)	1.7 (0.5)	1.2 (0.4)
22	0.1 (0.0)	0.1 (0.0)	2.1 (0.8)	1.5 (0.6)	2.3 (0.8)	1.6 (0.6)	0.0 (0.0)	0.0 (0.0)	0.3 (0.1)	1.4 (0.3)	1.0 (0.2)
23	0.1 (0.0)	0.1 (0.0)	2.0 (0.8)	1.5 (0.5)	1.9 (0.6)	1.4 (0.4)	0.1 (0.0)	0.1 (0.0)	0.3 (0.1)	1.5 (0.2)	1.1 (0.2)
24	0.1 (0.0)	0.1 (0.0)	2.7 (1.0)	2.0 (0.7)	2.1 (0.8)	1.5 (0.6)	0.2 (0.0)	0.1 (0.0)	0.5 (0.2)	1.9 (0.4)	1.3 (0.3)
25	0.1 (0.0)	0.1 (0.0)	2.6 (0.9)	1.9 (0.7)	2.5 (0.7)	1.8 (0.5)	0.1 (0.0)	0.1 (0.0)	0.4 (0.1)	1.9 (0.2)	1.4 (0.2)
26	0.0 (0.0)	0.0 (0.0)	2.8 (0.9)	2.0 (0.6)	2.3 (0.7)	1.6 (0.5)	0.0 (0.0)	0.0 (0.0)	0.4 (0.1)	2.2 (0.5)	1.6 (0.3)
27	0.1 (0.1)	0.1 (0.0)	4.0 (1.7)	2.8 (1.2)	2.5 (0.8)	1.8 (0.6)	0.1 (0.0)	0.1 (0.0)	0.6 (0.4)	2.9 (1.0)	2.1 (0.7)
28	0.1 (0.0)	0.1 (0.0)	4.0 (1.1)	2.8 (0.8)	2.5 (0.6)	1.8 (0.4)	0.1 (0.0)	0.1 (0.0)	0.6 (0.4)	3.1 (1.1)	2.2 (0.8)
29	0.0 (0.0)	0.0 (0.0)	4.9 (1.0)	3.5 (0.7)	2.8 (0.8)	2.0 (0.6)	0.0 (0.0)	0.0 (0.0)	0.5 (0.4)	3.7 (1.1)	2.7 (0.8)
30	0.4 (0.4)	0.3 (0.3)	6.3 (3.0)	4.5 (2.2)	3.5 (1.5)	2.5 (1.1)	0.0 (0.0)	0.0 (0.0)	1.2 (1.1)	4.2 (1.7)	3.0 (1.2)
Mean	0.2	0.2	3.7	2.6	2.8	2.0	0.1	0.1	0.6	2.7	1.9
n	30	30	29	29	29	29	30	30	28	28	27
SD	0.2	0.1	1.2	0.8	0.5	0.4	0.1	0.1	0.2	0.8	0.6
Min	0.0	0.0	2.0	1.5	1.9	1.4	0.0	0.0	0.3	1.4	1.0
Max	0.7	0.5	6.3	4.5	4.1	3.0	0.3	0.2	1.2	4.2	3.0

ED_004549_00015840-00168

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for October, 2008. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.4 (0.2)	0.3 (0.1)	4.9 (2.6)	3.5 (1.9)	3.4 (1.0)	2.4 (0.7)	0.0 (0.0)	0.0 (0.0)	0.8 (0.7)	3.3 (1.3)	2.3 (0.9)
2	0.3 (0.3)	0.2 (0.2)	4.5 (2.2)	3.2 (1.6)	4.9 (2.1)	3.5 (1.5)	0.2 (0.1)	0.1 (0.1)	1.1 (0.8)	3.7 (1.6)	2.7 (1.1)
3	0.4 (0.3)	0.3 (0.2)	3.3 (0.8)	2.3 (0.6)	3.5 (1.1)	2.5 (0.8)	0.1 (0.1)	0.1 (0.1)	0.6 (0.2)	2.7 (0.7)	2.0 (0.5)
4	0.2 (0.2)	0.1 (0.1)	3.2 (1.2)	2.3 (0.8)	3.6 (1.4)	2.5 (1.0)	0.1 (0.1)	0.1 (0.0)	0.4 (0.1)	2.3 (0.7)	1.6 (0.5)
5	0.2 (0.1)	0.1 (0.0)	3.7 (0.7)	2.7 (0.5)	4.2 (1.1)	3.0 (0.8)	0.2 (0.1)	0.1 (0.1)	0.5 (0.1)	2.8 (0.5)	2.0 (0.4)
6	0.1 (0.0)	0.1 (0.0)	4.2 (0.9)	3.0 (0.6)	4.7 (1.3)	3.4 (1.0)	0.2 (0.1)	0.1 (0.1)	0.8 (0.5)	3.5 (1.0)	2.8 (0.6)
7	0.1 (0.0)	0.0 (0.0)	5.2 (1.5)	3.7 (1.1)	5.3 (2.0)	3.8 (1.4)	0.2 (0.1)	0.1 (0.0)	1.3 (0.8)	3.7 (1.5)	2.7 (1.1)
8	0.4 (0.2)	0.3 (0.2)	4.8 (1.9)	3.4 (1.4)	4.8 (2.2)	3.5 (1.6)	0.2 (0.0)	0.1 (0.0)	1.3 (0.9)	3.0 (1.2)	2.2 (0.8)
9	0.2 (0.1)	0.2 (0.1)	4.1 (1.8)	3.0 (1.3)	4.4 (2.4)	3.1 (1.7)	0.1 (0.1)	0.1 (0.1)	1.3 (0.8)		
10	0.1 (0.0)	0.1 (0.0)	3.0 (1.0)	2.1 (0.7)	2.7 (1.2)	1.9 (0.9)	0.0 (0.0)	0.0 (0.0)	0.5 (0.3)	1.9 (0.5)	1.4 (0.3)
11	0.2 (0.1)	0.1 (0.0)	4.0 (1.4)	2.9 (1.0)	4.1 (1.7)	2.9 (1.2)	0.2 (0.1)	0.1 (0.0)	0.9 (0.6)	2.7 (0.9)	1.9 (0.6)
12	0.2 (0.0)	0.2 (0.0)	3.4 (0.7)	2.5 (0.5)	3.6 (0.8)	2.6 (0.6)	0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	2.3 (0.4)	1.6 (0.3)
13	0.1 (0.0)	0.1 (0.0)	7.2 (1.8)	5.2 (1.3)	6.5 (1.2)	4.7 (0.8)	0.1 (0.0)	0.1 (0.0)	1.4 (0.6)	3.6 (0.6)	2.6 (0.4)
14	0.1 (0.0)	0.1 (0.0)	7.0 (1.4)	5.0 (1.0)	7.1 (1.1)	5.1 (0.8)	0.1 (0.0)	0.0 (0.0)	3.0 (1.9)	4.4 (0.3)	3.2 (0.2)
15	0.1 (0.0)	0.1 (0.0)	5.9 (1.1)	4.2 (0.8)	6.3 (1.0)	4.5 (0.7)	0.0 (0.0)	0.0 (0.0)	1.7 (0.8)	4.3 (0.5)	3.1 (0.3)
16	0.2 (0.0)	0.1 (0.0)	5.5 (1.6)	3.9 (1.1)	6.7 (2.2)	4.8 (1.6)	0.1 (0.0)	0.1 (0.0)	1.7 (0.9)	3.9 (0.9)	2.8 (0.6)
17	0.2 (0.0)	0.1 (0.0)	5.2 (2.2)	3.7 (1.6)	5.9 (2.9)	4.3 (2.1)	0.1 (0.0)	0.1 (0.0)	1.2 (1.0)	3.5 (1.0)	2.5 (0.7)
18	0.1 (0.1)	0.1 (0.0)	4.8 (2.7)	3.4 (1.9)	5.5 (3.3)	4.0 (2.4)	0.0 (0.0)	0.0 (0.0)	1.0 (0.8)	3.5 (1.3)	2.5 (0.9)
19	0.1 (0.0)	0.1 (0.0)	3.6 (1.3)	2.6 (0.9)	4.6 (2.6)	3.3 (1.9)	0.0 (0.0)	0.0 (0.0)	0.5 (0.3)	3.0 (0.8)	2.2 (0.6)
20	0.1 (0.0)	0.1 (0.0)					0.1 (0.0)	0.1 (0.0)			
21	0.2 (0.0)	0.1 (0.0)	4.7 (1.6)	3.4 (1.2)	6.2 (2.9)	4.5 (2.0)	0.2 (0.0)	0.1 (0.0)	0.8 (0.4)	3.5 (0.9)	2.5 (0.6)
22	0.1 (0.1)	0.1 (0.0)	8.9 (0.9)	6.4 (0.6)	10.0 (1.2)	7.2 (0.8)	0.0 (0.0)	0.0 (0.0)	2.1 (0.7)	6.1 (0.7)	4.4 (0.5)
23	0.2 (0.0)	0.1 (0.0)	11.4 (1.1)	8.1 (0.8)	9.2 (1.0)	6.6 (0.7)	0.0 (0.0)	0.0 (0.0)	2.8 (0.6)	7.2 (0.3)	5.2 (0.2)
24	0.2 (0.0)	0.1 (0.0)	9.0 (3.3)	6.4 (2.3)	8.0 (2.1)	5.7 (1.5)	0.0 (0.0)	0.0 (0.0)	2.6 (1.6)	6.0 (1.3)	4.3 (1.0)
25	0.2 (0.1)	0.2 (0.1)	7.6 (3.6)	5.4 (2.6)	6.9 (2.9)	4.9 (2.1)	0.0 (0.0)	0.0 (0.0)	2.0 (1.5)	5.1 (2.0)	3.6 (1.5)
26	0.1 (0.1)	0.1 (0.0)	9.3 (1.5)	6.7 (1.1)	9.4 (1.3)	6.7 (0.9)	0.0 (0.0)	0.0 (0.0)	2.2 (0.9)	5.6 (0.8)	4.0 (0.5)
27	0.3 (0.1)	0.2 (0.1)	9.3 (3.4)	6.6 (2.4)	8.3 (2.0)	5.9 (1.4)	0.1 (0.0)	0.0 (0.0)	2.6 (1.1)	4.0 (2.4)	
28	0.2 (0.1)	0.1 (0.1)	8.4 (3.4)	6.0 (2.4)	7.8 (2.2)	5.6 (1.6)	0.1 (0.0)	0.1 (0.0)	2.4 (0.6)	3.5 (0.5)	
29	0.3 (0.2)	0.2 (0.2)	7.4 (3.2)	5.3 (2.3)	6.7 (3.0)	4.8 (2.1)	0.1 (0.0)	0.1 (0.0)	1.5 (0.9)	2.8 (1.1)	
30	0.1 (0.0)	0.1 (0.0)	6.8 (2.9)	4.8 (2.1)	6.8 (3.4)	4.9 (2.4)	0.1 (0.1)	0.1 (0.1)	1.6 (0.9)	2.7 (0.8)	
31	0.3 (0.2)	0.2 (0.1)	5.9 (2.3)	4.2 (1.6)	6.1 (2.7)	4.4 (1.9)	0.0 (0.0)	0.0 (0.0)	1.2 (0.8)	2.4 (1.1)	
Mean	0.2	0.1	5.9	4.2	5.9	4.2	0.1	0.1	1.4	3.7	2.7
n	31	31	30	30	30	30	31	31	30	29	24
SD	0.1	0.1	2.2	1.6	1.9	1.4	0.1	0.0	0.7	1.2	0.9
Min	0.1	0.0	3.0	2.1	2.7	1.9	0.0	0.0	0.4	1.9	1.4
Max	0.4	0.3	11.4	8.1	10.0	7.2	0.2	0.1	3.0	7.2	5.2

ED_004549_00015840-00169

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for November, 2008. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.3 (0.2)	0.2 (0.1)	5.7 (2.8)	4.1 (2.0)	6.7 (3.1)	4.8 (2.2)	0.1 (0.1)	0.1 (0.0)	1.2 (1.0)	2.6 (0.9)	
2	0.1 (0.1)	0.1 (0.0)	5.2 (2.9)	3.7 (2.1)	6.7 (3.6)	4.8 (2.6)	0.1 (0.1)	0.1 (0.1)	1.4 (1.1)	2.8 (0.9)	
3	0.1 (0.0)	0.1 (0.0)	4.7 (1.9)	3.4 (1.3)	5.7 (2.5)	4.1 (1.8)	0.1 (0.0)	0.0 (0.0)	0.5 (0.3)	2.4 (0.6)	
4	0.1 (0.0)	0.1 (0.0)	3.8 (2.2)	2.8 (1.6)	4.9 (2.7)	3.5 (1.9)	0.1 (0.0)	0.1 (0.0)	0.5 (0.3)	2.3 (0.6)	
5	0.1 (0.1)	0.1 (0.0)	4.9 (2.0)	3.5 (1.5)	6.2 (2.7)	4.4 (1.9)	0.0 (0.1)	0.0 (0.0)	0.6 (0.5)	3.0 (1.0)	2.1 (0.7)
6	0.2 (0.0)	0.1 (0.0)	8.0 (2.6)	5.7 (1.9)	10.8 (4.0)	7.7 (2.9)	0.0 (0.0)	0.0 (0.0)	1.8 (1.0)	4.3 (0.9)	3.1 (0.7)
7	0.3 (0.2)	0.2 (0.1)	7.2 (2.6)	5.2 (1.8)	10.6 (4.9)	7.6 (3.5)	0.0 (0.0)	0.0 (0.0)	1.9 (0.9)	4.8 (0.9)	3.4 (0.6)
8	0.3 (0.2)	0.2 (0.1)	7.5 (2.8)	5.3 (2.0)	12.7 (8.3)	9.2 (6.0)	0.0 (0.0)	0.0 (0.0)	1.9 (1.3)	4.5 (1.2)	3.2 (0.9)
9	0.2 (0.1)	0.1 (0.0)	8.0 (2.5)	5.7 (1.8)	9.8 (3.4)	7.0 (2.4)	0.1 (0.0)	0.1 (0.0)	2.3 (1.5)	5.0 (0.7)	3.6 (0.5)
10	0.1 (0.1)	0.1 (0.0)	7.3 (1.9)	5.2 (1.4)	8.6 (2.3)	6.2 (1.6)	0.0 (0.0)	0.0 (0.0)	1.9 (1.3)	5.0 (0.8)	3.6 (0.6)
11	0.3 (0.1)	0.2 (0.1)	9.5 (1.9)	6.8 (1.4)	11.0 (2.1)	7.8 (1.5)	0.0 (0.0)	0.0 (0.0)	2.6 (1.0)	6.6 (1.0)	4.7 (0.7)
12	0.4 (0.2)	0.3 (0.1)	8.5 (3.5)	6.1 (2.5)	11.1 (3.7)	7.9 (2.7)	0.0 (0.0)	0.0 (0.0)	2.9 (1.2)	6.6 (1.6)	4.7 (1.1)
13	0.2 (0.1)	0.2 (0.0)	7.1 (3.1)	5.1 (2.2)	9.0 (5.0)	6.5 (3.6)	0.0 (0.0)	0.0 (0.0)	1.6 (1.3)	5.8 (1.4)	4.2 (1.0)
14	0.1 (0.1)	0.1 (0.0)	9.3 (0.8)	6.6 (0.6)	11.5 (1.1)	8.2 (0.8)	0.0 (0.0)	0.0 (0.0)	2.0 (0.9)	7.8 (0.8)	5.6 (0.6)
15	0.4 (0.1)	0.2 (0.1)	10.2 (2.0)	7.3 (1.4)	12.5 (2.3)	8.9 (1.6)	0.0 (0.0)	0.0 (0.0)	2.7 (0.8)	8.4 (1.1)	6.0 (0.8)
16	0.3 (0.1)	0.2 (0.1)	7.1 (3.1)	5.1 (2.2)	8.6 (4.2)	6.1 (3.0)	0.0 (0.0)	0.0 (0.0)	2.0 (1.5)	6.7 (2.3)	4.8 (1.6)
17	0.2 (0.0)	0.1 (0.0)	8.4 (2.3)	6.0 (1.7)	10.9 (3.2)	7.8 (2.3)	0.1 (0.0)	0.1 (0.0)	2.2 (0.9)	4.7 (3.0)	
18	0.1 (0.0)	0.1 (0.0)	7.3 (3.3)	5.2 (2.4)	9.8 (4.8)	7.0 (3.4)	0.1 (0.0)	0.1 (0.0)	2.0 (1.2)	3.4 (0.9)	2.5 (0.6)
19	0.1 (0.0)	0.1 (0.0)	6.2 (3.3)	4.4 (2.3)	8.3 (4.7)	5.9 (3.4)	0.0 (0.0)	0.0 (0.0)	1.5 (0.9)	3.5 (1.1)	2.5 (0.8)
20	0.1 (0.0)	0.0 (0.0)	10.4 (1.6)	7.4 (1.1)	13.6 (1.8)	9.7 (1.3)	0.1 (0.0)	0.0 (0.0)	1.9 (0.5)	4.4 (0.6)	3.1 (0.4)
21	0.1 (0.0)	0.1 (0.0)	9.3 (1.1)	6.6 (0.8)	13.2 (1.3)	9.4 (0.9)	0.0 (0.0)	0.0 (0.0)	3.3 (0.4)	4.2 (0.4)	3.0 (0.3)
22	0.2 (0.1)	0.2 (0.0)	8.4 (2.4)	6.0 (1.7)	11.4 (3.2)	8.2 (2.3)	0.1 (0.0)	0.1 (0.0)	2.9 (0.6)	4.4 (0.5)	3.2 (0.4)
23	0.2 (0.1)	0.2 (0.1)	8.2 (3.1)	5.8 (2.2)	10.8 (4.0)	7.7 (2.8)	0.1 (0.0)	0.1 (0.0)	2.7 (0.8)	4.9 (0.8)	3.5 (0.6)
24	0.1 (0.0)	0.1 (0.0)	9.1 (2.2)	6.5 (1.6)	11.5 (3.5)	8.2 (2.5)	0.0 (0.0)	0.0 (0.0)	2.7 (0.6)	5.3 (0.8)	3.8 (0.6)
25	0.2 (0.1)	0.1 (0.0)	7.9 (2.8)	5.6 (2.0)	10.4 (4.0)	7.4 (2.9)	0.0 (0.0)	0.0 (0.0)	2.9 (0.7)	5.2 (1.1)	3.7 (0.8)
26	0.2 (0.0)	0.1 (0.0)	7.3 (2.3)	5.2 (1.7)	9.3 (3.0)	6.6 (2.2)	0.1 (0.0)	0.0 (0.0)	2.5 (0.6)	5.3 (1.2)	3.8 (0.9)
27	0.2 (0.0)	0.1 (0.0)	9.2 (1.6)	6.5 (1.2)	13.1 (1.6)	9.3 (1.2)	0.1 (0.0)	0.1 (0.0)	2.9 (0.5)	5.8 (0.7)	4.1 (0.5)
28	0.2 (0.0)	0.1 (0.0)	9.6 (1.8)	6.9 (1.3)	14.1 (1.8)	10.1 (1.3)	0.1 (0.0)	0.1 (0.0)	3.8 (0.4)	5.4 (0.6)	3.8 (0.4)
29	0.2 (0.0)	0.1 (0.0)	9.4 (1.4)	6.7 (1.0)	13.4 (2.0)	9.6 (1.4)	0.1 (0.0)	0.1 (0.0)	2.6 (0.5)	5.9 (0.5)	4.2 (0.4)
30	0.2 (0.0)	0.1 (0.0)	9.4 (1.3)	6.7 (0.9)	13.3 (1.3)	9.5 (0.9)	0.1 (0.0)	0.0 (0.0)	2.3 (0.4)	6.0 (0.3)	4.3 (0.2)
Mean	0.2	0.1	7.8	5.6	10.3	7.4	0.1	0.0	2.1	4.9	3.8
n	30	30	30	30	30	30	30	30	30	30	25
SD	0.1	0.1	1.7	1.2	2.5	1.8	0.0	0.0	0.8	1.5	0.9
Min	0.1	0.0	3.8	2.8	4.9	3.5	0.0	0.0	0.5	2.3	2.1
Max	0.4	0.3	10.4	7.4	14.1	10.1	0.1	0.1	3.8	8.4	6.0

ED_004549_00015840-00170

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for December, 2008. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.3 (0.1)	0.2 (0.1)	9.8 (2.1)	7.0 (1.5)	13.2 (2.0)	9.4 (1.4)	0.1 (0.0)	0.1 (0.0)	3.0 (0.5)	5.9 (0.9)	4.2 (0.6)
2	0.2 (0.1)	0.2 (0.1)	7.3 (3.6)	5.2 (2.6)	10.2 (4.3)	7.3 (3.1)	0.1 (0.0)	0.1 (0.0)	2.5 (1.0)	4.9 (1.3)	3.5 (0.9)
3	0.1 (0.0)	0.1 (0.0)	10.5 (2.2)	7.5 (1.6)	14.2 (2.6)	10.1 (1.9)	0.0 (0.0)	0.0 (0.0)	3.2 (1.0)	6.6 (1.1)	4.7 (0.8)
4	0.2 (0.1)	0.1 (0.1)	10.3 (1.7)	7.3 (1.2)	14.2 (1.4)	10.1 (1.0)	0.1 (0.0)	0.1 (0.0)	5.5 (0.9)	6.7 (0.8)	4.8 (0.6)
5	0.2 (0.2)	0.2 (0.1)	10.1 (1.2)	7.2 (0.9)	13.5 (1.9)	9.7 (1.3)	0.0 (0.0)	0.0 (0.0)	5.2 (1.2)	8.1 (1.1)	5.8 (0.8)
6	0.4 (0.2)	0.3 (0.1)	9.5 (1.8)	6.8 (1.3)	11.8 (2.7)	8.4 (2.0)	0.1 (0.0)	0.1 (0.0)	4.0 (1.2)	7.3 (1.6)	5.2 (1.2)
7	0.2 (0.1)	0.1 (0.0)	7.3 (2.2)	5.2 (1.6)	9.1 (3.6)	6.5 (2.6)	0.1 (0.0)	0.1 (0.0)	3.8 (1.8)	6.5 (1.2)	4.6 (0.9)
8	0.1 (0.0)	0.1 (0.0)	7.4 (2.8)	5.3 (2.0)	7.7 (2.4)	5.5 (1.7)	0.2 (0.0)	0.1 (0.0)	3.4 (1.1)	6.6 (1.3)	4.7 (0.9)
9	0.2 (0.1)	0.1 (0.0)	11.4 (1.4)	8.1 (1.0)	10.6 (1.5)	7.5 (1.1)	0.0 (0.0)	0.0 (0.0)	3.4 (0.7)	10.2 (1.7)	7.3 (1.2)
10	0.4 (0.2)	0.3 (0.1)	10.0 (1.3)	7.1 (1.0)	8.9 (0.7)	6.3 (0.5)	0.0 (0.0)	0.0 (0.0)	4.3 (1.0)	11.2 (1.6)	8.1 (1.1)
11	0.2 (0.1)	0.1 (0.0)	8.9 (2.2)	6.3 (1.6)	8.5 (1.4)	6.1 (1.0)	0.1 (0.0)	0.0 (0.0)	3.2 (0.8)	9.4 (1.8)	6.7 (1.3)
12	0.1 (0.0)	0.1 (0.0)	9.4 (1.7)	6.7 (1.2)	9.8 (1.5)	7.0 (1.1)	0.0 (0.0)	0.0 (0.0)		7.3 (2.7)	
13	0.1 (0.1)	0.1 (0.0)	6.9 (2.5)	4.9 (1.8)	7.6 (2.2)	5.5 (1.6)	0.1 (0.0)	0.1 (0.0)	3.9 (1.5)	6.8 (1.3)	4.9 (0.9)
14	0.0 (0.0)	0.0 (0.0)	10.7 (2.1)	7.6 (1.5)	10.4 (2.0)	7.4 (1.5)	0.0 (0.0)	0.0 (0.0)	4.2 (0.7)	9.0 (1.0)	6.4 (0.7)
15	0.0 (0.0)	0.0 (0.0)	11.7 (1.1)	8.3 (0.8)	9.4 (0.9)	6.7 (0.7)	0.0 (0.0)	0.0 (0.0)	7.6 (1.7)	10.8 (1.6)	7.7 (1.2)
16	0.1 (0.0)	0.1 (0.0)	12.3 (1.3)	8.7 (1.0)	10.8 (1.5)	7.7 (1.0)	0.0 (0.0)	0.0 (0.0)	7.4 (1.6)		
17	0.2 (0.1)	0.1 (0.1)	12.9 (0.9)	9.2 (0.7)	13.4 (1.1)	9.6 (0.8)	0.1 (0.0)	0.1 (0.0)	6.5 (0.5)	9.7 (0.7)	7.0 (0.5)
18	0.2 (0.1)	0.2 (0.1)	9.3 (3.6)	6.6 (2.6)	10.2 (3.4)	7.3 (2.4)	0.1 (0.1)	0.1 (0.0)	3.9 (2.1)	8.0 (2.0)	5.7 (1.4)
19	0.2 (0.1)	0.1 (0.0)	9.9 (2.0)	7.0 (1.4)	13.6 (1.9)	9.7 (1.4)	0.1 (0.0)	0.1 (0.0)	4.4 (1.1)	8.4 (1.3)	6.0 (0.9)
20	0.2 (0.1)	0.1 (0.1)	10.3 (1.2)	7.4 (0.8)	11.0 (1.7)	7.8 (1.2)	0.0 (0.0)	0.0 (0.0)	3.9 (1.1)	10.5 (0.9)	7.5 (0.6)
21	0.0 (0.0)	0.0 (0.0)	10.5 (1.4)	7.5 (1.0)	9.6 (1.2)	6.8 (0.8)	0.0 (0.0)	0.0 (0.0)	6.1 (0.5)	10.9 (0.8)	7.8 (0.6)
22	0.1 (0.0)	0.1 (0.0)	9.8 (1.0)	7.0 (0.7)	11.1 (1.6)	7.9 (1.1)	0.0 (0.0)	0.0 (0.0)	5.9 (1.6)		
23	0.1 (0.1)	0.1 (0.0)	9.1 (2.5)	6.5 (1.8)	11.6 (3.0)	8.2 (2.2)	0.0 (0.0)	0.0 (0.0)	3.8 (1.9)	8.3 (0.9)	5.9 (0.7)
24	0.2 (0.1)	0.1 (0.1)	10.5 (1.5)	7.5 (1.1)	11.8 (2.1)	8.4 (1.5)	0.0 (0.0)	0.0 (0.0)	5.3 (2.5)	8.9 (1.9)	6.4 (1.4)
25	0.1 (0.0)	0.1 (0.0)	9.2 (1.6)	6.5 (1.2)	8.9 (1.2)	6.3 (0.8)	0.0 (0.0)	0.0 (0.0)	3.2 (1.7)	6.4 (1.1)	4.5 (0.8)
26	0.1 (0.1)	0.1 (0.0)	7.8 (2.8)	5.5 (2.0)	7.8 (2.8)	5.6 (2.0)	0.0 (0.1)	0.0 (0.0)	2.3 (1.5)	6.2 (1.2)	4.4 (0.9)
27	0.1 (0.1)	0.1 (0.0)	10.3 (1.4)	7.3 (1.0)	10.2 (1.2)	7.3 (0.9)	0.0 (0.0)	0.0 (0.0)	3.1 (1.2)	9.5 (1.2)	6.8 (0.8)
28	0.3 (0.1)	0.2 (0.0)	9.4 (2.6)	6.7 (1.9)	8.8 (1.2)	6.3 (0.9)	0.0 (0.0)	0.0 (0.0)	3.5 (1.8)	8.7 (2.2)	6.2 (1.6)
29	0.6 (0.1)	0.5 (0.1)	8.9 (3.2)	6.4 (2.3)	9.4 (2.7)	6.7 (1.9)	0.0 (0.0)	0.0 (0.0)	3.2 (1.4)	8.5 (1.7)	6.1 (1.2)
30	0.1 (0.1)	0.1 (0.1)	8.6 (2.9)	6.2 (2.1)	11.3 (4.1)	8.1 (2.9)	0.0 (0.0)	0.0 (0.0)	2.9 (1.7)	8.6 (2.6)	6.1 (1.9)
31	0.1 (0.1)	0.1 (0.1)	11.2 (2.1)	8.0 (1.5)	14.2 (1.8)	10.1 (1.3)	0.0 (0.0)	0.0 (0.0)	4.2 (0.7)	9.8 (1.7)	7.0 (1.2)
Mean	0.2	0.1	9.7	6.9	10.7	7.7	0.0	0.0	4.2	8.3	5.9
n	31	31	31	31	31	31	31	31	30	29	28
SD	0.1	0.1	1.4	1.0	2.0	1.4	0.0	0.0	1.4	1.7	1.2
Min	0.0	0.0	6.9	4.9	7.6	5.5	0.0	0.0	2.3	4.9	3.5
Max	0.6	0.5	12.9	9.2	14.2	10.1	0.2	0.1	7.6	11.2	8.1

ED_004549_00015840-00171

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for January, 2009. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.1 (0.1)	0.1 (0.1)	9.4 (2.9)	6.7 (2.0)	12.4 (3.4)	8.9 (2.5)	0.0 (0.0)	0.0 (0.0)	3.8 (1.9)	9.4 (2.2)	6.7 (1.6)
2	0.3 (0.2)	0.2 (0.1)	8.9 (3.5)	6.3 (2.5)	11.7 (4.3)	8.3 (3.1)	0.1 (0.0)	0.1 (0.0)	3.5 (2.2)	9.6 (2.9)	6.9 (2.1)
3	0.2 (0.2)	0.1 (0.1)	10.3 (2.5)	7.3 (1.8)	12.3 (3.0)	8.8 (2.1)	0.1 (0.0)	0.1 (0.0)	2.7 (1.2)	10.3 (1.8)	7.4 (1.3)
4	0.1 (0.1)	0.0 (0.0)	12.1 (1.1)	8.6 (0.8)	14.0 (1.6)	10.0 (1.2)	0.0 (0.0)	0.0 (0.0)	4.5 (1.5)	12.4 (0.6)	8.9 (0.4)
5	0.3 (0.2)	0.2 (0.1)	11.2 (2.0)	8.0 (1.4)	13.7 (1.1)	9.8 (0.8)	0.0 (0.0)	0.0 (0.0)	7.2 (2.0)	9.7 (3.8)	
6	0.2 (0.1)	0.2 (0.1)	11.3 (2.1)	8.1 (1.5)	13.3 (1.6)	9.5 (1.2)	0.0 (0.0)	0.0 (0.0)	3.0 (1.4)	7.3 (3.2)	5.2 (2.3)
7	0.3 (0.1)	0.2 (0.1)	9.5 (3.6)	6.8 (2.6)	11.5 (4.1)	8.2 (3.0)	0.0 (0.0)	0.0 (0.0)	3.0 (0.8)	5.3 (1.5)	3.8 (1.1)
8	0.4 (0.2)	0.3 (0.1)	9.8 (4.0)	7.0 (2.9)	11.2 (4.7)	8.0 (3.3)	0.1 (0.0)	0.1 (0.0)	2.7 (1.4)	5.1 (1.1)	3.6 (0.8)
9	0.2 (0.1)	0.1 (0.1)	12.2 (5.6)	8.8 (4.1)	13.2 (3.6)	9.5 (2.6)	0.1 (0.0)	0.0 (0.0)	2.5 (1.4)	6.8 (1.3)	4.9 (0.9)
10	0.4 (0.2)	0.3 (0.2)	10.8 (2.2)	7.7 (1.6)	13.9 (2.0)	9.9 (1.5)	0.0 (0.0)	0.0 (0.0)	2.8 (0.8)	7.0 (1.1)	5.0 (0.8)
11	0.3 (0.2)	0.2 (0.1)	10.5 (2.2)	7.5 (1.6)	13.2 (2.6)	9.4 (1.8)	0.1 (0.0)	0.0 (0.0)	2.8 (1.0)	6.8 (1.8)	4.8 (1.3)
12	0.4 (0.2)	0.3 (0.1)	11.3 (1.2)	8.1 (0.8)	13.6 (1.8)	9.7 (1.3)	0.0 (0.0)	0.0 (0.0)	2.2 (0.8)	7.3 (0.5)	5.3 (0.4)
13	0.3 (0.2)	0.2 (0.1)	12.2 (3.4)	8.8 (2.5)	13.9 (2.2)	9.9 (1.6)	0.0 (0.0)	0.0 (0.0)	2.8 (1.2)	7.0 (1.3)	5.0 (1.0)
14	0.2 (0.1)	0.2 (0.1)	11.7 (4.4)	8.4 (3.2)	12.0 (2.1)	8.6 (1.5)	0.0 (0.0)	0.0 (0.0)	2.9 (1.1)	7.2 (1.3)	5.2 (0.9)
15	0.1 (0.0)	0.1 (0.0)	11.0 (1.1)	7.8 (0.8)	11.7 (3.6)	8.4 (2.5)	0.0 (0.0)	0.0 (0.0)	4.8 (0.5)	8.1 (0.9)	5.8 (0.6)
16	0.2 (0.1)	0.1 (0.1)	9.7 (3.1)	6.9 (2.2)	11.6 (3.5)	8.3 (2.5)	0.1 (0.0)	0.1 (0.0)	2.2 (1.4)	6.0 (0.9)	4.3 (0.7)
17	0.3 (0.1)	0.2 (0.1)	9.1 (2.2)	6.5 (1.6)	11.6 (3.4)	8.3 (2.4)	0.0 (0.0)	0.0 (0.0)	1.6 (0.6)	6.2 (0.9)	4.5 (0.7)
18	0.2 (0.1)	0.1 (0.1)	7.9 (3.0)	5.7 (2.1)	9.4 (3.5)	6.7 (2.5)	0.0 (0.0)	0.0 (0.0)	1.1 (0.9)	5.9 (1.0)	4.2 (0.7)
19	0.1 (0.1)	0.1 (0.0)	7.3 (2.7)	5.2 (2.0)	9.4 (3.4)	6.7 (2.4)	0.0 (0.0)	0.0 (0.0)	1.2 (0.8)	6.1 (1.3)	4.4 (0.9)
20	0.2 (0.1)	0.2 (0.1)	9.7 (2.9)	6.9 (2.1)	11.4 (3.8)	8.2 (2.7)	0.0 (0.0)	0.0 (0.0)	2.4 (1.2)	8.5 (1.6)	6.1 (1.1)
21	0.3 (0.1)	0.2 (0.1)	8.5 (3.4)	6.0 (2.4)	9.4 (3.5)	6.7 (2.5)	0.0 (0.0)	0.0 (0.0)	1.7 (1.3)	7.6 (2.2)	5.4 (1.6)
22	0.3 (0.1)	0.2 (0.1)	7.7 (3.4)	5.5 (2.4)	7.3 (4.6)	5.2 (3.3)	0.0 (0.0)	0.0 (0.0)	2.0 (1.8)	7.2 (1.9)	5.2 (1.4)
23	0.2 (0.2)	0.1 (0.1)	10.9 (0.9)	7.8 (0.6)	10.6 (4.2)	7.6 (3.0)	0.0 (0.0)	0.0 (0.0)	3.2 (0.9)	9.2 (1.5)	6.6 (1.1)
24	0.1 (0.0)	0.0 (0.0)	12.6 (1.3)	9.0 (0.9)	14.4 (1.4)	10.3 (1.0)	0.0 (0.0)	0.0 (0.0)	4.7 (1.1)	9.1 (1.3)	6.5 (0.9)
25	0.0 (0.0)	0.0 (0.0)	12.8 (1.0)	9.1 (0.7)	16.2 (2.5)	11.5 (1.8)	0.0 (0.0)	0.0 (0.0)	6.0 (1.2)	10.3 (1.8)	7.4 (1.3)
26	0.1 (0.0)	0.0 (0.0)	13.1 (0.4)	9.3 (0.3)	17.7 (1.0)	12.6 (0.8)	0.0 (0.0)	0.0 (0.0)	4.8 (2.2)	8.7 (5.0)	
27	0.2 (0.2)	0.1 (0.1)	14.1 (1.1)	10.0 (0.8)	16.3 (0.7)	11.6 (0.5)	0.0 (0.0)	0.0 (0.0)	3.6 (0.8)	7.1 (2.5)	5.1 (1.8)
28	0.4 (0.2)	0.3 (0.1)	12.1 (2.2)	8.7 (1.5)	15.0 (2.2)	10.7 (1.6)	0.0 (0.0)	0.0 (0.0)	3.8 (0.6)	5.9 (1.0)	4.2 (0.7)
29	0.4 (0.2)	0.3 (0.1)	12.4 (1.4)	8.9 (1.0)	15.2 (2.3)	10.9 (1.7)	0.0 (0.0)	0.0 (0.0)	3.6 (0.6)	6.8 (0.6)	4.8 (0.4)
30	0.5 (0.2)	0.3 (0.1)	10.5 (3.1)	7.5 (2.2)	12.6 (3.8)	9.0 (2.8)	0.0 (0.0)	0.0 (0.0)	2.5 (1.1)	5.7 (1.6)	4.1 (1.1)
31	0.1 (0.1)	0.1 (0.1)	9.8 (3.7)	7.0 (2.7)	11.1 (4.8)	7.9 (3.4)	0.0 (0.0)	0.0 (0.0)	2.1 (1.2)	5.1 (1.4)	3.7 (1.0)
Mean	0.2	0.2	10.7	7.6	12.6	9.0	0.0	0.0	3.2	7.6	5.3
n	31	31	31	31	31	31	31	31	31	31	29
SD	0.1	0.1	1.7	1.2	2.2	1.6	0.0	0.0	1.3	1.7	1.2
Min	0.0	0.0	7.3	5.2	7.3	5.2	0.0	0.0	1.1	5.1	3.6
Max	0.5	0.3	14.1	10.0	17.7	12.6	0.1	0.1	7.2	12.4	8.9

ED_004549_00015840-00172

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for February, 2009. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.1 (0.1)	0.1 (0.1)	11.8 (2.3)	8.4 (1.7)	15.7 (2.5)	11.2 (1.8)	0.0 (0.0)	0.0 (0.0)	2.7 (0.8)	6.8 (0.5)	4.9 (0.4)
2	0.2 (0.1)	0.2 (0.1)	10.9 (2.6)	7.8 (1.8)	13.1 (2.6)	9.3 (1.9)	0.0 (0.0)	0.0 (0.0)	2.9 (1.4)	6.1 (1.3)	4.3 (0.9)
3	0.3 (0.1)	0.2 (0.1)	8.6 (2.3)	6.1 (1.6)	11.8 (4.2)	8.4 (3.0)	0.0 (0.0)	0.0 (0.0)	2.2 (0.9)	5.2 (1.2)	3.7 (0.9)
4	0.2 (0.1)	0.1 (0.1)	9.2 (3.8)	6.6 (2.7)	10.8 (5.3)	7.7 (3.8)	0.0 (0.0)	0.0 (0.0)	1.9 (1.3)	4.2 (1.3)	3.0 (1.0)
5	0.2 (0.1)	0.1 (0.1)	8.5 (3.6)	6.1 (2.6)	10.7 (4.8)	7.7 (3.5)	0.0 (0.0)	0.0 (0.0)			
6	0.1 (0.1)	0.1 (0.1)	6.9 (4.0)	4.9 (2.8)	9.1 (5.9)	6.5 (4.2)	0.0 (0.0)	0.0 (0.0)	1.6 (1.4)	3.9 (1.7)	2.8 (1.2)
7	0.5 (0.2)	0.3 (0.1)	8.5 (3.4)	6.0 (2.5)	9.1 (4.0)	6.5 (2.8)	0.0 (0.0)	0.0 (0.0)	1.6 (0.9)	4.5 (1.3)	3.2 (0.9)
8	0.5 (0.2)	0.4 (0.1)	9.7 (1.5)	6.9 (1.1)	10.2 (1.7)	7.3 (1.2)	0.2 (0.1)	0.1 (0.1)	1.6 (0.8)	4.3 (0.3)	3.1 (0.2)
9	0.1 (0.1)	0.1 (0.1)	9.1 (3.5)	6.5 (2.5)	9.9 (3.8)	7.1 (2.7)	0.1 (0.1)	0.1 (0.1)	2.1 (1.1)	4.6 (0.8)	3.3 (0.6)
10	0.1 (0.1)	0.1 (0.1)	9.4 (3.3)	6.7 (2.3)	12.4 (4.6)	8.8 (3.3)	0.0 (0.0)	0.0 (0.0)	2.4 (1.5)	5.4 (1.4)	3.9 (1.0)
11	0.2 (0.0)	0.2 (0.0)	10.0 (2.6)	7.1 (1.9)	13.8 (4.8)	9.8 (3.5)	0.0 (0.0)	0.0 (0.0)	1.9 (1.0)	6.2 (1.3)	4.4 (0.9)
12	0.4 (0.2)	0.3 (0.2)	11.9 (1.8)	8.5 (1.3)	16.3 (2.3)	11.6 (1.7)	0.1 (0.0)	0.1 (0.0)	3.3 (1.2)	6.7 (1.2)	4.8 (0.8)
13	0.1 (0.1)	0.1 (0.0)	13.5 (1.9)	9.7 (1.4)	16.8 (2.1)	12.0 (1.5)	0.1 (0.0)	0.1 (0.0)	3.6 (1.2)	8.1 (0.8)	5.8 (0.6)
14	0.1 (0.0)	0.1 (0.0)	12.9 (1.0)	9.2 (0.7)	15.5 (1.6)	11.0 (1.2)	0.1 (0.0)	0.0 (0.0)	4.6 (0.9)	7.3 (0.7)	5.2 (0.5)
15	0.1 (0.1)	0.1 (0.0)	13.4 (1.5)	9.6 (1.1)	14.2 (1.5)	10.1 (1.1)	0.1 (0.0)	0.1 (0.0)	4.5 (1.1)	8.2 (1.3)	5.9 (0.9)
16	0.1 (0.0)	0.1 (0.0)	10.4 (2.7)	7.5 (1.9)	13.0 (3.6)	9.3 (2.6)	0.1 (0.0)	0.0 (0.0)	3.3 (1.9)	7.1 (1.3)	5.1 (0.9)
17	0.1 (0.0)	0.1 (0.0)	8.3 (4.6)	5.9 (3.3)	11.0 (6.6)	7.8 (4.7)	0.0 (0.0)	0.0 (0.0)	1.9 (1.6)	6.9 (2.2)	4.9 (1.6)
18	0.2 (0.1)	0.2 (0.0)					0.0 (0.0)	0.0 (0.0)			
19	0.4 (0.2)	0.3 (0.1)	10.5 (2.9)	7.5 (2.1)	12.9 (3.9)	9.2 (2.8)	0.0 (0.0)	0.0 (0.0)	4.6 (1.2)	8.5 (1.4)	6.1 (1.0)
20	0.3 (0.3)	0.2 (0.2)	9.6 (3.7)	6.8 (2.7)	11.5 (5.4)	8.2 (3.9)	0.0 (0.0)	0.0 (0.0)	3.6 (2.1)	6.2 (2.1)	4.4 (1.5)
21	0.2 (0.1)	0.1 (0.0)	11.4 (2.4)	8.1 (1.8)	16.0 (3.5)	11.4 (2.5)	0.0 (0.0)	0.0 (0.0)	3.5 (1.2)	6.3 (0.8)	4.5 (0.6)
22	0.2 (0.1)	0.1 (0.1)	8.2 (2.6)	5.8 (1.9)	14.2 (6.7)	10.2 (4.8)	0.0 (0.0)	0.0 (0.0)	3.9 (2.3)	5.5 (2.1)	3.9 (1.5)
23	0.1 (0.0)	0.1 (0.0)	10.0 (2.2)	7.2 (1.6)	12.8 (2.6)	9.1 (1.9)	0.1 (0.0)	0.1 (0.0)	3.2 (1.9)	6.1 (1.7)	4.4 (1.2)
24	0.3 (0.1)	0.2 (0.0)	8.8 (3.9)	6.3 (2.7)	11.3 (5.4)	8.1 (3.9)	0.1 (0.0)	0.1 (0.0)	2.4 (1.6)	5.6 (1.8)	4.0 (1.3)
25	0.5 (0.1)						0.1 (0.0)				
26	0.2 (0.1)						0.0 (0.0)				
27	0.1 (0.0)	0.0 (0.0)	10.4 (1.6)	7.4 (1.2)	15.0 (2.5)	10.7 (1.8)	0.0 (0.0)	0.0 (0.0)	3.1 (1.6)	7.6 (1.6)	5.4 (1.1)
28	0.2 (0.1)	0.1 (0.1)	11.7 (1.1)	8.3 (0.8)	15.5 (1.8)	11.1 (1.3)	0.0 (0.0)	0.0 (0.0)	3.4 (0.9)	8.3 (1.0)	5.9 (0.7)
Mean	0.2	0.2	10.1	7.2	12.9	9.2	0.0	0.0	2.9	6.2	4.5
n	28	26	25	25	25	25	28	26	24	24	24
SD	0.1	0.1	1.7	1.2	2.3	1.6	0.0	0.0	0.9	1.3	1.0
Min	0.1	0.0	6.9	4.9	9.1	6.5	0.0	0.0	1.6	3.9	2.8
Max	0.5	0.4	13.5	9.7	16.8	12.0	0.2	0.1	4.6	8.5	6.1

ED_004549_00015840-00173

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for March, 2009. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.2 (0.2)	0.1 (0.1)	11.2 (1.5)	8.0 (1.1)	12.9 (3.1)	9.2 (2.2)	0.0 (0.0)	0.0 (0.0)	7.7 (7.4)	8.1 (2.3)	5.8 (1.7)
2	0.4 (0.2)	0.3 (0.2)	9.9 (3.6)	7.1 (2.6)	10.7 (4.1)	7.7 (2.9)	0.1 (0.0)	0.1 (0.0)	9.3 (9.7)	10.9 (6.8)	7.9 (4.9)
3	0.2 (0.1)	0.1 (0.1)	8.8 (2.8)	6.3 (2.0)	8.6 (2.2)	6.1 (1.6)	0.1 (0.0)	0.1 (0.0)	2.0 (1.6)	5.6 (1.6)	4.0 (1.1)
4	0.1 (0.1)	0.1 (0.1)	6.4 (5.0)	4.6 (3.6)	7.0 (5.3)	5.1 (3.8)	0.0 (0.0)	0.0 (0.0)	1.1 (1.0)	3.6 (1.4)	2.6 (1.0)
5	0.0 (0.1)	0.0 (0.1)	5.5 (3.8)	4.0 (2.7)	5.7 (3.9)	4.0 (2.8)	0.0 (0.1)	0.0 (0.0)	0.4 (0.3)	3.5 (1.2)	2.5 (0.9)
6	0.0 (0.0)	0.0 (0.0)	6.1 (4.2)	4.4 (3.0)	6.4 (4.3)	4.6 (3.0)	-0.1 (0.0)	0.0 (0.0)	0.9 (0.9)	4.1 (1.4)	2.9 (1.0)
7	0.0 (0.0)	0.0 (0.0)	4.6 (2.7)	3.3 (1.9)	5.1 (3.1)	3.7 (2.2)	0.0 (0.0)	0.0 (0.0)	0.5 (0.6)	3.8 (1.4)	2.7 (1.0)
8	0.1 (0.1)	0.1 (0.1)	8.6 (3.9)	6.1 (2.8)	10.2 (5.0)	7.3 (3.6)	0.0 (0.0)	0.0 (0.0)	1.4 (1.3)	5.7 (1.5)	4.1 (1.1)
9	0.1 (0.0)	0.1 (0.0)	5.6 (2.7)	4.0 (1.9)	6.2 (3.3)	4.4 (2.4)	0.0 (0.0)	0.0 (0.0)	0.7 (0.4)	5.3 (1.2)	3.8 (0.9)
10	0.2 (0.0)	0.2 (0.0)	13.3 (1.2)	9.5 (0.8)	15.4 (2.0)	11.0 (1.5)	0.0 (0.0)	0.0 (0.0)	2.6 (1.0)	10.2 (1.5)	7.3 (1.0)
11	0.3 (0.0)	0.2 (0.0)	12.7 (1.8)	9.0 (1.3)	13.5 (1.7)	9.6 (1.2)	0.1 (0.0)	0.0 (0.0)	5.3 (2.5)		
12	0.4 (0.1)	0.3 (0.1)	11.0 (1.7)	7.9 (1.2)	14.9 (1.2)	10.6 (0.8)	0.1 (0.0)	0.1 (0.0)	6.3 (0.6)	5.0 (0.9)	3.5 (0.7)
13	0.3 (0.0)	0.2 (0.0)	12.0 (1.8)	8.6 (1.3)	18.2 (1.8)	13.0 (1.3)	0.1 (0.0)	0.1 (0.0)	5.4 (0.7)	6.1 (0.5)	4.4 (0.3)
14	0.3 (0.1)	0.2 (0.1)	9.5 (2.7)	6.8 (2.0)	13.3 (4.6)	9.5 (3.3)	0.1 (0.0)	0.1 (0.0)	5.0 (1.3)	5.3 (1.1)	3.8 (0.8)
15	0.3 (0.1)	0.2 (0.0)	7.9 (3.8)	5.6 (2.7)	10.4 (4.9)	7.4 (3.5)	0.1 (0.0)	0.1 (0.0)	3.1 (2.3)	4.8 (1.6)	3.4 (1.1)
16	0.2 (0.1)	0.2 (0.1)	6.8 (4.4)	4.9 (3.2)	8.9 (5.5)	6.3 (4.0)	0.1 (0.1)	0.0 (0.0)	2.3 (2.2)	4.3 (2.2)	3.0 (1.6)
17	0.4 (0.2)	0.3 (0.1)	5.8 (3.9)	4.1 (2.8)	7.3 (5.3)	5.2 (3.8)	0.0 (0.0)	0.0 (0.0)	1.3 (1.4)	3.3 (1.6)	2.3 (1.2)
18	0.4 (0.2)	0.3 (0.1)	7.7 (2.7)	5.5 (1.9)	9.0 (2.9)	6.5 (2.1)	0.0 (0.0)	0.0 (0.0)	1.5 (0.9)	4.3 (1.4)	3.0 (1.0)
19	0.5 (0.2)	0.4 (0.1)	7.8 (2.8)	5.6 (2.0)	10.3 (3.8)	7.4 (2.7)	0.1 (0.1)	0.1 (0.0)	1.7 (1.1)	5.2 (1.5)	3.7 (1.1)
20	0.4 (0.1)	0.3 (0.1)	6.3 (3.1)	4.5 (2.2)	8.2 (3.9)	5.9 (2.8)	0.2 (0.0)	0.2 (0.0)	1.3 (0.9)	3.5 (1.2)	2.5 (0.8)
21	0.2 (0.1)	0.2 (0.0)	4.1 (2.6)	2.9 (1.9)	5.0 (2.9)	3.6 (2.1)	0.1 (0.1)	0.1 (0.0)	0.4 (0.1)	2.6 (1.0)	1.9 (0.7)
22	0.2 (0.0)	0.2 (0.0)	3.5 (1.3)	2.5 (1.0)	5.3 (2.5)	3.8 (1.8)	0.1 (0.0)	0.1 (0.0)	0.5 (0.1)	2.7 (0.7)	1.9 (0.5)
23	0.1 (0.1)	0.1 (0.1)	4.3 (2.1)	3.0 (1.5)	5.1 (2.5)	3.7 (1.8)	0.0 (0.0)	0.0 (0.0)	0.5 (0.3)	2.9 (0.8)	2.1 (0.6)
24	0.2 (0.0)	0.1 (0.0)	9.7 (2.8)	6.9 (2.0)	9.8 (2.0)	7.0 (1.5)	0.0 (0.0)	0.0 (0.0)	1.9 (1.3)	5.2 (1.3)	3.7 (1.0)
25	0.2 (0.1)	0.2 (0.1)	9.2 (3.3)	6.5 (2.3)	11.2 (3.7)	8.0 (2.6)	0.0 (0.0)	0.0 (0.0)	1.6 (1.2)	5.3 (1.3)	3.8 (0.9)
26	0.4 (0.1)	0.3 (0.1)	9.8 (2.5)	7.0 (1.8)	13.2 (3.5)	9.5 (2.5)	0.1 (0.1)	0.1 (0.0)	1.6 (1.0)	5.4 (0.6)	3.9 (0.4)
27	0.2 (0.1)	0.2 (0.1)	12.4 (2.3)	8.9 (1.7)	16.6 (2.0)	11.8 (1.5)	0.0 (0.0)	0.0 (0.0)	2.9 (0.4)	8.6 (1.0)	6.1 (0.7)
28	0.5 (0.1)	0.3 (0.1)	12.5 (1.9)	8.9 (1.4)	15.4 (1.3)	11.0 (0.9)	0.0 (0.0)	0.0 (0.0)	3.6 (0.8)	8.1 (1.1)	5.8 (0.8)
29	0.4 (0.1)	0.3 (0.1)	10.5 (2.5)	7.5 (1.8)	13.4 (4.0)	9.6 (2.9)	0.1 (0.0)	0.1 (0.0)	2.9 (2.2)	7.2 (1.2)	5.1 (0.8)
30	0.3 (0.0)	0.2 (0.0)	11.4 (2.0)	8.2 (1.4)	13.6 (2.9)	9.7 (2.1)	0.1 (0.0)	0.1 (0.0)	2.3 (1.5)	6.4 (1.2)	4.6 (0.8)
31	0.3 (0.0)	0.2 (0.0)	11.3 (2.4)	8.1 (1.7)	13.1 (4.1)	9.4 (2.9)	0.0 (0.0)	0.0 (0.0)	1.9 (0.8)	6.7 (1.5)	4.8 (1.1)
Mean	0.3	0.2	8.6	6.1	10.4	7.5	0.1	0.0	2.6	5.5	3.9
n	31	31	31	31	31	31	31	31	31	30	30
SD	0.1	0.1	2.8	2.0	3.7	2.7	0.1	0.0	2.2	2.1	1.5
Min	0.0	0.0	3.5	2.5	5.0	3.6	-0.1	0.0	0.4	2.6	1.9
Max	0.5	0.4	13.3	9.5	18.2	13.0	0.2	0.2	9.3	10.9	7.9

ED_004549_00015840-00174

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for April, 2009. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.3 (0.1)	0.2 (0.1)	9.9 (3.5)	7.1 (2.5)	10.8 (3.9)	7.7 (2.8)	0.1 (0.0)	0.1 (0.0)	2.2 (2.2)	5.7 (1.6)	4.1 (1.1)
2	0.3 (0.0)	0.2 (0.0)	10.6 (1.9)	7.5 (1.4)	11.1 (2.8)	7.9 (2.0)	0.1 (0.0)	0.1 (0.0)			
3	0.2 (0.1)	0.1 (0.0)	8.3 (4.3)	6.0 (3.1)	8.8 (4.5)	6.3 (3.3)	0.1 (0.0)	0.1 (0.0)	2.3 (1.7)	2.9 (1.0)	2.1 (0.7)
4	0.2 (0.0)	0.1 (0.0)	7.6 (3.1)	5.5 (2.2)	7.8 (2.8)	5.6 (2.0)	0.0 (0.0)	0.0 (0.0)	1.5 (1.1)	3.5 (0.7)	2.5 (0.5)
5	0.2 (0.0)	0.1 (0.0)	13.2 (1.7)	9.4 (1.2)	14.2 (1.3)	10.1 (0.9)	0.1 (0.0)	0.0 (0.0)	1.5 (0.6)	4.7 (0.8)	3.4 (0.6)
6	0.3 (0.0)	0.2 (0.0)	12.3 (2.9)	8.8 (2.1)	14.0 (2.6)	10.0 (1.9)	0.0 (0.0)	0.0 (0.0)	3.4 (0.9)	5.9 (1.0)	4.2 (0.7)
7	0.3 (0.1)	0.2 (0.1)	6.6 (3.1)	4.7 (2.2)	9.1 (6.0)	6.5 (4.3)	0.0 (0.1)	0.0 (0.0)	2.4 (2.2)	3.9 (1.9)	2.8 (1.3)
8	0.4 (0.1)	0.3 (0.1)	8.2 (4.6)	5.8 (3.3)	7.8 (4.8)	5.6 (3.5)	0.1 (0.0)	0.0 (0.0)	1.7 (1.7)	3.5 (1.4)	2.5 (1.0)
9	0.4 (0.2)	0.3 (0.2)	7.8 (3.0)	5.5 (2.1)	9.0 (3.1)	6.4 (2.2)	0.0 (0.0)	0.0 (0.0)	1.2 (0.9)	4.1 (0.9)	2.9 (0.6)
10	0.5 (0.3)	0.3 (0.2)	9.7 (3.3)	6.9 (2.4)	11.2 (4.1)	8.0 (3.0)	0.1 (0.1)	0.0 (0.1)	1.4 (0.9)	4.5 (1.4)	3.3 (1.0)
11	0.5 (0.1)	0.4 (0.1)	10.9 (1.8)	7.8 (1.3)	12.5 (2.9)	8.9 (2.0)	0.2 (0.0)	0.1 (0.0)	1.5 (0.7)	3.9 (0.7)	2.8 (0.5)
12	0.4 (0.1)	0.3 (0.1)	11.1 (0.8)	7.9 (0.6)	11.5 (0.9)	8.3 (0.6)	0.1 (0.0)	0.1 (0.0)	1.2 (0.3)	3.2 (0.3)	2.3 (0.2)
13	0.3 (0.0)	0.2 (0.0)	9.0 (3.2)	6.4 (2.3)	10.6 (3.4)	7.6 (2.4)	0.1 (0.1)	0.1 (0.0)	1.0 (0.5)	3.3 (0.7)	2.4 (0.5)
14	0.2 (0.1)	0.2 (0.1)	6.5 (3.2)	4.6 (2.3)	8.2 (4.9)	5.8 (3.5)	0.1 (0.1)	0.1 (0.0)	0.7 (0.3)	2.9 (0.5)	2.1 (0.3)
15	0.2 (0.0)	0.2 (0.0)	5.9 (2.2)	4.4 (1.6)	6.3 (2.2)	4.7 (1.5)	0.1 (0.0)	0.1 (0.0)	0.5 (0.1)	2.5 (0.3)	1.8 (0.2)
16	0.4 (0.1)	0.3 (0.1)	8.2 (1.0)	5.8 (0.7)	8.3 (0.7)	5.9 (0.5)	0.2 (0.0)	0.2 (0.0)	0.8 (0.1)	3.7 (0.4)	
17	0.5 (0.0)	0.4 (0.0)	7.5 (2.2)	5.4 (1.6)	7.9 (1.5)	5.6 (1.1)	0.1 (0.1)	0.1 (0.1)	0.8 (0.2)	3.9 (0.6)	
18	0.3 (0.0)	0.2 (0.0)	9.0 (1.4)	6.5 (1.0)	10.8 (2.2)		0.1 (0.0)	0.1 (0.0)	1.3 (0.5)	4.7 (0.9)	
19	0.2 (0.1)	0.2 (0.0)	7.6 (2.7)	5.4 (1.9)	8.4 (3.2)		0.1 (0.0)	0.1 (0.0)	0.8 (0.5)	4.0 (1.4)	
20	0.4 (0.1)	0.3 (0.1)	6.6 (3.3)	4.7 (2.3)	7.0 (3.6)		0.1 (0.0)	0.1 (0.0)	1.1 (1.0)	3.6 (1.4)	
21	0.5 (0.3)	0.4 (0.2)	5.2 (2.7)	3.7 (2.0)	5.5 (3.3)	3.9 (2.4)	0.2 (0.1)	0.1 (0.1)	0.8 (0.5)	3.2 (1.3)	2.3 (0.9)
22	0.6 (0.3)	0.4 (0.2)	5.1 (2.4)	3.6 (1.7)	6.3 (2.0)	4.5 (1.4)	0.2 (0.1)	0.1 (0.1)	0.6 (0.2)	3.2 (0.7)	2.3 (0.5)
23	0.4 (0.0)	0.3 (0.0)					0.0 (0.0)	0.0 (0.0)			
24	0.2 (0.0)	0.2 (0.0)	4.5 (2.3)	3.2 (1.7)	4.0 (1.7)	2.9 (1.2)	0.0 (0.0)	0.0 (0.0)	0.7 (0.3)		
25	0.3 (0.1)	0.2 (0.1)	5.4 (2.0)	3.9 (1.5)	6.2 (2.7)	4.4 (2.0)	0.1 (0.0)	0.1 (0.0)	1.6 (0.8)	4.1 (0.6)	2.9 (0.4)
26	0.3 (0.1)	0.2 (0.0)	5.9 (2.6)	4.2 (1.9)	6.2 (3.7)	4.4 (2.7)	0.1 (0.0)	0.0 (0.0)	1.9 (1.2)	4.1 (1.6)	2.9 (1.2)
27	0.3 (0.1)	0.2 (0.1)	6.5 (1.7)	4.7 (1.2)	7.3 (2.2)	5.2 (1.6)	0.1 (0.0)	0.0 (0.0)	2.0 (0.9)	4.4 (1.2)	3.1 (0.8)
28	0.5 (0.2)	0.4 (0.1)	7.9 (1.6)	5.7 (1.2)	8.8 (2.5)	6.3 (1.8)	0.2 (0.0)	0.1 (0.0)	3.7 (1.5)	5.3 (0.8)	3.8 (0.6)
29	0.4 (0.0)	0.3 (0.0)	4.4 (1.1)	3.2 (0.8)	4.6 (1.3)	3.3 (0.9)	0.3 (0.1)	0.2 (0.0)	1.0 (0.3)	3.0 (0.8)	2.1 (0.6)
30	0.4 (0.0)	0.3 (0.0)	4.7 (1.4)	3.4 (1.0)	4.7 (1.5)	3.4 (1.1)	0.2 (0.1)	0.1 (0.1)	0.7 (0.1)	3.1 (0.8)	2.2 (0.6)
Mean	0.3	0.2	7.8	5.6	8.6	6.1	0.1	0.1	1.4	3.9	2.8
n	30	30	29	29	29	26	30	30	28	27	22
SD	0.1	0.1	2.3	1.6	2.6	1.9	0.1	0.0	0.8	0.8	0.6
Min	0.2	0.1	4.4	3.2	4.0	2.9	0.0	0.0	0.5	2.5	1.8
Max	0.6	0.4	13.2	9.4	14.2	10.1	0.3	0.2	3.7	5.9	4.2

ED_004549_00015840-00175

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for May, 2009. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.3 (0.0)	0.2 (0.0)	7.3 (1.3)	5.2 (1.0)	7.0 (1.4)	5.0 (1.0)	0.1 (0.0)	0.0 (0.0)	1.2 (0.4)	4.3 (0.5)	3.1 (0.4)
2											
3											
4											
5											
6											
7	0.7 (0.1)	0.5 (0.1)	3.9 (2.2)	2.8 (1.6)	4.2 (1.8)	3.0 (1.3)	0.3 (0.1)	0.2 (0.1)	0.9 (0.2)	2.6 (0.5)	1.8 (0.3)
8	0.4 (0.1)	0.3 (0.1)	2.7 (0.6)	2.0 (0.4)	3.9 (1.2)	2.8 (0.9)	0.1 (0.1)	0.1 (0.1)	0.7 (0.2)	2.6 (0.2)	1.9 (0.1)
9	0.6 (0.2)	0.4 (0.2)	5.1 (2.3)	3.6 (1.6)	6.3 (2.2)	4.5 (1.6)	0.2 (0.1)	0.1 (0.1)	0.8 (0.2)	3.5 (0.6)	2.5 (0.4)
10	0.7 (0.1)	0.5 (0.1)	8.3 (1.9)	5.9 (1.4)	8.5 (1.4)	6.1 (1.0)	0.3 (0.0)	0.2 (0.0)	1.1 (0.1)	4.8 (0.4)	3.5 (0.3)
11	0.5 (0.0)	0.4 (0.0)	7.2 (1.9)	5.2 (1.4)	8.8 (1.7)	6.3 (1.2)	0.2 (0.0)	0.2 (0.0)	1.2 (0.3)	3.9 (0.8)	2.8 (0.6)
12	0.4 (0.1)	0.3 (0.1)	4.9 (2.8)	3.5 (2.0)	5.4 (2.5)	3.9 (1.8)	0.2 (0.1)	0.1 (0.0)	1.1 (0.2)	2.8 (0.7)	2.0 (0.5)
13	0.3 (0.0)	0.2 (0.0)	3.7 (1.2)	2.7 (0.8)	4.1 (1.5)	3.0 (1.1)	0.1 (0.0)	0.1 (0.0)	0.7 (0.2)	2.6 (0.3)	1.9 (0.2)
14	0.4 (0.1)	0.3 (0.1)	4.6 (1.6)	3.3 (1.2)	5.7 (1.9)	4.1 (1.3)	0.2 (0.0)	0.1 (0.0)	0.9 (0.1)	3.4 (0.5)	2.4 (0.3)
15	0.4 (0.1)	0.3 (0.1)	3.8 (0.9)	2.7 (0.6)	4.6 (1.7)	3.3 (1.2)	0.2 (0.1)	0.1 (0.0)	0.9 (0.2)	2.6 (0.5)	1.8 (0.3)
16	0.6 (0.1)	0.4 (0.1)	5.8 (1.9)	4.1 (1.4)	7.4 (3.2)	5.3 (2.3)	0.2 (0.1)	0.1 (0.0)	0.8 (0.1)	3.4 (0.7)	2.5 (0.5)
17	0.4 (0.1)	0.3 (0.1)	5.8 (2.9)	4.1 (2.1)	7.0 (3.9)	5.0 (2.8)	0.2 (0.1)	0.1 (0.0)	1.0 (0.4)	4.0 (1.3)	2.9 (0.9)
18	0.6 (0.1)	0.4 (0.1)			5.4 (4.6)	3.9 (3.3)	0.2 (0.0)	0.2 (0.0)			
19	0.4 (0.2)	0.3 (0.2)	4.1 (2.6)	3.0 (1.9)	4.9 (3.5)	3.5 (2.5)	0.2 (0.0)	0.1 (0.0)		1.8 (0.6)	1.3 (0.4)
20	0.3 (0.0)	0.2 (0.0)	4.4 (2.1)	3.1 (1.5)	5.2 (3.1)	3.7 (2.2)	0.1 (0.0)	0.1 (0.0)	0.7 (0.2)	1.9 (0.6)	1.4 (0.4)
21	0.3 (0.0)	0.2 (0.0)	4.1 (1.6)	3.0 (1.1)	5.1 (2.6)	3.7 (1.9)	0.2 (0.0)	0.1 (0.0)	0.8 (0.1)	1.9 (0.3)	1.4 (0.2)
22	0.6 (0.2)	0.4 (0.2)	4.4 (1.5)	3.2 (1.1)	5.2 (2.4)	3.7 (1.7)	0.3 (0.2)	0.2 (0.1)	0.9 (0.1)	2.1 (0.5)	1.5 (0.3)
23	0.5 (0.1)	0.4 (0.0)	4.8 (1.2)	3.5 (0.9)	5.6 (2.2)	4.0 (1.6)	0.3 (0.1)	0.2 (0.1)	0.9 (0.1)	2.3 (0.2)	1.6 (0.2)
24	0.5 (0.0)	0.3 (0.0)	5.2 (1.9)	3.8 (1.4)	5.7 (2.7)	4.1 (2.0)	0.3 (0.0)	0.2 (0.0)	0.9 (0.1)	2.4 (0.3)	1.7 (0.2)
25	0.4 (0.1)	0.3 (0.1)	5.4 (1.6)	3.9 (1.1)	6.1 (2.5)	4.4 (1.8)	0.2 (0.0)	0.2 (0.0)	1.0 (0.1)	2.4 (0.4)	1.7 (0.3)
26	0.4 (0.0)	0.3 (0.0)	5.3 (1.6)	3.8 (1.1)	6.0 (2.5)	4.3 (1.8)	0.1 (0.0)	0.1 (0.0)	0.8 (0.2)	2.4 (0.4)	1.7 (0.3)
27	0.3 (0.1)	0.2 (0.0)	6.0 (2.8)	4.3 (2.0)	6.3 (3.3)	4.5 (2.4)	0.1 (0.0)	0.1 (0.0)	0.7 (0.2)	3.0 (1.1)	2.1 (0.8)
28	0.5 (0.2)	0.3 (0.1)	5.0 (2.1)	3.6 (1.5)	5.2 (2.9)	3.7 (2.1)	0.1 (0.0)	0.1 (0.0)	0.7 (0.2)	2.9 (0.8)	2.1 (0.6)
29	0.4 (0.2)	0.3 (0.1)	4.5 (2.2)	3.2 (1.6)	4.4 (2.3)	3.1 (1.7)	0.1 (0.0)	0.1 (0.0)	0.7 (0.1)	2.5 (0.5)	1.8 (0.4)
30	0.2 (0.0)	0.2 (0.0)	4.0 (1.9)	2.9 (1.3)	3.9 (2.1)	2.8 (1.5)	0.1 (0.1)	0.1 (0.0)	0.6 (0.1)	2.4 (0.5)	1.7 (0.4)
31	0.3 (0.0)	0.2 (0.0)	3.4 (1.2)	2.4 (0.8)	3.2 (1.4)	2.3 (1.0)	0.1 (0.0)	0.1 (0.0)	0.6 (0.1)	2.4 (0.3)	1.7 (0.2)
Mean	0.4	0.3	5.0	3.5	5.6	4.0	0.2	0.1	0.9	2.8	2.0
n	26	26	25	25	26	26	26	26	24	25	25
SD	0.1	0.1	1.3	0.9	1.3	1.0	0.1	0.0	0.2	0.8	0.5
Min	0.2	0.2	2.7	2.0	3.2	2.3	0.1	0.0	0.6	1.8	1.3
Max	0.7	0.5	8.3	5.9	8.8	6.3	0.3	0.2	1.2	4.8	3.5

ED_004549_00015840-00176

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for June, 2009. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.4 (0.0)	0.3 (0.0)	3.6 (0.7)	2.6 (0.5)	3.9 (1.4)	2.8 (1.0)	0.2 (0.0)	0.1 (0.0)	0.7 (0.1)	2.4 (0.3)	1.7 (0.2)
2	0.4 (0.0)	0.3 (0.0)	5.0 (1.2)	3.6 (0.8)	4.6 (1.1)	3.3 (0.8)	0.2 (0.0)	0.2 (0.0)	0.8 (0.1)	2.4 (0.3)	1.7 (0.3)
3	0.5 (0.0)	0.3 (0.0)	5.3 (1.5)	3.8 (1.1)	5.4 (2.4)	3.9 (1.7)	0.2 (0.0)	0.1 (0.0)	0.8 (0.1)	2.6 (0.5)	1.8 (0.3)
4	0.4 (0.0)	0.3 (0.0)	5.0 (2.1)	3.7 (1.6)	5.4 (2.5)	3.9 (1.9)	0.3 (0.0)	0.2 (0.0)	0.8 (0.1)	2.5 (0.5)	1.8 (0.3)
5	0.4 (0.0)	0.3 (0.0)	3.9 (1.3)	2.8 (0.9)	4.6 (1.6)	3.3 (1.1)	0.3 (0.0)	0.2 (0.0)	0.8 (0.1)	2.3 (0.3)	1.7 (0.2)
6	0.2 (0.1)						0.1 (0.0)				
7	0.2 (0.1)						0.0 (0.0)				
8	0.6 (0.2)	0.4 (0.2)	4.9 (2.3)	3.5 (1.7)	5.8 (3.0)	4.1 (2.2)	0.2 (0.1)	0.1 (0.1)	1.1 (0.8)	3.0 (0.6)	2.2 (0.4)
9	0.5 (0.2)	0.3 (0.2)	3.5 (1.3)	2.5 (1.0)	3.9 (2.2)	2.8 (1.6)	0.2 (0.1)	0.2 (0.1)	1.0 (0.8)	2.3 (0.5)	1.7 (0.4)
10	0.4 (0.1)	0.3 (0.0)	3.4 (0.7)	2.5 (0.5)	3.4 (0.9)	2.4 (0.6)	0.2 (0.0)	0.1 (0.0)	0.8 (0.2)	2.2 (0.4)	1.6 (0.3)
11	0.5 (0.1)	0.3 (0.1)	4.3 (1.5)	3.1 (1.1)	4.1 (2.0)	2.9 (1.4)	0.2 (0.1)	0.1 (0.0)	0.8 (0.1)	2.0 (0.3)	1.4 (0.2)
12	0.8 (0.2)	0.5 (0.1)	3.3 (0.7)	2.4 (0.5)	3.1 (0.9)	2.3 (0.6)	0.2 (0.1)	0.1 (0.0)	0.7 (0.1)	1.8 (0.2)	1.3 (0.2)
13	0.7 (0.2)	0.5 (0.1)	3.6 (0.7)	2.6 (0.5)	3.2 (0.7)	2.3 (0.5)	0.3 (0.1)	0.2 (0.1)	0.8 (0.1)	1.9 (0.2)	1.4 (0.1)
14	0.6 (0.4)	0.5 (0.3)	3.1 (1.2)	2.3 (0.9)	2.8 (1.2)	2.0 (0.8)	0.3 (0.1)	0.2 (0.1)	0.8 (0.2)	2.1 (0.2)	1.5 (0.2)
15	0.4 (0.1)	0.3 (0.0)	2.6 (0.5)	1.9 (0.4)	2.6 (0.5)	1.8 (0.4)	0.1 (0.1)	0.1 (0.0)	0.7 (0.1)	2.3 (0.3)	1.7 (0.2)
16	0.8 (0.3)	0.6 (0.2)	3.5 (0.6)	2.5 (0.5)	3.0 (0.8)	2.1 (0.6)	0.3 (0.2)	0.2 (0.1)	0.8 (0.1)	2.7 (0.6)	2.0 (0.5)
17	0.4 (0.2)	0.3 (0.1)	3.0 (0.7)	2.1 (0.5)	2.4 (0.6)	1.7 (0.4)	0.2 (0.1)	0.2 (0.1)	0.7 (0.1)	2.9 (0.2)	2.1 (0.1)
18	0.4 (0.0)	0.3 (0.0)	3.2 (0.8)	2.3 (0.6)	2.9 (1.0)	2.1 (0.7)	0.2 (0.0)	0.2 (0.0)	0.7 (0.1)		
19	0.3 (0.0)	0.2 (0.0)	2.8 (0.7)	2.0 (0.5)	2.4 (0.6)	1.7 (0.5)	0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	1.8 (0.2)	1.3 (0.1)
20	0.6 (0.1)	0.5 (0.1)	3.0 (0.8)	2.1 (0.6)	2.7 (0.8)	1.9 (0.6)	0.4 (0.1)	0.3 (0.1)	0.8 (0.2)	1.9 (0.3)	1.4 (0.2)
21	0.3 (0.1)	0.2 (0.1)	2.8 (0.7)	2.0 (0.5)	2.4 (0.8)	1.7 (0.6)	0.3 (0.1)	0.2 (0.1)	0.7 (0.1)	1.8 (0.2)	1.3 (0.1)
22	0.4 (0.0)	0.3 (0.0)	3.1 (1.0)	2.2 (0.7)	2.6 (0.8)	1.9 (0.6)	0.2 (0.1)	0.1 (0.0)	0.7 (0.1)	1.8 (0.4)	1.3 (0.3)
23	0.4 (0.1)	0.3 (0.0)	2.9 (0.9)	2.1 (0.6)	2.6 (0.9)	1.9 (0.6)	0.3 (0.0)	0.2 (0.0)	0.7 (0.1)	1.4 (0.2)	1.0 (0.1)
24	0.3 (0.0)	0.2 (0.0)	2.8 (0.7)	2.0 (0.5)	2.6 (0.7)	1.9 (0.5)	0.2 (0.0)	0.2 (0.0)	0.7 (0.1)	1.4 (0.2)	1.0 (0.1)
25	0.3 (0.0)	0.2 (0.0)	3.0 (0.8)	2.2 (0.6)	2.6 (0.6)	1.9 (0.5)	0.2 (0.0)	0.2 (0.0)	0.7 (0.1)	1.5 (0.2)	1.1 (0.1)
26	0.3 (0.0)	0.2 (0.0)	3.0 (0.7)	2.2 (0.5)	2.6 (0.6)	1.9 (0.5)	0.2 (0.0)	0.1 (0.0)	0.7 (0.1)	1.4 (0.2)	1.0 (0.1)
27	0.3 (0.0)	0.2 (0.0)	3.2 (0.7)	2.3 (0.5)	2.6 (0.8)	1.9 (0.6)	0.2 (0.0)	0.1 (0.0)	0.7 (0.1)	1.4 (0.3)	1.0 (0.2)
28	0.5 (0.1)	0.3 (0.0)	3.4 (1.0)	2.4 (0.7)	2.9 (0.8)	2.1 (0.6)	0.2 (0.0)	0.2 (0.0)	0.7 (0.2)	1.8 (0.4)	1.3 (0.3)
29	0.5 (0.0)	0.3 (0.0)	3.2 (0.7)	2.3 (0.5)	2.7 (0.7)	1.9 (0.5)	0.2 (0.0)	0.1 (0.0)	0.7 (0.1)	1.4 (0.2)	1.0 (0.1)
30	1.0 (0.3)	0.7 (0.2)	3.3 (1.0)	2.4 (0.7)	2.7 (1.0)	2.0 (0.7)	0.3 (0.1)	0.2 (0.1)	0.7 (0.2)	1.4 (0.3)	1.0 (0.2)
Mean	0.5	0.3	3.5	2.5	3.3	2.4	0.2	0.2	0.8	2.0	1.4
n	30	28	28	28	28	28	30	28	28	27	27
SD	0.2	0.1	0.7	0.5	1.0	0.7	0.1	0.0	0.1	0.5	0.3
Min	0.2	0.2	2.6	1.9	2.4	1.7	0.0	0.1	0.6	1.4	1.0
Max	1.0	0.7	5.3	3.8	5.8	4.1	0.4	0.3	1.1	3.0	2.2

ED_004549_00015840-00177

Table E5. Daily means (SD) of NH3 concentrations at Site OK4B for July, 2009. Minimum detection limit is 0.2 ppm.

Day	Ambient (b/w Barn 1 and 2)		Barn 1		Barn 2		Ambient (by Far 9)		Inlet (by Far 9)	Farrowing rm 9	
	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	mg/dsm^3	ppm	ppm	mg/dsm^3
1	0.3 (0.2)	0.2 (0.1)	3.1 (1.1)	2.3 (0.8)	2.6 (0.9)	1.9 (0.7)	0.3 (0.1)	0.2 (0.1)	0.6 (0.1)	1.2 (0.2)	0.9 (0.1)
2	0.3 (0.0)	0.2 (0.0)	2.6 (0.6)	1.9 (0.4)	2.2 (0.6)	1.6 (0.4)	0.1 (0.0)	0.1 (0.0)	0.6 (0.1)	1.1 (0.2)	0.8 (0.2)
3	0.3 (0.0)	0.2 (0.0)	2.7 (0.6)	2.0 (0.4)	2.4 (0.6)	1.7 (0.4)	0.2 (0.0)	0.2 (0.0)	0.7 (0.1)	1.2 (0.3)	0.9 (0.2)
4	0.5 (0.1)	0.4 (0.1)	3.0 (0.7)	2.1 (0.5)	2.4 (0.6)	1.7 (0.4)	0.3 (0.1)	0.2 (0.0)	0.8 (0.1)	0.8 (0.1)	0.6 (0.1)
5	0.7 (0.1)	0.5 (0.1)	3.0 (1.0)	2.1 (0.7)	2.5 (0.7)	1.8 (0.5)	0.3 (0.2)	0.2 (0.1)	0.7 (0.1)	0.8 (0.2)	0.6 (0.2)
6	0.6 (0.2)	0.5 (0.2)	3.1 (0.8)	2.3 (0.6)	2.9 (0.9)	2.1 (0.6)	0.5 (0.2)	0.4 (0.1)	0.8 (0.1)	1.1 (0.1)	0.8 (0.1)
7	0.9 (0.5)	0.6 (0.3)	3.3 (0.9)	2.4 (0.6)	3.1 (1.1)	2.2 (0.8)	0.4 (0.3)	0.3 (0.2)	1.0 (0.3)	1.2 (0.4)	0.9 (0.3)
8	0.4 (0.2)	0.3 (0.1)	3.3 (0.5)	2.4 (0.4)	2.8 (0.8)	2.0 (0.6)	0.3 (0.2)	0.2 (0.1)	0.9 (0.2)	1.1 (0.3)	0.8 (0.2)
9	0.2 (0.0)	0.1 (0.0)	3.1 (0.6)	2.2 (0.5)	2.4 (0.7)	1.7 (0.5)	0.1 (0.1)	0.1 (0.1)	0.7 (0.0)	0.9 (0.1)	0.6 (0.1)
10	0.3 (0.0)	0.2 (0.0)					0.2 (0.0)	0.1 (0.0)			
11	0.2 (0.1)	0.2 (0.0)	3.3 (0.7)	2.4 (0.5)	2.4 (0.7)	1.8 (0.5)	0.1 (0.1)	0.1 (0.1)	0.7 (0.1)	0.9 (0.1)	0.7 (0.1)
12	0.2 (0.1)	0.2 (0.0)	3.1 (0.5)	2.2 (0.3)	2.5 (0.6)	1.8 (0.4)	0.1 (0.0)	0.1 (0.0)	0.6 (0.0)	1.0 (0.1)	0.7 (0.1)
13	0.3 (0.1)	0.2 (0.0)	3.6 (0.9)	2.6 (0.6)	2.8 (0.8)	2.0 (0.6)	0.2 (0.1)	0.1 (0.0)	0.8 (0.1)	1.0 (0.2)	0.7 (0.1)
14	0.3 (0.0)	0.2 (0.0)	3.2 (0.8)	2.3 (0.6)	2.4 (0.5)	1.7 (0.3)	0.2 (0.1)	0.1 (0.0)	0.7 (0.1)	1.0 (0.1)	0.8 (0.1)
15	0.7 (0.2)	0.5 (0.1)	3.6 (0.9)	2.6 (0.6)	2.9 (0.7)	2.1 (0.5)	0.4 (0.1)	0.3 (0.1)	0.9 (0.2)	1.3 (0.3)	0.9 (0.2)
16	0.9 (0.1)	0.7 (0.1)	3.4 (1.0)	2.4 (0.7)	2.8 (0.9)	2.0 (0.6)	0.5 (0.1)	0.3 (0.1)			
17	0.8 (0.2)	0.6 (0.1)	3.6 (0.8)	2.6 (0.6)	3.0 (0.7)	2.2 (0.5)	0.4 (0.1)	0.3 (0.1)	0.9 (0.2)	1.6 (0.2)	1.1 (0.1)
18	0.6 (0.1)	0.5 (0.1)	3.4 (1.2)	2.4 (0.9)	3.0 (1.1)	2.1 (0.8)	0.3 (0.0)	0.2 (0.0)	0.8 (0.2)	1.8 (0.5)	1.3 (0.4)
19	0.4 (0.1)	0.3 (0.1)	2.6 (0.8)	1.8 (0.6)	2.7 (0.7)	1.9 (0.5)	0.2 (0.0)	0.2 (0.0)	0.6 (0.1)	1.5 (0.4)	1.1 (0.3)
20	0.5 (0.1)		2.5 (0.5)		2.9 (0.9)		0.3 (0.0)				
21	0.4 (0.0)		2.2 (0.9)		2.4 (0.9)		0.2 (0.1)		0.6 (0.1)		
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
Mean	0.5	0.3	3.1	2.3	2.7	1.9	0.3	0.2	0.7	1.2	0.8
n	21	19	20	18	20	18	21	19	18	17	17
SD	0.2	0.2	0.4	0.2	0.3	0.2	0.1	0.1	0.1	0.3	0.2
Min	0.2	0.1	2.2	1.8	2.2	1.6	0.1	0.1	0.6	0.8	0.6
Max	0.9	0.7	3.6	2.6	3.1	2.2	0.5	0.4	1.0	1.8	1.3

ED_004549_00015840-00178

Table E6. NH_3 Emissions

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for July, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21	14.1 (4.51)	6.06 (1.94)	12.3 (3.95)	30.8 (9.87)	15.5 (3.98)	6.68 (1.72)	13.6 (3.49)	33.9 (8.72)	224 (44.7)	1.57 (0.31)	9.32 (1.86)	17.9 (3.59)
22	13.7 (4.15)	5.90 (1.79)	12.0 (3.63)	30.0 (9.08)	14.9 (3.95)	6.43 (1.70)	13.1 (3.45)	32.7 (8.63)	207 (25.7)	1.45 (0.18)	8.63 (1.07)	16.4 (2.02)
23	11.9 (3.23)	5.14 (1.39)	10.4 (2.83)	26.1 (7.06)	13.3 (3.22)	5.71 (1.39)	11.6 (2.82)	29.0 (7.04)	272 (34.1)	1.90 (0.24)	11.3 (1.42)	21.4 (2.64)
24	13.4 (3.34)	5.75 (1.44)	11.7 (2.92)	29.2 (7.30)	14.4 (3.56)	6.18 (1.53)	12.6 (3.12)	31.4 (7.79)	283 (22.3)	1.98 (0.16)	11.8 (0.93)	22.0 (1.73)
25	13.8 (3.37)	5.94 (1.45)	12.1 (2.95)	30.2 (7.36)	16.0 (4.40)	6.89 (1.89)	14.0 (3.84)	35.0 (9.61)	274 (33.9)	1.92 (0.24)	11.4 (1.41)	21.1 (2.60)
26	12.9 (3.90)	5.57 (1.68)	11.3 (3.41)	28.2 (8.52)	15.6 (4.24)	6.71 (1.83)	13.6 (3.71)	34.0 (9.27)	231 (69.8)	1.62 (0.49)	9.62 (2.91)	17.6 (5.33)
27	12.7 (3.29)	5.45 (1.42)	11.1 (2.88)	27.6 (7.19)	13.8 (3.29)	5.94 (1.42)	12.0 (2.87)	30.1 (7.18)	263 (105)	1.84 (0.74)	10.9 (4.39)	19.9 (7.99)
28	12.8 (2.68)	5.51 (1.15)	11.2 (2.34)	28.0 (5.86)	13.8 (3.04)	5.93 (1.31)	12.0 (2.66)	30.1 (6.64)	117 (38.0)	0.82 (0.27)	4.86 (1.58)	8.78 (2.87)
29	13.8 (2.36)	5.94 (1.02)	12.0 (2.06)	30.1 (5.15)	14.4 (3.26)	6.22 (1.40)	12.6 (2.85)	31.5 (7.11)	104 (22.3)	0.73 (0.16)	4.32 (0.93)	7.75 (1.65)
30	14.5 (1.55)	6.27 (0.67)	12.7 (1.35)	31.8 (3.38)	13.8 (2.86)	5.93 (1.23)	12.0 (2.50)	30.1 (6.24)	218 (117)	1.53 (0.82)	9.84 (5.24)	22.9 (14.0)
31	14.6 (3.55)	6.29 (1.53)	12.7 (3.10)	31.8 (7.76)	13.0 (3.54)	5.60 (1.52)	11.3 (3.09)	28.4 (7.73)	415 (99.7)	2.90 (0.70)	17.3 (4.15)	38.4 (8.44)
Mean	13.50	5.80	11.80	29.40	14.40	6.20	12.60	31.50	237.00	1.66	9.94	19.50
n	11	11	11	11	11	11	11	11	11	11	11	11
SD	0.79	0.34	0.69	1.71	0.95	0.41	0.84	2.09	80.10	0.56	3.33	7.70
Min	11.90	5.14	10.40	26.10	13.00	5.60	11.30	28.40	104.00	0.73	4.32	7.75
Max	14.60	6.29	12.70	31.80	16.00	6.89	14.00	35.00	415.00	2.90	17.30	38.40

ED_004549_00015840-00179

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for August, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	14.4 (3.84)	6.21 (1.65)	12.6 (3.35)	31.5 (8.38)	13.2 (5.52)	5.67 (2.38)	11.5 (4.82)	28.7 (12.1)	380 (35.0)	2.66 (0.25)	15.8 (1.46)	34.1 (3.19)
2	14.8 (6.02)	6.37 (2.59)	12.9 (5.25)	32.3 (13.10)	11.5 (4.82)	4.94 (2.07)	10.0 (4.20)	25.0 (10.5)	358 (71.0)	2.51 (0.50)	14.9 (2.96)	31.6 (6.20)
3	14.1 (3.39)	6.07 (1.46)	12.3 (2.95)	30.7 (7.39)	13.7 (3.97)	5.91 (1.71)	12.0 (3.47)	30.0 (8.67)	356 (70.6)	2.49 (0.49)	14.8 (2.94)	31.1 (6.13)
4	15.3 (3.12)	6.61 (1.34)	13.4 (2.72)	33.5 (6.81)	13.1 (3.36)	5.66 (1.45)	11.5 (2.93)	28.6 (7.32)	358 (32.0)	2.51 (0.22)	14.9 (1.34)	30.9 (2.81)
5	17.3 (4.61)	7.47 (1.98)	15.1 (4.02)	37.8 (10.10)	13.6 (3.31)	5.87 (1.42)	11.9 (2.88)	29.7 (7.21)	357 (50.2)	2.50 (0.35)	14.9 (2.09)	30.5 (4.23)
6	17.0 (4.56)	7.32 (1.96)	14.8 (3.98)	37.1 (9.94)	14.8 (3.88)	6.36 (1.67)	12.9 (3.38)	32.2 (8.45)	347 (35.3)	2.43 (0.25)	14.4 (1.47)	29.3 (2.96)
7	16.2 (1.96)	6.96 (0.85)	14.1 (1.71)	35.2 (4.28)	13.5 (2.78)	5.83 (1.20)	11.8 (2.43)	29.5 (6.07)	411 (46.5)	2.88 (0.33)	17.1 (1.94)	34.3 (3.90)
8	21.6 (6.27)	9.29 (2.70)	18.8 (5.47)	47.0 (13.70)	14.8 (2.99)	6.37 (1.29)	12.9 (2.61)	32.3 (6.53)	431 (55.8)	3.02 (0.39)	18.0 (2.33)	35.5 (4.49)
9												
10												
11												
12												
13												
14												
15	12.3 (3.13)	5.28 (1.35)	10.7 (2.73)	26.7 (6.82)	12.0 (3.16)	5.18 (1.36)	10.5 (2.76)	26.2 (6.89)	683 (49.1)	4.78 (0.34)	28.5 (2.05)	52.5 (3.71)
16	14.9 (5.11)	6.44 (2.20)	13.0 (4.45)	32.6 (11.10)	13.0 (2.79)	5.59 (1.20)	11.3 (2.43)	28.3 (6.08)	645 (105)	4.51 (0.74)	26.9 (4.39)	49.2 (8.06)
17												
18	14.9 (5.51)	6.41 (2.37)	13.0 (4.80)	32.4 (12.00)	12.9 (4.08)	5.57 (1.76)	11.3 (3.56)	28.2 (8.89)	577 (67.3)	4.04 (0.47)	24.0 (2.80)	43.3 (5.06)
19	18.1 (5.94)	7.80 (2.56)	15.8 (5.18)	39.5 (12.90)	13.7 (3.38)	5.90 (1.46)	11.9 (2.94)	29.8 (7.36)	627 (77.0)	4.39 (0.54)	26.1 (3.21)	46.8 (5.76)
20	17.3 (3.39)	7.44 (1.46)	15.1 (2.95)	37.6 (7.38)	15.9 (3.42)	6.83 (1.47)	13.8 (2.98)	34.5 (7.44)				
21	16.3 (3.70)	7.02 (1.59)	14.2 (3.22)	35.5 (8.06)	14.6 (3.88)	6.31 (1.67)	12.8 (3.38)	31.9 (8.46)	639 (61.0)	4.47 (0.43)	26.6 (2.54)	59.5 (5.52)
22	16.1 (2.29)	6.92 (0.99)	14.0 (1.99)	35.0 (4.99)	13.0 (3.07)	5.60 (1.32)	11.3 (2.67)	28.3 (6.68)	507 (80.1)	3.55 (0.56)	21.1 (3.34)	45.4 (7.19)
23	14.0 (2.97)	6.04 (1.28)	12.2 (2.59)	30.5 (6.47)	11.8 (3.24)	5.08 (1.40)	10.3 (2.82)	25.7 (7.06)	462 (90.8)	3.24 (0.64)	19.3 (3.78)	40.8 (8.03)
24	13.9 (5.72)	5.99 (2.46)	12.1 (4.98)	30.3 (12.40)	11.1 (3.38)	4.77 (1.46)	9.64 (2.94)	24.1 (7.36)	489 (135)	3.43 (0.95)	20.4 (5.63)	42.7 (11.7)
25	12.9 (3.01)	5.57 (1.30)	11.3 (2.62)	28.1 (6.56)	12.6 (2.69)	5.42 (1.16)	11.0 (2.35)	27.4 (5.87)	548 (142)	3.84 (1.00)	22.8 (5.92)	47.3 (12.2)
26	14.7 (2.04)	6.31 (0.88)	12.8 (1.77)	31.9 (4.44)	13.0 (2.80)	5.59 (1.20)	11.3 (2.43)	28.3 (6.08)	642 (87.6)	4.50 (0.61)	26.8 (3.65)	54.9 (7.45)
27	14.8 (3.70)	6.39 (1.59)	12.9 (3.22)	32.3 (8.05)	13.2 (3.17)	5.67 (1.36)	11.5 (2.76)	28.7 (6.89)	613 (109)	4.29 (0.76)	25.5 (4.54)	51.8 (9.28)
28	14.6 (2.96)	6.30 (1.28)	12.7 (2.58)	31.8 (6.45)	12.2 (2.70)	5.25 (1.16)	10.6 (2.35)	26.6 (5.88)	568 (61.5)	3.98 (0.43)	23.7 (2.56)	47.4 (5.07)
29	17.5 (6.02)	7.55 (2.59)	15.3 (5.24)	38.2 (13.10)	12.2 (4.79)	5.24 (2.06)	10.6 (4.17)	26.5 (10.4)				
30	13.8 (4.18)	5.93 (1.80)	12.0 (3.64)	30.0 (9.10)	9.72 (2.83)	4.19 (1.22)	8.46 (2.47)	21.2 (6.17)	480 (69.8)	3.36 (0.49)	20.0 (2.91)	39.0 (5.64)
31	12.2 (4.19)	5.24 (1.80)	10.6 (3.64)	26.5 (9.11)	11.0 (3.40)	4.72 (1.46)	9.54 (2.96)	23.9 (7.40)	526 (140)	3.69 (0.98)	21.9 (5.84)	42.4 (11.2)
Mean	15.40	6.62	13.40	33.50	12.90	5.56	11.30	28.10	500.00	3.50	20.80	41.80
n	24	24	24	24	24	24	24	24	22	22	22	22
SD	2.04	0.88	1.78	4.45	1.35	0.58	1.18	2.95	111.00	0.78	4.62	8.64
Min	12.20	5.24	10.60	26.50	9.72	4.19	8.46	21.20	347.00	2.43	14.40	29.30
Max	21.60	9.29	18.80	47.00	15.90	6.83	13.80	34.50	683.00	4.78	28.50	59.50

ED_004549_00015840-00180

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for September, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	11.5 (3.92)	4.94 (1.69)	9.98 (3.41)	24.9 (8.53)	12.2 (3.68)	5.24 (1.59)	10.6 (3.20)	26.5 (8.01)	499 (115)	3.49 (0.80)	20.8 (4.77)	39.8 (9.11)
2	12.4 (3.92)	5.32 (1.69)	10.8 (3.41)	26.9 (8.54)	12.0 (2.76)	5.15 (1.19)	10.4 (2.40)	26.0 (6.00)	547 (121)	3.83 (0.85)	22.8 (5.06)	43.4 (9.57)
3	12.1 (2.98)	5.23 (1.28)	10.6 (2.60)	26.4 (6.49)	12.5 (3.58)	5.38 (1.54)	10.9 (3.11)	27.2 (7.79)	555 (107)	3.88 (0.75)	23.1 (4.44)	43.6 (8.33)
4												
5												
6	13.7 (2.59)	5.89 (1.12)	11.9 (2.25)	29.8 (5.64)	12.8 (3.83)	5.52 (1.65)	11.2 (3.33)	27.9 (8.33)				
7	14.6 (2.95)	6.30 (1.27)	12.7 (2.57)	31.8 (6.43)	13.0 (3.42)	5.61 (1.47)	11.3 (2.98)	28.3 (7.44)				
8	14.6 (5.05)	6.29 (2.17)	12.7 (4.39)	31.8 (11.00)	12.3 (3.36)	5.32 (1.45)	10.7 (2.93)	26.9 (7.32)				
9	12.0 (3.36)	5.18 (1.45)	10.5 (2.92)	26.2 (7.31)	11.7 (3.35)	5.05 (1.44)	10.2 (2.91)	25.5 (7.29)				
10												
11					11.7 (3.06)	5.04 (1.32)	10.2 (2.66)	25.5 (6.66)				
12	12.4 (3.64)	5.32 (1.57)	10.8 (3.17)	26.9 (7.92)	13.1 (4.25)	5.66 (1.83)	11.4 (3.70)	28.6 (9.26)				
13	12.2 (3.47)	5.27 (1.49)	10.7 (3.02)	26.6 (7.55)	13.2 (4.33)	5.69 (1.86)	11.5 (3.77)	28.7 (9.42)				
14	10.7 (3.15)	4.62 (1.36)	9.33 (2.75)	23.3 (6.87)	11.0 (2.54)	4.72 (1.09)	9.54 (2.21)	23.8 (5.52)				
15	12.9 (3.61)	5.57 (1.55)	11.3 (3.14)	28.2 (7.85)	14.6 (3.95)	6.27 (1.70)	12.7 (3.44)	31.7 (8.60)				
16	13.4 (3.85)	5.79 (1.66)	11.7 (3.35)	29.3 (8.37)	14.2 (3.51)	6.10 (1.51)	12.3 (3.06)	30.8 (7.65)				
17	14.1 (4.52)	6.06 (1.95)	12.3 (3.94)	30.6 (9.85)	14.3 (4.80)	6.15 (2.07)	12.4 (4.18)	31.1 (10.4)				
18	13.8 (4.64)	5.96 (2.00)	12.1 (4.04)	30.1 (10.10)	13.0 (4.24)	5.61 (1.83)	11.3 (3.69)	28.3 (9.23)				
19	12.5 (4.73)	5.40 (2.04)	10.9 (4.12)	27.3 (10.30)	13.5 (4.57)	5.80 (1.97)	11.7 (3.98)	29.3 (9.95)				
20	11.2 (2.93)	4.84 (1.26)	9.79 (2.55)	24.5 (6.38)	12.3 (3.68)	5.28 (1.59)	10.7 (3.21)	26.7 (8.02)				
21	13.1 (3.23)	5.64 (1.39)	11.4 (2.82)	28.5 (7.04)	12.9 (3.81)	5.53 (1.64)	11.2 (3.32)	28.0 (8.30)	983 (89.4)	6.88 (0.63)	41.0 (3.73)	79.3 (7.22)
22	12.6 (2.79)	5.42 (1.20)	11.0 (2.43)	27.4 (6.08)	13.7 (3.57)	5.91 (1.54)	12.0 (3.11)	29.9 (7.77)	936 (217)	6.56 (1.52)	39.0 (9.03)	74.8 (17.30)
23	13.5 (3.90)	5.79 (1.68)	11.7 (3.39)	29.3 (8.49)	14.8 (3.63)	6.38 (1.56)	12.9 (3.16)	32.2 (7.90)	1010 (117)	7.08 (0.82)	42.1 (4.86)	80.1 (9.24)
24												
25												
26	10.1 (2.88)	4.36 (1.24)	8.82 (2.51)	22.0 (6.28)	11.9 (3.11)	5.12 (1.34)	10.4 (2.71)	25.9 (6.78)	859 (268)	6.02 (1.88)	35.8 (11.20)	66.1 (20.60)
27	9.81 (3.03)	4.23 (1.31)	8.55 (2.64)	21.4 (6.61)	10.8 (2.87)	4.66 (1.24)	9.43 (2.50)	23.6 (6.25)	1030 (164)	7.18 (1.15)	42.7 (6.81)	78.2 (12.40)
28	10.8 (3.08)	4.67 (1.33)	9.45 (2.68)	23.6 (6.71)	13.2 (3.91)	5.67 (1.68)	11.5 (3.41)	28.7 (8.51)				
29	10.9 (2.53)	4.68 (1.09)	9.47 (2.21)	23.7 (5.51)	13.0 (3.14)	5.61 (1.35)	11.3 (2.73)	28.3 (6.84)				
30												
Mean	12.40	5.34	10.80	27.00	12.80	5.52	11.20	27.90	802.00	5.62	33.40	63.20
n	23	23	23	23	24	24	24	24	8	8	8	8
SD	1.34	0.58	1.16	2.91	1.02	0.44	0.89	2.23	214.00	1.50	8.91	16.70
Min	9.81	4.23	8.55	21.40	10.80	4.66	9.43	23.60	499.00	3.49	20.80	39.80
Max	14.60	6.30	12.70	31.80	14.80	6.38	12.90	32.20	1030.00	7.18	42.70	80.10

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Table E6. Daily means (SD) of NH3 emissions at Site OK4B for October, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1												
2												
3												
4												
5	11.6 (3.59)	5.01 (1.55)	10.1 (3.13)	25.3 (7.81)	11.4 (2.51)	4.91 (1.08)	9.92 (2.19)	24.8 (5.47)	544 (119)	3.81 (0.84)	22.7 (4.97)	47.4 (10.4)
6												
7	9.79 (2.55)	4.21 (1.10)	8.51 (2.21)	21.3 (5.54)	10.4 (2.46)	4.47 (1.06)	9.03 (2.14)	22.6 (5.36)	531 (113)	3.72 (0.79)	22.1 (4.69)	45.4 (9.65)
8	8.93 (1.97)	3.85 (0.85)	7.77 (1.71)	19.4 (4.28)	10.3 (2.29)	4.43 (0.99)	8.95 (1.99)	22.4 (4.99)	468 (211)	3.28 (1.47)	19.5 (8.77)	39.5 (17.8)
9	8.01 (2.06)	3.45 (0.89)	6.97 (1.79)	17.4 (4.49)	10.6 (2.93)	4.58 (1.26)	9.24 (2.55)	23.1 (6.38)	454 (229)	3.18 (1.60)	18.9 (9.54)	37.8 (19.1)
10	8.26 (1.76)	3.56 (0.76)	7.18 (1.53)	18.0 (3.83)	10.3 (3.00)	4.44 (1.29)	8.97 (2.61)	22.4 (6.52)	421 (175)	2.95 (1.23)	17.6 (7.29)	34.7 (14.4)
11	8.64 (1.82)	3.72 (0.79)	7.51 (1.58)	18.8 (3.96)	10.2 (2.22)	4.41 (0.96)	8.90 (1.93)	22.3 (4.82)	471 (152)	3.30 (1.07)	19.6 (6.34)	38.3 (12.3)
12	8.37 (2.22)	3.60 (0.96)	7.27 (1.93)	18.2 (4.83)	12.7 (3.03)	5.48 (1.30)	11.1 (2.63)	27.6 (6.57)	584 (121)	4.09 (0.85)	24.3 (5.05)	47.1 (9.71)
13	8.07 (1.39)	3.48 (0.60)	7.01 (1.21)	17.5 (3.02)	10.8 (1.28)	4.66 (0.55)	9.40 (1.12)	23.5 (2.79)	651 (130)	4.56 (0.91)	27.1 (5.42)	52.0 (10.4)
14	9.45 (2.61)	4.07 (1.13)	8.21 (2.27)	20.5 (5.67)	11.8 (2.46)	5.10 (1.06)	10.30 (2.14)	25.7 (5.35)	616 (164)	4.31 (1.15)	25.7 (6.84)	48.8 (13.0)
15												
16	9.38 (3.51)	4.04 (1.51)	8.15 (3.05)	20.4 (7.62)	12.7 (3.61)	5.47 (1.55)	11.0 (3.13)	27.6 (7.83)	626 (246)	4.38 (1.72)	26.1 (10.3)	48.6 (19.1)
17	9.12 (2.26)	3.93 (0.97)	7.92 (1.96)	19.8 (4.90)	10.7 (3.04)	4.60 (1.31)	9.27 (2.64)	23.2 (6.61)	685 (181)	4.80 (1.27)	28.6 (7.53)	52.7 (13.9)
18	9.27 (2.17)	3.99 (0.93)	8.05 (1.88)	20.1 (4.70)	11.3 (3.75)	4.86 (1.62)	9.80 (3.26)	24.5 (8.14)	617 (234)	4.32 (1.64)	25.7 (9.76)	47.0 (17.9)
19	9.34 (3.29)	4.02 (1.42)	8.11 (2.86)	20.3 (7.15)	10.8 (4.06)	4.64 (1.75)	9.36 (3.52)	23.4 (8.81)	717 (300)	5.02 (2.10)	29.9 (12.5)	54.2 (22.7)
20	9.10 (2.31)	3.92 (0.99)	7.90 (2.00)	19.7 (5.00)	11.3 (2.43)	4.86 (1.05)	9.78 (2.11)	24.5 (5.28)	786 (274)	5.50 (1.92)	32.7 (11.4)	59.0 (20.5)
21	10.7 (3.10)	4.60 (1.33)	9.27 (2.69)	23.2 (6.72)	10.9 (3.21)	4.71 (1.38)	9.48 (2.79)	23.7 (6.97)	620 (315)	4.34 (2.21)	25.8 (13.1)	46.3 (23.5)
22	9.32 (3.31)	4.01 (1.42)	8.08 (2.87)	20.2 (7.17)	9.98 (3.42)	4.30 (1.47)	8.65 (2.96)	21.6 (7.41)				
23	9.80 (3.18)	4.22 (1.37)	8.50 (2.76)	21.2 (6.90)	11.7 (3.96)	5.05 (1.70)	10.2 (3.43)	25.4 (8.58)	286 (100)	2.01 (0.70)	11.9 (4.17)	26.7 (9.32)
24	9.91 (2.10)	4.27 (0.90)	8.59 (1.82)	21.5 (4.55)	10.4 (2.53)	4.47 (1.09)	9.00 (2.20)	22.5 (5.49)	286 (114)	2.01 (0.80)	11.9 (4.75)	25.7 (10.2)
25	8.81 (2.25)	3.79 (0.97)	7.63 (1.95)	19.1 (4.87)	10.5 (3.75)	4.51 (1.61)	9.08 (3.25)	22.7 (8.12)				
26	9.25 (2.76)	3.98 (1.19)	8.02 (2.39)	20.0 (5.98)	11.3 (3.98)	4.88 (1.72)	9.83 (3.45)	24.6 (8.63)	363 (181)	2.54 (1.27)	15.1 (7.55)	31.7 (15.8)
27	10.8 (3.81)	4.64 (1.64)	9.33 (3.30)	23.3 (8.25)	10.9 (3.82)	4.68 (1.65)	9.41 (3.31)	23.5 (8.29)	388 (204)	2.72 (1.43)	16.2 (8.48)	33.5 (17.6)
28	10.8 (3.53)	4.64 (1.52)	9.34 (3.06)	23.4 (7.64)	11.0 (3.63)	4.73 (1.56)	9.51 (3.14)	23.8 (7.86)	407 (165)	2.85 (1.15)	16.9 (6.86)	34.7 (14.1)
29	9.01 (3.17)	3.88 (1.36)	7.81 (2.74)	19.5 (6.86)	12.3 (4.40)	5.32 (1.90)	10.7 (3.81)	26.7 (9.53)	360 (120)	2.52 (0.84)	15.0 (4.99)	30.4 (10.2)
30	11.0 (2.22)	4.72 (0.96)	9.49 (1.93)	23.7 (4.82)	11.7 (3.19)	5.04 (1.37)	10.1 (2.76)	25.3 (6.91)	367 (73.8)	2.57 (0.52)	15.3 (3.08)	30.6 (6.20)
31	10.3 (2.53)	4.44 (1.09)	8.94 (2.19)	22.3 (5.48)	9.68 (3.10)	4.17 (1.34)	8.38 (2.68)	21.0 (6.71)	397 (147)	2.78 (1.03)	16.6 (6.11)	32.7 (12.1)
Mean	9.48	4.08	8.23	20.60	11.00	4.75	9.57	23.90	506.00	3.55	21.10	41.10
n	25	25	25	25	25	25	25	25	23	23	23	23
SD	0.93	0.40	0.81	2.01	0.79	0.34	0.69	1.71	139.00	0.97	5.77	9.35
Min	8.01	3.45	6.97	17.40	9.68	4.17	8.38	21.00	286.00	2.01	11.90	25.70
Max	11.60	5.01	10.10	25.30	12.70	5.48	11.10	27.60	786.00	5.50	32.70	59.00

ED_004549_00015840-00182

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for November, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	9.01 (2.92)	3.88 (1.26)	7.80 (2.52)	19.5 (6.31)	8.97 (3.56)	3.86 (1.53)	7.77 (3.08)	19.4 (7.70)	361 (142)	2.53 (1.00)	15.1 (5.94)	29.4 (11.6)
2	9.59 (3.51)	4.13 (1.51)	8.30 (3.04)	20.8 (7.59)					369 (142)	2.58 (1.00)	15.4 (5.93)	29.7 (11.5)
3	9.15 (2.90)	3.94 (1.25)	7.91 (2.51)	19.8 (6.27)	10.2 (3.69)	4.41 (1.59)	8.87 (3.19)	22.2 (7.98)	361 (129)	2.53 (0.91)	15.0 (5.38)	28.8 (10.3)
4	8.71 (3.04)	3.75 (1.31)	7.54 (2.63)	18.8 (6.57)	10.5 (3.83)	4.51 (1.65)	9.06 (3.31)	22.7 (8.28)	372 (124)	2.60 (0.87)	15.5 (5.19)	29.4 (9.86)
5	9.47 (2.66)	4.08 (1.14)	8.19 (2.30)	20.5 (5.74)	9.69 (3.42)	4.17 (1.47)	8.38 (2.96)	21.0 (7.39)	411 (152)	2.88 (1.06)	17.1 (6.33)	32.2 (11.9)
6	9.10 (3.10)	3.92 (1.33)	7.87 (2.68)	19.7 (6.70)								
7	9.27 (2.43)	3.99 (1.05)	8.01 (2.10)	20.0 (5.25)								
8	8.08 (2.85)	3.48 (1.23)	6.98 (2.47)	17.5 (6.17)	8.25 (2.51)	3.55 (1.08)	7.13 (2.17)	17.8 (5.43)	386 (118)	2.70 (0.83)	16.1 (4.93)	29.3 (9.03)
9	8.89 (2.60)	3.83 (1.12)	7.68 (2.24)	19.2 (5.61)	10.2 (3.93)	4.40 (1.69)	8.83 (3.40)	22.1 (8.50)	416 (124)	2.91 (0.87)	17.3 (5.16)	31.5 (9.37)
10	10.6 (2.40)	4.58 (1.03)	9.20 (2.08)	23.0 (5.19)	10.7 (3.17)	4.59 (1.36)	9.22 (2.74)	23.0 (6.84)	426 (51.1)	2.98 (0.36)	17.7 (2.13)	32.1 (3.87)
11	8.81 (2.05)	3.80 (0.88)	7.61 (1.77)	19.0 (4.42)	10.3 (3.11)	4.45 (1.34)	8.92 (2.68)	22.3 (6.71)	461 (86.9)	3.23 (0.61)	19.2 (3.62)	34.5 (6.51)
12												
13												
14	9.31 (2.58)	4.01 (1.11)	8.04 (2.23)	20.1 (5.58)	9.01 (2.46)	3.88 (1.06)	7.78 (2.13)	19.4 (5.32)	178 (132)	1.25 (0.93)	7.43 (5.52)	16.6 (12.4)
15	9.37 (2.48)	4.04 (1.07)	8.09 (2.14)	20.2 (5.35)	9.24 (3.45)	3.98 (1.48)	7.98 (2.97)	19.9 (7.43)	221 (150)	1.54 (1.05)	9.19 (6.25)	19.8 (13.4)
16	10.2 (3.59)	4.38 (1.55)	8.78 (3.10)	21.9 (7.75)	10.2 (3.74)	4.38 (1.61)	8.78 (3.23)	22.0 (8.07)	239 (133)	1.68 (0.93)	9.98 (5.56)	21.1 (11.8)
17	9.55 (2.90)	4.11 (1.25)	8.24 (2.51)	20.6 (6.27)	9.40 (2.22)	4.05 (0.96)	8.11 (1.92)	20.3 (4.79)	242 (121)	1.69 (0.85)	10.1 (5.06)	21.1 (10.6)
18	9.40 (3.04)	4.05 (1.31)	8.11 (2.62)	20.3 (6.55)	10.3 (2.30)	4.45 (0.99)	8.92 (1.99)	22.3 (4.97)	273 (125)	1.91 (0.88)	11.4 (5.23)	23.5 (10.8)
19	8.76 (2.20)	3.77 (0.95)	7.55 (1.90)	18.9 (4.74)	11.0 (3.11)	4.73 (1.34)	9.48 (2.68)	23.7 (6.70)	310 (151)	2.17 (1.06)	12.9 (6.29)	26.5 (12.9)
20	10.3 (3.29)	4.43 (1.42)	8.88 (2.84)	22.2 (7.10)	10.7 (4.07)	4.61 (1.75)	9.23 (3.51)	23.1 (8.78)	321 (163)	2.25 (1.14)	13.4 (6.78)	27.1 (13.7)
21	8.92 (2.61)	3.84 (1.13)	7.69 (2.25)	19.2 (5.63)	10.2 (3.95)	4.41 (1.70)	8.84 (3.41)	22.1 (8.52)	285 (192)	1.99 (1.34)	11.9 (7.99)	23.7 (16.0)
22	9.03 (2.21)	3.89 (0.95)	7.79 (1.91)	19.5 (4.77)	9.36 (2.72)	4.03 (1.17)	8.07 (2.35)	20.2 (5.87)	278 (156)	1.95 (1.09)	11.6 (6.51)	22.9 (12.8)
23	8.74 (2.10)	3.77 (0.90)	7.54 (1.81)	18.8 (4.52)					312 (166)	2.18 (1.17)	13.0 (6.94)	25.3 (13.5)
24	9.02 (2.98)	3.88 (1.28)	7.77 (2.57)	19.4 (6.42)	8.48 (2.49)	3.65 (1.07)	7.30 (2.15)	18.3 (5.37)	286 (170)	2.00 (1.19)	11.9 (7.08)	23.0 (13.7)
25	9.72 (3.09)	4.19 (1.33)	8.37 (2.66)	20.9 (6.66)	8.91 (2.13)	3.84 (0.92)	7.68 (1.83)	19.2 (4.58)	331 (171)	2.32 (1.20)	13.8 (7.14)	26.3 (13.6)
26	9.46 (2.60)	4.08 (1.12)	8.15 (2.24)	20.4 (5.60)	8.71 (2.69)	3.75 (1.16)	7.50 (2.31)	18.8 (5.79)	358 (192)	2.51 (1.34)	14.9 (7.98)	28.3 (15.1)
27												
28												
29												
30	10.1 (3.01)	4.33 (1.30)	8.65 (2.59)	21.6 (6.49)	9.08 (2.88)	3.91 (1.24)	7.81 (2.48)	19.5 (6.19)	448 (235)	3.14 (1.65)	18.7 (9.80)	34.0 (17.8)
Mean	9.30	4.01	8.03	20.10	9.69	4.17	8.36	20.90	332.00	2.33	13.80	26.80
n	25	25	25	25	21	21	21	21	23	23	23	23
SD	0.56	0.24	0.48	1.20	0.79	0.34	0.69	1.71	73.60	0.52	3.07	4.64
Min	8.08	3.48	6.98	17.50	8.25	3.55	7.13	17.80	178.00	1.25	7.43	16.60
Max	10.60	4.58	9.20	23.00	11.00	4.73	9.48	23.70	461.00	3.23	19.20	34.50

ED_004549_00015840-00183

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for December, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	9.79 (2.15)	4.22 (0.93)	8.42 (1.85)	21.1 (4.64)					461 (130)	3.23 (0.91)	19.2 (5.43)	34.9 (9.86)
2	10.4 (2.96)	4.47 (1.28)	8.93 (2.55)	22.3 (6.37)	10.4 (3.38)	4.48 (1.45)	8.95 (2.91)	22.4 (7.27)	507 (188)	3.55 (1.32)	21.1 (7.85)	38.2 (14.2)
3	9.79 (2.81)	4.21 (1.21)	8.42 (2.42)	21.1 (6.05)	9.90 (3.49)	4.26 (1.50)	8.52 (3.00)	21.3 (7.51)	576 (183)	4.03 (1.28)	24.0 (7.61)	43.3 (13.7)
4	9.65 (2.72)	4.15 (1.17)	8.30 (2.34)	20.8 (5.86)	10.2 (1.57)	4.38 (0.68)	8.76 (1.35)	21.9 (3.38)	571 (134)	4.00 (0.94)	23.8 (5.59)	42.8 (10.0)
5	11.0 (3.20)	4.75 (1.38)	9.50 (2.76)	23.7 (6.89)	10.8 (3.17)	4.63 (1.36)	9.26 (2.73)	23.2 (6.81)	720 (206)	5.04 (1.44)	30.0 (8.58)	53.8 (15.3)
6	10.4 (3.29)	4.48 (1.42)	8.95 (2.83)	22.4 (7.08)	11.1 (4.89)	4.79 (2.11)	9.57 (4.21)	23.9 (10.5)				
7	9.86 (3.56)	4.25 (1.53)	8.49 (3.06)	21.2 (7.65)	12.5 (4.18)	5.38 (1.80)	10.7 (3.59)	26.9 (8.99)				
8	9.46 (2.59)	4.07 (1.12)	8.14 (2.23)	20.4 (5.58)	12.1 (1.56)	5.20 (0.67)	10.4 (1.35)	26.0 (3.36)	214 (156)	1.50 (1.09)	8.91 (6.49)	19.9 (14.4)
9	8.85 (1.63)	3.81 (0.70)	7.62 (1.40)	19.0 (3.50)	10.8 (0.99)	4.64 (0.43)	9.27 (0.85)	23.2 (2.12)	244 (177)	1.71 (1.24)	10.2 (7.38)	21.9 (15.9)
10	8.58 (2.49)	3.69 (1.07)	7.39 (2.15)	18.5 (5.36)	11.1 (1.28)	4.79 (0.55)	9.57 (1.11)	23.9 (2.77)	249 (221)	1.74 (1.55)	10.4 (9.21)	22.0 (19.5)
11					10.4 (1.06)	4.49 (0.46)	8.97 (0.91)	22.4 (2.27)	268 (199)	1.88 (1.39)	11.2 (8.29)	23.4 (17.4)
12	8.61 (3.01)	3.71 (1.30)	7.42 (2.59)	18.5 (6.48)	10.5 (1.32)	4.51 (0.57)	9.02 (1.13)	22.6 (2.83)	308 (206)	2.16 (1.44)	12.8 (8.60)	26.6 (17.8)
13	9.74 (2.11)	4.19 (0.91)	8.38 (1.81)	21.0 (4.53)	10.9 (1.70)	4.69 (0.73)	9.38 (1.47)	23.5 (3.67)	320 (233)	2.24 (1.63)	13.3 (9.72)	27.3 (19.9)
14	9.60 (2.07)	4.13 (0.89)	8.27 (1.78)	20.7 (4.45)	10.9 (1.24)	4.70 (0.53)	9.40 (1.06)	23.5 (2.66)	335 (246)	2.35 (1.72)	14.0 (10.3)	28.3 (20.8)
15	9.50 (1.82)	4.09 (0.78)	8.18 (1.57)	20.5 (3.92)	11.0 (1.30)	4.73 (0.56)	9.46 (1.12)	23.7 (2.79)	318 (233)	2.23 (1.63)	13.2 (9.71)	26.5 (19.4)
16	10.2 (2.43)	4.41 (1.05)	8.82 (2.10)	22.0 (5.24)	11.2 (1.01)	4.84 (0.43)	9.68 (0.87)	24.2 (2.17)	389 (246)	2.72 (1.72)	16.2 (10.3)	32.0 (20.3)
17	9.85 (2.85)	4.24 (1.23)	8.48 (2.45)	21.2 (6.13)	11.8 (1.30)	5.10 (0.56)	10.2 (1.12)	25.5 (2.80)	450 (273)	3.15 (1.91)	18.7 (11.4)	36.6 (22.2)
18	8.43 (3.31)	3.63 (1.43)	7.26 (2.86)	18.1 (7.14)	9.81 (2.90)	4.23 (1.25)	8.45 (2.50)	21.1 (6.25)				
19	10.4 (2.37)	4.46 (1.02)	8.93 (2.04)	22.3 (5.10)	9.12 (3.17)	3.93 (1.37)	7.86 (2.73)	19.6 (6.83)	413 (210)	2.89 (1.47)	17.2 (8.75)	33.1 (16.8)
20												
21												
22	9.42 (2.11)	4.06 (0.91)	8.12 (1.82)	20.3 (4.55)	8.67 (1.88)	3.73 (0.81)	7.47 (1.62)	18.7 (4.04)	434 (243)	3.04 (1.70)	18.1 (10.1)	33.7 (18.9)
23	10.7 (2.26)	4.61 (0.97)	9.22 (1.94)	23.0 (4.86)	9.74 (2.90)	4.20 (1.25)	8.39 (2.50)	21.0 (6.25)	483 (268)	3.38 (1.88)	20.1 (11.2)	37.2 (20.6)
24	10.6 (2.65)	4.58 (1.14)	9.16 (2.29)	22.9 (5.72)					561 (283)	3.93 (1.98)	23.4 (11.8)	42.8 (21.6)
25	10.2 (2.07)	4.37 (0.89)	8.75 (1.78)	21.9 (4.45)	8.22 (2.52)	3.54 (1.09)	7.08 (2.17)	17.7 (5.43)	493 (315)	3.45 (2.21)	20.5 (13.1)	37.2 (23.8)
26	9.25 (1.74)	3.98 (0.75)	7.97 (1.50)	19.9 (3.75)	9.38 (2.46)	4.04 (1.06)	8.08 (2.12)	20.2 (5.30)	509 (333)	3.57 (2.33)	21.2 (13.9)	38.1 (24.9)
27												
28	8.78 (1.87)	3.78 (0.81)	7.56 (1.61)	18.9 (4.03)	10.1 (1.17)	4.35 (0.51)	8.71 (1.01)	21.8 (2.53)				
29	9.10 (2.30)	3.92 (0.99)	7.85 (1.98)	19.6 (4.95)	10.4 (1.20)	4.49 (0.52)	8.99 (1.03)	22.5 (2.58)				
30	10.3 (2.63)	4.44 (1.13)	8.88 (2.26)	22.2 (5.66)	9.19 (2.01)	3.96 (0.87)	7.92 (1.73)	19.8 (4.34)				
31												
Mean	9.71	4.18	8.36	20.90	10.40	4.48	8.97	22.40	420.00	2.94	17.50	33.30
n	26	26	26	26	25	25	25	25	21	21	21	21
SD	0.69	0.30	0.59	1.48	1.00	0.43	0.86	2.15	129.00	0.91	5.40	8.40
Min	8.43	3.63	7.26	18.10	8.22	3.54	7.08	17.70	214.00	1.50	8.91	19.90
Max	11.00	4.75	9.50	23.70	12.50	5.38	10.70	26.90	720.00	5.04	30.00	53.80

ED_004549_00015840-00184

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for January, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1												
2	9.48 (1.98)	4.08 (0.85)	8.17 (1.71)	20.4 (4.27)	8.66 (2.96)	3.73 (1.27)	7.47 (2.55)	18.7 (6.37)	199 (144)	1.40 (1.01)	8.30 (5.98)	17.0 (12.3)
3												
4	9.42 (3.05)	4.05 (1.32)	8.11 (2.63)	20.3 (6.58)	8.40 (4.46)	3.62 (1.92)	7.24 (3.84)	18.1 (9.60)	283 (195)	1.98 (1.37)	11.8 (8.14)	23.5 (16.2)
5	9.92 (2.05)	4.27 (0.89)	8.54 (1.77)	21.3 (4.42)					373 (211)	2.61 (1.48)	15.5 (8.80)	30.6 (17.3)
6	10.6 (2.35)	4.58 (1.01)	9.15 (2.02)	22.9 (5.05)					379 (214)	2.65 (1.50)	15.8 (8.92)	30.7 (17.3)
7	9.59 (2.62)	4.13 (1.13)	8.25 (2.25)	20.6 (5.64)					404 (227)	2.83 (1.59)	16.8 (9.45)	32.4 (18.2)
8	9.83 (3.46)	4.23 (1.49)	8.46 (2.97)	21.1 (7.44)	8.23 (4.13)	3.54 (1.78)	7.08 (3.55)	17.7 (8.88)	386 (238)	2.71 (1.67)	16.1 (9.91)	30.7 (18.9)
9	10.6 (3.04)	4.55 (1.31)	9.08 (2.61)	22.7 (6.53)					466 (218)	3.27 (1.53)	19.4 (9.09)	36.7 (17.2)
10	9.56 (3.28)	4.12 (1.41)	8.22 (2.82)	20.5 (7.04)	7.99 (4.71)	3.44 (2.03)	6.87 (4.05)	17.2 (10.1)	422 (247)	2.96 (1.73)	17.6 (10.3)	32.9 (19.3)
11												
12	9.93 (3.27)	4.28 (1.41)	8.53 (2.81)	21.3 (7.04)	8.39 (4.27)	3.61 (1.84)	7.21 (3.67)	18.0 (9.18)	433 (232)	3.03 (1.62)	18.0 (9.66)	33.0 (17.7)
13	9.44 (2.70)	4.07 (1.16)	8.12 (2.32)	20.3 (5.80)	8.92 (5.16)	3.84 (2.22)	7.67 (4.43)	19.2 (11.1)	435 (231)	3.05 (1.61)	18.1 (9.61)	32.9 (17.4)
14	9.38 (2.64)	4.04 (1.14)	8.06 (2.27)	20.2 (5.68)	8.66 (4.99)	3.73 (2.15)	7.44 (4.29)	18.6 (10.7)	492 (237)	3.45 (1.66)	20.5 (9.88)	37.1 (17.9)
15									534 (223)	3.74 (1.56)	22.3 (9.30)	40.2 (16.8)
16	8.36 (2.23)	3.60 (0.96)	7.17 (1.92)	17.9 (4.79)	6.94 (2.71)	2.99 (1.17)	5.96 (2.33)	14.9 (5.81)				
17	9.77 (2.22)	4.21 (0.96)	8.39 (1.91)	21.0 (4.77)	8.85 (4.28)	3.81 (1.84)	7.60 (3.67)	19.0 (9.18)				
18	9.82 (2.42)	4.23 (1.04)	8.43 (2.08)	21.1 (5.20)					504 (282)	3.53 (1.98)	21.0 (11.8)	37.8 (21.1)
19	9.78 (2.37)	4.21 (1.02)	8.39 (2.03)	21.0 (5.08)					520 (280)	3.64 (1.96)	21.7 (11.7)	38.9 (20.9)
20	10.3 (3.03)	4.42 (1.30)	8.81 (2.60)	22.0 (6.49)					598 (260)	4.19 (1.82)	24.9 (10.8)	44.6 (19.4)
21	8.57 (1.46)	3.69 (0.63)	7.35 (1.25)	18.4 (3.13)	11.6 (1.72)	4.98 (0.74)	9.92 (1.48)	24.8 (3.69)	587 (314)	4.11 (2.20)	24.5 (13.1)	43.8 (23.4)
22	9.05 (2.18)	3.90 (0.94)	7.76 (1.87)	19.4 (4.67)	10.8 (1.64)	4.67 (0.71)	9.30 (1.41)	23.3 (3.52)	610 (287)	4.27 (2.01)	25.4 (12.0)	45.5 (21.4)
23	8.43 (1.22)	3.63 (0.53)	7.23 (1.05)	18.1 (2.62)	9.83 (1.09)	4.23 (0.47)	8.43 (0.93)	21.1 (2.33)				
24												
25	11.3 (3.08)	4.86 (1.33)	9.67 (2.64)	24.2 (6.59)	9.54 (2.88)	4.11 (1.24)	8.17 (2.47)	20.4 (6.18)	206 (159)	1.44 (1.11)	8.59 (6.62)	19.1 (14.6)
26	10.5 (2.97)	4.51 (1.28)	8.97 (2.54)	22.4 (6.36)	8.72 (1.77)	3.76 (0.76)	7.47 (1.52)	18.7 (3.80)	253 (164)	1.77 (1.15)	10.5 (6.82)	22.7 (14.7)
27												
28												
29												
30												
31												
Mean	9.69	4.17	8.33	20.80	8.97	3.86	7.70	19.30	426.00	2.98	17.70	33.20
n	21	21	21	21	14	14	14	14	19	19	19	19
SD	0.71	0.31	0.61	1.53	1.13	0.49	0.96	2.41	121.00	0.85	5.06	7.98
Min	8.36	3.60	7.17	17.90	6.94	2.99	5.96	14.90	199.00	1.40	8.30	17.00
Max	11.30	4.86	9.67	24.20	11.60	4.98	9.92	24.80	610.00	4.27	25.40	45.50

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Table E6. Daily means (SD) of NH3 emissions at Site OK4B for February, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	9.73 (2.58)	4.19 (1.11)	8.32 (2.21)	20.8 (5.53)					380 (232)	2.66 (1.63)	15.8 (9.68)	31.6 (19.3)
2	10.3 (3.20)	4.42 (1.38)	8.78 (2.74)	21.9 (6.84)	8.34 (1.67)	3.59 (0.72)	7.13 (1.43)	17.8 (3.57)	387 (236)	2.71 (1.65)	16.1 (9.84)	31.7 (19.4)
3	10.5 (2.78)	4.51 (1.20)	8.94 (2.37)	22.4 (5.93)	8.79 (1.53)	3.79 (0.66)	7.52 (1.31)	18.8 (3.28)	417 (200)	2.92 (1.40)	17.4 (8.32)	33.8 (16.2)
4												
5	8.54 (1.98)	3.68 (0.85)	7.30 (1.69)	18.2 (4.23)	8.89 (1.38)	3.83 (0.60)	7.59 (1.18)	19.0 (2.95)	336 (232)	2.35 (1.62)	14.0 (9.65)	26.7 (18.5)
6									443 (232)	3.10 (1.62)	18.4 (9.67)	34.9 (18.3)
7												
8	12.4 (4.80)	5.33 (2.07)	10.6 (4.10)	26.4 (10.20)	9.23 (2.78)	3.97 (1.20)	7.87 (2.37)	19.7 (5.94)	449 (219)	3.14 (1.54)	18.7 (9.14)	34.7 (16.9)
9	10.3 (2.96)	4.46 (1.28)	8.83 (2.53)	22.1 (6.32)	7.98 (1.71)	3.44 (0.74)	6.81 (1.46)	17.0 (3.65)	472 (192)	3.31 (1.34)	19.7 (8.00)	36.1 (14.7)
10	8.62 (1.71)	3.71 (0.74)	7.36 (1.46)	18.4 (3.65)	7.85 (0.93)	3.38 (0.40)	6.69 (0.79)	16.7 (1.99)	476 (263)	3.34 (1.84)	19.8 (11.0)	36.1 (20.0)
11	10.1 (2.79)	4.36 (1.20)	8.63 (2.38)	21.6 (5.94)	9.16 (3.04)	3.94 (1.31)	7.81 (2.59)	19.5 (6.47)	511 (241)	3.58 (1.69)	21.3 (10.1)	38.6 (18.2)
12	9.45 (2.35)	4.07 (1.01)	8.05 (2.01)	20.1 (5.02)					557 (280)	3.90 (1.96)	23.2 (11.7)	41.9 (21.1)
13	11.2 (3.02)	4.82 (1.30)	9.54 (2.58)	23.8 (6.44)					548 (198)	3.84 (1.38)	22.9 (8.24)	41.2 (14.9)
14	9.75 (3.24)	4.20 (1.39)	8.31 (2.76)	20.8 (6.89)	8.79 (2.41)	3.78 (1.04)	7.49 (2.05)	18.7 (5.13)	526 (264)	3.68 (1.85)	21.9 (11.0)	39.4 (19.8)
15	9.31 (2.20)	4.01 (0.95)	7.93 (1.88)	19.8 (4.69)	9.42 (1.32)	4.06 (0.57)	8.02 (1.12)	20.1 (2.81)	564 (314)	3.95 (2.20)	23.5 (13.1)	42.2 (23.5)
16	10.6 (3.36)	4.59 (1.44)	9.07 (2.86)	22.7 (7.14)	9.17 (1.64)	3.95 (0.71)	7.81 (1.39)	19.5 (3.48)	616 (263)	4.32 (1.84)	25.7 (11.0)	46.0 (19.6)
17	10.7 (3.22)	4.59 (1.39)	9.07 (2.74)	22.7 (6.85)	9.59 (2.22)	4.13 (0.96)	8.16 (1.89)	20.4 (4.72)	519 (326)	3.63 (2.28)	21.6 (13.6)	38.6 (24.3)
18	10.2 (3.09)	4.41 (1.33)	8.71 (2.63)	21.8 (6.57)					329 (343)	2.30 (2.40)		
19	10.9 (2.97)	4.70 (1.28)	9.29 (2.52)	23.2 (6.31)	11.4 (3.12)	4.90 (1.34)	9.67 (2.66)	24.2 (6.64)	194 (169)	1.36 (1.19)	8.07 (7.06)	18.0 (15.6)
20	9.64 (2.83)	4.15 (1.22)	8.20 (2.41)	20.5 (6.02)	9.30 (1.24)	4.01 (0.53)	7.91 (1.05)	19.8 (2.63)	218 (221)	1.53 (1.55)	9.10 (9.20)	19.6 (19.8)
21	10.6 (3.13)	4.57 (1.35)	9.02 (2.66)	22.5 (6.66)	10.2 (1.61)	4.38 (0.70)	8.65 (1.37)	21.6 (3.43)	292 (252)	2.04 (1.76)	12.1 (10.5)	25.7 (22.2)
22	13.0 (4.08)	5.60 (1.76)	11.0 (3.47)	27.6 (8.67)	11.4 (3.32)	4.91 (1.43)	9.68 (2.82)	24.2 (7.05)	323 (254)	2.26 (1.78)	13.5 (10.6)	28.2 (22.2)
23	12.7 (4.22)	5.48 (1.82)	10.8 (3.58)	27.0 (8.96)	11.5 (3.92)	4.97 (1.69)	9.80 (3.33)	24.5 (8.32)	390 (260)	2.73 (1.82)	16.2 (10.8)	33.6 (22.4)
24	13.7 (3.24)	5.90 (1.39)	11.6 (2.75)	29.1 (6.88)	11.9 (3.03)	5.13 (1.30)	10.1 (2.57)	25.3 (6.42)	412 (240)	2.89 (1.68)	17.2 (9.98)	35.1 (20.4)
25	12.6 (3.07)	5.42 (1.32)	10.7 (2.61)	26.7 (6.52)	11.7 (3.81)	5.05 (1.64)	9.95 (3.24)	24.9 (8.10)	363 (244)	2.54 (1.71)	15.1 (10.2)	30.6 (20.6)
26	11.7 (2.88)	5.05 (1.24)	9.95 (2.45)	24.9 (6.12)	11.1 (3.32)	4.77 (1.43)	9.41 (2.81)	23.5 (7.04)	427 (308)	2.99 (2.15)	17.8 (12.8)	35.5 (25.5)
27	12.1 (3.49)	5.21 (1.50)	10.3 (2.96)	25.7 (7.40)	10.8 (2.41)	4.67 (1.04)	9.21 (2.05)	23.0 (5.12)	523 (294)	3.66 (2.06)	21.8 (12.2)	42.9 (24.1)
28	12.0 (3.73)	5.17 (1.61)	10.2 (3.17)	25.5 (7.91)	11.2 (2.78)	4.81 (1.20)	9.48 (2.36)	23.7 (5.89)	509 (251)	3.56 (1.76)	21.2 (10.5)	41.2 (20.3)
29	12.7 (4.59)	5.48 (1.98)	10.8 (3.90)	27.0 (9.74)	11.6 (2.98)	4.97 (1.28)	9.80 (2.52)	24.5 (6.31)	508 (237)	3.55 (1.66)	21.2 (9.89)	40.7 (19.1)
Mean	10.90	4.69	9.28	23.20	9.97	4.29	8.48	21.20	433.00	3.03	18.20	34.80
n	26	26	26	26	22	22	22	22	27	27	26	26
SD	1.37	0.59	1.16	2.89	1.30	0.56	1.09	2.72	104.00	0.73	4.34	6.83
Min	8.54	3.68	7.30	18.20	7.85	3.38	6.69	16.70	194.00	1.36	8.07	18.00
Max	13.70	5.90	11.60	29.10	11.90	5.13	10.10	25.30	616.00	4.32	25.70	46.00

ED_004549_00015840-00186

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for March, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	13.6 (3.37)	5.86 (1.45)	11.5 (2.85)	28.8 (7.14)	12.2 (3.17)	5.23 (1.37)	10.3 (2.69)	25.8 (6.72)	450 (190)	3.15 (1.33)	18.8 (7.93)	35.8 (15.2)
2	14.1 (3.21)	6.09 (1.38)	12.0 (2.72)	30.0 (6.80)	13.2 (3.58)	5.68 (1.54)	11.2 (3.04)	28.0 (7.60)	419 (145)	2.93 (1.01)	17.4 (6.04)	33.0 (11.4)
3	12.3 (4.58)	5.30 (1.97)	10.4 (3.88)	26.1 (9.71)	11.9 (1.85)	5.12 (0.80)	10.1 (1.57)	25.2 (3.92)	377 (257)	2.64 (1.80)	15.7 (10.7)	29.4 (20.0)
4	12.4 (3.10)	5.36 (1.33)	10.5 (2.62)	26.4 (6.56)	12.4 (2.95)	5.32 (1.27)	10.5 (2.50)	26.2 (6.24)	436 (219)	3.05 (1.53)	18.2 (9.11)	33.6 (16.9)
5	11.9 (3.28)	5.14 (1.41)	10.1 (2.78)	25.3 (6.94)	11.7 (3.55)	5.04 (1.53)	9.91 (3.01)	24.8 (7.52)	411 (265)	2.88 (1.85)	17.1 (11.0)	31.3 (20.2)
6	12.0 (3.02)	5.17 (1.30)	10.2 (2.56)	25.4 (6.40)	12.2 (2.77)	5.25 (1.19)	10.3 (2.34)	25.8 (5.86)	507 (275)	3.55 (1.93)	21.1 (11.5)	38.3 (20.8)
7	10.9 (2.38)	4.70 (1.03)	9.24 (2.02)	23.1 (5.05)	13.0 (2.71)	5.59 (1.17)	11.0 (2.30)	27.5 (5.75)	399 (271)	2.79 (1.90)	16.6 (11.3)	30.1 (20.4)
8	12.1 (2.85)	5.21 (1.23)	10.2 (2.42)	25.6 (6.04)	13.0 (2.24)	5.58 (0.97)	11.0 (1.90)	27.4 (4.74)	493 (220)	3.45 (1.54)	20.6 (9.17)	37.1 (16.6)
9	12.4 (3.60)	5.32 (1.55)	10.5 (3.04)	26.1 (7.61)	12.3 (2.08)	5.30 (0.90)	10.4 (1.76)	26.1 (4.41)	501 (159)	3.50 (1.11)	20.9 (6.61)	37.6 (11.9)
10	11.7 (2.98)	5.03 (1.28)	9.89 (2.52)	24.7 (6.31)	13.2 (2.15)	5.69 (0.93)	11.2 (1.82)	28.0 (4.55)	540 (164)	3.78 (1.15)	22.5 (6.82)	40.5 (12.3)
11	12.0 (3.51)	5.15 (1.51)	10.1 (2.97)	25.3 (7.43)	14.0 (2.29)	6.05 (0.99)	11.9 (1.94)	29.7 (4.84)	559 (138)	3.92 (0.97)	23.3 (5.77)	41.9 (10.4)
12	12.7 (3.74)	5.45 (1.61)	10.7 (3.17)	26.8 (7.91)	12.9 (2.78)	5.57 (1.20)	10.9 (2.36)	27.4 (5.89)	567 (128)	3.97 (0.90)	23.6 (5.35)	42.4 (9.6)
13	11.7 (4.24)	5.03 (1.83)	9.88 (3.59)	24.7 (8.97)	13.5 (4.05)	5.79 (1.74)	11.4 (3.42)	28.5 (8.56)	568 (134)	3.98 (0.94)	23.7 (5.57)	42.4 (10.0)
14	12.0 (3.56)	5.15 (1.53)	10.1 (3.01)	25.3 (7.52)	13.6 (3.43)	5.86 (1.48)	11.5 (2.90)	28.8 (7.24)	589 (185)	4.13 (1.29)	24.6 (7.69)	43.9 (13.8)
15	12.6 (3.60)	5.41 (1.55)	10.6 (3.04)	26.6 (7.60)	12.6 (2.85)	5.43 (1.23)	10.7 (2.41)	26.6 (6.02)	655 (237)	4.59 (1.66)	27.3 (9.86)	48.8 (17.6)
16	13.2 (4.04)	5.67 (1.74)	11.1 (3.42)	27.8 (8.54)	12.3 (3.74)	5.31 (1.61)	10.4 (3.16)	26.1 (7.91)	747 (285)	5.23 (2.00)	31.1 (11.9)	55.5 (21.2)
17	12.5 (4.39)	5.38 (1.89)	10.5 (3.71)	26.4 (9.28)	12.1 (4.62)	5.19 (1.99)	10.2 (3.90)	25.5 (9.75)	341 (297)	2.39 (2.08)		
18	11.8 (3.02)	5.10 (1.30)	10.0 (2.55)	25.0 (6.37)	11.7 (2.95)	5.03 (1.27)	9.86 (2.49)	24.6 (6.23)	221 (164)	1.55 (1.15)	9.20 (6.82)	20.6 (15.3)
19	11.9 (2.96)	5.13 (1.27)	10.1 (2.50)	25.2 (6.25)	11.1 (2.32)	4.78 (1.00)	9.37 (1.96)	23.4 (4.89)	285 (151)	2.00 (1.05)	11.9 (6.28)	25.6 (13.5)
20	12.2 (3.32)	5.24 (1.43)	10.3 (2.80)	25.7 (7.00)	12.6 (2.96)	5.43 (1.27)	10.6 (2.50)	26.6 (6.25)	302 (141)	2.11 (0.99)	12.6 (5.90)	26.6 (12.5)
21	12.3 (2.74)	5.30 (1.18)	10.4 (2.32)	26.0 (5.79)	12.1 (3.26)	5.20 (1.40)	10.2 (2.75)	25.5 (6.88)	353 (189)	2.47 (1.32)	14.7 (7.88)	30.8 (16.5)
22	12.3 (3.58)	5.31 (1.54)	10.4 (3.02)	26.0 (7.55)	11.3 (3.11)	4.87 (1.34)	9.54 (2.63)	23.9 (6.56)	321 (217)	2.25 (1.52)	13.4 (9.05)	27.7 (18.7)
23	11.3 (3.95)	4.86 (1.70)	9.53 (3.33)	23.8 (8.34)	11.2 (2.67)	4.83 (1.15)	9.47 (2.26)	23.7 (5.64)	374 (247)	2.62 (1.73)	15.6 (10.3)	31.9 (21.1)
24												
25	10.8 (2.95)	4.66 (1.27)	9.13 (2.49)	22.8 (6.21)	12.2 (3.22)	5.27 (1.39)	10.3 (2.71)	25.8 (6.79)	425 (171)	2.97 (1.20)	17.7 (7.13)	35.3 (14.3)
26	10.7 (3.59)	4.60 (1.55)	9.02 (3.03)	22.5 (7.57)	11.0 (2.91)	4.73 (1.25)	9.26 (2.45)	23.1 (6.13)	457 (198)	3.20 (1.39)	19.0 (8.25)	37.5 (16.3)
27	10.7 (2.88)	4.59 (1.24)	8.99 (2.43)	22.5 (6.06)	11.4 (3.09)	4.90 (1.33)	9.59 (2.60)	24.0 (6.51)	464 (205)	3.25 (1.43)	19.3 (8.53)	37.6 (16.6)
28	11.9 (4.10)	5.11 (1.76)	10.0 (3.45)	25.0 (8.63)	11.7 (3.33)	5.04 (1.44)	9.86 (2.81)	24.6 (7.03)	459 (223)	3.21 (1.56)	19.1 (9.31)	36.9 (18.0)
29	11.8 (3.47)	5.08 (1.49)	9.95 (2.92)	24.9 (7.31)	11.2 (2.57)	4.83 (1.11)	9.45 (2.16)	23.6 (5.41)	460 (182)	3.22 (1.27)	19.2 (7.58)	36.6 (14.5)
30	12.3 (3.22)	5.29 (1.39)	10.3 (2.71)	25.9 (6.79)	10.7 (2.05)	4.62 (0.88)	9.04 (1.73)	22.6 (4.31)	492 (192)	3.45 (1.34)	20.5 (8.00)	38.9 (15.2)
31	12.6 (3.56)	5.42 (1.53)	10.6 (3.00)	26.5 (7.51)	11.6 (3.15)	4.99 (1.35)	9.77 (2.65)	24.4 (6.63)	487 (192)	3.41 (1.35)	20.3 (8.01)	38.1 (15.1)
Mean	12.10	5.20	10.20	25.50	12.20	5.25	10.30	25.80	455.00	3.19	19.10	36.10
n	30	30	30	30	30	30	30	30	30	30	29	29
SD	0.76	0.33	0.65	1.62	0.83	0.36	0.71	1.79	110.00	0.77	4.58	7.04
Min	10.70	4.59	8.99	22.50	10.70	4.62	9.04	22.60	221.00	1.55	9.20	20.60
Max	14.10	6.09	12.00	30.00	14.00	6.05	11.90	29.70	747.00	5.23	31.10	55.50

ED_004549_00015840-00187

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for April, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	11.6 (4.00)	5.01 (1.72)	9.81 (3.37)	24.5 (8.42)	10.8 (3.77)	4.66 (1.62)	9.11 (3.18)	22.8 (7.94)	460 (235)	3.22 (1.65)	19.1 (9.79)	35.6 (18.2)
2	11.5 (3.28)	4.96 (1.41)	9.71 (2.76)	24.3 (6.90)	11.2 (2.99)	4.80 (1.29)	9.39 (2.52)	23.5 (6.29)	501 (173)	3.51 (1.21)	20.9 (7.19)	38.4 (13.2)
3	11.7 (3.26)	5.02 (1.41)	9.83 (2.75)	24.6 (6.87)	11.4 (3.20)	4.90 (1.38)	9.59 (2.70)	24.0 (6.74)	524 (174)	3.67 (1.22)	21.8 (7.26)	39.7 (13.2)
4	11.2 (3.61)	4.82 (1.55)	9.43 (3.04)	23.6 (7.59)	10.6 (2.33)	4.57 (1.01)	8.95 (1.97)	22.4 (4.92)	542 (188)	3.80 (1.32)	22.6 (7.84)	41.0 (14.2)
5	11.4 (2.96)	4.90 (1.27)	9.58 (2.49)	23.9 (6.23)	11.8 (2.58)	5.07 (1.11)	9.91 (2.17)	24.8 (5.43)	538 (153)	3.77 (1.07)	22.4 (6.38)	40.6 (11.5)
6	12.3 (2.53)	5.31 (1.09)	10.4 (2.13)	26.0 (5.34)	12.3 (2.40)	5.31 (1.03)	10.4 (2.02)	26.0 (5.04)	615 (165)	4.30 (1.15)	25.6 (6.86)	46.2 (12.4)
7	11.6 (3.40)	4.99 (1.46)	9.75 (2.86)	24.4 (7.16)	11.3 (3.05)	4.86 (1.31)	9.51 (2.57)	23.8 (6.43)	613 (235)	4.29 (1.65)	25.5 (9.79)	45.9 (17.6)
8	12.3 (3.48)	5.29 (1.50)	10.3 (2.93)	25.8 (7.33)	11.4 (3.16)	4.92 (1.36)	9.62 (2.66)	24.0 (6.65)	610 (275)	4.27 (1.93)	25.4 (11.5)	45.5 (20.6)
9	11.8 (3.91)	5.07 (1.68)	9.91 (3.29)	24.8 (8.24)	11.2 (2.99)	4.83 (1.29)	9.45 (2.52)	23.6 (6.31)				
10					12.9 (3.69)	5.56 (1.59)	10.90 (3.11)	27.2 (7.78)				
11					11.2 (2.58)	4.84 (1.11)	9.46 (2.18)	23.6 (5.44)				
12	11.8 (3.48)	5.07 (1.50)	9.91 (2.93)	24.8 (7.32)	11.8 (3.39)	5.09 (1.46)	9.96 (2.86)	24.9 (7.14)				
13	11.5 (3.40)	4.95 (1.46)	9.69 (2.86)	24.2 (7.16)	10.4 (1.72)	4.49 (0.74)	8.78 (1.45)	21.9 (3.62)				
14												
15	11.9 (3.11)	5.13 (1.34)	10.0 (2.62)	25.1 (6.56)	12.3 (2.97)	5.28 (1.28)	10.3 (2.50)	25.8 (6.25)	356 (127)	2.49 (0.89)	14.8 (5.30)	30.7 (11.0)
16	11.9 (2.72)	5.11 (1.17)	9.99 (2.29)	25.0 (5.73)	12.5 (2.56)	5.40 (1.10)	10.6 (2.15)	26.4 (5.38)	404 (45.0)	2.83 (0.32)	16.8 (1.87)	34.4 (3.77)
17	11.7 (3.82)	5.04 (1.64)	9.85 (3.21)	24.6 (8.03)	11.9 (3.89)	5.13 (1.68)	10.0 (3.28)	25.1 (8.19)	337 (254)	2.36 (1.78)	14.0 (10.6)	28.4 (21.4)
18	11.2 (3.56)	4.83 (1.53)	9.45 (2.99)	23.6 (7.49)	11.2 (3.09)	4.82 (1.33)	9.43 (2.61)	23.6 (6.51)	472 (207)	3.30 (1.45)	19.7 (8.63)	39.3 (17.3)
19	10.9 (3.13)	4.67 (1.35)	9.14 (2.63)	22.8 (6.58)	9.5 (3.49)	4.09 (1.50)	7.99 (2.94)	20.0 (7.35)	455 (166)	3.18 (1.17)	18.9 (6.93)	37.3 (13.7)
20	10.6 (2.65)	4.58 (1.14)	8.95 (2.23)	22.4 (5.58)	10.6 (2.35)	4.58 (1.01)	8.96 (1.98)	22.4 (4.95)	468 (84.4)	3.28 (0.59)	19.5 (3.52)	38.0 (6.88)
21												
22	11.8 (2.84)	5.09 (1.22)	9.96 (2.39)	24.9 (5.99)	11.1 (3.07)	4.78 (1.32)	9.34 (2.58)	23.4 (6.46)	529 (128)	3.71 (0.90)	22.1 (5.33)	42.2 (10.2)
23					11.6 (3.85)	4.98 (1.66)	9.74 (3.24)	24.4 (8.10)	542 (45.8)	3.80 (0.32)	22.6 (1.91)	42.8 (3.69)
24	11.7 (2.88)	5.04 (1.24)	9.85 (2.42)	24.6 (6.05)	12.0 (3.38)	5.16 (1.46)	10.1 (2.85)	25.2 (7.12)	574 (56.9)	4.02 (0.40)	23.9 (2.37)	44.9 (4.40)
25	12.9 (3.23)	5.54 (1.39)	10.8 (2.72)	27.1 (6.80)	13.0 (3.60)	5.59 (1.55)	10.9 (3.03)	27.3 (7.57)	624 (110)	4.37 (0.77)	26.0 (4.60)	48.2 (8.57)
26	12.6 (3.86)	5.45 (1.66)	10.6 (3.25)	26.6 (8.12)					631 (160)	4.42 (1.12)	26.3 (6.65)	48.2 (12.2)
27	12.2 (3.99)	5.23 (1.72)	10.2 (3.36)	25.6 (8.39)	12.2 (5.18)	5.27 (2.23)	10.3 (4.36)	25.8 (10.90)	625 (211)	4.38 (1.48)	26.0 (8.79)	47.3 (16.0)
28	11.6 (3.80)	5.00 (1.64)	9.78 (3.20)	24.4 (8.01)	11.4 (4.05)	4.91 (1.74)	9.60 (3.41)	24.0 (8.51)	606 (147)	4.24 (1.03)	25.2 (6.13)	45.8 (11.1)
29												
30												
Mean	11.70	5.05	9.87	24.70	11.50	4.96	9.69	24.20	525.00	3.68	21.90	41.00
n	23	23	23	23	25	25	25	25	21	21	21	21
SD	0.50	0.22	0.42	1.06	0.79	0.34	0.66	1.65	86.80	0.61	3.62	5.48
Min	10.60	4.58	8.95	22.40	9.49	4.09	7.99	20.00	337.00	2.36	14.00	28.40
Max	12.90	5.54	10.80	27.10	13.00	5.59	10.90	27.30	631.00	4.42	26.30	48.20

ED_004549_00015840-00188

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for May, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1												
2												
3												
4												
5												
6	12.0 (3.38)	5.15 (1.46)	10.0 (2.84)	25.1 (7.11)	11.9 (3.50)	5.12 (1.51)	9.99 (2.94)	25.0 (7.35)	434 (56.1)	3.04 (0.39)	18.1 (2.34)	40.5 (5.63)
7	8.72 (2.42)	3.76 (1.04)	7.33 (2.03)	18.3 (5.09)					375 (132)	2.63 (0.93)	15.6 (5.51)	33.7 (11.9)
8	10.8 (2.63)	4.65 (1.13)	9.08 (2.21)	22.7 (5.53)	12.4 (3.35)	5.36 (1.44)	10.4 (2.82)	26.1 (7.04)	345 (190)	2.42 (1.33)	14.4 (7.90)	30.5 (16.8)
9					11.0 (2.39)	4.74 (1.03)	9.24 (2.01)	23.1 (5.02)	349 (163)	2.44 (1.14)	14.5 (6.78)	30.4 (14.2)
10	11.1 (2.12)	4.80 (0.91)	9.35 (1.78)	23.4 (4.45)	10.4 (2.70)	4.49 (1.16)	8.76 (2.27)	21.9 (5.67)	376 (150)	2.64 (1.05)	15.7 (6.24)	32.5 (12.9)
11	9.60 (1.94)	4.13 (0.84)	8.06 (1.63)	20.1 (4.08)	11.2 (2.44)	4.84 (1.05)	9.44 (2.05)	23.6 (5.12)	414 (199)	2.90 (1.39)	17.3 (8.29)	35.4 (17.0)
12	10.3 (2.87)	4.45 (1.24)	8.67 (2.41)	21.7 (6.02)	11.4 (3.14)	4.92 (1.35)	9.59 (2.64)	24.0 (6.59)	440 (146)	3.08 (1.02)	18.3 (6.06)	37.2 (12.3)
13	9.98 (2.73)	4.30 (1.17)	8.37 (2.29)	20.9 (5.72)	11.6 (3.61)	4.99 (1.56)	9.73 (3.03)	24.3 (7.58)	499 (151)	3.50 (1.06)	20.8 (6.28)	41.6 (12.6)
14	9.22 (2.05)	3.97 (0.88)	7.74 (1.72)	19.3 (4.29)					433 (189)	3.03 (1.32)	18.0 (7.86)	35.6 (15.5)
15	9.60 (2.48)	4.13 (1.07)	8.05 (2.08)	20.1 (5.20)	12.8 (3.39)	5.49 (1.46)	10.7 (2.84)	26.7 (7.11)	434 (153)	3.04 (1.07)	18.1 (6.38)	35.3 (12.5)
16	9.88 (2.36)	4.26 (1.02)	8.29 (1.98)	20.7 (4.95)	11.4 (2.46)	4.90 (1.06)	9.55 (2.07)	23.9 (5.16)	465 (180)	3.26 (1.26)	19.4 (7.51)	37.5 (14.5)
17	10.8 (3.39)	4.66 (1.46)	9.07 (2.84)	22.7 (7.10)	12.1 (3.46)	5.23 (1.49)	10.2 (2.90)	25.4 (7.25)	463 (97.7)	3.24 (0.68)	19.3 (4.07)	37.0 (7.80)
18	10.4 (2.77)	4.48 (1.19)	8.71 (2.32)	21.8 (5.80)	11.2 (3.00)	4.82 (1.29)	9.39 (2.51)	23.5 (6.28)	531 (134)	3.72 (0.94)	22.1 (5.58)	42.0 (10.6)
19	13.3 (2.87)	5.72 (1.24)	11.1 (2.41)	27.8 (6.01)	12.5 (3.26)	5.39 (1.40)	10.5 (2.73)	26.2 (6.83)	532 (121)	3.72 (0.85)	22.2 (5.03)	41.7 (9.46)
20	10.4 (3.00)	4.46 (1.29)	8.67 (2.51)	21.7 (6.28)	9.72 (2.82)	4.19 (1.21)	8.14 (2.36)	20.4 (5.90)	531 (125)	3.72 (0.87)	22.1 (5.20)	41.2 (9.65)
21	12.8 (3.13)	5.52 (1.35)	10.7 (2.62)	26.9 (6.56)	12.4 (3.23)	5.32 (1.39)	10.3 (2.71)	25.9 (6.77)	538 (71.2)	3.77 (0.50)	22.4 (2.97)	41.3 (5.43)
22	14.4 (3.94)	6.19 (1.70)	12.0 (3.30)	30.1 (8.25)	14.4 (4.06)	6.22 (1.75)	12.1 (3.40)	30.2 (8.51)	625 (88.5)	4.37 (0.62)	26.0 (3.69)	47.5 (6.68)
23	14.8 (5.09)	6.37 (2.19)	12.4 (4.27)	30.9 (10.7)	15.0 (4.35)	6.45 (1.87)	12.5 (3.64)	31.4 (9.10)	650 (96.6)	4.55 (0.68)	27.1 (4.03)	49.2 (7.35)
24	12.0 (3.38)	5.18 (1.46)	10.1 (2.83)	25.2 (7.07)	12.6 (3.55)	5.45 (1.53)	10.6 (2.97)	26.5 (7.43)	642 (96.5)	4.50 (0.68)	26.8 (4.02)	48.4 (7.28)
25	15.0 (4.16)	6.44 (1.79)	12.5 (3.48)	31.3 (8.69)	14.6 (4.35)	6.29 (1.87)	12.2 (3.64)	30.5 (9.09)	595 (110)	4.17 (0.77)	24.8 (4.56)	44.6 (8.19)
26	13.3 (2.48)	5.74 (1.07)	11.1 (2.08)	27.9 (5.19)	13.9 (3.22)	5.97 (1.39)	11.6 (2.69)	29.0 (6.73)	601 (122)	4.21 (0.86)	25.1 (5.09)	44.8 (9.12)
27	11.9 (4.72)	5.14 (2.03)	9.98 (3.95)	25.0 (9.88)					515 (208)	3.61 (1.46)		
28	12.7 (3.03)	5.47 (1.30)	10.6 (2.53)	26.6 (6.33)					454 (180)	3.18 (1.26)	18.9 (7.52)	42.3 (17.2)
29	15.4 (4.36)	6.61 (1.88)	12.8 (3.64)	32.1 (9.11)	12.0 (3.09)	5.17 (1.33)	10.0 (2.58)	25.1 (6.45)				
30	13.5 (5.34)	5.83 (2.30)	11.3 (4.46)	28.3 (11.20)	10.5 (3.44)	4.54 (1.48)	8.81 (2.87)	22.0 (7.19)				
31	11.8 (3.42)	5.08 (1.47)	9.85 (2.85)	24.6 (7.13)	10.0 (2.81)	4.32 (1.21)	8.38 (2.35)	21.0 (5.87)				
Mean	11.70	5.06	9.84	24.60	12.10	5.19	10.10	25.30	489.00	3.42	20.30	39.60
n	25	25	25	25	22	22	22	22	23	23	22	22
SD	1.89	0.81	1.57	3.92	1.40	0.61	1.17	2.93	89.90	0.63	3.82	5.37
Min	8.72	3.76	7.33	18.30	9.72	4.19	8.14	20.40	345.00	2.42	14.40	30.40
Max	15.40	6.61	12.80	32.10	15.00	6.45	12.50	31.40	650.00	4.55	27.10	49.20

ED_004549_00015840-00189

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for June, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	13.7 (3.51)	5.91 (1.51)	11.5 (2.93)	28.7 (7.33)	10.5 (2.77)	4.54 (1.19)	8.81 (2.31)	22.0 (5.79)	583 (92.1)	4.08 (0.65)	24.3 (3.84)	50.3 (7.87)
2	14.1 (3.85)	6.06 (1.66)	11.8 (3.22)	29.4 (8.04)	10.9 (3.04)	4.70 (1.31)	9.12 (2.54)	22.8 (6.36)	565 (99.5)	3.96 (0.70)	23.5 (4.15)	48.3 (8.43)
3												
4												
5	12.5 (4.11)	5.39 (1.77)	10.5 (3.45)	26.2 (8.62)	10.2 (3.08)	4.38 (1.33)	8.53 (2.59)	21.3 (6.47)	633 (127)	4.43 (0.89)	26.4 (5.29)	52.2 (10.6)
6	11.9 (4.05)	5.13 (1.74)	10.0 (3.40)	25.0 (8.49)	10.7 (3.60)	4.59 (1.55)	8.95 (3.02)	22.4 (7.56)	639 (163)	4.47 (1.14)	26.6 (6.80)	52.0 (13.3)
7	12.8 (2.58)	5.51 (1.11)	10.7 (2.17)	26.9 (5.42)	12.5 (3.12)	5.38 (1.34)	10.50 (2.62)	26.2 (6.55)	685 (53.7)	4.79 (0.38)	28.5 (2.24)	55.3 (4.36)
8	13.2 (2.10)	5.66 (0.91)	11.1 (1.77)	27.6 (4.42)	11.2 (1.98)	4.82 (0.85)	9.41 (1.67)	23.5 (4.17)	696 (133)	4.88 (0.93)	29.0 (5.56)	55.7 (10.6)
9	12.0 (3.09)	5.17 (1.33)	10.1 (2.60)	25.3 (6.50)	10.0 (2.61)	4.29 (1.12)	8.38 (2.19)	21.0 (5.49)	667 (182)	4.67 (1.28)	27.8 (7.60)	52.9 (14.5)
10	11.6 (3.39)	5.00 (1.46)	9.78 (2.85)	24.4 (7.13)	11.3 (3.32)	4.88 (1.43)	9.54 (2.80)	23.9 (6.99)	690 (117)	4.83 (0.82)	28.8 (4.85)	54.3 (9.09)
11	13.2 (4.68)	5.70 (2.02)	11.2 (3.94)	27.9 (9.86)	12.6 (3.53)	5.45 (1.52)	10.7 (2.98)	26.7 (7.44)	824 (99.1)	5.77 (0.69)	34.3 (4.13)	64.2 (7.68)
12	11.5 (2.97)	4.95 (1.28)	9.70 (2.51)	24.2 (6.27)	10.3 (2.46)	4.43 (1.06)	8.67 (2.07)	21.7 (5.19)	767 (201)	5.37 (1.41)	32.0 (8.39)	59.1 (15.4)
13	11.6 (2.74)	4.99 (1.18)	9.79 (2.31)	24.5 (5.78)	9.89 (3.01)	4.26 (1.29)	8.35 (2.54)	20.9 (6.34)	706 (131)	4.94 (0.92)	29.4 (5.47)	53.8 (9.97)
14												
15	12.9 (3.54)	5.54 (1.53)	10.9 (3.00)	27.2 (7.49)	12.2 (3.64)	5.25 (1.57)	10.30 (3.08)	25.8 (7.70)	942 (193)	6.60 (1.35)	39.3 (8.05)	70.5 (14.3)
16	12.2 (2.93)	5.24 (1.26)	10.3 (2.48)	25.7 (6.21)								
17	13.0 (2.91)	5.59 (1.25)	11.0 (2.46)	27.5 (6.16)	10.3 (2.50)	4.44 (1.08)	8.73 (2.12)	21.8 (5.30)	622 (174)	4.36 (1.22)	25.9 (7.24)	57.8 (15.3)
18	11.2 (3.36)	4.84 (1.45)	9.53 (2.85)	23.8 (7.11)	10.9 (3.68)	4.71 (1.58)	9.28 (3.12)	23.2 (7.79)	540 (108)	3.78 (0.76)	22.5 (4.51)	48.4 (9.76)
19	11.3 (3.75)	4.85 (1.62)	9.56 (3.19)	23.9 (7.97)	8.98 (2.86)	3.87 (1.23)	7.63 (2.43)	19.1 (6.08)	493 (94.9)	3.45 (0.66)	20.6 (3.95)	43.6 (8.35)
20	11.6 (3.16)	4.99 (1.36)	9.85 (2.69)	24.6 (6.72)								
21												
22	12.4 (3.45)	5.34 (1.49)	10.6 (2.94)	26.4 (7.34)	15.1 (4.81)	6.51 (2.07)	12.9 (4.09)	32.2 (10.20)				
23	11.9 (2.91)	5.13 (1.25)	10.1 (2.48)	25.4 (6.19)	13.7 (3.56)	5.88 (1.53)	11.6 (3.03)	29.1 (7.58)				
24	12.6 (3.07)	5.42 (1.32)	10.7 (2.61)	26.8 (6.53)	12.6 (3.78)	5.41 (1.63)	10.7 (3.22)	26.8 (8.05)				
25												
26												
27												
28	15.6 (4.77)	6.70 (2.05)	13.3 (4.08)	33.3 (10.20)	13.6 (5.12)	5.84 (2.21)	11.6 (4.38)	29.0 (11.00)	645 (69.0)	4.52 (0.48)	26.9 (2.88)	51.6 (5.54)
29	11.6 (2.54)	4.98 (1.10)	9.91 (2.18)	24.8 (5.45)	8.91 (2.37)	3.84 (1.02)	7.63 (2.03)	19.1 (5.07)				
30	14.8 (4.25)	6.36 (1.83)	12.7 (3.64)	31.7 (9.10)	12.2 (3.98)	5.25 (1.72)	10.4 (3.42)	26.1 (8.54)				
Mean	12.60	5.41	10.60	26.60	11.40	4.89	9.61	24.00	669.00	4.68	27.90	54.40
n	23	23	23	23	21	21	21	21	16	16	16	16
SD	1.11	0.48	0.95	2.38	1.56	0.67	1.35	3.37	107.00	0.75	4.44	6.23
Min	11.20	4.84	9.53	23.80	8.91	3.84	7.63	19.10	493.00	3.45	20.60	43.60
Max	15.60	6.70	13.30	33.30	15.10	6.51	12.90	32.20	942.00	6.60	39.30	70.50

ED_004549_00015840-00190

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for July, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1												
2	15.7 (4.30)	6.78 (1.85)	13.5 (3.69)	33.7 (9.22)	12.3 (3.36)	5.31 (1.45)	10.6 (2.88)	26.4 (7.20)				
3												
4	13.7 (3.51)	5.88 (1.51)	11.7 (3.01)	29.3 (7.53)	13.5 (4.84)	5.81 (2.09)	11.6 (4.15)	28.9 (10.4)	710 (116)	4.97 (0.81)	29.6 (4.83)	53.7 (8.74)
5	16.3 (3.49)	7.03 (1.50)	14.0 (2.99)	35.0 (7.48)	14.6 (3.88)	6.28 (1.67)	12.5 (3.33)	31.2 (8.31)	822 (123)	5.76 (0.87)	34.3 (5.15)	61.8 (9.23)
6	15.1 (3.79)	6.49 (1.63)	12.9 (3.25)	32.3 (8.12)	14.8 (3.98)	6.37 (1.71)	12.7 (3.41)	31.7 (8.53)	861 (144)	6.03 (1.01)	35.9 (6.01)	64.3 (10.8)
7	17.2 (5.82)	7.41 (2.51)	14.8 (4.99)	36.9 (12.50)	15.6 (5.07)	6.73 (2.18)	13.4 (4.34)	33.5 (10.9)				
8	14.4 (3.33)	6.19 (1.43)	12.3 (2.85)	30.8 (7.13)	13.9 (4.82)	5.97 (2.08)	11.9 (4.13)	29.7 (10.3)	607 (115)	4.25 (0.81)	25.3 (4.80)	56.5 (10.3)
9	12.9 (4.64)	5.57 (2.00)	11.1 (3.98)	27.7 (9.95)	10.6 (2.86)	4.55 (1.23)	9.05 (2.45)	22.6 (6.13)	559 (122)	3.91 (0.86)	23.3 (5.09)	50.1 (10.8)
10	13.6 (5.19)	5.87 (2.24)	11.7 (4.45)	29.2 (11.10)	11.6 (4.12)	5.01 (1.77)	9.96 (3.53)	24.9 (8.82)	525 (90.6)	3.67 (0.63)	21.9 (3.77)	46.3 (7.99)
11	12.7 (4.45)	5.47 (1.92)	10.9 (3.81)	27.2 (9.53)	11.2 (2.90)	4.81 (1.25)	9.56 (2.48)	23.9 (6.20)	494 (71.5)	3.46 (0.50)	20.6 (2.98)	43.1 (6.22)
12	11.0 (1.83)	4.72 (0.79)	9.39 (1.57)	23.5 (3.92)	9.40 (1.73)	4.05 (0.75)	8.05 (1.48)	20.1 (3.71)	465 (65.5)	3.26 (0.46)	19.4 (2.73)	40.2 (5.70)
13	10.6 (2.05)	4.55 (0.88)	9.05 (1.76)	22.6 (4.39)	9.19 (2.18)	3.96 (0.94)	7.87 (1.86)	19.7 (4.66)	506 (86.6)	3.54 (0.61)	21.1 (3.61)	43.2 (7.33)
14	13.4 (4.29)	5.78 (1.85)	11.5 (3.68)	28.7 (9.19)	11.9 (3.85)	5.12 (1.66)	10.2 (3.30)	25.4 (8.24)	486 (55.6)	3.41 (0.39)	20.3 (2.32)	41.1 (4.67)
15	13.9 (4.57)	6.00 (1.97)	11.9 (3.91)	29.8 (9.78)	11.5 (3.59)	4.97 (1.55)	9.88 (3.07)	24.7 (7.68)	520 (56.2)	3.64 (0.39)	21.7 (2.34)	43.4 (4.66)
16									612 (159)	4.28 (1.11)	25.5 (6.63)	50.3 (13.2)
17	13.0 (3.83)	5.59 (1.65)	11.1 (3.28)	27.8 (8.20)	12.8 (4.18)	5.51 (1.80)	11.0 (3.58)	27.4 (8.95)	514 (64.5)	3.60 (0.45)	21.4 (2.69)	41.8 (5.27)
18	11.2 (2.31)	4.82 (0.99)	9.57 (1.97)	23.9 (4.93)	10.9 (2.52)	4.69 (1.08)	9.31 (2.15)	23.3 (5.39)	525 (47.0)	3.67 (0.33)	21.9 (1.96)	42.3 (3.76)
19	13.1 (3.25)	5.66 (1.40)	11.2 (2.78)	28.1 (6.94)	12.8 (3.19)	5.50 (1.38)	10.9 (2.73)	27.3 (6.83)	564 (97.7)	3.95 (0.68)	23.5 (4.07)	45.0 (7.87)
20	13.1 (3.74)	5.64 (1.61)	11.2 (3.20)	28.0 (8.00)	13.6 (3.93)	5.86 (1.69)	11.6 (3.36)	29.1 (8.40)	577 (69.2)	4.04 (0.49)	24.1 (2.89)	45.7 (5.50)
21	14.0 (3.67)	6.02 (1.58)	12.0 (3.13)	29.9 (7.84)	13.8 (4.05)	5.93 (1.74)	11.8 (3.46)	29.4 (8.65)	585 (83.2)	4.10 (0.58)	24.4 (3.47)	45.9 (6.50)
22	14.2 (2.91)	6.10 (1.25)	12.1 (2.49)	30.3 (6.23)	15.0 (4.66)	6.47 (2.01)	12.9 (3.98)	32.1 (9.95)	633 (97.1)	4.43 (0.68)	26.4 (4.05)	49.1 (7.55)
23	13.4 (3.33)	5.77 (1.43)	11.5 (2.84)	28.7 (7.11)	14.1 (4.64)	6.08 (2.00)	12.1 (3.96)	30.2 (9.91)	665 (70.5)	4.66 (0.49)	27.7 (2.94)	51.1 (5.44)
24	13.6 (3.55)	5.85 (1.53)	11.6 (3.03)	29.0 (7.58)	12.7 (3.50)	5.47 (1.51)	10.9 (2.99)	27.2 (7.47)	688 (104)	4.82 (0.73)	28.7 (4.34)	52.3 (7.89)
25	12.2 (3.96)	5.26 (1.71)	10.4 (3.39)	26.1 (8.47)	12.0 (4.45)	5.16 (1.92)	10.2 (3.81)	25.6 (9.52)	716 (110)	5.02 (0.77)	29.8 (4.59)	54.2 (8.29)
26	11.9 (2.15)	5.13 (0.93)	10.2 (1.84)	25.5 (4.60)	13.8 (3.89)	5.94 (1.68)	11.8 (3.33)	29.5 (8.31)	719 (70.7)	5.04 (0.50)	30.0 (2.94)	54.2 (5.28)
27	15.0 (4.44)	6.45 (1.91)	12.8 (3.80)	32.0 (9.49)	16.3 (4.14)	7.01 (1.78)	13.9 (3.53)	34.8 (8.83)	802 (73.4)	5.61 (0.51)	33.4 (3.06)	60.1 (5.51)
28	13.2 (5.75)	5.66 (2.48)	11.2 (4.92)	28.1 (12.30)	15.2 (6.07)	6.53 (2.61)	13.0 (5.19)	32.4 (13.0)	955 (152)	6.69 (1.06)	39.8 (6.33)	71.2 (11.3)
29												
30	13.2 (2.55)	5.68 (1.10)	11.3 (2.18)	28.2 (5.44)	11.5 (3.79)	4.95 (1.63)	9.83 (3.23)	24.6 (8.09)	445 (193)	3.12 (1.35)	18.5 (8.02)	41.2 (17.4)
31	14.5 (3.21)	6.23 (1.38)	12.3 (2.74)	30.90 (6.85)	11.2 (4.49)	4.82 (1.94)	9.55 (3.84)	23.9 (9.60)	502 (79.3)	3.52 (0.56)	20.9 (3.31)	45.0 (7.08)
Mean	13.60	5.84	11.60	29.00	12.80	5.51	11.00	27.40	618.00	4.32	25.70	49.70
n	27	27	27	27	27	27	27	27	26	26	26	26
SD	1.49	0.64	1.28	3.21	1.81	0.78	1.55	3.88	130.00	0.91	5.43	7.86
Min	10.60	4.55	9.05	22.60	9.19	3.96	7.87	19.70	445.00	3.12	18.50	40.20
Max	17.20	7.41	14.80	36.90	16.30	7.01	13.90	34.80	955.00	6.69	39.80	71.20

ED_004549_00015840-00191

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for August, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	13.5 (2.76)	5.83 (1.19)	11.6 (2.35)	28.9 (5.89)	10.5 (2.67)	4.51 (1.15)	8.95 (2.28)	22.4 (5.70)	524 (92.4)	3.67 (0.65)	21.8 (3.85)	46.3 (8.20)
2	13.9 (3.10)	5.99 (1.33)	11.9 (2.65)	29.7 (6.62)	10.8 (2.05)	4.65 (0.88)	9.22 (1.75)	23.1 (4.38)	472 (63.5)	3.31 (0.45)	19.7 (2.64)	41.2 (5.54)
3	14.6 (4.77)	6.30 (2.05)	12.5 (4.07)	31.2 (10.20)	11.9 (2.44)	5.11 (1.05)	10.1 (2.08)	25.3 (5.20)	488 (55.0)	3.41 (0.39)	20.3 (2.29)	42.1 (4.75)
4	14.5 (4.82)	6.22 (2.07)	12.3 (4.11)	30.8 (10.30)	11.7 (2.62)	5.05 (1.13)	10.0 (2.24)	25.0 (5.59)	515 (108.0)	3.61 (0.76)	21.5 (4.51)	44.0 (9.32)
5	14.8 (3.79)	6.35 (1.63)	12.6 (3.23)	31.5 (8.08)	10.9 (2.50)	4.70 (1.08)	9.32 (2.13)	23.3 (5.33)	477 (96.9)	3.34 (0.68)	19.9 (4.04)	40.3 (8.28)
6	13.5 (3.97)	5.82 (1.71)	11.5 (3.39)	28.8 (8.47)	11.5 (2.93)	4.96 (1.26)	9.83 (2.50)	24.6 (6.25)	480 (68.9)	3.36 (0.48)	20.0 (2.87)	40.0 (5.81)
7	12.4 (3.32)	5.33 (1.43)	10.6 (2.83)	26.4 (7.08)	9.64 (2.91)	4.15 (1.25)	8.22 (2.48)	20.5 (6.20)				
8					11.6 (5.63)	4.99 (2.43)	9.87 (4.80)	24.7 (12.0)				
9	14.7 (3.73)	6.33 (1.60)	12.5 (3.18)	31.3 (7.94)	11.2 (3.14)	4.80 (1.35)	9.51 (2.68)	23.8 (6.70)	560 (67.2)	3.92 (0.47)	23.3 (2.80)	45.0 (5.48)
10	13.5 (4.38)	5.83 (1.89)	11.5 (3.73)	28.8 (9.33)	11.0 (4.12)	4.76 (1.77)	9.41 (3.51)	23.5 (8.78)	623 (89.1)	4.37 (0.62)	26.0 (3.71)	49.7 (7.00)
11	11.8 (3.13)	5.10 (1.35)	10.1 (2.66)	25.2 (6.66)	10.3 (4.50)	4.44 (1.94)	8.78 (3.83)	22.0 (9.58)	626 (97.8)	4.38 (0.69)	26.1 (4.07)	49.5 (7.73)
12	8.80 (3.17)	3.79 (1.37)	7.49 (2.70)	18.7 (6.75)	8.27 (2.87)	3.56 (1.24)	7.05 (2.44)	17.6 (6.11)	569 (116)	3.99 (0.82)	23.7 (4.85)	44.6 (9.10)
13	10.6 (2.87)	4.56 (1.24)	9.01 (2.44)	22.5 (6.11)	10.9 (3.54)	4.68 (1.52)	9.26 (3.01)	23.2 (7.53)	674 (121)	4.72 (0.85)	28.1 (5.05)	52.1 (9.27)
14	9.54 (3.87)	4.11 (1.67)	8.12 (3.29)	20.3 (8.24)	8.69 (3.05)	3.74 (1.31)	7.40 (2.60)	18.5 (6.49)	704 (191)	4.93 (1.34)	29.3 (7.96)	53.9 (14.6)
15	10.0 (3.21)	4.33 (1.38)	8.55 (2.73)	21.4 (6.83)	8.25 (2.29)	3.55 (0.99)	7.02 (1.95)	17.6 (4.87)				
16	10.7 (3.30)	4.59 (1.42)	9.07 (2.81)	22.7 (7.03)	8.41 (2.26)	3.62 (0.97)	7.16 (1.92)	17.9 (4.80)				
17	9.63 (2.79)	4.15 (1.20)	8.19 (2.37)	20.5 (5.94)	9.28 (2.83)	4.00 (1.22)	7.89 (2.41)	19.7 (6.02)				
18												
19	9.35 (3.79)	4.03 (1.63)	7.95 (3.23)	19.9 (8.07)	7.79 (2.04)	3.35 (0.88)	6.62 (1.74)	16.6 (4.35)				
20	9.04 (3.48)	3.89 (1.50)	7.69 (2.96)	19.2 (7.40)	8.92 (3.05)	3.84 (1.31)	7.59 (2.60)	19.0 (6.49)	771 (201)	5.40 (1.41)	32.1 (8.37)	57.6 (15.0)
21	10.5 (3.90)	4.54 (1.68)	8.97 (3.32)	22.4 (8.30)	12.3 (4.15)	5.31 (1.79)	10.5 (3.53)	26.2 (8.83)	800 (167)	5.60 (1.17)	33.3 (6.96)	59.6 (12.4)
22	11.4 (2.49)	4.89 (1.07)	9.65 (2.11)	24.1 (5.29)	11.9 (3.41)	5.12 (1.47)	10.1 (2.90)	25.3 (7.24)				
23	10.6 (4.20)	4.57 (1.81)	9.01 (3.57)	22.5 (8.93)	10.2 (4.07)	4.40 (1.75)	8.68 (3.46)	21.7 (8.65)	474 (172)	3.32 (1.20)	19.8 (7.16)	43.9 (15.2)
24	11.5 (2.50)	4.95 (1.08)	9.77 (2.12)	24.4 (5.31)	11.6 (3.69)	5.01 (1.59)	9.88 (3.13)	24.7 (7.83)	484 (80.0)	3.39 (0.56)	20.2 (3.33)	43.4 (7.09)
25	12.5 (2.22)	5.39 (0.96)	10.6 (1.88)	26.6 (4.71)	11.9 (2.97)	5.11 (1.28)	10.1 (2.52)	25.2 (6.30)	467 (85.2)	3.27 (0.60)	19.5 (3.55)	41.2 (7.49)
26	13.0 (3.03)	5.60 (1.30)	11.0 (2.57)	27.6 (6.43)	12.3 (4.09)	5.31 (1.76)	10.5 (3.48)	26.2 (8.69)	431 (56.6)	3.02 (0.40)	18.0 (2.36)	37.7 (4.89)
27	12.9 (2.23)	5.55 (0.96)	10.9 (1.89)	27.3 (4.74)	11.8 (3.77)	5.08 (1.62)	10.0 (3.20)	25.0 (8.00)	475 (91.0)	3.33 (0.64)	19.8 (3.79)	41.0 (7.78)
28	12.8 (2.02)	5.51 (0.87)	10.9 (1.71)	27.1 (4.29)	12.4 (3.43)	5.33 (1.48)	10.5 (2.91)	26.3 (7.27)	536 (106)	3.75 (0.74)	22.3 (4.43)	45.8 (9.02)
29	11.2 (2.31)	4.81 (0.99)	9.48 (1.96)	23.7 (4.89)	11.3 (2.95)	4.87 (1.27)	9.60 (2.51)	24.0 (6.27)	481 (122)	3.37 (0.85)	20.0 (5.07)	40.6 (10.2)
30	11.5 (2.49)	4.97 (1.07)	9.79 (2.11)	24.5 (5.28)	12.4 (3.83)	5.35 (1.65)	10.5 (3.25)	26.4 (8.13)	463 (82.2)	3.24 (0.58)	19.3 (3.42)	38.6 (6.79)
31	12.2 (2.18)	5.26 (0.94)	10.4 (1.85)	25.9 (4.63)	12.2 (3.02)	5.26 (1.30)	10.4 (2.56)	25.9 (6.40)	463 (106)	3.24 (0.75)	19.3 (4.43)	38.1 (8.73)
Mean	11.90	5.12	10.10	25.30	10.70	4.62	9.13	22.80	546.00	3.82	22.80	45.00
n	29	29	29	29	30	30	30	30	23	23	23	23
SD	1.78	0.77	1.53	3.81	1.41	0.61	1.19	2.98	102.00	0.72	4.26	5.94
Min	8.80	3.79	7.49	18.70	7.79	3.35	6.62	16.60	431.00	3.02	18.00	37.70
Max	14.80	6.35	12.60	31.50	12.40	5.35	10.50	26.40	800.00	5.60	33.30	59.60

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Table E6. Daily means (SD) of NH3 emissions at Site OK4B for September, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	13.3 (3.72)	5.73 (1.60)	11.3 (3.15)	28.2 (7.88)	14.2 (4.53)	6.12 (1.95)	12.1 (3.84)	30.1 (9.61)	469 (88.4)	3.29 (0.62)	19.5 (3.69)	38.2 (7.18)
2	11.4 (5.14)	4.91 (2.22)	9.67 (4.36)	24.2 (10.90)	11.8 (3.76)	5.07 (1.62)	9.98 (3.19)	24.9 (7.96)	417 (85.5)	2.92 (0.60)	17.4 (3.56)	33.6 (6.90)
3	9.55 (3.24)	4.11 (1.40)	8.10 (2.75)	20.3 (6.88)					411 (173)	2.88 (1.21)	17.1 (7.21)	32.8 (13.8)
4												
5	11.7 (3.23)	5.05 (1.39)	9.96 (2.74)	24.9 (6.85)	9.56 (2.59)	4.12 (1.12)	8.11 (2.20)	20.3 (5.50)	466 (131)	3.26 (0.92)	19.4 (5.46)	36.6 (10.3)
6	10.9 (3.20)	4.71 (1.38)	9.29 (2.71)	23.2 (6.79)	9.83 (2.37)	4.23 (1.02)	8.35 (2.01)	20.9 (5.03)	450 (142)	3.15 (1.00)	18.8 (5.94)	35.0 (11.1)
7	12.7 (4.43)	5.49 (1.91)	10.80 (3.76)	27.0 (9.40)	9.30 (2.57)	4.01 (1.11)	7.90 (2.18)	19.7 (5.46)	507 (112)	3.55 (0.79)	21.1 (4.69)	39.0 (8.63)
8	11.7 (3.19)	5.03 (1.37)	9.92 (2.71)	24.8 (6.77)	10.7 (3.38)	4.61 (1.46)	9.09 (2.87)	22.7 (7.17)	495 (194)	3.47 (1.36)	20.6 (8.08)	37.7 (14.7)
9	10.6 (3.30)	4.56 (1.42)	9.00 (2.80)	22.5 (7.01)	10.4 (2.57)	4.46 (1.11)	8.79 (2.18)	22.0 (5.45)	542 (211)	3.80 (1.48)	22.6 (8.80)	41.0 (16.0)
10	12.0 (4.61)	5.15 (1.99)	10.2 (3.92)	25.4 (9.79)	12.3 (4.15)	5.31 (1.79)	10.5 (3.52)	26.2 (8.80)	617 (142)	4.32 (1.00)	25.7 (5.94)	46.3 (10.7)
11	11.3 (3.95)	4.87 (1.70)	9.61 (3.35)	24.0 (8.38)	10.0 (3.07)	4.33 (1.32)	8.53 (2.61)	21.3 (6.53)	659 (169)	4.61 (1.18)	27.5 (7.03)	49.2 (12.6)
12	9.69 (3.03)	4.17 (1.30)	8.23 (2.57)	20.6 (6.43)	9.79 (2.12)	4.22 (0.91)	8.32 (1.80)	20.8 (4.51)				
13	10.3 (3.42)	4.43 (1.47)	8.74 (2.90)	21.9 (7.26)	10.1 (2.71)	4.34 (1.17)	8.56 (2.30)	21.4 (5.76)	406 (103)	2.84 (0.72)	16.9 (4.30)	37.8 (9.11)
14	10.4 (2.84)	4.48 (1.22)	8.83 (2.41)	22.1 (6.03)	10.9 (2.44)	4.69 (1.05)	9.25 (2.07)	23.1 (5.19)	362 (119)	2.54 (0.83)	15.1 (4.94)	32.5 (10.6)
15	9.41 (3.15)	4.05 (1.35)	7.99 (2.67)	20.0 (6.68)	9.55 (3.64)	4.11 (1.57)	8.11 (3.09)	20.3 (7.72)	353 (178)	2.47 (1.24)	14.7 (7.40)	31.2 (15.7)
16	10.2 (3.17)	4.39 (1.37)	8.67 (2.70)	21.7 (6.74)	10.4 (4.09)	4.46 (1.76)	8.80 (3.48)	22.0 (8.70)				
17	7.70 (1.94)	3.32 (0.84)	6.55 (1.65)	16.4 (4.12)	10.7 (3.35)	4.63 (1.44)	9.13 (2.84)	22.8 (7.11)	304 (111)	2.13 (0.78)	12.7 (4.64)	26.3 (9.61)
18	8.19 (2.26)	3.53 (0.97)	6.96 (1.92)	17.4 (4.80)	10.7 (3.35)	4.60 (1.44)	9.08 (2.84)	22.7 (7.11)	303 (131)	2.12 (0.92)	12.6 (5.46)	25.9 (11.2)
19	8.27 (1.99)	3.56 (0.86)	7.03 (1.69)	17.6 (4.23)	10.4 (2.72)	4.47 (1.17)	8.82 (2.31)	22.1 (5.78)	334 (123)	2.34 (0.86)	13.9 (5.11)	28.2 (10.3)
20	8.66 (2.17)	3.73 (0.94)	7.36 (1.85)	18.4 (4.62)	11.8 (2.71)	5.09 (1.17)	10.1 (2.31)	25.1 (5.77)	359 (137)	2.51 (0.96)	15.0 (5.73)	29.9 (11.5)
21	8.90 (1.95)	3.83 (0.84)	7.57 (1.65)	18.9 (4.14)	12.1 (2.50)	5.20 (1.08)	10.3 (2.13)	25.7 (5.32)	346 (70.6)	2.42 (0.49)	14.4 (2.94)	28.4 (5.79)
22	8.76 (1.97)	3.77 (0.85)	7.46 (1.68)	18.6 (4.19)	11.3 (3.63)	4.85 (1.57)	9.58 (3.09)	23.9 (7.73)	329 (82.4)	2.31 (0.58)	13.7 (3.43)	26.7 (6.67)
23	8.29 (1.81)	3.57 (0.78)	7.05 (1.54)	17.6 (3.86)	9.61 (2.30)	4.14 (0.99)	8.18 (1.96)	20.5 (4.90)	365 (97.5)	2.56 (0.68)	15.2 (4.06)	29.3 (7.81)
24	9.26 (2.66)	3.99 (1.14)	7.88 (2.26)	19.7 (5.65)					406 (112)	2.84 (0.79)	16.9 (4.67)	32.3 (8.92)
25	9.72 (3.11)	4.18 (1.34)	8.27 (2.64)	20.7 (6.61)	11.8 (3.55)	5.08 (1.53)	10.0 (3.02)	25.1 (7.56)	438 (116)	3.07 (0.81)	18.3 (4.83)	34.6 (9.13)
26	8.71 (2.35)	3.75 (1.01)	7.41 (2.00)	18.5 (4.99)	11.1 (3.00)	4.80 (1.29)	9.49 (2.56)	23.7 (6.39)	496 (128)	3.47 (0.90)	20.7 (5.34)	38.8 (9.99)
27	9.22 (2.32)	3.97 (1.00)	7.85 (1.98)	19.6 (4.95)	9.21 (2.12)	3.96 (0.92)	7.84 (1.81)	19.6 (4.52)	558 (196)	3.91 (1.37)	23.3 (8.17)	43.2 (15.1)
28	9.76 (2.61)	4.20 (1.13)	8.31 (2.23)	20.8 (5.56)	9.82 (2.71)	4.23 (1.17)	8.36 (2.30)	20.9 (5.76)	576 (171)	4.03 (1.19)	24.0 (7.11)	44.1 (13.1)
29	9.87 (2.42)	4.25 (1.04)	8.41 (2.06)	21.0 (5.15)	10.6 (3.30)	4.55 (1.42)	8.99 (2.81)	22.5 (7.04)	604 (219)	4.23 (1.54)	25.2 (9.14)	45.8 (16.6)
30	10.2 (3.33)	4.39 (1.44)	8.68 (2.84)	21.7 (7.10)	9.54 (3.40)	4.11 (1.46)	8.12 (2.89)	20.3 (7.23)	601 (298)	4.21 (2.09)	25.0 (12.4)	45.4 (22.5)
Mean	10.00	4.32	8.52	21.30	10.60	4.58	9.05	22.60	451.00	3.16	18.80	35.90
n	29	29	29	29	27	27	27	27	27	27	27	27
SD	1.39	0.60	1.17	2.94	1.12	0.48	0.95	2.37	102.00	0.72	4.26	6.63
Min	7.70	3.32	6.55	16.40	9.21	3.96	7.84	19.60	303.00	2.12	12.60	25.90
Max	13.30	5.73	11.30	28.20	14.20	6.12	12.10	30.10	659.00	4.61	27.50	49.20

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Table E6. Daily means (SD) of NH3 emissions at Site OK4B for October, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	10.1 (2.85)	4.35 (1.23)	8.60 (2.43)	21.5 (6.07)	9.85 (3.11)	4.24 (1.34)	8.39 (2.65)	21.0 (6.63)	490 (191)	3.43 (1.34)	20.4 (7.98)	36.9 (14.4)
2	9.41 (2.79)	4.05 (1.20)	8.02 (2.38)	20.1 (5.95)	11.2 (4.44)	4.83 (1.91)	9.57 (3.78)	23.9 (9.46)	552 (246)	3.87 (1.72)	23.0 (10.3)	41.5 (18.5)
3	9.06 (2.90)	3.90 (1.25)	7.73 (2.47)	19.3 (6.19)	9.26 (3.09)	3.99 (1.33)	7.90 (2.63)	19.7 (6.58)	548 (151)	3.84 (1.06)	22.8 (6.31)	41.0 (11.3)
4	9.99 (2.99)	4.30 (1.29)	8.52 (2.55)	21.3 (6.38)	11.4 (3.78)	4.92 (1.63)	9.74 (3.23)	24.4 (8.06)	496 (96.5)	3.47 (0.68)	20.7 (4.02)	37.0 (7.19)
5	9.36 (2.89)	4.03 (1.24)	7.99 (2.47)	20.0 (6.16)					426 (44.3)	2.99 (0.31)	17.8 (1.85)	31.8 (3.29)
6	9.33 (2.36)	4.02 (1.02)	7.96 (2.01)	19.9 (5.04)	10.2 (3.28)	4.40 (1.41)	8.73 (2.80)	21.8 (7.00)				
7	9.51 (2.51)	4.10 (1.08)	8.13 (2.14)	20.3 (5.35)	9.75 (2.37)	4.20 (1.02)	8.33 (2.03)	20.8 (5.07)	323 (205)	2.26 (1.44)	13.4 (8.55)	30.1 (19.6)
8	9.65 (2.82)	4.15 (1.22)	8.24 (2.41)	20.6 (6.03)	9.97 (3.06)	4.29 (1.32)	8.52 (2.61)	21.3 (6.53)	280 (146)	1.96 (1.02)	11.7 (6.07)	25.1 (13.1)
9	9.13 (2.90)	3.93 (1.25)	7.81 (2.48)	19.5 (6.19)								
10	9.83 (2.53)	4.23 (1.09)	8.41 (2.17)	21.0 (5.42)	9.75 (2.26)	4.20 (0.97)	8.34 (1.93)	20.8 (4.82)	307 (110)	2.15 (0.77)	12.8 (4.57)	26.8 (9.55)
11	9.07 (2.23)	3.91 (0.96)	7.76 (1.91)	19.4 (4.77)	9.27 (2.97)	3.99 (1.28)	7.93 (2.54)	19.8 (6.35)	314 (116)	2.20 (0.81)	13.1 (4.83)	27.1 (10.0)
12									305 (50.4)	2.13 (0.35)	12.7 (2.10)	26.0 (4.35)
13	9.86 (2.49)	4.25 (1.07)	8.44 (2.13)	21.1 (5.34)					263 (195)	1.84 (1.36)	10.9 (8.12)	22.2 (16.5)
14	9.32 (1.88)	4.01 (0.81)	7.98 (1.61)	20.0 (4.02)					269 (223)	1.88 (1.56)	11.2 (9.30)	22.4 (18.6)
15	8.85 (2.02)	3.81 (0.87)	7.58 (1.73)	19.0 (4.32)	9.89 (2.17)	4.26 (0.93)	8.48 (1.86)	21.2 (4.64)	357 (230)	2.50 (1.61)	14.9 (9.58)	29.4 (18.9)
16	8.76 (2.25)	3.77 (0.97)	7.51 (1.93)	18.8 (4.83)	10.6 (2.75)	4.55 (1.18)	9.07 (2.36)	22.7 (5.90)	336 (194)	2.36 (1.36)	14.0 (8.10)	27.4 (15.8)
17	8.33 (2.68)	3.59 (1.16)	7.15 (2.30)	17.9 (5.75)	10.9 (2.71)	4.70 (1.17)	9.36 (2.33)	23.4 (5.82)	382 (165)	2.68 (1.16)	15.9 (6.88)	30.8 (13.3)
18	8.82 (2.97)	3.80 (1.28)	7.57 (2.55)	18.9 (6.36)	11.5 (3.34)	4.97 (1.44)	9.91 (2.87)	24.8 (7.16)	456 (200)	3.19 (1.40)	19.0 (8.32)	36.4 (16.0)
19	8.67 (2.07)	3.73 (0.89)	7.45 (1.78)	18.6 (4.44)	10.9 (3.26)	4.70 (1.40)	9.36 (2.80)	23.4 (6.99)	490 (155)	3.43 (1.09)	20.4 (6.48)	38.9 (12.3)
20												
21	9.59 (2.43)	4.13 (1.05)	8.25 (2.09)	20.6 (5.22)	12.0 (3.63)	5.18 (1.56)	10.3 (3.12)	25.8 (7.79)	510 (143)	3.57 (1.00)	21.3 (5.96)	39.7 (11.1)
22	8.80 (3.81)	3.79 (1.64)	7.57 (3.28)	18.9 (8.19)	11.0 (3.81)	4.75 (1.64)	9.49 (3.28)	23.7 (8.19)	459 (272)	3.21 (1.90)	19.1 (11.3)	35.3 (20.9)
23					11.1 (1.49)	4.79 (0.64)	9.57 (1.29)	23.9 (3.21)	455 (228)	3.19 (1.60)	19.0 (9.49)	34.7 (17.3)
24	9.19 (3.44)	3.96 (1.48)	7.91 (2.96)	19.8 (7.39)	10.9 (2.20)	4.71 (0.95)	9.40 (1.89)	23.5 (4.73)	471 (220)	3.30 (1.54)	19.6 (9.18)	35.7 (16.7)
25	9.56 (3.34)	4.12 (1.44)	8.23 (2.88)	20.6 (7.20)	10.6 (2.01)	4.58 (0.87)	9.16 (1.73)	22.9 (4.33)	478 (200)	3.35 (1.40)	19.9 (8.35)	36.0 (15.1)
26	10.8 (3.93)	4.66 (1.69)	9.33 (3.38)	23.3 (8.45)	11.4 (3.45)	4.89 (1.49)	9.78 (2.98)	24.5 (7.44)	448 (233)	3.14 (1.63)	18.7 (9.69)	33.5 (17.4)
27	8.58 (3.51)	3.70 (1.51)	7.40 (3.02)	18.5 (7.56)	10.8 (2.70)	4.65 (1.16)	9.30 (2.33)	23.2 (5.82)				
28	8.69 (3.05)	3.74 (1.31)	7.49 (2.63)	18.7 (6.58)	11.2 (1.67)	4.81 (0.72)	9.64 (1.44)	24.1 (3.61)	214 (102)	1.50 (0.72)	8.92 (4.25)	20.0 (9.45)
29	9.05 (3.03)	3.90 (1.31)	7.80 (2.61)	19.5 (6.54)	10.5 (2.46)	4.51 (1.06)	9.03 (2.12)	22.6 (5.30)	210 (109)	1.47 (0.77)	8.76 (4.55)	18.9 (9.83)
30	10.4 (3.12)	4.47 (1.34)	8.96 (2.69)	22.4 (6.72)	10.4 (3.47)	4.47 (1.50)	8.96 (3.00)	22.4 (7.49)	213 (87.1)	1.49 (0.61)	8.86 (3.63)	18.8 (7.68)
31	9.03 (2.70)	3.89 (1.16)	7.80 (2.33)	19.5 (5.82)	9.88 (3.01)	4.25 (1.30)	8.53 (2.60)	21.3 (6.51)	190 (93.6)	1.33 (0.66)	7.90 (3.90)	16.6 (8.17)
Mean	9.31	4.01	7.99	20.00	10.60	4.55	9.07	22.70	379.00	2.66	15.80	30.40
n	28	28	28	28	25	25	25	25	27	27	27	27
SD	0.57	0.24	0.48	1.21	0.72	0.31	0.63	1.57	111.00	0.78	4.62	7.22
Min	8.33	3.59	7.15	17.90	9.26	3.99	7.90	19.70	190.00	1.33	7.90	16.60
Max	10.80	4.66	9.33	23.30	12.00	5.18	10.30	25.80	552.00	3.87	23.00	41.50

ED_004549_00015840-00194

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for November, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	9.27 (2.69)	3.99 (1.16)	8.01 (2.33)	20.0 (5.82)	10.6 (3.47)	4.57 (1.50)	9.17 (3.00)	22.9 (7.50)	239 (73.0)	1.67 (0.51)	9.96 (3.04)	20.6 (6.29)
2	9.20 (2.51)	3.96 (1.08)	7.94 (2.17)	19.9 (5.42)	10.9 (3.57)	4.71 (1.54)	9.45 (3.09)	23.6 (7.71)	305 (134)	2.14 (0.94)	12.7 (5.60)	26.1 (11.5)
3	9.78 (2.55)	4.21 (1.10)	8.44 (2.21)	21.1 (5.51)	12.3 (3.09)	5.31 (1.33)	10.6 (2.67)	26.6 (6.68)	320 (55.9)	2.24 (0.39)	13.3 (2.33)	27.0 (4.77)
4	9.26 (2.31)	3.99 (1.00)	8.00 (2.00)	20.0 (4.99)	11.5 (2.61)	4.94 (1.12)	9.90 (2.26)	24.8 (5.64)	354 (71.9)	2.48 (0.50)	14.7 (2.99)	29.5 (6.02)
5	8.16 (3.26)	3.52 (1.40)	7.05 (2.81)	17.6 (7.03)					361 (105)	2.53 (0.73)	15.1 (4.36)	29.8 (8.59)
6	7.21 (2.84)	3.11 (1.22)	6.23 (2.45)	15.6 (6.13)	9.77 (4.04)	4.21 (1.74)	8.43 (3.49)	21.1 (8.72)	329 (146)	2.30 (1.02)	13.7 (6.07)	26.8 (11.8)
7	7.59 (2.94)	3.27 (1.27)	6.55 (2.54)	16.4 (6.35)					395 (166)	2.77 (1.16)	16.5 (6.92)	31.9 (13.4)
8	7.81 (3.40)	3.36 (1.47)	6.74 (2.94)	16.9 (7.34)					368 (164)	2.57 (1.15)	15.3 (6.83)	29.4 (13.1)
9	7.92 (3.06)	3.41 (1.32)	6.83 (2.64)	17.1 (6.61)	10.2 (4.33)	4.41 (1.86)	8.85 (3.74)	22.1 (9.34)	400 (166)	2.80 (1.16)	16.7 (6.91)	31.7 (13.1)
10	8.54 (3.25)	3.68 (1.40)	7.37 (2.81)	18.4 (7.02)	11.0 (4.53)	4.72 (1.95)	9.47 (3.91)	23.7 (9.78)	469 (190)	3.29 (1.33)	19.6 (7.92)	36.9 (14.9)
11	8.21 (3.35)	3.53 (1.44)	7.08 (2.89)	17.7 (7.23)	9.74 (3.97)	4.19 (1.71)	8.41 (3.43)	21.0 (8.58)	499 (262)	3.50 (1.84)	20.8 (10.9)	38.8 (20.4)
12	7.96 (3.21)	3.43 (1.38)	6.87 (2.77)	17.2 (6.92)	10.9 (4.29)	4.70 (1.85)	9.42 (3.70)	23.5 (9.25)	564 (251)	3.95 (1.76)	23.5 (10.4)	43.3 (19.3)
13	7.84 (3.06)	3.38 (1.32)	6.76 (2.64)	16.9 (6.60)					544 (205)	3.81 (1.43)	22.7 (8.52)	41.5 (15.6)
14	8.27 (3.22)	3.56 (1.38)	7.13 (2.77)	17.8 (6.94)	10.4 (3.74)	4.49 (1.61)	8.99 (3.23)	22.5 (8.07)	551 (284)	3.86 (1.99)	23.0 (11.8)	41.7 (21.5)
15	8.04 (3.17)	3.46 (1.37)	6.94 (2.74)	17.3 (6.85)	10.0 (3.27)	4.33 (1.41)	8.67 (2.82)	21.7 (7.06)	530 (267)	3.71 (1.87)	22.1 (11.1)	39.8 (20.0)
16	8.47 (2.98)	3.65 (1.28)	7.31 (2.57)	18.3 (6.42)	9.85 (3.44)	4.24 (1.48)	8.50 (2.97)	21.2 (7.43)	546 (239)	3.82 (1.68)	22.7 (9.97)	40.7 (17.9)
17	6.85 (2.37)	2.95 (1.02)	5.91 (2.05)	14.8 (5.12)	10.6 (3.61)	4.56 (1.55)	9.13 (3.11)	22.8 (7.78)	266 (271)	1.86 (1.90)		
18	9.01 (3.08)	3.88 (1.33)	7.78 (2.66)	19.4 (6.65)	11.3 (3.14)	4.87 (1.35)	9.75 (2.70)	24.4 (6.76)	236 (130)	1.65 (0.91)	9.85 (5.40)	21.9 (12.0)
19	8.77 (3.28)	3.78 (1.41)	7.56 (2.83)	18.9 (7.06)	11.4 (4.29)	4.91 (1.85)	9.84 (3.70)	24.6 (9.25)	264 (98.1)	1.85 (0.69)	11.0 (4.09)	23.7 (8.79)
20									227 (156)	1.59 (1.09)	9.44 (6.48)	20.0 (13.7)
21	7.56 (2.58)	3.26 (1.11)	6.52 (2.23)	16.3 (5.57)					207 (149)	1.45 (1.05)	8.62 (6.22)	18.1 (13.0)
22	7.54 (2.36)	3.25 (1.01)	6.50 (2.03)	16.3 (5.08)	10.0 (3.04)	4.30 (1.31)	8.62 (2.62)	21.6 (6.55)				
23	8.00 (3.21)	3.45 (1.38)	6.90 (2.77)	17.3 (6.93)	9.99 (3.55)	4.30 (1.53)	8.61 (3.07)	21.5 (7.66)	317 (134)	2.22 (0.94)	13.2 (5.59)	27.0 (11.4)
24	8.43 (3.42)	3.63 (1.47)	7.27 (2.95)	18.2 (7.38)	10.5 (4.12)	4.52 (1.78)	9.06 (3.56)	22.6 (8.89)	336 (206)	2.35 (1.44)	14.0 (8.59)	28.3 (17.4)
25	7.87 (2.93)	3.39 (1.26)	6.79 (2.53)	17.0 (6.32)	10.4 (3.72)	4.50 (1.60)	9.00 (3.20)	22.5 (8.01)	338 (190)	2.37 (1.33)	14.1 (7.91)	28.1 (15.8)
26	7.18 (2.52)	3.09 (1.08)	6.19 (2.17)	15.5 (5.42)	8.12 (2.27)	3.50 (0.98)	7.00 (1.96)	17.5 (4.89)	367 (188)	2.57 (1.32)	15.3 (7.85)	30.2 (15.5)
27	7.34 (3.65)	3.16 (1.57)	6.33 (3.15)	15.8 (7.87)	9.19 (2.74)	3.96 (1.18)	7.92 (2.36)	19.8 (5.90)	329 (154)	2.31 (1.08)	13.7 (6.44)	26.7 (12.5)
28	7.23 (3.48)	3.11 (1.50)	6.23 (3.00)	15.6 (7.51)	9.53 (2.93)	4.11 (1.26)	8.22 (2.52)	20.6 (6.31)	309 (168)	2.16 (1.18)	12.9 (7.00)	24.8 (13.5)
29	7.45 (3.35)	3.21 (1.44)	6.42 (2.89)	16.0 (7.23)	10.1 (2.58)	4.36 (1.11)	8.73 (2.22)	21.8 (5.56)	360 (209)	2.52 (1.46)	15.0 (8.70)	28.7 (16.6)
30	7.79 (3.72)	3.35 (1.60)	6.72 (3.20)	16.8 (8.01)	10.2 (2.56)	4.38 (1.10)	8.78 (2.21)	21.9 (5.52)	350 (147)	2.45 (1.03)	14.6 (6.14)	27.6 (11.6)
Mean	8.09	3.48	6.98	17.40	10.40	4.46	8.94	22.40	368.00	2.58	15.50	30.00
n	29	29	29	29	24	24	24	24	29	29	28	28
SD	0.71	0.31	0.62	1.54	0.84	0.36	0.72	1.81	103.00	0.72	4.30	6.87
Min	6.85	2.95	5.91	14.80	8.12	3.50	7.00	17.50	207.00	1.45	8.62	18.10
Max	9.78	4.21	8.44	21.10	12.30	5.31	10.60	26.60	564.00	3.95	23.50	43.30

ED_004549_00015840-00195

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for December, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	7.71 (3.21)	3.32 (1.38)	6.64 (2.77)	16.6 (6.93)	10.1 (2.54)	4.35 (1.09)	8.71 (2.19)	21.8 (5.47)	380 (158)	2.66 (1.10)	15.8 (6.57)	29.70 (12.3)
2	8.73 (2.87)	3.76 (1.24)	7.53 (2.48)	18.8 (6.19)	10.9 (2.33)	4.70 (1.00)	9.40 (2.01)	23.5 (5.01)	423 (161)	2.96 (1.13)	17.6 (6.72)	32.70 (12.5)
3	8.04 (2.90)	3.46 (1.25)	6.93 (2.50)	17.3 (6.25)	11.2 (5.03)	4.82 (2.17)	9.65 (4.34)	24.1 (10.8)	388 (225)	2.72 (1.58)	16.2 (9.38)	29.70 (17.2)
4	7.45 (2.27)	3.21 (0.98)	6.42 (1.96)	16.0 (4.90)					341 (278)	2.39 (1.95)	14.2 (11.6)	25.80 (21.1)
5	7.90 (2.06)	3.40 (0.89)	6.81 (1.78)	17.0 (4.45)					487 (362)	3.41 (2.54)	20.3 (15.1)	36.80 (27.4)
6	8.01 (2.39)	3.45 (1.03)	6.90 (2.06)	17.2 (5.15)	9.84 (3.77)	4.24 (1.62)	8.48 (3.24)	21.2 (8.11)	533 (322)	3.74 (2.25)	22.2 (13.4)	40.20 (24.2)
7	7.91 (2.66)	3.41 (1.15)	6.82 (2.30)	17.0 (5.74)	10.4 (2.82)	4.49 (1.22)	8.98 (2.43)	22.4 (6.08)	560 (295)	3.92 (2.06)	23.4 (12.3)	42.10 (22.2)
8	8.79 (3.43)	3.78 (1.48)	7.57 (2.96)	18.9 (7.40)	11.5 (2.10)	4.93 (0.91)	9.87 (1.81)	24.7 (4.53)	604 (309)	4.23 (2.16)	25.2 (12.9)	45.30 (23.1)
9	7.83 (1.27)	3.37 (0.55)	6.75 (1.09)	16.9 (2.73)	12.2 (1.43)	5.26 (0.62)	10.5 (1.23)	26.3 (3.09)	513 (445)	3.59 (3.11)	21.4 (18.5)	38.30 (33.2)
10	7.37 (2.58)	3.17 (1.11)	6.35 (2.22)	15.9 (5.56)	10.9 (1.06)	4.71 (0.45)	9.42 (0.91)	23.5 (2.27)	807 (517)	5.65 (3.62)	33.6 (21.5)	60.20 (38.6)
11	7.69 (2.61)	3.31 (1.12)	6.62 (2.25)	16.6 (5.62)	11.7 (1.76)	5.02 (0.76)	10.00 (1.51)	25.1 (3.78)	836 (422)	5.85 (2.96)	34.8 (17.6)	62.20 (31.4)
12												
13									454 (281)	3.18 (1.96)	18.9 (11.7)	42.10 (26.0)
14	8.63 (2.15)	3.72 (0.93)	7.43 (1.85)	18.6 (4.62)	12.4 (1.94)	5.36 (0.84)	10.7 (1.67)	26.8 (4.18)	375 (324)	2.63 (2.27)	15.6 (13.5)	33.70 (29.1)
15	7.87 (0.85)	3.39 (0.37)	6.78 (0.73)	16.9 (1.83)	11.7 (1.27)	5.04 (0.55)	10.1 (1.10)	25.2 (2.74)	397 (404)	2.78 (2.83)	16.5 (16.8)	35.00 (35.7)
16	9.31 (2.43)	4.01 (1.05)	8.01 (2.09)	20.0 (5.23)	10.8 (1.82)	4.65 (0.78)	9.30 (1.56)	23.2 (3.91)				
17	9.30 (1.73)	4.00 (0.74)	8.00 (1.49)	20.0 (3.72)	8.80 (1.15)	3.79 (0.50)	7.57 (0.99)	18.9 (2.48)	425 (274)	2.98 (1.92)	17.7 (11.4)	36.70 (23.6)
18	9.71 (2.48)	4.18 (1.07)	8.35 (2.13)	20.9 (5.33)					514 (317)	3.60 (2.22)	21.4 (13.2)	43.90 (27.1)
19	8.52 (3.37)	3.67 (1.45)	7.33 (2.90)	18.3 (7.25)	10.5 (3.09)	4.54 (1.33)	9.07 (2.66)	22.7 (6.64)	489 (351)	3.43 (2.46)	20.4 (14.6)	41.30 (29.6)
20	7.23 (1.99)	3.12 (0.86)	6.22 (1.71)	15.6 (4.28)	11.6 (2.29)	4.99 (0.99)	9.96 (1.97)	24.9 (4.93)	467 (401)	3.27 (2.81)	19.4 (16.7)	38.80 (33.3)
21	7.75 (1.42)	3.34 (0.61)	6.67 (1.22)	16.7 (3.05)	11.7 (1.23)	5.03 (0.53)	10.0 (1.06)	25.1 (2.65)	466 (424)	3.27 (2.97)	19.4 (17.7)	38.30 (34.9)
22	7.17 (0.87)	3.09 (0.37)	6.17 (0.75)	15.4 (1.86)					435 (367)	3.05 (2.57)	18.1 (15.3)	35.30 (29.8)
23									551 (364)	3.86 (2.55)	23.0 (15.2)	44.30 (29.3)
24	8.75 (2.03)	3.77 (0.88)	7.52 (1.75)	18.8 (4.37)	10.6 (2.12)	4.55 (0.91)	9.08 (1.82)	22.7 (4.56)	473 (305)	3.31 (2.13)	19.7 (12.7)	37.70 (24.3)
25	9.34 (3.23)	4.02 (1.39)	8.03 (2.78)	20.1 (6.95)	10.8 (1.50)	4.65 (0.65)	9.29 (1.29)	23.2 (3.22)	474 (277)	3.32 (1.94)	19.7 (11.5)	37.40 (21.9)
26									503 (259)	3.53 (1.82)	21.0 (10.8)	39.40 (20.3)
27	7.38 (2.79)	3.18 (1.20)	6.34 (2.40)	15.9 (5.99)	11.9 (1.34)	5.15 (0.58)	10.3 (1.15)	25.7 (2.87)	445 (351)	3.11 (2.46)	18.5 (14.6)	34.40 (27.2)
28	7.91 (2.55)	3.41 (1.10)	6.80 (2.20)	17.0 (5.49)	11.1 (1.59)	4.78 (0.68)	9.54 (1.36)	23.8 (3.41)	523 (359)	3.67 (2.52)	21.8 (15.0)	40.10 (27.5)
29	8.23 (2.58)	3.55 (1.11)	7.08 (2.22)	17.7 (5.55)	10.8 (2.65)	4.64 (1.14)	9.26 (2.28)	23.2 (5.69)	621 (355)	4.35 (2.48)	25.9 (14.8)	47.10 (26.9)
30	9.51 (3.70)	4.09 (1.59)	8.17 (3.18)	20.4 (7.95)	11.6 (3.68)	5.00 (1.59)	9.97 (3.16)	24.9 (7.91)	594 (371)	4.16 (2.60)	24.7 (15.5)	44.90 (28.0)
31	8.82 (3.07)	3.80 (1.32)	7.58 (2.64)	19.0 (6.60)	10.8 (3.22)	4.67 (1.39)	9.32 (2.76)	23.3 (6.91)	572 (419)	4.01 (2.93)	23.8 (17.5)	43.10 (31.6)
Mean	8.25	3.55	7.10	17.80	11.00	4.75	9.50	23.80	505.00	3.54	21.00	39.90
n	27	27	27	27	23	23	23	23	29	29	29	29
SD	0.73	0.32	0.63	1.57	0.80	0.34	0.69	1.71	111.00	0.78	4.62	7.61
Min	7.17	3.09	6.17	15.40	8.80	3.79	7.57	18.90	341.00	2.39	14.20	25.80
Max	9.71	4.18	8.35	20.90	12.40	5.36	10.70	26.80	836.00	5.85	34.80	62.20

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Table E6. Daily means (SD) of NH3 emissions at Site OK4B for January, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	9.07 (3.54)	3.91 (1.53)	7.79 (3.04)	19.5 (7.61)	10.5 (3.20)	4.52 (1.38)	9.02 (2.75)	22.5 (6.88)	615 (402)	4.31 (2.81)	25.6 (16.7)	46.2 (30.2)
2	8.80 (2.77)	3.79 (1.19)	7.56 (2.38)	18.9 (5.94)	11.2 (3.66)	4.82 (1.58)	9.62 (3.15)	24.0 (7.86)	697 (417)	4.88 (2.92)	29.0 (17.4)	52.2 (31.2)
3	9.46 (3.47)	4.08 (1.49)	8.13 (2.98)	20.3 (7.45)	10.9 (3.22)	4.71 (1.39)	9.39 (2.77)	23.5 (6.92)	634 (433)	4.44 (3.03)	26.4 (18.0)	47.4 (32.3)
4	8.86 (0.92)	3.82 (0.40)	7.61 (0.79)	19.0 (1.97)	9.80 (1.37)	4.22 (0.59)	8.41 (1.18)	21.0 (2.94)	592 (508)	4.14 (3.55)	24.7 (21.2)	44.1 (37.8)
5	8.42 (2.46)	3.62 (1.06)	7.23 (2.11)	18.1 (5.28)	10.8 (2.65)	4.64 (1.14)	9.25 (2.28)	23.1 (5.69)	420 (445)	2.94 (3.11)		
6	9.01 (2.65)	3.88 (1.14)	7.74 (2.28)	19.3 (5.69)	10.6 (2.35)	4.57 (1.01)	9.10 (2.02)	22.8 (5.05)	285 (341)	2.00 (2.39)	11.9 (14.2)	26.9 (32.8)
7	8.99 (2.88)	3.87 (1.24)	7.72 (2.47)	19.3 (6.17)	10.6 (3.30)	4.59 (1.42)	9.14 (2.83)	22.8 (7.07)	229 (222)	1.60 (1.56)	9.54 (9.26)	20.6 (20.0)
8	9.59 (3.33)	4.13 (1.43)	8.22 (2.86)	20.6 (7.14)	10.9 (4.22)	4.71 (1.82)	9.38 (3.62)	23.4 (9.06)	299 (213)	2.09 (1.49)	12.5 (8.88)	26.4 (18.8)
9									321 (225)	2.25 (1.58)	13.4 (9.37)	28.1 (19.6)
10	8.28 (2.60)	3.56 (1.12)	7.10 (2.23)	17.7 (5.57)	10.8 (3.10)	4.65 (1.33)	9.26 (2.66)	23.2 (6.64)	328 (277)	2.30 (1.94)	13.7 (11.5)	28.3 (23.9)
11	8.66 (2.53)	3.73 (1.09)	7.43 (2.17)	18.6 (5.42)	10.9 (3.18)	4.70 (1.37)	9.36 (2.72)	23.4 (6.81)	363 (246)	2.54 (1.72)	15.1 (10.2)	31.0 (21.0)
12	7.60 (2.41)	3.27 (1.04)	6.51 (2.07)	16.3 (5.17)	10.1 (2.99)	4.36 (1.29)	8.68 (2.57)	21.7 (6.42)	332 (245)	2.33 (1.71)	13.8 (10.2)	28.1 (20.7)
13					11.1 (3.82)	4.79 (1.64)	9.53 (3.27)	23.8 (8.18)	400 (270)	2.80 (1.89)	16.7 (11.2)	33.4 (22.5)
14									398 (280)	2.78 (1.96)	16.6 (11.7)	32.7 (23.0)
15	7.62 (0.86)	3.28 (0.37)	6.53 (0.74)	16.3 (1.84)					358 (320)	2.51 (2.24)	14.9 (13.3)	29.1 (26.1)
16	8.49 (3.01)	3.65 (1.30)	7.27 (2.58)	18.2 (6.45)	10.2 (3.10)	4.38 (1.33)	8.72 (2.65)	21.8 (6.63)	522 (268)	3.65 (1.88)	21.7 (11.2)	42.0 (21.7)
17	8.80 (3.23)	3.79 (1.39)	7.54 (2.77)	18.9 (6.93)	10.9 (3.46)	4.68 (1.49)	9.31 (2.97)	23.3 (7.41)	504 (282)	3.53 (1.97)	21.0 (11.7)	40.3 (22.5)
18	9.48 (3.20)	4.08 (1.38)	8.12 (2.75)	20.3 (6.86)	10.4 (3.45)	4.46 (1.49)	8.88 (2.96)	22.2 (7.39)	552 (254)	3.86 (1.78)	23.0 (10.6)	43.7 (20.2)
19	9.04 (3.17)	3.89 (1.36)	7.75 (2.71)	19.4 (6.78)	11.4 (4.31)	4.90 (1.85)	9.74 (3.69)	24.3 (9.22)	561 (269)	3.93 (1.88)	23.4 (11.2)	44.1 (21.1)
20	9.17 (3.73)	3.95 (1.61)	7.85 (3.20)	19.6 (7.99)	10.9 (3.85)	4.68 (1.66)	9.31 (3.30)	23.3 (8.24)	635 (381)	4.45 (2.67)	26.4 (15.9)	49.3 (29.6)
21	9.31 (3.29)	4.01 (1.42)	7.97 (2.81)	19.9 (7.03)	10.1 (3.45)	4.34 (1.49)	8.63 (2.96)	21.6 (7.39)	617 (332)	4.32 (2.32)	25.7 (13.8)	47.5 (25.6)
22	8.54 (2.90)	3.68 (1.25)	7.31 (2.48)	18.3 (6.21)	10.8 (3.53)	4.64 (1.52)	9.23 (3.02)	23.1 (7.55)	583 (305)	4.08 (2.13)	24.3 (12.7)	44.4 (23.2)
23									575 (411)	4.03 (2.88)	24.0 (17.1)	43.5 (31.1)
24	8.36 (1.19)	3.60 (0.51)	7.16 (1.02)	17.9 (2.54)	10.2 (2.42)	4.39 (1.04)	8.72 (2.07)	21.8 (5.18)	502 (401)	3.51 (2.80)	20.9 (16.7)	37.7 (30.1)
25									571 (468)	4.00 (3.28)	23.8 (19.5)	42.7 (34.9)
26												
27	9.40 (0.92)	4.05 (0.39)	8.04 (0.78)	20.1 (1.96)	10.5 (0.53)	4.52 (0.23)	8.98 (0.45)	22.4 (1.13)	285 (317)	2.00 (2.22)	11.9 (13.2)	26.8 (30.2)
28	8.79 (1.70)	3.79 (0.73)	7.52 (1.45)	18.8 (3.63)	12.5 (3.26)	5.37 (1.40)	10.70 (2.78)	26.7 (6.96)	236 (240)	1.65 (1.68)	9.84 (10.0)	21.2 (21.5)
29	9.07 (1.60)	3.90 (0.69)	7.75 (1.37)	19.4 (3.41)	11.9 (4.08)	5.14 (1.76)	10.20 (3.49)	25.5 (8.71)	268 (270)	1.88 (1.89)	11.2 (11.3)	23.7 (23.8)
30	8.97 (2.24)	3.86 (0.96)	7.66 (1.91)	19.2 (4.78)	11.8 (4.39)	5.07 (1.89)	10.10 (3.75)	25.2 (9.39)	302 (239)	2.11 (1.68)	12.6 (9.97)	26.3 (20.9)
31	9.65 (2.57)	4.16 (1.11)	8.25 (2.20)	20.6 (5.49)					314 (208)	2.20 (1.45)	13.1 (8.65)	27.1 (17.9)
Mean	8.86	3.81	7.59	19.00	10.80	4.66	9.27	23.20	443.00	3.10	18.50	35.70
n	25	25	25	25	24	24	24	24	30	30	29	29
SD	0.52	0.23	0.45	1.12	0.61	0.26	0.51	1.28	141.00	0.99	5.98	9.36
Min	7.60	3.27	6.51	16.30	9.80	4.22	8.41	21.00	229.00	1.60	9.54	20.60
Max	9.65	4.16	8.25	20.60	12.50	5.37	10.70	26.70	697.00	4.88	29.00	52.20

ED_004549_00015840-00197

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for February, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	8.69 (2.14)	3.74 (0.92)	7.43 (1.83)	18.6 (4.57)	13.3 (6.19)	5.74 (2.67)	11.4 (5.29)	28.5 (13.20)	285 (265)	2.00 (1.85)	11.9 (11.0)	24.3 (22.6)
2	8.75 (2.78)	3.77 (1.20)	7.48 (2.38)	18.7 (5.94)	11.3 (3.47)	4.88 (1.49)	9.68 (2.96)	24.2 (7.40)	313 (250)	2.19 (1.75)	13.0 (10.4)	26.4 (21.1)
3	7.59 (1.98)	3.27 (0.85)	6.48 (1.69)	16.2 (4.22)	10.5 (3.57)	4.50 (1.54)	8.93 (3.05)	22.3 (7.62)	347 (212)	2.43 (1.49)	14.5 (8.85)	28.9 (17.7)
4	9.32 (2.54)	4.01 (1.09)	7.95 (2.17)	19.9 (5.42)	11.1 (3.88)	4.76 (1.67)	9.44 (3.31)	23.6 (8.28)	311 (185)	2.18 (1.29)	12.9 (7.69)	25.5 (15.2)
5	9.23 (2.93)	3.98 (1.26)	7.88 (2.50)	19.7 (6.25)	12.2 (4.60)	5.26 (1.98)	10.4 (3.93)	26.1 (9.81)	325 (216)	2.28 (1.51)	13.5 (8.99)	26.4 (17.5)
6	8.90 (3.16)	3.83 (1.36)	7.60 (2.70)	19.0 (6.75)	11.0 (4.35)	4.75 (1.87)	9.42 (3.71)	23.5 (9.28)	337 (189)	2.36 (1.32)	14.1 (7.86)	27.1 (15.2)
7	9.01 (3.67)	3.88 (1.58)	7.69 (3.13)	19.2 (7.84)	10.3 (3.86)	4.44 (1.66)	8.80 (3.30)	22.0 (8.24)	383 (205)	2.68 (1.44)	16.0 (8.56)	30.5 (16.4)
8	11.40 (3.16)	4.90 (1.36)	9.71 (2.70)	24.3 (6.75)	13.3 (2.65)	5.71 (1.14)	11.3 (2.26)	28.3 (5.64)	410 (171)	2.87 (1.20)	17.1 (7.13)	32.4 (13.5)
9									416 (237)	2.92 (1.66)	17.4 (9.87)	32.6 (18.5)
10	8.81 (4.43)	3.79 (1.91)	7.51 (3.78)	18.8 (9.45)	11.6 (4.97)	4.98 (2.14)	9.86 (4.24)	24.7 (10.60)	432 (248)	3.03 (1.73)	18.0 (10.3)	33.5 (19.2)
11					11.3 (4.43)	4.88 (1.91)	9.65 (3.78)	24.1 (9.44)	425 (287)	2.97 (2.01)	17.7 (11.9)	32.5 (22.0)
12	9.74 (3.45)	4.19 (1.49)	8.30 (2.94)	20.7 (7.35)	14.2 (4.72)	6.10 (2.03)	12.1 (4.02)	30.2 (10.0)	449 (317)	3.14 (2.22)	18.7 (13.2)	34.1 (24.1)
13	9.79 (3.31)	4.22 (1.43)	8.34 (2.82)	20.8 (7.05)	13.8 (4.03)	5.94 (1.74)	11.8 (3.43)	29.4 (8.59)	452 (378)	3.17 (2.65)	18.8 (15.8)	34.2 (28.6)
14	9.45 (2.63)	4.07 (1.13)	8.05 (2.24)	20.1 (5.61)	12.2 (2.90)	5.25 (1.25)	10.4 (2.47)	25.9 (6.17)	421 (333)	2.95 (2.33)	17.5 (13.9)	31.7 (25.1)
15	10.50 (3.07)	4.54 (1.32)	8.98 (2.61)	22.5 (6.52)	11.7 (2.63)	5.03 (1.13)	9.95 (2.24)	24.9 (5.59)	475 (380)	3.33 (2.66)	19.8 (15.8)	35.7 (28.5)
16									602 (326)	4.22 (2.29)	25.1 (13.6)	45.0 (24.4)
17									644 (348)	4.51 (2.43)	26.8 (14.5)	48.0 (25.9)
18									398 (411)	2.79 (2.88)		
19	9.15 (3.19)	3.94 (1.37)	7.78 (2.71)	19.4 (6.78)	11.6 (3.97)	5.00 (1.71)	9.87 (3.37)	24.7 (8.43)	411 (214)	2.88 (1.50)	17.1 (8.90)	38.3 (19.7)
20	9.09 (3.24)	3.92 (1.39)	7.73 (2.75)	19.3 (6.88)	12.4 (4.85)	5.32 (2.09)	10.5 (4.13)	26.3 (10.3)	353 (177)	2.47 (1.24)	14.7 (7.37)	31.7 (15.9)
21									264 (269)	1.85 (1.88)	11.0 (11.2)	23.3 (23.8)
22									300 (243)	2.10 (1.70)	12.5 (10.1)	26.2 (21.3)
23	8.75 (3.36)	3.77 (1.45)	7.43 (2.85)	18.6 (7.13)	12.5 (4.48)	5.37 (1.93)	10.6 (3.81)	26.5 (9.51)	368 (270)	2.58 (1.89)	15.3 (11.3)	31.8 (23.3)
24	9.27 (3.62)	3.99 (1.56)	7.88 (3.08)	19.7 (7.69)	11.4 (5.40)	4.91 (2.32)	9.68 (4.58)	24.2 (11.5)	448 (249)	3.14 (1.74)	18.7 (10.4)	38.3 (21.3)
25												
26												
27	8.75 (2.88)	3.77 (1.24)	7.43 (2.44)	18.6 (6.10)	12.9 (2.95)	5.54 (1.27)	10.9 (2.50)	27.3 (6.25)	468 (327)	3.28 (2.29)	19.5 (13.6)	38.5 (27.0)
28	8.66 (2.20)	3.73 (0.95)	7.35 (1.86)	18.4 (4.66)	11.5 (2.03)	4.94 (0.87)	9.73 (1.72)	24.3 (4.30)	427 (284)	2.99 (1.99)	17.8 (11.8)	34.8 (23.1)
Mean	9.20	3.96	7.84	19.60	12.00	5.17	10.20	25.50	403.00	2.82	16.80	32.50
n	19	19	19	19	20	20	20	20	26	26	25	25
SD	0.77	0.33	0.66	1.65	1.03	0.45	0.88	2.20	86.50	0.61	3.67	5.94
Min	7.59	3.27	6.48	16.20	10.30	4.44	8.80	22.00	264.00	1.85	11.00	23.30
Max	11.40	4.90	9.71	24.30	14.20	6.10	12.10	30.20	644.00	4.51	26.80	48.00

ED_004549_00015840-00198

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for March, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	9.60 (2.51)	4.14 (1.08)	8.14 (2.13)	20.4 (5.32)	11.0 (2.07)	4.72 (0.89)	9.30 (1.76)	23.2 (4.39)	347 (349)	2.43 (2.44)	14.4 (14.5)	28.0 (28.2)
2	9.59 (3.41)	4.13 (1.47)	8.13 (2.89)	20.3 (7.23)	11.3 (3.43)	4.87 (1.48)	9.59 (2.91)	24.0 (7.27)	597 (703)	4.18 (4.92)	24.9 (29.3)	47.7 (56.3)
3	9.46 (3.42)	4.07 (1.47)	8.02 (2.90)	20.1 (7.25)	11.4 (2.62)	4.90 (1.13)	9.65 (2.22)	24.1 (5.55)	559 (254)	3.91 (1.78)	23.3 (10.6)	44.3 (20.1)
4	10.6 (4.24)	4.57 (1.83)	8.99 (3.59)	22.5 (8.98)	11.9 (4.75)	5.12 (2.04)	10.10 (4.02)	25.2 (10.1)	526 (225)	3.68 (1.58)	21.9 (9.39)	41.3 (17.7)
5	10.8 (2.97)	4.63 (1.28)	9.11 (2.52)	22.8 (6.30)	11.4 (3.41)	4.93 (1.47)	9.70 (2.89)	24.3 (7.21)	556 (129)	3.90 (0.90)	23.2 (5.37)	43.3 (10.0)
6	9.85 (3.43)	4.24 (1.48)	8.35 (2.91)	20.9 (7.26)	11.8 (3.92)	5.08 (1.69)	10.0 (3.32)	25.0 (8.30)	570 (174)	3.99 (1.22)	23.8 (7.24)	43.8 (13.4)
7	9.49 (2.52)	4.09 (1.08)	8.04 (2.13)	20.1 (5.33)					547 (151)	3.83 (1.06)	22.8 (6.28)	41.7 (11.4)
8	9.98 (3.12)	4.30 (1.34)	8.45 (2.64)	21.1 (6.60)	11.6 (3.91)	4.99 (1.68)	9.81 (3.31)	24.5 (8.27)	605 (261)	4.24 (1.83)	25.2 (10.9)	45.8 (19.7)
9									797 (253)	5.58 (1.77)	33.2 (10.6)	59.9 (19.0)
10	10.1 (3.80)	4.34 (1.64)	8.53 (3.22)	21.3 (8.04)	12.2 (5.12)	5.24 (2.20)	10.3 (4.33)	25.7 (10.8)	768 (543)	5.38 (3.80)	32.0 (22.6)	57.3 (40.5)
11	9.16 (2.89)	3.94 (1.25)	7.75 (2.45)	19.4 (6.12)	10.9 (3.21)	4.68 (1.38)	9.20 (2.71)	23.0 (6.78)				
12	8.32 (2.82)	3.58 (1.22)	7.04 (2.39)	17.6 (5.97)	11.2 (2.11)	4.82 (0.91)	9.47 (1.79)	23.7 (4.46)	192 (110)	1.34 (0.77)	7.99 (4.59)	18.0 (10.4)
13	8.23 (3.65)	3.54 (1.57)	6.96 (3.09)	17.4 (7.73)	13.2 (4.81)	5.67 (2.07)	11.1 (4.07)	27.8 (10.2)	206 (208)	1.44 (1.45)	8.58 (8.65)	18.5 (18.6)
14	9.01 (3.59)	3.88 (1.55)	7.62 (3.04)	19.1 (7.59)	12.3 (4.26)	5.28 (1.83)	10.4 (3.60)	25.9 (9.00)	220 (209)	1.54 (1.46)	9.18 (8.70)	19.4 (18.4)
15	9.15 (3.14)	3.94 (1.35)	7.74 (2.65)	19.3 (6.63)	10.7 (2.40)	4.62 (1.03)	9.07 (2.03)	22.7 (5.08)	306 (208)	2.15 (1.46)	12.8 (8.68)	26.7 (18.2)
16	9.03 (3.46)	3.89 (1.49)	7.64 (2.93)	19.1 (7.33)	11.6 (2.74)	4.99 (1.18)	9.80 (2.32)	24.5 (5.79)	346 (114)	2.42 (0.80)	14.4 (4.77)	29.8 (9.86)
17	9.51 (3.00)	4.10 (1.29)	8.04 (2.54)	20.1 (6.35)	11.0 (3.73)	4.72 (1.61)	9.27 (3.16)	23.2 (7.89)	373 (163)	2.61 (1.14)	15.6 (6.77)	31.9 (13.9)
18	9.87 (3.51)	4.25 (1.51)	8.34 (2.97)	20.9 (7.42)					373 (194)	2.61 (1.36)	15.5 (8.10)	31.5 (16.4)
19	8.28 (3.37)	3.57 (1.45)	7.00 (2.85)	17.5 (7.12)	11.4 (4.29)	4.89 (1.85)	9.60 (3.62)	24.0 (9.06)	421 (219)	2.95 (1.53)	17.6 (9.13)	35.1 (18.3)
20	9.41 (3.24)	4.05 (1.40)	7.95 (2.74)	19.9 (6.86)	12.4 (3.97)	5.33 (1.71)	10.5 (3.36)	26.2 (8.39)	378 (146)	2.64 (1.02)	15.7 (6.07)	31.1 (12.0)
21	9.06 (2.05)	3.90 (0.88)	7.65 (1.73)	19.1 (4.32)	11.5 (2.27)	4.95 (0.98)	9.71 (1.92)	24.3 (4.80)	423 (66)	2.96 (0.46)	17.6 (2.76)	34.4 (5.44)
22	8.32 (1.98)	3.58 (0.85)	7.03 (1.67)	17.6 (4.17)					408 (86)	2.86 (0.60)	17.0 (3.58)	32.9 (6.94)
23									437 (100)	3.06 (0.70)	18.2 (4.16)	34.9 (7.94)
24	8.94 (3.94)	3.85 (1.70)	7.55 (3.33)	18.9 (8.33)	11.2 (3.28)	4.82 (1.41)	9.45 (2.77)	23.6 (6.93)	488 (247)	3.42 (1.73)	20.3 (10.3)	38.6 (19.6)
25	9.21 (3.88)	3.97 (1.67)	7.78 (3.28)	19.4 (8.20)	11.3 (4.86)	4.88 (2.09)	9.56 (4.11)	23.9 (10.3)	507 (225)	3.55 (1.57)	21.1 (9.37)	39.8 (17.6)
26									521 (232)	3.65 (1.62)	21.7 (9.65)	40.4 (18.0)
27	8.02 (2.30)	3.45 (0.99)	6.77 (1.94)	16.9 (4.85)					394 (244)	2.76 (1.71)	16.4 (10.2)	30.2 (18.7)
28	7.26 (1.70)	3.13 (0.73)	6.12 (1.43)	15.3 (3.58)					452 (371)	3.17 (2.60)	18.8 (15.5)	34.4 (28.2)
29	8.40 (2.20)	3.62 (0.95)	7.09 (1.86)	17.7 (4.64)	10.7 (2.61)	4.60 (1.13)	9.00 (2.21)	22.5 (5.51)	626 (299)	4.39 (2.09)	26.1 (12.4)	47.4 (22.6)
30	9.15 (3.13)	3.94 (1.35)	7.72 (2.64)	19.3 (6.61)	10.6 (3.31)	4.57 (1.43)	8.95 (2.79)	22.4 (6.98)	571 (305)	4.00 (2.14)	23.8 (12.7)	43.0 (23.0)
31	8.91 (3.13)	3.84 (1.35)	7.52 (2.64)	18.8 (6.61)	10.6 (2.80)	4.55 (1.21)	8.91 (2.37)	22.3 (5.91)	607 (325)	4.25 (2.27)	25.3 (13.5)	45.5 (24.3)
Mean	9.17	3.95	7.75	19.40	11.40	4.92	9.67	24.20	471.00	3.30	19.60	37.20
n	28	28	28	28	23	23	23	23	30	30	30	30
SD	0.77	0.33	0.66	1.65	0.62	0.27	0.53	1.33	145.00	1.02	6.05	9.95
Min	7.26	3.13	6.12	15.30	10.60	4.55	8.91	22.30	192.00	1.34	7.99	18.00
Max	10.80	4.63	9.11	22.80	13.20	5.67	11.10	27.80	797.00	5.58	33.20	59.90

ED_004549_00015840-00199

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for April, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	9.14 (2.27)	3.94 (0.98)	7.71 (1.91)	19.3 (4.78)	10.1 (2.40)	4.33 (1.03)	8.48 (2.02)	21.2 (5.05)	624 (264.0)	4.37 (1.85)	26.00 (11.00)	46.50 (19.70)
2												
3												
4												
5	8.07 (2.67)	3.48 (1.15)	6.81 (2.25)	17.0 (5.64)	9.72 (3.47)	4.19 (1.49)	8.20 (2.93)	20.5 (7.32)				
6	11.0 (3.33)	4.74 (1.43)	9.30 (2.81)	23.2 (7.03)	11.8 (3.70)	5.10 (1.59)	10.0 (3.12)	25.0 (7.80)				
7	10.2 (1.93)	4.39 (0.83)	8.61 (1.63)	21.5 (4.07)	10.9 (3.34)	4.70 (1.44)	9.22 (2.82)	23.0 (7.05)				
8	10.9 (4.25)	4.69 (1.83)	9.19 (3.59)	23.0 (8.97)	10.6 (4.28)	4.57 (1.84)	8.95 (3.62)	22.4 (9.04)				
9					9.88 (3.66)	4.26 (1.58)	8.35 (3.09)	20.9 (7.74)				
10	9.93 (4.02)	4.28 (1.73)	8.39 (3.39)	21.0 (8.48)	10.7 (4.40)	4.62 (1.89)	9.05 (3.72)	22.6 (9.29)	347 (197)	2.43 (1.38)	14.5 (8.19)	28.9 (16.4)
11	9.67 (4.23)	4.16 (1.82)	8.17 (3.58)	20.4 (8.94)	11.8 (4.46)	5.10 (1.92)	10.0 (3.76)	25.0 (9.41)	336 (154)	2.35 (1.08)	14.0 (6.40)	27.6 (12.7)
12					11.2 (3.51)	4.81 (1.51)	9.43 (2.96)	23.6 (7.41)	324 (124)	2.27 (0.87)	13.5 (5.15)	26.3 (10.0)
13					11.4 (3.80)	4.89 (1.64)	9.59 (3.21)	24.0 (8.03)	373 (127)	2.61 (0.89)	15.5 (5.28)	30.1 (10.2)
14	10.6 (3.39)	4.57 (1.46)	8.97 (2.86)	22.4 (7.16)	12.0 (2.97)	5.16 (1.28)	10.1 (2.51)	25.3 (6.28)	452 (114)	3.17 (0.80)	18.8 (4.74)	36.1 (9.05)
15	10.9 (2.61)	4.67 (1.12)	9.17 (2.21)	22.9 (5.51)					403 (55.8)	2.82 (0.39)	16.8 (2.33)	31.9 (4.45)
16	11.4 (2.00)	4.92 (0.86)	9.66 (1.69)	24.1 (4.23)	12.3 (2.69)	5.30 (1.16)	10.4 (2.27)	26.0 (5.68)				
17	10.1 (2.80)	4.34 (1.21)	8.53 (2.37)	21.3 (5.93)	11.6 (2.92)	5.01 (1.26)	9.83 (2.47)	24.6 (6.17)				
18					11.8 (4.02)	5.09 (1.73)	10.0 (3.40)	25.0 (8.51)				
19					11.5 (4.04)	4.97 (1.74)	9.77 (3.42)	24.4 (8.54)				
20	9.68 (3.40)	4.17 (1.46)	8.20 (2.88)	20.5 (7.19)	11.3 (3.39)	4.89 (1.46)	9.60 (2.87)	24.0 (7.18)				
21	9.11 (2.73)	3.92 (1.17)	7.71 (2.31)	19.3 (5.77)	9.98 (3.73)	4.30 (1.61)	8.45 (3.16)	21.1 (7.90)	516 (149)	3.61 (1.04)	21.5 (6.19)	38.8 (11.2)
22	9.76 (2.06)	4.20 (0.89)	8.27 (1.74)	20.7 (4.35)	11.5 (2.18)	4.95 (0.94)	9.74 (1.84)	24.3 (4.61)	549 (126)	3.85 (0.88)	22.9 (5.23)	41.2 (9.42)
23												
24	9.74 (3.14)	4.20 (1.35)	8.25 (2.66)	20.6 (6.65)	9.60 (1.90)	4.14 (0.82)	8.14 (1.61)	20.3 (4.03)				
25	9.66 (2.71)	4.16 (1.17)	8.18 (2.30)	20.5 (5.75)	10.6 (3.59)	4.58 (1.54)	9.01 (3.04)	22.5 (7.60)	253 (190)	1.77 (1.33)	10.5 (7.92)	23.6 (17.7)
26	11.0 (2.24)	4.74 (0.97)	9.33 (1.90)	23.3 (4.75)	10.9 (3.37)	4.71 (1.45)	9.27 (2.86)	23.2 (7.14)	287 (123)	2.01 (0.86)	12.0 (5.13)	25.8 (11.0)
27	9.93 (2.20)	4.28 (0.95)	8.42 (1.86)	21.0 (4.66)	11.2 (2.27)	4.82 (0.98)	9.49 (1.93)	23.7 (4.82)	233 (196)	1.63 (1.37)	9.70 (8.17)	20.5 (17.3)
28	10.1 (2.39)	4.34 (1.03)	8.55 (2.03)	21.4 (5.07)	11.0 (2.84)	4.72 (1.23)	9.29 (2.41)	23.2 (6.03)	250 (216)	1.75 (1.51)	10.4 (8.99)	21.8 (18.8)
29	11.0 (2.44)	4.72 (1.05)	9.30 (2.07)	23.2 (5.18)	11.9 (3.29)	5.11 (1.42)	10.1 (2.79)	25.1 (6.98)	355 (112)	2.49 (0.79)	14.8 (4.68)	30.6 (9.73)
30	10.9 (2.29)	4.71 (0.99)	9.28 (1.94)	23.2 (4.86)	11.3 (2.72)	4.87 (1.17)	9.59 (2.31)	24.0 (5.76)	430 (79.6)	3.01 (0.56)	17.9 (3.32)	36.7 (6.82)
Mean	10.10	4.36	8.57	21.40	11.10	4.77	9.36	23.40	382.00	2.68	15.90	31.10
n	21	21	21	21	25	25	25	25	15	15	15	15
SD	0.79	0.34	0.67	1.68	0.74	0.32	0.63	1.58	111.00	0.78	4.63	7.21
Min	8.07	3.48	6.81	17.00	9.60	4.14	8.14	20.30	233.00	1.63	9.70	20.50
Max	11.40	4.92	9.66	24.10	12.30	5.30	10.40	26.00	624.00	4.37	26.00	46.50

ED_004549_00015840-00200

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for May, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1					11.10 (2.08)	4.79 (0.89)	9.43 (1.76)	23.60 (4.40)	435 (185.0)	3.04 (1.30)	18.10 (7.71)	36.70 (15.60)
2												
3												
4												
5												
6												
7	10.8 (3.63)	4.66 (1.57)	9.19 (3.09)	23.0 (7.71)	10.5 (3.18)	4.50 (1.37)	8.88 (2.70)	22.2 (6.75)	454 (93.7)	3.18 (0.66)	18.9 (3.90)	35.9 (7.37)
8	10.4 (1.72)	4.46 (0.74)	8.79 (1.46)	22.0 (3.65)					471 (50.6)	3.30 (0.35)	19.6 (2.11)	36.9 (3.95)
9	9.64 (2.57)	4.15 (1.10)	8.19 (2.18)	20.5 (5.45)	10.6 (2.68)	4.56 (1.15)	8.99 (2.27)	22.5 (5.68)	511 (61.3)	3.58 (0.43)	21.3 (2.55)	39.5 (4.77)
10	11.4 (2.94)	4.93 (1.27)	9.71 (2.50)	24.3 (6.24)	11.1 (2.47)	4.79 (1.07)	9.44 (2.10)	23.6 (5.25)	583 (54.7)	4.09 (0.38)	24.3 (2.28)	44.7 (4.18)
11	10.7 (2.42)	4.60 (1.04)	9.07 (2.05)	22.7 (5.13)	13.7 (3.85)	5.90 (1.66)	11.6 (3.27)	29.1 (8.18)	517 (79.7)	3.62 (0.56)	21.5 (3.32)	39.2 (6.07)
12	10.9 (2.63)	4.68 (1.13)	9.23 (2.24)	23.1 (5.59)	11.8 (5.18)	5.10 (2.23)	10.1 (4.40)	25.1 (11.00)	492 (79.5)	3.44 (0.56)	20.5 (3.31)	37.2 (6.02)
13	9.91 (2.22)	4.27 (0.96)	8.42 (1.89)	21.1 (4.71)	11.3 (2.90)	4.85 (1.25)	9.56 (2.47)	23.9 (6.16)	523 (106.0)	3.66 (0.74)	21.8 (4.42)	39.4 (7.99)
14	9.69 (2.40)	4.17 (1.04)	8.23 (2.04)	20.6 (5.11)	11.0 (2.54)	4.73 (1.09)	9.33 (2.15)	23.3 (5.39)	526 (46.3)	3.69 (0.32)	21.9 (1.93)	39.5 (3.49)
15	10.7 (2.21)	4.60 (0.95)	9.08 (1.88)	22.7 (4.69)	12.6 (3.51)	5.42 (1.51)	10.7 (2.98)	26.7 (7.45)	498 (93.5)	3.49 (0.66)	20.7 (3.89)	37.3 (7.00)
16	10.3 (2.10)	4.43 (0.90)	8.74 (1.78)	21.9 (4.46)	11.0 (2.53)	4.73 (1.09)	9.33 (2.15)	23.3 (5.38)	536 (58.4)	3.75 (0.41)	22.3 (2.44)	40.0 (4.36)
17	10.3 (2.48)	4.42 (1.07)	8.73 (2.10)	21.8 (5.26)	11.0 (2.44)	4.75 (1.05)	9.37 (2.07)	23.4 (5.18)	543 (146.0)	3.80 (1.02)	22.6 (6.07)	40.5 (10.9)
18												
19									244 (62.0)	1.71 (0.43)	10.2 (2.58)	22.8 (6.13)
20	11.2 (3.60)	4.84 (1.55)	9.56 (3.06)	23.9 (7.66)	11.7 (3.73)	5.04 (1.60)	9.95 (3.17)	24.9 (7.92)	280 (72.7)	1.96 (0.51)	11.7 (3.03)	25.1 (6.57)
21	9.79 (2.25)	4.22 (0.97)	8.33 (1.91)	20.8 (4.78)	11.2 (3.37)	4.83 (1.45)	9.54 (2.87)	23.9 (7.17)	294 (41.6)	2.06 (0.29)	12.3 (1.73)	26.0 (3.66)
22	9.69 (2.61)	4.17 (1.12)	8.25 (2.22)	20.6 (5.55)	10.1 (3.22)	4.37 (1.39)	8.63 (2.74)	21.6 (6.85)	303 (58.3)	2.12 (0.41)	12.6 (2.43)	26.5 (5.11)
23	10.7 (2.77)	4.60 (1.19)	9.08 (2.35)	22.7 (5.88)	11.8 (4.14)	5.09 (1.78)	10.1 (3.52)	25.2 (8.81)	351 (56.2)	2.46 (0.39)	14.6 (2.34)	30.3 (4.81)
24	11.3 (2.76)	4.86 (1.19)	9.60 (2.35)	24.0 (5.88)	11.4 (3.61)	4.91 (1.55)	9.69 (3.07)	24.2 (7.67)	360 (52.2)	2.52 (0.37)	15.0 (2.17)	30.7 (4.48)
25	11.2 (2.71)	4.81 (1.17)	9.50 (2.31)	23.7 (5.78)	12.3 (4.25)	5.31 (1.83)	10.5 (3.62)	26.2 (9.04)	411 (74.4)	2.88 (0.52)	17.1 (3.10)	34.7 (6.27)
26	11.0 (3.62)	4.74 (1.56)	9.36 (3.08)	23.4 (7.71)	10.2 (3.45)	4.41 (1.49)	8.71 (2.94)	21.8 (7.35)	380 (48.8)	2.66 (0.34)	15.8 (2.03)	31.6 (4.08)
27	10.9 (2.32)	4.68 (1.00)	9.25 (1.98)	23.1 (4.94)	9.9 (2.54)	4.25 (1.09)	8.39 (2.16)	21.0 (5.40)	454 (91.1)	3.18 (0.64)	18.9 (3.80)	37.3 (7.55)
28	10.5 (3.68)	4.52 (1.59)	8.94 (3.14)	22.3 (7.84)	10.0 (2.87)	4.31 (1.23)	8.52 (2.44)	21.3 (6.10)	472 (90.6)	3.30 (0.63)	19.7 (3.77)	38.3 (7.38)
29	11.0 (2.79)	4.74 (1.20)	9.37 (2.37)	23.4 (5.93)	10.8 (2.69)	4.66 (1.16)	9.21 (2.29)	23.0 (5.73)	452 (96.5)	3.16 (0.68)	18.8 (4.02)	36.3 (7.77)
30	12.2 (3.35)	5.27 (1.44)	10.40 (2.85)	26.0 (7.12)	11.1 (2.79)	4.79 (1.20)	9.48 (2.37)	23.7 (5.93)	455 (79.0)	3.19 (0.55)	19.0 (3.29)	36.3 (6.26)
31	12.7 (4.11)	5.45 (1.77)	10.80 (3.50)	27.0 (8.75)	11.2 (3.18)	4.82 (1.37)	9.53 (2.71)	23.8 (6.77)	414 (89.2)	2.90 (0.63)	17.3 (3.72)	32.8 (7.06)
Mean	10.70	4.62	9.12	22.80	11.20	4.82	9.52	23.80	438.00	3.07	18.30	35.00
n	23	23	23	23	23	23	23	23	25	25	25	25
SD	0.75	0.32	0.64	1.61	0.86	0.37	0.73	1.82	89.00	0.62	3.71	5.37
Min	9.64	4.15	8.19	20.50	9.86	4.25	8.39	21.00	244.00	1.71	10.20	22.80
Max	12.70	5.45	10.80	27.00	13.70	5.90	11.60	29.10	583.00	4.09	24.30	44.70

ED_004549_00015840-00201

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for June, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	10.4 (2.28)	4.49 (0.98)	8.89 (1.94)	22.2 (4.85)	11.4 (3.08)	4.92 (1.33)	9.73 (2.62)	24.3 (6.55)	476 (73.9)	3.33 (0.52)	19.8 (3.08)	37.3 (5.77)
2	11.8 (2.65)	5.06 (1.14)	10.0 (2.26)	25.0 (5.65)	10.9 (2.61)	4.70 (1.12)	9.29 (2.22)	23.2 (5.55)	414 (69.2)	2.90 (0.49)	17.3 (2.88)	32.1 (5.39)
3	11.4 (2.03)	4.93 (0.87)	9.75 (1.72)	24.4 (4.31)	10.3 (3.45)	4.44 (1.49)	8.77 (2.94)	21.9 (7.35)	483 (110)	3.39 (0.77)	20.1 (4.58)	37.1 (8.39)
4	12.0 (3.05)	5.16 (1.31)	10.2 (2.60)	25.5 (6.49)	12.6 (3.97)	5.43 (1.71)	10.7 (3.38)	26.8 (8.46)	502 (95.9)	3.51 (0.67)	20.9 (3.99)	38.1 (7.28)
5	12.1 (2.94)	5.22 (1.27)	10.3 (2.50)	25.8 (6.25)	13.9 (3.96)	5.99 (1.71)	11.8 (3.37)	29.6 (8.43)	493 (119.0)	3.45 (0.83)	20.5 (4.94)	37.3 (8.95)
6												
7												
8	10.4 (2.72)	4.49 (1.17)	8.86 (2.31)	22.2 (5.78)	10.4 (3.04)	4.46 (1.31)	8.81 (2.58)	22.0 (6.45)	492 (106)	3.44 (0.74)	20.5 (4.43)	36.8 (7.96)
9	11.5 (3.11)	4.96 (1.34)	9.79 (2.65)	24.5 (6.62)	11.1 (3.87)	4.77 (1.67)	9.42 (3.29)	23.6 (8.23)	538 (157)	3.77 (1.10)	22.4 (6.54)	40.1 (11.7)
10	10.5 (3.47)	4.51 (1.49)	8.91 (2.95)	22.3 (7.38)	10.5 (2.98)	4.52 (1.28)	8.93 (2.53)	22.3 (6.33)				
11	10.9 (2.88)	4.70 (1.24)	9.28 (2.45)	23.2 (6.13)	10.7 (3.37)	4.61 (1.45)	9.10 (2.86)	22.7 (7.16)				
12	10.6 (2.45)	4.56 (1.05)	9.00 (2.08)	22.5 (5.20)	10.9 (4.20)	4.69 (1.81)	9.26 (3.57)	23.2 (8.92)	438 (119)	3.07 (0.83)	18.3 (4.96)	39.3 (10.5)
13	11.3 (2.86)	4.87 (1.23)	9.61 (2.43)	24.0 (6.08)	10.3 (2.41)	4.44 (1.04)	8.76 (2.05)	21.9 (5.12)	406 (118)	2.84 (0.83)	16.9 (4.91)	35.8 (10.3)
14	10.5 (2.37)	4.51 (1.02)	8.90 (2.01)	22.2 (5.03)	8.73 (2.00)	3.76 (0.86)	7.42 (1.70)	18.5 (4.25)	338 (48.4)	2.36 (0.34)	14.1 (2.02)	29.5 (4.22)
15	10.7 (2.87)	4.61 (1.23)	9.09 (2.44)	22.7 (6.09)	10.8 (3.09)	4.67 (1.33)	9.20 (2.62)	23.0 (6.56)	426 (106)	2.98 (0.74)	17.7 (4.41)	36.7 (9.10)
16	12.0 (2.32)	5.16 (1.00)	10.2 (1.97)	25.5 (4.93)	10.2 (3.43)	4.41 (1.48)	8.70 (2.91)	21.7 (7.27)	513 (143)	3.59 (1.00)	21.4 (5.95)	43.8 (12.2)
17	12.2 (2.27)	5.27 (0.98)	10.4 (1.93)	26.0 (4.83)	10.4 (2.85)	4.47 (1.23)	8.82 (2.42)	22.0 (6.06)	517 (107)	3.62 (0.75)	21.5 (4.46)	43.7 (9.16)
18	13.7 (3.76)	5.89 (1.62)	11.6 (3.19)	29.0 (7.98)	12.0 (5.49)	5.16 (2.36)	10.20 (4.66)	25.4 (11.70)	477 (140)	3.34 (0.98)	19.9 (5.83)	39.7 (11.6)
19	11.9 (3.31)	5.13 (1.43)	10.1 (2.81)	25.3 (7.03)	10.7 (3.12)	4.59 (1.34)	9.05 (2.65)	22.6 (6.62)	543 (67.4)	3.80 (0.47)	22.6 (2.81)	44.6 (5.48)
20	11.0 (2.51)	4.74 (1.08)	9.33 (2.13)	23.3 (5.33)	9.86 (2.54)	4.25 (1.10)	8.36 (2.16)	20.9 (5.40)	508 (81.8)	3.56 (0.57)	21.2 (3.41)	41.2 (6.70)
21	12.7 (3.50)	5.49 (1.51)	10.8 (2.97)	27.0 (7.43)	10.8 (3.97)	4.64 (1.71)	9.14 (3.37)	22.9 (8.42)	522 (64.7)	3.66 (0.45)	21.8 (2.70)	42.0 (5.16)
22	13.6 (5.17)	5.88 (2.23)	11.6 (4.39)	28.9 (11.00)	11.6 (3.88)	4.99 (1.67)	9.82 (3.29)	24.6 (8.23)	537 (122)	3.76 (0.85)	22.4 (5.08)	42.8 (9.76)
23	13.3 (4.31)	5.75 (1.86)	11.3 (3.66)	28.3 (9.15)	11.8 (4.56)	5.08 (1.97)	10.0 (3.87)	25.0 (9.68)	394 (68.0)	2.76 (0.48)	16.4 (2.83)	31.2 (5.40)
24	13.5 (4.02)	5.79 (1.73)	11.4 (3.41)	28.5 (8.52)	12.2 (3.62)	5.26 (1.56)	10.4 (3.07)	25.9 (7.66)	414 (60.8)	2.90 (0.43)	17.2 (2.53)	32.4 (4.72)
25	14.9 (4.31)	6.42 (1.86)	12.6 (3.65)	31.6 (9.13)	11.9 (3.43)	5.12 (1.48)	10.1 (2.90)	25.2 (7.26)	436 (73.0)	3.05 (0.51)	18.2 (3.04)	33.8 (5.65)
26	15.1 (4.52)	6.50 (1.95)	12.8 (3.83)	32.0 (9.59)	12.2 (3.53)	5.27 (1.52)	10.4 (2.99)	25.9 (7.48)	431 (53.0)	3.02 (0.37)	18.0 (2.21)	33.1 (4.01)
27	15.3 (3.81)	6.57 (1.64)	12.9 (3.23)	32.3 (8.08)	11.9 (4.08)	5.11 (1.76)	10.1 (3.46)	25.1 (8.65)	449 (91.9)	3.14 (0.64)	18.7 (3.83)	34.1 (6.98)
28	12.9 (3.67)	5.57 (1.58)	10.9 (3.11)	27.4 (7.77)	11.3 (3.56)	4.86 (1.54)	9.56 (3.02)	23.9 (7.55)	522 (122)	3.66 (0.86)	21.7 (5.10)	39.5 (9.23)
29	14.2 (3.05)	6.12 (1.31)	12.0 (2.58)	30.1 (6.46)	11.7 (3.72)	5.06 (1.60)	9.95 (3.15)	24.9 (7.87)	449 (62.8)	3.14 (0.44)	18.7 (2.62)	33.8 (4.73)
30					8.77 (4.25)	3.78 (1.83)	7.42 (3.60)	18.6 (9.00)	374 (94.2)	2.62 (0.66)	15.6 (3.93)	28.1 (7.07)
Mean	12.20	5.27	10.40	26.00	11.10	4.77	9.40	23.50	465.00	3.26	19.40	37.10
n	27	27	27	27	28	28	28	28	26	26	26	26
SD	1.48	0.64	1.25	3.11	1.08	0.46	0.92	2.29	54.20	0.38	2.26	4.46
Min	10.40	4.49	8.86	22.20	8.73	3.76	7.42	18.50	338.00	2.36	14.10	28.10
Max	15.30	6.57	12.90	32.30	13.90	5.99	11.80	29.60	543.00	3.80	22.60	44.60

ED_004549_00015840-00202

Table E6. Daily means (SD) of NH3 emissions at Site OK4B for July, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	kg/d	g/d-m^2	g/d-hd	g/d-AU	kg/d	g/d-m^2	g/d-hd	g/d-AU	g/d	g/d-m^2	g/d-hd	g/d-AU
1	14.0 (5.05)	6.03 (2.17)	11.9 (4.28)	29.6 (10.70)	10.4 (3.90)	4.48 (1.68)	8.81 (3.30)	22.0 (8.25)	313 (67.8)	2.19 (0.48)	13.1 (2.83)	23.4 (5.06)
2	12.6 (3.18)	5.44 (1.37)	10.7 (2.69)	26.8 (6.72)	9.71 (2.75)	4.18 (1.18)	8.22 (2.33)	20.6 (5.82)	357 (87.9)	2.50 (0.62)	14.9 (3.66)	26.6 (6.56)
3	14.2 (3.41)	6.11 (1.47)	12.0 (2.88)	30.0 (7.20)	11.3 (3.50)	4.88 (1.51)	9.58 (2.96)	24.0 (7.40)	337 (107)	2.36 (0.75)	13.5 (3.82)	29.4 (10.8)
4	14.1 (3.29)	6.08 (1.42)	12.0 (2.79)	29.9 (6.96)	11.0 (3.26)	4.73 (1.41)	9.29 (2.76)	23.2 (6.90)	199 (46.1)	1.40 (0.32)	8.30 (1.92)	18.6 (4.36)
5	12.3 (3.42)	5.28 (1.47)	10.4 (2.89)	25.9 (7.23)	9.43 (3.23)	4.06 (1.39)	7.98 (2.73)	19.9 (6.83)	151 (34.9)	1.06 (0.24)	6.31 (1.45)	13.6 (3.10)
6	12.7 (3.63)	5.45 (1.57)	10.7 (3.07)	26.8 (7.68)	10.2 (3.57)	4.38 (1.54)	8.61 (3.02)	21.5 (7.55)	189 (74.8)	1.32 (0.52)	7.86 (3.12)	16.6 (6.57)
7	11.6 (3.61)	5.02 (1.56)	9.85 (3.05)	24.6 (7.64)	9.97 (3.99)	4.30 (1.72)	8.43 (3.37)	21.1 (8.43)	235 (74.6)	1.65 (0.52)	9.80 (3.11)	20.5 (6.48)
8	16.0 (3.17)	6.88 (1.37)	13.5 (2.68)	33.7 (6.71)	12.2 (4.10)	5.25 (1.76)	10.3 (3.46)	25.8 (8.66)	287 (135)	2.01 (0.95)	12.0 (5.63)	24.8 (11.6)
9	15.2 (3.08)	6.57 (1.32)	12.9 (2.60)	32.2 (6.50)	11.3 (3.52)	4.88 (1.52)	9.57 (2.98)	23.9 (7.45)	278 (53.1)	1.95 (0.37)	11.6 (2.21)	23.8 (4.55)
10												
11	14.5 (3.69)	6.26 (1.59)	12.3 (3.12)	30.7 (7.79)	11.3 (3.30)	4.85 (1.42)	9.52 (2.78)	23.8 (6.96)	291 (53.9)	2.04 (0.38)	12.1 (2.24)	24.3 (4.49)
12	13.8 (3.07)	5.94 (1.32)	11.6 (2.59)	29.1 (6.48)	11.1 (3.02)	4.78 (1.30)	9.37 (2.55)	23.4 (6.37)	304 (40.3)	2.13 (0.28)	12.7 (1.68)	25.1 (3.37)
13	15.4 (3.67)	6.61 (1.58)	13.0 (3.10)	32.4 (7.75)	11.9 (3.32)	5.13 (1.43)	10.1 (2.80)	25.1 (7.01)	300 (61.5)	2.10 (0.43)	12.5 (2.56)	24.5 (5.03)
14	13.9 (4.08)	5.97 (1.76)	11.7 (3.44)	29.3 (8.61)	9.98 (2.55)	4.30 (1.10)	8.42 (2.15)	21.1 (5.38)	318 (60.1)	2.23 (0.42)	13.2 (2.50)	25.8 (4.90)
15	12.9 (3.38)	5.56 (1.45)	10.9 (2.85)	27.2 (7.13)	9.87 (2.40)	4.25 (1.03)	8.33 (2.02)	20.8 (5.06)	350 (78.7)	2.45 (0.55)	14.6 (3.28)	28.2 (6.31)
16												
17	12.4 (4.16)	5.32 (1.79)	10.4 (3.51)	26.1 (8.77)	9.78 (3.26)	4.21 (1.40)	8.25 (2.75)	20.6 (6.88)				
18	11.1 (3.42)	4.78 (1.47)	9.36 (2.89)	23.4 (7.22)	9.60 (2.44)	4.14 (1.05)	8.10 (2.06)	20.2 (5.14)				
19	10.8 (3.96)	4.65 (1.70)	9.11 (3.34)	22.8 (8.34)	10.8 (3.67)	4.66 (1.58)	9.12 (3.10)	22.8 (7.75)				
20												
21	10.4 (5.59)	4.48 (2.41)	8.77 (4.72)	21.9 (11.80)	9.71 (4.40)	4.18 (1.89)	8.18 (3.71)	20.5 (9.27)				
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Mean	13.20	5.69	11.20	27.90	10.50	4.54	8.90	22.20	279.00	1.96	11.60	23.20
n	18	18	18	18	18	18	18	18	14	14	14	14
SD	1.57	0.68	1.33	3.33	0.83	0.36	0.70	1.75	60.40	0.42	2.49	4.27
Min	10.40	4.48	8.77	21.90	9.43	4.06	7.98	19.90	151.00	1.06	6.31	13.60
Max	16.00	6.88	13.50	33.70	12.20	5.25	10.30	25.80	357.00	2.50	14.90	29.40

ED_004549_00015840-00203

Table E7. H2S concentrations

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for July, 2007. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20	6 (4)	8 (6)	88 (25)	121 (30)	74 (9)	105 (12)	10 (4)	14 (6)		228 (16)	
21	2 (1)	3 (1)	68 (13)	98 (18)	79 (14)	113 (20)	8 (2)	12 (3)		242 (25)	
22	3 (1)	5 (2)	76 (10)	109 (15)	82 (12)	118 (17)	10 (4)	14 (6)		294 (28)	
23	10 (7)	14 (10)	97 (18)	140 (26)	92 (22)	132 (32)	6 (4)	9 (5)		334 (32)	
24	6 (3)	9 (4)	121 (24)	175 (34)	97 (18)	141 (26)	8 (4)	11 (6)		366 (42)	
25	3 (2)	4 (3)	118 (15)	170 (21)	126 (52)	182 (75)	7 (3)	10 (4)		382 (24)	
26	3 (2)	4 (2)	119 (21)	172 (31)	108 (15)	156 (21)	9 (4)	12 (6)		313 (75)	
27	8 (6)	12 (8)	125 (27)	180 (39)	109 (11)	157 (17)	6 (4)	9 (6)		202 (165)	
28	9 (3)	13 (5)	113 (15)	163 (21)	121 (22)	174 (31)	9 (5)	12 (7)		26 (10)	
29	4 (2)	6 (3)	123 (17)	177 (24)	94 (14)	136 (20)	10 (6)	15 (9)		22 (4)	
30	4 (2)	6 (3)	137 (22)	197 (32)	77 (11)	111 (16)	5 (4)	8 (5)		70 (70)	
31	13 (14)	19 (21)	125 (18)	180 (25)	84 (22)	122 (31)	9 (6)	13 (9)		51 (61)	
Mean	6	9	109	157	95	137	8	12		211	
n	12	12	12	12	12	12	12	12	0	12	0
SD	3	5	21	31	17	24	2	2		130	
Min	2	3	68	98	74	105	5	8		22	
Max	13	19	137	197	126	182	10	15		382	

ED_004549_00015840-00204

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for August, 2007. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	10 (9)	15 (13)	110 (13)	159 (19)	93 (26)	134 (38)	7 (3)	10 (4)		22 (4)	
2	17 (10)	25 (15)	115 (21)	169 (31)	67 (16)	95 (24)	4 (3)	6 (5)		24 (8)	
3	3 (2)	4 (3)	115 (19)	166 (28)	68 (13)	99 (19)	4 (2)	5 (3)		39 (11)	
4	0 (0)	1 (1)	103 (22)	148 (31)	75 (14)	108 (20)	2 (1)	3 (1)		59 (20)	
5	1 (1)	1 (1)	109 (25)	158 (35)	75 (15)	108 (22)	4 (1)	6 (1)		82 (13)	
6	2 (1)	2 (1)	120 (22)	174 (32)	88 (13)	127 (18)	4 (1)	5 (2)		96 (22)	
7	2 (1)	3 (2)	126 (17)	182 (25)	105 (28)	151 (40)	5 (3)	7 (5)		134 (20)	
8	3 (2)	5 (3)	153 (34)	220 (50)	84 (18)	121 (26)	2 (1)	3 (1)		171 (27)	
9											
10											
11											
12											
13											
14											
15	2 (1)	3 (1)	108 (28)	155 (39)	70 (11)	101 (15)	4 (1)	5 (2)	549 (44)	317 (17)	
16	4 (2)	5 (3)	90 (18)	130 (26)	80 (14)	115 (20)	2 (2)	2 (2)	581 (101)	294 (39)	
17	3 (1)						6 (2)				
18	5 (5)	7 (7)	113 (12)	163 (17)	103 (16)	149 (23)	5 (1)	7 (2)	741 (102)	304 (11)	
19	6 (4)	9 (6)	131 (22)	189 (32)	111 (19)	160 (28)	5 (2)	7 (3)	697 (58)	309 (24)	
20	5 (3)	7 (4)	155 (36)	224 (52)	148 (33)	214 (47)	6 (1)	9 (1)	251 (305)	172 (148)	
21	5 (6)	7 (8)	131 (19)	189 (28)	129 (19)	186 (28)	4 (1)	6 (2)	42 (11)	11 (2)	16 (3)
22	2 (0)	2 (1)	126 (17)	180 (23)	128 (36)	184 (57)	3 (0)	4 (1)	58 (36)	11 (3)	16 (4)
23	1 (1)	1 (2)	120 (12)	173 (17)	103 (19)	149 (27)	2 (1)	3 (2)	60 (9)	16 (4)	23 (6)
24	9 (5)	13 (7)	129 (26)	186 (37)	123 (23)	177 (33)	1 (2)	2 (3)	62 (15)	19 (3)	28 (5)
25	12 (7)	17 (10)	118 (20)	171 (28)	212 (196)	306 (283)	6 (4)	8 (6)	102 (17)	32 (5)	46 (7)
26	0 (1)	0 (1)	133 (15)	192 (21)	63 (10)	90 (14)	2 (1)	3 (1)	203 (63)	46 (16)	66 (23)
27	1 (0)	1 (0)	133 (47)	191 (67)	69 (11)	100 (16)	3 (1)	4 (2)	119 (124)	73 (19)	105 (28)
28	0 (0)	0 (0)	104 (28)	150 (41)	67 (14)	96 (21)	3 (1)	4 (2)	4 (3)	86 (18)	124 (26)
29	3 (1)	4 (2)	113 (47)	168 (69)	66 (11)	93 (16)	0 (1)	0 (1)	3 (2)	105 (16)	
30	10 (4)	14 (5)	100 (25)	144 (36)	78 (19)	113 (28)	4 (3)	5 (5)	3 (3)	110 (11)	158 (16)
31	7 (4)	10 (6)	104 (20)	150 (29)	89 (14)	128 (21)	5 (4)	8 (5)	11 (16)	155 (62)	224 (89)
Mean	4	7	119	172	96	138	4	5	218	112	81
n	25	24	24	24	24	24	25	24	16	24	10
SD	4	6	15	22	34	49	2	2	257	99	67
Min	0	0	90	130	63	90	0	0	3	11	16
Max	17	25	155	224	212	306	7	10	741	317	224

ED_004549_00015840-00205

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for September, 2007. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	3 (2)	4 (2)	122 (26)	175 (37)	111 (30)	159 (43)	6 (2)	9 (3)	8 (3)	166 (48)	239 (69)
2	3 (1)	5 (2)	152 (44)	218 (63)	120 (38)	173 (54)	5 (1)	7 (2)	9 (5)	172 (15)	247 (21)
3	2 (1)	2 (1)	135 (39)	194 (57)	139 (48)	200 (68)	5 (1)	7 (1)	7 (3)	190 (28)	273 (40)
4	1 (0)	1 (1)					3 (1)	4 (1)			
5	2 (1)	3 (1)					2 (1)	3 (1)			
6	2 (1)	2 (2)	126 (26)	182 (37)	101 (20)	145 (29)	2 (1)	4 (1)	4 (2)	169 (107)	
7	9 (7)	13 (10)	139 (22)	200 (31)	105 (20)	151 (29)	0 (1)	1 (1)	1 (1)	334 (102)	
8	11 (7)	15 (9)	172 (75)	248 (108)	111 (17)	160 (24)	1 (2)	1 (3)	3 (4)	515 (279)	
9	9 (4)	12 (6)	146 (34)	211 (49)	164 (79)	236 (113)	1 (2)	2 (3)	2 (3)	530 (242)	
10	10 (7)	15 (11)					0 (0)	0 (1)			
11	4 (2)	6 (3)	267 (183)	383 (264)	187 (111)	269 (159)	2 (2)	3 (3)	19 (22)		
12	1 (1)	2 (1)	184 (79)	266 (114)	120 (69)	173 (100)	3 (1)	4 (1)	7 (6)	14 (8)	20 (12)
13	3 (2)	5 (3)	148 (52)	213 (75)	95 (44)	137 (64)	4 (3)	6 (5)	6 (4)	14 (7)	20 (10)
14	13 (9)	18 (13)	212 (57)	304 (82)	129 (42)	185 (60)	0 (0)	0 (1)	6 (9)	32 (19)	45 (27)
15	2 (3)	3 (5)	185 (102)	266 (146)	111 (39)	160 (55)	1 (1)	2 (1)	25 (40)	32 (35)	46 (49)
16	0 (0)	0 (1)	125 (21)	180 (30)	90 (21)	129 (31)	2 (1)	3 (1)	3 (1)	24 (5)	35 (6)
17	1 (1)	1 (1)	136 (67)	200 (98)	119 (35)	169 (52)	2 (1)	3 (1)	2 (1)	48 (21)	70 (31)
18	1 (2)	1 (2)	83 (21)	119 (29)	127 (28)	182 (41)	0 (1)	1 (2)	1 (2)	79 (20)	113 (29)
19	6 (5)	9 (7)	70 (12)	100 (18)	150 (97)	216 (140)	1 (1)	1 (1)	3 (2)	85 (22)	123 (32)
20	1 (1)	1 (1)	79 (10)	111 (14)	75 (21)	98 (25)	2 (1)	3 (1)	4 (1)	115 (43)	173 (67)
21	1 (2)	2 (2)	93 (13)	134 (19)	67 (17)	97 (25)	0 (1)	0 (1)	2 (2)	113 (15)	163 (21)
22	3 (1)	4 (2)	92 (25)	133 (36)	85 (21)	122 (30)	2 (2)	3 (3)	5 (5)	165 (38)	238 (54)
23	1 (1)	1 (1)	94 (22)	135 (31)	93 (20)	134 (29)	3 (1)	5 (2)	5 (1)	181 (42)	261 (60)
24	0 (0)						1 (1)				
25	4 (3)						0 (1)				
26	2 (2)	3 (3)	157 (69)	224 (99)	178 (98)	254 (140)	3 (4)	4 (5)	43 (65)	342 (140)	490 (200)
27	8 (3)	11 (4)	168 (62)	241 (89)	161 (96)	231 (137)	0 (1)	1 (2)	23 (42)	349 (164)	502 (234)
28	1 (1)	1 (1)	102 (16)	145 (24)	129 (76)	183 (111)	3 (2)	4 (3)	19 (27)	317 (69)	
29	1 (0)	1 (1)	99 (11)	143 (16)	101 (20)	146 (29)	1 (1)	2 (1)	3 (1)	343 (65)	
30	0 (0)						1 (1)				
Mean	3	5	137	197	120	171	2	3	9	188	180
n	30	27	24	24	24	24	30	27	24	23	17
SD	4	5	46	66	31	44	2	2	10	151	144
Min	0	0	70	100	67	97	0	0	1	14	20
Max	13	18	267	383	187	269	6	9	43	530	502

ED_004549_00015840-00206

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for October, 2007. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	0 (1)						2 (1)				
2	2 (2)	3 (2)	173 (51)	248 (74)	181 (98)	259 (140)	1 (2)	2 (3)	2 (2)	4 (2)	5 (3)
3	2 (2)	3 (3)	180 (81)	258 (116)	201 (107)	287 (153)	2 (1)	4 (2)	9 (10)	26 (29)	37 (42)
4	1 (2)	1 (2)	151 (39)	217 (56)	107 (19)	154 (27)	3 (1)	4 (2)	3 (3)	8 (3)	11 (4)
5	1 (1)	1 (1)	133 (52)	192 (75)	111 (19)	160 (28)	1 (0)	1 (1)	2 (2)	13 (9)	18 (13)
6	1 (0)						1 (0)				
7	4 (3)	5 (5)	146 (37)	210 (53)	145 (48)	207 (69)	0 (1)	0 (1)	2 (1)	38 (13)	55 (19)
8	7 (5)	11 (7)	211 (62)	302 (89)	215 (118)	308 (169)	0 (0)	0 (1)	35 (47)	76 (26)	109 (37)
9	1 (1)	1 (1)	224 (64)	321 (92)	247 (121)	354 (173)	3 (3)	5 (4)	58 (64)	118 (54)	170 (78)
10	5 (5)	7 (7)	155 (74)	230 (106)	186 (131)	277 (191)	6 (3)	9 (4)	31 (53)	144 (69)	212 (101)
11	23 (24)	32 (35)	129 (64)	186 (92)	137 (55)	197 (78)	4 (2)	6 (3)	7 (4)	178 (47)	255 (67)
12	2 (0)	2 (1)	107 (50)	154 (72)	157 (81)	225 (116)	3 (1)	4 (2)	49 (94)	176 (61)	254 (87)
13	1 (1)	1 (1)	92 (12)	132 (17)	77 (11)	111 (16)	2 (2)	3 (2)	5 (3)	191 (32)	275 (47)
14	3 (0)	4 (1)	215 (68)	309 (98)	204 (80)	293 (114)	0 (1)	0 (1)	39 (73)	405 (137)	581 (196)
15	3 (1)	4 (2)	243 (133)	348 (190)	414 (167)	593 (239)	0 (1)	0 (1)	139 (112)	444 (86)	636 (123)
16	2 (1)	2 (1)	195 (102)	280 (146)	311 (187)	445 (267)	3 (1)	4 (2)	48 (108)	352 (91)	504 (130)
17	1 (2)	2 (2)	138 (53)	198 (76)	209 (43)	299 (61)	1 (1)	2 (1)	10 (16)	390 (104)	558 (149)
18	8 (5)	11 (7)	274 (126)	392 (179)	263 (96)	376 (138)	0 (1)	1 (1)	121 (93)	608 (146)	869 (210)
19	8 (10)	11 (14)	288 (171)	411 (244)	273 (163)	390 (233)	3 (2)	4 (2)	144 (198)	543 (192)	775 (275)
20	1 (1)	1 (1)	165 (115)	235 (164)	145 (61)	207 (86)	2 (1)	2 (2)	65 (127)	480 (155)	686 (221)
21	2 (1)	3 (2)	449 (143)	642 (204)	321 (71)	458 (101)	0 (0)	0 (1)	105 (122)	889 (243)	1270 (349)
22	9 (8)	13 (11)	443 (111)	632 (159)	419 (84)	598 (120)	0 (1)	0 (1)	58 (78)		
23	9 (6)	12 (8)	357 (180)	509 (257)	340 (176)	485 (251)	0 (0)	0 (1)	4 (5)	9 (7)	12 (10)
24	8 (5)	11 (7)	299 (91)	427 (130)	286 (100)	409 (143)	0 (1)	0 (1)	3 (3)	9 (5)	13 (7)
25	7 (2)	10 (4)	280 (143)	399 (204)	295 (122)	421 (174)	2 (1)	3 (2)	8 (6)		
26	8 (3)	11 (4)	360 (202)	515 (289)	439 (192)	627 (275)	5 (3)	7 (5)	19 (16)	31 (10)	44 (15)
27	5 (2)	7 (2)	483 (167)	690 (239)	316 (90)	452 (128)	1 (1)	1 (2)	23 (23)	58 (15)	83 (21)
28	10 (4)	14 (6)	374 (125)	535 (179)	309 (132)	441 (189)	5 (2)	8 (3)	35 (35)	93 (40)	133 (57)
29	7 (4)	10 (5)	365 (190)	522 (273)	331 (156)	473 (224)	3 (1)	5 (2)	34 (53)	178 (102)	254 (145)
30	4 (2)	5 (2)	351 (175)	501 (250)	297 (116)	425 (165)	2 (2)	3 (2)	11 (9)	192 (58)	275 (83)
31	5 (2)	7 (3)	419 (108)	599 (155)	477 (121)	681 (173)	0 (0)	1 (1)	18 (28)	407 (134)	582 (191)
Mean	5	7	255	365	256	366	2	3	38	224	321
n	31	29	29	29	29	29	31	29	29	27	27
SD	5	6	112	160	103	147	2	3	41	224	320
Min	0	1	92	132	77	111	0	0	2	4	5
Max	23	32	483	690	477	681	6	9	144	889	1270

ED_004549_00015840-00207

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for November, 2007. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	12 (9)	17 (12)	399 (112)	570 (160)	592 (154)	846 (220)	4 (3)	6 (5)	161 (209)	516 (137)	737 (196)
2	6 (2)	8 (2)	379 (100)	542 (144)	483 (193)	690 (276)	3 (4)	4 (5)	105 (127)	560 (135)	801 (193)
3	9 (5)	12 (7)	332 (118)	474 (168)	449 (273)	642 (390)	3 (3)	5 (5)	97 (103)	627 (207)	896 (296)
4	10 (5)	14 (6)	308 (143)	440 (204)	365 (191)	521 (274)	3 (2)	5 (3)	125 (137)	561 (207)	802 (297)
5	9 (4)	13 (6)	426 (96)	608 (137)	403 (93)	575 (133)	0 (0)	1 (1)	124 (216)	749 (175)	1070 (250)
6	9 (2)	13 (2)	475 (76)	662 (98)	489 (130)	718 (181)	3 (2)	4 (3)	307 (308)	936 (149)	1340 (213)
7	8 (2)	11 (3)	401 (192)	576 (274)	394 (142)	565 (201)	6 (2)	9 (3)	40 (86)	888 (287)	1270 (411)
8	20 (12)	29 (17)	328 (174)	469 (249)	404 (182)	577 (260)	14 (21)	21 (30)	189 (263)	932 (336)	1330 (481)
9	15 (11)	21 (16)	350 (176)	500 (252)	360 (190)	513 (271)	10 (9)	14 (12)	83 (150)	1010 (287)	1450 (411)
10	3 (2)	4 (2)	246 (113)	352 (162)	271 (127)	388 (182)	7 (3)	10 (5)	9 (5)	882 (235)	1260 (337)
11	11 (7)	16 (10)	277 (132)	397 (188)	348 (160)	497 (230)	5 (3)	7 (4)	26 (36)	1020 (329)	1460 (471)
12	18 (6)	25 (9)	463 (143)	661 (205)	499 (120)	713 (172)	3 (2)	4 (4)			
13	12 (7)	18 (10)					5 (2)	7 (3)			
14	8 (6)	11 (9)	516 (84)	736 (119)	677 (239)	965 (341)	0 (0)	-1 (1)	6 (4)	24 (10)	34 (14)
15	9 (8)	13 (11)	524 (123)	747 (176)	454 (124)	648 (176)	2 (2)	3 (3)	34 (16)	53 (12)	76 (18)
16	11 (5)	15 (7)	459 (263)	656 (376)	378 (223)	540 (318)	4 (3)	6 (5)	35 (28)	67 (31)	95 (45)
17	19 (9)	27 (13)	357 (215)	510 (306)	266 (144)	379 (205)	1 (2)	2 (3)	20 (13)	90 (36)	129 (51)
18	18 (7)	26 (10)	415 (282)	593 (403)	335 (136)	479 (194)	1 (2)	1 (3)	48 (56)	130 (51)	186 (74)
19	3 (4)	5 (6)	351 (191)	501 (273)	219 (105)	313 (150)	4 (2)	6 (3)	53 (77)	196 (80)	280 (114)
20	6 (4)	8 (5)	487 (190)	696 (271)	322 (130)	459 (185)	1 (2)	1 (3)	79 (62)	335 (103)	478 (147)
21	2 (2)	3 (3)	680 (76)	971 (109)	463 (68)	660 (99)	0 (1)	0 (1)	119 (80)	508 (47)	726 (67)
22	5 (4)	7 (6)	765 (216)	1090 (309)	387 (61)	552 (86)	1 (2)	1 (2)	216 (115)	633 (102)	904 (146)
23	4 (5)	5 (8)	609 (121)	869 (173)	397 (52)	566 (75)	3 (2)	4 (3)	245 (143)	935 (143)	1340 (205)
24	14 (8)	21 (11)	774 (213)	1110 (304)	400 (42)	571 (60)	2 (2)	2 (3)	322 (165)	1070 (177)	1530 (253)
25	18 (5)	25 (8)	961 (180)	1370 (257)	458 (70)	653 (99)	3 (2)	4 (3)	337 (259)	1110 (170)	1590 (244)
26	8 (4)	12 (6)	704 (123)	1010 (176)	487 (57)	696 (81)	0 (0)	-1 (1)	216 (167)	1240 (212)	1770 (303)
27	39 (10)						2 (1)				
28	9 (5)						0 (1)				
29	5 (2)						0 (0)				
30	2 (2)	2 (3)	525 (64)	750 (91)	647 (48)	924 (70)	0 (1)	0 (1)	653 (375)	1630 (165)	2340 (236)
Mean	11	14	481	687	421	602	3	5	146	669	956
n	30	27	26	26	26	26	30	27	25	25	25
SD	7	8	171	244	106	152	3	5	143	418	598
Min	2	2	246	352	219	313	0	-1	6	24	34
Max	39	29	961	1370	677	965	14	21	653	1630	2340

ED_004549_00015840-00208

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for December, 2007. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	1 (1)	1 (1)	286 (147)	409 (210)	476 (241)	681 (345)	2 (1)	3 (1)	174 (272)	1190 (337)	1700 (481)
2	12 (9)	17 (13)	546 (228)	779 (325)	511 (96)	730 (138)	0 (1)	0 (1)	150 (239)	1180 (160)	1680 (229)
3	10 (7)	14 (10)	506 (179)	723 (256)	340 (111)	485 (159)	2 (1)	3 (2)	50 (86)	1010 (221)	1440 (317)
4	7 (5)	10 (7)	383 (157)	546 (224)	223 (95)	318 (135)	1 (2)	2 (3)	81 (123)	896 (256)	1280 (366)
5	11 (3)	16 (4)	506 (83)	722 (119)	342 (48)	488 (69)	-1 (0)	-1 (1)	6 (7)	935 (429)	1340 (615)
6	1 (1)	1 (2)	480 (126)	685 (180)	402 (92)	575 (132)	0 (0)	-1 (0)	7 (5)	321 (176)	
7	8 (6)	11 (9)	565 (90)	807 (128)	498 (283)	712 (405)	0 (0)	0 (0)	28 (31)	211 (236)	
8	0 (1)	0 (2)	492 (60)	703 (87)	326 (44)	465 (63)	0 (0)	-1 (0)	15 (3)	13 (3)	19 (4)
9	1 (1)	1 (1)	466 (52)	665 (75)	393 (230)	560 (327)	-1 (0)	-1 (1)	20 (7)	30 (12)	43 (17)
10	2 (2)	4 (3)	511 (92)	720 (131)	393 (183)	514 (187)	1 (1)	2 (2)	67 (28)	43 (15)	61 (21)
11	6 (3)	9 (5)	490 (75)	700 (108)	321 (61)	459 (88)	0 (1)	0 (2)	39 (8)	66 (17)	94 (24)
12	4 (3)	6 (4)	497 (45)	709 (66)	337 (70)	480 (100)	3 (3)	5 (4)	81 (27)	95 (24)	136 (34)
13	6 (4)	8 (5)	566 (85)	808 (122)	407 (56)	580 (80)	0 (0)	-1 (1)	97 (28)	171 (62)	244 (89)
14	6 (7)	8 (11)	520 (38)	743 (54)	390 (39)	557 (55)	-1 (0)	-1 (0)	109 (43)	193 (27)	277 (38)
15	12 (8)	18 (12)	552 (87)	788 (124)	420 (89)	599 (128)	-1 (0)	-1 (1)	39 (16)	226 (51)	323 (73)
16	15 (3)	21 (5)	529 (103)	754 (147)	462 (140)	659 (201)	3 (3)	4 (4)	121 (80)	247 (45)	354 (64)
17	11 (6)	15 (8)	533 (85)	761 (121)	338 (86)	483 (123)	3 (2)	4 (3)	151 (75)	383 (50)	548 (72)
18	9 (8)	12 (11)	548 (83)	783 (119)	289 (61)	412 (88)	3 (4)	4 (6)	126 (63)		
19	4 (4)	6 (5)	831 (392)	1190 (560)	315 (93)	450 (133)	2 (3)	2 (4)	199 (161)	725 (124)	1040 (177)
20	6 (5)	6 (8)					2 (3)	5 (5)			
21	16 (9)						4 (2)				
22	6 (4)	9 (6)	601 (141)	857 (201)	411 (110)	586 (157)	0 (1)	0 (1)	116 (84)	933 (140)	1330 (201)
23	14 (6)	20 (8)	688 (243)	982 (347)	392 (78)	559 (112)	1 (1)	1 (1)	286 (146)	928 (122)	1330 (174)
24	12 (9)	17 (13)	501 (55)	715 (79)	411 (64)	587 (91)	3 (2)	4 (3)	200 (170)	903 (158)	1290 (226)
25	8 (7)	12 (9)	546 (103)	779 (148)	428 (98)	611 (141)	2 (2)	2 (2)	296 (184)	1060 (126)	1520 (180)
26	9 (5)	12 (7)	551 (91)	786 (131)	463 (110)	662 (157)	0 (0)	0 (1)	278 (209)	1330 (253)	1900 (363)
27	4 (5)	6 (7)	559 (128)	797 (183)	434 (102)	620 (146)	0 (0)	0 (0)		1640 (174)	
28	22 (5)	31 (7)	542 (64)	773 (91)	336 (45)	479 (65)	1 (1)	2 (1)	579 (481)	1350 (206)	
29	20 (6)	29 (9)	719 (232)	1030 (332)	446 (257)	635 (366)	2 (2)	3 (2)	650 (457)	1530 (372)	
30	13 (8)	18 (11)	636 (56)	908 (80)	281 (59)	401 (84)	4 (1)	5 (2)	268 (279)	1170 (357)	
31	9 (5)	12 (7)	653 (192)		301 (102)		0 (1)	0 (2)		247 (206)	
Mean	9	12	545	772	382	548	1	1	157	679	855
n	31	30	29	28	29	28	31	30	27	28	21
SD	5	8	98	139	69	98	1	2	156	510	646
Min	0	0	286	409	223	318	-1	-1	6	13	19
Max	22	31	831	1190	511	730	4	5	650	1640	1900

ED_004549_00015840-00209

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for January, 2008. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	12 (3)						0 (0)				
2	8 (7)	12 (10)	772 (203)	1100 (290)	360 (45)	514 (64)	1 (0)	1 (1)	54 (18)	77 (22)	110 (32)
3	8 (3)						2 (0)				
4	18 (8)	25 (11)	583 (174)	833 (248)	436 (140)	624 (200)	2 (1)	3 (1)	40 (19)	89 (34)	128 (49)
5	7 (6)	10 (9)	450 (197)	641 (282)	356 (159)	507 (228)	2 (1)	3 (2)	39 (27)	84 (27)	119 (39)
6	6 (3)	9 (5)	496 (121)	709 (173)	427 (147)	612 (211)	1 (1)	2 (1)	64 (39)	119 (38)	170 (54)
7	8 (5)	11 (7)	638 (140)	912 (201)	535 (137)	768 (197)	2 (2)	3 (3)		180 (34)	257 (49)
8	9 (7)	13 (10)	885 (345)	1260 (494)	714 (300)	1020 (430)	2 (3)	3 (4)	112 (68)	307 (47)	439 (68)
9	5 (3)	7 (4)	475 (160)	678 (229)	517 (212)	742 (306)	3 (2)	5 (3)	110 (92)	406 (86)	581 (123)
10	6 (3)	8 (4)	586 (76)	837 (108)	519 (68)	745 (98)	1 (2)	2 (3)	185 (140)	605 (62)	866 (88)
11	6 (2)	9 (4)					1 (1)	1 (1)			
12	12 (5)	18 (7)	557 (80)	794 (115)	476 (67)	681 (96)	-1 (0)	-1 (0)	223 (111)	872 (122)	1250 (175)
13	19 (8)	27 (12)	586 (141)	836 (201)	545 (109)	781 (158)	1 (1)	1 (1)	220 (157)	809 (95)	1160 (136)
14	30 (21)	43 (30)	552 (109)	787 (156)	488 (76)	699 (109)	0 (1)	1 (1)	223 (175)	917 (96)	1310 (138)
15	10 (5)	14 (7)	577 (97)	822 (139)	586 (195)	842 (282)	2 (1)	3 (1)	280 (189)	1150 (213)	1650 (314)
16	12 (4)	18 (5)	691 (158)	985 (227)	674 (127)	965 (182)	0 (1)	0 (2)	194 (155)	1400 (265)	2000 (380)
17	9 (5)	12 (7)	599 (127)	854 (183)	588 (121)	842 (174)	3 (2)	4 (2)	290 (209)	1090 (201)	1560 (288)
18	6 (2)	8 (3)	386 (47)	551 (68)	381 (103)		0 (0)	0 (1)	329 (248)	1280 (190)	1830 (272)
19	6 (3)	9 (4)	473 (271)	674 (386)	312 (73)	452 (108)	2 (1)	3 (2)	481 (362)	1230 (272)	1760 (390)
20	3 (2)	5 (3)	335 (68)	477 (97)	241 (90)		5 (1)	7 (2)	315 (337)	1250 (265)	1780 (378)
21	1 (1)	2 (1)	375 (50)	534 (71)	212 (32)		0 (2)	0 (2)	259 (150)	1500 (225)	2150 (322)
22	7 (2)	10 (3)	409 (78)	583 (111)	215 (27)		0 (1)	0 (1)	294 (186)	1280 (269)	1840 (385)
23	6 (3)	8 (5)	468 (139)	667 (198)	212 (50)		0 (1)	0 (1)		1470 (139)	
24	3 (2)	4 (2)					0 (1)	0 (1)			
25	4 (2)	6 (3)	387 (114)	552 (163)	323 (74)	460 (106)	1 (1)	1 (1)	90 (46)	190 (51)	271 (74)
26	7 (4)	10 (5)	393 (137)	561 (195)	311 (112)	444 (160)	3 (3)	4 (4)	47 (26)	102 (28)	146 (40)
27											
28											
29											
30											
31											
Mean	9	12	531	757	428	688	1	2	192	745	1020
n	26	24	22	22	22	17	26	24	20	22	21
SD	6	9	134	191	145	171	1	2	118	521	728
Min	1	2	335	477	212	444	-1	-1	39	77	110
Max	30	43	885	1260	714	1020	5	7	481	1500	2150

ED_004549_00015840-00210

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for February, 2008. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	6 (4)	8 (5)	480 (169)	684 (241)	412 (152)	588 (217)	1 (1)	1 (1)	104 (104)	186 (60)	266 (86)
2	7 (4)	10 (6)	472 (90)	674 (129)	385 (75)	550 (107)	1 (3)	2 (4)	109 (67)	318 (97)	455 (139)
3	9 (7)	13 (10)	425 (92)	606 (132)	342 (86)	489 (123)	1 (1)	1 (1)	114 (112)	374 (72)	535 (103)
4	0 (1)						-1 (1)				
5	3 (4)	5 (5)	564 (62)	805 (89)	444 (50)	634 (71)	-1 (0)	-2 (0)	97 (42)	661 (147)	947 (210)
6	14 (5)	20 (6)	735 (200)	1050 (287)			3 (2)	5 (3)	183 (132)	692 (119)	991 (171)
7	16 (5)	23 (8)					0 (1)	0 (1)			
8	14 (8)	20 (12)	505 (77)	721 (109)	376 (68)	536 (98)	0 (1)	1 (1)	131 (79)	813 (91)	1160 (130)
9	6 (4)	8 (5)	420 (119)	598 (170)	333 (123)	475 (176)	3 (1)	5 (2)	238 (258)	997 (172)	1430 (246)
10	10 (4)	14 (6)	487 (100)	695 (143)	340 (98)	485 (140)	2 (1)	2 (1)	351 (189)	1290 (214)	1850 (307)
11	6 (1)	8 (1)	456 (79)	650 (113)	304 (73)	434 (104)	0 (1)	1 (1)	300 (304)	1290 (294)	1850 (421)
12	20 (7)	29 (10)	488 (94)	698 (134)	330 (64)	470 (92)	1 (1)	2 (2)	350 (220)	1500 (229)	2170 (332)
13	13 (14)	18 (19)	392 (162)	560 (231)	299 (113)	426 (162)	4 (2)	6 (2)	257 (330)	1330 (250)	1900 (358)
14	2 (1)	2 (2)	575 (178)	822 (255)	495 (75)	707 (107)	1 (2)	1 (3)	292 (182)	1640 (182)	2350 (261)
15	5 (4)	7 (6)	423 (59)	603 (85)	492 (43)	701 (61)	0 (0)	0 (0)	568 (360)	1790 (346)	2560 (496)
16	5 (1)	7 (2)	440 (75)	628 (107)	481 (58)	688 (83)	2 (1)	2 (2)	301 (199)	1580 (183)	2270 (261)
17	6 (4)	9 (6)	445 (38)	635 (53)	525 (56)	750 (81)	1 (1)	1 (1)	287 (142)	1720 (237)	2470 (340)
18	19 (7)	27 (10)	404 (103)	577 (147)	439 (82)	626 (117)	3 (2)	4 (3)	148 (179)	854 (790)	1180 (1250)
19	10 (8)	14 (11)	355 (115)	506 (164)	459 (65)	655 (93)	1 (1)	2 (1)	61 (41)	74 (12)	105 (17)
20	8 (5)	12 (7)	504 (80)	718 (114)	618 (144)	882 (206)	2 (2)	3 (3)	21 (6)	55 (15)	79 (22)
21	6 (2)	8 (3)	603 (251)	860 (359)	582 (275)	831 (392)	2 (2)	3 (3)	30 (18)	48 (14)	68 (20)
22	12 (9)	17 (13)	395 (139)	564 (198)	370 (141)	527 (202)	4 (1)	5 (2)	48 (19)	58 (13)	82 (18)
23	5 (3)	7 (5)	326 (114)	466 (162)	306 (77)	438 (111)	6 (3)	9 (4)	42 (14)	62 (12)	88 (18)
24	6 (4)	9 (6)	298 (139)	425 (199)	300 (118)	429 (168)	3 (1)	5 (1)	56 (32)	85 (18)	121 (26)
25	4 (1)	6 (1)	301 (105)	430 (149)	305 (42)	435 (59)	3 (1)	4 (2)	64 (39)	129 (27)	185 (38)
26	8 (8)	11 (11)	420 (97)	599 (138)	431 (76)	615 (108)	2 (1)	2 (2)	50 (24)	165 (20)	237 (29)
27	19 (7)	28 (10)	408 (118)	582 (168)	364 (122)	520 (174)	6 (4)	8 (6)	74 (54)	212 (53)	304 (77)
28	15 (5)	21 (7)	467 (227)	667 (324)	379 (113)	540 (161)	4 (3)	5 (4)	66 (66)	256 (71)	366 (102)
29	18 (15)	26 (22)	419 (178)	613 (247)	344 (126)	503 (173)	2 (1)	3 (1)	86 (68)	364 (62)	524 (89)
Mean	9	14	452	646	402	574	2	3	164	687	983
n	29	28	27	27	26	26	29	28	27	27	27
SD	6	8	92	131	87	125	2	2	131	604	866
Min	0	2	298	425	299	426	-1	-2	21	48	68
Max	20	29	735	1050	618	882	6	9	568	1790	2560

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Table E7. Daily means (SD) of H2S concentrations at Site OK4B for March, 2008. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	2 (1)	3 (1)	317 (217)	453 (311)	247 (151)	352 (216)	3 (1)	4 (1)	51 (64)	395 (134)	566 (192)
2	3 (0)	4 (0)	431 (154)	617 (219)	403 (178)	576 (254)	2 (1)	3 (1)	14 (21)	577 (159)	827 (227)
3	5 (3)	7 (4)	513 (35)	733 (50)	454 (85)	647 (122)	2 (1)	2 (1)	209 (176)	939 (90)	1340 (129)
4	8 (2)	11 (3)	479 (151)	683 (215)	451 (230)	643 (329)	5 (1)	8 (2)	219 (214)	975 (294)	1400 (422)
5	5 (1)	7 (1)	561 (88)	801 (125)	547 (90)	780 (128)	2 (1)	3 (1)	210 (159)	1310 (190)	1880 (272)
6	11 (11)	15 (15)	600 (94)	855 (134)	449 (68)	640 (97)	2 (1)	2 (1)	299 (207)	1320 (214)	1880 (307)
7	17 (13)	24 (18)	577 (89)	824 (126)	511 (93)	728 (134)	4 (2)	6 (2)	232 (125)		
8	10 (5)	14 (7)	448 (135)	638 (193)	405 (194)	578 (277)	3 (1)	4 (2)	244 (226)	1310 (327)	1870 (468)
9	7 (5)	11 (8)	374 (135)	534 (193)	380 (212)	542 (302)	1 (1)	2 (1)	189 (251)	1180 (213)	1690 (306)
10	6 (2)	8 (3)	361 (159)	514 (227)	484 (214)	690 (306)	4 (1)	5 (1)	160 (182)	1200 (285)	1720 (408)
11	5 (3)	8 (4)	333 (171)	475 (244)	389 (232)	556 (331)	3 (1)	4 (2)	87 (110)	989 (243)	1410 (348)
12	8 (4)	12 (6)	380 (189)	542 (270)	353 (173)	504 (248)	2 (1)	2 (1)	63 (104)	1000 (192)	1430 (275)
13	11 (2)	15 (3)	411 (156)	585 (224)	475 (341)	676 (491)	2 (1)	3 (1)		1040 (114)	1480 (165)
14	7 (3)	10 (4)	399 (163)	570 (232)	260 (92)	372 (131)	2 (1)	2 (1)	203 (209)	1140 (273)	1630 (391)
15	14 (9)	20 (12)	480 (180)	685 (258)	381 (153)	544 (219)	7 (5)	10 (7)	231 (167)	1220 (166)	1750 (238)
16	31 (3)	43 (4)	562 (112)	803 (159)	398 (42)	569 (61)	11 (4)	16 (6)	156 (180)	1320 (135)	1890 (193)
17	10 (9)	14 (13)	558 (136)	799 (194)	433 (77)	620 (111)	2 (1)	3 (1)	145 (181)	601 (506)	754 (779)
18	14 (7)	20 (10)	360 (134)	514 (192)	412 (81)	589 (116)	2 (1)	3 (1)	24 (16)	57 (19)	81 (28)
19	17 (12)	24 (17)	297 (170)	424 (243)	311 (164)	444 (234)	5 (4)	7 (6)	17 (11)	33 (16)	47 (23)
20	5 (3)	7 (4)	314 (238)	447 (340)	260 (177)	371 (253)	6 (3)	9 (5)	16 (16)	30 (17)	42 (24)
21	5 (3)	7 (4)	142 (53)	203 (76)	274 (121)	392 (173)	1 (0)	1 (1)	19 (16)	45 (27)	65 (39)
22	3 (1)	4 (1)	156 (37)	223 (53)	430 (93)	614 (133)	1 (0)	1 (0)	37 (6)	69 (19)	99 (27)
23	4 (1)	5 (1)	150 (53)	214 (76)	447 (111)	638 (158)	2 (1)	3 (2)	54 (26)	100 (22)	143 (32)
24	2 (1)	3 (1)			306 (139)	438 (199)	4 (1)	5 (2)			
25	5 (1)	7 (2)	117 (64)	167 (91)	431 (242)	616 (345)	3 (1)	4 (2)	36 (36)	143 (46)	204 (66)
26	13 (10)	19 (14)	209 (147)	298 (210)	324 (196)	462 (280)	6 (3)	8 (5)	46 (44)	209 (51)	299 (74)
27	10 (5)	14 (7)	237 (114)	338 (163)	391 (124)	558 (177)	3 (2)	4 (3)	89 (89)	323 (46)	462 (66)
28	10 (5)	14 (7)	260 (98)	371 (140)	453 (176)	646 (251)	4 (3)	6 (4)	114 (102)	459 (56)	658 (80)
29	6 (4)	8 (6)	181 (132)	258 (188)	273 (199)	390 (284)	6 (1)	9 (2)	105 (137)	418 (129)	599 (186)
30	6 (1)	9 (2)	223 (49)	320 (71)	343 (102)	490 (146)	3 (2)	4 (2)	104 (136)	563 (87)	807 (125)
31	5 (3)		264 (88)	377 (126)	443 (188)	633 (268)	1 (0)		127 (150)	763 (123)	1090 (176)
Mean	9	12	356	509	391	558	3	5	121	680	970
n	31	30	30	30	31	31	31	30	29	29	29
SD	6	8	142	202	77	110	2	3	83	467	669
Min	2	3	117	167	247	352	1	1	14	30	42
Max	31	43	600	855	547	780	11	16	299	1320	1890

ED_004549_00015840-00212

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for April, 2008. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	20 (10)		335 (126)	488 (175)	504 (209)	721 (296)	4 (2)		189 (197)	966 (214)	1390 (306)
2	11 (6)		284 (132)	406 (188)	360 (146)	514 (208)	7 (1)		260 (317)	908 (214)	1300 (306)
3	11 (4)		329 (124)	478 (175)	422 (221)	614 (315)	3 (3)		203 (260)	1000 (229)	1440 (333)
4	9 (5)		310 (153)	443 (219)	381 (214)	544 (307)	4 (3)		198 (214)	1010 (230)	1450 (331)
5	2 (1)		236 (180)	337 (257)	205 (136)	292 (194)	6 (2)		74 (138)	799 (300)	1140 (431)
6	6 (4)		250 (118)	357 (169)	304 (152)	434 (217)	2 (1)		49 (108)	890 (195)	1270 (279)
7	7 (3)		347 (149)	495 (213)	259 (90)	370 (128)	1 (0)		166 (209)	897 (166)	1280 (238)
8	16 (10)		393 (157)	562 (225)	301 (138)	430 (197)	2 (1)		114 (150)	779 (944)	1120 (1360)
9	27 (6)		435 (47)	622 (67)	320 (31)	458 (44)	6 (1)		33 (16)	106 (30)	
10	11 (7)		358 (87)	514 (125)	393 (112)	565 (160)	5 (2)		20 (14)	98 (69)	
11	15 (5)		379 (87)	541 (124)	381 (107)	544 (153)	4 (3)		12 (4)	35 (10)	
12	7 (2)		372 (123)	532 (175)	360 (84)	513 (120)	2 (1)		8 (7)	24 (9)	
13	6 (2)		360 (163)	514 (232)	349 (111)	498 (159)	2 (1)		11 (7)	24 (9)	
14	9 (6)						5 (2)				
15	2 (1)	2 (2)	183 (107)	262 (153)	178 (111)	254 (158)	2 (0)	3 (1)	7 (8)	30 (23)	43 (33)
16	3 (1)	5 (1)	171 (60)	245 (86)	169 (69)	242 (99)	1 (0)	2 (1)	3 (2)	33 (7)	47 (10)
17	6 (6)	9 (9)	509 (124)	728 (176)	552 (339)	790 (486)	1 (1)	2 (1)	21 (18)	81 (16)	116 (23)
18	16 (11)	23 (16)	393 (263)	561 (376)	279 (150)	398 (214)	2 (1)	3 (1)	16 (18)	81 (25)	115 (36)
19	21 (8)	30 (11)	272 (160)	389 (228)	264 (248)	377 (354)	5 (2)	7 (3)	14 (12)	101 (33)	144 (47)
20	7 (6)	10 (9)	198 (62)	282 (89)	168 (65)	240 (92)	4 (2)	5 (2)	6 (3)	114 (26)	162 (37)
21	9 (3)	13 (5)	289 (131)	412 (187)	222 (125)	317 (179)	2 (1)	3 (1)			
22	21 (19)	31 (28)	288 (142)	413 (204)	236 (132)	338 (188)	2 (2)	4 (2)	11 (12)	276 (47)	394 (67)
23	27 (7)	38 (10)	245 (114)	351 (163)	274 (143)	394 (206)	8 (4)	11 (6)	24 (32)	320 (61)	459 (87)
24	7 (5)	10 (8)	222 (76)	318 (108)	170 (51)	244 (73)	2 (1)	3 (1)	5 (5)	278 (33)	399 (48)
25	12 (8)	17 (12)	504 (203)	720 (291)	281 (182)	402 (261)	4 (3)	5 (4)	22 (27)	400 (97)	572 (140)
26	8 (4)	12 (6)	450 (200)	643 (286)	268 (103)	382 (148)	5 (4)	7 (5)	29 (55)	534 (166)	763 (238)
27	9 (4)	13 (5)	452 (235)	646 (337)	306 (131)	438 (188)	1 (1)	2 (1)	52 (73)	662 (138)	946 (198)
28	15 (6)	21 (8)	336 (250)	480 (356)	252 (130)	360 (186)	3 (2)	5 (3)	65 (105)	661 (165)	944 (235)
29											
30											
Mean	11	17	330	472	302	432	3	4	62	427	738
n	28	14	27	27	27	27	28	14	26	26	21
SD	7	10	91	130	95	137	2	3	74	368	511
Min	2	2	171	245	168	240	1	2	3	24	43
Max	27	38	509	728	552	790	8	11	260	1010	1450

ED_004549_00015840-00213

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for May, 2008. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1											
2											
3											
4											
5											
6	7 (7)	10 (10)	132 (54)	190 (78)	143 (61)	206 (87)	6 (2)	8 (3)	5 (3)	100 (130)	143 (186)
7	17 (9)	24 (13)	231 (68)	332 (98)	267 (82)	384 (118)	2 (2)	3 (3)	6 (3)	14 (7)	20 (10)
8	6 (2)	8 (3)	249 (115)	357 (165)	298 (111)	428 (159)	5 (3)	7 (4)	9 (8)	18 (12)	25 (17)
9	4 (1)	5 (1)	201 (51)	288 (74)	308 (190)	442 (273)	2 (1)	3 (2)	44 (76)	66 (110)	95 (157)
10	2 (1)	3 (1)	327 (281)	467 (402)	236 (81)	339 (116)	1 (1)	2 (2)	6 (8)	37 (12)	53 (17)
11	2 (1)	3 (2)	324 (101)	464 (145)	341 (70)	488 (101)	2 (2)	3 (3)	29 (32)	68 (14)	97 (19)
12	0 (1)	1 (1)	238 (89)	341 (127)	228 (147)	327 (210)	2 (1)	3 (2)	12 (15)	80 (14)	115 (21)
13	3 (2)	4 (3)	259 (52)	371 (75)	283 (71)	405 (102)	0 (0)	0 (0)	12 (16)	110 (23)	158 (32)
14	16 (10)	22 (14)	314 (65)	450 (94)	415 (137)	596 (196)	3 (2)	4 (3)	65 (56)	175 (17)	250 (24)
15	1 (1)	2 (1)	267 (76)	383 (109)	246 (65)	353 (93)	5 (4)	6 (6)	36 (42)	197 (55)	282 (79)
16	1 (0)	1 (0)	286 (111)	409 (159)	200 (85)	286 (122)	0 (0)	0 (0)	51 (80)	248 (73)	355 (105)
17	5 (3)	7 (4)	233 (80)	334 (114)	178 (52)	255 (74)	1 (0)	1 (0)	11 (28)	256 (84)	367 (120)
18	4 (1)	6 (2)	235 (90)	336 (129)	178 (71)	255 (101)	1 (1)	1 (1)	25 (39)	317 (92)	454 (131)
19	7 (5)	11 (7)	241 (65)	346 (92)	166 (79)	238 (113)	1 (1)	1 (1)	4 (3)	294 (86)	422 (122)
20	34 (15)	49 (22)	183 (28)	262 (41)	154 (36)	221 (51)	5 (4)	8 (6)	6 (5)	369 (47)	529 (67)
21	8 (11)	11 (16)	163 (61)	234 (88)	164 (64)	235 (92)	10 (5)	15 (7)	8 (3)	352 (129)	504 (184)
22	4 (3)	5 (4)	143 (26)	205 (37)	130 (42)	187 (60)	3 (1)	4 (2)	6 (4)	275 (68)	394 (98)
23	5 (4)	7 (5)	146 (34)	210 (49)	83 (21)	119 (30)	4 (1)	5 (1)	7 (9)	357 (138)	512 (199)
24	5 (6)	7 (9)	201 (79)	288 (113)	144 (107)	206 (153)	3 (2)	4 (2)	13 (19)	405 (204)	579 (292)
25	1 (1)	1 (1)	151 (32)		85 (26)	123 (38)	4 (1)	6 (1)	5 (3)	318 (111)	
26	3 (2)	5 (2)	153 (19)	220 (27)	81 (24)	117 (35)	3 (1)	4 (1)	9 (6)	315 (98)	452 (141)
27	6 (3)	8 (4)	237 (66)	341 (94)	199 (77)	285 (110)	1 (1)	1 (1)	222 (494)		
28	11 (8)	15 (11)	246 (162)	354 (233)	208 (120)	299 (172)	3 (2)	5 (3)	8 (4)	14 (6)	19 (8)
29	1 (0)	1 (1)	69 (20)	99 (29)	92 (14)	133 (21)	3 (2)	5 (3)	3 (1)	10 (3)	14 (4)
30	11 (9)	15 (13)	92 (22)	133 (31)	119 (41)	172 (58)	2 (2)	3 (2)	3 (2)	12 (3)	17 (4)
31	16 (6)	23 (9)	107 (22)	154 (32)	125 (38)	179 (55)	3 (1)	4 (2)	2 (2)	15 (3)	21 (4)
Mean	7	10	209	303	195	280	3	4	23	177	245
n	26	26	26	25	26	26	26	26	26	25	24
SD	7	10	69	100	84	121	2	3	43	137	196
Min	0	1	69	99	81	117	0	0	2	10	14
Max	34	49	327	467	415	596	10	15	222	405	579

ED_004549_00015840-00214

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for June, 2008. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	27 (9)	39 (12)	109 (35)	157 (50)	112 (21)	161 (31)	9 (6)	13 (8)	5 (3)	24 (6)	34 (9)
2	9 (12)	16 (18)	116 (29)	173 (44)	89 (37)	129 (59)	4 (1)	6 (2)	5 (4)	43 (15)	62 (22)
3	21 (8)		100 (15)		78 (18)		1 (1)		6 (5)		
4	3 (4)		119 (54)		120 (50)		4 (2)		2 (1)	84 (20)	
5	1 (1)	1 (1)	94 (12)	134 (17)	102 (23)	147 (33)	1 (1)	2 (2)	1 (1)	93 (34)	133 (48)
6	1 (1)	2 (1)	131 (51)	188 (73)	153 (90)	219 (130)	0 (0)	1 (0)	14 (28)	115 (36)	165 (51)
7	0 (0)	1 (1)	81 (8)	117 (12)	80 (13)	116 (19)	1 (0)	1 (0)	2 (1)	97 (17)	140 (25)
8	3 (1)	4 (2)	114 (18)	164 (25)	101 (31)	146 (44)	1 (1)	1 (1)	0 (1)	138 (30)	198 (43)
9	3 (0)	4 (1)	148 (39)	211 (56)	136 (54)	196 (77)	4 (3)	6 (5)	3 (3)	208 (43)	297 (62)
10	3 (1)	4 (1)	124 (47)	179 (68)	117 (38)	168 (54)	5 (4)	8 (6)	3 (2)	196 (50)	282 (72)
11	1 (1)	1 (1)	110 (18)	158 (26)	80 (21)	114 (30)	1 (1)	1 (1)	1 (1)	181 (25)	260 (37)
12	6 (2)	8 (2)	150 (48)	216 (69)	101 (49)	145 (70)	0 (0)	0 (1)	3 (5)	263 (76)	376 (109)
13	9 (3)	12 (5)	141 (24)	202 (35)	79 (27)	113 (39)	3 (3)	4 (5)	2 (2)	267 (72)	383 (102)
14	3 (3)						7 (0)				
15	4 (3)	6 (5)	112 (13)	161 (19)	53 (8)	76 (12)	7 (3)	10 (4)	2 (2)	314 (111)	451 (159)
16	20 (5)	29 (7)	123 (26)	178 (37)	59 (16)	85 (23)	3 (1)	4 (2)	3 (4)	182 (205)	
17	3 (3)	5 (4)	112 (52)	162 (75)	68 (13)	98 (19)	2 (1)	3 (1)	5 (3)	13 (10)	19 (15)
18	13 (11)	18 (16)	98 (57)	142 (82)	114 (30)	164 (43)	3 (1)	5 (2)	6 (4)	8 (4)	12 (5)
19	18 (4)	26 (5)	67 (13)	97 (19)	102 (21)	147 (31)	8 (4)	12 (6)	5 (4)	11 (3)	16 (5)
20	8 (2)	11 (3)	87 (25)	125 (36)	115 (35)	166 (51)	2 (1)	2 (1)			
21	6 (3)						9 (2)				
22	4 (3)	5 (4)	83 (21)	119 (30)	102 (23)	147 (34)	6 (2)	8 (3)	7 (2)	20 (5)	29 (7)
23	5 (4)	7 (6)	78 (14)	113 (20)	106 (14)	153 (20)	4 (0)	5 (1)	6 (2)	31 (7)	45 (11)
24	12 (6)	16 (9)	86 (13)	123 (19)	112 (23)	162 (33)	4 (2)	6 (2)	9 (5)	45 (16)	64 (22)
25	10 (5)	15 (7)					5 (1)	7 (2)			
26	4 (1)	6 (1)					6 (1)	9 (2)			
27	13 (10)	19 (14)					2 (1)	3 (1)			
28	9 (1)	12 (2)	130 (20)	187 (30)	144 (74)	207 (106)	5 (2)	7 (2)	3 (1)	106 (18)	152 (26)
29	27 (6)	39 (9)	153 (25)	219 (35)	76 (18)	109 (26)	4 (1)	6 (1)	6 (3)	155 (33)	222 (47)
30	6 (4)	9 (6)	129 (15)	186 (21)	59 (13)	84 (19)	5 (1)	7 (1)	7 (2)	129 (20)	185 (28)
Mean	8	12	112	161	98	141	4	5	4	118	168
n	30	26	25	23	25	23	30	26	24	23	21
SD	7	11	23	35	26	38	3	3	3	88	131
Min	0	1	67	97	53	76	0	0	0	8	12
Max	27	39	153	219	153	219	9	13	14	314	451

ED_004549_00015840-00215

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for July, 2008. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	2 (1)	3 (2)					5 (1)	7 (2)			
2	1 (1)	1 (1)	125 (25)	179 (35)	69 (14)	100 (20)	1 (1)	2 (1)	1 (1)	170 (30)	245 (44)
3	9 (8)						0 (1)				
4	10 (11)	14 (16)	131 (35)	188 (51)	91 (32)		2 (1)	3 (1)	5 (3)	245 (37)	352 (53)
5	0 (1)	1 (1)	131 (17)	189 (24)	87 (20)		3 (0)	4 (1)	3 (1)	286 (50)	412 (72)
6	1 (0)	1 (1)	137 (18)	197 (25)	88 (17)		3 (1)	5 (1)	3 (2)	357 (76)	514 (109)
7	0 (0)	0 (1)	137 (49)	197 (70)	89 (26)		3 (1)	4 (1)	3 (2)	399 (446)	
8	0 (1)	0 (1)	104 (27)	151 (39)	98 (34)	141 (49)	3 (1)	5 (1)	2 (1)	7 (2)	10 (3)
9	2 (1)	3 (2)	77 (14)	112 (20)	68 (17)	97 (25)	1 (0)	2 (1)	4 (2)	13 (4)	18 (5)
10	0 (1)	0 (1)	116 (87)	167 (125)	73 (27)	105 (39)	2 (1)	3 (1)	6 (6)	13 (5)	18 (8)
11	0 (1)	0 (1)	65 (18)	94 (26)	63 (11)	91 (16)	2 (1)	3 (1)	3 (1)	11 (3)	16 (4)
12	1 (1)	2 (1)	79 (16)	113 (23)	89 (26)	128 (37)	1 (2)	2 (3)	0 (2)	15 (4)	21 (6)
13	6 (3)	9 (5)	71 (20)	101 (29)	81 (28)	116 (40)	1 (1)	2 (1)	3 (4)	27 (11)	39 (16)
14	1 (1)	2 (1)	64 (18)	92 (25)	74 (17)	106 (25)	4 (2)	6 (3)	2 (1)	35 (16)	50 (24)
15	2 (1)	3 (1)	72 (15)	103 (22)	87 (20)	126 (28)	4 (2)	5 (2)	6 (7)	47 (8)	67 (11)
16	2 (1)	3 (1)	67 (23)		91 (36)	131 (53)	3 (1)	5 (2)		86 (33)	124 (47)
17	1 (1)	1 (1)	76 (20)	110 (29)	88 (20)	126 (29)	5 (1)	7 (2)	4 (2)	92 (11)	132 (16)
18	9 (3)	14 (5)	78 (11)	113 (16)	93 (15)	134 (21)	4 (4)	5 (5)	4 (4)	116 (30)	167 (43)
19	1 (1)	1 (2)	89 (13)	128 (19)	102 (18)	146 (26)	1 (0)	2 (1)	2 (2)	127 (11)	183 (17)
20	1 (1)	2 (2)	101 (15)	145 (22)	113 (19)	162 (27)	3 (3)	5 (4)	1 (1)	183 (37)	263 (52)
21	1 (1)	2 (1)	116 (27)		113 (24)	162 (34)	3 (1)	4 (1)	5 (4)	173 (15)	249 (21)
22	3 (1)	4 (1)	118 (20)		112 (26)	161 (38)	4 (1)	6 (2)	8 (3)	198 (22)	285 (32)
23	1 (1)	2 (2)	106 (22)		117 (31)	168 (44)	3 (1)	4 (2)	4 (2)	230 (25)	331 (36)
24	1 (1)	2 (1)	192 (267)		98 (17)	141 (25)	4 (2)	5 (3)	4 (2)	227 (17)	326 (25)
25	7 (8)	10 (11)	99 (11)	142 (16)	102 (24)	147 (35)	4 (1)	6 (2)	4 (2)	251 (21)	361 (31)
26	3 (4)	4 (6)	93 (7)	133 (11)	100 (55)	144 (79)	4 (1)	6 (1)	4 (3)	294 (26)	423 (37)
27	2 (1)	2 (2)	109 (20)	157 (28)	71 (14)	102 (20)	4 (1)	6 (2)	6 (2)	285 (29)	411 (42)
28	9 (7)	13 (10)	104 (18)	150 (26)	77 (19)	111 (28)	4 (1)	6 (2)	8 (10)	264 (88)	381 (126)
29	9 (5)	13 (8)	91 (16)		79 (47)		0 (1)	0 (1)			
30	9 (3)	14 (5)	119 (17)	172 (24)	87 (27)	125 (39)	1 (1)	1 (1)	2 (2)	9 (9)	13 (13)
31	6 (3)	8 (4)	148 (46)	212 (66)	93 (50)	133 (72)	11 (5)	16 (7)	4 (2)	11 (4)	16 (6)
Mean	3	4	104	145	89	129	3	5	4	149	201
n	31	30	29	23	29	24	31	30	27	28	27
SD	3	5	29	36	14	22	2	3	2	119	159
Min	0	0	64	92	63	91	0	0	0	7	10
Max	10	14	192	212	117	168	11	16	8	399	514

ED_004549_00015840-00216

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for August, 2008. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	1 (0)	1 (0)	97 (25)	139 (35)	82 (19)	118 (28)	3 (2)	5 (3)	3 (1)	11 (4)	16 (6)
2	0 (0)	1 (1)	79 (26)	113 (37)	81 (12)	116 (18)	2 (1)	3 (1)	2 (2)	8 (3)	11 (4)
3	1 (1)	1 (1)	81 (15)	116 (21)	98 (12)	141 (17)	3 (1)	4 (2)	3 (2)	9 (4)	13 (6)
4	1 (1)	1 (1)	96 (26)	138 (37)	87 (16)	125 (23)	2 (1)	3 (1)	3 (2)	13 (6)	18 (9)
5	5 (3)	7 (4)	133 (47)	191 (68)	104 (27)	150 (39)	0 (0)	0 (1)	3 (4)	13 (7)	19 (10)
6	4 (1)	6 (2)	110 (83)	159 (120)	108 (38)	156 (55)	4 (2)	5 (4)	4 (3)	28 (13)	40 (18)
7	17 (4)	24 (6)	65 (24)	94 (34)	93 (23)	134 (34)	6 (1)	9 (1)			
8	19 (2)	28 (4)	55 (15)	79 (21)	89 (23)	128 (33)	6 (1)	9 (1)			
9	2 (3)	3 (4)	67 (14)	97 (21)	76 (13)	110 (18)	2 (2)	2 (2)	1 (3)	87 (17)	125 (25)
10	8 (4)	11 (5)	73 (11)	105 (15)	91 (25)	132 (36)	0 (1)	1 (1)	0 (1)	104 (20)	150 (29)
11	11 (5)	16 (8)	86 (18)	124 (25)	107 (45)	154 (65)	0 (1)	0 (1)	0 (1)	110 (13)	158 (18)
12	17 (7)	24 (11)	83 (14)	120 (20)	101 (24)	145 (34)	4 (1)	6 (2)	4 (3)	139 (11)	201 (15)
13	0 (1)	0 (1)	93 (14)	134 (21)	75 (18)	108 (26)	0 (1)	1 (1)	3 (3)	145 (24)	208 (34)
14	11 (5)	15 (7)	147 (80)	211 (115)	98 (47)	141 (68)	3 (1)	4 (1)		188 (38)	271 (54)
15	11 (7)	16 (9)	116 (27)	166 (38)	87 (14)	125 (20)	1 (0)	2 (1)	2 (2)	196 (36)	281 (51)
16	14 (7)	20 (10)	102 (20)	146 (28)	96 (15)	138 (22)	2 (1)	2 (1)	4 (4)	249 (43)	358 (61)
17	3 (3)	5 (5)	101 (14)	146 (21)	104 (16)	150 (23)	2 (1)	3 (2)	9 (9)	308 (29)	443 (42)
18	9 (2)	13 (3)	117 (22)	168 (31)	130 (29)	187 (42)	1 (1)	1 (1)	17 (25)	355 (50)	510 (72)
19	20 (7)	29 (9)	123 (26)	176 (38)	171 (43)	246 (62)	2 (2)	3 (3)	5 (6)	341 (72)	491 (104)
20	15 (6)	22 (8)	119 (18)	171 (25)	123 (30)	177 (43)	3 (2)	5 (3)	14 (21)	300 (51)	432 (73)
21	5 (4)	8 (6)	128 (36)	184 (51)	103 (29)	149 (41)	4 (1)	6 (2)	20 (35)	265 (73)	382 (104)
22	4 (1)	5 (2)	113 (14)	164 (21)	98 (24)	141 (34)	3 (0)	4 (1)	9 (5)	230 (271)	
23	12 (8)	17 (11)	119 (21)	171 (30)	99 (23)	143 (33)	4 (1)	5 (2)	7 (5)	14 (10)	20 (14)
24	5 (4)	8 (6)	120 (27)	173 (39)	118 (26)	170 (38)	7 (1)	10 (1)	8 (6)	10 (4)	15 (6)
25	4 (1)	6 (2)	127 (22)	184 (31)	148 (35)	213 (51)	5 (2)	7 (2)	11 (5)	14 (5)	21 (7)
26	2 (1)	3 (1)	133 (32)	191 (46)	151 (45)	218 (64)	4 (2)	6 (3)	4 (3)	11 (4)	16 (6)
27	2 (1)	2 (1)	131 (20)	188 (29)	154 (41)	222 (59)	3 (1)	4 (1)	4 (1)	17 (5)	25 (7)
28	2 (2)	3 (3)	141 (12)	203 (17)	162 (44)	234 (63)	3 (3)	4 (4)	5 (5)	35 (12)	51 (17)
29	15 (7)	21 (9)	137 (32)	198 (46)	158 (53)	227 (76)	0 (0)	0 (1)	3 (5)	46 (14)	67 (20)
30	2 (1)	2 (2)	138 (31)	198 (45)	145 (49)	209 (71)	4 (2)	6 (2)	4 (6)	59 (24)	85 (35)
31	2 (0)	3 (1)	193 (130)	278 (187)	137 (24)	197 (35)	3 (1)	4 (1)	2 (2)	70 (22)	101 (32)
Mean	7	10	110	159	112	161	3	4	5	116	162
n	31	31	31	31	31	31	31	31	28	29	28
SD	6	9	29	41	28	40	2	3	5	114	164
Min	0	0	55	79	75	108	0	0	0	8	11
Max	20	29	193	278	171	246	7	10	20	355	510

ED_004549_00015840-00217

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for September, 2008. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	1 (1)	1 (1)	88 (33)	127 (48)	146 (41)	210 (58)	3 (1)	5 (1)	3 (2)	99 (15)	142 (22)
2	3 (1)	4 (1)	90 (33)	129 (48)	136 (59)	196 (85)	0 (1)	1 (2)	4 (9)	162 (52)	233 (74)
3	4 (1)	6 (1)	176 (36)	253 (52)	141 (39)	203 (57)	0 (0)	0 (0)	54 (51)	299 (61)	428 (88)
4	11 (5)	16 (7)					0 (0)	0 (0)			
5	8 (5)	12 (8)	218 (69)	312 (99)	89 (16)	128 (23)	0 (0)	1 (0)	24 (26)	272 (54)	391 (77)
6	12 (4)	17 (6)	200 (77)	288 (110)	88 (19)	127 (27)	2 (2)	3 (2)	51 (70)	350 (95)	503 (136)
7	15 (10)	22 (14)	162 (48)	233 (70)	76 (18)	109 (26)	4 (1)	5 (2)	25 (44)	323 (107)	465 (153)
8	8 (5)	12 (8)	296 (126)	424 (180)	141 (48)	202 (68)	1 (1)	2 (2)	56 (58)	475 (131)	681 (188)
9	5 (3)	7 (4)	334 (217)	479 (312)	126 (46)	180 (67)	4 (2)	6 (2)	68 (107)	534 (205)	767 (294)
10	2 (1)	3 (1)	143 (63)	206 (91)	112 (23)	161 (33)	3 (1)	5 (1)	4 (2)	323 (74)	464 (105)
11	1 (1)	2 (1)	93 (30)	134 (43)	83 (14)	120 (20)	3 (1)	4 (2)	5 (2)	312 (52)	449 (75)
12	4 (2)	6 (3)	84 (12)	120 (18)	100 (14)	143 (20)	0 (0)	0 (0)		147 (181)	
13	2 (1)	3 (2)	99 (23)	142 (33)	111 (23)	159 (33)	0 (0)	1 (0)	7 (18)	7 (5)	9 (7)
14	2 (0)	3 (0)	163 (48)	234 (69)	181 (43)	259 (62)	0 (0)	0 (1)	1 (1)	8 (4)	11 (5)
15	9 (7)	13 (10)	180 (93)	257 (133)	183 (70)	262 (100)	2 (2)	3 (2)	8 (4)	13 (4)	19 (6)
16	3 (4)	5 (5)	160 (77)	229 (111)	173 (68)	248 (98)	6 (3)	9 (4)	8 (6)	15 (6)	21 (9)
17	1 (1)	2 (1)	118 (68)	169 (97)	136 (39)	195 (56)	7 (3)	10 (4)	6 (6)	17 (8)	24 (11)
18	2 (1)	3 (2)	132 (57)	190 (82)	152 (47)	217 (68)	4 (2)	5 (3)	9 (6)	27 (9)	39 (13)
19	2 (1)	4 (1)	130 (46)	186 (66)	116 (40)	166 (58)	6 (2)	8 (3)	20 (20)	72 (16)	103 (23)
20	2 (1)	3 (1)	151 (86)	217 (123)	143 (80)	205 (115)	7 (3)	10 (4)	26 (24)	116 (46)	166 (66)
21	1 (0)	1 (0)	109 (44)	157 (64)	59 (19)	85 (27)	2 (1)	3 (2)	6 (12)	144 (75)	206 (108)
22	1 (1)	2 (1)	100 (27)	144 (39)	51 (15)	73 (21)	2 (0)	3 (0)	3 (1)	156 (27)	224 (38)
23	0 (1)	0 (1)	104 (44)	150 (63)	57 (22)	82 (32)	2 (2)	3 (3)	2 (1)	201 (39)	288 (55)
24	1 (0)	2 (0)	124 (36)	177 (53)	53 (25)	77 (35)	9 (3)	13 (5)	6 (4)	225 (56)	326 (80)
25	2 (1)	3 (1)	123 (42)	177 (61)	83 (30)	120 (43)	5 (2)	7 (2)	4 (2)	254 (39)	364 (56)
26	0 (0)	0 (1)	142 (54)	204 (78)	103 (66)	148 (95)	3 (1)	4 (2)	7 (10)	306 (71)	439 (102)
27	6 (3)	9 (5)	213 (106)	305 (152)	93 (31)	133 (45)	3 (2)	4 (3)	69 (125)	364 (150)	522 (214)
28	5 (2)	7 (3)	182 (92)	261 (132)	92 (24)	132 (34)	6 (3)	8 (5)	66 (81)	332 (130)	476 (186)
29	3 (2)	5 (3)	203 (53)	291 (76)	107 (21)	153 (31)	1 (2)	1 (2)	20 (54)	405 (137)	579 (197)
30	11 (8)	16 (12)	260 (124)	373 (178)	152 (82)	218 (117)	2 (1)	2 (2)	143 (207)	509 (245)	729 (351)
Mean	4	6	158	226	113	162	3	4	25	223	324
n	30	30	29	29	29	29	30	30	28	29	28
SD	4	6	61	88	37	53	2	3	32	155	226
Min	0	0	84	120	51	73	0	0	1	7	9
Max	15	22	334	479	183	262	9	13	143	534	767

ED_004549_00015840-00218

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for October, 2008. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	12 (7)	18 (9)	226 (126)	324 (180)	162 (52)	231 (74)	1 (1)	2 (1)	97 (130)	460 (207)	658 (296)
2	7 (7)	11 (10)	206 (92)	295 (132)	163 (69)	233 (99)	2 (0)	3 (1)	144 (172)	527 (238)	754 (342)
3	6 (5)	9 (8)	182 (53)	261 (76)	137 (65)	196 (93)	2 (1)	3 (1)	18 (19)	500 (148)	716 (212)
4	3 (3)	5 (4)	167 (65)	240 (93)	142 (77)	203 (110)	3 (1)	4 (1)	30 (71)	501 (170)	718 (243)
5	6 (2)	8 (3)	175 (32)	252 (46)	167 (41)	240 (59)	4 (0)	5 (1)	4 (1)	655 (102)	940 (147)
6	2 (1)	2 (2)	210 (64)	301 (92)	164 (65)	236 (94)	2 (2)	2 (2)	7 (6)	459 (444)	464 (577)
7	4 (1)	5 (1)	337 (173)	483 (249)	249 (94)	356 (135)	2 (1)	3 (2)	7 (5)	14 (6)	20 (9)
8	12 (7)	17 (10)	229 (93)	328 (133)	206 (116)	295 (167)	3 (2)	5 (3)	9 (10)	18 (9)	26 (13)
9	5 (3)	7 (4)	191 (104)	274 (149)	171 (92)	246 (132)	8 (4)	12 (6)	9 (7)	18 (8)	26 (12)
10	4 (2)	5 (2)	126 (40)	181 (58)	123 (55)	177 (79)	2 (1)	3 (1)	5 (4)	22 (4)	32 (5)
11	3 (1)	4 (1)	147 (53)	212 (75)	191 (84)	274 (120)	4 (1)	6 (1)	16 (17)	74 (36)	106 (52)
12	1 (0)	2 (0)	125 (19)	179 (27)	172 (27)	248 (38)	3 (1)	5 (1)	9 (10)	102 (17)	147 (24)
13	3 (1)	4 (1)	391 (178)	561 (256)	432 (100)	619 (144)	1 (1)	1 (1)	151 (104)	306 (55)	438 (78)
14	4 (2)	6 (3)	320 (41)	455 (59)	381 (69)	546 (103)	0 (0)	1 (0)	133 (65)	385 (60)	550 (89)
15	3 (1)	4 (1)	310 (48)	444 (69)	280 (34)	401 (48)	0 (0)	0 (0)	142 (92)	408 (85)	584 (122)
16	6 (1)	8 (2)	262 (77)	375 (110)	298 (94)	427 (135)	4 (3)	6 (4)	206 (144)	435 (112)	623 (160)
17	9 (2)	13 (3)	235 (96)	336 (137)	232 (113)	333 (162)	2 (2)	2 (2)	122 (147)	423 (142)	605 (204)
18	5 (5)	7 (7)	217 (110)	312 (158)	205 (121)	294 (173)	2 (0)	3 (1)	143 (191)	447 (218)	641 (313)
19	9 (7)	13 (10)	193 (71)	276 (102)	191 (89)	273 (127)	5 (3)	7 (4)	48 (86)	441 (137)	631 (196)
20	7 (3)	10 (4)					2 (2)	3 (3)			
21	5 (1)	7 (1)	227 (73)	326 (105)	281 (115)	403 (165)	5 (4)	7 (5)	58 (70)	532 (169)	763 (242)
22	10 (4)	14 (6)	488 (38)	698 (54)	528 (62)	755 (89)	1 (2)	2 (3)	343 (171)	1020 (127)	1460 (182)
23	12 (3)	18 (4)	571 (135)	817 (193)	522 (136)	745 (195)	2 (1)	3 (1)	572 (179)	1360 (60)	1940 (86)
24	11 (2)	16 (3)	423 (160)	604 (229)	356 (102)	509 (145)	2 (1)	3 (1)	548 (431)	1210 (392)	1730 (562)
25	12 (7)	17 (10)	313 (165)	447 (236)	290 (137)	415 (196)	3 (0)	4 (1)	391 (368)	1060 (445)	1510 (638)
26	6 (3)	9 (4)	444 (208)	635 (297)	493 (130)	705 (186)	1 (0)	1 (1)	407 (287)	1210 (264)	1730 (378)
27	8 (2)	12 (2)	380 (131)	544 (187)	407 (109)	583 (155)	1 (0)	1 (1)	342 (418)	584 (816)	
28	4 (5)	6 (7)	363 (133)	519 (191)	337 (101)	481 (144)	1 (1)	1 (1)	26 (25)	25 (10)	
29	18 (12)	26 (17)	357 (182)	511 (260)	289 (156)	413 (223)	7 (2)	10 (3)	25 (31)	56 (61)	
30	5 (1)	6 (2)	302 (127)	432 (182)	328 (216)	469 (310)	5 (4)	7 (6)	23 (18)	27 (8)	
31	14 (6)	19 (9)	237 (87)	339 (124)	279 (131)	399 (187)	1 (0)	1 (0)	12 (10)	23 (10)	
Mean	7	10	279	399	273	390	3	4	135	443	713
n	31	31	30	30	30	30	31	31	30	30	25
SD	4	6	109	156	115	164	2	3	165	386	552
Min	1	2	125	179	123	177	0	0	4	14	20
Max	18	26	571	817	528	755	8	12	572	1360	1940

ED_004549_00015840-00219

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for November, 2008. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	13 (9)	18 (12)	233 (124)	333 (178)	333 (177)	476 (254)	5 (4)	7 (5)	26 (24)	48 (23)	
2	5 (2)	7 (2)	219 (119)	314 (171)	293 (176)	420 (253)	4 (3)	6 (4)	38 (39)	78 (29)	
3	3 (1)	4 (2)	200 (72)	286 (103)	256 (120)	367 (172)	4 (1)	6 (1)	20 (33)	95 (21)	
4	2 (1)	2 (2)	188 (88)	270 (126)	288 (154)	413 (222)	4 (1)	6 (1)	9 (16)	134 (33)	
5	7 (8)	11 (12)	330 (173)	472 (246)	400 (212)	572 (304)	1 (1)	2 (1)	43 (69)	279 (119)	399 (170)
6	18 (4)	25 (6)	660 (198)	943 (283)	638 (248)	912 (356)	0 (1)	0 (1)	202 (138)	529 (136)	756 (195)
7	25 (12)	36 (17)	556 (234)	793 (334)	580 (289)	829 (414)	2 (1)	3 (2)	267 (163)	638 (148)	911 (213)
8	17 (17)	25 (24)	475 (178)	678 (255)	566 (351)	812 (507)	2 (2)	3 (3)	272 (237)	663 (228)	949 (327)
9	8 (5)	12 (7)	494 (195)	707 (279)	518 (203)	740 (290)	2 (2)	3 (2)	407 (300)	779 (178)	1110 (255)
10	7 (3)	10 (4)	416 (142)	594 (203)	451 (137)	645 (196)	1 (0)	2 (1)	270 (212)	705 (139)	1010 (200)
11	14 (7)	20 (10)	530 (148)	758 (212)	678 (155)	970 (222)	0 (1)	1 (1)	431 (206)	989 (163)	1420 (234)
12	21 (11)	30 (15)	503 (198)	720 (283)	605 (312)	866 (448)	2 (1)	3 (1)	562 (304)	1050 (267)	1500 (382)
13	15 (6)	22 (9)	477 (184)	684 (262)	465 (220)	667 (314)	1 (0)	2 (0)	252 (309)	930 (334)	1330 (477)
14	10 (5)	14 (7)	658 (109)	940 (155)	610 (76)	872 (108)	0 (0)	1 (1)	405 (177)	1240 (178)	1780 (255)
15	24 (8)	34 (12)	612 (102)	873 (147)	660 (89)	942 (127)	3 (1)	4 (1)	553 (184)	1460 (189)	2090 (272)
16	19 (10)	26 (14)	493 (264)	703 (377)	428 (234)	611 (336)	4 (1)	6 (1)	353 (343)	1180 (467)	1690 (668)
17	6 (1)	9 (2)	477 (138)	682 (197)	425 (111)	608 (159)	1 (1)	2 (1)	232 (271)	679 (640)	
18	2 (2)	3 (3)	527 (410)	753 (588)	367 (148)	525 (212)	4 (1)	5 (1)	67 (59)	70 (19)	99 (26)
19	5 (1)	7 (1)	280 (151)	400 (216)	486 (395)	695 (565)	1 (1)	2 (2)	32 (23)	59 (31)	84 (44)
20	1 (1)	2 (1)	408 (69)	583 (99)	583 (73)	833 (104)	1 (0)	1 (0)	28 (9)	51 (10)	73 (14)
21	2 (1)	3 (1)	384 (60)	548 (86)	540 (72)	772 (103)	2 (1)	3 (1)	74 (21)	70 (20)	100 (29)
22	9 (8)	12 (11)	331 (75)	472 (108)	520 (142)	743 (203)	2 (1)	2 (1)	71 (24)	93 (38)	132 (54)
23	12 (6)	17 (9)	322 (125)	459 (179)	560 (162)	801 (232)	3 (1)	4 (1)	100 (41)	110 (24)	157 (35)
24	6 (3)	9 (4)	283 (57)	405 (82)	745 (223)	1070 (320)	2 (1)	3 (1)	110 (31)	182 (51)	261 (73)
25	7 (1)	9 (1)	289 (81)	413 (116)	629 (230)	898 (329)	1 (1)	2 (1)	159 (40)	218 (47)	311 (68)
26	12 (5)	17 (7)	351 (89)	500 (127)	625 (214)	891 (305)	2 (1)	3 (1)	181 (59)	321 (47)	459 (67)
27	8 (6)	12 (8)	481 (69)	686 (99)	742 (61)	1060 (87)	1 (1)	2 (1)	348 (89)	602 (91)	861 (130)
28	3 (1)	4 (2)	453 (71)	647 (102)	697 (100)	998 (143)	1 (0)	1 (0)	682 (66)	768 (117)	1100 (167)
29	9 (2)	12 (2)	483 (68)	690 (97)	775 (196)	1110 (280)	1 (0)	1 (0)	501 (135)	1090 (142)	1560 (203)
30	10 (3)	14 (4)	578 (149)	825 (213)	795 (280)	1140 (401)	1 (0)	1 (0)	486 (157)	1420 (240)	2020 (342)
Mean	10	14	423	604	542	775	2	3	239	551	886
n	30	30	30	30	30	30	30	30	30	30	25
SD	7	9	131	188	146	209	1	2	191	450	645
Min	1	2	188	270	256	367	0	0	9	48	73
Max	25	36	660	943	795	1140	5	7	682	1460	2090

ED_004549_00015840-00220

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for December, 2008. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	19 (4)	27 (5)	721 (274)	1030 (393)	630 (130)	901 (185)	1 (1)	2 (2)	639 (156)	1300 (363)	1860 (519)
2	10 (5)	14 (7)	351 (173)	501 (248)	468 (185)	669 (265)	2 (1)	3 (2)	568 (239)	1030 (267)	1470 (382)
3	7 (2)	10 (3)	384 (52)	547 (74)	573 (98)	818 (140)	1 (0)	1 (0)	673 (251)	1420 (207)	2030 (297)
4	7 (3)	10 (4)	485 (156)	692 (225)	656 (127)	937 (183)	2 (0)	3 (1)	1340 (294)	1200 (247)	1720 (353)
5	11 (10)	15 (14)	409 (41)	584 (59)	571 (138)	814 (195)	2 (0)	3 (1)	1130 (366)	1320 (252)	1890 (359)
6	16 (9)	23 (13)	431 (111)	615 (159)	547 (285)	781 (408)	4 (4)	6 (5)	724 (298)	1280 (318)	1840 (456)
7	7 (2)	10 (3)	405 (178)	578 (253)	381 (162)	544 (233)	11 (5)	15 (7)	719 (362)	1120 (313)	1600 (449)
8	4 (3)	6 (4)	368 (130)	527 (186)	475 (340)	679 (485)	7 (4)	9 (6)	600 (238)	1100 (219)	1570 (314)
9	5 (4)	7 (6)	497 (67)	708 (96)	564 (173)	805 (248)	0 (0)	1 (1)	663 (267)	1780 (344)	2550 (495)
10	21 (13)	30 (18)	498 (44)	710 (63)	385 (86)	548 (123)	3 (1)	4 (1)	811 (256)	2000 (391)	2870 (561)
11	8 (5)	11 (7)	485 (79)	692 (113)	321 (48)	458 (68)	1 (0)	2 (0)	536 (151)	1610 (347)	2310 (498)
12	3 (1)	4 (1)	537 (121)	768 (174)	404 (183)	572 (258)	3 (2)	4 (2)		869 (689)	
13	2 (1)	3 (1)	415 (154)	593 (220)	289 (77)	413 (110)	4 (1)	6 (1)	403 (191)	335 (90)	480 (129)
14	3 (1)	4 (1)	528 (72)	754 (102)	409 (61)	584 (87)	2 (2)	3 (2)	169 (45)	269 (37)	385 (52)
15	1 (0)	2 (1)	532 (45)	758 (64)	412 (106)	587 (151)	0 (1)	0 (1)	198 (73)	251 (120)	358 (171)
16	4 (2)	5 (2)	517 (133)	737 (189)	359 (54)	512 (77)	2 (1)	2 (2)	140 (32)		
17	6 (4)	9 (5)	357 (105)	510 (150)	386 (77)	551 (110)	2 (1)	2 (2)	218 (68)	244 (57)	350 (81)
18	6 (3)	8 (4)	233 (77)	332 (111)	320 (106)	457 (152)	4 (1)	6 (1)	241 (196)	319 (129)	456 (186)
19	9 (3)	13 (4)	376 (101)	536 (144)	570 (188)	814 (269)	2 (1)	3 (2)	119 (56)	318 (87)	455 (125)
20	6 (5)	9 (8)	277 (42)	395 (61)	442 (88)	630 (126)	0 (1)	0 (2)	75 (38)	410 (58)	587 (83)
21	2 (2)	2 (2)	257 (32)	367 (46)	427 (184)	609 (262)	1 (3)	2 (4)	224 (51)	581 (104)	832 (148)
22	3 (1)	4 (1)	268 (39)	381 (55)	407 (100)	579 (142)	4 (2)	6 (3)	379 (105)		
23	4 (3)	6 (5)	271 (76)	387 (108)	416 (138)	594 (196)	4 (2)	5 (3)	266 (89)	731 (152)	1050 (217)
24	7 (5)	10 (6)	342 (37)	488 (54)	493 (88)	703 (126)	3 (2)	5 (2)	350 (190)	955 (183)	1370 (262)
25	4 (1)	5 (1)	284 (43)	405 (62)	427 (175)	609 (249)	3 (1)	5 (2)	272 (196)	819 (144)	1170 (206)
26	3 (1)	4 (2)	278 (94)	397 (135)	330 (125)	472 (178)	3 (1)	4 (2)	403 (214)	986 (272)	1410 (389)
27	8 (4)	12 (5)	407 (46)	580 (66)	498 (73)	710 (104)	0 (1)	1 (2)	428 (186)	1650 (267)	2370 (383)
28	15 (3)	21 (4)	357 (88)	510 (126)	416 (65)	593 (93)	3 (1)	5 (1)	585 (461)	1470 (474)	2100 (680)
29	34 (7)	48 (9)	330 (119)	471 (170)	394 (142)	562 (202)	5 (4)	7 (5)	540 (359)	1490 (505)	2130 (724)
30	8 (4)	11 (5)	355 (95)	506 (136)	532 (197)	760 (281)	2 (2)	2 (3)	568 (444)	1450 (467)	2070 (670)
31	7 (4)	10 (5)	423 (64)	603 (92)	674 (92)	962 (132)	3 (1)	5 (2)	593 (219)	1650 (411)	2360 (589)
Mean	8	11	399	570	457	653	3	4	486	1030	1490
n	31	31	31	31	31	31	31	31	30	29	28
SD	7	10	106	151	100	143	2	3	285	514	748
Min	1	2	233	332	289	413	0	0	75	244	350
Max	34	48	721	1030	674	962	11	15	1340	2000	2870

ED_004549_00015840-00221

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for January, 2009. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	9 (8)	13 (11)	381 (115)	543 (165)	559 (192)	798 (274)	5 (2)	7 (3)	518 (413)	1610 (399)	2310 (572)
2	21 (10)	30 (14)	379 (156)	542 (222)	538 (253)	769 (361)	5 (1)	8 (1)	513 (481)	1490 (435)	2140 (625)
3	12 (8)	17 (11)	444 (130)	634 (186)	563 (165)	803 (236)	3 (2)	4 (3)	598 (311)	1790 (341)	2570 (489)
4	4 (3)	6 (4)	448 (96)	639 (136)	720 (136)	1030 (195)	1 (1)	1 (1)	837 (344)	2210 (109)	3160 (156)
5	9 (4)	13 (5)	548 (256)	781 (366)	681 (108)	972 (154)	3 (1)	4 (2)	689 (437)	1430 (892)	
6	13 (5)	18 (7)	454 (61)	648 (87)	603 (100)	860 (143)	1 (1)	1 (2)	73 (74)	287 (304)	410 (435)
7	19 (7)	26 (10)	435 (204)	620 (291)	539 (239)	769 (341)	5 (2)	8 (3)	30 (8)	55 (26)	79 (37)
8	23 (12)	33 (17)	377 (168)	538 (240)	594 (331)	848 (474)	5 (2)	7 (3)	38 (24)	56 (18)	80 (25)
9	8 (4)	12 (6)	536 (180)	770 (261)	558 (200)	798 (286)	3 (2)	4 (3)	32 (19)	93 (22)	134 (32)
10	26 (18)	37 (25)	744 (165)	1060 (236)	402 (95)	574 (137)	1 (1)	1 (1)	95 (54)	199 (55)	285 (78)
11	20 (14)	28 (19)	667 (193)	952 (275)	357 (66)	509 (95)	4 (3)	6 (5)	161 (91)	346 (81)	495 (116)
12	24 (13)	34 (18)	665 (245)	950 (351)	441 (88)	630 (127)	2 (2)	3 (3)	239 (149)	689 (120)	986 (171)
13	15 (8)	21 (11)	495 (170)	708 (245)	442 (60)	632 (86)	3 (1)	4 (1)	439 (311)	938 (275)	1340 (394)
14	13 (4)	18 (6)	404 (161)	579 (233)	442 (87)	632 (124)	1 (1)	2 (1)	423 (224)	970 (305)	1390 (437)
15	11 (1)	15 (2)	583 (167)	830 (239)	460 (43)	656 (62)	5 (1)	7 (2)	641 (274)	1070 (193)	1540 (276)
16	10 (4)	13 (6)	412 (173)	588 (246)	394 (142)	562 (202)	7 (3)	10 (5)	304 (258)	795 (228)	1140 (326)
17	14 (7)	20 (10)	413 (165)	589 (235)	409 (119)	583 (170)	2 (2)	2 (2)	131 (94)	975 (195)	1390 (279)
18	11 (4)	16 (6)	318 (134)	453 (192)	373 (131)	532 (187)	1 (1)	1 (1)	189 (168)	903 (199)	1290 (284)
19	6 (2)	8 (3)	309 (132)	440 (188)	407 (173)	581 (248)	1 (0)	1 (0)	108 (102)	922 (251)	1320 (359)
20	13 (7)	19 (10)	456 (202)	651 (289)	488 (150)	697 (215)	0 (0)	0 (0)	363 (236)	1190 (285)	1710 (409)
21	15 (5)	21 (7)	354 (150)	505 (214)	481 (161)	686 (229)	1 (1)	2 (2)	279 (265)	1230 (351)	1750 (503)
22	17 (6)	24 (9)	354 (159)	505 (227)	294 (206)	419 (293)	4 (2)	5 (3)	432 (372)	1380 (432)	1970 (619)
23	13 (12)	18 (17)	527 (59)	752 (84)	389 (148)	554 (212)	0 (1)	1 (2)	582 (179)	1880 (336)	2690 (481)
24	8 (5)	12 (7)	701 (151)	1000 (217)	631 (197)	901 (282)	5 (4)	7 (6)	954 (398)	2000 (296)	2870 (423)
25	13 (6)	18 (8)	728 (189)	1040 (269)	821 (494)	1170 (706)	3 (3)	4 (5)	1060 (850)	1730 (773)	2480 (1110)
26	7 (3)	9 (4)	719 (101)	1020 (144)	478 (92)	682 (132)	2 (2)	3 (2)	276 (211)	543 (295)	
27	8 (8)	11 (11)	843 (345)	1200 (494)	402 (92)	573 (132)	1 (1)	1 (1)	135 (80)	205 (109)	293 (156)
28	18 (7)	26 (10)	420 (96)	599 (137)	320 (76)	457 (109)	2 (1)	2 (2)	68 (17)	105 (31)	149 (44)
29	13 (4)	19 (5)	333 (50)	475 (72)	283 (32)	404 (46)	3 (3)	5 (4)	81 (30)	145 (43)	207 (61)
30	11 (4)	15 (6)	206 (61)	294 (88)	262 (79)	374 (114)	1 (1)	2 (2)	80 (57)	151 (38)	216 (55)
31	3 (2)	5 (3)	209 (97)	298 (139)	284 (118)	406 (169)	8 (3)	11 (4)	120 (85)	220 (67)	314 (96)
Mean	13	19	479	684	471	673	3	4	338	891	1270
n	31	31	31	31	31	31	31	31	31	31	29
SD	6	8	158	225	132	189	2	3	281	651	948
Min	3	5	206	294	262	374	0	0	30	55	79
Max	26	37	843	1200	821	1170	8	11	1060	2210	3160

ED_004549_00015840-00222

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for February, 2009. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	4 (3)	6 (4)	257 (49)	366 (70)	391 (71)	559 (102)	1 (2)	2 (3)	155 (61)	308 (21)	441 (30)
2	7 (3)	10 (5)	306 (53)	436 (75)	365 (86)	521 (124)	1 (1)	1 (2)	232 (114)	407 (88)	582 (126)
3	20 (7)	28 (10)	346 (196)	494 (280)	402 (189)	573 (269)	4 (2)	5 (3)	239 (144)	549 (120)	785 (172)
4	9 (6)	13 (8)	298 (132)	425 (188)	371 (171)	530 (245)	5 (1)	8 (2)	313 (294)	652 (212)	932 (304)
5	11 (2)	15 (2)	310 (123)	443 (175)	355 (157)	507 (224)	2 (1)	3 (1)			
6	12 (7)	17 (9)	320 (183)	456 (262)	384 (240)	549 (343)	2 (1)	2 (1)	453 (434)	868 (449)	1240 (644)
7	33 (10)	48 (14)	385 (167)	549 (239)	421 (153)	601 (218)	8 (7)	12 (10)	342 (305)	880 (294)	1260 (420)
8	32 (18)	46 (26)	328 (89)	469 (127)	403 (78)	577 (111)	7 (4)	10 (6)	261 (242)	880 (151)	1260 (217)
9	4 (3)	6 (4)	351 (110)	502 (157)	450 (159)	644 (228)	3 (1)	4 (1)	395 (333)	1030 (299)	1480 (429)
10	7 (4)	10 (6)	480 (226)	685 (323)	633 (236)	902 (339)	1 (0)	1 (1)	479 (497)	1010 (254)	1440 (366)
11	8 (2)	11 (3)	503 (129)	718 (185)	680 (241)	972 (344)	0 (1)	0 (1)	241 (275)	1210 (307)	1760 (433)
12	25 (16)	35 (23)	642 (227)	917 (324)	449 (104)	641 (148)	3 (3)	4 (4)	593 (290)	1160 (225)	1660 (322)
13	4 (4)	5 (5)	540 (46)	771 (67)	425 (60)	607 (86)	2 (2)	3 (3)	577 (313)	1440 (206)	2070 (295)
14	6 (5)	9 (7)	623 (146)	889 (209)	418 (97)	596 (140)	3 (3)	5 (4)	696 (302)	1350 (177)	1930 (252)
15	4 (2)	5 (3)	523 (68)	746 (97)	360 (93)	514 (133)	4 (2)	5 (3)	861 (353)	1540 (395)	2200 (566)
16	3 (1)	4 (1)	446 (137)	636 (195)	382 (179)	546 (256)	2 (1)	3 (1)	585 (545)	1210 (300)	1730 (430)
17	4 (3)	6 (4)	354 (181)	505 (258)	311 (151)	444 (217)	4 (0)	5 (1)	347 (381)	1250 (401)	1780 (576)
18	11 (3)	15 (4)					2 (1)	2 (1)			
19	15 (10)	21 (14)	579 (298)	825 (424)	455 (154)	650 (220)	3 (2)	4 (3)	171 (111)	211 (34)	302 (49)
20	14 (15)	21 (22)	452 (176)	645 (251)	409 (164)	583 (234)	2 (1)	3 (2)	32 (33)	138 (51)	197 (73)
21	10 (4)	15 (6)	559 (88)	796 (126)	534 (90)	762 (130)	1 (1)	1 (1)	80 (35)	155 (35)	222 (51)
22	10 (7)	15 (10)	434 (199)	619 (284)	586 (448)	841 (646)	4 (1)	6 (2)	90 (61)	172 (38)	245 (55)
23	6 (2)	9 (2)	456 (114)	651 (163)	473 (126)	675 (180)	3 (2)	4 (3)	60 (39)	216 (51)	309 (74)
24	14 (3)	20 (4)	500 (520)	717 (746)	487 (238)	699 (340)	4 (3)	6 (5)	100 (85)	272 (101)	390 (145)
25	16 (3)						1 (2)				
26	7 (3)						-1 (0)				
27	1 (1)	2 (1)	261 (53)	372 (75)	666 (163)	952 (234)	0 (1)	0 (1)	265 (108)	620 (138)	886 (197)
28	7 (3)	10 (5)	289 (46)	412 (65)	542 (93)	774 (133)	0 (1)	0 (1)	271 (126)	592 (80)	847 (114)
Mean	11	15	422	602	454	649	3	4	327	755	1080
n	28	26	25	25	25	25	28	26	24	24	24
SD	8	12	114	162	98	140	2	3	212	446	639
Min	1	2	257	366	311	444	-1	0	32	138	197
Max	33	48	642	917	680	972	8	12	861	1540	2200

ED_004549_00015840-00223

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for March, 2009. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	7 (7)	10 (10)	299 (51)	426 (73)	457 (74)	652 (106)	2 (1)	3 (2)	693 (733)	739 (305)	1060 (446)
2	21 (16)	29 (23)	299 (111)	427 (159)	404 (148)	576 (212)	7 (3)	10 (4)	498 (569)	878 (509)	1270 (747)
3	12 (7)	17 (10)	279 (101)	398 (145)	384 (113)	548 (161)	8 (1)	11 (2)	159 (188)	556 (143)	793 (205)
4	7 (5)	10 (7)	217 (178)	314 (255)	323 (226)	465 (325)	2 (1)	3 (1)	89 (117)	440 (176)	631 (254)
5	3 (2)	4 (3)	215 (141)	307 (201)	313 (278)	446 (398)	2 (1)	2 (1)	19 (24)	377 (131)	537 (188)
6	2 (2)	3 (3)	246 (170)	351 (242)	206 (144)	293 (206)	1 (1)	1 (1)	64 (94)	419 (153)	597 (218)
7	3 (1)	4 (2)	223 (162)	318 (231)	177 (108)	252 (154)	1 (1)	1 (1)	45 (86)	402 (128)	574 (184)
8	5 (3)	7 (4)	421 (212)	602 (303)	325 (161)	465 (231)	2 (1)	2 (1)	96 (90)	549 (217)	783 (311)
9	1 (1)	2 (2)	261 (125)	372 (178)	188 (113)	268 (162)	1 (1)	2 (1)	49 (80)	367 (81)	524 (115)
10	2 (1)	3 (2)	522 (61)	745 (87)	489 (54)	698 (77)	0 (0)	0 (1)	172 (81)	768 (383)	1100 (548)
11	9 (2)	13 (3)	521 (93)	741 (133)	616 (191)	879 (274)	2 (2)	4 (3)	94 (60)		
12	10 (3)	15 (4)	440 (93)	628 (134)	446 (47)	638 (66)	4 (1)	5 (2)	50 (33)	18 (13)	26 (18)
13	2 (1)	3 (2)	456 (120)	651 (172)	676 (227)	967 (326)	1 (1)	1 (2)	16 (3)	14 (4)	20 (5)
14	4 (1)	5 (2)	269 (92)	384 (131)	373 (124)	533 (178)	2 (0)	3 (1)	21 (14)	15 (4)	21 (6)
15	4 (5)	5 (6)	240 (134)	342 (192)	300 (127)	429 (182)	3 (1)	4 (2)	27 (35)	31 (29)	44 (41)
16	7 (3)	10 (5)	197 (125)	281 (178)	295 (168)	422 (240)	5 (3)	7 (4)	16 (14)	22 (11)	31 (16)
17	13 (6)	18 (9)	187 (124)	267 (177)	299 (187)	427 (267)	3 (1)	4 (2)	23 (41)	27 (13)	39 (18)
18	5 (3)	7 (4)	246 (101)	353 (144)	394 (93)	565 (133)	0 (0)	1 (1)	15 (15)	62 (22)	89 (32)
19	14 (8)	21 (11)	271 (114)	387 (163)	359 (135)	513 (194)	4 (3)	5 (4)	55 (42)	114 (26)	162 (37)
20	6 (5)	8 (7)	194 (102)	278 (146)	262 (149)	376 (213)	5 (2)	7 (3)	40 (49)	119 (30)	170 (43)
21	3 (3)	4 (4)	125 (69)	180 (98)	187 (114)	268 (163)	2 (2)	3 (2)	4 (2)	134 (57)	192 (81)
22	1 (0)	2 (0)	117 (39)	167 (56)	231 (106)	331 (151)	2 (1)	2 (1)	12 (18)	199 (104)	286 (149)
23	1 (0)	1 (1)	200 (84)	286 (120)	241 (129)	345 (185)	1 (1)	1 (1)	20 (34)	238 (85)	341 (121)
24	4 (3)	5 (4)	405 (138)	579 (197)	512 (137)	730 (195)	0 (0)	0 (0)	144 (134)	412 (108)	588 (154)
25	7 (5)	10 (7)	287 (108)	410 (154)	550 (197)	785 (282)	0 (1)	1 (1)	153 (157)	377 (102)	538 (146)
26	12 (8)	17 (11)	295 (73)	422 (104)	329 (98)	471 (141)	1 (2)	2 (2)	155 (159)	458 (51)	655 (73)
27	3 (2)	4 (3)	430 (69)	613 (99)	314 (67)	449 (96)	0 (0)	0 (1)	379 (136)	791 (106)	1130 (152)
28	14 (5)	20 (7)	467 (88)	667 (126)	278 (28)	397 (41)	1 (1)	1 (1)	495 (160)	755 (168)	1080 (240)
29	9 (9)	13 (13)	484 (277)	692 (397)	335 (114)	479 (163)	3 (1)	5 (2)	322 (373)	698 (177)	999 (254)
30	7 (2)	11 (2)	415 (78)	593 (111)	380 (76)	543 (109)	1 (2)	2 (2)	285 (169)	686 (102)	982 (146)
31	6 (3)	8 (4)	417 (79)	596 (113)	447 (109)	638 (156)	1 (1)	1 (1)	298 (183)	790 (122)	1130 (176)
Mean	7	9	311	444	358	511	2	3	145	382	546
n	31	31	31	31	31	31	31	31	31	30	30
SD	5	7	115	164	121	173	2	3	171	283	405
Min	1	1	117	167	177	252	0	0	4	14	20
Max	21	29	522	745	676	967	8	11	693	878	1270

ED_004549_00015840-00224

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for April, 2009. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	10 (4)	15 (6)	383 (158)	548 (226)	475 (173)	679 (248)	2 (1)	2 (2)	195 (185)	681 (157)	974 (226)
2	4 (1)	6 (1)	392 (84)	560 (120)	494 (108)	706 (155)	0 (0)	0 (0)			
3	2 (0)	2 (1)	289 (148)	413 (212)	386 (188)	551 (269)	3 (1)	4 (2)	35 (45)	41 (24)	58 (34)
4	2 (1)	2 (1)	330 (173)	476 (247)	394 (207)	568 (294)	2 (2)	2 (2)	149 (310)	123 (190)	169 (267)
5	4 (1)	5 (2)	585 (139)	835 (198)	835 (455)	1190 (649)	0 (0)	-1 (0)	9 (5)	34 (8)	49 (11)
6	5 (1)	7 (2)	500 (100)	714 (144)	505 (104)	722 (149)	0 (1)	0 (1)	21 (12)	37 (8)	53 (12)
7	8 (4)	11 (6)	336 (208)	479 (297)	372 (220)	532 (315)	1 (2)	2 (2)	26 (27)	35 (13)	50 (19)
8	19 (6)	27 (8)	318 (204)	456 (291)	360 (209)	515 (299)	5 (3)	8 (4)	37 (37)	78 (30)	112 (43)
9	11 (10)	15 (14)	368 (177)	521 (250)	440 (139)	628 (199)	1 (2)	2 (3)	125 (174)	182 (88)	260 (127)
10	10 (10)	15 (14)	406 (169)	581 (241)	525 (162)	751 (233)	1 (2)	1 (2)	61 (61)	237 (68)	339 (98)
11	16 (3)	22 (5)	405 (62)	580 (88)	607 (91)	869 (131)	3 (1)	5 (1)	84 (91)	247 (34)	353 (49)
12	10 (6)	15 (8)	432 (63)	620 (90)	599 (59)	857 (84)	0 (1)	0 (1)	80 (63)	245 (45)	351 (64)
13	4 (2)	5 (3)	347 (148)	496 (212)	635 (249)	909 (356)	2 (2)	2 (4)	59 (77)	293 (68)	420 (98)
14	7 (4)	10 (6)	240 (171)	344 (246)	360 (222)	515 (318)	3 (1)	4 (1)	32 (51)	286 (71)	409 (101)
15	9 (2)	13 (3)	188 (70)	274 (101)	229 (109)	341 (153)	5 (2)	7 (2)	6 (4)	292 (45)	422 (63)
16	7 (5)	10 (7)	254 (49)	364 (70)	227 (16)	326 (23)	7 (2)	10 (3)	13 (8)	406 (49)	
17	12 (4)	17 (6)	307 (131)	442 (188)	245 (61)	351 (87)	3 (1)	4 (2)	46 (61)	454 (69)	
18	5 (2)	7 (2)	448 (117)	641 (168)	369 (79)		1 (1)	1 (1)	134 (117)	530 (115)	
19	4 (3)	6 (4)	352 (157)	504 (226)	274 (104)		0 (0)	0 (1)	78 (85)	500 (133)	
20	8 (2)	11 (3)	317 (212)	454 (303)	231 (135)		2 (1)	2 (2)	68 (89)	478 (191)	
21	13 (9)	19 (13)	234 (145)	336 (207)	192 (118)	275 (168)	4 (5)	6 (7)	57 (83)	497 (186)	711 (265)
22	18 (13)	25 (19)	245 (179)	350 (257)	288 (91)	413 (131)	5 (4)	7 (5)	14 (24)	497 (85)	712 (121)
23	6 (1)	8 (1)					2 (1)	3 (2)			
24	3 (1)	4 (1)	223 (119)	319 (170)	236 (113)	337 (162)	4 (1)	5 (1)	54 (86)	363 (338)	
25	15 (10)	21 (14)	256 (119)	366 (171)	356 (136)	509 (195)	2 (1)	2 (2)	16 (9)	28 (12)	40 (18)
26	3 (2)	4 (3)	257 (142)	368 (204)	334 (206)	479 (296)	1 (0)	2 (1)	16 (18)	25 (16)	35 (23)
27	9 (7)	13 (10)	317 (138)	453 (197)	472 (127)	676 (182)	0 (0)	1 (1)	11 (7)	36 (27)	51 (39)
28	17 (14)	24 (19)	396 (165)	568 (236)	469 (146)	672 (209)	4 (2)	6 (3)	33 (17)	39 (21)	56 (31)
29	4 (1)	5 (2)	139 (46)	199 (67)	214 (68)	308 (97)	4 (2)	5 (3)	5 (2)	16 (3)	23 (5)
30	4 (1)	6 (2)	186 (54)	268 (77)	273 (88)	392 (126)	1 (2)	2 (3)	4 (4)	44 (8)	63 (12)
Mean	8	12	326	467	393	580	2	3	52	240	260
n	30	30	29	29	29	26	30	30	28	28	22
SD	5	7	98	139	150	217	2	3	48	198	261
Min	2	2	139	199	192	275	0	-1	4	16	23
Max	19	27	585	835	835	1190	7	10	195	681	974

ED_004549_00015840-00225

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for May, 2009. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	5 (1)	7 (1)	372 (109)	534 (156)	449 (101)	644 (145)	0 (0)	0 (1)	23 (20)	97 (30)	140 (43)
2	16 (9)	22 (12)	454 (56)	650 (81)	578 (105)	828 (150)	1 (1)	2 (1)	66 (41)	148 (33)	212 (47)
3	9 (2)	13 (3)	400 (132)	573 (189)	424 (98)	607 (141)	1 (2)	2 (2)	61 (47)	203 (43)	290 (61)
4	4 (1)	6 (2)	355 (115)	508 (164)	397 (105)	570 (151)	7 (3)	10 (4)	40 (42)	223 (57)	319 (82)
5	10 (6)	14 (8)	350 (98)	502 (140)	373 (100)	535 (144)	8 (2)	11 (3)	13 (14)	249 (56)	357 (81)
6	12 (6)	18 (9)	218 (122)	312 (176)	273 (166)	392 (239)	9 (6)	13 (9)	4 (4)	209 (24)	301 (35)
7	10 (8)	14 (12)	153 (87)	220 (125)	205 (124)	295 (178)	4 (3)	6 (4)	6 (4)	224 (37)	321 (53)
8	10 (5)	14 (6)	117 (31)	168 (45)	119 (45)	170 (64)	3 (2)	4 (3)	1 (1)	268 (33)	385 (47)
9	18 (9)	26 (13)	196 (61)	280 (87)	209 (88)	299 (126)	2 (2)	3 (2)	3 (3)	378 (75)	541 (107)
10	13 (5)	18 (7)	279 (53)	400 (76)	256 (54)	367 (78)	3 (1)	5 (2)	10 (5)	527 (32)	755 (46)
11	3 (1)	4 (1)	274 (75)	393 (108)	267 (94)	382 (134)	3 (1)	5 (2)	24 (31)	504 (79)	723 (113)
12	2 (2)	3 (2)	191 (108)	275 (155)	160 (72)	230 (104)	4 (1)	6 (1)	4 (2)	390 (61)	561 (87)
13	3 (1)	4 (1)	200 (59)	289 (84)	204 (82)	294 (118)	3 (2)	4 (3)	1 (2)	403 (59)	580 (83)
14	3 (1)	4 (1)	241 (97)	345 (139)	280 (129)	400 (184)	3 (1)	4 (2)	5 (2)	532 (81)	762 (115)
15	4 (4)	6 (6)	162 (41)	233 (59)	201 (63)	288 (90)	3 (2)	4 (3)	15 (35)	472 (45)	678 (64)
16	16 (7)	23 (10)	293 (112)	419 (160)	390 (193)	558 (278)	2 (2)	3 (3)	2 (2)	615 (86)	880 (123)
17	5 (5)	7 (7)	284 (173)	406 (248)	357 (240)	512 (345)	6 (2)	9 (3)	81 (128)	667 (209)	956 (298)
18	2 (1)	3 (2)			260 (205)	373 (294)	3 (2)	4 (3)			
19	4 (2)	5 (2)	201 (104)	287 (149)	333 (277)	477 (398)	1 (0)	2 (0)		17 (8)	24 (12)
20	2 (1)	3 (1)	239 (92)	343 (133)	259 (178)	371 (255)	3 (1)	4 (1)	3 (1)	18 (7)	26 (10)
21	3 (1)	5 (1)	204 (73)	292 (104)	238 (137)	341 (197)	3 (1)	4 (1)	4 (3)	21 (8)	29 (11)
22	18 (16)	25 (22)	235 (84)	336 (121)	264 (134)	379 (193)	7 (5)	10 (7)	7 (6)	34 (9)	49 (12)
23	9 (5)	12 (8)	234 (84)	336 (120)	244 (144)	350 (207)	10 (3)	14 (4)	10 (7)	108 (143)	155 (205)
24	4 (1)	6 (2)	189 (70)	272 (101)	188 (109)	270 (157)	6 (7)	9 (10)	6 (3)	74 (17)	106 (24)
25	3 (1)	4 (1)	203 (57)	291 (82)	239 (117)	344 (168)	4 (2)	6 (3)	6 (3)	90 (16)	130 (23)
26	2 (1)	2 (2)	225 (71)	323 (102)	320 (177)	460 (254)	0 (0)	0 (1)	1 (2)	125 (22)	179 (31)
27	4 (2)	6 (3)	293 (115)	419 (165)	326 (184)	468 (264)	0 (0)	0 (1)	7 (12)	179 (55)	256 (78)
28	15 (8)	21 (11)	258 (111)	369 (159)	263 (165)	377 (237)	0 (0)	1 (0)	1 (1)	183 (49)	263 (71)
29	7 (9)	10 (13)	249 (124)	357 (178)	215 (134)	308 (192)	3 (2)	4 (3)	5 (5)	175 (33)	251 (48)
30	3 (1)	4 (1)	207 (94)	297 (135)	186 (111)	267 (159)	2 (1)	3 (2)	13 (21)	193 (32)	276 (46)
31	2 (1)	3 (1)	169 (52)	242 (74)	129 (48)	185 (69)	2 (1)	2 (2)	3 (2)	247 (21)	355 (30)
Mean	7	10	248	356	278	398	3	5	15	252	362
n	31	31	30	30	31	31	31	31	29	30	30
SD	5	7	76	108	98	141	3	4	21	182	261
Min	2	2	117	168	119	170	0	0	1	17	24
Max	18	26	454	650	578	828	10	14	81	667	956

ED_004549_00015840-00226

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for June, 2009. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	8 (2)	12 (3)	165 (23)	236 (33)	146 (37)	209 (53)	3 (2)	5 (3)	4 (3)	257 (34)	368 (48)
2	4 (1)	6 (1)	221 (55)	318 (78)	181 (30)	260 (44)	0 (1)	0 (1)	1 (3)	305 (32)	439 (46)
3	7 (2)	9 (3)	246 (65)	354 (94)	225 (82)	323 (117)	1 (2)	2 (3)	1 (2)	375 (75)	539 (107)
4	10 (2)	15 (3)	212 (97)	309 (143)	236 (133)	344 (196)	5 (3)	7 (5)	7 (4)	427 (119)	616 (176)
5	4 (1)	6 (1)	163 (59)	235 (84)	230 (89)	331 (128)	10 (3)	14 (4)	7 (4)	457 (92)	658 (131)
6	1 (1)						2 (1)				
7	0 (2)						1 (0)				
8	13 (9)	18 (12)	251 (132)	360 (189)	229 (137)	328 (197)	1 (1)	1 (1)	26 (40)	634 (116)	909 (165)
9	5 (6)	6 (9)	153 (42)	220 (61)	127 (56)	183 (81)	3 (1)	4 (1)	12 (28)	512 (82)	736 (119)
10	3 (2)	4 (2)	220 (85)	316 (123)	124 (48)	178 (69)	1 (1)	1 (2)	35 (71)	279 (304)	292 (387)
11	9 (6)	13 (9)	217 (74)	311 (106)	147 (92)	211 (132)	2 (2)	3 (2)	2 (4)	7 (3)	10 (4)
12	20 (4)	29 (6)	172 (39)	247 (55)	102 (25)	147 (36)	1 (1)	1 (2)	1 (2)	4 (2)	6 (2)
13	19 (9)	27 (13)	150 (25)	216 (36)	115 (27)	165 (39)	3 (2)	4 (3)	3 (2)	8 (3)	11 (5)
14	14 (11)	19 (16)	133 (46)	191 (66)	124 (58)	179 (84)	3 (1)	5 (2)	3 (3)	12 (5)	17 (7)
15	1 (1)	1 (1)	119 (37)	171 (54)	99 (17)	143 (24)	5 (1)	6 (2)	5 (4)	19 (5)	27 (7)
16	11 (8)	16 (11)	136 (70)	196 (101)	119 (27)	172 (38)	2 (2)	3 (2)	2 (2)	25 (9)	36 (13)
17	6 (4)	9 (6)	74 (18)	106 (27)	102 (23)	146 (33)	7 (3)	10 (4)	6 (4)	64 (18)	92 (25)
18	6 (3)	8 (4)	72 (25)	104 (36)	126 (33)	182 (48)	3 (1)	4 (2)	3 (1)		
19	2 (1)	3 (1)	67 (16)	96 (23)	102 (26)	147 (37)	6 (3)	9 (4)	5 (4)	72 (10)	103 (14)
20	11 (8)	16 (11)	87 (43)	125 (62)	99 (19)	142 (28)	6 (2)	8 (2)	4 (2)	75 (12)	109 (18)
21	1 (1)	1 (1)	83 (30)	120 (43)	96 (24)	139 (35)	3 (2)	4 (2)	4 (5)	106 (20)	152 (29)
22	2 (1)	2 (1)	66 (20)	94 (28)	117 (33)	169 (48)	6 (3)	9 (5)	7 (5)	115 (7)	166 (10)
23	2 (1)	2 (1)	65 (18)	94 (25)	99 (27)	142 (38)	7 (3)	10 (5)	8 (4)	132 (22)	190 (32)
24	1 (1)	1 (1)	61 (12)	88 (17)	103 (26)	149 (37)	4 (2)	6 (3)	7 (5)	159 (15)	229 (22)
25	1 (0)	1 (0)	65 (10)	94 (15)	99 (14)	142 (20)	7 (3)	9 (5)	7 (4)	175 (15)	252 (22)
26	2 (1)	3 (1)	66 (18)	94 (26)	124 (49)	179 (70)	7 (3)	10 (4)	7 (3)	181 (10)	261 (14)
27	3 (2)	4 (2)	80 (13)	116 (19)	106 (41)	153 (59)	0 (1)	0 (1)	2 (3)	179 (15)	258 (21)
28	11 (3)	16 (4)	85 (15)	122 (21)	92 (20)	133 (29)	4 (3)	6 (5)	6 (3)	204 (44)	293 (63)
29	10 (5)	14 (7)	84 (19)	121 (27)	89 (28)	128 (40)	4 (1)	5 (2)	4 (3)	181 (5)	260 (7)
30	18 (8)	26 (12)	89 (20)	128 (29)	88 (24)	126 (35)	2 (2)	2 (2)	4 (3)	228 (35)	329 (50)
Mean	7	10	129	185	130	187	4	5	7	192	273
n	30	28	28	28	28	28	30	28	28	27	27
SD	6	8	62	89	45	65	2	4	7	166	237
Min	0	1	61	88	88	126	0	0	1	4	6
Max	20	29	251	360	236	344	10	14	35	634	909

ED_004549_00015840-00227

Table E7. Daily means (SD) of H2S concentrations at Site OK4B for July, 2009. Minimum detection limit is 5 ppb.

Day	Inlet (b/w barn 1 and 2)		Barn 1		Barn 2		Ambient (by far 9)		Inlet (by far 9)	Farrowing room 9	
	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	mg/dsm^3	ppb	ppb	mg/dsm^3
1	5 (4)	7 (5)	107 (26)	154 (37)	89 (25)	128 (35)	7 (2)	10 (3)	5 (3)	269 (53)	386 (77)
2	1 (1)	2 (1)	106 (16)	152 (22)	82 (13)	118 (18)	3 (1)	5 (1)	6 (2)	263 (31)	378 (45)
3	1 (0)	2 (1)	110 (31)	158 (44)	89 (31)	128 (45)	4 (1)	6 (1)	13 (15)	175 (208)	129 (167)
4	8 (5)	11 (8)	113 (21)	164 (30)	66 (12)	95 (17)	1 (1)	1 (2)	1 (1)	1 (1)	2 (2)
5	15 (4)	21 (6)	119 (26)	171 (38)	76 (20)	110 (29)	1 (2)	1 (3)	1 (1)	3 (2)	4 (3)
6	9 (6)	13 (9)	145 (54)	208 (77)	94 (25)	135 (36)	9 (4)	13 (6)	8 (3)	11 (3)	16 (4)
7	11 (10)	15 (14)	116 (30)	168 (44)	100 (29)	144 (42)	7 (5)	9 (7)	5 (3)	10 (3)	14 (4)
8	2 (3)	3 (4)	123 (20)	177 (29)	96 (19)	139 (27)	2 (2)	4 (3)	7 (5)	17 (10)	25 (14)
9	1 (1)	1 (1)	145 (28)	209 (40)	95 (23)	136 (33)	3 (2)	4 (3)	3 (3)	27 (6)	39 (9)
10	1 (1)	2 (1)					5 (2)	7 (2)			
11	2 (0)	3 (1)	133 (36)	192 (52)	110 (25)	159 (36)	6 (2)	8 (2)	5 (2)	53 (7)	76 (10)
12	3 (1)	4 (2)	127 (17)	183 (24)	109 (32)	157 (46)	4 (1)	6 (1)	6 (4)	76 (19)	110 (28)
13	4 (2)	5 (2)	127 (23)	182 (33)	90 (19)	130 (27)	4 (1)	5 (1)	6 (3)	91 (15)	131 (21)
14	7 (3)	10 (4)	134 (20)	193 (29)	80 (13)	115 (18)	4 (1)	6 (1)	8 (3)	118 (11)	170 (16)
15	14 (3)	19 (4)	141 (35)	203 (50)	86 (17)	124 (24)	5 (2)	8 (3)	5 (3)	122 (9)	176 (15)
16	20 (5)	28 (8)	130 (27)	188 (39)	106 (23)	152 (33)	3 (1)	5 (1)		137 (9)	
17	21 (6)	30 (9)	141 (25)	202 (36)	119 (20)	172 (29)	7 (1)	9 (2)	11 (6)	167 (25)	241 (36)
18	13 (4)	19 (6)	150 (42)	216 (60)	123 (36)	176 (52)	6 (2)	8 (3)	13 (20)	191 (61)	275 (88)
19	5 (2)	7 (2)	128 (42)	184 (60)	126 (30)	181 (43)	4 (1)	6 (1)	8 (2)	174 (46)	251 (65)
20	4 (2)		84 (20)		121 (28)		4 (0)				
21	9 (3)		79 (27)		113 (26)		3 (1)		4 (2)		
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
Mean	7	11	123	183	99	139	4	6	7	106	143
n	21	19	20	18	20	18	21	19	18	18	17
SD	6	9	19	19	16	23	2	3	3	85	123
Min	1	1	79	152	66	95	1	1	1	1	2
Max	21	30	150	216	126	181	9	13	13	269	386

ED_004549_00015840-00228

Table E8. H_2S emissions

Table E8. Daily means (SD) of H2S emissions at Site OK4B for July, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21	496 (82)	213 (35)	434 (72)	1.08 (0.18)	724 (124)	312 (53)	633 (108)	1.58 (0.27)	79 (10)	549 (67)	3270 (396)	6 (1)
22	545 (72)	235 (31)	477 (63)	1.19 (0.16)	671 (82)	289 (35)	587 (71)	1.47 (0.18)	96 (11)	673 (76)	4000 (451)	8 (1)
23	618 (93)	266 (40)	541 (81)	1.35 (0.20)	633 (95)	273 (41)	554 (83)	1.39 (0.21)	112 (11)	781 (77)	4650 (456)	9 (1)
24	801 (116)	345 (50)	700 (102)	1.75 (0.25)	816 (170)	351 (73)	714 (149)	1.78 (0.37)	123 (15)	860 (103)	5120 (612)	10 (1)
25	836 (102)	360 (44)	731 (89)	1.83 (0.22)	1000 (195)	432 (84)	877 (171)	2.19 (0.43)	126 (9)	881 (65)	5240 (389)	10 (1)
26	834 (144)	359 (62)	729 (126)	1.82 (0.32)	875 (108)	377 (47)	765 (94)	1.91 (0.24)	105 (27)	732 (188)	4360 (1120)	8 (2)
27	867 (144)	373 (62)	758 (126)	1.89 (0.32)	820 (87)	353 (37)	717 (76)	1.79 (0.19)	73 (61)	512 (428)	3040 (2550)	6 (5)
28	756 (66)	326 (28)	661 (57)	1.65 (0.14)	900 (126)	388 (54)	786 (110)	1.97 (0.27)	6 (3)	43 (21)	254 (123)	0 (0)
29	879 (109)	378 (47)	767 (95)	1.92 (0.24)	805 (97)	347 (42)	703 (84)	1.76 (0.21)	4 (1)	29 (8)	171 (49)	0 (0)
30	941 (165)	405 (71)	821 (144)	2.05 (0.36)	664 (81)	286 (35)	579 (70)	1.45 (0.18)	27 (24)	189 (170)	849 (610)	2 (1)
31	874 (239)	376 (103)	763 (209)	1.91 (0.52)	629 (232)	271 (100)	549 (202)	1.37 (0.51)	28 (43)	195 (300)	1160 (1780)	3 (4)
Mean	768	331	671	1.68	776	334	679	1.70	71	495	2920	6
n	11	11	11	11	11	11	11	11	11	11	11	11
SD	141	61	123	0.31	117	50	102	0.26	44	311	1870	3
Min	496	213	434	1.08	629	271	549	1.37	4	29	171	0
Max	941	405	821	2.05	1000	432	877	2.19	126	881	5240	10

ED_004549_00015840-00229

Table E8. Daily means (SD) of H2S emissions at Site OK4B for August, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	819 (135)	353 (58)	715 (118)	1.79 (0.29)	780 (340)	336 (146)	680 (297)	1.70 (0.74)	10 (3)	69 (24)	409 (141)	1 (0)
2	748 (199)	322 (86)	652 (173)	1.63 (0.43)	476 (114)	205 (49)	416 (100)	1.04 (0.25)	14 (5)	97 (37)	576 (217)	1 (0)
3	840 (149)	362 (64)	733 (130)	1.83 (0.33)	573 (99)	247 (43)	500 (87)	1.25 (0.22)	22 (8)	156 (59)	930 (353)	2 (1)
4	861 (148)	371 (64)	751 (129)	1.88 (0.32)	708 (160)	305 (69)	617 (140)	1.54 (0.35)	37 (13)	259 (93)	1540 (553)	3 (1)
5	950 (220)	409 (95)	828 (192)	2.07 (0.48)	678 (140)	292 (60)	591 (122)	1.48 (0.30)	52 (8)	360 (55)	2140 (328)	4 (1)
6	1080 (218)	467 (94)	945 (190)	2.36 (0.48)	858 (132)	370 (57)	749 (115)	1.87 (0.29)	61 (16)	426 (110)	2530 (654)	5 (1)
7	1070 (94)	462 (40)	935 (82)	2.34 (0.20)	940 (204)	405 (88)	820 (178)	2.05 (0.45)	86 (13)	603 (90)	3590 (536)	7 (1)
8	1390 (382)	597 (164)	1210 (333)	3.02 (0.83)	830 (142)	358 (61)	724 (124)	1.81 (0.31)	112 (18)	784 (127)	4670 (753)	9 (1)
9												
10												
11												
12												
13												
14												
15	811 (231)	349 (100)	707 (202)	1.77 (0.50)	735 (124)	317 (53)	641 (108)	1.60 (0.27)	210 (13)	1470 (88)	8730 (521)	16 (1)
16	732 (91)	315 (39)	638 (79)	1.60 (0.20)	751 (71)	323 (30)	654 (62)	1.64 (0.15)	195 (30)	1370 (212)	8130 (1260)	15 (2)
17												
18	745 (99)	321 (43)	649 (86)	1.62 (0.22)	729 (135)	314 (58)	635 (117)	1.59 (0.29)	200 (10)	1400 (71)	8340 (423)	15 (1)
19	897 (152)	387 (66)	782 (133)	1.95 (0.33)	777 (153)	334 (66)	677 (134)	1.69 (0.33)	203 (13)	1420 (92)	8460 (548)	15 (1)
20	1080 (193)	465 (83)	941 (168)	2.35 (0.42)	1090 (249)	471 (107)	953 (217)	2.38 (0.54)				
21	964 (151)	415 (65)	840 (131)	2.10 (0.33)	961 (183)	414 (79)	837 (160)	2.09 (0.40)	5 (1)	33 (7)	196 (42)	0 (0)
22	956 (107)	412 (46)	832 (93)	2.08 (0.23)	997 (352)	429 (152)	868 (307)	2.17 (0.77)	5 (2)	36 (14)	216 (83)	0 (0)
23	868 (109)	374 (47)	756 (95)	1.89 (0.24)	782 (167)	337 (72)	681 (146)	1.70 (0.36)	8 (2)	56 (14)	335 (85)	1 (0)
24	757 (168)	326 (72)	660 (146)	1.65 (0.37)	785 (189)	338 (81)	684 (164)	1.71 (0.41)	10 (2)	69 (11)	408 (67)	1 (0)
25	721 (107)	310 (46)	628 (93)	1.57 (0.23)	1470 (1550)	632 (668)	1280 (1350)	3.19 (3.38)	15 (3)	104 (23)	619 (137)	1 (0)
26	971 (141)	418 (61)	846 (123)	2.11 (0.31)	495 (81)	213 (35)	431 (70)	1.08 (0.18)	29 (10)	201 (73)	1200 (434)	2 (1)
27	931 (304)	401 (131)	810 (265)	2.03 (0.66)	527 (119)	227 (51)	459 (104)	1.15 (0.26)	45 (13)	316 (92)	1880 (544)	4 (1)
28	714 (183)	308 (79)	622 (159)	1.55 (0.40)	528 (130)	228 (56)	460 (113)	1.15 (0.28)	55 (11)	384 (80)	2290 (475)	5 (1)
29	734 (296)	316 (127)	639 (257)	1.60 (0.64)	464 (93)	200 (40)	404 (81)	1.01 (0.20)				
30	566 (146)	244 (63)	493 (128)	1.23 (0.32)	458 (109)	197 (47)	399 (95)	1.00 (0.24)	71 (9)	495 (64)	2940 (380)	6 (1)
31	585 (150)	252 (65)	509 (131)	1.27 (0.33)	528 (119)	228 (51)	460 (104)	1.15 (0.26)	86 (33)	603 (231)	3590 (1370)	7 (3)
Mean	866	373	755	1.89	747	322	651	1.63	70	487	2900	6
n	24	24	24	24	24	24	24	24	22	22	22	22
SD	176	76	153	0.38	232	100	202	0.51	69	482	2870	5
Min	566	244	493	1.23	458	197	399	1.00	5	33	196	0
Max	1390	597	1210	3.02	1470	632	1280	3.19	210	1470	8730	16

ED_004549_00015840-00230

Table E8. Daily means (SD) of H2S emissions at Site OK4B for September, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	690 (137)	297 (59)	600 (119)	1.50 (0.30)	650 (135)	280 (58)	566 (117)	1.41 (0.29)	90 (18)	627 (125)	3730 (744)	7 (1)
2	858 (271)	370 (117)	747 (236)	1.87 (0.59)	663 (94)	286 (40)	577 (82)	1.44 (0.20)	97 (18)	681 (125)	4050 (746)	8 (1)
3	719 (116)	310 (50)	626 (101)	1.56 (0.25)	791 (201)	341 (86)	689 (175)	1.72 (0.44)	104 (17)	731 (121)	4350 (720)	8 (1)
4												
5												
6	820 (134)	353 (58)	714 (117)	1.79 (0.29)	707 (150)	304 (65)	615 (130)	1.54 (0.33)				
7	840 (174)	362 (75)	731 (152)	1.83 (0.38)	710 (137)	306 (59)	618 (120)	1.54 (0.30)				
8	1000 (395)	432 (170)	873 (344)	2.18 (0.86)	699 (111)	301 (48)	609 (97)	1.52 (0.24)				
9	631 (118)	272 (51)	549 (103)	1.37 (0.26)	748 (242)	322 (104)	651 (211)	1.63 (0.53)				
10												
11					597 (186)	257 (80)	520 (162)	1.30 (0.40)				
12	670 (125)	288 (54)	583 (109)	1.46 (0.27)	491 (146)	212 (63)	428 (128)	1.07 (0.32)				
13	667 (128)	287 (55)	580 (111)	1.45 (0.28)	488 (149)	210 (64)	425 (130)	1.06 (0.33)				
14	643 (130)	277 (56)	560 (114)	1.40 (0.28)	417 (103)	179 (45)	363 (90)	0.91 (0.23)				
15	751 (213)	324 (92)	654 (185)	1.64 (0.46)	527 (129)	227 (56)	459 (113)	1.15 (0.28)				
16	815 (188)	351 (81)	709 (164)	1.77 (0.41)	685 (182)	295 (78)	596 (158)	1.49 (0.40)				
17	849 (488)	366 (210)	739 (425)	1.85 (1.06)	845 (360)	364 (155)	736 (314)	1.84 (0.78)				
18	469 (156)	202 (67)	408 (136)	1.02 (0.34)	811 (228)	349 (98)	707 (199)	1.77 (0.50)				
19	372 (86)	160 (37)	324 (75)	0.81 (0.19)	971 (805)	418 (347)	845 (701)	2.11 (1.75)				
20	468 (96)	202 (41)	408 (84)	1.02 (0.21)	466 (100)	201 (43)	406 (87)	1.02 (0.22)				
21	587 (100)	253 (43)	511 (87)	1.28 (0.22)	499 (133)	215 (57)	435 (116)	1.09 (0.29)	78 (11)	548 (76)	3260 (454)	6 (1)
22	524 (93)	226 (40)	456 (81)	1.14 (0.20)	552 (141)	238 (61)	480 (123)	1.20 (0.31)	92 (20)	647 (142)	3850 (843)	7 (2)
23	577 (141)	249 (61)	503 (123)	1.26 (0.31)	682 (149)	294 (64)	594 (130)	1.48 (0.32)	112 (29)	787 (205)	4680 (1220)	9 (2)
24												
25												
26	508 (112)	219 (48)	442 (98)	1.11 (0.25)	637 (163)	274 (70)	554 (142)	1.39 (0.35)	117 (37)	817 (260)	4860 (1550)	9 (3)
27	597 (223)	257 (96)	520 (195)	1.30 (0.49)	600 (127)	258 (55)	522 (111)	1.31 (0.28)	145 (29)	1020 (203)	6060 (1210)	11 (2)
28	541 (111)	233 (48)	471 (97)	1.18 (0.24)	862 (612)	371 (264)	750 (533)	1.88 (1.33)				
29	595 (113)	256 (49)	519 (98)	1.30 (0.25)	721 (169)	311 (73)	628 (147)	1.57 (0.37)				
30												
Mean	661	284	575	1.44	659	284	574	1.43	105	732	4360	8
n	23	23	23	23	24	24	24	24	8	8	8	8
SD	150	65	131	0.33	137	59	119	0.30	19	136	808	1
Min	372	160	324	0.81	417	179	363	0.91	78	548	3260	6
Max	1000	432	873	2.18	971	418	845	2.11	145	1020	6060	11

ED_004549_00015840-00231

Table E8. Daily means (SD) of H2S emissions at Site OK4B for October, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1												
2	852 (396)	367 (170)	742 (345)	1.86 (0.86)	941 (279)	405 (120)	819 (243)	2.05 (0.61)	1 (1)	6 (4)	37 (23)	0 (0)
3	587 (127)	253 (55)	511 (110)	1.28 (0.28)	759 (176)	327 (76)	660 (154)	1.65 (0.38)	5 (6)	33 (39)	198 (235)	0 (1)
4	826 (342)	356 (147)	719 (297)	1.80 (0.74)	692 (171)	298 (74)	603 (148)	1.51 (0.37)	2 (1)	15 (9)	90 (54)	0 (0)
5	795 (310)	342 (134)	692 (270)	1.73 (0.68)	799 (177)	344 (76)	695 (154)	1.74 (0.39)	6 (5)	44 (32)	262 (190)	1 (0)
6												
7	571 (141)	246 (61)	497 (123)	1.24 (0.31)	712 (183)	307 (79)	619 (159)	1.55 (0.40)	16 (6)	114 (41)	679 (242)	1 (0)
8	534 (116)	230 (50)	464 (101)	1.16 (0.25)	577 (138)	248 (59)	502 (120)	1.25 (0.30)	21 (11)	149 (76)	884 (451)	2 (1)
9	586 (272)	253 (117)	510 (236)	1.27 (0.59)	707 (231)	305 (100)	615 (201)	1.54 (0.50)	33 (18)	233 (127)	1390 (759)	3 (2)
10	530 (108)	228 (47)	461 (94)	1.15 (0.24)	683 (140)	294 (60)	593 (121)	1.48 (0.30)	45 (19)	316 (131)	1880 (778)	4 (2)
11	531 (127)	229 (55)	462 (110)	1.15 (0.28)	772 (236)	333 (102)	671 (206)	1.68 (0.51)	65 (14)	457 (99)	2720 (587)	5 (1)
12	596 (114)	257 (49)	518 (99)	1.30 (0.25)	1100 (344)	472 (148)	953 (299)	2.38 (0.75)	75 (11)	526 (73)	3130 (436)	6 (1)
13	727 (79)	313 (34)	632 (69)	1.58 (0.17)	790 (65)	340 (28)	686 (57)	1.72 (0.14)	104 (17)	731 (122)	4350 (723)	8 (1)
14	936 (317)	403 (137)	813 (276)	2.03 (0.69)	988 (235)	425 (101)	858 (204)	2.15 (0.51)	135 (39)	948 (270)	5640 (1610)	11 (3)
15									109 (45)	760 (312)	4520 (1860)	9 (4)
16	834 (356)	359 (153)	724 (309)	1.81 (0.77)	1290 (450)	557 (194)	1120 (391)	2.81 (0.98)	121 (45)	846 (316)	5030 (1880)	9 (3)
17	719 (156)	310 (67)	625 (135)	1.56 (0.34)	1220 (411)	526 (177)	1060 (357)	2.65 (0.89)	149 (31)	1050 (215)	6220 (1280)	12 (2)
18	896 (230)	386 (99)	778 (199)	1.94 (0.50)	871 (248)	375 (107)	756 (215)	1.89 (0.54)	162 (69)	1130 (483)	6750 (2880)	12 (5)
19	884 (290)	381 (125)	767 (252)	1.92 (0.63)	856 (286)	369 (123)	743 (248)	1.86 (0.62)	169 (64)	1180 (445)	7030 (2650)	13 (5)
20	809 (236)	348 (102)	702 (205)	1.75 (0.51)	831 (183)	358 (79)	721 (159)	1.80 (0.40)	188 (54)	1310 (377)	7810 (2240)	14 (4)
21	1260 (465)	543 (200)	1090 (403)	2.74 (1.01)	830 (257)	358 (111)	720 (223)	1.80 (0.56)	188 (93)	1320 (650)	7830 (3870)	14 (7)
22	891 (289)	384 (125)	773 (251)	1.93 (0.63)	859 (257)	370 (111)	745 (223)	1.86 (0.56)				
23	983 (265)	423 (114)	852 (230)	2.13 (0.57)	1020 (255)	439 (110)	884 (221)	2.21 (0.55)	1 (1)	9 (5)	53 (32)	0 (0)
24	1120 (306)	484 (132)	974 (265)	2.43 (0.66)	969 (440)	417 (190)	840 (382)	2.10 (0.96)	2 (1)	12 (8)	70 (46)	0 (0)
25	845 (236)	364 (102)	732 (205)	1.83 (0.51)	815 (256)	351 (110)	706 (222)	1.77 (0.56)				
26	968 (358)	417 (154)	839 (311)	2.10 (0.78)	1190 (830)	512 (358)	1030 (720)	2.58 (1.80)	4 (2)	31 (15)	187 (89)	0 (0)
27	1290 (672)	554 (290)	1110 (583)	2.79 (1.46)	693 (229)	299 (98)	601 (198)	1.50 (0.50)	9 (5)	64 (35)	381 (209)	1 (0)
28	1070 (406)	460 (175)	925 (352)	2.31 (0.88)	751 (222)	323 (96)	650 (193)	1.63 (0.48)	19 (9)	133 (63)	789 (374)	2 (1)
29	1020 (389)	441 (167)	886 (337)	2.21 (0.84)	975 (372)	420 (160)	845 (323)	2.11 (0.81)	42 (21)	293 (144)	1740 (860)	4 (2)
30	1370 (365)	589 (157)	1190 (316)	2.96 (0.79)	996 (235)	429 (101)	862 (203)	2.16 (0.51)	51 (11)	360 (77)	2140 (460)	4 (1)
31	1160 (426)	501 (183)	1010 (369)	2.52 (0.92)	1140 (345)	491 (148)	988 (298)	2.47 (0.75)	81 (36)	566 (254)	3370 (1510)	7 (3)
Mean	864	372	750	1.87	887	382	770	1.92	67	468	2780	5
n	28	28	28	28	28	28	28	28	27	27	27	27
SD	235	101	203	0.51	178	77	154	0.39	63	442	2630	5
Min	530	228	461	1.15	577	248	502	1.25	1	6	37	0
Max	1370	589	1190	2.96	1290	557	1120	2.81	188	1320	7830	14

ED_004549_00015840-00232

Table E8. Daily means (SD) of H2S emissions at Site OK4B for November, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	1030 (668)	445 (288)	894 (578)	2.24 (1.45)	1300 (860)	558 (370)	1120 (744)	2.81 (1.86)	100 (40)	699 (277)	4160 (1650)	8 (3)
2	910 (328)	392 (141)	787 (284)	1.97 (0.71)					109 (44)	766 (306)	4560 (1820)	9 (4)
3	794 (221)	342 (95)	687 (191)	1.72 (0.48)	915 (458)	394 (197)	792 (396)	1.98 (0.99)	131 (50)	919 (350)	5470 (2080)	11 (4)
4	824 (222)	355 (96)	713 (192)	1.78 (0.48)	861 (261)	371 (113)	745 (226)	1.86 (0.57)	126 (46)	881 (322)	5240 (1920)	10 (4)
5	1120 (501)	484 (216)	973 (433)	2.43 (1.08)	869 (266)	374 (115)	752 (230)	1.88 (0.58)	149 (57)	1040 (398)	6190 (2370)	12 (4)
6	935 (425)	403 (183)	809 (368)	2.02 (0.92)								
7	929 (333)	400 (144)	803 (288)	2.01 (0.72)								
8	849 (269)	365 (116)	734 (233)	1.83 (0.58)	1030 (306)	443 (132)	889 (265)	2.22 (0.66)	213 (69)	1490 (482)	8880 (2870)	16 (5)
9	1020 (272)	441 (117)	886 (235)	2.21 (0.59)	979 (359)	422 (155)	846 (310)	2.12 (0.78)	252 (67)	1760 (470)	10500 (2790)	19 (5)
10	986 (176)	425 (76)	852 (152)	2.13 (0.38)	995 (215)	429 (92)	860 (185)	2.15 (0.46)	268 (32)	1870 (226)	11200 (1350)	20 (2)
11	1040 (410)	449 (176)	901 (354)	2.25 (0.89)	1050 (249)	450 (107)	904 (215)	2.26 (0.54)	294 (50)	2060 (351)	12300 (2090)	22 (4)
12	1080 (291)	465 (125)	932 (251)	2.33 (0.63)								
13												
14	1200 (351)	517 (151)	1040 (303)	2.59 (0.76)	1370 (596)	591 (257)	1190 (514)	2.96 (1.29)	2 (2)	14 (12)	84 (73)	0 (0)
15	1100 (276)	472 (119)	945 (238)	2.36 (0.60)	794 (247)	342 (106)	686 (213)	1.71 (0.53)	5 (4)	36 (27)	214 (163)	0 (0)
16	1240 (422)	535 (182)	1070 (364)	2.68 (0.91)	894 (332)	385 (143)	772 (286)	1.93 (0.72)	8 (6)	58 (40)	345 (240)	1 (1)
17	1030 (298)	443 (128)	888 (257)	2.22 (0.64)	782 (220)	337 (95)	675 (190)	1.69 (0.47)	13 (7)	89 (51)	531 (302)	1 (1)
18	1160 (408)	501 (176)	1000 (352)	2.51 (0.88)	1090 (462)	471 (199)	944 (399)	2.36 (1.00)	20 (9)	139 (65)	826 (385)	2 (1)
19	1080 (256)	463 (110)	928 (220)	2.32 (0.55)	721 (149)	310 (64)	622 (129)	1.55 (0.32)	35 (18)	243 (124)	1440 (740)	3 (2)
20	1220 (341)	526 (147)	1050 (294)	2.63 (0.74)	734 (261)	316 (112)	633 (225)	1.58 (0.56)	57 (30)	396 (212)	2360 (1260)	5 (3)
21	1130 (323)	485 (139)	970 (279)	2.43 (0.70)	773 (274)	333 (118)	666 (236)	1.67 (0.59)	65 (44)	458 (311)	2720 (1850)	5 (4)
22	1290 (575)	555 (248)	1110 (496)	2.78 (1.24)	650 (152)	280 (66)	561 (131)	1.40 (0.33)	97 (55)	676 (385)	4020 (2290)	8 (5)
23	905 (238)	390 (103)	780 (205)	1.95 (0.51)					149 (83)	1040 (581)	6200 (3460)	12 (7)
24	1020 (371)	438 (160)	877 (320)	2.19 (0.80)	646 (166)	278 (72)	557 (143)	1.39 (0.36)	152 (91)	1060 (634)	6310 (3770)	12 (7)
25	1290 (424)	556 (183)	1110 (365)	2.78 (0.91)	723 (119)	311 (51)	623 (102)	1.56 (0.26)	180 (93)	1260 (650)	7500 (3870)	14 (7)
26	1210 (345)	521 (149)	1040 (297)	2.60 (0.74)	857 (254)	369 (110)	739 (219)	1.85 (0.55)	185 (101)	1300 (710)	7720 (4230)	15 (8)
27												
28												
29												
30	863 (214)	372 (92)	743 (184)	1.86 (0.46)	950 (286)	409 (123)	818 (246)	2.04 (0.62)	263 (141)	1840 (985)	11000 (5860)	20 (11)
Mean	1050	452	905	2.26	904	389	780	1.95	125	874	5200	10
n	26	26	26	26	21	21	21	21	23	23	23	23
SD	142	61	122	0.31	187	81	162	0.41	90	629	3740	7
Min	794	342	687	1.72	646	278	557	1.39	2	14	84	0
Max	1290	556	1110	2.78	1370	591	1190	2.96	294	2060	12300	22

ED_004549_00015840-00233

Table E8. Daily means (SD) of H2S emissions at Site OK4B for December, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	816 (141)	352 (61)	703 (121)	1.76 (0.30)					264 (78)	1850 (544)	11000 (3240)	20 (6)
2	976 (181)	420 (78)	840 (156)	2.10 (0.39)	958 (391)	412 (168)	824 (336)	2.06 (0.84)	234 (85)	1640 (594)	9750 (3530)	18 (6)
3	998 (304)	430 (131)	859 (261)	2.15 (0.65)	600 (211)	258 (91)	516 (181)	1.29 (0.45)	213 (73)	1490 (508)	8890 (3020)	16 (5)
4	1040 (240)	447 (104)	893 (207)	2.23 (0.52)	681 (99)	293 (43)	586 (85)	1.47 (0.21)	210 (56)	1470 (393)	8770 (2340)	16 (4)
5	1130 (351)	488 (151)	976 (302)	2.44 (0.76)	768 (194)	331 (83)	661 (167)	1.65 (0.42)	214 (119)	1500 (830)	8920 (4940)	16 (9)
6	927 (312)	399 (135)	798 (269)	1.99 (0.67)	793 (326)	341 (141)	683 (281)	1.71 (0.70)				
7	782 (296)	337 (127)	674 (255)	1.68 (0.64)	1080 (838)	465 (361)	929 (722)	2.32 (1.80)				
8	717 (206)	309 (89)	617 (177)	1.54 (0.44)	840 (123)	362 (53)	723 (106)	1.81 (0.26)	1 (1)	7 (6)	45 (34)	0 (0)
9	657 (119)	283 (51)	566 (103)	1.42 (0.26)	1020 (652)	438 (281)	875 (561)	2.19 (1.40)	3 (2)	18 (15)	104 (91)	0 (0)
10	745 (280)	321 (121)	641 (241)	1.60 (0.60)	924 (404)	398 (174)	795 (348)	1.99 (0.87)	3 (3)	21 (19)	127 (116)	0 (0)
11					765 (137)	330 (59)	659 (118)	1.65 (0.30)	5 (4)	36 (29)	217 (175)	0 (0)
12	737 (227)	317 (98)	635 (195)	1.59 (0.49)	854 (216)	368 (93)	735 (186)	1.84 (0.46)	7 (5)	52 (38)	311 (225)	1 (0)
13	984 (319)	424 (137)	847 (274)	2.12 (0.69)	1030 (162)	442 (70)	883 (139)	2.21 (0.35)	14 (12)	94 (81)	562 (482)	1 (1)
14	726 (164)	312 (71)	625 (141)	1.56 (0.35)	1000 (119)	432 (51)	863 (103)	2.16 (0.26)	16 (12)	113 (84)	675 (501)	1 (1)
15	792 (198)	341 (85)	682 (171)	1.71 (0.43)	1020 (256)	441 (110)	882 (221)	2.21 (0.55)	21 (16)	145 (109)	860 (648)	2 (1)
16	918 (335)	395 (144)	791 (289)	1.98 (0.72)	1140 (381)	491 (164)	982 (328)	2.46 (0.82)	31 (20)	215 (140)	1280 (833)	3 (2)
17	943 (365)	406 (157)	812 (315)	2.03 (0.79)	799 (227)	344 (98)	688 (196)	1.72 (0.49)	50 (32)	350 (226)	2080 (1350)	4 (3)
18	937 (275)	403 (118)	807 (237)	2.02 (0.59)	569 (154)	245 (66)	490 (133)	1.23 (0.33)				
19	1360 (592)	586 (255)	1170 (510)	2.93 (1.27)	565 (167)	243 (72)	486 (144)	1.22 (0.36)	116 (60)	814 (423)	4840 (2520)	9 (5)
20												
21												
22	842 (231)	363 (100)	726 (199)	1.81 (0.50)	579 (153)	249 (66)	499 (132)	1.25 (0.33)	134 (72)	942 (505)	5600 (3010)	11 (6)
23	1130 (536)	488 (231)	977 (462)	2.44 (1.15)	517 (143)	223 (62)	445 (124)	1.11 (0.31)	138 (75)	968 (525)	5760 (3130)	11 (6)
24	892 (292)	384 (126)	768 (252)	1.92 (0.63)					149 (74)	1040 (521)	6200 (3100)	11 (6)
25	907 (265)	391 (114)	782 (228)	1.95 (0.57)	613 (199)	264 (86)	528 (172)	1.32 (0.43)	138 (89)	964 (620)	5740 (3690)	10 (7)
26	920 (226)	396 (97)	792 (195)	1.98 (0.49)	803 (270)	346 (116)	692 (233)	1.73 (0.58)	163 (107)	1140 (751)	6780 (4470)	12 (8)
27					1090 (281)	470 (121)	940 (243)	2.35 (0.61)				
28	812 (146)	350 (63)	700 (126)	1.75 (0.32)	765 (114)	329 (49)	659 (98)	1.65 (0.25)				
29	888 (244)	383 (105)	766 (210)	1.91 (0.53)	1100 (718)	472 (309)	945 (619)	2.36 (1.55)				
30	1050 (305)	450 (131)	902 (263)	2.25 (0.66)	601 (251)	259 (108)	518 (216)	1.29 (0.54)				
31												
Mean	909	391	783	1.96	826	356	711	1.78	101	708	4210	8
n	26	26	26	26	26	26	26	26	21	21	21	21
SD	152	66	131	0.33	191	82	165	0.41	89	626	3720	7
Min	657	283	566	1.42	517	223	445	1.11	1	7	45	0
Max	1360	586	1170	2.93	1140	491	982	2.46	264	1850	11000	20

ED_004549_00015840-00234

Table E8. Daily means (SD) of H2S emissions at Site OK4B for January, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1												
2	1230 (383)	528 (165)	1060 (330)	2.64 (0.83)	556 (158)	240 (68)	479 (136)	1.20 (0.34)	6 (5)	43 (34)	254 (199)	1 (0)
3												
4	1200 (347)	518 (149)	1040 (299)	2.59 (0.75)	716 (343)	309 (148)	617 (295)	1.54 (0.74)	8 (6)	58 (45)	346 (265)	1 (1)
5	1200 (422)	515 (182)	1030 (363)	2.58 (0.91)					10 (6)	71 (42)	420 (248)	1 (0)
6	1470 (425)	632 (183)	1260 (366)	3.16 (0.92)					16 (10)	114 (71)	678 (422)	1 (1)
7	1330 (641)	572 (276)	1140 (552)	2.86 (1.38)					26 (15)	182 (107)	1080 (638)	2 (1)
8	1720 (1140)	741 (489)	1480 (978)	3.70 (2.44)	1110 (734)	480 (316)	959 (631)	2.40 (1.58)	40 (26)	279 (180)	1660 (1070)	3 (2)
9	987 (251)	425 (108)	849 (216)	2.12 (0.54)					68 (32)	473 (224)	2810 (1330)	5 (3)
10	1100 (358)	472 (154)	942 (308)	2.36 (0.77)	687 (356)	296 (153)	591 (306)	1.48 (0.77)	88 (52)	613 (362)	3650 (2150)	7 (4)
11												
12	1030 (257)	444 (111)	885 (221)	2.21 (0.55)	661 (300)	285 (129)	568 (258)	1.42 (0.65)	129 (69)	903 (485)	5370 (2890)	10 (5)
13	1060 (304)	458 (131)	913 (261)	2.28 (0.65)	838 (490)	361 (211)	720 (421)	1.80 (1.05)	126 (65)	882 (456)	5250 (2710)	10 (5)
14	1010 (297)	436 (128)	869 (256)	2.17 (0.64)	659 (368)	284 (159)	566 (317)	1.42 (0.79)	155 (74)	1090 (517)	6460 (3070)	12 (6)
15									211 (92)	1480 (644)	8780 (3830)	16 (7)
16	1020 (358)	441 (154)	878 (307)	2.20 (0.77)	665 (247)	286 (106)	571 (212)	1.43 (0.53)				
17	901 (309)	388 (133)	773 (265)	1.93 (0.66)	691 (367)	298 (158)	593 (315)	1.48 (0.79)				
18	669 (152)	288 (65)	574 (130)	1.44 (0.33)					186 (107)	1300 (747)	7760 (4440)	14 (8)
19	610 (175)	263 (76)	524 (150)	1.31 (0.38)					189 (110)	1320 (769)	7870 (4580)	14 (8)
20	602 (154)	259 (66)	517 (132)	1.29 (0.33)					221 (99)	1550 (696)	9220 (4140)	17 (7)
21	534 (92)	230 (40)	458 (79)	1.15 (0.20)	556 (69)	239 (30)	477 (59)	1.19 (0.15)	237 (128)	1660 (899)	9870 (5350)	18 (10)
22	611 (150)	263 (65)	524 (129)	1.31 (0.32)	555 (74)	239 (32)	476 (64)	1.19 (0.16)	218 (104)	1530 (730)	9090 (4340)	16 (8)
23	731 (241)	315 (104)	626 (207)	1.57 (0.52)	560 (90)	241 (39)	480 (77)	1.20 (0.19)				
24												
25	819 (228)	353 (98)	702 (195)	1.75 (0.49)	650 (150)	280 (65)	557 (128)	1.39 (0.32)	17 (14)	120 (99)	715 (592)	2 (1)
26	864 (284)	372 (122)	740 (244)	1.85 (0.61)	612 (72)	264 (31)	525 (61)	1.31 (0.15)	10 (7)	70 (51)	417 (306)	1 (1)
27												
28												
29												
30												
31												
Mean	985	424	847	2.12	680	293	584	1.46	103	723	4300	8
n	21	21	21	21	14	14	14	14	19	19	19	19
SD	301	130	260	0.65	142	61	123	0.31	85	595	3540	6
Min	534	230	458	1.15	555	239	476	1.19	6	43	254	1
Max	1720	741	1480	3.70	1110	480	959	2.40	237	1660	9870	18

ED_004549_00015840-00235

Table E8. Daily means (SD) of H2S emissions at Site OK4B for February, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	871 (261)	375 (112)	745 (223)	1.86 (0.56)					23 (15)	161 (102)	957 (607)	2 (1)
2	875 (320)	377 (138)	748 (274)	1.87 (0.68)	713 (110)	307 (47)	610 (94)	1.52 (0.24)	39 (26)	273 (181)	1620 (1080)	3 (2)
3	1050 (537)	452 (231)	897 (459)	2.24 (1.15)	769 (116)	331 (50)	658 (100)	1.64 (0.25)	60 (29)	417 (202)	2480 (1200)	5 (2)
4												
5	778 (163)	335 (70)	664 (139)	1.66 (0.35)	739 (102)	318 (44)	631 (87)	1.58 (0.22)	64 (45)	448 (312)	2670 (1860)	5 (4)
6									109 (58)	764 (402)	4550 (2390)	9 (5)
7												
8	944 (327)	407 (141)	806 (279)	2.01 (0.70)	671 (191)	289 (82)	573 (163)	1.43 (0.41)	137 (69)	957 (480)	5690 (2850)	11 (5)
9	907 (384)	391 (165)	774 (328)	1.94 (0.82)	672 (301)	289 (130)	573 (257)	1.43 (0.64)	180 (74)	1260 (520)	7490 (3100)	14 (6)
10	614 (168)	264 (72)	523 (143)	1.31 (0.36)	514 (158)	221 (68)	439 (134)	1.10 (0.34)	191 (109)	1340 (762)	7970 (4530)	15 (8)
11	960 (542)	413 (233)	819 (462)	2.05 (1.16)	545 (144)	235 (62)	465 (123)	1.16 (0.31)	207 (100)	1450 (699)	8640 (4160)	16 (8)
12	742 (192)	320 (83)	633 (163)	1.58 (0.41)					243 (124)	1700 (871)	10100 (5190)	18 (9)
13	908 (185)	391 (80)	774 (158)	1.93 (0.40)					255 (92)	1790 (641)	10600 (3820)	19 (7)
14	1040 (408)	447 (176)	885 (347)	2.21 (0.87)	740 (211)	319 (91)	630 (180)	1.58 (0.45)	261 (133)	1830 (928)	10900 (5520)	20 (10)
15	628 (159)	271 (68)	535 (135)	1.34 (0.34)	738 (102)	318 (44)	629 (87)	1.57 (0.22)	260 (147)	1820 (1030)	10800 (6110)	19 (11)
16	857 (470)	369 (202)	730 (400)	1.83 (1.00)	728 (183)	314 (79)	620 (156)	1.55 (0.39)	279 (120)	1960 (840)	11600 (5000)	21 (9)
17	794 (351)	342 (151)	676 (299)	1.69 (0.75)	997 (401)	430 (173)	849 (341)	2.12 (0.85)	232 (146)	1630 (1020)	9680 (6070)	17 (11)
18	732 (253)	315 (109)	623 (215)	1.56 (0.54)					119 (165)	830 (1150)		
19	755 (265)	325 (114)	642 (225)	1.61 (0.56)	1160 (336)	501 (145)	990 (286)	2.47 (0.71)	6 (6)	44 (39)	259 (232)	1 (1)
20	688 (235)	296 (101)	585 (200)	1.46 (0.50)	891 (144)	384 (62)	758 (123)	1.89 (0.31)	4 (4)	26 (28)	154 (169)	0 (0)
21	982 (566)	423 (244)	835 (481)	2.09 (1.20)	946 (419)	408 (180)	805 (356)	2.01 (0.89)	3 (3)	24 (23)	141 (135)	0 (0)
22	784 (310)	338 (134)	666 (264)	1.67 (0.66)	760 (205)	327 (88)	646 (174)	1.62 (0.44)	4 (4)	30 (25)	176 (150)	0 (0)
23	710 (336)	306 (145)	603 (285)	1.51 (0.71)	654 (217)	282 (94)	555 (185)	1.39 (0.46)	5 (4)	37 (26)	220 (152)	0 (0)
24	855 (482)	368 (207)	726 (409)	1.81 (1.02)	877 (473)	378 (204)	745 (401)	1.86 (1.00)	9 (6)	66 (40)	391 (239)	1 (0)
25	751 (193)	323 (83)	638 (164)	1.59 (0.41)	672 (234)	290 (101)	571 (199)	1.43 (0.50)	11 (8)	77 (54)	458 (319)	1 (1)
26	699 (183)	301 (79)	594 (155)	1.48 (0.39)	737 (197)	317 (85)	625 (168)	1.56 (0.42)	16 (12)	109 (81)	651 (480)	1 (1)
27	885 (297)	381 (128)	751 (252)	1.88 (0.63)	732 (222)	315 (96)	621 (189)	1.55 (0.47)	27 (16)	191 (111)	1140 (660)	2 (1)
28	1250 (911)	538 (392)	1060 (773)	2.65 (1.93)	930 (315)	401 (136)	789 (267)	1.97 (0.67)	40 (20)	280 (143)	1670 (850)	3 (2)
29	1020 (426)	439 (183)	865 (361)	2.16 (0.90)	834 (240)	359 (104)	707 (204)	1.77 (0.51)	64 (30)	450 (207)	2680 (1230)	5 (2)
Mean	849	366	723	1.81	774	333	659	1.65	106	739	4380	8
n	26	26	26	26	22	22	22	22	27	27	26	26
SD	144	62	123	0.31	145	62	123	0.31	99	693	4200	8
Min	614	264	523	1.31	514	221	439	1.10	3	24	141	0
Max	1250	538	1060	2.65	1160	501	990	2.47	279	1960	11600	21

ED_004549_00015840-00236

Table E8. Daily means (SD) of H2S emissions at Site OK4B for March, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	1210 (425)	519 (183)	1020 (361)	2.56 (0.90)	839 (169)	362 (73)	712 (143)	1.78 (0.36)	85 (29)	593 (204)	3530 (1220)	7 (2)
2	1420 (657)	611 (283)	1200 (557)	3.01 (1.39)	964 (223)	415 (96)	817 (189)	2.04 (0.47)	99 (35)	695 (243)	4140 (1450)	8 (3)
3	923 (363)	397 (156)	782 (308)	1.96 (0.77)	921 (160)	397 (69)	781 (136)	1.95 (0.34)	107 (74)	748 (517)	4450 (3070)	8 (6)
4	999 (265)	430 (114)	847 (225)	2.12 (0.56)	1220 (671)	525 (289)	1030 (569)	2.58 (1.42)	149 (76)	1050 (534)	6220 (3180)	12 (6)
5	1000 (314)	431 (135)	847 (266)	2.12 (0.67)	982 (368)	423 (159)	832 (312)	2.08 (0.78)	162 (105)	1140 (737)	6760 (4390)	12 (8)
6	1090 (295)	471 (127)	926 (250)	2.31 (0.63)	831 (182)	358 (79)	704 (154)	1.76 (0.39)	194 (106)	1360 (743)	8080 (4420)	15 (8)
7	850 (182)	366 (79)	720 (155)	1.80 (0.39)	1100 (403)	474 (173)	932 (341)	2.33 (0.85)	176 (123)	1230 (859)	7330 (5110)	13 (9)
8	863 (133)	372 (57)	731 (113)	1.83 (0.28)	1120 (529)	481 (228)	946 (448)	2.36 (1.12)	223 (100)	1560 (702)	9310 (4170)	17 (8)
9	922 (269)	397 (116)	781 (227)	1.95 (0.57)	1110 (577)	478 (249)	941 (489)	2.35 (1.22)	241 (77)	1690 (536)	10000 (3190)	18 (6)
10	832 (181)	358 (78)	705 (153)	1.76 (0.38)	1430 (568)	618 (245)	1210 (481)	3.04 (1.20)	252 (80)	1770 (561)	10500 (3340)	19 (6)
11	907 (224)	391 (96)	767 (189)	1.92 (0.47)	1320 (560)	569 (241)	1120 (474)	2.79 (1.19)	231 (57)	1620 (401)	9620 (2390)	17 (4)
12	1010 (256)	434 (110)	853 (217)	2.13 (0.54)	1160 (472)	501 (203)	983 (399)	2.46 (1.00)	235 (50)	1640 (352)	9770 (2090)	18 (4)
13	967 (310)	416 (134)	818 (262)	2.04 (0.66)	1180 (1010)	508 (435)	998 (854)	2.50 (2.13)	240 (52)	1680 (361)	9980 (2150)	18 (4)
14	990 (258)	426 (111)	837 (218)	2.09 (0.55)	804 (253)	346 (109)	680 (214)	1.70 (0.54)	243 (81)	1700 (566)	10100 (3370)	18 (6)
15	1010 (358)	435 (154)	855 (303)	2.14 (0.76)	814 (352)	350 (151)	688 (297)	1.72 (0.74)	238 (85)	1670 (597)	9920 (3550)	18 (6)
16	912 (335)	393 (144)	771 (283)	1.93 (0.71)	650 (187)	280 (80)	550 (158)	1.37 (0.39)	250 (97)	1750 (680)	10400 (4040)	19 (7)
17	916 (486)	394 (209)	774 (411)	1.93 (1.03)	768 (253)	331 (109)	649 (214)	1.62 (0.54)	80 (114)	560 (801)		
18	694 (173)	299 (75)	587 (146)	1.47 (0.37)	785 (243)	338 (105)	663 (205)	1.66 (0.51)	4 (4)	30 (25)	179 (149)	0 (0)
19	708 (130)	305 (56)	598 (110)	1.49 (0.27)	659 (129)	284 (56)	557 (109)	1.39 (0.27)	3 (3)	22 (18)	129 (109)	0 (0)
20	1090 (634)	471 (273)	923 (535)	2.31 (1.34)	823 (163)	355 (70)	695 (137)	1.74 (0.34)	3 (2)	24 (12)	142 (71)	0 (0)
21	474 (111)	204 (48)	401 (94)	1.00 (0.24)	858 (217)	370 (94)	725 (184)	1.81 (0.46)	6 (4)	43 (28)	253 (165)	1 (0)
22	370 (129)	160 (56)	313 (109)	0.78 (0.27)	977 (272)	421 (117)	825 (229)	2.06 (0.57)	7 (5)	49 (36)	289 (211)	1 (0)
23	307 (91)	132 (39)	259 (76)	0.65 (0.19)	921 (226)	396 (97)	777 (191)	1.94 (0.48)	11 (8)	79 (57)	468 (341)	1 (1)
24												
25	397 (98)	171 (42)	335 (83)	0.84 (0.21)	1500 (858)	648 (370)	1270 (724)	3.17 (1.81)	27 (11)	190 (78)	1130 (463)	2 (1)
26	555 (385)	239 (166)	468 (324)	1.17 (0.81)	878 (229)	378 (99)	741 (193)	1.85 (0.48)	38 (17)	268 (117)	1590 (696)	3 (1)
27	528 (236)	227 (102)	445 (199)	1.11 (0.50)	1070 (482)	461 (208)	903 (407)	2.26 (1.02)	56 (24)	392 (169)	2330 (1010)	5 (2)
28	552 (241)	238 (104)	465 (203)	1.16 (0.51)	1020 (489)	441 (210)	863 (412)	2.16 (1.03)	76 (38)	530 (264)	3150 (1570)	6 (3)
29	482 (133)	208 (57)	406 (112)	1.02 (0.28)	860 (253)	370 (109)	725 (213)	1.81 (0.53)	82 (30)	575 (210)	3420 (1250)	7 (2)
30	583 (148)	251 (64)	492 (125)	1.23 (0.31)	982 (279)	423 (120)	827 (235)	2.07 (0.59)	105 (42)	732 (290)	4350 (1730)	8 (3)
31	629 (199)	271 (86)	530 (168)	1.33 (0.42)	1210 (544)	521 (234)	1020 (458)	2.55 (1.15)	142 (57)	995 (399)	5920 (2380)	11 (4)
Mean	806	347	682	1.71	992	427	839	2.10	126	879	5290	10
n	30	30	30	30	30	30	30	30	30	30	29	29
SD	265	114	225	0.56	208	90	176	0.44	90	632	3810	7
Min	307	132	259	0.65	650	280	550	1.37	3	22	129	0
Max	1420	611	1200	3.01	1500	648	1270	3.17	252	1770	10500	19

ED_004549_00015840-00237

Table E8. Daily means (SD) of H2S emissions at Site OK4B for April, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	662 (248)	285 (107)	558 (209)	1.39 (0.52)	1110 (542)	479 (233)	937 (457)	2.34 (1.14)	157 (82)	1100 (576)	6540 (3430)	12 (6)
2	700 (206)	301 (89)	590 (173)	1.47 (0.43)	992 (295)	427 (127)	836 (249)	2.09 (0.62)	183 (66)	1280 (464)	7630 (2760)	14 (5)
3	893 (288)	384 (124)	752 (243)	1.88 (0.61)	1150 (617)	497 (266)	972 (519)	2.43 (1.30)	205 (72)	1440 (506)	8560 (3010)	16 (5)
4	772 (232)	333 (100)	650 (195)	1.63 (0.49)	1040 (484)	446 (208)	872 (408)	2.18 (1.02)	204 (71)	1430 (500)	8500 (2970)	15 (5)
5	829 (230)	357 (99)	699 (193)	1.75 (0.48)	777 (145)	335 (63)	655 (122)	1.64 (0.31)	187 (59)	1310 (415)	7770 (2470)	14 (4)
6	833 (179)	359 (77)	701 (151)	1.75 (0.38)	1090 (472)	472 (203)	922 (398)	2.31 (0.99)	195 (53)	1370 (374)	8130 (2230)	15 (4)
7	823 (258)	354 (111)	693 (217)	1.73 (0.54)	647 (182)	279 (78)	545 (153)	1.36 (0.38)	176 (67)	1230 (466)	7340 (2770)	13 (5)
8	873 (297)	376 (128)	736 (250)	1.84 (0.63)	608 (158)	262 (68)	512 (133)	1.28 (0.33)	131 (187)	917 (1310)	5460 (7780)	10 (14)
9	825 (259)	355 (112)	695 (218)	1.74 (0.55)	551 (96)	237 (42)	464 (81)	1.16 (0.20)				
10					869 (356)	374 (154)	732 (300)	1.83 (0.75)				
11					772 (135)	332 (58)	650 (114)	1.63 (0.29)				
12	854 (242)	368 (104)	719 (203)	1.80 (0.51)	753 (144)	324 (62)	634 (121)	1.59 (0.30)				
13	831 (206)	358 (89)	700 (173)	1.75 (0.43)	728 (77)	314 (33)	613 (65)	1.53 (0.16)				
14												
15	965 (221)	416 (95)	813 (186)	2.03 (0.47)	986 (223)	424 (96)	830 (188)	2.08 (0.47)	6 (5)	44 (37)	264 (221)	1 (0)
16	952 (191)	410 (82)	802 (160)	2.00 (0.40)	740 (137)	319 (59)	623 (116)	1.56 (0.29)	8 (2)	59 (11)	350 (63)	1 (0)
17	1100 (363)	475 (156)	928 (305)	2.32 (0.76)	1410 (1370)	609 (589)	1190 (1150)	2.98 (2.88)	8 (6)	57 (42)	336 (251)	1 (1)
18	1080 (393)	463 (169)	906 (331)	2.26 (0.83)	735 (183)	316 (79)	619 (154)	1.55 (0.39)	15 (6)	106 (45)	628 (265)	1 (1)
19	959 (281)	413 (121)	807 (236)	2.02 (0.59)	773 (572)	333 (246)	651 (482)	1.63 (1.20)	23 (9)	160 (64)	951 (379)	2 (1)
20	951 (205)	410 (89)	801 (173)	2.00 (0.43)	803 (195)	346 (84)	676 (164)	1.69 (0.41)	31 (6)	216 (43)	1290 (255)	3 (0)
21												
22	985 (249)	424 (107)	829 (210)	2.07 (0.53)	758 (305)	326 (131)	638 (257)	1.60 (0.64)	67 (13)	467 (94)	2780 (556)	5 (1)
23					934 (312)	402 (135)	786 (263)	1.97 (0.66)	82 (12)	572 (86)	3400 (509)	6 (1)
24	1190 (224)	511 (96)	1000 (188)	2.50 (0.47)	1100 (365)	475 (157)	929 (308)	2.32 (0.77)	82 (12)	573 (81)	3410 (484)	6 (1)
25	1620 (571)	696 (246)	1360 (481)	3.40 (1.20)	894 (468)	385 (202)	753 (394)	1.88 (0.99)	103 (18)	724 (122)	4310 (728)	8 (1)
26	1240 (498)	532 (215)	1040 (419)	2.60 (1.05)					130 (32)	910 (224)	5410 (1330)	10 (2)
27	1050 (520)	452 (224)	884 (438)	2.21 (1.09)	738 (330)	318 (142)	621 (278)	1.55 (0.69)	141 (44)	990 (310)	5890 (1840)	11 (3)
28	962 (609)	414 (262)	810 (512)	2.02 (1.28)	797 (302)	343 (130)	671 (254)	1.68 (0.64)	167 (37)	1170 (257)	6960 (1530)	13 (3)
29												
30												
Mean	954	411	803	2.01	871	375	733	1.83	110	768	4570	8
n	23	23	23	23	25	25	25	25	21	21	21	21
SD	198	85	167	0.42	196	84	165	0.41	71	497	2960	5
Min	662	285	558	1.39	551	237	464	1.16	6	44	264	1
Max	1620	696	1360	3.40	1410	609	1190	2.98	205	1440	8560	16

ED_004549_00015840-00238

Table E8. Daily means (SD) of H2S emissions at Site OK4B for May, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1												
2												
3												
4												
5												
6	781 (134)	336 (58)	656 (113)	1.64 (0.28)	870 (157)	374 (68)	731 (132)	1.83 (0.33)	23 (30)	158 (212)	938 (1260)	2 (3)
7	896 (231)	386 (99)	753 (194)	1.88 (0.48)					3 (2)	19 (14)	111 (83)	0 (0)
8	993 (193)	428 (83)	834 (162)	2.09 (0.41)	1170 (248)	505 (107)	985 (209)	2.46 (0.52)	2 (2)	16 (15)	93 (91)	0 (0)
9					1190 (558)	511 (240)	997 (469)	2.49 (1.17)	9 (17)	65 (116)	387 (688)	1 (1)
10	1460 (763)	630 (329)	1230 (641)	3.07 (1.60)	934 (188)	402 (81)	784 (158)	1.96 (0.40)	9 (4)	61 (31)	365 (187)	1 (0)
11	982 (195)	423 (84)	825 (164)	2.06 (0.41)	1020 (171)	438 (74)	854 (144)	2.13 (0.36)	14 (7)	96 (47)	571 (282)	1 (1)
12	1080 (251)	467 (108)	910 (210)	2.27 (0.53)	998 (178)	430 (77)	837 (150)	2.09 (0.37)	21 (8)	145 (53)	861 (313)	2 (1)
13	994 (213)	428 (92)	834 (179)	2.09 (0.45)	949 (242)	409 (104)	797 (203)	1.99 (0.51)	32 (11)	221 (75)	1320 (449)	3 (1)
14	858 (176)	369 (76)	720 (148)	1.80 (0.37)					35 (15)	243 (107)	1450 (634)	3 (1)
15	953 (179)	410 (77)	799 (150)	2.00 (0.38)	947 (263)	408 (113)	794 (221)	1.99 (0.55)	48 (17)	336 (122)	2000 (726)	4 (1)
16	1110 (207)	477 (89)	928 (173)	2.32 (0.43)	730 (164)	314 (70)	612 (137)	1.53 (0.34)	66 (26)	465 (181)	2770 (1080)	5 (2)
17	1030 (221)	445 (95)	866 (185)	2.17 (0.46)	716 (134)	308 (58)	600 (112)	1.50 (0.28)	79 (19)	551 (130)	3280 (771)	6 (1)
18	1110 (192)	476 (83)	926 (161)	2.32 (0.40)	825 (155)	355 (67)	692 (130)	1.73 (0.33)	102 (26)	714 (180)	4250 (1070)	8 (2)
19	1590 (649)	685 (279)	1330 (544)	3.33 (1.36)	1000 (185)	431 (80)	839 (155)	2.10 (0.39)	121 (24)	846 (170)	5030 (1010)	9 (2)
20	901 (304)	388 (131)	755 (255)	1.89 (0.64)	777 (156)	334 (67)	651 (131)	1.63 (0.33)	146 (34)	1020 (235)	6100 (1400)	11 (3)
21	1030 (207)	445 (89)	865 (173)	2.16 (0.43)	1080 (232)	464 (100)	903 (194)	2.26 (0.49)	148 (16)	1040 (109)	6170 (648)	11 (1)
22	1280 (320)	552 (138)	1070 (268)	2.68 (0.67)	1270 (486)	549 (209)	1070 (407)	2.67 (1.02)	152 (21)	1070 (145)	6350 (864)	12 (2)
23	1220 (388)	527 (167)	1030 (325)	2.56 (0.81)	786 (138)	338 (59)	658 (115)	1.64 (0.29)	166 (30)	1160 (211)	6920 (1250)	13 (2)
24	1080 (249)	467 (107)	907 (208)	2.27 (0.52)	774 (247)	333 (106)	648 (207)	1.62 (0.52)	156 (28)	1090 (196)	6510 (1170)	12 (2)
25	1150 (258)	493 (111)	959 (216)	2.40 (0.54)	756 (171)	326 (74)	633 (143)	1.58 (0.36)	143 (22)	1000 (151)	5960 (898)	11 (2)
26	1130 (270)	489 (116)	949 (226)	2.37 (0.56)	729 (151)	314 (65)	610 (126)	1.52 (0.32)	149 (22)	1040 (154)	6210 (915)	11 (2)
27	1020 (287)	441 (123)	857 (240)	2.14 (0.60)								
28	967 (405)	416 (174)	808 (338)	2.02 (0.85)					3 (2)	18 (13)	107 (75)	0 (0)
29	723 (237)	311 (102)	604 (198)	1.51 (0.50)	1050 (245)	453 (106)	878 (205)	2.20 (0.51)				
30	728 (223)	313 (96)	608 (186)	1.52 (0.47)	1040 (263)	447 (113)	868 (220)	2.17 (0.55)				
31	732 (222)	315 (96)	611 (186)	1.53 (0.47)	891 (197)	384 (85)	745 (164)	1.86 (0.41)				
Mean	1030	445	865	2.16	932	401	781	1.95	74	518	3080	6
n	25	25	25	25	22	22	22	22	22	22	22	22
SD	206	89	173	0.43	158	68	133	0.33	61	429	2550	5
Min	723	311	604	1.51	716	308	600	1.50	2	16	93	0
Max	1590	685	1330	3.33	1270	549	1070	2.67	166	1160	6920	13

ED_004549_00015840-00239

Table E8. Daily means (SD) of H2S emissions at Site OK4B for June, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	769 (394)	331 (170)	643 (329)	1.61 (0.82)	788 (179)	339 (77)	659 (150)	1.65 (0.38)	9 (3)	60 (24)	356 (141)	1 (0)
2	1080 (488)	466 (210)	906 (408)	2.26 (1.02)	739 (158)	318 (68)	618 (133)	1.55 (0.33)	19 (8)	136 (55)	809 (325)	2 (1)
3												
4												
5	827 (178)	356 (77)	693 (150)	1.73 (0.37)	912 (174)	393 (75)	765 (146)	1.91 (0.36)	46 (16)	322 (112)	1910 (668)	4 (1)
6	711 (136)	306 (59)	597 (114)	1.49 (0.29)	898 (198)	387 (85)	754 (166)	1.88 (0.41)	50 (14)	349 (98)	2080 (580)	4 (1)
7	679 (85)	292 (37)	570 (72)	1.43 (0.18)	856 (154)	369 (66)	720 (129)	1.80 (0.32)	59 (9)	416 (66)	2470 (391)	5 (1)
8	865 (113)	372 (49)	727 (95)	1.82 (0.24)	830 (133)	358 (57)	698 (112)	1.75 (0.28)	84 (16)	589 (111)	3500 (662)	7 (1)
9	855 (158)	368 (68)	720 (133)	1.80 (0.33)	795 (137)	342 (59)	669 (115)	1.67 (0.29)	90 (27)	631 (188)	3750 (1120)	7 (2)
10	861 (522)	371 (225)	725 (439)	1.81 (1.10)	891 (322)	384 (139)	751 (272)	1.88 (0.68)	92 (15)	645 (104)	3840 (617)	7 (1)
11	1030 (182)	442 (78)	865 (153)	2.16 (0.38)	879 (202)	379 (87)	741 (171)	1.85 (0.43)	117 (17)	821 (116)	4880 (691)	9 (1)
12	893 (184)	385 (79)	754 (155)	1.88 (0.39)	639 (154)	275 (67)	539 (130)	1.35 (0.33)	132 (26)	924 (184)	5500 (1090)	10 (2)
13	904 (138)	389 (60)	763 (117)	1.91 (0.29)	505 (118)	218 (51)	427 (100)	1.07 (0.25)	148 (32)	1040 (222)	6160 (1320)	11 (2)
14												
15	955 (209)	411 (90)	808 (177)	2.02 (0.44)	527 (109)	227 (47)	446 (92)	1.12 (0.23)	202 (74)	1420 (520)	8430 (3090)	15 (6)
16	858 (268)	369 (115)	726 (226)	1.82 (0.57)								
17	964 (202)	415 (87)	817 (171)	2.04 (0.43)	616 (92)	265 (40)	522 (78)	1.30 (0.20)	5 (3)	32 (23)	192 (135)	0 (0)
18	808 (639)	348 (275)	685 (542)	1.71 (1.35)	843 (208)	363 (90)	715 (177)	1.79 (0.44)	2 (1)	13 (8)	78 (49)	0 (0)
19	488 (180)	210 (78)	415 (153)	1.04 (0.38)	779 (228)	336 (98)	662 (194)	1.65 (0.48)	1 (1)	8 (7)	50 (42)	0 (0)
20	592 (195)	255 (84)	503 (166)	1.26 (0.42)								
21												
22	711 (149)	306 (64)	606 (127)	1.51 (0.32)	994 (238)	428 (102)	846 (202)	2.12 (0.51)				
23	723 (170)	311 (73)	616 (145)	1.54 (0.36)	1030 (218)	444 (94)	879 (186)	2.20 (0.47)				
24	724 (107)	312 (46)	617 (91)	1.54 (0.23)	958 (221)	413 (95)	817 (188)	2.04 (0.47)				
25												
26												
27												
28	959 (209)	413 (90)	820 (179)	2.05 (0.45)	956 (388)	412 (167)	818 (332)	2.04 (0.83)	68 (12)	478 (82)	2850 (489)	5 (1)
29	837 (115)	360 (50)	717 (99)	1.79 (0.25)	392 (80)	169 (34)	335 (68)	0.84 (0.17)				
30	965 (144)	415 (62)	827 (124)	2.07 (0.31)	554 (156)	239 (67)	475 (134)	1.19 (0.34)				
Mean	829	357	701	1.75	780	336	660	1.65	70	492	2930	6
n	23	23	23	23	21	21	21	21	16	16	16	16
SD	138	59	116	0.29	173	74	146	0.37	57	399	2370	4
Min	488	210	415	1.04	392	169	335	0.84	1	8	50	0
Max	1080	466	906	2.26	1030	444	879	2.20	202	1420	8430	15

ED_004549_00015840-00240

Table E8. Daily means (SD) of H2S emissions at Site OK4B for July, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1												
2	1160 (203)	500 (88)	996 (174)	2.49 (0.44)	816 (134)	351 (58)	699 (115)	1.75 (0.29)				
3												
4	975 (131)	420 (57)	836 (112)	2.09 (0.28)	783 (185)	337 (80)	671 (159)	1.68 (0.40)	132 (21)	925 (144)	5500 (858)	10 (2)
5	1230 (120)	528 (52)	1050 (103)	2.63 (0.26)	911 (235)	393 (101)	781 (202)	1.95 (0.50)	167 (33)	1170 (230)	6950 (1370)	13 (2)
6	1220 (155)	524 (67)	1040 (133)	2.61 (0.33)	878 (167)	378 (72)	753 (143)	1.88 (0.36)	200 (41)	1400 (286)	8330 (1700)	15 (3)
7	1390 (499)	601 (215)	1200 (427)	2.99 (1.07)	963 (259)	415 (112)	825 (222)	2.06 (0.56)				
8	1150 (415)	497 (179)	988 (356)	2.47 (0.89)	911 (318)	392 (137)	781 (272)	1.95 (0.68)	2 (2)	17 (11)	101 (63)	0 (0)
9	660 (98)	284 (42)	565 (84)	1.41 (0.21)	615 (150)	265 (65)	527 (128)	1.32 (0.32)	6 (2)	39 (12)	232 (70)	1 (0)
10	1090 (704)	470 (303)	934 (603)	2.33 (1.51)	726 (207)	313 (89)	622 (177)	1.55 (0.44)	6 (2)	40 (17)	239 (98)	1 (0)
11	707 (164)	304 (71)	605 (140)	1.51 (0.35)	769 (139)	331 (60)	659 (119)	1.65 (0.30)	6 (2)	41 (15)	242 (87)	1 (0)
12	688 (119)	296 (51)	589 (102)	1.47 (0.26)	739 (127)	318 (55)	633 (109)	1.58 (0.27)	7 (2)	48 (13)	286 (78)	1 (0)
13	546 (74)	235 (32)	467 (64)	1.17 (0.16)	622 (95)	268 (41)	533 (82)	1.33 (0.20)	14 (6)	95 (39)	563 (230)	1 (0)
14	629 (112)	271 (48)	538 (96)	1.35 (0.24)	790 (211)	340 (91)	676 (181)	1.69 (0.45)	17 (7)	120 (52)	714 (306)	1 (1)
15	703 (155)	303 (67)	602 (133)	1.51 (0.33)	922 (268)	397 (115)	789 (229)	1.97 (0.57)	27 (7)	192 (48)	1140 (286)	2 (1)
16									54 (21)	374 (149)	2230 (888)	4 (2)
17	731 (157)	315 (67)	625 (134)	1.56 (0.34)	959 (274)	413 (118)	821 (234)	2.05 (0.59)	58 (7)	407 (50)	2420 (297)	5 (1)
18	699 (159)	301 (68)	598 (136)	1.50 (0.34)	897 (214)	386 (92)	768 (183)	1.92 (0.46)	76 (20)	532 (142)	3160 (846)	6 (2)
19	834 (138)	359 (60)	714 (118)	1.78 (0.30)	959 (136)	413 (59)	820 (117)	2.05 (0.29)	83 (8)	584 (59)	3470 (353)	7 (1)
20	868 (148)	374 (64)	743 (127)	1.86 (0.32)	1040 (248)	447 (107)	888 (212)	2.22 (0.53)	109 (19)	762 (134)	4530 (800)	9 (2)
21	1050 (482)	454 (207)	901 (412)	2.25 (1.03)	1100 (283)	473 (122)	940 (242)	2.35 (0.61)	110 (15)	770 (102)	4580 (605)	9 (1)
22	961 (186)	414 (80)	822 (159)	2.05 (0.40)	1080 (268)	465 (116)	924 (229)	2.31 (0.57)	130 (16)	911 (111)	5420 (661)	10 (1)
23	896 (189)	386 (82)	766 (162)	1.91 (0.41)	1220 (369)	525 (159)	1040 (316)	2.61 (0.79)	150 (15)	1050 (108)	6270 (642)	12 (1)
24	2210 (4140)	951 (1780)	1890 (3540)	4.72 (8.84)	1030 (244)	442 (105)	877 (208)	2.19 (0.52)	146 (19)	1020 (136)	6080 (807)	11 (1)
25	745 (135)	321 (58)	636 (116)	1.59 (0.29)	889 (241)	383 (104)	759 (206)	1.90 (0.51)	168 (15)	1180 (102)	7000 (607)	13 (1)
26	727 (62)	313 (27)	621 (53)	1.55 (0.13)	870 (254)	375 (109)	744 (217)	1.86 (0.54)	197 (19)	1380 (131)	8210 (781)	15 (1)
27	871 (218)	375 (94)	744 (186)	1.86 (0.47)	789 (151)	340 (65)	674 (129)	1.69 (0.32)	189 (19)	1330 (133)	7890 (791)	14 (1)
28	843 (228)	363 (98)	720 (195)	1.80 (0.49)	844 (289)	364 (124)	721 (247)	1.80 (0.62)	174 (57)	1220 (399)	7250 (2380)	13 (4)
29												
30	853 (104)	367 (45)	728 (89)	1.82 (0.22)	711 (160)	306 (69)	607 (137)	1.52 (0.34)	2 (2)	17 (15)	101 (91)	0 (0)
31	1180 (480)	509 (207)	1010 (410)	2.53 (1.03)	853 (572)	367 (246)	728 (489)	1.82 (1.22)	-1 (4)	-4 (28)	-26 (166)	0 (0)
Mean	949	409	812	2.03	877	378	750	1.88	86	600	3570	7
n	27	27	27	27	27	27	27	27	26	26	26	26
SD	327	141	280	0.70	140	60	119	0.30	71	500	2970	5
Min	546	235	467	1.17	615	265	527	1.32	-1	-4	-26	0
Max	2210	951	1890	4.72	1220	525	1040	2.61	200	1400	8330	15

ED_004549_00015840-00241

Table E8. Daily means (SD) of H2S emissions at Site OK4B for August, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	774 (200)	333 (86)	661 (171)	1.65 (0.43)	707 (99)	304 (42)	603 (84)	1.51 (0.21)	5 (3)	32 (20)	190 (120)	0 (0)
2	657 (247)	283 (106)	561 (211)	1.40 (0.53)	741 (91)	319 (39)	632 (78)	1.58 (0.19)	4 (2)	27 (14)	160 (81)	0 (0)
3	651 (113)	280 (49)	556 (96)	1.39 (0.24)	908 (105)	391 (45)	775 (90)	1.94 (0.22)	4 (2)	27 (15)	163 (89)	0 (0)
4	827 (285)	356 (123)	706 (243)	1.76 (0.61)	875 (107)	377 (46)	747 (91)	1.87 (0.23)	7 (4)	50 (28)	296 (166)	1 (0)
5	1250 (492)	537 (212)	1060 (420)	2.66 (1.05)	833 (189)	359 (81)	711 (161)	1.78 (0.40)	8 (4)	59 (29)	350 (173)	1 (0)
6	1060 (833)	455 (359)	901 (711)	2.25 (1.78)	912 (338)	393 (145)	778 (288)	1.94 (0.72)	16 (8)	112 (54)	667 (320)	1 (1)
7	626 (230)	270 (99)	534 (196)	1.33 (0.49)	667 (164)	287 (71)	569 (140)	1.42 (0.35)				
8					580 (133)	250 (57)	495 (113)	1.24 (0.28)				
9	732 (190)	315 (82)	624 (162)	1.56 (0.41)	747 (125)	322 (54)	637 (107)	1.59 (0.27)	58 (13)	408 (88)	2420 (521)	5 (1)
10	684 (155)	295 (67)	583 (132)	1.46 (0.33)	810 (179)	349 (77)	691 (152)	1.73 (0.38)	71 (13)	497 (88)	2960 (525)	6 (1)
11	738 (212)	318 (91)	629 (181)	1.57 (0.45)	953 (434)	410 (187)	812 (370)	2.03 (0.93)	70 (10)	493 (73)	2930 (434)	6 (1)
12	585 (138)	252 (59)	498 (117)	1.25 (0.29)	801 (230)	345 (99)	683 (196)	1.71 (0.49)	79 (14)	550 (97)	3270 (574)	6 (1)
13	846 (154)	365 (67)	721 (131)	1.80 (0.33)	762 (142)	328 (61)	649 (121)	1.62 (0.30)	88 (16)	619 (114)	3680 (677)	7 (1)
14	954 (515)	411 (222)	813 (438)	2.03 (1.10)	725 (325)	312 (140)	617 (277)	1.54 (0.69)	103 (20)	720 (137)	4290 (814)	8 (1)
15	840 (296)	362 (128)	715 (252)	1.79 (0.63)	580 (125)	250 (54)	494 (106)	1.23 (0.27)				
16	649 (199)	279 (86)	552 (169)	1.38 (0.42)	612 (107)	263 (46)	520 (91)	1.30 (0.23)				
17	593 (132)	255 (57)	504 (113)	1.26 (0.28)	619 (137)	267 (59)	527 (117)	1.32 (0.29)				
18												
19	712 (273)	307 (117)	605 (232)	1.51 (0.58)	910 (375)	392 (161)	774 (319)	1.94 (0.80)				
20	718 (185)	309 (80)	610 (158)	1.53 (0.39)	634 (117)	273 (51)	539 (100)	1.35 (0.25)	140 (29)	980 (203)	5830 (1210)	10 (2)
21	927 (216)	399 (93)	788 (183)	1.97 (0.46)	801 (151)	345 (65)	681 (129)	1.70 (0.32)	134 (16)	939 (113)	5590 (673)	10 (1)
22	966 (137)	416 (59)	821 (117)	2.05 (0.29)	860 (137)	371 (59)	731 (116)	1.83 (0.29)				
23	1010 (236)	437 (101)	862 (200)	2.16 (0.50)	793 (140)	342 (60)	674 (119)	1.69 (0.30)	5 (4)	34 (29)	202 (171)	0 (0)
24	1010 (190)	435 (82)	859 (161)	2.15 (0.40)	933 (166)	402 (72)	793 (141)	1.98 (0.35)	2 (2)	12 (13)	73 (79)	0 (0)
25	1030 (179)	446 (77)	879 (152)	2.20 (0.38)	1050 (212)	453 (91)	894 (180)	2.23 (0.45)	5 (3)	35 (22)	206 (128)	0 (0)
26	1080 (194)	467 (83)	921 (165)	2.30 (0.41)	1160 (209)	498 (90)	982 (178)	2.46 (0.45)	4 (1)	25 (9)	151 (53)	0 (0)
27	1140 (149)	493 (64)	972 (127)	2.43 (0.32)	1150 (243)	496 (105)	978 (206)	2.44 (0.52)	9 (4)	63 (26)	373 (154)	1 (0)
28	1180 (164)	507 (71)	998 (139)	2.50 (0.35)	1250 (260)	537 (112)	1060 (220)	2.65 (0.55)	19 (7)	136 (48)	809 (286)	2 (1)
29	1030 (160)	443 (69)	872 (136)	2.18 (0.34)	1040 (178)	449 (77)	884 (151)	2.21 (0.38)	26 (10)	183 (68)	1090 (407)	2 (1)
30	1060 (146)	457 (63)	901 (124)	2.25 (0.31)	1230 (305)	530 (131)	1040 (259)	2.61 (0.65)	29 (11)	203 (78)	1210 (463)	2 (1)
31	1670 (1410)	721 (609)	1420 (1200)	3.55 (3.00)	1290 (366)	557 (157)	1100 (310)	2.74 (0.78)	41 (18)	284 (125)	1690 (742)	3 (1)
Mean	897	386	763	1.91	865	372	736	1.84	40	282	1680	3
n	29	29	29	29	30	30	30	30	23	23	23	23
SD	239	103	202	0.51	200	86	169	0.42	43	300	1790	3
Min	585	252	498	1.25	580	250	494	1.23	2	12	73	0
Max	1670	721	1420	3.55	1290	557	1100	2.74	140	980	5830	10

ED_004549_00015840-00242

Table E8. Daily means (SD) of H2S emissions at Site OK4B for September, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	767 (246)	330 (106)	651 (209)	1.63 (0.52)	1330 (368)	572 (158)	1130 (312)	2.82 (0.78)	56 (14)	392 (101)	2330 (598)	5 (1)
2	765 (400)	330 (172)	649 (339)	1.62 (0.85)	971 (247)	418 (106)	824 (210)	2.06 (0.52)	73 (24)	512 (171)	3040 (1020)	6 (2)
3	701 (230)	302 (99)	595 (195)	1.49 (0.49)					68 (31)	474 (220)	2820 (1310)	5 (3)
4												
5	929 (254)	400 (110)	788 (216)	1.97 (0.54)	587 (82)	253 (35)	498 (70)	1.25 (0.17)	75 (22)	523 (156)	3110 (928)	6 (2)
6	806 (269)	347 (116)	684 (228)	1.71 (0.57)	559 (61)	241 (26)	475 (52)	1.19 (0.13)	98 (33)	683 (230)	4060 (1370)	8 (3)
7	918 (276)	395 (119)	779 (235)	1.95 (0.59)	534 (99)	230 (43)	454 (84)	1.13 (0.21)	116 (26)	816 (181)	4850 (1080)	9 (2)
8	1090 (314)	470 (135)	927 (266)	2.32 (0.67)	833 (343)	359 (148)	707 (291)	1.77 (0.73)	118 (46)	825 (321)	4910 (1910)	9 (3)
9	1210 (728)	522 (314)	1030 (618)	2.57 (1.55)	669 (112)	288 (48)	568 (95)	1.42 (0.24)	139 (55)	976 (382)	5810 (2270)	11 (4)
10	884 (261)	381 (112)	751 (222)	1.88 (0.55)	960 (240)	414 (103)	816 (203)	2.04 (0.51)	151 (28)	1060 (193)	6280 (1150)	11 (2)
11	743 (261)	320 (112)	631 (221)	1.58 (0.55)	925 (139)	398 (60)	785 (118)	1.96 (0.30)	163 (34)	1140 (235)	6810 (1400)	12 (2)
12	512 (90)	220 (39)	435 (77)	1.09 (0.19)	859 (111)	370 (48)	730 (94)	1.82 (0.24)				
13	617 (157)	266 (68)	524 (134)	1.31 (0.33)	1030 (180)	444 (78)	875 (153)	2.19 (0.38)	3 (2)	19 (11)	113 (64)	0 (0)
14	693 (135)	299 (58)	589 (115)	1.47 (0.29)	1130 (214)	488 (92)	964 (182)	2.41 (0.46)	2 (1)	16 (7)	98 (44)	0 (0)
15	700 (167)	302 (72)	595 (142)	1.49 (0.36)	989 (268)	426 (116)	841 (228)	2.10 (0.57)	3 (2)	20 (12)	121 (72)	0 (0)
16	850 (282)	366 (121)	722 (239)	1.81 (0.60)	1200 (416)	519 (179)	1020 (354)	2.56 (0.89)	2 (1)	14 (10)	86 (60)	0 (0)
17	644 (149)	277 (64)	548 (127)	1.37 (0.32)	1050 (189)	452 (81)	893 (160)	2.23 (0.40)	3 (2)	24 (17)	142 (101)	0 (0)
18	703 (127)	303 (55)	598 (108)	1.49 (0.27)	1240 (630)	535 (271)	1060 (535)	2.64 (1.34)	9 (6)	62 (42)	371 (247)	1 (1)
19	717 (135)	309 (58)	610 (115)	1.52 (0.29)	896 (262)	386 (113)	762 (223)	1.91 (0.56)	22 (10)	156 (68)	928 (406)	2 (1)
20	754 (137)	325 (59)	641 (117)	1.60 (0.29)	1090 (635)	471 (273)	931 (540)	2.33 (1.35)	37 (15)	259 (105)	1540 (628)	3 (1)
21	744 (117)	320 (50)	633 (100)	1.58 (0.25)	573 (112)	247 (48)	487 (96)	1.22 (0.24)	59 (16)	413 (110)	2460 (654)	5 (1)
22	770 (66)	332 (28)	655 (56)	1.64 (0.14)	554 (144)	239 (62)	472 (123)	1.18 (0.31)	76 (19)	533 (133)	3170 (794)	6 (2)
23	785 (109)	338 (47)	668 (93)	1.67 (0.23)	629 (179)	271 (77)	536 (153)	1.34 (0.38)	97 (22)	678 (157)	4030 (931)	8 (2)
24	922 (405)	397 (174)	785 (344)	1.96 (0.86)					101 (18)	708 (125)	4210 (745)	8 (1)
25	807 (217)	348 (93)	687 (185)	1.72 (0.46)	889 (442)	383 (190)	756 (376)	1.89 (0.94)	117 (28)	819 (194)	4870 (1150)	9 (2)
26	784 (171)	338 (74)	667 (146)	1.67 (0.37)	880 (207)	379 (89)	749 (176)	1.87 (0.44)	133 (29)	932 (201)	5540 (1190)	10 (2)
27	868 (195)	374 (84)	739 (166)	1.85 (0.42)	769 (158)	331 (68)	655 (134)	1.64 (0.34)	136 (46)	955 (320)	5680 (1910)	11 (4)
28	754 (229)	325 (99)	642 (195)	1.60 (0.49)	792 (188)	341 (81)	675 (160)	1.69 (0.40)	124 (34)	869 (239)	5170 (1420)	10 (3)
29	800 (173)	344 (74)	681 (147)	1.70 (0.37)	794 (186)	342 (80)	676 (159)	1.69 (0.40)	128 (43)	894 (303)	5320 (1800)	10 (3)
30	885 (245)	381 (106)	754 (209)	1.89 (0.52)	800 (300)	345 (129)	682 (256)	1.70 (0.64)	138 (70)	970 (487)	5770 (2900)	11 (5)
Mean	797	343	678	1.69	872	376	741	1.85	80	562	3340	6
n	29	29	29	29	27	27	27	27	28	28	28	28
SD	134	58	114	0.29	218	94	185	0.46	52	364	2170	4
Min	512	220	435	1.09	534	230	454	1.13	2	14	86	0
Max	1210	522	1030	2.57	1330	572	1130	2.82	163	1140	6810	12

ED_004549_00015840-00243

Table E8. Daily means (SD) of H2S emissions at Site OK4B for October, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	917 (188)	395 (81)	781 (160)	1.95 (0.40)	960 (393)	413 (169)	818 (334)	2.04 (0.84)	136 (52)	952 (361)	5660 (2150)	10 (4)
2	893 (194)	385 (84)	762 (165)	1.90 (0.41)	691 (180)	297 (78)	589 (153)	1.47 (0.38)	157 (62)	1100 (434)	6550 (2580)	12 (5)
3	961 (238)	414 (103)	819 (203)	2.05 (0.51)	697 (205)	300 (88)	594 (174)	1.49 (0.44)	206 (52)	1440 (364)	8560 (2170)	15 (4)
4	947 (219)	408 (94)	807 (187)	2.02 (0.47)	850 (278)	366 (120)	725 (237)	1.81 (0.59)	224 (41)	1570 (289)	9340 (1720)	17 (3)
5	834 (300)	359 (129)	711 (256)	1.78 (0.64)					217 (17)	1520 (122)	9030 (723)	16 (1)
6	825 (186)	355 (80)	704 (159)	1.76 (0.40)	844 (417)	363 (180)	721 (356)	1.80 (0.89)				
7	1050 (348)	450 (150)	893 (297)	2.23 (0.74)	899 (190)	387 (82)	768 (162)	1.92 (0.41)	2 (2)	14 (13)	85 (77)	0 (0)
8	885 (182)	381 (78)	756 (155)	1.89 (0.39)	825 (177)	355 (76)	705 (151)	1.76 (0.38)	3 (2)	21 (13)	126 (76)	0 (0)
9	906 (263)	390 (113)	775 (225)	1.94 (0.56)					2 (1)	16 (10)	97 (60)	0 (0)
10	763 (174)	328 (75)	652 (148)	1.63 (0.37)	912 (192)	393 (83)	780 (164)	1.95 (0.41)	7 (4)	51 (26)	305 (154)	1 (0)
11	644 (180)	277 (78)	551 (154)	1.38 (0.39)	861 (272)	371 (117)	737 (233)	1.84 (0.58)	17 (8)	117 (58)	697 (343)	1 (1)
12									29 (6)	206 (39)	1220 (231)	3 (0)
13	1090 (708)	468 (305)	931 (606)	2.33 (1.51)					46 (34)	320 (239)	1900 (1420)	4 (3)
14	730 (101)	314 (44)	626 (87)	1.56 (0.22)					47 (40)	330 (282)	1960 (1680)	4 (3)
15	817 (143)	352 (61)	700 (122)	1.75 (0.31)	929 (179)	400 (77)	797 (153)	1.99 (0.38)	66 (42)	458 (296)	2730 (1760)	5 (3)
16	741 (128)	319 (55)	635 (110)	1.59 (0.27)	991 (271)	427 (117)	850 (233)	2.13 (0.58)	75 (44)	528 (311)	3140 (1850)	6 (4)
17	719 (189)	310 (81)	617 (162)	1.54 (0.41)	879 (228)	379 (98)	754 (195)	1.89 (0.49)	92 (40)	643 (283)	3820 (1680)	7 (3)
18	788 (180)	339 (78)	676 (155)	1.69 (0.39)	894 (182)	385 (78)	767 (156)	1.92 (0.39)	109 (47)	761 (330)	4530 (1960)	9 (4)
19	835 (176)	359 (76)	717 (151)	1.79 (0.38)	902 (201)	388 (86)	774 (172)	1.94 (0.43)	141 (43)	985 (301)	5860 (1790)	11 (3)
20												
21	886 (199)	382 (86)	762 (171)	1.90 (0.43)	1120 (277)	484 (119)	965 (238)	2.41 (0.59)	156 (37)	1100 (261)	6520 (1560)	12 (3)
22	947 (375)	408 (162)	814 (323)	2.04 (0.81)	1140 (374)	490 (161)	978 (322)	2.45 (0.80)	153 (91)	1070 (635)	6390 (3780)	12 (7)
23					1280 (379)	550 (163)	1100 (326)	2.74 (0.82)	172 (87)	1210 (611)	7180 (3640)	13 (7)
24	852 (289)	367 (124)	734 (248)	1.83 (0.62)	987 (211)	425 (91)	849 (181)	2.12 (0.45)	183 (86)	1280 (602)	7640 (3580)	14 (7)
25	781 (261)	336 (112)	672 (225)	1.68 (0.56)	904 (199)	389 (86)	778 (171)	1.95 (0.43)	199 (83)	1400 (583)	8310 (3470)	15 (6)
26	1010 (486)	435 (209)	870 (418)	2.17 (1.05)	1190 (543)	511 (234)	1020 (468)	2.56 (1.17)	192 (102)	1340 (711)	7980 (4230)	14 (8)
27	707 (277)	305 (119)	609 (238)	1.52 (0.60)	1080 (318)	463 (137)	927 (274)	2.32 (0.69)				
28	779 (283)	335 (122)	672 (244)	1.68 (0.61)	981 (166)	422 (72)	846 (143)	2.11 (0.36)	3 (3)	24 (23)	144 (139)	0 (0)
29	859 (381)	370 (164)	741 (329)	1.85 (0.82)	871 (251)	375 (108)	752 (217)	1.88 (0.54)	7 (9)	48 (64)	284 (380)	1 (1)
30	981 (366)	422 (158)	847 (316)	2.12 (0.79)	974 (372)	419 (160)	840 (321)	2.10 (0.80)	4 (3)	28 (19)	168 (110)	0 (0)
31	721 (201)	310 (87)	622 (174)	1.56 (0.43)	927 (279)	399 (120)	800 (241)	2.00 (0.60)	4 (2)	26 (13)	156 (78)	0 (0)
Mean	852	367	731	1.83	943	406	809	2.02	95	663	3940	7
n	28	28	28	28	25	25	25	25	28	28	28	28
SD	108	47	92	0.23	134	58	117	0.29	79	554	3300	6
Min	644	277	551	1.38	691	297	589	1.47	2	14	85	0
Max	1090	468	931	2.33	1280	550	1100	2.74	224	1570	9340	17

ED_004549_00015840-00244

Table E8. Daily means (SD) of H2S emissions at Site OK4B for November, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	731 (191)	315 (82)	631 (165)	1.58 (0.41)	1130 (724)	485 (312)	973 (625)	2.43 (1.56)	8 (5)	59 (35)	353 (210)	1 (0)
2	779 (200)	335 (86)	673 (173)	1.68 (0.43)	928 (342)	399 (147)	801 (295)	2.00 (0.74)	19 (13)	135 (89)	802 (528)	2 (1)
3	824 (189)	355 (82)	712 (163)	1.78 (0.41)	1090 (228)	470 (98)	942 (197)	2.35 (0.49)	26 (5)	178 (36)	1060 (211)	2 (0)
4	929 (195)	400 (84)	802 (169)	2.01 (0.42)	1370 (540)	589 (233)	1180 (466)	2.95 (1.17)	43 (12)	301 (83)	1790 (494)	4 (1)
5	1050 (394)	454 (170)	910 (340)	2.28 (0.85)					66 (27)	464 (186)	2760 (1100)	5 (2)
6	1220 (509)	527 (219)	1060 (440)	2.64 (1.10)	1150 (448)	496 (193)	995 (386)	2.49 (0.97)	80 (38)	563 (264)	3350 (1570)	7 (3)
7	1100 (385)	476 (166)	953 (332)	2.38 (0.83)					103 (42)	724 (295)	4310 (1760)	8 (3)
8	968 (394)	417 (170)	835 (340)	2.09 (0.85)					103 (45)	723 (317)	4300 (1880)	8 (4)
9	945 (407)	407 (175)	816 (351)	2.04 (0.88)	1130 (596)	486 (257)	973 (515)	2.43 (1.29)	123 (48)	861 (339)	5120 (2020)	10 (4)
10	975 (405)	420 (174)	842 (350)	2.10 (0.87)	1120 (440)	483 (189)	968 (379)	2.42 (0.95)	132 (54)	926 (381)	5510 (2270)	10 (4)
11	901 (457)	388 (197)	778 (395)	1.94 (0.99)	1190 (489)	512 (211)	1030 (422)	2.56 (1.06)	148 (74)	1030 (518)	6160 (3080)	12 (6)
12	912 (378)	393 (163)	787 (326)	1.97 (0.82)	1140 (607)	492 (261)	985 (523)	2.46 (1.31)	176 (71)	1230 (497)	7330 (2960)	14 (5)
13	1030 (376)	446 (162)	893 (325)	2.23 (0.81)					168 (66)	1180 (464)	7010 (2760)	13 (5)
14	1190 (588)	511 (253)	1020 (507)	2.56 (1.27)	1070 (439)	461 (189)	924 (379)	2.31 (0.95)	175 (92)	1230 (641)	7310 (3810)	13 (7)
15	934 (320)	402 (138)	806 (276)	2.01 (0.69)	1070 (475)	460 (205)	922 (410)	2.30 (1.02)	184 (92)	1290 (642)	7650 (3820)	14 (7)
16	1110 (563)	477 (243)	955 (486)	2.39 (1.21)	905 (386)	390 (166)	781 (333)	1.95 (0.83)	189 (83)	1320 (579)	7870 (3440)	14 (6)
17	767 (259)	330 (112)	661 (223)	1.65 (0.56)	855 (262)	368 (113)	738 (226)	1.84 (0.56)	74 (105)	517 (733)		
18	1280 (1040)	553 (447)	1110 (894)	2.77 (2.24)	898 (198)	387 (85)	775 (171)	1.94 (0.43)	9 (5)	65 (37)	389 (218)	1 (0)
19	741 (241)	319 (104)	639 (208)	1.60 (0.52)	1190 (631)	513 (272)	1030 (544)	2.57 (1.36)	8 (4)	59 (28)	351 (168)	1 (0)
20									5 (4)	37 (27)	221 (158)	0 (0)
21	630 (214)	271 (92)	543 (184)	1.36 (0.46)					7 (5)	48 (38)	285 (227)	1 (0)
22	581 (187)	250 (81)	501 (162)	1.25 (0.40)	935 (217)	403 (94)	806 (187)	2.02 (0.47)	11 (9)	76 (65)	452 (387)	1 (1)
23	628 (314)	270 (135)	541 (271)	1.35 (0.68)	1100 (376)	473 (162)	947 (324)	2.37 (0.81)	14 (7)	101 (51)	601 (305)	1 (1)
24	529 (191)	228 (82)	457 (164)	1.14 (0.41)	1410 (450)	606 (194)	1210 (388)	3.03 (0.97)	23 (15)	163 (107)	971 (639)	2 (1)
25	586 (201)	252 (87)	505 (173)	1.26 (0.43)	1270 (392)	545 (169)	1090 (338)	2.73 (0.85)	29 (17)	203 (120)	1210 (714)	2 (1)
26	711 (289)	306 (125)	613 (249)	1.53 (0.62)	1130 (346)	487 (149)	975 (298)	2.44 (0.75)	47 (25)	331 (176)	1970 (1040)	4 (2)
27	785 (333)	338 (143)	677 (287)	1.69 (0.72)	1120 (233)	482 (100)	965 (201)	2.41 (0.50)	70 (36)	489 (253)	2910 (1500)	6 (3)
28	711 (274)	306 (118)	613 (237)	1.53 (0.59)	1010 (297)	433 (128)	867 (256)	2.17 (0.64)	91 (52)	637 (361)	3790 (2150)	7 (4)
29	782 (339)	337 (146)	674 (293)	1.68 (0.73)	1170 (296)	502 (127)	1000 (255)	2.51 (0.64)	135 (78)	946 (543)	5630 (3230)	11 (6)
30	1030 (580)	442 (250)	885 (500)	2.21 (1.25)	1330 (875)	575 (377)	1150 (755)	2.88 (1.89)	167 (74)	1170 (515)	6950 (3060)	13 (6)
Mean	875	377	755	1.89	1110	479	960	2.40	81	569	3390	6
n	29	29	29	29	24	24	24	24	30	30	29	29
SD	199	86	172	0.43	141	61	122	0.31	63	443	2680	5
Min	529	228	457	1.14	855	368	738	1.84	5	37	221	0
Max	1280	553	1110	2.77	1410	606	1210	3.03	189	1320	7870	14

ED_004549_00015840-00245

Table E8. Daily means (SD) of H2S emissions at Site OK4B for December, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	1240 (779)	535 (336)	1070 (672)	2.68 (1.68)	938 (259)	404 (112)	809 (224)	2.02 (0.56)	166 (71)	1160 (497)	6910 (2960)	13 (6)
2	803 (224)	346 (97)	692 (193)	1.73 (0.48)	1020 (345)	440 (148)	881 (297)	2.20 (0.74)	181 (72)	1270 (503)	7540 (2990)	14 (6)
3	576 (214)	248 (92)	496 (185)	1.24 (0.46)	852 (415)	367 (179)	735 (358)	1.84 (0.90)	168 (97)	1180 (679)	7020 (4040)	13 (7)
4	659 (425)	284 (183)	568 (366)	1.42 (0.92)					124 (105)	866 (734)	5150 (4370)	9 (8)
5	625 (175)	269 (75)	539 (151)	1.35 (0.38)					159 (119)	1110 (837)	6620 (4980)	12 (9)
6	691 (219)	298 (95)	596 (189)	1.49 (0.47)	782 (374)	337 (161)	674 (322)	1.68 (0.81)	192 (117)	1340 (821)	7980 (4890)	14 (9)
7	801 (256)	345 (110)	690 (220)	1.72 (0.55)	798 (197)	344 (85)	688 (170)	1.72 (0.42)	193 (106)	1350 (740)	8050 (4400)	15 (8)
8	887 (305)	382 (131)	764 (262)	1.91 (0.66)	1430 (782)	617 (337)	1230 (674)	3.08 (1.68)	205 (105)	1430 (736)	8530 (4380)	15 (8)
9	667 (92)	287 (40)	574 (79)	1.44 (0.20)	1350 (405)	583 (175)	1170 (349)	2.92 (0.87)	182 (161)	1270 (1120)	7570 (6690)	14 (12)
10	731 (189)	315 (82)	629 (163)	1.57 (0.41)	918 (240)	395 (103)	791 (206)	1.98 (0.52)	284 (184)	1990 (1290)	11800 (7660)	21 (14)
11	877 (255)	378 (110)	755 (220)	1.89 (0.55)	858 (233)	370 (100)	739 (201)	1.85 (0.50)	287 (146)	2010 (1020)	12000 (6080)	21 (11)
12												
13									48 (34)	333 (235)	1980 (1400)	4 (3)
14	862 (277)	371 (119)	742 (238)	1.85 (0.60)	969 (185)	417 (80)	834 (159)	2.08 (0.40)	22 (19)	153 (131)	909 (781)	2 (2)
15	706 (47)	304 (20)	608 (41)	1.52 (0.10)	1030 (308)	444 (133)	888 (265)	2.22 (0.66)	18 (22)	127 (153)	759 (911)	2 (2)
16	764 (239)	329 (103)	657 (206)	1.64 (0.52)	792 (190)	341 (82)	682 (164)	1.70 (0.41)	11 (8)	75 (54)	448 (323)	1 (1)
17	538 (167)	232 (72)	463 (144)	1.16 (0.36)	585 (135)	252 (58)	504 (117)	1.26 (0.29)	21 (16)	150 (114)	890 (677)	2 (1)
18	480 (140)	207 (60)	413 (120)	1.03 (0.30)					40 (29)	282 (205)	1680 (1220)	3 (3)
19	645 (339)	278 (146)	555 (292)	1.39 (0.73)	970 (615)	418 (265)	835 (529)	2.09 (1.32)	37 (27)	257 (192)	1530 (1140)	3 (2)
20	418 (100)	180 (43)	360 (86)	0.90 (0.21)	1030 (330)	442 (142)	882 (284)	2.21 (0.71)	36 (31)	251 (215)	1490 (1280)	3 (3)
21	409 (67)	176 (29)	352 (58)	0.88 (0.14)	1050 (424)	453 (183)	905 (365)	2.26 (0.91)	50 (46)	349 (324)	2080 (1930)	4 (4)
22	414 (70)	178 (30)	356 (60)	0.89 (0.15)					65 (57)	453 (402)	2700 (2390)	5 (5)
23									95 (64)	668 (450)	3980 (2680)	8 (5)
24	588 (158)	253 (68)	505 (136)	1.26 (0.34)	945 (226)	407 (97)	812 (194)	2.03 (0.49)	102 (66)	714 (465)	4250 (2770)	8 (5)
25	577 (204)	248 (88)	496 (175)	1.24 (0.44)	1110 (419)	479 (181)	956 (361)	2.39 (0.90)	123 (73)	862 (510)	5130 (3030)	10 (6)
26									158 (85)	1100 (598)	6560 (3560)	12 (7)
27	612 (185)	263 (80)	526 (159)	1.31 (0.40)	1200 (173)	515 (75)	1030 (149)	2.57 (0.37)	153 (120)	1070 (840)	6380 (5000)	12 (9)
28	610 (124)	263 (53)	525 (107)	1.31 (0.27)	1140 (374)	490 (161)	977 (321)	2.44 (0.80)	173 (123)	1210 (858)	7190 (5110)	13 (9)
29	604 (147)	260 (64)	519 (127)	1.30 (0.32)	892 (240)	384 (103)	766 (206)	1.92 (0.52)	204 (125)	1430 (879)	8510 (5230)	16 (10)
30	878 (463)	378 (199)	755 (398)	1.89 (1.00)	1080 (406)	465 (175)	929 (349)	2.32 (0.87)	199 (126)	1390 (880)	8270 (5230)	15 (9)
31	668 (183)	288 (79)	574 (157)	1.44 (0.39)	1010 (353)	436 (152)	869 (303)	2.17 (0.76)	190 (142)	1330 (991)	7930 (5900)	14 (11)
Mean	679	292	584	1.46	989	426	851	2.13	129	907	5390	10
n	27	27	27	27	23	23	23	23	30	30	30	30
SD	176	76	151	0.38	182	78	157	0.39	78	547	3250	6
Min	409	176	352	0.88	585	252	504	1.26	11	75	448	1
Max	1240	535	1070	2.68	1430	617	1230	3.08	287	2010	12000	21

ED_004549_00015840-00246

Table E8. Daily means (SD) of H2S emissions at Site OK4B for January, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	723 (245)	312 (105)	621 (210)	1.55 (0.53)	893 (282)	385 (122)	767 (243)	1.92 (0.61)	211 (140)	1480 (982)	8800 (5840)	16 (11)
2	728 (236)	313 (102)	625 (203)	1.56 (0.51)	913 (365)	393 (157)	784 (314)	1.96 (0.78)	220 (132)	1540 (926)	9160 (5510)	17 (10)
3	804 (314)	346 (135)	690 (270)	1.73 (0.67)	913 (334)	393 (144)	784 (287)	1.96 (0.72)	221 (151)	1550 (1060)	9220 (6310)	17 (11)
4	636 (84)	274 (36)	546 (72)	1.37 (0.18)	832 (208)	358 (90)	714 (179)	1.79 (0.45)	211 (182)	1480 (1270)	8800 (7580)	16 (14)
5	757 (516)	326 (222)	650 (443)	1.63 (1.11)	970 (292)	418 (126)	832 (251)	2.08 (0.63)	129 (158)	904 (1110)		
6	707 (218)	304 (94)	607 (187)	1.52 (0.47)	925 (249)	398 (107)	794 (214)	1.98 (0.54)	23 (41)	158 (287)	939 (1710)	2 (4)
7	743 (350)	320 (151)	637 (300)	1.59 (0.75)	912 (324)	393 (139)	783 (278)	1.96 (0.70)	5 (7)	37 (49)	222 (291)	0 (1)
8	673 (220)	290 (95)	577 (189)	1.44 (0.47)	1090 (610)	469 (263)	934 (523)	2.33 (1.31)	7 (6)	47 (44)	277 (260)	1 (1)
9									9 (6)	60 (45)	356 (269)	1 (1)
10	1080 (315)	464 (136)	925 (271)	2.31 (0.68)	645 (180)	278 (78)	553 (154)	1.38 (0.39)	19 (17)	133 (116)	794 (690)	2 (1)
11	1030 (255)	443 (110)	882 (218)	2.20 (0.55)	630 (178)	272 (77)	541 (153)	1.35 (0.38)	38 (28)	264 (192)	1570 (1140)	3 (2)
12	857 (662)	369 (285)	735 (567)	1.84 (1.42)	677 (283)	292 (122)	581 (243)	1.45 (0.61)	63 (47)	438 (329)	2600 (1960)	5 (4)
13					789 (328)	340 (141)	677 (281)	1.69 (0.70)	106 (72)	742 (504)	4420 (3000)	9 (6)
14									103 (75)	720 (528)	4280 (3140)	8 (6)
15	537 (97)	231 (42)	460 (83)	1.15 (0.21)	707 (102)	305 (44)	606 (87)	1.52 (0.22)	95 (87)	668 (608)	3970 (3620)	8 (7)
16	616 (253)	265 (109)	528 (217)	1.32 (0.54)	702 (177)	302 (76)	601 (152)	1.50 (0.38)	133 (69)	929 (486)	5530 (2890)	11 (6)
17	650 (223)	280 (96)	557 (191)	1.39 (0.48)	804 (218)	346 (94)	689 (186)	1.72 (0.47)	157 (89)	1100 (623)	6520 (3700)	13 (7)
18	674 (203)	290 (87)	578 (174)	1.44 (0.43)	825 (234)	355 (101)	707 (201)	1.77 (0.50)	166 (80)	1160 (561)	6920 (3340)	13 (6)
19	717 (251)	309 (108)	614 (215)	1.53 (0.54)	957 (334)	412 (144)	820 (286)	2.05 (0.72)	165 (82)	1150 (576)	6870 (3430)	13 (6)
20	771 (347)	332 (149)	660 (297)	1.65 (0.74)	944 (275)	406 (119)	808 (236)	2.02 (0.59)	176 (107)	1230 (749)	7330 (4460)	14 (8)
21	743 (247)	320 (106)	636 (211)	1.59 (0.53)	1220 (777)	525 (335)	1040 (666)	2.61 (1.66)	198 (107)	1390 (750)	8270 (4460)	15 (8)
22	749 (248)	323 (107)	642 (212)	1.60 (0.53)	778 (179)	335 (77)	666 (153)	1.66 (0.38)	219 (120)	1530 (839)	9120 (4990)	17 (9)
23									233 (166)	1630 (1160)	9710 (6920)	18 (13)
24	774 (152)	333 (66)	662 (130)	1.65 (0.33)	882 (420)	380 (181)	755 (359)	1.89 (0.90)	221 (176)	1550 (1230)	9210 (7320)	17 (13)
25									193 (189)	1350 (1320)	8050 (7870)	14 (14)
26												
27	1030 (433)	445 (187)	883 (371)	2.21 (0.93)	574 (109)	247 (47)	491 (93)	1.23 (0.23)	16 (21)	114 (144)	681 (855)	2 (2)
28	651 (157)	280 (67)	557 (134)	1.39 (0.34)	603 (285)	260 (123)	516 (243)	1.29 (0.61)	8 (9)	58 (62)	344 (371)	1 (1)
29	471 (108)	203 (47)	403 (93)	1.01 (0.23)	471 (148)	203 (64)	403 (126)	1.01 (0.32)	11 (12)	79 (86)	472 (512)	1 (1)
30	344 (67)	148 (29)	294 (58)	0.73 (0.14)	515 (161)	222 (70)	440 (138)	1.10 (0.35)	16 (13)	112 (88)	669 (524)	1 (1)
31	391 (101)	168 (43)	334 (86)	0.84 (0.22)					26 (18)	184 (125)	1090 (742)	2 (2)
Mean	714	308	612	1.53	807	347	692	1.73	113	793	4700	9
n	25	25	25	25	25	25	25	25	30	30	29	29
SD	171	74	147	0.37	175	76	151	0.38	84	589	3560	6
Min	344	148	294	0.73	471	203	403	1.01	5	37	222	0
Max	1080	464	925	2.31	1220	525	1040	2.61	233	1630	9710	18

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Table E8. Daily means (SD) of H2S emissions at Site OK4B for February, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	386 (95)	166 (41)	330 (81)	0.83 (0.20)	678 (218)	292 (94)	579 (187)	1.45 (0.47)	26 (24)	179 (167)	1070 (996)	2 (2)
2	504 (128)	217 (55)	430 (109)	1.08 (0.27)	654 (151)	282 (65)	559 (129)	1.40 (0.32)	42 (34)	297 (237)	1760 (1410)	4 (3)
3	518 (102)	223 (44)	442 (87)	1.11 (0.22)	668 (172)	287 (74)	570 (147)	1.43 (0.37)	73 (45)	513 (316)	3050 (1880)	6 (4)
4	586 (147)	252 (64)	501 (126)	1.25 (0.32)	769 (200)	331 (86)	657 (171)	1.64 (0.43)	96 (59)	674 (415)	4010 (2470)	8 (5)
5	658 (173)	283 (74)	561 (148)	1.40 (0.37)	783 (213)	337 (92)	669 (182)	1.67 (0.45)	122 (88)	855 (618)	5090 (3670)	10 (7)
6	787 (241)	339 (104)	672 (206)	1.68 (0.52)	903 (299)	389 (129)	770 (255)	1.93 (0.64)	140 (85)	981 (597)	5840 (3550)	11 (7)
7	764 (312)	329 (134)	652 (266)	1.63 (0.67)	936 (381)	403 (164)	799 (325)	2.00 (0.81)	143 (79)	1000 (553)	5960 (3290)	11 (6)
8	690 (209)	297 (90)	589 (179)	1.47 (0.45)	949 (200)	409 (86)	809 (171)	2.02 (0.43)	176 (79)	1230 (553)	7330 (3290)	14 (6)
9									180 (101)	1260 (708)	7500 (4210)	14 (8)
10	780 (314)	336 (135)	665 (268)	1.66 (0.67)	1120 (368)	482 (159)	954 (314)	2.38 (0.79)	163 (94)	1140 (660)	6810 (3930)	13 (7)
11					1220 (755)	525 (325)	1040 (643)	2.60 (1.61)	170 (119)	1190 (832)	7070 (4950)	13 (9)
12	967 (426)	416 (184)	824 (363)	2.06 (0.91)	772 (297)	332 (128)	658 (253)	1.64 (0.63)	159 (113)	1110 (794)	6600 (4720)	12 (9)
13	796 (216)	343 (93)	678 (184)	1.69 (0.46)	749 (244)	323 (105)	638 (207)	1.59 (0.52)	163 (138)	1140 (963)	6790 (5730)	12 (10)
14	770 (288)	332 (124)	656 (246)	1.64 (0.61)	680 (180)	293 (78)	579 (153)	1.45 (0.38)	155 (123)	1090 (863)	6480 (5130)	12 (9)
15	771 (213)	332 (92)	656 (181)	1.64 (0.45)	605 (132)	260 (57)	515 (113)	1.29 (0.28)	177 (148)	1240 (1030)	7360 (6150)	13 (11)
16									206 (117)	1440 (822)	8580 (4890)	15 (9)
17									249 (167)	1740 (1170)	10400 (6950)	19 (12)
18									40 (60)	281 (418)		
19	803 (339)	346 (146)	683 (288)	1.71 (0.72)	836 (218)	360 (94)	711 (185)	1.78 (0.46)	21 (14)	147 (95)	877 (564)	2 (1)
20	829 (278)	357 (120)	705 (236)	1.76 (0.59)	896 (266)	386 (115)	762 (226)	1.90 (0.57)	16 (9)	110 (62)	655 (369)	1 (1)
21									13 (14)	90 (95)	536 (563)	1 (1)
22									20 (16)	141 (109)	840 (650)	2 (1)
23	765 (338)	329 (146)	649 (287)	1.62 (0.72)	927 (353)	399 (152)	787 (299)	1.97 (0.75)	27 (21)	190 (144)	1130 (859)	2 (2)
24	973 (1250)	419 (539)	826 (1060)	2.07 (2.66)	938 (462)	404 (199)	796 (392)	1.99 (0.98)	44 (25)	304 (175)	1810 (1040)	4 (2)
25												
26												
27	435 (163)	187 (70)	369 (139)	0.92 (0.35)	1280 (569)	552 (245)	1090 (483)	2.72 (1.21)	78 (55)	546 (386)	3250 (2300)	6 (5)
28	429 (136)	185 (59)	364 (115)	0.91 (0.29)	817 (158)	352 (68)	693 (134)	1.73 (0.34)	62 (44)	435 (306)	2590 (1820)	5 (4)
Mean	695	299	592	1.48	859	370	732	1.83	106	743	4530	9
n	19	19	19	19	20	20	20	20	26	26	25	25
SD	169	73	144	0.36	180	78	153	0.38	69	485	2890	5
Min	386	166	330	0.83	605	260	515	1.29	13	90	536	1
Max	973	419	826	2.07	1280	552	1090	2.72	249	1740	10400	19

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Table E8. Daily means (SD) of H2S emissions at Site OK4B for March, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	507 (133)	219 (57)	430 (113)	1.08 (0.28)	854 (176)	368 (76)	724 (149)	1.81 (0.37)	57 (58)	400 (409)	2380 (2430)	5 (5)
2	545 (201)	235 (87)	462 (171)	1.15 (0.43)	887 (267)	382 (115)	752 (226)	1.88 (0.57)	94 (92)	656 (643)	3900 (3820)	7 (7)
3	578 (213)	249 (92)	490 (180)	1.23 (0.45)	1010 (223)	434 (96)	854 (189)	2.13 (0.47)	112 (51)	788 (354)	4690 (2110)	9 (4)
4	677 (238)	292 (103)	574 (202)	1.43 (0.51)	1140 (387)	491 (167)	966 (328)	2.41 (0.82)	125 (49)	877 (345)	5220 (2050)	10 (4)
5	793 (198)	341 (85)	672 (168)	1.68 (0.42)	1160 (509)	497 (219)	979 (432)	2.45 (1.08)	117 (26)	819 (183)	4880 (1090)	9 (2)
6	802 (253)	345 (109)	680 (215)	1.70 (0.54)	765 (222)	329 (96)	648 (188)	1.62 (0.47)	114 (35)	795 (243)	4730 (1450)	9 (3)
7	891 (214)	384 (92)	755 (182)	1.89 (0.45)					117 (31)	818 (216)	4870 (1290)	9 (2)
8	931 (376)	401 (162)	788 (319)	1.97 (0.80)	731 (279)	315 (120)	619 (236)	1.55 (0.59)	111 (54)	780 (379)	4640 (2250)	8 (4)
9									111 (43)	775 (304)	4610 (1810)	8 (3)
10	774 (418)	333 (180)	655 (354)	1.64 (0.89)	773 (266)	333 (115)	655 (225)	1.64 (0.56)	117 (110)	822 (773)	4890 (4600)	9 (8)
11	697 (292)	300 (126)	590 (247)	1.48 (0.62)	1070 (682)	460 (294)	904 (577)	2.26 (1.44)				
12	586 (271)	252 (117)	496 (229)	1.24 (0.57)	670 (127)	289 (55)	567 (107)	1.42 (0.27)	1 (1)	8 (9)	49 (53)	0 (0)
13	578 (358)	249 (154)	489 (303)	1.22 (0.76)	998 (724)	430 (312)	844 (613)	2.11 (1.53)	1 (1)	6 (7)	37 (41)	0 (0)
14	473 (173)	204 (75)	401 (146)	1.00 (0.37)	726 (207)	313 (89)	614 (175)	1.53 (0.44)	1 (1)	8 (8)	45 (48)	0 (0)
15	514 (202)	221 (87)	435 (171)	1.09 (0.43)	652 (95)	281 (41)	552 (81)	1.38 (0.20)	3 (4)	21 (26)	127 (152)	0 (0)
16	521 (197)	224 (85)	440 (167)	1.10 (0.42)	822 (151)	354 (65)	696 (127)	1.74 (0.32)	3 (2)	21 (14)	123 (82)	0 (0)
17	616 (203)	265 (88)	521 (172)	1.30 (0.43)	951 (264)	410 (114)	804 (223)	2.01 (0.56)	6 (3)	42 (21)	251 (127)	1 (0)
18	630 (210)	272 (91)	533 (178)	1.33 (0.45)					11 (6)	77 (44)	459 (262)	1 (1)
19	566 (221)	244 (95)	479 (187)	1.20 (0.47)	867 (482)	373 (207)	733 (407)	1.83 (1.02)	20 (11)	138 (76)	821 (451)	2 (1)
20	610 (218)	263 (94)	515 (184)	1.29 (0.46)	819 (240)	353 (103)	692 (203)	1.73 (0.51)	28 (11)	195 (74)	1160 (440)	2 (1)
21	618 (95)	266 (41)	522 (80)	1.31 (0.20)	889 (135)	383 (58)	751 (114)	1.88 (0.29)	43 (7)	302 (49)	1800 (291)	4 (1)
22	601 (110)	259 (47)	508 (93)	1.27 (0.23)					62 (24)	432 (168)	2570 (1000)	5 (2)
23									70 (18)	490 (127)	2910 (753)	6 (1)
24	812 (518)	350 (223)	686 (437)	1.71 (1.09)	1160 (359)	498 (155)	976 (303)	2.44 (0.76)	77 (39)	538 (272)	3200 (1620)	6 (3)
25	566 (220)	244 (95)	478 (186)	1.20 (0.46)	1170 (655)	505 (282)	991 (553)	2.48 (1.38)	71 (32)	496 (222)	2950 (1320)	6 (3)
26									90 (41)	630 (285)	3750 (1700)	7 (3)
27	569 (137)	245 (59)	480 (116)	1.20 (0.29)					73 (44)	511 (306)	3040 (1820)	6 (3)
28	539 (135)	232 (58)	455 (114)	1.14 (0.29)					83 (70)	582 (493)	3460 (2930)	6 (5)
29	823 (594)	355 (256)	695 (501)	1.74 (1.25)	548 (182)	236 (79)	462 (154)	1.16 (0.38)	121 (58)	845 (408)	5030 (2430)	9 (4)
30	655 (189)	282 (81)	553 (159)	1.38 (0.40)	596 (108)	257 (47)	502 (91)	1.26 (0.23)	123 (63)	863 (443)	5140 (2640)	9 (5)
31	657 (164)	283 (71)	554 (139)	1.38 (0.35)	752 (157)	324 (68)	634 (133)	1.59 (0.33)	148 (77)	1040 (541)	6170 (3220)	11 (6)
Mean	648	279	548	1.37	870	374	736	1.84	70	492	2930	5
n	28	28	28	28	23	23	23	23	30	30	30	30
SD	120	52	102	0.26	181	78	154	0.38	47	327	1950	4
Min	473	204	401	1.00	548	236	462	1.16	1	6	37	0
Max	931	401	788	1.97	1170	505	991	2.48	148	1040	6170	11

ED_004549_00015840-00249

Table E8. Daily means (SD) of H2S emissions at Site OK4B for April, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	718 (187)	309 (81)	605 (158)	1.51 (0.40)	905 (186)	390 (80)	763 (156)	1.91 (0.39)	150 (57)	1050 (400)	6260 (2380)	11 (4)
2												
3												
4												
5	606 (183)	261 (79)	511 (154)	1.28 (0.39)	967 (387)	416 (167)	816 (326)	2.04 (0.82)				
6	924 (303)	398 (131)	780 (256)	1.95 (0.64)	891 (273)	384 (118)	752 (231)	1.88 (0.58)				
7	1070 (432)	460 (186)	903 (364)	2.26 (0.91)	976 (303)	421 (130)	824 (255)	2.06 (0.64)				
8	845 (383)	364 (165)	713 (324)	1.78 (0.81)	962 (285)	414 (123)	812 (241)	2.03 (0.60)				
9					972 (271)	419 (117)	821 (229)	2.05 (0.57)				
10	828 (400)	357 (172)	700 (338)	1.75 (0.85)	1080 (302)	464 (130)	911 (255)	2.28 (0.64)	37 (21)	262 (148)	1560 (883)	3 (2)
11	740 (334)	319 (144)	625 (282)	1.56 (0.71)	1170 (349)	504 (150)	988 (295)	2.47 (0.74)	45 (21)	316 (144)	1880 (854)	4 (2)
12					1110 (248)	477 (107)	937 (210)	2.34 (0.53)	51 (20)	355 (142)	2110 (845)	4 (2)
13					1300 (539)	559 (232)	1100 (455)	2.74 (1.14)	69 (25)	485 (173)	2890 (1030)	6 (2)
14	749 (315)	323 (136)	633 (267)	1.58 (0.67)	1080 (262)	466 (113)	914 (221)	2.29 (0.55)	88 (19)	619 (136)	3680 (807)	7 (2)
15	730 (158)	315 (68)	618 (133)	1.54 (0.33)					95 (13)	665 (91)	3960 (539)	8 (1)
16	768 (159)	331 (69)	649 (135)	1.62 (0.34)	725 (149)	312 (64)	613 (126)	1.53 (0.32)				
17	881 (305)	379 (131)	745 (258)	1.86 (0.64)	741 (172)	319 (74)	627 (145)	1.57 (0.36)				
18					851 (314)	366 (135)	720 (266)	1.80 (0.66)				
19					780 (262)	336 (113)	660 (222)	1.65 (0.55)				
20	902 (409)	389 (176)	764 (346)	1.91 (0.87)	739 (200)	318 (86)	625 (169)	1.56 (0.42)				
21	866 (280)	373 (120)	733 (237)	1.83 (0.59)	736 (202)	317 (87)	623 (171)	1.56 (0.43)	165 (43)	1160 (299)	6870 (1780)	12 (3)
22	1010 (461)	435 (198)	855 (390)	2.14 (0.98)	1090 (164)	471 (70)	926 (139)	2.32 (0.35)	176 (29)	1230 (202)	7340 (1200)	13 (2)
23												
24	1070 (361)	460 (155)	906 (306)	2.26 (0.76)	1160 (187)	501 (81)	986 (159)	2.47 (0.40)	135 (194)	948 (1360)		
25	942 (340)	406 (147)	798 (288)	2.00 (0.72)	1210 (296)	523 (128)	1030 (251)	2.57 (0.63)	3 (3)	22 (19)	129 (113)	0 (0)
26	1030 (265)	442 (114)	870 (224)	2.17 (0.56)	1210 (242)	519 (104)	1020 (205)	2.55 (0.51)	3 (2)	23 (14)	136 (85)	0 (0)
27	1010 (357)	435 (154)	857 (302)	2.14 (0.76)	1500 (524)	648 (225)	1280 (444)	3.19 (1.11)	3 (4)	24 (29)	142 (172)	0 (0)
28	1040 (405)	447 (175)	881 (344)	2.20 (0.86)	1160 (248)	499 (107)	983 (210)	2.46 (0.53)	3 (3)	22 (24)	129 (140)	0 (0)
29	752 (92)	324 (40)	638 (78)	1.59 (0.20)	1170 (165)	502 (71)	988 (140)	2.47 (0.35)	4 (1)	25 (9)	147 (53)	0 (0)
30	985 (140)	424 (61)	835 (119)	2.09 (0.30)	1270 (167)	548 (72)	1080 (141)	2.70 (0.35)	13 (4)	91 (26)	542 (157)	1 (0)
Mean	879	379	744	1.86	1030	444	872	2.18	65	456	2520	5
n	21	21	21	21	25	25	25	25	16	16	15	15
SD	131	57	112	0.28	200	86	170	0.42	61	426	2500	4
Min	606	261	511	1.28	725	312	613	1.53	3	22	129	0
Max	1070	460	906	2.26	1500	648	1280	3.19	176	1230	7340	13

ED_004549_00015840-00250

Table E8. Daily means (SD) of H2S emissions at Site OK4B for May, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1					1380 (178)	596 (77)	1170 (151)	2.93 (0.38)	20 (10)	139 (73)	826 (432)	2 (1)
2	1220 (216)	526 (93)	1040 (183)	2.59 (0.46)	1570 (525)	675 (226)	1330 (446)	3.32 (1.11)	27 (15)	189 (107)	1120 (636)	2 (1)
3	1110 (258)	479 (111)	943 (219)	2.36 (0.55)	1170 (194)	503 (84)	990 (164)	2.48 (0.41)	41 (20)	286 (143)	1700 (851)	3 (2)
4	1000 (229)	431 (99)	849 (195)	2.12 (0.49)	1130 (168)	488 (72)	962 (142)	2.41 (0.36)	50 (19)	350 (130)	2080 (773)	4 (2)
5	1200 (228)	515 (98)	1020 (193)	2.54 (0.48)	1090 (152)	470 (65)	926 (129)	2.32 (0.32)	69 (10)	483 (68)	2870 (406)	6 (1)
6	915 (192)	394 (83)	776 (163)	1.94 (0.41)	1120 (300)	483 (129)	952 (254)	2.38 (0.64)	66 (7)	465 (46)	2770 (276)	5 (1)
7	933 (346)	402 (149)	792 (294)	1.98 (0.74)	1120 (576)	483 (248)	951 (489)	2.38 (1.22)	89 (13)	625 (89)	3720 (527)	7 (1)
8	891 (170)	384 (73)	756 (144)	1.89 (0.36)					100 (10)	704 (69)	4190 (409)	8 (1)
9	715 (93)	308 (40)	608 (79)	1.52 (0.20)	697 (170)	300 (73)	592 (144)	1.48 (0.36)	117 (14)	819 (95)	4870 (566)	9 (1)
10	735 (130)	316 (56)	624 (110)	1.56 (0.28)	718 (172)	309 (74)	610 (146)	1.52 (0.37)	134 (10)	939 (72)	5590 (429)	10 (1)
11	808 (121)	348 (52)	686 (103)	1.71 (0.26)	873 (252)	376 (109)	741 (214)	1.85 (0.54)	143 (16)	1000 (113)	5950 (675)	11 (1)
12	929 (116)	400 (50)	789 (99)	1.97 (0.25)	814 (145)	350 (62)	691 (123)	1.73 (0.31)	146 (15)	1020 (105)	6090 (623)	11 (1)
13	1110 (145)	480 (63)	947 (123)	2.37 (0.31)	1120 (198)	482 (85)	951 (168)	2.38 (0.42)	166 (21)	1170 (144)	6930 (857)	13 (2)
14	1020 (172)	441 (74)	871 (146)	2.18 (0.37)	1130 (190)	486 (82)	960 (162)	2.40 (0.40)	173 (13)	1210 (92)	7200 (548)	13 (1)
15	984 (108)	424 (47)	836 (92)	2.09 (0.23)	1200 (228)	518 (98)	1020 (193)	2.55 (0.48)	200 (36)	1400 (255)	8340 (1520)	15 (3)
16	1020 (178)	439 (77)	866 (151)	2.17 (0.38)	1160 (288)	500 (124)	987 (245)	2.47 (0.61)	204 (12)	1430 (85)	8510 (507)	15 (1)
17	973 (152)	419 (65)	827 (129)	2.07 (0.32)	1090 (247)	470 (106)	927 (210)	2.32 (0.52)	190 (46)	1330 (321)	7900 (1910)	14 (3)
18												
19									5 (2)	32 (13)	191 (76)	0 (0)
20	1270 (358)	546 (154)	1080 (304)	2.70 (0.76)	1140 (251)	490 (108)	968 (214)	2.42 (0.53)	5 (2)	32 (16)	190 (97)	0 (0)
21	1000 (108)	432 (47)	852 (92)	2.13 (0.23)	1040 (138)	448 (59)	884 (117)	2.21 (0.29)	6 (3)	42 (20)	249 (122)	1 (0)
22	1040 (203)	450 (88)	888 (173)	2.22 (0.43)	1030 (259)	443 (112)	876 (220)	2.19 (0.55)	9 (3)	66 (20)	391 (118)	1 (0)
23	1080 (387)	463 (167)	915 (330)	2.29 (0.82)	968 (312)	417 (135)	823 (266)	2.06 (0.67)	35 (50)	244 (352)	1450 (2100)	3 (4)
24	858 (148)	369 (64)	730 (126)	1.82 (0.31)	727 (122)	313 (53)	618 (104)	1.55 (0.26)	23 (6)	164 (45)	973 (270)	2 (1)
25	882 (198)	380 (85)	750 (168)	1.88 (0.42)	930 (213)	400 (92)	791 (181)	1.98 (0.45)	33 (5)	232 (36)	1380 (211)	3 (0)
26	978 (283)	421 (122)	833 (241)	2.08 (0.60)	1030 (274)	443 (118)	876 (233)	2.19 (0.58)	42 (6)	291 (44)	1730 (262)	3 (1)
27	1130 (216)	485 (93)	959 (184)	2.40 (0.46)	982 (179)	423 (77)	836 (153)	2.09 (0.38)	58 (9)	406 (64)	2410 (378)	5 (1)
28	1090 (293)	469 (126)	928 (249)	2.32 (0.62)	969 (151)	417 (65)	825 (128)	2.06 (0.32)	62 (10)	433 (71)	2580 (421)	5 (1)
29	1270 (319)	546 (137)	1080 (272)	2.70 (0.68)	1010 (149)	435 (64)	860 (127)	2.15 (0.32)	67 (12)	466 (84)	2770 (499)	5 (1)
30	1340 (646)	576 (278)	1140 (550)	2.85 (1.37)	1120 (375)	483 (162)	955 (319)	2.39 (0.80)	78 (15)	549 (106)	3260 (630)	6 (1)
31	1320 (449)	568 (193)	1120 (382)	2.81 (0.96)	927 (139)	399 (60)	789 (119)	1.97 (0.30)	88 (14)	619 (95)	3680 (565)	7 (1)
Mean	1030	443	875	2.19	1050	450	888	2.22	82	571	3400	6
n	28	28	28	28	28	28	28	28	30	30	30	30
SD	162	70	138	0.35	184	79	156	0.39	61	428	2550	5
Min	715	308	608	1.52	697	300	592	1.48	5	32	190	0
Max	1340	576	1140	2.85	1570	675	1330	3.32	204	1430	8510	15

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Table E8. Daily means (SD) of H2S emissions at Site OK4B for June, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	955 (162)	411 (70)	813 (138)	2.03 (0.34)	880 (135)	379 (58)	750 (115)	1.87 (0.29)	107 (18)	748 (126)	4450 (752)	8 (1)
2	1080 (244)	465 (105)	920 (208)	2.30 (0.52)	885 (155)	381 (67)	753 (132)	1.88 (0.33)	117 (15)	820 (103)	4880 (612)	9 (1)
3	1100 (162)	475 (70)	938 (138)	2.35 (0.34)	926 (196)	399 (85)	789 (167)	1.97 (0.42)	152 (34)	1070 (239)	6340 (1420)	12 (3)
4	1070 (204)	461 (88)	910 (174)	2.28 (0.43)	1060 (277)	455 (119)	899 (235)	2.25 (0.59)	185 (25)	1300 (177)	7710 (1050)	14 (2)
5	1080 (274)	467 (118)	923 (233)	2.31 (0.58)	1410 (496)	606 (214)	1200 (422)	2.99 (1.06)	213 (41)	1490 (287)	8880 (1710)	16 (3)
6												
7												
8	1140 (312)	490 (135)	967 (266)	2.42 (0.66)	848 (248)	365 (107)	721 (211)	1.80 (0.53)	220 (42)	1540 (292)	9150 (1740)	16 (3)
9	1100 (191)	472 (82)	933 (162)	2.33 (0.41)	934 (185)	402 (80)	795 (158)	1.99 (0.39)	263 (66)	1840 (463)	10900 (2760)	20 (5)
10	1590 (1020)	684 (438)	1350 (865)	3.37 (2.16)	847 (183)	365 (79)	720 (156)	1.80 (0.39)				
11	1130 (346)	488 (149)	963 (294)	2.41 (0.74)	779 (207)	336 (89)	662 (176)	1.66 (0.44)				
12	1220 (489)	525 (211)	1040 (416)	2.59 (1.04)	830 (313)	357 (135)	705 (266)	1.76 (0.67)	2 (1)	13 (9)	75 (54)	0 (0)
13	976 (151)	421 (65)	830 (128)	2.07 (0.32)	762 (122)	328 (53)	648 (104)	1.62 (0.26)	2 (2)	17 (12)	101 (69)	0 (0)
14	953 (165)	410 (71)	809 (140)	2.02 (0.35)	896 (323)	386 (139)	762 (275)	1.90 (0.69)	3 (2)	23 (13)	138 (76)	0 (0)
15	1090 (389)	470 (168)	927 (330)	2.32 (0.83)	942 (175)	406 (75)	800 (149)	2.00 (0.37)	6 (2)	39 (15)	229 (86)	0 (0)
16	1170 (815)	504 (351)	995 (692)	2.49 (1.73)	944 (160)	407 (69)	802 (136)	2.00 (0.34)	10 (4)	68 (25)	407 (151)	1 (0)
17	678 (142)	292 (61)	575 (121)	1.44 (0.30)	920 (204)	396 (88)	781 (173)	1.95 (0.43)	22 (5)	154 (35)	919 (211)	2 (0)
18	665 (217)	286 (94)	564 (184)	1.41 (0.46)	990 (239)	426 (103)	840 (203)	2.10 (0.51)	31 (9)	215 (66)	1280 (390)	3 (1)
19	645 (176)	278 (76)	548 (149)	1.37 (0.37)	954 (192)	411 (83)	809 (163)	2.02 (0.41)	44 (7)	305 (46)	1810 (275)	4 (1)
20	663 (164)	285 (71)	562 (139)	1.41 (0.35)	768 (104)	331 (45)	651 (89)	1.63 (0.22)	46 (7)	323 (52)	1920 (311)	4 (1)
21	885 (320)	381 (138)	751 (271)	1.88 (0.68)	1030 (269)	442 (116)	870 (228)	2.17 (0.57)	68 (13)	475 (94)	2830 (558)	5 (1)
22	648 (228)	279 (98)	549 (193)	1.37 (0.48)	1170 (268)	502 (115)	989 (227)	2.47 (0.57)	75 (6)	525 (43)	3120 (253)	6 (0)
23	665 (217)	286 (93)	564 (184)	1.41 (0.46)	1070 (261)	462 (112)	910 (221)	2.27 (0.55)	90 (15)	628 (108)	3740 (642)	7 (1)
24	625 (159)	269 (68)	530 (135)	1.33 (0.34)	1110 (307)	479 (132)	942 (260)	2.36 (0.65)	112 (11)	782 (77)	4650 (459)	9 (1)
25	702 (136)	302 (59)	595 (115)	1.49 (0.29)	991 (146)	427 (63)	840 (124)	2.10 (0.31)	119 (15)	832 (106)	4950 (633)	9 (1)
26	710 (242)	306 (104)	601 (205)	1.50 (0.51)	1160 (299)	500 (129)	983 (254)	2.46 (0.63)	123 (7)	862 (50)	5130 (299)	9 (1)
27	852 (177)	367 (76)	722 (150)	1.80 (0.38)	1000 (305)	432 (131)	850 (258)	2.13 (0.65)	135 (10)	946 (71)	5630 (422)	10 (1)
28	683 (145)	294 (62)	579 (123)	1.45 (0.31)	794 (173)	342 (74)	673 (146)	1.68 (0.37)	128 (15)	896 (105)	5330 (626)	10 (1)
29	777 (148)	335 (64)	659 (125)	1.65 (0.31)	837 (266)	361 (114)	709 (225)	1.77 (0.56)	128 (6)	897 (42)	5340 (252)	10 (0)
30					734 (185)	316 (80)	622 (157)	1.55 (0.39)	156 (16)	1090 (112)	6500 (669)	12 (1)
Mean	921	396	782	1.96	945	407	803	2.01	98	688	4090	8
n	27	27	27	27	28	28	28	28	26	26	26	26
SD	238	103	203	0.51	146	63	124	0.31	72	505	3000	5
Min	625	269	530	1.33	734	316	622	1.55	2	13	75	0
Max	1590	684	1350	3.37	1410	606	1200	2.99	263	1840	10900	20

ED_004549_00015840-00252

Table E8. Daily means (SD) of H2S emissions at Site OK4B for July, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU	g/d	mg/d-m^2	mg/d-hd	g/d-AU
1	1010 (279)	437 (120)	858 (236)	2.15 (0.59)	803 (153)	346 (66)	680 (129)	1.70 (0.32)	171 (22)	1190 (153)	7110 (910)	13 (2)
2	1060 (175)	456 (75)	897 (148)	2.24 (0.37)	879 (143)	378 (62)	744 (121)	1.86 (0.30)	188 (24)	1310 (169)	7810 (1000)	14 (2)
3	1230 (425)	528 (183)	1040 (360)	2.60 (0.90)	965 (403)	415 (174)	816 (341)	2.04 (0.85)	109 (122)	761 (857)	3890 (4540)	7 (9)
4	1200 (234)	515 (101)	1010 (198)	2.53 (0.49)	670 (125)	288 (54)	567 (106)	1.42 (0.27)	1 (1)	4 (5)	23 (30)	0 (0)
5	1030 (167)	442 (72)	869 (141)	2.17 (0.35)	625 (179)	269 (77)	528 (152)	1.32 (0.38)	1 (2)	8 (11)	45 (67)	0 (0)
6	1150 (281)	496 (121)	974 (237)	2.43 (0.59)	720 (198)	310 (85)	609 (167)	1.52 (0.42)	2 (3)	12 (19)	71 (113)	0 (0)
7	944 (152)	407 (65)	798 (128)	2.00 (0.32)	833 (191)	359 (82)	705 (161)	1.76 (0.40)	1 (3)	10 (21)	62 (125)	0 (0)
8	1210 (199)	523 (86)	1030 (168)	2.57 (0.42)	1020 (198)	439 (86)	862 (168)	2.16 (0.42)	11 (8)	75 (53)	445 (314)	1 (1)
9	1340 (303)	576 (131)	1130 (256)	2.83 (0.64)	984 (235)	424 (101)	832 (199)	2.08 (0.50)	17 (4)	121 (31)	720 (184)	1 (0)
10												
11	1160 (422)	501 (182)	982 (357)	2.46 (0.89)	1090 (240)	471 (103)	924 (203)	2.31 (0.51)	35 (6)	243 (40)	1450 (240)	3 (0)
12	1110 (243)	479 (105)	939 (205)	2.35 (0.51)	1040 (269)	448 (116)	878 (227)	2.20 (0.57)	52 (14)	367 (97)	2180 (574)	4 (1)
13	1060 (164)	455 (71)	893 (138)	2.23 (0.35)	867 (170)	373 (73)	732 (143)	1.83 (0.36)	63 (10)	444 (70)	2640 (417)	5 (1)
14	1100 (212)	475 (91)	930 (179)	2.33 (0.45)	734 (118)	316 (51)	620 (99)	1.55 (0.25)	84 (7)	586 (51)	3490 (302)	7 (1)
15	1030 (242)	442 (104)	867 (204)	2.17 (0.51)	698 (113)	301 (49)	589 (95)	1.47 (0.24)	86 (8)	605 (54)	3600 (324)	7 (1)
16												
17	942 (242)	406 (104)	794 (204)	1.99 (0.51)	870 (137)	375 (59)	734 (116)	1.84 (0.29)				
18	1160 (463)	498 (199)	976 (391)	2.44 (0.98)	889 (98)	383 (42)	750 (83)	1.88 (0.21)				
19	1150 (467)	496 (201)	971 (394)	2.43 (0.99)	1040 (240)	449 (103)	879 (202)	2.20 (0.51)				
20												
21	800 (357)	345 (154)	675 (301)	1.69 (0.75)	1060 (260)	455 (112)	890 (219)	2.22 (0.55)				
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Mean	1090	471	924	2.31	877	378	741	1.85	59	410	2400	5
n	18	18	18	18	18	18	18	18	14	14	14	14
SD	122	53	103	0.26	142	61	120	0.30	60	422	2480	4
Min	800	345	675	1.69	625	269	528	1.32	1	4	23	0
Max	1340	576	1130	2.83	1090	471	924	2.31	188	1310	7810	14

ED_004549_00015840-00253

Table E9. PM Concentrations

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for August, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4												
5												
6												
7												
8												
9	496 (350)	214 (151)	432 (305)	1080 (764)	594 (420)	256 (181)	518 (366)	1300 (916)	42 (39)	292 (271)	1740 (1610)	3390 (3140)
10	560 (261)	241 (113)	488 (228)	1220 (570)	601 (392)	259 (169)	524 (342)	1310 (855)	48 (29)	339 (206)	2020 (1230)	3910 (2370)
11	602 (336)	259 (144)	525 (293)	1310 (731)	546 (414)	235 (178)	476 (361)	1190 (903)	56 (28)	394 (199)	2340 (1180)	4500 (2270)
12												
13												
14	646 (497)	278 (214)	563 (433)	1410 (1080)	848 (1120)	365 (482)	739 (976)	1850 (2440)	50 (48)	350 (338)	2080 (2010)	3890 (3740)
15	693 (426)	299 (184)	604 (372)	1510 (929)	627 (648)	270 (279)	547 (565)	1370 (1410)	6 (73)	43 (510)	258 (3030)	468 (5600)
16	593 (445)	255 (192)	517 (388)	1290 (969)	525 (535)	226 (230)	458 (466)	1140 (1170)				
17												
18	322 (240)	139 (103)	280 (209)	701 (523)	299 (256)	129 (110)	260 (223)	651 (558)				
19	318 (261)	137 (112)	277 (227)	692 (568)	302 (287)	130 (124)	264 (250)	659 (626)				
20	299 (351)	129 (151)	260 (306)	651 (765)	295 (421)	127 (181)	257 (367)	642 (917)				
21	287 (185)	124 (80)	250 (162)	626 (404)	265 (253)	114 (109)	231 (220)	577 (550)	1 (16)	4 (108)	22 (644)	45 (1440)
22	239 (411)	103 (177)	208 (358)	520 (895)	94 (677)	40 (292)	82 (590)	204 (1470)	-5 (46)	-32 (324)	-190 (1930)	-403 (4120)
23	383 (343)	165 (148)	333 (299)	834 (748)	428 (341)	184 (147)	373 (297)	933 (742)	2 (22)	14 (157)	81 (932)	173 (1980)
24	291 (191)	125 (82)	253 (166)	633 (416)	313 (194)	135 (83)	272 (169)	681 (422)	8 (12)	56 (82)	331 (490)	693 (1030)
25	224 (227)	97 (98)	195 (198)	488 (495)	235 (258)	101 (111)	204 (225)	511 (562)	11 (14)	77 (94)	460 (562)	955 (1160)
26	200 (469)	86 (202)	175 (409)	436 (1020)	163 (540)	70 (232)	142 (470)	355 (1170)	8 (44)	55 (308)	328 (1830)	671 (3750)
27	385 (310)	166 (133)	336 (270)	839 (674)	466 (461)	201 (199)	405 (402)	1010 (1000)	24 (35)	166 (243)	985 (1440)	2000 (2930)
28	324 (243)	139 (104)	282 (211)	705 (528)	449 (416)	193 (179)	391 (362)	977 (906)	32 (32)	225 (227)	1340 (1350)	2680 (2700)
29	272 (286)	117 (123)	237 (249)	593 (622)	424 (458)	182 (197)	369 (399)	922 (997)	40 (22)	276 (156)	1640 (927)	3250 (1830)
30	424 (318)	183 (137)	369 (277)	924 (691)	489 (409)	210 (176)	425 (356)	1060 (891)	55 (23)	382 (163)	2280 (969)	4440 (1890)
31	530 (463)	228 (199)	462 (403)	1150 (1010)	513 (418)	221 (180)	446 (364)	1120 (909)	55 (24)	383 (166)	2280 (989)	4410 (1910)
Mean	404	174	352	881	424	182	369	923	27	189	1120	2190
n	20	20	20	20	20	20	20	20	16	16	16	16
SD	149	64	130	325	176	76	153	383	22	152	904	1740
Min	200	86	175	436	94	40	82	204	-5	-32	-190	-403
Max	693	299	604	1510	848	365	739	1850	56	394	2340	4500

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Table E9. Daily means (SD) of PM10 emissions at Site OK4B for September, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	692 (505)	298 (218)	602 (440)	1510 (1100)	530 (562)	228 (242)	461 (489)	1150 (1220)	52 (23)	362 (162)	2160 (963)	4140 (1850)
2	776 (492)	334 (212)	675 (428)	1690 (1070)	557 (635)	240 (273)	485 (552)	1210 (1380)				
3	745 (705)	321 (304)	648 (614)	1620 (1530)	677 (825)	292 (355)	589 (718)	1470 (1800)				
4	455 (390)	196 (168)	396 (340)	990 (850)	539 (519)	232 (224)	469 (452)	1170 (1130)				
5	367 (368)	158 (158)	319 (320)	799 (800)	544 (472)	234 (203)	474 (411)	1180 (1030)				
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29	236 (168)	101 (72)	205 (146)	513 (365)	496 (309)	213 (133)	432 (269)	1080 (672)				
30												
Mean	545	235	474	1190	557	240	485	1210				
n	6	6	6	6	6	6	6	6	1	1	1	1
SD	204	88	178	444	57	25	49	124				
Min	236	101	205	513	496	213	432	1080				
Max	776	334	675	1690	677	292	589	1470				

ED_004549_00015840-00255

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for October, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2	249 (173)	107 (74)	216 (151)	541 (376)	540 (304)	233 (131)	470 (264)	1180 (661)				
3	427 (268)	184 (115)	371 (233)	929 (583)	673 (466)	290 (201)	586 (405)	1460 (1010)				
4	264 (284)	114 (122)	230 (247)	575 (618)	618 (473)	266 (204)	538 (412)	1340 (1030)				
5	165 (215)	71 (93)	143 (187)	358 (468)	520 (430)	224 (185)	453 (374)	1130 (935)				
6												
7	285 (200)	123 (86)	248 (174)	621 (434)	620 (301)	267 (130)	540 (262)	1350 (654)				
8	389 (298)	167 (128)	338 (259)	845 (648)	593 (534)	255 (230)	516 (464)	1290 (1160)				
9	320 (362)	138 (156)	279 (314)	697 (786)	606 (769)	261 (331)	527 (669)	1320 (1670)				
10	473 (262)	204 (113)	411 (228)	1030 (569)	694 (586)	299 (253)	603 (510)	1510 (1270)				
11	590 (396)	254 (171)	512 (344)	1280 (861)	942 (605)	406 (260)	819 (526)	2050 (1310)				
12	489 (296)	211 (128)	425 (257)	1060 (643)	797 (496)	343 (214)	693 (431)	1730 (1080)				
13	410 (219)	177 (94)	357 (190)	892 (475)	790 (576)	340 (248)	686 (500)	1720 (1250)				
14	521 (275)	224 (118)	453 (239)	1130 (597)	749 (484)	322 (208)	650 (420)	1630 (1050)				
15	907 (2820)	391 (1210)	788 (2450)	1970 (6120)	821 (930)	353 (401)	713 (808)	1780 (2020)				
16	492 (401)	212 (173)	427 (348)	1070 (871)	809 (835)	348 (360)	702 (725)	1760 (1810)				
17	473 (539)	204 (232)	411 (468)	1030 (1170)	798 (538)	344 (232)	693 (468)	1730 (1170)				
18	468 (381)	202 (164)	407 (330)	1020 (826)	706 (353)	304 (152)	613 (306)	1530 (766)				
19	411 (616)	177 (265)	357 (534)	892 (1340)	731 (521)	315 (225)	634 (453)	1590 (1130)				
20	483 (1160)	208 (498)	419 (1000)	1050 (2510)	690 (622)	297 (268)	598 (540)	1500 (1350)				
21	547 (576)	235 (248)	474 (500)	1190 (1250)	488 (356)	210 (153)	423 (309)	1060 (771)				
22	358 (451)	154 (194)	310 (391)	776 (978)	433 (251)	186 (108)	375 (218)	938 (544)				
23	406 (480)	175 (207)	352 (417)	881 (1040)	618 (430)	266 (185)	536 (373)	1340 (931)	10 (8)	69 (56)	408 (334)	917 (753)
24	431 (561)	186 (241)	373 (486)	934 (1210)	595 (447)	256 (192)	516 (387)	1290 (968)	12 (7)	81 (51)	479 (301)	1030 (647)
25	288 (570)	124 (246)	250 (494)	624 (1240)	463 (475)	199 (205)	401 (412)	1000 (1030)	12 (10)	84 (67)	500 (396)	1060 (838)
26	372 (681)	160 (293)	322 (590)	806 (1480)	505 (519)	217 (224)	437 (450)	1090 (1120)	20 (11)	139 (74)	828 (439)	1730 (918)
27	362 (468)	156 (202)	314 (406)	785 (1010)	467 (281)	201 (121)	405 (244)	1010 (610)	23 (15)	164 (108)	975 (642)	2020 (1330)
28	318 (813)	137 (350)	275 (704)	689 (1760)	460 (483)	198 (208)	398 (418)	996 (1050)	22 (14)	156 (101)	927 (602)	1900 (1240)
29	294 (929)	127 (400)	254 (805)	636 (2010)	491 (579)	212 (249)	426 (501)	1060 (1250)	25 (21)	174 (147)	1040 (876)	2100 (1780)
30	292 (1110)	126 (476)	253 (958)	631 (2390)	477 (805)	205 (347)	413 (697)	1030 (1740)	28 (34)	196 (235)	1170 (1400)	2340 (2790)
31	371 (648)	160 (279)	321 (561)	803 (1400)	440 (543)	189 (234)	381 (470)	951 (1170)	34 (26)	236 (181)	1400 (1080)	2770 (2130)
Mean	409	176	355	887	625	269	543	1360	21	144	858	1760
n	29	29	29	29	29	29	29	29	9	9	9	9
SD	135	58	118	294	137	59	120	299	8	54	319	604
Min	165	71	143	358	433	186	375	938	10	69	408	917
Max	907	391	788	1970	942	406	819	2050	34	236	1400	2770

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Table E9. Daily means (SD) of PM10 emissions at Site OK4B for November, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	303 (375)	130 (161)	262 (324)	655 (810)	427 (574)	184 (247)	370 (497)	924 (1240)	50 (32)	352 (223)	2100 (1330)	4090 (2590)
2	293 (466)	126 (201)	253 (403)	633 (1010)					55 (34)	388 (240)	2310 (1430)	4460 (2760)
3	281 (448)	121 (193)	243 (388)	608 (969)	408 (459)	176 (198)	353 (397)	883 (993)	48 (32)	337 (223)	2000 (1330)	3840 (2550)
4	199 (1220)	86 (527)	172 (1060)	431 (2650)	352 (1070)	151 (462)	304 (928)	761 (2320)	56 (58)	392 (402)	2330 (2390)	4430 (4550)
5	407 (642)	175 (277)	352 (556)	879 (1390)	435 (522)	187 (225)	376 (451)	941 (1130)	67 (42)	468 (297)	2790 (1770)	5250 (3330)
6												
7												
8												
9												
10												
11												
12												
13												
14	593 (353)	255 (152)	512 (304)	1280 (761)	518 (346)	223 (149)	447 (299)	1120 (748)	4 (8)	30 (57)	178 (336)	396 (770)
15	483 (272)	208 (117)	417 (235)	1040 (587)	446 (298)	192 (128)	385 (257)	963 (642)	10 (9)	70 (61)	416 (364)	895 (784)
16	510 (325)	220 (140)	441 (281)	1100 (701)	550 (332)	237 (143)	475 (287)	1190 (717)	12 (12)	80 (82)	478 (487)	1010 (1030)
17	520 (353)	224 (152)	448 (304)	1120 (761)	610 (417)	263 (180)	526 (360)	1320 (900)	11 (10)	79 (71)	469 (424)	982 (888)
18	528 (317)	228 (137)	456 (274)	1140 (684)	583 (439)	251 (189)	503 (379)	1260 (947)	25 (15)	171 (103)	1020 (614)	2110 (1270)
19	522 (355)	225 (153)	450 (307)	1120 (767)	604 (431)	260 (185)	521 (372)	1300 (929)	27 (17)	191 (122)	1140 (724)	2330 (1490)
20	526 (362)	226 (156)	454 (312)	1130 (781)	527 (382)	227 (165)	455 (330)	1140 (824)	29 (22)	206 (153)	1230 (911)	2480 (1850)
21	343 (264)	148 (114)	296 (227)	740 (569)	364 (295)	157 (127)	314 (255)	786 (637)	24 (22)	171 (157)	1020 (932)	2030 (1860)
22	322 (250)	139 (108)	277 (216)	693 (539)	316 (331)	136 (142)	272 (285)	681 (713)	36 (30)	251 (208)	1490 (1240)	2950 (2440)
23	287 (246)	124 (106)	247 (212)	618 (531)					52 (39)	366 (274)	2180 (1630)	4240 (3170)
24	266 (226)	114 (97)	229 (194)	572 (486)	249 (211)	107 (91)	215 (182)	537 (455)	55 (45)	384 (316)	2280 (1880)	4410 (3620)
25	255 (259)	110 (111)	219 (223)	548 (557)	287 (271)	124 (117)	247 (234)	618 (584)	76 (56)	530 (395)	3150 (2350)	6030 (4490)
26	329 (288)	142 (124)	283 (248)	708 (620)	305 (334)	131 (144)	263 (287)	656 (718)	73 (57)	512 (399)	3050 (2380)	5780 (4510)
27												
28												
29												
30	300 (223)	129 (96)	259 (192)	646 (480)	253 (202)	109 (87)	218 (174)	544 (435)	89 (64)	623 (447)	3710 (2660)	6750 (4840)
Mean	382	165	330	825	425	183	367	918	42	295	1750	3390
n	19	19	19	19	17	17	17	17	19	19	19	19
SD	118	51	102	254	119	51	103	257	24	169	1000	1840
Min	199	86	172	431	249	107	215	537	4	30	178	396
Max	593	255	512	1280	610	263	526	1320	89	623	3710	6750

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Table E9. Daily means (SD) of PM10 emissions at Site OK4B for December, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	373 (254)	161 (109)	321 (219)	803 (546)					82 (46)	572 (324)	3400 (1930)	6170 (3500)
2	388 (231)	167 (100)	334 (199)	834 (497)	376 (251)	162 (108)	324 (216)	810 (540)	90 (54)	630 (380)	3750 (2260)	6780 (4090)
3	361 (214)	156 (92)	311 (184)	777 (461)	352 (255)	152 (110)	303 (220)	757 (549)	99 (58)	691 (408)	4110 (2430)	7410 (4380)
4	470 (275)	203 (118)	405 (236)	1010 (591)	488 (308)	210 (133)	420 (265)	1050 (663)	94 (61)	657 (429)	3910 (2550)	7030 (4590)
5	457 (411)	197 (177)	394 (354)	984 (885)	484 (317)	208 (137)	417 (273)	1040 (683)	110 (68)	769 (477)	4580 (2840)	8200 (5080)
6	367 (245)	158 (105)	316 (210)	790 (526)	348 (370)	150 (159)	300 (318)	750 (795)				
7	276 (235)	119 (101)	238 (202)	595 (505)	377 (239)	162 (103)	324 (206)	811 (515)				
8	229 (271)	99 (117)	197 (233)	493 (582)	451 (224)	194 (97)	389 (193)	971 (483)				
9	204 (165)	88 (71)	176 (142)	440 (356)	430 (190)	185 (82)	370 (164)	926 (409)				
10	248 (188)	107 (81)	214 (162)	534 (405)	514 (206)	221 (89)	442 (177)	1110 (443)				
11					590 (179)	254 (77)	508 (154)	1270 (386)	11 (9)	75 (62)	445 (369)	932 (772)
12	292 (196)	126 (84)	252 (168)	629 (421)	597 (224)	257 (97)	514 (193)	1290 (483)	14 (10)	97 (72)	576 (428)	1190 (888)
13	340 (214)	146 (92)	293 (185)	732 (462)	584 (218)	252 (94)	503 (187)	1260 (469)	16 (13)	113 (88)	673 (521)	1380 (1070)
14	244 (185)	105 (80)	210 (160)	526 (399)	625 (224)	269 (97)	538 (193)	1350 (483)	23 (19)	163 (131)	969 (779)	1970 (1580)
15	284 (234)	122 (101)	244 (202)	611 (504)	620 (268)	267 (115)	534 (231)	1330 (577)	20 (17)	140 (116)	834 (688)	1670 (1380)
16	332 (223)	143 (96)	286 (192)	715 (481)	551 (252)	237 (109)	475 (217)	1190 (543)	27 (22)	189 (153)	1130 (913)	2230 (1810)
17	334 (246)	144 (106)	288 (212)	720 (529)	530 (271)	228 (117)	456 (234)	1140 (584)	31 (25)	213 (176)	1270 (1040)	2480 (2040)
18	390 (288)	168 (124)	336 (248)	840 (621)	482 (279)	208 (120)	415 (240)	1040 (601)	39 (28)	274 (196)	1630 (1170)	3160 (2260)
19	380 (257)	164 (111)	327 (221)	818 (554)	370 (355)	159 (153)	318 (306)	796 (765)	44 (31)	311 (215)	1850 (1280)	3550 (2460)
20	344 (336)	148 (145)	297 (290)	742 (725)					54 (30)	376 (209)	2240 (1240)	4260 (2370)
21												
22	218 (246)	94 (106)	188 (212)	470 (529)	241 (269)	104 (116)	207 (232)	518 (579)	47 (37)	327 (258)	1940 (1530)	3630 (2860)
23	305 (247)	131 (107)	263 (213)	656 (533)	260 (372)	112 (160)	224 (321)	560 (802)	60 (51)	417 (354)	2480 (2100)	4590 (3890)
24	298 (272)	128 (117)	257 (234)	643 (586)					62 (50)	437 (347)	2600 (2070)	4760 (3780)
25	281 (264)	121 (114)	242 (227)	605 (568)	266 (470)	115 (202)	229 (405)	573 (1010)	48 (43)	335 (300)	2000 (1780)	3620 (3240)
26	244 (227)	105 (98)	210 (195)	525 (488)	259 (469)	112 (202)	223 (404)	558 (1010)	51 (47)	357 (326)	2120 (1940)	3820 (3490)
27	213 (185)	92 (80)	183 (160)	458 (400)	442 (216)	191 (93)	381 (186)	953 (465)				
28	268 (145)	115 (63)	231 (125)	577 (313)	471 (108)	203 (46)	406 (93)	1010 (232)				
29	248 (167)	107 (72)	214 (144)	535 (360)	447 (148)	193 (64)	385 (128)	963 (320)				
30	312 (161)	134 (69)	269 (138)	671 (346)	387 (213)	167 (92)	333 (184)	834 (459)				
31	245 (171)	105 (74)	211 (148)	528 (370)	289 (212)	125 (91)	249 (182)	623 (456)				
Mean	309	133	266	664	438	189	377	943	51	357	2130	3940
n	29	29	29	29	27	27	27	27	20	20	20	20
SD	69	30	60	149	115	50	99	248	30	207	1230	2150
Min	204	88	176	440	241	104	207	518	11	75	445	932
Max	470	203	405	1010	625	269	538	1350	110	769	4580	8200

ED_004549_00015840-00258

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for January, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2	240 (153)	103 (66)	207 (132)	517 (330)	278 (157)	120 (68)	239 (136)	598 (339)	14 (12)	98 (87)	584 (515)	1200 (1060)
3												
4	415 (271)	179 (117)	358 (234)	894 (584)	413 (365)	178 (157)	356 (314)	889 (785)	19 (16)	134 (110)	798 (656)	1590 (1310)
5	425 (247)	183 (107)	366 (213)	915 (533)					23 (17)	162 (115)	961 (686)	1890 (1350)
6	517 (304)	223 (131)	445 (262)	1110 (655)					27 (18)	191 (124)	1140 (736)	2210 (1430)
7	473 (246)	204 (106)	407 (212)	1020 (529)					28 (19)	195 (134)	1160 (798)	2230 (1540)
8	304 (175)	131 (76)	262 (151)	654 (377)	356 (176)	153 (76)	306 (151)	766 (378)	25 (19)	176 (133)	1050 (793)	2000 (1510)
9	402 (213)	173 (92)	346 (183)	864 (458)					36 (24)	249 (169)	1480 (1000)	2800 (1900)
10	370 (228)	159 (98)	318 (196)	796 (491)	470 (307)	202 (132)	404 (264)	1010 (659)	37 (30)	261 (209)	1550 (1240)	2910 (2320)
11	308 (201)	132 (86)	264 (173)	661 (431)					40 (30)	280 (208)	1670 (1240)	3080 (2290)
12	320 (214)	138 (92)	275 (184)	688 (460)	405 (362)	175 (156)	348 (311)	871 (778)	47 (31)	327 (217)	1950 (1290)	3560 (2360)
13	291 (209)	125 (90)	250 (179)	625 (448)	439 (386)	189 (166)	377 (331)	943 (829)	58 (41)	403 (285)	2400 (1690)	4340 (3070)
14	317 (239)	136 (103)	272 (205)	681 (513)	483 (418)	208 (180)	415 (359)	1040 (897)	61 (41)	428 (285)	2550 (1690)	4600 (3060)
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Mean	365	157	314	786	406	175	349	873	35	242	1440	2700
n	12	12	12	12	7	7	7	7	12	12	12	12
SD	79	34	68	170	65	28	56	140	14	99	588	1010
Min	240	103	207	517	278	120	239	598	14	98	584	1200
Max	517	223	445	1110	483	208	415	1040	61	428	2550	4600

ED_004549_00015840-00259

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for February, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4												
5												
6												
7												
8	440 (259)	190 (111)	376 (221)	939 (552)					58 (37)	405 (258)	2410 (1530)	4470 (2840)
9	398 (232)	171 (100)	339 (198)	848 (495)	426 (180)	184 (77)	364 (153)	910 (384)	60 (36)	418 (249)	2490 (1480)	4570 (2720)
10	245 (183)	106 (79)	209 (156)	524 (390)	377 (146)	162 (63)	322 (125)	804 (312)	61 (45)	427 (314)	2540 (1870)	4620 (3390)
11	399 (214)	172 (92)	341 (182)	852 (455)	439 (202)	189 (87)	374 (173)	936 (431)	74 (50)	520 (352)	3090 (2090)	5610 (3790)
12	327 (177)	141 (76)	279 (151)	698 (378)					63 (47)	442 (331)	2630 (1970)	4750 (3570)
13	450 (210)	194 (91)	384 (179)	960 (448)					84 (48)	585 (335)	3480 (1990)	6270 (3590)
14	438 (298)	188 (129)	373 (254)	932 (636)	496 (343)	214 (148)	423 (293)	1060 (731)	62 (54)	435 (375)	2590 (2230)	4660 (4010)
15	272 (165)	117 (71)	232 (141)	580 (352)					74 (57)	518 (397)	3080 (2360)	5530 (4240)
16	314 (235)	135 (101)	267 (200)	668 (500)					91 (58)	640 (408)	3810 (2420)	6820 (4340)
17	329 (251)	142 (108)	280 (213)	701 (533)	443 (259)	191 (112)	377 (220)	942 (551)	68 (64)	478 (451)	2840 (2680)	5080 (4790)
18	349 (211)	150 (91)	297 (180)	743 (449)								
19	450 (239)	194 (103)	383 (203)	957 (509)	725 (345)	312 (148)	617 (293)	1540 (733)	10 (11)	69 (76)	410 (454)	919 (1020)
20	245 (186)	105 (80)	208 (158)	521 (395)	357 (165)	154 (71)	304 (140)	760 (351)	9 (11)	62 (76)	370 (451)	797 (972)
21	271 (168)	117 (72)	230 (143)	576 (357)	376 (176)	162 (76)	319 (150)	798 (374)	9 (10)	62 (70)	366 (417)	775 (884)
22	391 (270)	168 (116)	332 (230)	831 (574)	464 (261)	200 (112)	394 (222)	986 (555)	11 (10)	77 (71)	457 (422)	956 (884)
23	418 (276)	180 (119)	356 (234)	889 (586)	419 (261)	180 (112)	356 (222)	890 (554)	10 (10)	72 (71)	429 (424)	888 (878)
24	431 (300)	186 (129)	366 (255)	916 (638)	457 (285)	197 (123)	388 (242)	970 (605)	9 (7)	66 (51)	395 (301)	808 (617)
25	604 (397)	260 (171)	513 (337)	1280 (842)	426 (293)	184 (126)	362 (249)	905 (622)	12 (10)	81 (73)	482 (432)	974 (872)
26	249 (221)	107 (95)	211 (187)	528 (469)	317 (291)	137 (125)	269 (247)	673 (617)	23 (19)	158 (130)	942 (776)	1880 (1550)
27	381 (300)	164 (129)	323 (254)	809 (636)	374 (261)	161 (112)	318 (222)	794 (554)	29 (20)	201 (143)	1190 (850)	2350 (1670)
28	389 (302)	168 (130)	330 (256)	826 (641)	434 (311)	187 (134)	369 (264)	921 (659)	23 (22)	158 (152)	939 (905)	1820 (1760)
29	451 (250)	194 (108)	383 (212)	957 (531)	471 (254)	203 (109)	400 (215)	999 (538)	33 (23)	228 (161)	1350 (960)	2610 (1850)
Mean	375	161	319	797	438	188	372	930	42	291	1730	3200
n	22	22	22	22	16	16	16	16	21	21	21	21
SD	86	37	73	183	87	38	74	185	28	199	1180	2070
Min	245	105	208	521	317	137	269	673	9	62	366	775
Max	604	260	513	1280	725	312	617	1540	91	640	3810	6820

ED_004549_00015840-00260

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for March, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	548 (241)	236 (104)	465 (205)	1160 (512)	575 (266)	248 (115)	488 (226)	1220 (564)	33 (21)	229 (148)	1360 (879)	2600 (1680)
2	593 (377)	255 (162)	503 (320)	1260 (800)	411 (326)	177 (140)	348 (277)	870 (691)	33 (21)	229 (149)	1360 (885)	2580 (1670)
3	402 (321)	173 (138)	341 (272)	853 (681)	421 (132)	181 (57)	357 (112)	892 (280)	34 (29)	240 (201)	1430 (1200)	2670 (2240)
4	398 (228)	171 (98)	337 (193)	843 (482)	544 (260)	234 (112)	461 (220)	1150 (550)	44 (30)	310 (209)	1840 (1240)	3410 (2300)
5	327 (229)	141 (99)	277 (194)	692 (485)	352 (221)	152 (95)	298 (187)	746 (468)	39 (32)	271 (224)	1610 (1330)	2950 (2430)
6	318 (226)	137 (97)	270 (191)	674 (478)	431 (258)	186 (111)	365 (219)	913 (547)	45 (33)	314 (231)	1870 (1370)	3380 (2490)
7	241 (166)	104 (72)	204 (141)	511 (352)	421 (170)	181 (73)	357 (144)	892 (361)	39 (32)	272 (223)	1620 (1330)	2930 (2400)
8	294 (178)	127 (77)	249 (151)	623 (378)	524 (306)	226 (132)	444 (259)	1110 (648)	45 (27)	314 (185)	1870 (1100)	3370 (1990)
9	379 (331)	163 (142)	321 (280)	802 (700)	518 (347)	223 (149)	438 (294)	1100 (735)	50 (29)	348 (205)	2070 (1220)	3730 (2200)
10	346 (287)	149 (124)	293 (243)	731 (608)	563 (431)	243 (186)	477 (365)	1190 (913)	54 (39)	375 (271)	2230 (1610)	4010 (2910)
11	314 (360)	135 (155)	265 (304)	663 (761)	615 (370)	265 (159)	520 (313)	1300 (783)	59 (37)	415 (262)	2470 (1560)	4440 (2800)
12	367 (358)	158 (154)	310 (303)	776 (757)	499 (368)	215 (158)	422 (311)	1050 (778)	55 (51)	382 (359)	2270 (2140)	4080 (3840)
13	401 (333)	173 (144)	339 (282)	847 (705)	539 (273)	232 (118)	456 (231)	1140 (578)	75 (41)	527 (288)	3130 (1710)	5620 (3070)
14	398 (222)	172 (96)	337 (188)	842 (470)	571 (277)	246 (119)	483 (234)	1210 (586)	116 (138)	810 (967)	4820 (5750)	8630 (10300)
15	349 (205)	151 (88)	295 (173)	739 (433)	437 (214)	188 (92)	369 (181)	924 (452)	74 (56)	521 (391)	3100 (2330)	5540 (4160)
16	262 (182)	113 (78)	221 (154)	553 (384)	346 (231)	149 (100)	292 (195)	731 (488)	89 (59)	625 (409)	3720 (2440)	6630 (4350)
17	238 (176)	102 (76)	201 (149)	502 (372)	358 (215)	154 (93)	303 (182)	756 (455)				
18	282 (163)	121 (70)	238 (137)	595 (343)	397 (223)	171 (96)	335 (189)	838 (472)	9 (10)	65 (73)	387 (433)	874 (990)
19	253 (194)	109 (84)	214 (164)	534 (411)	478 (294)	206 (126)	404 (248)	1010 (620)	8 (13)	53 (94)	317 (558)	684 (1200)
20	400 (299)	172 (129)	338 (253)	845 (632)	559 (379)	241 (163)	472 (320)	1180 (800)	5 (15)	32 (106)	189 (631)	401 (1340)
21	394 (255)	170 (110)	333 (215)	833 (537)	556 (329)	240 (142)	470 (278)	1170 (695)	11 (14)	79 (95)	468 (565)	981 (1180)
22	368 (277)	159 (119)	311 (234)	777 (585)	371 (268)	160 (115)	313 (226)	783 (566)	12 (13)	87 (90)	516 (535)	1070 (1110)
23	298 (232)	129 (100)	252 (196)	630 (489)	344 (195)	148 (84)	291 (164)	727 (411)	18 (16)	127 (111)	754 (661)	1540 (1350)
24	289 (309)	124 (133)	244 (261)	610 (653)	491 (346)	212 (149)	415 (292)	1040 (729)	27 (16)	191 (113)	1140 (674)	2300 (1360)
25	408 (346)	176 (149)	344 (292)	861 (730)	469 (388)	202 (167)	396 (327)	989 (818)	32 (18)	227 (124)	1350 (739)	2690 (1480)
26	308 (280)	133 (120)	260 (236)	649 (590)	406 (329)	175 (142)	343 (278)	857 (694)	27 (16)	189 (114)	1120 (676)	2210 (1340)
27	366 (307)	157 (132)	308 (259)	771 (647)	367 (272)	158 (117)	310 (230)	775 (574)	30 (18)	211 (124)	1250 (740)	2440 (1440)
28	301 (307)	129 (132)	253 (259)	634 (647)	361 (278)	156 (120)	305 (235)	761 (587)	39 (27)	275 (187)	1640 (1110)	3150 (2150)
29	301 (424)	130 (182)	254 (357)	635 (893)	421 (316)	181 (136)	355 (266)	887 (666)	48 (29)	334 (204)	1990 (1210)	3800 (2320)
30	313 (288)	135 (124)	264 (243)	660 (607)	417 (247)	180 (106)	352 (208)	879 (520)	48 (27)	333 (188)	1980 (1120)	3760 (2120)
31	282 (219)	121 (94)	237 (184)	593 (461)					54 (33)	380 (230)	2260 (1370)	4250 (2570)
Mean	346	149	293	732	459	198	388	970	42	292	1740	3220
n	31	31	31	31	30	30	30	30	30	30	30	30
SD	78	34	66	166	81	35	68	171	24	170	1010	1760
Min	238	102	201	502	344	148	291	727	5	32	189	401
Max	593	255	503	1260	615	265	520	1300	116	810	4820	8630

ED_004549_00015840-00261

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for April, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	289 (272)	124 (117)	243 (229)	608 (574)					63 (44)	441 (310)	2620 (1850)	4870 (3420)
2	320 (193)	138 (83)	269 (162)	673 (406)					76 (42)	535 (297)	3180 (1770)	5850 (3250)
3	344 (149)	148 (64)	290 (126)	725 (314)					74 (40)	514 (281)	3060 (1670)	5570 (3040)
4	304 (284)	131 (122)	256 (239)	640 (597)	438 (226)	189 (98)	369 (191)	923 (477)	80 (41)	560 (286)	3330 (1700)	6050 (3090)
5	369 (299)	159 (129)	311 (252)	776 (629)	604 (343)	260 (148)	509 (289)	1270 (723)	82 (42)	572 (294)	3400 (1750)	6160 (3160)
6	425 (310)	183 (134)	358 (261)	894 (654)	566 (344)	244 (148)	476 (290)	1190 (725)	89 (49)	620 (340)	3690 (2020)	6650 (3650)
7												
8												
9												
10												
11												
12												
13												
14												
15	971 (1380)	418 (596)	818 (1170)	2050 (2910)	1080 (1070)	464 (459)	907 (897)	2270 (2240)	8 (26)	58 (185)	344 (1100)	714 (2280)
16	749 (384)	323 (165)	631 (324)	1580 (809)	696 (337)	300 (145)	586 (284)	1470 (709)	20 (9)	141 (64)	841 (378)	1720 (776)
17	417 (337)	179 (145)	351 (283)	877 (708)	388 (285)	167 (123)	327 (240)	818 (601)	15 (17)	103 (122)	615 (724)	1240 (1460)
18	447 (335)	192 (144)	376 (282)	941 (705)	512 (357)	221 (154)	431 (301)	1080 (752)	27 (17)	192 (117)	1140 (698)	2280 (1400)
19	572 (635)	247 (273)	482 (534)	1200 (1340)	599 (646)	258 (278)	504 (544)	1260 (1360)	26 (27)	180 (187)	1070 (1110)	2110 (2200)
20	625 (724)	269 (312)	527 (610)	1320 (1520)	653 (805)	281 (347)	550 (678)	1380 (1690)	30 (40)	211 (281)	1260 (1670)	2450 (3250)
21	706 (603)	304 (260)	595 (508)	1490 (1270)	709 (361)	306 (155)	597 (304)	1490 (759)	43 (24)	300 (170)	1790 (1010)	3440 (1960)
22	552 (502)	238 (216)	465 (423)	1160 (1060)	557 (439)	240 (189)	469 (370)	1170 (925)	51 (26)	358 (182)	2130 (1080)	4070 (2070)
23					555 (440)	239 (189)	467 (370)	1170 (925)	51 (27)	359 (190)	2140 (1130)	4050 (2140)
24	346 (840)	149 (362)	291 (707)	728 (1770)	383 (808)	165 (348)	322 (680)	806 (1700)	51 (51)	359 (357)	2140 (2120)	4010 (3980)
25	554 (470)	239 (203)	467 (396)	1170 (990)	654 (465)	282 (200)	550 (392)	1380 (980)	73 (39)	509 (272)	3030 (1620)	5620 (3000)
26	396 (825)	170 (355)	333 (695)	832 (1740)					75 (60)	525 (421)	3120 (2510)	5730 (4600)
27	410 (472)	177 (203)	345 (397)	863 (993)	563 (447)	242 (193)	474 (376)	1180 (941)	76 (53)	533 (370)	3170 (2200)	5760 (4000)
28	475 (1230)	205 (530)	400 (1040)	1000 (2590)	611 (1060)	263 (455)	515 (889)	1290 (2220)	81 (102)	565 (712)	3360 (4240)	6100 (7680)
29	453 (400)	195 (172)	381 (337)	954 (841)	742 (487)	319 (210)	624 (410)	1560 (1030)	87 (48)	606 (338)	3610 (2010)	6520 (3630)
30	557 (268)	240 (116)	469 (226)	1170 (564)	787 (418)	339 (180)	663 (352)	1660 (880)	76 (58)	534 (409)	3180 (2430)	5740 (4390)
Mean	490	211	412	1030	616	265	519	1300	57	399	2370	4400
n	21	21	21	21	18	18	18	18	22	22	22	22
SD	165	71	139	348	156	67	131	328	25	176	1050	1840
Min	289	124	243	608	383	165	322	806	8	58	344	714
Max	971	418	818	2050	1080	464	907	2270	89	620	3690	6650

ED_004549_00015840-00262

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for May, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	491 (446)	212 (192)	414 (375)	1030 (939)	695 (499)	299 (215)	585 (420)	1460 (1050)	77 (43)	535 (299)	3190 (1780)	5730 (3200)
2	360 (369)	155 (159)	303 (311)	756 (777)	633 (445)	273 (192)	533 (375)	1330 (936)				
3	423 (252)	182 (109)	356 (212)	890 (530)	627 (336)	270 (145)	528 (283)	1320 (707)	88 (63)	617 (438)	3670 (2610)	6570 (4670)
4	446 (317)	192 (137)	375 (267)	938 (667)	632 (519)	272 (224)	531 (437)	1330 (1090)	103 (68)	721 (476)	4290 (2830)	7660 (5060)
5	477 (361)	205 (155)	401 (304)	1000 (759)	676 (483)	291 (208)	568 (406)	1420 (1020)				
6	306 (267)	132 (115)	257 (224)	642 (560)	373 (307)	160 (132)	313 (258)	783 (645)	7 (13)	49 (93)	291 (555)	661 (1240)
7	402 (252)	173 (108)	337 (211)	844 (529)					10 (15)	68 (104)	403 (621)	868 (1340)
8	350 (369)	151 (159)	294 (310)	736 (775)	438 (418)	189 (180)	368 (352)	921 (879)	9 (25)	61 (175)	361 (1040)	766 (2200)
9					514 (335)	221 (144)	432 (281)	1080 (703)	15 (33)	102 (233)	607 (1390)	1270 (2900)
10	480 (569)	207 (245)	403 (478)	1010 (1200)	498 (444)	215 (191)	418 (373)	1050 (931)	14 (37)	97 (255)	579 (1520)	1200 (3140)
11	484 (472)	209 (203)	407 (396)	1020 (991)	620 (482)	267 (208)	520 (405)	1300 (1010)	27 (43)	189 (301)	1120 (1790)	2300 (3660)
12	503 (594)	217 (256)	422 (498)	1060 (1250)	698 (671)	300 (289)	586 (563)	1460 (1410)	26 (49)	180 (342)	1070 (2030)	2170 (4120)
13	450 (483)	194 (208)	378 (406)	944 (1010)	665 (318)	287 (137)	558 (267)	1400 (667)	29 (30)	204 (213)	1210 (1270)	2420 (2530)
14	406 (395)	175 (170)	341 (331)	852 (828)					39 (32)	275 (221)	1640 (1320)	3230 (2600)
15	334 (451)	144 (194)	280 (379)	700 (947)	566 (305)	244 (131)	475 (256)	1190 (639)	38 (33)	268 (227)	1600 (1350)	3110 (2640)
16	414 (284)	178 (122)	347 (238)	869 (595)	616 (266)	265 (115)	516 (223)	1290 (558)	43 (27)	304 (190)	1810 (1130)	3500 (2180)
17	375 (317)	162 (136)	315 (266)	787 (664)	512 (343)	220 (148)	429 (288)	1070 (720)	42 (22)	293 (157)	1740 (935)	3340 (1790)
18	390 (317)	168 (136)	327 (265)	817 (664)	544 (634)	234 (273)	456 (532)	1140 (1330)	41 (29)	290 (204)	1730 (1220)	3280 (2310)
19	449 (450)	193 (194)	376 (377)	941 (943)	715 (929)	308 (400)	599 (778)	1500 (1950)	47 (29)	327 (205)	1940 (1220)	3660 (2310)
20	245 (444)	105 (191)	205 (372)	512 (929)	600 (667)	258 (287)	502 (558)	1260 (1400)	32 (43)	223 (302)	1330 (1800)	2480 (3340)
21	333 (283)	143 (122)	279 (237)	697 (593)	576 (575)	248 (248)	482 (481)	1210 (1200)	42 (54)	291 (376)	1730 (2230)	3190 (4120)
22	149 (338)	64 (145)	125 (283)	311 (707)	452 (1460)	195 (630)	379 (1220)	947 (3060)	33 (41)	233 (287)	1390 (1710)	2530 (3120)
23	92 (307)	40 (132)	77 (257)	193 (643)	310 (678)	133 (292)	259 (567)	648 (1420)	18 (52)	128 (367)	759 (2180)	1380 (3960)
24	403 (371)	174 (160)	338 (310)	844 (776)	533 (648)	230 (279)	446 (542)	1120 (1360)	52 (66)	365 (461)	2170 (2750)	3920 (4960)
25	308 (536)	133 (231)	258 (448)	645 (1120)	547 (792)	236 (341)	458 (663)	1150 (1660)	39 (63)	275 (441)	1640 (2630)	2950 (4720)
26	157 (332)	68 (143)	132 (278)	329 (694)	586 (666)	253 (287)	491 (557)	1230 (1390)	45 (48)	313 (336)	1860 (2000)	3330 (3580)
27	309 (184)	133 (79)	259 (154)	647 (384)								
28	315 (245)	136 (105)	263 (204)	658 (511)					11 (7)	79 (51)	471 (305)	1060 (700)
29	284 (835)	122 (360)	238 (698)	594 (1740)	249 (447)	107 (192)	208 (374)	520 (934)				
30	239 (315)	103 (136)	200 (264)	500 (659)	513 (615)	221 (265)	428 (514)	1070 (1280)				
31	163 (380)	70 (164)	136 (318)	340 (794)	384 (547)	165 (236)	321 (457)	802 (1140)				
Mean	351	151	295	737	547	236	459	1150	37	259	1540	2900
n	30	30	30	30	27	27	27	27	25	25	25	25
SD	109	47	92	230	117	50	98	246	24	165	981	1710
Min	92	40	77	193	249	107	208	520	7	49	291	661
Max	503	217	422	1060	715	308	599	1500	103	721	4290	7660

ED_004549_00015840-00263

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for June, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	124 (219)	54 (94)	104 (183)	260 (457)	301 (410)	130 (176)	252 (342)	629 (856)	9 (9)	64 (66)	383 (395)	794 (819)
2												
3												
4												
5	256 (629)	110 (271)	214 (528)	536 (1320)	506 (517)	218 (223)	424 (434)	1060 (1080)	15 (39)	108 (272)	641 (1620)	1270 (3200)
6	538 (332)	232 (143)	451 (278)	1130 (696)	622 (416)	268 (179)	522 (349)	1310 (873)	44 (29)	306 (204)	1820 (1210)	3560 (2370)
7	182 (316)	78 (136)	153 (266)	381 (664)	246 (319)	106 (137)	207 (268)	517 (669)	26 (25)	182 (171)	1080 (1020)	2100 (1980)
8	241 (312)	104 (134)	202 (262)	506 (656)	434 (386)	187 (166)	365 (325)	912 (812)	39 (44)	272 (309)	1620 (1840)	3110 (3530)
9	478 (325)	206 (140)	403 (273)	1010 (683)	677 (382)	292 (164)	570 (321)	1430 (803)	58 (44)	403 (306)	2400 (1820)	4570 (3460)
10	254 (403)	109 (174)	214 (339)	535 (848)	559 (422)	241 (182)	471 (356)	1180 (889)	34 (33)	240 (229)	1430 (1360)	2700 (2580)
11												
12												
13												
14												
15												
16												
17	287 (335)	124 (144)	243 (284)	608 (710)	392 (399)	169 (172)	332 (338)	831 (846)	6 (31)	39 (214)	230 (1280)	533 (2800)
18	305 (422)	131 (182)	259 (358)	647 (895)	398 (523)	171 (225)	337 (444)	844 (1110)	9 (27)	63 (191)	374 (1140)	807 (2440)
19	367 (331)	158 (143)	311 (281)	779 (703)	410 (374)	176 (161)	348 (318)	870 (795)	10 (36)	72 (250)	427 (1490)	905 (3150)
20	391 (380)	169 (164)	332 (323)	831 (808)	470 (393)	202 (169)	399 (334)	998 (835)	17 (40)	115 (281)	686 (1670)	1440 (3500)
21												
22	363 (400)	156 (172)	309 (340)	772 (851)	481 (490)	207 (211)	410 (417)	1020 (1040)				
23	388 (370)	167 (159)	331 (316)	827 (789)	527 (569)	227 (245)	449 (485)	1120 (1210)				
24	325 (298)	140 (129)	277 (254)	693 (636)	488 (429)	210 (185)	416 (366)	1040 (915)				
25												
26												
27												
28												
29												
30												
Mean	321	138	272	679	465	200	393	983	24	169	1010	1980
n	14	14	14	14	14	14	14	14	11	11	11	11
SD	107	46	90	226	111	48	94	235	16	115	682	1270
Min	124	54	104	260	246	106	207	517	6	39	230	533
Max	538	232	451	1130	677	292	570	1430	58	403	2400	4570

ED_004549_00015840-00264

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for July, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17	278 (341)	120 (147)	237 (292)	594 (729)	340 (311)	146 (134)	291 (266)	727 (665)				
18	253 (95)	109 (41)	216 (81)	540 (204)	369 (145)	159 (62)	315 (124)	789 (309)				
19	266 (106)	114 (46)	227 (91)	568 (226)	421 (158)	181 (68)	360 (135)	899 (338)				
20	303 (244)	130 (105)	259 (209)	648 (521)	503 (345)	216 (148)	430 (295)	1070 (737)				
21	569 (1290)	245 (556)	486 (1110)	1220 (2760)	572 (310)	246 (133)	489 (265)	1220 (663)				
22	359 (210)	154 (90)	307 (179)	767 (449)	557 (233)	240 (100)	476 (199)	1190 (498)				
23	392 (254)	169 (109)	335 (217)	838 (542)	637 (288)	274 (124)	544 (247)	1360 (616)				
24												
25												
26												
27												
28												
29												
30												
31												
Mean	345	149	295	739	485	209	415	1040				
n	7	7	7	7	7	7	7	7	0	0	0	0
SD	103	44	88	219	103	45	88	221				
Min	253	109	216	540	340	146	291	727				
Max	569	245	486	1220	637	274	544	1360				

ED_004549_00015840-00265

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for August, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4												
5												
6												
7												
8	177 (95)	76 (41)	151 (81)	378 (202)	360 (124)	155 (53)	307 (105)	766 (263)				
9	252 (131)	109 (56)	215 (112)	537 (279)	428 (148)	184 (64)	365 (126)	911 (316)				
10	223 (84)	96 (36)	190 (71)	475 (178)	363 (107)	156 (46)	310 (91)	774 (227)				
11	244 (109)	105 (47)	208 (93)	521 (232)	360 (167)	155 (72)	307 (143)	767 (356)				
12	272 (133)	117 (57)	232 (113)	580 (283)	359 (157)	155 (68)	306 (134)	765 (335)				
13	338 (196)	146 (85)	288 (167)	720 (418)	470 (234)	202 (101)	400 (200)	1000 (499)				
14	393 (264)	169 (114)	335 (225)	836 (562)	469 (255)	202 (110)	400 (217)	999 (543)				
15	348 (241)	150 (104)	296 (205)	740 (512)	329 (146)	142 (63)	280 (125)	700 (312)				
16					347 (147)	149 (63)	295 (125)	738 (313)				
17					307 (127)	132 (55)	261 (108)	652 (271)				
18												
19					334 (170)	144 (73)	284 (145)	710 (362)				
20	197 (143)	85 (61)	168 (121)	419 (303)	360 (225)	155 (97)	307 (191)	766 (478)	67 (44)	468 (308)	2780 (1830)	4990 (3280)
21	159 (152)	69 (66)	135 (129)	339 (324)	345 (196)	149 (85)	294 (167)	734 (418)	113 (180)	790 (1260)	4700 (7500)	8410 (13400)
22	161 (129)	69 (56)	137 (110)	343 (275)	318 (197)	137 (85)	271 (168)	676 (419)				
23	150 (150)	65 (64)	128 (127)	319 (318)	302 (221)	130 (95)	256 (188)	641 (470)	7 (10)	52 (68)	310 (406)	702 (909)
24	144 (164)	62 (71)	123 (139)	306 (348)	260 (249)	112 (107)	221 (212)	552 (529)	7 (9)	47 (65)	282 (388)	608 (837)
25	63 (237)	27 (102)	53 (202)	134 (504)	216 (219)	93 (94)	183 (186)	458 (465)	0 (19)	1 (135)	4 (804)	8 (1700)
26	163 (205)	70 (88)	138 (174)	346 (435)	328 (277)	141 (119)	278 (235)	695 (589)	8 (11)	57 (80)	337 (475)	707 (993)
27	184 (164)	79 (71)	156 (139)	390 (347)	349 (274)	150 (118)	296 (233)	741 (582)	14 (10)	97 (70)	577 (416)	1200 (862)
28	151 (226)	65 (97)	128 (192)	321 (480)	329 (336)	142 (145)	279 (285)	698 (714)	18 (21)	124 (147)	735 (873)	1510 (1790)
29	126 (236)	54 (102)	107 (200)	267 (501)	291 (345)	125 (149)	247 (293)	617 (732)	13 (15)	90 (104)	536 (618)	1090 (1260)
30	196 (186)	84 (80)	166 (158)	416 (395)	411 (256)	177 (110)	348 (217)	871 (543)	25 (16)	178 (111)	1060 (661)	2110 (1320)
31	135 (139)	58 (60)	114 (118)	286 (295)	261 (207)	113 (89)	222 (175)	554 (438)	23 (17)	158 (118)	942 (701)	1860 (1390)
Mean	204	88	173	434	343	148	292	730	27	187	1110	2110
n	20	20	20	20	23	23	23	23	11	11	11	11
SD	81	35	69	172	60	26	51	128	32	225	1340	2350
Min	63	27	53	134	216	93	183	458	0	1	4	8
Max	393	169	335	836	470	202	400	1000	113	790	4700	8410

ED_004549_00015840-00266

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for September, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	143 (155)	62 (67)	121 (131)	303 (328)	366 (281)	158 (121)	311 (238)	777 (596)	48 (87)	337 (610)	2010 (3630)	3920 (7100)
2	197 (226)	85 (97)	167 (192)	417 (480)	461 (409)	199 (176)	391 (347)	978 (868)	38 (22)	266 (152)	1580 (901)	3060 (1740)
3	379 (220)	163 (95)	321 (187)	803 (467)					41 (26)	288 (181)	1720 (1070)	3290 (2060)
4	326 (251)	140 (108)	276 (213)	691 (533)	511 (315)	220 (136)	433 (268)	1080 (669)	47 (31)	325 (217)	1940 (1290)	3680 (2460)
5	322 (206)	138 (89)	273 (175)	682 (436)	406 (175)	175 (75)	344 (148)	861 (371)	48 (23)	333 (162)	1980 (965)	3730 (1820)
6	295 (190)	127 (82)	250 (161)	626 (403)	398 (172)	171 (74)	338 (146)	844 (365)	49 (29)	345 (203)	2050 (1210)	3830 (2260)
7	194 (175)	84 (75)	165 (149)	411 (372)	324 (171)	140 (74)	275 (145)	688 (363)	45 (25)	316 (175)	1880 (1040)	3480 (1920)
8	278 (137)	120 (59)	236 (116)	590 (291)	486 (167)	209 (72)	412 (142)	1030 (354)	55 (34)	387 (240)	2300 (1430)	4210 (2610)
9	286 (191)	123 (82)	243 (163)	607 (406)	387 (190)	167 (82)	329 (161)	822 (402)	66 (39)	459 (273)	2730 (1630)	4960 (2950)
10	231 (297)	100 (128)	196 (252)	491 (631)	360 (251)	155 (108)	306 (213)	764 (534)	51 (44)	354 (306)	2110 (1820)	3810 (3280)
11	137 (115)	59 (50)	116 (98)	291 (245)	249 (114)	107 (49)	212 (97)	529 (243)	79 (74)	551 (515)	3280 (3070)	5870 (5500)
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25	426 (304)	183 (131)	362 (259)	906 (647)	508 (261)	219 (112)	432 (222)	1080 (554)	51 (25)	360 (175)	2140 (1040)	4070 (1970)
26	502 (281)	216 (121)	427 (239)	1070 (597)	615 (305)	265 (131)	523 (260)	1310 (650)	67 (34)	468 (236)	2780 (1410)	5230 (2640)
27	449 (332)	193 (143)	382 (283)	956 (707)	611 (353)	263 (152)	520 (301)	1300 (752)	61 (44)	430 (309)	2560 (1840)	4750 (3420)
28	478 (364)	206 (157)	407 (310)	1020 (775)	664 (323)	286 (139)	566 (275)	1410 (688)	70 (52)	488 (366)	2900 (2180)	5340 (4000)
29	486 (424)	209 (183)	414 (361)	1030 (903)	787 (421)	339 (181)	671 (359)	1680 (897)	68 (46)	476 (319)	2830 (1900)	5160 (3460)
30	462 (391)	199 (169)	394 (333)	984 (833)	550 (488)	237 (210)	468 (416)	1170 (1040)	74 (71)	521 (497)	3100 (2960)	5620 (5370)
Mean	329	142	280	699	480	207	408	1020	56	394	2350	4350
n	17	17	17	17	16	16	16	16	17	17	17	17
SD	120	52	102	255	136	59	116	291	12	83	495	844
Min	137	59	116	291	249	107	212	529	38	266	1580	3060
Max	502	216	427	1070	787	339	671	1680	79	551	3280	5870

ED_004549_00015840-00267

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for October, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	358 (446)	154 (192)	305 (380)	763 (950)	517 (452)	223 (194)	441 (385)	1100 (962)	77 (82)	537 (576)	3190 (3430)	5770 (6200)
2	410 (364)	177 (157)	349 (311)	874 (776)	517 (374)	223 (161)	440 (319)	1100 (797)	65 (105)	455 (739)	2710 (4400)	4880 (7920)
3	388 (464)	167 (200)	331 (396)	827 (990)	475 (461)	204 (199)	405 (393)	1010 (983)	94 (96)	659 (674)	3920 (4010)	7050 (7210)
4	385 (481)	166 (207)	329 (411)	821 (1030)	456 (502)	197 (216)	389 (428)	973 (1070)	81 (114)	567 (800)	3370 (4760)	6040 (8530)
5	387 (373)	167 (161)	331 (318)	826 (796)					101 (58)	707 (406)	4200 (2410)	7520 (4320)
6	358 (271)	154 (117)	305 (231)	764 (578)	370 (244)	159 (105)	316 (208)	790 (521)				
7	319 (628)	137 (270)	272 (536)	681 (1340)	471 (494)	203 (213)	402 (422)	1010 (1050)	9 (8)	64 (54)	380 (319)	848 (711)
8	365 (422)	157 (182)	312 (361)	780 (902)	409 (359)	176 (155)	350 (307)	874 (767)	12 (8)	81 (55)	479 (330)	1030 (710)
9	387 (416)	167 (179)	331 (356)	828 (890)					17 (11)	119 (78)	707 (462)	1500 (979)
10	478 (288)	206 (124)	409 (247)	1020 (617)	570 (305)	245 (131)	487 (261)	1220 (652)	26 (13)	182 (89)	1080 (532)	2270 (1110)
11	353 (190)	152 (82)	302 (163)	755 (407)					18 (12)	123 (81)	731 (479)	1520 (995)
12									15 (7)	104 (48)	619 (288)	1270 (591)
13	382 (165)	165 (71)	328 (142)	819 (354)					31 (30)	220 (207)	1310 (1230)	2650 (2500)
14	405 (173)	175 (74)	347 (148)	868 (370)					36 (34)	252 (237)	1500 (1410)	3000 (2830)
15	412 (183)	177 (79)	353 (157)	883 (392)	537 (201)	231 (87)	460 (172)	1150 (431)	46 (35)	324 (247)	1930 (1470)	3810 (2910)
16	403 (217)	174 (93)	346 (186)	865 (464)					52 (38)	363 (264)	2160 (1570)	4220 (3070)
17	345 (384)	149 (166)	296 (330)	741 (825)					50 (36)	352 (250)	2090 (1490)	4050 (2880)
18	327 (283)	141 (122)	280 (243)	701 (606)					53 (59)	371 (410)	2210 (2440)	4240 (4680)
19	315 (446)	136 (192)	271 (383)	677 (957)					59 (105)	410 (735)	2440 (4370)	4640 (8320)
20	410 (289)	177 (124)	353 (248)	882 (620)					59 (34)	409 (236)	2440 (1410)	4590 (2650)
21	281 (363)	121 (156)	242 (312)	605 (780)					61 (29)	430 (200)	2560 (1190)	4780 (2220)
22	298 (246)	128 (106)	256 (211)	640 (528)					57 (45)	399 (313)	2370 (1860)	4380 (3440)
23									47 (39)	327 (269)	1950 (1600)	3560 (2930)
24	294 (454)	126 (196)	253 (391)	632 (977)					77 (54)	538 (378)	3200 (2250)	5810 (4080)
25	266 (651)	114 (280)	229 (561)	572 (1400)					70 (45)	493 (312)	2930 (1850)	5290 (3350)
26	358 (458)	154 (197)	309 (395)	771 (986)					78 (58)	546 (404)	3250 (2400)	5820 (4310)
27	311 (316)	134 (136)	268 (273)	669 (681)								
28	308 (174)	133 (75)	266 (150)	665 (374)					9 (10)	60 (67)	357 (400)	803 (896)
29	278 (218)	120 (94)	239 (188)	599 (469)					7 (11)	48 (79)	283 (469)	610 (1010)
30	287 (243)	124 (105)	248 (210)	620 (525)					11 (44)	77 (310)	457 (1840)	970 (3900)
31	274 (357)	118 (154)	237 (308)	592 (771)					14 (20)	96 (137)	568 (812)	1190 (1700)
Mean	350	151	300	750	480	207	410	1030	46	321	1910	3590
n	29	29	29	29	9	9	9	9	29	29	29	29
SD	52	23	44	110	59	26	51	127	28	194	1160	2020
Min	266	114	229	572	370	159	316	790	7	48	283	610
Max	478	206	409	1020	570	245	487	1220	101	707	4200	7520

ED_004549_00015840-00268

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for November, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	187 (553)	80 (238)	161 (478)	403 (1190)					15 (43)	103 (299)	615 (1780)	1270 (3680)
2	86 (550)	37 (237)	74 (474)	186 (1190)					6 (67)	41 (468)	243 (2780)	498 (5700)
3	238 (297)	103 (128)	206 (257)	514 (642)					14 (25)	99 (176)	588 (1050)	1190 (2120)
4	333 (357)	143 (154)	287 (308)	718 (770)					17 (19)	118 (134)	700 (800)	1400 (1600)
5	274 (437)	118 (188)	237 (377)	592 (943)					36 (19)	249 (133)	1480 (791)	2930 (1560)
6	284 (282)	122 (121)	245 (243)	612 (609)	457 (303)	197 (130)	395 (261)	987 (653)	40 (24)	283 (170)	1680 (1010)	3290 (1970)
7												
8	246 (312)	106 (134)	212 (269)	531 (672)					44 (26)	305 (181)	1810 (1080)	3480 (2070)
9	238 (241)	102 (104)	205 (208)	513 (520)	366 (298)	158 (128)	316 (257)	789 (642)	52 (34)	364 (234)	2170 (1390)	4120 (2650)
10	266 (330)	114 (142)	229 (285)	573 (712)	445 (406)	191 (175)	384 (350)	959 (876)	48 (33)	336 (228)	2000 (1360)	3770 (2560)
11	228 (227)	98 (98)	197 (196)	492 (490)	351 (337)	151 (145)	303 (291)	758 (727)	56 (40)	389 (277)	2320 (1650)	4320 (3080)
12	165 (337)	71 (145)	142 (291)	355 (727)	325 (371)	140 (160)	280 (320)	700 (801)	62 (40)	435 (279)	2590 (1660)	4780 (3060)
13	273 (221)	117 (95)	235 (191)	588 (477)	440 (273)	190 (118)	380 (236)	950 (590)	69 (51)	481 (354)	2860 (2110)	5240 (3850)
14	260 (167)	112 (72)	225 (144)	561 (359)	363 (209)	156 (90)	313 (180)	782 (451)	64 (47)	448 (326)	2670 (1940)	4840 (3520)
15	219 (161)	94 (70)	189 (139)	473 (348)	281 (185)	121 (80)	242 (160)	606 (399)	52 (37)	366 (261)	2170 (1560)	3920 (2810)
16	203 (178)	87 (77)	175 (154)	437 (384)	377 (247)	162 (106)	325 (213)	813 (532)	63 (41)	439 (288)	2610 (1710)	4680 (3070)
17	234 (167)	101 (72)	202 (144)	505 (360)	395 (253)	170 (109)	341 (219)	853 (547)				
18									10 (8)	67 (55)	397 (326)	893 (741)
19	325 (269)	140 (116)	280 (232)	700 (580)					9 (7)	64 (52)	382 (307)	823 (661)
20									9 (8)	62 (53)	370 (318)	784 (673)
21	204 (144)	88 (62)	176 (124)	441 (311)					9 (9)	64 (64)	378 (379)	793 (794)
22	227 (213)	98 (92)	196 (184)	489 (460)					9 (8)	66 (59)	392 (349)	811 (724)
23	242 (269)	104 (116)	209 (232)	523 (581)					14 (10)	97 (71)	577 (424)	1180 (869)
24	235 (242)	101 (104)	203 (209)	507 (521)					18 (13)	126 (88)	747 (525)	1510 (1060)
25	221 (502)	95 (216)	190 (433)	476 (1080)					21 (18)	145 (123)	863 (734)	1720 (1460)
26	220 (334)	95 (144)	189 (288)	473 (719)					21 (16)	148 (110)	880 (657)	1730 (1290)
27	244 (284)	105 (122)	211 (245)	527 (612)					21 (15)	146 (102)	868 (605)	1690 (1180)
28	193 (238)	83 (102)	167 (205)	417 (513)					23 (19)	162 (130)	963 (772)	1860 (1490)
29	199 (261)	86 (112)	171 (225)	428 (562)					35 (30)	245 (213)	1460 (1270)	2790 (2420)
30	183 (300)	79 (129)	158 (259)	394 (647)					34 (25)	237 (176)	1410 (1050)	2670 (1990)
Mean	231	99	199	497	380	164	328	820	31	217	1290	2460
n	27	27	27	27	10	10	10	10	28	28	28	28
SD	48	21	42	104	53	23	46	115	20	140	832	1490
Min	86	37	74	186	281	121	242	606	6	41	243	498
Max	333	143	287	718	457	197	395	987	69	481	2860	5240

ED_004549_00015840-00269

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for December, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	153 (241)	66 (104)	132 (208)	329 (520)					44 (31)	307 (215)	1830 (1280)	3430 (2400)
2	146 (604)	63 (260)	126 (520)	315 (1300)					44 (37)	311 (259)	1850 (1540)	3430 (2850)
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14	329 (355)	142 (153)	284 (305)	709 (763)	660 (269)	284 (116)	568 (231)	1420 (579)				
15	179 (73)	77 (31)	154 (62)	386 (156)	587 (211)	253 (91)	505 (181)	1260 (453)				
16	232 (181)	100 (78)	199 (156)	499 (390)	544 (299)	234 (129)	468 (258)	1170 (644)				
17	197 (118)	85 (51)	169 (102)	423 (254)	215 (141)	93 (61)	185 (121)	463 (303)	14 (10)	100 (67)	594 (396)	1230 (819)
18	253 (224)	109 (97)	218 (193)	544 (483)					18 (14)	124 (96)	740 (569)	1520 (1160)
19	316 (258)	136 (111)	272 (222)	680 (554)	363 (329)	156 (142)	312 (283)	780 (707)	21 (18)	148 (123)	880 (734)	1780 (1490)
20	262 (323)	113 (139)	225 (278)	563 (694)	520 (291)	224 (125)	447 (251)	1120 (626)	20 (20)	142 (139)	844 (828)	1690 (1650)
21	169 (117)	73 (51)	146 (101)	364 (252)	536 (287)	231 (124)	461 (247)	1150 (618)	25 (25)	172 (174)	1020 (1030)	2020 (2040)
22									54 (89)	376 (623)	2240 (3710)	4360 (7230)
23									33 (27)	228 (192)	1360 (1140)	2620 (2200)
24	270 (191)	116 (82)	232 (164)	581 (411)	386 (203)	166 (88)	332 (175)	830 (437)	33 (26)	230 (184)	1370 (1100)	2620 (2090)
25	341 (260)	147 (112)	294 (223)	734 (558)	482 (269)	208 (116)	415 (231)	1040 (577)	39 (29)	273 (204)	1630 (1210)	3080 (2300)
26									43 (28)	299 (197)	1780 (1170)	3340 (2210)
27	235 (242)	101 (104)	202 (208)	505 (520)	497 (239)	214 (103)	427 (206)	1070 (515)	35 (33)	246 (229)	1460 (1360)	2720 (2530)
28	270 (206)	116 (89)	232 (177)	580 (443)	486 (252)	209 (108)	417 (216)	1040 (541)	49 (40)	343 (278)	2040 (1650)	3750 (3030)
29	305 (290)	132 (125)	262 (249)	656 (623)	500 (311)	215 (134)	429 (268)	1070 (669)	55 (43)	388 (298)	2310 (1780)	4200 (3230)
30	249 (306)	107 (132)	214 (263)	536 (657)	365 (395)	157 (170)	314 (339)	784 (849)	52 (42)	366 (292)	2180 (1740)	3950 (3150)
31	214 (188)	92 (81)	184 (161)	460 (404)	263 (235)	113 (101)	226 (202)	565 (504)	57 (52)	399 (365)	2380 (2170)	4300 (3920)
Mean	242	104	209	521	457	197	393	983	37	262	1560	2940
n	17	17	17	17	14	14	14	14	17	17	17	17
SD	59	25	50	126	119	51	103	257	14	95	566	992
Min	146	63	126	315	215	93	185	463	14	100	594	1230
Max	341	147	294	734	660	284	568	1420	57	399	2380	4360

ED_004549_00015840-00270

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for January, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	248 (316)	107 (136)	213 (271)	532 (678)	252 (278)	108 (120)	216 (239)	541 (597)	47 (47)	331 (332)	1970 (1970)	3550 (3560)
2	260 (429)	112 (185)	223 (368)	558 (920)	395 (288)	170 (124)	339 (248)	848 (619)	66 (53)	459 (373)	2730 (2220)	4910 (3990)
3	244 (438)	105 (189)	210 (376)	524 (941)	337 (230)	145 (99)	289 (197)	723 (494)	71 (59)	494 (411)	2940 (2450)	5270 (4390)
4	152 (114)	66 (49)	131 (98)	327 (245)	214 (104)	92 (45)	184 (89)	459 (224)	66 (66)	464 (463)	2760 (2750)	4940 (4920)
5	221 (146)	95 (63)	190 (126)	474 (314)	283 (168)	122 (72)	243 (144)	606 (361)				
6	227 (127)	98 (55)	195 (109)	487 (273)	297 (187)	128 (81)	255 (161)	637 (402)	13 (15)	91 (105)	543 (624)	1220 (1400)
7	258 (159)	111 (69)	222 (137)	554 (341)	335 (237)	144 (102)	288 (203)	720 (508)	15 (16)	106 (113)	628 (674)	1350 (1450)
8	291 (193)	125 (83)	250 (165)	624 (414)	357 (284)	154 (122)	306 (244)	765 (609)	16 (19)	113 (131)	672 (778)	1420 (1650)
9									14 (14)	99 (98)	589 (583)	1240 (1220)
10	205 (173)	88 (74)	176 (148)	440 (370)	254 (296)	109 (127)	217 (254)	544 (634)	18 (17)	126 (122)	748 (724)	1550 (1500)
11	240 (161)	104 (69)	206 (138)	516 (345)	303 (259)	131 (112)	260 (222)	650 (555)	21 (19)	150 (133)	892 (791)	1830 (1620)
12	160 (238)	69 (102)	137 (204)	343 (509)	230 (292)	99 (126)	197 (251)	494 (626)	19 (23)	131 (157)	780 (936)	1580 (1900)
13									33 (29)	229 (202)	1360 (1200)	2720 (2400)
14									36 (32)	248 (225)	1480 (1340)	2920 (2650)
15	147 (75)	64 (32)	126 (64)	316 (161)	192 (110)	83 (47)	165 (94)	412 (236)	49 (62)	339 (430)	2020 (2560)	3940 (5000)
16	253 (141)	109 (61)	217 (121)	542 (301)	434 (283)	187 (122)	372 (242)	929 (606)	96 (117)	674 (819)	4010 (4870)	7770 (9440)
17	326 (214)	140 (92)	279 (184)	698 (459)	501 (298)	216 (128)	429 (255)	1070 (639)	57 (41)	397 (288)	2360 (1710)	4530 (3280)
18	333 (240)	143 (103)	285 (205)	713 (513)	474 (326)	204 (140)	406 (279)	1010 (698)	55 (38)	388 (268)	2310 (1600)	4390 (3040)
19	340 (264)	146 (114)	291 (226)	728 (565)	672 (462)	289 (199)	576 (396)	1440 (989)	89 (129)	624 (901)	3710 (5360)	7000 (10100)
20	293 (206)	126 (89)	251 (177)	628 (442)	451 (338)	194 (146)	386 (289)	966 (724)	65 (55)	456 (384)	2710 (2290)	5060 (4260)
21	255 (276)	110 (119)	218 (236)	546 (591)	399 (434)	172 (187)	342 (371)	855 (928)	63 (47)	439 (332)	2610 (1980)	4820 (3650)
22	315 (227)	136 (98)	269 (195)	674 (486)	699 (541)	301 (233)	599 (463)	1500 (1160)	52 (45)	364 (317)	2170 (1890)	3960 (3450)
23									44 (40)	305 (279)	1810 (1660)	3290 (3010)
24	156 (76)	67 (33)	134 (65)	335 (162)	252 (137)	108 (59)	216 (117)	539 (293)	48 (44)	337 (311)	2010 (1850)	3620 (3330)
25									58 (53)	404 (372)	2400 (2220)	4310 (3970)
26												
27	155 (84)	67 (36)	132 (72)	331 (179)	204 (110)	88 (48)	175 (95)	437 (236)	8 (9)	57 (64)	342 (379)	766 (855)
28	191 (167)	82 (72)	163 (143)	408 (358)	314 (235)	135 (101)	268 (201)	671 (503)	8 (10)	59 (67)	350 (401)	754 (864)
29	152 (194)	65 (84)	130 (166)	325 (416)	259 (226)	111 (97)	221 (193)	553 (484)	10 (12)	70 (87)	419 (517)	887 (1100)
30	205 (258)	88 (111)	175 (221)	439 (552)	357 (345)	154 (149)	305 (295)	763 (738)	15 (13)	102 (92)	606 (547)	1270 (1150)
31	224 (287)	97 (124)	191 (246)	479 (614)					18 (14)	125 (97)	746 (576)	1540 (1190)
Mean	234	101	201	502	353	152	302	756	40	282	1680	3190
n	25	25	25	25	24	24	24	24	29	29	29	29
SD	59	26	51	127	131	57	112	281	25	175	1040	1890
Min	147	64	126	316	192	83	165	412	8	57	342	754
Max	340	146	291	728	699	301	599	1500	96	674	4010	7770

ED_004549_00015840-00271

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for February, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	208 (221)	90 (95)	178 (189)	444 (473)	310 (323)	134 (139)	265 (276)	663 (690)	18 (18)	126 (128)	747 (761)	1530 (1560)
2	206 (300)	89 (129)	176 (256)	440 (641)	330 (380)	142 (164)	282 (324)	705 (811)	20 (20)	139 (142)	829 (844)	1680 (1710)
3	222 (304)	96 (131)	190 (260)	474 (650)	348 (430)	150 (185)	297 (368)	743 (919)	23 (19)	161 (133)	957 (789)	1910 (1580)
4	184 (388)	79 (167)	157 (331)	393 (828)	443 (529)	191 (228)	378 (452)	945 (1130)	28 (28)	196 (195)	1170 (1160)	2300 (2290)
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19	388 (275)	167 (118)	330 (234)	824 (584)	480 (296)	207 (127)	408 (251)	1020 (629)	18 (13)	124 (90)	739 (536)	1660 (1210)
20	312 (229)	135 (99)	266 (194)	664 (486)	572 (376)	246 (162)	487 (320)	1220 (799)	26 (16)	181 (113)	1080 (669)	2320 (1440)
21									19 (21)	134 (145)	796 (862)	1690 (1830)
22									20 (19)	137 (131)	813 (779)	1700 (1630)
23	378 (252)	163 (108)	321 (214)	803 (535)	521 (372)	224 (160)	442 (316)	1110 (791)	29 (26)	206 (179)	1230 (1070)	2540 (2210)
24	356 (382)	153 (164)	303 (324)	757 (810)	561 (451)	242 (194)	477 (383)	1190 (957)	28 (26)	197 (182)	1170 (1080)	2400 (2230)
25												
26												
27	296 (259)	128 (112)	251 (220)	628 (550)	427 (328)	184 (141)	362 (278)	906 (696)	48 (44)	334 (306)	1990 (1820)	3930 (3600)
28	209 (200)	90 (86)	177 (170)	443 (424)	320 (278)	138 (120)	272 (236)	679 (589)	46 (40)	323 (283)	1920 (1690)	3750 (3290)
Mean	276	119	235	587	431	186	367	917	27	188	1120	2280
n	10	10	10	10	10	10	10	10	12	12	12	12
SD	75	32	64	159	96	41	81	202	10	69	410	770
Min	184	79	157	393	310	134	265	663	18	124	739	1530
Max	388	167	330	824	572	246	487	1220	48	334	1990	3930

ED_004549_00015840-00272

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for March, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	268 (232)	116 (100)	227 (197)	569 (493)	383 (274)	165 (118)	325 (233)	811 (582)	37 (47)	258 (329)	1530 (1960)	2970 (3790)
2	318 (422)	137 (182)	269 (357)	673 (894)	478 (556)	206 (239)	405 (471)	1010 (1180)				
3	340 (496)	146 (214)	288 (420)	720 (1050)	674 (553)	290 (238)	571 (469)	1430 (1170)	53 (47)	370 (326)	2200 (1940)	4190 (3690)
4	245 (560)	106 (241)	208 (474)	520 (1190)	886 (832)	382 (358)	751 (705)	1880 (1760)	32 (48)	223 (339)	1320 (2020)	2500 (3810)
5	498 (270)	215 (116)	422 (229)	1060 (572)	1020 (450)	438 (194)	861 (382)	2150 (954)	49 (33)	343 (229)	2040 (1360)	3810 (2540)
6	446 (265)	192 (114)	378 (224)	945 (561)	917 (474)	395 (204)	777 (402)	1940 (1000)	50 (35)	350 (246)	2080 (1460)	3840 (2700)
7	404 (456)	174 (196)	342 (386)	856 (965)					37 (31)	261 (216)	1550 (1290)	2840 (2350)
8	327 (261)	141 (112)	277 (221)	693 (553)	625 (396)	269 (171)	530 (335)	1320 (839)	52 (37)	366 (262)	2180 (1560)	3960 (2830)
9									44 (56)	307 (389)	1830 (2310)	3300 (4180)
10	247 (287)	106 (124)	209 (243)	523 (608)	366 (310)	157 (134)	310 (263)	774 (656)	59 (58)	415 (404)	2470 (2400)	4430 (4310)
11	180 (155)	77 (67)	152 (131)	380 (328)	332 (173)	143 (75)	281 (147)	703 (367)				
12	201 (174)	87 (75)	170 (147)	425 (368)	379 (229)	163 (99)	321 (194)	803 (485)	13 (10)	94 (70)	560 (417)	1260 (950)
13	193 (202)	83 (87)	164 (171)	409 (427)	324 (220)	140 (95)	274 (187)	685 (466)	11 (14)	77 (97)	460 (578)	992 (1250)
14	318 (259)	137 (112)	269 (219)	672 (548)	498 (312)	214 (134)	421 (264)	1050 (659)	13 (14)	93 (95)	551 (564)	1170 (1200)
15	294 (274)	127 (118)	249 (232)	623 (580)	490 (296)	211 (127)	415 (250)	1040 (626)	14 (12)	99 (84)	588 (500)	1230 (1050)
16	400 (467)	172 (201)	338 (395)	846 (988)	804 (665)	346 (286)	680 (562)	1700 (1410)	18 (9)	128 (64)	762 (381)	1580 (788)
17	447 (569)	192 (245)	378 (481)	944 (1200)	688 (599)	296 (258)	581 (507)	1450 (1270)	17 (18)	120 (129)	716 (765)	1470 (1570)
18	512 (374)	220 (161)	433 (316)	1080 (791)					26 (20)	179 (140)	1060 (835)	2150 (1690)
19	436 (246)	188 (106)	368 (208)	921 (520)	558 (314)	240 (135)	472 (265)	1180 (663)	34 (24)	236 (171)	1400 (1020)	2800 (2030)
20	415 (233)	179 (100)	350 (196)	876 (491)	647 (358)	278 (154)	546 (303)	1370 (757)	39 (25)	271 (175)	1610 (1040)	3180 (2060)
21	595 (324)	256 (139)	503 (274)	1260 (684)	868 (443)	374 (191)	733 (375)	1830 (937)	42 (26)	296 (180)	1760 (1070)	3440 (2090)
22	597 (487)	257 (210)	505 (411)	1260 (1030)					40 (25)	280 (174)	1670 (1040)	3220 (2000)
23									88 (137)	617 (959)	3670 (5700)	7040 (10900)
24	411 (322)	177 (139)	347 (272)	869 (679)	525 (382)	226 (165)	443 (323)	1110 (807)	52 (45)	364 (314)	2160 (1870)	4110 (3560)
25	366 (356)	158 (153)	309 (301)	773 (752)	427 (384)	184 (165)	360 (324)	901 (811)	62 (46)	431 (322)	2560 (1920)	4830 (3610)
26									77 (49)	541 (340)	3220 (2020)	5990 (3760)
27	139 (252)	60 (109)	118 (213)	294 (533)					46 (35)	325 (242)	1930 (1440)	3560 (2650)
28	181 (147)	78 (63)	153 (124)	382 (310)					72 (69)	501 (481)	2980 (2860)	5440 (5230)
29	243 (265)	105 (114)	205 (223)	513 (558)	369 (222)	159 (95)	311 (187)	778 (467)	97 (63)	675 (442)	4020 (2630)	7300 (4770)
30	255 (381)	110 (164)	215 (322)	537 (804)	385 (307)	166 (132)	324 (259)	811 (647)	89 (62)	625 (436)	3720 (2600)	6720 (4690)
31	230 (523)	99 (225)	194 (441)	484 (1100)	352 (369)	152 (159)	297 (311)	743 (779)	91 (75)	640 (528)	3810 (3140)	6850 (5650)
Mean	340	146	287	718	565	243	478	1190	47	327	1950	3660
n	28	28	28	28	23	23	23	23	29	29	29	29
SD	123	53	104	260	208	89	176	440	25	172	1020	1820
Min	139	60	118	294	324	140	274	685	11	77	460	992
Max	597	257	505	1260	1020	438	861	2150	97	675	4020	7300

ED_004549_00015840-00273

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for April, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	280 (321)	121 (138)	236 (271)	590 (677)	369 (397)	159 (171)	311 (335)	778 (837)	94 (79)	656 (551)	3900 (3280)	6980 (5870)
2					436 (224)	188 (96)	368 (189)	920 (472)				
3												
4												
5	141 (111)	61 (48)	119 (94)	297 (235)	270 (237)	116 (102)	228 (200)	569 (501)				
6	281 (165)	121 (71)	237 (139)	594 (348)	381 (200)	164 (86)	321 (169)	803 (423)				
7	394 (275)	170 (118)	333 (232)	832 (581)	425 (359)	183 (155)	359 (303)	897 (757)				
8												
9												
10												
11												
12												
13												
14												
15												
16					755 (401)	325 (173)	638 (339)	1600 (848)				
17					750 (455)	323 (196)	634 (385)	1590 (963)				
18					599 (304)	258 (131)	507 (257)	1270 (643)				
19					602 (287)	259 (124)	510 (243)	1270 (608)				
20	538 (399)	231 (172)	455 (337)	1140 (843)	896 (523)	386 (225)	758 (442)	1900 (1110)				
21	508 (384)	219 (165)	430 (325)	1080 (812)	811 (477)	349 (206)	687 (404)	1720 (1010)	70 (71)	490 (495)	2920 (2940)	5270 (5320)
22	486 (480)	209 (207)	411 (407)	1030 (1020)	707 (494)	304 (213)	598 (419)	1500 (1050)	61 (49)	428 (339)	2540 (2020)	4580 (3630)
23	401 (385)	173 (166)	339 (326)	849 (815)	582 (619)	251 (267)	493 (524)	1230 (1310)	63 (56)	440 (392)	2620 (2330)	4690 (4170)
24	513 (319)	221 (137)	435 (270)	1090 (675)	823 (432)	355 (186)	697 (366)	1740 (915)				
25	609 (282)	262 (121)	516 (239)	1290 (597)	693 (279)	299 (120)	587 (236)	1470 (591)	9 (9)	61 (62)	364 (369)	821 (839)
26	475 (241)	205 (104)	403 (204)	1010 (511)	605 (261)	260 (112)	512 (221)	1280 (552)	8 (6)	57 (43)	340 (257)	734 (553)
27	555 (276)	239 (119)	470 (234)	1180 (584)	641 (255)	276 (110)	543 (216)	1360 (540)	8 (8)	53 (58)	315 (344)	667 (728)
28	398 (180)	172 (78)	338 (153)	844 (382)	483 (229)	208 (99)	409 (194)	1020 (485)	9 (11)	65 (75)	388 (447)	813 (938)
29	287 (216)	124 (93)	244 (183)	609 (458)	536 (297)	231 (128)	455 (251)	1140 (629)	15 (7)	103 (52)	611 (311)	1270 (646)
30	342 (201)	147 (87)	290 (170)	724 (426)	557 (231)	240 (99)	472 (196)	1180 (489)	15 (7)	103 (50)	613 (300)	1260 (616)
Mean	414	178	350	876	596	257	504	1260	35	246	1460	2710
n	15	15	15	15	20	20	20	20	10	10	10	10
SD	125	54	106	264	164	71	139	348	31	219	1300	2270
Min	141	61	119	297	270	116	228	569	8	53	315	667
Max	609	262	516	1290	896	386	758	1900	94	656	3900	6980

ED_004549_00015840-00274

Table E9. Daily means (SD) of PM10 emissions at Site OK4B for May, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1					520 (256)	224 (110)	441 (217)	1100 (543)	16 (11)	114 (75)	681 (446)	1380 (900)
2	392 (230)	169 (99)	333 (195)	831 (489)	532 (252)	229 (109)	451 (214)	1130 (535)	29 (20)	203 (137)	1210 (818)	2410 (1630)
3	403 (200)	174 (86)	342 (170)	855 (424)	535 (289)	230 (125)	454 (246)	1140 (614)	30 (19)	210 (130)	1250 (772)	2460 (1520)
4	358 (191)	154 (82)	304 (162)	759 (406)	510 (252)	220 (108)	433 (214)	1080 (534)	36 (20)	248 (141)	1480 (836)	2880 (1630)
5	341 (235)	147 (101)	289 (199)	724 (498)	465 (292)	200 (126)	395 (248)	987 (619)	38 (18)	267 (123)	1590 (733)	3070 (1420)
6	265 (423)	114 (182)	225 (359)	561 (897)	493 (232)	212 (100)	419 (197)	1050 (492)	33 (18)	233 (127)	1390 (756)	2650 (1450)
7	402 (387)	173 (167)	342 (329)	854 (822)	663 (473)	286 (204)	563 (402)	1410 (1000)	43 (23)	301 (160)	1790 (952)	3400 (1800)
8	233 (582)	100 (251)	198 (494)	495 (1240)					43 (24)	302 (171)	1800 (1020)	3380 (1910)
9	495 (367)	213 (158)	420 (312)	1050 (779)	721 (265)	310 (114)	612 (225)	1530 (563)	63 (31)	441 (214)	2630 (1270)	4880 (2360)
10	394 (274)	170 (118)	334 (233)	836 (582)	523 (219)	225 (94)	444 (186)	1110 (466)	76 (32)	529 (225)	3150 (1340)	5780 (2460)
11	354 (236)	153 (101)	301 (200)	752 (500)	554 (210)	239 (90)	471 (178)	1180 (446)	72 (36)	507 (252)	3020 (1500)	5490 (2730)
12	237 (990)	102 (426)	202 (841)	504 (2100)	398 (452)	171 (195)	338 (384)	846 (960)	62 (82)	434 (573)	2580 (3410)	4680 (6180)
13	439 (352)	189 (152)	373 (299)	932 (747)	563 (482)	243 (207)	479 (409)	1200 (1020)	86 (60)	604 (419)	3600 (2490)	6500 (4510)
14	495 (264)	213 (114)	420 (225)	1050 (562)	721 (392)	310 (169)	612 (333)	1530 (834)	82 (36)	575 (249)	3420 (1480)	6170 (2670)
15	264 (170)	114 (73)	224 (145)	560 (362)	424 (472)	182 (203)	360 (401)	900 (1000)	55 (26)	387 (183)	2300 (1090)	4140 (1960)
16	426 (260)	184 (112)	362 (221)	906 (553)	508 (341)	219 (147)	432 (289)	1080 (724)	84 (32)	585 (225)	3480 (1340)	6240 (2400)
17	339 (211)	146 (91)	288 (180)	720 (449)	439 (431)	189 (186)	373 (366)	932 (915)	72 (36)	501 (249)	2980 (1480)	5320 (2650)
18	369 (252)	159 (108)	314 (214)	785 (535)	444 (516)	191 (222)	377 (439)	943 (1100)				
19	390 (252)	168 (109)	331 (214)	828 (536)	511 (401)	220 (173)	435 (341)	1090 (852)	8 (9)	53 (64)	317 (378)	715 (857)
20	396 (201)	171 (87)	337 (171)	843 (428)	527 (260)	227 (112)	448 (221)	1120 (554)	13 (7)	88 (48)	525 (285)	1130 (617)
21	356 (192)	153 (83)	303 (163)	756 (407)	478 (243)	206 (104)	407 (206)	1020 (516)	14 (7)	101 (49)	599 (290)	1270 (615)
22	345 (270)	149 (116)	294 (229)	735 (574)	419 (205)	181 (89)	357 (175)	892 (437)	14 (7)	98 (52)	586 (309)	1230 (648)
23	288 (217)	124 (94)	245 (185)	612 (462)	392 (199)	169 (86)	334 (169)	834 (423)	13 (8)	90 (57)	535 (337)	1110 (698)
24	299 (249)	129 (107)	255 (212)	637 (529)	382 (214)	165 (92)	325 (182)	814 (456)	17 (12)	118 (84)	704 (499)	1440 (1020)
25	316 (199)	136 (86)	269 (169)	671 (423)	389 (216)	167 (93)	331 (184)	827 (460)	21 (11)	144 (75)	856 (447)	1730 (906)
26	354 (429)	152 (185)	301 (365)	753 (913)	423 (209)	182 (90)	360 (178)	899 (445)	27 (14)	190 (98)	1130 (584)	2260 (1170)
27	350 (339)	151 (146)	298 (289)	745 (722)	487 (201)	210 (87)	415 (171)	1040 (428)	36 (18)	250 (125)	1490 (745)	2930 (1470)
28	341 (389)	147 (168)	290 (331)	725 (828)	527 (518)	227 (223)	449 (441)	1120 (1100)	57 (75)	400 (526)	2380 (3130)	4650 (6110)
29	343 (470)	148 (203)	292 (400)	731 (1000)	568 (741)	245 (319)	483 (631)	1210 (1580)	92 (127)	646 (888)	3850 (5280)	7430 (10200)
30	327 (435)	141 (187)	279 (371)	697 (926)	483 (620)	208 (267)	411 (528)	1030 (1320)	35 (40)	245 (283)	1460 (1680)	2790 (3220)
31	371 (505)	160 (218)	316 (430)	790 (1080)	518 (702)	223 (303)	441 (598)	1100 (1500)	36 (40)	254 (278)	1510 (1650)	2870 (3130)
Mean	356	153	303	757	504	217	428	1070	43	304	1810	3410
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	63	27	53	133	85	37	72	180	25	176	1050	1860
Min	233	100	198	495	382	165	325	814	8	53	317	715
Max	495	213	420	1050	721	310	612	1530	92	646	3850	7430

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Table E9. Daily means (SD) of PM10 emissions at Site OK4B for June, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	422 (555)	182 (239)	360 (472)	900 (1180)	538 (607)	232 (262)	458 (517)	1150 (1290)	43 (46)	304 (319)	1810 (1900)	3400 (3570)
2	550 (732)	237 (315)	468 (623)	1170 (1560)	433 (298)	187 (128)	369 (254)	923 (634)	40 (27)	282 (187)	1680 (1110)	3130 (2070)
3	301 (358)	130 (154)	256 (305)	640 (762)	347 (489)	150 (210)	296 (416)	739 (1040)	46 (35)	324 (242)	1930 (1440)	3540 (2640)
4	353 (308)	152 (133)	300 (262)	751 (655)	612 (382)	264 (164)	521 (325)	1300 (813)	55 (29)	383 (204)	2280 (1220)	4150 (2220)
5	341 (288)	147 (124)	290 (245)	726 (612)	754 (281)	325 (121)	642 (239)	1600 (598)	45 (30)	312 (207)	1850 (1230)	3370 (2230)
6												
7												
8	440 (317)	189 (137)	374 (270)	936 (674)	620 (401)	267 (173)	527 (341)	1320 (853)	60 (37)	422 (259)	2510 (1540)	4510 (2770)
9	327 (287)	141 (123)	278 (244)	695 (609)	445 (448)	192 (193)	378 (381)	946 (952)	60 (43)	418 (298)	2490 (1770)	4450 (3170)
10												
11												
12												
13												
14												
15												
16												
17												
18												
19	522 (353)	225 (152)	443 (300)	1110 (749)	688 (380)	296 (164)	584 (323)	1460 (807)	37 (19)	256 (133)	1520 (791)	3000 (1560)
20	306 (118)	132 (51)	260 (100)	650 (250)	398 (145)	171 (63)	337 (123)	843 (309)	33 (14)	230 (96)	1370 (569)	2670 (1110)
21	387 (153)	167 (66)	328 (130)	821 (324)	463 (212)	199 (91)	393 (180)	982 (449)	48 (22)	336 (151)	2000 (899)	3860 (1730)
22	423 (214)	182 (92)	359 (181)	896 (453)	589 (285)	254 (123)	500 (242)	1250 (604)	99 (127)	691 (888)	4110 (5280)	7880 (10100)
23	426 (237)	183 (102)	361 (201)	902 (502)	647 (317)	278 (136)	548 (269)	1370 (671)	44 (22)	306 (153)	1820 (910)	3460 (1730)
24	454 (398)	196 (171)	385 (337)	963 (843)	709 (818)	305 (352)	601 (693)	1500 (1730)	51 (31)	354 (218)	2110 (1290)	3970 (2440)
25	442 (276)	190 (119)	375 (234)	936 (586)	680 (324)	293 (140)	577 (275)	1440 (687)	57 (22)	398 (157)	2370 (933)	4410 (1730)
26	477 (260)	206 (112)	405 (220)	1010 (551)	710 (385)	306 (166)	602 (327)	1500 (817)	59 (23)	412 (162)	2450 (961)	4520 (1770)
27	441 (252)	190 (108)	373 (213)	933 (533)	690 (335)	297 (144)	585 (283)	1460 (709)	61 (24)	424 (167)	2520 (991)	4600 (1810)
28	493 (332)	212 (143)	418 (281)	1040 (703)	768 (373)	331 (160)	650 (316)	1630 (789)	66 (33)	461 (234)	2750 (1390)	4980 (2530)
29	529 (394)	228 (170)	448 (334)	1120 (835)	737 (579)	317 (249)	624 (490)	1560 (1230)	72 (35)	505 (244)	3000 (1450)	5430 (2630)
30					518 (303)	223 (131)	438 (257)	1100 (642)	61 (29)	424 (203)	2520 (1210)	4550 (2170)
Mean	424	183	360	900	597	257	507	1270	54	381	2270	4200
n	18	18	18	18	19	19	19	19	19	19	19	19
SD	74	32	62	156	127	55	107	268	15	102	605	1120
Min	301	130	256	640	347	150	296	739	33	230	1370	2670
Max	550	237	468	1170	768	331	650	1630	99	691	4110	7880

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Table E9. Daily means (SD) of PM10 emissions at Site OK4B for July, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	475 (330)	205 (142)	402 (279)	1010 (699)	759 (384)	327 (165)	643 (325)	1610 (813)	73 (49)	511 (345)	3040 (2050)	5460 (3690)
2	474 (338)	204 (146)	401 (286)	1000 (716)	840 (462)	362 (199)	711 (391)	1780 (979)	79 (50)	553 (347)	3290 (2060)	5890 (3690)
3	501 (389)	216 (168)	424 (330)	1060 (824)	753 (543)	324 (234)	637 (460)	1590 (1150)				
4	257 (160)	111 (69)	218 (135)	544 (338)	487 (266)	210 (115)	412 (225)	1030 (563)	0 (15)	-2 (103)	-9 (611)	-9 (1370)
5	421 (234)	181 (101)	356 (198)	890 (494)	664 (264)	286 (114)	562 (223)	1400 (558)	3 (15)	23 (106)	136 (631)	293 (1360)
6	369 (289)	159 (125)	312 (245)	780 (612)	666 (417)	287 (179)	563 (352)	1410 (881)	3 (16)	24 (110)	142 (657)	300 (1390)
7	329 (232)	142 (100)	278 (196)	696 (491)	596 (437)	257 (188)	504 (370)	1260 (925)	10 (21)	68 (146)	407 (870)	855 (1820)
8	354 (308)	152 (133)	299 (260)	748 (651)	705 (512)	303 (221)	596 (433)	1490 (1080)	8 (20)	58 (143)	343 (849)	712 (1760)
9	602 (724)	259 (312)	509 (612)	1270 (1530)	760 (477)	327 (205)	642 (403)	1610 (1010)	18 (22)	126 (154)	747 (916)	1540 (1880)
10	496 (508)	214 (219)	419 (429)	1050 (1070)	945 (855)	407 (368)	798 (723)	2000 (1810)	14 (30)	100 (209)	593 (1250)	1210 (2540)
11	425 (352)	183 (151)	359 (297)	898 (743)	560 (668)	241 (288)	473 (564)	1180 (1410)	17 (35)	117 (241)	698 (1440)	1400 (2880)
12	487 (407)	210 (175)	411 (344)	1030 (860)	661 (659)	285 (284)	559 (556)	1400 (1390)	28 (31)	193 (214)	1150 (1270)	2280 (2530)
13	353 (335)	152 (144)	298 (283)	746 (708)	515 (569)	222 (245)	435 (481)	1090 (1200)	24 (28)	168 (198)	997 (1180)	1950 (2310)
14	462 (416)	199 (179)	390 (351)	976 (878)	511 (639)	220 (275)	431 (539)	1080 (1350)	36 (34)	255 (241)	1520 (1430)	2950 (2790)
15	311 (382)	134 (165)	262 (323)	656 (807)	487 (423)	210 (182)	411 (357)	1030 (892)	30 (23)	212 (159)	1260 (945)	2430 (1820)
16	340 (177)	146 (76)	287 (150)	717 (374)	532 (293)	229 (126)	449 (247)	1120 (617)				
17	329 (141)	142 (61)	277 (119)	693 (298)	544 (182)	234 (78)	459 (154)	1150 (384)				
18	348 (180)	150 (78)	294 (152)	735 (380)	501 (187)	216 (81)	423 (158)	1060 (394)				
19	294 (126)	127 (54)	248 (106)	621 (266)	534 (209)	230 (90)	450 (176)	1120 (441)				
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Mean	401	173	339	848	633	272	535	1340	25	172	1020	1950
n	19	19	19	19	19	19	19	19	14	14	14	14
SD	87	38	74	185	129	56	110	274	24	164	978	1740
Min	257	111	218	544	487	210	411	1030	0	-2	-9	-9
Max	602	259	509	1270	945	407	798	2000	79	553	3290	5890

ED_004549_00015840-00277

Table E10. $PM_{2.5}$ Emissions

Table E10. Daily means (SD) of PM2.5 emissions at Site OK4B for September, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4												
5												
6												
7	36 (337)	16 (145)	32 (294)	79 (734)	78 (682)	33 (294)	68 (594)	169 (1490)				
8	19 (296)	8 (128)	17 (258)	41 (645)	48 (332)	21 (143)	42 (289)	105 (723)				
9	-17 (414)	-7 (178)	-15 (360)	-38 (901)	6 (345)	3 (148)	6 (300)	14 (750)				
10					15 (202)	7 (87)	13 (176)	33 (440)				
11					-113 (1210)	-49 (522)	-98 (1050)	-245 (2640)				
12	21 (417)	9 (180)	18 (363)	46 (907)	19 (741)	8 (319)	16 (645)	40 (1610)				
13	39 (335)	17 (144)	34 (292)	85 (729)	43 (445)	19 (192)	38 (387)	94 (969)				
14	-28 (600)	-12 (258)	-24 (522)	-60 (1310)	-22 (274)	-9 (118)	-19 (239)	-48 (597)				
15	87 (300)	37 (129)	76 (262)	189 (654)	113 (457)	49 (197)	99 (398)	247 (994)				
16	-15 (413)	-6 (178)	-13 (360)	-32 (900)	-17 (671)	-7 (289)	-15 (585)	-37 (1460)				
17	94 (261)	41 (112)	82 (227)	205 (568)	146 (246)	63 (106)	127 (214)	317 (535)				
18	42 (17)	18 (7)	37 (15)	92 (37)	54 (22)	23 (9)	47 (19)	117 (47)				
19	35 (24)	15 (10)	30 (21)	76 (51)	49 (26)	21 (11)	43 (22)	107 (56)				
20	32 (18)	14 (8)	28 (16)	69 (40)	50 (24)	22 (10)	44 (20)	109 (51)				
21	28 (22)	12 (9)	24 (19)	61 (47)	58 (26)	25 (11)	51 (23)	126 (58)				
22	25 (23)	11 (10)	22 (20)	55 (51)	54 (27)	23 (12)	47 (24)	116 (60)				
23	27 (23)	12 (10)	24 (20)	60 (50)	62 (30)	27 (13)	54 (26)	135 (66)				
24												
25												
26	34 (28)	15 (12)	30 (24)	75 (61)	57 (35)	24 (15)	49 (30)	123 (76)				
27	35 (28)	15 (12)	30 (24)	76 (60)	62 (31)	27 (13)	54 (27)	134 (68)				
28												
29												
30												
Mean	29	13	25	63	40	17	35	87				
n	17	17	17	17	19	19	19	19	0	0	0	0
SD	30	13	26	66	53	23	46	115				
Min	-28	-12	-24	-60	-113	-49	-98	-245				
Max	94	41	82	205	146	63	127	317				

ED_004549_00015840-00278

Table E10. Daily means (SD) of PM2.5 emissions at Site OK4B for January, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16	20 (97)	9 (42)	17 (84)	43 (209)	36 (24)	16 (10)	31 (20)	78 (51)				
17	21 (107)	9 (46)	18 (92)	45 (230)	47 (26)	20 (11)	40 (23)	101 (56)				
18	27 (85)	12 (36)	24 (73)	59 (181)					7 (16)	50 (109)	297 (650)	533 (1170)
19	13 (79)	6 (34)	11 (68)	29 (170)					8 (14)	58 (100)	344 (594)	617 (1070)
20	5 (119)	2 (51)	4 (102)	10 (256)					7 (14)	48 (97)	283 (580)	507 (1040)
21	25 (78)	11 (34)	21 (67)	54 (168)	85 (35)	37 (15)	73 (30)	182 (76)	13 (22)	91 (153)	539 (908)	965 (1620)
22	33 (92)	14 (40)	29 (79)	71 (198)	71 (33)	30 (14)	61 (28)	152 (71)	12 (23)	86 (157)	513 (937)	917 (1670)
23	29 (89)	13 (38)	25 (76)	62 (190)	62 (38)	27 (16)	53 (32)	133 (81)				
24												
25	28 (17)	12 (7)	24 (15)	60 (37)	39 (14)	17 (6)	33 (12)	83 (30)	2 (2)	11 (13)	65 (78)	146 (177)
26	28 (18)	12 (8)	24 (16)	60 (39)	40 (25)	17 (11)	35 (21)	87 (52)	1 (1)	9 (9)	53 (55)	113 (117)
27	28 (29)	12 (13)	24 (25)	60 (62)	34 (20)	15 (9)	29 (18)	73 (44)	1 (5)	9 (34)	54 (199)	114 (422)
28									2 (3)	12 (23)	72 (137)	151 (286)
29	36 (26)	16 (11)	31 (22)	77 (56)	48 (24)	21 (10)	41 (20)	103 (51)	2 (2)	15 (13)	90 (76)	185 (158)
30	30 (27)	13 (12)	25 (23)	63 (57)	45 (22)	19 (10)	38 (19)	96 (48)	2 (2)	13 (14)	79 (80)	162 (165)
31												
Mean	25	11	21	53	51	22	44	109	5	37	217	401
n	13	13	13	13	10	10	10	10	11	11	11	11
SD	8	4	7	17	16	7	14	34	4	30	179	310
Min	5	2	4	10	34	15	29	73	1	9	53	113
Max	36	16	31	77	85	37	73	182	13	91	539	965

ED_004549_00015840-00279

Table E10. Daily means (SD) of PM2.5 emissions at Site OK4B for July, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25	32 (28)	14 (12)	27 (24)	68 (60)	62 (26)	27 (11)	53 (22)	131 (56)				
26	22 (27)	9 (12)	19 (23)	47 (58)	56 (26)	24 (11)	48 (22)	120 (55)				
27	27 (27)	12 (12)	23 (23)	58 (59)	61 (25)	26 (11)	52 (21)	130 (53)				
28	32 (31)	14 (13)	28 (26)	69 (66)	68 (30)	30 (13)	59 (26)	146 (64)				
29	27 (27)	12 (11)	23 (23)	57 (57)	57 (22)	25 (10)	49 (19)	122 (47)				
30	28 (35)	12 (15)	24 (30)	60 (74)	57 (28)	24 (12)	49 (24)	121 (59)				
31	27 (43)	12 (19)	23 (37)	58 (93)	57 (44)	25 (19)	49 (37)	122 (93)				
Mean	28	12	24	59	60	26	51	127				
n	7	7	7	7	7	7	7	7	0	0	0	0
SD	3	1	3	7	4	2	3	9				
Min	22	9	19	47	56	24	48	120				
Max	32	14	28	69	68	30	59	146				

ED_004549_00015840-00280

Table E10. Daily means (SD) of PM2.5 emissions at Site OK4B for August, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	27 (50)	12 (22)	23 (43)	57 (107)	57 (49)	25 (21)	49 (42)	121 (105)				
2	31 (32)	13 (14)	27 (28)	67 (69)	66 (33)	28 (14)	56 (28)	140 (71)				
3	27 (28)	11 (12)	23 (24)	57 (59)	61 (28)	26 (12)	52 (24)	130 (60)				
4	38 (27)	16 (12)	33 (23)	81 (59)	71 (27)	30 (12)	60 (23)	151 (59)				
5	31 (41)	13 (18)	26 (35)	65 (87)	59 (37)	26 (16)	51 (32)	126 (80)				
6	26 (32)	11 (14)	22 (28)	55 (69)	58 (31)	25 (13)	49 (26)	123 (65)				
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Mean	30	13	25	64	62	27	53	132				
n	6	6	6	6	6	6	6	6	0	0	0	0
SD	4	2	4	9	5	2	4	10				
Min	26	11	22	55	57	25	49	121				
Max	38	16	33	81	71	30	60	151				

ED_004549_00015840-00281

Table E11. TSP emissions

Table E11. Daily means (SD) of TSP emissions at Site OK4B for August, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	287 (314)	124 (135)	251 (274)	627 (686)	612 (399)	263 (172)	534 (348)	1330 (870)	40 (55)	280 (383)	1670 (2280)	3580 (4890)
2	363 (150)	156 (65)	316 (131)	791 (327)	776 (242)	334 (104)	677 (211)	1690 (528)	44 (23)	310 (162)	1840 (963)	3900 (2040)
3	480 (197)	207 (85)	419 (172)	1050 (430)	806 (269)	347 (116)	703 (235)	1760 (587)	64 (20)	449 (141)	2670 (837)	5590 (1750)
4	531 (219)	229 (94)	464 (191)	1160 (477)	737 (319)	318 (138)	643 (279)	1610 (697)	54 (18)	378 (128)	2250 (764)	4670 (1590)
5	498 (273)	215 (118)	435 (238)	1090 (596)	664 (365)	286 (157)	579 (319)	1450 (797)	58 (23)	404 (158)	2400 (939)	4930 (1930)
6	532 (249)	229 (107)	464 (218)	1160 (544)	709 (392)	305 (169)	618 (342)	1550 (856)	77 (37)	536 (259)	3190 (1540)	6470 (3120)
7	578 (375)	249 (161)	504 (327)	1260 (817)	969 (527)	417 (227)	845 (460)	2110 (1150)	93 (40)	649 (282)	3860 (1680)	7740 (3370)
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Mean	467	201	407	1020	753	324	657	1640	61	429	2560	5270
n	7	7	7	7	7	7	7	7	7	7	7	7
SD	96	42	84	210	107	46	93	233	17	120	711	1350
Min	287	124	251	627	612	263	534	1330	40	280	1670	3580
Max	578	249	504	1260	969	417	845	2110	93	649	3860	7740

ED_004549_00015840-00282

Table E11. Daily means (SD) of TSP emissions at Site OK4B for July, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21	309 (130)	133 (56)	270 (114)	676 (284)	664 (227)	286 (98)	582 (198)	1450 (496)	74 (24)	517 (168)	3080 (998)	5910 (1920)
22	282 (118)	122 (51)	247 (104)	618 (259)	555 (206)	239 (89)	486 (180)	1210 (451)	74 (23)	519 (164)	3090 (977)	5880 (1860)
23	347 (206)	149 (89)	304 (180)	759 (450)	599 (243)	258 (105)	524 (213)	1310 (532)	81 (32)	569 (223)	3380 (1330)	6380 (2510)
24	290 (264)	125 (114)	253 (231)	634 (578)	660 (328)	284 (141)	577 (287)	1440 (717)	88 (33)	613 (232)	3650 (1380)	6800 (2580)
25	333 (182)	144 (78)	292 (159)	729 (398)	863 (404)	371 (174)	754 (354)	1890 (884)	97 (39)	678 (270)	4030 (1600)	7440 (2960)
26	400 (216)	172 (93)	350 (189)	874 (472)	851 (436)	366 (188)	744 (381)	1860 (953)				
27	364 (315)	157 (136)	318 (276)	794 (689)	795 (433)	343 (187)	695 (379)	1740 (946)				
28	300 (200)	129 (86)	262 (175)	655 (437)	680 (479)	293 (206)	594 (418)	1480 (1050)				
29	315 (216)	136 (93)	275 (189)	688 (473)	741 (381)	319 (164)	647 (333)	1620 (832)				
30	326 (217)	140 (94)	284 (190)	711 (474)	735 (407)	317 (175)	642 (355)	1610 (889)				
31	318 (265)	137 (114)	277 (231)	693 (578)	658 (508)	283 (219)	574 (443)	1440 (1110)	19 (39)	131 (274)	780 (1630)	1740 (3600)
Mean	326	140	285	712	709	305	620	1550	72	504	3000	5690
n	11	11	11	11	11	11	11	11	6	6	6	6
SD	33	14	29	71	94	40	82	204	25	176	1050	1850
Min	282	122	247	618	555	239	486	1210	19	131	780	1740
Max	400	172	350	874	863	371	754	1890	97	678	4030	7440

ED_004549_00015840-00283

Table E11. Daily means (SD) of TSP emissions at Site OK4B for November, 2007

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4												
5												
6												
7	1040 (543)	448 (234)	899 (470)	2250 (1170)								
8	1110 (677)	477 (291)	958 (585)	2390 (1460)	1100 (740)	476 (319)	955 (640)	2390 (1600)	267 (144)	1870 (1010)	11100 (6000)	20300 (10900)
9	1200 (724)	517 (312)	1040 (625)	2590 (1560)	1120 (707)	484 (305)	970 (611)	2430 (1530)	281 (168)	1970 (1180)	11700 (7000)	21300 (12700)
10	1030 (763)	445 (329)	892 (659)	2230 (1650)	1080 (835)	467 (360)	937 (722)	2340 (1800)	274 (130)	1920 (910)	11400 (5420)	20600 (9790)
11	957 (808)	412 (348)	827 (698)	2070 (1740)	1080 (945)	464 (407)	931 (816)	2330 (2040)	295 (181)	2070 (1270)	12300 (7530)	22100 (13500)
12	1140 (651)	491 (280)	984 (562)	2460 (1410)	959 (595)	413 (256)	829 (514)	2070 (1290)				
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
Mean	1080	465	933	2330	1070	461	924	2310	279	1960	11600	21100
n	6	6	6	6	5	5	5	5	4	4	4	4
SD	79	34	69	171	57	25	50	124	10	73	432	687
Min	957	412	827	2070	959	413	829	2070	267	1870	11100	20300
Max	1200	517	1040	2590	1120	484	970	2430	295	2070	12300	22100

ED_004549_00015840-00284

Table E11. Daily means (SD) of TSP emissions at Site OK4B for February, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	983 (513)	423 (221)	841 (439)	2100 (1100)					71 (52)	495 (363)	2950 (2160)	5890 (4310)
2	997 (614)	429 (264)	853 (525)	2130 (1310)					74 (59)	519 (411)	3090 (2450)	6080 (4820)
3	963 (537)	415 (231)	823 (459)	2060 (1150)					102 (74)	715 (519)	4260 (3090)	8280 (6010)
4												
5	795 (551)	342 (237)	679 (471)	1700 (1180)	867 (452)	373 (195)	741 (386)	1850 (965)	78 (76)	549 (530)	3270 (3160)	6240 (6030)
6	894 (620)	385 (267)	763 (530)	1910 (1320)	848 (484)	365 (208)	724 (413)	1810 (1030)	152 (109)	1060 (766)	6320 (4560)	12000 (8640)
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
Mean	926	399	792	1980	857	369	732	1830	95	668	3980	7700
n	5	5	5	5	2	2	2	2	5	5	5	5
SD	75	32	64	161	10	4	8	21	30	212	1260	2310
Min	795	342	679	1700	848	365	724	1810	71	495	2950	5890
Max	997	429	853	2130	867	373	741	1850	152	1060	6320	12000

ED_004549_00015840-00285

Table E11. Daily means (SD) of TSP emissions at Site OK4B for April, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4												
5												
6												
7												
8	1000 (536)	431 (231)	843 (451)	2110 (1130)	1080 (522)	464 (225)	907 (440)	2270 (1100)	296 (268)	2070 (1880)	12300 (11200)	22100 (20000)
9	873 (551)	376 (237)	736 (464)	1840 (1160)	790 (621)	340 (267)	665 (523)	1660 (1310)				
10					786 (444)	338 (191)	662 (374)	1650 (936)				
11					923 (510)	398 (220)	777 (430)	1940 (1070)				
12	942 (647)	406 (278)	793 (545)	1980 (1360)	900 (452)	388 (195)	758 (381)	1900 (953)				
13	911 (553)	393 (238)	768 (466)	1920 (1170)	944 (492)	407 (212)	795 (414)	1990 (1040)				
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
Mean	932	401	785	1960	903	389	761	1900				
n	4	4	4	4	6	6	6	6	1	1	1	1
SD	46	20	39	98	99	43	83	208				
Min	873	376	736	1840	786	338	662	1650				
Max	1000	431	843	2110	1080	464	907	2270				

ED_004549_00015840-00286

Table E11. Daily means (SD) of TSP emissions at Site OK4B for June, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26	476 (270)	205 (116)	407 (230)	1020 (576)								
27												
28	310 (172)	133 (74)	265 (147)	663 (368)	452 (446)	195 (192)	387 (382)	967 (954)				
29	535 (355)	231 (153)	458 (304)	1150 (759)	257 (102)	111 (44)	220 (87)	551 (218)				
30	536 (295)	231 (127)	460 (253)	1150 (632)	381 (154)	164 (66)	327 (132)	816 (330)				
Mean	464	200	397	994	363	157	311	778				
n	4	4	4	4	3	3	3	3	0	0	0	0
SD	93	40	79	198	81	35	69	172				
Min	310	133	265	663	257	111	220	551				
Max	536	231	460	1150	452	195	387	967				

ED_004549_00015840-00287

Table E11. Daily means (SD) of TSP emissions at Site OK4B for July, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1	555 (305)	239 (131)	476 (262)	1190 (654)	363 (200)	156 (86)	311 (171)	777 (428)				
2					320 (179)	138 (77)	274 (154)	686 (385)				
3												
4	335 (237)	144 (102)	287 (203)	718 (507)	256 (108)	110 (46)	220 (92)	549 (231)				
5	342 (198)	147 (85)	293 (170)	732 (425)	286 (132)	123 (57)	245 (113)	612 (282)				
6	361 (228)	155 (98)	309 (196)	773 (489)	287 (170)	124 (73)	246 (146)	615 (364)				
7	308 (261)	133 (112)	264 (224)	661 (559)	319 (158)	137 (68)	273 (136)	683 (339)				
8	279 (182)	120 (79)	239 (156)	597 (391)	366 (144)	158 (62)	314 (123)	784 (308)				
9	221 (128)	95 (55)	189 (110)	473 (274)	360 (112)	155 (48)	309 (96)	771 (239)				
10	216 (160)	93 (69)	185 (137)	463 (342)	343 (127)	148 (55)	294 (109)	735 (272)				
11	284 (163)	122 (70)	243 (140)	608 (349)	494 (158)	213 (68)	423 (135)	1060 (338)				
12	369 (530)	159 (228)	316 (454)	789 (1140)	453 (316)	195 (136)	388 (270)	970 (676)				
13	504 (382)	217 (165)	431 (327)	1080 (818)	353 (185)	152 (80)	302 (158)	756 (395)				
14	289 (316)	124 (136)	247 (270)	618 (676)	346 (129)	149 (56)	296 (110)	740 (276)				
15	260 (190)	112 (82)	223 (163)	557 (407)	401 (173)	173 (75)	343 (148)	858 (371)				
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Mean	332	143	285	712	353	152	303	757				
n	13	13	13	13	14	14	14	14	0	0	0	0
SD	96	41	82	206	62	27	53	132				
Min	216	93	185	463	256	110	220	549				
Max	555	239	476	1190	494	213	423	1060				

ED_004549_00015840-00288

Table E11. Daily means (SD) of TSP emissions at Site OK4B for September, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13	532 (262)	229 (113)	452 (223)	1130 (557)	1040 (565)	447 (243)	882 (480)	2200 (1200)	23 (16)	161 (112)	955 (664)	2110 (1460)
14	849 (438)	366 (189)	721 (373)	1800 (931)	1550 (693)	666 (298)	1310 (589)	3280 (1470)	28 (15)	198 (107)	1180 (637)	2540 (1370)
15	894 (616)	385 (265)	760 (523)	1900 (1310)	1280 (799)	553 (344)	1090 (679)	2730 (1700)	31 (20)	219 (142)	1300 (846)	2760 (1790)
16	827 (670)	356 (289)	703 (570)	1760 (1420)	944 (586)	407 (252)	803 (498)	2010 (1250)	42 (28)	296 (198)	1760 (1180)	3690 (2460)
17	744 (606)	320 (261)	632 (515)	1580 (1290)	1160 (773)	502 (333)	990 (657)	2480 (1640)	51 (36)	358 (251)	2130 (1490)	4410 (3090)
18	729 (578)	314 (249)	620 (492)	1550 (1230)	914 (588)	394 (253)	777 (500)	1940 (1250)	96 (64)	673 (445)	4000 (2640)	8200 (5420)
19	696 (561)	300 (242)	592 (477)	1480 (1190)	739 (530)	318 (228)	629 (451)	1570 (1130)	68 (53)	476 (371)	2830 (2210)	5740 (4470)
20	700 (595)	301 (256)	595 (506)	1490 (1260)	750 (578)	323 (249)	638 (492)	1590 (1230)	84 (76)	589 (529)	3510 (3150)	7000 (6280)
21	549 (477)	236 (206)	467 (406)	1170 (1010)	760 (508)	327 (219)	646 (432)	1620 (1080)	89 (76)	622 (533)	3700 (3170)	7300 (6240)
22	508 (600)	219 (259)	432 (511)	1080 (1280)	1030 (710)	442 (306)	873 (604)	2180 (1510)	108 (90)	757 (630)	4500 (3750)	8770 (7290)
23	573 (687)	247 (296)	487 (584)	1220 (1460)	608 (714)	262 (308)	517 (608)	1290 (1520)	125 (102)	873 (716)	5190 (4260)	10000 (8220)
24												
25												
26												
27												
28												
29												
30												
Mean	691	298	588	1470	979	422	833	2080	68	475	2820	5690
n	11	11	11	11	11	11	11	11	11	11	11	11
SD	129	55	109	273	262	113	223	556	33	233	1390	2630
Min	508	219	432	1080	608	262	517	1290	23	161	955	2110
Max	894	385	760	1900	1550	666	1310	3280	125	873	5190	10000

ED_004549_00015840-00289

Table E11. Daily means (SD) of TSP emissions at Site OK4B for December, 2008

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4	616 (461)	265 (198)	531 (397)	1330 (992)					113 (113)	793 (792)	4720 (4710)	8580 (8560)
5	621 (350)	267 (151)	535 (301)	1340 (754)					136 (127)	955 (887)	5680 (5280)	10300 (9570)
6	775 (520)	334 (224)	667 (448)	1670 (1120)					151 (120)	1060 (842)	6300 (5010)	11400 (9060)
7	816 (610)	351 (263)	703 (525)	1760 (1310)					149 (122)	1040 (852)	6200 (5070)	11200 (9140)
8	972 (864)	419 (372)	837 (745)	2090 (1860)					158 (126)	1100 (886)	6570 (5270)	11800 (9480)
9	440 (321)	189 (138)	379 (276)	946 (691)					97 (116)	677 (814)	4030 (4850)	7230 (8700)
10	604 (531)	260 (229)	520 (457)	1300 (1140)					201 (173)	1410 (1210)	8370 (7190)	15000 (12900)
11	647 (664)	279 (286)	557 (572)	1390 (1430)					226 (195)	1580 (1360)	9430 (8120)	16800 (14500)
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Mean	686	296	591	1480					154	1080	6410	11500
n	8	8	8	8	0	0	0	0	8	8	8	8
SD	152	65	131	327					40	279	1660	2940
Min	440	189	379	946					97	677	4030	7230
Max	972	419	837	2090					226	1580	9430	16800

ED_004549_00015840-00290

Table E11. Daily means (SD) of TSP emissions at Site OK4B for February, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4												
5												
6	1260 (1520)	543 (654)	1080 (1300)	2690 (3240)	1490 (1120)	642 (484)	1270 (960)	3180 (2400)	119 (85)	830 (594)	4940 (3540)	9540 (6830)
7	1020 (722)	441 (311)	873 (616)	2180 (1540)	1260 (698)	545 (301)	1080 (596)	2700 (1490)	115 (83)	803 (584)	4780 (3480)	9150 (6660)
8	1020 (722)	440 (311)	872 (616)	2180 (1540)	1180 (697)	509 (300)	1010 (595)	2520 (1490)	131 (84)	916 (590)	5450 (3510)	10300 (6660)
9									151 (112)	1050 (783)	6280 (4660)	11800 (8760)
10	748 (681)	322 (293)	638 (581)	1590 (1450)	925 (720)	398 (310)	789 (614)	1970 (1530)	147 (122)	1030 (852)	6120 (5070)	11400 (9430)
11	740 (555)	319 (239)	631 (473)	1580 (1180)	814 (609)	351 (262)	694 (519)	1730 (1300)	142 (132)	994 (925)	5910 (5500)	10900 (10100)
12	757 (514)	326 (221)	645 (438)	1610 (1100)	888 (637)	382 (274)	756 (543)	1890 (1360)	186 (160)	1300 (1120)	7750 (6670)	14100 (12200)
13	593 (431)	255 (186)	505 (367)	1260 (918)	619 (366)	267 (157)	527 (311)	1320 (778)	156 (157)	1090 (1100)	6510 (6530)	11800 (11800)
14	470 (238)	202 (103)	400 (203)	1000 (508)	552 (379)	238 (163)	470 (323)	1170 (808)	184 (181)	1290 (1270)	7680 (7530)	13900 (13600)
15	588 (366)	253 (158)	501 (312)	1250 (779)	554 (371)	238 (160)	471 (316)	1180 (791)	198 (200)	1390 (1400)	8260 (8320)	14900 (15000)
16									246 (205)	1720 (1430)	10200 (8520)	18400 (15300)
17									204 (202)	1430 (1410)	8500 (8410)	15200 (15000)
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
Mean	800	345	682	1710	921	397	785	1960	165	1150	6870	12600
n	9	9	9	9	9	9	9	9	12	12	12	12
SD	239	103	205	512	314	135	268	670	38	263	1570	2600
Min	470	202	400	1000	552	238	470	1170	115	803	4780	9150
Max	1260	543	1080	2690	1490	642	1270	3180	246	1720	10200	18400

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Table E11. Daily means (SD) of TSP emissions at Site OK4B for April, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4												
5												
6												
7												
8												
9					1300 (706)	559 (304)	1100 (596)	2740 (1490)				
10	1170 (644)	502 (277)	985 (544)	2460 (1360)	1110 (560)	478 (241)	938 (473)	2340 (1180)	91 (66)	638 (460)	3800 (2740)	7590 (5480)
11	1080 (648)	463 (279)	908 (547)	2270 (1370)	1110 (724)	478 (312)	937 (612)	2340 (1530)	123 (70)	860 (493)	5120 (2930)	10100 (5790)
12					905 (660)	390 (284)	765 (558)	1910 (1390)	142 (77)	993 (537)	5910 (3200)	11500 (6230)
13					882 (552)	380 (238)	746 (466)	1860 (1170)	144 (76)	1010 (534)	6020 (3180)	11600 (6150)
14	964 (767)	415 (330)	815 (649)	2040 (1620)	941 (598)	405 (258)	795 (506)	1990 (1260)	152 (89)	1070 (625)	6350 (3720)	12200 (7130)
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
Mean	1070	460	903	2260	1040	448	880	2200	131	914	5440	10600
n	3	3	3	3	6	6	6	6	5	5	5	5
SD	83	36	69	174	147	63	124	309	22	154	916	1660
Min	964	415	815	2040	882	380	746	1860	91	638	3800	7590
Max	1170	502	985	2460	1300	559	1100	2740	152	1070	6350	12200

ED_004549_00015840-00292

Table E11. Daily means (SD) of TSP emissions at Site OK4B for June, 2009

Day	Barn 1				Barn 2				Farrowing room 9			
	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU	g/d	mg/d-m2	mg/d-hd	mg/d-AU
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11	754 (529)	325 (228)	641 (449)	1600 (1120)	1060 (424)	457 (183)	902 (361)	2260 (902)				
12	611 (271)	263 (117)	520 (231)	1300 (577)	1220 (450)	527 (194)	1040 (382)	2600 (956)	19 (11)	133 (80)	792 (475)	1700 (1020)
13	693 (393)	299 (169)	589 (334)	1470 (834)	935 (567)	403 (244)	794 (481)	1990 (1200)	23 (17)	159 (119)	948 (708)	2010 (1500)
14	500 (422)	215 (182)	425 (358)	1060 (896)	757 (491)	326 (211)	643 (417)	1610 (1040)	19 (10)	135 (70)	805 (419)	1690 (877)
15	472 (285)	203 (123)	401 (242)	1000 (605)	846 (424)	364 (183)	719 (360)	1800 (901)	30 (12)	209 (83)	1250 (494)	2580 (1030)
16	464 (284)	200 (123)	394 (242)	985 (604)	802 (416)	346 (179)	681 (353)	1700 (883)	63 (21)	444 (149)	2640 (889)	5410 (1820)
17	551 (329)	237 (142)	467 (279)	1170 (698)	1240 (935)	535 (403)	1060 (794)	2640 (1990)	75 (31)	528 (214)	3140 (1270)	6370 (2580)
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
Mean	578	249	491	1230	981	423	834	2080	38	268	1600	3290
n	7	7	7	7	7	7	7	7	6	6	6	6
SD	104	45	89	222	184	79	156	391	23	158	939	1880
Min	464	200	394	985	757	326	643	1610	19	133	792	1690
Max	754	325	641	1600	1240	535	1060	2640	75	528	3140	6370

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Table E12. Completeness of airflow and emission data

Table E12. Data completeness at Site OK4B for August, 2007

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	99.8	99.7	100	99.8	99.7	100	99.8	99.7	100	0	0	0	0	0	0	99.8	99.7	100
2	100	99.7	100	91.3	90.9	91.3	91.3	90.9	91.3	0	0	0	0	0	0	91.3	89.9	91.3
3	100	99.8	100	100	99.8	100	100	99.8	100	0	0	0	0	0	0	100	99.8	100
4	100	99.7	100	100	99.7	100	100	99.7	100	0	0	0	0	0	0	100	99.7	100
5	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	100
6	100	99.9	100	100	99.9	100	100	99.9	100	0	0	0	0	0	0	100	99.9	100
7	99.4	100	100	99.4	100	100	99.4	100	100	0	0	0	0	0	0	99.4	100	100
8	100	100	99.9	75.1	75.1	85.6	75.1	75.1	85.6	37.8	37.8	37.8	0	0	0	50.8	50.8	49.1
9	98.2	98.2	98.2	0	0	0	0	0	0	98.2	98.2	98.2	0	0	0	0	0	0
10	99.9	99.8	99.9	0	0	0	0	0	0	99.9	99.8	99.9	0	0	0	0	0	0
11	100	100	100	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0
12	74.9	74.9	74.9	0	0	0	0	0	0	74.9	74.9	74.9	0	0	0	0	0	0
13	63.5	63.5	63.5	0	0	0	0	0	0	63.5	59.7	63.5	0	0	0	0	0	0
14	100	99.6	100	30.6	30.6	35.5	31.7	31.6	36.5	100	86.5	92.9	0	0	0	0	0	0
15	100	99.9	100	100	99.9	100	100	99.9	100	100	99.9	91.7	0	0	0	0	0	0
16	82.8	82.6	93.3	79.3	78.4	87	79.3	78.4	87	82.8	82.6	49.9	0	0	0	0	0	0
17	68.4	67.1	68.4	66.6	66	64.5	66.7	66.1	64.7	68.4	67.1	0	0	0	0	0	0	0
18	100	99.9	100	100	99.9	100	100	99.9	100	100	99.9	0	0	0	0	0	0	0
19	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
20	98.5	95.3	100	98.5	95.3	45.6	98.5	95.3	45.6	94.7	92.9	36.1	0	0	0	0	0	0
21	100	97.4	100	100	97.4	100	100	97.4	100	100	97.4	100	0	0	0	0	0	0
22	81.6	82.4	82.7	81.6	82.4	76.5	81.6	82.4	76.6	81.6	82.4	82.7	0	0	0	0	0	0
23	99.8	91.5	100	99.8	91.5	100	99.8	91.5	100	99.8	91.5	91.8	0	0	0	0	0	0
24	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
25	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
26	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
27	100	99.9	100	100	99.9	100	100	99.9	100	100	99.9	100	0	0	0	0	0	0
28	100	99.9	100	100	99.9	100	100	99.9	100	100	99.9	100	0	0	0	0	0	0
29	100	100	100	90.3	90.3	74.7	90.3	90.3	74.7	90.3	88.8	88.3	0	0	0	0	0	0
30	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
31	99.7	100	100	99.7	100	100	99.7	100	100	99.7	100	100	0	0	0	0	0	0
Mean	95.7	95.2	96.2	77.8	77.3	76.1	77.8	77.3	76.2	70.7	69.7	58.3	0	0	0	23.9	23.9	23.9
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	9.9	9.9	9.6	36.9	36.7	37	36.9	36.6	36.9	40.5	40	43.7	0	0	0	41.4	41.3	41.4
Min	63.5	63.5	63.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	100	100	100

ED_004549_00015840-00294

Table E12. Data completeness at Site OK4B for July, 2007

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	47.2	47.4	47.4	47.2	47.4	47.4	47.2	47.4	47.4	0	0	0	0	0	0	47.2	47.4	47.4
21	100	99.5	100	100	99.5	100	100	99.5	100	0	0	0	0	0	0	97.8	97.3	97.8
22	100	99.8	100	100	99.8	100	100	99.8	100	0	0	0	0	0	0	100	99.8	100
23	100	99.8	100	100	99.8	100	100	99.8	100	0	0	0	0	0	0	100	99.8	100
24	99.8	99.8	100	99.8	99.8	100	99.8	99.8	100	0	0	0	0	0	0	99.8	99.8	100
25	100	99.9	100	100	99.9	100	100	99.9	100	0	0	0	0	0	0	100	99.9	100
26	100	99	100	100	99	100	100	99	100	0	0	0	0	0	0	100	99	43.1
27	100	98.5	100	100	98.5	100	100	98.5	100	0	0	0	0	0	0	100	98.5	0
28	100	99.8	100	100	99.8	100	100	99.8	100	0	0	0	0	0	0	100	99.8	0
29	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
30	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	0	0	0	0	0	0	98.9	98.9	35.6
31	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	100
Mean	37	36.9	37	37	36.9	37	37	36.9	37	0	0	0	0	0	0	36.9	36.8	23.3
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	47.4	47.2	47.4	47.4	47.2	47.4	47.4	47.2	47.4	0	0	0	0	0	0	47.3	47.1	39.4
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	100

ED_004549_00015840-00295

Table E12. Data completeness at Site OK4B for September, 2007

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	100	100	100	100	100	100	100	100	100	100	100	96.8	0	0	0	0	0	0
2	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
3	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
4	100	100	100	32.9	32.2	38.5	32.9	32.2	38.5	91.6	91.6	0	0	0	0	0	0	0
5	100	99.2	100	47.8	47.9	49.2	51.3	48.1	49.4	100	90.8	0	0	0	0	0	0	0
6	99.7	99.7	99.7	79.2	81.9	38.5	79.5	82	38.5	42.1	42.1	0	37.7	37.7	0	0	0	0
7	100	100	100	100	100	0	100	100	0	0	0	0	100	100	0	0	0	0
8	100	100	100	100	100	0	100	100	0	0	0	0	100	100	0	0	0	0
9	100	100	100	100	100	0	100	100	0	0	0	0	100	100	0	0	0	0
10	61.5	92.3	48.7	37.4	68.3	0.3	37.4	68.4	0.3	0	0	0	61.5	92.3	0	0	0	0
11	37.4	99.2	0	37.4	99.2	0	37.4	99.2	0	0	0	0	37.4	99.2	0	0	0	0
12	97.5	97.1	0	97.5	97.1	0	97.5	97.1	0	0	0	0	97.5	97.1	0	0	0	0
13	99.7	99.4	0	99.7	99.3	0	99.7	99.3	0	0	0	0	99.7	99.4	0	0	0	0
14	87.6	93.9	0	87.6	93.9	0	87.6	93.9	0	0	0	0	87.6	93.9	0	0	0	0
15	96.9	97.5	0	96.9	97.5	0	96.9	97.5	0	0	0	0	96.9	97.5	0	0	0	0
16	100	100	0	100	100	0	100	100	0	0	0	0	100	100	0	0	0	0
17	98.3	97.7	0	91.8	91.2	0	91.8	91.2	0	0	0	0	91.8	91.2	0	0	0	0
18	100	100	0	100	100	0	100	100	0	0	0	0	100	100	0	0	0	0
19	100	97.8	0	100	97.8	0	100	97.8	0	0	0	0	100	97.8	0	0	0	0
20	100	99.6	41.6	77.8	77.5	37.9	77.8	77.5	37.9	0	0	0	77.8	77.5	0	0	0	0
21	99.9	100	100	99.9	99.9	100	99.9	99.9	100	0	0	0	99.9	100	0	0	0	0
22	100	98.6	94.4	100	98.6	94.4	100	98.6	94.4	0	0	0	100	98.6	0	0	0	0
23	100	98.3	100	100	98.3	100	100	98.3	100	0	0	0	100	98.3	0	0	0	0
24	60.6	60.6	60.6	60.1	59.4	57.3	60.1	59.4	57.3	0	0	0	60.6	60.6	0	0	0	0
25	60	59.9	60.1	42.3	42.8	47.8	42.4	42.9	48	0	0	0	60	59.9	0	0	0	0
26	99.7	99.8	100	99.7	99.8	100	99.7	99.8	100	0	0	0	99.7	99.8	0	0	0	0
27	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	0	0	0	99.7	99.7	0	0	0	0
28	100	95.5	100	93.1	88.5	40.6	93.1	88.5	40.6	49.2	44.4	0	43.8	43.8	0	0	0	0
29	99.6	93.3	100	99.6	93.3	0	99.6	93.3	0	99.6	93.3	0	0	0	0	0	0	0
30	46.9	49.2	49.1	35.8	36	0	44.8	46.4	0	46.9	49.2	0	0	0	0	0	0	0
Mean	91.5	94.3	61.8	83.9	86.7	36.8	84.3	87	36.8	24.3	23.7	3.2	65.1	68.1	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	17.7	12.9	44	24.2	20.9	41.7	23.4	20.1	41.7	39.6	38.6	17.4	40.7	41	0	0	0	0
Min	37.4	49.2	0	32.9	32.2	0	32.9	32.2	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	96.8	100	100	0	0	0	0

ED_004549_00015840-00296

Table E12. Data completeness at Site OK4B for October, 2007

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	57.6	57.5	57.6	0	0	0.1	52.4	52.9	45.6	57.6	57.5	0	0	0	0	0	0	0
2	99.4	99	100	0	0	2.2	99.4	99	100	99.4	99	0	0	0	0	0	0	0
3	99.7	100	100	0	0	11.3	99.7	99.9	100	99.7	100	0	0	0	0	0	0	0
4	99.9	100	100	29.7	29.7	34.5	99.9	100	100	99.9	100	0	0	0	0	0	0	0
5	99.7	94.2	100	99.7	94.2	100	99.7	94.2	100	99.7	94.2	0	0	0	0	0	0	0
6	24.8	24.8	24.8	21.6	24.2	21.3	21.7	24.3	21.3	24.8	24.8	0	0	0	0	0	0	0
7	99.7	100	100	99.7	100	99	99.7	100	99.1	99.7	100	0	0	0	0	0	0	0
8	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
9	98.9	99.3	99.3	77.4	77.3	99.3	77.5	77.4	99.3	98.9	99.3	0	0	0	0	0	0	0
10	99.7	99.7	99.7	81.5	82.4	92	81.6	82.5	92	88.7	88.7	0	0	0	0	0	0	0
11	99.5	99.9	99.9	99.5	99.9	99.9	99.5	99.9	99.9	99.5	99.9	0	0	0	0	0	0	0
12	100	98.5	100	100	98.5	100	100	98.5	100	100	98.5	0	0	0	0	0	0	0
13	100	91.5	100	100	91.5	100	100	91.5	100	100	91.5	0	0	0	0	0	0	0
14	99.9	100	100	99.9	100	100	99.9	100	100	99.9	100	0	0	0	0	0	0	0
15	96.9	100	99.7	71	72.4	71.5	71.1	72.6	99.7	96.8	98.3	0	0	0	0	0	0	0
16	98.4	90.5	100	98.4	90.5	100	98.4	90.5	100	98.4	90.5	0	0	0	0	0	0	0
17	98.8	85.8	100	98.8	85.8	100	98.8	85.8	100	98.8	82.4	0	0	0	0	0	0	0
18	96.7	99.4	99.8	96.7	99.4	99.8	96.7	99.4	99.8	96.7	99.4	0	0	0	0	0	0	0
19	95.2	96.9	100	95.2	96.9	100	95.2	96.9	100	95.2	96.9	0	0	0	0	0	0	0
20	96.9	99.4	100	96.9	99.4	100	96.9	99.4	100	96.9	99.4	0	0	0	0	0	0	0
21	100	99	93.7	100	99	93.7	100	99	93.7	100	99	0	0	0	0	0	0	0
22	99.7	100	95.6	76.8	76.6	66.8	76.9	76.7	66.9	99.7	100	37.7	0	0	0	0	0	0
23	98.4	100	100	98.4	100	100	98.4	100	100	98.4	100	100	0	0	0	0	0	0
24	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
25	86.5	86.3	86.5	79.7	79.9	74.6	79.9	80.1	74.7	86.5	86.3	86.5	0	0	0	0	0	0
26	100	99.7	100	100	99.7	100	100	99.7	100	100	99.7	100	0	0	0	0	0	0
27	100	97.1	98.9	100	97.1	98.9	100	97.1	98.9	100	97.1	98.9	0	0	0	0	0	0
28	95.5	96.2	100	95.5	96.2	100	95.5	96.2	100	95.5	96.2	100	0	0	0	0	0	0
29	97.2	99.4	100	97.2	99.4	100	97.2	99.4	100	97.2	99.4	100	0	0	0	0	0	0
30	95.7	91.7	100	95.7	91.7	100	95.7	91.7	100	95.7	91.7	100	0	0	0	0	0	0
31	100	86.1	94.7	100	86.1	94.7	100	86.1	94.7	100	86.1	94.7	0	0	0	0	0	0
Mean	94.7	93.3	95.2	80.9	79.6	82.6	91.3	90	93.1	94.3	92.8	29.6	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	14.9	15	15	32.4	31.6	31.7	16.8	16.1	17.5	14.9	15	44.2	0	0	0	0	0	0
Min	24.8	24.8	24.8	0	0	0.1	21.7	24.3	21.3	24.8	24.8	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0

ED_004549_00015840-00297

Table E12. Data completeness at Site OK4B for November, 2007

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	99.9	89.5	100	99.9	89.5	100	99.9	89.5	100	99.9	89	100	0	0	0	0	0	0
2	100	71	99.5	100	71	99.5	100	71	99.5	100	71	99.5	0	0	0	0	0	0
3	98.8	93.8	100	98.8	93.8	100	98.8	93.8	100	98.8	93.8	100	0	0	0	0	0	0
4	100	99.4	100	100	99.4	100	100	99.4	100	100	99.4	100	0	0	0	0	0	0
5	99.7	91.7	99.5	99.7	91.7	99.5	99.7	91.7	99.5	99.7	91.7	99.5	0	0	0	0	0	0
6	99.8	48.8	49.8	91.7	46.2	35.3	91.7	46.2	35.3	47	46.2	47	0	0	0	40.9	0	0
7	98.5	42.2	42.3	98.5	42.2	42.3	98.5	42.2	42.3	0	0	0	0	0	0	98.5	42.2	42.3
8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	99.9	99.9	99.9
9	98.6	100	100	98.6	100	100	98.6	100	100	0	0	0	0	0	0	98.6	100	100
10	99.9	99.4	100	99.9	99.4	100	99.9	99.4	100	0	0	0	0	0	0	99.9	99.4	100
11	100	99.9	100	100	99.9	100	100	99.9	100	0	0	0	0	0	0	100	99.9	100
12	99.5	96.6	99	70.6	70.6	26.7	76.3	73.5	26.7	0	0	0	0	0	0	99.5	96.6	29.2
13	97.8	95.3	99.6	63.2	63	19.4	63.3	63.1	19.5	41.9	41.9	31.9	0	0	0	50	47.6	0
14	100	97.5	95.7	100	97.5	95.7	100	97.5	95.7	100	97.5	95.7	0	0	0	0	0	0
15	98.2	98.8	100	98.2	98.8	100	98.2	98.8	100	98.2	98.8	100	0	0	0	0	0	0
16	94.6	99.9	100	94.6	99.9	100	94.6	99.9	100	94.6	99.9	100	0	0	0	0	0	0
17	100	100	99.9	100	100	99.9	100	100	99.9	100	100	99.9	0	0	0	0	0	0
18	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
19	98.8	97.4	98.8	76.6	75.1	78.6	76.7	75.3	78.8	98.8	97.4	98.8	0	0	0	0	0	0
20	99.7	85.2	99.7	99.7	85.2	99.7	99.7	85.2	99.7	99.7	85.2	99.7	0	0	0	0	0	0
21	99.9	92.2	92.7	99.9	92.2	92.7	99.9	92.2	92.7	99.9	92.2	92.7	0	0	0	0	0	0
22	100	98.5	100	100	98.5	100	100	98.5	100	100	98.5	100	0	0	0	0	0	0
23	100	53.8	100	100	53.8	100	100	53.8	100	100	53.8	100	0	0	0	0	0	0
24	95.6	100	99.9	95.6	100	99.9	95.6	100	99.9	95.6	100	99.9	0	0	0	0	0	0
25	95.1	99.7	100	95.1	99.7	100	95.1	99.7	100	95.1	99.7	100	0	0	0	0	0	0
26	100	99.4	100	100	99.4	100	100	99.4	100	100	99.4	100	0	0	0	0	0	0
27	65.8	63	66.3	41	38.8	45.2	41	38.8	45.3	59.4	56.3	59	0	0	0	0	0	0
28	60.5	60.4	53.2	54.7	57.7	50.7	57.4	57.7	50.7	60.5	60.4	53.2	0	0	0	0	0	0
29	28.5	22.6	28.5	25.3	20.4	21.8	25.4	20.6	21.9	28.5	22.6	28.5	0	0	0	0	0	0
30	99.8	85.8	100	99.8	85.8	100	99.8	85.8	100	99.8	85.8	100	0	0	0	0	0	0
Mean	94.3	86.1	90.8	90	82.3	83.6	90.3	82.4	83.6	70.6	66	70.2	0	0	0	22.9	19.5	15.7
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	15.2	20.7	19.9	19.2	22.6	27.9	18.8	22.5	27.9	40.3	38.6	40.7	0	0	0	39.9	37.3	34.3
Min	28.5	22.6	28.5	25.3	20.4	19.4	25.4	20.6	19.5	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	100	100	100

ED_004549_00015840-00298

Table E12. Data completeness at Site OK4B for December, 2007

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	100	72.8	100	100	72.8	100	100	72.8	100	100	72.8	100	0	0	0	0	0	0
2	99.9	94.9	100	99.9	94.9	100	99.9	94.9	100	99.9	94.9	100	0	0	0	0	0	0
3	98.6	96.9	99.9	98.6	96.9	99.9	98.6	96.9	99.9	98.6	96.9	99.9	0	0	0	0	0	0
4	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
5	100	98.1	100	100	98.1	100	100	98.1	100	100	98.1	100	0	0	0	0	0	0
6	100	88.2	99.9	82.7	88.2	41.2	82.8	88.2	41.3	100	88.2	54.3	0	0	0	0	0	0
7	99.9	94.4	100	99.9	94.4	48	99.9	94.4	48	99.9	94.4	0	0	0	0	0	0	0
8	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
9	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
10	99.9	99.9	99.9	94	94	84.4	94	94	84.4	94	91.8	39.8	0	0	0	0	0	0
11	34	100	97.8	34	100	97.8	34	100	97.8	34	100	97.8	0	0	0	0	0	0
12	99.9	100	100	99.9	100	100	99.9	100	100	99.9	100	100	0	0	0	0	0	0
13	100	100	99.7	100	100	99.7	100	100	99.7	100	100	99.7	0	0	0	0	0	0
14	99.9	100	100	99.9	100	100	99.9	100	100	99.9	100	100	0	0	0	0	0	0
15	99.7	100	97.5	99.7	100	97.5	99.7	100	97.5	99.7	100	97.5	0	0	0	0	0	0
16	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
17	99.3	99.6	99.6	99.3	99.6	99.6	99.3	99.6	99.6	99.3	99.6	99.6	0	0	0	0	0	0
18	99.2	99.2	99.2	78.5	78.5	69.4	78.6	78.6	69.5	99.2	99.2	99.2	0	0	0	0	0	0
19	100	95.7	100	100	95.7	100	100	95.7	100	100	95	100	0	0	0	0	0	0
20	75.6	71.5	75.6	69.4	65.7	66.3	69.6	65.8	66.3	75.6	71.5	75.6	0	0	0	0	0	0
21	64.2	48.2	61.9	61	46.5	55.8	61.2	46.8	55.9	64.2	48.1	61.9	0	0	0	0	0	0
22	97.2	89.4	79.6	97.2	89.4	79.6	97.2	89.4	79.6	97.2	80.3	79.6	0	0	0	0	0	0
23	100	99.8	100	100	99.8	100	100	99.8	100	100	98.7	100	0	0	0	0	0	0
24	99.3	73.3	100	99.3	73.3	100	99.3	73.3	100	99.3	72.8	100	0	0	0	0	0	0
25	99.3	92.9	98.9	99.3	92.9	98.9	99.3	92.9	98.9	99.3	91	98.9	0	0	0	0	0	0
26	99.9	99.9	98.7	99.9	99.9	98.7	99.9	99.9	98.7	99.9	99.3	98.7	0	0	0	0	0	0
27	96.5	97.9	100	74.5	70.9	37.8	74.7	75.1	40.5	90.9	91.3	29.2	0	0	0	0	0	0
28	100	100	100	100	100	14.4	100	100	14.4	100	100	0	0	0	0	0	0	0
29	97.8	100	100	97.8	100	14.5	97.8	100	14.5	97.8	100	0	0	0	0	0	0	0
30	99.9	99.7	99.2	99.9	99.7	7.7	99.9	99.7	7.7	99.9	99.7	0	0	0	0	0	0	0
31	94.9	95.1	93.3	68.6	68	46.5	68.8	68	46.5	94.9	95.1	30.1	0	0	0	0	0	0
Mean	95.3	93.8	96.8	92	90.9	79.3	92.1	91.1	79.4	95	92.9	69.7	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	13.5	11.6	8.4	15.3	13.6	29.8	15.3	13.4	29.6	13.4	11.7	40	0	0	0	0	0	0
Min	34	48.2	61.9	34	46.5	7.7	34	46.8	7.7	34	48.1	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0

ED_004549_00015840-00299

Table E12. Data completeness at Site OK4B for January, 2008

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	54.7	54.9	54.4	51.7	52.9	49.9	51.7	53	49.9	54.7	54.9	54.4	0	0	0	0	0	0
2	99.6	88.7	100	99.6	88.7	100	99.6	88.7	100	99.6	88.7	100	0	0	0	0	0	0
3	22.4	24.5	47.4	16.1	23.3	45.9	16.1	23.4	45.9	22.4	24.5	47.4	0	0	0	0	0	0
4	100	87.8	100	99.2	87.4	96	99.4	87.5	96.1	100	87.8	100	0	0	0	0	0	0
5	99	47.4	96.5	99	47.4	96.5	99	47.4	96.5	99	47.4	96.5	0	0	0	0	0	0
6	100	70.9	100	100	70.9	100	100	70.9	100	100	70.9	100	0	0	0	0	0	0
7	99.9	35.7	99.9	76.6	24.9	79.7	76.7	24.9	79.8	96.5	32.4	95.6	0	0	0	0	0	0
8	99.9	86.1	99.4	99.9	86.1	99.4	99.9	86.1	99.4	99.9	86.1	99.4	0	0	0	0	0	0
9	97.1	22.9	99.2	97.1	22.9	99.2	97.1	22.9	99.2	97.1	22.9	99.2	0	0	0	0	0	0
10	100	85.3	99.7	100	85.3	99.7	100	85.3	99.7	100	85.3	99.7	0	0	0	0	0	0
11	75.4	45.2	75.4	62.8	33.5	66	62.9	33.5	66.1	75.4	45.2	75.4	0	0	0	0	0	0
12	100	91.9	100	100	91.9	100	100	91.9	100	100	91.9	100	0	0	0	0	0	0
13	100	81.9	100	100	81.9	100	100	81.9	100	100	81.9	100	0	0	0	0	0	0
14	100	76.3	100	100	76.3	100	100	76.3	100	100	76.3	100	0	0	0	0	0	0
15	92.6	15.5	92.6	74.4	12.6	92.6	74.6	12.6	92.6	47.4	12	48.1	38.1	2.8	38.2	0	0	0
16	97.8	87.4	47.2	97.8	87.4	47.2	97.8	87.4	47.2	0	0	0	97.8	87.4	47.2	0	0	0
17	99.5	80.3	68.1	99.5	80.3	68.1	99.5	80.3	68.1	0	0	0	99.5	80.3	68.1	0	0	0
18	100	61.7	98.7	100	61.7	98.7	100	61.7	98.7	0	0	0	100	61.7	98.7	0	0	0
19	99.5	73.1	100	99.5	73.1	100	99.5	73.1	100	0	0	0	99.5	73.1	100	0	0	0
20	97.2	64.7	100	97.2	64.7	100	97.2	64.7	100	0	0	0	97.2	64.7	100	0	0	0
21	97.7	100	99.8	97.7	100	99.8	97.7	100	99.8	0	0	0	97.7	100	99.8	0	0	0
22	100	100	100	100	100	100	100	100	100	0	0	0	100	100	100	0	0	0
23	100	100	99.7	76.6	79.4	55.1	76.7	79.5	55.1	0	0	0	96.9	97.3	49	0	0	0
24	74.7	71	77.6	68.9	64.7	50.6	68.9	64.8	50.6	0	0	0	70.2	67.9	35.5	0	0	0
25	78.2	100	99.7	78.2	100	99.7	78.2	100	99.7	0	0	0	78.2	100	99.7	0	0	0
26	100	100	94.9	100	100	92.1	100	100	92.1	0	0	0	100	100	94.9	0	0	0
27	96	100	100	1.5	1.5	10.4	1.5	1.5	10.4	0	0	0	96	100	100	0	0	0
28	73.8	49.7	99.3	0	0	9.4	0	0	9.4	0	0	0	73.8	49.7	99.3	0	0	0
29	98.5	79	91.3	0	0	23.9	0	0	23.9	0	0	0	98.5	79	91.3	0	0	0
30	93.4	90.8	99.9	0	0	17.8	0	0	17.8	0	0	0	93.4	90.8	99.9	0	0	0
31	95.1	98.1	90.8	23.6	22.9	25.2	23.8	23.1	25.2	0	0	0	59.1	62.5	54.2	30.3	25.4	30.3
Mean	91.7	73.3	91.3	74.7	58.8	74.9	74.8	58.8	74.9	41.7	29.3	42.4	48.3	42.5	44.4	1	0.8	1
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	16.6	24.7	15.8	35.8	33.9	31.3	35.8	33.9	31.3	46.1	35.6	46	45.7	42.7	44.2	5.4	4.5	5.4
Min	22.4	15.5	47.2	0	0	9.4	0	0	9.4	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	91.9	100	100	100	100	30.3	25.4	30.3

ED_004549_00015840-00300

Table E12. Data completeness at Site OK4B for February, 2008

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	95.9	74.9	100	95.9	74.9	91	95.9	74.9	91.8	0	0	0	0	0	0	95.9	74.9	100
2	99.9	97.9	100	99.9	97.9	100	99.9	97.9	100	0	0	0	0	0	0	99.9	74.3	100
3	100	88.5	100	98.9	86.7	97.8	98.9	86.7	97.8	0	0	0	0	0	0	99.8	67.6	99.8
4	69.1	43.7	70.3	64.4	39.7	62.4	64.6	39.9	62.4	0	0	0	0	0	0	68.8	43.4	70
5	95.7	99.2	96.7	95.7	99.2	96.7	95.7	99.2	96.7	0	0	0	0	0	0	95.7	99.2	96.7
6	98.9	99.3	99.3	73	58.5	99.3	73.1	58.7	99.3	0	0	0	0	0	0	98.9	99.3	99.3
7	98.5	97.6	98	50.1	51.1	50.7	50.3	51.5	51	33.8	24	33.8	0	0	0	39.5	42.7	36.4
8	100	100	99.8	100	100	99.8	100	100	99.8	99.8	68	99.6	0	0	0	0	0	0
9	99.8	100	100	99.8	100	100	99.8	100	100	99.8	93.8	100	0	0	0	0	0	0
10	98.8	99.4	100	98.8	99.4	100	98.8	99.4	100	98.8	90.6	100	0	0	0	0	0	0
11	99.6	95	100	99.6	95	100	99.6	95	100	99.6	95	100	0	0	0	0	0	0
12	98.8	98.8	98.8	75.3	71.2	93.1	75.5	71.3	93.1	79.2	68.4	77.2	0	0	0	0	0	0
13	90.8	65.5	100	90.8	65.5	100	90.8	65.5	100	90.8	61.7	100	0	0	0	0	0	0
14	98.3	96.9	98.7	98.3	96.9	98.7	98.3	96.9	98.7	98.3	94.4	98.7	0	0	0	0	0	0
15	99.8	100	99.7	99.8	100	99.7	99.8	100	99.7	99.8	46.5	99.7	0	0	0	0	0	0
16	100	97.8	100	100	97.8	100	100	97.8	100	100	48.1	100	0	0	0	0	0	0
17	99.5	99.9	98.1	99.5	99.9	98.1	99.5	99.9	98.1	99.5	87.4	98.1	0	0	0	0	0	0
18	98.2	99.7	84.5	77.2	72.1	77.5	77.3	72.2	77.5	89.8	61.5	61.6	0	0	0	0	0	0
19	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
20	90.9	95.4	100	90.9	95.4	100	90.9	95.4	100	90.9	95.4	100	0	0	0	0	0	0
21	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
22	99.8	99.8	99.8	99.8	99.8	80.3	99.8	99.8	80.3	99.8	99.8	98.7	0	0	0	0	0	0
23	93.9	96.9	100	93.9	96.9	100	93.9	96.9	100	93.9	96.9	100	0	0	0	0	0	0
24	99	93.3	100	99	93.3	100	99	93.3	100	99	93.3	100	0	0	0	0	0	0
25	99.9	95.8	89.4	99.9	95.8	89.4	99.9	95.8	89.4	99.9	95.8	89.4	0	0	0	0	0	0
26	96.6	99	97.5	96.6	99	97.5	96.6	99	97.5	96.6	99	97.5	0	0	0	0	0	0
27	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	0	0	0	0	0	0
28	100	97.3	100	100	97.3	100	100	97.3	100	100	97.3	100	0	0	0	0	0	0
29	98.8	99.1	99.1	95.8	96.1	96.1	95.8	96.1	96.1	87.4	84.4	87.1	0	0	0	0	0	0
Mean	97.2	94.1	97.6	92.9	88.9	94.1	92.9	89	94.1	74.4	65.5	73.8	0	0	0	20.6	17.3	20.8
n	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
SD	5.9	12.2	6.1	12.3	16.6	11.8	12.3	16.5	11.7	39.9	38.3	40.2	0	0	0	38.1	32.4	38.5
Min	69.1	43.7	70.3	50.1	39.7	50.7	50.3	39.9	51	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	99.9	99.3	100

ED_004549_00015840-00301

Table E12. Data completeness at Site OK4B for March, 2008

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	94.2	92.2	100	94.2	92.2	100	94.2	92.2	100	94.2	92.2	100	0	0	0	0	0	0
2	89	95.6	88.3	89	95.6	88.3	89	95.6	88.3	89	95.6	88.3	0	0	0	0	0	0
3	80.6	100	97.6	80.6	100	97.6	80.6	100	97.6	80.6	100	97.6	0	0	0	0	0	0
4	100	99.8	100	100	99.8	100	100	99.8	100	100	99.8	100	0	0	0	0	0	0
5	98.4	99.4	99.6	98.4	99.4	99.6	98.4	99.4	99.6	98.4	99.4	99.6	0	0	0	0	0	0
6	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
7	93.5	93.8	98.8	93.5	93.8	75.9	93.5	93.8	76	93.5	93.8	98.8	0	0	0	0	0	0
8	99	99.5	99.5	99	99.5	99.5	99	99.5	99.5	99	99.5	99.5	0	0	0	0	0	0
9	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
10	99.9	99.9	100	99.9	99.9	100	99.9	99.9	100	99.9	99.9	100	0	0	0	0	0	0
11	99.7	99.9	100	99.7	99.9	100	99.7	99.9	100	99.4	99.6	99.7	0	0	0	0	0	0
12	100	99.2	100	100	99.2	100	100	99.2	100	99.8	99	99.8	0	0	0	0	0	0
13	99	98.9	95.7	75.6	75.5	95.7	75.7	75.6	95.7	94.7	94.6	94.9	0	0	0	0	0	0
14	99.9	96.1	100	99.9	96.1	100	99.9	96.1	100	99.9	96.1	100	0	0	0	0	0	0
15	97.6	100	100	97.6	100	100	97.6	100	100	97.6	100	100	0	0	0	0	0	0
16	92.6	99	100	92.6	99	100	92.6	99	100	92.6	99	100	0	0	0	0	0	0
17	95.9	83.7	88.4	95.9	83.7	81	95.9	83.7	81	95.9	83.7	65.5	0	0	0	0	0	0
18	100	100	99.2	100	100	99.2	100	100	99.2	100	100	99.2	0	0	0	0	0	0
19	99.7	99.9	99.9	99.7	99.9	99.9	99.7	99.9	99.9	99.7	99.9	99.9	0	0	0	0	0	0
20	98.7	99.4	100	98.7	99.4	100	98.7	99.4	100	98.7	99.4	100	0	0	0	0	0	0
21	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
22	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
23	99.9	100	100	99.9	100	100	99.9	100	100	99.9	100	100	0	0	0	0	0	0
24	99.2	99.4	100	70.8	71	70.6	71	71.2	70.7	99.2	99.4	95.9	0	0	0	0	0	0
25	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0
26	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
27	100	100	99.4	100	100	99.4	100	100	99.4	100	100	99.4	0	0	0	0	0	0
28	99.7	100	100	99.7	100	100	99.7	100	100	99.7	100	100	0	0	0	0	0	0
29	99.5	93.9	99.9	99.5	93.9	99.9	99.5	93.9	99.9	99.5	93.9	99.9	0	0	0	0	0	0
30	99.9	100	99.9	99.9	100	99.9	99.9	100	99.9	99.9	78.3	99.9	0	0	0	0	0	0
31	100	100	100	100	100	100	100	100	100	100	0	100	0	0	0	0	0	0
Mean	97.9	98.4	98.9	96.3	96.7	97	96.3	96.7	97	97.8	94.3	98	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	4.1	3.4	2.9	7.3	7.1	7.4	7.3	7	7.4	4.1	17.9	6.4	0	0	0	0	0	0
Min	80.6	83.7	88.3	70.8	71	70.6	71	71.2	70.7	80.6	0	65.5	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0

ED_004549_00015840-00302

Table E12. Data completeness at Site OK4B for April, 2008

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	99.4	99.9	99.6	98.9	99.3	80.7	98.9	99.3	80.8	92.2	0	99	0	0	0	0	0	0
2	99.6	89.7	99.7	99.6	89.7	99.7	99.6	89.7	99.7	99.6	0	99.7	0	0	0	0	0	0
3	99.9	100	99.7	96.6	96.7	96.5	96.6	96.7	96.5	88.9	32.7	92.8	0	0	0	0	0	0
4	100	99.8	100	100	99.8	100	100	99.8	100	100	99.8	100	0	0	0	0	0	0
5	98.1	99.4	100	98.1	99.4	100	98.1	99.4	100	98.1	99.4	100	0	0	0	0	0	0
6	100	100	99.6	100	100	99.6	100	100	99.6	100	100	99.6	0	0	0	0	0	0
7	91.9	93	99.9	91.9	93	78.1	91.9	93	78.2	43.3	45.2	43.1	0	0	0	39.7	40.4	47.4
8	99.6	99	99.2	99.6	99	99.2	99.6	99	99.2	0	0	0	0	0	0	99.6	99	96
9	83.1	85.3	35.5	83.1	85.3	35.5	83.1	85.3	35.5	0	0	0	0	0	0	83.1	85.3	35.5
10	47.6	93.1	0	47.6	93.1	0	47.6	93.1	0	0	0	0	0	0	0	47.6	93.1	0
11	73.5	100	0	73.5	100	0	73.5	100	0	0	0	0	0	0	0	73.5	100	0
12	100	100	0	100	100	0	100	100	0	0	0	0	0	0	0	100	100	0
13	99.7	100	0	99.7	100	0	99.7	100	0	0	0	0	0	0	0	99.7	100	0
14	99.9	93	40.3	44.4	36.7	33.5	44.6	36.9	33.6	32.8	26.3	32.8	0	0	0	45.4	45.1	0
15	90.1	91.1	99.9	90.1	91.1	99.9	90.1	91.1	99.9	85.5	85.5	93.5	0	0	0	0	0	0
16	92.2	86.6	99.2	92.2	86.6	77.4	92.2	86.6	99.2	92.2	86.6	99.2	0	0	0	0	0	0
17	82.6	99.8	85.2	82.6	99.8	85.2	82.6	99.8	85.2	82.6	99.8	85.2	0	0	0	0	0	0
18	98.5	99.4	100	98.5	99.4	100	98.5	99.4	100	98.5	99.4	100	0	0	0	0	0	0
19	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
20	99.7	99.2	100	99.7	99.2	100	99.7	99.2	100	99.7	99.2	100	0	0	0	0	0	0
21	100	100	100	65.5	65.5	64.3	65.6	72.6	64.4	98.5	97.9	98	0	0	0	0	0	0
22	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	0	0	0	0	0	0
23	56.5	84.3	84.4	56.5	84.3	84.4	56.5	84.3	84.4	56.5	84.3	84.4	0	0	0	0	0	0
24	78.6	97.4	100	78.6	97.4	100	78.6	97.4	100	78.6	97.4	100	0	0	0	0	0	0
25	99.2	99.6	99.6	99.2	99.6	99.6	99.2	99.6	99.6	99.2	99.6	99.6	0	0	0	0	0	0
26	92.5	73.1	90.8	92.5	73.1	90.8	92.5	73.1	90.8	88.7	72.4	86.6	0	0	0	0	0	0
27	99.7	97	99.8	99.7	97	99.8	99.7	97	99.8	99.7	97	99.8	0	0	0	0	0	0
28	99.2	96	100	99.2	96	100	99.2	96	100	99.2	96	100	0	0	0	0	0	0
29	100	97.6	100	34.7	32.3	29.8	34.7	32.3	29.8	95.8	93.8	96.3	0	0	0	0	0	0
30	99.3	83.2	100	0	0	0	0	0	0	99.3	83.2	100	0	0	0	0	0	0
Mean	92.7	95.2	81.1	84	87.1	71.8	84.1	87.3	72.5	70.9	63.2	73.7	0	0	0	19.6	22.1	6
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	13	6.7	35.4	24.2	23.4	37.8	24.2	23.2	38.1	39	42.4	39.9	0	0	0	34.9	38.6	19.7
Min	47.6	73.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	100	100	96

ED_004549_00015840-00303

Table E12. Data completeness at Site OK4B for May, 2008

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	88.7	87.4	89.7	0	0	1.2	0	0	1.2	88.7	87.4	89.7	0	0	0	0	0	0
2	91.5	97.5	70.4	0	0	7.2	0	0	7.2	87.7	91.9	70	0	0	0	0	0	0
3	99.2	99.9	99.2	0	0	5.3	0	0	5.3	99.2	99.9	99.2	0	0	0	0	0	0
4	100	97.6	100	0	0	1.7	0	0	1.7	100	97.6	100	0	0	0	0	0	0
5	94.9	81.5	99.2	16	9.1	25.8	17.1	10.1	26.8	92	78.1	59.7	0	0	0	0	0	0
6	91.2	97.7	100	91.2	97.7	100	91.2	97.7	100	91.2	97.7	100	0	0	0	0	0	0
7	99.2	72.9	99.7	99.2	72.9	99.7	99.2	72.9	99.7	99.2	72.9	99.7	0	0	0	0	0	0
8	81.4	86.9	95.8	81.4	86.9	95.8	81.4	86.9	95.8	80.6	86.5	94.9	0	0	0	0	0	0
9	65.6	84.2	100	65.6	84.2	100	65.6	84.2	100	65.6	84.2	100	0	0	0	0	0	0
10	93.5	81.6	97.6	93.5	81.6	97.6	93.5	81.6	97.6	93.5	81.6	97.6	0	0	0	0	0	0
11	99.9	81.5	100	99.9	81.5	100	99.9	81.5	100	99.9	81.5	100	0	0	0	0	0	0
12	99.5	79.7	100	99.5	79.7	100	99.5	79.7	100	85.1	77.4	100	0	0	0	0	0	0
13	99.9	86.9	100	99.9	86.9	100	99.9	86.9	100	99.9	86.9	100	0	0	0	0	0	0
14	100	72.6	100	100	72.6	100	100	72.6	100	100	72.6	100	0	0	0	0	0	0
15	100	78.9	99.9	100	78.9	99.9	100	78.9	99.9	100	78.9	99.9	0	0	0	0	0	0
16	100	99.5	100	100	99.5	100	100	99.5	100	96	99.5	96.2	0	0	0	0	0	0
17	99.9	96.3	100	99.9	96.3	100	99.9	96.3	100	99.9	96.3	100	0	0	0	0	0	0
18	96.8	99.2	100	96.8	99.2	100	96.8	99.2	100	96.8	99.2	100	0	0	0	0	0	0
19	99.8	97.3	100	99.8	97.3	100	99.8	97.3	100	99.8	97.3	100	0	0	0	0	0	0
20	99.9	96.3	100	99.9	96.3	100	99.9	96.3	100	99.9	96.3	100	0	0	0	0	0	0
21	99.9	92	100	99.9	92	100	99.9	92	100	99.9	92	100	0	0	0	0	0	0
22	98.7	93.2	94.3	98.7	93.2	94.3	98.7	93.2	94.3	82.2	93.2	79.1	0	0	0	0	0	0
23	99.4	95.3	82.8	99.4	95.3	82.8	99.4	95.3	82.8	99.4	95.3	82.8	0	0	0	0	0	0
24	99.5	90.3	100	99.5	90.3	100	99.5	90.3	100	99.5	90.3	100	0	0	0	0	0	0
25	95.1	87.9	95.1	95.1	87.9	95.1	95.1	87.9	95.1	75.7	87.7	75.7	0	0	0	0	0	0
26	100	96.6	92.3	100	96.6	92.3	100	96.6	92.3	100	96.6	92.3	0	0	0	0	0	0
27	95	66	99.4	95	66	75.6	95	66	69.1	95	66	71.5	0	0	0	0	0	0
28	99.2	63.6	100	99.2	63.6	100	99.2	63.6	100	99.2	63.6	100	0	0	0	0	0	0
29	100	94.7	50	100	94.7	50	100	94.7	50	100	94.7	50	0	0	0	0	0	0
30	100	100	26.9	100	100	26.9	100	100	26.9	100	100	26.9	0	0	0	0	0	0
31	100	100	35.8	100	100	35.8	100	100	35.8	100	100	35.8	0	0	0	0	0	0
Mean	96.4	88.9	91.2	81.6	74.2	77	81.6	74.2	76.8	94.4	88.5	87.8	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	7	10.2	18.8	35.1	33.2	35.5	35.1	33.1	35.5	8.5	10.3	19.8	0	0	0	0	0	0
Min	65.6	63.6	26.9	0	0	1.2	0	0	1.2	65.6	63.6	26.9	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0

ED_004549_00015840-00304

Table E12. Data completeness at Site OK4B for June, 2008

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	100	100	82.9	100	100	82.9	100	100	82.9	100	100	82.9	0	0	0	0	0	0
2	100	100	100	78.2	78.2	78.2	78.2	78.2	78.2	36.5	36.5	36.5	0	0	0	0	0	0
3	100	99.9	100	25.6	21.2	18.7	25.8	21.2	18.8	0	0	0	0	0	0	0	0	0
4	96.9	96.6	96	69	69	67.7	69	69	67.7	63.9	64.9	63.7	0	0	0	0	0	0
5	92.6	83.6	99	92.6	83.6	99	92.6	83.6	99	92.6	83.6	99	0	0	0	0	0	0
6	92.6	97.8	100	92.6	97.8	100	92.6	97.8	100	92.6	97.8	100	0	0	0	0	0	0
7	100	99.1	100	100	99.1	100	100	99.1	100	100	99.1	100	0	0	0	0	0	0
8	95.9	89.4	97.6	95.9	89.4	97.6	95.9	89.4	97.6	95.9	89.4	97.6	0	0	0	0	0	0
9	99.2	97.1	100	99.2	97.1	100	99.2	97.1	100	99.2	97.1	100	0	0	0	0	0	0
10	99.9	76.7	99.9	99.9	76.7	99.9	99.9	76.7	99.9	99.9	76.7	99.9	0	0	0	0	0	0
11	96.8	86.6	93.4	96.8	86.6	93.4	96.8	86.6	93.4	37.1	36.5	37.1	0	0	0	0	0	0
12	99.2	88.8	99.6	99.2	88.8	99.6	99.2	88.8	99.6	0	0	0	0	0	0	0	0	0
13	100	97.2	100	100	97.2	100	100	97.2	100	0	0	0	0	0	0	0	0	0
14	64.2	63.6	64.7	59.7	59	52.1	59.8	59.2	52.2	0	0	0	0	0	0	0	0	0
15	99.7	100	100	99.7	100	100	99.7	100	100	0	0	0	0	0	0	0	0	0
16	99	93.2	99.7	99	65.6	72	99	65.8	72	50.7	44.9	34.2	0	0	0	0	0	0
17	100	99.9	100	100	99.9	100	100	99.9	100	100	99.9	100	0	0	0	0	0	0
18	97.5	97.4	100	97.5	97.4	100	97.5	97.4	100	97.5	97.4	100	0	0	0	0	0	0
19	92.9	89.4	100	92.9	89.4	100	92.9	89.4	100	92.9	89.4	100	0	0	0	0	0	0
20	76	75.1	75.3	76	74.6	72.4	76	74.6	72.4	76	75.1	75.3	0	0	0	0	0	0
21	39.7	39.3	0	36.5	36.8	0	36.6	36.9	0	39.4	39	0	0	0	0	0	0	0
22	98.1	99.9	0	98.1	99.9	0	98.1	99.9	0	97.9	99.7	0	0	0	0	0	0	0
23	98.9	90.9	0	98.9	90.9	0	98.9	90.9	0	98.9	90.9	0	0	0	0	0	0	0
24	99.1	99	0	99.1	99	0	99.1	99	0	99.1	99	0	0	0	0	0	0	0
25	99.9	99.4	40.4	43.3	43.3	19.8	43.4	43.4	19.9	52.2	54.9	0	0	0	0	28.4	28.3	0
26	91.5	89.2	91.5	39.4	38.7	31.7	39.4	38.7	31.7	0	0	0	0	0	0	91	74.4	0
27	98.8	98.8	98.8	68.8	69.4	64.6	68.9	69.6	64.7	0	0	0	0	0	0	63.3	66.4	0
28	98.5	91.3	100	98.5	91.3	100	98.5	91.3	100	0	0	0	0	0	0	98.5	91.3	0
29	100	99.9	22.6	100	99.9	22.6	100	99.9	22.6	0	0	0	0	0	0	99.8	99.7	0
30	100	100	0	100	100	0	100	100	0	0	0	0	0	0	0	100	100	0
Mean	94.2	91.3	75.4	85.2	81.3	65.7	85.2	81.3	65.8	54.1	52.4	40.9	0	0	0	16	15.3	0
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	12.6	13	38.1	22.2	21.7	38.9	22.1	21.7	38.9	42.9	41.6	44.6	0	0	0	34.2	32.6	0
Min	39.7	39.3	0	25.6	21.2	0	25.8	21.2	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	100	100	0

ED_004549_00015840-00305

Table E12. Data completeness at Site OK4B for July, 2008

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	100	99.9	0	71	65.5	0	71.2	65.6	0	0	0	0	0	0	0	82.6	99.9	0
2	89.1	78.3	53.3	84.9	78.3	51.8	84.9	78.3	51.8	0	0	0	0	0	0	70.1	78.3	0
3	70.1	51.8	70.1	66.9	51.8	62.7	67	51.8	62.8	0	0	0	0	0	0	69.9	51.8	0
4	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
5	100	99.2	100	100	99.2	100	100	99.2	100	0	0	0	0	0	0	100	99.2	0
6	100	97.5	100	100	97.5	100	100	97.5	100	0	0	0	0	0	0	100	97.5	0
7	100	100	100	100	100	70.8	100	100	70.8	0	0	0	0	0	0	100	100	0
8	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
9	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
10	100	99.3	100	100	99.3	100	100	99.3	100	0	0	0	0	0	0	100	99.3	0
11	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
12	99.9	89.8	94.9	99.9	89.8	94.9	99.9	89.8	94.9	0	0	0	0	0	0	96.1	89.4	0
13	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
14	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
15	100	99.9	100	100	99.9	100	100	99.9	100	0	0	0	0	0	0	100	99.9	0
16	99.2	99.2	98.6	71.7	71.7	98.6	71.8	71.8	98.6	54	52.9	0	0	0	0	37.6	37.6	0
17	100	99.9	100	100	99.9	100	100	99.9	100	100	99.9	0	0	0	0	0	0	0
18	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
19	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
20	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
21	99.9	100	100	99.9	100	100	99.9	100	100	99.9	100	0	0	0	0	0	0	0
22	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
23	100	99.9	100	100	99.9	100	100	99.9	100	100	99.9	0	0	0	0	0	0	0
24	99.4	99.6	99.6	99.4	99.6	99.6	99.4	99.6	99.6	37.9	38.3	0	36.5	36.7	0	0	0	0
25	100	99.9	100	100	99.9	100	100	99.9	100	0	0	0	100	99.9	0	0	0	0
26	100	100	100	100	100	100	100	100	100	0	0	0	100	100	0	0	0	0
27	100	100	100	100	100	100	100	100	100	0	0	0	100	100	0	0	0	0
28	100	97.1	100	100	97.1	100	100	97.1	100	0	0	0	100	97.1	0	0	0	0
29	91.9	88.8	97.6	64.9	61.4	60.6	65.2	70.7	60.6	0	0	0	91.9	88.8	0	0	0	0
30	100	100	99.7	100	100	99.7	100	100	99.7	0	0	0	100	100	0	0	0	0
31	100	100	100	100	100	100	100	100	100	0	0	0	100	100	0	0	0	0
Mean	98.4	96.8	94	95.4	93.9	91.6	95.5	94.2	91.6	25.5	25.5	0	23.5	23.3	0	47	46.9	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	5.7	9.4	19.7	10.7	13	21.2	10.6	12.3	21.2	41.8	41.8	0	41.2	40.9	0	47.1	47.3	0
Min	70.1	51.8	0	64.9	51.8	0	65.2	51.8	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	0	100	100	0	100	100	0

ED_004549_00015840-00306

Table E12. Data completeness at Site OK4B for August, 2008

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	100	100	100	100	100	100	100	100	100	0	0	0	92.8	92.8	0	0	0	0
2	100	100	100	100	100	100	100	100	100	0	0	0	100	100	0	0	0	0
3	100	99.7	100	100	99.7	100	100	99.7	100	0	0	0	100	99.7	0	0	0	0
4	100	100	100	100	100	100	100	100	100	0	0	0	100	100	0	0	0	0
5	100	99.9	100	100	99.9	100	100	99.9	100	0	0	0	100	99.9	0	0	0	0
6	100	100	100	100	100	100	100	100	100	0	0	0	100	100	0	0	0	0
7	98	98.2	98.2	78.1	78.3	74.1	78.2	78.4	74.2	33.2	33.4	0	54.4	58.1	0	0	0	0
8	97.7	97.2	99.2	70.9	97.2	64.1	71	97.2	64.2	97.7	97.2	0	0	0	0	0	0	0
9	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
10	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
11	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
12	99.6	99	100	99.6	99	100	99.6	99	100	99.6	99	0	0	0	0	0	0	0
13	100	99.9	100	100	99.9	100	100	99.9	100	100	99.9	0	0	0	0	0	0	0
14	99.4	99.5	99.6	99.4	99.5	99.6	99.4	99.5	99.6	78.8	78.9	0	0	0	0	0	0	0
15	84.2	78.3	63.7	84.2	78.3	63.7	84.2	78.3	63.7	84.2	78.3	0	0	0	0	0	0	0
16	100	100	25.4	100	100	25.4	100	100	25.4	5.8	100	0	0	0	0	0	0	0
17	100	94	38.3	100	94	38.3	100	94	38.3	0	94	0	0	0	0	0	0	0
18	72.8	69.6	0	72.8	69.6	0	72.8	69.6	0	0	69.6	0	0	0	0	0	0	0
19	96.5	96.4	43.3	96.5	96.4	43.3	96.5	96.4	43.3	43.7	95	35.7	0	0	0	0	0	0
20	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
21	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
22	99.8	99.8	99.8	99.8	99.8	72.2	99.8	99.8	72.2	99.8	99.8	62.1	0	0	0	0	0	0
23	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
24	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
25	99.8	100	100	99.8	100	100	99.8	100	100	99.8	100	100	0	0	0	0	0	0
26	100	99.9	100	100	99.9	100	100	99.9	100	100	99.9	100	0	0	0	0	0	0
27	100	99.7	98.5	100	99.7	76.5	100	99.7	76.7	100	99.7	98.5	0	0	0	0	0	0
28	100	96.7	100	100	96.7	100	100	96.7	100	100	96.7	100	0	0	0	0	0	0
29	100	99	100	100	99	100	100	99	100	100	99	100	0	0	0	0	0	0
30	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
31	100	98.4	100	100	98.4	100	100	98.4	100	100	98.4	100	0	0	0	0	0	0
Mean	98.3	97.6	89.2	96.8	96.9	85.7	96.8	96.9	85.7	65.9	75.4	38.6	20.9	21	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	5.5	6.5	25.6	8.1	7.3	25.9	8	7.3	25.9	44.4	39.2	47.1	39.4	39.5	0	0	0	0
Min	72.8	69.6	0	70.9	69.6	0	71	69.6	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0

ED_004549_00015840-00307

Table E12. Data completeness at Site OK4B for September, 2008

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	100	97	100	100	97	100	100	97	100	100	97	100	0	0	0	0	0	0
2	98.5	92.8	99.9	98.5	92.8	99.9	98.5	92.8	99.9	98.5	92.8	99.9	0	0	0	0	0	0
3	98	73.7	99.5	98	73.7	99.5	98	73.7	99.5	98	73.7	99.5	0	0	0	0	0	0
4	98.5	98.6	97.7	51.7	51.7	43.1	51.9	51.8	43.3	87	87.2	85.8	0	0	0	0	0	0
5	90.5	93.1	100	90.5	93.1	100	90.5	93.1	100	90.5	93.1	100	0	0	0	0	0	0
6	97.4	99.4	100	97.4	99.4	100	97.4	99.4	100	97.4	99.4	100	0	0	0	0	0	0
7	99.8	100	100	99.8	100	100	99.8	100	100	99.8	100	100	0	0	0	0	0	0
8	98.2	85.6	98.9	98.2	85.6	98.9	98.2	85.6	98.9	98.2	85.6	98.9	0	0	0	0	0	0
9	100	95.1	100	100	95.1	100	100	95.1	100	100	95.1	100	0	0	0	0	0	0
10	98.3	95.2	97.9	98.3	95.2	97.9	98.3	95.2	97.9	98.3	95.2	97.9	0	0	0	0	0	0
11	100	87.6	100	100	87.6	100	100	87.6	100	100	87.6	100	0	0	0	0	0	0
12	95.3	91.4	99.6	95.3	91.4	69.2	95.3	91.4	69.2	39.7	32	26.9	0	0	0	43.8	43.8	33.8
13	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	100
14	100	96	99.2	100	96	99.2	100	96	99.2	0	0	0	0	0	0	100	96	99.2
15	100	92.2	100	100	92.2	100	100	92.2	100	0	0	0	0	0	0	100	92.2	100
16	100	96.2	100	100	96.2	72.6	100	96.2	100	0	0	0	0	0	0	97.8	94	98.5
17	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	100
18	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	100
19	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	100
20	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	100
21	100	96.3	100	100	96.3	100	100	96.3	100	0	0	0	0	0	0	100	96.3	100
22	100	97.2	100	100	97.2	100	100	97.2	100	0	0	0	0	0	0	100	97.2	100
23	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	100
24	96.5	96.5	96.5	96.5	74.6	96.5	96.5	74.7	96.5	46.5	46.5	46.5	0	0	0	39.1	39.5	38.7
25	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
26	98.1	99.9	99.9	98.1	99.9	99.9	98.1	99.9	99.9	98.1	99.9	99.9	0	0	0	0	0	0
27	87.7	100	100	87.7	100	100	87.7	100	100	87.7	100	100	0	0	0	0	0	0
28	81.4	100	100	81.4	100	100	81.4	100	100	81.4	100	100	0	0	0	0	0	0
29	83.2	99.4	100	83.2	99.4	100	83.2	99.4	100	83.2	99.4	100	0	0	0	0	0	0
30	88.4	93.2	100	88.4	93.2	100	88.4	93.2	100	88.4	93.2	100	0	0	0	0	0	0
Mean	97	95.9	99.6	95.4	93.6	95.9	95.4	93.6	96.8	56.4	55.9	58.5	0	0	0	39.4	38.6	39
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	5.1	5.6	0.8	9.6	10.3	12.2	9.6	10.3	11.4	45	45	47.2	0	0	0	47.1	46.2	47.1
Min	81.4	73.7	96.5	51.7	51.7	43.1	51.9	51.8	43.3	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	100	100	100

ED_004549_00015840-00308

Table E12. Data completeness at Site OK4B for October, 2008

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	86.3	79.3	100	86.3	79.3	100	86.3	79.3	100	86.3	79.3	100	0	0	0	0	0	0
2	99.2	91.3	99.2	99.2	91.3	99.2	99.2	91.3	99.2	99.2	87.4	99.2	0	0	0	0	0	0
3	98.3	90.8	100	98.3	90.8	100	98.3	90.8	100	98.3	90.8	100	0	0	0	0	0	0
4	99.7	88.5	100	99.7	88.5	100	99.7	88.5	100	99.7	88.5	100	0	0	0	0	0	0
5	95.3	69.8	100	95.3	69.8	100	95.3	69.8	100	95.3	69.8	100	0	0	0	0	0	0
6	96.4	97.4	96.7	96.4	78.2	71.9	96.4	78.3	71.9	96.4	97.4	64.2	0	0	0	0	0	0
7	98.5	90.1	99	98.5	90.1	99	98.5	90.1	99	98.5	90.1	99	0	0	0	0	0	0
8	100	93.2	99.9	100	93.2	99.9	100	93.2	99.9	100	93.2	99.9	0	0	0	0	0	0
9	99.8	68.8	99.9	76.6	57.2	64.2	99.8	68.8	78.1	95.8	66.5	95.5	0	0	0	0	0	0
10	99.5	84.8	100	99.5	84.8	100	99.5	84.8	100	99.5	78.8	100	0	0	0	0	0	0
11	96	85.8	99.9	96	85.8	99.9	96	85.8	99.9	96	0	99.9	0	0	0	0	0	0
12	66.4	39.6	99.9	66.4	39.6	99.9	66.4	39.6	99.9	66.4	0	99.9	0	0	0	0	0	0
13	94	57.7	92.4	94	57.7	92.4	94	57.7	92.4	94	0	92.4	0	0	0	0	0	0
14	97.8	71.9	100	91.9	69.2	96	91.9	69.2	96	87.6	39.7	82.4	0	0	0	0	0	0
15	99.2	88.4	100	99.2	88.4	100	99.2	88.4	100	99.2	76	100	0	0	0	0	0	0
16	99	97.3	100	99	97.3	100	99	97.3	100	99	0	100	0	0	0	0	0	0
17	98.6	98.9	100	98.6	98.9	100	98.6	98.9	100	98.6	0	100	0	0	0	0	0	0
18	99.1	98.5	100	99.1	98.5	100	99.1	98.5	100	99.1	0	100	0	0	0	0	0	0
19	97.5	96.4	100	97.5	96.4	100	97.5	96.4	100	97.5	0	100	0	0	0	0	0	0
20	99.5	96.6	99.7	69.2	67.8	64	62.4	59.7	64.1	99.5	0	95.6	0	0	0	0	0	0
21	97.4	94.3	99.5	97.4	94.3	99.5	97.4	94.3	99.5	97.4	0	99.5	0	0	0	0	0	0
22	92.6	100	95.8	92.6	100	95.8	92.6	100	95.8	92.6	0	95.8	0	0	0	0	0	0
23	72.4	100	94.7	72.4	100	94.7	72.4	100	94.7	72.4	0	94.7	0	0	0	0	0	0
24	99.4	100	100	99.4	100	100	99.4	100	100	99.4	0	100	0	0	0	0	0	0
25	94.2	92.9	99.9	94.2	92.9	99.9	94.2	92.9	99.9	94.2	0	99.9	0	0	0	0	0	0
26	95.3	96.5	100	95.3	96.5	100	95.3	96.5	100	95.3	0	100	0	0	0	0	0	0
27	97.6	99.3	98.2	97.6	99.3	66.3	97.6	99.3	66.3	93.4	0	53.3	0	0	0	0	0	0
28	99	100	100	99	100	100	99	100	100	99	0	100	0	0	0	0	0	0
29	98.9	98.7	100	98.9	98.7	100	98.9	98.7	100	98.9	0	100	0	0	0	0	0	0
30	98.3	96.5	100	98.3	96.5	100	98.3	96.5	100	98.3	0	100	0	0	0	0	0	0
31	99.7	99.3	100	99.7	99.3	100	99.7	99.3	100	97	0	97.4	0	0	0	0	0	0
Mean	95.6	89.1	99.2	93.7	87.1	94.9	94.2	87.2	95.4	95	30.9	95.8	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	7.5	13.9	1.8	9.3	15.1	11.1	9.5	14.9	10.1	7.5	40	10.4	0	0	0	0	0	0
Min	66.4	39.6	92.4	66.4	39.6	64	62.4	39.6	64.1	66.4	0	53.3	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	97.4	100	0	0	0	0	0	0

ED_004549_00015840-00309

Table E12. Data completeness at Site OK4B for November, 2008

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	99.9	97.1	100	99.9	97.1	100	99.9	97.1	100	97.4	0	97.5	0	0	0	0	0	0
2	100	99.2	100	100	99.2	100	100	99.2	100	98.3	0	98.3	0	0	0	0	0	0
3	97.5	87.6	100	97.5	87.6	100	97.5	87.6	100	97.5	0	100	0	0	0	0	0	0
4	98.7	82.7	100	98.7	82.7	100	98.7	82.7	100	76.2	29.3	77.4	0	0	0	0	0	0
5	75.8	63.1	98.5	75.8	63.1	98.5	75.8	63.1	98.5	75.8	63.1	98.5	0	0	0	0	0	0
6	96.5	93.3	100	96.5	93.3	100	96.5	93.3	100	77.8	78.1	81.3	0	0	0	0	0	0
7	94.4	61.7	100	94.4	61.7	100	94.4	61.7	100	47.1	31.7	47.8	0	0	0	0	0	0
8	97.7	63	99.9	97.7	63	99.9	97.7	63	99.9	97.7	63	99.9	0	0	0	0	0	0
9	97.4	80.6	100	97.4	80.6	100	97.4	80.6	100	97.4	80.6	100	0	0	0	0	0	0
10	84.6	81.7	99.9	84.6	81.7	99.9	84.6	81.7	99.9	84.6	81.7	99.9	0	0	0	0	0	0
11	93.3	99.4	99.6	93.3	99.4	99.6	93.3	99.4	99.6	93.3	99.4	99.6	0	0	0	0	0	0
12	98.8	97.7	99.8	98.8	97.7	99.8	98.8	97.7	99.8	98.8	97.7	99.8	0	0	0	0	0	0
13	97.6	85.8	99.3	77.5	65.6	77.4	77.6	65.8	77.6	92.9	81.4	95.4	0	0	0	0	0	0
14	98.3	98.2	97.4	98.3	98.2	97.4	98.3	98.2	97.4	98.3	98.2	97.4	0	0	0	0	0	0
15	93	95.3	100	93	95.3	100	93	95.3	100	93	95.3	100	0	0	0	0	0	0
16	96.6	90.5	100	96.6	90.5	100	96.6	90.5	100	96.6	90.5	100	0	0	0	0	0	0
17	97.6	90.8	87.1	82.5	90.8	78.1	82.6	90.8	78.1	92.7	85.8	57.6	0	0	0	0	0	0
18	90.3	84.9	100	90.3	84.9	100	90.3	84.9	100	51.9	57.6	100	0	0	0	0	0	0
19	93.8	88.5	100	93.8	88.5	100	93.8	88.5	100	93.8	0	100	0	0	0	0	0	0
20	70.8	58.7	99	70.8	58.7	99	70.8	58.7	99	70.8	0	99	0	0	0	0	0	0
21	97.2	54	92.5	97.2	54	91.1	97.2	54	92.5	97.2	0	92.5	0	0	0	0	0	0
22	99.1	98.1	84.5	99.1	98.1	71.1	99.1	98.1	84.5	99.1	0	84.5	0	0	0	0	0	0
23	97.4	89.8	84.5	97.4	89.8	84.5	97.4	89.8	84.5	97.4	0	84.5	0	0	0	0	0	0
24	95.7	84.9	99.3	95.7	84.9	99.3	95.7	84.9	99.3	95.7	0	99.3	0	0	0	0	0	0
25	92.4	86.8	99.8	92.4	86.8	99.8	92.4	86.8	99.8	92.4	0	99.8	0	0	0	0	0	0
26	99.4	99.3	99.6	99.4	99.3	99.6	99.4	99.3	99.6	99.4	0	99.6	0	0	0	0	0	0
27	94.4	85.8	98.1	94.4	85.8	98.1	94.4	85.8	98.1	94.4	0	98.1	0	0	0	0	0	0
28	99.8	90.4	100	99.8	90.4	100	99.8	90.4	100	99.8	0	100	0	0	0	0	0	0
29	92.6	98.2	98.5	92.6	98.2	98.5	92.6	98.2	98.5	92.6	0	98.5	0	0	0	0	0	0
30	89.7	99	97.2	89.7	99	97.2	89.7	99	97.2	89.7	0	97.2	0	0	0	0	0	0
Mean	94.3	86.2	97.8	93.2	85.5	96.3	93.2	85.5	96.8	89.6	37.8	93.4	0	0	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	6.6	13	4.4	7.5	13.6	7.7	7.5	13.5	6.4	13.2	40.8	12.5	0	0	0	0	0	0
Min	70.8	54	84.5	70.8	54	71.1	70.8	54	77.6	47.1	0	47.8	0	0	0	0	0	0
Max	100	99.4	100	100	99.4	100	100	99.4	100	99.8	99.4	100	0	0	0	0	0	0

ED_004549_00015840-00310

Table E12. Data completeness at Site OK4B for December, 2008

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	92.3	99.4	100	92.3	99.4	100	92.3	99.4	100	92.3	0	100	0	0	0	0	0	0
2	95.1	88.8	100	95.1	88.8	100	95.1	88.8	100	95.1	0	100	0	0	0	0	0	0
3	93.5	87.2	97.8	93.5	87.2	97.8	93.5	87.2	97.8	39.1	0	41.2	0	0	0	47.6	0	48.5
4	85.8	67.2	99.7	85.8	67.2	99.7	85.8	67.2	99.7	0	0	0	0	0	0	85.8	0	99.7
5	82.3	74.5	99	82.3	74.5	99	82.3	74.5	99	0	0	0	0	0	0	82.3	0	99
6	98.8	97.3	100	98.8	97.3	100	98.8	97.3	100	0	0	0	0	0	0	98.8	0	100
7	91.8	91	99.1	91.8	91	99.1	91.8	91	99.1	0	0	0	0	0	0	91.8	0	99.1
8	93.8	85.6	99.7	93.8	85.6	99.7	93.8	85.6	99.7	0	0	0	0	0	0	93.8	0	99.7
9	94.1	99	94.3	94.1	99	94.3	94.1	99	94.3	0	0	0	0	0	0	94.1	0	94.3
10	96.3	99.4	99.2	96.3	99.4	99.2	96.3	99.4	99.2	0	0	0	0	0	0	96.3	0	99.2
11	95.4	99.4	99.4	95.4	99.4	99.4	95.4	99.4	99.4	0	0	0	0	0	0	95.4	0	99.4
12	98.1	96.5	93.6	72.6	74.7	74.7	72.7	74.7	74.7	44.6	38.5	0	0	0	0	43.9	0	29.9
13	68.8	69.5	100	68.8	69.5	100	68.8	69.5	100	68.8	69.5	0	0	0	0	0	0	0
14	87.3	99.9	97.7	87.3	99.9	97.7	87.3	99.9	97.7	87.3	99.9	0	0	0	0	0	0	0
15	86	100	100	86	100	100	86	100	100	82.5	96	0	0	0	0	0	0	0
16	85.2	80.9	99.9	85.2	80.9	74.9	85.2	80.9	75.1	85.2	80.9	46.6	0	0	0	0	0	0
17	99.2	91.3	99.9	99.2	91.3	99.9	99.2	91.3	99.9	99.2	91.3	99.9	0	0	0	0	0	0
18	81	65.6	100	81	65.6	100	81	65.6	100	81	65.6	100	0	0	0	0	0	0
19	94.9	83.4	100	94.9	83.4	100	94.9	83.4	100	94.9	83.4	100	0	0	0	0	0	0
20	93.1	88.9	99.7	93.1	88.9	99.7	93.1	88.9	99.7	93.1	88.9	99.7	0	0	0	0	0	0
21	98.9	100	100	98.9	100	100	98.9	100	100	98.9	100	100	0	0	0	0	0	0
22	75.8	66	99.6	75.8	66	75.4	75.8	66	75.6	72.8	62.2	97	0	0	0	0	0	0
23	60.9	72.7	99.9	60.9	72.7	99.9	60.9	72.7	99.9	60.9	72.7	99.9	0	0	0	0	0	0
24	96.5	95.8	100	96.5	95.8	100	96.5	95.8	100	96.5	95.8	100	0	0	0	0	0	0
25	82.5	88.5	99.9	82.5	88.5	99.9	82.5	88.5	99.9	82.5	88.5	99.9	0	0	0	0	0	0
26	67.8	69.2	100	67.8	69.2	100	67.8	69.2	100	67.8	69.2	100	0	0	0	0	0	0
27	95.5	100	99.9	95.5	100	99.9	95.5	100	99.9	95.5	100	99.9	0	0	0	0	0	0
28	98.8	100	100	98.8	100	100	98.8	100	100	98.8	100	100	0	0	0	0	0	0
29	95.8	98.5	100	95.8	98.5	100	95.8	98.5	100	95.8	98.5	100	0	0	0	0	0	0
30	93.3	84.5	100	93.3	84.5	100	93.3	84.5	100	93.3	84.5	100	0	0	0	0	0	0
31	94.6	85.8	100	94.6	85.8	100	94.6	85.8	100	94.6	85.8	100	0	0	0	0	0	0
Mean	89.5	87.9	99.3	88.6	87.2	97.1	88.6	87.2	97.1	61.9	53.9	57.6	0	0	0	26.8	0	28
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	9.8	11.6	1.5	10.1	11.8	7.3	10	11.8	7.3	39.3	42	47.7	0	0	0	40.3	0	42.9
Min	60.9	65.6	93.6	60.9	65.6	74.7	60.9	65.6	74.7	0	0	0	0	0	0	0	0	0
Max	99.2	100	100	99.2	100	100	99.2	100	100	99.2	100	100	0	0	0	98.8	0	100

ED_004549_00015840-00311

Table E12. Data completeness at Site OK4B for January, 2009

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	91.5	86.6	100	91.5	86.6	100	91.5	86.6	100	91.5	86.6	100	0	0	0	0	0	0
2	99.2	96	99.6	99.2	96	99.6	99.2	96	99.6	99.2	92.2	96.1	0	0	0	0	0	0
3	90.1	86.9	99.6	90.1	86.9	99.6	90.1	86.9	99.6	90.1	86.9	99.6	0	0	0	0	0	0
4	91.7	92	100	91.7	92	100	91.7	92	100	91.7	92	100	0	0	0	0	0	0
5	82.2	76.9	91	82.2	76.9	76.1	82.2	76.9	76.1	82.2	76.9	62.2	0	0	0	0	0	0
6	98.3	100	98.5	98.3	100	98.5	98.3	100	98.5	98.3	100	98.5	0	0	0	0	0	0
7	97.9	97	99.9	97.9	97	99.9	97.9	97	99.9	97.9	97	99.9	0	0	0	0	0	0
8	79.5	92	100	79.5	92	100	79.5	92	100	79.5	92	100	0	0	0	0	0	0
9	62.3	73.2	98.5	62.3	73.2	98.5	62.3	73.2	98.5	62.3	73.2	98.5	0	0	0	0	0	0
10	98.1	97.8	99.5	98.1	97.8	99.5	98.1	97.8	99.5	98.1	97.8	99.5	0	0	0	0	0	0
11	98.1	98.4	100	98.1	98.4	100	98.1	98.4	100	98.1	98.4	100	0	0	0	0	0	0
12	96.3	99.2	98.6	96.3	99.2	98.6	96.3	99.2	98.6	96.3	99.2	98.6	0	0	0	0	0	0
13	52.5	77	99	52.5	77	99	52.5	77	99	52.5	72.3	99	0	0	0	0	0	0
14	59	70.8	100	59	70.8	100	59	70.8	100	59	70.8	100	0	0	0	0	0	0
15	92.3	79.7	99.4	92.3	63.1	85.6	92.3	79.7	85.6	88.5	76	95.8	0	0	0	0	0	0
16	94.7	77.8	100	94.7	77.8	100	94.7	77.8	100	94.7	77.8	100	0	0	0	0	0	0
17	95.1	90.6	99.9	95.1	90.6	99.9	95.1	90.6	99.9	95.1	90.6	99.9	0	0	0	0	0	0
18	86.7	94	99.9	86.7	94	99.9	86.7	94	99.9	86.7	94	99.9	0	0	0	0	0	0
19	97.6	94.2	99.8	97.6	94.2	99.8	97.6	94.2	99.8	97.6	94.2	99.8	0	0	0	0	0	0
20	92.2	94.1	100	92.2	94.1	100	92.2	94.1	100	92.2	94.1	100	0	0	0	0	0	0
21	94.7	99	100	94.7	99	100	94.7	99	100	94.7	99	100	0	0	0	0	0	0
22	98.8	97.2	99.9	98.8	97.2	99.9	98.8	97.2	99.9	95.2	93.5	96.3	0	0	0	0	0	0
23	70.9	44.7	99.5	70.9	44.7	99.5	70.9	44.7	99.5	70.9	44.7	99.5	0	0	0	0	0	0
24	91.1	77.7	100	91.1	77.7	100	91.1	77.7	100	91.1	77.7	100	0	0	0	0	0	0
25	46.5	35.7	100	46.5	35.7	100	46.5	35.7	100	46.5	35.7	100	0	0	0	0	0	0
26	72.6	14.9	76	72.6	14.9	73.8	72.6	14.9	73.8	72.6	14.9	60.8	0	0	0	0	0	0
27	97.4	95	100	97.4	95	100	97.4	95	100	97.4	95	100	0	0	0	0	0	0
28	96.7	79.5	100	96.7	79.5	100	96.7	79.5	100	96.7	79.5	100	0	0	0	0	0	0
29	94.9	95	100	94.9	95	100	94.9	95	100	94.9	95	100	0	0	0	0	0	0
30	85.9	89.4	100	85.9	89.4	100	85.9	89.4	100	85.9	89.4	100	0	0	0	0	0	0
31	75.3	61.2	99.8	75.3	61.2	99.8	75.3	61.2	99.8	75.3	61.2	99.8	0	0	0	0	0	0
Mean	86.5	82.7	98.7	86.5	82.2	97.7	86.5	82.7	97.7	86.2	82.2	96.9	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	14.4	19.7	4.4	14.4	20	6.5	14.4	19.7	6.5	14.3	19.6	9.4	0	0	0	0	0	0
Min	46.5	14.9	76	46.5	14.9	73.8	46.5	14.9	73.8	46.5	14.9	60.8	0	0	0	0	0	0
Max	99.2	100	100	99.2	100	100	99.2	100	100	99.2	100	100	0	0	0	0	0	0

ED_004549_00015840-00312

Table E12. Data completeness at Site OK4B for February, 2009

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	94.2	81	99.2	94.2	81	99.2	94.2	81	99.2	94.2	81	99.2	0	0	0	0	0	0
2	98.1	92.2	100	98.1	92.2	100	98.1	92.2	100	98.1	92.2	100	0	0	0	0	0	0
3	96.5	96.5	99.9	96.5	96.5	99.9	96.5	96.5	99.9	96.5	96.5	99.9	0	0	0	0	0	0
4	84.4	85.9	100	84.4	85.9	100	84.4	85.9	100	84.4	85.9	100	0	0	0	0	0	0
5	92.1	90.1	99.9	92.1	90.1	75.4	92.1	90.1	75.6	36.3	33.7	42.4	0	0	0	49.7	49.6	52.3
6	87.5	82.2	100	87.5	82.2	100	87.5	82.2	100	0	0	0	0	0	0	87.5	82.2	100
7	85.8	88.4	100	85.8	88.4	100	85.8	88.4	100	0	0	0	0	0	0	85.8	88.4	100
8	83.3	85.8	100	83.3	85.8	100	83.3	85.8	100	0	0	0	0	0	0	83.3	85.8	100
9	54	39.4	100	54	39.4	100	54	39.4	100	0	0	0	0	0	0	54	39.4	100
10	76.7	76.1	99.1	76.7	76.1	99.1	76.7	76.1	99.1	0	0	0	0	0	0	76.7	76.1	99.1
11	92.5	99.4	99.5	73	79	96.3	73.1	79.2	96.3	0	0	0	0	0	0	80.9	84.9	83.8
12	88.2	83	100	88.2	83	100	88.2	83	100	0	0	0	0	0	0	88.2	83	100
13	85.6	79.8	97.5	85.6	79.8	97.5	85.6	79.8	97.5	0	0	0	0	0	0	85.6	79.8	97.5
14	94.5	86.9	100	94.5	86.9	100	94.5	86.9	100	0	0	0	0	0	0	94.5	86.9	100
15	98.5	96.3	100	98.5	96.3	100	98.5	96.3	100	0	0	0	0	0	0	98.5	96.3	100
16	63.3	63.5	100	63.3	63.5	100	63.3	63.5	100	0	0	0	0	0	0	63.3	63.5	100
17	49.6	49.2	98.3	49.6	49.2	98.3	49.6	49.2	98.3	0	0	0	0	0	0	49.6	49.2	98.3
18	91.5	89.4	98.6	51.2	54.3	80.1	51.3	54.4	80.1	48.2	38.8	32.5	0	0	0	34	42.2	29.9
19	96.9	97.2	99.9	96.9	97.2	99.9	96.9	97.2	99.9	96.9	97.2	99.9	0	0	0	0	0	0
20	89.5	82.8	97.6	89.5	82.8	97.6	89.5	82.8	97.6	87.8	82.4	92.3	0	0	0	0	0	0
21	61.8	63.7	99.2	61.8	63.7	99.2	61.8	63.7	99.2	60.3	62.6	97.4	0	0	0	0	0	0
22	65.3	68.1	100	65.3	68.1	100	65.3	68.1	100	65.3	68.1	100	0	0	0	0	0	0
23	99.6	100	100	99.6	100	100	99.6	100	100	99.6	100	100	0	0	0	0	0	0
24	99.2	97.8	99.3	99.2	97.8	99.3	99.2	97.8	99.3	99.2	97.8	99.3	0	0	0	0	0	0
25	35.3	9.9	37.4	32.6	7.4	34.7	32.6	7.4	34.7	35.3	8.6	37.4	0	0	0	0	0	0
26	32.8	27.4	35.8	30.3	25.6	24.9	30.4	25.7	25.1	32.8	27.4	35.8	0	0	0	0	0	0
27	89.9	78.5	100	89.9	78.5	100	89.9	78.5	100	89.9	78.5	100	0	0	0	0	0	0
28	96	99.6	99.4	96	99.6	99.4	96	99.6	99.4	96	99.6	99.4	0	0	0	0	0	0
Mean	81.5	78.2	95	79.2	76.1	92.9	79.2	76.1	92.9	43.6	41.1	47.7	0	0	0	36.9	36	45
n	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
SD	19	22.1	16.2	20	22.5	18.4	20	22.5	18.4	42.1	41.6	46.1	0	0	0	39.3	38.3	47.4
Min	32.8	9.9	35.8	30.3	7.4	24.9	30.4	7.4	25.1	0	0	0	0	0	0	0	0	0
Max	99.6	100	100	99.6	100	100	99.6	100	100	99.6	100	100	0	0	0	98.5	96.3	100

ED_004549_00015840-00313

Table E12. Data completeness at Site OK4B for March, 2009

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	97.8	98.5	100	97.8	98.5	100	97.8	98.5	100	97.4	98.1	99.6	0	0	0	0	0	0
2	97.6	98.5	99.7	97.6	98.5	99.7	97.6	98.5	99.7	97.6	98.5	66.5	0	0	0	0	0	0
3	98.8	100	100	98.8	100	100	98.8	100	100	98.8	100	100	0	0	0	0	0	0
4	93.3	92.7	97.6	93.3	92.7	97.6	93.3	92.7	97.6	89.1	88.8	93.5	0	0	0	0	0	0
5	95.3	83.1	100	95.3	83.1	100	95.3	83.1	100	95.3	83.1	100	0	0	0	0	0	0
6	98.5	93.6	100	98.5	93.6	100	98.5	93.6	100	98.5	93.6	100	0	0	0	0	0	0
7	80.1	61.9	100	80.1	61.9	100	80.1	61.9	100	80.1	61.9	100	0	0	0	0	0	0
8	96.9	98.1	100	96.9	98.1	100	96.9	98.1	100	96.9	98.1	100	0	0	0	0	0	0
9	63.7	41.7	99.2	63.7	41.7	99.2	63.7	41.7	99.2	62.4	41.7	94.2	0	0	0	0	0	0
10	90.3	81.6	99.2	90.3	81.6	99.2	90.3	81.6	99.2	90.3	81.6	99.2	0	0	0	0	0	0
11	86.4	85.2	99.4	86.4	85.2	68.3	86.4	85.2	68.5	86.4	83.4	61.8	0	0	0	0	0	0
12	85.8	93	100	85.8	93	100	85.8	93	100	85.8	93	100	0	0	0	0	0	0
13	96.1	86.3	100	96.1	86.3	100	96.1	86.3	100	96.1	86.3	100	0	0	0	0	0	0
14	99.6	100	100	99.6	100	100	99.6	100	100	99.6	100	100	0	0	0	0	0	0
15	100	99.4	100	100	99.4	100	100	99.4	100	100	99.4	100	0	0	0	0	0	0
16	99.9	98.7	100	99.9	98.7	100	99.9	98.7	100	99.9	98.7	100	0	0	0	0	0	0
17	99.2	99.9	100	99.2	99.9	100	99.2	99.9	100	99.2	99.9	100	0	0	0	0	0	0
18	93.8	70.5	99.2	93.8	70.5	99.2	93.8	70.5	99.2	89.8	67.1	99.2	0	0	0	0	0	0
19	99	97.8	100	99	97.8	100	99	97.8	100	99	97.8	100	0	0	0	0	0	0
20	98.3	98.5	100	98.3	98.5	100	98.3	98.5	100	98.3	98.5	100	0	0	0	0	0	0
21	100	95	100	100	95	100	100	95	100	100	95	100	0	0	0	0	0	0
22	89.7	56.5	100	89.7	56.5	100	89.7	56.5	100	89.7	56.5	100	0	0	0	0	0	0
23	64.5	34	99.9	64.5	34	99.9	64.5	34	99.9	64.5	34	99.9	0	0	0	0	0	0
24	87.8	97.6	99.8	87.8	97.6	99.8	87.8	97.6	99.8	87.8	97.6	99.8	0	0	0	0	0	0
25	93.2	90.6	99.5	93.2	90.6	99.5	93.2	90.6	99.5	93.2	90.6	99.5	0	0	0	0	0	0
26	67.4	69.8	99.4	50.2	69.8	99.4	50.3	69.8	99.4	67.4	69.8	96	0	0	0	0	0	0
27	79.3	0	84	79.3	0	84	79.3	0	84	79.3	0	84	0	0	0	0	0	0
28	98.3	58.8	100	98.3	58.8	100	98.3	58.8	100	98.3	58.8	100	0	0	0	0	0	0
29	97.9	79.8	100	97.9	79.8	100	97.9	79.8	100	97.9	79.8	100	0	0	0	0	0	0
30	97.5	99.9	94.7	97.5	99.9	94.7	97.5	99.9	94.7	97.5	99.9	94.7	0	0	0	0	0	0
31	77.2	97.1	99.2	77.2	97.1	99.2	77.2	97.1	99.2	77.2	97.1	99.2	0	0	0	0	0	0
Mean	91.1	82.5	99.1	90.5	82.5	98.1	90.5	82.5	98.1	90.7	82.2	96.4	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	10.6	23.3	2.9	12.1	23.3	6.2	12.1	23.3	6.1	10.7	23.3	9.1	0	0	0	0	0	0
Min	63.7	0	84	50.2	0	68.3	50.3	0	68.5	62.4	0	61.8	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0

ED_004549_00015840-00314

Table E12. Data completeness at Site OK4B for April, 2009

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	90.3	83.5	100	90.3	83.5	100	90.3	83.5	100	90.3	83.5	100	0	0	0	0	0	0
2	71.8	83.5	10.7	65.6	72.6	9	65.6	72.8	9	68.1	79.7	10.5	0	0	0	0	0	0
3	46.3	43.8	0	46.3	43.8	0	46.3	43.8	0	46.3	43.8	0	0	0	0	0	0	0
4	33.8	36.7	0	33.8	36.7	0	33.8	36.7	0	33.8	36.7	0	0	0	0	0	0	0
5	85.6	95.1	0	85.6	95.1	0	85.6	95.1	0	85.6	95.1	0	0	0	0	0	0	0
6	88.3	98.7	0	88.3	98.7	0	88.3	98.7	0	88.3	98.7	0	0	0	0	0	0	0
7	98.9	98.1	0	98.9	98.1	0	98.9	98.1	0	98.9	98.1	0	0	0	0	0	0	0
8	94.8	96.3	0	94.8	96.3	0	94.8	96.3	0	38.8	39.5	0	0	0	0	38.9	39.5	0
9	70.3	84.4	52.2	70.3	84.4	52.2	70.3	84.4	52.2	0	0	0	0	0	0	70.1	78.8	40.2
10	97.4	98.6	100	97.4	98.6	100	97.4	98.6	100	0	0	0	0	0	0	97.4	98.6	100
11	85.9	93.1	100	85.9	93.1	100	85.9	93.1	100	0	0	0	0	0	0	85.9	93.1	100
12	36.8	95.8	100	36.8	95.8	100	36.8	95.8	100	0	0	0	0	0	0	36.8	95.8	100
13	54.4	99.6	100	54.4	99.6	100	54.4	99.6	100	0	0	0	0	0	0	54.4	99.6	100
14	95.3	84.8	100	95.3	84.8	100	95.3	84.8	100	0	0	0	0	0	0	95.3	84.8	100
15	96.6	69.7	98.2	91.7	68.3	93.3	91.7	68.3	93.3	0	24.5	37.2	0	0	0	38.1	34.7	38.1
16	89	77.6	40.3	89	77.6	40.3	89	77.6	40.3	0	77.6	40.3	0	0	0	0	0	0
17	81.9	83.5	0	81.9	83.5	0	81.9	83.5	0	49.8	83.5	0	0	0	0	0	0	0
18	64.3	99.2	0	64.3	99.2	0	64.3	99.2	0	64.3	99.2	0	0	0	0	0	0	0
19	24.9	98.9	0	24.9	98.9	0	24.9	98.9	0	24.9	98.9	0	0	0	0	0	0	0
20	98.6	99.3	45.1	98.6	99.3	45.1	98.6	99.3	45.1	98.6	99.3	45.1	0	0	0	0	0	0
21	98.3	100	100	98.3	100	100	98.3	100	100	98.3	100	100	0	0	0	0	0	0
22	100	89	100	100	89	100	100	89	100	100	89	100	0	0	0	0	0	0
23	99.5	84.9	99.5	52.6	37.3	59.5	52.6	37.3	46.3	98.8	84.2	98.8	0	0	0	0	0	0
24	99.2	98.3	95.6	95.3	95.1	63.5	95.4	95.2	90.5	94.7	95.8	67.1	0	0	0	0	0	0
25	98.6	96.4	100	98.6	96.4	100	98.6	96.4	100	98.6	96.4	100	0	0	0	0	0	0
26	96.2	89.9	100	96.2	89.9	100	96.2	89.9	100	96.2	89.9	100	0	0	0	0	0	0
27	99.9	99.9	95.1	99.9	99.9	95.1	99.9	99.9	95.1	99.9	99.9	95.1	0	0	0	0	0	0
28	99.8	99.1	100	99.8	99.1	100	99.8	99.1	100	99.8	99.1	100	0	0	0	0	0	0
29	100	99.8	100	100	99.8	100	100	99.8	100	100	99.8	100	0	0	0	0	0	0
30	99.5	99.7	99.6	99.5	99.7	99.6	99.5	99.7	99.6	94.6	96.3	96.2	0	0	0	0	0	0
Mean	83.2	89.2	61.2	81.1	87.1	58.6	81.2	87.1	59	59	66.9	39.7	0	0	0	17.2	20.8	19.3
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	22.1	15.3	45.4	22.5	18.1	44.2	22.5	18.1	44.7	41.4	39.1	44.9	0	0	0	31.2	36.8	37.4
Min	24.9	36.7	0	24.9	36.7	0	24.9	36.7	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	97.4	99.6	100

ED_004549_00015840-00315

Table E12. Data completeness at Site OK4B for May, 2009

Day	Airflow, m^3/s			NH_3 Emission, kg/d			H2S Emission, g/d			PM10 Emission			PM2.5 Emission			TSP Emission		
	B1	B2	Far9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9	B1	B2	Far 9
1	59.3	99.6	99.6	59.3	99.6	99.6	59.3	99.6	99.6	59.3	99.6	92.6	0	0	0	0	0	0
2	99.9	100	100	27	27	44.9	99.9	100	100	99.9	100	100	0	0	0	0	0	0
3	97.8	98.5	98.5	0	0	11.3	97.8	98.5	98.5	97.8	98.5	98.5	0	0	0	0	0	0
4	99.9	95.8	100	0	0	6.5	99.9	95.8	100	99.9	95.8	100	0	0	0	0	0	0
5	100	100	100	0	0	0.1	100	100	100	99.7	99.7	99.7	0	0	0	0	0	0
6	87.8	91.7	99.9	48.2	42.9	37.1	87.8	91.7	99.9	87.4	88	99.2	0	0	0	0	0	0
7	100	100	100	100	99.5	100	100	99.5	100	99.7	99.7	99.7	0	0	0	0	0	0
8	99.9	71.3	99.7	99.9	71.3	99.7	99.9	71.3	99.7	99.9	71.3	99.7	0	0	0	0	0	0
9	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
10	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0
11	100	99.2	100	100	99.2	100	100	99.2	100	100	99.2	100	0	0	0	0	0	0
12	98.5	93.1	100	98.5	93.1	100	98.5	93.1	100	98.1	93.1	100	0	0	0	0	0	0
13	96.7	76.7	96.9	96.7	76.7	96.9	96.7	76.7	96.9	91.9	76.7	92.8	0	0	0	0	0	0
14	100	99.8	100	100	99.8	100	100	99.8	100	100	99.8	100	0	0	0	0	0	0
15	100	85	100	100	85	100	100	85	100	100	85	100	0	0	0	0	0	0
16	99.2	81.5	100	99.2	81.5	100	99.2	81.5	100	99.2	81.5	100	0	0	0	0	0	0
17	99.7	99.7	100	99.7	99.7	100	99.7	99.7	100	99.7	99.7	100	0	0	0	0	0	0
18	99.4	99.4	98.1	36.3	64.4	63.3	36.3	64.6	63.4	99.4	99.4	67	0	0	0	0	0	0
19	99.3	85.8	99.4	73.8	63.4	75.3	74.1	63.5	75.4	96	81.7	95.6	0	0	0	0	0	0
20	99.6	92.6	100	99.6	92.6	100	99.6	92.6	100	99.6	92.6	100	0	0	0	0	0	0
21	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	0	0	0	0	0	0
22	100	99.9	100	100	99.9	100	100	99.9	100	100	99.9	100	0	0	0	0	0	0
23	100	99.7	100	100	99.7	100	100	99.7	100	100	99.7	100	0	0	0	0	0	0
24	97.4	99.9	100	97.4	99.9	100	97.4	99.9	100	97.4	99.9	100	0	0	0	0	0	0
25	98	96.8	99.2	98	96.8	99.2	98	96.8	99.2	98	96.8	99.2	0	0	0	0	0	0
26	99.2	99	100	99.2	99	100	99.2	99	100	99.2	99	100	0	0	0	0	0	0
27	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
28	100	99.9	100	100	99.9	100	100	99.9	100	83.8	83.8	83.8	0	0	0	0	0	0
29	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
30	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
31	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
Mean	97.8	95.6	99.7	81.7	80.3	84.9	94.9	93.8	97.8	97	94.8	97.7	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	7.4	7.5	0.7	33.1	31.8	30.3	13.6	10.7	7.6	7.8	8	6.5	0	0	0	0	0	0
Min	59.3	71.3	96.9	0	0	0.1	36.3	63.5	63.4	59.3	71.3	67	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0

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APPENDIX F. BIOMATERIALS CHARACTERISTICS.

Table F1. Feed characteristics (mean ± SD).

Barn	Date	n	Percent (wet weight basis)	
			Nitrogen	Solids
Gestation	12/6/07	5	2.00 ± 0.04	89.1 ± 0.24
Gestation	12/18/07	5	2.03 ± 0.04	86.1 ± 0.13
Gestation	12/27/07	5	1.89 ± 0.04	87.3 ± 0.07
Gestation	1/7/08	5	2.28 ± 0.11	87.4 ± 0.18
Gestation	1/15/08	5	2.27 ± 0.04	87.7 ± 0.09
Gestation	1/24/08	5	2.23 ± 0.06	88.3 ± 0.09
Farrowing	12/6/07	5	3.08 ± 0.09	87.8 ± 0.19
Farrowing	12/18/07	5	3.04 ± 0.03	86.5 ± 0.13
Farrowing	12/27/07	5	3.05 ± 0.07	86.4 ± 0.07
Farrowing	1/7/08	5	3.21 ± 0.09	86.5 ± 0.08
Farrowing	1/15/08	5	3.34 ± 0.13	87.3 ± 0.08
Farrowing	1/24/08	5	3.06 ± 0.08	87.5 ± 0.05

Table F2. Loadout manure characteristics (mean ± SD).

Barn	Date	n	Percent (wet weight basis)	
			Nitrogen	Solids
B1	8/22/08	12	0.38 ± 0.10	5.33 ± 4.42
B1	10/6/08	12	0.37 ± 0.06	8.63 ± 3.86
B1	10/30/08	12	0.35 ± 0.08	10.9 ± 5.48
B2	8/22/08	12	0.42 ± 0.17	8.26 ± 6.05
B2	9/15/08	12	0.43 ± 0.11	11.5 ± 7.67
B2	10/6/08	12	0.56 ± 0.13	17.5 ± 5.53
B2	10/30/08	12	0.56 ± 0.10	14.6 ± 7.23
B3	8/22/08	6	0.13 ± 0.03	1.05 ± 0.27
B3	9/15/08	6	0.11 ± 0.03	1.48 ± 0.63
B3	10/6/08	6	0.15 ± 0.04	1.96 ± 0.70
B3	10/30/08	6	0.19 ± 0.06	3.76 ± 2.04

Table F3. Water characteristics (mean ± SD).

Barn	Date	n	Concentration, mg/L			
			Nitrate/Nitrite	TKN	TKN + NO_3	Sulfur
1	12/8/08	1	1.80	-	-	72.8
1	2/6/08	2	2.00	12.8	13.2	-

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Table F4. Surface manure characteristics (mean ± SD).

Barn	Date	n	pH (SU)	Percent (wet weight basis)	
				Solids	Ammonia
B1	8/25/08	12	8.48 ± 0.09	2.18 ± 2.02	0.15 ± 0.02
B1	10/6/08	12	7.96 ± 0.16	2.27 ± 2.79	0.21 ± 0.03
B1	10/6/08	12	8.05 ± 0.15	1.18 ± 1.06	0.14 ± 0.05
B1	11/25/08	12	7.78 ± 0.20	2.39 ± 3.58	0.17 ± 0.03
B1	12/15/08	12	7.89 ± 0.16	2.41 ± 3.52	0.17 ± 0.02
B1	1/29/09	12	7.89 ± 0.10	1.38 ± 1.05	0.28 ± 0.15
B1	2/23/09	12	8.06 ± 0.10	0.87 ± 0.38	0.22 ± 0.02
B1	3/11/09	24	7.87 ± 0.20	5.27 ± 4.66	0.15 ± 0.06
B1	4/27/09	12	7.57 ± 0.20	4.49 ± 3.06	0.24 ± 0.01
B1	5/26/09	12	7.75 ± 0.15	5.19 ± 3.02	0.30 ± 0.08
B1	6/15/09	12	7.75 ± 0.12	1.85 ± 1.93	0.20 ± 0.02
B1	8/10/09	12	7.72 ± 0.16	4.43 ± 3.00	0.27 ± 0.06
B2	8/25/08	12	8.45 ± 0.19	2.49 ± 2.83	0.18 ± 0.06
B2	9/15/08	12	7.93 ± 0.13	2.03 ± 2.46	0.19 ± 0.05
B2	10/6/08	12	7.76 ± 0.12	4.35 ± 2.91	0.29 ± 0.03
B2	10/6/08	12	7.83 ± 0.13	1.63 ± 1.00	0.24 ± 0.05
B2	11/25/08	12	7.71 ± 0.20	5.42 ± 3.37	0.30 ± 0.02
B2	12/15/08	12	7.47 ± 0.15	6.70 ± 2.77	0.23 ± 0.04
B2	1/29/09	12	8.04 ± 0.11	3.55 ± 3.52	0.33 ± 0.05
B2	2/23/09	12	7.60 ± 0.14	5.31 ± 3.23	0.27 ± 0.04
B2	4/27/09	4	7.39 ± 0.28	1.50 ± 1.08	0.11 ± 0.01
B2	5/26/09	12	7.88 ± 0.08	9.10 ± 3.94	0.37 ± 0.04
B2	6/15/09	12	7.92 ± 0.07	5.54 ± 2.94	0.37 ± 0.04
B2	8/10/09	12	7.81 ± 0.07	6.07 ± 3.22	0.29 ± 0.04
B3	8/25/08	4	8.54 ± 0.06	0.86 ± 0.12	0.09 ± 0.01
B3	9/15/08	4	7.40 ± 0.05	0.76 ± 0.20	0.08 ± 0.00
B3	10/6/08	8	7.49 ± 0.17	1.30 ± 1.00	0.12 ± 0.05
B3	11/25/08	12	6.52 ± 0.58	3.98 ± 2.38	0.11 ± 0.02
B3	12/15/08	4	7.31 ± 0.10	0.94 ± 0.22	0.13 ± 0.01
B3	4/6/09	4	7.62 ± 0.37	6.69 ± 3.41	0.28 ± 0.07
B3	6/15/09	4	7.35 ± 0.07	1.18 ± 0.28	0.11 ± 0.01
B3	6/30/09	4	7.34 ± 0.07	1.01 ± 0.09	0.10 ± 0.00
B3	8/10/09	4	7.70 ± 0.14	1.04 ± 0.01	0.07 ± 0.00

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EMISSIONS DATA FROM TWO DAIRY FREESTALL BARNS IN WASHINGTON

Final Report for Site WA5B

of the

National Air Emissions Monitoring Study

submitted to

John Thorne, Executive Director
Agricultural Air Research Council
C/O Crowell and Moring, LLP
1001 Pennsylvania Avenue, NW
Washington, DC 20004

and

Bill Schrock, Environmental Engineer
U.S. EPA Office of Air Quality Planning and Standards
Mail Code E143-03, 4930 Page Road
Durham, NC 27703

from

Albert J. Heber, Professor and NAEMS Science Advisor
Agricultural and Biological Engineering, Purdue University
225 S. University St., West Lafayette, IN 47907
Phone: 765-494-1214 Email: heber@purdue.edu.

July 30, 2010

ED_004549_00015841-00001

Contributors

Pius Ndegwa (Site PI) and Hung Soo Joo (Site Engineer)
Biological Systems Engineering
LJ Smith 212
Washington State University at Pullman
Pullman, WA 99164-6120

Juan Carlos Ramirez-Dorronsoro, Bill W. Bogan, Claude Diehl, Albert J. Heber, Ji-Qin Ni, Changhe Xiao, Kaiying Wang, Ilker Kilic.
Agricultural and Biological Engineering
Purdue University
225 S. University St.
West Lafayette, IN 47907

Erin L. Cortus
Agricultural and Biosystems Engineering
South Dakota State University
Box 2120
Brookings, SD 57007

Teng Teeh Lim
Agricultural Systems Management
University of Missouri
230 Agricultural Engineering Building
Columbia, MO 65211

Acknowledgments

This project was supported by the National Milk Producers Federation and the Agricultural Air Research Council.

Citation

Ramirez-Dorronsoro, J.C., H.S. Joo, P. Ndegwa, and A.J. Heber. 2010. National Air Emissions Monitoring Study: Data from Two Dairy Freestall Barns in Washington WA5B, Final Report. Purdue University, West Lafayette, IN, July 30.

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1. INTRODUCTION AND OBJECTIVES

1.1. Overview of NAEMS

The primary goals of the National Air Emissions Monitoring Study (NAEMS) were to: 1) quantify aerial pollutant emissions from dairy, pork, egg, and broiler production facilities, 2) provide reliable data for developing and validating emissions models for livestock and poultry production and for comparison with government regulatory thresholds, and 3) promote a national consensus on methods and procedures for measuring emissions from livestock operations. Emissions measurements were conducted at a total of 15 different barn monitoring sites in the continental US.

The NAEMS was managed by Purdue University (Purdue), in its role as Independent Research Contractor (IRC) to the Agricultural Air Research Council. Purdue selected equipment and methodology in consultation with US EPA and subcontracted with other universities to operate the monitoring sites. Washington State University at Pullman (WSU) installed, maintained and calibrated equipment, collected samples, and conducted all other on-site activities. Purdue provided rapid feedback (generally within 2-4 business days) designed to catch aberrations in the data, and later conducted final data processing of the data.

The overall objective of this report is to present the quality-assured measurements of ammonia (NH_3), hydrogen sulfide (H_2S), particulate matter (PM) and volatile organic compounds (VOC's) from two naturally ventilated freestall barns at the Washington dairy farm. The specific objectives of the report are to:

1. Describe the farm, and the monitored buildings,
2. Describe the monitoring methods and quality assurance, and
3. Present tabulated daily averages of emissions.

2. CONFINED ANIMAL FEEDING OPERATION

2.1. Farm

This 5,600-cow Holstein dairy farm (WA5B) was located in Washington State. The main components of the farm, (Figure 1) were constructed between 2002 and 2003. The nearest identifiable off-farm livestock was a small open lot dairy located approximately 0.8 km to the north, a seasonally-used sheep lambing camp 0.4 km to the west, and a calf operation 0.5 km to the west.

The farm had six naturally-ventilated and symmetrically-distributed freestall barns. The barns were oriented east-west and the milking center was oriented north-south. Ten corrals/exercise pens were distributed around the barns. Calf hutches situated in one of the exercise lots housed the newborn and suckling calves. Lactating cows were milked three times daily in a centrally located milking center. The on-site heifer program was limited.

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The manure handling system included a sand separating pit, two primary settling ponds, a manure separation pad, two secondary serpentine basins, a secondary lagoon, and dry manure storage containment.

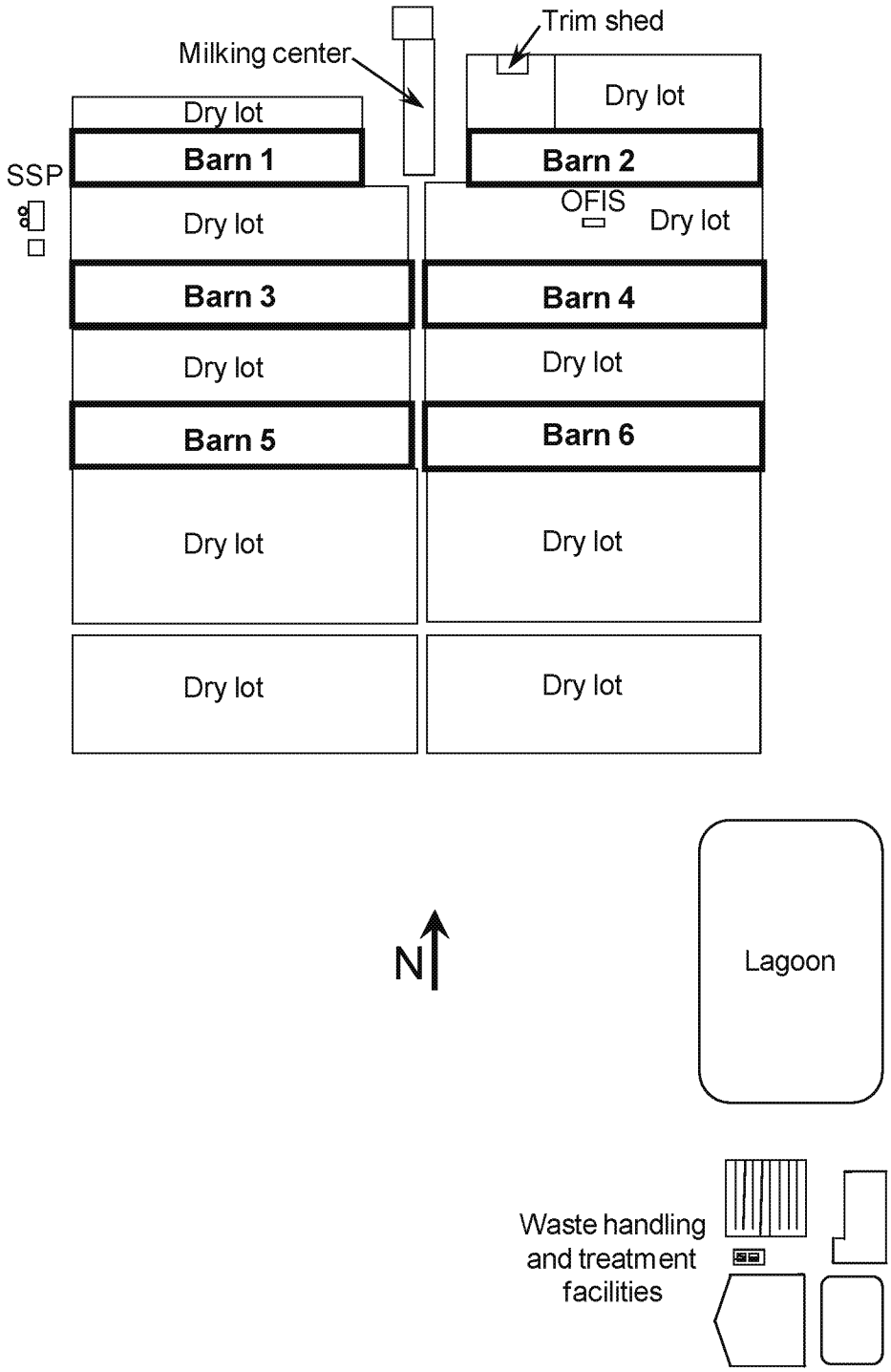

Figure 1. Layout of dairy farm, with locations of monitored buildings (B2 and B4).

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2.2. Monitored Buildings

Aerial pollutant emissions were measured from the naturally ventilated freestall barns 2 and 4. Barn 2 was 182.9 m x 31.1 m, and housed 600 cows in four rows of freestalls. Barn 4 was 213.4 m x 39 m, and housed 700 cows in six freestall rows. The west and east sides of the barns were open, with each opening having a rectangular shaped area. Barn 2's end opening was 31.1 m wide and 4.3 m high and that of barn 4 was 39 m wide and 4.3 m high. Barns 2 and 4 were 54.5 m apart, and each barn had its own exercise lot, the dimensions of which were 54.5 m wide and 182.9 m long (barn 2) and 213.4 m long (barn 4).

The exercise lot between barns 1 and 3 contained several rows of calf hutches. The cows were milked three times daily, and therefore each cow spent approximately 20 h in the freestall barn and exercise lot, and 4 h in the milking center.

Feed was delivered, using a truck with an auger mixer, through 6-ft wide concrete feed alleys in each freestall barn's center, and consisted of a mixture of alfalfa hay, winter triticale green chop/silage, grain (corn), and cottonseed meal, with some apple pomace, as dictated by commodity prices and veterinarian/feed specialist recommendations. A standby generator was available to power critical systems during power outages.

Barns 2 and 4 were naturally ventilated. Ventilation air entered the naturally-ventilated freestall barns through the four open walls of the barn, and exited through a continuous open ridge. Each 4.3-m high sidewall (north and south) was open to the wind in the summer, and had two vertical curtain systems, one on top of the other. The one exception to this was the north wall of barn 2, which had no curtains. Each curtain was either fully open or fully closed, and close from top to bottom. The bottom curtain was closed in windy or cold conditions and was always closed first. The top one was closed in cold conditions, and was never closed unless the bottom one was closed. When both curtains were closed, there was a 30- cm opening between the top curtain and the roof. The maximum wall opening height was 2.7 m for the freestall barns. The air exited through a continuous ridge opening that was 1.5 m and 1.2 m wide for barns 2 and 4, respectively.

The milking center was cleaned as needed and used coolant water to flush manure. Manure from the freestall barns was flushed automatically three times daily, and scraped as needed. The effluent was directed, via PVC pipes, to the waste handling and treatment system that included a sand separation pit, two primary settling ponds, a manure separation pad (which includes screen separators and centrifugal solid separators), and a pair of serpentine settling systems, in which each one had five sequential settling cells. Both of the serpentine cells then discharged into a central cell. The liquid effluent from the central cell was directed to the storage lagoon, which had a volume of 9.5×10^7 L. The solid effluent from the sand separation pit, depending on the season and temperature, also was directed to two manure drying ponds, each with 5.7×10^7 L capacities, which were located south of the manure separator pad. The basin east of the settling basins was also used to store dried manure. Dried manure was used for bedding and land application. Liquid manure was applied, via a system of pressurized pipes, to surrounding fields, and was applied using a ground injection rig at agronomic rates.

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2.3. Significant Events and Modifications

An excessive snow event occurred on 12/17/08 and necessitated the closing of the sidewall curtains and may have caused low ventilation rates during this event.

3. MONITORING AND SAMPLING METHODS

3.1. General Approach

Equipment installation and preliminary testing began on 6/11/07 and concluded on 9/28/07. The site setup and equipment installation followed an approved site monitoring plan, a quality assurance project plan, and instrument or method-specific standard operating procedures.

The monitoring period began on 9/28/07, and concluded on 9/27/09. Target pollutants were NH_3, H_2S, PM (PM_{10}, TSP, and $PM_{2.5}$), and VOC. Appendix A lists the target pollutants, and all measured supporting variables. The monitoring schemes for the two structures are shown in Figure 2 and 3. Table 1 lists the major instruments.

Table 1. Major instrumentation.

Analyzer/Instrument	Serial number
INNOVA 1412 Multi-gas analyzer	710-206
TEI 450i H_2S analyzer	709220679
Environics 4040 Dilutor	3912
TEOM 1	265040701
TEOM 2	265100701
TEI FH 62C14 (Beta Gauge)	E-1297

Table 2 summarizes the sampling locations for the various analytes. There were eleven gas sampling locations (GSLGs) for barns 2 and 4, each with one to four gas sampling probes (Figure 2 and 3). Gas-sampling probes were placed at ventilation openings on north and south endwalls, east and west sidewalls and ridge of each barn. The outdoor ventilation inlet location was located at the 1.5 m above the roof of the OFIS.

3.2. Instrument Shelter

The on-farm instrument shelter (OFIS) was located at the center of the exercise lot between barns 2 and 4. Heated raceways were used to connect the OFIS with each barn, to avoid condensation in the sampling lines during cold weather.

The OFIS was supplied with, single-phase, 120/240-V, (100 A) power by the farm. A copper ground rod was installed at the location of the OFIS and connected to the OFIS ground. The HVAC system of the OFIS maintained inside temperatures within the operating range for the analyzers, and created a positive pressure with a filtered outside air intake to minimize entry of unfiltered outside air. The temperature and differential static pressure in the OFIS were

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monitored with a thermocouple near the instrument rack and a pressure sensor, respectively. One set of gas analyzers in the OFIS measured gas concentrations as the gas sampling system (GSS) sequenced through all the gas sampling locations (GSLs). Vacuum pumps and controllers for the PM monitors were located in the OFIS. A personal computer collected all site monitoring data using AIRDAC a data acquisition and control program.

Table 2. Analyte sampling locations.

Analyte	Barn	Sampling locations	# Probes
Gas (NH_3, H_2S, CO_2)	2,4	GSLG 1: Inlet	1
	4	GSLG 2: B4 east wall	2
	2	GSLG 3: B2 east wall	2
	4	GSLG 4: B4 north wall	4
	2	GSLG 5: B2 north wall	4
	4	GSLG 6: B4 ridge	4
	2	GSLG 7: B2 ridge	4
	4	GSLG 8: B4 south wall	4
	2	GSLG 9: B2 south wall	4
	4	GSLG 10: B4 west wall	2
	2	GSLG 11: B2 west wall	2
PM ($PM_{2.5}$, PM_{10}, TSP)	2, 4	Ridge: Lengthwise midpoint, centered, 0.5 m below	2
	2, 4	Inlet: 1.8 m above the roof of the OFIS	1
VOC	2, 4	On each TEOM platform near ridge	

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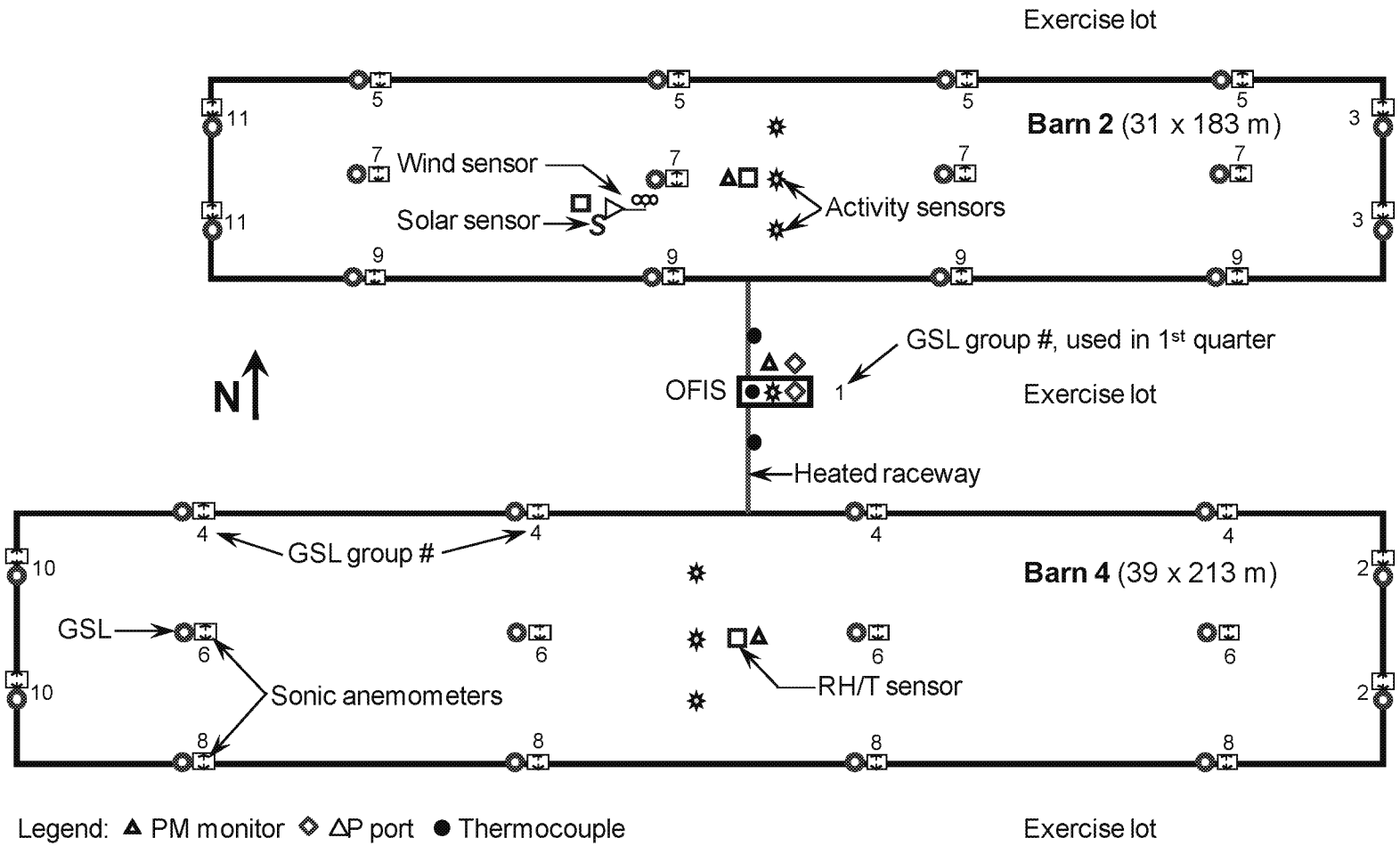

Figure 2. Overhead view of sensor and air sampling locations.

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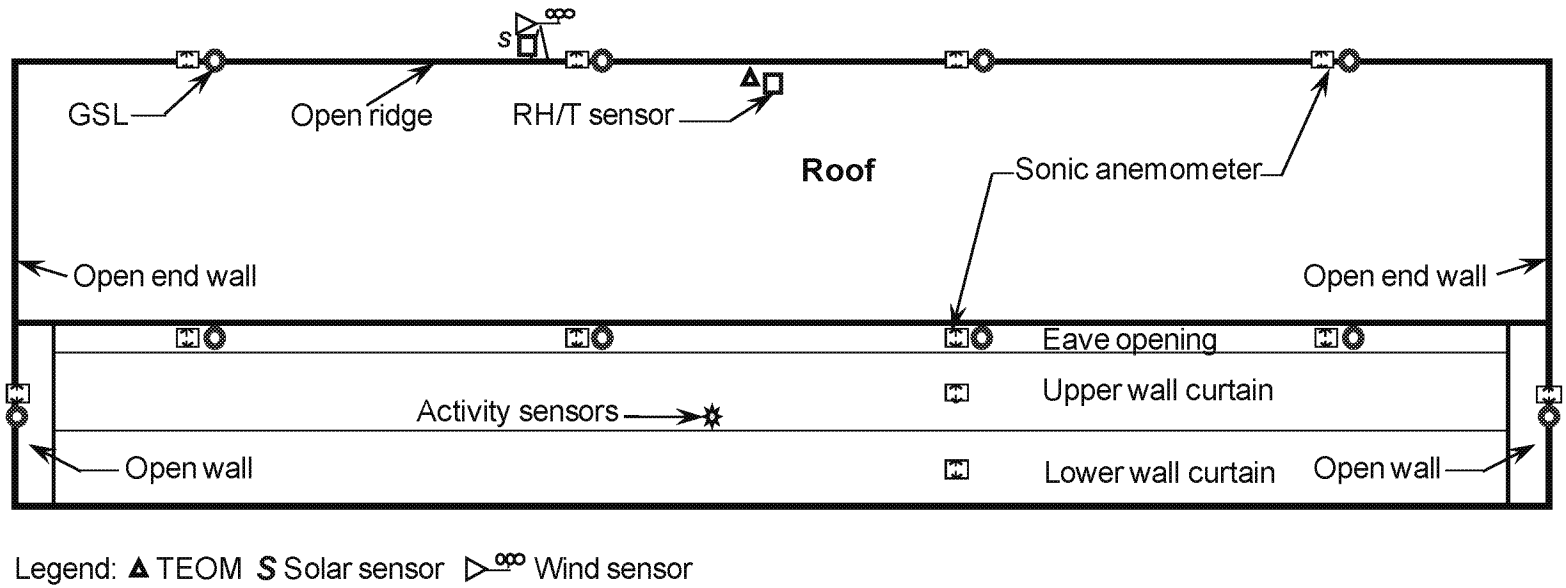

Figure 3. Side view of sensor and air sampling locations.

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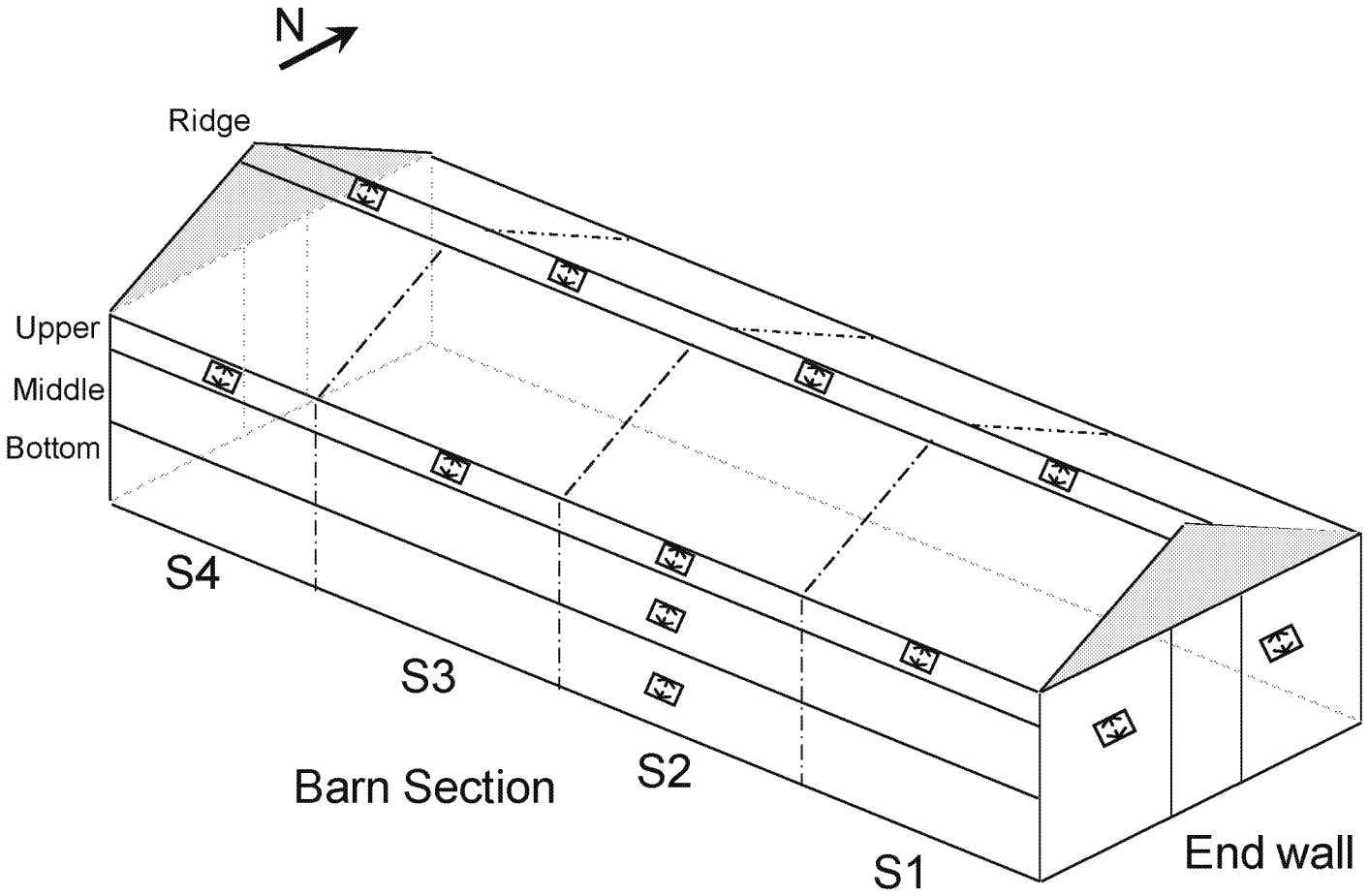

Figure 4. End view of sonic anemometer locations.

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3.3. Data Acquisition and Control System

The data acquisition and control system consisted of a personal computer, custom software (AirDAC) written in a commercial programming language (LabVIEW, National Instruments, Austin, TX), distributed I/O hardware (National Instruments FieldPoint modules), and Universal Serial Bus (USB) devices by National Instrument (NI). The NI FieldPoint (FP) modules were selected and configured to acquire data for all the on-line measurement variables (Appendix A).

The 16-channel NI FP-DO-401 digital output module was used to control: 1) sequential switching of multiple gas sampling lines, 2) the raceway heating system, and 3) GSS cooling fan. Serial communication (RS232) was used to acquire data from the multi-gas monitor and calibration variables (calibration time, gas concentration, etc.) from the gas dilutor. Voltage or current analog signals from various analyzers and sensors were connected to FP-AI-112 modules. Type T thermocouples were connected to FP-TC-120 modules. Serial communication (RS485) was used to acquire the digital data from the ultrasonic anemometers during the second year of the study. During the first year the data from the sonic anemometers was acquired using the analog signal of the sonics with the FP-AI-112 modules.

Table 3. Data acquisition hardware configuration.

Manufacturer, model	I/O type	Units	Channels	Notes
NI FP-AI-112	Analog input	3	16	Single-ended, 16-bit
NI FP-TC-120	Thermocouple	1	8	
NI FP-DO-401	Digital output	1	16	2 A at 10-30 VDC
NI USB/RS485 converter	Serial port	1	496	4 channels/sonic

AirDAC averaged the signals (after conversion to engineering units) over 15-s and 60-s intervals and recorded the means into two separate computer files. All real-time data were displayed in tabular and graphic forms for on-site or remote (pcAnywhere, Symantec, Mountain View, CA) viewing (Ni et al., 2009; Ni and Heber, 2010). Measurement alarms, data collection notifications, data files, graphs and statistics of the daily data sets, and modified configuration and fieldnote files were automatically emailed to several recipients after midnight.

3.4. Monitoring and Recording Farm and Building Operation

3.4.1. Animal Husbandry and Building Systems

Infrared motion detectors (activity sensors) were installed to monitor movement of cows and workers in the barns as noted in Figure 2. The farm provided milk production, feed consumption, and pen inventory data.

3.4.2. Thermal Environment

Weather data was collected using a solar radiation-shielded capacitance-type relative humidity and temperature probe (RH/T) (Model RHT-WMV, Novus Automation, Porto Alegre, Brazil), a pyranometer (Model LI-200SL, LI-COR, Lincoln, NE) and a cup anemometer (RM Young, Traverse City, MI), which were mounted on the ridge of barn 2 (Figure 2).

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Each sonic was used to measure temperatures in barns 2 and 4.

Thermocouples (TCs) were located in the heated raceways between the barns and the OFIS. Two TCs were located in the OFIS to measure the temperatures of the OFIS and the air-conditioning system. One TC monitored the temperature conditions in the ambient PM monitor enclosure.

3.4.3. Building Airflow

Building airflow was determined by multiplying the upwind speeds supplied by the weather station on the ridge of barn 2 by the upwind opening area.

3.4.4. Biomaterials Sampling Methods and Schedule

All analyses of biomaterials were performed by an independent laboratory (Midwest Laboratories, Omaha, NE).

Daily records of feed consumption were regularly obtained from the producer and daily records of diet constituents were provided by the farm's nutritionist.

Samples of feed, bedding, and manure were taken from each barn. Each sample was analyzed for total solids and total nitrogen. Additionally, the manure was analyzed for ammonia. Milk samples were analyzed for total nitrogen only.

3.5. Particulate Matter Monitoring

Real-time PM monitors (TEOM Model 1400a, Thermo Fisher Scientific, Waltham, MA) continuously sampled exhaust PM. The TEOMs were on elevated platforms underneath the ridge openings at the center of the barn to sample exhaust air (Figures 2 and 3).

A beta attenuation PM monitor (Beta Gauge Model FH62C-14, Thermo Fisher Scientific, Franklin, MA) continuously measured ambient air above the OFIS and was assumed to represent the barn inlet PM concentration.

At any one time, the sampled PM size class at both TEOMs and the Beta gauge was either PM_{10}, $PM_{2.5}$ or TSP. The PM_{10} inlet heads on the TEOMs and Beta gauge were replaced with $PM_{2.5}$ heads in January 08, July 08, February 09, and July 09, for 21.1, 12.9, 14.0, and 14 d, respectively (Table 5). The TSP inlet heads were placed on the TEOMs for seven, 6-14 d periods. The PM_{10} concentration was measured at all other times.

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Table 4. Sampling schedule for PM_{10}, TSP, and $PM_{2.5}$.

Time and day, h/m/d		Test duration, d		
Start	**Stop**	**PM10**	**TSP**	**PM2.5**
9/28/07	1/17/08	111.6		
1/17/08	2/7/08			21.1
2/7/08	4/10/08	62.9		
4/10/08	4/24/08		13.9	
4/24/08	6/12/08	49.1		
6/12/08	6/18/08		6.0	
6/18/08	7/10/08	22.0		
7/10/08	7/23/08			12.9
7/23/08	9/12/08	50.9		
9/12/08	9/18/08		6.0	
9/18/08	11/13/08	56.0		
11/13/08	11/21/08		8.0	
11/21/08	2/12/09	82.9		
2/12/09	2/26/09			14.0
2/26/09	3/4/09		6.1	
3/4/09	4/30/09	57.0		
4/30/09	5/7/09		7.0	
5/7/09	7/8/09	62.1		
7/8/09	7/22/09			14.0
7/22/09	7/30/09	7.9		
7/30/09	8/5/09		6.2	
8/5/09	9/27/09	53.4		
Totals		615.8	53.1	62.1

3.6. Continuous Gas Sampling and Monitoring

Air samples for continuous gas measurements were collected from multiple gas sampling probes with a custom-designed GSS. Each probe was connected to the GSS with Teflon tubing. Tubular raceways between the OFIS and the monitored barns protected the sampling lines and data signal cables. The sampling lines were wrapped with insulation and heated inside the raceways and at other locations vulnerable to cold air to prevent condensation inside the tubes.

There were 16 gas sampling locations (GSLs) per barn. Each GSL was located at a sonic anemometer; specifically, the four sonics in each barn ridge, the two in each endwall (four per barn), and the four in each upper (eave) opening (eight per barn) were paired with GSLs.

The 16 sampling locations were grouped into five GSL groups (GSLGs), such that the individual sampling lines of each sidewall (four lines), endwall (two lines), or ridge (four lines) fed into a single sample. This was accomplished through the use of a Teflon mixing manifold for each

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sidewall and ridge GSLG, and a Teflon tee for each endwall. Because the lines joining the sidewall and ridge GSLs to their respective mixing manifolds differed significantly in length, flow restrictors were used to equalize the flow rates in each line; otherwise, higher flow rates in some lines would cause the GSLG to be biased spatially towards the regions of the barn closest to the manifold (i.e. with the shortest lines). The outputs of the mixing manifolds were each drawn to the gas sampling system located in the OFIS.

The probe for sampling ambient air was placed on top of the OFIS. However, this measurement was not used to represent the incoming gas concentrations. Rather, gas concentrations in the wall GSLG samples were treated as "inlet concentrations" when the flow was entering the barn. The exhaust concentration was represented by the ridge concentration.

The barn GSLG's were sampled sequentially for 10 min each. The ambient location was monitored at least twice daily, originally with a 10-min sampling period. The ambient air sampling was abandoned on 1/20/09.

One set of gas analyzers in the OFIS was sequenced through all eleven GSLGs. The gas analyzers included a TE Model 450C fluorescence-based H_2S analyzer. Ammonia and CO_2 was measured with an INNOVA Model 1412 Photoacoustic IR multi-gas monitor.

3.7. VOC Sampling

Grab samples of VOC were collected using methodology based on methods TO-15 and TO-16. Sampling was conducted with 6-L stainless-steel canisters (TO-Can, Restek Corp, Bellefonte, PA), equipped with ¼″ bellows valves (Swagelok SS4H) and 207-kPa vacuum gauges. Sampling trains contained flow controllers (Veriflo Model 423XL, Parker-Hannifin Corp., Richmond, CA) with 2- to 4-sccm critical orifices and 7-µm in-line stainless steel filters. Flow controllers were pre-set to a constant flow rate of 3.4 mL min^{-1}. Canister sampling was conducted for 24 h, and canister pressures were recorded at the beginning and end of the sampling periods for the calculation of total sample volumes collected. Sampling was conducted seven times between 5/6/09 and 10/7/09, with duplicate samples typically collected at each location. All canisters were cleaned and passed QC before sample collection.

Canister samples were analyzed at Purdue University's Trace Contaminant Laboratory. The canisters were pressurized to +207 kPa with ultrapure N_2, and transferred to TDS tubes (Carbotrap 300, Supelco, Bellefonte, PA). The pressurized canisters initially yielded sample flows of 50 mL min^{-1} during sample transfer to tubes. Canister heating was introduced when a canister pressure decreased to 13.8 kPa to ensure maximal transfer of nonvolatile components.

Samples were analyzed on a thermodesorption-gas chromatograph-mass spectrometer (TDS-GC-MS), consisting of a gas chromatograph (Model 6890, Agilent Technologies, Palo Alto, CA) coupled with a Model 5795 mass spectrometer detector (Agilent Model 5795) and equipped with a thermal desorption system (Model TDS-G, Gerstel, Baltimore, MD) and a cooled injection system (Gerstel CIS). The GC-MS passed a leak check prior to analyzing each set of samples. Compounds were separated on a 60 m x 0.25 mm x 1µm column. The detector utilized the full scan mode covering masses from 27-270 Daltons in 8 scans s^{-1}. The MS quad hold temperature was 150°C, and the MS source hold temperature was 230°C. The analytical results were analyzed

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by ChemStation, and all integrations were manually checked. This method used an external standard compound for instrument monitoring and QA to avoid losses of low-molecular-weight analytes that would occur when purging solvent used with internal standard(s). All TDS tubes were cleaned with a tube conditioning system (Gerstel TC-2 TDS) for 3.5 h at 350°C prior to each use.

Response curves were generated at both the beginning and the end of the VOC analysis period. The response curves of all chemical standards reach good linearity as 55% of the response curves had $R^2 > 99\%$ and over 98% had $R^2 > 95\%$. Toluene was used as an external standard that was analyzed during each batch of samples to assure quality. The relative bias and standard deviation of 97 toluene checks were -4.3% and 18.8%, respectively. The uncertainty of the mean of duplicate field samples was calculated as 27%, based on the toluene checks.

3.8. Documentation of Quality Assurance

3.8.1. Oversight, Maintenance, and Calibration

Washington State University at Pullman (WSU) personnel visited the site frequently during the monitoring period. Remote checking via the internet was conducted by Purdue on a near-daily basis.

The NAEMS Science Advisor audited the site on 10/31/07. The Environmental Protection Agency (EPA) conducted a site audit on 3/19/09 and 9/30/09.

Various site maintenance and calibration activities were conducted by site personnel (Appendix B). Specific quality assurance tests of the GSS, gas analyzers and other sensors are discussed below.

3.8.2. Gas Sampling System

Two types of GSS leak tests were conducted. The first test examined GSS integrity, by briefly creating a "dead head" against the pump by closing all solenoid valves, while measuring exhaust airflow with a portable rotameter, and recording the leakage flow with the GSS mass flow meter. The second test consisted of monitoring GSS flow and pressure after manually setting AirDAC to sample from a particular GSL and plugging the GSL's gas sampling probe, which created a GSS manifold vacuum of about -64600 Pa or 0.36 atm. Preliminary tests indicated that GSS flows under dead-head conditions that were 10% or less (<0.45 L min^{-1}) of the normal GSS flow rate of 4.5 L min^{-1} were indicative of leak-free operation under normal GSS manifold vacuums of -5,000 to -8,000 Pa (0.93-0.96 atm). Leak tests of the GSS were conducted on 10/14/08, 7/15/09, and 7/29/09. The dead-head leakage flows were always significantly less than the 0.45 L min^{-1} threshold. Systematic checking of individual sampling lines was conducted frequently. Data was only invalidated when leaks occurred away from the sampling location. If gas sampling probe filter maintenance eliminated a leak, no data was invalidated since leakage air would be the same as sampled air.

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3.8.3. Gas Analyzers

Gas measurements were evaluated using multipoint calibrations and zero and span checks. The gas concentration data output by the analyzers was adjusted to correct for bias introduced by the gas sampling and measurement system.

3.8.3.1. Correction of Ammonia Concentrations

Multipoint calibrations (MPC) were conducted through the challenge line using purified air (Cat. # AI0.0CE-T, CEM zero-grade, Praxair, Indianapolis, IN) and four span concentrations of NH_3 (Cat. # NI-AM5MP-AS, Praxair Primary Standard). Each MPC was conducted with replication (Table 6). . The NH_3 was delivered using a 6-port gas dilutor (Model 4040, Environics, Tolland, CT). The minimum and average R^2 values of the MPCs were 0.962 and 0.991, respectively, indicating linearity of the instrument response to standard gas between 0 and 40.7 ppm.

Table 5. Multipoint calibration record and results for the NH_3 measurements.

Date	# of points	Concentration, ppm		R^2
		Minimum	Maximum	
4/24/08	4	9.73	40.7	0.997
6/18/08	4	9.92	40.7	0.999
7/10/08	4	9.94	40.8	0.998
9/2/08	4	8.00	20.0	0.993
10/15/08	5	8.00	20.0	0.962
10/23/08	5	8.00	20.0	0.984
10/29/08	4	8.00	15.0	0.998
2/25/09	4	8.00	15.0	0.999

Table 6. Concentration correction and measurement accuracy for ammonia.

Start/end dates	# of checks		Linear model	Accuracy, % of span			
				Bias		Precision	
	Zero	Span		z	s	z	s
4/24/08 to 9/2/08	10	10	Y = 4.29x - 0.51	0.17	1.30	1.42	11.7
9/2/08 to 1/21/09	6	6	Y = 1.75x + 0.15	-0.28	-11.8	2.57	43.7
1/21/09 to 2/25/09	4	4	Y = 1.28x - 0.05	-0.25	5.12	0.34	11.3
2/25/09 to 3/26/09	4	4	Y = 0.96x - 0.07	-1.68	-6.60	1.47	10.2
3/13/09 to 9/2709	4	4	Y = 1.03x + 0.01	0.79	-0.03	0.60	0.70

Precision checks were conducted periodically using zero and span gases (Z/S checks), delivered via the dilutor through the challenge line, and responses were recorded to monitor changes in system performance over time. Span checks were conducted with 41.6 ppm of NH_3, except that 4.56 ppm was used in October, 2009.

The average response of the analyzer to the zero and span gas applications was assessed and the results were combined based on changes to the instrument or GSS to create linear correction models. For the purpose of constructing gas correction models, the analyzer responses at the 4.56

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ppm concentrations were ratiometrically adjusted to the expected response at 41.6 ppm. The models were used to correct instrument readout data. The measurement accuracy was assessed based on model-corrected zero and span checks.

3.8.3.2. Correction of Hydrogen Sulfide Concentrations

MPC's were conducted through the challenge line ten times (using purified air (Cat. # AIO.OCE-T, Praxair CEM zero air) and three span concentrations (Cat. # NI-HSR1E-AS, Praxair EPA Protocol Standard). Each MPC was conducted with replication. The H_2S was delivered using a 6-port dilutor (Model 040, Environics, Tolland, CT). The R^2 values of each MPC were 0.991 or above, indicating excellent linearity of instrument response to standard gas between 0 and 4562 ppb.

Precision checks were conducted periodically using zero and span gases (Z/S checks), delivered via the dilutor through the challenge line, and responses were recorded to monitor changes in system performance over time. Span checks were typically conducted with 895 ppb.

Table 7. Concentration correction and measurement accuracy for hydrogen sulfide.

Start/end dates	# of checks		Linear model	Accuracy, % of span			
				Bias		Precision	
	Zero	Span		z	s	z	s
12/13/07-4/24/08	1	1	Y= 1.000x – 0.340	0	0	-	-
4/24/08-4/25/08	1	1	Y= 0.967x - 1.742	0	0	-	-
4/25/08- 9/3/08	10	9	Y= 3.557x +1.389	0.139	-1.305	8.02	804.9

Table 8. Multipoint calibration record and results for the H_2S measurements.

Date	# points	Span concentration, ppb		R^2
		Minimum	Maximum	
4/24/08	4	1140	4562	0.991
6/18/08	4	1139	4562	0.999
7/10/08	4	1140	4572	0.997
9/2/08	2	0	1000	1.000
10/23/08	5	750	1500	0.991
10/29/08	4	750	1500	0.991
2/25/09	4	750	1500	1.000
4/30/09	4	750	1500	0.999
6/17/09	4	750	1500	0.999
6/25/09	4	750	1500	0.999

The average response of the analyzer to the zero and span gas applications was assessed, and the results were combined based on changes to the instrument or GSS to create linear correction models. The models were used to correct instrument readout data. The measurement accuracy was assessed based on model-corrected zero and span checks Table 8.

3.8.3.3. Noise Tests

Analyzer noise tests were conducted to assess the minimum detection limit (MDL) of the gas measurements. The analyzers measured CEM zero air (Praxair Cat. # AIO.OCE-T CEM) continuously for 44 to 52 min after equilibrium of the instrument readout was reached. The MDL was calculated as three times the standard deviation of the data collected during the equilibrated period (Tables 10 and 11).

Table 9. Noise test of gas analyzers with dry air on 10/07/09.

Concentration	Statistical variable				Duration, min	T_{dew}, °C
	Min	Max	SD	MDL		
NH3, ppm	-0.26	0.01	0.05	0.13	44	-110
H2S, ppb	7.0	16.0	0.7	1.5	49	-121

Table 10. Noise test of gas analyzers with humidified air on 10/07/09.

Concentration	Statistical variable				Duration, min	T_{dew}, °C
	Min	Max	SD	MDL		
NH3, ppm	-0.13	0.15	0.05	0.13	59	5.30
CO2, ppm	5.0	19.0	2.7	6.2	53	5.54
H2S, ppb	7.0	10.0	0.7	1.7	58	5.64

3.8.4. Particulate Matter Analyzers

The quality of the exhaust PM data collected by the TEOMs was assessed through mass verifications and flow and leak checks.

Table 11. Quality assurance tests of barn 2 TEOM.

Date	Time since last test, d	Mass error, %	TEOM flows, $L \cdot min^{-1}$		Leak test flows, $L \cdot min^{-1}$	
			Main	Total	Main	Auxiliary
11/20/07	0	0.68	3.00	17.3	0.05	0.21
7/3/08	226	0.69	3.00	16.7	0.13	0.06
2/5/09	443	1.13	3.00	16.7	0.03	0.14
2/25/10	602	0.50	3.00	16.8	0.06	0.25

The criteria for total and main flows were 16.7±1.0 and 3.0±0.2 L min^{-1}, respectively, and were met on all dates.

The leakage criteria were ≤0.62 and ≤0.15 L min^{-1} for total and main flows, respectively. All leak and flow tests for barns 2 and 4 TEOMs were acceptable on all dates.

A mass verification and flow calibration of the inlet PM monitor was conducted periodically. The mass verification criteria of <5% was met on all dates and the total flow check criteria of <4% were met on all dates.

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Table 12. Quality assurance tests of the barn 4 TEOM.

Date	Time since last test, d	Mass error, %	TEOM flows, L min^{-1}		Leak test flows, L min^{-1}	
			Main	Total	Main	Auxiliary
11/20/07	0	1.15	2.99	17.1	0.05	0.45
7/3/08	226	1.06	3.00	16.7	0.14	0.16
2/5/09	443	2.23	2.99	16.6	0.09	0.16
2/25/10	602	0.99	2.99	16.5	0.05	0.11

Table 13. Inlet PM monitoring quality assurance parameters.

Date	Time since last test, d	Mass verification, %	Total flow check, %
11/14/07	0	0.01	-0.06
2/13/08	91	-0.54	-0.06
3/13/09	394	0.97	-0.30
10/15/09	216	-1.88	0.18

3.9. Data Analysis

3.9.1. Software

All emission data processing was conducted using custom software (CAPECAB, Fibre Recovery Systems, Inc, Calgary, AB). Data was carefully inspected and validated. If a datum was invalid for a known reason, the datum was marked (flagged) invalid and all calculations dependent on that datum were also invalid unless a substitution datum was identified. All periods of invalid data of relevant variables that were longer than one day are listed in Appendix D.

If the QA/QC checks described above indicated a measurement bias, the data was corrected prior to calculating emissions. The CAPECAB program provided a robust method to inspect data, invalidate if necessary, and implement various corrections over specified time periods.

3.9.2. Data substitution, validation, correction and uncertainty

3.9.2.1. Environmental Sensors

A solar radiation-shielded RH/temperature probe, solar radiation pyranometer and a wind anemometer was attached to a 1-m aluminum tower located on the ridge of barn 2 near the OFIS. RH/T sensors were placed with the TEOM in each barn.

The ambient temperature sensor produced a noisy signal from 10/27/07 to 3/1/08. The average of the temperatures measured by the NE, NW and SW sonic anemometers was used as a substitute ambient temperature during this period after confirming good agreement during other periods.

The ultrasonic anemometers were used to measure the temperatures at each GSL.

3.9.2.2. Gas Concentrations

Times were specified in the data processing software for gas concentration measurements to stabilize based on gas and sampling location. Linear interpolation of corrected gas concentrations

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was used to fill in concentrations for each minute between two valid concentration measurements at a sampling location, up to a specified maximum interpolation interval.

Table 14. Gas concentration data validation and interpolation requirements.

Gas	Exhaust sampling locations		Inlet sampling location	
	Equilibration period, min	Maximum interpolation interval, min	Equilibration period, min	Maximum interpolation interval, min
NH_3	7	300	7	3000
H_2S	7	300	7	3000

Gas and water vapor concentrations, and sample relative humidity, temperature, flow rate, and flow direction were automatically invalidated during all gas analyzer MPCs and Z/S checks, and when sample Q < 3.8 L min^{-1}. Gas and PM data were invalidated under conditions of calm winds (< 1 m/s). Gas concentration data was invalidated whenever the GSS failed leak tests.

Standard gas concentrations were calculated on dry and moist bases with Eqns. 3-1 and 3-2, respectively.

$$C'' = \frac{C'}{(1-W)} \tag{3-1}$$

and

$$C' = \frac{P' \cdot c \cdot M}{R \cdot (273 + T')} \tag{3-2}$$

Where:

- C'' Standard mass concentration, dry basis (mg $d^{-1}sm^{-3}$ or µg $d^{-1}sm^{-3}$)
- C' Standard mass concentration, moist-air basis (mg sm^{-3} or µg sm^{-3})
- P' Standard pressure (1 atm)
- T' Standard temperature (20°C)
- c Volumetric concentration of gas (ppm or ppb)
- M Molecular weight of gas (g mol^{-1})
- R Universal Gas Constant (0.08206 L atm mol^{-1} $°K^{-1}$)
- W Humidity ratio

3.9.2.3. PM concentrations

Dry standard PM concentrations were obtained by dividing raw concentrations by the air humidity ratio.

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3.9.3. Emission calculations

3.9.3.1. Particulate matter

PM emissions were calculated with Eqn. 3-3.

$$E = \left(Q_O \cdot P_O \cdot \left(\frac{273+20}{273+T_O} \right) \right) \cdot \left(c'_O - c'_i \right) \tag{3-3}$$

Where:

E Net PM emission rate (µg s^{-1})
Q_0 Exhaust airflow rate at To (m^3 s^{-1})
P_0 Pressure of exhaust air (atm)
C_0' PM concentration of exhaust air (µg m^{-3})
C_i' Ambient PM concentration (µg m^{-3})
T_0 Temperature of exhaust air (°C)

3.9.3.2.

3.9.3.3. Gases

Stream-specific gas emissions were determined as follows:

$$E = Q_O \cdot \frac{P_O \cdot M}{R \cdot (273+T_O)} \cdot (c_O - c_i) \tag{3-4}$$

Where:

E Stream or barn emission rate (mg s^{-1} or µg s^{-1})
Q_O Stream or barn outlet moist airflow rate at To (m^3 s^{-1})
P_O Exhaust air pressure (atm)
M Gas molecular weight (g mol^{-1})
R Universal Gas Constant (0.08206 L atm/mol^{-1} °K^{-1})
T_O Exhaust air temperature (°C)
c_o Exhaust air concentration (ppm or ppb)
c_i Ambient or ventilation air inlet concentration (ppm or ppb)

3.9.3.4. Volatile organic compounds

The total VOC concentration was multiplied by average building airflow for the 24-h canister sampling period to yield an average emission rate. If two samples were successfully collected for a building at one sampling event, the average concentration was used in the calculation.

4. RESULTS

4.1. Farm Production Information

The farm production information is presented in Table F1. An average of 514 and 963 cows were in barns 2 and 4.

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4.2. Characteristics of Biomaterials

Samples of feed, bedding, and manure were taken from each barn. Each sample was analyzed for total solids and total nitrogen. Additionally, the manure was analyzed for ammonia. Milk samples were analyzed for total nitrogen only.

The solids and total nitrogen concentrations of the manure, feed and incoming bedding are presented in Appendix E. The nitrogen content of the bedding ranged from 0.53 to 1.00% nitrogen (wet-basis). The nitrogen content of the manure ranged from 0.01 to 0.31% nitrogen (wet-basis). The nitrogen content of the feed ranged from 0.95 to 1.97% nitrogen (wet-basis). The nitrogen content of the milk ranged from 0.32 to 0.52% nitrogen (wet-basis).

4.3. Thermal Environment

4.3.1. Ambient Conditions

Average monthly climatic data for the weather station nearest the Washington dairy site is presented in Table 16. According to historical climatic information, daytime average high temperatures range from 3°C in the winter to 31°C in the summer. Average overnight lows range from -7°C in winter to 11°C in summer. Typical prevailing winds for the region are from the west throughout the year.

Table F1 shows the daily average outdoor temperature, relative humidity, wind speed, wind direction, solar radiation and barometric pressure. The ADM outdoor temperature during the study period was 10.1±9.2°C, while the historical annual average for the area was 9.3°C (**Error! Reference source not found.**). The DM temperatures ranged from -11.0°C to 33.2°C (Figure 4).

Table 15. Monthly averages for weather conditions in the area*.

Month	Temperature, °C			Wind speed, km·h^{-1}	Wind direction
	High	Low	Mean		
January	3	-6	-2	10	W
February	8	-4	2	11	W
March	13	-2	6	14	W
April	18	1	9	14	W
May	22	4	13	14	W
June	27	8	17	14	W
July	31	11	21	13	W
August	30	10	20	13	W
September	26	6	16	13	W
October	18	1	9	11	W
November	9	-3	3	10	W
December	3	-7	-2	9	W
Annual average	17	2	9		

* http://www.weather.com/outlook/travel/vacationplanner/wxclimatology/monthly/USWA0502.

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4.3.2. Barn Conditions

The daily average inside temperatures and RH in barns 2 and 4 are presented in Table F2.

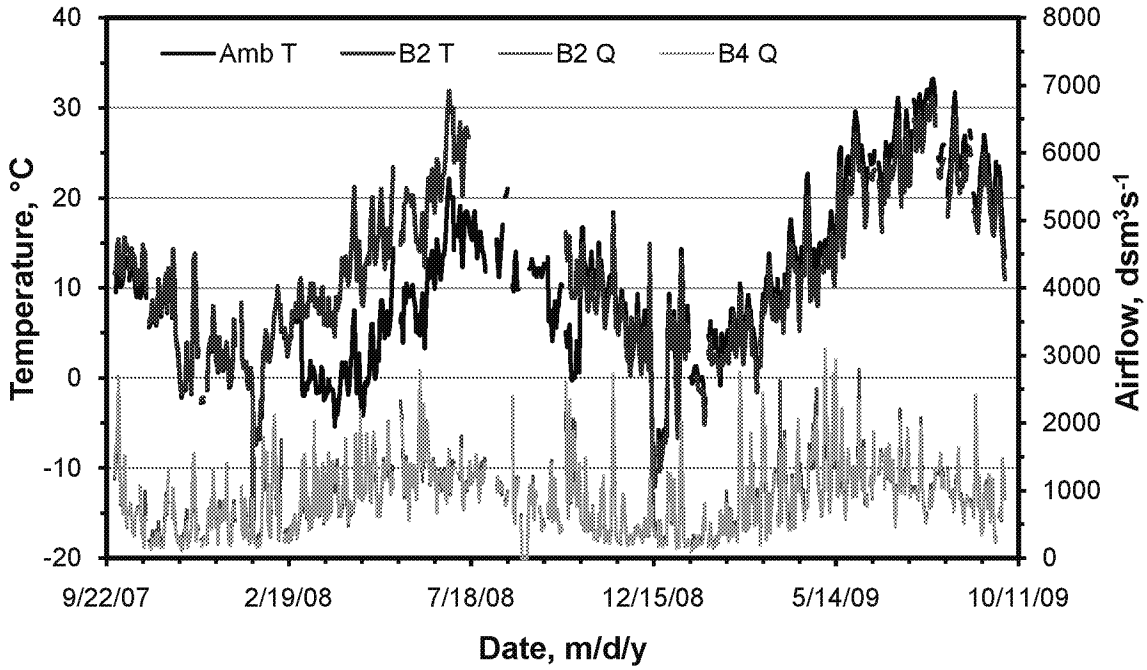

Figure 4. Inlet and exhaust temperatures (T) and airflow rates (Q) for B2 and B4.

4.3.3. Ventilation Rates

The mean wind velocity was 2.58±1.63 $m \cdot s^{-1}$. The wind direction was from the NE, SE, SE and NW for 19.7, 9.1, 33.9 and 37.3% of the time. Northerly winds occurred 57% of the time and southerly winds occurred 43% of the time. The overall average ventilation rates were 886±510 and 883±543 $dsm^3\ s^{-1}$ for B2 and B4, respectively.

4.4. Particulate Matter Concentration and Emission

4.4.1. PM_{10}

The DM inlet PM_{10} concentration ranged from 2 to 487 μg dsm^{-3}, whereas daily mean barn 2 and 4 PM_{10} exhaust concentrations ranged from 20 to 2040 and 18 to 1520 μg dsm^{-3}, respectively (Table F3).

The ADM (±SD) inlet, barn 2, and barn 4 PM_{10} concentrations were 96±88 μg dsm^{-3}, 147±163 μg dsm^{-3} and 216±237 μg dsm^{-3}, respectively, based on 449, 518 and 477 valid days of data, respectively.

The overall mean PM_{10} emission rates were 3.59±6.62 $kg \cdot d^{-1}$ (6.94±12.8 g $d^{-1}cow^{-1}$) from barn 2 (n=448), and 10.0 ±15.3 $kg \cdot d^{-1}$ (10.3 ±15.9 g $d^{-1}cow^{-1}$) from barn 4 (n=415) (Table F4).

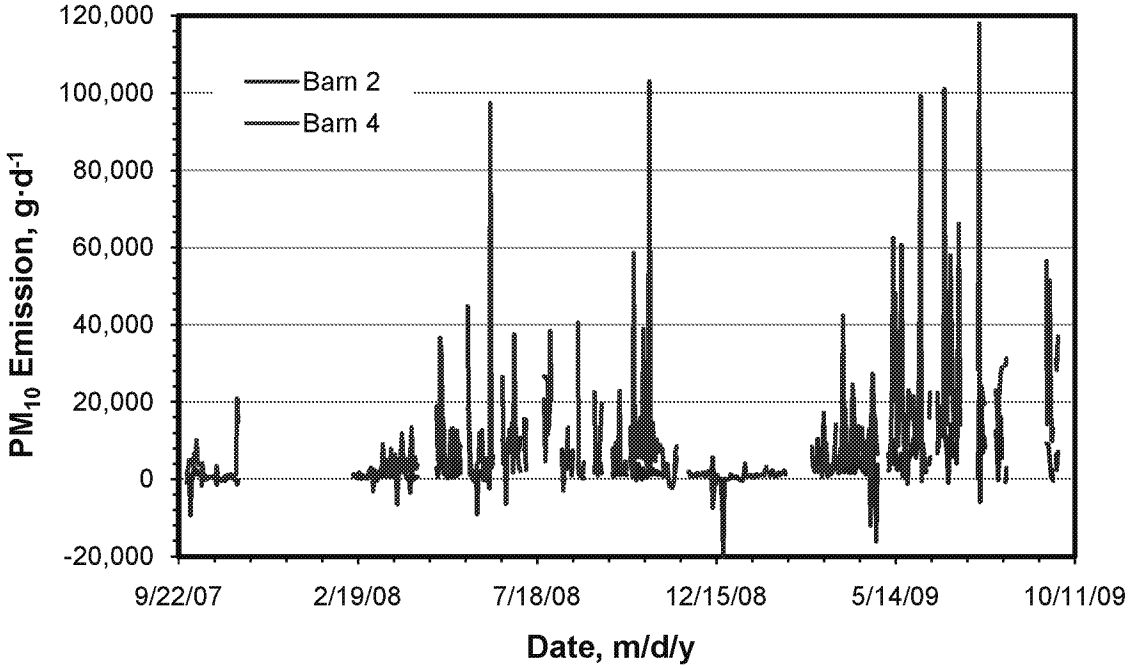

Figure 5. Daily mean PM_{10} emissions.

4.4.2. $PM_{2.5}$

Daily mean concentrations of $PM_{2.5}$ ranged from 13 to 45 µg dsm^{-3} in the inlet air (n=37 d), 10 to 88 µg dsm^{-3} in barn 2 exhaust air (n=64 d) and from 4 to 91 µg dsm^{-3} in the barn 4 exhaust air (n=64 d) (Table F4).

The ADM inlet, barns 2 and 4 $PM_{2.5}$ exhaust concentrations were 22.8±9.0, 42.7±24.0 and 35.8±23.9 µg dsm^{-3}, respectively.

The overall mean $PM_{2.5}$ emission rates were 2720±1804 $g \cdot d^{-1}$ (5251±3463 $mg \cdot d^{-1} cow^{-1}$) for barn 2 (n=37 d), and 1863±1755 $g \cdot d^{-1}$ (1903±1795 $mg \cdot d^{-1} cow^{-1}$) for barn 4 (n=37 d).

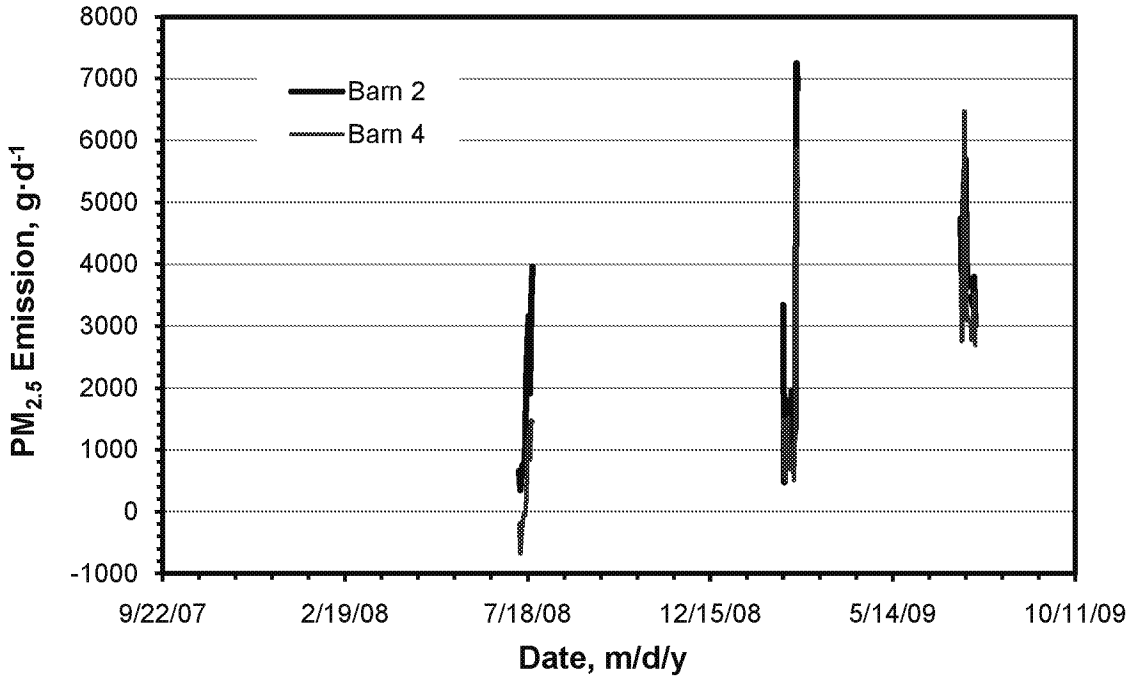

Figure 6. Daily mean $PM_{2.5}$ emissions.

4.4.3. TSP

Data from the seven TSP measurement periods are shown in Table F5. Daily mean TSP concentrations ranged from 17 to 635 μg dsm^{-3} in the inlet air (n=45 d), 50 to 1470 μg dsm^{-3} in barn 2 exhaust air (n=52 d) and from 107 to 2420 μg dsm^{-3} in barn 4 exhaust air (n=52 d).

The ADM inlet, barn 2, and barn 4 TSP exhaust concentrations were 191±171, 425±295 and 791±550 μg dsm^{-3}, respectively (Table F5).

The TSP emission rates are also shown in Table F5. The overall mean TSP emission rates were 18.8±24.0 kg·d^{-1} (36.2±45.8 g·$d^{-1}cow^{-1}$) for barn 2 (n=45 d), and 46.9±66.5 kg·d^{-1} (48.8±69.6 g·$d^{-1}cow^{-1}$) for barn 4 (n=45 d).

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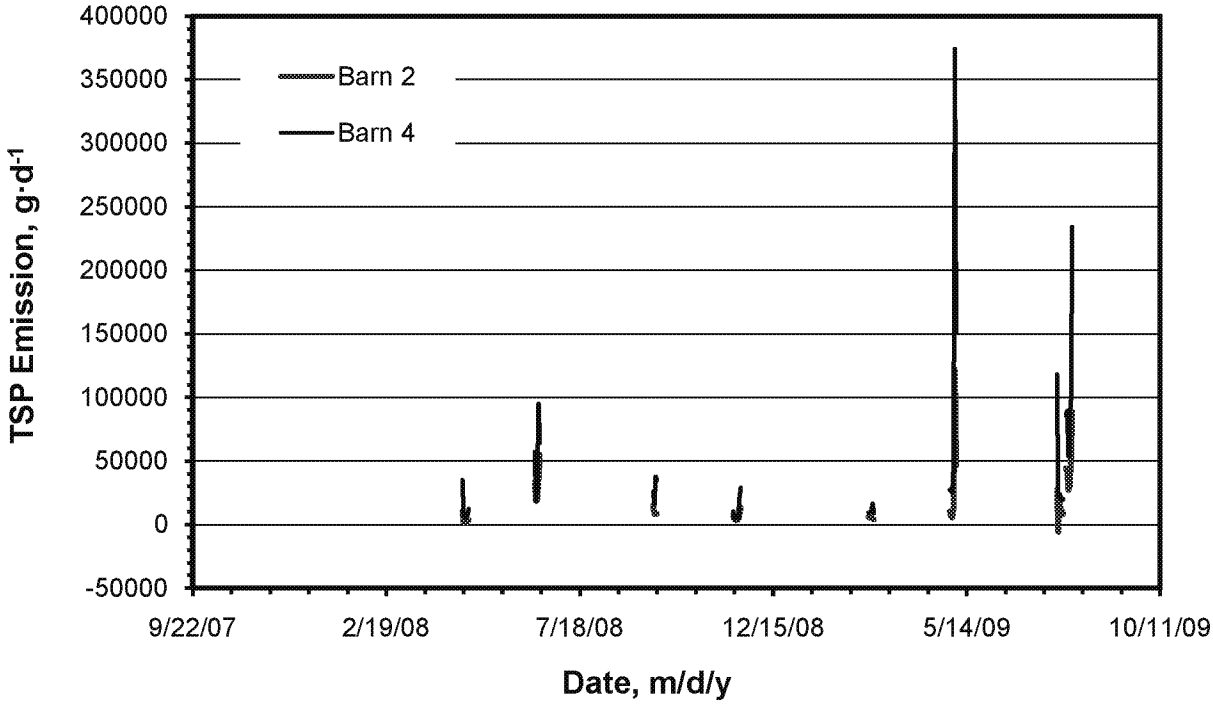

Figure 7. Daily mean TSP emissions.

4.5. VOC Concentration and Emission

The 20 most prevalent VOCs detected in the canister samples accounted for 95.9% of the total quantified mass. The most prevalent compound was n-propanol, which was 36.6% of the total mass of measured VOC (Table 17).

Concentrations of total VOC in exhaust air ranged from 0.17 to 3.17 $mg \cdot m^{-3}$ in barn 2, and from 0.60 to 2.41 $mg \cdot m^{-3}$ in barn 4 (Table 18). The mean total VOC concentrations were 1.01±1.00 and 1.46±0.70 $mg \cdot m^{-3}$ in barns 2 and 4, respectively.

Total VOC emissions ($ng \cdot s^{-1}$) during each sampling period were determined by multiplying the mean building airflow rate ($m^3\ s^{-1}$) by the total mass ($ng \cdot m^{-3}$) and converting to $kg \cdot d^{-1}$. The VOC emission rate from barns 2 and 4 ranged from 20.8 to 102 $kg \cdot d^{-1}$, and from 56.5 to 198 $kg \cdot d^{-1}$, respectively. The overall mean VOC emission rate from barn 2 was 52.0±36.3 $kg \cdot d^{-1}$. The overall mean VOC emission rate from barn 4 was 102±65.5 $kg \cdot d^{-1}$ (Table 18).

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Table 16. Average concentration of 20 most prevalent VOCs.

Compound	Concentration, $ng \cdot m^{-3}$	% of total	Cumulative %
n-Propanol	4.58E+05	36.56	36.56
Ethyl Acetate	2.04E+05	16.29	52.85
iso-propanol	1.68E+05	13.43	66.28
Acetaldehyde	1.20E+05	9.55	75.83
Methanol	1.00E+05	7.99	83.82
n-Propyl acetate	4.09E+04	3.26	87.08
2-butanone	2.37E+04	1.89	88.98
Toluene	1.37E+04	1.10	90.07
phenol	1.08E+04	0.86	90.93
2-butanol	7.40E+03	0.59	91.52
Benzene	7.33E+03	0.58	92.11
Hexanal	6.53E+03	0.52	92.63
Dimethyl sulfide	6.32E+03	0.50	93.13
Acetic Acid	5.89E+03	0.47	93.60
Pentanal	5.32E+03	0.42	94.03
1-butanol	5.23E+03	0.42	94.44
Heptanal	5.19E+03	0.41	94.86
4-methyl-phenol	4.83E+03	0.39	95.24
2-pentanone	4.04E+03	0.32	95.57
Benzaldehyde	3.57E+03	0.28	95.85

Table 17. Emission of total VOC.

Date	# canisters		Concentration, $mg \cdot m^{-3}$		Airflow, $m^3 s^{-1}$		Emission, $kg \cdot d^{-1}$	
	B2	B4	B2	B4	B2	B4	B2	B4
5/6/09	2	1	0.17	0.60	2125	1241	30.9	64.6
6/24/09	2	2	0.40	0.63	1577	1661	54.1	89.8
9/3/09	2	2	0.85	2.04	N/A	N/A	N/A	N/A
9/23/09	2	2	0.51	1.82	473	359	20.8	56.5
9/24/09	2	2	0.96	2.41	N/A	N/A	N/A	N/A
9/29/09	2	2	1.03	1.83	1151	1256	102.4	198.1
10/7/09	2	2	3.17	1.24	N/A	N/A	N/A	N/A
Mean	2	1.9	1.01	1.46	1332	1129	52.0	102.2

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4.6. Hydrogen Sulfide Concentrations and Emissions

Daily mean inlet and exhaust H_2S concentrations for the entire test are provided in Table F6.

The average daily mean H_2S concentrations were 25.6±27.6 (n=452) ppb in the inlet air, and 28.9±24.1 (n=561) and 32.1±24.2 ppb (n=542) in the exhaust air from barns 2 and 4, respectively.

Daily mean H_2S emissions from barns 2 and 4 are tabulated in Table F7. The ADM H_2S emission rates from barns 2 and 4 were 556±1738 $g \cdot d^{-1}$ (n=116) and 1132±3488 $g \cdot d^{-1}$ (n=104), respectively.

The ADM cow-specific H_2S emission rates from barns 2 and 4 were 1083±3390 (n=116) and 1145±3563 (n=104) $mg \cdot d^{-1}$ cow^{-1}, respectively.

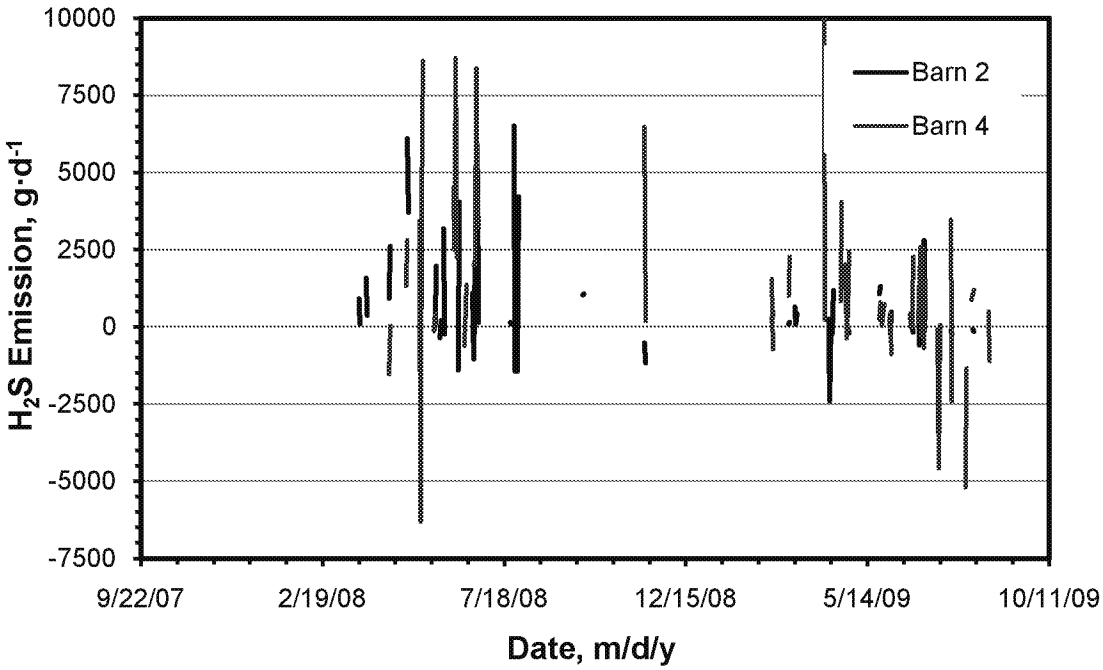

Figure 8. Daily mean H_2S emissions.

4.7. Ammonia Concentration and Emission

Daily mean inlet and exhaust NH_3 concentrations are provided in Table F8.

The average daily mean NH_3 concentrations were 0.74 ±0.49 (n=411) ppm in the ambient air, and 0.78±0.49 (n=516) and 1.02±0.58 (n=501) ppm in the incoming air to barns 2 and 4, respectively. The average daily mean NH_3 concentrations at the ridge exhaust of barns 2 and 4 were 1.26±0.72 (n=361) and 1.80±0.88 (n=300) ppm in the incoming air to barns 2 and 4, respectively.

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The ADM NH_3 emission rates from barns 2 and 4 were 29.1±21.7 kg d^{-1} (n=123) and 54.7±31.5 kg·d^{-1} (n=99), respectively (Table F9).

The ADM cow-specific NH_3 emission rates from barns 2 and 4 were 56.5 ±42.5 (n=123) g·d^{-1} cow^{-1}, and 56.5±33.0 g·$d^{-1}hd^{-1}$ (n=99).

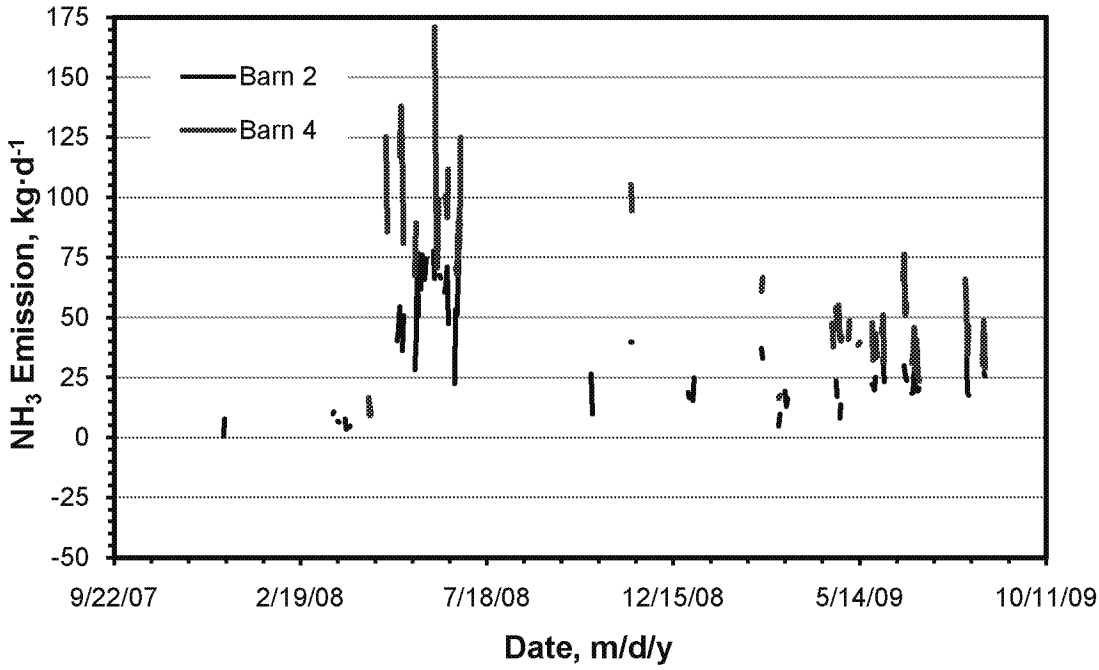

Figure 9. Daily mean NH_3 emissions.

4.8. Emission Data Completeness

Daily completeness data is given in Table F10. The numbers of complete data (>75% valid required for reporting a daily mean) were calculated for emission measurements conducted from 9/28/09 through 9/27/09.

Table 18. Emissions data completeness (days with >75% valid emission data collection).

Location	NH_3	H_2S	PM_{10}	$PM_{2.5}$	TSP
B2	123	116	448	37	45
B4	99	104	415	37	45

4.9. Reconciliation with Data Quality Objectives

The data quality objectives prior to executing the study were to measure gas and PM emissions from naturally-ventilated buildings with total relative uncertainties of 50% and 53%, respectively.

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4.9.1. Airflow

The accuracy of the wind anemometer was ±0.5 m/s for wind speed and ±5° for wind direction. Preliminary data from site CA5B comparing the weather station wind measurements with the barn sonics suggested that a positive bias of 20% results when using the wind anemometer instead of the sonic anemometers in the upwind sidewalls. The uncertainty in airflow associated with the anemometer accuracy was calculated as 22%.

4.9.2. Gas Emissions

The bias and precision of NH_3 concentration measurements were derived from the NH_3 zero/span checks as compared with the NH_3 correction models (Table 7). The bias and precision of NH_3 measurements were -4.0% and 5.1% for an overall uncertainty of 11.0%.

The bias and precision of H_2S concentration measurements were derived from the H_2S zero and span checks as compared with the H_2S correction models (Table 8). The bias and precision of H_2S measurements were 1.3% and 1.7% for an overall uncertainty of 3.7%.

Based on these measurement errors calculated for concentrations and airflows, the uncertainties of NH_3 and H_2S emissions from barn 2 were 11.6 and 7.9%, respectively. The uncertainties of NH_3 and H_2S emissions from barn 4 were 15.9% and 13.4%, respectively.

4.9.3. PM Emissions

The precision in PM_{10}, TSP and $PM_{2.5}$ exhaust concentrations were 2.6, 5.3 and 5.9%, respectively, based on collocation tests of identical TEOMs at Site WA5B. The time-weighted relative biases of the TEOMs were 0.0 and -0.24% for barns 2 and 4 based on the main flow checks. The uncertainties of PM_{10}, TSP and $PM_{2.5}$ emissions from barn 2 were 48.6, 49.5 and 49.8%, respectively. The uncertainties of PM_{10}, TSP and $PM_{2.5}$ emissions from barn 4 were 48.6, 49.5, and 49.8%, respectively.

5. SUMMARY

The emissions of NH_3, H_2S, PM_{10}, TSP, $PM_{2.5}$ and VOCs from two naturally-ventilated freestall barns at a 5,600-cow dairy farm in Washington were measured during a two-year monitoring study. Manure was flushed from the barns and stored in a lagoon after going through solids separation system. Dried manure solids were used as bedding in the freestalls.

The overall average emission rates from barn 2 were 29.1 kg d^{-1} of NH_3, 0.556 kg d^{-1} of H_2S, 3.59 kg d^{-1} of PM_{10}, 2.72 kg d^{-1} of $PM_{2.5}$, 18.8 kg d^{-1} of TSP, and 52.0 kg d^{-1} of total VOC. The overall average emission rates from barn 4 were 54.7 kg d^{-1} of NH_3, 1.13 kg d^{-1} of H_2S, 10.0 kg d^{-1} of PM_{10}, 1.86 kg d^{-1} of $PM_{2.5}$, 46.9 kg d^{-1} of TSP, and 102 kg d^{-1} of total VOC.

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6. REFERENCES

Ni, J.-Q., A.J. Heber, M.J. Darr, T. T. Lim, C.A. Diehl, and B.W. Bogan. 2009. Air quality monitoring and on-site computer system for livestock and poultry environment studies. Transactions of the ASABE 52(3): 937-947.

Ni, J.-Q. and A.J. Heber. 2010. An on-site computer system for comprehensive agricultural air quality research. Computers and Electronics in Agriculture 71(1):38-49.

7. DEFINITIONS AND ACRONYMS

AirDAC	Air Data Acquisition and Control – computer program
ADM	Average daily mean
B2	Barn 2 (Freestall barn)
B4	Barn 4 (Freestall barn)
CAPECAB	Calculations of Air Pollutant Emissions from Confined Animal Buildings
CO_2	Carbon dioxide
DM	Daily mean
GC-MS	Gas chromatograph mass spectrometer
GSL	Gas sampling location(s)
GSS	Gas sampling system
H_2S	Hydrogen sulfide
MDL	Minimum detection limit
MPC	Multipoint calibration
MS	Mass spectrometer
MUN	Milk urea nitrogen
n	Number or count
NAEMS	National Air Emissions Monitoring Study
NH_3	Ammonia
Q	Airflow
QA	Quality assurance
QC	Quality control
OFIS	On farm instrument shelter
PM	Particulate matter
RH/T	Relative humidity/temperature
RH	Relative humidity
SD	Standard deviation
TC	Thermocouple
T_{dew}	Dew point temperature
TDS	Thermal desorption system
TDS-GS-MS	Thermodesorption-gas chromatograph mass spectrometer
TEOM	Tapered element oscillating microbalance
TSP	Total suspended particulate
VOC	Volatile organic compounds
Z/S	Zero/span

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APPENDIX A. MEASUREMENT VARIABLES.

Table A1. Site measurement variables, instruments and sensors.

Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range/target	DAC item
1	Date & time	---				PC clock
2	Smpl loc#	---				LabVIEW
3	Cal gas #	Environics	Rack			Serial port
4	Cal gas, ppm	Environics	Rack			Serial port
5	NH3, ppm	Innova 1412	Rack	13 GSLs		Serial port
6	CO2, ppm	Innova 1412	Rack	13 GSLs		Serial port
7	N2O, ppm	Innova 1412	Rack	13 GSLs		Serial port
8	CH4, ppm	Innova 1412	Rack	13 GSLs		Serial port
10	WV, Tdew	Innova 1412	Rack	13 GSLs		Serial port
11	H2S, ppb	H2S analyzer	Rack	13 GSLs	0 - 2000	FP-AI-112-1
12	SO2, ppb	H2S analyzer	Rack	13 GSLs	0 - 2000	FP-AI-112-1
13	Smpl P, Pa	Setra 209 ΔP	GSS	13 GSLs	0 - 14.7 psiv	FP-AI-112-1
14	Smpl Q, L/m	Mass flow	GSS	13 GSLs	0 - 10	FP-AI-112-1
15	Smpl RH, %	Humitter 50Y	GSS	13 GSLs	0 - 100	FP-AI-112-1
16	Smpl T, ºC	Humitter 50Y	GSS	13 GSLs	-40 - 60	FP-AI-112-1
17	Smpl dir, %t	Flow direction	GSS	13 GSLs		FP-AI-112-1
18	GSS T, ºC	AD 592D T	GSS	GSS	0 - 70	FP-AI-112-1
19	B2 PM, µg/m3	TEOM #1	B2	Middle barn 2 (M8)	-1000 - 9000	FP-AI-112-1
20	B2 Filter, %	TEOM #1	B2		0 - 140	FP-AI-112-1
21	B2 Atm P, atm	TEOM #1	B2		0.8 - 1.3	FP-AI-112-1
22	B4 PM, µg/m3	TEOM #2	B4	Middle B4 (M3)	-1000 - 9000	FP-AI-112-1
23	B4 Filter, %	TEOM #2	B4		0 - 140	FP-AI-112-1
24	Amb PM, µg/m3	Beta Gauge	Amb	Top of OFIS	-1000 - 9000	FP-AI-112-1
26	Lab ΔP, Pa	Setra 260 ΔP sensor	OFIS	Inside & outdoor of OFIS	-100 - 100	FP-AI-112-1
27	Wind D, deg	Wind monitor 05103-5	roof	Roof tower	0 - 360	FP-AI-112-2
28	Wind V, m/s	Wind monitor 05103-5	roof	Roof tower	0 - 60	FP-AI-112-2
29	Solar, W/m2	Solar sensor	roof	Roof tower	0 - 1000	FP-AI-112-2
30	Amb RH, %	NOVUS RHT-WM #1	roof	Roof tower	0 - 100	FP-AI-112-2

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Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range/target	DAC item
31	Amb T, ºC	NOVUS RHT-WM #1	roof	Roof tower	-40 - 120	FP-AI-112-2
32	B2M8 RH, %	NOVUS RHT-WM #2	B2M8	At air sampling probe	0 - 100	FP-AI-112-2
33	B2M8 T, ºC	NOVUS RHT-WM #2	B2M8	At air sampling probe	-40 - 120	FP-AI-112-2
34	B4M3 RH, %	NOVUS RHT-WM #3	B4M3	At air sampling probe	0 - 100	FP-AI-112-2
35	B4M3 T, ºC	NOVUS RHT-WM #3	B4M3	At air sampling probe	-40 - 120	FP-AI-112-2
36	Lab Act , V	Activity sensor #1	OFIS	End wall		FP-AI-112-2
37	B4S act, V	Activity sensor #2	B4 S	Center b/w S wall and alley		FP-AI-112-2
38	B4M act, V	Activity sensor #3	B4 M	Center of barn; middle alley		FP-AI-112-2
39	B4N act, V	Activity sensor #4	B4 N	Center b/w N wall and alley		FP-AI-112-2
40	B2S act, V	Activity sensor #2	B2 S	Center b/w S wall and alley		FP-AI-112-2
41	B2M act, V	Activity sensor #3	B2 M	Center of barn; middle alley		FP-AI-112-2
42	B2N act, V	Activity sensor #4	B2 N	Center b/w N wall and alley		FP-AI-112-2
43	NO, ppm	17 ºC	Rack	13 GSLs		FP-AI-112-3
44	NOx, ppm	17 ºC	Rack	13 GSLs		FP-AI-112-3
45	NO2, ppm	17 ºC	Rack	13 GSLs		FP-AI-112-3
46	NH3, ppm	17 ºC	Rack	13 GSLs		FP-AI-112-3
51	2NE U, m/s	81000 sonic	B2	B2 northeast	-25 - 25	RS485 P1
52	2NE V, m/s	81000 sonic	B2	B2 northeast	-25 - 25	RS485 P1
53	2NE W, m/s	81000 sonic	B2	B2 northeast	-25 - 25	RS485 P1
54	2NE T, ºC	81000 sonic	B2	B2 northeast	220 - 320	RS485 P1
55	2SE U, m/s	81000 sonic	B2	B2 southeast	-25 - 25	RS485 P1
56	2SE V, m/s	81000 sonic	B2	B2 southeast	-25 - 25	RS485 P1
57	2SE W, m/s	81000 sonic	B2	B2 southeast	-25 - 25	RS485 P1
58	2SE T, ºC	81000 sonic	B2	B2 southeast	220 - 320	RS485 P1
59	2NU1 U, m/s	81000 sonic	B2	B2 north upper 1	-25 - 25	RS485 P1
60	2NU1 V, m/s	81000 sonic	B2	B2 north upper 1	-25 - 25	RS485 P1
61	2NU1 W, m/s	81000 sonic	B2	B2 north upper 1	-25 - 25	RS485 P1
62	2NU1 T, ºC	81000 sonic	B2	B2 north upper 1	220 - 320	RS485 P1
63	2NU2 U, m/s	81000 sonic	B2	B2 north upper 2	-25 - 25	RS485 P1
64	2NU2 V, m/s	81000 sonic	B2	B2 north upper 2	-25 - 25	RS485 P1

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Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range/target	DAC item
65	2NU2 W, m/s	81000 sonic	B2	B2 north upper 2	-25 - 25	RS485 P1
66	2NU2 T, ºC	81000 sonic	B2	B2 north upper 2	220 - 320	RS485 P1
67	2NM U, m/s	81000 sonic	B2	B2 north middle	-25 - 25	RS485 P1
68	2NM V, m/s	81000 sonic	B2	B2 north middle	-25 - 25	RS485 P1
69	2NM W, m/s	81000 sonic	B2	B2 north middle	-25 - 25	RS485 P1
70	2NM T, ºC	81000 sonic	B2	B2 north middle	220 - 320	RS485 P1
71	2NB U, m/s	81000 sonic	B2	B2 north bottom	-25 - 25	RS485 P1
72	2NB V, m/s	81000 sonic	B2	B2 north bottom	-25 - 25	RS485 P1
73	2NB W, m/s	81000 sonic	B2	B2 north bottom	-25 - 25	RS485 P1
74	2NB T, ºC	81000 sonic	B2	B2 north bottom	220 - 320	RS485 P1
75	2NU3 U, m/s	81000 sonic	B2	B2 north upper 3	-25 - 25	RS485 P1
76	2NU3 V, m/s	81000 sonic	B2	B2 north upper 3	-25 - 25	RS485 P1
77	2NU3 W, m/s	81000 sonic	B2	B2 north upper 3	-25 - 25	RS485 P1
78	2NU3 T, ºC	81000 sonic	B2	B2 north upper 3	220 - 320	RS485 P1
79	2NU4 U, m/s	81000 sonic	B2	B2 north upper 4	-25 - 25	RS485 P1
80	2NU4 V, m/s	81000 sonic	B2	B2 north upper 4	-25 - 25	RS485 P1
81	2NU4 W, m/s	81000 sonic	B2	B2 north upper 4	-25 - 25	RS485 P1
82	2NU4 T, ºC	81000 sonic	B2	B2 north upper 4	220 - 320	RS485 P1
83	2R1 U, m/s	81000 sonic	B2	B2 ridge 1	-25 - 25	RS485 P2
84	2R1 V, m/s	81000 sonic	B2	B2 ridge 1	-25 - 25	RS485 P2
85	2R1 W, m/s	81000 sonic	B2	B2 ridge 1	-25 - 25	RS485 P2
86	2R1 T, ºC	81000 sonic	B2	B2 ridge 1	220 - 320	RS485 P2
87	2R2 U, m/s	81000 sonic	B2	B2 ridge 2	-25 - 25	RS485 P2
88	2R2 V, m/s	81000 sonic	B2	B2 ridge 2	-25 - 25	RS485 P2
89	2R2 W, m/s	81000 sonic	B2	B2 ridge 2	-25 - 25	RS485 P2
90	2R2 T, ºC	81000 sonic	B2	B2 ridge 2	220 - 320	RS485 P2
91	2R3 U, m/s	81000 sonic	B2	B2 ridge 3	-25 - 25	RS485 P2
92	2R3 V, m/s	81000 sonic	B2	B2 ridge 3	-25 - 25	RS485 P2
93	2R3 W, m/s	81000 sonic	B2	B2 ridge 3	-25 - 25	RS485 P2
94	2R3 T, ºC	81000 sonic	B2	B2 ridge 3	220 - 320	RS485 P2

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Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range/target	DAC item
95	2R4 U, m/s	81000 sonic	B2	B2 ridge 4	-25 - 25	RS485 P2
96	2R4 V, m/s	81000 sonic	B2	B2 ridge 4	-25 - 25	RS485 P2
97	2R4 W, m/s	81000 sonic	B2	B2 ridge 4	-25 - 25	RS485 P2
98	2R4 T, ºC	81000 sonic	B2	B2 ridge 4	220 - 320	RS485 P2
99	2SU1 U, m/s	81000 sonic	B2	B2 south upper 1	-25 - 25	RS485 P1
100	2SU1 V, m/s	81000 sonic	B2	B2 south upper 1	-25 - 25	RS485 P1
101	2SU1 W, m/s	81000 sonic	B2	B2 south upper 1	-25 - 25	RS485 P1
102	2SU1 T, ºC	81000 sonic	B2	B2 south upper 1	220 - 320	RS485 P1
103	2SU2 U, m/s	81000 sonic	B2	B2 south upper 2	-25 - 25	RS485 P1
104	2SU2 V, m/s	81000 sonic	B2	B2 south upper 2	-25 - 25	RS485 P1
105	2SU2 W, m/s	81000 sonic	B2	B2 south upper 2	-25 - 25	RS485 P1
106	2SU2 T, ºC	81000 sonic	B2	B2 south upper 2	220 - 320	RS485 P1
107	2SM U, m/s	81000 sonic	B2	B2 north middle	-25 - 25	RS485 P2
108	2SM V, m/s	81000 sonic	B2	B2 north middle	-25 - 25	RS485 P2
109	2SM W, m/s	81000 sonic	B2	B2 north middle	-25 - 25	RS485 P2
110	2SM T, ºC	81000 sonic	B2	B2 north middle	220 - 320	RS485 P2
111	2SB U, m/s	81000 sonic	B2	B2 north bottom	-25 - 25	RS485 P2
112	2SB V, m/s	81000 sonic	B2	B2 north bottom	-25 - 25	RS485 P2
113	2SB W, m/s	81000 sonic	B2	B2 north bottom	-25 - 25	RS485 P2
114	2SB T, ºC	81000 sonic	B2	B2 north bottom	220 - 320	RS485 P2
115	2SU3 U, m/s	81000 sonic	B2	B2 south upper 3	-25 - 25	RS485 P2
116	2SU3 V, m/s	81000 sonic	B2	B2 south upper 3	-25 - 25	RS485 P2
117	2SU3 W, m/s	81000 sonic	B2	B2 south upper 3	-25 - 25	RS485 P2
118	2SU3 T, ºC	81000 sonic	B2	B2 south upper 3	220 - 320	RS485 P2
119	2SU4 U, m/s	81000 sonic	B2	B2 south upper 4	-25 - 25	RS485 P2
120	2SU4 V, m/s	81000 sonic	B2	B2 south upper 4	-25 - 25	RS485 P2
121	2SU4 W, m/s	81000 sonic	B2	B2 south upper 4	-25 - 25	RS485 P2
122	2SU4 T, ºC	81000 sonic	B2	B2 south upper 4	220 - 320	RS485 P2
123	2SW U, m/s	81000 sonic	B2	B2 southwest	-25 - 25	RS485 P2
124	2SW V, m/s	81000 sonic	B2	B2 southwest	-25 - 25	RS485 P2

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Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range/target	DAC item
125	2SW W, m/s	81000 sonic	B2	B2 southwest	-25 - 25	RS485 P2
126	2SW T, ºC	81000 sonic	B2	B2 southwest	220 - 320	RS485 P2
127	2NW U, m/s	81000 sonic	B2	B2 northwest	-25 - 25	RS485 P2
128	2NW V, m/s	81000 sonic	B2	B2 northwest	-25 - 25	RS485 P2
129	2NW W, m/s	81000 sonic	B2	B2 northwest	-25 - 25	RS485 P2
130	2NW T, ºC	81000 sonic	B2	B2 northwest	220 - 320	RS485 P2
131	4SE U, m/s	81000 sonic	B4	B4 southeast	-25 - 25	RS485 P3
132	4SE V, m/s	81000 sonic	B4	B4 southeast	-25 - 25	RS485 P3
133	4SE W, m/s	81000 sonic	B4	B4 southeast	-25 - 25	RS485 P3
134	4SE T, ºC	81000 sonic	B4	B4 southeast	220 - 320	RS485 P3
135	4NE U, m/s	81000 sonic	B4	B4 northeast	-25 - 25	RS485 P3
136	4NE V, m/s	81000 sonic	B4	B4 northeast	-25 - 25	RS485 P3
137	4NE W, m/s	81000 sonic	B4	B4 northeast	-25 - 25	RS485 P3
138	4NE T, ºC	81000 sonic	B4	B4 northeast	220 - 320	RS485 P3
139	4NU1 U, m/s	81000 sonic	B4	B4 north upper 1	-25 - 25	RS485 P3
140	4NU1 V, m/s	81000 sonic	B4	B4 north upper 1	-25 - 25	RS485 P3
141	4NU1 W, m/s	81000 sonic	B4	B4 north upper 1	-25 - 25	RS485 P3
142	4NU1 T, ºC	81000 sonic	B4	B4 north upper 1	220 - 320	RS485 P3
143	4NU2 U, m/s	81000 sonic	B4	B4 north upper 2	-25 - 25	RS485 P3
144	4NU2 V, m/s	81000 sonic	B4	B4 north upper 2	-25 - 25	RS485 P3
145	4NU2 W, m/s	81000 sonic	B4	B4 north upper 2	-25 - 25	RS485 P3
146	4NU2 T, ºC	81000 sonic	B4	B4 north upper 2	220 - 320	RS485 P3
147	4NM U, m/s	81000 sonic	B4	B4 north middle	-25 - 25	RS485 P3
148	4NM V, m/s	81000 sonic	B4	B4 north middle	-25 - 25	RS485 P3
149	4NM W, m/s	81000 sonic	B4	B4 north middle	-25 - 25	RS485 P3
150	4NM T, ºC	81000 sonic	B4	B4 north middle	220 - 320	RS485 P3
151	4NB U, m/s	81000 sonic	B4	B4 north bottom	-25 - 25	RS485 P3
152	4NB V, m/s	81000 sonic	B4	B4 north bottom	-25 - 25	RS485 P3
153	4NB W, m/s	81000 sonic	B4	B4 north bottom	-25 - 25	RS485 P3
154	4NB T, ºC	81000 sonic	B4	B4 north bottom	220 - 320	RS485 P3

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Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range/target	DAC item
155	4NU3 U, m/s	81000 sonic	B4	B4 north upper 3	-25 - 25	RS485 P3
156	4NU3 V, m/s	81000 sonic	B4	B4 north upper 3	-25 - 25	RS485 P3
157	4NU3 W, m/s	81000 sonic	B4	B4 north upper 3	-25 - 25	RS485 P3
158	4NU3 T, ºC	81000 sonic	B4	B4 north upper 3	220 - 320	RS485 P3
159	4NU4 U, m/s	81000 sonic	B4	B4 north upper 4	-25 - 25	RS485 P3
160	4NU4 V, m/s	81000 sonic	B4	B4 north upper 4	-25 - 25	RS485 P3
161	4NU4 W, m/s	81000 sonic	B4	B4 north upper 4	-25 - 25	RS485 P3
162	4NU4 T, ºC	81000 sonic	B4	B4 north upper 4	220 - 320	RS485 P3
163	4R1 U, m/s	81000 sonic	B4	B4 ridge 1	-25 - 25	RS485 P4
164	4R1 V, m/s	81000 sonic	B4	B4 ridge 1	-25 - 25	RS485 P4
165	4R1 W, m/s	81000 sonic	B4	B4 ridge 1	-25 - 25	RS485 P4
166	4R1 T, ºC	81000 sonic	B4	B4 ridge 1	220 - 320	RS485 P4
167	4R2 U, m/s	81000 sonic	B4	B4 ridge 2	-25 - 25	RS485 P4
168	4R2 V, m/s	81000 sonic	B4	B4 ridge 2	-25 - 25	RS485 P4
169	4R2 W, m/s	81000 sonic	B4	B4 ridge 2	-25 - 25	RS485 P4
170	4R2 T, ºC	81000 sonic	B4	B4 ridge 2	220 - 320	RS485 P4
171	4R3 U, m/s	81000 sonic	B4	B4 ridge 3	-25 - 25	RS485 P4
172	4R3 V, m/s	81000 sonic	B4	B4 ridge 3	-25 - 25	RS485 P4
173	4R3 W, m/s	81000 sonic	B4	B4 ridge 3	-25 - 25	RS485 P4
174	4R3 T, ºC	81000 sonic	B4	B4 ridge 3	220 - 320	RS485 P4
175	4R4 U, m/s	81000 sonic	B4	B4 ridge 4	-25 - 25	RS485 P4
176	4R4 V, m/s	81000 sonic	B4	B4 ridge 4	-25 - 25	RS485 P4
177	4R4 W, m/s	81000 sonic	B4	B4 ridge 4	-25 - 25	RS485 P4
178	4R4 T, ºC	81000 sonic	B4	B4 ridge 4	220 - 320	RS485 P4
179	4SU1 U, m/s	81000 sonic	B4	B4 south upper 1	-25 - 25	RS485 P3
180	4SU1 V, m/s	81000 sonic	B4	B4 south upper 1	-25 - 25	RS485 P3
181	4SU1 W, m/s	81000 sonic	B4	B4 south upper 1	-25 - 25	RS485 P3
182	4SU1 T, ºC	81000 sonic	B4	B4 south upper 1	220 - 320	RS485 P3
183	4SU2 U, m/s	81000 sonic	B4	B4 south upper 2	-25 - 25	RS485 P3
184	4SU2 V, m/s	81000 sonic	B4	B4 south upper 2	-25 - 25	RS485 P3

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Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range/target	DAC item
185	4SU2 W, m/s	81000 sonic	B4	B4 south upper 2	-25 - 25	RS485 P3
186	4SU2 T, ºC	81000 sonic	B4	B4 south upper 2	220 - 320	RS485 P3
187	4SM U, m/s	81000 sonic	B4	B4 south middle	-25 - 25	RS485 P4
188	4SM V, m/s	81000 sonic	B4	B4 south middle	-25 - 25	RS485 P4
189	4SM W, m/s	81000 sonic	B4	B4 south middle	-25 - 25	RS485 P4
190	4SM T, ºC	81000 sonic	B4	B4 south middle	220 - 320	RS485 P4
191	4SB U, m/s	81000 sonic	B4	B4 south bottom	-25 - 25	RS485 P4
192	4SB V, m/s	81000 sonic	B4	B4 south bottom	-25 - 25	RS485 P4
193	4SB W, m/s	81000 sonic	B4	B4 south bottom	-25 - 25	RS485 P4
194	4SB T, ºC	81000 sonic	B4	B4 south bottom	220 - 320	RS485 P4
195	4SU3 U, m/s	81000 sonic	B4	B4 south upper 3	-25 - 25	RS485 P4
196	4SU3 V, m/s	81000 sonic	B4	B4 south upper 3	-25 - 25	RS485 P4
197	4SU3 W, m/s	81000 sonic	B4	B4 south upper 3	-25 - 25	RS485 P4
198	4SU3 T, ºC	81000 sonic	B4	B4 south upper 3	220 - 320	RS485 P4
199	4SU4 U, m/s	81000 sonic	B4	B4 south upper 4	-25 - 25	RS485 P4
200	4SU4 V, m/s	81000 sonic	B4	B4 south upper 4	-25 - 25	RS485 P4
201	4SU4 W, m/s	81000 sonic	B4	B4 south upper 4	-25 - 25	RS485 P4
202	4SU4 T, ºC	81000 sonic	B4	B4 south upper 4	220 - 320	RS485 P4
203	4SW U, m/s	81000 sonic	B4	B4 southwest	-25 - 25	RS485 P4
204	4SW V, m/s	81000 sonic	B4	B4 southwest	-25 - 25	RS485 P4
205	4SW W, m/s	81000 sonic	B4	B4 southwest	-25 - 25	RS485 P4
206	4SW T, ºC	81000 sonic	B4	B4 southwest	220 - 320	RS485 P4
207	4NW U, m/s	81000 sonic	B4	B4 northwest	-25 - 25	RS485 P4
208	4NW V, m/s	81000 sonic	B4	B4 northwest	-25 - 25	RS485 P4
209	4NW W, m/s	81000 sonic	B4	B4 northwest	-25 - 25	RS485 P4
210	4NW T, ºC	81000 sonic	B4	B4 northwest	220 - 320	RS485 P4
219	OFIS T, ºC	TC T type	OFIS	DAC panel		FP-TC-120
220	OFIS T, ºC	TC T type	OFIS	OFIS		FP-TC-120
221	HVAC T, ºC	TC T type	OFIS	Wall A/C exhaust		FP-TC-120
222	RwyB4 T, ºC	TC T type	RwyB4	Rwy b/w OFIS and B4		FP-TC-120

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Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range/target	DAC item
223	RwyB4 HT, ºC	TC T type	RwyB4 HT	Rwy b/w OFIS and B4		FP-TC-120
224	RwyB2 T, ºC	TC T type	RwyB2	Rwy b/w OFIS and B2		FP-TC-120
225	RwyB2 HT, ºC	TC T type	RwyB2 HT	Rwy b/w OFIS and B2		FP-TC-120

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APPENDIX B. RECORD OF MAINTENANCE AND CALIBRATION .

Maintenance and Calibration Tasks	
Category	**Times Completed**
Environment Sensing and Other	
Clean RH/T probe	27
Calibration check of RH/T probe	5
Calibration check of thermocouples	9
Performance check of weather station	14
Direction verification of wind indicator	4
Clean solar sensor	19
Check solar sensor with collocated sensor	2
Clean motion sensors	21
Air Flow Measurement System	
Fan test events	0
Zero check of pressure sensors	29
Multipoint calibration of pressure sensors	1
Drift and accuracy check of anemometer(s)	27
Particulate Matter Measurement System	
Clean TOEM screens	62
Check/clean TEOM inlet head(s)	49
Replace TEOM filters	24
Verify TEOM mass transducer calibration	4
Leak test of TEOM	9
Verify TEOM flow rate and MFC accuracy	13
Change TEOM in-line filters	5
Check/clean Beta Gauge inlet head	54
Check Beta Gauge airflow	31
Validate Beta Gauge mass w/foil set	8
Calibrate Beta Gauge mass and airflow	7
Gas Measurement System	
Clean/replace GSS membrane filters	14
Leak check of GSS	41
Leak check (all lines)	5
Leak check (selected lines)	10
Replace GSS filters	12
Calibrate GSS pressure and flow sensors	10
Flow calibration/check MFC flow of Environics Dilutor	20
Precision check of Multigas Analyzer (NH_3)	10
Multipoint calibration of Multigas Analyzer (NH_3)	41
Precision check of Multigas Analyzer (CO_2)	15
Multipoint calibration of Multigas Analyzer (CO_2)	14
Precision check of TEC 450i	41
Multipoint calibration of TEC 450i	5

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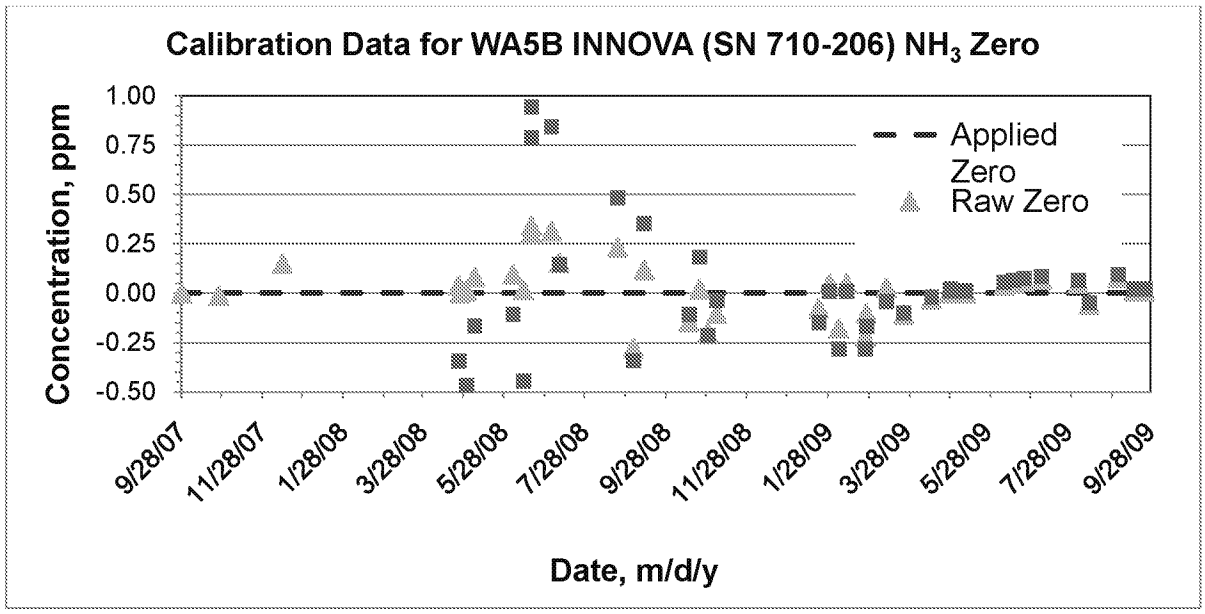
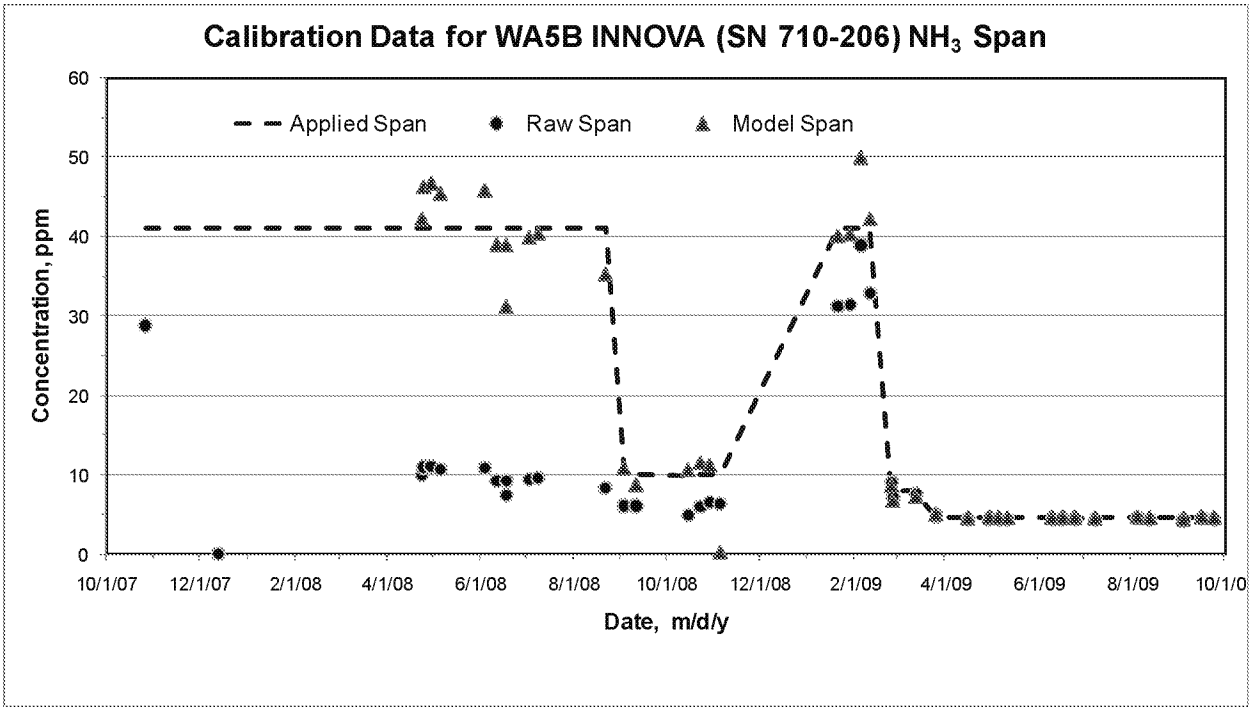
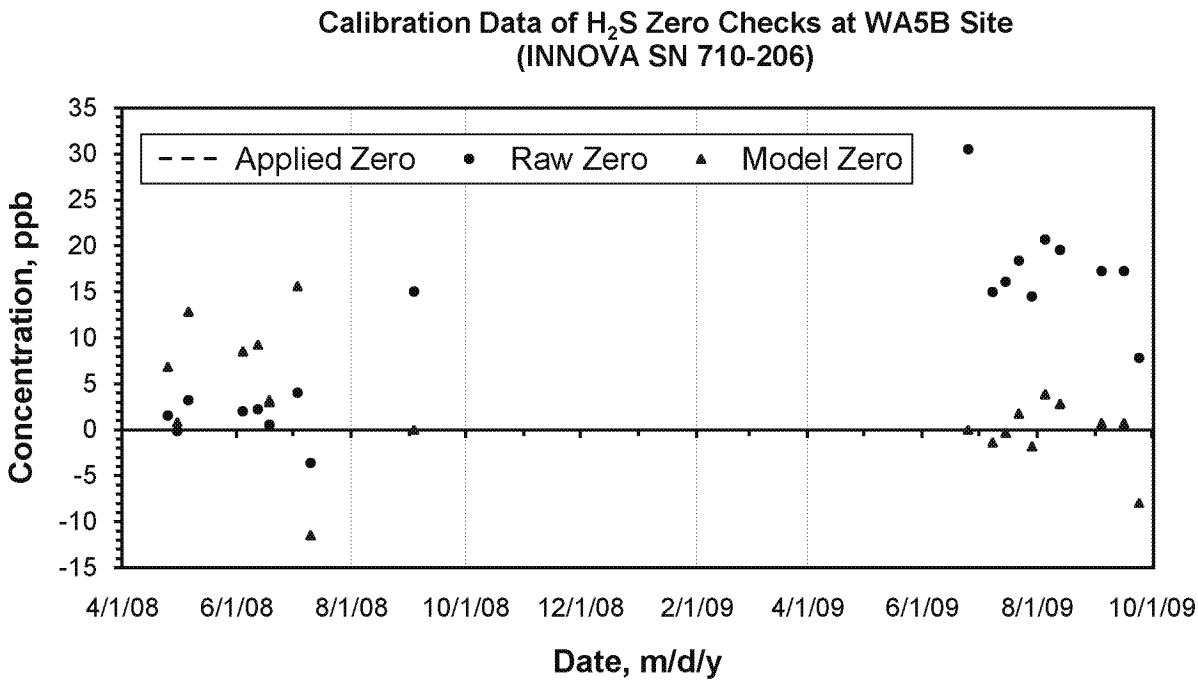
APPENDIX C. GAS ANALYZER CALIBRATIONS.

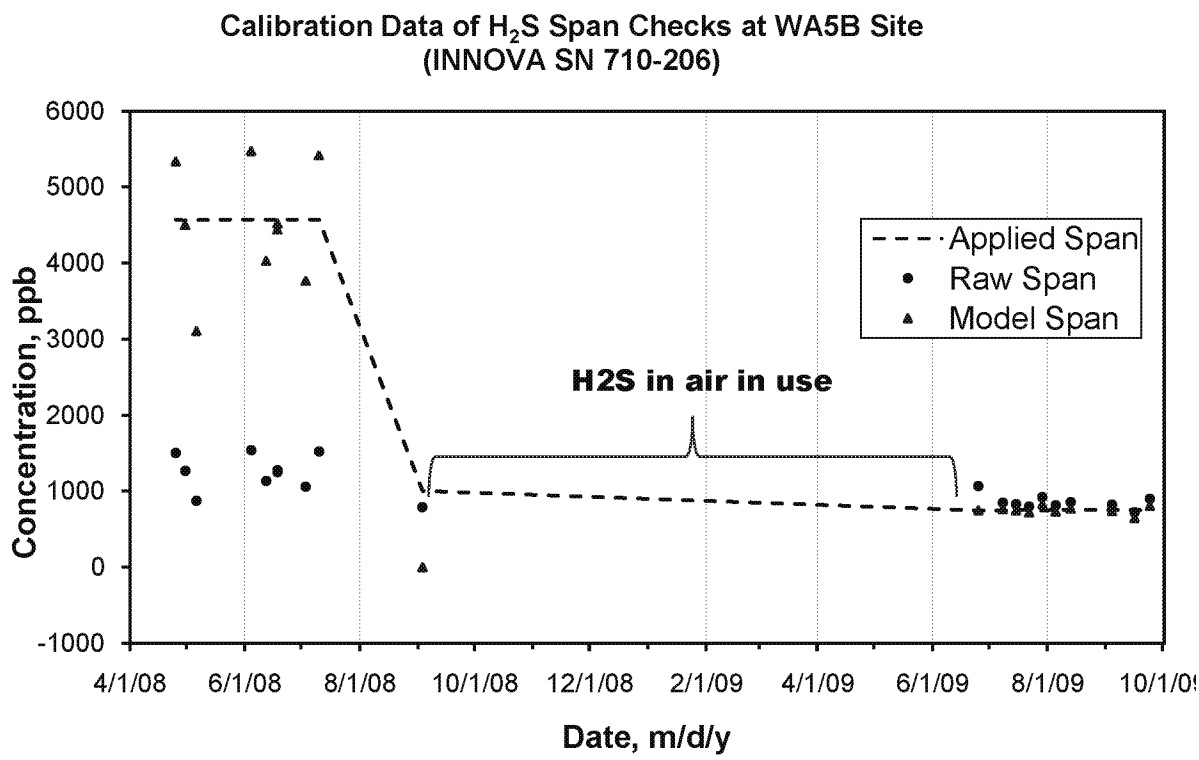
Ammonia





Hydrogen Sulfide





APPENDIX D. MAJOR DATA INVALIDATIONS

Variable(s)	Start time	End time	Min.	Comment
4NB WV	1/1/08 0:01	4/1/08 1:53	131153	Out of Range: signal incompariable with other same wall sonics
4R2 T	1/1/08 0:01	4/1/08 1:53	131153	Out of Range
4NB WV	10/4/07 5:02	1/1/08 0:00	127859	Greater than Max: values of wind speed are out of range
B4 R1-4 Elv	7/24/08 13:30	10/5/08 14:31	105182	Change from analog to digital signal
4NB T	10/21/07 11:45	1/1/08 3:31	103187	Out of Range
4R2 T	10/21/07 14:47	1/1/08 3:31	103005	Out of Range
4R1 T	10/21/07 19:00	1/1/08 1:58	102659	Out of Range
4R2 T	10/21/07 19:00	1/1/08 1:58	102659	Out of Range
4R3 T	10/21/07 19:00	1/1/08 1:58	102659	Out of Range
4R2 T	10/21/07 20:59	1/1/08 1:58	102540	Out of Range
B4 R 1-4 WV	11/1/07 17:02	1/2/08 22:56	89635	Lower than Min; signal too low and was different from the other sonics on the same ridge.
4R1 WD	11/1/07 16:42	1/1/08 1:58	86957	Failure
4R1 T	11/1/07 18:41	1/1/08 1:58	86838	Failure
4R1 Elv	11/1/07 20:40	1/1/08 1:58	86719	Failure
B4 R 1-4	11/1/07 20:40	1/1/08 1:58	86719	Failure
4SM T	1/1/08 0:01	2/28/08 17:09	84549	Out of Range- flat and lower than limit
4R4 T	11/4/07 8:35	1/1/08 0:27	83033	Out of Range
WV	7/13/08 15:05	8/22/08 18:48	57824	FN: Failure and repair of INNOVA
4R1 T	1/1/08 0:01	2/8/08 9:04	55264	Lower than Min
CO2-AirDAC	7/17/08 17:45	8/22/08 19:14	51930	Off: INNOVA repair
NH3-AirDAC	7/17/08 23:13	8/22/08 18:37	51565	Off: INNOVA repair
INNOVA	7/9/09 13:52	8/6/09 0:06	39495	INNOVA was sent for factory calibration.
INNOVA	7/9/09 12:44	8/5/09 20:01	39318	INNOVA was sent for factory calibration.
INNOVA	7/9/09 15:01	8/5/09 22:12	39312	INNOVA was sent for factory calibration.
INNOVA	7/9/09 14:29	8/5/09 12:28	38760	INNOVA was sent for factory calibration.
INNOVA	7/9/09 14:29	8/5/09 11:49	38721	INNOVA was sent for factory calibration.
4SM T	3/3/08 16:07	3/28/08 23:49	36463	Out of Range
4NB T	9/28/07 0:01	10/21/07	34140	Out of Range
4SM Elv	12/9/07 6:47	1/1/08 1:58	32832	Systematic Error

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Variable(s)	Start time	End time	Min.	Comment
4SM T	12/9/07 10:45	1/1/08 1:58	32594	Systematic Error
4SM WD	12/9/07 10:45	1/1/08 1:58	32594	Failure
4SM WV	12/9/07 12:19	1/1/08 0:35	32417	Failure: FN
INNOVA	9/28/07 0:01	10/19/07 3:27	30447	Off-FN: INNOVA offline
INNOVA	7/16/09 13:13	8/6/09 0:41	29489	INNOVA was sent for factory calibration.
NH3-AirDAC	3/30/09 12:36	4/16/09 13:23	24528	Off: INNOVA down for calibration and reconfiguration
CO2-AirDAC	3/31/09 22:51	4/16/09 8:52	22202	Off Innova arrived after installing new filters
INNOVA	3/31/09 22:51	4/16/09 8:52	22202	INNOVA sent to CAI for calibration
INNOVA	3/31/09 22:51	4/16/09 5:01	21971	INNOVA sent to CAI for calibration
INNOVA	10/3/07 12:18	10/18/07	21534	Systematic Error
TEI 450	10/3/07 12:18	10/18/07	21534	Systematic Error
GSS	10/3/07 12:18	10/18/07	21534	Systematic Error
2SB T	1/27/08 10:19	2/8/08 20:28	17890	Systematic Error
2SM T	1/27/08 10:19	2/8/08 20:28	17890	Systematic Error
B2 SU 1-4 T	1/27/08 10:19	2/8/08 20:28	17890	Systematic Error
4NB T	1/27/08 12:13	2/8/08 18:34	17662	FN: Maintenance
2SM T	1/27/08 13:13	2/8/08 16:40	17488	Systematic Error
GSS T	10/11/07 7:31	10/18/07	10379	FN: GSS maintenance
2NU1 T	3/21/08 14:29	3/28/08 16:21	10193	FN: Maintenance
2NB T	3/21/08 15:12	3/28/08 16:21	10150	FN: Testing sonics
2NU2 T	3/21/08 15:34	3/28/08 16:21	10128	FN: Maintenance
2NM T	3/21/08 15:34	3/28/08 15:16	10063	FN: Maintenance
4NB T	3/22/08 10:54	3/29/08 3:28	9635	Systematic Error FN:Out scale and maintenance
GSS T	10/4/07 8:40	10/10/07	9281	FN: GSS maintenance
4NB WV	9/28/07 0:01	10/4/07 8:39	9159	Lower than Min
4NB Elv	9/28/07 0:01	10/4/07 4:41	8921	Lower than Min
Smpl dir	7/11/08 9:37	7/17/08 11:31	8755	Lower than Min: Negative signal - reverse flow
4NB WV	9/28/07 7:40	10/4/07 5:19	8500	Lower than Min
B2 Atm P	8/28/08 13:27	9/3/08 9:36	8410	Out of Range: lower than normal
B2 ridge	6/4/09 18:53	6/10/09 12:13	8241	Failure: broken wire
B2 wall sonics	6/4/09 19:00	6/10/09 12:05	8226	Off

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Variable(s)	Start time	End time	Min.	Comment
B2 Atm P	8/29/09 8:12	9/4/09 0:00	8149	Failure: FN
4NB T	1/10/08 8:06	1/15/08 17:14	7749	Lower than Min
GSS T	9/28/07 7:35	10/3/07 13:56	7582	Off GSS was off
4NE T	1/13/08 13:10	1/18/08 19:09	7560	FN: Maintenance
4SE T	1/13/08 13:10	1/18/08 19:09	7560	FN: Maintenance
4SM T	3/22/08 17:49	3/27/08 19:20	7292	Lower than Min
B4 PM10	11/15/07 14:34	11/20/07 9:33	6900	Systematic Error FN: wrong sensor unit with control unit
B2 PM10	11/15/07 14:41	11/20/07 9:26	6886	Systematic Error
INNOVA	9/28/07 16:05	10/3/07 10:13	6849	Sampling Elsewhere
TEI 450	9/28/07 16:05	10/3/07 10:13	6849	Sampling Elsewhere
GSS	9/28/07 16:05	10/3/07 10:13	6849	Sampling Elsewhere
4NM WV	3/27/08 11:26	4/1/08 0:05	6520	Out of Range
NH3-AirDAC	7/13/08 10:36	7/17/08 23:12	6517	Failure: FN
CO2-AirDAC	7/13/08 15:10	7/17/08 20:04	6055	Failure: FN
CO2-AirDAC	7/13/08 15:14	7/17/08 19:59	6046	Failure: FN
GSS T	11/26/07 9:04	11/30/07	6006	Off-FN: Power failure
GSS	11/26/07 8:56	11/30/07 9:21	5786	Off-FN: GSS off - tripped breaker
Smpl Q	7/25/09 11:43	7/29/09 10:15	5673	Failure FN: Obstruction on the flow restrictor in the GSS and also a leak at the GSS pump.
AirDAC	1/7/08 10:36	1/10/08 12:40	4445	Off: FN AirDAC shut down.
B4 wall sonics	1/7/08 10:43	1/10/08 12:46	4444	Off
B2 PM	1/7/08 10:40	1/10/08 12:37	4438	Data Acquisition: computer was down.
B2 PM	1/7/08 10:45	1/10/08 12:42	4438	Data Acquisition: computer was down.
B4 sonics	1/7/08 10:45	1/10/08 12:28	4424	Off: FN AirDAC was off
2NB WV	1/7/08 10:44	1/10/08 12:24	4421	FN: Computer was down
2NM WV	1/7/08 10:44	1/10/08 12:24	4421	FN: Computer was down
B2 NU1-4 WV	1/7/08 10:44	1/10/08 12:24	4421	FN: Computer was down
B2 Atm P	6/13/09 17:46	6/16/09 12:57	4032	Failure: FN
2R1 T	4/23/08 0:32	4/25/08 10:44	3493	Out of Range: signal did not match the pattern of the other soncis on the same wall.
4NB T	1/13/08 2:56	1/15/08 12:39	3464	Lower than Min
2R2 WD	6/13/08 12:19	6/15/08 21:19	3421	Failure: signal is totally different from the other sonics on the same ridge.
2R1 WV	4/23/08 1:59	4/25/08 10:36	3398	Greater than Max: Definitely higher than all the sonic's WV of all the barn

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Variable(s)	Start time	End time	Min.	Comment
2R2 WD	2/1/08 0:04	2/3/08 0:00	2877	Out of Range: signal values are consistently out of range compared to the other three
4R1 Elv	12/16/08 11:29	12/18/08 2:30	2342	Out of Range
4R4 WV	11/14/07 18:20	11/16/07 9:09	2330	Systematic Error: no explanation in FN available.
4R4 Elv	11/14/07 18:21	11/16/07 9:01	2321	Systematic Error
4NB T	1/20/08 3:36	1/21/08 15:40	2165	Lower than Min
H2S-AirDAC	8/28/08 14:17	8/29/08 23:56	2020	Missing Data
4R4 Elv	11/29/07 10:34	11/30/07	1959	Systematic Error
4SU4 T	3/26/08 11:00	3/27/08 19:16	1937	Lower than Min
NH3-AirDAC	4/16/09 13:05	4/17/09 21:13	1929	Systematic Error: Periodic INNOVA peaks after CAI calibration
B2 R 1-4 T	1/27/08 13:05	1/28/08 17:53	1729	Systematic Error
4R4 Elv	12/26/07 16:26	12/27/07	1604	Systematic Error
4NB T	1/1/08 15:12	1/2/08 17:46	1595	Lower than Min
4R1 Elv	1/7/09 14:23	1/8/09 14:45	1463	Out of Range
4R4 WV	12/30/07 10:52	12/31/07	1459	Systematic Error: no explanation in FN available

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APPENDIX E. BIOMATERIALS CHARACTERISTICS.

Table E1. Bedding characteristics (mean ± SD).

Barn	Date	n	Percent (wet weight basis)	
			Nitrogen	Solids
2	6/4/08	3	0.91 ± 0.02	71.0 ± 2.53
2	7/31/08	3	0.62 ± 0.03	79.3 ± 3.43
2	10/16/08	3	0.72 ± 0.06	77.3 ± 2.40
2	4/30/09	3	0.81 ± 0.05	74.0 ± 12.3
2	6/24/09	3	0.96 ± 0.03	86.4 ± 3.32
2	8/31/09	3	0.69 ± 0.07	80.4 ± 3.31
2	9/4/09	3	0.58 ± 0.08	82.6 ± 4.01
2	9/29/09	3	0.96 ± 0.33	68.9 ± 11.8
4	6/4/08	3	0.89 ± 0.01	61.7 ± 2.30
4	7/31/08	3	0.69 ± 0.05	85.6 ± 6.26
4	10/16/08	3	0.77 ± 0.03	80.4 ± 5.07
4	4/30/09	3	0.84 ± 0.01	78.8 ± 1.59
4	6/24/09	3	1.00 ± 0.04	84.8 ± 3.22
4	8/31/09	3	0.70 ± 0.04	83.7 ± 2.38
4	9/4/09	3	0.53 ± 0.24	78.8 ± 3.49
4	9/29/09	3	1.00 ± 0.51	87.0 ± 2.78

Table E2. Feed characteristics (mean ± SD).

Barn	Date	n	Percent (wet weight basis)	
			Nitrogen	Solids
2	6/4/08	3	1.82 ± 0.23	64.3 ± 4.94
2	7/31/08	3	1.33 ± 0.1	54.0 ± 5.61
2	10/16/08	3	1.38 ± 0.12	57.2 ± 1.01
2	4/30/09	3	0.98 ± 0.08	38.4 ± 1.96
2	6/24/09	3	1.56 ± 0.28	60.1 ± 0.69
2	9/4/09	3	1.23 ± 0.22	50.2 ± 1.39
2	9/23/09	3	1.38 ± 0.38	49.2 ± 2.40
2	9/29/09	3	1.23 ± 0.09	47.0 ± 0.87
4	6/4/08	3	1.97 ± 0.22	58.6 ± 2.74
4	7/31/08	3	1.32 ± 0.06	56.7 ± 2.59
4	10/16/08	3	1.42 ± 0.05	55.4 ± 2.47
4	4/30/09	3	0.95 ± 0.21	39.7 ± 0.90
4	6/24/09	3	1.38 ± 0.18	57.0 ± 2.93
4	9/4/09	3	1.54 ± 0.31	50.6 ± 4.60
4	9/23/09	3	1.57 ± 0.30	49.8 ± 1.72
4	9/29/09	3	1.38 ± 0.13	47.2 ± 3.29

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Table E3. Manure characteristics (mean ± SD).

Barn	Date	n	pH (SU)	Percent (wet weight basis)		
				Nitrogen	Solids	Ammonia
2	6/4/08	5	7.40 ± 0.3	0.22 ± 0.05	3.83 ± 1.31	0.13 ± 0.01
2	6/4/08	10	7.34 ± 0.23	0.26 ± 0.04	4.33 ± 1.47	0.13 ± 0.01
2	7/31/08	2	7.38 ± 0.00	0.13 ± 0.00	1.47 ± 0.06	0.17 ± 0.01
2	7/31/08	3	7.15 ± 0.19	0.17 ± 0.04	3.33 ± 2.43	0.11 ± 0.02
2	10/16/08	2	7.84 ± 0.04	0.24 ± 0.03	1.54 ± 0.03	0.10 ± 0.00
2	10/16/08	3	7.74 ± 0.15	0.24 ± 0.04	2.43 ± 0.86	0.10 ± 0.01
2	4/30/09	2	7.25 ± 0.04	0.25 ± 0.01	3.24 ± 1.70	0.13 ± 0.01
2	4/30/09	3	7.19 ± 0.11	0.24 ± 0.04	6.15 ± 0.97	0.13 ± 0.01
2	6/24/09	2	7.05 ± 0.01	0.01 ± 0.01	0.09 ± 0.00	0.01 ± 0.00
2	6/24/09	3	6.52 ± 0.24	0.09 ± 0.04	2.35 ± 0.92	0.04 ± 0.02
2	9/4/09	2	7.61 ± 0.01	-	2.91 ± 0.11	0.11 ± 0.00
2	9/4/09	3	7.50 ± 0.06	-	5.26 ± 0.67	0.12 ± 0.01
2	9/29/09	2	7.56 ± 0.01	-	3.46 ± 0.47	0.12 ± 0.00
2	9/29/09	3	7.31 ± 0.06	-	5.50 ± 0.12	0.12 ± 0.01
4	6/4/08	5	7.35 ± 0.14	0.22 ± 0.07	3.44 ± 0.54	0.13 ± 0.01
4	6/4/08	12	7.04 ± 0.20	0.31 ± 0.03	5.68 ± 1.19	0.17 ± 0.03
4	7/31/08	2	7.39 ± 0.00	0.13 ± 0.00	1.41 ± 0.14	0.09 ± 0.00
4	7/31/08	5	7.05 ± 0.47	0.20 ± 0.08	5.30 ± 3.24	0.14 ± 0.04
4	10/16/08	2	7.87 ± 0.03	0.21 ± 0.01	1.50 ± 0.10	0.1 ± 0.00
4	10/16/08	4	7.36 ± 0.17	0.30 ± 0.04	4.25 ± 1.34	0.14 ± 0.03
4	4/30/09	2	7.52 ± 0.02	0.20 ± 0.00	3.60 ± 0.45	0.12 ± 0.00
4	4/30/09	4	7.41 ± 0.03	0.27 ± 0.03	5.28 ± 1.64	0.15 ± 0.02
4	6/24/09	2	7.26 ± 0.04	0.01 ± 0.00	0.10 ± 0.00	0.01 ± 0.00
4	6/24/09	4	6.50 ± 0.16	0.14 ± 0.03	4.08 ± 0.40	0.07 ± 0.01
4	9/4/09	2	7.57 ± 0.04	-	3.06 ± 0.12	0.11 ± 0.00
4	9/4/09	3	7.30± 0.09	-	6.95 ± 0.53	0.16 ± 0.02
4	9/29/09	2	7.53 ± 0.01	-	3.72 ± 0.23	0.12 ± 0.00
4	9/29/09	4	7.21 ± 0.13	-	6.41 ± 1.41	0.17 ± 0.02

Table E4. Milk characteristics (mean ± SD).

Barn	Date	n	Percent (wet weight basis)
			Nitrogen
Milk Tank	6/4/08	12	0.41 ± 0.14
Milk Tank	7/30/08	12	0.35 ± 0.17
Milk Tank	10/16/08	12	0.32 ± 0.09
Milk Tank	4/30/09	12	0.52 ± 0.11
Milk Tank	6/24/09	12	0.38 ± 0.11
Milk Tank	9/3/09	12	0.36 ± 0.10
Milk Tank	9/23/09	12	0.51 ± 0.04
Milk Tank	9/29/09	12	0.44 ± 0.08

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APPENDIX F. DAILY MEANS

Table F1. Weather variables.

Table F1. Daily means (SD) of weather parameters at site WA5B for September, 2007.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29	10.6 (4.1)	39.1 (8.2)	2.40 (1.33)	242 (103)	168 (237)	98100 (139)
30	9.5 (0.7)	52.8 (2.1)	3.33 (1.67)	134 (60)	33 (46)	97760 (167)
Avg	10.1	45.9	2.86	188.0	101	97930
n	2	2	2	2	2	2
SD	0.6	6.9	0.47	54.0	68	170
Min	9.5	39.1	2.40	134.0	33	97760
Max	10.6	52.8	3.33	242.0	168	98100

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Table F1. Daily means (SD) of weather parameters at site WA5B for October, 2007.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	12.7 (3.0)	43.0 (8.5)	4.33 (2.67)	247 (64)	170 (239)	98230 (345)
2	12.6 (1.6)	45.0 (4.1)	6.14 (2.43)	232 (28)	66 (88)	98090 (425)
3	11.5 (2.6)	39.8 (8.0)	3.97 (2.78)	256 (83)	142 (213)	97620 (105)
4	10.1 (3.2)	44.9 (7.6)	1.71 (1.09)	273 (108)	129 (206)	97520 (78)
5	10.3 (4.6)	40.6 (11.2)	2.79 (1.25)	261 (53)	177 (247)	98090 (188)
6	11.2 (4.4)	40.7 (9.4)	1.43 (1.11)	1 (119)	138 (192)	98530 (70)
7	13.1 (4.4)	44.5 (7.6)	3.90 (3.48)	237 (84)	143 (216)	98260 (192)
8	12.3 (2.7)	41.6 (6.5)	1.78 (1.10)	278 (78)	108 (159)	98070 (183)
9	13.4 (4.3)	41.4 (7.1)	1.04 (0.96)	287 (111)	132 (201)	97330 (238)
10						
11	10.8 (3.6)	44.9 (7.2)	1.60 (1.21)	313 (114)	130 (204)	98240 (285)
12	12.4 (3.1)	47.8 (6.7)	2.17 (1.04)	268 (61)	121 (199)	97670 (93)
13	13.2 (4.2)	46.1 (9.1)	1.14 (0.89)	58 (107)	156 (213)	98180 (115)
14	12.1 (5.0)	45.9 (8.8)	0.86 (0.77)	7 (114)	151 (207)	97980 (228)
15	11.7 (3.6)	47.8 (5.8)	1.37 (1.22)	59 (109)	93 (140)	97240 (232)
16	9.8 (1.9)	48.0 (4.8)	3.01 (1.84)	209 (69)	71 (125)	96910 (91)
17	9.0 (3.6)	44.3 (8.2)	3.19 (2.62)	241 (74)	128 (200)	97430 (359)
18	10.0 (3.3)	49.3 (4.0)	3.52 (2.39)	158 (76)	83 (144)	97210 (413)
19						
20	8.9 (2.0)	44.7 (5.7)	5.02 (2.63)	241 (55)	105 (155)	97880 (511)
21	9.4 (2.8)	47.9 (4.6)	1.66 (1.23)	180 (94)	85 (136)	99490 (199)
22	13.3 (5.0)	45.5 (8.7)	1.62 (1.48)	272 (102)	143 (193)	99500 (89)
23	12.1 (4.6)	48.4 (7.5)	0.76 (0.69)	116 (103)		99140 (325)
24	12.5 (5.4)	43.8 (9.5)	2.84 (3.07)	298 (105)	131 (193)	98480 (243)
25	8.9 (4.0)	36.3 (8.8)	2.65 (1.37)	255 (88)	149 (204)	99380 (143)
26						
27	5.6 (3.7)	41.1 (9.7)	0.80 (0.76)	72 (98)	136 (181)	99340 (207)
28	5.9 (4.4)	44.2 (9.4)	1.00 (0.92)	255 (102)	136 (179)	99050 (164)
29	6.4 (3.5)	47.4 (5.4)	0.62 (0.58)	5 (111)	65 (78)	98560 (152)
30	8.1 (3.4)	39.8 (11.7)	1.41 (0.95)	242 (103)	134 (180)	99160 (224)
31	6.2 (4.1)	43.1 (7.9)	1.04 (0.99)	298 (111)	118 (175)	99160 (207)
Avg	10.5	44.2	2.26	267.0	124	98280
n	28	28	28	28	27	28
SD	2.4	3.1	1.40	97.0	30	752
Min	5.6	36.3	0.62	1.0	65	96910
Max	13.4	49.3	6.14	313.0	177	99500

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Table F1. Daily means (SD) of weather parameters at site WA5B for November, 2007.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	7.4 (3.7)	41.0 (11.1)	0.91 (0.82)	61 (105)	119 (174)	99110 (212)
2	5.8 (4.0)	42.5 (9.0)	1.78 (2.46)	148 (105)	104 (157)	99520 (130)
3	6.7 (4.4)	43.2 (8.9)	0.90 (0.72)	266 (107)	106 (155)	99140 (284)
4	10.7 (6.7)	45.5 (7.7)	1.72 (1.31)	191 (99)	113 (164)	98600 (105)
5	9.2 (2.7)	41.5 (10.5)	1.13 (0.80)	249 (100)	105 (163)	98970 (138)
6	6.8 (3.8)	44.9 (9.3)	0.78 (0.72)	86 (106)	97 (151)	98600 (139)
7	8.6 (3.0)	47.1 (8.2)	0.87 (0.86)	75 (105)	77 (127)	98490 (140)
8	8.3 (3.2)	50.6 (4.2)	0.78 (0.56)	65 (94)	67 (103)	98020 (187)
9	9.7 (5.0)	49.8 (4.8)	2.08 (1.71)	116 (93)	98 (157)	97550 (188)
10	11.4 (3.9)	39.6 (13.5)	4.23 (3.08)	232 (74)	88 (150)	97360 (257)
11	7.2 (3.9)	42.3 (8.2)	3.37 (2.96)	210 (81)	98 (150)	98120 (215)
12	12.1 (3.5)	40.5 (5.9)	6.39 (3.87)	193 (75)		97220 (464)
13						
14						
15	6.7 (3.5)	49.9 (4.2)	2.98 (2.82)	162 (98)	47 (69)	97760 (144)
16	13.9 (1.5)	49.3 (3.0)	4.84 (2.50)	223 (60)	43 (57)	97620 (48)
17	10.6 (1.6)	52.1 (2.8)	2.74 (2.23)	255 (94)	43 (49)	97620 (247)
18	5.1 (1.8)	52.2 (1.6)	2.15 (1.08)	249 (78)	27 (14)	98130 (110)
19	3.6 (1.5)	52.7 (0.2)	1.65 (1.38)	183 (77)	59 (64)	98530 (246)
20	2.8 (2.0)	49.9 (4.8)	0.95 (0.69)	232 (93)	101 (130)	99610 (249)
21	0.6 (1.6)	51.6 (2.0)	0.98 (0.84)	266 (101)	79 (110)	99990 (75)
22	-1.0 (1.6)	49.2 (5.8)	1.44 (0.93)	199 (99)	89 (135)	99990 (53)
23	-2.2 (0.7)	52.1 (0.1)	0.50 (0.54)	323 (123)	18 (25)	99740 (221)
24	-1.4 (0.3)	52.2 (0.1)	0.70 (0.64)	358 (114)	17 (22)	99010 (168)
25	-1.2 (0.5)	52.1 (0.1)	1.52 (0.92)	242 (99)	15 (20)	99330 (162)
26	-1.4 (0.5)	52.1 (0.1)	1.97 (2.45)	82 (96)	14 (19)	98830 (690)
27	3.6 (3.3)	46.4 (6.1)	2.56 (1.58)	259 (84)	71 (116)	98820 (503)
28	0.7 (1.5)	52.4 (0.5)	0.76 (0.73)	280 (104)	40 (67)	99210 (518)
29	0.5 (0.7)	52.4 (0.0)	1.23 (0.88)	262 (37)	27 (42)	98770 (198)
30	0.0 (0.9)	52.3 (0.2)	1.36 (1.29)	254 (25)	50 (63)	98310 (351)
Avg	5.2	48.1	1.90	223.0	67	98640
n	28	28	28	28	27	28
SD	4.7	4.4	1.37	78.0	34	779
Min	-2.2	39.6	0.50	61.0	14	97220
Max	13.9	52.7	6.39	358.0	119	99990

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Table F1. Daily means (SD) of weather parameters at site WA5B for December, 2007.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	-1.8 (0.8)	52.1 (0.1)	2.21 (2.12)	207 (84)	62 (71)	97130 (232)
2	5.6 (2.3)	51.4 (3.1)	6.71 (3.52)	187 (51)	50 (59)	96970 (119)
3	13.0 (2.6)	51.5 (2.1)	7.58 (5.28)	176 (61)	44 (48)	97370 (265)
4	13.6 (1.9)	47.9 (4.9)	5.77 (2.84)	221 (37)	97 (129)	98640 (268)
5	7.4 (2.0)	50.3 (3.9)	1.23 (0.86)	220 (99)	84 (104)	98410 (288)
6	2.3 (1.1)	52.6 (0.1)	2.02 (1.47)	251 (81)	34 (13)	97730 (114)
7	3.0 (1.0)	52.6 (0.3)	2.29 (1.69)	184 (77)		98090 (231)
8						
9	-2.8 (0.9)	52.0 (0.1)	0.90 (0.78)	48 (109)	43 (26)	99150 (188)
10	-2.6 (0.4)	51.9 (0.6)	0.84 (0.72)	15 (110)	64 (86)	99410 (266)
11	-2.7 (0.6)	52.0 (0.1)	1.50 (1.20)	270 (82)	34 (13)	99430 (219)
12						
13						
14	-1.4 (0.3)	52.1 (0.1)	1.02 (0.69)	9 (116)	35 (19)	99020 (241)
15	2.5 (3.9)	51.6 (1.1)	3.51 (2.65)	222 (78)	65 (73)	98380 (69)
16	3.5 (1.2)	50.5 (3.6)	2.28 (2.04)	143 (76)	61 (75)	97630 (461)
17	4.4 (1.9)	51.4 (2.1)	4.02 (2.53)	184 (68)	52 (43)	97210 (215)
18	2.9 (2.1)	52.5 (0.5)	2.02 (2.75)	277 (105)	38 (21)	96980 (221)
19	7.8 (1.1)	52.3 (1.3)	6.31 (3.27)	207 (54)	40 (28)	96980 (228)
20	5.4 (2.1)	46.3 (6.8)	4.13 (2.77)	254 (57)	87 (113)	97630 (687)
21	2.1 (1.9)	47.9 (6.8)	2.22 (1.79)	166 (88)	87 (114)	99340 (181)
22	1.5 (1.8)	51.9 (1.4)	2.64 (2.57)	152 (88)	37 (26)	98970 (268)
23	0.6 (1.1)	52.4 (0.2)	1.02 (0.84)	93 (100)	43 (25)	98770 (385)
24	4.2 (1.9)	47.1 (5.8)	3.43 (1.89)	242 (65)	95 (113)	99120 (384)
25	1.1 (1.7)	51.7 (1.9)	2.92 (2.08)	149 (69)	49 (51)	98810 (613)
26	2.7 (2.0)	46.8 (6.5)	2.55 (1.36)	237 (69)	75 (94)	98290 (205)
27	0.8 (0.9)	51.9 (1.0)	3.90 (3.37)	135 (75)	43 (26)	97980 (533)
28	1.8 (3.3)	52.5 (0.4)	4.04 (3.76)	237 (82)	72 (87)	97410 (116)
29	2.0 (2.2)	51.0 (3.0)	2.71 (2.51)	209 (87)	56 (63)	97470 (135)
30	3.8 (1.3)	42.6 (5.6)	6.80 (3.32)	255 (27)	95 (114)	98450 (421)
31	1.7 (2.2)	46.4 (6.2)	1.99 (1.46)	128 (80)	97 (116)	99890 (231)
Avg	3.0	50.5	3.16	202.0	61	98240
n	28	28	28	28	27	28
SD	3.9	2.5	1.89	71.0	21	857
Min	-2.8	42.6	0.84	9.0	34	96970
Max	13.6	52.6	7.58	277.0	97	99890

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Table F1. Daily means (SD) of weather parameters at site WA5B for January, 2008.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, $W\ m^{-2}$	Atm P, Pa
1	-1.1 (1.4)	51.5 (1.3)	1.01 (0.65)	271 (96)	68 (74)	99650 (406)
2	-1.0 (0.8)	52.2 (0.2)	0.89 (0.72)	295 (106)	42 (24)	98210 (258)
3	-0.1 (0.8)	52.3 (0.2)	1.19 (0.93)	243 (99)	48 (47)	97010 (437)
4	1.8 (3.4)	50.9 (3.4)	3.21 (4.35)	195 (98)	46 (34)	95160 (627)
5	6.3 (1.3)	46.3 (5.5)	3.70 (2.78)	229 (80)	102 (129)	95920 (408)
6	3.6 (1.5)	49.8 (3.7)	2.97 (2.41)	186 (65)	76 (89)	96690 (207)
7						
8						
9						
10						
11	8.2 (2.5)	48.2 (6.5)	5.14 (3.95)	218 (66)		98180 (312)
12	2.0 (1.4)	51.1 (6.6)	2.06 (1.24)	101 (86)	51 (63)	98590 (295)
13	1.1 (0.8)	51.3 (5.4)	1.51 (0.99)	99 (91)	34 (17)	99460 (77)
14	1.3 (2.1)	51.0 (2.8)	4.42 (3.83)	145 (82)	50 (59)	98560 (556)
15	1.5 (1.6)	42.2 (7.5)	2.89 (3.33)	249 (79)	88 (122)	99670 (342)
16	-0.5 (1.9)	48.6 (5.3)	1.67 (2.01)	208 (97)	91 (124)	99850 (214)
17	-1.2 (2.1)	49.6 (4.1)	1.42 (0.89)	90 (82)	100 (124)	99180 (127)
18	-0.4 (2.6)	51.3 (2.7)	1.04 (1.04)	204 (85)		99380 (224)
19	0.8 (1.5)	51.8 (1.6)	1.37 (1.08)	90 (88)	79 (106)	98220 (388)
20	-1.1 (1.1)	47.2 (6.8)	4.26 (2.51)	45 (72)	59 (51)	98200 (349)
21	-4.8 (1.6)	35.9 (7.1)	3.47 (2.40)	39 (89)	119 (143)	99350 (296)
22	-6.9 (2.5)	46.4 (6.9)	1.28 (0.78)	98 (86)	111 (136)	99770 (79)
23	-7.4 (2.1)	48.0 (5.6)	0.96 (0.89)	106 (91)	107 (125)	99190 (449)
24	-6.6 (2.7)	46.9 (6.7)	0.78 (0.68)	34 (109)	102 (136)	97880 (187)
25	-5.9 (2.4)	48.1 (5.7)	1.22 (1.02)	76 (99)	98 (139)	98450 (122)
26	-6.8 (1.4)	51.4 (0.2)	0.86 (0.64)	63 (101)	29 (37)	97740 (457)
27	-3.6 (1.5)	51.8 (0.1)	1.13 (1.14)	309 (117)	15 (12)	96110 (365)
28	-4.4 (3.7)	46.7 (14.7)	2.48 (3.95)	228 (88)	26 (32)	96910 (475)
29	2.9 (1.2)	47.6 (4.3)	8.74 (2.51)	223 (48)	111 (168)	96900 (249)
30	2.9 (1.8)	46.9 (4.2)	5.72 (3.60)	205 (51)	90 (124)	97560 (220)
31	5.3 (1.0)	47.7 (4.2)	6.83 (3.67)	230 (63)	91 (145)	96800 (156)
Avg	-0.5	48.6	2.68	175.0	73	98100
n	27	27	27	27	25	27
SD	4.1	3.5	2.02	82.0	30	1281
Min	-7.4	35.9	0.78	34.0	15	95160
Max	8.2	52.3	8.74	309.0	119	99850

ED_004549_00015841-00055

Table F1. Daily means (SD) of weather parameters at site WA5B for February, 2008.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	4.8 (0.9)	44.7 (6.3)	7.27 (2.95)	245 (32)	104 (156)	97570 (239)
2	1.9 (1.2)	47.9 (9.8)	2.56 (1.31)	85 (88)	35 (29)	96840 (635)
3	1.8 (1.2)	52.0 (0.7)	2.12 (1.10)	253 (52)	62 (77)	96880 (578)
4	2.5 (2.0)	48.2 (6.1)	1.60 (1.32)	196 (80)	110 (165)	98530 (280)
5	4.1 (1.8)	50.7 (2.3)	5.35 (3.84)	225 (66)	46 (80)	98280 (381)
6	4.4 (1.1)	48.1 (3.8)	6.69 (2.59)	225 (34)	73 (118)	98250 (302)
7	6.7 (1.5)	42.4 (6.8)	10.20 (4.69)	243 (37)	139 (178)	97600 (461)
8	7.6 (1.8)	45.6 (5.3)	8.80 (1.98)	212 (36)	120 (156)	98110 (48)
9	8.3 (1.9)	50.8 (2.8)	2.95 (2.53)	144 (83)	66 (70)	98430 (144)
10	10.0 (2.0)	45.2 (6.4)	6.40 (3.33)	231 (41)	81 (104)	98180 (180)
11	7.9 (2.3)	46.3 (6.4)	1.22 (1.00)	72 (108)	95 (122)	98990 (113)
12	7.9 (2.5)	46.9 (5.4)	2.10 (2.06)	283 (105)	92 (120)	98370 (460)
13	5.1 (2.6)	39.5 (6.9)	4.36 (1.91)	264 (68)	145 (191)	98410 (248)
14						
15	4.4 (3.4)	48.1 (6.6)	1.38 (1.08)	123 (99)	114 (168)	98640 (310)
16	5.3 (3.7)	47.6 (7.5)	1.16 (0.77)	65 (108)	139 (172)	98740 (118)
17	3.9 (2.8)	46.4 (8.9)	1.73 (1.09)	93 (87)	154 (191)	99180 (101)
18	2.4 (3.4)	46.4 (7.7)	1.13 (0.99)	68 (106)	159 (193)	98820 (273)
19	3.4 (3.2)	46.2 (8.0)	1.13 (0.83)	76 (101)	149 (191)	98230 (112)
20	4.4 (2.9)	47.9 (6.6)	1.58 (1.34)	86 (83)	141 (180)	98020 (141)
21	4.4 (3.1)	49.2 (5.6)	0.96 (0.78)	251 (98)	114 (150)	97530 (237)
22	6.8 (2.5)	48.7 (6.0)	0.94 (0.91)	71 (97)	150 (193)	97380 (142)
23	6.3 (3.3)	44.2 (9.5)	1.45 (1.40)	43 (112)	171 (210)	97760 (268)
24	6.3 (1.2)	52.2 (1.1)	2.16 (0.84)	268 (60)	83 (102)	97370 (269)
25	7.8 (2.4)	51.2 (2.9)	1.19 (0.89)	56 (108)	105 (142)	99000 (425)
26	6.2 (2.9)	50.5 (3.3)	0.87 (0.82)	79 (90)	126 (154)	99330 (203)
27	7.2 (3.3)	51.8 (2.1)	1.53 (1.41)	188 (89)	116 (165)	98660 (148)
28	10.0 (3.9)	45.0 (9.1)	1.80 (1.20)	123 (91)	162 (213)	98460 (145)
29	10.6 (3.5)	40.1 (14.9)	3.19 (3.01)	203 (88)	102 (126)	97520 (347)
Avg	5.8	47.3	2.99	159.0	112	98180
n	28	28	28	28	28	28
SD	2.4	3.3	2.56	80.0	36	648
Min	1.8	39.5	0.87	43.0	35	96840
Max	10.6	52.2	10.20	283.0	171	99330

ED_004549_00015841-00056

Table F1. Daily means (SD) of weather parameters at site WA5B for March, 2008.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, $W\ m^{-2}$	Atm P, Pa
1	-1.1 (2.8)	37.0 (7.3)	5.03 (2.58)	255 (38)	153 (196)	98270 (493)
2	-2.0 (3.8)	35.5 (9.3)	2.43 (1.62)	211 (70)	186 (227)	99550 (188)
3	-2.0 (3.1)	40.8 (7.1)	5.39 (4.46)	261 (72)	88 (113)	98320 (391)
4	-0.6 (3.9)	33.5 (8.4)	3.73 (1.76)	280 (59)	185 (233)	98680 (236)
5	-1.3 (4.4)	36.5 (9.8)	1.95 (1.74)	175 (94)	197 (236)	99140 (139)
6	-0.4 (4.7)	37.7 (9.9)	2.76 (2.64)	147 (78)	188 (225)	98930 (150)
7	-0.5 (2.7)	45.5 (4.5)	1.04 (0.79)	52 (107)	78 (81)	98590 (197)
8	1.9 (4.8)	41.8 (9.8)	2.30 (2.01)	200 (89)	206 (243)	98580 (129)
9	-0.1 (4.6)	44.2 (9.4)	1.48 (1.35)	86 (97)	168 (224)	98800 (105)
10	1.2 (3.6)	45.9 (6.6)	1.94 (1.26)	75 (93)	111 (153)	98500 (168)
11	0.6 (2.6)	39.0 (8.2)	7.32 (3.45)	247 (39)	201 (243)	98810 (120)
12	-0.3 (3.6)	42.9 (7.4)	1.81 (1.28)	72 (97)	145 (187)	98310 (368)
13	-1.7 (2.1)	49.4 (4.5)	3.35 (2.74)	255 (90)	94 (100)	97370 (92)
14	-1.0 (2.1)	43.9 (6.6)	4.42 (2.55)	222 (55)	112 (149)	97220 (88)
15	-1.6 (3.9)	43.9 (9.6)	1.94 (1.78)	217 (95)	175 (233)	97610 (195)
16	-1.1 (4.3)	38.8 (10.5)	2.16 (1.62)	253 (71)	195 (249)	98440 (194)
17	1.2 (3.9)	40.4 (7.9)	3.53 (2.61)	223 (93)	190 (251)	98310 (167)
18	0.8 (3.7)	43.1 (9.9)	4.85 (3.84)	239 (63)	192 (250)	98130 (187)
19	-2.5 (3.1)	45.3 (6.3)	1.68 (1.56)	220 (99)	127 (153)	98210 (229)
20	-2.2 (2.3)	45.4 (5.7)	3.87 (2.64)	220 (54)	129 (143)	98320 (102)
21	-1.8 (3.3)	35.3 (9.9)	4.21 (1.94)	247 (54)	199 (263)	99380 (425)
22	-1.7 (5.1)	37.3 (10.7)	1.57 (1.22)	297 (107)	198 (256)	99600 (386)
23	-0.2 (3.3)	40.3 (3.1)	5.44 (4.15)	213 (76)	67 (86)	98240 (302)
24	-1.3 (3.8)	34.3 (8.3)	1.78 (1.35)	286 (111)	190 (242)	98550 (147)
25	-1.2 (4.3)	35.4 (9.0)	2.42 (2.08)	225 (94)	195 (258)	98290 (189)
26	-1.3 (2.3)	40.0 (9.1)	4.81 (2.36)	239 (50)	125 (174)	97770 (87)
27	-1.8 (3.3)	30.4 (7.8)	5.02 (2.90)	246 (74)	242 (301)	98630 (218)
28	-5.4 (2.5)	45.2 (8.4)	4.12 (3.93)	165 (92)	133 (192)	97420 (466)
29	-2.5 (3.0)	37.7 (7.3)	3.91 (2.55)	249 (92)	198 (261)	97910 (240)
30	-4.1 (3.0)	43.1 (8.9)	3.08 (1.99)	289 (79)	203 (264)	98200 (150)
31	-2.8 (4.4)	33.3 (10.2)	1.89 (1.39)	216 (95)	219 (277)	98790 (99)
Avg	-1.2	40.1	3.27	231.0	164	98410
n	31	31	31	31	31	31
SD	1.5	4.5	1.50	64.0	45	573
Min	-5.4	30.4	1.04	52.0	67	97220
Max	1.9	49.4	7.32	297.0	242	99600

ED_004549_00015841-00057

Table F1. Daily means (SD) of weather parameters at site WA5B for April, 2008.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	-1.9 (4.7)	31.6 (9.9)	1.99 (1.23)	232 (98)	255 (285)	98690 (224)
2	0.0 (4.9)	30.5 (7.8)	1.86 (1.63)	101 (107)	264 (290)	98490 (87)
3	1.7 (5.5)	32.5 (10.2)	2.48 (2.71)	189 (99)	239 (268)	98420 (242)
4	0.1 (2.0)	33.0 (5.3)	5.04 (4.42)	242 (75)	121 (148)	97660 (133)
5	0.5 (3.9)	36.3 (9.2)	3.24 (2.56)	233 (87)	226 (266)	97630 (123)
6	1.7 (3.2)	38.9 (10.9)	6.24 (2.53)	239 (42)	214 (261)	97590 (142)
7	-0.4 (3.5)	37.8 (9.2)	3.53 (3.12)	240 (85)	212 (244)	98130 (78)
8	-1.9 (2.7)	44.4 (6.5)	1.69 (1.52)	166 (79)	145 (153)	97880 (169)
9	-0.7 (4.9)	35.8 (12.1)	2.00 (1.52)	269 (101)	255 (290)	97910 (113)
10	1.9 (4.6)	32.8 (9.2)	2.40 (1.58)	268 (79)	267 (299)	98690 (254)
11	2.4 (5.5)	32.6 (10.0)	2.26 (1.59)	119 (89)	276 (293)	99340 (136)
12	5.8 (6.4)	33.2 (10.1)	1.70 (1.22)	70 (102)	279 (295)	98920 (329)
13	7.5 (5.4)	33.0 (9.7)	2.36 (2.15)	312 (111)	237 (274)	97850 (411)
14	2.5 (3.1)	27.1 (6.1)	5.70 (2.20)	271 (36)	263 (304)	97380 (92)
15	-1.7 (3.8)	31.2 (7.8)	3.67 (2.29)	287 (69)	220 (252)	98060 (233)
16	0.5 (4.9)	35.2 (9.8)	2.41 (1.63)	221 (81)	293 (310)	98800 (124)
17	2.7 (5.9)	33.8 (11.5)	1.90 (1.45)	309 (115)	281 (304)	98330 (328)
18	-2.0 (2.6)	32.9 (7.2)	6.34 (3.22)	254 (29)	241 (291)	97780 (148)
19	-3.7 (3.7)	31.8 (8.1)	1.92 (1.33)	289 (106)	211 (260)	97410 (104)
20	-4.2 (3.2)	34.8 (6.3)	1.81 (1.42)	260 (91)	179 (266)	97800 (173)
21	-3.2 (3.6)	36.0 (7.8)	2.43 (2.07)	262 (103)	172 (208)	98030 (72)
22	-0.5 (3.8)	39.3 (9.7)	2.18 (1.61)	7 (118)	196 (249)	97700 (303)
23	-0.9 (2.9)	40.8 (9.4)	4.45 (2.67)	237 (50)	211 (244)	97400 (182)
24	-0.6 (3.7)	36.4 (9.5)	4.32 (3.04)	266 (82)	232 (297)	98490 (243)
25	0.2 (5.0)	30.7 (10.8)	2.67 (2.07)	267 (100)	295 (330)	98980 (86)
26	2.1 (5.3)	29.5 (11.1)	1.78 (1.39)	43 (110)	297 (328)	99310 (181)
27	5.9 (5.3)	25.7 (6.6)	1.74 (1.72)	50 (107)	224 (242)	98550 (351)
28	6.0 (4.0)	34.9 (6.4)	3.72 (3.00)	266 (93)	267 (304)	97700 (283)
29	1.1 (2.9)	32.6 (7.9)	4.53 (2.54)	277 (61)	252 (303)	97330 (99)
30	-0.1 (4.1)	30.3 (9.7)	3.32 (1.80)	283 (61)	313 (349)	97930 (170)
Avg	0.7	33.8	3.06	261.0	238	98140
n	30	30	30	30	30	30
SD	2.8	3.9	1.38	84.0	45	569
Min	-4.2	25.7	1.69	7.0	121	97330
Max	7.5	44.4	6.34	312.0	313	99340

ED_004549_00015841-00058

Table F1. Daily means (SD) of weather parameters at site WA5B for May, 2008.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	0.5 (4.5)	31.7 (9.2)	2.77 (1.52)	140 (77)	327 (337)	98610 (117)
2	3.0 (5.1)	30.0 (9.3)	1.27 (0.98)	334 (124)	250 (266)	98440 (186)
3	1.9 (2.7)	44.6 (6.5)	2.45 (2.47)	269 (97)	133 (163)	98150 (97)
4	6.5 (6.6)	42.7 (9.7)	1.37 (0.86)	272 (97)	327 (337)	98230 (162)
5	8.6 (6.0)	38.6 (12.1)	1.74 (1.45)	332 (126)	287 (296)	97780 (184)
6	8.6 (3.8)	34.7 (8.0)	2.66 (1.58)	285 (104)	265 (306)	97730 (120)
7	6.9 (4.9)	31.7 (10.2)	3.28 (1.98)	292 (74)	324 (345)	97880 (121)
8	4.4 (4.2)	28.4 (7.4)	2.93 (1.78)	283 (85)	330 (346)	98020 (196)
9	5.4 (4.4)	28.5 (7.7)	3.24 (1.51)	220 (85)	332 (347)	98100 (83)
10	7.4 (3.7)	33.0 (5.1)	3.20 (2.19)	242 (83)	188 (216)	97720 (261)
11	4.8 (3.2)	31.3 (8.3)	5.13 (2.29)	282 (48)	321 (349)	97790 (153)
12	5.6 (4.9)	30.8 (8.3)	2.81 (1.75)	217 (88)	336 (347)	98190 (84)
13	6.9 (3.2)	39.3 (8.0)	2.37 (2.11)	320 (117)	180 (183)	98110 (98)
14	10.9 (4.2)	40.2 (7.3)	2.78 (2.39)	302 (100)	219 (252)	98820 (237)
15	14.4 (5.5)	34.7 (10.2)	2.48 (1.47)	10 (111)	347 (345)	99040 (238)
16						
17						
18						
19						
20						
21	6.2 (3.5)	34.3 (7.1)	4.76 (2.20)	303 (43)	277 (314)	97710 (133)
22	7.1 (4.1)	33.4 (7.6)	5.03 (1.52)	290 (67)	244 (314)	97120 (397)
23	3.9 (3.0)	51.4 (3.0)	4.41 (1.60)	261 (72)	110 (135)	96640 (122)
24	10.0 (5.5)	39.5 (11.5)	2.19 (1.19)	265 (89)	314 (345)	97130 (101)
25	8.3 (3.8)	45.9 (9.6)	2.57 (1.28)	321 (111)	213 (256)	97520 (160)
26	10.5 (4.3)	37.7 (11.2)	3.16 (1.36)	311 (117)	296 (340)	97250 (84)
27	9.6 (3.9)	42.2 (10.0)	2.53 (1.20)	258 (93)	249 (311)	97620 (153)
28	9.0 (2.8)	46.4 (8.0)	1.17 (0.89)	312 (119)	180 (236)	97390 (48)
29	9.4 (3.4)	38.0 (10.9)	3.21 (2.44)	247 (75)	258 (298)	97610 (110)
30	9.9 (5.8)	27.7 (8.6)	2.32 (1.18)	97 (104)	364 (357)	98020 (121)
31	10.3 (4.3)	36.2 (9.1)	2.40 (2.34)	285 (95)	271 (300)	97910 (92)
Avg	7.3	36.7	2.85	285.0	267	97870
n	26	26	26	26	26	26
SD	3.1	6.1	1.02	73.0	67	526
Min	0.5	27.7	1.17	10.0	110	96640
Max	14.4	51.4	5.13	334.0	364	99040

ED_004549_00015841-00059

Table F1. Daily means (SD) of weather parameters at site WA5B for June, 2008.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	8.9 (4.4)	36.5 (11.1)	3.27 (1.84)	272 (80)	327 (346)	97880 (130)
2	8.0 (4.9)	32.0 (10.9)	2.39 (1.82)	304 (113)	355 (360)	97840 (204)
3	5.1 (2.9)	47.8 (5.8)	2.33 (2.01)	341 (112)	164 (199)	97250 (143)
4	7.0 (5.0)	37.2 (10.0)	3.22 (1.19)	285 (65)	353 (358)	97530 (115)
5	5.1 (2.8)	43.8 (6.6)	4.35 (3.87)	244 (83)	192 (195)	97410 (191)
6	4.7 (2.2)	38.8 (5.3)	8.19 (2.17)	254 (19)	198 (206)	97540 (161)
7	6.9 (5.1)	37.5 (11.1)	3.20 (2.49)	305 (105)	337 (352)	98020 (112)
8	9.4 (5.1)	30.9 (10.0)	3.25 (2.03)	239 (81)	351 (359)	98130 (253)
9	8.7 (3.1)	33.2 (6.0)	6.36 (5.44)	259 (79)	332 (360)	97350 (259)
10	3.3 (2.7)	43.0 (4.8)	3.31 (2.06)	261 (98)	155 (160)	97720 (290)
11	7.8 (4.9)	36.5 (9.6)	4.08 (2.26)	305 (62)	365 (360)	98100 (94)
12	10.7 (5.6)	29.8 (9.3)	4.42 (2.29)	215 (65)	370 (353)	98280 (162)
13	13.2 (4.8)	27.2 (6.3)	3.33 (1.85)	271 (86)	374 (357)	98000 (171)
14	11.1 (5.4)	28.8 (9.9)	2.45 (1.16)	66 (106)	375 (357)	98160 (204)
15	13.1 (5.5)	26.4 (9.3)	2.48 (1.41)	305 (113)	378 (362)	97950 (153)
16	14.1 (5.4)	24.1 (11.6)	3.30 (2.17)	253 (92)	378 (359)	97690 (157)
17	12.0 (4.4)	28.5 (8.4)	3.01 (1.44)	296 (90)	372 (357)	98180 (180)
18	9.9 (5.3)	29.8 (10.6)	2.56 (1.40)	317 (124)	367 (351)	98420 (165)
19	12.0 (5.8)	26.3 (7.4)	2.56 (2.22)	248 (96)	358 (353)	98260 (160)
20	15.4 (6.1)	26.8 (7.1)	1.34 (0.95)	338 (125)	316 (316)	97920 (179)
21	14.2 (3.9)	35.2 (8.3)	2.52 (2.52)	294 (108)	187 (209)	97720 (97)
22	12.6 (4.7)	31.9 (7.9)	2.72 (1.79)	316 (123)	364 (358)	98130 (130)
23	10.9 (4.4)	30.9 (9.4)	2.69 (1.60)	295 (109)	264 (292)	98090 (113)
24	12.4 (5.4)	26.3 (7.7)	2.46 (1.28)	159 (99)	364 (349)	98150 (213)
25	13.7 (4.7)	29.1 (7.9)	2.71 (1.16)	307 (115)	346 (349)	97810 (182)
26	13.7 (4.9)	30.2 (8.0)	2.77 (1.19)	301 (106)	346 (339)	97960 (93)
27	15.4 (5.7)	32.5 (9.6)	1.98 (1.26)	20 (120)	360 (347)	98180 (141)
28	18.4 (6.7)	30.5 (10.3)	1.64 (1.04)	294 (93)	360 (346)	97970 (214)
29	20.9 (6.1)	25.6 (8.6)	2.72 (2.90)	319 (119)	319 (349)	97660 (161)
30	22.1 (4.6)	25.8 (6.6)	3.26 (2.55)	260 (103)	322 (338)	97430 (170)
Avg	11.4	32.1	3.16	288.0	322	97890
n	30	30	30	30	30	30
SD	4.5	5.8	1.31	70.0	68	299
Min	3.3	24.1	1.34	20.0	155	97250
Max	22.1	47.8	8.19	341.0	378	98420

ED_004549_00015841-00060

Table F1. Daily means (SD) of weather parameters at site WA5B for July, 2008.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, $W\ m^{-2}$	Atm P, Pa
1	20.0 (4.3)	34.2 (8.8)	2.19 (1.28)	273 (100)	304 (323)	97490 (102)
2	19.9 (5.1)	32.4 (7.9)	2.58 (1.43)	352 (121)	310 (310)	97440 (220)
3	20.1 (4.1)	33.0 (6.3)	2.97 (1.48)	310 (109)	318 (320)	97020 (134)
4	14.2 (2.7)	39.9 (6.3)	3.12 (1.53)	297 (80)	260 (267)	97420 (138)
5						
6						
7	15.7 (6.1)	27.2 (8.5)	3.10 (1.70)	295 (80)	348 (342)	97980 (110)
8	17.7 (5.1)	24.7 (4.6)	2.90 (1.56)	293 (96)	353 (345)	98150 (192)
9	19.1 (5.8)	25.9 (8.3)	2.80 (1.53)	258 (100)	351 (340)	97670 (294)
10	15.1 (4.3)	27.0 (9.4)	3.31 (2.31)	302 (88)	357 (345)	97670 (243)
11	12.3 (5.6)	24.4 (8.9)	1.74 (1.12)	19 (121)	360 (348)	98610 (164)
12	15.5 (6.9)	24.7 (10.3)	1.39 (1.18)	316 (113)	355 (345)	98380 (218)
13	18.3 (5.5)	23.0 (6.9)	2.35 (1.28)	302 (112)	317 (328)	97870 (261)
14	18.5 (5.1)	24.0 (5.5)	2.23 (1.06)	315 (124)	312 (328)	97580 (155)
15	18.4 (4.6)	23.6 (7.6)	2.19 (1.23)	278 (107)	277 (308)	97630 (107)
16	17.6 (4.0)	25.4 (6.0)	2.47 (1.48)	317 (121)	324 (323)	97910 (100)
17	16.3 (5.0)	24.1 (6.1)	3.22 (1.38)	298 (104)	344 (340)	97840 (209)
18	15.6 (4.9)	24.7 (7.3)	2.53 (1.51)	292 (109)	343 (336)	97790 (141)
19	15.3 (5.0)	27.8 (7.3)	2.43 (1.52)	352 (132)	344 (336)	97640 (190)
20	17.5 (6.4)	24.9 (10.7)	2.51 (1.65)	156 (103)	331 (325)	97490 (154)
21	18.5 (5.4)	25.0 (8.1)	2.81 (1.86)	268 (100)	320 (327)	97430 (202)
22	15.7 (3.9)	33.1 (5.5)	3.73 (1.94)	268 (91)	255 (265)	97520 (128)
23	13.3 (4.9)	32.0 (7.7)	3.42 (1.78)	295 (105)	344 (336)	98040 (105)
24	14.6 (5.4)	32.2 (7.5)	2.23 (1.24)	302 (107)	340 (333)	98210 (131)
25	16.2 (5.9)	30.8 (8.9)	1.82 (1.22)	337 (132)	318 (320)	97910 (187)
26	16.2 (4.5)	28.6 (6.7)	2.99 (1.80)	305 (123)	293 (297)	97840 (134)
27	14.1 (4.1)	34.7 (6.9)	2.69 (1.55)	300 (109)	333 (328)	97900 (92)
28	13.9 (5.6)	30.7 (11.4)	2.24 (1.30)	32 (107)	330 (329)	97980 (202)
29	13.0 (2.8)	34.0 (5.5)	3.52 (2.30)	301 (102)	220 (218)	97880 (57)
30	11.8 (3.8)	31.8 (7.5)	2.95 (1.40)	313 (123)	333 (329)	98150 (152)
31						
Avg	16.2	28.7	2.66	305.0	321	97800
n	28	28	28	28	28	28
SD	2.3	4.4	0.55	78.0	33	327
Min	11.8	23.0	1.39	19.0	220	97020
Max	20.1	39.9	3.73	352.0	360	98610

ED_004549_00015841-00061

Table F1. Daily means (SD) of weather parameters at site WA5B for August, 2008.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1						
2						
3						
4						
5						
6						
7						
8	15.4 (4.7)	41.6 (9.1)	2.03 (1.34)	321 (118)	220 (282)	97310 (74)
9	12.9 (3.9)	35.9 (9.6)	3.75 (3.63)	282 (105)	280 (326)	97830 (227)
10	11.2 (4.6)	36.4 (8.8)	1.96 (1.05)	334 (119)	304 (337)	98400 (77)
11	13.1 (6.2)	36.5 (10.4)	2.15 (1.27)	37 (114)	301 (328)	98270 (246)
12	15.3 (5.6)	36.0 (11.6)	2.31 (1.95)	185 (104)	256 (309)	97900 (143)
13	17.0 (4.6)	31.3 (7.3)	2.59 (1.19)	308 (114)	290 (321)	98060 (97)
14						
15	20.1 (5.8)	29.3 (7.9)	1.57 (1.14)	311 (107)	300 (309)	97870 (198)
16	20.3 (6.3)	27.9 (10.0)	1.73 (1.17)	50 (109)	287 (298)	97440 (228)
17	21.0 (4.6)	29.6 (9.3)	2.10 (1.87)	314 (114)	283 (298)	97050 (225)
18						
19						
20						
21	10.3 (3.1)	36.3 (7.7)	5.42 (2.84)	267 (53)	226 (271)	97590 (387)
22	9.6 (5.3)	37.9 (12.0)	1.38 (1.00)	45 (113)	261 (299)	98290 (162)
23	13.1 (6.3)	35.7 (11.5)	1.00 (0.89)	30 (126)	291 (309)	97980 (232)
24	14.0 (5.1)	34.4 (9.9)	2.35 (1.88)	334 (125)	220 (248)	97560 (139)
25	9.8 (3.3)	43.8 (7.8)	2.23 (1.65)	315 (118)	156 (204)	97640 (158)
26	9.8 (4.6)	30.2 (10.4)	2.46 (1.53)	250 (96)	283 (306)	98140 (260)
27						
28						
29						
30						
31						
Avg	14.2	34.9	2.3	225.5	263.9	97820
n	15	15	15	15	15	15
SD	3.9	4.5	1.1	121.6	41.6	375
Min	9.6	27.9	1.0	30.0	156.0	97050
Max	21.0	43.8	5.4	334.0	304.0	98400

ED_004549_00015841-00062

Table F1. Daily means (SD) of weather parameters at site WA5B for September, 2008.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1						
2						
3						
4	12.1 (4.6)	26.5 (6.2)	2.59 (1.66)	280 (100)	227 (276)	98360 (103)
5	12.2 (5.7)	35.2 (9.6)	1.96 (1.33)	301 (93)	210 (266)	98180 (117)
6	13.2 (4.5)	35.0 (8.5)	1.86 (1.12)	330 (114)	218 (277)	98180 (138)
7	12.4 (3.6)	31.1 (7.1)	2.12 (1.44)	343 (123)	226 (276)	98320 (98)
8	11.5 (6.1)	30.7 (9.9)	1.22 (0.89)	305 (109)	226 (278)	97820 (382)
9	12.2 (6.1)	29.7 (9.8)	2.13 (1.65)	283 (108)	217 (270)	97230 (199)
10	11.2 (4.9)	28.7 (8.0)	2.10 (1.16)	276 (101)	220 (272)	98100 (145)
11						
12	12.2 (6.6)	32.1 (9.1)	1.57 (1.49)	308 (122)	166 (232)	97570 (175)
13	11.9 (5.2)	29.2 (10.0)	1.84 (1.13)	284 (103)	210 (263)	98250 (148)
14	11.2 (6.2)	31.3 (10.1)	0.79 (0.68)	11 (130)	210 (263)	98460 (100)
15	11.7 (6.3)	29.8 (11.1)	1.11 (0.94)	38 (115)	201 (254)	98340 (220)
16	12.7 (6.1)	30.3 (10.2)	0.96 (0.88)	68 (102)	191 (246)	98010 (180)
17						
18						
19	13.4 (4.0)	31.6 (7.6)	1.61 (1.46)	272 (106)	121 (199)	97540 (129)
20	6.3 (2.1)	52.1 (3.2)	1.58 (0.95)	285 (104)	23 (28)	97580 (94)
21	7.5 (4.0)	42.0 (8.7)	2.54 (1.54)	288 (85)	172 (240)	97830 (91)
22	5.7 (3.3)	37.0 (10.8)	3.17 (1.96)	270 (62)	190 (258)	98330 (242)
23	4.1 (4.8)	38.4 (9.6)	1.13 (0.97)	50 (110)	195 (301)	98710 (251)
24	6.2 (4.6)	38.5 (10.3)	1.29 (1.12)	360 (109)	142 (220)	97920 (229)
25	8.5 (3.6)	40.9 (10.8)	3.37 (3.06)	285 (97)	189 (248)	98000 (242)
26	5.6 (4.7)	45.3 (8.1)	1.25 (0.83)	338 (116)	152 (211)	98410 (158)
27	7.7 (5.9)	40.3 (12.1)	1.42 (0.94)	38 (116)	188 (244)	98430 (92)
28	8.0 (5.7)	38.3 (10.9)	1.06 (0.75)	322 (123)	188 (245)	98720 (120)
29	9.5 (6.0)	33.3 (10.7)	0.77 (0.60)	345 (121)	184 (241)	98470 (211)
30	10.4 (5.8)	31.5 (8.6)	0.98 (0.77)	57 (110)	165 (224)	98280 (116)
Avg	9.9	35.0	1.7	239.0	184.6	98130
n	24	24	24	24	24	24
SD	2.8	6.1	0.7	118.2	44.2	372
Min	4.1	26.5	0.8	11.0	23.0	97230
Max	13.4	52.1	3.4	360.0	227.0	98720

ED_004549_00015841-00063

Table F1. Daily means (SD) of weather parameters at site WA5B for October, 2008.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	10.2 (5.0)	37.3 (10.4)	0.85 (0.67)	352 (120)	148 (257)	97930 (254)
2						
3						
4	5.1 (1.7)	46.3 (6.7)	5.87 (3.34)	208 (67)	80 (119)	96490 (443)
5	3.4 (2.8)	44.3 (6.6)	1.90 (1.19)	318 (115)	92 (119)	97820 (201)
6	5.1 (4.1)	48.1 (5.7)	1.36 (1.04)	338 (112)	121 (192)	98280 (138)
7	5.9 (2.7)	33.3 (8.3)	6.03 (3.08)	253 (49)	191 (244)	98720 (449)
8	1.6 (4.5)	35.8 (11.3)	1.69 (1.15)	257 (101)	186 (238)	99180 (295)
9	-0.3 (2.8)	40.1 (7.7)	1.99 (1.60)	268 (101)	88 (118)	98470 (88)
10	0.0 (3.1)	32.0 (9.2)	3.99 (1.97)	294 (121)	185 (241)	98740 (148)
11	0.0 (3.1)	26.4 (4.1)	3.46 (2.10)	318 (127)	180 (231)	98950 (159)
12	0.8 (3.5)	30.7 (6.1)	2.50 (2.09)	174 (86)	114 (158)	99070 (108)
13	4.1 (6.4)	38.9 (7.2)	1.78 (1.69)	316 (118)	163 (213)	99200 (198)
14	3.7 (3.9)	34.9 (11.5)	2.45 (1.31)	285 (99)	141 (194)	99200 (134)
15	0.6 (4.1)	36.3 (8.7)	2.65 (2.17)	171 (87)	152 (201)	98930 (188)
16	11.6 (9.3)	40.5 (8.1)	1.11 (0.89)	347 (127)	171 (215)	98770 (62)
17	16.6 (5.3)	52.3 (12.1)	1.07 (0.90)	294 (113)	171 (191)	98430 (301)
18	16.7 (3.8)	51.0 (11.9)	1.14 (0.81)	287 (108)	122 (120)	98130 (82)
19	13.0 (4.6)	42.8 (10.1)	0.95 (0.75)	309 (113)	173 (197)	98450 (178)
20	12.4 (3.2)	48.0 (8.5)	4.47 (3.84)	255 (84)	118 (149)	98180 (257)
21	12.0 (4.6)	37.4 (10.6)	2.47 (2.11)	209 (102)	181 (202)	99650 (309)
22	10.2 (5.3)	42.6 (11.5)	0.93 (0.82)	62 (105)	175 (202)	99600 (438)
23	10.4 (5.9)	46.3 (11.4)	1.55 (0.81)	75 (104)	160 (189)	98680 (106)
24	11.5 (5.0)	51.7 (12.9)	1.26 (1.05)	247 (101)	151 (168)	98780 (160)
25	14.0 (5.2)	44.5 (13.7)	1.14 (0.89)	263 (104)	139 (157)	99070 (219)
26	11.2 (5.5)	39.2 (17.3)	1.93 (1.10)	275 (87)	164 (182)	99600 (217)
27	12.0 (5.4)	31.3 (8.2)	0.77 (0.69)	60 (103)	159 (178)	99230 (117)
28	10.3 (4.7)	40.1 (8.4)	0.78 (0.84)	12 (123)	130 (141)	98990 (200)
29	9.9 (5.3)	48.2 (11.8)	0.81 (0.62)	4 (113)	145 (162)	98210 (271)
30	11.2 (4.5)	51.8 (10.2)	0.69 (0.73)	22 (119)	108 (121)	97940 (86)
31	15.0 (3.3)	54.9 (10.1)	1.87 (1.58)	73 (104)	98 (119)	98090 (241)
Avg	8.2	41.6	2.05	302.0	145	98650
n	29	29	29	29	29	29
SD	5.3	7.3	1.42	109.0	32	652
Min	-0.3	26.4	0.69	4.0	80	96490
Max	16.7	54.9	6.03	352.0	191	99650

ED_004549_00015841-00064

Table F1. Daily means (SD) of weather parameters at site WA5B for November, 2008.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	11.5 (2.3)	78.0 (7.2)	1.14 (0.85)	216 (97)	86 (77)	97780 (363)
2	13.1 (2.7)	64.2 (14.9)	3.61 (2.39)	237 (73)	121 (131)	97370 (258)
3	11.3 (2.2)	65.3 (10.4)	2.65 (1.55)	91 (88)	93 (91)	97140 (555)
4	9.4 (2.2)	64.1 (16.7)	4.76 (3.74)	251 (57)	117 (128)	97020 (672)
5	7.1 (2.6)	64.5 (5.4)	0.80 (0.62)	205 (101)	85 (118)	98590 (183)
6	8.0 (0.9)	80.7 (3.7)	1.08 (1.00)	299 (108)	59 (42)	99030 (94)
7	9.1 (1.1)	79.8 (3.4)	0.94 (0.84)	57 (108)	57 (43)	98830 (213)
8	10.0 (1.5)	83.2 (4.7)	1.15 (1.19)	345 (113)	86 (116)	97700 (278)
9	11.2 (2.8)	77.3 (10.9)	0.72 (0.82)	10 (112)	102 (132)	97500 (44)
10	11.4 (4.2)	64.4 (17.2)	1.24 (1.16)	247 (102)	122 (147)	97900 (172)
11	11.5 (2.2)	69.1 (7.2)	5.18 (2.84)	173 (45)	82 (90)	97800 (168)
12	18.4 (3.0)	62.1 (10.6)	8.91 (3.18)	231 (30)	107 (124)	97430 (112)
13	13.0 (3.3)	46.6 (11.5)	3.54 (1.97)	287 (88)	138 (180)	98710 (624)
14	7.8 (3.9)	56.6 (11.2)	1.22 (0.86)	84 (94)	108 (143)	99960 (103)
15	8.1 (4.5)	62.6 (13.4)	0.86 (0.65)	91 (99)	104 (139)	99330 (314)
16	6.5 (3.3)	72.3 (9.9)	0.75 (0.72)	44 (111)	66 (89)	98820 (54)
17	8.0 (3.6)	73.7 (10.7)	0.65 (0.58)	48 (112)	87 (121)	98640 (141)
18	8.2 (3.4)	76.7 (9.6)	0.63 (0.57)	61 (106)	81 (117)	98590 (133)
19	9.7 (1.7)	52.2 (14.3)	1.99 (0.90)	254 (51)	53 (61)	99030 (120)
20	7.7 (2.2)	59.7 (6.1)	3.13 (2.63)	208 (80)	50 (66)	98310 (267)
21	8.3 (1.9)	55.9 (6.5)	2.67 (1.94)	164 (79)	87 (118)	98710 (455)
22	8.3 (3.8)	54.3 (13.3)	1.59 (0.96)	240 (91)	107 (140)	98540 (292)
23	4.9 (3.8)	64.4 (11.3)	0.79 (0.81)	268 (103)	100 (130)	99140 (101)
24	4.5 (4.1)	67.0 (12.6)	0.61 (0.61)	76 (97)	102 (136)	98850 (124)
25	3.5 (2.8)	76.4 (9.7)	0.82 (0.82)	310 (118)	72 (96)	98620 (67)
26	0.9 (1.5)	84.4 (2.3)	1.20 (1.05)	67 (102)	52 (61)	98970 (124)
27	1.9 (1.5)	82.9 (3.0)	1.06 (0.79)	278 (99)	39 (55)	98710 (96)
28	3.6 (1.0)	80.9 (3.1)	0.73 (0.67)	288 (105)	41 (45)	99160 (92)
29	5.6 (2.9)	77.0 (9.1)	1.24 (0.91)	89 (87)	78 (113)	99190 (77)
30	5.7 (2.0)	82.1 (5.7)	1.28 (0.82)	62 (86)	57 (77)	99120 (226)
Avg	8.3	69.3	1.90	275.0	85	98480
n	30	30	30	30	30	30
SD	3.6	10.3	1.79	98.0	26	716
Min	0.9	46.6	0.61	10.0	39	97020
Max	18.4	84.4	8.91	345.0	138	99960

ED_004549_00015841-00065

Table F1. Daily means (SD) of weather parameters at site WA5B for December, 2008.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	6.2 (0.9)	86.0 (1.5)	1.03 (0.71)	299 (111)	38 (36)	97960 (355)
2	9.3 (5.3)	72.2 (15.1)	1.81 (1.77)	73 (100)	101 (132)	98320 (513)
3	5.6 (1.9)	62.3 (17.8)	1.78 (1.14)	94 (83)	53 (60)	99300 (84)
4	4.1 (3.6)	49.3 (11.4)	1.40 (0.96)	121 (78)	98 (129)	99700 (140)
5	2.4 (3.2)	60.4 (9.8)	0.90 (0.77)	27 (113)	75 (112)	99080 (180)
6	5.4 (3.6)	59.9 (11.1)	0.74 (0.60)	250 (103)	89 (127)	98600 (164)
7	6.1 (3.2)	69.5 (4.5)	1.26 (1.17)	173 (100)	34 (35)	97980 (151)
8	7.5 (3.6)	56.1 (10.9)	1.87 (1.13)	222 (79)	87 (121)	98580 (292)
9	3.2 (1.7)	73.8 (3.9)	0.97 (0.77)	283 (105)	42 (54)	99120 (47)
10	6.1 (3.9)	68.1 (12.1)	1.01 (0.75)	241 (97)	89 (119)	99450 (90)
11	2.3 (2.1)	83.2 (4.1)	1.19 (0.92)	86 (86)	54 (63)	99490 (242)
12	2.0 (4.4)	77.2 (13.2)	5.15 (5.66)	245 (79)	37 (57)	96800 (1201)
13	3.1 (3.1)	67.3 (13.6)	4.02 (4.17)	292 (115)	39 (37)	96270 (474)
14	-6.9 (1.2)	68.7 (4.6)	2.81 (1.77)	8 (155)	35 (32)	98000 (330)
15	-7.8 (1.8)	71.9 (5.5)	1.96 (1.22)	296 (105)	27 (19)	98540 (151)
16	-11.0 (2.6)	65.7 (7.8)	1.69 (1.45)	193 (85)	98 (144)	98880 (225)
17	-10.2 (2.3)	74.5 (2.3)	1.51 (1.61)	42 (104)	53 (64)	97600 (452)
18						
19	-5.8 (1.1)	71.6 (6.5)	0.82 (0.73)	79 (99)	53 (58)	98530 (462)
20	-9.6 (1.2)	65.2 (10.5)	2.74 (1.03)	97 (63)	68 (89)	99550 (205)
21	-8.5 (1.9)	84.4 (1.5)	2.41 (2.00)	268 (54)	53 (59)	98070 (598)
22	-7.7 (1.4)	81.7 (2.2)	1.06 (0.99)	76 (104)	62 (75)	97360 (167)
23	-6.2 (1.5)	82.1 (2.1)	0.84 (0.66)	78 (97)	50 (55)	97900 (59)
24	-5.7 (1.1)	82.1 (2.6)	1.26 (0.87)	74 (92)	47 (49)	96830 (654)
25	-6.1 (0.9)	82.9 (3.3)	1.02 (0.76)	264 (85)	44 (46)	96620 (472)
26	-6.5 (2.8)	84.1 (2.4)	0.95 (1.38)	320 (122)	47 (52)	98120 (241)
27	5.5 (5.4)	72.8 (6.3)	6.06 (3.08)	225 (45)	67 (87)	97280 (127)
28	9.3 (1.9)	62.8 (7.7)	4.86 (2.79)	219 (72)	72 (84)	97540 (446)
29	5.5 (1.8)	68.3 (13.7)	5.87 (4.77)	242 (76)	78 (112)	97730 (590)
30	4.6 (1.3)	66.6 (5.3)	2.62 (3.01)	242 (86)	77 (118)	98790 (353)
31	6.8 (2.1)	58.2 (9.2)	5.70 (3.91)	218 (66)	58 (63)	97820 (234)
Avg	0.1	71.0	2.24	243.0	61	98190
n	30	30	30	30	30	30
SD	6.6	9.4	1.65	94.0	21	905
Min	-11.0	49.3	0.74	8.0	27	96270
Max	9.3	86.0	6.06	320.0	101	99700

ED_004549_00015841-00066

Table F1. Daily means (SD) of weather parameters at site WA5B for January, 2009.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	7.4 (2.9)	73.0 (9.0)	5.60 (3.62)	212 (64)	50 (55)	96760 (550)
2	3.3 (2.7)	70.9 (14.7)	2.09 (1.52)	255 (85)	101 (132)	96950 (861)
3	-1.5 (3.3)	67.6 (9.4)	0.71 (1.01)	90 (79)	102 (133)	98750 (246)
4	-5.8 (0.6)	81.2 (3.8)	1.90 (2.00)	86 (35)	51 (57)	98400 (707)
5	-2.9 (1.2)	85.2 (1.3)	0.77 (0.86)	266 (95)	48 (51)	97240 (388)
6	8.9 (4.7)	68.9 (9.3)	6.43 (4.84)	218 (67)	70 (93)	97290 (291)
7	14.3 (1.0)	59.9 (3.3)	9.08 (2.79)	225 (21)	81 (172)	97190 (80)
8	10.8 (3.0)	53.4 (7.1)	5.92 (2.51)	255 (28)	82 (143)	97660 (731)
9	4.9 (2.4)	59.7 (7.2)	1.33 (1.18)	208 (86)	85 (115)	99710 (181)
10	3.3 (1.4)	72.8 (3.8)	0.80 (0.85)	268 (100)	40 (40)	99670 (68)
11	4.9 (2.5)	74.6 (6.8)	0.86 (0.91)	256 (101)	69 (81)	99820 (99)
12	8.0 (4.6)	73.6 (12.7)	0.89 (0.79)	251 (102)	98 (126)	99890 (137)
13	4.4 (2.6)	82.1 (6.6)	1.39 (1.40)	118 (96)	74 (88)	99450 (101)
14						
15	0.1 (0.6)	87.8 (1.3)	0.45 (0.52)	16 (132)	36 (27)	100000 (65)
16	-0.6 (0.3)	87.5 (1.0)	0.86 (0.88)	300 (105)	30 (18)	100200 (118)
17	0.5 (0.5)	87.2 (1.2)	0.70 (0.60)	309 (62)	29 (16)	100500 (80)
18	1.2 (0.6)	83.1 (3.3)	1.24 (0.78)	271 (34)	34 (23)	100700 (48)
19	1.3 (0.4)	77.5 (2.0)	0.90 (0.68)	264 (76)	31 (17)	100400 (219)
20	0.6 (0.5)	80.8 (2.6)	1.23 (0.96)	75 (38)	35 (23)	
21	-0.4 (0.5)	79.1 (2.7)	1.55 (0.93)	100 (37)	42 (95)	
22	0.0 (0.6)	76.4 (2.9)	0.93 (0.82)	92 (79)	35 (23)	98780 (118)
23	-0.3 (0.8)	72.9 (3.7)	1.13 (1.07)	39 (121)	40 (32)	99320 (136)
24	0.1 (1.2)	79.6 (4.6)	1.09 (0.82)	318 (100)	65 (72)	98810 (129)
25	-0.8 (1.8)	72.2 (9.5)	1.63 (1.04)	292 (111)	85 (103)	98840 (126)
26	-3.6 (3.3)	58.4 (12.3)	3.97 (3.15)	197 (62)	133 (167)	99540 (179)
27	-2.3 (3.0)	67.1 (6.7)	2.01 (1.54)	170 (87)	79 (97)	98930 (339)
28						
29	4.7 (2.1)	67.7 (6.4)	0.78 (0.73)	241 (105)	79 (84)	99850 (42)
30	4.2 (4.0)	73.3 (11.5)	1.56 (1.65)	124 (90)	116 (149)	99160 (510)
31	6.3 (2.9)	49.9 (9.2)	1.82 (1.30)	232 (83)	107 (137)	99150 (209)
Avg	2.5	73.2	2.06	240.0	66	99000
n	29	29	29	29	29	27
SD	4.5	9.8	2.05	86.0	29	1128
Min	-5.8	49.9	0.45	16.0	29	96760
Max	14.3	87.8	9.08	318.0	133	100700

ED_004549_00015841-00067

Table F1. Daily means (SD) of weather parameters at site WA5B for February, 2009.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	3.2 (2.1)	66.4 (5.1)	0.97 (0.82)	321 (109)	63 (66)	99480 (148)
2	3.3 (1.6)	71.9 (6.0)	0.57 (0.58)	290 (110)	61 (64)	99070 (50)
3	4.8 (5.3)	68.1 (17.1)	0.51 (0.51)	297 (113)	136 (170)	98960 (222)
4	5.3 (4.7)	69.4 (14.6)	0.82 (0.80)	62 (106)	125 (159)	98400 (197)
5	3.3 (1.6)	81.7 (4.2)	1.02 (1.21)	24 (113)	56 (61)	97600 (264)
6	3.2 (1.4)	85.3 (2.0)	0.75 (0.56)	298 (112)	59 (65)	97820 (448)
7	2.0 (3.7)	82.7 (9.2)	1.35 (1.38)	68 (96)	100 (131)	98830 (198)
8	-0.8 (2.9)	85.1 (5.2)	2.23 (2.27)	109 (64)	76 (101)	97400 (485)
9	4.9 (4.6)	63.7 (20.2)	1.19 (0.92)	260 (108)	120 (172)	97470 (266)
10	2.4 (1.3)	69.0 (11.5)	2.08 (1.75)	193 (81)	65 (73)	97880 (84)
11	2.9 (1.5)	75.9 (9.6)	1.41 (1.08)	264 (54)	74 (107)	98390 (189)
12	3.3 (1.2)	73.3 (4.2)	1.35 (0.98)	68 (93)	53 (66)	98400 (120)
13	4.3 (2.7)	69.7 (11.0)	2.90 (0.99)	273 (80)	109 (146)	97790 (331)
14	5.3 (2.9)	68.2 (10.1)	1.23 (0.89)	248 (102)	107 (127)	97680 (242)
15	2.8 (1.6)	82.4 (2.3)	0.95 (0.78)	277 (101)	51 (48)	97670 (185)
16	5.2 (1.7)	75.9 (5.4)	2.26 (1.03)	268 (42)	71 (76)	97250 (180)
17	7.6 (3.3)	69.3 (10.6)	2.29 (2.34)	152 (92)	130 (176)	97620 (349)
18	7.7 (5.6)	69.6 (17.8)	1.38 (1.24)	62 (100)	168 (212)	98850 (229)
19	3.2 (1.5)	79.9 (14.2)	1.79 (1.08)	75 (50)	56 (54)	99060 (165)
20	4.6 (2.4)	78.8 (9.6)	1.62 (1.13)	307 (105)	97 (136)	99070 (88)
21	3.7 (1.8)	75.8 (8.3)	1.62 (1.08)	55 (104)	63 (64)	98810 (262)
22	3.8 (2.6)	81.0 (7.5)	0.96 (0.83)	62 (101)	88 (128)	98140 (98)
23	5.3 (1.1)	84.7 (3.6)	2.19 (2.40)	279 (106)	50 (44)	97700 (306)
24	10.5 (2.7)	62.5 (10.1)	8.78 (2.96)	215 (26)	152 (193)	97410 (137)
25	9.5 (2.0)	63.4 (8.2)	7.66 (2.08)	228 (16)	111 (147)	97170 (151)
26	4.4 (2.1)	53.2 (8.8)	4.38 (2.21)	259 (40)	139 (203)	98000 (622)
27	4.2 (4.3)	58.5 (12.4)	1.41 (1.19)	55 (106)	183 (224)	99150 (75)
28	5.1 (3.1)	59.7 (9.7)	1.76 (1.25)	277 (66)	127 (144)	99040 (249)
Avg	4.5	72.3	2.05	298.0	96	98220
n	28	28	28	28	28	28
SD	2.2	8.6	1.89	101.0	38	684
Min	-0.8	53.2	0.51	24.0	50	97170
Max	10.5	85.3	8.78	321.0	183	99480

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Table F1. Daily means (SD) of weather parameters at site WA5B for March, 2009.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, $W\ m^{-2}$	Atm P, Pa
1	6.4 (1.8)	68.9 (11.5)	1.56 (1.17)	270 (75)	69 (78)	98070 (274)
2	7.6 (2.8)	81.0 (4.7)	3.45 (3.57)	112 (79)	102 (141)	97290 (134)
3	9.2 (3.5)	73.4 (20.1)	1.54 (1.40)	82 (99)	120 (167)	97180 (117)
4	7.7 (4.1)	69.8 (14.6)	1.85 (1.50)	229 (74)	185 (236)	97470 (60)
5	7.4 (2.7)	59.8 (10.4)	6.46 (4.29)	262 (81)	139 (196)	97370 (251)
6	4.2 (3.0)	53.7 (13.3)	3.00 (2.27)	196 (80)	201 (254)	98510 (194)
7	5.5 (4.3)	54.6 (14.8)	5.34 (4.43)	272 (89)	209 (251)	97880 (237)
8	4.5 (3.6)	50.1 (13.4)	1.63 (1.32)	241 (88)	179 (208)	97880 (59)
9	3.5 (3.1)	57.7 (12.8)	3.20 (3.02)	247 (82)	154 (183)	97850 (131)
10	0.2 (2.4)	44.2 (12.1)	3.86 (1.82)	83 (68)	206 (248)	98990 (392)
11	1.8 (3.8)	39.1 (8.7)	1.97 (1.07)	73 (78)	222 (260)	99490 (88)
12						
13	3.6 (4.2)	49.8 (9.1)	0.64 (1.00)	66 (105)		98710 (605)
14	6.8 (2.7)	60.7 (6.2)	4.49 (4.30)	195 (83)	57 (43)	97070 (330)
15	9.3 (2.9)	54.2 (8.6)	8.34 (5.16)	221 (53)	213 (264)	96420 (416)
16	8.0 (2.8)	51.5 (8.8)	6.04 (2.96)	213 (54)	210 (264)	97770 (255)
17	8.6 (2.4)	54.4 (8.0)	6.44 (2.84)	225 (43)	147 (186)	98740 (176)
18	11.1 (4.3)	52.4 (12.3)	0.94 (0.94)	73 (107)	177 (220)	99010 (179)
19	11.4 (4.9)	57.8 (11.6)	1.58 (1.67)	123 (101)	149 (189)	98210 (198)
20	13.8 (4.1)	55.1 (13.1)	3.23 (2.86)	225 (84)	220 (254)	97630 (212)
21	11.4 (2.6)	59.3 (10.4)	1.33 (0.99)	95 (97)	113 (148)	97250 (220)
22	10.3 (3.7)	53.6 (15.1)	2.86 (3.04)	274 (97)	171 (211)	97550 (484)
23	8.4 (4.5)	45.8 (15.7)	3.03 (1.88)	246 (72)	220 (271)	98900 (118)
24	9.9 (3.6)	55.8 (14.7)	4.67 (4.03)	239 (79)	142 (164)	98590 (229)
25	9.6 (2.5)	48.0 (6.8)	4.18 (2.94)	279 (91)	134 (164)	97980 (176)
26		36.1 (14.3)	2.11 (1.37)		250 (290)	99000 (202)
27	11.0 (5.1)	40.9 (8.4)	2.20 (1.98)	264 (104)	171 (188)	98480 (221)
28	8.1 (1.8)	66.2 (12.2)	1.71 (1.70)	58 (101)	76 (79)	97520 (582)
29	8.2 (3.5)	45.1 (16.0)	5.42 (2.32)	295 (38)	258 (303)	97770 (548)
30	9.3 (5.3)	42.5 (11.1)	1.81 (1.29)	284 (106)	227 (262)	98700 (149)
31	9.6 (3.2)	43.8 (10.6)	6.02 (4.55)	264 (81)	205 (252)	97750 (316)
Avg	7.8	54.2	3.36	233.0	170	98030
n	29	30	30	29	29	30
SD	3.1	10.2	1.94	79.0	53	707
Min	0.2	36.1	0.64	58.0	57	96420
Max	13.8	81.0	8.34	295.0	258	99490

ED_004549_00015841-00069

Table F1. Daily means (SD) of weather parameters at site WA5B for April, 2009.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	5.9 (2.2)	57.2 (10.5)	4.30 (3.51)	200 (66)	105 (118)	97870 (388)
2	11.5 (3.3)	48.7 (14.6)	6.54 (2.88)	262 (41)	246 (293)	96830 (108)
3	10.4 (4.6)	36.5 (10.1)	3.25 (1.92)	282 (86)	248 (303)	97710 (343)
4	10.7 (5.4)	40.1 (11.5)	2.15 (1.59)	45 (103)	279 (312)	98780 (137)
5	12.8 (6.5)	43.5 (14.9)	1.58 (1.44)	60 (104)	268 (298)	98950 (100)
6	16.3 (6.6)	37.2 (12.5)	1.47 (1.27)	88 (102)	280 (312)	98610 (334)
7	17.6 (6.6)	38.9 (13.4)	1.54 (1.48)	15 (115)	261 (300)	97530 (495)
8	15.9 (3.6)	41.0 (7.7)	4.58 (2.57)	263 (35)	193 (221)	96890 (200)
9	14.6 (4.0)	42.5 (8.9)	2.63 (1.58)	236 (105)	210 (252)	97410 (102)
10	14.5 (4.3)	57.5 (14.8)	1.52 (1.16)	266 (96)	224 (262)	97440 (100)
11	13.8 (4.5)	44.5 (13.4)	2.89 (1.62)	259 (77)	272 (310)	97870 (252)
12	13.4 (2.0)	56.6 (4.9)	4.64 (2.50)	202 (41)	90 (116)	98220 (199)
13	10.5 (2.9)	41.4 (9.2)	8.00 (2.65)	252 (15)	295 (337)	98120 (107)
14	6.7 (3.3)	59.6 (8.8)	3.58 (2.28)	271 (65)	228 (277)	97980 (63)
15	11.7 (5.6)	43.7 (16.1)	3.52 (1.62)	286 (99)	284 (322)	98180 (121)
16	14.5 (5.1)	36.8 (11.2)	3.21 (2.18)	168 (85)	280 (304)	98810 (133)
17	14.1 (4.7)	43.4 (9.5)	2.87 (2.57)	288 (101)	201 (257)	98870 (147)
18	14.1 (6.0)	40.9 (15.2)	1.86 (1.30)	31 (114)	283 (307)	99200 (228)
19	18.6 (6.9)	37.1 (10.6)	2.43 (2.25)	161 (91)	287 (309)	98890 (203)
20	22.1 (6.6)	36.1 (12.5)	1.68 (1.54)	69 (111)	310 (329)	98620 (216)
21	22.7 (6.6)	33.1 (11.3)	1.55 (1.14)	299 (117)	312 (332)	98100 (284)
22	17.8 (4.4)	30.9 (7.9)	3.87 (3.11)	300 (94)	217 (214)	97430 (173)
23	10.7 (4.1)	33.0 (6.7)	3.36 (1.71)	302 (104)	285 (322)	97830 (120)
24	12.0 (5.7)	33.1 (11.4)	2.87 (2.42)	290 (111)	318 (336)	98140 (150)
25	12.5 (4.2)	34.3 (8.5)	4.08 (2.39)	288 (69)	313 (338)	97970 (143)
26	14.3 (5.2)	34.6 (10.3)	3.17 (1.57)	244 (88)	314 (342)	98360 (221)
27	13.2 (3.3)	43.8 (7.1)	3.78 (2.61)	352 (124)	197 (215)	97700 (183)
28	10.4 (2.0)	51.3 (13.9)	3.85 (2.29)	7 (153)	202 (224)	97980 (287)
29	9.3 (2.5)	68.0 (10.9)	2.64 (1.27)	299 (72)	108 (122)	98680 (116)
30	14.5 (4.9)	40.7 (15.0)	2.23 (1.32)	310 (112)	316 (351)	98710 (75)
Avg	13.6	42.9	3.19	287.0	247	98120
n	30	30	30	30	30	30
SD	3.7	9.0	1.45	102.0	62	598
Min	5.9	30.9	1.47	7.0	90	96830
Max	22.7	68.0	8.00	352.0	318	99200

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Table F1. Daily means (SD) of weather parameters at site WA5B for May, 2009.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	15.0 (6.1)	40.6 (14.9)	1.87 (1.79)	34 (112)	308 (321)	98160 (462)
2	13.9 (2.8)	56.7 (13.8)	1.58 (1.49)	293 (108)	164 (214)	97440 (189)
3	14.8 (4.3)	47.9 (14.6)	1.40 (1.39)	313 (119)	253 (288)	97870 (93)
4	13.0 (2.9)	63.1 (14.5)	2.74 (2.42)	112 (70)	163 (198)	97340 (645)
5	15.3 (2.5)	47.5 (14.7)	8.57 (4.65)	244 (29)	321 (343)	97210 (461)
6	13.8 (2.3)	57.4 (9.8)	5.09 (3.83)	201 (71)	160 (168)	97660 (148)
7	13.9 (3.8)	42.0 (13.6)	5.62 (2.80)	266 (41)	343 (359)	98490 (266)
8	14.8 (5.4)	40.4 (13.4)	2.31 (1.33)	162 (96)	353 (356)	98900 (187)
9	16.6 (6.3)	39.2 (14.5)	1.49 (1.12)	291 (102)	342 (358)	98550 (135)
10	18.5 (5.7)	40.5 (15.3)	2.19 (1.89)	31 (121)	313 (328)	98130 (339)
11	17.6 (3.5)	39.3 (11.8)	4.63 (3.05)	277 (81)	339 (346)	97620 (107)
12	12.5 (2.8)	38.1 (9.8)	8.43 (3.12)	264 (24)	310 (347)	97840 (269)
13	11.5 (3.4)	52.6 (16.1)	3.06 (2.37)	163 (80)	196 (233)	98100 (443)
14	17.0 (3.8)	44.0 (16.9)	7.21 (2.87)	264 (39)	352 (360)	97630 (416)
15	17.0 (6.0)	36.3 (13.8)	2.06 (1.26)	357 (109)	356 (354)	98630 (102)
16	20.7 (7.2)	31.5 (12.4)	2.03 (1.44)	78 (96)	349 (352)	98430 (200)
17	25.0 (6.9)	31.9 (10.6)	2.33 (2.09)	176 (95)	347 (345)	97970 (301)
18	25.6 (5.7)	33.0 (9.0)	2.92 (2.60)	273 (99)	358 (353)	97240 (324)
19	17.3 (3.3)	35.1 (9.5)	7.31 (2.46)	268 (22)	346 (366)	97570 (310)
20	16.1 (5.6)	35.7 (12.4)	1.97 (1.41)	90 (105)	368 (360)	98480 (136)
21	18.2 (6.0)	33.9 (13.1)	1.83 (1.46)	353 (116)	357 (358)	98320 (185)
22	21.4 (6.6)	28.7 (10.0)	1.10 (1.11)	3 (129)	365 (355)	98040 (170)
23	24.2 (6.4)	28.2 (11.4)	2.28 (2.00)	291 (109)	357 (350)	97720 (174)
24	24.6 (5.9)	21.7 (8.0)	4.00 (2.07)	281 (71)	369 (361)	97680 (131)
25	23.7 (5.6)	25.9 (8.5)	3.15 (1.61)	284 (84)	367 (359)	97780 (158)
26	22.6 (4.8)	35.2 (9.5)	2.95 (1.78)	293 (104)	345 (343)	97990 (97)
27	22.9 (5.8)	37.6 (13.7)	2.40 (1.53)	54 (109)	355 (350)	98080 (185)
28	25.4 (6.4)	32.7 (9.9)	1.96 (1.00)	354 (127)	367 (353)	97910 (182)
29	27.9 (6.7)	33.1 (10.5)	2.57 (2.05)	35 (113)	335 (347)	97730 (170)
30	29.6 (5.3)	29.2 (10.4)	2.51 (1.55)	308 (119)	370 (357)	97540 (186)
31	28.7 (5.7)	22.7 (7.8)	1.81 (1.29)	313 (118)	343 (339)	97450 (160)
Avg	19.3	38.1	3.27	304.0	322	97920
n	31	31	31	31	31	31
SD	5.2	9.7	2.06	108.0	63	422
Min	11.5	21.7	1.10	3.0	160	97210
Max	29.6	63.1	8.57	357.0	370	98900

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Table F1. Daily means (SD) of weather parameters at site WA5B for June, 2009.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	28.0 (4.4)	24.8 (6.3)	2.76 (1.41)	333 (122)	310 (311)	97500 (95)
2	24.6 (3.3)	32.0 (5.7)	4.37 (2.44)	24 (115)	347 (352)	97880 (163)
3	25.5 (5.2)	30.0 (7.8)	2.50 (1.15)	298 (102)	354 (349)	97850 (160)
4	25.8 (5.2)	36.6 (10.9)	2.59 (3.26)	315 (119)	253 (259)	97410 (207)
5	24.7 (5.1)	53.6 (15.8)	2.13 (1.77)	315 (109)	337 (343)	96920 (336)
6	23.2 (4.6)	45.5 (12.3)	4.11 (1.82)	308 (110)	302 (320)	96890 (199)
7	18.6 (2.9)	64.3 (11.6)	1.85 (1.28)	218 (76)	189 (214)	97540 (87)
8	21.5 (5.1)	51.3 (16.4)	2.18 (1.71)	52 (108)	363 (372)	97480 (143)
9	23.3 (5.3)	42.3 (16.3)	1.56 (1.34)	48 (110)	362 (355)	97390 (160)
10						
11	24.8 (5.2)	36.8 (13.0)	2.39 (1.21)	282 (106)	354 (359)	97430 (131)
12	23.7 (4.5)	44.0 (11.2)	2.71 (2.26)	238 (94)	290 (311)	97460 (116)
13	23.8 (5.2)	47.0 (15.1)	2.06 (2.24)	283 (108)	319 (350)	
14	24.0 (2.9)	45.4 (7.5)	4.26 (1.89)	228 (56)	274 (314)	
15	25.2 (4.9)	40.7 (10.8)	2.73 (1.64)	291 (80)	371 (358)	
16						
17						
18	23.9 (4.7)	35.2 (11.2)	2.91 (1.78)	282 (108)	358 (361)	97700 (272)
19	23.0 (3.6)	43.1 (9.1)	2.86 (1.86)	314 (112)	271 (283)	97320 (78)
20	20.7 (4.8)	39.2 (10.2)	3.54 (1.55)	295 (90)	381 (363)	97320 (216)
21	18.2 (3.7)	40.0 (8.2)	3.08 (2.09)	298 (85)	264 (267)	97570 (150)
22						
23	21.7 (5.9)	34.8 (11.7)	2.11 (1.27)	357 (123)	350 (355)	98000 (286)
24	26.2 (5.6)	29.3 (9.4)	4.24 (3.34)	254 (97)	378 (355)	97390 (196)
25	22.7 (4.4)	36.4 (8.3)	2.92 (2.04)	315 (121)	371 (356)	98070 (170)
26	22.9 (5.4)	30.4 (12.1)	3.05 (1.73)	281 (57)	381 (361)	98340 (94)
27	25.1 (6.3)	23.7 (9.3)	3.48 (2.39)	177 (86)	376 (355)	98440 (298)
28	25.9 (4.8)	28.8 (8.6)	2.84 (1.92)	295 (112)	380 (362)	98160 (193)
29	24.6 (5.5)	24.0 (6.3)	3.40 (2.24)	300 (113)	383 (363)	97940 (216)
30	25.7 (5.7)	22.3 (7.4)	3.47 (2.28)	284 (86)	385 (365)	97920 (124)
Avg	23.7	37.7	2.93	297.0	335	97650
n	26	26	26	26	26	23
SD	2.2	9.9	0.75	86.0	50	395
Min	18.2	22.3	1.56	24.0	189	96890
Max	28.0	64.3	4.37	357.0	385	98440

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Table F1. Daily means (SD) of weather parameters at site WA5B for July, 2009.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, $W\ m^{-2}$	Atm P, Pa
1	26.5 (6.3)	24.9 (7.5)	2.05 (1.28)	305 (106)	388 (359)	98000 (163)
2	28.0 (7.0)	26.0 (8.9)	0.91 (0.94)	332 (123)	373 (352)	97780 (182)
3	29.8 (6.7)	25.5 (11.5)	1.93 (1.77)	41 (117)	362 (343)	97670 (127)
4	31.1 (5.8)	23.5 (10.0)	2.31 (2.14)	308 (114)	364 (350)	97590 (197)
5	29.4 (4.6)	25.2 (9.2)	2.30 (1.93)	317 (122)	305 (294)	97370 (170)
6	23.5 (3.6)	35.9 (10.8)	4.56 (2.63)	303 (74)	365 (354)	97720 (204)
7	21.3 (5.0)	40.8 (10.8)	1.99 (1.41)	316 (123)	333 (330)	97790 (173)
8						
9	22.8 (5.3)	39.1 (11.4)	2.70 (1.09)	287 (65)	366 (347)	98110 (83)
10	25.7 (5.9)	33.7 (10.9)	1.91 (1.45)	313 (122)	361 (341)	98150 (173)
11	29.7 (6.1)	26.3 (5.9)	2.85 (1.29)	288 (96)	361 (342)	97770 (228)
12	28.0 (5.0)	36.6 (13.1)	4.85 (2.57)	263 (89)	324 (353)	97560 (151)
13	23.2 (4.5)	43.4 (12.7)	2.85 (1.69)	290 (84)	326 (344)	98150 (105)
14	24.0 (6.0)	37.9 (14.8)	1.78 (1.05)	17 (126)	373 (356)	98220 (214)
15	27.4 (6.5)	30.5 (12.1)	1.93 (1.47)	4 (122)	366 (350)	98050 (120)
16						
17	30.9 (5.4)	28.0 (11.0)	2.07 (1.71)	319 (117)	331 (323)	98190 (149)
18	30.3 (4.9)	30.0 (7.2)	2.23 (1.25)	302 (104)	329 (314)	97980 (159)
19	28.0 (5.6)	29.8 (11.8)	2.40 (1.56)	292 (102)	367 (351)	98200 (139)
20	28.1 (5.3)	28.9 (5.9)	1.93 (1.22)	297 (91)	346 (338)	98150 (212)
21	30.5 (6.2)	28.1 (10.8)	1.63 (1.59)	39 (118)	344 (331)	97770 (176)
22	31.5 (5.6)	32.0 (10.3)	3.00 (1.81)	282 (107)	338 (324)	97530 (227)
23	28.8 (4.1)	34.1 (7.4)	4.23 (2.00)	302 (97)	314 (300)	97500 (116)
24	27.3 (4.8)	39.3 (9.2)	2.32 (1.38)	344 (117)	350 (346)	97860 (78)
25	28.1 (5.3)	41.3 (11.0)	1.61 (1.59)	337 (125)	310 (319)	97940 (75)
26	30.5 (5.0)	38.0 (10.6)	1.66 (1.16)	322 (113)	341 (335)	98180 (95)
27	31.2 (5.3)	38.2 (9.6)	1.01 (0.99)	330 (118)	335 (329)	98190 (209)
28	32.0 (5.2)	38.6 (8.9)	1.19 (1.11)	21 (128)	286 (300)	97620 (209)
29						97680 (147)
30	31.0 (5.8)	33.4 (12.1)	1.50 (1.53)	13 (116)	317 (317)	97570 (174)
31	32.0 (6.0)	35.1 (11.9)	2.17 (1.51)	49 (99)	306 (313)	97530 (106)
Avg	28.2	33.0	2.28	325.0	342	97860
n	28	28	28	28	28	29
SD	3.0	5.7	0.93	123.0	25	261
Min	21.3	23.5	0.91	4.0	286	97370
Max	32.0	43.4	4.85	344.0	388	98220

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Table F1. Daily means (SD) of weather parameters at site WA5B for August, 2009.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	33.1 (6.2)	34.0 (9.4)	1.53 (1.48)	328 (128)	310 (309)	97470 (197)
2	33.2 (4.5)	23.4 (5.5)	2.35 (1.41)	310 (111)	326 (324)	97380 (188)
3	32.1 (5.1)	28.9 (10.2)	2.30 (1.41)	299 (107)	316 (317)	97320 (136)
4	30.3 (6.2)	24.3 (6.0)	2.78 (2.14)	291 (110)	294 (314)	97430 (117)
5						
6	24.5 (2.3)	36.7 (8.0)	3.67 (2.33)	274 (68)	174 (210)	97220 (62)
7	24.1 (4.6)	40.7 (9.5)	3.71 (1.65)	277 (93)	249 (290)	97520 (180)
8	24.0 (4.6)	41.7 (10.6)	3.52 (2.51)	219 (97)	306 (312)	98070 (125)
9	25.5 (4.5)	42.0 (10.2)	2.03 (1.33)	317 (118)	327 (325)	98030 (154)
10	25.9 (5.4)	41.0 (12.4)	2.91 (2.16)	324 (121)	326 (337)	97970 (111)
11	25.9 (3.9)	45.9 (7.9)	2.11 (1.36)	332 (114)	231 (248)	97970 (63)
12						
13						
14	20.2 (5.0)	41.5 (10.3)	2.71 (1.54)	287 (91)	308 (319)	98220 (91)
15	22.2 (6.0)	39.1 (12.9)	2.22 (1.93)	281 (109)	321 (315)	98250 (157)
16	23.1 (5.8)	39.5 (10.6)	2.18 (1.56)	286 (86)	319 (312)	98300 (100)
17	25.6 (5.4)	36.5 (9.7)	1.81 (1.16)	291 (106)	281 (289)	98350 (162)
18	27.7 (6.6)	34.8 (14.7)	1.93 (1.76)	305 (116)	311 (304)	97850 (277)
19	29.8 (6.4)	34.2 (9.3)	1.50 (1.21)	35 (116)	298 (294)	97430 (138)
20	31.7 (6.6)	35.1 (14.1)	1.97 (1.74)	14 (120)	288 (285)	97330 (141)
21	28.0 (4.8)	35.8 (7.4)	2.48 (1.67)	325 (124)	297 (297)	97800 (137)
22	23.9 (5.0)	39.0 (12.8)	2.63 (1.60)	318 (110)	294 (308)	97910 (324)
23	24.2 (5.0)	32.0 (10.7)	3.99 (1.75)	266 (57)	309 (307)	97690 (122)
24	23.2 (6.1)	35.2 (11.1)	1.84 (1.26)	354 (118)	304 (301)	97840 (207)
25	24.5 (4.6)	31.9 (8.5)	1.81 (1.73)	342 (122)	284 (291)	97850 (107)
26	23.6 (6.4)	37.7 (12.3)	1.68 (1.34)	16 (119)	262 (289)	98140 (108)
27	26.2 (7.2)	33.7 (14.2)	1.10 (0.96)	299 (102)	294 (313)	98360 (140)
28	26.9 (4.5)	29.5 (6.8)	1.82 (1.72)	307 (114)	209 (239)	98090 (124)
29	24.2 (4.3)	42.7 (9.6)	1.55 (0.92)	342 (118)	230 (253)	
30	25.8 (5.4)	41.8 (11.0)	1.82 (1.59)	321 (117)	251 (290)	
31						
Avg	26.3	36.2	2.29	312.0	286	97830
n	27	27	27	27	27	25
SD	3.4	5.4	0.73	93.0	38	351
Min	20.2	23.4	1.10	14.0	174	97220
Max	33.2	45.9	3.99	354.0	327	98360

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Table F1. Daily means (SD) of weather parameters at site WA5B for September, 2009.

Day	Temp., °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind dir., °	Solar, W m^{-2}	Atm P, Pa
1	27.5 (5.5)	41.9 (11.0)	1.76 (1.19)	311 (118)	261 (285)	
2	26.6 (5.3)	43.7 (12.9)	1.48 (1.20)	24 (119)	245 (267)	
3						
4	20.5 (4.2)	46.1 (8.0)	1.21 (0.88)	307 (107)	181 (211)	97980 (299)
5	20.2 (3.6)	55.6 (16.0)	2.13 (2.22)	311 (111)	192 (229)	97410 (113)
6	18.3 (2.8)	49.6 (10.6)	5.99 (3.29)	240 (58)	198 (245)	97900 (183)
7	18.8 (4.5)	45.6 (11.0)	2.98 (1.30)	270 (92)	266 (295)	98270 (84)
8	18.5 (5.5)	46.6 (14.6)	1.61 (1.31)	37 (117)	257 (289)	98200 (210)
9	20.4 (5.5)	44.5 (12.7)	2.52 (2.64)	186 (100)	197 (236)	98070 (124)
10	23.1 (5.7)	44.6 (14.7)	1.14 (1.05)	344 (117)	252 (275)	98660 (118)
11	24.4 (6.6)	38.9 (15.0)	0.71 (0.76)	303 (111)	246 (268)	98450 (301)
12	25.2 (6.1)	36.2 (9.3)	0.83 (0.72)	345 (126)	238 (259)	97470 (404)
13	27.0 (5.9)	34.3 (9.9)	1.87 (2.03)	265 (108)	234 (254)	96540 (203)
14	25.9 (4.6)	43.0 (11.3)	2.31 (1.27)	322 (120)	228 (256)	97320 (418)
15	23.5 (4.5)	42.1 (7.9)	2.22 (1.10)	70 (92)	218 (243)	98380 (140)
16	24.8 (5.6)	41.7 (12.6)	1.72 (1.90)	332 (128)	218 (243)	98030 (139)
17	22.7 (4.1)	38.4 (13.6)	2.90 (1.41)	285 (101)	234 (257)	98440 (141)
18	21.4 (6.4)	39.1 (12.7)	1.00 (0.84)	360 (124)	227 (248)	98040 (392)
19	19.6 (4.5)	42.8 (7.6)	2.18 (2.21)	352 (120)	116 (134)	97740 (293)
20	18.5 (5.1)	37.4 (10.4)	2.57 (1.39)	259 (97)	225 (247)	99060 (229)
21	18.7 (6.5)	39.9 (14.5)	0.91 (0.99)	28 (118)	219 (241)	99290 (186)
22	21.5 (7.1)	36.0 (12.9)	0.42 (0.49)	349 (129)	211 (232)	98850 (250)
23	24.0 (6.6)	32.6 (9.5)	0.63 (0.74)	56 (112)	203 (222)	98270 (248)
24						
25	23.5 (5.5)	35.7 (9.0)	1.47 (1.19)	282 (89)	200 (220)	98330 (141)
26	22.4 (6.3)	33.1 (13.6)	1.81 (1.88)	297 (107)	194 (214)	98330 (107)
27	18.9 (5.0)	28.2 (7.0)	1.30 (1.07)	272 (96)	195 (214)	98450 (439)
28	17.5 (5.2)	33.1 (10.3)	3.68 (3.93)	219 (95)	169 (185)	96940 (246)
29	14.6 (3.7)	41.2 (8.3)	3.88 (2.70)	276 (92)	173 (202)	97530 (172)
30	13.3 (5.1)	39.4 (11.4)	1.88 (1.24)	261 (80)	189 (217)	98570 (331)
Avg	21.5	40.4	1.97	312.0	214	98100
n	28	28	28	28	28	26
SD	3.6	5.7	1.15	104.0	32	615
Min	13.3	28.2	0.42	24.0	116	96540
Max	27.5	55.6	5.99	360.0	266	99290

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Table F2. Building environment and inventory.

Table F2. Daily means (SD) of environmental parameters at site WA5B for September, 2007.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28				512				937
29	11.6 (4.0)	40.8 (6.9)	1170 (670)	512	12.4 (4.0)	39.1 (9.1)	1220 (700)	937
30	12.0 (0.8)	52.0 (2.0)	1460 (816)	512	12.8 (0.8)	52.1 (2.2)	1660 (989)	937
Avg	11.8	46.4	1320	512	12.6	46	1440.0	937
n	2	2	2	3	2	2	2	3
SD	0.2	5.6	144	0	0.2	7	219.00	0
Min	11.6	40.8	1170	512	12.4	39	1220.00	937
Max	12.0	52.0	1460	512	12.8	52	1660.00	937

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Table F2. Daily means (SD) of environmental parameters at site WA5B for October, 2007.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	14.7 (2.9)	44.4 (7.4)	1480 (884)	512	15.6 (3.0)	43.3 (9.2)	1670 (965)	937
2	15.4 (1.7)	45.2 (3.6)	2270 (1030)	512	16.1 (1.7)	44.7 (4.1)	2690 (1230)	937
3	13.2 (2.3)	41.4 (6.9)	1290 (870)	512	14.1 (2.3)	40.7 (7.8)	1490 (1060)	937
4	11.3 (2.4)	45.9 (5.3)	786 (559)	512	10.8 (9.5)	43.6 (9.2)	813 (588)	937
5	11.1 (3.4)	42.9 (8.5)	993 (492)	512	11.9 (3.4)	41.3 (11.5)	1090 (525)	937
6	12.1 (3.7)	42.4 (7.4)	646 (466)	512	12.9 (3.7)	40.4 (9.5)	651 (499)	937
7	15.6 (4.8)	45.3 (6.6)	1310 (1160)	512	16.4 (4.8)	44.6 (7.8)	1510 (1380)	937
8	14.0 (2.0)	42.4 (4.9)	732 (415)	512	14.8 (2.0)	42.3 (5.8)	754 (432)	937
9	14.8 (3.6)	43.5 (4.8)	448 (368)	512	15.5 (3.6)	43.0 (6.3)	467 (408)	937
10				512				937
11	12.0 (3.2)	46.2 (4.7)	644 (499)	512	12.8 (3.2)	45.0 (7.0)	653 (499)	937
12	14.4 (2.0)	48.6 (4.4)	768 (434)	512	15.3 (2.0)	48.0 (6.2)	814 (396)	937
13	14.4 (3.0)	48.6 (5.6)	475 (434)	512	15.2 (3.0)	46.7 (8.5)	466 (403)	937
14	13.1 (3.9)	48.4 (5.3)	366 (342)	512	13.8 (3.8)	47.2 (7.8)	366 (333)	937
15	13.5 (3.6)	48.8 (4.3)	405 (386)	512	14.3 (3.5)	48.2 (5.3)	325 (252)	937
16	11.9 (2.0)	48.6 (4.0)	613 (398)	512	12.7 (2.0)	48.5 (4.1)	644 (405)	937
17	10.3 (3.1)	45.5 (6.4)	693 (561)	512	11.0 (3.3)	45.9 (6.7)	666 (559)	937
18	12.0 (3.6)	49.9 (2.8)	759 (466)	512	12.8 (3.6)	49.7 (3.1)	732 (519)	937
19				512				937
20	10.6 (1.9)	45.4 (4.5)	971 (508)	512	11.2 (2.0)	45.5 (4.6)	1070 (577)	937
21	11.1 (2.8)	48.9 (3.0)	527 (517)	512	11.5 (2.8)	48.3 (3.8)	341 (249)	937
22	14.8 (4.2)	47.8 (5.3)	517 (516)	512	15.6 (4.1)	47.7 (5.6)	335 (307)	937
23	13.5 (3.9)	50.2 (3.8)	233 (268)	512	14.3 (3.8)	50.3 (4.2)	154 (143)	937
24	14.0 (4.8)	45.4 (8.0)	988 (1060)	512	15.0 (4.8)	45.1 (8.5)	595 (650)	937
25	9.5 (2.7)	38.4 (6.3)	643 (421)	512	10.4 (2.8)	39.0 (7.1)	566 (300)	937
26				512				937
27	6.2 (3.7)	43.8 (6.7)	259 (290)	512	7.1 (3.6)	43.0 (7.4)	161 (156)	937
28	6.5 (4.4)	45.9 (6.6)	268 (282)	512	7.5 (4.3)	45.9 (6.9)	208 (197)	937
29	7.0 (3.5)	48.3 (3.9)	182 (177)	512	8.0 (3.4)	47.5 (5.0)	126 (122)	937
30	8.6 (3.4)	42.3 (8.9)	399 (301)	512	9.6 (3.4)	42.1 (9.4)	289 (198)	937
31	6.6 (4.2)	45.3 (5.3)	345 (373)	512	7.7 (4.0)	45.0 (6.2)	215 (213)	937
Avg	11.9	45.7	715	512	12.7	45	710.0	937
n	28	28	28	31	28	28	28	31
SD	2.8	2.8	444	0	2.8	3	558.00	0
Min	6.2	38.4	182	512	7.1	39	126.00	937
Max	15.6	50.2	2270	512	16.4	50	2690.00	937

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Table F2. Daily means (SD) of environmental parameters at site WA5B for November, 2007.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	7.8 (3.9)	43.1 (8.7)	281 (329)	512	8.5 (3.5)	43.2 (8.9)	188 (177)	937
2	6.2 (4.0)	44.4 (6.9)	411 (460)	512	6.9 (4.4)	44.1 (7.7)	366 (512)	937
3	7.0 (4.5)	45.6 (5.8)	286 (283)	512	8.0 (4.3)	45.4 (6.0)	183 (149)	937
4	11.0 (6.8)	47.3 (5.5)	540 (538)	512	11.7 (6.4)	47.0 (6.4)	361 (274)	937
5	9.6 (2.7)	43.9 (7.3)	313 (259)	512	9.9 (2.8)	44.0 (8.0)	240 (180)	937
6	7.2 (3.8)	46.7 (6.4)	206 (210)	512	7.8 (3.7)	46.6 (6.7)	155 (143)	937
7	8.8 (3.0)	48.4 (4.9)	263 (281)	512	9.4 (2.9)	47.8 (5.5)	178 (177)	937
8	8.5 (3.2)	51.4 (1.6)	275 (287)	512	9.2 (3.1)	50.5 (3.3)	160 (117)	937
9	9.9 (5.0)	50.5 (3.3)	501 (386)	512	10.6 (4.8)	50.1 (4.1)	422 (347)	937
10	11.6 (4.0)	40.7 (11.9)	962 (795)	512	12.1 (4.0)	41.3 (11.6)	876 (648)	937
11	7.5 (3.9)	43.7 (7.2)	648 (517)	512	8.1 (3.9)	43.9 (6.9)	695 (618)	937
12	12.2 (3.5)	41.5 (5.4)	1260 (769)	512	12.6 (3.4)	41.1 (5.2)	1320 (816)	937
13				512				937
14				512				937
15	7.0 (3.5)	50.0 (2.9)	648 (489)	512	7.6 (3.2)	49.3 (3.7)	601 (572)	937
16	14.3 (1.5)	49.5 (2.5)	932 (489)	512	14.6 (1.4)	49.2 (2.8)	1040 (560)	937
17	11.0 (1.6)	51.6 (2.2)	693 (641)	512	11.4 (1.6)	52.0 (2.0)	568 (465)	937
18	5.0 (2.1)	51.8 (1.1)	432 (290)	512	5.6 (2.2)	52.0 (1.4)	440 (225)	937
19	3.8 (1.6)	51.9 (0.2)	302 (242)	512	4.5 (1.6)	52.3 (0.2)	340 (291)	937
20	3.3 (2.1)	51.3 (1.5)	221 (181)	512	3.9 (2.1)	51.5 (1.7)	198 (147)	937
21	1.1 (1.7)	51.8 (0.2)	236 (231)	512	1.7 (1.7)	51.9 (0.4)	203 (185)	937
22	-0.7 (1.6)	50.9 (1.7)	321 (209)	512	0.0 (1.7)	50.9 (2.2)	294 (199)	937
23	-1.7 (0.7)	51.5 (0.1)	142 (129)	512	-0.9 (0.7)	51.9 (0.1)	99 (108)	937
24	-0.9 (0.4)	51.6 (0.0)	203 (223)	512	-0.3 (0.4)	51.9 (0.1)	137 (127)	937
25	-0.8 (0.3)	51.6 (0.0)	380 (284)	512	-0.2 (0.3)	51.9 (0.1)	308 (188)	937
26	-1.1 (0.4)	51.5 (0.1)	464 (456)	512	-0.6 (0.4)	51.9 (0.1)	401 (504)	937
27	3.9 (3.4)	47.6 (4.3)	717 (590)	512	4.4 (3.4)	48.5 (4.2)	537 (332)	937
28	1.1 (1.4)	51.7 (0.4)	212 (233)	512	1.7 (1.4)	52.0 (0.2)	154 (150)	937
29	1.0 (0.3)	51.7 (0.1)	228 (184)	512	1.8 (0.3)	52.0 (0.1)	246 (174)	937
30	0.3 (0.9)	51.6 (0.1)	294 (371)	512	1.0 (1.0)	52.0 (0.1)	282 (266)	937
Avg	5.5	48.7	442	512	6.1	49	392.0	937
n	28	28	28	30	28	28	28	30
SD	4.7	3.6	267	0	4.6	4	287.00	0
Min	-1.7	40.7	142	512	-0.9	41	98.60	937
Max	14.3	51.9	1260	512	14.6	52	1320.00	937

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Table F2. Daily means (SD) of environmental parameters at site WA5B for December, 2007.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	-1.5 (0.7)	51.5 (0.1)	442 (407)	512	-0.9 (0.6)	51.9 (0.1)	457 (435)	937
2	5.9 (2.3)	51.0 (2.3)	1160 (593)	512	6.1 (2.3)	51.3 (2.2)	1350 (719)	937
3	13.2 (2.6)	51.6 (1.2)	1380 (878)	512	13.5 (2.5)	51.7 (1.3)	1550 (1090)	937
4	13.8 (2.0)	48.8 (3.5)	1020 (494)	512	14.1 (2.1)	49.5 (3.3)	1220 (599)	937
5	7.6 (2.0)	51.1 (1.8)	337 (284)	512	8.3 (2.0)	51.3 (2.4)	251 (180)	937
6	2.6 (1.2)	51.8 (0.2)	388 (261)	512	3.3 (1.2)	52.1 (0.2)	430 (320)	937
7	3.2 (1.0)	51.8 (0.2)	448 (311)	512	3.9 (1.0)	52.1 (0.4)	474 (346)	937
8				512				937
9	-2.5 (0.9)	51.4 (0.2)	270 (296)	512	-1.6 (1.0)	51.8 (0.2)	181 (162)	937
10	-2.2 (0.4)	51.5 (0.1)	234 (233)	512	-1.0 (0.6)	51.9 (0.1)	168 (148)	937
11	-2.2 (0.5)	51.4 (0.2)	320 (236)	512	-1.1 (0.5)	51.8 (0.1)	302 (250)	937
12				512				937
13				512				937
14	-1.1 (0.4)	51.5 (0.1)	291 (271)	512	0.1 (0.5)	51.9 (0.1)	200 (137)	937
15	2.8 (3.8)	51.3 (0.6)	730 (523)	512	3.8 (3.6)	51.8 (0.5)	729 (565)	937
16	3.8 (1.2)	51.2 (1.3)	485 (447)	512	4.7 (1.2)	51.2 (1.9)	465 (419)	937
17	4.5 (1.9)	50.9 (1.6)	736 (449)	512	5.5 (1.7)	51.4 (1.4)	859 (561)	937
18	3.2 (2.0)	51.8 (0.3)	435 (533)	512	4.2 (1.8)	52.2 (0.2)	424 (595)	937
19	8.0 (1.1)	51.9 (0.7)	1170 (565)	512	8.7 (1.1)	52.2 (0.7)	1320 (704)	937
20	5.6 (2.2)	47.0 (5.3)	879 (715)	512	6.8 (2.3)	48.6 (5.0)	854 (563)	937
21	2.3 (2.0)	49.3 (3.9)	471 (368)	512	3.5 (2.0)	50.0 (3.6)	451 (364)	937
22	1.7 (1.8)	51.5 (0.7)	579 (508)	512	2.7 (1.7)	51.7 (0.9)	545 (525)	937
23	0.9 (1.0)	51.7 (0.1)	265 (279)	512	2.1 (1.0)	52.0 (0.1)	208 (174)	937
24	4.5 (1.9)	48.3 (4.1)	845 (771)	512	5.4 (2.2)	49.7 (3.7)	717 (407)	937
25	1.3 (1.7)	51.3 (1.3)	573 (378)	512	2.1 (1.5)	51.7 (1.1)	599 (430)	937
26	3.0 (2.1)	47.9 (4.7)	567 (437)	512	4.1 (2.2)	49.5 (4.3)	527 (286)	937
27	1.0 (1.0)	51.5 (0.5)	840 (608)	512	1.9 (0.9)	51.9 (0.3)	794 (687)	937
28	2.2 (3.2)	51.8 (0.2)	809 (695)	512	3.2 (3.0)	52.1 (0.2)	852 (805)	937
29	2.2 (2.2)	51.0 (1.8)	602 (575)	512	3.2 (2.2)	51.2 (1.9)	564 (514)	937
30	4.0 (1.4)	44.4 (4.4)	1310 (760)	512	5.0 (1.6)	46.3 (4.6)	1400 (675)	937
31	1.9 (2.3)	48.9 (3.0)	421 (316)	512	2.9 (2.4)	49.7 (3.4)	404 (304)	937
Avg	3.2	50.5	643	512	4.1	51	653.0	937
n	28	28	28	31	28	28	28	31
SD	3.9	1.8	324	0	3.7	1	390.00	0
Min	-2.5	44.4	234	512	-1.6	46	168.00	937
Max	13.8	51.9	1380	512	14.1	52	1550.00	937

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Table F2. Daily means (SD) of environmental parameters at site WA5B for January, 2008.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	-0.8 (1.5)	51.4 (0.5)	275 (260)	512	0.6 (1.6)	51.7 (0.5)	209 (135)	937
2	-0.6 (0.7)	51.6 (0.1)	229 (221)	512	0.7 (0.9)	51.9 (0.1)	177 (148)	937
3	0.2 (0.8)	51.6 (0.1)	327 (328)	512	1.7 (0.9)	52.0 (0.1)	245 (200)	937
4	2.1 (3.4)	50.9 (2.0)	682 (809)	512	3.5 (3.1)	51.3 (1.9)	662 (922)	937
5	6.5 (1.4)	47.6 (4.0)	851 (629)	512	7.9 (1.5)	48.5 (3.9)	781 (605)	937
6	3.8 (1.5)	50.2 (2.5)	540 (426)	512	5.1 (1.5)	50.7 (2.3)	609 (509)	937
7				512				937
8				512				937
9				512				937
10				512				937
11	8.4 (2.7)	49.1 (4.4)	979 (743)	512	9.8 (2.8)	49.9 (3.9)	1070 (842)	937
12	2.2 (1.5)	51.7 (0.1)	490 (438)	512	3.9 (1.5)	52.1 (0.2)	414 (247)	937
13	1.3 (0.9)	51.7 (0.1)	328 (296)	512	3.1 (0.8)	52.1 (0.1)	292 (194)	937
14	1.7 (2.0)	51.0 (1.7)	804 (717)	512	3.3 (1.6)	51.6 (1.1)	886 (812)	937
15	1.8 (1.7)	46.2 (5.1)	653 (635)	512	3.2 (1.9)	48.3 (4.3)	594 (683)	937
16	-0.2 (1.9)	50.7 (1.6)	358 (355)	512	1.2 (2.1)	51.0 (1.8)	336 (404)	937
17	-1.0 (2.3)	51.4 (0.3)	355 (303)	512	0.9 (2.5)	51.5 (0.6)	285 (181)	937
18	-0.1 (2.6)	51.5 (0.3)	206 (189)	512	1.2 (2.7)	51.9 (0.4)	215 (217)	937
19	1.1 (1.5)	51.7 (0.2)	395 (419)	512	2.7 (1.5)	52.0 (0.3)	276 (219)	937
20	-1.0 (1.1)	47.6 (5.8)	2390 (1920)	512	0.7 (1.3)	46.8 (6.6)	875 (536)	937
21	-4.7 (1.6)	39.1 (6.1)	2100 (1750)	512	-3.1 (1.8)	40.2 (7.2)	701 (482)	937
22	-6.7 (2.5)	49.5 (2.5)	309 (254)	512	-5.2 (2.4)	49.3 (3.4)	260 (161)	937
23	-7.1 (2.2)	49.9 (1.8)	244 (308)	512	-5.6 (2.4)	50.2 (2.1)	191 (176)	937
24	-6.2 (2.7)	49.5 (2.4)	211 (207)	512	-4.6 (2.9)	49.8 (2.7)	157 (143)	937
25	-5.6 (2.4)	50.4 (1.2)	342 (371)	512	-3.9 (2.6)	50.5 (1.9)	242 (202)	937
26	-6.5 (1.5)	50.9 (0.2)	242 (248)	512	-4.6 (1.8)	51.3 (0.2)	169 (126)	937
27	-2.6 (1.3)	51.2 (0.1)	360 (374)	512	-1.0 (0.9)	51.7 (0.1)	227 (238)	937
28	-3.6 (3.1)	51.2 (0.2)	462 (700)	512	-2.4 (2.7)	51.6 (0.2)	525 (847)	937
29	2.9 (1.3)	50.1 (2.2)	1620 (588)	512	4.1 (1.7)	51.2 (1.5)	1790 (541)	802
30	3.0 (1.8)	50.7 (1.7)	1010 (624)	512	4.5 (1.9)	51.5 (1.2)	1190 (766)	804
31	5.3 (1.0)	50.9 (1.6)	1340 (674)	512	6.9 (1.1)	51.4 (1.6)	1440 (788)	806
Avg	-0.2	50.0	671	512	1.3	50	549.0	924
n	27	27	27	31	27	27	27	31
SD	4.0	2.5	568	0	4.0	2	420.00	39
Min	-7.1	39.1	206	512	-5.6	40	157.00	802
Max	8.4	51.7	2390	512	9.8	52	1790.00	937

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Table F2. Daily means (SD) of environmental parameters at site WA5B for February, 2008.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	4.8 (0.9)	49.4 (2.1)	1400 (568)	512	6.6 (0.9)	50.1 (2.1)	1570 (669)	808
2	1.9 (1.1)	51.5 (0.5)	777 (602)	512	3.9 (1.2)	51.9 (0.6)	520 (274)	810
3	1.9 (1.3)	51.8 (0.2)	403 (254)	512	3.9 (1.3)	52.1 (0.2)	431 (223)	812
4	2.6 (2.0)	50.4 (2.2)	308 (234)	512	4.4 (2.1)	50.7 (2.5)	336 (278)	814
5	4.1 (1.8)	51.3 (1.1)	1010 (699)	512	5.8 (1.6)	52.0 (0.7)	1090 (789)	816
6	4.4 (1.1)	49.5 (2.7)	1180 (443)	512	6.0 (1.2)	50.2 (2.7)	1410 (541)	818
7	6.7 (1.6)	45.2 (5.4)	1990 (1020)	512	8.4 (1.7)	46.3 (5.2)	2120 (996)	820
8	7.7 (1.9)	48.4 (4.2)	1530 (379)	512	8.5 (1.9)	48.9 (4.0)	1820 (449)	822
9	8.4 (1.9)	51.9 (0.9)	641 (471)	512	9.9 (1.9)	52.0 (1.6)	624 (563)	824
10	10.2 (2.0)	47.3 (5.3)	1210 (648)	512	11.5 (1.9)	48.4 (4.9)	1360 (719)	826
11	8.2 (2.3)	49.6 (3.9)	349 (297)	512	9.9 (2.2)	50.1 (3.9)	252 (215)	828
12	8.2 (2.6)	49.3 (3.3)	577 (564)	512	9.8 (2.6)	50.0 (2.7)	441 (444)	829
13	5.3 (2.6)	42.6 (6.4)	1750 (1700)	512	7.1 (2.8)	30.8 (19.5)	929 (405)	831
14				512				833
15	4.7 (3.5)	50.0 (3.2)	382 (409)	512	6.6 (3.3)	49.8 (4.2)	285 (228)	835
16	5.5 (3.8)	50.2 (3.2)	383 (332)	512	7.3 (3.8)	50.0 (4.1)	238 (166)	837
17	4.1 (3.0)	49.5 (4.1)	425 (369)	512	5.6 (3.1)	48.9 (5.4)	343 (213)	839
18	2.6 (3.4)	50.2 (2.7)	307 (285)	512	4.3 (3.6)	49.7 (3.6)	232 (209)	841
19	3.7 (3.3)	49.7 (3.4)	330 (297)	512	5.3 (3.5)	49.3 (4.3)	226 (176)	843
20	4.6 (2.9)	50.8 (1.9)	474 (561)	512	6.2 (3.0)	50.0 (3.7)	462 (504)	845
21	4.8 (3.4)	51.1 (1.6)	272 (248)	512	6.4 (3.5)	51.0 (2.6)	294 (251)	847
22	7.4 (2.6)	51.6 (1.0)	323 (358)	512	8.7 (2.8)	50.9 (2.9)	319 (323)	849
23	6.9 (3.4)	48.3 (5.2)	532 (552)	512	8.0 (3.3)	47.3 (6.7)	512 (491)	851
24	6.8 (1.3)	52.2 (0.2)	612 (394)	512	8.2 (1.3)	52.4 (0.4)	648 (324)	853
25	8.3 (2.4)	52.1 (0.6)	416 (346)	512	9.4 (2.3)	51.5 (2.6)	413 (316)	855
26	6.7 (2.9)	52.1 (0.3)	290 (347)	512	7.6 (2.7)	51.5 (2.0)	287 (306)	857
27	7.7 (3.2)	52.2 (0.3)	436 (422)	512	8.7 (3.1)	51.9 (1.7)	482 (459)	859
28	10.5 (3.9)	48.7 (5.2)	530 (379)	512	11.4 (3.7)	44.3 (11.8)	569 (383)	861
29	11.1 (3.5)	44.0 (11.2)	838 (741)	512	11.8 (3.3)	45.9 (7.6)	938 (825)	863
Avg	6.1	49.7	703	512	7.5	49	684.0	835
n	28	28	28	29	28	28	28	29
SD	2.5	2.4	473	0	2.2	4	515.00	16
Min	1.9	42.6	272	512	3.9	31	226.00	808
Max	11.1	52.2	1990	512	11.8	52	2120.00	863

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Table F2. Daily means (SD) of environmental parameters at site WA5B for March, 2008.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	8.4 (2.6)	40.0 (6.6)	1340 (872)	512	9.6 (2.5)	40.3 (7.3)	1450 (785)	865
2	6.6 (3.4)	39.4 (7.9)	682 (446)	512	7.9 (3.1)	38.3 (10.6)	778 (516)	867
3	7.3 (3.3)	43.2 (6.1)	1400 (1160)	512	8.6 (2.9)	42.3 (6.7)	1550 (1220)	869
4	8.0 (3.2)	36.5 (7.4)	1340 (822)	512	9.2 (3.1)	36.0 (9.6)	1320 (664)	871
5	6.8 (4.1)	40.4 (8.0)	575 (472)	512	8.1 (3.8)	38.2 (11.3)	640 (544)	873
6	8.4 (5.2)	41.1 (8.5)	781 (692)	512	9.5 (4.8)	39.0 (11.0)	891 (822)	875
7	8.6 (2.8)	47.8 (3.3)	418 (386)	512	9.9 (2.5)	46.6 (4.2)	404 (334)	877
8	10.5 (3.4)	45.4 (6.8)	681 (551)	512	11.5 (3.2)	42.4 (11.6)	754 (631)	879
9	8.6 (3.8)	47.5 (5.9)	458 (501)	512	9.8 (3.5)	44.0 (10.8)	473 (469)	881
10	10.5 (3.4)	48.5 (4.0)	620 (486)	512	11.6 (3.2)	46.6 (5.9)	625 (444)	882
11	9.7 (2.5)	40.9 (7.4)	1720 (782)	512	10.7 (2.6)	38.9 (10.0)	2030 (920)	884
12	7.9 (3.0)	45.4 (5.2)	637 (460)	512	9.0 (3.0)	43.2 (6.9)	641 (447)	886
13	8.4 (1.7)	50.4 (2.9)	896 (605)	512	9.7 (1.6)	50.2 (3.4)	1010 (737)	888
14	8.8 (1.9)	46.0 (5.7)	1100 (615)	512	9.7 (1.9)	44.8 (7.2)	1300 (735)	890
15	7.1 (3.1)	46.5 (7.0)	610 (547)	512	8.2 (3.0)	44.1 (10.2)	652 (586)	892
16	7.4 (3.5)	41.5 (8.6)	679 (533)	512	8.5 (3.6)	40.1 (10.6)	721 (546)	894
17	9.9 (3.5)	43.4 (6.4)	968 (624)	512	10.8 (3.5)	40.7 (8.6)	1070 (694)	896
18	10.1 (3.5)	44.2 (8.6)	1250 (1030)	512	11.2 (3.5)	42.9 (10.8)	1400 (1070)	898
19	5.9 (2.7)	47.0 (4.5)	500 (431)	512	7.0 (2.5)	44.4 (7.7)	545 (491)	900
20	6.9 (2.4)	46.4 (4.9)	988 (663)	512	7.8 (2.4)	44.8 (6.1)	1170 (796)	902
21	6.6 (3.0)	37.5 (8.8)	1110 (571)	512	7.7 (3.2)	36.5 (10.0)	1260 (586)	904
22	5.8 (4.5)	40.4 (8.7)	590 (609)	512	7.2 (4.3)	38.8 (10.8)	576 (523)	906
23	8.9 (3.8)	42.1 (3.2)	1320 (1010)	512	10.2 (3.5)	41.2 (2.9)	1560 (1200)	908
24	5.8 (2.8)	37.0 (6.5)	637 (490)	512	7.3 (2.7)	35.3 (9.5)	637 (452)	910
25	6.5 (4.3)	37.9 (8.1)	717 (624)	512	7.9 (4.2)	36.4 (9.9)	786 (660)	912
26	7.3 (1.9)	40.9 (7.9)	1280 (706)	512	7.8 (2.1)	40.3 (7.9)	1430 (699)	914
27	5.8 (3.1)	32.5 (7.4)	1170 (685)	512	5.0 (8.0)	31.5 (9.3)	1360 (758)	916
28	4.6 (4.3)	45.9 (7.2)	973 (925)	512	4.1 (2.8)	43.7 (8.4)	1110 (1040)	918
29	9.0 (2.9)	40.3 (6.6)	1230 (880)	512	7.0 (2.9)	38.7 (8.0)	1310 (875)	920
30	7.5 (2.3)	44.3 (7.4)	1460 (1440)	512	5.8 (2.1)	43.5 (8.6)	1330 (1160)	922
31	8.2 (3.8)	36.8 (9.3)	609 (463)	512	6.3 (3.6)	35.9 (10.4)	644 (453)	924
Avg	7.8	42.5	927	512	8.5	41	1010.0	894
n	31	31	31	31	31	31	31	31
SD	1.5	4.2	345	0	1.8	4	398.00	18
Min	4.6	32.5	418	512	4.1	32	404.00	865
Max	10.5	50.4	1720	512	11.6	50	2030.00	924

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Table F2. Daily means (SD) of environmental parameters at site WA5B for April, 2008.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	8.6 (3.8)	35.7 (8.5)	617 (435)	512	6.5 (4.0)	33.9 (11.1)	651 (418)	926
2	10.5 (4.2)	34.2 (6.5)	621 (501)	512	8.3 (3.9)	32.5 (9.1)	648 (534)	928
3	13.3 (5.9)	35.3 (9.7)	727 (710)	512	10.8 (5.5)	34.6 (10.5)	810 (842)	930
4	12.0 (2.1)	35.7 (5.0)	1140 (983)	512	8.9 (1.6)	35.9 (4.6)	1350 (1170)	932
5	11.5 (3.7)	39.2 (8.1)	860 (601)	512	8.5 (3.0)	38.1 (8.9)	978 (706)	934
6	13.5 (2.8)	39.8 (9.9)	1520 (611)	512	9.9 (2.2)	39.2 (9.9)	1770 (672)	935
7	11.8 (3.9)	39.9 (8.7)	866 (750)	512	9.0 (3.0)	39.3 (8.5)	987 (833)	937
8	10.3 (2.5)	45.8 (5.6)	465 (410)	512	8.2 (2.4)	44.2 (6.4)	528 (476)	939
9	11.2 (4.7)	38.3 (10.5)	642 (488)	512	8.4 (4.3)	37.7 (11.5)	669 (481)	941
10	13.7 (5.0)	36.2 (8.4)	831 (679)	512	10.0 (2.9)	36.1 (9.1)	832 (587)	943
11	15.0 (5.6)	36.1 (9.5)	629 (450)	512	12.8 (5.5)	35.1 (10.3)	696 (489)	945
12	18.3 (6.0)	37.2 (8.7)	680 (637)	512	15.6 (5.7)	35.9 (9.7)	652 (539)	947
13	21.2 (5.5)	36.3 (9.6)	774 (710)	512	17.6 (4.7)	35.7 (10.2)	795 (702)	949
14	15.7 (3.1)	29.8 (5.7)	1720 (898)	512	11.8 (2.8)	29.8 (6.1)	1830 (826)	951
15	10.8 (3.6)	33.4 (7.2)	1370 (1010)	512	7.5 (3.1)	33.3 (7.6)	1350 (891)	953
16	13.1 (4.9)	37.7 (8.5)	999 (716)	512	10.2 (5.2)	36.9 (9.2)	1130 (845)	955
17	15.2 (5.0)	36.8 (10.2)	930 (807)	512	11.7 (4.4)	35.9 (10.8)	890 (708)	957
18	11.4 (2.5)	35.4 (6.6)	1920 (991)	512	7.5 (2.3)	35.4 (7.0)	2180 (1080)	959
19	8.4 (3.3)	34.9 (7.7)	889 (701)	512	6.2 (2.6)	34.5 (7.9)	879 (641)	961
20	8.0 (2.8)	37.3 (5.8)	849 (875)	512	5.2 (2.7)	37.3 (6.4)	848 (754)	962
21	9.1 (3.7)	39.0 (7.4)	1010 (810)	512	6.6 (3.2)	38.4 (7.8)	1080 (897)	963
22	12.5 (3.6)	42.1 (7.9)	987 (845)	512	10.4 (3.7)	40.6 (9.1)	938 (736)	963
23	12.7 (3.2)	42.9 (7.8)	1560 (995)	512	9.3 (2.0)	42.7 (8.1)	1840 (1180)	963
24	13.5 (3.5)	39.2 (8.8)	1420 (1070)	512	9.2 (3.1)	38.8 (9.0)	1520 (1050)	964
25	12.7 (4.1)	33.7 (9.8)	1230 (969)	512	9.9 (4.1)	33.0 (10.4)	1310 (1130)	964
26	14.8 (4.9)	33.2 (10.2)	887 (834)	512	12.4 (4.8)	32.0 (11.1)	827 (706)	965
27	18.7 (4.9)	29.3 (6.6)	818 (809)	512	16.3 (4.7)	28.5 (7.6)	826 (891)	965
28	20.1 (4.0)	37.9 (6.4)	1610 (1380)	512	16.2 (3.5)	37.3 (6.8)	1630 (1310)	965
29	14.5 (2.6)	35.2 (7.2)	1800 (1100)	512	10.8 (2.4)	34.6 (7.3)	1860 (1090)	966
30	12.6 (3.6)	32.3 (8.8)	1560 (1230)	512	9.1 (3.3)	31.9 (9.6)	1460 (988)	966
Avg	13.1	36.7	1060	512	10.2	36	1130.0	951
n	30	30	30	30	30	30	30	30
SD	3.2	3.5	399	0	3.0	3	443.00	13
Min	8.0	29.3	465	512	5.2	29	528.00	926
Max	21.2	45.8	1920	512	17.6	44	2180.00	966

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Table F2. Daily means (SD) of environmental parameters at site WA5B for May, 2008.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	13.3 (4.6)	34.2 (8.8)	1120 (712)	512	11.3 (4.8)	33.1 (9.1)	1250 (814)	967
2	15.1 (7.3)	32.7 (8.8)	642 (526)	512	11.8 (6.9)	31.9 (9.2)	603 (474)	967
3	15.8 (2.5)	46.0 (5.2)	815 (730)	512	12.4 (2.5)	45.4 (5.7)	918 (874)	968
4	18.4 (4.8)	45.1 (7.3)	624 (437)	512	14.3 (4.2)	44.7 (7.9)	635 (426)	968
5	21.0 (4.8)	40.4 (10.3)	815 (596)	512	15.8 (3.7)	39.1 (11.5)	791 (599)	968
6	18.6 (2.3)	36.2 (7.1)	1140 (667)	512	14.8 (2.8)	35.2 (8.2)	1140 (627)	969
7	15.1 (4.2)	32.6 (9.1)	1470 (1070)	512	13.0 (4.7)	32.3 (9.9)	1400 (901)	969
8	12.1 (3.5)	29.7 (6.4)	1160 (852)	512	11.3 (4.0)	29.4 (7.1)	1170 (769)	970
9	13.5 (3.9)	29.7 (6.8)	1230 (611)	512	12.8 (4.0)	29.2 (7.5)	1390 (735)	970
10	16.6 (3.8)	33.9 (4.7)	1200 (857)	512	15.9 (3.6)	33.6 (5.1)	1330 (951)	970
11	13.3 (2.8)	32.2 (7.5)	2020 (1250)	512	12.8 (2.8)	31.7 (8.2)	2010 (1080)	971
12	13.8 (4.6)	31.6 (7.1)	1230 (820)	512	13.1 (4.7)	31.2 (7.8)	1360 (953)	971
13	15.9 (3.0)	39.9 (7.0)	968 (829)	512	15.1 (2.7)	38.9 (7.1)	938 (777)	972
14	20.4 (3.8)	41.6 (6.4)	1370 (1420)	512	19.0 (3.4)	40.6 (7.1)	1260 (1210)	972
15	23.4 (4.6)	36.6 (8.6)	1030 (671)	512	21.2 (4.0)	36.1 (9.6)	1040 (641)	972
16				512				973
17				512				973
18				512				974
19				512				974
20				512				975
21	14.8 (3.1)	35.0 (6.2)	2330 (1570)	512	13.1 (3.8)	34.3 (6.9)	2100 (1270)	975
22	16.2 (3.8)	34.0 (6.9)	2120 (1210)	512	15.5 (3.7)	33.7 (7.7)	2040 (936)	975
23	15.2 (2.7)	51.6 (1.7)	1470 (767)	512	11.9 (2.1)	51.5 (2.5)	1620 (687)	976
24	19.3 (4.4)	40.8 (9.7)	885 (530)	512	15.6 (4.4)	41.0 (10.1)	938 (550)	976
25	19.4 (3.0)	47.3 (7.2)	1210 (698)	512	15.6 (3.4)	46.7 (8.4)	1150 (602)	977
26	21.1 (3.5)	39.0 (10.2)	1500 (950)	512	18.2 (4.7)	38.1 (11.4)	1420 (764)	977
27	20.2 (2.8)	44.2 (8.1)	970 (578)	512	17.7 (2.9)	43.7 (8.9)	1010 (517)	977
28	19.9 (1.7)	47.5 (6.2)	575 (518)	512	16.0 (2.5)	46.4 (7.8)	557 (460)	978
29	20.3 (3.0)	39.6 (10.2)	1250 (1040)	512	17.5 (3.9)	39.2 (10.5)	1400 (1220)	978
30	19.1 (5.2)	29.6 (7.2)	1050 (593)	512	18.3 (4.7)	29.1 (8.7)	1070 (577)	979
31	20.3 (3.8)	36.8 (8.6)	1090 (874)	512	19.3 (3.3)	36.6 (9.3)	1090 (933)	979
Avg	17.4	38.0	1200	512	15.1	37	1220.0	973
n	26	26	26	31	26	26	26	31
SD	3.0	6.1	424	0	2.7	6	398.00	4
Min	12.1	29.6	575	512	11.3	29	557.00	967
Max	23.4	51.6	2330	512	21.2	52	2100.00	979

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Table F2. Daily means (SD) of environmental parameters at site WA5B for June, 2008.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	19.5 (3.7)	37.6 (10.2)	1350 (943)	512	18.4 (3.4)	37.4 (10.8)	1370 (851)	979
2	16.9 (4.5)	32.7 (9.4)	1070 (820)	512	16.4 (4.2)	32.4 (10.2)	1020 (720)	980
3	15.1 (2.0)	48.3 (4.7)	864 (721)	512	13.3 (2.2)	47.9 (5.0)	879 (710)	980
4	15.4 (4.1)	38.1 (8.7)	1340 (614)	512	12.9 (4.9)	38.0 (9.4)	1340 (542)	981
5	14.3 (2.5)	43.9 (5.5)	1470 (1150)	512	12.4 (3.2)	43.4 (6.0)	1680 (1380)	981
6	14.0 (2.2)	39.6 (4.8)	2350 (885)	512	13.6 (2.0)	39.5 (5.0)	2780 (1050)	981
7	15.4 (4.5)	37.8 (9.4)	1690 (1580)	512	15.1 (4.2)	37.1 (10.2)	1520 (1320)	982
8	18.3 (5.1)	31.7 (8.8)	1130 (696)	512	17.8 (4.6)	31.8 (9.4)	1270 (775)	982
9	18.0 (3.1)	34.0 (5.5)	1970 (1690)	512	17.7 (2.6)	33.8 (5.4)	2280 (2000)	983
10	12.3 (2.7)	43.4 (4.5)	1420 (1010)	512	11.2 (1.4)	42.5 (4.6)	1450 (950)	983
11	16.6 (4.5)	37.0 (8.6)	2030 (1430)	512	14.5 (5.1)	36.4 (9.3)	1830 (1190)	984
12	20.1 (5.9)	30.4 (8.5)	1720 (1080)	512	18.2 (6.6)	30.3 (9.2)	2000 (1280)	984
13	22.2 (4.4)	28.4 (5.8)	1550 (1120)	512	21.4 (3.6)	28.0 (6.6)	1540 (1010)	984
14	19.7 (4.9)	30.1 (8.5)	1080 (570)	512	19.4 (4.2)	29.5 (9.4)	1110 (563)	985
15	21.4 (4.6)	27.9 (8.3)	1090 (561)	512	20.7 (3.7)	27.7 (8.9)	1090 (586)	985
16	23.2 (5.3)	25.2 (10.9)	1310 (871)	512	22.2 (4.2)	25.0 (11.7)	1430 (959)	986
17	20.7 (3.8)	29.1 (7.5)	1470 (912)	512	20.3 (3.2)	29.0 (8.4)	1390 (744)	986
18	18.3 (4.9)	30.7 (9.2)	1240 (740)	512	18.1 (4.1)	29.7 (9.9)	1190 (652)	986
19	20.9 (5.9)	27.5 (7.0)	1110 (932)	512	20.5 (5.1)	27.2 (7.3)	1180 (1040)	987
20	24.3 (5.9)	28.7 (6.6)	741 (636)	512	22.8 (4.4)	28.4 (7.9)	669 (527)	987
21	23.7 (3.5)	36.6 (7.5)	1160 (1080)	512	21.1 (4.3)	36.1 (8.1)	1230 (1290)	988
22	21.3 (3.9)	33.5 (7.2)	1310 (784)	512	16.9 (5.6)	32.5 (8.2)	1280 (842)	988
23	19.7 (4.2)	31.6 (8.5)	1140 (555)	512	17.4 (4.8)	30.9 (9.3)	1170 (623)	988
24	21.0 (5.0)	27.7 (6.6)	994 (547)	512	20.3 (4.2)	27.2 (7.4)	1070 (604)	989
25	22.6 (4.1)	30.1 (6.9)	1240 (517)	512	21.8 (3.3)	29.0 (8.5)	1200 (470)	989
26	22.7 (4.3)	31.0 (7.2)	1330 (687)	512	21.7 (3.4)	30.3 (8.4)	1270 (568)	990
27	24.4 (5.0)	34.2 (8.1)	989 (671)	512	22.7 (3.6)	32.9 (9.4)	919 (590)	990
28	27.8 (6.2)	31.8 (9.3)	867 (660)	512	24.6 (4.0)	31.6 (10.5)	807 (559)	990
29	30.5 (5.9)	27.3 (8.5)	1340 (1280)	512	26.4 (3.8)	26.4 (9.2)	1370 (1500)	991
30	31.9 (4.3)	27.4 (6.1)	1490 (1050)	512	27.5 (2.3)	27.0 (6.9)	1610 (1280)	991
Avg	20.4	33.1	1330	512	18.9	33	1370.0	985
n	30	30	30	30	30	30	30	30
SD	4.5	5.5	352	0	4.0	6	426.00	4
Min	12.3	25.2	741	512	11.2	25	669.00	979
Max	31.9	48.3	2350	512	27.5	48	2780.00	991

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Table F2. Daily means (SD) of environmental parameters at site WA5B for July, 2008.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	29.9 (3.7)	35.9 (8.3)	937 (616)	512	25.7 (2.3)	35.2 (9.1)	976 (671)	992
2	29.4 (4.6)	34.2 (6.4)	1150 (667)	512	25.2 (3.3)	33.1 (7.9)	1100 (584)	992
3	30.0 (3.7)	34.4 (5.6)	1450 (887)	512	25.3 (2.5)	33.5 (7.0)	1350 (760)	993
4	23.9 (2.2)	40.7 (5.5)	1410 (856)	512	20.8 (1.6)	39.9 (5.8)	1320 (698)	993
5				512				993
6				512				994
7	24.2 (5.3)	28.4 (7.4)	1260 (563)	512	22.1 (3.9)	27.9 (8.3)	1270 (609)	994
8	26.6 (4.5)	26.2 (4.3)	1260 (529)	512	23.8 (2.9)	25.3 (5.3)	1270 (574)	995
9	28.4 (5.5)	27.4 (7.8)	1160 (635)	512	24.9 (3.5)	26.6 (8.3)	1240 (692)	995
10	24.1 (3.8)	27.8 (9.0)	1810 (1540)	512	22.2 (2.8)	27.6 (9.8)	1620 (1260)	995
11	20.2 (4.9)	25.9 (7.8)	912 (715)	512	19.4 (4.2)	25.6 (9.1)	843 (611)	996
12	23.7 (6.2)	26.1 (9.3)	775 (701)	512	21.6 (4.4)	26.3 (10.7)	720 (643)	996
13	27.4 (5.6)	24.8 (6.8)	1090 (619)	512	24.5 (3.6)	24.1 (7.4)	1110 (661)	997
14	27.8 (5.0)	25.8 (5.3)	1120 (727)	512	24.7 (3.1)	25.0 (6.3)	1040 (571)	997
15	27.3 (3.9)	25.6 (7.4)	1000 (568)	512	24.5 (2.2)	24.8 (7.8)	1040 (590)	997
16	26.7 (3.7)	26.8 (5.6)	1200 (808)	512	24.0 (2.2)	26.0 (6.3)	1130 (689)	998
17		25.3 (5.8)	1430 (563)	512		24.4 (6.8)	1410 (540)	998
18		25.9 (6.6)	1090 (549)	512		25.6 (7.6)	1100 (573)	999
19		29.3 (6.6)	1210 (785)	512		28.3 (7.7)	1130 (698)	999
20		26.3 (9.9)	1180 (802)	512		26.0 (10.5)	1260 (907)	1,000
21		26.6 (7.7)	1190 (731)	512		25.9 (8.1)	1270 (849)	1,000
22		34.3 (4.9)	1460 (771)	512		33.4 (6.2)	1530 (729)	1,000
23		33.0 (6.6)	1380 (637)	512		32.4 (7.5)	1380 (635)	1,001
24		33.1 (6.2)	1090 (537)	512		32.5 (7.5)	1040 (486)	1,001
25		32.1 (8.1)	913 (643)	512		31.1 (9.9)	822 (536)	1,002
26		30.0 (6.1)	1330 (720)	512		28.7 (7.7)	1270 (657)	1,002
27		35.4 (6.1)	1430 (1020)	512		34.8 (6.9)	1310 (826)	1,002
28		32.2 (9.6)	1140 (788)	512		31.5 (10.6)	1100 (695)	1,003
29		35.0 (5.1)	1480 (974)	512		34.4 (5.3)	1400 (843)	1,003
30		32.9 (6.6)	1440 (744)	512		31.8 (8.0)	1350 (640)	1,004
31				512				1,004
Avg	26.4	30.0	1230	512	23.5	29	1190.0	998
n	14	28	28	31	14	28	28	31
SD	2.8	4.2	218	0	1.9	4	205.00	4
Min	20.2	24.8	775	512	19.4	24	720.00	992
Max	30.0	40.7	1810	512	25.7	40	1620.00	1,004

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Table F2. Daily means (SD) of environmental parameters at site WA5B for August, 2008.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1				512				1,004
2				512				1,005
3				512				1,005
4				512				1,006
5				512				1,006
6				512				1,006
7				512				1,007
8		43.0 (8.1)	1060 (861)	512		42.7 (8.6)	980 (734)	1,007
9		38.2 (9.1)	1130 (892)	512		37.8 (9.1)	1200 (967)	1,008
10		37.8 (7.9)	1050 (694)	512		36.9 (8.5)	974 (578)	1,008
11		38.3 (8.6)	1120 (768)	512		36.8 (9.9)	1050 (699)	1,009
12		37.3 (10.2)	930 (720)	512		36.7 (10.8)	994 (802)	1,009
13		33.4 (6.5)	1090 (477)	512		33.2 (7.4)	1090 (486)	1,009
14				512				1,010
15		32.3 (7.6)	850 (707)	512		31.9 (8.3)	777 (600)	1,010
16		30.6 (9.8)	872 (732)	512		30.0 (10.6)	798 (601)	1,011
17		31.9 (8.7)	987 (659)	512		31.0 (9.3)	954 (676)	1,011
18				512				1,011
19				512				1,012
20				512				1,012
21		37.5 (6.9)	2240 (1170)	512		37.2 (7.5)	2390 (1360)	1,013
22		39.8 (9.9)	692 (597)	512		39.0 (10.8)	643 (510)	1,013
23		37.9 (9.9)	567 (564)	512		36.8 (10.8)	503 (473)	1,013
24		36.2 (9.5)	1180 (841)	512		34.8 (10.3)	1070 (733)	1,014
25		44.2 (6.7)	1040 (921)	512		43.5 (7.4)	970 (787)	1,014
26		31.7 (9.6)	1120 (691)	512		31.0 (10.0)	1210 (786)	1,015
27				512				1,015
28		28.1 (22.1)	638 (677)	512		26.7 (21.5)	585 (597)	1,016
29		0.0 (0.0)	0 (0)	512		0.0 (0.0)	0 (0)	1,016
30		0.0 (0.0)	0 (0)	512		0.0 (0.0)	0 (0)	1,016
31		0.0 (0.0)	0 (0)	512		0.0 (0.0)	0 (0)	1,017
Avg		30.4	871	512		30	852.0	1,011
n		19	19	31		19	19	31
SD		13.8	501	0		14	525.00	4
Min		0.0	0	512		0	0.00	1,004
Max		44.2	2240	512		44	2390.00	1,017

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Table F2. Daily means (SD) of environmental parameters at site WA5B for September, 2008.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1		0.0 (0.0)	0 (0)	512		0.0 (0.0)	0 (0)	1,017
2		0.0 (0.0)	0 (0)	512		0.0 (0.0)	0 (0)	1,018
3		16.2 (14.9)	496 (604)	512		15.1 (14.6)	465 (537)	1,018
4		28.9 (5.5)	1020 (566)	512		28.1 (6.8)	1080 (660)	1,018
5		36.9 (8.4)	957 (758)	512		36.0 (9.5)	881 (643)	1,019
6		37.5 (7.2)	804 (530)	512		36.0 (9.5)	806 (515)	1,019
7		33.1 (6.6)	1210 (1020)	512		31.4 (9.5)	1090 (809)	1,020
8		33.1 (8.5)	599 (521)	512		31.7 (10.5)	564 (445)	1,020
9		31.6 (9.3)	948 (752)	512		29.7 (10.5)	977 (777)	1,020
10		30.9 (7.1)	908 (593)	512		29.6 (9.4)	942 (608)	1,021
11				512				1,021
12		33.9 (8.2)	707 (604)	512		32.2 (11.8)	694 (591)	1,022
13		31.3 (8.6)	734 (430)	512		29.8 (11.1)	764 (449)	1,022
14		34.0 (9.4)	452 (432)	512		31.6 (12.1)	402 (367)	1,022
15		32.3 (10.2)	578 (523)	512		30.5 (12.8)	537 (468)	1,023
16		33.3 (9.5)	482 (458)	512		31.1 (11.8)	445 (400)	1,023
17				512				1,024
18				512				1,024
19		33.5 (7.1)	729 (654)	512		33.0 (8.0)	779 (760)	1,025
20		51.5 (2.9)	585 (388)	512		51.7 (3.1)	616 (390)	1,025
21		43.0 (7.5)	1100 (881)	512		41.9 (9.5)	1060 (736)	1,025
22		37.6 (9.6)	1450 (1150)	512		36.3 (12.2)	1390 (956)	1,026
23		40.1 (7.4)	567 (587)	512		37.5 (11.0)	529 (501)	1,026
24		39.6 (8.5)	589 (582)	512		38.5 (10.0)	586 (555)	1,027
25		42.0 (9.6)	1140 (949)	512		40.1 (11.8)	1180 (972)	1,027
26		46.5 (6.0)	577 (446)	512		45.3 (7.9)	558 (402)	1,027
27		42.4 (9.8)	714 (495)	512		39.6 (13.7)	701 (506)	1,028
28		40.6 (9.2)	568 (427)	512		37.9 (12.6)	541 (403)	1,028
29		36.6 (9.4)	384 (335)	512		34.3 (12.5)	375 (322)	1,029
30		34.9 (7.6)	479 (396)	512		32.7 (10.7)	468 (412)	1,029
Avg		33.4	695	512		32	683.0	1,023
n		27	27	30		27	27	30
SD		11.4	324	0		11	322.00	4
Min		0.0	0	512		0	0.00	1,017
Max		51.5	1450	512		52	1390.00	1,029

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Table F2. Daily means (SD) of environmental parameters at site WA5B for October, 2008.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1		39.8 (9.4)	412 (366)	512		38.6 (10.9)	399 (337)	1,029
2				512				1,030
3				512				1,030
4	16.2 (1.6)	47.0 (5.5)	2210 (1230)	512	15.7 (2.1)	46.7 (6.4)	2600 (1470)	1,031
5	13.0 (2.5)	45.3 (5.5)	884 (554)	512	13.2 (2.8)	43.8 (7.1)	888 (587)	1,031
6	15.3 (3.8)	49.5 (3.8)	584 (527)	512	15.8 (3.7)	48.2 (5.6)	584 (506)	1,031
7	15.7 (2.7)	35.2 (7.6)	2100 (1030)	512	16.2 (2.7)	34.6 (8.8)	2340 (1190)	1,032
8	9.8 (3.5)	37.9 (9.8)	815 (598)	512	10.2 (3.6)	36.8 (11.4)	837 (625)	1,032
9	8.9 (2.4)	41.1 (6.4)	926 (1080)	512	9.4 (2.3)	40.2 (7.5)	920 (896)	1,033
10	9.3 (3.0)	33.6 (8.6)	2060 (1630)	512	9.7 (3.0)	32.5 (10.6)	1870 (1230)	1,033
11	8.9 (3.1)	28.3 (3.7)	2010 (1620)	512	9.2 (3.2)	27.2 (6.1)	1760 (1250)	1,034
12	9.6 (3.7)	32.8 (5.9)	1130 (994)	512	9.9 (3.6)	32.6 (6.1)	1290 (1180)	1,034
13	13.0 (6.4)	41.5 (4.9)	768 (649)	512	13.4 (6.3)	40.3 (6.9)	765 (676)	1,034
14	12.6 (3.0)	36.9 (9.9)	947 (557)	512	13.0 (3.0)	36.7 (10.5)	973 (533)	1,035
15	9.2 (4.2)	38.0 (7.4)	1230 (1030)	512	9.6 (4.1)	37.4 (8.4)	1400 (1220)	1,035
16	13.6 (3.3)	42.3 (6.6)	587 (502)	512	14.0 (3.2)	39.6 (9.8)	551 (470)	1,036
17	14.5 (4.6)	53.1 (9.1)	502 (422)	512	14.9 (4.4)	52.3 (10.0)	503 (418)	1,036
18	14.9 (2.9)	51.7 (9.9)	551 (429)	512	15.3 (2.9)	51.0 (9.2)	551 (411)	1,036
19	10.4 (3.3)	44.4 (7.6)	399 (343)	512	10.9 (3.2)	44.6 (8.4)	405 (335)	1,037
20	11.2 (3.2)	48.7 (7.2)	1270 (1120)	512	11.7 (3.1)	48.2 (6.9)	1480 (1330)	1,037
21	9.6 (3.2)	39.3 (8.7)	885 (665)	512	10.0 (3.1)	39.2 (9.2)	981 (800)	1,038
22	7.4 (4.0)	44.7 (8.7)	390 (369)	512	7.7 (4.0)	44.5 (9.3)	384 (333)	1,038
23	8.1 (4.9)	47.5 (8.2)	607 (371)	512	8.7 (4.8)	46.7 (8.5)	626 (357)	1,038
24	9.6 (4.4)	51.7 (9.6)	560 (528)	512	10.1 (4.3)	51.5 (10.4)	587 (550)	1,039
25	11.7 (3.7)	46.5 (11.0)	423 (383)	512	13.7 (4.6)	47.0 (10.4)	445 (385)	1,039
26	9.1 (4.3)	40.3 (14.7)	769 (638)	512	12.9 (3.9)	41.8 (15.4)	746 (531)	1,040
27	8.9 (3.7)	36.7 (7.6)	286 (282)	512	12.6 (3.3)	37.5 (8.0)	275 (255)	1,040
28	7.8 (3.9)	42.9 (6.9)	284 (294)	512	11.6 (3.4)	42.8 (7.9)	276 (281)	1,041
29	7.2 (3.8)	50.2 (7.9)	267 (219)	512	11.3 (3.5)	50.2 (8.8)	267 (201)	1,041
30	9.0 (3.9)	52.8 (8.0)	247 (265)	512	12.8 (3.6)	51.9 (8.9)	244 (249)	1,041
31	13.3 (2.5)	55.9 (7.3)	609 (514)	512	16.8 (2.2)	54.8 (7.2)	639 (533)	1,042
Avg	11.0	43.3	852	512	12.2	43	882.0	1,036
n	28	29	29	31	28	29	29	31
SD	2.7	6.8	567	0	2.5	7	609.00	4
Min	7.2	28.3	247	512	7.7	27	244.00	1,029
Max	16.2	55.9	2210	512	16.8	55	2600.00	1,042

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Table F2. Daily means (SD) of environmental parameters at site WA5B for November, 2008.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	10.4 (1.9)	73.8 (5.1)	327 (258)	512	14.0 (1.8)	72.2 (5.3)	345 (253)	1,042
2	12.1 (2.4)	63.8 (13.5)	893 (540)	512	15.0 (2.2)	63.9 (12.0)	1020 (621)	1,043
3	10.1 (1.7)	64.3 (6.9)	841 (555)	512	13.2 (1.5)	61.9 (7.8)	874 (543)	1,043
4	8.6 (2.1)	63.0 (14.0)	1020 (757)	512	10.7 (3.3)	63.5 (13.6)	1220 (931)	1,043
5	5.5 (2.4)	63.1 (3.6)	230 (184)	512	7.6 (1.2)	62.6 (4.7)	245 (182)	1,044
6	6.9 (0.6)	74.7 (3.3)	304 (309)	504	7.2 (0.6)	73.3 (3.2)	325 (318)	1,021
7	7.9 (0.7)	75.4 (2.3)	265 (240)	504	8.0 (0.8)	72.0 (2.4)	270 (226)	974
8	8.9 (1.0)	78.2 (2.5)	383 (419)	505	9.2 (1.0)	75.6 (4.0)	387 (415)	927
9	9.5 (1.4)	75.0 (5.6)	222 (252)	505	9.8 (1.4)	72.8 (6.7)	229 (249)	880
10	9.4 (3.1)	64.5 (13.0)	402 (386)	505	9.8 (3.1)	63.8 (12.7)	422 (395)	833
11	10.9 (2.3)	68.0 (6.0)	1410 (775)	506	11.1 (2.2)	65.6 (4.9)	1650 (915)	786
12	17.9 (2.8)	62.2 (9.0)	2310 (896)	506	18.0 (2.7)	61.7 (8.4)	2730 (1080)	739
13	11.6 (2.9)	47.2 (10.2)	1370 (1150)	510	11.9 (2.9)	48.2 (10.5)	1310 (930)	770
14	5.6 (2.8)	57.9 (6.5)	388 (339)	519	6.1 (2.7)	57.1 (8.0)	393 (304)	879
15	5.6 (3.0)	63.1 (8.2)	257 (204)	523	6.1 (2.9)	61.6 (8.8)	272 (204)	935
16	4.8 (2.6)	68.8 (6.2)	222 (205)	521	5.4 (2.6)	67.5 (7.0)	232 (210)	938
17	6.1 (2.5)	70.8 (5.9)	214 (209)	520	6.5 (2.4)	69.3 (6.6)	215 (193)	940
18	6.5 (2.8)	73.5 (4.6)	206 (234)	518	6.9 (2.7)	71.9 (6.2)	209 (210)	943
19	8.6 (1.2)	51.4 (11.6)	519 (276)	516	9.1 (1.3)	53.8 (11.8)	589 (275)	945
20	6.7 (2.6)	58.5 (5.5)	811 (667)	514	7.1 (2.5)	58.6 (4.0)	941 (792)	948
21	7.0 (1.8)	56.0 (5.7)	729 (523)	512	7.4 (1.7)	55.4 (5.3)	835 (610)	951
22	6.3 (2.8)	54.6 (10.7)	557 (467)	511	6.8 (2.8)	55.4 (9.9)	559 (402)	953
23	2.4 (2.3)	63.5 (5.9)	251 (254)	509	2.9 (2.4)	64.4 (6.3)	266 (273)	956
24	1.9 (2.9)	66.8 (6.6)	189 (184)	507	2.3 (2.7)	65.1 (7.6)	194 (184)	958
25	1.8 (2.4)	71.4 (6.4)	284 (280)	505	2.3 (2.4)	70.7 (6.9)	289 (276)	961
26	0.2 (2.9)	80.2 (1.1)	336 (313)	504	0.2 (1.4)	78.2 (3.2)	353 (304)	963
27	6.7 (5.1)	77.4 (2.4)	283 (202)	502	1.5 (1.2)	75.8 (4.1)	308 (215)	966
28	2.3 (0.9)	74.2 (2.5)	210 (191)	500	2.9 (1.0)	72.9 (2.6)	222 (195)	968
29	3.9 (2.0)	74.2 (3.7)	308 (255)	498	4.4 (2.0)	71.4 (5.1)	335 (248)	971
30	4.2 (1.6)	77.7 (1.7)	441 (393)	496	4.7 (1.5)	74.0 (3.6)	430 (338)	974
Avg	7.0	67.1	539	509	7.6	66	589.0	943
n	30	30	30	30	30	30	30	30
SD	3.6	8.4	467	7	4.1	7	545.00	77
Min	0.2	47.2	189	496	0.2	48	194.00	739
Max	17.9	80.2	2310	523	18.0	78	2730.00	1,044

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Table F2. Daily means (SD) of environmental parameters at site WA5B for December, 2008.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	5.2 (0.6)	79.5 (1.4)	338 (267)	495	5.8 (0.6)	78.5 (2.6)	336 (238)	976
2	6.9 (3.6)	72.4 (8.5)	455 (395)	493	7.3 (3.5)	71.7 (8.7)	485 (411)	979
3	4.3 (1.6)	61.2 (13.7)	421 (258)	492	4.7 (1.6)	60.2 (14.1)	468 (268)	980
4	1.8 (2.2)	51.9 (7.7)	380 (251)	492	2.2 (2.2)	52.9 (8.5)	425 (280)	980
5	0.4 (2.5)	59.5 (7.4)	302 (295)	493	1.1 (2.6)	58.7 (6.8)	303 (272)	980
6	3.2 (2.4)	59.8 (7.5)	236 (229)	493	3.8 (2.4)	60.3 (6.8)	243 (209)	980
7	4.7 (3.2)	67.6 (3.7)	377 (325)	493	5.2 (3.1)	66.2 (3.3)	413 (359)	979
8	5.6 (2.5)	56.8 (7.6)	517 (303)	493	5.9 (2.6)	58.2 (7.6)	590 (348)	979
9	1.8 (1.6)	69.5 (2.3)	326 (323)	494	2.5 (1.7)	69.1 (2.9)	332 (291)	979
10	3.9 (2.9)	66.8 (7.5)	328 (278)	494	4.5 (2.9)	67.3 (7.1)	343 (263)	979
11	0.9 (2.1)	77.9 (1.5)	330 (249)	494	1.5 (1.8)	75.3 (3.6)	352 (259)	979
12	14.9 (12.8)	71.9 (9.7)	972 (1010)	494		73.0 (10.2)	1160 (1240)	979
13	2.0 (3.1)	62.6 (9.3)	1150 (852)	495		63.5 (7.8)	877 (971)	979
14	-8.1 (1.2)	62.1 (4.0)	1860 (1190)	495		61.7 (4.9)	547 (369)	979
15	-8.9 (1.1)	64.6 (5.0)	660 (687)	495		67.2 (4.5)	408 (259)	979
16	-12.1 (1.7)	61.2 (4.8)	319 (263)	495		66.6 (5.1)	349 (303)	978
17	-11.1 (2.1)	69.0 (2.3)	517 (637)	496		70.5 (3.3)	311 (325)	978
18				496				978
19	-7.0 (0.8)	66.9 (5.1)	178 (163)	496		67.1 (5.7)	158 (139)	978
20	-10.4 (1.1)	61.8 (7.5)	558 (356)	496		61.7 (8.6)	526 (188)	978
21	-9.4 (1.3)	70.6 (2.7)	458 (325)	497		74.4 (2.9)	488 (407)	978
22	-8.9 (1.3)	70.2 (4.2)	239 (227)	497		71.1 (2.7)	210 (198)	978
23	-7.4 (0.9)	72.7 (3.3)	169 (128)	497		70.3 (3.2)	162 (133)	978
24	-6.8 (0.6)	74.5 (2.4)	306 (248)	498		71.3 (2.6)	246 (169)	978
25	-7.2 (0.6)	73.1 (2.5)	239 (184)	498		74.8 (2.9)	209 (159)	977
26	-3.7 (9.0)	76.6 (2.4)	360 (606)	498		77.2 (3.2)	194 (287)	977
27	4.3 (5.6)	70.7 (4.6)	1170 (541)	498		71.2 (4.4)	1270 (646)	977
28	8.1 (1.7)	62.8 (6.3)	1000 (586)	499		63.8 (5.4)	972 (572)	977
29	4.5 (1.5)	65.7 (10.7)	1140 (813)	499		66.8 (9.6)	1250 (1020)	977
30	3.2 (0.9)	65.1 (3.1)	506 (540)	499		66.5 (3.5)	555 (651)	977
31	5.8 (2.0)	57.7 (7.6)	1020 (647)	499		59.4 (6.6)	1160 (788)	977
Avg	-0.6	66.7	561	496	4.0	67	511.0	978
n	30	30	30	31	11	30	30	31
SD	7.0	6.5	387	2	2.0	6	328.00	1
Min	-12.1	51.9	169	492	1.1	53	158.00	976
Max	14.9	79.5	1860	499	7.3	79	1270.00	980

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Table F2. Daily means (SD) of environmental parameters at site WA5B for January, 2009.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	6.6 (2.8)	69.4 (7.1)	1020 (614)	500		69.3 (6.1)	1160 (753)	977
2	5.8 (11.4)	67.4 (10.9)	498 (452)	500		70.7 (9.0)	438 (321)	977
3	-3.5 (1.8)	68.6 (4.7)	159 (213)	500	-2.6 (1.8)	67.4 (4.3)	138 (198)	976
4	-6.7 (0.5)	76.9 (2.8)	419 (505)	500	-2.0 (9.5)	74.0 (3.1)	360 (376)	976
5	-3.9 (1.0)	76.4 (1.4)	169 (196)	501	-2.8 (1.0)	77.3 (1.5)	158 (176)	976
6	7.7 (4.8)	67.8 (7.0)	1160 (834)	501	8.3 (4.6)	67.4 (6.2)	1320 (1030)	976
7	13.3 (2.8)	59.5 (2.9)	1680 (556)	501	9.0 (6.9)	60.5 (3.1)	2010 (656)	976
8	9.6 (3.2)	53.2 (5.9)	1210 (562)	501	3.4 (4.4)	56.7 (5.6)	1240 (531)	976
9	3.5 (1.7)	59.9 (4.9)	278 (257)	502	4.2 (1.9)	63.0 (4.9)	276 (248)	976
10	2.1 (1.1)	69.5 (2.6)	171 (178)	502	3.0 (1.2)	70.3 (3.1)	164 (177)	976
11	3.3 (2.0)	71.9 (3.7)	208 (241)	502	4.1 (2.1)	71.9 (4.0)	178 (195)	975
12	5.9 (3.0)	71.8 (6.1)	214 (197)	502	6.7 (3.1)	72.7 (5.7)	183 (167)	975
13	3.0 (1.9)	77.4 (3.0)	270 (244)	503	3.8 (1.9)	76.7 (3.8)	270 (263)	975
14				503				975
15		79.3 (1.0)	177 (207)	503	-0.9 (1.5)	77.2 (2.3)	89 (103)	975
16		78.1 (1.1)	202 (173)	503	-0.6 (0.5)	78.4 (1.6)	168 (173)	975
17		78.6 (1.1)	341 (357)	504	0.4 (0.6)	78.6 (1.6)	149 (131)	975
18	0.1 (0.5)	75.7 (2.1)	280 (194)	504	1.3 (0.5)	76.3 (2.4)	252 (159)	975
19	0.2 (0.2)	71.6 (1.6)	171 (129)	504	1.0 (0.4)	72.7 (2.2)	177 (137)	975
20	-0.5 (0.4)	76.7 (1.9)	282 (183)	504	0.1 (0.3)	72.2 (1.9)	238 (183)	974
21	-1.3 (0.3)	75.2 (2.3)	330 (206)	505	-0.7 (0.3)	70.8 (1.8)	314 (191)	974
22	-1.2 (0.3)	72.0 (3.3)	227 (208)	505	-0.6 (0.3)	69.3 (2.4)	195 (179)	974
23	-1.6 (0.4)	69.1 (3.4)	274 (246)	505	-0.9 (0.5)	67.3 (2.6)	218 (203)	974
24	-1.2 (0.6)	73.8 (3.2)	238 (178)	505	0.2 (1.6)	72.3 (4.2)	216 (164)	974
25	-2.2 (0.9)	67.1 (6.5)	584 (572)	506	-1.1 (1.0)	67.6 (8.2)	338 (220)	974
26	-5.2 (1.9)	57.7 (7.7)	700 (523)	506	-4.4 (2.0)	60.6 (7.5)	807 (632)	974
27	-3.6 (2.6)	64.5 (5.6)	441 (354)	506	-2.7 (2.6)	65.1 (4.5)	402 (304)	974
28				507				974
29	2.9 (1.6)	66.6 (4.6)	199 (189)	507	3.7 (1.6)	67.3 (4.8)	162 (155)	973
30	2.1 (3.4)	72.7 (5.6)	337 (330)	507	2.8 (3.4)	71.3 (6.2)	331 (367)	973
31	4.5 (2.1)	52.4 (7.4)	501 (374)	507	5.2 (2.2)	55.1 (7.4)	517 (365)	973
Avg	1.5	69.7	439	503	1.4	70	430.0	975
n	26	29	29	31	27	29	29	31
SD	4.8	7.3	367	2	3.5	6	443.00	1
Min	-6.7	52.4	159	500	-4.4	55	89.40	973
Max	13.3	79.3	1680	507	9.0	79	2010.00	977

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Table F2. Daily means (SD) of environmental parameters at site WA5B for February, 2009.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	1.5 (1.7)	65.0 (4.0)	286 (249)	508	2.2 (1.7)	63.9 (4.7)	260 (224)	973
2	1.8 (1.1)	68.6 (4.7)	163 (158)	508	2.4 (1.1)	68.3 (4.4)	152 (162)	973
3	1.9 (3.5)	67.8 (10.0)	174 (184)	508	2.5 (3.5)	68.0 (9.8)	142 (141)	973
4	2.7 (2.9)	69.6 (8.0)	241 (230)	508	3.3 (2.9)	67.8 (8.4)	213 (200)	973
5	1.9 (1.7)	76.4 (2.5)	318 (366)	509	2.5 (1.7)	73.6 (3.1)	294 (374)	973
6	1.9 (0.9)	79.6 (1.0)	251 (215)	509	2.6 (0.9)	78.0 (4.3)	205 (157)	973
7	0.3 (2.7)	78.3 (3.2)	367 (388)	509	0.8 (2.7)	75.9 (5.4)	310 (307)	972
8		78.5 (2.6)	632 (623)	509		74.6 (5.3)	694 (744)	972
9	2.5 (2.9)	63.9 (14.1)	366 (268)	510	3.0 (2.7)	62.9 (12.4)	351 (286)	972
10	1.4 (1.3)	65.9 (8.4)	564 (480)	510	1.9 (1.3)	65.0 (8.1)	619 (572)	972
11	1.9 (1.4)	71.1 (6.7)	355 (322)	510	2.4 (1.3)	70.8 (6.6)	358 (283)	975
12	1.9 (0.9)	71.1 (2.9)	443 (381)	511	2.4 (0.8)	67.3 (3.6)	353 (250)	981
13	3.0 (1.9)	66.9 (7.8)	987 (729)	511	3.8 (2.0)	65.7 (9.4)	806 (297)	988
14	3.4 (1.9)	66.7 (7.3)	354 (244)	512	4.0 (1.9)	65.4 (7.8)	341 (261)	994
15	1.6 (1.6)	76.3 (1.6)	239 (191)	513	2.2 (1.7)	74.5 (2.0)	246 (209)	1,000
16	4.2 (1.2)	71.2 (3.3)	732 (510)	513	4.9 (1.3)	70.6 (4.9)	617 (291)	1,007
17	5.7 (2.2)	69.1 (5.9)	636 (628)	514	6.1 (2.2)	66.6 (6.9)	706 (762)	1,013
18	4.7 (3.7)	70.4 (10.2)	375 (315)	514	5.3 (3.7)	67.6 (10.2)	325 (271)	1,019
19	7.2 (8.7)	79.1 (1.2)	483 (302)	515	8.6 (9.3)	75.3 (4.6)	408 (218)	1,026
20	3.1 (1.6)	75.3 (5.1)	532 (405)	516	3.9 (1.5)	70.6 (7.4)	464 (364)	1,032
21	2.3 (1.2)	72.1 (7.1)	462 (302)	516	3.0 (1.3)	69.0 (5.8)	421 (268)	1,038
22	3.9 (5.4)	77.1 (4.4)	299 (290)	517	4.3 (6.0)	72.4 (5.3)	239 (201)	1,045
23	4.2 (0.9)	78.6 (2.0)	729 (644)	517	4.8 (1.0)	75.6 (2.9)	665 (750)	1,051
24	9.4 (2.4)	61.9 (8.3)	2330 (827)	518	9.7 (2.5)	60.8 (7.5)	2760 (986)	1,057
25	8.8 (1.8)	62.3 (6.5)	1960 (602)	519	9.2 (1.8)	61.5 (6.4)	2340 (712)	1,064
26	3.3 (1.7)	52.7 (7.2)	1280 (1070)	519	4.1 (1.7)	54.6 (7.2)	1150 (585)	1,066
27	1.5 (3.1)	60.4 (7.1)	538 (573)	519	2.3 (3.0)	58.0 (10.1)	405 (347)	1,065
28	3.3 (2.8)	58.9 (7.5)	546 (445)	519	4.1 (2.9)	59.2 (8.3)	474 (339)	1,063
Avg	3.3	69.8	594	513	3.9	68	583.0	1,008
n	27	28	28	28	27	28	28	28
SD	2.2	6.8	494	4	2.2	6	592.00	36
Min	0.3	52.7	163	508	0.8	55	142.00	972
Max	9.4	79.6	2330	519	9.7	78	2760.00	1,066

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Table F2. Daily means (SD) of environmental parameters at site WA5B for March, 2009.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	5.3 (1.5)	65.1 (8.7)	402 (277)	520	6.0 (1.2)	64.9 (8.0)	411 (305)	1,062
2	6.6 (2.8)	77.8 (2.7)	997 (978)	520	7.1 (2.7)	73.0 (3.4)	1060 (1170)	1,060
3	7.6 (2.5)	72.8 (10.2)	489 (477)	520	8.2 (2.5)	69.4 (11.3)	432 (425)	1,059
4	5.8 (3.5)	68.5 (10.3)	497 (383)	520	6.5 (3.4)	63.8 (14.2)	548 (459)	1,057
5	6.3 (2.5)	58.5 (8.2)	1770 (1060)	520	7.0 (2.4)	56.6 (8.7)	1850 (1270)	1,056
6	2.6 (2.5)	54.1 (10.7)	834 (596)	520	3.3 (2.5)	50.9 (13.3)	923 (732)	1,054
7	4.0 (4.1)	55.0 (13.1)	1400 (1320)	521	4.7 (4.0)	53.2 (13.6)	1350 (1140)	1,053
8	2.7 (2.4)	49.8 (10.0)	491 (404)	521	3.4 (2.4)	48.9 (12.8)	478 (387)	1,051
9	1.9 (2.6)	57.0 (10.1)	813 (889)	521	2.6 (2.6)	55.7 (12.2)	850 (852)	1,050
10	-1.6 (1.6)	47.6 (8.6)	1020 (715)	521	-0.9 (1.6)	43.5 (12.7)	881 (416)	1,048
11	-0.8 (2.5)	43.5 (7.2)	708 (570)	521	0.0 (2.5)	38.5 (11.6)	521 (288)	1,046
12				521				1,045
13	1.2 (3.5)	52.6 (6.6)	203 (319)	521	1.9 (3.6)	51.2 (8.0)	188 (307)	1,043
14	5.8 (3.0)	60.3 (5.8)	1240 (1170)	522	6.3 (2.8)	57.9 (5.1)	1430 (1400)	1,042
15	8.4 (2.8)	53.9 (7.7)	2050 (1290)	522	8.8 (2.8)	50.9 (9.5)	2440 (1560)	1,040
16	7.1 (2.6)	51.3 (8.0)	1470 (629)	522	7.6 (2.7)	47.2 (9.8)	1720 (786)	1,039
17	7.8 (2.2)	53.6 (7.3)	1650 (771)	522	8.3 (2.3)	51.7 (7.6)	1950 (926)	1,037
18	8.7 (3.2)	54.2 (9.6)	312 (315)	522	9.5 (3.2)	50.0 (12.5)	271 (289)	1,036
19	9.6 (4.4)	58.6 (9.4)	503 (499)	522	10.3 (4.3)	52.7 (13.2)	481 (525)	1,034
20	12.4 (4.0)	55.5 (12.1)	945 (862)	523	13.0 (3.8)	51.7 (13.3)	928 (836)	1,033
21	9.8 (1.9)	59.0 (7.3)	451 (413)	523	10.4 (1.8)	56.0 (8.2)	374 (285)	1,031
22	8.5 (2.7)	53.8 (13.4)	853 (1020)	523	9.1 (2.7)	50.9 (13.0)	739 (752)	1,030
23	6.5 (3.3)	46.0 (12.8)	904 (566)	523	7.0 (3.4)	44.5 (14.1)	904 (573)	1,028
24	8.5 (3.3)	55.3 (12.4)	1110 (890)	523	9.0 (3.3)	52.7 (11.6)	1270 (1080)	1,027
25	8.2 (1.9)	47.9 (6.0)	1300 (850)	523	8.8 (2.0)	46.8 (6.4)	1150 (760)	1,025
26	6.3 (3.0)	38.3 (12.2)		524	7.0 (3.0)	35.9 (15.3)		1,024
27	8.9 (4.5)	42.5 (6.8)	647 (546)	524	9.5 (4.4)	41.2 (7.9)	601 (510)	1,022
28	6.8 (1.6)	64.7 (10.5)	554 (634)	524	7.4 (1.5)	61.0 (8.8)	461 (453)	1,021
29	6.7 (2.8)	45.0 (13.7)	2630 (2010)	524	7.3 (2.7)	44.1 (15.0)	1610 (878)	1,019
30	6.8 (4.2)	44.2 (9.8)	730 (697)	524	7.4 (4.2)	42.0 (11.8)	539 (399)	1,018
31	8.3 (2.9)	44.8 (10.4)	1710 (1530)	524	8.9 (2.9)	44.0 (9.6)	1450 (1060)	1,016
Avg	6.2	54.4	989	522	6.9	52	959.0	1,039
n	30	30	29	31	30	30	29	31
SD	3.1	9.0	563	1	3.1	9	562.00	14
Min	-1.6	38.3	203	520	-0.9	36	188.00	1,016
Max	12.4	77.8	2630	524	13.0	73	2440.00	1,062

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Table F2. Daily means (SD) of environmental parameters at site WA5B for April, 2009.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	5.0 (2.2)	56.0 (9.7)	1140 (943)	524	5.4 (2.2)	53.4 (7.3)	1310 (1120)	1,015
2	10.2 (2.8)	48.6 (13.1)	1880 (1020)	525	10.8 (2.9)	47.6 (12.9)	1750 (788)	1,013
3	8.1 (3.0)	37.8 (7.8)	1020 (662)	525	8.8 (3.0)	37.0 (9.9)	874 (522)	1,011
4	7.9 (4.1)	42.8 (9.2)	718 (649)	525	8.5 (4.0)	41.0 (11.9)	597 (448)	1,010
5	10.0 (5.5)	46.2 (12.4)	551 (576)	525	10.5 (5.3)	43.9 (13.6)	415 (360)	1,008
6	13.4 (5.6)	40.9 (11.7)	478 (414)	525	13.9 (5.5)	39.2 (13.2)	421 (367)	1,007
7	14.8 (5.8)	41.7 (11.9)	516 (468)	525	15.3 (5.6)	40.7 (12.8)	415 (363)	1,005
8	14.5 (3.0)	41.8 (7.0)	1230 (745)	526	15.0 (3.1)	42.2 (7.5)	1160 (576)	1,004
9	12.5 (2.8)	43.7 (7.4)	949 (586)	526	13.0 (2.9)	42.1 (8.2)	813 (505)	1,002
10	12.2 (2.7)	57.2 (11.3)	484 (385)	526	12.9 (2.8)	55.4 (11.1)	438 (351)	1,001
11	11.8 (3.4)	45.0 (11.1)	898 (663)	526	12.4 (3.6)	45.4 (12.1)	805 (425)	999
12	12.7 (2.1)	55.8 (4.1)	1200 (646)	526	13.1 (2.1)	54.1 (3.4)	1420 (773)	998
13	9.4 (2.6)	41.6 (8.2)	1740 (622)	526	10.0 (2.7)	41.9 (8.4)	2050 (742)	996
14	5.2 (2.4)	57.6 (6.4)	1200 (1070)	527	5.9 (2.6)	56.5 (5.9)	987 (642)	995
15	9.8 (4.8)	43.7 (14.0)	1390 (937)	527	10.4 (4.7)	42.9 (14.4)	1010 (468)	993
16	12.0 (4.3)	38.9 (9.7)	919 (597)	527	12.4 (4.2)	37.8 (10.8)	983 (708)	992
17	12.3 (4.1)	43.7 (8.1)	1010 (960)	527	12.9 (4.1)	43.5 (8.1)	788 (649)	990
18	11.4 (5.0)	42.4 (12.4)	732 (561)	527	11.9 (4.9)	41.7 (13.4)	559 (400)	989
19	16.5 (6.8)	38.8 (9.2)	704 (587)	527	16.8 (6.6)	38.6 (10.6)	757 (719)	987
20	19.4 (5.8)	38.3 (11.4)	750 (703)	528	19.6 (5.7)	38.1 (12.8)	736 (775)	986
21	20.1 (5.5)	34.3 (10.1)	768 (568)	528	20.3 (5.6)	34.2 (11.6)	746 (539)	984
22	15.8 (3.9)	32.2 (7.9)	1690 (1380)	528	16.3 (3.9)	31.8 (8.4)	1580 (1220)	983
23	8.5 (3.0)	33.6 (5.4)	1510 (1030)	528	9.1 (3.0)	33.1 (6.1)	1430 (844)	981
24	9.3 (4.7)	33.4 (9.9)	1320 (1090)	528	9.8 (4.6)	33.0 (10.3)	1430 (1290)	980
25	10.5 (3.4)	34.9 (7.4)	1980 (1580)	528	11.1 (3.5)	34.5 (8.1)	1850 (1300)	978
26	11.8 (3.8)	35.3 (8.7)	1330 (706)	528	12.2 (3.8)	35.0 (9.2)	1470 (851)	976
27	11.6 (3.0)	44.0 (5.4)	2090 (1840)	529	12.1 (2.9)	41.7 (6.9)	1860 (1490)	975
28	8.8 (1.4)	50.7 (11.3)	2510 (1550)	529	9.4 (1.3)	46.0 (11.4)	2090 (1280)	973
29	8.0 (2.0)	63.9 (8.2)	1290 (842)	529	8.6 (2.0)	62.3 (8.7)	1190 (677)	972
30	11.8 (3.3)	41.8 (12.3)	934 (651)	529	12.3 (3.3)	40.7 (13.0)	955 (631)	970
Avg	11.5	43.6	1160	527	12.0	43	1100.0	992
n	30	30	30	30	30	30	30	30
SD	3.5	7.9	504	1	3.4	7	495.00	13
Min	5.0	32.2	478	524	5.4	32	415.00	970
Max	20.1	63.9	2510	529	20.3	62	2090.00	1,015

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Table F2. Daily means (SD) of environmental parameters at site WA5B for May, 2009.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	12.3 (5.2)	41.6 (12.0)	988 (1100)	529	12.7 (5.1)	40.8 (13.5)	887 (924)	969
2	12.3 (1.9)	55.0 (10.7)	620 (528)	529	12.7 (1.9)	53.4 (10.7)	638 (540)	967
3	12.4 (3.1)	48.4 (12.4)	652 (602)	530	12.8 (3.1)	47.1 (13.3)	651 (603)	966
4	11.7 (2.9)	62.6 (13.0)	1080 (966)	530	12.0 (2.9)	59.3 (12.2)	1210 (1140)	964
5	14.2 (2.1)	48.1 (13.0)	2640 (1420)	530	14.5 (2.2)	48.0 (12.5)	3100 (1690)	963
6	12.8 (2.3)	56.9 (9.4)	1860 (1200)	530	13.1 (2.3)	55.2 (7.4)	2170 (1450)	962
7	12.4 (3.2)	41.8 (11.7)	1880 (1040)	530	12.8 (3.3)	42.0 (12.1)	1990 (961)	962
8	12.2 (4.2)	41.2 (10.7)	997 (647)	530	12.5 (4.2)	40.4 (12.0)	1080 (699)	961
9	14.0 (5.0)	39.7 (12.3)	697 (641)	530	14.4 (5.0)	39.8 (13.1)	665 (546)	961
10	16.1 (4.9)	41.2 (12.5)	1070 (1020)	529	16.4 (4.8)	40.0 (13.5)	990 (886)	961
11	15.9 (3.0)	39.5 (10.7)	1490 (969)	529	16.4 (3.1)	39.8 (10.9)	1570 (976)	961
12	11.2 (2.4)	38.1 (8.8)	2460 (1200)	529	11.6 (2.5)	38.2 (9.2)	2730 (1150)	961
13	10.2 (3.6)	51.1 (15.5)	1330 (1040)	529	10.5 (3.6)	49.2 (14.0)	1510 (1240)	960
14	15.7 (3.0)	44.0 (15.5)	2730 (1250)	529	16.0 (3.2)	43.7 (15.9)	2940 (1370)	960
15	14.1 (4.7)	37.3 (11.6)	921 (647)	529	14.5 (4.7)	37.2 (12.5)	930 (644)	960
16	17.9 (6.3)	32.9 (10.3)	892 (757)	529	18.2 (6.2)	32.9 (11.8)	894 (719)	960
17	22.5 (6.3)	32.8 (9.2)	1030 (899)	529	22.6 (6.3)	33.0 (10.8)	1140 (1060)	960
18	23.3 (4.9)	33.8 (7.8)	1160 (1040)	528	23.4 (4.9)	34.2 (9.2)	1190 (1050)	959
19	15.8 (2.7)	34.9 (8.4)	2000 (919)	528	16.2 (2.9)	35.5 (9.0)	2220 (920)	959
20	13.4 (4.5)	35.8 (10.3)	935 (719)	528	13.7 (4.6)	35.4 (11.4)	956 (754)	959
21	15.6 (5.1)	34.0 (10.8)	985 (933)	528	15.9 (5.1)	33.5 (12.3)	899 (773)	959
22	18.4 (5.4)	30.0 (8.9)	639 (708)	528	18.7 (5.4)	29.9 (10.1)	562 (593)	959
23	21.3 (4.8)	29.0 (9.9)	972 (694)	528	21.4 (4.9)	29.5 (11.0)	1010 (794)	958
24	21.9 (4.4)	22.7 (7.3)	1540 (721)	528	22.1 (4.5)	22.6 (8.0)	1620 (799)	958
25	21.1 (4.3)	26.4 (7.5)	1290 (555)	528	21.4 (4.4)	26.4 (8.1)	1330 (603)	958
26	20.4 (3.9)	35.1 (8.0)	1290 (754)	528	20.3 (4.5)	34.8 (8.9)	1280 (703)	958
27	20.5 (5.2)	38.0 (11.7)	1210 (852)	527	20.7 (5.1)	36.4 (12.8)	1150 (772)	958
28	22.9 (5.4)	33.3 (8.5)	960 (614)	527	23.1 (5.3)	32.8 (10.0)	891 (506)	957
29	25.7 (6.0)	34.1 (9.1)	1350 (1040)	527	25.8 (5.9)	33.3 (10.7)	1360 (1150)	957
30	27.1 (4.3)	30.0 (9.9)	1170 (619)	527	27.3 (4.3)	29.2 (10.9)	1140 (632)	957
31	25.7 (4.7)	24.2 (7.5)	915 (610)	527	25.8 (4.8)	24.0 (8.4)	920 (674)	957
Avg	17.1	38.5	1280	529	17.4	38	1340.0	960
n	31	31	31	31	31	31	31	31
SD	4.8	9.2	552	1	4.7	9	658.00	3
Min	10.2	22.7	620	527	10.5	23	562.00	957
Max	27.1	62.6	2730	530	27.3	59	3100.00	969

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Table F2. Daily means (SD) of environmental parameters at site WA5B for June, 2009.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	25.6 (3.3)	26.1 (5.8)	1280 (744)	527	25.8 (3.4)	25.2 (7.2)	1200 (607)	957
2	23.0 (2.8)	33.2 (4.8)	2790 (1660)	527	23.2 (2.8)	29.5 (5.7)	2330 (1360)	956
3	23.3 (4.2)	30.3 (6.8)	1320 (805)	527	23.5 (4.3)	30.2 (8.4)	1240 (634)	956
4	23.7 (4.2)	36.9 (9.9)	1260 (1450)	526	23.9 (4.3)	37.1 (11.0)	1320 (1720)	956
5	22.8 (4.0)	52.6 (13.7)	1030 (767)	526	23.0 (4.0)	52.9 (14.5)	1000 (814)	956
6	21.3 (3.5)	45.1 (10.8)	1740 (1040)	526	22.0 (3.6)	44.2 (10.5)	1630 (839)	956
7	16.7 (1.9)	61.0 (8.1)	796 (604)	526	17.7 (1.8)	60.1 (9.1)	903 (706)	955
8	17.7 (6.3)	51.5 (12.7)	957 (778)	526	19.4 (3.8)	50.3 (14.1)	907 (692)	955
9	20.4 (4.0)	43.0 (13.1)	830 (821)	526	20.9 (4.1)	42.0 (14.7)	756 (700)	955
10				526				955
11	22.6 (3.9)	36.9 (11.4)	1080 (625)	526		37.3 (12.6)	1080 (581)	955
12	22.2 (3.8)	43.6 (9.8)	1140 (1080)	525		43.4 (10.7)	1250 (1230)	954
13	22.0 (4.7)	46.4 (13.0)	875 (873)	525		45.9 (13.3)	907 (917)	954
14	23.0 (2.6)	45.4 (6.8)	1620 (905)	525		45.0 (7.5)	1870 (1070)	954
15	23.1 (3.7)	40.9 (9.4)	1160 (699)	525		40.8 (10.2)	1150 (689)	954
16				525				954
17				525				953
18	21.9 (3.9)	35.1 (10.1)	1240 (796)	525	22.2 (3.9)	34.9 (11.1)	1280 (796)	953
19	21.0 (2.7)	43.6 (8.6)	1370 (1040)	525	21.4 (2.8)	42.7 (8.4)	1270 (882)	953
20	18.6 (3.5)	38.6 (8.8)	1610 (843)	525	18.9 (3.6)	38.7 (9.6)	1550 (686)	953
21	16.2 (2.8)	39.4 (6.9)	1510 (1230)	524	16.6 (2.9)	39.0 (7.6)	1420 (1050)	953
22				524				952
23	19.3 (5.2)	35.3 (9.7)	1080 (752)	524	19.5 (5.1)	34.7 (11.3)	1010 (653)	952
24	24.3 (5.5)	30.4 (9.1)	1490 (1140)	524	24.5 (5.6)	30.3 (9.8)	1610 (1260)	952
25	20.3 (3.5)	36.7 (7.4)	1310 (790)	524	20.6 (3.6)	36.4 (8.3)	1280 (791)	952
26	20.2 (4.0)	30.7 (10.7)	1180 (611)	524	20.6 (4.1)	31.3 (11.3)	1220 (647)	952
27	22.9 (6.0)	24.4 (8.8)	1460 (1050)	524	23.0 (6.0)	24.2 (9.1)	1690 (1260)	951
28	23.5 (3.6)	29.5 (7.5)	1130 (661)	524	23.7 (3.7)	29.3 (8.6)	1170 (721)	951
29	22.1 (4.7)	24.8 (5.6)	1430 (715)	523	22.4 (4.6)	24.2 (6.8)	1450 (812)	951
30	22.7 (4.0)	23.3 (6.6)	1350 (733)	523	23.0 (4.1)	23.4 (7.1)	1450 (877)	951
Avg	21.6	37.9	1310	525	21.7	37	1300.0	954
n	26	26	26	30	21	26	26	30
SD	2.3	9.2	381	1	2.3	9	335.00	2
Min	16.2	23.3	796	523	16.6	23	756.00	951
Max	25.6	61.0	2790	527	25.8	60	2330.00	957

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Table F2. Daily means (SD) of environmental parameters at site WA5B for July, 2009.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	23.3 (4.7)	26.1 (6.5)	886 (489)	523	23.6 (4.8)	26.4 (7.2)	881 (500)	951
2	24.9 (5.9)	27.6 (8.6)	522 (594)	523	25.1 (6.0)	27.8 (9.6)	464 (506)	950
3	27.3 (6.2)	27.0 (10.9)	1080 (1010)	523	27.3 (6.2)	26.5 (12.4)	1020 (962)	950
4	28.6 (5.3)	24.6 (9.6)	1000 (901)	523	28.8 (5.3)	24.3 (10.3)	1040 (939)	950
5	26.9 (4.1)	26.2 (8.5)	1070 (891)	523	27.1 (4.2)	25.8 (8.7)	995 (777)	950
6	21.7 (3.0)	35.4 (9.4)	2200 (1410)	523	22.0 (3.1)	35.4 (9.7)	2030 (1210)	950
7	19.0 (4.2)	39.7 (9.3)	1040 (775)	522	19.3 (4.2)	39.5 (10.2)	962 (680)	949
8				522				949
9	20.6 (4.2)	38.5 (9.8)	1310 (629)	522	20.9 (4.3)	38.8 (10.5)	1260 (524)	949
10	23.3 (5.2)	34.1 (9.9)	1050 (952)	522	23.5 (5.1)	34.0 (11.1)	949 (782)	949
11	27.4 (5.2)	27.5 (5.4)	1360 (854)	522	27.5 (5.3)	27.4 (6.3)	1300 (681)	949
12	26.5 (4.3)	37.2 (12.2)	1800 (1010)	522	26.8 (4.5)	36.8 (12.3)	1920 (1050)	948
13	21.3 (3.6)	43.0 (11.5)	1460 (1060)	522	21.7 (3.7)	42.9 (11.9)	1370 (898)	948
14	21.5 (5.3)	37.9 (12.9)	988 (691)	522	21.7 (5.3)	37.3 (13.5)	896 (569)	948
15	25.0 (5.8)	31.2 (10.7)	1060 (879)	522	25.0 (5.7)	30.4 (12.2)	993 (806)	948
16				521				947
17	28.7 (5.1)	29.1 (10.2)	1020 (952)	521	28.8 (5.1)	28.8 (11.1)	979 (841)	947
18	28.2 (4.1)	31.2 (7.0)	1060 (714)	521	28.4 (4.0)	31.2 (8.1)	980 (587)	947
19	25.2 (4.1)	30.3 (10.5)	972 (588)	521	25.4 (4.1)	30.6 (11.7)	1010 (626)	947
20	25.6 (4.6)	29.9 (5.8)	983 (680)	521	25.8 (4.6)	30.2 (6.0)	923 (595)	947
21	27.8 (5.6)	29.9 (10.5)	896 (880)	521	28.0 (5.5)	28.9 (11.4)	858 (857)	946
22	29.6 (5.1)	32.8 (9.2)	1380 (876)	521	29.7 (5.0)	32.4 (10.4)	1410 (897)	946
23	27.0 (3.1)	34.3 (6.6)	2080 (1310)	521	27.2 (3.2)	33.9 (7.8)	1950 (1070)	946
24	25.1 (3.8)	39.9 (7.3)	1130 (757)	520	25.3 (3.8)	39.5 (8.6)	1090 (664)	946
25	26.1 (5.0)	41.6 (9.8)	817 (817)	520	26.4 (4.9)	40.8 (11.0)	782 (822)	946
26	28.0 (3.6)	39.2 (9.2)	693 (517)	520	28.2 (3.6)	39.6 (9.7)	682 (481)	945
27	29.0 (4.4)	39.6 (9.0)	589 (642)	520	29.2 (4.4)	39.5 (9.6)	521 (535)	945
28	30.3 (4.8)	40.0 (8.5)	670 (708)	520	30.5 (4.8)	38.9 (10.5)	595 (602)	945
29				520				945
30	28.6 (4.9)	35.2 (10.7)	812 (942)	520	28.7 (4.8)	34.4 (12.2)	727 (798)	945
31	29.9 (5.4)	36.9 (10.7)	1090 (919)	520	30.0 (5.3)	35.6 (11.2)	1000 (762)	944
Avg	26.0	33.8	1110	521	26.1	34	1060.0	947
n	28	28	28	31	28	28	28	31
SD	3.0	5.3	390	1	2.9	5	384.00	2
Min	19.0	24.6	522	520	19.3	24	464.00	944
Max	30.3	43.0	2200	523	30.5	43	2030.00	951

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Table F2. Daily means (SD) of environmental parameters at site WA5B for August, 2009.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	31.2 (6.0)	35.2 (8.7)	827 (827)	519	31.3 (5.9)	34.5 (9.9)	762 (728)	944
2	30.8 (3.8)	24.7 (5.0)	1100 (589)	519	30.9 (3.8)	24.5 (5.6)	1080 (605)	944
3	30.0 (4.3)	30.1 (9.5)	1040 (686)	519	30.1 (4.4)	30.0 (10.1)	1010 (608)	944
4	28.0 (5.8)	25.8 (5.3)	1270 (924)	519	28.1 (5.7)	25.0 (5.9)	1310 (1020)	944
5				519				943
6	23.1 (1.8)	37.1 (7.3)	1250 (813)	519	23.4 (1.9)	37.6 (7.2)	1330 (867)	943
7	22.3 (3.5)	41.1 (7.8)	1250 (653)	519	22.6 (3.5)	40.7 (8.8)	1330 (671)	943
8	22.2 (4.2)	42.0 (9.0)	1430 (1020)	519	22.4 (4.1)	40.9 (9.8)	1550 (1150)	943
9	23.5 (3.9)	42.3 (9.2)	1120 (832)	519	23.7 (3.9)	41.8 (9.6)	1040 (699)	943
10	24.0 (5.0)	41.7 (11.6)	1310 (845)	518	24.2 (5.0)	40.5 (11.5)	1260 (792)	942
11	24.3 (3.3)	46.0 (7.1)	1120 (813)	518	24.6 (3.4)	45.6 (7.9)	1020 (688)	942
12				518				942
13				518				942
14	17.9 (3.8)	41.0 (8.5)	1340 (997)	518	18.3 (3.8)	41.0 (9.0)	1280 (825)	942
15	19.6 (5.0)	39.4 (11.4)	995 (740)	518	19.8 (5.1)	38.7 (11.8)	1030 (801)	941
16	20.4 (4.4)	39.9 (8.5)	906 (599)	518	20.7 (4.4)	40.5 (9.0)	915 (603)	941
17	22.8 (4.4)	37.8 (8.7)	900 (602)	518	23.1 (4.4)	38.2 (9.0)	907 (646)	941
18	25.1 (5.9)	35.6 (13.3)	1010 (852)	517	25.2 (5.8)	35.4 (14.1)	1020 (977)	941
19	27.1 (5.7)	36.5 (8.5)	755 (716)	517	27.3 (5.6)	35.8 (9.6)	682 (597)	941
20	29.1 (5.8)	37.3 (13.3)	1000 (877)	517	29.1 (5.7)	36.3 (14.1)	917 (789)	940
21	25.7 (3.9)	37.1 (6.6)	1210 (832)	517	25.8 (4.0)	36.2 (8.0)	1140 (739)	940
22	21.5 (4.2)	39.5 (11.4)	1270 (796)	517	21.7 (4.1)	38.6 (13.1)	1290 (872)	940
23	21.7 (3.4)	32.6 (9.4)	1520 (632)	517	22.0 (3.5)	32.7 (9.9)	1640 (685)	940
24	20.5 (5.2)	36.1 (9.3)	931 (769)	517	20.7 (5.1)	35.6 (10.7)	868 (653)	940
25	22.0 (4.1)	33.6 (8.6)	956 (955)	517	22.2 (4.2)	32.6 (9.2)	888 (850)	939
26	21.2 (5.7)	38.5 (10.4)	842 (808)	516	21.4 (5.7)	37.6 (12.0)	783 (690)	939
27	23.2 (6.2)	35.5 (13.2)	541 (499)	516	23.6 (6.2)	35.6 (13.5)	510 (453)	939
28	24.8 (4.4)	31.6 (6.8)	768 (758)	516	24.9 (4.3)	31.5 (7.6)	795 (852)	939
29	21.9 (3.2)	43.9 (8.4)	804 (505)	516	22.1 (3.3)	42.9 (9.5)	781 (478)	939
30	23.6 (4.3)	42.9 (10.1)	905 (760)	516	23.9 (4.3)	41.9 (10.9)	928 (883)	938
31				516				938
Avg	24.0	37.2	1050	518	24.2	37	1040.0	941
n	27	27	27	31	27	27	27	31
SD	3.4	5.0	228	1	3.3	5	261.00	2
Min	17.9	24.7	541	516	18.3	25	510.00	938
Max	31.2	46.0	1520	519	31.3	46	1640.00	944

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Table F2. Daily means (SD) of environmental parameters at site WA5B for September, 2009.

Day	Barn 2				Barn 4			
	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd	Temp., °C	RH, %	Airflow, dsm^3s^{-1}	Inv., hd
1	25.6 (4.9)	43.5 (10.3)	872 (662)	516	25.8 (4.9)	41.9 (10.9)	836 (583)	938
2	24.7 (4.8)	45.1 (11.3)	833 (808)	516	24.9 (4.7)	43.1 (13.2)	746 (668)	938
3				516				938
4	18.5 (3.7)	45.8 (6.8)	634 (514)	515	18.8 (3.6)	45.8 (7.2)	601 (460)	937
5	18.7 (2.7)	55.0 (13.4)	1080 (1280)	515	19.1 (2.8)	54.1 (12.9)	999 (1100)	937
6	17.3 (2.7)	49.1 (9.7)	2060 (1090)	515	17.6 (2.7)	49.0 (9.2)	2410 (1310)	937
7	16.8 (3.2)	45.2 (9.3)	1450 (628)	515	17.1 (3.3)	44.0 (11.5)	1490 (679)	937
8	16.1 (4.9)	47.2 (12.0)	837 (854)	515	16.4 (4.7)	44.7 (14.6)	766 (715)	937
9	18.9 (5.4)	44.4 (11.5)	1090 (1210)	515	19.5 (5.6)	43.3 (12.3)	1220 (1430)	936
10	20.4 (4.5)	46.0 (12.4)	539 (521)	515	20.6 (4.4)	43.5 (15.2)	538 (510)	936
11	21.5 (5.2)	41.0 (13.7)	354 (418)	515	21.7 (5.2)	39.7 (15.4)	339 (393)	936
12	22.6 (5.2)	38.2 (8.9)	472 (423)	514	22.8 (5.2)	36.7 (11.7)	437 (395)	936
13	24.9 (5.6)	36.4 (10.3)	865 (911)	514	25.0 (5.5)	34.8 (12.7)	936 (1070)	936
14	23.9 (3.5)	44.1 (10.5)	1080 (551)	514	24.1 (3.5)	41.1 (13.6)	1040 (502)	935
15	21.4 (3.9)	44.0 (7.0)	1140 (745)	514	21.5 (3.9)	40.5 (10.1)	1080 (595)	935
16	22.5 (4.8)	43.2 (11.8)	746 (700)	512	22.8 (4.8)	40.5 (14.4)	715 (698)	937
17	20.5 (2.8)	38.8 (12.0)	1180 (622)	512	20.8 (2.7)	36.7 (15.1)	1240 (685)	937
18	18.6 (5.3)	40.4 (11.2)	577 (537)	512	18.8 (5.2)	37.2 (14.9)	522 (457)	937
19	17.8 (4.2)	43.8 (6.6)	853 (826)	512	18.2 (4.1)	42.3 (7.0)	817 (757)	937
20	16.1 (3.7)	38.1 (8.5)	1090 (639)	512	16.4 (3.8)	35.5 (12.4)	1170 (716)	937
21	15.8 (5.3)	41.4 (11.9)	486 (584)	512	16.1 (5.2)	38.0 (15.4)	446 (506)	937
22	18.3 (5.5)	38.7 (11.9)	245 (296)	512	18.4 (5.5)	36.0 (15.3)	224 (272)	937
23	21.0 (5.7)	36.1 (9.7)	303 (359)	512	21.3 (5.6)	33.7 (12.9)	282 (334)	937
24				512				937
25	21.0 (4.2)	37.0 (7.8)	609 (444)	512	21.3 (4.2)	34.9 (11.7)	638 (484)	937
26	19.8 (5.1)	34.9 (13.1)	688 (651)	512	20.1 (5.1)	32.7 (14.5)	725 (709)	937
27	16.3 (3.8)	29.8 (6.1)	554 (485)	512	16.6 (3.9)	28.1 (9.4)	574 (482)	937
28	15.6 (5.0)	34.9 (10.1)	1300 (1290)	512	15.9 (4.9)	33.8 (11.2)	1470 (1530)	937
29	12.6 (3.0)	41.4 (7.0)	1210 (752)	512	13.0 (3.0)	39.8 (8.9)	1330 (881)	937
30	10.9 (3.8)	40.9 (7.1)	877 (673)	512	11.3 (4.0)	42.4 (10.7)	884 (602)	937
Avg	19.2	41.6	858	513	19.5	40	874.0	937
n	28	28	28	30	28	28	28	30
SD	3.5	5.0	385	1	3.5	5	451.00	1
Min	10.9	29.8	245	512	11.3	28	224.00	935
Max	25.6	55.0	2060	516	25.8	54	2410.00	938

ED_004549_00015841-00100

Table F3. PM10 concentrations and emissions.

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for September, 2007.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29	40 (49)	39 (14)	54 (27)	-1080 (7600)	-191 (1340)	-2110 (14800)	1140 (6770)	138 (815)	1220 (7230)
30	11 (8)	23 (5)	34 (14)	1330 (1300)	235 (229)	2610 (2540)	3030 (2530)	365 (305)	3230 (2710)
Avg	26	31	44	126	22	246	2090	251	2230
n	2	2	2	2	2	2	2	2	2
SD	14.6	7.8	10.4	1210.0	213.0	2360.0	943.0	114.0	1010.0
Min	11	23	34	-1080	-191	-2110	1140	138	1220
Max	40	39	54	1330	235	2610	3030	365	3230

ED_004549_00015841-00101

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for October, 2007.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1	35 (21)	44 (23)	68 (36)	856 (2580)	151 (454)	1670 (5030)	4950 (6250)	596 (753)	5290 (6670)
2	88 (96)	54 (27)	111 (96)	-9360 (25500)	-1650 (4490)	-18300 (49800)	4780 (22500)	575 (2710)	5100 (24000)
3	47 (29)	47 (18)	95 (42)	-662 (4310)	-117 (760)	-1290 (8420)	5080 (7660)	611 (922)	5420 (8180)
4	36 (20)	50 (25)	87 (40)	771 (2200)	136 (388)	1510 (4300)	3430 (3770)	412 (453)	3660 (4020)
5	41 (20)	75 (133)	142 (288)	3110 (16400)	547 (2890)	6070 (32100)	6460 (12600)	777 (1520)	6890 (13500)
6	30 (13)	57 (33)	121 (56)	1210 (1610)	214 (284)	2370 (3150)	5080 (5210)	612 (627)	5420 (5560)
7	52 (37)	83 (37)	142 (69)	2370 (6820)	419 (1200)	4640 (13300)	10100 (17100)	1210 (2060)	10700 (18300)
8	56 (20)	89 (48)	135 (65)	1690 (3090)	298 (545)	3310 (6030)	4670 (4900)	562 (590)	4990 (5230)
9	78 (35)	116 (73)	166 (72)	960 (2720)	169 (479)	1880 (5310)	3560 (5110)	428 (615)	3800 (5450)
10									
11	95 (73)	85 (54)	136 (60)	-1690 (6460)	-298 (1140)	-3300 (12600)	1250 (5890)	151 (709)	1340 (6290)
12	41 (20)	68 (41)	97 (64)	1690 (2850)	297 (502)	3290 (5560)	4200 (5120)	505 (616)	4480 (5470)
13	24 (9)	34 (17)	40 (38)	257 (882)	45 (155)	502 (1720)	521 (2300)	63 (277)	556 (2450)
14	40 (21)	39 (21)	55 (96)	-233 (1290)	-41 (227)	-455 (2520)	1020 (6070)	123 (731)	1090 (6480)
15	47 (23)	43 (24)	55 (38)	-175 (1180)	-31 (207)	-342 (2300)	129 (1310)	16 (157)	138 (1390)
16	12 (6)	22 (19)	26 (39)	303 (1160)	53 (204)	592 (2260)	358 (2680)	43 (323)	382 (2860)
17	15 (7)	22 (14)	25 (31)	275 (1020)	49 (179)	537 (1990)	394 (1840)	48 (221)	421 (1960)
18	12 (7)	21 (13)	23 (30)	517 (1240)	91 (218)	1010 (2420)	424 (1910)	51 (231)	452 (2040)
19									
20	10 (7)	20 (11)	20 (26)	680 (1200)	120 (212)	1330 (2350)	483 (2310)	58 (278)	515 (2460)
21	10 (7)	23 (16)	21 (31)	471 (929)	83 (164)	920 (1810)	218 (1010)	26 (121)	233 (1080)
22	23 (10)	34 (24)	31 (38)	517 (1760)	91 (310)	1010 (3440)	91 (1550)	11 (187)	97 (1660)
23	31 (28)	33 (21)	32 (35)	83 (600)	15 (106)	162 (1170)	-35 (711)	-4 (86)	-37 (759)
24	49 (60)	42 (68)	65 (128)	-1440 (15700)	-254 (2770)	-2820 (30700)	3380 (20600)	406 (2480)	3600 (22000)
25	26 (16)	30 (20)	52 (56)	49 (1690)	9 (298)	96 (3300)	913 (2190)	110 (263)	974 (2330)
26									
27	29 (14)	30 (20)	36 (40)	-24 (621)	-4 (109)	-47 (1210)	109 (865)	13 (104)	116 (924)
28	53 (38)	38 (22)	56 (57)	-434 (1020)	-77 (181)	-848 (2000)	88 (1370)	11 (165)	94 (1470)
29	60 (26)	44 (25)	56 (50)	-329 (728)	-58 (128)	-642 (1420)	-24 (736)	-3 (89)	-26 (786)
30	40 (23)	40 (39)	49 (51)	-35 (1460)	-6 (257)	-69 (2850)	117 (1620)	14 (195)	125 (1730)
31	57 (57)	48 (49)	76 (96)	-458 (4290)	-81 (757)	-895 (8390)	765 (5770)	92 (694)	817 (6160)
Avg	41	48	72	35	6	68	2230	269	2380
n	28	28	28	28	28	28	28	28	28
SD	21.8	23.3	43.0	2070.0	364.0	4040.0	2560.0	308.0	2730.0
Min	10	20	20	-9360	-1650	-18300	-35	-4	-37
Max	95	116	166	3110	547	6070	10100	1210	10700

ED_004549_00015841-00102

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for November, 2007.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1		62 (37)	125 (77)						
2	97 (122)	102 (106)	153 (118)	46 (5250)	8 (925)	90 (10200)	1130 (7100)	136 (854)	1200 (7570)
3	54 (30)	69 (44)	90 (64)	323 (1760)	57 (310)	631 (3430)	487 (1200)	59 (144)	520 (1280)
4	40 (23)	55 (55)	72 (66)	443 (2140)	78 (377)	866 (4180)	697 (2300)	84 (277)	744 (2450)
5	29 (19)	56 (43)	88 (97)	629 (1210)	111 (213)	1230 (2360)	1250 (2590)	151 (312)	1340 (2770)
6	49 (29)	65 (55)	105 (80)	188 (905)	33 (160)	368 (1770)	858 (2600)	103 (314)	916 (2780)
7	56 (21)	72 (39)	113 (64)	224 (1160)	40 (205)	438 (2270)	818 (1850)	98 (223)	873 (1980)
8	72 (27)	70 (31)	121 (69)	-183 (1270)	-32 (223)	-358 (2470)	610 (1190)	73 (143)	651 (1270)
9	65 (50)	65 (51)	99 (86)	-259 (2720)	-46 (479)	-506 (5310)	1100 (4170)	133 (501)	1180 (4450)
10	115 (181)	108 (234)	240 (718)	-1410 (34700)	-248 (6110)	-2750 (67700)	20800 (132000)	2500 (15900)	22200 (141000)
11	40 (49)	45 (32)	147 (454)	-374 (4690)	-66 (828)	-731 (9170)	14700 (79900)	1770 (9610)	15700 (85200)
12		313 (634)	979 (1950)						
13									
14									
15									
16									
17									
18									
19									
20									
21		36 (22)	37 (37)						
22		39 (18)	42 (35)						
23			44 (29)						
24		49 (24)	42 (29)						
25		35 (19)	32 (29)						
26			27 (29)						
27		32 (27)	32 (50)						
28		34 (23)	30 (37)						
29		22 (9)	21 (16)						
30		25 (14)	24 (22)						
Avg	62	68	121	-37	-7	-72	4240	511	4530
n	10	20	22	10	10	10	10	10	10
SD	25.6	60.6	195.0	547.0	96.4	1070.0	6890.0	829.0	7350.0
Min	29	22	21	-1410	-248	-2750	487	59	520
Max	115	313	979	629	111	1230	20800	2500	22200

ED_004549_00015841-00103

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for December, 2007.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1			26 (32)						
2		20 (17)	24 (48)						
3		24 (16)	23 (46)						
4		22 (18)	21 (54)						
5		33 (24)	37 (47)						
6		23 (18)	23 (29)						
7		22 (18)	25 (38)						
8									
9									
10			32 (32)						
11									
12									
13									
14		28 (6)	27 (11)						
15		22 (3)	27 (20)						
16		28 (13)	30 (11)						
17		25 (7)	31 (14)						
18		26 (6)	27 (22)						
19		21 (7)	25 (9)						
20		40 (24)	55 (30)						
21		42 (26)	56 (24)						
22		34 (16)	40 (15)						
23		30 (8)	36 (12)						
24		27 (8)	35 (13)						
25		24 (8)	29 (13)						
26		33 (13)	44 (16)						
27		31 (58)	37 (26)						
28		24 (8)	28 (14)						
29		29 (13)	31 (14)						
30		39 (25)	37 (17)						
31		47 (64)	40 (17)						
Avg		29	33						
n	0	24	26	0	0	0	0	0	0
SD		7.2	8.9						
Min		20	21						
Max		47	56						

ED_004549_00015841-00104

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for January, 2008.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1			38 (15)						
2		52 (45)	48 (22)						
3									
4		32 (35)	29 (17)						
5		23 (10)	28 (20)						
6		26 (11)	28 (18)						
7									
8									
9									
10									
11		28 (12)	35 (23)						
12		24 (8)	24 (18)						
13		20 (5)	18 (14)						
14		21 (8)	18 (22)						
15		39 (21)	38 (24)						
16		34 (17)	33 (18)						
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
Avg		30	31						
n	0	10	11	0	0	0	0	0	0
SD		9.2	8.6						
Min		20	18						
Max		52	48						

ED_004549_00015841-00105

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for February, 2008.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1									
2									
3									
4									
5									
6									
7									
8		36 (30)	51 (41)						
9		36 (23)	38 (28)						
10		37 (22)	42 (32)						
11		50 (32)	65 (37)						
12		50 (38)	57 (31)						
13		46 (22)	67 (29)						
14									
15	31 (19)	58 (39)	83 (39)	797 (1750)	140 (308)	1560 (3420)	1190 (1550)	144 (187)	1430 (1860)
16	22 (10)	50 (75)	58 (34)	771 (2750)	136 (485)	1510 (5380)	695 (894)	84 (108)	830 (1070)
17	15 (10)	35 (22)	57 (44)	744 (1580)	131 (279)	1450 (3090)	1260 (1830)	151 (220)	1500 (2180)
18	24 (15)	44 (31)	66 (40)	487 (1140)	86 (201)	951 (2220)	902 (1460)	109 (175)	1070 (1730)
19	31 (25)	43 (30)	83 (71)	231 (807)	41 (142)	451 (1580)	994 (1680)	120 (202)	1180 (1990)
20	34 (11)	46 (23)	81 (41)	256 (1870)	45 (330)	500 (3650)	1720 (3770)	207 (453)	2040 (4450)
21	42 (23)	55 (39)	83 (40)	186 (856)	33 (151)	363 (1670)	1000 (1570)	121 (189)	1180 (1850)
22	27 (8)	34 (16)	70 (63)	77 (749)	14 (132)	149 (1460)	1110 (3800)	133 (458)	1300 (4480)
23	24 (16)	37 (41)	46 (54)	612 (4040)	108 (712)	1190 (7890)	1030 (4400)	124 (530)	1210 (5170)
24	11 (6)	23 (10)	26 (17)	607 (717)	107 (126)	1190 (1400)	808 (1210)	97 (145)	947 (1410)
25	9 (4)	21 (13)	23 (42)	317 (610)	56 (108)	620 (1190)	357 (2250)	43 (271)	418 (2630)
26	14 (5)	25 (15)	27 (44)	205 (601)	36 (106)	401 (1170)	305 (2430)	37 (292)	356 (2830)
27	20 (12)	27 (18)	31 (34)	90 (817)	16 (144)	175 (1600)	252 (2000)	30 (241)	293 (2330)
28	2 (6)	27 (16)	35 (50)	1110 (1340)	195 (236)	2160 (2610)	1520 (3420)	183 (412)	1770 (3980)
29	41 (55)	64 (68)	68 (68)	1950 (10600)	344 (1880)	3810 (20800)	2170 (10700)	262 (1290)	2520 (12400)
Avg	23	40	55	562	99	1100	1020	123	1200
n	15	21	21	15	15	15	15	15	15
SD	11.2	11.7	19.5	473.0	83.4	924.0	509.0	61.2	593.0
Min	2	21	23	77	14	149	252	30	293
Max	42	64	83	1950	344	3810	2170	262	2520

ED_004549_00015841-00106

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for March, 2008.

Day	Concentration, µg·dsm^{-3}			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-1}	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-2}
1	27 (25)	51 (30)	45 (25)	2930 (4390)	516 (774)	5720 (8580)	2140 (3940)	258 (474)	2480 (4560)
2	20 (13)	40 (19)	41 (18)	991 (1090)	175 (192)	1940 (2130)	1400 (1830)	169 (220)	1620 (2110)
3	93 (166)	99 (151)	88 (105)	533 (23200)	94 (4080)	1040 (45200)	-3170 (22700)	-382 (2730)	-3650 (26100)
4	32 (36)	54 (83)	52 (47)	2360 (6020)	417 (1060)	4620 (11800)	1950 (3780)	235 (455)	2240 (4340)
5	34 (21)	54 (36)	57 (24)	736 (1420)	130 (250)	1440 (2770)	1280 (1930)	154 (232)	1460 (2210)
6	77 (83)	85 (75)	104 (71)	-455 (7140)	-80 (1260)	-888 (14000)	815 (8340)	98 (1000)	932 (9540)
7	53 (34)	65 (29)	96 (59)	235 (1410)	41 (248)	459 (2750)	1020 (1970)	123 (237)	1170 (2250)
8	15 (10)	28 (10)	48 (23)	492 (776)	87 (137)	961 (1520)	1990 (2160)	240 (261)	2270 (2460)
9	19 (11)	39 (17)	73 (44)	579 (1120)	102 (197)	1130 (2180)	2320 (3860)	279 (465)	2630 (4390)
10	25 (13)	42 (18)	83 (35)	829 (1610)	146 (283)	1620 (3140)	3180 (3550)	383 (427)	3600 (4020)
11	55 (52)	78 (63)	109 (68)	3990 (9910)	703 (1750)	7790 (19400)	9040 (11700)	1090 (1410)	10200 (13200)
12	31 (15)	47 (21)	105 (44)	798 (1440)	141 (254)	1560 (2820)	3740 (3180)	450 (382)	4220 (3580)
13	9 (5)	27 (13)	53 (29)	1480 (2240)	260 (395)	2880 (4380)	3530 (3390)	425 (408)	3970 (3810)
14	9 (5)	27 (11)	60 (35)	1640 (1680)	290 (297)	3210 (3290)	4960 (4110)	597 (495)	5570 (4620)
15	10 (7)	26 (12)	33 (23)	699 (1050)	123 (186)	1370 (2060)	991 (1670)	119 (201)	1110 (1870)
16	14 (9)	31 (16)	39 (27)	969 (1410)	171 (249)	1890 (2750)	1300 (1990)	156 (239)	1450 (2220)
17	24 (19)	41 (26)	60 (35)	1560 (2980)	276 (526)	3050 (5830)	3000 (3990)	361 (480)	3340 (4450)
18	73 (144)	132 (270)	162 (284)	2320 (33000)	408 (5810)	4520 (64400)	7810 (46100)	940 (5550)	8700 (51300)
19	30 (18)	49 (28)	85 (39)	600 (1630)	106 (287)	1170 (3180)	2420 (3190)	292 (384)	2690 (3540)
20	32 (20)	50 (31)	83 (43)	1540 (4190)	272 (738)	3010 (8170)	4350 (5870)	523 (706)	4820 (6500)
21	31 (23)	48 (27)	85 (51)	1870 (3450)	329 (608)	3650 (6740)	6320 (6750)	760 (813)	6990 (7470)
22	32 (23)	47 (28)	58 (40)	484 (1970)	85 (348)	945 (3860)	1170 (3330)	141 (401)	1290 (3680)
23	127 (145)	152 (251)	117 (158)	5100 (50300)	899 (8870)	9960 (98300)	-6520 (39800)	-785 (4790)	-7180 (43800)
24	46 (25)	70 (52)	75 (56)	1080 (3230)	190 (568)	2100 (6300)	1360 (3790)	163 (456)	1490 (4160)
25	66 (49)	88 (65)	110 (78)	1500 (9060)	264 (1600)	2920 (17700)	3410 (10400)	410 (1260)	3730 (11500)
26	68 (65)	113 (132)	116 (87)	7090 (26000)	1250 (4590)	13800 (50800)	6260 (17400)	754 (2090)	6850 (19000)
27	69 (42)	108 (97)	171 (105)	3670 (7370)	647 (1300)	7170 (14400)	11800 (13900)	1420 (1670)	12900 (15200)
28	118 (197)	155 (245)	199 (265)	5090 (56600)	897 (9970)	9940 (110000)	4770 (68800)	575 (8280)	5200 (74900)
29	47 (38)	63 (51)	65 (57)	1940 (6730)	341 (1190)	3780 (13100)	1620 (8380)	194 (1010)	1760 (9120)
30	30 (24)	41 (26)	67 (89)	1500 (6940)	264 (1220)	2930 (13600)	5270 (16200)	634 (1950)	5710 (17500)
31	38 (25)	47 (36)	87 (159)	140 (2670)	25 (470)	273 (5210)	2230 (7820)	268 (941)	2410 (8470)
Avg	44	64	85	1750	309	3420	2960	356	3290
n	31	31	31	31	31	31	31	31	31
SD	29.8	35.3	38.6	1650.0	291.0	3230.0	3290.0	396.0	3640.0
Min	9	26	33	-455	-80	-888	-6520	-785	-7180
Max	127	155	199	7090	1250	13800	11800	1420	12900

ED_004549_00015841-00107

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for April, 2008.

Day	Concentration, µg·dsm^{-3}			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-1}	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-2}
1	46 (37)	64 (71)	88 (74)	526 (2390)	93 (421)	1030 (4660)	2270 (4810)	273 (578)	2450 (5190)
2	58 (37)	81 (62)	133 (101)	425 (2970)	75 (524)	830 (5810)	3330 (6550)	401 (788)	3590 (7050)
3	217 (255)	196 (232)	315 (292)	-3520 (27200)	-621 (4790)	-6880 (53000)	6190 (37600)	745 (4530)	6660 (40500)
4	150 (146)	187 (247)	292 (259)	4840 (48800)	853 (8600)	9450 (95200)	13500 (56100)	1620 (6760)	14500 (60200)
5	36 (26)	48 (31)	74 (75)	302 (3000)	53 (528)	590 (5850)	2790 (6390)	336 (769)	2990 (6840)
6	41 (42)	39 (32)	76 (75)	-92 (5940)	-16 (1050)	-180 (11600)	5260 (10900)	634 (1310)	5630 (11700)
7	51 (37)	64 (59)	116 (88)	550 (4060)	97 (716)	1070 (7930)	5670 (10100)	683 (1220)	6050 (10800)
8	48 (31)	64 (46)	107 (90)	415 (3390)	73 (598)	810 (6630)	2750 (7590)	331 (914)	2930 (8080)
9	42 (28)	57 (42)	111 (98)	515 (2900)	91 (512)	1010 (5670)	3660 (8110)	440 (976)	3880 (8610)
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18									
19									
20									
21									
22									
23									
24									
25	60 (50)	93 (91)	222 (268)	2880 (11500)	508 (2020)	5630 (22400)	18800 (35100)	2260 (4220)	19500 (36400)
26	67 (45)	111 (110)	206 (292)	493 (8330)	87 (1470)	962 (16300)	4790 (23000)	577 (2770)	4970 (23900)
27	73 (47)	149 (123)	292 (341)	3090 (6610)	544 (1170)	6030 (12900)	10400 (29200)	1260 (3510)	10800 (30200)
28	149 (171)	261 (369)	369 (430)	23800 (113000)	4190 (19900)	46400 (220000)	36600 (111000)	4400 (13400)	37900 (115000)
29	103 (86)	159 (203)	277 (371)	11600 (46800)	2040 (8240)	22600 (91300)	32600 (90100)	3920 (10900)	33700 (93300)
30	70 (44)	145 (119)	224 (255)	10600 (23200)	1870 (4090)	20700 (45300)	15900 (32900)	1920 (3960)	16500 (34100)
Avg	81	114	193	3760	662	7330	11000	1320	11500
n	15	15	15	15	15	15	15	15	15
SD	50.3	63.4	95.6	6600.0	1160.0	12900.0	10500.0	1260.0	10800.0
Min	36	39	74	-3520	-621	-6880	2270	273	2450
Max	217	261	369	23800	4190	46400	36600	4400	37900

ED_004549_00015841-00108

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for May, 2008.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1	81 (67)	111 (97)	225 (117)	1330 (11000)	234 (1940)	2590 (21500)	12900 (18600)	1550 (2230)	13400 (19200)
2	74 (69)	126 (119)	157 (113)	2080 (7710)	367 (1360)	4070 (15100)	3250 (7110)	391 (856)	3360 (7360)
3	41 (21)	76 (95)	94 (54)	979 (5710)	173 (1010)	1910 (11100)	2780 (4100)	335 (494)	2880 (4240)
4	19 (11)	37 (69)	49 (33)	204 (3770)	36 (665)	398 (7370)	1340 (1940)	162 (234)	1390 (2000)
5	31 (15)	45 (94)	67 (38)	400 (7680)	71 (1350)	781 (15000)	2060 (2750)	248 (331)	2130 (2840)
6	61 (37)	74 (56)	119 (74)	1050 (6350)	185 (1120)	2050 (12400)	5490 (9300)	661 (1120)	5670 (9600)
7	69 (61)	117 (105)	164 (116)	9520 (25700)	1680 (4530)	18600 (50200)	12700 (21100)	1530 (2540)	13100 (21700)
8	76 (45)	101 (55)	227 (122)	2650 (7520)	466 (1330)	5170 (14700)	13200 (15300)	1590 (1840)	13600 (15800)
9	74 (48)	85 (45)	189 (108)	415 (7000)	73 (1230)	811 (13700)	11900 (15800)	1430 (1900)	12300 (16200)
10	112 (78)	125 (89)	168 (94)	1270 (12000)	224 (2110)	2480 (23400)	6350 (16000)	764 (1920)	6540 (16400)
11	95 (78)	130 (126)	156 (136)	9760 (37600)	1720 (6640)	19100 (73500)	10700 (36000)	1290 (4340)	11000 (37100)
12	63 (31)	76 (32)	159 (98)	821 (4330)	145 (763)	1600 (8450)	12600 (19300)	1520 (2320)	13000 (19900)
13	80 (86)	106 (168)	189 (107)	1250 (20600)	221 (3640)	2450 (40300)	5450 (13900)	656 (1680)	5610 (14300)
14	79 (60)	120 (95)	200 (95)	9110 (28000)	1610 (4940)	17800 (54800)	8630 (16300)	1040 (1960)	8880 (16800)
15	56 (18)	86 (54)	170 (109)	1560 (3350)	275 (590)	3040 (6540)	8290 (8890)	998 (1070)	8530 (9140)
16									
17									
18									
19									
20									
21	65 (43)	203 (255)	185 (118)	44700 (104000)	7870 (18300)	87300 (203000)	18300 (21400)	2210 (2570)	18800 (21900)
22	83 (51)	134 (99)	202 (123)	12900 (29400)	2270 (5190)	25100 (57500)	17500 (18100)	2100 (2180)	17900 (18600)
23	26 (14)	38 (24)	82 (95)	1110 (2560)	196 (451)	2170 (5000)	6590 (12200)	793 (1470)	6750 (12500)
24	20 (12)	36 (30)	47 (115)	1120 (3000)	198 (528)	2200 (5850)	1510 (9220)	182 (1110)	1550 (9450)
25	23 (20)	27 (36)	35 (105)	460 (4490)	81 (791)	899 (8760)	281 (10300)	34 (1240)	287 (10500)
26	38 (20)	39 (46)	45 (119)	275 (6360)	49 (1120)	538 (12400)	-604 (13500)	-73 (1630)	-619 (13900)
27	28 (12)	39 (33)	69 (116)	612 (2500)	108 (441)	1200 (4890)	2130 (10500)	257 (1270)	2180 (10800)
28	41 (27)	53 (54)	77 (122)	726 (3460)	128 (610)	1420 (6760)	1150 (6870)	138 (827)	1170 (7030)
29	93 (147)	60 (55)	129 (180)	-9080 (33300)	-1600 (5860)	-17700 (65000)	3840 (43300)	462 (5210)	3920 (44200)
30	57 (29)	82 (85)	125 (156)	2120 (8650)	374 (1520)	4150 (16900)	4450 (13300)	535 (1600)	4540 (13600)
31	101 (87)	121 (101)	216 (208)	708 (15900)	125 (2790)	1380 (31000)	11900 (31200)	1430 (3760)	12100 (31900)
Avg	61	86	136	3770	664	7360	7100	855	7310
n	26	26	26	26	26	26	26	26	26
SD	26.4	41.4	60.6	9140.0	1610.0	17900.0	5340.0	643.0	5490.0
Min	19	27	35	-9080	-1600	-17700	-604	-73	-619
Max	112	203	227	44700	7870	87300	18300	2210	18800

ED_004549_00015841-00109

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for June, 2008.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1	63 (38)	60 (59)	144 (160)	898 (12600)	158 (2220)	1750 (24600)	9500 (23400)	1140 (2820)	9690 (23900)
2	78 (49)	105 (110)	225 (213)	2110 (9240)	372 (1630)	4120 (18000)	12600 (25800)	1520 (3100)	12900 (26300)
3	41 (48)	50 (86)	159 (246)	-192 (7780)	-34 (1370)	-375 (15200)	2060 (20000)	248 (2400)	2100 (20400)
4	17 (11)	34 (36)	29 (75)	1930 (5200)	340 (917)	3770 (10200)	807 (7680)	97 (925)	822 (7840)
5	42 (57)	58 (65)	61 (40)	-19 (12900)	-3 (2270)	-38 (25100)	486 (11800)	59 (1420)	496 (12000)
6	55 (49)	55 (44)	76 (58)	-357 (11400)	-63 (2020)	-697 (22400)	5430 (20000)	654 (2410)	5530 (20400)
7	25 (17)	49 (46)	39 (26)	4150 (10800)	732 (1900)	8110 (21100)	1410 (5250)	170 (632)	1440 (5350)
8	57 (55)	41 (54)	65 (62)	-2410 (7800)	-425 (1380)	-4710 (15200)	1470 (9530)	177 (1150)	1490 (9700)
9	262 (319)	313 (686)	504 (841)	19500 (214000)	3430 (37700)	38100 (418000)	97400 (291000)	11700 (35100)	99100 (296000)
10	33 (43)	51 (55)	67 (53)	2990 (12200)	526 (2150)	5830 (23800)	4010 (10000)	483 (1210)	4080 (10200)
11	47 (30)	75 (60)	76 (37)	5920 (14500)	1040 (2560)	11600 (28400)	3810 (6900)	459 (830)	3880 (7010)
12									
13									
14									
15									
16									
17									
18									
19	150 (130)	287 (236)	404 (320)	10200 (25400)	1790 (4480)	19900 (49600)	26500 (52100)	3190 (6270)	26900 (52800)
20	153 (92)	313 (250)	312 (346)	8680 (16300)	1530 (2870)	17000 (31800)	3950 (16500)	476 (1990)	4000 (16700)
21	104 (99)	165 (178)	169 (359)	4210 (18900)	743 (3330)	8230 (36900)	5210 (45300)	627 (5460)	5270 (45900)
22	76 (95)	140 (480)	73 (202)	1480 (14100)	262 (2480)	2900 (27400)	-6450 (32300)	-776 (3880)	-6530 (32700)
23	81 (43)	178 (193)	178 (237)	8910 (18000)	1570 (3180)	17400 (35200)	7440 (23800)	896 (2860)	7530 (24000)
24	81 (40)	162 (123)	222 (240)	6670 (13700)	1180 (2420)	13000 (26800)	10500 (21300)	1270 (2570)	10600 (21600)
25	138 (131)	259 (287)	255 (245)	12700 (29600)	2230 (5210)	24700 (57800)	10400 (26300)	1250 (3170)	10500 (26600)
26	146 (123)	234 (194)	260 (227)	10100 (27200)	1780 (4800)	19800 (53200)	9720 (24800)	1170 (2990)	9820 (25100)
27	108 (43)	241 (188)	311 (679)	10000 (17000)	1760 (2990)	19500 (33100)	14500 (67000)	1750 (8070)	14600 (67700)
28	102 (73)	198 (172)	169 (286)	7140 (14300)	1260 (2530)	13900 (28000)	1790 (20000)	216 (2410)	1810 (20200)
29	121 (117)	354 (745)	434 (1120)	23100 (178000)	4070 (31400)	45100 (348000)	37500 (304000)	4510 (36600)	37800 (307000)
30	152 (140)	218 (200)	260 (328)	7410 (37100)	1310 (6540)	14500 (72400)	13500 (55200)	1630 (6650)	13700 (55700)
Avg	93	158	195	6310	1110	12300	11900	1430	12100
n	23	23	23	23	23	23	23	23	23
SD	55.5	101.0	130.0	6130.0	1080.0	12000.0	20300.0	2450.0	20700.0
Min	17	34	29	-2410	-425	-4710	-6450	-776	-6530
Max	262	354	504	23100	4070	45100	97400	11700	99100

ED_004549_00015841-00110

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for July, 2008.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1	145 (59)	225 (214)	280 (302)	5560 (20400)	980 (3600)	10900 (39900)	8020 (20700)	965 (2490)	8080 (20900)
2	168 (71)	249 (211)	261 (339)	6950 (23100)	1230 (4060)	13600 (45000)	5850 (36800)	704 (4440)	5890 (37100)
3	155 (130)	225 (198)	216 (284)	7680 (32700)	1350 (5760)	15000 (63800)	3200 (34000)	385 (4090)	3220 (34200)
4	144 (186)	209 (139)	171 (101)	10700 (33000)	1890 (5810)	20900 (64400)	1980 (19600)	239 (2360)	2000 (19700)
5									
6									
7	91 (43)	239 (225)	175 (125)	15500 (27900)	2740 (4920)	30400 (54500)	7920 (10800)	953 (1290)	7960 (10800)
8	176 (114)	275 (237)	255 (177)	7520 (26200)	1330 (4610)	14700 (51100)	6890 (15900)	829 (1910)	6930 (16000)
9	170 (90)	195 (194)	331 (159)	2360 (17700)	416 (3120)	4610 (34500)	15300 (22900)	1850 (2760)	15400 (23000)
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17									
18									
19									
20									
21									
22									
23									
24	147 (66)	347 (281)	354 (233)	26600 (43600)	4680 (7680)	51900 (85100)	20700 (24600)	2500 (2960)	20700 (24500)
25	179 (88)	401 (327)	327 (254)	26600 (51300)	4690 (9040)	51900 (100000)	4530 (15800)	545 (1900)	4520 (15800)
26	155 (119)	300 (279)	237 (247)	25900 (71200)	4570 (12600)	50600 (139000)	13900 (71300)	1670 (8580)	13800 (71200)
27	107 (56)	216 (188)	199 (134)	25400 (56800)	4480 (10000)	49600 (111000)	11700 (18500)	1400 (2230)	11600 (18500)
28	143 (82)	253 (188)	294 (193)	13500 (30300)	2380 (5350)	26400 (59300)	14800 (23400)	1780 (2820)	14800 (23300)
29	207 (178)	319 (283)	463 (393)	20700 (75400)	3640 (13300)	40400 (147000)	38300 (94200)	4610 (11300)	38200 (93800)
30	168 (152)	280 (221)	396 (463)	20400 (30500)	3600 (5370)	39900 (59500)	21200 (25300)	2550 (3050)	21100 (25200)
31									
Avg	154	267	283	15400	2710	30000	12400	1500	12400
n	14	14	14	14	14	14	14	14	14
SD	28.1	56.4	81.8	8450.0	1490.0	16500.0	9270.0	1120.0	9230.0
Min	91	195	171	2360	416	4610	1980	239	2000
Max	207	401	463	26600	4690	51900	38300	4610	38200

ED_004549_00015841-00111

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for August, 2008.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1									
2									
3									
4									
5									
6									
7									
8	150 (114)	224 (185)	269 (363)	7650 (22400)	1350 (3940)	14900 (43700)	5290 (32200)	637 (3880)	5250 (32000)
9	86 (102)	97 (69)	106 (90)	-2030 (14900)	-359 (2630)	-3970 (29100)	-3030 (19300)	-364 (2330)	-3000 (19200)
10	52 (37)	124 (157)	109 (84)	5750 (9720)	1010 (1710)	11200 (19000)	4250 (8070)	512 (972)	4220 (8000)
11	96 (59)	160 (104)	169 (99)	6610 (14700)	1160 (2590)	12900 (28700)	5250 (11300)	632 (1360)	5200 (11200)
12	150 (127)	203 (178)	258 (199)	2660 (11500)	468 (2040)	5190 (22600)	7260 (15900)	873 (1920)	7190 (15800)
13	105 (76)	220 (166)	275 (208)	10800 (17700)	1900 (3120)	21100 (34600)	13300 (12500)	1610 (1500)	13200 (12400)
14									
15	154 (98)	237 (192)	270 (239)	6810 (15700)	1200 (2780)	13300 (30800)	4540 (12300)	546 (1480)	4490 (12200)
16	218 (184)	249 (225)	286 (301)	922 (19100)	162 (3370)	1800 (37400)	3520 (22800)	424 (2750)	3480 (22600)
17	173 (172)	223 (209)	238 (292)	6060 (20700)	1070 (3650)	11800 (40500)	7370 (34700)	887 (4180)	7290 (34400)
18									
19									
20									
21	76 (36)	104 (110)	238 (200)	4110 (23700)	725 (4180)	8030 (46300)	40500 (60800)	4870 (7320)	40000 (60100)
22	58 (41)	99 (107)	120 (166)	1200 (7200)	212 (1270)	2350 (14100)	1970 (11600)	237 (1390)	1950 (11400)
23	59 (25)	91 (141)	108 (187)	797 (8500)	141 (1500)	1560 (16600)	1310 (10900)	157 (1310)	1290 (10700)
24	81 (63)	112 (163)	125 (198)	2070 (19100)	365 (3370)	4050 (37400)	1250 (23700)	151 (2860)	1240 (23400)
25	55 (32)	79 (114)	105 (163)	105 (20500)	19 (3620)	205 (40100)	378 (25300)	46 (3050)	373 (25000)
26	86 (61)	108 (169)	156 (216)	226 (19000)	40 (3340)	441 (37100)	4330 (25800)	521 (3110)	4270 (25500)
27									
28									
29									
30									
31									
Avg	106	155	189	3580	631	6990	6500	782	6430
n	15	15	15	15	15	15	15	15	15
SD	48.6	60.8	71.3	3440.0	606.0	6720.0	9770.0	1180.0	9650.0
Min	52	79	105	-2030	-359	-3970	-3030	-364	-3000
Max	218	249	286	10800	1900	21100	40500	4870	40000

ED_004549_00015841-00112

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for September, 2008.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1									
2									
3									
4	135 (64)	176 (102)	388 (192)	1650 (7220)	290 (1270)	3220 (14100)	22500 (25400)	2710 (3060)	22100 (24900)
5	122 (77)	193 (167)	253 (211)	5440 (13500)	958 (2390)	10600 (26400)	5460 (10200)	657 (1230)	5360 (10000)
6	81 (50)	121 (84)	154 (122)	2290 (4420)	404 (780)	4480 (8640)	3890 (9410)	468 (1130)	3820 (9230)
7	124 (83)	148 (104)	175 (135)	3130 (14300)	552 (2530)	6120 (28000)	895 (12400)	108 (1490)	878 (12100)
8	142 (83)	179 (130)	245 (149)	1750 (6700)	309 (1180)	3420 (13100)	3080 (6200)	371 (747)	3020 (6080)
9	167 (90)	204 (184)	338 (187)	4120 (28600)	726 (5050)	8050 (55900)	11900 (18000)	1430 (2160)	11700 (17600)
10	163 (105)	210 (143)	430 (251)	1500 (11200)	264 (1980)	2920 (22000)	19400 (22500)	2330 (2710)	19000 (22100)
11									
12									
13									
14									
15									
16									
17									
18									
19	223 (86)	267 (235)	394 (241)	1350 (14400)	237 (2540)	2630 (28200)	7830 (16800)	943 (2030)	7640 (16400)
20	46 (24)	77 (101)	100 (44)	644 (5500)	114 (969)	1260 (10700)	2510 (2690)	303 (323)	2450 (2620)
21	32 (14)	57 (97)	92 (35)	1650 (12000)	291 (2120)	3220 (23500)	5150 (4450)	620 (535)	5020 (4340)
22	71 (51)	108 (115)	157 (70)	4840 (19800)	853 (3480)	9450 (38600)	9330 (10100)	1120 (1220)	9100 (9840)
23	62 (36)	108 (106)	227 (206)	1670 (8800)	294 (1550)	3260 (17200)	6530 (12400)	786 (1500)	6360 (12100)
24	92 (33)	127 (46)	249 (96)	1200 (2300)	211 (405)	2340 (4490)	7200 (8760)	867 (1050)	7010 (8530)
25	157 (179)	239 (335)	421 (409)	6910 (35600)	1220 (6270)	13500 (69500)	22800 (49400)	2750 (5950)	22200 (48100)
26	74 (48)	103 (49)	174 (142)	1060 (2310)	186 (407)	2060 (4510)	3890 (7480)	468 (901)	3790 (7280)
27	64 (32)	94 (39)	117 (79)	1610 (3330)	283 (587)	3140 (6510)	2920 (7530)	351 (906)	2840 (7330)
28	85 (45)	121 (102)	141 (95)	2200 (7790)	389 (1370)	4300 (15200)	2480 (6650)	298 (801)	2410 (6470)
29	100 (73)	137 (91)	188 (153)	1200 (3140)	211 (554)	2340 (6140)	2560 (6660)	309 (802)	2490 (6470)
30	101 (59)	140 (73)	221 (147)	1430 (3270)	252 (576)	2800 (6380)	4600 (8450)	554 (1020)	4470 (8210)
Avg	107	148	235	2400	423	4690	7630	918	7450
n	19	19	19	19	19	19	19	19	19
SD	47.2	54.7	107.0	1660.0	293.0	3240.0	6590.0	794.0	6450.0
Min	32	57	92	644	114	1260	895	108	878
Max	223	267	430	6910	1220	13500	22800	2750	22200

ED_004549_00015841-00113

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for October, 2008.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1	142 (77)	188 (150)	247 (131)	901 (4700)	159 (829)	1760 (9180)	2400 (4640)	289 (559)	2340 (4510)
2									
3									
4	38 (29)	69 (24)	94 (74)	5400 (7780)	952 (1370)	10500 (15200)	13300 (20200)	1600 (2430)	12900 (19600)
5	38 (18)	81 (38)	99 (94)	3060 (3560)	539 (628)	5970 (6960)	3230 (5430)	388 (654)	3130 (5270)
6	55 (61)	82 (25)	105 (64)	645 (5050)	114 (889)	1260 (9860)	1360 (5060)	164 (609)	1320 (4910)
7	144 (97)	183 (127)	384 (371)	6740 (25600)	1190 (4520)	13200 (50000)	58600 (103000)	7050 (12400)	56700 (99600)
8	63 (40)	109 (55)	161 (136)	2590 (4890)	456 (861)	5050 (9540)	6220 (12000)	749 (1450)	6030 (11700)
9	86 (61)	113 (45)	201 (103)	-335 (13900)	-59 (2450)	-655 (27200)	8830 (16900)	1060 (2040)	8550 (16400)
10	77 (29)	108 (38)	148 (90)	3900 (11400)	687 (2010)	7620 (22300)	8230 (14400)	991 (1740)	7970 (14000)
11	78 (36)	112 (50)	134 (106)	3810 (11100)	672 (1960)	7440 (21700)	5770 (16400)	695 (1970)	5590 (15800)
12	78 (42)	115 (46)	185 (125)	2760 (4880)	486 (860)	5390 (9530)	15000 (24100)	1800 (2900)	14500 (23300)
13	127 (112)	139 (75)	274 (504)	118 (11200)	21 (1970)	230 (21800)	16100 (92000)	1930 (11100)	15500 (88900)
14	136 (147)	123 (60)	186 (128)	-20 (11500)	-4 (2030)	-40 (22500)	5450 (17300)	656 (2090)	5260 (16700)
15	144 (83)	169 (99)	345 (259)	2750 (12100)	485 (2130)	5370 (23600)	38900 (67600)	4680 (8140)	37500 (65300)
16	121 (80)	146 (78)	291 (145)	1080 (3240)	191 (571)	2120 (6320)	7600 (8350)	915 (1000)	7340 (8060)
17	106 (47)	135 (69)	230 (163)	499 (3660)	88 (645)	975 (7140)	4980 (13800)	600 (1660)	4810 (13300)
18	101 (57)	111 (69)	172 (94)	318 (4010)	56 (707)	621 (7840)	3530 (6240)	425 (751)	3400 (6020)
19	73 (38)	121 (111)	183 (89)	1300 (3570)	229 (629)	2540 (6970)	3410 (4040)	411 (486)	3290 (3890)
20	226 (259)	528 (1290)	747 (1470)	43700 (307000)	7700 (54100)	85300 (599000)	103000 (452000)	12400 (54500)	99400 (436000)
21	87 (42)	133 (86)	277 (107)	1960 (5370)	346 (947)	3830 (10500)	15300 (16300)	1850 (1960)	14800 (15700)
22	123 (73)	166 (111)	347 (220)	989 (3800)	174 (669)	1930 (7410)	6980 (10300)	841 (1240)	6730 (9940)
23	105 (33)	160 (139)	379 (210)	2690 (9370)	474 (1650)	5250 (18300)	14500 (16900)	1750 (2030)	14000 (16200)
24	133 (63)	181 (138)	270 (144)	1430 (4710)	251 (831)	2790 (9200)	5250 (7160)	632 (862)	5050 (6890)
25	118 (57)	159 (96)	256 (147)	1220 (5070)	215 (893)	2380 (9900)	4690 (7130)	564 (859)	4510 (6860)
26	95 (43)	139 (91)	271 (162)	2060 (7060)	362 (1240)	4020 (13800)	10200 (11900)	1230 (1430)	9820 (11400)
27	130 (77)	206 (98)	436 (184)	1120 (3190)	198 (562)	2200 (6230)	6920 (8770)	833 (1060)	6650 (8440)
28	163 (95)	222 (125)	470 (178)	1780 (4270)	314 (752)	3480 (8340)	7410 (9470)	892 (1140)	7120 (9100)
29	168 (103)	229 (129)	536 (343)	1210 (2690)	213 (474)	2360 (5250)	8800 (11100)	1060 (1340)	8450 (10700)
30	166 (91)	219 (127)	476 (194)	983 (2620)	173 (462)	1920 (5120)	7200 (9750)	867 (1170)	6910 (9360)
31	105 (36)	144 (65)	278 (159)	1280 (3260)	226 (575)	2500 (6380)	7750 (10100)	934 (1210)	7440 (9670)
Avg	111	158	282	3310	583	6460	13800	1660	13300
n	29	29	29	29	29	29	29	29	29
SD	41.5	81.3	145.0	7790.0	1370.0	15200.0	20300.0	2450.0	19600.0
Min	38	69	94	-335	-59	-655	1360	164	1320
Max	226	528	747	43700	7700	85300	103000	12400	99400

ED_004549_00015841-00114

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for November, 2008.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1	69 (38)	90 (30)	111 (49)	712 (1320)	126 (233)	1390 (2580)	1280 (1960)	154 (236)	1220 (1880)
2	33 (22)	53 (18)	69 (52)	1320 (2310)	233 (408)	2580 (4520)	2610 (5240)	314 (631)	2510 (5030)
3	33 (13)	70 (33)	84 (56)	2550 (3210)	450 (566)	4980 (6270)	3350 (5430)	403 (653)	3210 (5200)
4	33 (12)	61 (19)	76 (41)	2040 (2030)	360 (358)	3990 (3970)	3890 (5740)	469 (691)	3730 (5500)
5	73 (51)	69 (23)	90 (46)	-127 (1290)	-22 (228)	-248 (2520)	202 (1780)	24 (215)	194 (1710)
6	134 (24)	63 (13)	79 (31)	-1920 (2150)	-339 (379)	-3810 (4260)	-1590 (2520)	-192 (303)	-1560 (2490)
7	134 (5)	66 (14)	74 (30)	-1590 (1530)	-281 (269)	-3160 (3020)	-1450 (1650)	-174 (199)	-1480 (1690)
8	131 (5)	62 (14)	68 (34)	-2380 (2810)	-419 (496)	-4710 (5570)	-2200 (3250)	-264 (391)	-2370 (3510)
9	129 (7)	60 (17)	66 (35)	-1340 (1600)	-236 (282)	-2650 (3170)	-1270 (1710)	-152 (205)	-1440 (1940)
10	72 (49)	63 (26)	67 (51)	436 (1880)	77 (332)	863 (3720)	477 (3000)	57 (361)	592 (3630)
11	29 (11)	54 (14)	76 (106)	2980 (2560)	526 (450)	5900 (5050)	7280 (26100)	876 (3140)	9260 (33000)
12	31 (17)	60 (17)	71 (33)	5560 (4280)	979 (754)	11000 (8460)	8520 (7720)	1030 (930)	11500 (10300)
13									
14									
15									
16									
17									
18									
19									
20									
21									
22	39 (15)	82 (40)	90 (81)	1850 (2840)	327 (500)	3630 (5550)	1960 (5260)	236 (634)	2060 (5520)
23	33 (9)	75 (39)	82 (51)	821 (1570)	145 (277)	1610 (3090)	1160 (1960)	140 (236)	1210 (2050)
24	40 (15)	84 (46)	96 (64)	630 (1180)	111 (209)	1240 (2330)	911 (1530)	110 (184)	951 (1590)
25	37 (9)	75 (29)	103 (192)	817 (1070)	144 (189)	1620 (2120)	1290 (3250)	155 (391)	1340 (3380)
26	23 (4)	54 (21)	58 (44)	808 (1030)	142 (181)	1610 (2040)	1070 (2000)	128 (240)	1110 (2070)
27	22 (4)	59 (16)	69 (32)	832 (662)	147 (117)	1660 (1320)	1260 (1310)	152 (157)	1300 (1350)
28	27 (4)	68 (23)	81 (41)	651 (694)	115 (122)	1300 (1390)	990 (1270)	119 (153)	1020 (1310)
29	34 (9)	71 (20)	85 (40)	909 (963)	160 (170)	1820 (1930)	1490 (1880)	179 (226)	1530 (1930)
30	32 (7)	61 (22)	69 (43)	1020 (1180)	179 (209)	2050 (2390)	1330 (2140)	160 (258)	1360 (2200)
Avg	56	67	79	790	139	1550	1550	187	1770
n	21	21	21	21	21	21	21	21	21
SD	39.3	9.8	12.9	1720.0	304.0	3400.0	2550.0	307.0	3190.0
Min	22	53	58	-2380	-419	-4710	-2200	-264	-2370
Max	134	90	111	5560	979	11000	8520	1030	11500

ED_004549_00015841-00115

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for December, 2008.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1	21 (6)	53 (17)	57 (30)	915 (953)	161 (168)	1850 (1930)	997 (1270)	120 (153)	1020 (1300)
2	29 (19)	64 (50)	65 (59)	1100 (3150)	194 (555)	2230 (6390)	1090 (3310)	131 (398)	1110 (3380)
3	31 (14)	63 (33)	63 (43)	1150 (1870)	203 (329)	2340 (3790)	1190 (2090)	143 (251)	1210 (2130)
4	36 (11)	72 (30)	83 (19)	1250 (1320)	220 (232)	2530 (2670)	1760 (1370)	212 (165)	1800 (1400)
5	38 (17)	74 (28)	77 (21)	958 (1160)	169 (204)	1950 (2350)	1100 (1170)	132 (141)	1120 (1200)
6	44 (12)	77 (23)	80 (22)	698 (844)	123 (149)	1420 (1710)	734 (698)	88 (84)	749 (712)
7	39 (15)	68 (22)	76 (22)	845 (809)	149 (143)	1710 (1640)	1230 (1140)	148 (137)	1260 (1160)
8	26 (11)	64 (31)	68 (18)	1530 (1340)	269 (237)	3100 (2720)	2000 (1270)	240 (153)	2040 (1300)
9	33 (12)	71 (22)	72 (20)	1040 (1070)	183 (188)	2110 (2160)	1070 (983)	128 (118)	1090 (1000)
10	43 (19)	79 (32)	86 (33)	997 (1120)	176 (197)	2020 (2260)	1180 (1270)	142 (152)	1200 (1290)
11	28 (7)	62 (13)	67 (19)	975 (889)	172 (157)	1970 (1800)	1180 (1040)	142 (125)	1200 (1060)
12	90 (147)	162 (322)	91 (106)	5580 (53100)	983 (9360)	11300 (107000)	-7470 (28100)	-900 (3380)	-7630 (28700)
13	64 (124)	84 (94)	81 (34)	-855 (13900)	-151 (2450)	-1730 (28200)	-3650 (26500)	-440 (3190)	-3730 (27100)
14	71 (44)	74 (13)	87 (25)	-474 (9310)	-84 (1640)	-959 (18800)	469 (2790)	57 (336)	480 (2850)
15	92 (85)	69 (13)	79 (22)	-1220 (8580)	-215 (1510)	-2470 (17300)	26 (3010)	3 (362)	27 (3070)
16	37 (8)	67 (26)	72 (22)	761 (878)	134 (155)	1540 (1770)	1010 (1180)	122 (142)	1030 (1200)
17	46 (31)	56 (32)		-176 (4320)	-31 (761)	-355 (8710)			
18									
19	28 (5)	31 (0)		34 (95)	6 (17)	69 (191)			
20	152 (230)	30 (0)		-8260 (24000)	-1460 (4230)	-16600 (48300)			
21	300 (353)	30 (0)		-20300 (32900)	-3580 (5810)	-40900 (66300)			
22	27 (5)	30 (0)		40 (174)	7 (31)	80 (349)			
23	33 (6)	30 (0)		-50 (120)	-9 (21)	-101 (240)			
24	32 (7)	29 (0)		-66 (276)	-12 (49)	-132 (554)			
25	31 (7)	29 (0)		-24 (171)	-4 (30)	-49 (343)			
26	28 (11)	29 (0)		118 (652)	21 (115)	236 (1310)			
27	20 (11)	29 (0)		1190 (1350)	210 (238)	2390 (2710)			
28	18 (5)	29 (0)		965 (724)	170 (128)	1940 (1450)			
29	22 (11)	29 (0)		419 (2250)	74 (396)	841 (4500)			
30	24 (5)	28 (1)		296 (450)	52 (79)	594 (901)			
31	22 (7)	27 (0)		345 (981)	61 (173)	691 (1970)			
Avg	50	55	75	-342	-60	-683	244	29	249
n	30	30	16	30	30	30	16	16	16
SD	53.9	28.4	9.3	4190.0	739.0	8450.0	2340.0	281.0	2390.0
Min	18	27	57	-20300	-3580	-40900	-7470	-900	-7630
Max	300	162	91	5580	983	11300	2000	240	2040

ED_004549_00015841-00116

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for January, 2009.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1	19 (5)	26 (0)		669 (612)	118 (108)	1340 (1220)			
2	18 (5)	25 (0)		255 (323)	45 (57)	511 (646)			
3	22 (5)	23 (1)		28 (140)	5 (25)	56 (280)			
4	23 (9)	22 (0)		-271 (1080)	-48 (190)	-542 (2160)			
5	25 (4)	21 (0)		-57 (130)	-10 (23)	-113 (260)			
6	25 (19)	21 (0)		-466 (2710)	-82 (478)	-930 (5410)			
7	19 (5)	26 (9)		676 (1390)	119 (245)	1350 (2770)			
8	19 (8)	57 (23)		3970 (3110)	700 (547)	7920 (6190)			
9	25 (7)	79 (23)	85 (18)	1300 (1320)	228 (233)	2580 (2640)	1450 (1400)	175 (168)	1490 (1430)
10	29 (7)	76 (13)	77 (12)	710 (724)	125 (128)	1420 (1440)	690 (766)	83 (92)	708 (785)
11	33 (9)	76 (12)	80 (14)	778 (941)	137 (166)	1550 (1870)	710 (772)	86 (93)	728 (791)
12	28 (8)	74 (20)	77 (17)	872 (992)	154 (175)	1740 (1970)	751 (713)	91 (86)	770 (731)
13	22 (8)	66 (13)	68 (20)	1030 (936)	181 (165)	2040 (1860)	964 (918)	116 (110)	989 (941)
14									
15	16 (4)	63 (34)	59 (7)	696 (885)	123 (156)	1380 (1760)	349 (401)	42 (48)	358 (412)
16	15 (4)	57 (8)	61 (10)	756 (666)	133 (117)	1500 (1320)	705 (747)	85 (90)	723 (766)
17	17 (4)	59 (7)	62 (7)	1200 (1220)	212 (215)	2390 (2430)	608 (544)	73 (66)	624 (558)
18	17 (4)	62 (8)	62 (8)	1170 (887)	206 (156)	2320 (1760)	1010 (649)	122 (78)	1040 (666)
19	17 (5)	63 (9)	64 (8)	717 (544)	126 (96)	1420 (1080)	749 (612)	90 (74)	768 (628)
20									
21									
22	17 (5)	66 (8)	81 (11)	979 (902)	173 (159)	1940 (1790)	1140 (1070)	137 (129)	1170 (1100)
23	22 (6)	77 (18)	82 (11)	1380 (1300)	244 (229)	2740 (2580)	1160 (1050)	139 (127)	1190 (1080)
24	20 (5)	65 (7)	77 (7)	955 (738)	168 (130)	1890 (1460)	1060 (761)	127 (92)	1080 (782)
25	20 (4)	65 (9)	79 (8)	2360 (2390)	415 (420)	4660 (4720)	1770 (1150)	214 (139)	1820 (1190)
26	34 (37)	72 (23)	86 (20)	2120 (3020)	374 (533)	4190 (5970)	3250 (3990)	391 (480)	3330 (4100)
27	28 (8)	77 (20)		1770 (1420)	312 (250)	3500 (2800)			
28									
29	26 (8)	75 (11)	85 (12)	850 (785)	150 (138)	1680 (1550)	827 (774)	100 (93)	849 (795)
30	25 (7)	72 (13)		1390 (1370)	245 (242)	2740 (2700)			
31	20 (6)	72 (21)		2240 (1850)	396 (326)	4420 (3650)			
Avg	22	57	74	1040	183	2060	1070	129	1100
n	27	27	16	27	27	27	16	16	16
SD	5.0	20.8	9.5	892.0	157.0	1770.0	652.0	78.5	670.0
Min	15	21	59	-466	-82	-930	349	42	358
Max	34	79	86	3970	700	7920	3250	391	3330

ED_004549_00015841-00117

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for February, 2009.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1	26 (7)	77 (35)		1320 (1620)	233 (286)	2610 (3190)			
2	30 (8)	83 (26)		735 (760)	130 (134)	1450 (1500)			
3	33 (7)	84 (22)		806 (1100)	142 (194)	1590 (2170)			
4	35 (8)	86 (34)		1210 (2140)	214 (377)	2380 (4210)			
5	34 (12)	86 (20)		1550 (2350)	273 (414)	3050 (4610)			
6	26 (17)	85 (92)	79 (11)	1670 (4900)	295 (864)	3290 (9630)	950 (856)	114 (103)	977 (880)
7	18 (5)	61 (6)	67 (7)	1440 (1640)	254 (290)	2830 (3230)	1340 (1340)	162 (162)	1380 (1380)
8	16 (4)								
9	20 (4)	66 (18)		1480 (1270)	260 (223)	2890 (2490)			
10	18 (4)	66 (20)		2210 (2440)	389 (430)	4320 (4790)			
11	20 (7)	63 (76)		1070 (3830)	189 (674)	2100 (7490)			
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
Avg	25	76	73	1350	238	2650	1150	138	1180
n	11	10	2	10	10	10	2	2	2
SD	6.7	10.1	6.0	409.0	72.1	801.0	197.0	23.7	202.0
Min	16	61	67	735	130	1450	950	114	977
Max	35	86	79	2210	389	4320	1340	162	1380

ED_004549_00015841-00118

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for March, 2009.

Day	Concentration, µg·dsm^{-3}			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-1}	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-2}
1									
2									
3									
4									
5	24 (11)	68 (144)	77 (44)	6570 (27000)	1160 (4750)	12600 (51800)	8320 (8360)	1000 (1010)	7880 (7920)
6	24 (8)	82 (192)	73 (39)	3230 (16500)	569 (2900)	6200 (31600)	3500 (4220)	421 (507)	3320 (4000)
7	36 (29)	74 (154)	68 (38)	5120 (24200)	903 (4270)	9840 (46500)	2300 (6440)	277 (776)	2190 (6120)
8	22 (7)	79 (183)	70 (47)	2560 (8790)	451 (1550)	4910 (16900)	1860 (3000)	223 (361)	1770 (2850)
9	34 (16)	81 (166)	75 (38)	3160 (15600)	557 (2740)	6070 (29900)	2550 (5090)	308 (612)	2430 (4850)
10	96 (100)	184 (290)	129 (99)	10400 (33600)	1830 (5920)	19900 (64500)	1950 (5290)	235 (636)	1860 (5040)
11	40 (25)	86 (227)	95 (47)	3760 (19400)	664 (3430)	7220 (37300)	2630 (2890)	316 (347)	2510 (2760)
12									
13	70 (73)	127 (431)	122 (62)	494 (17600)	87 (3100)	947 (33800)	838 (2090)	101 (251)	804 (2000)
14	46 (18)	96 (220)	81 (45)	5300 (36200)	934 (6390)	10200 (69400)	3130 (7180)	377 (864)	3010 (6890)
15	85 (144)	154 (345)	111 (118)	17200 (77700)	3040 (13700)	33000 (149000)	2380 (37800)	286 (4550)	2280 (36400)
16	52 (38)	85 (168)	99 (69)	3760 (20300)	663 (3570)	7210 (38800)	6490 (9960)	781 (1200)	6250 (9580)
17	51 (35)	89 (96)	108 (63)	5760 (14600)	1020 (2570)	11000 (28000)	9320 (11900)	1120 (1430)	8980 (11400)
18	56 (22)	96 (54)	141 (55)	897 (2520)	158 (443)	1720 (4820)	1930 (3190)	232 (383)	1860 (3080)
19	62 (28)	95 (36)	152 (68)	938 (2440)	165 (430)	1800 (4670)	3570 (5540)	430 (666)	3450 (5350)
20	66 (48)	103 (56)	125 (73)	2550 (6400)	449 (1130)	4880 (12200)	3320 (7570)	400 (911)	3220 (7330)
21	42 (21)	83 (48)	84 (67)	1480 (2650)	261 (467)	2830 (5070)	1320 (2780)	159 (335)	1280 (2700)
22	47 (56)	77 (62)	78 (83)	1860 (11800)	327 (2080)	3550 (22600)	1540 (11400)	186 (1380)	1500 (11100)
23	38 (22)	72 (21)	89 (84)	2700 (3320)	476 (585)	5170 (6350)	3590 (5510)	432 (664)	3490 (5360)
24	52 (32)	85 (40)	113 (66)	2430 (4690)	428 (826)	4640 (8960)	6780 (8720)	816 (1050)	6610 (8500)
25	48 (16)	84 (36)	216 (772)	4140 (6700)	730 (1180)	7910 (12800)	14200 (51200)	1700 (6170)	13800 (50000)
26									
27	85 (58)	110 (54)	194 (143)	1560 (3820)	274 (674)	2970 (7300)	5880 (8480)	708 (1020)	5750 (8290)
28	40 (34)	81 (48)	102 (74)	1590 (1930)	281 (340)	3040 (3680)	1780 (2190)	214 (264)	1740 (2150)
29	36 (34)	70 (15)	96 (41)	5730 (12900)	1010 (2270)	10900 (24600)	7840 (6610)	944 (796)	7700 (6490)
30	41 (15)	81 (23)	116 (59)	2780 (5630)	490 (993)	5300 (10700)	3340 (3540)	402 (426)	3280 (3480)
31	212 (300)	297 (511)	445 (667)	11400 (94700)	2010 (16700)	21700 (181000)	42300 (121000)	5090 (14600)	41600 (119000)
Avg	56	102	122	4290	757	8220	5700	687	5540
n	25	25	25	25	25	25	25	25	25
SD	36.9	47.6	75.1	3740.0	659.0	7160.0	8070.0	971.0	7940.0
Min	22	68	68	494	87	947	838	101	804
Max	212	297	445	17200	3040	33000	42300	5090	41600

ED_004549_00015841-00119

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for April, 2009.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1	70 (55)	98 (45)	199 (115)	1750 (7590)	308 (1340)	3330 (14500)	11900 (16600)	1440 (1990)	11800 (16300)
2	98 (85)	126 (74)	231 (130)	3470 (13800)	611 (2430)	6610 (26300)	18000 (15200)	2170 (1830)	17800 (15000)
3	54 (26)	103 (46)	178 (104)	4190 (5770)	738 (1020)	7980 (11000)	9470 (10500)	1140 (1260)	9360 (10300)
4	59 (27)	103 (49)	140 (97)	2500 (4530)	441 (799)	4770 (8630)	3840 (4730)	463 (570)	3810 (4690)
5	69 (43)	107 (61)	195 (214)	1590 (3570)	280 (629)	3020 (6790)	4010 (9570)	483 (1150)	3980 (9490)
6	81 (45)	133 (78)	249 (147)	1590 (2940)	280 (518)	3020 (5600)	5330 (7490)	642 (902)	5300 (7440)
7	109 (86)	152 (116)	366 (288)	1730 (6470)	305 (1140)	3290 (12300)	9140 (13700)	1100 (1650)	9100 (13600)
8	130 (125)	182 (166)	422 (202)	6900 (26500)	1220 (4670)	13100 (50400)	24600 (28000)	2960 (3370)	24500 (27900)
9	83 (42)	132 (83)	385 (189)	3800 (6450)	670 (1140)	7230 (12300)	19900 (16200)	2390 (1950)	19800 (16100)
10	39 (29)	85 (57)	289 (183)	1600 (2520)	282 (445)	3040 (4800)	7790 (9920)	937 (1190)	7780 (9910)
11	38 (16)	76 (31)	101 (96)	3050 (4730)	538 (833)	5800 (8980)	4060 (8230)	489 (990)	4070 (8230)
12	38 (13)	70 (23)	94 (71)	2980 (2950)	526 (519)	5670 (5600)	5900 (11500)	710 (1390)	5910 (11500)
13	85 (76)	112 (67)	171 (121)	4430 (10200)	782 (1800)	8420 (19400)	13700 (19900)	1650 (2400)	13800 (20000)
14	50 (20)	95 (51)	157 (117)	5790 (14000)	1020 (2470)	11000 (26700)	7440 (8730)	895 (1050)	7480 (8780)
15	68 (34)	100 (38)	178 (137)	3250 (6820)	573 (1200)	6170 (12900)	8470 (13000)	1020 (1560)	8530 (13100)
16	112 (57)	147 (94)	287 (178)	2430 (6930)	429 (1220)	4620 (13100)	13300 (17000)	1600 (2040)	13400 (17100)
17	114 (91)	163 (158)	237 (370)	1950 (23000)	343 (4060)	3690 (43700)	4550 (28000)	548 (3370)	4600 (28200)
18	91 (73)	137 (132)	138 (107)	2360 (6540)	415 (1150)	4470 (12400)	2850 (10100)	343 (1220)	2880 (10300)
19	92 (34)	124 (38)	165 (90)	1150 (2940)	203 (517)	2180 (5570)	3840 (7640)	462 (920)	3890 (7750)
20	117 (87)	161 (161)	255 (212)	1660 (6230)	292 (1100)	3140 (11800)	9700 (20800)	1170 (2500)	9850 (21100)
21	178 (141)	239 (182)	284 (249)	3580 (11700)	631 (2060)	6780 (22100)	8300 (20700)	999 (2500)	8440 (21100)
22	270 (224)	329 (288)	387 (331)	9780 (69000)	1720 (12200)	18500 (131000)	12900 (61100)	1550 (7350)	13100 (62200)
23	298 (246)	210 (104)	351 (214)	-12100 (41900)	-2140 (7380)	-23000 (79300)	1140 (42600)	138 (5130)	1170 (43500)
24	127 (63)	187 (132)	271 (168)	6750 (27000)	1190 (4760)	12800 (51100)	22100 (39600)	2660 (4760)	22500 (40400)
25	131 (99)	240 (249)	316 (433)	19800 (35800)	3490 (6320)	37500 (67800)	27200 (59700)	3280 (7190)	27900 (61100)
26	100 (59)	146 (96)	223 (128)	3880 (8240)	684 (1450)	7340 (15600)	17200 (19800)	2070 (2390)	17600 (20300)
27	198 (134)	229 (201)	327 (185)	3650 (57500)	643 (10100)	6900 (109000)	15100 (44900)	1820 (5400)	15500 (46000)
28	188 (192)	140 (91)	247 (238)	-16200 (67400)	-2860 (11900)	-30600 (128000)	9950 (74300)	1200 (8940)	10200 (76300)
29	33 (13)	71 (30)	111 (75)	3780 (3760)	667 (662)	7150 (7100)	6480 (6820)	780 (821)	6670 (7020)
30									
Avg	108	145	240	2790	493	5310	10600	1280	10700
n	29	29	29	29	29	29	29	29	29
SD	64.2	58.9	89.4	5830.0	1030.0	11000.0	6690.0	805.0	6770.0
Min	33	70	94	-16200	-2860	-30600	1140	138	1170
Max	298	329	422	19800	3490	37500	27200	3280	27900

ED_004549_00015841-00120

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for May, 2009.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1									
2									
3									
4									
5									
6									
7									
8	56 (32)	86 (27)	129 (77)	2220 (3780)	392 (666)	4200 (7130)	6380 (8870)	768 (1070)	6640 (9230)
9	68 (36)	108 (44)	130 (75)	2410 (4740)	425 (836)	4550 (8950)	2650 (4700)	319 (566)	2750 (4890)
10	73 (35)	127 (113)	209 (174)	5910 (22400)	1040 (3950)	11200 (42300)	8920 (15200)	1070 (1830)	9280 (15800)
11	86 (53)	128 (68)	262 (147)	5750 (11000)	1010 (1940)	10900 (20800)	22700 (21900)	2740 (2640)	23700 (22800)
12	224 (224)	279 (354)	509 (382)	10000 (103000)	1770 (18200)	19000 (195000)	62500 (107000)	7520 (12900)	65000 (111000)
13	94 (72)	143 (116)	333 (243)	3820 (15800)	672 (2790)	7210 (29900)	33400 (45400)	4020 (5470)	34800 (47300)
14	112 (89)	136 (75)	306 (163)	8140 (21900)	1430 (3870)	15400 (41500)	48200 (50700)	5810 (6110)	50200 (52800)
15	80 (35)	132 (84)	221 (178)	2590 (3590)	456 (632)	4890 (6780)	10300 (15100)	1230 (1820)	10700 (15700)
16	95 (53)	122 (52)	234 (150)	2390 (5920)	422 (1040)	4520 (11200)	8600 (12100)	1030 (1460)	8960 (12600)
17	127 (72)	151 (55)	305 (177)	2490 (4310)	439 (761)	4710 (8160)	18500 (25400)	2220 (3060)	19200 (26400)
18	162 (102)	208 (131)	456 (303)	4740 (21200)	835 (3740)	8960 (40100)	26000 (49000)	3130 (5900)	27100 (51100)
19	222 (198)	260 (196)	576 (294)	6590 (40400)	1160 (7110)	12500 (76400)	60600 (56500)	7300 (6800)	63200 (58900)
20	157 (171)	201 (215)	444 (291)	734 (18100)	129 (3190)	1390 (34200)	21300 (35400)	2570 (4270)	22200 (36900)
21	137 (68)	222 (180)	389 (312)	4480 (8670)	789 (1530)	8470 (16400)	11700 (20200)	1410 (2430)	12200 (21100)
22	156 (83)	245 (158)	253 (270)	2630 (6360)	464 (1120)	4980 (12000)	3 (12400)	0 (1490)	3 (12900)
23	108 (69)	168 (139)	258 (397)	2270 (10100)	400 (1780)	4300 (19100)	16700 (52800)	2010 (6350)	17500 (55000)
24	171 (195)	171 (142)	254 (274)	-1200 (29600)	-212 (5220)	-2280 (56100)	9000 (29200)	1080 (3520)	9390 (30500)
25	185 (175)	225 (137)	363 (354)	4710 (17500)	830 (3090)	8930 (33200)	23000 (40300)	2770 (4850)	24000 (42100)
26	166 (85)	220 (93)	371 (312)	5660 (16700)	997 (2940)	10700 (31600)	21500 (42400)	2590 (5100)	22500 (44300)
27	147 (51)	242 (157)	362 (272)	8930 (17600)	1570 (3100)	16900 (33300)	15900 (30500)	1910 (3670)	16600 (31800)
28	166 (73)	269 (174)	454 (394)	6380 (13200)	1130 (2330)	12100 (25100)	17700 (29500)	2130 (3550)	18500 (30800)
29	213 (97)	321 (216)	431 (324)	10400 (31400)	1840 (5540)	19800 (59600)	21400 (48800)	2580 (5880)	22400 (51000)
30	165 (125)	252 (251)	309 (436)	8560 (29300)	1510 (5170)	16200 (55600)	10800 (34000)	1300 (4100)	11300 (35600)
31	152 (87)	254 (189)	399 (440)	5500 (13900)	970 (2450)	10400 (26400)	13100 (30400)	1580 (3660)	13700 (31700)
Avg	138	195	332	4840	853	9160	20500	2460	21300
n	24	24	24	24	24	24	24	24	24
SD	47.8	62.6	111.0	2910.0	514.0	5520.0	15900.0	1920.0	16600.0
Min	56	86	129	-1200	-212	-2280	3	0	3
Max	224	321	576	10400	1840	19800	62500	7520	65000

ED_004549_00015841-00121

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for June, 2009.

Day	Concentration, µg·dsm^{-3}			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-1}	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-2}
1	252 (194)	306 (271)	404 (420)	7490 (44300)	1320 (7810)	14200 (84100)	11600 (56300)	1400 (6770)	12100 (58800)
2	279 (116)	367 (243)	420 (320)	10800 (61400)	1900 (10800)	20400 (117000)	10100 (41600)	1220 (5000)	10600 (43500)
3	240 (139)	336 (293)	668 (571)	9490 (37200)	1670 (6560)	18000 (70700)	40800 (76800)	4910 (9250)	42700 (80400)
4	267 (215)	473 (1110)	705 (1260)	61200 (441000)	10800 (77800)	116000 (838000)	99200 (591000)	11900 (71100)	104000 (618000)
5	84 (143)	95 (148)	127 (456)	-547 (17100)	-97 (3020)	-1040 (32500)	-138 (28000)	-17 (3370)	-145 (29300)
6	81 (43)	133 (140)	165 (334)	9050 (28900)	1600 (5090)	17200 (54900)	8640 (70500)	1040 (8480)	9040 (73700)
7	51 (18)	82 (88)	153 (612)	1740 (6440)	307 (1130)	3310 (12200)	6050 (42800)	728 (5150)	6330 (44800)
8	66 (76)	95 (135)	117 (298)	2980 (23700)	525 (4170)	5670 (45000)	3490 (26200)	420 (3150)	3660 (27400)
9	100 (86)	149 (168)	200 (318)	1760 (16500)	310 (2910)	3350 (31400)	4360 (26000)	525 (3130)	4570 (27200)
10									
11	126 (85)	173 (67)	293 (414)	3850 (9440)	679 (1660)	7320 (18000)	15900 (68100)	1920 (8200)	16700 (71400)
12	175 (177)	226 (222)	354 (599)	5640 (57100)	994 (10100)	10700 (109000)	22400 (114000)	2700 (13800)	23500 (120000)
13									
14									
15									
16									
17									
18	152 (103)	232 (173)	357 (430)	6690 (14900)	1180 (2620)	12700 (28300)	22300 (54700)	2680 (6590)	23300 (57400)
19	104 (78)	218 (119)	217 (165)	12800 (17400)	2250 (3060)	24300 (33100)	8380 (15700)	1010 (1890)	8790 (16500)
20	81 (40)	171 (131)	184 (155)	12500 (19000)	2200 (3350)	23800 (36200)	13300 (26200)	1600 (3150)	13900 (27500)
21	98 (84)	209 (162)	220 (251)	18800 (55800)	3320 (9840)	35900 (106000)	18600 (89100)	2240 (10700)	19500 (93600)
22									
23	136 (64)	256 (149)	315 (188)	10900 (18700)	1910 (3290)	20700 (35600)	13100 (15300)	1580 (1840)	13800 (16100)
24	337 (200)	468 (576)	924 (1330)	13100 (79300)	2300 (14000)	24900 (151000)	101000 (292000)	12200 (35200)	106000 (307000)
25	155 (93)	266 (164)	393 (436)	9900 (24000)	1740 (4220)	18900 (45700)	25000 (64900)	3010 (7810)	26200 (68100)
26	138 (127)	245 (219)	344 (419)	6540 (18300)	1150 (3230)	12500 (35000)	14300 (29200)	1720 (3520)	15000 (30700)
27	267 (193)	291 (187)	519 (721)	-977 (22400)	-172 (3940)	-1870 (42700)	42200 (126000)	5080 (15100)	44400 (132000)
28	229 (205)	324 (299)	471 (415)	2440 (39400)	430 (6950)	4660 (75300)	22000 (42700)	2650 (5140)	23100 (44900)
29	212 (105)	375 (249)	896 (1750)	14100 (24400)	2490 (4300)	26900 (46600)	58000 (153000)	6980 (18400)	61000 (161000)
30	196 (102)	340 (227)	549 (421)	10300 (18300)	1820 (3220)	19700 (34900)	35500 (40400)	4280 (4870)	37400 (42500)
Avg	166	254	391	10000	1770	19100	25900	3120	27200
n	23	23	23	23	23	23	23	23	23
SD	78.8	108.0	226.0	12000.0	2110.0	22800.0	26700.0	3210.0	28000.0
Min	51	82	117	-977	-172	-1870	-138	-17	-145
Max	337	473	924	61200	10800	116000	101000	12200	106000

ED_004549_00015841-00122

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for July, 2009.

Day	Concentration, µg·dsm^{-3}			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-1}	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-2}
1	224 (121)	387 (241)	660 (586)	8300 (20600)	1460 (3630)	15900 (39300)	23600 (34400)	2840 (4140)	24800 (36200)
2	339 (241)	574 (484)	784 (694)	5840 (18700)	1030 (3290)	11200 (35700)	10900 (37400)	1320 (4500)	11500 (39300)
3	377 (234)	493 (395)	695 (681)	8440 (32900)	1490 (5810)	16100 (63000)	10900 (34000)	1310 (4100)	11400 (35800)
4	266 (196)	338 (387)	456 (522)	4080 (42700)	719 (7520)	7800 (81600)	13400 (56800)	1610 (6830)	14100 (59800)
5	217 (163)	381 (477)	610 (721)	13900 (63000)	2450 (11100)	26600 (120000)	22600 (56800)	2730 (6840)	23800 (59800)
6	199 (151)	407 (571)	620 (812)	30900 (78800)	5440 (13900)	59100 (151000)	66100 (175000)	7950 (21000)	69600 (184000)
7	174 (81)	338 (312)	480 (375)	14000 (31900)	2470 (5630)	26800 (61100)	19600 (32700)	2350 (3940)	20600 (34500)
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22	248 (241)	264 (219)	427 (395)	35 (26000)	6 (4570)	67 (49800)	28400 (42100)	3420 (5060)	30000 (44500)
23	309 (195)	408 (280)	1010 (710)	27200 (74400)	4790 (13100)	52200 (143000)	118000 (170000)	14200 (20400)	125000 (180000)
24	362 (264)	352 (267)	640 (392)	-5960 (42500)	-1050 (7490)	-11400 (81600)	22900 (31900)	2750 (3840)	24200 (33700)
25	372 (268)	602 (663)	670 (450)	21400 (95600)	3770 (16900)	41100 (184000)	24000 (96900)	2890 (11700)	25400 (102000)
26	255 (172)	427 (432)	687 (489)	6870 (20700)	1210 (3640)	13200 (39800)	21400 (32500)	2570 (3920)	22600 (34400)
27	388 (244)	640 (568)	913 (582)	10800 (24600)	1910 (4340)	20800 (47300)	19400 (38400)	2340 (4620)	20600 (40600)
28	468 (247)	670 (707)	948 (553)	8100 (32600)	1430 (5750)	15600 (62800)	19800 (37200)	2390 (4470)	21000 (39300)
29									
30									
31									
Avg	299.9	448.6	685.7	10993.2	1937.5	21076.2	30071.4	3619.3	31757.1
n	14	14	14	14	14	14	14	14	14
SD	86	126	178	10022	1765	19200	28603	3441	30285
Min	174	264	427	-5960	-1050	-11400	10900	1310	11400
Max	468	670	1010	30900	5440	59100	118000	14200	125000

ED_004549_00015841-00123

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for August, 2009.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1									
2									
3									
4									
5									
6	429 (269)	532 (440)	683 (397)	12400 (47700)	2180 (8410)	23900 (91900)	23000 (45100)	2770 (5430)	24400 (47800)
7	307 (182)	360 (258)	478 (253)	5910 (37300)	1040 (6580)	11400 (72000)	17200 (32600)	2070 (3920)	18300 (34600)
8	295 (204)	327 (245)	468 (288)	-265 (38700)	-47 (6830)	-510 (74700)	12000 (47100)	1440 (5670)	12700 (49900)
9	286 (197)	385 (373)	586 (424)	5860 (25100)	1030 (4430)	11300 (48400)	22100 (33200)	2660 (3990)	23500 (35200)
10	324 (230)	471 (440)	648 (381)	16100 (51300)	2830 (9040)	31000 (99000)	27300 (58500)	3280 (7040)	29000 (62100)
11	326 (201)	382 (339)	706 (422)	5410 (48900)	953 (8620)	10400 (94300)	28900 (49400)	3480 (5950)	30600 (52400)
12									
13									
14	237 (132)	290 (173)	554 (308)	-775 (27500)	-137 (4850)	-1500 (53100)	29400 (44900)	3540 (5400)	31200 (47700)
15	306 (123)	332 (215)	662 (417)	2820 (22600)	497 (3990)	5450 (43700)	31200 (49900)	3750 (6010)	33100 (53000)
16		423 (386)	744 (422)						
17		544 (407)	1210 (1350)						
18		560 (435)	1040 (783)						
19		806 (948)	1260 (946)						
20		690 (691)	1120 (1030)						
21		739 (1080)	981 (1480)						
22		2040 (2070)	591 (555)						
23									
24									
25									
26									
27									
28									
29									
30									
31									
Avg	313.8	592.1	782.1	5932.5	1043.3	11430.0	23887.5	2873.8	25350.0
n	8	15	15	8	8	8	8	8	8
SD	54	430	267	5838	1026	11245	6662	802	7063
Min	237	290	468	-775	-137	-1500	12000	1440	12700
Max	429	2040	1260	16100	2830	31000	31200	3750	33100

ED_004549_00015841-00124

Table F3. Daily means (SD) of PM10 concentrations and emissions at site WA5B for September, 2009.

Day	Concentration, µg·dsm^{-3}			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-1}	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-2}
1									
2									
3									
4		485 (293)							
5		332 (272)							
6		333 (535)							
7		252 (210)							
8		319 (242)							
9		659 (702)							
10		408 (376)							
11		529 (445)							
12		391 (390)							
13		452 (364)							
14		342 (240)							
15		397 (330)							
16		589 (683)							
17	305 (157)	445 (283)	878 (488)	9270 (24200)	1630 (4270)	18100 (47300)	56500 (54500)	6800 (6560)	60300 (58100)
18	381 (212)	624 (475)	860 (607)	9030 (20900)	1590 (3680)	17600 (40800)	14100 (21000)	1700 (2530)	15000 (22400)
19	307 (235)	419 (439)	818 (601)	9020 (40300)	1590 (7110)	17600 (78700)	35800 (86600)	4310 (10400)	38200 (92400)
20	234 (147)	318 (276)	754 (502)	5290 (19600)	932 (3460)	10300 (38300)	51400 (56500)	6180 (6800)	54800 (60300)
21	440 (292)	540 (481)	1090 (581)	806 (13200)	142 (2320)	1570 (25700)	18500 (27300)	2230 (3290)	19800 (29200)
22	427 (284)	718 (627)	1270 (818)	2410 (11000)	425 (1940)	4710 (21500)	9910 (15500)	1190 (1860)	10600 (16500)
23	487 (300)	563 (486)	1520 (1220)	-508 (8250)	-90 (1450)	-992 (16100)	12900 (17700)	1550 (2130)	13800 (18900)
24									
25	317 (194)	595 (659)	951 (693)	6290 (21600)	1110 (3810)	12300 (42200)	31000 (34500)	3730 (4150)	33100 (36800)
26	313 (185)	418 (389)	902 (469)	2330 (26000)	410 (4580)	4540 (50700)	28200 (40800)	3400 (4920)	30100 (43600)
27	339 (204)	522 (485)	1210 (713)	7070 (33900)	1250 (5970)	13800 (66200)	37000 (43500)	4450 (5230)	39500 (46400)
28									
29									
30									
Avg	355	463	1025	5101	899	9953	29531	3554	31520
n	10	23	10	10	10	10	10	10	10
SD	77	124	242	3626	639	7076	16076	1934	17143
Min	234	252	754	-508	-90	-992	9910	1190	10600
Max	487	718	1520	9270	1630	18100	56500	6800	60300

ED_004549_00015841-00125

Table F4. PM2.5 concentrations and emissions.

Table F4. Daily means (SD) of PM2.5 concentrations and emissions at site WA5B for January, 2008.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18		20 (9)	15 (17)						
19		21 (9)	16 (17)						
20		13 (9)	6 (17)						
21		16 (12)	10 (20)						
22		19 (9)	13 (14)						
23		18 (7)	13 (14)						
24		21 (8)	15 (14)						
25		23 (8)	18 (17)						
26		24 (7)	20 (12)						
27		25 (11)	19 (14)						
28		15 (10)	7 (12)						
29		10 (8)	4 (18)						
30		13 (7)	7 (17)						
31		12 (6)	6 (14)						
Avg		18	12						
n	0	14	14	0	0	0	0	0	0
SD		4.6	5.2						
Min		10	4						
Max		25	20						

ED_004549_00015841-00126

Table F4. Daily means (SD) of PM2.5 concentrations and emissions at site WA5B for February, 2008.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1		13 (7)	8 (12)						
2		13 (6)	6 (16)						
3		14 (6)	9 (9)						
4		16 (9)	12 (19)						
5		12 (8)	6 (16)						
6		13 (6)	8 (13)						
7		17 (11)	15 (21)						
8		36 (30)	51 (41)						
9		36 (23)	38 (28)						
10		37 (22)	42 (32)						
11		50 (32)	65 (37)						
12		50 (38)	57 (31)						
13		46 (22)	67 (29)						
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
Avg		27.1	29.5						
n		13	13						
SD		15.5	24.2						
Min		11.8	6.3						
Max		50.2	67.4						

ED_004549_00015841-00127

Table F4. Daily means (SD) of PM2.5 concentrations and emissions at site WA5B for July, 2008.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11	14 (7)	28 (54)	19 (70)	659 (4030)	116 (711)	1290 (7870)	-195 (5440)	-24 (655)	-196 (5460)
12	14 (8)	28 (59)	19 (80)	348 (4130)	61 (728)	679 (8070)	-676 (5440)	-81 (655)	-679 (5460)
13	13 (9)	25 (64)	16 (82)	604 (5270)	107 (928)	1180 (10300)	-401 (6730)	-48 (811)	-403 (6760)
14	18 (14)	27 (69)	19 (83)	757 (7120)	133 (1260)	1480 (13900)	-167 (7010)	-20 (843)	-167 (7030)
15	17 (15)	26 (70)	21 (84)	607 (7320)	107 (1290)	1190 (14300)	-38 (7440)	-5 (895)	-38 (7460)
16	14 (10)	28 (54)	18 (59)	1020 (5320)	180 (937)	2000 (10400)	-57 (5090)	-7 (613)	-57 (5110)
17	19 (15)	33 (54)	19 (57)	2230 (8550)	394 (1510)	4360 (16700)	217 (7630)	26 (919)	217 (7650)
18	17 (7)	51 (55)	35 (62)	2820 (5250)	497 (926)	5500 (10300)	1120 (5860)	135 (705)	1120 (5870)
19	24 (21)	57 (64)	41 (68)	3160 (7340)	558 (1290)	6180 (14300)	1310 (5810)	158 (700)	1310 (5820)
20	23 (9)	47 (46)	36 (53)	1910 (4740)	336 (835)	3720 (9250)	837 (5460)	101 (658)	838 (5470)
21	32 (23)	65 (71)	50 (78)	3370 (7820)	594 (1380)	6580 (15300)	1470 (7610)	177 (916)	1470 (7610)
22	20 (9)	47 (32)	34 (42)	3960 (7040)	699 (1240)	7740 (13800)	1450 (5600)	174 (674)	1450 (5590)
23									
24									
25									
26									
27									
28									
29									
30									
31									
Avg	19	39	27	1790	315	3490	406	49	405
n	12	12	12	12	12	12	12	12	12
SD	5.3	13.6	10.9	1230.0	217.0	2400.0	747.0	89.9	747.0
Min	13	25	16	348	61	679	-676	-81	-679
Max	32	65	50	3960	699	7740	1470	177	1470

ED_004549_00015841-00128

Table F4. Daily means (SD) of PM2.5 concentrations and emissions at site WA5B for February, 2009.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13	17 (4)	53 (125)	38 (5)	3340 (11900)	589 (2090)	6540 (23200)	1490 (694)	180 (84)	1510 (702)
14	16 (4)	53 (219)	40 (5)	469 (8050)	83 (1420)	916 (15700)	711 (579)	86 (70)	715 (583)
15	17 (4)	69 (465)	40 (3)	925 (13500)	163 (2390)	1800 (26400)	503 (429)	61 (52)	502 (428)
16	16 (4)	59 (382)	39 (3)	1750 (27500)	308 (4840)	3410 (53500)	1240 (611)	149 (74)	1230 (605)
17	17 (4)	52 (247)	43 (5)	1800 (17700)	318 (3120)	3510 (34400)	1500 (1710)	181 (206)	1480 (1690)
18	20 (5)	86 (419)	45 (5)	1200 (17700)	211 (3130)	2330 (34500)	682 (582)	82 (70)	668 (570)
19	17 (4)	50 (288)	43 (7)	841 (15300)	148 (2690)	1630 (29700)	888 (498)	107 (60)	866 (487)
20	19 (4)	63 (258)	44 (4)	1950 (17700)	344 (3110)	3780 (34300)	963 (737)	116 (89)	933 (713)
21	18 (4)	52 (171)	42 (5)	1250 (8650)	220 (1530)	2420 (16800)	927 (706)	112 (85)	893 (681)
22	19 (5)	56 (99)	44 (5)	1210 (4620)	213 (814)	2340 (8940)	509 (457)	61 (55)	487 (437)
23	16 (4)	48 (145)	40 (6)	1330 (13700)	235 (2420)	2570 (26500)	1360 (1590)	164 (192)	1300 (1510)
24	13 (4)	50 (141)	38 (4)	7250 (29800)	1280 (5260)	14000 (57600)	5850 (2180)	704 (263)	5530 (2070)
25	13 (4)	51 (150)	40 (5)	6830 (26500)	1200 (4670)	13200 (51100)	5250 (1740)	631 (209)	4930 (1630)
26									
27									
28									
Avg	17	57	41	2320	409	4490	1680	203	1620
n	13	13	13	13	13	13	13	13	13
SD	2.0	10.2	2.1	2120.0	374.0	4090.0	1680.0	203.0	1580.0
Min	13	48	38	469	83	916	503	61	487
Max	20	86	45	7250	1280	14000	5850	704	5530

ED_004549_00015841-00129

Table F4. Daily means (SD) of PM2.5 concentrations and emissions at site WA5B for July, 2009.

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1									
2									
3									
4									
5									
6									
7									
8									
9	25 (12)	69 (7)	62 (12)	4740 (2880)	836 (508)	9090 (5510)	3800 (2270)	457 (273)	4000 (2390)
10	29 (11)	73 (12)	68 (23)	3590 (3250)	632 (573)	6870 (6230)	2760 (3140)	332 (378)	2900 (3310)
11	29 (9)	73 (13)	65 (18)	4920 (3550)	867 (625)	9430 (6790)	3970 (3690)	478 (444)	4180 (3890)
12	39 (14)	77 (13)	78 (31)	5450 (4130)	960 (728)	10400 (7910)	6470 (7570)	779 (912)	6830 (7990)
13	23 (8)	70 (10)	59 (8)	5700 (4400)	1000 (776)	10900 (8440)	3850 (2530)	464 (304)	4060 (2660)
14	30 (9)	78 (16)	72 (16)	3980 (3210)	702 (566)	7630 (6150)	3090 (2400)	373 (289)	3270 (2530)
15	35 (8)	80 (14)	75 (32)	3630 (3140)	640 (554)	6970 (6030)	3140 (5340)	378 (643)	3310 (5640)
16									
17	39 (12)	82 (17)	78 (35)	3440 (3470)	606 (611)	6590 (6650)	3090 (5350)	372 (644)	3260 (5650)
18	37 (15)	78 (15)	73 (22)	3470 (2910)	613 (513)	6670 (5580)	2780 (2710)	334 (326)	2930 (2860)
19	28 (11)	72 (12)	66 (18)	3320 (2280)	585 (402)	6370 (4380)	3030 (2300)	365 (276)	3200 (2420)
20	41 (18)	88 (22)	91 (69)	3790 (2890)	668 (509)	7280 (5550)	3530 (6340)	425 (763)	3730 (6700)
21	45 (11)	88 (15)	86 (24)	3000 (3120)	528 (550)	5750 (5990)	2690 (3190)	324 (385)	2840 (3380)
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
Avg	33	77	73	4090	720	7830	3520	423	3710
n	12	12	12	12	12	12	12	12	12
SD	6.6	6.3	9.2	852.0	150.0	1630.0	987.0	119.0	1040.0
Min	23	69	59	3000	528	5750	2690	324	2840
Max	45	88	91	5700	1000	10900	6470	779	6830

ED_004549_00015841-00130

Table F5. TSP concentrations and emissions.

Table F5. Daily means (SD) of TSP concentrations and emissions at site WA5B for April, 2008

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11		515 (360)	1090 (789)						
12		340 (285)	567 (307)						
13		353 (236)	866 (462)						
14		482 (335)	1060 (617)						
15		565 (512)	1620 (1310)						
16		386 (264)	1140 (629)						
17		317 (436)	765 (702)						
18	284 (192)	312 (369)	446 (426)	9920 (79700)	1750 (14000)	19400 (156000)	35000 (106000)	4220 (12800)	36500 (111000)
19	72 (47)	88 (90)	172 (434)	1470 (10200)	259 (1810)	2870 (20000)	9290 (59300)	1120 (7140)	9660 (61700)
20	86 (88)	93 (98)	134 (241)	1640 (21700)	289 (3830)	3200 (42500)	4820 (36100)	580 (4350)	5010 (37500)
21	86 (41)	100 (78)	146 (192)	1410 (9760)	249 (1720)	2760 (19100)	5160 (26200)	621 (3160)	5360 (27200)
22	78 (46)	111 (92)	180 (199)	3120 (12500)	550 (2210)	6090 (24400)	7520 (22800)	905 (2750)	7810 (23700)
23	30 (12)	50 (58)	107 (154)	3400 (9410)	599 (1660)	6630 (18400)	12300 (26400)	1480 (3180)	12800 (27400)
24									
25									
26									
27									
28									
29									
30									
Avg	106	286	638	3490	616	6820	12400	1490	12900
n	6	13	13	6	6	6	6	6	6
SD	82.0	172.0	473.0	2980.0	525.0	5820.0	10500.0	1260.0	10900.0
Min	30	50	107	1410	249	2760	4820	580	5010
Max	284	565	1620	9920	1750	19400	35000	4220	36500

ED_004549_00015841-00131

Table F5. Daily means (SD) of TSP concentrations and emissions at site WA5B for June, 2008

Day	Concentration, µg·dsm^{-3}			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-1}	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-2}
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13	112 (62)	379 (271)	634 (429)	33100 (44000)	5840 (7750)	64700 (85900)	57100 (64500)	6880 (7760)	58000 (65500)
14	65 (21)	274 (270)	293 (179)	18500 (30200)	3250 (5320)	36000 (58900)	19000 (16300)	2290 (1970)	19300 (16600)
15	98 (86)	328 (261)	461 (347)	19700 (24500)	3470 (4320)	38400 (47800)	32000 (33800)	3850 (4070)	32400 (34300)
16	213 (190)	532 (449)	911 (571)	35600 (73700)	6270 (13000)	69500 (144000)	94700 (118000)	11400 (14200)	96100 (119000)
17	145 (87)	591 (685)	732 (537)	54800 (87400)	9670 (15400)	107000 (171000)	64100 (90100)	7710 (10800)	65000 (91400)
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
Avg	126	421	606	32300	5700	63100	53400	6430	54200
n	5	5	5	5	5	5	5	5	5
SD	50.6	121.0	214.0	13200.0	2330.0	25800.0	26400.0	3170.0	26700.0
Min	65	274	293	18500	3250	36000	19000	2290	19300
Max	213	591	911	54800	9670	107000	94700	11400	96100

ED_004549_00015841-00132

Table F5. Daily means (SD) of TSP concentrations and emissions at site WA5B for September, 2008

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13	169 (107)	392 (263)	624 (367)	14700 (24300)	2590 (4280)	28700 (47500)	25800 (24400)	3110 (2930)	25200 (23800)
14	255 (177)	450 (371)	865 (543)	8330 (22700)	1470 (4010)	16300 (44400)	15400 (20000)	1860 (2400)	15100 (19500)
15	316 (213)	522 (544)	1440 (940)	8200 (23200)	1450 (4090)	16000 (45300)	37600 (48600)	4530 (5850)	36800 (47500)
16	317 (221)	614 (482)	1720 (1120)	8570 (18000)	1510 (3180)	16700 (35200)	34700 (38600)	4180 (4650)	33900 (37700)
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
Avg	264	494	1160	9940	1750	19400	28400	3420	27800
n	4	4	4	4	4	4	4	4	4
SD	60.3	83.1	438.0	2730.0	482.0	5340.0	8650.0	1040.0	8450.0
Min	169	392	624	8200	1450	16000	15400	1860	15100
Max	317	614	1720	14700	2590	28700	37600	4530	36800

ED_004549_00015841-00133

Table F5. Daily means (SD) of TSP concentrations and emissions at site WA5B for November, 2008

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14	58 (25)	346 (274)	415 (229)	7610 (9460)	1340 (1670)	14600 (18200)	10400 (9770)	1250 (1180)	11900 (11200)
15	46 (16)	221 (117)	333 (134)	3820 (4410)	673 (778)	7300 (8430)	6570 (5600)	791 (674)	7030 (5990)
16	47 (10)	237 (128)	308 (129)	3390 (3770)	597 (664)	6490 (7220)	4900 (4710)	590 (567)	5220 (5030)
17	57 (17)	319 (290)	361 (132)	4520 (7710)	796 (1360)	8690 (14800)	5190 (4910)	625 (591)	5520 (5220)
18	70 (18)	310 (145)	408 (187)	3650 (3830)	643 (674)	7040 (7390)	5590 (6010)	673 (723)	5920 (6370)
19	65 (33)	277 (187)	500 (211)	8240 (8230)	1450 (1450)	16000 (15900)	21200 (13200)	2560 (1590)	22500 (14000)
20	62 (28)	273 (154)	489 (200)	13200 (20000)	2330 (3520)	25800 (38900)	28800 (26800)	3460 (3220)	30300 (28200)
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
Avg	58	283	402	6350	1120	12300	11800	1420	12600
n	7	7	7	7	7	7	7	7	7
SD	8.4	41.8	68.3	3350.0	591.0	6540.0	8750.0	1050.0	9190.0
Min	46	221	308	3390	597	6490	4900	590	5220
Max	70	346	500	13200	2330	25800	28800	3460	30300

ED_004549_00015841-00134

Table F5. Daily means (SD) of TSP concentrations and emissions at site WA5B for February, 2009

Day	Concentration, µg·dsm^{-3}			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-1}	g·d^{-1}	mg·d^{-1}m^{-2}	mg·d^{-1} hd^{-2}
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27	35 (11)	208 (258)	325 (156)	5980 (12200)	1050 (2150)	11500 (23500)	9320 (8660)	1120 (1040)	8750 (8130)
28	37 (15)	176 (209)	263 (79)	5380 (12000)	948 (2120)	10300 (23200)	9380 (7180)	1130 (864)	8820 (6760)
Avg	36	192	294	5680	1000	10900	9350	1130	8790
n	2	2	2	2	2	2	2	2	2
SD	1.2	16.1	31.3	300.0	53.0	580.0	31.5	3.8	36.4
Min	35	176	263	5380	948	10300	9320	1120	8750
Max	37	208	325	5980	1050	11500	9380	1130	8820

ED_004549_00015841-00135

Table F5. Daily means (SD) of TSP concentrations and emissions at site WA5B for March, 2009

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1	27 (8)	165 (205)	308 (83)	4640 (10800)	818 (1910)	8930 (20800)	9650 (7550)	1160 (909)	9090 (7110)
2	21 (7)	105 (132)	243 (106)	5070 (11300)	893 (2000)	9750 (21800)	16200 (20900)	1950 (2520)	15300 (19700)
3	17 (5)	106 (180)	289 (106)	3830 (9980)	675 (1760)	7360 (19200)	8920 (7600)	1070 (915)	8420 (7180)
4									
5									
6									
7									
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9									
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26									
27									
28									
29									
30									
31									
Avg	22	125	280	4510	795	8680	11600	1400	10900
n	3	3	3	3	3	3	3	3	3
SD	3.8	27.9	27.6	513.0	90.4	988.0	3270.0	394.0	3090.0
Min	17	105	243	3830	675	7360	8920	1070	8420
Max	27	165	308	5070	893	9750	16200	1950	15300

ED_004549_00015841-00136

Table F5. Daily means (SD) of TSP concentrations and emissions at site WA5B for May, 2009

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1	125 (58)	431 (399)	813 (659)	10300 (19100)	1820 (3360)	19500 (36000)	27400 (30200)	3300 (3630)	28300 (31200)
2	98 (70)	299 (318)	689 (624)	6300 (7790)	1110 (1370)	11900 (14700)	26100 (55500)	3140 (6680)	26900 (57400)
3	49 (17)	163 (128)	548 (385)	5390 (8740)	950 (1540)	10200 (16500)	25400 (33300)	3060 (4010)	26300 (34500)
4	66 (39)	254 (217)	634 (426)	13400 (27100)	2370 (4770)	25300 (51100)	46200 (68700)	5560 (8270)	47900 (71200)
5	116 (100)	488 (631)	1160 (1220)	122000 (254000)	21600 (44700)	231000 (479000)	374000 (634000)	45000 (76300)	389000 (659000)
6	69 (43)	303 (284)	787 (626)	46400 (88300)	8170 (15600)	87500 (167000)	151000 (266000)	18200 (32100)	157000 (277000)
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
Avg	87	323	771	34000	6000	64200	108000	13000	113000
n	6	6	6	6	6	6	6	6	6
SD	27.7	108.0	194.0	41900.0	7380.0	79000.0	127000.0	15300.0	132000.0
Min	49	163	548	5390	950	10200	25400	3060	26300
Max	125	488	1160	122000	21600	231000	374000	45000	389000

ED_004549_00015841-00137

Table F5. Daily means (SD) of TSP concentrations and emissions at site WA5B for July, 2009

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23	309 (195)	408 (280)	1010 (710)	27200 (74400)	4790 (13100)	52200 (143000)	118000 (170000)	14200 (20400)	125000 (180000)
24	362 (264)	352 (267)	640 (392)	-5960 (42500)	-1050 (7490)	-11400 (81600)	22900 (31900)	2750 (3840)	24200 (33700)
25	372 (268)	602 (663)	670 (450)	21400 (95600)	3770 (16900)	41100 (184000)	24000 (96900)	2890 (11700)	25400 (102000)
26	255 (172)	427 (432)	687 (489)	6870 (20700)	1210 (3640)	13200 (39800)	21400 (32500)	2570 (3920)	22600 (34400)
27	388 (244)	640 (568)	913 (582)	10800 (24600)	1910 (4340)	20800 (47300)	19400 (38400)	2340 (4620)	20600 (40600)
28	468 (247)	670 (707)	948 (553)	8100 (32600)	1430 (5750)	15600 (62800)	19800 (37200)	2390 (4470)	21000 (39300)
29									
30	395 (146)	772 (674)	1340 (1050)	44200 (100000)	7790 (17700)	85000 (193000)	85500 (123000)	10300 (14800)	90600 (130000)
31	591 (266)	1110 (1070)	2010 (1350)	41600 (129000)	7330 (22700)	80100 (248000)	89300 (98600)	10800 (11900)	94600 (104000)
Avg	393	622	1030	19300	3400	37100	50100	6030	53000
n	8	8	8	8	8	8	8	8	8
SD	95.2	229.0	429.0	16500.0	2900.0	31700.0	38000.0	4580.0	40200.0
Min	255	352	640	-5960	-1050	-11400	19400	2340	20600
Max	591	1110	2010	44200	7790	85000	118000	14200	125000

ED_004549_00015841-00138

Table F5. Daily means (SD) of TSP concentrations and emissions at site WA5B for August, 2009

Day	Concentration, $\mu g \cdot dsm^{-3}$			Barn 2			Barn 4		
	Inlet	Barn 2	Barn 4	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-2}$
1	511 (256)	1120 (1140)	1790 (1420)	27100 (64800)	4790 (11400)	52300 (125000)	53800 (68500)	6480 (8240)	57000 (72500)
2	404 (243)	821 (773)	1720 (1340)	29800 (54900)	5250 (9680)	57300 (106000)	84600 (87900)	10200 (10600)	89600 (93200)
3	496 (224)	1220 (1130)	2120 (1630)	51800 (99800)	9120 (17600)	99700 (192000)	97900 (105000)	11800 (12600)	104000 (111000)
4	635 (271)	1470 (1610)	2420 (2050)	88500 (258000)	15600 (45500)	170000 (497000)	234000 (519000)	28200 (62500)	248000 (550000)
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
Avg	511	1160	2020	49300	8690	94900	118000	14200	125000
n	4	4	4	4	4	4	4	4	4
SD	82.2	231.0	280.0	24600.0	4330.0	47300.0	69100.0	8320.0	73300.0
Min	404	821	1720	27100	4790	52300	53800	6480	57000
Max	635	1470	2420	88500	15600	170000	234000	28200	248000

ED_004549_00015841-00139

Table F6. Hydrogen sulfide concentrations.

Table F6. Daily means (SD) of H2S concentrations at site WA5B for October, 2007.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20			3.2 (3.5)	4.6 (4.9)	8.7 (11.6)	12.4 (16.5)				
21			7.3 (5.0)	10.3 (7.1)	9.1 (10.4)	12.9 (14.8)				
22			13.1 (12.6)	18.7 (17.9)	22.7 (20.2)	32.4 (28.7)				
23					32.5 (38.9)	51.9 (57.1)	43.8 (62.5)	70.6 (92.5)		
24	217.0 (61.2)	309.0 (87.1)	5.3 (4.4)	7.5 (6.2)	13.8 (15.9)	19.6 (22.7)	97.0 (191.0)	138.0 (271.0)		
25	176.0 (182.0)	260.0 (259.0)								
26										
27			19.3 (14.8)	27.5 (21.1)	29.4 (34.4)	41.8 (48.8)				
28			11.8 (12.3)	16.8 (17.4)	26.6 (34.3)	37.9 (48.8)				
29			9.3 (9.8)	13.3 (13.9)	16.8 (16.8)	23.9 (23.9)	20.2 (21.2)	28.7 (30.2)		
30			10.9 (39.9)	15.5 (56.7)						
31										
Avg	197.0	284.0	10.0	14.3	20.0	29.1	53.7	79.1		
n	2	2	8	8	8	8	3	3	0	0
SD	20.3	24.5	4.7	6.7	8.6	13.4	32.1	45.0		
Min	176.0	260.0	3.2	4.6	8.7	12.4	20.2	28.7		
Max	217	309	19.3	27.5	32.5	51.9	97.0	138.0		

ED_004549_00015841-00140

Table F6. Daily means (SD) of H2S concentrations at site WA5B for November, 2007.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1										
2										
3					14.5 (12.9)	20.6 (18.3)				
4			9.1 (6.7)	12.9 (9.6)	18.7 (18.9)	26.7 (26.9)				
5			23.3 (31.4)	33.1 (44.7)	33.8 (47.2)	48.1 (67.1)				
6	36.6 (78.4)	52.0 (111.0)	36.6 (44.2)	52.0 (62.9)						
7	35.6 (40.2)	50.6 (57.2)	15.5 (11.2)	22.0 (16.0)	57.4 (61.3)	81.7 (87.2)				
8	129.0 (396.0)	183.0 (563.0)	17.6 (15.0)	25.1 (21.3)	15.6 (17.1)	22.2 (24.4)				
9	73.7 (198.0)	105.0 (282.0)	10.0 (11.2)	14.2 (15.9)	10.1 (5.9)	14.4 (8.3)				
10	17.9 (31.0)	25.4 (44.0)	8.4 (11.7)	11.9 (16.6)	16.1 (17.4)	23.0 (24.7)				
11	17.1 (20.3)	24.2 (28.9)	32.5 (34.7)	46.2 (49.3)	14.9 (14.7)	21.2 (20.9)				
12	5.5 (5.6)	9.0 (8.3)	4.5 (4.4)	6.4 (6.2)	13.1 (22.0)	18.6 (31.3)				
13	14.5 (15.9)									
14	37.5 (33.7)									
15	17.6 (20.3)	25.1 (28.8)	28.0 (33.9)	39.8 (48.2)			26.9 (29.9)	38.3 (42.4)		
16	23.5 (27.7)	33.5 (39.4)	4.9 (6.4)	6.9 (9.2)	14.8 (20.0)	21.1 (28.5)	7.3 (6.1)	10.4 (8.6)		
17	5.0 (2.0)	7.1 (2.9)	6.2 (3.1)	8.8 (4.4)	22.3 (30.8)	31.8 (43.8)	31.3 (47.0)	44.5 (66.9)		
18	4.1 (3.1)	5.8 (4.5)	11.4 (25.3)	16.2 (36.0)	12.5 (23.9)	17.8 (34.0)				
19	3.0 (0.9)	4.3 (1.2)	11.9 (22.0)	16.9 (31.3)	2.9 (1.6)	4.1 (2.2)				
20	8.4 (5.9)	11.9 (8.3)	9.2 (10.0)	13.1 (14.3)						
21			9.6 (10.2)	13.7 (14.5)						
22			5.3 (9.1)		4.8 (2.8)	6.0 (3.6)	7.7 (10.4)	12.1 (16.1)		
23			7.1 (7.2)		4.4 (3.1)	6.4 (4.4)				
24			5.2 (10.8)	7.4 (15.3)	3.9 (1.8)	5.5 (2.6)				
25			11.5 (17.9)	16.7 (25.7)	3.8 (2.6)	5.5 (3.7)				
26										
27										
28										
29										
30										
Avg	28.6	41.3	13.4	20.2	15.5	22.0	18.3	26.3		
n	15	13	20	18	17	17	4	4	0	0
SD	32.3	48.8	9.2	13.4	13.0	18.5	10.9	15.2		
Min	3.0	4.3	4.5	6.4	2.9	4.1	7.3	10.4		
Max	129	183	36.6	52.0	57.4	81.7	31.3	44.5		

ED_004549_00015841-00141

Table F6. Daily means (SD) of H2S concentrations at site WA5B for December, 2007.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	3.7 (2.7)	5.2 (3.9)	9.9 (22.0)		14.2 (35.3)	20.3 (51.1)				
2	4.3 (4.2)	6.1 (6.0)	23.8 (33.5)	31.7 (44.7)	30.9 (47.7)	43.8 (67.7)			29.2 (25.3)	41.6 (36.0)
3	3.4 (2.2)	4.9 (3.1)	3.1 (1.8)	4.4 (2.6)	3.6 (2.3)	5.1 (3.3)				
4	2.5 (1.2)	3.6 (1.7)	4.5 (3.8)	6.4 (5.4)	2.6 (0.8)	3.7 (1.1)	3.2 (1.3)	4.6 (1.8)		
5	12.9 (13.4)	18.3 (19.1)	6.8 (7.1)	9.7 (10.0)	11.2 (12.3)	15.9 (17.5)				
6	3.7 (3.7)	5.2 (5.3)	8.2 (6.4)	11.7 (9.1)	14.8 (19.1)	21.0 (27.1)				
7	4.9 (3.2)	6.2 (3.9)	6.4 (3.9)	8.9 (5.7)	6.4 (5.0)	8.7 (7.1)				
8	12.9 (5.5)									
9	2.3 (0.4)	3.3 (0.6)	4.9 (4.8)				7.2 (4.3)			
10	2.1 (0.7)	3.0 (1.0)	9.9 (11.1)							
11	4.1 (3.1)	5.8 (4.5)								
12	4.7 (2.1)									
13	2.7 (1.1)									
14	1.1 (1.2)	1.6 (1.7)	2.9 (4.3)							
15	5.4 (5.4)	7.6 (7.6)	48.6 (94.0)		7.2 (12.3)	10.5 (17.8)				
16	13.9 (12.6)	19.7 (18.0)	17.5 (17.0)	24.9 (24.1)	38.5 (63.9)	54.8 (90.9)	55.2 (88.5)	78.5 (126.0)		
17	4.2 (3.9)	6.0 (5.5)	57.6 (154.0)	81.8 (219.0)	16.3 (17.0)	23.2 (24.2)	8.1 (9.3)	11.5 (13.2)		
18	5.7 (7.3)	8.1 (10.4)	15.8 (16.8)	22.4 (23.9)	45.6 (103.0)	64.8 (146.0)				
19	2.5 (1.6)	3.5 (2.3)	30.7 (48.6)	43.6 (69.1)	10.9 (7.3)	15.5 (10.4)	5.2 (4.5)	7.4 (6.5)		
20	4.0 (4.9)	5.7 (6.9)	7.9 (6.0)	11.3 (8.5)	19.0 (26.8)	27.0 (38.1)				
21	3.6 (2.8)	5.1 (4.0)	91.5 (124.0)	130.0 (176.0)						
22	4.8 (2.9)	6.9 (4.1)								
23	7.7 (7.8)	11.0 (11.0)			9.9 (20.1)	14.0 (28.5)	10.2 (10.4)	14.5 (14.8)		
24	3.5 (3.5)	5.0 (4.9)	18.4 (49.6)	26.1 (70.5)	44.8 (56.2)	63.7 (79.9)				
25	3.8 (2.8)	5.4 (3.9)	7.4 (30.1)	11.4 (45.0)	7.0 (8.9)	9.9 (12.8)	14.7 (13.1)	22.4 (19.0)		
26	3.7 (4.4)	5.2 (6.3)	39.7 (45.3)	56.4 (64.3)	51.4 (76.9)	73.0 (109.0)				
27	5.0 (5.0)	7.2 (7.0)	95.8 (242.0)	143.0 (351.0)						
28	3.6 (2.3)	5.2 (3.3)			16.3 (18.7)	23.1 (26.5)	29.9 (48.1)	42.5 (68.3)		
29	3.5 (1.5)	5.0 (2.2)	9.1 (7.9)	12.9 (11.4)	20.9 (32.5)	29.6 (46.4)				
30	3.7 (2.6)	5.2 (3.7)	5.9 (5.4)	8.4 (7.7)	19.0 (28.5)	27.0 (40.4)				
31	4.4 (5.7)	6.2 (8.1)	3.0 (10.8)	4.3 (15.8)	16.4 (17.4)	23.3 (24.7)	8.4 (6.9)	11.9 (9.7)		
Avg	4.8	6.5	22.1	34.2	19.4	27.5	15.8	24.2		
n	31	28	24	19	21	21	9	8	1	1
SD	3	3.9	26.0	40.2	14.1	20.0	15.8	23.3		
Min	1.1	1.6	2.9	4.3	2.6	3.7	3.2	4.6		
Max	13.9	19.7	95.8	143.0	51.4	73.0	55.2	78.5		

ED_004549_00015841-00142

Table F6. Daily means (SD) of H2S concentrations at site WA5B for January, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	3.6 (3.1)	5.1 (4.4)	6.9 (10.7)		10.0 (18.4)	14.2 (26.2)				
2	5.9 (4.7)	8.3 (6.7)	4.0 (4.1)		13.4 (19.6)					
3	4.1 (3.1)	5.8 (4.4)	10.7 (15.8)							
4	2.9 (1.8)	4.1 (2.5)	4.7 (5.1)	6.6 (7.2)						
5	3.3 (2.4)	4.7 (3.4)	7.8 (13.7)	11.1 (19.4)						
6	7.8 (6.2)	11.1 (8.7)	9.0 (8.8)	12.8 (12.5)	12.5 (13.5)	17.8 (19.3)				
7										
8										
9										
10										
11	1.7 (0.6)	2.3 (1.0)								
12	1.9 (1.1)	2.7 (1.6)	39.8 (68.3)	56.5 (97.1)	12.9 (28.6)	18.3 (40.7)				
13	3.1 (3.0)	4.4 (4.2)	4.9 (19.6)	6.9 (27.8)	62.1 (99.0)	88.3 (141.0)				
14	35.4 (55.4)	50.4 (78.8)	100.0 (124.0)	142.0 (176.0)	52.9 (98.4)	75.1 (140.0)				
15	3.9 (4.3)	5.6 (6.1)	7.0 (8.8)	9.9 (12.4)	11.3 (13.0)	16.0 (18.6)				
16	10.7 (6.1)	15.2 (8.7)	90.6 (234.0)	129.0 (333.0)	26.7 (45.5)	38.1 (64.6)				
17	5.5 (8.5)	7.7 (12.0)	41.9 (81.9)	62.1 (122.0)	11.6 (22.6)	16.5 (32.1)				
18	8.1 (5.7)	13.6 (7.9)								
19	6.7 (8.4)	9.6 (11.9)	9.7 (34.3)	13.7 (48.7)						
20	3.5 (6.8)	4.9 (9.7)	1.1 (1.0)	1.7 (1.5)	29.9 (57.7)	42.7 (82.2)				
21	1.0 (0.7)	1.4 (1.0)	1.4 (1.5)	2.0 (2.2)	5.3 (7.1)	7.8 (10.4)				
22	2.5 (2.7)	3.6 (3.8)	3.9 (5.1)	5.8 (7.5)	3.5 (7.0)	5.1 (10.4)				
23	1.4 (0.7)	1.9 (1.0)	45.2 (75.7)	66.9 (112.0)	8.5 (9.0)	12.6 (13.3)				
24	1.8 (1.1)	2.5 (1.6)	8.5 (13.7)	12.6 (20.4)	49.0 (57.3)	72.3 (84.8)				
25	1.8 (1.5)	2.5 (2.1)			24.4 (31.3)	36.3 (46.6)				
26	2.8 (2.5)	4.0 (3.5)	2.5 (1.7)	3.7 (2.5)	4.5 (9.6)	6.6 (14.3)				
27	2.0 (1.0)	2.9 (1.5)	7.0 (7.8)	10.3 (11.6)	14.5 (17.0)	21.1 (25.2)	28.3 (40.4)	41.9 (60.1)		
28	6.2 (5.3)	8.7 (7.5)								
29	5.8 (7.3)	8.2 (10.3)	17.1 (24.9)	24.3 (35.4)	19.9 (39.6)	28.3 (56.3)				
30	8.7 (13.8)	12.4 (19.6)	14.7 (13.5)	20.9 (19.1)	21.2 (53.9)	30.2 (76.7)				
31	8.8 (17.9)	12.5 (25.4)	23.9 (31.1)	34.0 (44.2)						
Avg	5.6	8.0	20.1	31.7	20.7	30.4				
n	27	27	23	20	19	18	1	1	0	0
SD	6.4	9.2	26.4	39.7	16.5	24.1				
Min	1.0	1.4	1.1	1.7	3.5	5.1				
Max	35.4	50.4	100.0	142.0	62.1	88.3				

ED_004549_00015841-00143

Table F6. Daily means (SD) of H2S concentrations at site WA5B for February, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	5.8 (7.2)	8.3 (10.2)	6.1 (8.3)	8.7 (11.7)	16.9 (28.7)	24.0 (40.9)				
2	3.2 (4.1)	4.6 (5.9)	5.4 (3.4)	7.7 (4.9)	5.2 (4.7)	7.3 (6.6)				
3	5.1 (4.3)	7.2 (6.1)	17.0 (23.6)	24.2 (33.5)	10.2 (9.3)	14.4 (13.2)				
4	3.6 (2.8)	5.1 (4.0)	26.4 (27.7)	37.5 (39.3)	21.2 (15.7)	30.1 (22.3)				
5	2.2 (1.4)	3.1 (2.0)	11.4 (9.7)	16.1 (13.8)	32.2 (59.2)	45.7 (84.2)				
6	8.0 (10.2)	11.4 (14.4)	15.1 (18.1)	21.5 (25.7)	16.5 (19.8)	23.5 (28.2)				
7	1.4 (2.2)	2.0 (3.1)	1.7 (1.9)	2.4 (2.7)	2.9 (5.3)	4.2 (7.6)				
8	4.7 (4.6)	6.7 (6.6)	11.8 (24.5)	16.9 (35.0)	8.2 (11.1)	11.8 (15.8)				
9	1.6 (1.1)	2.3 (1.5)								
10	2.5 (1.0)	3.6 (1.4)	3.8 (3.0)	5.5 (4.3)	6.6 (9.4)	9.4 (13.4)				
11	3.3 (2.4)	4.7 (3.4)	4.6 (8.1)	6.6 (11.6)	6.5 (19.1)	9.3 (27.2)				
12	5.0 (4.5)	7.0 (6.4)	31.6 (48.8)	44.9 (69.4)	10.8 (15.4)	15.4 (21.9)				
13	3.9 (3.5)	5.5 (4.9)	4.1 (3.9)	5.9 (5.6)	19.5 (36.1)	27.7 (51.3)				
14	10.0 (9.7)									
15	2.5 (2.4)	3.5 (3.5)	13.8 (15.2)	19.7 (21.6)	15.8 (20.7)	22.5 (29.4)				
16	12.1 (11.3)	17.2 (16.1)								
17	1.3 (0.8)	1.8 (1.1)			3.4 (3.9)	4.8 (5.6)				
18	2.7 (1.3)	3.9 (1.8)	19.3 (39.2)	27.4 (55.7)	7.1 (9.5)	10.0 (13.4)				
19	4.6 (5.6)	6.6 (8.0)	3.6 (19.1)	5.2 (27.2)	11.0 (16.3)	15.7 (23.2)				
20	3.1 (2.1)	4.4 (3.0)	10.7 (14.6)	15.2 (20.7)	4.3 (9.6)	6.1 (13.6)				
21	2.5 (1.5)	3.6 (2.2)			6.8 (4.8)	9.9 (6.9)				
22	4.0 (3.7)	5.7 (5.3)	4.6 (3.8)	6.5 (5.4)						
23	1.8 (1.7)	2.5 (2.5)	6.9 (8.9)	9.8 (12.6)	8.9 (11.7)	12.7 (16.6)	5.1 (4.6)	7.3 (6.5)		
24	3.8 (3.1)	5.5 (4.3)	5.7 (6.4)	8.1 (9.2)	6.4 (9.9)	9.1 (14.0)	7.8 (21.0)	11.1 (29.9)		
25	3.1 (4.3)	4.4 (6.1)			6.7 (9.7)	9.5 (13.8)				
26	15.9 (16.5)	22.7 (23.5)	5.7 (6.4)	8.1 (9.1)	8.4 (9.2)	12.0 (13.0)				
27	5.2 (7.3)	7.4 (10.4)	22.7 (30.7)	32.3 (43.7)	6.4 (6.7)	9.2 (9.6)				
28	8.2 (10.3)	11.7 (14.6)	12.1 (17.8)	17.2 (25.2)	2.7 (1.9)	3.9 (2.7)				
29	2.1 (0.8)	3.0 (1.1)	11.1 (11.6)	15.8 (16.6)	7.5 (10.7)	10.8 (15.4)				
Avg	4.6	6.3	11.1	15.8	10.1	14.4	6.5	9.2		
n	29	28	23	23	25	25	2	2	0	0
SD	3.3	4.6	7.7	11.0	6.7	9.5	1.4	1.9		
Min	1.3	1.8	1.7	2.4	2.7	3.9	5.1	7.3		
Max	15.9	22.7	31.6	44.9	32.2	45.7	7.8	11.1		

ED_004549_00015841-00144

Table F6. Daily means (SD) of H2S concentrations at site WA5B for March, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	1.8 (1.0)	2.5 (1.4)	2.3 (1.8)	3.3 (2.5)	2.7 (1.9)	3.8 (2.6)				
2	6.9 (5.8)	9.8 (8.2)	6.4 (6.5)	9.0 (9.2)						
3	2.3 (1.8)	3.2 (2.6)	2.0 (4.2)	2.8 (6.0)	4.7 (10.9)	6.7 (15.5)				
4	1.8 (2.0)	2.5 (2.8)	1.3 (1.2)	1.8 (1.8)	2.2 (1.7)	3.1 (2.5)				
5	2.1 (1.3)	3.0 (1.8)	5.6 (4.8)	7.9 (6.8)						
6	3.8 (2.7)	5.4 (3.8)	8.5 (11.1)	12.0 (15.7)	17.5 (18.6)	24.9 (26.5)				
7	2.5 (1.7)	3.5 (2.4)	5.5 (4.4)	7.7 (6.2)	4.2 (3.0)	5.9 (4.2)				
8	5.7 (6.3)	8.1 (9.0)	3.6 (6.0)	5.1 (8.5)	7.2 (8.1)	10.2 (11.4)				
9	3.1 (2.8)	4.5 (4.0)	12.0 (19.2)	17.0 (27.2)	7.0 (9.0)	10.0 (12.8)				
10	2.4 (2.9)	3.4 (4.1)	12.1 (19.3)	17.1 (27.4)						
11	1.4 (0.9)	1.9 (1.3)	3.5 (4.3)	5.0 (6.1)	3.3 (6.4)	4.7 (9.1)				
12	1.8 (1.9)	2.7 (2.7)	4.3 (3.2)	5.6 (4.1)						
13	2.3 (1.3)	3.2 (1.9)	2.5 (1.4)	3.6 (1.9)	3.6 (3.2)	5.1 (4.6)				
14	2.4 (1.6)	3.5 (2.2)	4.7 (6.3)	6.7 (9.0)	5.9 (10.7)	8.3 (15.2)	11.1 (14.1)	15.8 (20.1)		
15	2.4 (1.2)	3.4 (1.7)	11.6 (8.5)	16.5 (12.1)	8.0 (6.7)	11.4 (9.5)	17.3 (34.1)	24.5 (48.4)		
16	3.2 (1.3)	4.6 (1.8)	8.3 (7.9)	11.8 (11.3)	4.1 (3.1)	5.8 (4.4)	8.4 (10.7)	11.9 (15.2)		
17	2.3 (0.9)	3.2 (1.3)	6.2 (7.8)	8.8 (11.1)	4.4 (5.9)	6.3 (8.3)	14.8 (15.5)	21.0 (22.1)		
18	5.0 (5.5)	7.1 (7.8)	6.7 (7.0)	9.6 (10.0)	3.5 (3.0)	5.0 (4.3)				
19	3.3 (2.4)	4.7 (3.5)			4.6 (3.7)	6.6 (5.2)	21.1 (39.6)	29.9 (56.3)		
20	3.7 (3.5)	5.2 (5.0)	2.8 (2.0)	4.0 (2.8)	4.5 (4.0)	6.3 (5.6)	11.0 (15.6)	15.6 (22.2)		
21	1.5 (0.9)	2.2 (1.3)	2.5 (1.9)	3.5 (2.7)	2.4 (1.7)	3.4 (2.3)	7.3 (15.2)	10.4 (21.6)		
22	1.4 (0.5)	2.1 (0.8)			2.6 (2.4)	3.7 (3.4)	10.5 (13.2)	14.9 (18.7)		
23	1.4 (0.6)	2.0 (0.8)	6.8 (8.4)	9.7 (12.0)	3.6 (3.0)	5.2 (4.2)				
24	5.1 (8.6)	7.3 (12.2)	8.7 (16.4)	12.4 (23.3)	4.8 (9.7)	6.8 (13.7)	6.0 (7.4)	8.6 (10.5)		
25	2.0 (2.5)	2.8 (3.6)			3.7 (3.5)	5.2 (5.0)	9.9 (16.5)	14.0 (23.5)		
26	1.4 (0.7)	2.0 (1.0)	4.9 (4.9)	6.9 (6.9)	1.9 (1.6)	2.7 (2.3)	14.0 (22.2)	19.9 (31.5)		
27	2.1 (2.4)	3.0 (3.4)	2.4 (14.2)	3.4 (20.4)	3.2 (2.8)	4.4 (4.0)	5.0 (4.4)	7.2 (6.3)		
28	3.9 (5.3)	5.6 (7.5)	7.8 (8.3)	11.0 (11.7)	1.9 (2.1)	2.7 (2.9)	11.7 (11.5)	16.6 (16.3)		
29	1.8 (2.0)	2.6 (2.8)					8.6 (14.8)	12.2 (21.0)		
30	1.0 (0.8)	1.4 (1.1)	3.8 (3.7)	5.4 (5.2)	4.7 (8.8)	6.7 (12.4)	3.4 (6.9)	4.9 (9.8)		
31	5.2 (4.7)	7.4 (6.7)					16.1 (30.0)	22.8 (42.6)		
Avg	2.8	4.0	5.6	8.0	4.6	6.6	11.0	15.6		
n	31	31	26	26	25	25	16	16	0	0
SD	1.5	2.1	3.1	4.4	3.1	4.3	4.6	6.5		
Min	1.0	1.4	1.3	1.8	1.9	2.7	3.4	4.9		
Max	6.9	9.8	12.1	17.1	17.5	24.9	21.1	29.9		

ED_004549_00015841-00145

Table F6. Daily means (SD) of H2S concentrations at site WA5B for April, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	6.1 (9.8)	8.6 (13.9)	3.0 (2.6)	4.3 (3.7)			3.7 (5.0)	5.2 (7.1)	7.4 (13.6)	10.5 (19.3)
2	7.6 (7.5)	10.7 (10.6)					11.1 (11.9)	15.8 (16.9)	6.8 (6.5)	9.7 (9.2)
3	5.0 (2.8)	7.0 (3.9)	8.3 (8.9)	11.8 (12.7)			5.5 (3.2)	7.8 (4.6)	17.5 (33.2)	24.9 (47.1)
4	10.0 (6.7)	14.2 (9.5)	8.8 (10.7)	12.4 (15.2)	5.1 (6.7)	7.2 (9.5)	10.0 (17.2)	14.2 (24.3)	6.5 (4.9)	9.2 (6.9)
5	10.3 (11.5)	14.6 (16.3)			6.8 (9.6)	9.7 (13.6)	11.1 (13.7)	15.7 (19.4)	23.0 (38.4)	32.7 (54.5)
6	3.4 (4.4)	4.8 (6.2)	3.4 (1.5)	4.8 (2.2)	4.5 (4.6)	6.4 (6.5)	11.8 (28.5)	16.8 (40.4)	3.3 (2.8)	4.7 (4.0)
7	6.0 (9.6)	8.6 (13.7)	22.6 (24.0)	32.1 (34.1)	14.2 (15.2)	20.2 (21.6)	13.6 (16.0)	19.3 (22.7)	20.7 (25.4)	29.4 (36.1)
8	14.3 (16.6)	20.3 (23.6)	9.3 (18.8)	13.1 (26.7)	14.2 (8.8)	20.1 (12.5)	38.2 (56.0)	54.2 (79.5)	11.2 (12.4)	15.8 (17.5)
9	1.8 (0.8)	2.5 (1.1)	18.4 (27.1)	26.1 (38.5)	21.3 (45.6)	30.2 (64.8)	9.3 (11.3)	13.2 (16.0)	32.8 (60.5)	46.6 (85.9)
10	3.3 (2.7)	4.7 (3.8)	9.0 (11.9)	12.7 (16.8)	6.8 (4.9)	9.6 (7.0)	40.1 (89.8)	57.0 (128.0)	13.4 (19.1)	19.0 (27.1)
11	6.3 (6.1)	8.9 (8.7)	4.0 (3.5)	5.7 (4.9)	6.8 (8.1)	9.6 (11.5)	6.3 (14.0)	9.0 (19.9)	21.5 (33.6)	30.5 (47.7)
12	12.0 (13.1)	17.0 (18.6)					35.8 (53.8)	50.8 (76.4)	12.2 (12.0)	17.3 (17.1)
13	15.0 (9.1)	21.3 (13.0)	17.4 (15.2)	24.7 (21.6)	28.7 (48.6)	40.9 (69.1)	31.5 (28.6)	44.8 (40.6)	44.2 (84.1)	62.9 (120.0)
14	7.0 (6.3)	10.0 (9.0)	9.8 (11.6)	13.9 (16.4)	10.9 (19.5)	15.5 (27.7)	17.4 (21.2)	24.8 (30.1)	4.3 (2.3)	6.1 (3.3)
15	5.8 (3.5)	8.2 (5.0)	5.3 (3.9)	7.6 (5.6)	17.4 (24.0)	24.7 (34.1)	40.1 (93.4)	56.9 (132.0)	17.1 (25.5)	24.3 (36.2)
16	12.3 (10.1)	17.4 (14.4)	4.0 (3.6)	5.7 (5.1)			21.8 (44.1)	31.0 (62.6)	3.8 (2.1)	5.4 (3.0)
17	5.9 (6.6)	8.3 (9.3)	9.2 (13.0)	13.1 (18.5)			4.2 (7.0)	5.9 (9.9)	7.6 (6.7)	10.8 (9.5)
18	7.2 (7.4)	10.2 (10.5)	4.1 (3.7)	5.8 (5.2)	2.9 (2.1)	4.1 (2.9)	6.7 (10.3)	9.6 (14.6)	5.1 (5.1)	7.2 (7.3)
19	4.2 (5.7)	6.0 (8.1)					5.0 (4.5)	7.2 (6.4)	25.2 (53.7)	35.8 (76.3)
20	7.9 (9.3)	11.1 (13.2)	4.1 (3.6)	5.8 (5.1)	4.3 (3.1)	6.1 (4.4)	10.1 (14.6)	14.3 (20.7)	12.1 (14.9)	17.1 (21.2)
21	2.6 (4.8)	3.7 (6.9)			4.7 (4.2)	6.7 (6.0)	10.8 (9.0)	15.3 (12.7)	15.8 (19.1)	22.5 (27.1)
22	9.2 (8.6)	13.1 (12.2)	7.6 (11.7)	10.8 (16.7)	8.5 (12.2)	12.0 (17.3)	15.8 (24.1)	22.4 (34.2)	5.6 (6.0)	8.0 (8.5)
23	0.9 (0.9)	1.3 (1.3)	5.6 (5.0)	7.9 (7.0)	10.0 (13.3)	14.2 (18.9)	3.7 (3.1)	5.3 (4.4)	13.4 (26.5)	19.0 (37.7)
24	6.9 (5.3)	9.8 (7.5)								
25	21.0 (18.9)	29.7 (26.8)								
26	35.4 (33.2)	50.2 (47.1)	16.9 (21.3)	24.0 (30.2)	32.8 (38.6)	46.6 (54.8)	201.0 (520.0)	286.0 (738.0)	87.3 (159.0)	124.0 (225.0)
27	23.0 (21.9)	32.6 (31.1)	24.9 (24.8)	35.4 (35.2)	32.7 (31.6)	46.4 (44.9)	42.8 (49.5)	60.8 (70.2)	129.0 (325.0)	184.0 (462.0)
28	9.9 (5.3)	14.1 (7.6)	22.7 (24.6)	32.3 (35.0)	25.0 (24.3)	35.5 (34.5)	65.3 (137.0)	92.8 (194.0)	78.7 (141.0)	112.0 (200.0)
29	10.2 (5.9)	14.4 (8.4)	15.2 (9.9)	21.6 (14.0)	22.1 (15.1)	31.3 (21.5)	60.1 (130.0)	85.4 (184.0)	26.0 (32.6)	36.9 (46.3)
30	27.6 (26.6)	39.2 (37.8)	14.0 (11.2)	19.9 (15.8)	50.1 (56.5)	71.2 (80.2)	62.4 (147.0)	88.6 (209.0)	70.0 (101.0)	99.3 (144.0)
Avg	9.9	14.1	10.8	15.3	15.7	22.3	28.4	40.3	25.8	36.6
n	30	30	23	23	21	21	28	28	28	28
SD	7.7	10.9	6.7	9.5	12.2	17.3	38.1	54.1	29.6	42.0
Min	0.9	1.3	3.0	4.3	2.9	4.1	3.7	5.2	3.3	4.7
Max	35.4	50.2	24.9	35.4	50.1	71.2	201.0	286.0	129.0	184.0

ED_004549_00015841-00146

Table F6. Daily means (SD) of H2S concentrations at site WA5B for May, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7	9.7 (3.2)	13.8 (4.6)	28.3 (32.2)	40.2 (45.8)	21.1 (17.6)	30.0 (24.9)	22.3 (30.8)	31.7 (43.7)	30.9 (45.8)	43.9 (65.1)
8	18.5 (13.8)	26.3 (19.5)			16.1 (11.0)	22.9 (15.6)	11.7 (6.3)	16.6 (8.9)	15.1 (12.0)	21.4 (17.1)
9	10.5 (7.0)	14.9 (9.9)	9.4 (11.6)	13.4 (16.5)	16.3 (14.0)	23.2 (19.9)	20.3 (32.5)	28.9 (46.2)	45.8 (92.8)	65.0 (132.0)
10	12.0 (5.0)	17.0 (7.0)			89.7 (102.0)	127.0 (146.0)	46.0 (62.0)	65.4 (88.2)	56.5 (68.2)	80.2 (96.9)
11	25.8 (33.8)	36.7 (48.0)	23.4 (32.0)	33.3 (45.4)	19.7 (18.0)	28.0 (25.6)	36.6 (70.3)	51.9 (99.8)	39.4 (51.1)	56.0 (72.6)
12	7.2 (5.9)	10.2 (8.3)	24.0 (26.9)	34.1 (38.3)	18.4 (16.7)	26.1 (23.7)	16.9 (9.0)	23.9 (12.8)	41.0 (67.6)	58.3 (96.1)
13	14.3 (10.2)	20.3 (14.4)			27.0 (41.6)	38.3 (59.1)	114.0 (294.0)	161.0 (418.0)	31.7 (29.5)	45.1 (41.9)
14	44.5 (58.7)	63.3 (83.5)	18.4 (14.2)	26.2 (20.2)	68.1 (89.9)	96.8 (128.0)	13.0 (5.8)	18.5 (8.2)	29.1 (23.5)	41.4 (33.5)
15	14.2 (10.3)	20.2 (14.7)	14.9 (13.5)	21.2 (19.2)	18.3 (19.0)	26.1 (27.0)	69.1 (178.0)	98.3 (254.0)	17.0 (18.1)	24.2 (25.8)
16										
17										
18										
19										
20										
21	6.8 (2.4)	9.7 (3.3)	7.7 (2.6)	10.9 (3.7)	9.7 (6.7)	13.8 (9.4)	7.5 (3.0)	10.6 (4.2)	11.3 (8.4)	16.0 (11.9)
22	7.7 (4.4)	10.9 (6.2)	7.9 (4.5)	11.3 (6.4)	13.2 (14.9)	18.8 (21.2)	7.5 (2.2)	10.7 (3.2)	13.8 (5.8)	19.6 (8.3)
23	8.9 (2.4)	12.6 (3.4)	12.0 (6.6)	17.1 (9.3)	11.6 (6.8)	16.5 (9.6)	22.5 (38.8)	32.0 (55.2)		
24	9.6 (3.9)	13.7 (5.5)			41.5 (46.0)	59.0 (65.4)	14.8 (13.1)	21.1 (18.6)		
25	18.9 (29.1)	26.8 (41.3)	14.9 (19.5)	21.2 (27.7)	22.9 (26.3)	32.6 (37.4)	10.8 (4.0)	15.3 (5.7)		
26	14.4 (11.7)	20.5 (16.6)	13.3 (7.8)	19.0 (11.1)	32.5 (72.0)	46.3 (102.0)	9.9 (2.3)	14.1 (3.3)		
27	9.5 (2.6)	13.5 (3.7)	9.1 (5.2)	13.0 (7.4)	14.9 (19.1)	21.2 (27.2)	9.9 (3.7)	14.0 (5.2)	15.2 (4.7)	21.6 (6.7)
28	12.0 (4.0)	17.1 (5.6)	23.4 (30.5)	33.3 (43.4)	13.5 (5.1)	19.3 (7.3)	12.8 (3.2)	18.2 (4.5)		
29	7.1 (1.8)	10.1 (2.6)	10.6 (7.8)	15.1 (11.1)	23.1 (25.2)	32.8 (35.9)	36.1 (66.7)	51.4 (94.8)	16.2 (12.5)	23.0 (17.8)
30	18.0 (21.3)	25.5 (30.3)	8.4 (6.9)	11.9 (9.7)	26.2 (67.5)	37.2 (95.9)	6.7 (2.1)	9.6 (3.0)	33.5 (74.7)	47.6 (106.0)
31	10.7 (6.6)	15.2 (9.4)	12.9 (7.6)	18.4 (10.9)	20.3 (19.3)	28.8 (27.5)	11.5 (3.1)	16.3 (4.5)	19.2 (15.7)	27.2 (22.3)
Avg	14.0	19.9	14.9	21.2	26.2	37.3	25.0	35.5	27.7	39.4
n	20	20	16	16	20	20	20	20	15	15
SD	8.5	12	6.4	9.1	19.3	27.4	25.5	36.2	13.2	18.8
Min	6.8	9.7	7.7	10.9	9.7	13.8	6.7	9.6	11.3	16.0
Max	44.5	63.3	28.3	40.2	89.7	127.0	114.0	161.0	56.5	80.2

ED_004549_00015841-00147

Table F6. Daily means (SD) of H2S concentrations at site WA5B for June, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	6.7 (2.3)	9.5 (3.3)	18.1 (17.4)	25.8 (24.7)	43.4 (73.4)	61.7 (104.0)	9.8 (5.0)	13.9 (7.1)	48.2 (104.0)	68.5 (148.0)
2	14.4 (17.0)	20.4 (24.1)	18.1 (28.4)	25.7 (40.3)	12.1 (12.2)	17.2 (17.3)	44.8 (70.3)	63.6 (99.8)	14.3 (7.9)	20.3 (11.2)
3	6.9 (2.7)	9.8 (3.9)	39.0 (96.7)	55.4 (137.0)	23.9 (31.8)	33.9 (45.2)	9.9 (3.2)	14.1 (4.5)	56.9 (133.0)	80.9 (189.0)
4	7.2 (5.8)	10.3 (8.2)	5.8 (2.3)	8.2 (3.3)	7.8 (2.1)	11.1 (3.0)	8.8 (4.1)	12.5 (5.8)		
5	37.2 (46.2)	52.9 (65.7)	17.4 (31.6)	24.8 (44.9)	20.1 (24.0)	28.5 (34.2)	28.0 (35.3)	39.8 (50.1)		
6	10.9 (5.6)	15.5 (7.9)	14.2 (10.7)	20.1 (15.2)	7.4 (3.1)	10.5 (4.5)	8.8 (3.6)	12.5 (5.1)	20.9 (43.1)	29.7 (61.2)
7	17.5 (14.4)	24.9 (20.5)	11.5 (15.8)	16.4 (22.4)	33.3 (68.2)	47.3 (96.8)	22.5 (33.9)	32.0 (48.2)	25.7 (23.7)	36.6 (33.6)
8	6.9 (5.5)	9.8 (7.9)	29.8 (28.4)	42.4 (40.3)	19.4 (21.7)	27.6 (30.8)	15.0 (11.8)	21.4 (16.8)	46.1 (84.7)	65.5 (120.0)
9	18.0 (12.9)	25.6 (18.4)	14.2 (9.8)	20.1 (14.0)	29.7 (45.3)	42.2 (64.4)	27.2 (34.1)	38.7 (48.4)	35.9 (54.7)	51.0 (77.7)
10	11.3 (12.5)	16.1 (17.8)	23.0 (20.0)	32.6 (28.4)			14.3 (10.0)	20.4 (14.3)	26.7 (26.7)	38.0 (37.9)
11	19.1 (11.4)	27.1 (16.2)	7.9 (2.2)	11.2 (3.1)	11.3 (10.8)	16.1 (15.3)	39.3 (63.4)	55.8 (90.0)		
12	7.8 (2.8)	11.1 (3.9)	13.7 (9.0)	19.5 (12.8)			16.1 (16.9)	22.9 (23.9)	18.9 (18.0)	26.8 (25.6)
13	6.8 (4.5)	9.6 (6.4)	10.1 (5.8)	14.3 (8.2)	8.8 (6.7)	12.5 (9.5)	8.7 (2.8)	12.3 (4.0)	12.8 (8.3)	18.2 (11.8)
14	6.6 (1.5)	9.3 (2.1)	7.8 (5.0)	11.1 (7.1)			52.5 (132.0)	74.6 (187.0)	11.4 (8.3)	16.2 (11.8)
15	14.2 (14.0)	20.2 (19.8)	12.4 (13.1)	17.6 (18.6)	19.5 (19.0)	27.7 (27.0)	9.1 (4.8)	13.0 (6.8)	16.2 (9.0)	23.0 (12.8)
16	11.1 (14.0)	15.7 (19.9)	10.6 (9.1)	15.1 (12.9)	28.4 (45.0)	40.4 (64.0)	78.6 (191.0)	112.0 (271.0)	15.5 (10.4)	22.0 (14.7)
17	6.2 (2.5)	8.8 (3.6)	10.4 (12.0)	14.8 (17.1)	10.2 (8.6)	14.5 (12.2)	8.8 (5.4)	12.6 (7.7)	17.9 (16.9)	25.5 (24.0)
18	7.2 (3.8)	10.2 (5.3)					31.0 (54.4)	44.0 (77.3)	15.1 (7.3)	21.5 (10.3)
19	13.0 (5.7)	18.4 (8.1)	20.1 (14.7)	28.6 (20.8)	31.1 (33.3)	44.1 (47.3)	30.9 (45.9)	44.0 (65.2)	54.9 (85.5)	77.9 (121.0)
20	19.5 (20.5)	27.8 (29.2)	20.2 (39.1)	28.7 (55.5)	62.3 (76.3)	88.5 (108.0)	129.0 (313.0)	184.0 (445.0)	69.5 (65.8)	98.7 (93.5)
21	19.0 (25.5)	27.0 (36.2)	52.5 (99.6)	74.7 (142.0)	38.9 (41.9)	55.3 (59.6)	53.4 (69.9)	76.0 (99.4)	54.9 (86.4)	78.1 (123.0)
22	5.0 (2.2)	7.2 (3.1)	12.7 (11.2)	18.0 (15.9)	15.2 (17.4)	21.6 (24.7)	23.5 (42.1)	33.4 (59.8)		
23	18.6 (15.4)	26.5 (21.8)	21.0 (21.2)	29.8 (30.1)	42.4 (78.3)	60.3 (111.0)	14.8 (9.6)	21.0 (13.7)	23.2 (38.7)	33.0 (55.1)
24	19.3 (26.8)	27.4 (38.1)	12.3 (8.4)	17.5 (11.9)	18.0 (21.7)	25.6 (30.9)	25.1 (38.1)	35.7 (54.2)	77.3 (173.0)	110.0 (247.0)
25	20.3 (18.9)	28.9 (26.8)	11.0 (7.1)	15.7 (10.1)	34.6 (48.8)	49.1 (69.3)	14.3 (18.9)	20.3 (26.9)	87.3 (214.0)	124.0 (304.0)
26	8.8 (7.9)	12.5 (11.2)	16.8 (18.7)	24.0 (26.7)	17.3 (23.4)	24.6 (33.3)	52.8 (116.0)	75.0 (165.0)	82.1 (191.0)	117.0 (271.0)
27	16.2 (9.8)	23.1 (13.9)	22.9 (26.9)	32.6 (38.2)	31.5 (42.2)	44.8 (60.0)	16.9 (12.2)	24.0 (17.4)	40.6 (65.6)	57.8 (93.3)
28	17.0 (11.3)	24.2 (16.1)	20.2 (14.7)	28.8 (20.9)	26.4 (21.9)	37.6 (31.2)	123.0 (286.0)	175.0 (407.0)	110.0 (161.0)	156.0 (229.0)
29	30.5 (30.4)	43.4 (43.2)	34.8 (57.0)	49.6 (81.1)	23.9 (21.8)	34.1 (31.0)	29.6 (39.8)	42.1 (56.5)	42.3 (44.9)	60.2 (63.9)
30	15.5 (11.1)	22.0 (15.8)	12.5 (10.1)	17.8 (14.4)	18.3 (20.4)	26.0 (29.0)	69.3 (157.0)	98.6 (223.0)	50.3 (96.9)	71.6 (138.0)
Avg	14.0	19.8	18.0	25.5	24.4	34.7	33.9	48.1	41.3	58.8
n	30	30	29	29	26	26	30	30	26	26
SD	7.3	10.4	10.0	14.3	12.8	18.2	30.7	43.7	26.3	37.4
Min	5.0	7.2	5.8	8.2	7.4	10.5	8.7	12.3	11.4	16.2
Max	37.2	52.9	52.5	74.7	62.3	88.5	129.0	184.0	110.0	156.0

ED_004549_00015841-00148

Table F6. Daily means (SD) of H2S concentrations at site WA5B for July, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	26.0 (11.2)	37.1 (15.9)	23.5 (21.6)	33.5 (30.8)	40.1 (26.5)	57.1 (37.8)				
2	16.8 (16.8)	23.9 (23.9)			22.4 (23.4)	31.9 (33.3)				
3	21.5 (15.4)	30.6 (22.0)	16.7 (19.6)	23.8 (27.9)	34.7 (43.2)	49.4 (61.5)				
4	10.7 (5.0)	15.2 (7.2)	12.6 (10.5)	17.9 (14.9)	34.2 (52.6)	48.6 (74.9)				
5	121.0 (42.0)									
6	34.9 (25.7)									
7	22.0 (29.1)	31.3 (41.4)	9.8 (5.7)	14.0 (8.1)	13.3 (10.9)	18.9 (15.5)				
8	10.0 (5.0)	14.2 (7.0)	20.5 (21.9)	29.1 (31.2)	17.2 (22.8)	24.5 (32.5)				
9	15.9 (13.8)	22.6 (19.6)	22.1 (20.2)	31.4 (28.7)	19.3 (24.6)	27.5 (35.0)				
10	48.4 (47.5)	68.8 (67.6)	42.1 (53.3)	59.9 (75.8)	9.4 (9.7)	13.4 (13.7)				
11	8.4 (3.4)	11.9 (4.9)	50.6 (66.9)	71.9 (95.0)	48.4 (78.4)	68.8 (111.0)				
12	33.6 (52.6)	47.7 (74.8)	78.1 (103.0)	111.0 (146.0)	71.6 (87.8)	102.0 (125.0)				
13	54.2 (39.1)	77.1 (55.6)	44.8 (36.4)	63.7 (51.8)	37.3 (34.3)	53.0 (48.7)				
14	60.5 (82.2)	86.0 (117.0)			67.3 (82.9)	95.7 (118.0)				
15	49.3 (37.2)	70.1 (53.0)	52.1 (71.0)	74.1 (101.0)	44.4 (39.9)	63.1 (56.7)				
16	9.7 (5.1)	13.8 (7.3)	27.0 (32.0)	38.3 (45.5)	25.5 (32.9)	36.3 (46.8)				
17	33.3 (19.2)	47.3 (27.4)	32.7 (26.9)	46.5 (38.4)	29.8 (29.4)	42.5 (41.9)				
18	48.0 (15.8)	68.3 (22.4)	47.7 (13.9)	67.9 (19.7)	75.9 (64.2)	108.0 (91.2)				
19	98.8 (66.3)	141.0 (94.3)	143.0 (244.0)	204.0 (347.0)	76.6 (55.9)	109.0 (79.6)				
20	57.5 (28.4)	81.7 (40.3)	71.2 (81.0)	101.0 (115.0)	61.7 (22.7)	87.7 (32.3)				
21	67.1 (18.2)	95.4 (25.8)	78.9 (46.3)	112.0 (65.8)	64.5 (48.4)	91.7 (68.9)				
22	54.9 (20.9)	78.1 (29.7)	47.7 (9.9)	67.9 (14.1)	80.5 (67.3)	115.0 (95.8)				
23	55.1 (25.1)	78.4 (35.7)	47.0 (11.3)	66.9 (16.1)	53.8 (14.4)	76.5 (20.4)	47.5 (6.7)	67.5 (9.6)		
24	65.5 (21.1)	93.1 (30.0)	70.7 (39.0)	101.0 (55.5)	79.9 (48.4)	114.0 (68.9)	71.8 (26.1)	102.0 (37.2)		
25	121.0 (30.9)	173.0 (44.0)	114.0 (21.9)	162.0 (31.2)			124.0 (34.6)	176.0 (49.1)		
26	106.0 (19.5)	151.0 (27.7)	104.0 (17.0)	148.0 (24.2)	143.0 (112.0)	203.0 (159.0)	135.0 (68.0)	192.0 (96.7)		
27	139.0 (44.7)	197.0 (63.6)	111.0 (20.8)	157.0 (29.6)	118.0 (25.0)	168.0 (35.5)	100.0 (8.1)	143.0 (11.4)		
28	126.0 (50.2)	180.0 (71.3)	113.0 (28.8)	161.0 (40.9)	113.0 (18.8)	161.0 (26.7)	133.0 (45.8)	189.0 (65.2)		
29	130.0 (37.0)	185.0 (52.7)	121.0 (36.9)	173.0 (52.4)	111.0 (19.3)	158.0 (27.5)	115.0 (18.9)	163.0 (26.8)		
30	99.5 (5.1)	141.0 (7.3)	105.0 (52.7)	150.0 (74.8)	133.0 (69.8)	189.0 (99.3)	118.0 (26.6)	167.0 (37.8)		
31	97.4 (0.8)									
Avg	59.5	80.7	61.8	87.9	60.2	85.6	105.0	150.0		
n	31	28	26	26	27	27	8	8	0	0
SD	40.3	56.5	38.1	54.2	36.9	52.5	29.0	41.2		
Min	8.4	11.9	9.8	14.0	9.4	13.4	47.5	67.5		
Max	139	197	143.0	204.0	143.0	203.0	135.0	192.0		

ED_004549_00015841-00149

Table F6. Daily means (SD) of H2S concentrations at site WA5B for August, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	98.7 (3.3)									
2										
3										
4										
5										
6										
7	73.7 (17.2)									
8	81.9 (4.1)	117.0 (5.9)	87.6 (10.7)	125.0 (15.2)	90.2 (9.8)	128.0 (13.9)				
9	80.0 (3.4)	114.0 (4.8)	86.5 (10.4)	123.0 (14.7)	92.8 (25.5)	132.0 (36.3)				
10	80.4 (2.9)	114.0 (4.2)	88.3 (10.3)	126.0 (14.7)	109.0 (40.8)	155.0 (58.1)				
11	88.7 (8.9)	126.0 (12.6)	87.5 (76.6)	124.0 (109.0)	89.0 (25.5)	127.0 (36.2)				
12	85.3 (4.6)	121.0 (6.5)	127.0 (78.8)	180.0 (112.0)	152.0 (125.0)	216.0 (178.0)				
13	88.0 (7.3)	125.0 (10.3)	101.0 (41.2)	143.0 (58.6)	92.1 (12.0)	131.0 (17.1)				
14	122.0 (31.0)									
15	95.2 (25.7)	136.0 (36.6)	109.0 (52.5)	155.0 (74.7)	99.2 (71.3)	141.0 (101.0)				
16	72.6 (10.2)	103.0 (14.5)	114.0 (76.6)	163.0 (109.0)	121.0 (80.3)	172.0 (114.0)				
17	121.0 (55.6)	172.0 (79.1)	131.0 (104.0)	186.0 (147.0)	112.0 (72.4)	160.0 (103.0)				
18	67.1 (6.8)									
19	63.0 (0.3)									
20	62.1 (2.1)									
21	59.4 (2.8)	84.4 (3.9)	72.6 (21.7)	103.0 (30.8)	62.8 (4.0)	89.2 (5.7)				
22	94.7 (50.2)	138.0 (73.6)								
23	91.1 (44.9)	130.0 (63.9)	118.0 (154.0)	167.0 (219.0)	89.7 (40.3)	128.0 (57.4)				
24	71.7 (11.2)	102.0 (16.0)	88.3 (44.5)	126.0 (63.3)	93.1 (46.9)	132.0 (66.8)				
25	63.6 (6.1)	90.5 (8.7)					68.4 (11.1)	97.3 (15.8)		
26	67.3 (14.9)	95.6 (21.1)								
27										
28										
29										
30										
31										
Avg	82.2	118.0	101.0	143.0	100.0	143.0				
n	21	15	12	12	12	12	1	1	0	0
SD	17.2	21.3	17.7	25.3	20.9	29.8				
Min	59.4	84.4	72.6	103.0	62.8	89.2				
Max	122	172	131.0	186.0	152.0	216.0				

ED_004549_00015841-00150

Table F6. Daily means (SD) of H2S concentrations at site WA5B for September, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1										
2										
3										
4	33.9 (2.3)	48.1 (3.2)	35.4 (4.6)	50.4 (6.6)	35.4 (3.4)	50.3 (4.9)	36.2 (5.6)	51.5 (7.9)		
5	34.2 (1.7)	48.6 (2.5)	35.1 (2.3)	49.9 (3.3)	35.5 (1.6)	50.4 (2.3)	35.2 (1.6)	50.0 (2.3)		
6	35.1 (3.5)	49.9 (4.9)	42.0 (17.0)	59.8 (24.2)	37.7 (6.6)	53.7 (9.4)	36.1 (6.1)	51.3 (8.7)		
7	40.3 (9.3)	57.2 (13.2)	45.6 (17.9)	64.9 (25.4)	49.6 (21.6)	70.5 (30.7)	42.4 (13.8)	60.3 (19.6)		
8	45.0 (21.9)	63.9 (31.1)	42.9 (10.5)	61.0 (14.9)	46.7 (12.1)	66.4 (17.2)	46.6 (17.2)	66.2 (24.4)		
9	41.3 (14.4)	58.6 (20.5)	52.7 (25.9)	75.0 (36.8)	52.5 (19.4)	74.6 (27.5)	43.3 (10.7)	61.5 (15.3)		
10	37.9 (6.0)	53.8 (8.5)	43.2 (9.2)	61.3 (13.0)	53.1 (17.8)	75.4 (25.2)	45.2 (18.7)	64.3 (26.6)		
11	38.5 (1.6)									
12	54.6 (32.5)	79.4 (47.9)	57.3 (33.2)	84.4 (48.4)	76.9 (60.1)	116.0 (87.8)	64.0 (42.9)	94.6 (62.6)		
13	38.7 (11.7)	55.0 (16.6)	39.3 (9.2)	55.8 (13.1)	42.7 (14.4)	60.7 (20.5)	45.7 (18.9)	64.9 (26.8)		
14	71.8 (54.6)	102.0 (77.6)	68.9 (38.3)	97.9 (54.4)	72.8 (35.5)	103.0 (50.5)	52.7 (23.5)	75.0 (33.3)		
15	52.7 (29.5)	74.9 (41.9)	72.8 (48.8)	103.0 (69.3)	84.4 (60.4)	120.0 (85.9)	57.6 (39.3)	81.8 (55.9)		
16	66.2 (50.3)	94.0 (71.5)	60.7 (34.0)	86.2 (48.4)	64.3 (37.4)	91.4 (53.1)	48.6 (15.1)	69.1 (21.4)		
17	51.1 (34.6)									
18	35.7 (2.4)									
19	38.8 (5.1)	55.1 (7.3)	47.9 (17.6)	68.1 (25.0)	44.9 (10.4)	63.8 (14.8)	53.6 (14.3)	76.2 (20.4)		
20	35.4 (2.5)	50.3 (3.6)	38.5 (4.1)	54.7 (5.8)	39.9 (5.4)	56.8 (7.7)	67.4 (50.0)	95.9 (71.1)		
21	35.5 (3.6)	50.4 (5.1)	38.2 (7.0)	54.3 (10.0)	43.7 (16.6)	62.1 (23.6)	49.7 (20.6)	70.6 (29.2)		
22	37.1 (6.5)	52.7 (9.2)	37.5 (7.7)	53.2 (10.9)	42.3 (16.1)	60.1 (22.9)	47.0 (20.9)	66.8 (29.7)		
23	38.9 (9.6)	55.5 (13.8)	42.1 (17.8)	60.2 (25.6)	43.5 (15.0)	62.3 (21.5)	50.1 (15.4)	70.9 (21.9)		
24	38.6 (9.9)	54.9 (14.1)	43.6 (8.9)	61.9 (12.6)	43.4 (9.9)	61.7 (14.1)	43.6 (12.2)	61.8 (17.2)		
25	39.3 (7.0)	55.8 (10.0)	53.8 (16.2)	76.5 (23.1)	51.6 (26.3)	73.4 (37.5)	41.5 (6.8)	58.9 (9.7)		
26	38.7 (13.0)	54.9 (18.5)	44.0 (16.5)	62.6 (23.5)	37.2 (4.4)	52.9 (6.2)	36.6 (2.9)	52.1 (4.1)		
27	38.6 (5.9)	54.9 (8.4)	42.8 (7.2)	60.8 (10.2)	42.2 (7.1)	60.0 (10.1)	45.5 (10.9)	64.7 (15.5)		
28	45.7 (14.8)	64.9 (21.0)	51.0 (13.4)	72.5 (19.0)	59.4 (27.5)	84.4 (39.0)	61.4 (44.8)	87.3 (63.6)		
29	51.9 (29.0)	73.7 (41.2)	64.6 (26.9)	91.8 (38.3)	62.3 (32.3)	88.6 (46.0)	76.3 (61.4)	108.0 (87.3)		
30	45.2 (20.9)	64.3 (29.7)	60.9 (37.7)	86.6 (53.6)	48.9 (17.7)	69.5 (25.1)	48.8 (14.6)	69.4 (20.7)		
Avg	43.0	61.4	48.4	68.9	50.5	72.0	49.0	69.7		
n	27	24	24	24	24	24	24	24	0	0
SD	9.4	13.8	10.6	15.2	13.0	19.1	10.1	14.6		
Min	33.9	48.1	35.1	49.9	35.4	50.3	35.2	50.0		
Max	71.8	102	72.8	103.0	84.4	120.0	76.3	108.0		

ED_004549_00015841-00151

Table F6. Daily means (SD) of H2S concentrations at site WA5B for October, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	38.3 (4.5)	54.8 (6.4)	46.4 (13.6)	66.9 (19.4)	53.5 (21.5)	77.2 (31.0)				
2	42.7 (9.5)									
3	44.7 (1.8)									
4	43.8 (1.0)	62.2 (1.4)	44.9 (1.5)	63.8 (2.1)	46.5 (5.1)	66.1 (7.3)	45.4 (3.1)	64.6 (4.4)		
5	45.1 (4.7)	64.0 (6.7)			52.5 (12.6)	74.6 (17.8)	46.9 (2.9)	66.6 (4.1)		
6	48.8 (7.5)	69.4 (10.7)	50.2 (18.0)	71.4 (25.6)	52.5 (8.5)	74.6 (12.0)	49.5 (2.9)	70.4 (4.2)	51.8 (11.1)	73.6 (15.7)
7	45.5 (2.7)	64.6 (3.9)	49.2 (7.9)	69.8 (11.2)	48.2 (10.8)	68.5 (15.4)				
8	55.3 (11.1)	78.5 (15.8)								
9	45.3 (4.5)	64.3 (6.3)	50.0 (8.6)	71.0 (12.2)	56.7 (17.5)	80.6 (24.8)	51.2 (14.2)	72.7 (20.2)	47.1 (4.7)	66.9 (6.7)
10	43.5 (2.7)	61.7 (3.9)			43.7 (2.7)	62.1 (3.8)			43.6 (1.9)	61.9 (2.7)
11	43.8 (2.2)	62.2 (3.2)	50.9 (13.9)	72.3 (19.8)	56.7 (21.2)	80.5 (30.1)				
12	47.8 (5.8)	67.8 (8.3)	84.0 (73.1)	119.0 (104.0)	47.2 (4.6)	67.1 (6.5)	49.5 (9.7)	70.3 (13.8)	45.8 (2.7)	65.1 (3.9)
13	53.4 (14.9)	75.8 (21.1)	66.9 (32.1)	95.1 (45.5)	87.1 (77.1)	124.0 (110.0)			52.1 (10.5)	74.0 (14.9)
14	47.5 (4.2)	67.4 (6.0)								
15	44.5 (20.3)	63.2 (28.8)			68.3 (58.7)	96.9 (83.3)				
16	28.6 (11.5)	41.1 (16.9)	69.5 (71.9)	104.0 (105.0)	48.5 (37.0)	70.0 (53.8)	42.4 (29.6)	60.4 (42.2)	26.3 (9.6)	
17	27.7 (9.8)	39.5 (13.9)	48.8 (29.2)	69.6 (41.6)			37.0 (16.9)	52.9 (24.1)	53.1 (37.7)	75.8 (53.9)
18	47.8 (41.1)	68.1 (58.5)	38.2 (18.7)	54.5 (26.7)	60.5 (56.5)	86.3 (80.8)	50.7 (26.8)	72.3 (38.2)	51.9 (37.0)	74.1 (52.8)
19	26.4 (10.5)	37.5 (15.0)	34.0 (18.5)	48.4 (26.3)	105.0 (90.1)	149.0 (128.0)	33.9 (16.2)	48.3 (23.0)	37.8 (14.0)	53.8 (19.9)
20	27.2 (11.5)	38.7 (16.4)	35.4 (13.5)	50.4 (19.3)	36.0 (19.8)	51.3 (28.2)				
21	23.5 (4.6)	33.4 (6.5)	37.1 (20.3)	52.8 (28.9)	23.8 (5.5)	33.9 (7.9)				
22	47.6 (49.8)	67.8 (70.9)	79.9 (67.1)	114.0 (95.5)	43.1 (25.4)	61.4 (36.1)				
23	29.2 (16.0)	41.5 (22.8)			32.7 (18.8)	46.7 (26.9)				
24	25.1 (10.1)	35.7 (14.3)	24.9 (3.3)	35.5 (4.7)	36.9 (20.6)	52.6 (29.3)	40.4 (20.4)	57.6 (29.0)	34.6 (17.1)	49.4 (24.4)
25	27.0 (11.2)	38.4 (15.9)	40.2 (21.5)	57.3 (30.6)	104.0 (139.0)	148.0 (199.0)	47.9 (37.4)	68.2 (53.2)	58.0 (44.4)	82.6 (63.4)
26	23.1 (5.1)	32.8 (7.3)	25.7 (18.7)	36.6 (26.6)			29.7 (17.2)	42.2 (24.5)	39.6 (32.6)	56.4 (46.5)
27	32.6 (19.5)	46.3 (27.7)	52.5 (45.8)	74.7 (65.2)			49.3 (31.1)	70.1 (44.3)	51.5 (41.5)	73.3 (59.0)
28	34.8 (19.6)	49.5 (27.8)	50.8 (33.7)	72.3 (48.0)	40.2 (36.3)	57.1 (51.6)			36.5 (14.1)	51.9 (20.1)
29	32.3 (21.4)	45.9 (30.4)								
30	31.6 (11.9)	45.0 (16.9)	58.2 (38.1)	83.0 (54.3)	76.8 (67.3)	109.0 (96.1)	58.0 (28.4)	82.7 (40.4)	39.3 (15.9)	56.1 (22.6)
31	29.2 (9.3)	41.6 (13.2)	36.1 (46.5)	51.5 (66.4)	54.1 (44.6)	77.2 (63.5)	34.0 (12.3)	48.5 (17.6)	25.3 (3.2)	36.1 (4.6)
Avg	38.2	53.8	48.8	69.7	55.4	78.9	44.4	63.2	43.4	63.4
n	31	29	22	22	23	23	15	15	16	15
SD	9.6	13.8	15.2	21.9	20.3	28.9	7.6	10.9	9.4	12.2
Min	23.1	32.8	24.9	35.5	23.8	33.9	29.7	42.2	25.3	36.1
Max	55.3	78.5	84.0	119.0	105.0	149.0	58.0	82.7	58.0	82.6

ED_004549_00015841-00152

Table F6. Daily means (SD) of H2S concentrations at site WA5B for November, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	31.9 (21.9)	45.5 (31.2)	46.7 (39.8)	66.7 (56.8)	51.9 (51.3)	74.2 (73.3)			28.6 (14.2)	40.9 (20.3)
2	23.9 (5.0)	34.1 (7.1)	40.3 (25.9)	57.6 (36.8)	80.9 (88.9)	115.0 (127.0)				
3	22.0 (6.0)	31.4 (8.6)	28.7 (12.3)	40.9 (17.5)	68.5 (85.5)	97.7 (122.0)			25.1 (8.2)	35.8 (11.7)
4	20.0 (3.0)	28.5 (4.2)	25.5 (6.3)	36.4 (9.0)	71.8 (90.5)	103.0 (129.0)				
5	24.9 (11.1)	35.5 (15.9)	25.1 (11.6)	35.8 (16.5)						
6	22.2 (3.3)	31.6 (4.7)	27.8 (12.7)	39.6 (18.0)	53.8 (58.6)	76.8 (83.6)	29.4 (11.5)	41.9 (16.5)	130.0 (123.0)	185.0 (175.0)
7	21.0 (2.9)	29.9 (4.1)	22.2 (2.2)	31.7 (3.2)			38.5 (10.9)	54.9 (15.6)	177.0 (143.0)	252.0 (204.0)
8	23.3 (4.5)	33.2 (6.5)			35.9 (38.1)	51.3 (54.3)	28.7 (5.0)	41.0 (7.2)	192.0 (172.0)	274.0 (246.0)
9	33.7 (18.5)	48.0 (26.4)					49.2 (12.8)	70.3 (18.3)	126.0 (120.0)	180.0 (172.0)
10	28.2 (10.5)	40.2 (14.9)	51.3 (41.2)	73.2 (58.8)			36.5 (11.3)	52.0 (16.2)	172.0 (145.0)	245.0 (207.0)
11	27.8 (11.1)	39.7 (15.9)	38.8 (15.6)	55.3 (22.2)	41.9 (11.5)	59.8 (16.4)	38.9 (11.1)	55.6 (15.9)	108.0 (97.6)	154.0 (139.0)
12	21.1 (7.3)	30.2 (10.5)	26.8 (6.8)	38.3 (9.8)	35.1 (24.1)	50.3 (34.5)	21.5 (4.0)	30.8 (5.7)	31.9 (16.6)	45.6 (23.7)
13	21.4 (3.0)	30.5 (4.3)	27.7 (11.9)	39.6 (16.9)	26.1 (17.2)	37.3 (24.7)				
14	38.6 (27.4)	54.9 (39.0)	27.8 (16.0)	39.5 (22.7)	24.8 (11.6)	35.3 (16.5)	51.0 (23.4)	72.6 (33.3)	62.9 (66.0)	89.5 (93.9)
15	27.7 (13.4)	39.5 (19.1)	30.8 (17.7)	43.8 (25.1)	26.1 (12.5)	37.2 (17.8)	86.6 (137.0)	123.0 (195.0)	106.0 (142.0)	150.0 (202.0)
16	22.4 (3.1)	31.9 (4.4)			29.4 (9.8)	41.9 (13.9)	45.2 (14.8)	64.4 (21.0)	86.6 (122.0)	123.0 (174.0)
17	22.5 (4.5)	32.0 (6.4)	76.4 (121.0)	109.0 (173.0)	39.5 (34.9)	56.3 (49.7)	131.0 (205.0)	186.0 (293.0)	86.9 (110.0)	124.0 (156.0)
18	20.7 (3.8)	29.6 (5.3)	35.0 (13.3)	49.9 (19.0)	36.6 (14.6)	52.2 (20.7)	92.1 (127.0)	131.0 (181.0)	69.5 (65.4)	99.0 (93.3)
19	20.8 (4.6)	29.6 (6.6)	36.4 (20.6)	51.8 (29.4)	55.1 (69.6)	78.4 (99.0)	32.0 (34.4)	45.6 (48.9)	64.4 (94.3)	91.7 (134.0)
20	28.8 (13.7)	41.0 (19.4)	28.6 (8.6)	40.7 (12.3)	50.8 (70.4)	72.3 (100.0)			51.6 (42.3)	73.5 (60.2)
21	27.1 (8.0)	38.5 (11.4)	42.2 (38.0)	60.1 (54.1)	32.5 (17.7)	46.2 (25.2)			159.0 (250.0)	227.0 (357.0)
22	49.8 (31.3)	70.8 (44.6)	39.6 (22.8)	56.3 (32.4)			56.6 (37.1)	80.5 (52.8)	119.0 (112.0)	170.0 (160.0)
23	41.7 (35.0)	59.4 (49.7)	35.9 (20.7)	51.1 (29.5)	35.7 (31.8)	50.8 (45.2)	60.3 (61.3)	85.8 (87.2)	71.8 (101.0)	102.0 (144.0)
24	24.9 (7.3)	35.5 (10.4)	36.3 (17.1)	51.6 (24.3)	36.8 (22.0)	52.3 (31.3)	101.0 (112.0)	144.0 (159.0)	110.0 (134.0)	156.0 (191.0)
25	21.1 (4.0)	30.0 (5.6)	29.3 (12.3)	41.7 (17.5)	26.7 (19.7)	37.9 (28.0)	142.0 (206.0)	201.0 (293.0)	72.0 (57.3)	102.0 (81.5)
26	35.5 (29.0)	50.4 (41.3)	29.8 (11.9)	42.4 (16.9)	33.8 (25.6)	48.0 (36.4)	136.0 (218.0)	193.0 (310.0)	78.8 (81.1)	112.0 (115.0)
27	23.4 (7.6)	33.3 (10.7)	45.1 (43.9)	64.2 (62.5)	28.8 (8.9)	41.0 (12.7)	51.8 (62.7)	73.7 (89.3)	85.0 (162.0)	121.0 (231.0)
28	23.3 (6.4)	33.1 (9.1)	33.5 (32.9)	47.7 (46.9)			109.0 (245.0)	155.0 (349.0)	36.0 (14.3)	51.3 (20.4)
29	20.8 (8.1)	29.6 (11.5)	113.0 (162.0)	160.0 (231.0)	66.3 (82.0)	94.5 (117.0)	96.1 (104.0)	137.0 (149.0)	73.0 (95.7)	104.0 (136.0)
30	23.5 (9.6)	33.5 (13.7)	28.5 (25.7)	40.6 (36.6)	22.4 (7.9)	31.9 (11.2)	52.0 (77.3)	74.0 (110.0)	39.0 (20.0)	55.6 (28.5)
Avg	26.5	37.7	38.1	54.3	42.1	60.1	67.5	96.1	90.8	129.0
n	30	30	27	27	24	24	22	22	26	26
SD	7	10	18.1	25.8	16.2	23.1	36.6	52.1	46.1	65.8
Min	20.0	28.5	22.2	31.7	22.4	31.9	21.5	30.8	25.1	35.8
Max	49.8	70.8	113.0	160.0	80.9	115.0	142.0	201.0	192.0	274.0

ED_004549_00015841-00153

Table F6. Daily means (SD) of H2S concentrations at site WA5B for December, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	33.7 (15.5)	47.9 (22.1)					37.5 (14.3)	53.5 (20.4)	67.3 (95.5)	96.0 (136.0)
2	23.5 (8.1)	33.5 (11.6)					136.0 (350.0)	194.0 (499.0)	39.8 (24.9)	56.8 (35.5)
3	24.2 (11.4)	34.4 (16.2)	54.9 (79.8)	78.3 (114.0)	33.5 (27.7)	47.6 (39.4)	60.5 (108.0)	86.2 (154.0)	75.8 (106.0)	108.0 (151.0)
4	28.2 (11.5)	40.1 (16.3)	35.3 (21.5)	50.2 (30.6)	24.3 (28.8)	34.5 (41.0)	40.2 (58.0)	57.2 (82.4)	39.5 (25.0)	56.1 (35.6)
5	19.9 (1.5)	28.2 (2.2)	26.6 (12.1)	37.8 (17.2)	23.4 (7.6)	33.3 (10.8)	33.9 (14.8)	48.3 (21.1)	58.1 (65.6)	82.7 (93.3)
6	41.4 (40.0)	58.9 (56.9)	74.9 (96.0)	107.0 (137.0)	36.2 (23.3)	51.5 (33.2)	102.0 (205.0)	145.0 (291.0)	41.2 (24.1)	58.6 (34.3)
7	36.5 (14.8)	52.0 (21.0)			76.4 (50.0)	109.0 (71.1)	63.8 (81.3)	90.8 (116.0)	218.0 (210.0)	310.0 (299.0)
8	27.5 (7.6)	39.1 (10.8)	28.3 (15.0)	40.2 (21.4)	44.1 (41.6)	62.7 (59.2)	174.0 (340.0)	248.0 (484.0)	42.5 (20.5)	60.5 (29.2)
9	50.3 (31.2)	71.5 (44.4)	41.6 (43.6)	59.2 (61.9)	41.8 (24.6)	59.5 (34.9)	43.0 (95.0)	61.1 (135.0)	60.4 (57.8)	86.0 (82.3)
10	46.1 (33.2)	65.6 (47.2)			31.6 (14.2)	45.0 (20.2)	62.7 (49.9)	89.3 (71.0)	56.1 (20.2)	79.9 (28.7)
11	35.2 (19.3)	50.0 (27.4)	48.3 (42.8)	68.8 (60.9)	21.9 (17.6)	31.2 (25.0)	34.4 (25.8)	49.0 (36.8)	71.3 (73.7)	101.0 (105.0)
12	25.3 (11.0)	36.0 (15.6)			51.1 (62.2)	72.7 (88.5)	33.2 (27.1)	47.2 (38.5)	42.2 (31.7)	60.0 (45.2)
13	21.5 (5.9)	30.6 (8.4)	22.7 (10.5)	32.3 (15.0)			21.5 (7.5)	30.6 (10.7)	53.1 (55.5)	75.6 (79.0)
14	18.0 (1.4)	25.5 (2.0)	18.0 (1.8)	25.5 (2.6)	23.1 (7.8)	32.8 (11.1)	22.7 (13.4)	32.2 (19.1)		
15	17.7 (0.8)	25.2 (1.1)	22.0 (5.6)	31.2 (7.9)	30.1 (24.4)	42.8 (34.8)	32.4 (28.9)	45.7 (41.1)	38.2 (18.8)	54.2 (26.9)
16	22.0 (4.8)	31.2 (6.8)	25.9 (7.3)	36.7 (10.3)	36.8 (28.0)	52.3 (39.8)	36.7 (30.8)	52.0 (43.7)		
17	18.6 (1.4)	26.5 (1.9)	23.1 (5.2)	32.8 (7.3)	22.0 (4.9)	31.3 (6.9)	36.3 (23.7)	51.6 (33.7)		
18	19.1 (1.4)									
19	19.5 (1.5)	27.7 (2.1)	24.9 (9.5)	35.3 (13.5)	25.8 (18.2)	36.7 (25.9)	84.3 (72.3)	120.0 (103.0)	35.7 (35.4)	50.7 (50.3)
20	18.3 (0.8)	26.0 (1.1)	37.2 (57.7)	52.9 (81.9)	26.2 (20.9)	37.2 (29.7)	56.1 (32.0)	79.6 (45.4)	40.2 (10.7)	57.1 (15.2)
21	22.4 (4.9)	31.8 (6.9)	32.1 (11.2)	45.5 (15.9)	63.3 (61.9)	90.0 (87.9)	66.5 (63.6)	94.4 (90.3)		
22	22.9 (3.3)	32.6 (4.7)	51.2 (61.8)	72.6 (87.8)	35.2 (24.6)	49.9 (35.0)	59.6 (28.8)	84.6 (40.9)	51.9 (18.1)	73.7 (25.7)
23	23.3 (5.5)	33.0 (7.8)	64.7 (59.7)	91.9 (84.8)	26.6 (8.9)	37.8 (12.6)	70.3 (40.0)	99.8 (56.8)	128.0 (243.0)	181.0 (346.0)
24	20.5 (1.5)	29.1 (2.1)	59.0 (81.6)	83.8 (116.0)	23.8 (11.5)	33.8 (16.3)			94.0 (128.0)	134.0 (182.0)
25	20.3 (1.6)	28.9 (2.3)	108.0 (136.0)	153.0 (193.0)	57.3 (43.6)	81.5 (61.9)	65.1 (33.5)	92.5 (47.6)	99.3 (152.0)	141.0 (216.0)
26	24.0 (5.4)	34.0 (7.6)	95.0 (159.0)	135.0 (226.0)						
27	23.8 (5.0)	33.9 (7.2)	31.9 (18.0)	45.4 (25.6)	44.7 (41.7)	63.7 (59.5)	44.9 (21.9)	63.9 (31.1)		
28	31.5 (7.5)	44.9 (10.6)	80.4 (78.0)	114.0 (111.0)	38.3 (18.8)	54.6 (26.8)				
29	20.9 (2.2)	29.7 (3.1)	118.0 (181.0)	166.0 (256.0)	41.9 (33.6)	59.7 (47.8)				
30	24.2 (6.5)	34.4 (9.3)	35.0 (22.9)	49.9 (32.6)	51.7 (57.3)	72.9 (81.1)	85.3 (99.0)	122.0 (141.0)	52.2 (29.5)	74.4 (42.0)
31	22.3 (4.8)	31.8 (6.8)	39.2 (15.7)	55.8 (22.4)	41.9 (30.6)	59.7 (43.5)				
Avg	25.9	37.1	47.9	68.0	37.4	53.2	60.1	85.5	66.9	95.1
n	31	30	25	25	26	26	25	25	21	21
SD	8.2	11.7	27.3	38.7	13.7	19.4	34.8	49.5	40.9	58.2
Min	17.7	25.2	18.0	25.5	21.9	31.2	21.5	30.6	35.7	50.7
Max	50.3	71.5	118.0	166.0	76.4	109.0	174.0	248.0	218.0	310.0

ED_004549_00015841-00154

Table F6. Daily means (SD) of H2S concentrations at site WA5B for January, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	37.3 (16.0)	53.1 (22.8)	30.7 (29.9)	43.7 (42.6)	43.3 (31.4)	61.8 (44.8)	64.7 (101.0)	92.2 (144.0)	44.9 (19.7)	63.9 (28.0)
2	20.7 (1.5)	29.5 (2.1)	29.0 (10.7)	41.3 (15.2)	39.6 (32.4)	56.3 (46.0)				
3	19.8 (1.6)	28.1 (2.3)	23.4 (5.9)	33.3 (8.4)	28.4 (18.6)	40.4 (26.5)	45.8 (47.0)	65.1 (66.8)		
4	18.7 (0.8)	26.6 (1.2)	22.2 (7.9)	31.5 (11.2)	25.7 (12.2)	36.5 (17.4)	37.0 (17.7)	52.5 (25.1)	33.3 (14.6)	47.4 (20.8)
5	19.7 (1.0)	27.9 (1.4)	32.7 (9.8)	46.4 (13.9)	34.1 (19.5)	48.5 (27.7)	81.2 (127.0)	115.0 (180.0)		
6	22.0 (2.3)	31.4 (3.2)	43.3 (26.8)	61.8 (38.2)	34.4 (14.8)	49.1 (21.0)	47.9 (21.6)	68.3 (30.9)	35.2 (22.5)	50.1 (32.0)
7	17.1 (2.7)	24.6 (3.8)	19.5 (2.3)	27.8 (3.4)	20.5 (6.3)	29.7 (9.2)				
8	15.8 (2.1)	22.5 (3.2)	20.1 (9.8)	29.0 (14.6)	20.9 (7.3)	30.5 (10.8)				
9	18.4 (1.6)	26.1 (2.2)	28.6 (10.8)	40.7 (15.3)	36.5 (25.0)	52.0 (35.6)	61.4 (51.6)	87.3 (73.4)		
10	18.7 (1.6)	26.6 (2.2)	59.3 (65.3)	84.4 (92.9)	24.0 (6.9)	34.1 (9.8)	35.9 (11.6)	51.1 (16.6)		
11	23.6 (5.0)	33.5 (7.2)	38.8 (24.8)	55.2 (35.3)					34.2 (9.3)	48.7 (13.3)
12	23.1 (3.1)	32.9 (4.4)	68.2 (80.8)	97.2 (115.0)	25.0 (17.9)	35.6 (25.5)			51.3 (42.9)	73.1 (61.1)
13	20.5 (2.9)	29.1 (4.1)								
14	17.3 (0.1)									
15	17.3 (0.9)	24.6 (1.3)	26.2 (25.7)	37.3 (36.5)	21.6 (9.7)	30.7 (13.8)	26.9 (15.3)	38.3 (21.7)	30.3 (12.5)	43.1 (17.8)
16	17.0 (1.2)	24.1 (1.7)	17.8 (1.0)	25.4 (1.4)	18.1 (1.3)	25.7 (1.8)	20.8 (14.2)	29.6 (20.2)	20.1 (8.2)	28.6 (11.6)
17	16.7 (0.7)	23.8 (1.0)	17.0 (1.4)	24.2 (2.0)	27.6 (19.2)	39.3 (27.3)	17.9 (1.2)	25.5 (1.7)		
18	17.0 (0.8)	24.2 (1.2)	23.1 (7.8)	32.8 (11.1)	36.2 (23.1)	51.5 (32.9)	19.3 (3.1)	27.5 (4.4)		
19	16.5 (0.8)	23.5 (1.2)	49.6 (104.0)	70.6 (148.0)	19.2 (3.0)	27.4 (4.3)	23.6 (10.1)	33.5 (14.4)		
20	15.9 (1.3)		48.0 (67.1)		21.5 (9.8)		35.7 (28.6)		32.0 (26.7)	
21	33.2 (162.0)		32.4 (22.6)		25.6 (15.4)		42.0 (24.6)		54.0 (29.4)	
22	17.9 (2.7)	25.4 (3.9)	22.4 (7.3)	31.8 (10.4)	16.5 (5.4)	23.5 (7.7)	43.9 (33.4)	62.4 (47.5)	145.0 (168.0)	207.0 (239.0)
23										
24										
25										
26										
27										
28										
29										
30			26.8 (19.0)	38.1 (27.0)	30.7 (36.4)	43.7 (51.9)	93.3 (148.0)	133.0 (211.0)	67.6 (48.8)	96.3 (69.5)
31			33.5 (26.0)	47.6 (37.0)	37.3 (26.8)	53.0 (38.1)	51.0 (64.6)	72.5 (91.9)	105.0 (137.0)	150.0 (195.0)
Avg	20.2	28.3	32.4	45.0	27.9	40.5	44.0	63.6	54.5	80.8
n	22	19	22	20	21	19	17	15	12	10
SD	5.3	6.6	13.4	19.3	7.6	11.1	20.8	31.3	34.9	53.4
Min	15.8	22.5	17.0	24.2	16.5	23.5	17.9	25.5	20.1	28.6
Max	37.3	53.1	68.2	97.2	43.3	61.8	93.3	133.0	145.0	207.0

ED_004549_00015841-00155

Table F6. Daily means (SD) of H2S concentrations at site WA5B for February, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1			24.2 (36.9)	34.4 (52.5)	22.8 (14.1)	32.5 (20.1)	30.0 (21.9)	42.6 (31.1)	53.2 (47.2)	75.7 (67.2)
2			30.1 (38.1)	42.9 (54.2)	43.2 (27.8)	61.5 (39.6)	54.9 (44.0)	78.1 (62.5)	65.9 (81.0)	93.7 (115.0)
3			57.9 (60.9)	82.3 (86.6)	25.4 (9.8)	36.1 (14.0)	42.3 (17.8)	60.2 (25.3)	46.6 (24.3)	66.4 (34.7)
4			24.0 (6.5)	34.1 (9.2)	23.3 (7.6)	33.1 (10.8)	79.3 (114.0)	113.0 (162.0)	50.4 (28.8)	71.8 (41.1)
5										
6	17.9 (6.9)	25.5 (9.8)								
7	17.3 (15.3)	24.6 (21.8)								
8	24.4 (18.0)	34.7 (25.6)								
9	20.4 (13.5)	29.0 (19.2)								
10			26.4 (15.7)	37.5 (22.3)	27.5 (17.1)	39.1 (24.4)	35.7 (27.9)	50.8 (39.7)	43.0 (45.0)	61.1 (64.0)
11			36.7 (53.6)	52.2 (76.2)	47.5 (70.4)	67.7 (100.0)	38.4 (24.8)	54.6 (35.3)	47.1 (34.4)	67.0 (49.0)
12			21.3 (18.8)	30.3 (26.8)	18.2 (3.5)	26.0 (5.0)	46.3 (57.2)	65.9 (81.4)	56.0 (89.7)	79.8 (128.0)
13			19.7 (6.6)	28.0 (9.4)	31.9 (18.6)	45.4 (26.5)	23.2 (10.6)	32.9 (15.1)	33.1 (21.1)	47.1 (30.0)
14			22.2 (5.6)	31.6 (8.0)	28.2 (20.9)	40.1 (29.8)	68.7 (127.0)	97.8 (180.0)	55.6 (69.4)	79.2 (98.9)
15			34.5 (24.9)	49.1 (35.5)	35.8 (37.9)	51.0 (54.0)	45.8 (69.4)	65.2 (98.8)	41.9 (46.2)	59.7 (65.7)
16			19.5 (5.3)	27.7 (7.6)	23.2 (10.2)	33.1 (14.6)	26.6 (24.5)	37.9 (34.9)	43.8 (28.7)	62.4 (40.9)
17			20.5 (5.8)	29.2 (8.2)	32.1 (29.0)	45.7 (41.3)	72.7 (148.0)	103.0 (211.0)	31.5 (21.3)	44.8 (30.4)
18			18.6 (3.8)	26.4 (5.4)	16.7 (1.9)	23.7 (2.7)	34.5 (46.9)	48.7 (66.2)	25.4 (18.0)	36.2 (25.7)
19			17.8 (18.9)	25.3 (27.0)	15.5 (1.8)	22.1 (2.6)	94.7 (197.0)	135.0 (280.0)	30.2 (41.7)	43.0 (59.5)
20			28.7 (10.1)	40.9 (14.4)	40.3 (31.8)	57.4 (45.3)	39.2 (38.1)	55.8 (54.3)	49.1 (62.2)	70.0 (88.6)
21			32.4 (46.0)	46.1 (65.4)	23.3 (25.9)	33.2 (36.8)	44.3 (31.0)	63.1 (44.2)	41.4 (44.5)	58.9 (63.3)
22			51.1 (56.1)	72.7 (79.9)	21.2 (7.9)	30.2 (11.2)	105.0 (210.0)	149.0 (298.0)	61.4 (82.2)	87.4 (117.0)
23			34.4 (24.3)	49.0 (34.6)	50.1 (37.2)	71.4 (53.0)	59.5 (46.7)	84.7 (66.5)	51.2 (64.3)	72.9 (91.7)
24			25.7 (14.4)	36.7 (20.5)	40.7 (36.9)	58.1 (52.7)	25.6 (12.0)	36.6 (17.1)	45.6 (63.1)	65.2 (90.2)
25			16.0 (0.6)	22.9 (0.8)	22.7 (14.0)	32.4 (20.0)	18.9 (6.5)	26.9 (9.3)	19.3 (7.0)	27.5 (10.0)
26			18.6 (4.7)	26.5 (6.6)	18.0 (2.9)	25.6 (4.1)				
27			22.8 (15.6)	32.4 (22.2)	23.5 (12.8)	33.4 (18.2)	59.8 (111.0)	85.0 (158.0)	68.6 (124.0)	97.5 (176.0)
28			31.3 (31.8)	44.6 (45.2)	48.5 (39.4)	69.0 (56.1)	53.4 (63.5)	75.9 (90.3)	84.8 (102.0)	121.0 (145.0)
Avg	20.0	28.4	27.6	39.2	29.6	42.1	49.9	71.1	47.5	67.6
n	4	4	23	23	23	23	22	22	22	22
SD	2.8	4	10.2	14.5	10.5	15.0	22.4	31.9	14.6	20.8
Min	17.3	24.6	16.0	22.9	15.5	22.1	18.9	26.9	19.3	27.5
Max	24.4	34.7	57.9	82.3	50.1	71.4	105.0	149.0	84.8	121.0

ED_004549_00015841-00156

Table F6. Daily means (SD) of H2S concentrations at site WA5B for March, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1			31.1 (17.8)	44.2 (25.2)	47.7 (17.5)	68.0 (24.9)	47.7 (75.9)	68.0 (108.0)	74.1 (131.0)	106.0 (187.0)
2			33.7 (28.2)	48.1 (40.2)	35.4 (28.0)	50.5 (39.9)	95.3 (233.0)	136.0 (332.0)	36.4 (43.0)	51.9 (61.2)
3			22.0 (13.4)	31.4 (19.1)	19.6 (6.7)	27.9 (9.6)	39.3 (65.5)	56.1 (93.4)	71.4 (146.0)	102.0 (208.0)
4			65.7 (104.0)	93.6 (147.0)	26.6 (16.5)	38.0 (23.5)	71.5 (153.0)	102.0 (218.0)	69.0 (119.0)	98.4 (169.0)
5			15.7 (1.2)	22.4 (1.6)	17.5 (5.6)	25.0 (8.0)	15.5 (2.6)	22.0 (3.7)	16.5 (4.6)	23.5 (6.6)
6			26.5 (10.0)	37.7 (14.2)	33.9 (15.8)	48.2 (22.5)	31.6 (17.4)	45.0 (24.8)	31.2 (19.5)	44.3 (27.7)
7			18.2 (4.2)	25.9 (5.9)	21.1 (7.7)	30.0 (11.0)	18.1 (4.8)	25.8 (6.8)	18.3 (3.0)	26.1 (4.3)
8			17.3 (3.4)	24.5 (4.9)	16.7 (3.0)	23.8 (4.3)	17.1 (3.2)	24.3 (4.7)	28.1 (25.9)	35.8 (31.5)
9			17.6 (4.1)	25.1 (5.8)	24.4 (11.0)	34.7 (15.7)	17.2 (5.6)	24.4 (8.0)	69.2 (137.0)	98.5 (195.0)
10			19.1 (20.1)	27.1 (28.5)	14.1 (0.7)	20.0 (1.0)	17.2 (3.2)	24.5 (4.6)	21.9 (15.4)	31.1 (21.9)
11			21.6 (26.2)	30.7 (37.2)	14.4 (1.8)	20.5 (2.5)	20.2 (5.1)	28.6 (7.3)	42.4 (69.7)	60.3 (99.1)
12										
13										
14			27.7 (16.0)	39.4 (22.8)	26.3 (14.1)	37.4 (20.1)	35.6 (34.6)	50.6 (49.3)	33.1 (22.5)	47.1 (32.0)
15			21.0 (9.9)	29.8 (14.1)	20.2 (5.0)	28.7 (7.1)	23.1 (11.6)	32.9 (16.5)	19.3 (4.9)	27.4 (7.0)
16			23.1 (6.3)	32.8 (8.9)	21.1 (7.1)	30.1 (10.1)	24.0 (11.4)	34.1 (16.3)		
17			20.3 (7.3)	28.9 (10.4)	18.8 (4.9)	26.7 (7.0)	22.2 (11.0)	31.6 (15.6)	45.6 (71.5)	64.9 (102.0)
18			20.4 (4.8)	29.0 (6.8)	33.3 (40.5)	47.4 (57.7)	24.9 (9.2)	35.4 (13.0)	41.1 (39.5)	58.5 (56.3)
19			21.8 (3.3)	31.0 (4.7)	36.3 (21.9)	51.7 (31.2)			29.4 (45.6)	42.0 (65.1)
20			30.3 (25.2)	43.2 (35.9)	21.4 (11.7)	30.5 (16.7)	21.2 (5.0)	30.2 (7.2)	25.9 (11.3)	36.9 (16.1)
21			20.8 (7.6)	29.7 (10.9)	21.4 (23.6)	30.5 (33.6)	24.7 (10.2)	35.2 (14.5)	118.0 (263.0)	168.0 (375.0)
22			23.0 (14.9)	32.7 (21.2)	18.3 (3.8)	26.1 (5.4)	25.1 (9.4)	35.7 (13.4)	118.0 (216.0)	169.0 (307.0)
23			24.9 (10.3)	35.4 (14.7)	24.4 (31.8)	34.7 (45.2)	30.1 (22.8)	42.8 (32.4)	102.0 (128.0)	145.0 (181.0)
24			19.3 (5.4)	27.4 (7.6)	39.6 (32.4)	56.3 (46.2)	35.1 (27.9)	50.0 (39.8)		
25			17.4 (6.8)	24.8 (9.7)	23.4 (13.5)	33.3 (19.2)	18.4 (6.8)	26.1 (9.7)	37.2 (38.5)	53.0 (54.8)
26							26.9 (12.7)		42.0 (63.0)	
27			22.3 (6.5)	31.7 (9.2)	57.0 (84.2)	81.0 (120.0)	28.6 (23.5)	40.7 (33.5)	56.0 (99.0)	79.6 (141.0)
28			23.8 (9.0)	33.9 (12.8)	23.6 (10.4)	33.7 (14.9)	24.0 (8.8)	34.1 (12.5)	74.2 (143.0)	106.0 (204.0)
29			17.9 (3.1)	25.4 (4.4)	45.0 (48.2)	64.0 (68.5)			19.3 (17.7)	27.5 (25.1)
30			29.6 (26.0)	42.1 (37.0)	33.2 (31.3)	47.3 (44.5)	56.5 (71.9)	80.3 (102.0)	23.3 (7.7)	33.2 (10.9)
31			39.5 (30.9)	56.3 (44.0)	21.3 (4.0)	30.3 (5.6)				
Avg			24.7	35.2	27.0	38.4	31.2	44.6	48.6	69.4
n	0	0	28	28	28	28	26	25	26	25
SD			9.6	13.7	10.5	14.9	18.1	26.3	29.5	42.9
Min			15.7	22.4	14.1	20.0	15.5	22.0	16.5	23.5
Max			65.7	93.6	57.0	81.0	95.3	136.0	118.0	169.0

ED_004549_00015841-00157

Table F6. Daily means (SD) of H2S concentrations at site WA5B for April, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1			29.6 (20.0)	42.2 (28.4)	36.4 (21.7)	51.9 (30.9)	48.3 (43.2)	68.8 (61.5)	69.7 (110.0)	99.2 (156.0)
2			18.4 (1.9)	26.1 (2.7)	33.8 (33.6)	48.2 (47.8)				
3					20.2 (10.3)	28.7 (14.6)	28.7 (15.3)	40.8 (21.6)	24.5 (14.0)	34.8 (19.9)
4			19.9 (8.4)	28.2 (11.9)	17.6 (2.1)	25.0 (3.0)	26.7 (17.6)	37.9 (25.1)	18.7 (2.7)	26.6 (3.8)
5			24.0 (11.8)	34.2 (16.8)	54.3 (96.5)	77.2 (137.0)	27.9 (14.9)	39.7 (21.2)	131.0 (227.0)	187.0 (323.0)
6			70.3 (76.9)	100.0 (109.0)	29.3 (17.9)	41.7 (25.5)			87.4 (158.0)	124.0 (226.0)
7			28.6 (9.9)	40.7 (14.1)	35.8 (18.9)	51.0 (26.9)	26.1 (6.9)	37.1 (9.8)	51.3 (45.8)	73.2 (65.4)
8			27.1 (13.9)	38.6 (19.8)	44.5 (37.5)	63.3 (53.4)			159.0 (248.0)	227.0 (353.0)
9			28.1 (12.7)	40.0 (18.0)	22.4 (8.4)	31.8 (11.9)	30.6 (20.2)	43.5 (28.8)	26.0 (10.6)	37.0 (15.1)
10			24.6 (22.4)	35.1 (32.0)	37.5 (39.5)	53.5 (56.2)	35.4 (29.3)	50.5 (41.8)	83.7 (166.0)	119.0 (237.0)
11			21.4 (5.7)	30.5 (8.1)	34.6 (26.6)	49.3 (37.9)				
12			31.7 (31.8)	45.2 (45.2)	25.6 (8.3)	36.6 (11.9)	48.3 (51.6)	68.9 (73.5)	55.9 (71.8)	79.7 (102.0)
13			30.7 (36.8)	43.7 (52.4)	43.4 (59.8)	61.7 (85.0)	19.0 (2.0)	27.1 (2.9)		
14			25.9 (18.1)	36.9 (25.7)	30.9 (31.1)	44.0 (44.3)	26.4 (18.1)	37.6 (25.8)	24.9 (13.6)	35.5 (19.3)
15			28.3 (14.8)	40.2 (21.1)	26.9 (20.7)	38.3 (29.5)	27.9 (19.4)	39.6 (27.5)	82.6 (140.0)	117.0 (199.0)
16			23.2 (10.3)	33.2 (14.7)	27.4 (18.3)	38.9 (26.0)	33.0 (32.7)	47.4 (46.8)	76.0 (148.0)	110.0 (212.0)
17			24.2 (5.7)	34.7 (8.2)	31.5 (13.4)	45.4 (19.1)	64.0 (75.4)	91.1 (107.0)		
18			22.5 (6.8)	32.1 (9.7)			41.9 (26.6)	59.6 (37.8)	104.0 (99.7)	147.0 (142.0)
19			54.5 (40.2)	77.6 (57.2)	53.9 (68.3)	76.8 (97.3)	87.7 (141.0)	125.0 (201.0)	81.4 (156.0)	116.0 (222.0)
20			34.7 (25.7)	49.5 (36.7)	34.8 (29.6)	49.6 (42.3)			27.2 (8.7)	38.8 (12.4)
21			54.9 (34.5)	78.3 (49.2)	52.8 (50.6)	75.3 (72.1)	57.7 (129.0)	82.2 (184.0)	104.0 (107.0)	148.0 (153.0)
22			55.5 (41.9)	79.0 (59.7)	29.7 (48.8)	42.3 (69.6)			38.6 (45.7)	55.0 (65.1)
23			21.8 (9.5)	31.0 (13.5)	35.9 (23.5)	51.0 (33.4)	31.2 (22.5)	44.3 (32.0)	55.4 (99.8)	78.7 (142.0)
24			50.0 (68.4)	71.0 (97.2)	22.9 (8.5)	32.6 (12.2)	55.9 (48.1)	79.4 (68.4)	22.9 (8.5)	32.5 (12.1)
25			20.2 (3.8)	28.7 (5.4)	25.0 (14.1)	35.6 (20.0)	23.6 (8.7)	33.5 (12.3)	35.0 (35.2)	49.8 (50.1)
26			24.7 (8.0)	35.2 (11.3)	21.1 (5.6)	30.0 (8.0)	23.3 (11.6)	33.1 (16.5)	31.9 (17.4)	45.4 (24.8)
27			23.7 (10.7)	33.8 (15.3)	23.7 (16.2)	33.7 (23.1)			18.9 (3.7)	26.9 (5.3)
28			16.5 (1.2)	23.4 (1.8)	18.1 (5.1)	25.7 (7.2)	16.3 (0.8)	23.2 (1.1)	21.7 (14.3)	31.0 (20.3)
29			19.8 (3.4)	28.2 (4.8)	32.6 (21.7)	46.5 (30.9)	18.7 (3.2)	26.7 (4.6)	49.7 (45.1)	70.9 (64.3)
30			18.7 (2.8)	26.6 (4.0)	20.3 (5.1)	28.8 (7.2)			20.6 (4.6)	29.4 (6.5)
Avg			30.1	42.9	31.8	45.3	36.3	51.7	57.8	82.3
n	0	0	29	29	29	29	22	22	26	26
SD			13.3	18.9	10.1	14.5	17.2	24.4	37.2	52.9
Min			16.5	23.4	17.6	25.0	16.3	23.2	18.7	26.6
Max			70.3	100.0	54.3	77.2	87.7	125.0	159.0	227.0

ED_004549_00015841-00158

Table F6. Daily means (SD) of H2S concentrations at site WA5B for May, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1			20.3 (4.0)	28.9 (5.7)	20.2 (8.3)	28.7 (11.9)	32.0 (21.3)	45.5 (30.3)	38.0 (40.6)	54.2 (57.8)
2			19.9 (4.7)	28.4 (6.7)	25.5 (10.3)	36.4 (14.7)	19.6 (8.9)	28.0 (12.6)	53.2 (85.2)	75.9 (122.0)
3			27.6 (16.9)	39.3 (24.1)	30.5 (22.4)	43.4 (31.9)	23.6 (10.6)	33.6 (15.1)	31.7 (28.8)	45.2 (41.1)
4			29.7 (28.5)	42.3 (40.6)	31.1 (31.1)	44.4 (44.3)			58.3 (94.4)	83.2 (135.0)
5			24.5 (8.4)	34.9 (12.0)	42.4 (45.2)	60.4 (64.4)				
6			24.3 (10.6)	34.7 (15.1)	40.0 (57.0)	57.1 (81.2)	54.6 (90.2)	77.8 (128.0)	35.1 (22.8)	50.0 (32.4)
7			21.7 (3.5)	30.9 (5.0)	23.6 (7.4)	33.7 (10.6)				
8			19.7 (4.0)	28.0 (5.7)	18.7 (4.4)	26.6 (6.2)	30.2 (21.5)	42.9 (30.7)	22.7 (9.4)	32.3 (13.4)
9			25.8 (11.3)	36.7 (16.0)	28.9 (17.2)	41.1 (24.5)	29.3 (13.1)	41.7 (18.6)	21.4 (9.7)	30.4 (13.8)
10			21.1 (5.3)	30.1 (7.6)	25.8 (14.7)	36.7 (20.9)	23.6 (15.8)	33.6 (22.5)	22.5 (9.6)	32.1 (13.7)
11			22.2 (6.5)	31.7 (9.3)	19.1 (2.2)	27.3 (3.2)				
12			20.3 (5.6)	28.8 (8.1)	18.6 (3.7)	26.5 (5.3)				
13			26.3 (9.1)	37.4 (12.9)	28.1 (21.8)	40.0 (31.0)	29.2 (17.7)	41.6 (25.2)	27.4 (22.4)	39.0 (31.8)
14			17.7 (1.4)	25.3 (2.0)	16.9 (0.5)	24.0 (0.8)				
15			18.3 (2.6)	26.1 (3.6)			22.5 (6.1)	32.0 (8.6)	18.3 (1.3)	26.0 (1.9)
16			21.0 (8.6)	30.0 (12.2)	18.6 (2.6)	26.5 (3.7)	21.9 (9.9)	31.1 (14.0)	20.1 (9.5)	28.6 (13.5)
17			21.6 (4.5)	30.9 (6.4)	22.3 (7.4)	31.8 (10.6)	20.1 (3.9)	28.7 (5.6)		
18			22.1 (4.8)	31.5 (6.9)	24.4 (15.8)	34.8 (22.5)	19.0 (6.5)	27.1 (9.3)	18.3 (3.6)	26.1 (5.1)
19			19.6 (3.4)	27.8 (4.9)	20.9 (6.1)	29.7 (8.7)				
20			25.2 (14.4)	35.9 (20.5)	20.1 (7.8)	28.6 (11.1)	29.7 (17.4)	42.2 (24.7)	29.3 (13.1)	41.7 (18.6)
21			50.0 (96.0)	71.2 (137.0)	28.4 (26.6)	40.4 (37.9)	20.0 (4.0)	28.5 (5.7)	36.6 (32.5)	52.1 (46.3)
22			47.1 (70.3)	67.0 (100.0)	41.1 (36.8)	58.6 (52.5)			41.0 (29.4)	58.4 (41.9)
23			20.8 (7.6)	29.7 (10.9)	23.4 (9.3)	33.3 (13.3)	22.9 (15.2)	32.6 (21.7)	32.9 (19.4)	46.9 (27.6)
24			19.1 (2.3)	27.2 (3.3)	25.7 (21.1)	36.6 (30.1)	24.8 (13.7)	35.3 (19.4)	27.2 (20.4)	38.7 (29.1)
25			20.7 (6.2)	29.5 (8.8)	23.5 (9.9)	33.4 (14.1)	27.6 (14.8)	39.3 (21.1)	28.0 (26.6)	39.9 (37.8)
26			21.3 (5.4)	30.3 (7.7)	29.3 (23.4)	42.1 (33.6)	20.4 (4.5)	29.2 (6.5)	31.5 (31.3)	45.2 (44.9)
27			19.1 (2.4)	27.2 (3.4)	20.5 (4.6)	29.2 (6.6)	27.6 (27.1)	39.3 (38.6)	25.4 (13.6)	36.3 (19.3)
28			22.8 (8.8)	32.6 (12.5)	20.2 (4.9)	28.8 (7.0)			28.0 (18.2)	40.0 (25.9)
29			33.5 (46.8)	47.9 (66.8)	22.5 (6.2)	32.2 (8.9)	69.9 (93.6)	99.8 (134.0)	42.1 (46.2)	60.1 (65.9)
30			34.0 (26.7)	48.5 (38.2)	31.6 (17.3)	45.2 (24.7)	26.0 (9.5)	37.1 (13.6)	38.5 (32.4)	54.9 (46.3)
31			21.2 (4.6)	30.3 (6.6)	29.8 (12.7)	42.5 (18.1)	28.0 (20.6)	39.9 (29.4)		
Avg			24.5	34.9	25.7	36.7	28.3	40.3	31.6	45.1
n	0	0	31	31	30	30	22	22	23	23
SD			7.5	10.6	6.6	9.4	11.6	16.6	10.1	14.5
Min			17.7	25.3	16.9	24.0	19.0	27.1	18.3	26.0
Max			50.0	71.2	42.4	60.4	69.9	99.8	58.3	83.2

ED_004549_00015841-00159

Table F6. Daily means (SD) of H2S concentrations at site WA5B for June, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1			21.5 (4.7)	30.7 (6.7)	23.2 (8.4)	33.0 (12.0)	19.7 (1.9)	28.0 (2.7)	23.5 (7.6)	33.5 (10.9)
2			19.4 (6.1)	27.7 (8.6)	18.8 (11.1)	26.8 (15.8)	18.2 (3.6)	26.0 (5.2)	20.9 (5.6)	29.8 (8.0)
3			23.6 (9.5)	33.6 (13.5)	32.9 (19.7)	46.9 (28.1)	28.7 (17.8)	41.0 (25.3)	25.0 (7.4)	35.7 (10.6)
4			24.9 (11.3)	35.5 (16.2)	32.6 (27.4)	46.6 (39.2)	33.3 (18.7)	47.6 (26.7)		
5			23.3 (8.0)	33.4 (11.4)	20.2 (6.1)	28.9 (8.7)			26.9 (17.8)	38.6 (25.5)
6			18.3 (2.9)	26.2 (4.1)	22.3 (5.0)	31.8 (7.1)				
7			23.3 (6.3)	33.4 (9.0)	21.7 (3.2)	31.0 (4.6)			33.4 (22.6)	47.8 (32.3)
8			49.7 (53.7)	71.0 (76.8)	38.0 (35.1)	54.3 (50.1)				
9			22.9 (23.0)	32.7 (32.9)	35.5 (23.9)	50.7 (34.1)			34.1 (16.7)	48.6 (23.8)
10										
11			20.8 (4.2)	29.7 (6.0)	36.1 (35.4)	51.5 (50.6)				
12			24.2 (8.4)	34.6 (12.0)	60.0 (72.8)	85.9 (104.0)				
13			27.6 (19.6)		76.7 (119.0)		21.5 (11.9)			
14			19.6 (5.7)		28.1 (28.4)					
15			16.7 (2.8)		21.9 (8.8)					
16										
17										
18			17.1 (1.9)	24.4 (2.8)	16.9 (0.9)	24.2 (1.3)	18.0 (3.0)	25.7 (4.3)	18.9 (3.0)	26.9 (4.2)
19			17.0 (1.7)	24.3 (2.4)	21.5 (11.9)	30.7 (16.9)	17.0 (1.3)	24.2 (1.9)	21.3 (5.7)	30.5 (8.2)
20			16.3 (0.8)	23.3 (1.2)	19.7 (6.0)	28.1 (8.6)	16.1 (0.7)	22.9 (1.0)	19.5 (4.4)	27.9 (6.3)
21			16.8 (2.1)	24.0 (3.0)	17.9 (2.1)	25.5 (3.0)	16.0 (1.0)	22.8 (1.4)	27.9 (12.0)	39.8 (17.1)
22										
23			15.5 (0.5)	22.1 (0.7)	15.2 (0.6)	21.6 (0.9)	16.1 (1.3)	22.9 (1.8)	15.4 (0.7)	21.9 (1.0)
24			17.1 (4.2)	24.4 (6.0)	18.3 (4.0)	26.1 (5.7)				
25			-10.0 (1.8)	-14.3 (2.6)	-10.3 (2.5)	-14.6 (3.6)	-10.5 (0.5)	-15.0 (0.8)	-9.7 (0.9)	-13.8 (1.3)
26			-6.5 (7.2)	-9.3 (10.2)	-5.1 (12.4)	-7.3 (17.6)	-10.3 (0.7)	-14.7 (0.9)	6.9 (38.0)	9.8 (54.1)
27			-5.9 (6.3)	-8.4 (9.0)	-7.1 (4.1)	-10.2 (5.8)	2.0 (18.0)	2.8 (25.6)	-0.3 (14.6)	-0.4 (20.8)
28			-4.9 (10.8)	-7.0 (15.4)	-2.4 (24.5)	-3.4 (35.0)	2.6 (25.1)	3.7 (35.8)	-4.7 (7.1)	-6.7 (10.1)
29			-6.8 (5.6)	-9.6 (7.9)	-6.1 (11.0)	-8.7 (15.7)	-3.5 (15.2)	-5.0 (21.6)	8.2 (27.3)	11.7 (38.9)
30			-7.3 (4.8)	-10.3 (6.8)	3.2 (34.6)	4.6 (49.3)	7.2 (31.6)	10.2 (45.1)	-1.2 (16.5)	-1.7 (23.6)
Avg			15.2	20.5	21.1	26.3	12.0	16.2	15.7	22.3
n	0	0	26	23	26	23	16	15	17	17
SD			13.7	20.3	19.4	24.0	12.5	18.0	13.0	18.6
Min			-10.0	-14.3	-10.3	-14.6	-10.5	-15.0	-9.7	-13.8
Max			49.7	71.0	76.7	85.9	33.3	47.6	34.1	48.6

ED_004549_00015841-00160

Table F6. Daily means (SD) of H2S concentrations at site WA5B for July, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1			-2.5 (13.4)	-3.6 (19.1)	-3.3 (12.2)	-4.7 (17.4)	-2.6 (16.3)	-3.7 (23.2)	16.4 (67.8)	23.4 (96.6)
2			1.2 (12.8)	1.7 (18.3)	2.0 (15.3)	2.9 (21.8)	-4.4 (8.9)	-6.3 (12.7)	4.9 (21.4)	6.9 (30.4)
3			6.1 (19.6)	8.8 (28.0)	20.3 (36.4)	29.0 (52.0)	-7.2 (9.7)	-10.3 (13.8)	-4.7 (9.5)	-6.7 (13.6)
4			9.1 (39.9)	13.1 (56.9)	-6.2 (7.7)	-8.8 (11.0)	0.0 (16.9)	0.0 (24.0)	5.8 (28.4)	8.3 (40.5)
5			-5.9 (10.0)	-8.4 (14.2)	20.3 (68.5)	28.9 (97.6)				
6			-13.0 (4.6)	-18.5 (6.5)	1.6 (43.3)	2.2 (61.8)	-11.6 (13.7)	-16.6 (19.5)	-12.6 (6.5)	-17.9 (9.3)
7			-13.7 (7.4)	-19.6 (10.5)	-15.0 (6.5)	-21.4 (9.2)	-14.0 (14.9)	-20.0 (21.3)	-6.6 (18.9)	-9.4 (27.0)
8										
9			24.5 (17.9)	35.0 (25.6)	32.5 (20.9)	46.3 (29.8)	20.6 (8.9)	29.4 (12.7)	19.6 (5.3)	28.0 (7.6)
10			21.5 (6.3)	30.7 (9.0)	46.3 (118.0)	66.2 (169.0)	22.6 (7.2)	32.2 (10.3)	70.8 (129.0)	101.0 (184.0)
11			25.0 (9.6)	35.6 (13.6)	34.5 (33.8)	49.2 (48.2)	21.9 (10.6)	31.3 (15.1)	32.8 (26.6)	46.8 (38.0)
12			22.0 (16.5)	31.4 (23.6)	44.4 (71.3)	63.5 (102.0)			46.4 (45.1)	66.3 (64.5)
13			21.8 (9.2)	31.1 (13.1)	24.6 (15.9)	35.2 (22.7)	20.7 (43.4)	29.6 (61.9)	21.7 (6.6)	31.0 (9.5)
14			23.4 (16.1)	33.4 (23.0)	24.2 (18.8)	34.6 (26.8)	23.0 (11.0)	32.9 (15.7)	22.8 (6.3)	32.5 (8.9)
15										
16										
17			33.8 (23.5)	48.3 (33.6)	35.8 (32.5)	51.1 (46.5)	27.2 (25.2)	38.8 (35.8)	43.0 (51.2)	61.4 (73.2)
18			20.5 (6.4)	29.3 (9.1)	103.0 (232.0)	148.0 (333.0)	26.1 (25.0)	37.2 (35.7)	21.1 (8.2)	30.1 (11.7)
19			19.0 (7.1)	27.2 (10.1)	24.0 (12.1)	34.2 (17.3)	28.4 (21.5)	40.5 (30.6)	27.1 (18.2)	38.7 (26.0)
20			20.6 (9.6)	29.4 (13.8)	92.1 (122.0)	132.0 (174.0)	27.4 (14.4)	39.1 (20.5)	51.7 (65.8)	73.7 (93.8)
21			42.8 (41.7)	61.1 (59.6)	41.7 (40.6)	59.6 (58.1)			57.3 (65.6)	81.8 (93.7)
22			26.8 (23.8)	38.3 (34.0)	24.7 (8.3)	35.3 (11.9)	21.4 (5.6)	30.7 (7.9)	36.6 (30.0)	52.4 (42.9)
23			18.2 (3.9)	26.0 (5.6)	45.7 (59.3)	65.3 (84.8)	17.0 (1.4)	24.4 (2.0)	31.6 (27.6)	45.2 (39.4)
24			27.5 (18.9)	39.4 (27.1)	25.7 (22.1)	36.8 (31.6)	19.1 (4.6)	27.3 (6.6)	51.9 (85.3)	74.3 (122.0)
25										
26										
27										
28										
29										
30			52.3 (53.4)	74.8 (76.5)	43.6 (35.0)	62.4 (50.1)	20.5 (20.2)	29.3 (28.9)		
31			38.8 (36.9)	55.6 (52.8)	48.8 (36.1)	69.9 (51.6)	28.6 (17.0)	41.0 (24.3)	37.9 (29.4)	54.3 (42.1)
Avg			18.2	26.1	30.9	44.2	14.2	20.3	27.4	39.2
n	0	0	23	23	23	23	20	20	21	21
SD			16.5	23.6	27.2	38.9	14.3	20.4	21.6	30.9
Min			-13.7	-19.6	-15.0	-21.4	-14.0	-20.0	-12.6	-17.9
Max			52.3	74.8	103.0	148.0	28.6	41.0	70.8	101.0

ED_004549_00015841-00161

Table F6. Daily means (SD) of H2S concentrations at site WA5B for August, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1			34.9 (31.2)	50.0 (44.7)	37.3 (25.8)	53.5 (36.9)				
2			19.9 (5.8)	28.5 (8.3)	22.6 (10.4)	32.2 (14.8)	27.4 (19.6)	39.1 (28.1)		
3			30.7 (20.0)	43.9 (28.5)	72.3 (113.0)	103.0 (162.0)	22.6 (12.7)	32.3 (18.1)	26.5 (46.4)	37.8 (66.5)
4			26.7 (16.0)	38.1 (22.7)	48.4 (77.0)	69.1 (110.0)	21.8 (7.0)	31.2 (9.9)	29.5 (18.1)	42.1 (25.8)
5										
6			33.7 (14.4)	48.2 (20.6)	106.0 (161.0)	151.0 (230.0)	21.0 (1.4)	30.0 (2.0)	27.9 (9.4)	39.8 (13.5)
7			25.8 (20.4)	36.9 (29.1)	21.9 (4.6)	31.4 (6.6)				
8			32.9 (23.1)	47.0 (32.9)	31.9 (24.4)	45.6 (34.9)			42.4 (48.3)	60.6 (69.1)
9			31.6 (17.6)	45.1 (25.2)	32.6 (21.0)	46.6 (30.1)	27.4 (9.6)	39.2 (13.7)	46.9 (47.3)	67.1 (67.6)
10			22.0 (4.5)	31.4 (6.4)	33.1 (31.7)	47.4 (45.3)	20.9 (3.6)	29.9 (5.1)	59.8 (80.9)	85.5 (116.0)
11			53.8 (65.0)	77.0 (93.0)	31.6 (17.4)	45.3 (25.0)	27.3 (12.5)	39.1 (17.8)	52.6 (34.2)	75.3 (49.0)
12										
13										
14			23.3 (4.8)	33.2 (6.9)	50.1 (49.6)	71.5 (70.8)	36.5 (48.0)	52.0 (68.4)	38.0 (30.4)	54.3 (43.4)
15			33.1 (19.1)	47.2 (27.3)	29.8 (12.6)	42.5 (18.0)	23.4 (14.9)	33.4 (21.3)	38.2 (27.0)	54.4 (38.4)
16			28.4 (20.9)	40.5 (29.9)	86.0 (122.0)	123.0 (175.0)			24.3 (26.1)	34.7 (37.4)
17			29.8 (14.7)	42.6 (21.0)	26.8 (10.9)	38.3 (15.5)			42.8 (37.3)	61.1 (53.3)
18			30.8 (13.4)	44.0 (19.2)	38.6 (24.0)	55.2 (34.4)	34.7 (21.4)	49.6 (30.6)	89.7 (165.0)	128.0 (235.0)
19	28.2 (14.9)	40.3 (21.4)	43.1 (35.1)	61.7 (50.1)	41.5 (33.4)	59.3 (47.7)			48.4 (49.1)	69.2 (70.3)
20	67.7 (63.1)	96.9 (90.4)	35.1 (29.2)	50.3 (41.8)					75.7 (107.0)	108.0 (153.0)
21	48.9 (53.4)	69.9 (76.2)	33.9 (29.8)	48.4 (42.6)	35.9 (26.7)	51.4 (38.1)			68.8 (73.4)	98.4 (105.0)
22	23.2 (6.8)	33.2 (9.8)	23.1 (7.8)	33.0 (11.1)	25.5 (8.2)	36.4 (11.7)	30.8 (22.8)	43.9 (32.5)	30.2 (17.4)	43.1 (24.8)
23	20.9 (4.1)	29.8 (5.8)	44.9 (43.2)	64.0 (61.6)	34.0 (39.7)	48.6 (56.7)	23.9 (15.3)	34.0 (21.8)	28.4 (15.3)	40.5 (21.8)
24	20.7 (4.9)	29.5 (6.9)	21.1 (4.5)	30.1 (6.5)	41.8 (55.0)	59.6 (78.4)				
25	32.1 (20.9)	45.8 (29.8)	42.8 (47.6)	61.0 (67.8)	42.7 (39.4)	60.9 (56.1)				
26	26.3 (12.3)	37.7 (17.6)	25.9 (26.3)	36.9 (37.5)	24.5 (24.0)	34.9 (34.2)	19.3 (2.5)	27.6 (3.6)		
27	27.0 (8.7)	38.5 (12.4)	39.0 (71.3)	55.7 (102.0)	79.5 (135.0)	114.0 (193.0)			60.9 (48.9)	86.9 (69.9)
28	19.6 (2.6)	28.0 (3.7)	28.0 (9.3)	40.0 (13.2)	36.4 (20.9)	52.0 (29.9)				
29	20.9 (3.9)		34.8 (18.0)		49.5 (66.7)		23.3 (12.6)			
30	23.7 (11.9)		24.0 (9.8)		44.4 (107.0)		27.1 (15.9)		32.0 (20.0)	
31	37.3 (8.6)									
Avg	30.5	45.0	31.6	45.4	43.3	61.4	25.8	37.0	45.4	66.0
n	13	10	27	25	26	24	15	13	19	18
SD	13.3	20.8	7.9	11.5	20.3	30.2	4.9	7.4	18.0	26.0
Min	19.6	28.0	19.9	28.5	21.9	31.4	19.3	27.6	24.3	34.7
Max	67.7	96.9	53.8	77.0	106.0	151.0	36.5	52.0	89.7	128.0

ED_004549_00015841-00162

Table F6. Daily means (SD) of H2S concentrations at site WA5B for September, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	27.6 (8.5)		65.5 (128.0)		30.7 (22.6)		50.8 (44.8)		31.9 (21.5)	
2	37.8 (34.0)		30.6 (15.1)		35.3 (20.8)		30.8 (13.0)		104.0 (206.0)	
3	21.9 (4.2)									
4	22.5 (5.4)	32.1 (7.7)	34.0 (18.6)	48.6 (26.5)	46.8 (36.3)	66.9 (51.8)	57.1 (84.1)	81.6 (120.0)	56.3 (55.1)	80.5 (78.8)
5	23.1 (8.7)	33.0 (12.3)	64.4 (68.8)	92.0 (98.2)	73.6 (80.8)	105.0 (115.0)	79.4 (142.0)	113.0 (203.0)	50.5 (41.8)	72.2 (59.8)
6	18.2 (1.3)	25.9 (1.9)	27.8 (21.2)	39.7 (30.2)	27.0 (20.3)	38.6 (29.0)			23.8 (10.9)	33.9 (15.6)
7	23.7 (12.3)	33.8 (17.6)	21.2 (4.7)	30.3 (6.7)	23.8 (11.4)	34.0 (16.3)	21.8 (6.9)	31.1 (9.8)	35.4 (24.4)	50.5 (34.9)
8	27.9 (14.0)	39.8 (19.9)	18.5 (2.6)	26.4 (3.7)	40.1 (48.4)	57.2 (69.1)	21.4 (5.6)	30.6 (8.0)	31.2 (29.7)	44.5 (42.3)
9	21.6 (3.4)	30.8 (4.9)	24.7 (11.8)	35.2 (16.8)	103.0 (169.0)	147.0 (242.0)	21.7 (8.6)	31.0 (12.3)	45.9 (31.2)	65.5 (44.5)
10	28.5 (14.7)	40.7 (21.1)	38.1 (32.0)	54.4 (45.7)	39.4 (32.4)	56.2 (46.2)	22.8 (11.1)	32.5 (15.9)	49.0 (52.1)	70.1 (74.4)
11	24.4 (9.4)	34.9 (13.4)			40.0 (29.0)	57.1 (41.4)				
12	38.4 (29.3)	54.7 (41.7)	54.7 (77.1)	78.1 (110.0)	66.4 (128.0)	94.8 (183.0)				
13	117.0 (134.0)	167.0 (192.0)	30.1 (14.0)	43.0 (20.0)						
14										
15										
16										
17	24.4 (12.2)	34.8 (17.4)	52.2 (102.0)	74.5 (145.0)	27.4 (23.2)	39.2 (33.3)	32.6 (26.9)	46.5 (38.4)	21.8 (6.0)	31.1 (8.5)
18	33.0 (22.4)	47.0 (32.0)	40.2 (61.3)	57.4 (87.5)	59.0 (46.1)	84.2 (65.8)			64.8 (75.4)	92.3 (107.0)
19	20.1 (4.1)	28.6 (5.8)	24.2 (9.6)	34.5 (13.7)	34.6 (24.9)	49.4 (35.5)				
20	20.4 (3.5)	29.1 (5.0)	24.8 (10.6)	35.4 (15.1)	59.8 (84.2)	85.2 (120.0)			26.3 (13.5)	37.4 (19.3)
21	48.4 (54.9)	69.0 (78.2)	40.1 (25.2)	57.1 (36.0)	59.6 (46.6)	85.0 (66.5)				
22	30.5 (28.8)	43.4 (41.0)	33.0 (21.6)	47.1 (30.9)	107.0 (187.0)	153.0 (267.0)				
23	36.2 (26.9)	51.6 (38.3)	29.4 (16.7)	41.9 (23.9)	36.7 (25.6)	52.4 (36.6)				
24	29.2 (17.3)									
25	21.0 (3.5)	30.0 (4.9)	21.6 (7.9)	30.9 (11.2)	22.3 (8.1)	31.8 (11.5)	28.0 (14.9)	40.0 (21.3)		
26	21.4 (3.5)	30.5 (4.9)	33.7 (33.4)	48.0 (47.7)	28.4 (17.9)	40.5 (25.6)	39.8 (33.1)	56.7 (47.3)		
27	22.7 (9.8)	32.3 (14.0)	30.5 (25.3)	43.5 (36.0)	22.4 (8.6)	31.9 (12.2)	29.0 (21.5)	41.3 (30.6)	49.3 (38.6)	70.2 (55.0)
28	40.4 (41.3)	57.5 (58.7)	28.2 (15.2)	40.2 (21.6)	50.6 (38.4)	72.1 (54.7)			32.3 (13.7)	46.0 (19.5)
29	19.1 (3.4)	27.2 (4.8)	28.8 (25.4)	41.0 (36.1)	25.2 (16.4)	35.9 (23.3)	23.8 (9.3)	33.9 (13.3)		
30	19.5 (1.9)	27.8 (2.7)	38.8 (42.5)	60.1 (64.9)	29.6 (15.4)				54.7 (55.0)	
Avg	30.3	43.6	34.8	48.1	45.4	67.5	35.3	49.0	45.2	57.8
n	27	23	24	22	24	21	13	11	15	12
SD	18.6	28.5	12.5	16.2	23.0	34.2	16.8	25.1	20.2	19.0
Min	18.2	25.9	18.5	26.4	22.3	31.8	21.4	30.6	21.8	31.1
Max	117	167	65.5	92.0	107.0	153.0	79.4	113.0	104.0	92.3

ED_004549_00015841-00163

Table F7. Hydrogen sulfide emissions.

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for November, 2007

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16	560 (1290)	99 (227)	1090 (2520)			
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
Avg						
n	1	1	1	0	0	0
SD						
Min						
Max						

ED_004549_00015841-00164

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for December, 2007.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2				-1790 (7520)	-215 (905)	-1910 (8020)
3						
4	-135 (371)	-24 (65)	-264 (724)			
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17	-5400 (15000)	-952 (2640)	-10500 (29300)			
18						
19	-3830 (7300)	-675 (1290)	-7480 (14300)			
20						
21						
22						
23						
24						
25	596 (1030)	105 (182)	1160 (2010)			
26						
27						
28						
29						
30						
31						
Avg	-2190	-387	-4280			
n	4	4	4	1	1	1
SD	2500	441	4880			
Min	-5400	-952	-10500			
Max	596	105	1160			

ED_004549_00015841-00165

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for February, 20

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24	167 (1470)	29 (259)	326 (2860)			
25						
26						
27						
28						
29						
Avg						
n	1	1	1	0	0	0
SD						
Min						
Max						

ED_004549_00015841-00166

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for March, 2008.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16	366 (1930)	65 (341)	714 (3770)			
17						
18						
19						
20	907 (2130)	160 (375)	1770 (4150)			
21	99 (661)	18 (117)	194 (1290)			
22						
23						
24						
25						
26	1580 (4090)	279 (720)	3090 (7980)			
27	361 (965)	64 (170)	706 (1880)			
28						
29						
30	-124 (749)	-22 (132)	-242 (1460)			
31						
Avg	532	94	1040			
n	6	6	6	0	0	0
SD	565	100	1100			
Min	-124	-22	-242			
Max	1580	279	3090			

ED_004549_00015841-00167

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for April, 2008.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6	546 (2300)	96 (406)	1070 (4490)	-189 (957)	-23 (115)	-202 (1020)
7						
8						
9						
10				1590 (4170)	192 (501)	1690 (4410)
11						
12						
13						
14	912 (1650)	161 (291)	1780 (3230)	-1540 (4590)	-185 (553)	-1620 (4830)
15	2610 (8880)	460 (1570)	5090 (17300)	31 (6900)	4 (831)	32 (7230)
16						
17						
18	659 (2190)	116 (387)	1290 (4290)	598 (1270)	72 (153)	623 (1320)
19						
20						
21						
22						
23	-316 (1560)	-56 (276)	-618 (3050)	1420 (5350)	171 (644)	1470 (5550)
24						
25						
26						
27						
28				1320 (5690)	159 (685)	1370 (5900)
29	6090 (22700)	1070 (4010)	11900 (44400)	2800 (10400)	337 (1260)	2900 (10800)
30	3710 (13100)	654 (2310)	7250 (25600)			
Avg	2030	358	3960	755	91	783
n	7	7	7	8	8	8
SD	2090	368	4070	1240	150	1300
Min	-316	-56	-618	-1540	-185	-1620
Max	6090	1070	11900	2800	337	2900

ED_004549_00015841-00168

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for May, 2008.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7	-1730 (8010)	-306 (1410)	-3390 (15700)	610 (9210)	74 (1110)	630 (9500)
8						
9	1840 (4670)	324 (824)	3590 (9130)	3420 (13200)	412 (1590)	3530 (13700)
10				-6310 (24000)	-759 (2880)	-6500 (24700)
11	286 (14500)	51 (2560)	559 (28400)	4030 (17800)	485 (2140)	4150 (18300)
12				8610 (23700)	1040 (2850)	8860 (24400)
13						
14						
15	5620 (18500)	991 (3250)	11000 (36100)	315 (5040)	38 (606)	324 (5180)
16						
17						
18						
19						
20						
21	-112 (615)	-20 (108)	-219 (1200)	-139 (2070)	-17 (249)	-142 (2120)
22	76 (975)	13 (172)	147 (1900)	430 (2420)	52 (291)	441 (2480)
23	1960 (7640)	345 (1350)	3820 (14900)			
24						
25						
26	-364 (982)	-64 (173)	-712 (1920)			
27	202 (595)	36 (105)	394 (1160)			
28						
29	3180 (10300)	561 (1820)	6220 (20200)			
30	-236 (968)	-42 (171)	-461 (1890)			
31						
Avg	974	172	1900	1370	165	1410
n	11	11	11	8	8	8
SD	1950	344	3810	3990	481	4110
Min	-1730	-306	-3390	-6310	-759	-6500
Max	5620	991	11000	8610	1040	8860

ED_004549_00015841-00169

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for June, 2008.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1	-1510 (3410)	-266 (601)	-2940 (6650)	-2740 (7050)	-330 (848)	-2800 (7190)
2						
3						
4						
5						
6	-1510 (3830)	-267 (675)	-2950 (7480)	4500 (14100)	541 (1690)	4580 (14300)
7				2490 (11100)	300 (1340)	2530 (11400)
8	-2380 (5630)	-420 (993)	-4650 (11000)	8700 (23900)	1050 (2870)	8850 (24300)
9				2230 (5070)	268 (610)	2270 (5160)
10	-1410 (3260)	-248 (575)	-2750 (6370)			
11	4040 (10200)	712 (1800)	7890 (20000)			
12						
13				741 (1340)	89 (161)	753 (1360)
14						
15	-539 (1850)	-95 (326)	-1050 (3610)	-624 (3150)	-75 (380)	-633 (3200)
16				305 (3730)	37 (449)	309 (3780)
17	-96 (1360)	-17 (239)	-188 (2650)	1360 (2770)	164 (333)	1380 (2810)
18						
19						
20						
21						
22	1080 (4420)	191 (780)	2120 (8640)			
23	-1040 (4000)	-184 (706)	-2040 (7820)	2000 (11900)	241 (1440)	2030 (12100)
24	2120 (7290)	373 (1280)	4140 (14200)	2050 (10400)	247 (1260)	2070 (10600)
25	501 (2350)	88 (414)	978 (4590)	8370 (32700)	1010 (3930)	8460 (33000)
26	5110 (16100)	901 (2840)	9990 (31500)	4710 (14400)	567 (1740)	4760 (14600)
27	134 (2260)	24 (398)	261 (4420)	3200 (9850)	386 (1190)	3240 (9950)
28						
29						
30	5290 (13600)	933 (2390)	10300 (26500)			
Avg	699	123	1370	2660	321	2700
n	14	14	14	14	14	14
SD	2440	430	4760	3030	365	3080
Min	-2380	-420	-4650	-2740	-330	-2800
Max	5290	933	10300	8700	1050	8850

ED_004549_00015841-00170

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for July, 2008.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23	136 (1910)	24 (337)	266 (3730)			
24	89 (5940)	16 (1050)	174 (11600)			
25						
26	6510 (14400)	1150 (2540)	12700 (28100)			
27	-1450 (2330)	-256 (411)	-2840 (4560)			
28						
29	-1450 (4650)	-256 (820)	-2840 (9080)			
30	4210 (9130)	743 (1610)	8230 (17800)			
31						
Avg	1340	236	2620			
n	6	6	6	0	0	0
SD	2990	527	5840			
Min	-1450	-256	-2840			
Max	6510	1150	12700			

ED_004549_00015841-00171

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for September, 20

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3						
4	148 (539)	26 (95)	290 (1050)			
5						
6						
7	-257 (507)	-45 (89)	-503 (989)			
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21	1030 (1920)	181 (338)	2010 (3740)			
22	1060 (1380)	187 (243)	2080 (2690)			
23						
24						
25						
26						
27						
28						
29						
30						
Avg	496	87	969			
n	4	4	4	0	0	0
SD	569	100	1110			
Min	-257	-45	-503			
Max	1060	187	2080			

ED_004549_00015841-00172

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for October, 20

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3						
4	-76 (503)	-14 (89)	-149 (983)			
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
Avg						
n	1	1	1	0	0	0
SD						
Min						
Max						

ED_004549_00015841-00173

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for November, 2008.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11	-530 (3180)	-93 (561)	-1050 (6290)	6470 (8720)	779 (1050)	8200 (11000)
12	-1180 (1340)	-207 (237)	-2330 (2660)	177 (5860)	21 (705)	205 (7880)
13						
14						
15						
16						
17						
18						
19	-354 (1760)	-62 (310)	-686 (3400)	2410 (10300)	290 (1250)	2550 (10900)
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
Avg	-687	-121	-1350	3020	363	3650
n	3	3	3	3	3	3
SD	354	62	703	2600	314	3360
Min	-1180	-207	-2330	177	21	205
Max	-354	-62	-686	6470	779	8200

ED_004549_00015841-00174

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for December, 2008.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14	415 (1180)	73 (207)	838 (2380)			
15						
16						
17						
18						
19						
20	1620 (4610)	286 (812)	3270 (9280)	865 (1280)	104 (155)	884 (1310)
21						
22						
23						
24						
25						
26						
27	2140 (3400)	378 (598)	4300 (6810)			
28						
29						
30						
31						
Avg	1390	246	2800			
n	3	3	3	1	1	1
SD	724	128	1450			
Min	415	73	838			
Max	2140	378	4300			

ED_004549_00015841-00175

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for January, 2009.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1	3450 (9260)	608 (1630)	6900 (18500)	502 (7760)	60 (935)	513 (7950)
2						
3						
4						
5						
6	1900 (6460)	335 (1140)	3790 (12900)			
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
Avg	2670	471	5350			
n	2	2	2	1	1	1
SD	775	137	1560			
Min	1900	335	3790			
Max	3450	608	6900			

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for February, 2009.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13	964 (3400)	170 (599)	1880 (6650)	135 (3240)	16 (390)	137 (3280)
14						
15						
16	355 (1150)	63 (203)	693 (2240)	1630 (2490)	196 (300)	1620 (2480)
17						
18						
19				650 (2450)	78 (295)	633 (2390)
20						
21						
22						
23						
24	182 (2240)	32 (395)	352 (4330)	1550 (13900)	187 (1670)	1480 (13100)
25	467 (922)	82 (162)	901 (1780)	-732 (2710)	-88 (326)	-689 (2550)
26						
27						
28						
Avg	492	87	957	648	78	635
n	4	4	4	5	5	5
SD	291	51	570	889	107	858
Min	182	32	352	-732	-88	-689
Max	964	170	1880	1630	196	1620

ED_004549_00015841-00177

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for March, 2009.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5	-182 (659)	-32 (116)	-350 (1270)	-503 (1970)	-61 (237)	-477 (1870)
6						
7	-509 (1500)	-90 (264)	-977 (2870)	-420 (1160)	-51 (140)	-399 (1110)
8						
9						
10	83 (899)	15 (158)	159 (1730)	1000 (2430)	121 (293)	959 (2320)
11	143 (1340)	25 (237)	275 (2580)	2270 (5380)	273 (648)	2170 (5150)
12						
13						
14						
15	650 (2000)	115 (352)	1250 (3830)	-310 (1950)	-37 (234)	-298 (1870)
16	85 (2410)	15 (424)	163 (4610)			
17	421 (2740)	74 (483)	807 (5250)	9910 (25200)	1190 (3030)	9550 (24200)
18						
19						
20	-693 (2490)	-122 (438)	-1330 (4760)			
21						
22						
23	432 (2010)	76 (355)	826 (3850)	11100 (18900)	1330 (2270)	10800 (18400)
24						
25				5320 (13500)	641 (1620)	5190 (13100)
26						
27						
28						
29				-4390 (8410)	-528 (1010)	-4310 (8250)
30						
31						
Avg	48	8	91	2660	321	2570
n	9	9	9	9	9	9
SD	418	74	801	4850	584	4710
Min	-693	-122	-1330	-4390	-528	-4310
Max	650	115	1250	11100	1330	10800

ED_004549_00015841-00178

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for April, 2009.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3				821 (2350)	99 (283)	812 (2320)
4						
5						
6						
7						
8				18000 (40800)	2160 (4920)	17900 (40700)
9	-278 (2340)	-49 (412)	-530 (4440)	219 (1340)	26 (161)	218 (1330)
10						
11						
12	248 (7280)	44 (1280)	473 (13800)	5350 (12600)	644 (1520)	5360 (12600)
13	-2400 (6700)	-422 (1180)	-4550 (12700)			
14	61 (2220)	11 (391)	115 (4210)			
15	-224 (3010)	-39 (531)	-425 (5720)	4650 (12300)	560 (1480)	4680 (12400)
16	1180 (5760)	208 (1010)	2240 (10900)			
17						
18						
19						
20						
21						
22				821 (8610)	99 (1040)	835 (8770)
23	2230 (6210)	392 (1100)	4220 (11800)	4040 (30300)	487 (3650)	4120 (30900)
24						
25	248 (1230)	44 (216)	470 (2320)	1270 (4980)	153 (599)	1300 (5090)
26				2020 (3030)	243 (365)	2070 (3100)
27				-378 (1920)	-46 (231)	-387 (1970)
28	-94 (378)	-17 (67)	-177 (714)	538 (1980)	65 (238)	552 (2040)
29	-194 (425)	-34 (75)	-367 (804)	2430 (7030)	292 (847)	2500 (7240)
30						
Avg	78	14	147	3310	399	3330
n	10	10	10	12	12	12
SD	1110	196	2110	4750	572	4740
Min	-2400	-422	-4550	-378	-46	-387
Max	2230	392	4220	18000	2160	17900

ED_004549_00015841-00179

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for May, 2009.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6	2030 (10100)	358 (1780)	3830 (19100)	-252 (9010)	-30 (1080)	-262 (9360)
7						
8	1410 (3420)	248 (602)	2660 (6450)	752 (2190)	91 (263)	782 (2270)
9						
10						
11						
12						
13	-49 (1520)	-9 (268)	-92 (2870)			
14						
15	383 (616)	67 (109)	723 (1160)			
16						
17						
18						
19						
20						
21						
22						
23						
24	1060 (2760)	186 (487)	2000 (5230)	231 (2970)	28 (357)	241 (3100)
25	1310 (3360)	230 (592)	2480 (6370)	793 (4090)	96 (492)	828 (4270)
26				24 (4670)	3 (563)	26 (4880)
27	977 (3540)	172 (623)	1850 (6700)	421 (1100)	51 (132)	440 (1150)
28				732 (1820)	88 (219)	764 (1900)
29						
30	-785 (2230)	-138 (393)	-1490 (4240)	1900 (4910)	229 (591)	1990 (5130)
31						
Avg	791	139	1490	575	69	601
n	8	8	8	8	8	8
SD	840	148	1590	612	74	639
Min	-785	-138	-1490	-252	-30	-262
Max	2030	358	3830	1900	229	1990

ED_004549_00015841-00180

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for June, 2009.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1				33 (685)	4 (83)	35 (716)
2	-227 (1100)	-40 (193)	-431 (2080)	440 (1150)	53 (139)	460 (1200)
3	477 (1940)	84 (342)	905 (3680)	-885 (1430)	-107 (173)	-926 (1500)
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18				417 (836)	50 (101)	437 (877)
19				15 (940)	2 (113)	16 (986)
20	-26 (108)	-5 (19)	-49 (205)	-9 (1370)	-1 (165)	-9 (1440)
21	-179 (347)	-32 (61)	-342 (661)	2270 (2730)	273 (328)	2380 (2860)
22						
23						
24						
25				122 (231)	15 (28)	129 (242)
26	-598 (1220)	-105 (215)	-1140 (2320)	1320 (4900)	159 (590)	1390 (5150)
27	1990 (4800)	351 (847)	3810 (9170)	2580 (6820)	311 (822)	2710 (7170)
28	1200 (5060)	211 (892)	2290 (9660)	-325 (3730)	-39 (449)	-342 (3920)
29	921 (4250)	162 (750)	1760 (8120)	2530 (4560)	305 (549)	2660 (4790)
30	2790 (6190)	493 (1090)	5340 (11800)	-690 (7290)	-83 (878)	-725 (7670)
Avg	706	124	1350	602	72	632
n	9	9	9	13	13	13
SD	1070	188	2040	1140	138	1200
Min	-598	-105	-1140	-885	-107	-926
Max	2790	493	5340	2580	311	2710

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Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for July, 2009.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1	268 (2860)	47 (505)	513 (5470)	1450 (6730)	174 (810)	1520 (7080)
2						
3						
4						
5						
6	-55 (1450)	-10 (255)	-105 (2770)	-1390 (5250)	-167 (632)	-1460 (5530)
7						
8						
9	-240 (2340)	-42 (413)	-460 (4490)	-1980 (3950)	-238 (476)	-2090 (4170)
10						
11	-600 (2560)	-106 (451)	-1150 (4900)	-91 (1600)	-11 (192)	-96 (1690)
12				-4590 (23800)	-552 (2870)	-4840 (25100)
13				55 (1090)	7 (131)	58 (1150)
14						
15						
16						
17						
18				-11600 (34800)	-1400 (4190)	-12300 (36800)
19	1820 (4120)	321 (727)	3490 (7910)			
20				1070 (11700)	129 (1400)	1130 (12300)
21						
22	-120 (1480)	-21 (261)	-230 (2840)	3470 (7430)	418 (894)	3670 (7850)
23	-235 (710)	-41 (125)	-451 (1360)	-2410 (8520)	-290 (1030)	-2540 (9000)
24						
25						
26						
27						
28						
29						
30						
31						
Avg	120	21	230	-1610	-193	-1690
n	7	7	7	10	10	10
SD	735	129	1410	3970	478	4190
Min	-600	-106	-1150	-11600	-1400	-12300
Max	1820	321	3490	3470	418	3670

ED_004549_00015841-00182

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for August, 2009.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3				-5200 (14800)	-626 (1790)	-5510 (15700)
4	-387 (1410)	-68 (249)	-746 (2720)	-1350 (6580)	-163 (792)	-1430 (6980)
5						
6						
7						
8				879 (4030)	106 (485)	932 (4270)
9	-87 (1880)	-15 (331)	-168 (3620)	1040 (3850)	125 (464)	1100 (4090)
10	-156 (691)	-27 (122)	-300 (1330)	1190 (6630)	143 (798)	1260 (7030)
11						
12						
13						
14	701 (4350)	124 (767)	1350 (8400)	-784 (5510)	-94 (664)	-833 (5850)
15						
16						
17						
18						
19						
20						
21						
22	326 (2090)	58 (368)	631 (4040)	493 (1990)	59 (240)	525 (2120)
23				-1120 (9350)	-135 (1130)	-1200 (9940)
24						
25						
26						
27						
28						
29						
30						
31						
Avg	80	14	154	-607	-73	-643
n	5	5	5	8	8	8
SD	387	68	747	1980	238	2100
Min	-387	-68	-746	-5200	-626	-5510
Max	701	124	1350	1190	143	1260

ED_004549_00015841-00183

Table F7. Daily means (SD) of hydrogen sulfide emissions at site WA5B for September, 2009.

Day	Barn 2			Barn 4		
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7	73 (1630)	13 (287)	142 (3160)	2060 (5700)	248 (687)	2200 (6090)
8						
9						
10						
11						
12						
13						
14						
15						
16						
17				-946 (3910)	-114 (471)	-1010 (4170)
18						
19						
20				-4880 (11100)	-587 (1340)	-5200 (11900)
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
Avg				-1260	-151	-1340
n	1	1	1	3	3	3
SD				2840	342	3030
Min				-4880	-587	-5200
Max				2060	248	2200

ED_004549_00015841-00184

Table F8. Ammonia concentrations.

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for October, 2007.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20			0.628 (0.161)	0.446 (0.115)	0.716 (0.155)	0.509 (0.110)				
21			1.020 (0.265)	0.723 (0.188)	0.993 (0.298)	0.706 (0.212)				
22			1.370 (0.549)	0.975 (0.391)	1.380 (0.433)	0.981 (0.309)				
23					1.340 (0.569)	1.020 (0.397)	1.970 (0.354)	1.430 (0.257)		
24	1.510 (0.008)	1.070 (0.006)	1.080 (0.405)	0.767 (0.289)	1.200 (0.377)	0.851 (0.268)	1.710 (0.645)	1.220 (0.459)		
25	1.310 (0.363)	0.928 (0.262)								
26										
27			0.902 (0.121)	0.640 (0.086)	0.704 (0.242)	0.500 (0.172)				
28			0.805 (0.122)	0.572 (0.087)	0.833 (0.238)	0.592 (0.169)				
29			0.793 (0.136)	0.563 (0.097)	0.776 (0.157)	0.552 (0.112)	1.270 (0.300)	0.901 (0.213)		
30			0.813 (0.243)	0.578 (0.172)						
31										
Avg	1.410	1.000	0.926	0.658	0.992	0.713	1.650	1.180		
n	2	2	8	8	8	8	3	3	0	0
SD	0.098	0.072	0.213	0.152	0.261	0.197	0.291	0.218		
Min	1.310	0.928	0.628	0.446	0.704	0.500	1.270	0.901		
Max	1.510	1.070	1.370	0.975	1.380	1.020	1.970	1.430		

ED_004549_00015841-00185

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for November, 2007.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3					0.859 (0.151)	0.610 (0.107)				
4			0.908 (0.140)	0.645 (0.100)	0.811 (0.135)	0.577 (0.096)				
5			0.852 (0.241)	0.605 (0.171)	0.760 (0.251)	0.540 (0.178)				
6	1.120 (0.292)	0.792 (0.207)	0.883 (0.247)	0.627 (0.175)						
7	1.420 (0.387)	1.010 (0.275)	0.857 (0.174)	0.609 (0.124)	0.891 (0.229)	0.633 (0.163)				
8	1.580 (0.457)	1.120 (0.325)	0.967 (0.264)	0.688 (0.187)	0.826 (0.322)	0.587 (0.229)				
9	1.020 (0.246)	0.726 (0.175)	0.671 (0.147)	0.477 (0.104)	0.797 (0.242)	0.567 (0.172)				
10	0.780 (0.165)	0.554 (0.117)	0.635 (0.230)	0.451 (0.163)	0.771 (0.228)	0.548 (0.162)				
11	0.921 (0.210)	0.654 (0.149)	0.694 (0.194)	0.493 (0.138)	0.780 (0.217)	0.554 (0.154)				
12	0.682 (0.233)	0.505 (0.175)	0.420 (0.030)	0.298 (0.021)	0.512 (0.105)	0.364 (0.075)				
13	0.697 (0.099)									
14	0.949 (0.234)									
15	0.762 (0.253)	0.542 (0.180)	0.503 (0.136)	0.357 (0.097)			0.823 (0.219)	0.585 (0.156)		
16	0.583 (0.132)	0.415 (0.094)	0.506 (0.128)	0.360 (0.091)	0.736 (0.374)	0.524 (0.266)	0.725 (0.234)	0.516 (0.167)		
17	0.889 (0.210)	0.633 (0.149)	0.629 (0.147)	0.447 (0.105)	0.746 (0.209)	0.530 (0.148)	0.975 (0.273)	0.694 (0.194)		
18	0.570 (0.158)	0.405 (0.112)	0.458 (0.122)	0.325 (0.087)	0.609 (0.223)	0.433 (0.159)				
19	0.685 (0.307)	0.486 (0.218)	0.453 (0.121)	0.322 (0.086)	0.472 (0.079)	0.336 (0.056)				
20	0.666 (0.139)	0.473 (0.099)	0.449 (0.118)	0.319 (0.084)						
21			0.453 (0.178)	0.321 (0.126)						
22			0.404 (0.080)		0.456 (0.085)	0.313 (0.056)	0.805 (0.099)	0.583 (0.062)		
23			0.423 (0.079)		0.540 (0.040)	0.383 (0.029)				
24			0.486 (0.106)	0.345 (0.075)	0.515 (0.089)	0.366 (0.063)				
25			0.405 (0.069)	0.289 (0.049)	0.514 (0.126)	0.365 (0.089)				
26										
27										
28										
29										
30										
Avg	0.888	0.640	0.603	0.443	0.682	0.484	0.832	0.594		
n	15	13	20	18	17	17	4	4	0	0
SD	0.286	0.213	0.189	0.133	0.146	0.105	0.091	0.064		
Min	0.570	0.405	0.404	0.289	0.456	0.313	0.725	0.516		
Max	1.580	1.120	0.967	0.688	0.891	0.633	0.975	0.694		

ED_004549_00015841-00186

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for December, 2007.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.290 (0.021)	0.206 (0.015)	0.372 (0.081)		0.429 (0.072)	0.303 (0.051)				
2	0.295 (0.028)	0.210 (0.020)	0.329 (0.053)	0.234 (0.038)	0.437 (0.076)	0.310 (0.054)			0.608 (0.125)	0.432 (0.089)
3	0.354 (0.057)	0.252 (0.040)	0.414 (0.085)	0.295 (0.060)	0.495 (0.064)	0.352 (0.045)				
4	0.367 (0.049)	0.261 (0.035)	0.465 (0.090)	0.331 (0.064)	0.580 (0.113)	0.412 (0.080)	0.620 (0.130)	0.441 (0.092)		
5	0.554 (0.109)	0.394 (0.078)	0.648 (0.133)	0.461 (0.095)	0.739 (0.203)	0.525 (0.144)				
6	0.372 (0.124)	0.264 (0.088)	0.487 (0.189)	0.346 (0.134)	0.574 (0.179)	0.408 (0.127)				
7	0.314 (0.050)	0.220 (0.035)	0.376 (0.082)	0.265 (0.059)	0.463 (0.103)	0.325 (0.073)				
8	0.360 (0.035)									
9	0.312 (0.043)	0.221 (0.031)	0.432 (0.128)				0.875 (0.086)			
10	0.286 (0.026)	0.203 (0.019)	0.694 (0.197)							
11	0.272 (0.017)	0.193 (0.012)	0.401 (0.082)							
12	0.261 (0.036)									
13	0.267 (0.017)									
14	0.311 (0.029)	0.221 (0.020)	0.390 (0.058)		0.545 (0.248)	0.387 (0.176)				
15	0.332 (0.031)	0.236 (0.022)	0.621 (0.174)	0.468 (0.118)	0.864 (0.213)	0.625 (0.144)				
16	0.414 (0.116)	0.294 (0.083)	0.666 (0.252)	0.473 (0.179)	0.906 (0.333)	0.643 (0.236)	0.947 (0.288)	0.673 (0.204)		
17	0.354 (0.028)	0.251 (0.020)	0.745 (0.198)	0.530 (0.141)	0.783 (0.113)	0.557 (0.080)	0.935 (0.339)	0.664 (0.240)		
18	0.326 (0.025)	0.232 (0.017)	0.597 (0.131)	0.424 (0.093)	0.611 (0.179)	0.434 (0.127)				
19	0.302 (0.030)	0.215 (0.021)	0.654 (0.122)	0.465 (0.087)	0.848 (0.139)	0.603 (0.099)	0.680 (0.094)	0.483 (0.067)		
20	0.345 (0.037)	0.245 (0.026)	0.588 (0.108)	0.418 (0.077)	0.908 (0.218)	0.645 (0.155)	0.702 (0.133)	0.499 (0.095)		
21	0.338 (0.021)	0.240 (0.015)	0.812 (0.218)	0.577 (0.155)	0.858 (0.276)	0.609 (0.196)	1.010 (0.123)	0.716 (0.088)		
22	0.321 (0.031)	0.228 (0.022)	0.695 (0.228)	0.493 (0.162)						
23	0.360 (0.030)	0.255 (0.022)			0.785 (0.247)	0.558 (0.176)	1.060 (0.176)	0.756 (0.125)		
24	0.375 (0.041)	0.267 (0.029)	0.672 (0.186)	0.477 (0.132)	0.966 (0.238)	0.686 (0.169)				
25	0.325 (0.069)	0.231 (0.049)	0.591 (0.218)	0.440 (0.149)	0.754 (0.186)	0.540 (0.131)	0.874 (0.209)	0.638 (0.145)		
26	0.327 (0.032)	0.232 (0.023)	0.676 (0.120)	0.480 (0.086)	0.874 (0.156)	0.621 (0.111)				
27	0.328 (0.084)	0.233 (0.060)	0.626 (0.348)	0.433 (0.247)	0.816 (0.298)	0.579 (0.211)				
28	0.317 (0.042)	0.225 (0.030)	0.497 (0.118)	0.353 (0.084)	0.679 (0.154)	0.482 (0.110)	0.771 (0.168)	0.547 (0.119)		
29	0.343 (0.045)	0.244 (0.032)	0.663 (0.182)	0.470 (0.131)	0.839 (0.147)	0.596 (0.105)				
30	0.290 (0.018)	0.206 (0.013)	0.493 (0.108)	0.350 (0.077)	0.730 (0.070)	0.518 (0.050)				
31	0.360 (0.030)	0.256 (0.022)	0.683 (0.214)	0.495 (0.147)	0.674 (0.200)	0.479 (0.142)	0.958 (0.166)	0.680 (0.118)		
Avg	0.335	0.240	0.566	0.422	0.715	0.508	0.858	0.610		
n	31	28	27	22	24	24	11	10	1	1
SD	0.053	0.037	0.131	0.086	0.160	0.114	0.138	0.103		
Min	0.261	0.193	0.329	0.234	0.429	0.303	0.620	0.441		
Max	0.554	0.394	0.812	0.577	0.966	0.686	1.060	0.756		

ED_004549_00015841-00187

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for January, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.339 (0.050)	0.240 (0.036)	0.527 (0.193)		0.720 (0.266)	0.512 (0.189)				
2	0.372 (0.047)	0.264 (0.033)	0.709 (0.253)		0.748 (0.176)	0.525 (0.136)				
3	0.316 (0.031)	0.224 (0.022)	0.660 (0.125)		0.797 (0.133)					
4	0.305 (0.025)	0.217 (0.018)	0.559 (0.234)	0.397 (0.166)						
5	0.330 (0.037)	0.234 (0.026)	0.892 (0.237)	0.634 (0.168)						
6	0.412 (0.039)	0.292 (0.027)	0.777 (0.239)	0.552 (0.170)	1.050 (0.211)	0.743 (0.150)				
7										
8										
9										
10										
11	0.354 (0.069)	0.270 (0.042)								
12	0.364 (0.052)	0.259 (0.037)	0.460 (0.111)	0.326 (0.079)	0.748 (0.189)	0.531 (0.134)				
13	0.383 (0.050)	0.272 (0.036)	0.622 (0.220)	0.441 (0.156)	0.734 (0.267)	0.521 (0.190)				
14	0.318 (0.033)	0.226 (0.024)	0.517 (0.042)	0.367 (0.030)	0.562 (0.094)	0.399 (0.067)				
15	0.376 (0.116)	0.267 (0.082)	0.622 (0.265)	0.441 (0.187)	0.751 (0.116)	0.533 (0.082)				
16	0.373 (0.053)	0.265 (0.037)	0.797 (0.197)	0.570 (0.140)	0.709 (0.181)	0.505 (0.129)				
17	0.412 (0.047)	0.292 (0.033)	0.418 (0.154)	0.303 (0.110)	0.611 (0.197)	0.436 (0.138)				
18	0.422 (0.026)	0.303 (0.020)								
19	0.490 (0.051)	0.348 (0.037)								
20	0.331 (0.113)	0.235 (0.080)	0.331 (0.089)	0.239 (0.063)	0.538 (0.155)	0.384 (0.109)				
21	0.275 (0.077)	0.195 (0.054)	0.276 (0.098)	0.202 (0.073)	0.443 (0.195)	0.323 (0.146)				
22	0.327 (0.024)	0.232 (0.017)	0.535 (0.333)	0.396 (0.246)	0.570 (0.206)	0.419 (0.155)				
23	0.353 (0.049)	0.250 (0.035)	0.571 (0.225)	0.423 (0.167)	0.706 (0.217)	0.518 (0.157)				
24	0.317 (0.042)	0.225 (0.030)	0.475 (0.164)	0.352 (0.121)	0.714 (0.132)	0.524 (0.096)				
25	0.291 (0.079)	0.206 (0.056)			0.674 (0.177)	0.494 (0.127)				
26	0.247 (0.047)	0.175 (0.033)	0.283 (0.163)	0.210 (0.121)	0.431 (0.150)	0.319 (0.111)				
27	0.177 (0.048)	0.126 (0.034)	0.362 (0.129)	0.267 (0.095)	0.723 (0.144)	0.520 (0.103)	0.739 (0.159)	0.544 (0.116)		
28	0.245 (0.046)	0.174 (0.032)	0.453 (0.160)	0.332 (0.120)						
29	0.186 (0.044)	0.132 (0.031)	0.487 (0.066)	0.346 (0.047)	0.592 (0.070)	0.420 (0.049)				
30	0.278 (0.064)	0.197 (0.045)	0.744 (0.323)	0.528 (0.230)	0.723 (0.183)	0.513 (0.130)				
31	0.213 (0.044)	0.151 (0.031)	0.605 (0.173)	0.430 (0.123)	0.607 (0.088)	0.431 (0.062)				
Avg	0.326	0.232	0.551	0.388	0.674	0.479				
n	27	27	23	20	21	20	1	1	0	0
SD	0.072	0.051	0.161	0.116	0.130	0.091				
Min	0.177	0.126	0.276	0.202	0.431	0.319				
Max	0.490	0.348	0.892	0.634	1.050	0.743				

ED_004549_00015841-00188

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for February, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.238 (0.042)	0.169 (0.030)	0.535 (0.108)	0.380 (0.077)	0.736 (0.160)	0.523 (0.114)				
2	0.357 (0.134)	0.253 (0.095)	0.550 (0.181)	0.391 (0.128)	0.740 (0.438)	0.525 (0.311)				
3	0.244 (0.049)	0.173 (0.035)	0.619 (0.171)	0.440 (0.122)	0.878 (0.139)	0.623 (0.099)				
4	0.471 (0.162)	0.334 (0.115)	0.938 (0.387)	0.666 (0.275)	1.350 (0.507)	0.961 (0.360)				
5	0.305 (0.081)	0.216 (0.058)	0.813 (0.272)	0.577 (0.193)	1.060 (0.168)	0.751 (0.119)				
6	0.257 (0.062)	0.183 (0.044)	0.574 (0.076)	0.408 (0.054)	0.778 (0.115)	0.553 (0.082)				
7	0.201 (0.053)	0.143 (0.037)	0.530 (0.104)	0.377 (0.074)	0.690 (0.133)	0.490 (0.094)				
8	0.243 (0.046)	0.172 (0.033)	0.620 (0.089)	0.440 (0.063)	0.807 (0.107)	0.573 (0.076)				
9	0.374 (0.088)	0.266 (0.062)	0.696 (0.380)	0.495 (0.271)						
10	0.343 (0.087)	0.244 (0.062)	0.675 (0.202)	0.480 (0.143)	0.979 (0.345)	0.696 (0.245)				
11	0.476 (0.070)	0.338 (0.050)	0.986 (0.249)	0.701 (0.177)	1.430 (0.319)	1.020 (0.227)				
12	0.446 (0.089)	0.317 (0.063)	1.020 (0.360)	0.725 (0.256)	1.120 (0.277)	0.797 (0.197)				
13	0.289 (0.029)	0.205 (0.021)	0.672 (0.258)	0.478 (0.183)						
14	0.412 (0.249)									
15	0.448 (0.081)	0.318 (0.057)	0.813 (0.263)	0.578 (0.187)	0.919 (0.141)	0.653 (0.100)				
16	0.581 (0.156)	0.413 (0.111)	0.582 (0.248)	0.414 (0.176)	0.906 (0.192)	0.644 (0.136)				
17	0.372 (0.045)	0.264 (0.032)	0.687 (0.345)	0.488 (0.245)	0.782 (0.351)	0.556 (0.249)				
18	0.318 (0.073)	0.226 (0.052)	0.709 (0.298)	0.505 (0.211)	0.770 (0.294)	0.547 (0.209)				
19	0.419 (0.106)	0.297 (0.076)	0.608 (0.273)	0.434 (0.194)	0.717 (0.352)	0.510 (0.250)				
20	0.372 (0.059)	0.264 (0.042)	0.526 (0.222)	0.374 (0.158)	0.552 (0.212)	0.392 (0.150)				
21	0.423 (0.091)	0.299 (0.066)			0.860 (0.310)					
22	0.426 (0.029)	0.303 (0.020)	0.666 (0.343)	0.473 (0.243)	1.060 (0.552)	0.752 (0.393)				
23	0.444 (0.086)	0.315 (0.061)	0.626 (0.179)	0.445 (0.127)	0.690 (0.202)	0.490 (0.143)	0.976 (0.326)	0.693 (0.231)		
24	0.327 (0.084)	0.233 (0.060)	0.384 (0.093)	0.273 (0.066)	0.713 (0.124)	0.507 (0.089)	0.711 (0.120)	0.505 (0.086)		
25	0.383 (0.086)	0.272 (0.061)	0.521 (0.169)	0.370 (0.120)	0.599 (0.143)	0.426 (0.101)				
26	0.504 (0.166)	0.358 (0.118)	0.507 (0.239)	0.361 (0.170)	0.563 (0.192)	0.400 (0.136)				
27	0.439 (0.073)	0.312 (0.051)	0.736 (0.169)	0.523 (0.120)	0.650 (0.177)	0.462 (0.126)				
28	0.478 (0.073)	0.340 (0.052)	0.644 (0.204)	0.458 (0.145)	0.608 (0.190)	0.435 (0.136)				
29	0.441 (0.081)	0.314 (0.058)	0.588 (0.187)	0.418 (0.133)	0.704 (0.217)	0.503 (0.155)				
Avg	0.380	0.269	0.660	0.469	0.833	0.591	0.843	0.599		
n	29	28	27	27	26	25	2	2	0	0
SD	0.090	0.065	0.146	0.104	0.219	0.159	0.132	0.094		
Min	0.201	0.143	0.384	0.273	0.552	0.392	0.711	0.505		
Max	0.581	0.413	1.020	0.725	1.430	1.020	0.976	0.693		

ED_004549_00015841-00189

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for March, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.281 (0.033)	0.199 (0.024)	0.438 (0.079)	0.311 (0.056)	0.562 (0.098)	0.399 (0.069)				
2	0.344 (0.111)	0.244 (0.079)	0.476 (0.101)	0.338 (0.072)						
3	0.276 (0.053)	0.196 (0.038)	0.375 (0.089)	0.266 (0.063)	0.563 (0.142)	0.400 (0.101)				
4	0.288 (0.036)	0.204 (0.026)	0.336 (0.053)	0.238 (0.038)	0.577 (0.081)	0.409 (0.057)				
5	0.345 (0.048)	0.245 (0.034)	0.528 (0.125)	0.375 (0.089)						
6	0.430 (0.077)	0.305 (0.055)	0.486 (0.137)	0.345 (0.098)	0.615 (0.225)	0.436 (0.160)				
7	0.446 (0.085)	0.316 (0.060)	0.725 (0.159)	0.515 (0.113)	0.646 (0.246)	0.458 (0.174)				
8	0.413 (0.091)	0.293 (0.065)	0.532 (0.117)	0.378 (0.083)	0.659 (0.104)	0.468 (0.074)				
9	0.396 (0.053)	0.281 (0.038)	0.649 (0.225)	0.461 (0.160)	0.618 (0.236)	0.439 (0.167)				
10	0.399 (0.087)	0.283 (0.062)	0.460 (0.245)	0.327 (0.174)	0.549 (0.275)	0.389 (0.195)				
11	0.241 (0.051)	0.171 (0.036)	0.369 (0.078)	0.262 (0.055)	0.437 (0.126)	0.310 (0.090)				
12	0.381 (0.082)	0.273 (0.058)	0.367 (0.115)	0.258 (0.083)			0.707 (0.094)	0.498 (0.067)		
13	0.261 (0.069)	0.186 (0.049)	0.335 (0.052)	0.238 (0.037)	0.457 (0.093)	0.324 (0.066)				
14	0.314 (0.044)	0.223 (0.031)	0.401 (0.081)	0.284 (0.057)	0.505 (0.131)	0.359 (0.093)	0.605 (0.181)	0.430 (0.128)		
15	0.332 (0.039)	0.235 (0.028)	0.535 (0.213)	0.380 (0.151)	0.606 (0.128)	0.430 (0.091)	0.710 (0.136)	0.504 (0.097)		
16	0.406 (0.126)	0.288 (0.090)	0.452 (0.079)	0.321 (0.056)	0.560 (0.062)	0.397 (0.044)	0.663 (0.116)	0.470 (0.082)		
17	0.384 (0.086)	0.273 (0.061)	0.476 (0.113)	0.338 (0.080)	0.511 (0.122)	0.362 (0.087)	0.673 (0.152)	0.478 (0.108)		
18	0.281 (0.038)	0.200 (0.027)	0.402 (0.082)	0.286 (0.058)	0.481 (0.052)	0.341 (0.037)	0.549 (0.116)	0.389 (0.083)		
19	0.343 (0.046)	0.243 (0.032)	0.401 (0.119)	0.284 (0.085)	0.471 (0.097)	0.334 (0.069)	0.641 (0.116)	0.455 (0.082)		
20	0.305 (0.041)	0.217 (0.029)	0.391 (0.078)	0.277 (0.055)	0.444 (0.075)	0.315 (0.053)	0.525 (0.166)	0.373 (0.118)		
21	0.256 (0.068)	0.181 (0.049)	0.350 (0.093)	0.248 (0.066)	0.445 (0.145)	0.316 (0.103)	0.452 (0.137)	0.321 (0.097)		
22	0.342 (0.042)	0.243 (0.030)			0.436 (0.079)	0.309 (0.056)	0.596 (0.118)	0.423 (0.084)		
23	0.299 (0.032)	0.212 (0.022)	0.382 (0.091)	0.271 (0.064)	0.394 (0.059)	0.280 (0.042)				
24	0.321 (0.070)	0.228 (0.050)	0.432 (0.173)	0.306 (0.123)	0.438 (0.112)	0.311 (0.079)	0.546 (0.099)	0.387 (0.070)		
25	0.382 (0.043)	0.271 (0.031)			0.487 (0.078)	0.345 (0.056)	0.622 (0.100)	0.441 (0.071)		
26	0.231 (0.043)	0.164 (0.030)	0.319 (0.031)	0.226 (0.022)	0.415 (0.067)	0.294 (0.047)	0.422 (0.051)	0.299 (0.036)		
27	0.284 (0.113)	0.198 (0.077)	0.348 (0.091)	0.245 (0.064)	0.404 (0.088)	0.285 (0.062)	0.431 (0.132)	0.305 (0.094)		
28	0.243 (0.046)	0.172 (0.033)	0.281 (0.065)	0.199 (0.046)	0.302 (0.048)	0.214 (0.034)	0.476 (0.138)	0.338 (0.098)		
29	0.218 (0.043)	0.154 (0.031)	0.327 (0.077)	0.232 (0.054)			0.392 (0.114)	0.278 (0.081)		
30	0.204 (0.041)	0.145 (0.029)	0.343 (0.114)	0.243 (0.081)	0.393 (0.064)	0.279 (0.045)	0.411 (0.118)	0.291 (0.084)		
31	0.302 (0.041)	0.214 (0.029)					0.534 (0.086)	0.379 (0.061)		
Avg	0.321	0.228	0.426	0.302	0.499	0.354	0.553	0.392		
n	31	31	28	28	26	26	18	18	0	0
SD	0.065	0.046	0.099	0.071	0.089	0.063	0.102	0.072		
Min	0.204	0.145	0.281	0.199	0.302	0.214	0.392	0.278		
Max	0.446	0.316	0.725	0.515	0.659	0.468	0.710	0.504		

ED_004549_00015841-00190

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for April, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.251 (0.038)	0.178 (0.027)	0.294 (0.071)	0.208 (0.051)			0.464 (0.102)	0.329 (0.073)	0.534 (0.062)	0.379 (0.044)
2	0.249 (0.049)	0.177 (0.034)	0.413 (0.109)	0.293 (0.077)			0.558 (0.141)	0.396 (0.100)	0.673 (0.080)	0.477 (0.057)
3	0.325 (0.048)	0.230 (0.034)	0.410 (0.109)	0.291 (0.078)	0.527 (0.149)	0.374 (0.106)	0.641 (0.197)	0.455 (0.139)	0.740 (0.169)	0.525 (0.120)
4	0.432 (0.164)	0.306 (0.116)	0.473 (0.166)	0.335 (0.118)	0.474 (0.143)	0.337 (0.102)	0.568 (0.225)	0.403 (0.160)	0.767 (0.235)	0.544 (0.167)
5	0.299 (0.088)	0.212 (0.062)			0.399 (0.097)	0.283 (0.069)	0.533 (0.150)	0.378 (0.106)	0.707 (0.133)	0.502 (0.094)
6	0.203 (0.029)	0.144 (0.020)	0.310 (0.079)	0.220 (0.056)	0.431 (0.140)	0.306 (0.099)	0.388 (0.081)	0.275 (0.057)	0.555 (0.171)	0.394 (0.122)
7	0.289 (0.065)	0.205 (0.046)	0.400 (0.100)	0.284 (0.071)	0.476 (0.107)	0.337 (0.076)	0.603 (0.182)	0.428 (0.129)	0.724 (0.102)	0.514 (0.072)
8	0.315 (0.074)	0.223 (0.052)	0.437 (0.142)	0.310 (0.101)	0.438 (0.087)	0.311 (0.061)	0.729 (0.195)	0.517 (0.138)	0.737 (0.134)	0.523 (0.095)
9	0.272 (0.032)	0.193 (0.022)	0.478 (0.104)	0.339 (0.074)	0.435 (0.078)	0.308 (0.055)	0.579 (0.133)	0.411 (0.094)	0.748 (0.132)	0.530 (0.094)
10	0.267 (0.042)	0.190 (0.030)	0.410 (0.085)	0.291 (0.060)	0.613 (0.118)	0.435 (0.084)	0.648 (0.124)	0.460 (0.088)	0.829 (0.123)	0.588 (0.087)
11	0.371 (0.090)	0.263 (0.064)	0.393 (0.126)	0.279 (0.089)	0.439 (0.128)	0.311 (0.091)	0.561 (0.161)	0.398 (0.114)	0.667 (0.188)	0.473 (0.133)
12	0.404 (0.075)	0.286 (0.053)	0.476 (0.236)	0.338 (0.168)	0.523 (0.181)	0.371 (0.128)	0.609 (0.147)	0.432 (0.104)	0.795 (0.194)	0.565 (0.138)
13	0.464 (0.094)	0.330 (0.067)	0.597 (0.183)	0.424 (0.130)	0.676 (0.368)	0.480 (0.261)	0.667 (0.221)	0.474 (0.157)	1.040 (0.357)	0.742 (0.253)
14	0.239 (0.064)	0.170 (0.045)	0.306 (0.049)	0.217 (0.035)	0.426 (0.089)	0.303 (0.063)	0.388 (0.053)	0.276 (0.038)	0.577 (0.155)	0.409 (0.110)
15	0.300 (0.034)	0.213 (0.024)	0.302 (0.062)	0.214 (0.044)	0.396 (0.082)	0.281 (0.058)	0.446 (0.065)	0.316 (0.046)	0.535 (0.102)	0.380 (0.073)
16	0.272 (0.047)	0.193 (0.034)	0.331 (0.059)	0.235 (0.042)	0.388 (0.072)	0.275 (0.051)	0.496 (0.103)	0.352 (0.073)	0.602 (0.090)	0.427 (0.064)
17	0.348 (0.034)	0.247 (0.024)					0.555 (0.148)	0.394 (0.105)	0.780 (0.267)	0.553 (0.190)
18	0.246 (0.067)	0.175 (0.047)	0.294 (0.048)	0.208 (0.034)	0.357 (0.086)	0.253 (0.061)	0.345 (0.064)	0.245 (0.045)	0.494 (0.117)	0.350 (0.083)
19	0.216 (0.035)	0.153 (0.025)	0.319 (0.062)	0.226 (0.044)			0.408 (0.134)	0.290 (0.095)	0.558 (0.173)	0.395 (0.123)
20	0.265 (0.053)	0.188 (0.038)	0.396 (0.077)	0.281 (0.055)	0.486 (0.073)	0.345 (0.052)	0.595 (0.124)	0.422 (0.088)	0.712 (0.140)	0.505 (0.099)
21	0.262 (0.028)	0.186 (0.020)	0.344 (0.067)	0.244 (0.048)	0.413 (0.091)	0.293 (0.065)	0.545 (0.102)	0.386 (0.072)	0.658 (0.156)	0.467 (0.110)
22	0.282 (0.050)	0.200 (0.035)	0.403 (0.090)	0.286 (0.064)	0.420 (0.146)	0.298 (0.104)	0.594 (0.171)	0.422 (0.121)	0.708 (0.172)	0.503 (0.122)
23	0.259 (0.043)	0.183 (0.031)	0.375 (0.064)	0.266 (0.046)	0.485 (0.070)	0.344 (0.050)	0.515 (0.106)	0.366 (0.075)	0.668 (0.134)	0.474 (0.095)
24	0.512 (0.242)	0.363 (0.171)								
25	0.176 (0.226)	0.125 (0.160)								
26	0.772 (0.507)	0.548 (0.360)	0.605 (0.464)	0.429 (0.329)	0.710 (0.529)	0.504 (0.375)	1.340 (0.616)	0.951 (0.437)	1.990 (1.140)	1.420 (0.809)
27	1.070 (0.973)	0.762 (0.690)	1.030 (0.837)	0.732 (0.594)	1.170 (0.876)	0.832 (0.622)	2.170 (1.340)	1.540 (0.949)	2.980 (1.280)	2.110 (0.910)
28	0.804 (0.486)	0.570 (0.345)	0.872 (0.523)	0.619 (0.371)	1.640 (0.836)	1.170 (0.594)	1.580 (0.537)	1.120 (0.381)	2.740 (0.895)	1.940 (0.635)
29	0.097 (0.161)	0.069 (0.114)	0.277 (0.194)	0.197 (0.138)	0.841 (0.383)	0.597 (0.272)	0.830 (0.431)	0.589 (0.305)	1.650 (0.870)	1.170 (0.618)
30										
Avg	0.354	0.251	0.438	0.311	0.572	0.406	0.680	0.482	0.932	0.661
n	29	29	25	25	23	23	27	27	27	27
SD	0.206	0.146	0.178	0.127	0.296	0.211	0.399	0.283	0.644	0.457
Min	0.097	0.069	0.277	0.197	0.357	0.253	0.345	0.245	0.494	0.350
Max	1.070	0.762	1.030	0.732	1.640	1.170	2.170	1.540	2.980	2.110

ED_004549_00015841-00191

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for May, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7	0.494 (0.292)	0.350 (0.207)	0.503 (0.157)	0.357 (0.111)	1.040 (0.286)	0.737 (0.203)	1.170 (0.554)	0.828 (0.393)	1.990 (0.634)	1.410 (0.450)
8	0.281 (0.125)	0.199 (0.089)	0.358 (0.210)	0.254 (0.149)	1.130 (0.616)	0.799 (0.437)	1.010 (0.359)	0.716 (0.255)	1.800 (0.584)	1.270 (0.414)
9	0.275 (0.186)	0.195 (0.132)	0.330 (0.462)	0.234 (0.327)	0.637 (0.443)	0.452 (0.315)	1.020 (0.398)	0.722 (0.282)	1.980 (0.796)	1.400 (0.565)
10	0.542 (0.406)	0.385 (0.288)			1.430 (0.640)	1.020 (0.454)	1.750 (1.040)	1.240 (0.741)	3.240 (1.160)	2.300 (0.824)
11	0.081 (0.147)	0.058 (0.104)	0.240 (0.210)	0.171 (0.149)	0.681 (0.349)	0.483 (0.248)	0.619 (0.327)	0.439 (0.232)	1.720 (0.836)	1.220 (0.593)
12	0.161 (0.145)	0.115 (0.103)	0.297 (0.298)	0.211 (0.212)	0.699 (0.347)	0.496 (0.247)	1.010 (0.456)	0.717 (0.324)	1.770 (0.814)	1.260 (0.577)
13	0.585 (0.278)	0.415 (0.197)	0.572 (0.294)	0.406 (0.208)	0.979 (0.378)	0.695 (0.268)	1.420 (0.753)	1.010 (0.535)	2.460 (0.834)	1.740 (0.592)
14	0.539 (0.547)	0.383 (0.388)	0.652 (0.379)	0.463 (0.269)	1.200 (0.558)	0.855 (0.396)	1.100 (0.626)	0.784 (0.445)	2.960 (1.650)	2.100 (1.180)
15	0.711 (0.515)	0.505 (0.366)	0.560 (0.600)	0.398 (0.426)	0.878 (0.609)	0.624 (0.433)	1.170 (0.642)	0.835 (0.456)	2.120 (1.140)	1.510 (0.807)
16										
17										
18										
19										
20										
21	0.042 (0.196)	0.030 (0.139)	0.245 (0.263)	0.174 (0.187)	0.942 (0.590)	0.668 (0.419)	0.504 (0.411)	0.358 (0.292)	1.630 (0.906)	1.160 (0.643)
22	0.041 (0.119)	0.029 (0.085)	0.178 (0.156)	0.126 (0.111)	0.699 (0.414)	0.496 (0.294)	0.560 (0.287)	0.397 (0.204)	1.570 (0.703)	1.120 (0.499)
23	0.414 (0.445)	0.294 (0.316)	0.361 (0.412)	0.256 (0.293)	0.922 (0.770)	0.656 (0.547)	1.250 (0.725)	0.889 (0.516)		
24	0.490 (0.222)	0.348 (0.158)	0.839 (0.317)	0.596 (0.226)	1.930 (0.855)	1.370 (0.608)	1.670 (0.214)	1.190 (0.152)		
25	0.219 (0.358)	0.156 (0.255)	0.433 (0.568)	0.308 (0.404)	0.923 (0.672)	0.656 (0.478)	1.230 (0.630)	0.873 (0.448)		
26	0.712 (0.176)	0.506 (0.125)	0.486 (0.141)	0.345 (0.100)	0.913 (0.396)	0.649 (0.281)	1.350 (0.725)	0.962 (0.515)		
27	0.742 (0.576)	0.527 (0.409)	0.776 (0.417)	0.552 (0.296)	1.550 (0.695)	1.100 (0.494)	2.070 (0.615)	1.470 (0.437)	4.330 (0.850)	3.070 (0.604)
28	1.290 (0.697)	0.920 (0.495)	1.330 (0.500)	0.945 (0.356)	1.880 (1.080)	1.340 (0.765)	2.750 (1.120)	1.950 (0.798)		
29	0.464 (0.313)	0.330 (0.222)	0.819 (0.540)	0.582 (0.384)	1.350 (0.580)	0.961 (0.413)	1.940 (1.080)	1.380 (0.769)	3.130 (1.640)	2.220 (1.170)
30	0.789 (0.238)	0.560 (0.169)	0.768 (0.193)	0.545 (0.137)	0.954 (0.452)	0.677 (0.321)	1.850 (0.798)	1.310 (0.567)	2.190 (0.728)	1.550 (0.517)
31	0.750 (0.544)	0.533 (0.386)	1.060 (0.462)	0.754 (0.328)	1.820 (0.795)	1.290 (0.564)	2.290 (1.470)	1.630 (1.040)	2.920 (1.200)	2.070 (0.854)
Avg	0.481	0.342	0.569	0.404	1.130	0.801	1.390	0.985	2.390	1.690
n	20	20	19	19	20	20	20	20	15	15
SD	0.302	0.215	0.296	0.210	0.395	0.281	0.573	0.407	0.752	0.535
Min	0.041	0.029	0.178	0.126	0.637	0.452	0.504	0.358	1.570	1.120
Max	1.290	0.920	1.330	0.945	1.930	1.370	2.750	1.950	4.330	3.070

ED_004549_00015841-00192

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for June, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.245 (0.193)	0.174 (0.137)	0.607 (0.351)	0.431 (0.249)	1.280 (0.353)	0.911 (0.251)	1.700 (0.763)	1.210 (0.543)	2.390 (0.868)	1.700 (0.617)
2	0.488 (0.165)	0.346 (0.117)	0.743 (0.203)	0.527 (0.144)	1.260 (0.814)	0.893 (0.578)	2.100 (1.050)	1.490 (0.748)	2.860 (1.060)	2.030 (0.755)
3	0.487 (0.114)	0.346 (0.081)	0.621 (0.250)	0.441 (0.177)	1.340 (0.544)	0.954 (0.386)	2.260 (1.150)	1.600 (0.815)	3.400 (1.160)	2.420 (0.826)
4	0.546 (3.440)	0.387 (2.440)	0.426 (0.243)	0.303 (0.173)	0.895 (0.330)	0.635 (0.234)	1.290 (0.392)	0.916 (0.279)		
5	0.393 (0.642)	0.279 (0.456)	0.500 (0.442)	0.355 (0.314)	0.893 (0.554)	0.634 (0.394)	1.480 (0.802)	1.050 (0.569)		
6	0.020 (0.185)	0.014 (0.131)	0.166 (0.216)	0.118 (0.153)	0.498 (0.390)	0.354 (0.277)	0.643 (0.450)	0.457 (0.320)	1.570 (0.856)	1.110 (0.608)
7	0.365 (0.450)	0.259 (0.320)	0.516 (0.529)	0.366 (0.376)	1.020 (0.486)	0.723 (0.345)	1.700 (0.929)	1.210 (0.660)	2.560 (1.420)	1.820 (1.010)
8	0.255 (0.159)	0.181 (0.113)	0.452 (0.218)	0.321 (0.155)	1.010 (0.605)	0.715 (0.429)	1.310 (0.353)	0.931 (0.251)	2.050 (0.610)	1.450 (0.433)
9	0.449 (0.489)	0.319 (0.348)	0.470 (0.567)	0.334 (0.402)	0.879 (0.549)	0.624 (0.390)	1.430 (1.010)	1.010 (0.720)	2.080 (1.390)	1.480 (0.987)
10	0.110 (0.189)	0.078 (0.134)	-0.011 (0.310)	-0.008 (0.220)	0.335 (0.372)	0.238 (0.264)	1.020 (0.790)	0.727 (0.561)	1.120 (0.663)	0.795 (0.471)
11	0.025 (0.096)	0.018 (0.068)	0.256 (0.288)	0.182 (0.205)	0.775 (0.442)	0.551 (0.314)	0.949 (0.684)	0.674 (0.486)		
12										
13	0.522 (0.253)	0.371 (0.179)			1.240 (0.548)	0.879 (0.389)	1.230 (0.504)	0.876 (0.358)	2.060 (0.858)	1.460 (0.610)
14	0.304 (0.255)	0.216 (0.181)	0.504 (0.360)	0.358 (0.256)			1.380 (0.743)	0.981 (0.528)	2.050 (1.100)	1.460 (0.778)
15	0.588 (0.297)	0.417 (0.210)	0.436 (0.242)	0.310 (0.172)	0.593 (0.225)	0.421 (0.160)	1.400 (0.763)	0.997 (0.542)	2.130 (1.290)	1.510 (0.914)
16	0.626 (0.222)	0.444 (0.158)	0.544 (0.274)	0.386 (0.195)	1.000 (0.470)	0.711 (0.334)	1.690 (1.040)	1.200 (0.737)	2.210 (1.090)	1.570 (0.775)
17	0.421 (0.196)	0.299 (0.139)	0.613 (0.184)	0.435 (0.130)	0.913 (0.351)	0.648 (0.249)	1.260 (0.422)	0.895 (0.300)	2.170 (0.807)	1.540 (0.573)
18	0.492 (0.157)	0.349 (0.111)	0.850 (0.311)	0.603 (0.221)	1.190 (0.770)	0.846 (0.547)	1.660 (0.759)	1.180 (0.539)	2.200 (0.667)	1.560 (0.473)
19	0.546 (0.371)	0.388 (0.264)	0.893 (0.524)	0.634 (0.372)	1.140 (0.550)	0.811 (0.390)	1.650 (0.988)	1.170 (0.701)	1.970 (1.190)	1.400 (0.844)
20	1.370 (0.740)	0.974 (0.525)	2.080 (1.480)	1.480 (1.050)	2.170 (1.320)	1.540 (0.935)	3.520 (2.260)	2.500 (1.600)	4.120 (2.180)	2.920 (1.550)
21	1.820 (1.900)	1.300 (1.350)	1.730 (1.320)	1.230 (0.935)	2.050 (1.420)	1.450 (1.010)	2.590 (2.030)	1.840 (1.440)	3.580 (2.150)	2.540 (1.530)
22	0.767 (0.351)	0.545 (0.250)	0.893 (0.274)	0.634 (0.194)	0.736 (0.411)	0.523 (0.292)	1.180 (0.289)	0.841 (0.206)		
23	0.445 (0.345)	0.316 (0.245)	0.638 (0.211)	0.453 (0.150)	0.965 (0.480)	0.686 (0.341)	1.370 (0.362)	0.974 (0.257)	1.800 (0.577)	1.270 (0.409)
24	0.410 (0.245)	0.291 (0.174)	0.898 (0.430)	0.638 (0.305)	0.963 (0.287)	0.684 (0.204)	1.970 (0.848)	1.400 (0.602)	1.960 (0.486)	1.390 (0.345)
25	0.824 (0.405)	0.586 (0.287)	0.974 (0.464)	0.692 (0.330)	1.180 (0.404)	0.836 (0.287)	1.870 (0.567)	1.330 (0.403)	2.400 (0.646)	1.700 (0.459)
26	0.568 (0.223)	0.404 (0.158)	0.756 (0.323)	0.537 (0.229)	1.290 (0.705)	0.920 (0.501)	1.890 (0.535)	1.340 (0.380)	2.270 (0.426)	1.610 (0.303)
27	1.680 (0.552)	1.200 (0.392)	1.940 (0.827)	1.380 (0.588)	1.700 (0.805)	1.210 (0.572)	3.500 (1.600)	2.490 (1.140)	4.000 (2.260)	2.840 (1.610)
28	1.840 (0.709)	1.310 (0.504)	2.160 (1.070)	1.540 (0.760)	3.290 (1.340)	2.340 (0.955)	4.380 (2.400)	3.110 (1.700)	5.170 (2.940)	3.680 (2.090)
29	2.730 (1.480)	1.940 (1.050)	2.130 (0.855)	1.520 (0.608)	2.630 (1.370)	1.870 (0.970)	3.190 (1.180)	2.270 (0.840)	4.000 (2.500)	2.840 (1.780)
30	2.010 (0.741)	1.430 (0.527)	1.350 (0.663)	0.958 (0.472)	1.660 (0.593)	1.180 (0.422)	2.610 (1.050)	1.860 (0.745)	3.020 (1.430)	2.150 (1.010)
Avg	0.736	0.523	0.862	0.613	1.246	0.885	1.870	1.329	2.606	1.850
n	29	29	28	28	28	28	29	29	25	25
SD	0.664	0.473	0.608	0.433	0.642	0.456	0.865	0.614	0.946	0.673
Min	0.020	0.014	-0.011	-0.008	0.335	0.238	0.643	0.457	1.120	0.795
Max	2.730	1.940	2.160	1.540	3.290	2.340	4.380	3.110	5.170	3.680

ED_004549_00015841-00193

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for July, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	2.560 (1.090)	1.820 (0.779)	2.690 (1.330)	1.910 (0.943)	3.650 (1.460)	2.600 (1.040)				
2	1.710 (1.050)	1.220 (0.748)	2.460 (0.901)	1.750 (0.641)	2.990 (2.060)	2.130 (1.470)				
3	1.990 (2.880)	1.420 (2.050)	1.700 (0.614)	1.210 (0.437)	2.820 (1.190)	2.010 (0.849)				
4	0.920 (0.696)	0.654 (0.495)	1.320 (0.565)	0.937 (0.402)	2.010 (0.934)	1.430 (0.664)				
5										
6										
7										
8	0.936 (0.378)	0.665 (0.269)	1.070 (0.290)	0.763 (0.207)	1.360 (0.586)	0.968 (0.417)				
9	1.260 (0.511)	0.893 (0.363)	1.300 (0.463)	0.927 (0.330)	1.660 (0.426)	1.180 (0.303)				
10	1.150 (0.525)	0.816 (0.373)	1.400 (1.070)	0.993 (0.758)	1.310 (0.451)	0.930 (0.321)				
11	0.931 (0.315)	0.661 (0.223)	1.390 (0.737)	0.990 (0.523)	1.870 (1.450)	1.330 (1.030)				
12	1.440 (0.709)	1.020 (0.503)	2.050 (1.060)	1.450 (0.754)	2.270 (1.700)	1.610 (1.210)				
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Avg	1.430	1.020	1.710	1.210	2.220	1.580				
n	9	9	9	9	9	9	0	0	0	0
SD	0.531	0.379	0.532	0.379	0.749	0.534				
Min	0.920	0.654	1.070	0.763	1.310	0.930				
Max	2.560	1.820	2.690	1.910	3.650	2.600				

ED_004549_00015841-00194

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for August, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	2.580 (2.290)	1.830 (1.630)	2.160 (1.620)	1.540 (1.150)	2.290 (2.080)	1.630 (1.480)				
24	1.980 (1.320)	1.410 (0.937)	2.030 (1.300)	1.440 (0.922)	2.550 (1.620)	1.810 (1.150)	2.370 (1.330)	1.680 (0.943)		
25	0.660 (0.537)	0.469 (0.382)	0.797 (0.394)	0.567 (0.280)			2.070 (0.754)	1.470 (0.537)		
26	0.803 (0.440)	0.570 (0.312)	0.682 (0.334)	0.484 (0.237)	0.937 (0.461)	0.665 (0.328)	1.240 (0.462)	0.883 (0.328)		
27										
28										
29										
30										
31										
Avg	1.500	1.070	1.420	1.010	1.920	1.370	1.890	1.350		
n	4	4	4	4	3	3	3	3	0	0
SD	0.804	0.571	0.682	0.485	0.706	0.502	0.475	0.338		
Min	0.660	0.469	0.682	0.484	0.937	0.665	1.240	0.883		
Max	2.580	1.830	2.160	1.540	2.550	1.810	2.370	1.680		

ED_004549_00015841-00195

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for September, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4	1.030 (0.183)	0.734 (0.130)	1.220 (0.194)	0.866 (0.138)	1.420 (0.277)	1.010 (0.197)				
5	1.340 (0.462)	0.948 (0.328)	1.710 (0.495)	1.220 (0.351)	2.180 (0.532)	1.550 (0.378)				
6	1.400 (0.663)	0.997 (0.471)	1.370 (0.589)	0.977 (0.419)	1.890 (0.670)	1.340 (0.477)				
7	1.790 (0.892)	1.270 (0.633)	1.650 (0.568)	1.170 (0.404)	2.010 (1.140)	1.430 (0.809)				
8	1.630 (0.756)	1.160 (0.537)	1.900 (0.677)	1.350 (0.480)	2.380 (1.030)	1.690 (0.730)				
9	1.430 (0.577)	1.010 (0.410)	1.820 (0.909)	1.290 (0.646)	1.660 (0.683)	1.180 (0.485)				
10	1.060 (0.296)	0.751 (0.210)	1.290 (0.274)	0.917 (0.194)	1.600 (0.563)	1.140 (0.400)	1.740 (0.373)	1.240 (0.265)		
11	1.360 (0.116)									
12	2.050 (0.847)	1.460 (0.626)			2.380 (1.250)	1.770 (0.896)				
13	1.100 (0.555)	0.779 (0.394)	1.420 (0.825)	1.010 (0.585)	1.800 (0.575)	1.280 (0.409)				
14	1.760 (0.946)	1.250 (0.672)	2.140 (0.717)	1.520 (0.509)	2.390 (1.430)	1.700 (1.020)				
15	1.850 (1.020)	1.320 (0.721)	2.050 (1.050)	1.460 (0.745)	3.270 (2.630)	2.320 (1.870)				
16	2.730 (1.660)	1.940 (1.180)	3.080 (2.280)	2.190 (1.620)	3.040 (1.810)	2.160 (1.280)				
17	2.140 (1.640)									
18	0.977 (0.281)									
19	1.570 (0.429)	1.120 (0.304)	2.160 (0.702)	1.540 (0.499)	2.770 (1.020)	1.970 (0.727)				
20	0.963 (0.168)	0.684 (0.119)	1.320 (0.232)	0.938 (0.165)	2.170 (0.760)	1.540 (0.540)				
21	0.897 (0.226)	0.637 (0.160)	1.210 (0.229)	0.863 (0.163)	1.770 (0.372)	1.260 (0.264)				
22	0.828 (0.253)	0.587 (0.179)	0.930 (0.231)	0.660 (0.164)	1.450 (0.495)	1.030 (0.352)				
23	1.060 (0.481)	0.758 (0.344)	1.030 (0.774)	0.745 (0.555)	1.220 (0.784)	0.881 (0.559)				
24	1.070 (0.385)	0.757 (0.274)					2.220 (0.638)	1.580 (0.454)		
25	0.912 (0.292)	0.648 (0.207)	1.220 (0.359)	0.866 (0.255)	1.860 (0.412)	1.320 (0.293)				
26	1.100 (0.431)	0.784 (0.306)	1.240 (0.197)	0.878 (0.140)	1.640 (0.450)	1.160 (0.320)	2.120 (0.360)	1.500 (0.255)		
27	1.080 (0.391)	0.766 (0.278)	1.330 (0.362)	0.948 (0.257)	1.550 (0.691)	1.100 (0.491)	2.070 (0.634)	1.470 (0.451)		
28	1.270 (0.420)	0.904 (0.298)	1.530 (0.482)	1.080 (0.342)			2.350 (0.570)	1.670 (0.405)		
29	1.590 (0.633)	1.130 (0.449)	1.850 (0.551)	1.310 (0.391)	1.970 (1.000)	1.400 (0.712)	2.740 (0.702)	1.940 (0.499)		
30	1.510 (0.641)	1.070 (0.455)	1.710 (0.765)	1.220 (0.543)	1.890 (1.080)	1.340 (0.764)				
Avg	1.390	0.978	1.600	1.140	2.010	1.430	2.210	1.570		
n	27	24	22	22	22	22	6	6	0	0
SD	0.444	0.311	0.472	0.335	0.513	0.366	0.301	0.214		
Min	0.828	0.587	0.930	0.660	1.220	0.881	1.740	1.240		
Max	2.730	1.940	3.080	2.190	3.270	2.320	2.740	1.940		

ED_004549_00015841-00196

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for October, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	1.310 (0.306)	0.941 (0.218)	1.880 (0.717)	1.360 (0.496)	2.380 (1.280)	1.720 (0.919)				
2	1.050 (0.469)									
3	0.904 (0.172)									
4	0.554 (0.148)	0.394 (0.105)	0.655 (0.253)	0.466 (0.180)	0.839 (0.207)	0.596 (0.147)	0.999 (0.378)	0.710 (0.269)	1.850 (0.663)	1.310 (0.471)
5	0.795 (0.217)	0.565 (0.154)	0.861 (0.279)	0.611 (0.199)	1.160 (0.235)	0.825 (0.165)	1.520 (0.345)	1.080 (0.245)	2.540 (0.426)	1.800 (0.302)
6	0.910 (0.199)	0.647 (0.141)	1.320 (0.195)	0.939 (0.138)	1.790 (0.548)	1.270 (0.389)	2.010 (0.330)	1.430 (0.234)	2.780 (0.496)	1.980 (0.353)
7	0.611 (0.151)	0.434 (0.107)	0.733 (0.211)	0.521 (0.150)	1.030 (0.323)	0.733 (0.229)	1.080 (0.326)	0.765 (0.231)		
8	0.902 (0.275)	0.641 (0.195)								
9	0.755 (0.199)	0.536 (0.141)	0.858 (0.192)	0.609 (0.136)	1.260 (0.357)	0.893 (0.254)	1.310 (0.422)	0.930 (0.300)	2.240 (0.549)	1.590 (0.390)
10	0.704 (0.204)	0.499 (0.145)	0.780 (0.194)	0.553 (0.137)	0.802 (0.274)	0.569 (0.195)	0.965 (0.160)	0.685 (0.114)	1.690 (0.626)	1.200 (0.444)
11	0.654 (0.144)	0.464 (0.102)	0.659 (0.175)	0.467 (0.124)	0.829 (0.270)	0.588 (0.191)	0.826 (0.267)	0.586 (0.189)	1.620 (0.675)	1.150 (0.479)
12	0.813 (0.271)	0.576 (0.192)	0.819 (0.368)	0.581 (0.261)	0.973 (0.383)	0.690 (0.272)	1.220 (0.584)	0.868 (0.415)	1.890 (0.749)	1.340 (0.532)
13	1.060 (0.464)	0.751 (0.329)	1.330 (0.361)	0.947 (0.257)	1.700 (0.553)	1.210 (0.392)			2.790 (0.642)	1.980 (0.456)
14	0.535 (0.253)	0.379 (0.179)								
15	0.890 (0.453)	0.631 (0.321)								
16	1.250 (0.617)	0.912 (0.444)	1.310 (0.542)	0.939 (0.399)	1.330 (0.626)	0.959 (0.456)	1.760 (0.645)	1.250 (0.460)	2.670 (1.050)	1.930 (0.771)
17	1.610 (0.718)	1.140 (0.511)	1.790 (0.546)	1.280 (0.388)	1.900 (0.588)	1.350 (0.419)	2.510 (0.870)	1.790 (0.621)	3.360 (1.610)	2.400 (1.150)
18	1.540 (0.625)	1.100 (0.445)	1.510 (0.339)	1.080 (0.241)	2.100 (0.619)	1.500 (0.442)	2.390 (0.583)	1.710 (0.417)	3.590 (0.950)	2.560 (0.678)
19	1.090 (0.378)	0.772 (0.269)	1.090 (0.313)	0.777 (0.223)	1.620 (0.348)	1.150 (0.248)	1.810 (0.378)	1.290 (0.269)	3.170 (0.544)	2.250 (0.387)
20	0.972 (0.602)	0.691 (0.428)	0.799 (0.237)	0.568 (0.169)	1.260 (0.403)	0.897 (0.287)			2.270 (0.916)	1.620 (0.652)
21	0.698 (0.269)	0.496 (0.191)	0.690 (0.244)	0.491 (0.173)	0.889 (0.377)	0.632 (0.268)			1.620 (0.238)	1.160 (0.169)
22	1.110 (0.358)	0.786 (0.255)	1.460 (0.403)	1.040 (0.286)	1.380 (0.513)	0.982 (0.365)				
23	0.994 (0.272)	0.705 (0.193)			1.200 (0.552)	0.860 (0.393)				
24	1.060 (0.301)	0.753 (0.214)	1.280 (0.444)	0.913 (0.316)	1.510 (0.530)	1.080 (0.377)	1.850 (0.396)	1.310 (0.282)	2.570 (0.452)	1.830 (0.322)
25	1.070 (0.392)	0.763 (0.279)	1.460 (0.473)	1.040 (0.337)	2.180 (0.773)	1.550 (0.550)	2.650 (0.542)	1.880 (0.386)	3.640 (0.784)	2.590 (0.558)
26	0.804 (0.247)	0.571 (0.175)	1.010 (0.182)	0.717 (0.129)	1.380 (0.419)	0.980 (0.298)	1.730 (0.514)	1.230 (0.366)	2.660 (0.648)	1.890 (0.461)
27	1.070 (0.428)	0.761 (0.304)	1.430 (0.572)	1.010 (0.407)	1.160 (0.638)	0.826 (0.454)	2.180 (0.560)	1.550 (0.399)	3.450 (0.614)	2.450 (0.437)
28	1.220 (0.645)	0.870 (0.458)	1.590 (0.401)	1.130 (0.285)	1.450 (0.566)	1.030 (0.402)	2.440 (0.659)	1.740 (0.468)	3.220 (0.657)	2.290 (0.467)
29	1.160 (0.341)	0.826 (0.242)								
30	1.380 (0.341)	0.984 (0.242)	1.610 (0.388)	1.150 (0.276)	1.670 (0.416)	1.190 (0.296)	2.690 (0.311)	1.920 (0.221)	3.550 (0.477)	2.530 (0.341)
31	1.260 (0.288)	0.896 (0.205)	1.560 (0.322)	1.110 (0.230)	1.840 (0.461)	1.310 (0.329)	2.160 (0.379)	1.540 (0.271)	3.220 (0.590)	2.300 (0.422)
Avg	0.991	0.706	1.190	0.846	1.430	1.020	1.790	1.280	2.690	1.910
n	31	29	24	24	25	25	19	19	21	21
SD	0.268	0.198	0.378	0.271	0.431	0.310	0.588	0.419	0.667	0.476
Min	0.535	0.379	0.655	0.466	0.802	0.569	0.826	0.586	1.620	1.150
Max	1.610	1.140	1.880	1.360	2.380	1.720	2.690	1.920	3.640	2.590

ED_004549_00015841-00197

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for November, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	1.370 (0.379)	0.974 (0.270)	1.820 (0.279)	1.300 (0.199)	1.950 (0.781)	1.400 (0.558)			3.680 (0.575)	2.630 (0.411)
2	0.908 (0.145)	0.647 (0.103)	1.240 (0.142)	0.887 (0.101)	1.830 (0.382)	1.310 (0.272)				
3	0.940 (0.142)	0.670 (0.101)	1.080 (0.207)	0.771 (0.148)	1.140 (0.401)	0.812 (0.286)	1.670 (0.407)	1.190 (0.291)	2.230 (0.363)	1.590 (0.259)
4	0.881 (0.166)	0.627 (0.118)	1.040 (0.194)	0.742 (0.139)	1.400 (0.211)	0.996 (0.151)	1.790 (0.409)	1.270 (0.292)		
5	1.370 (0.217)	0.981 (0.153)	1.580 (0.471)	1.120 (0.336)						
6	1.430 (2.220)	1.020 (1.580)	1.890 (2.180)	1.350 (1.550)	3.110 (4.070)	2.220 (2.900)	3.820 (4.470)	2.720 (3.190)	4.550 (4.690)	3.240 (3.340)
7	1.060 (0.178)	0.758 (0.127)	1.260 (0.185)	0.900 (0.132)	1.130 (0.277)	0.803 (0.198)	2.130 (0.353)	1.520 (0.252)	2.360 (0.304)	1.690 (0.217)
8	0.994 (0.162)	0.709 (0.115)	1.340 (0.274)	0.957 (0.196)	1.470 (0.325)	1.050 (0.232)	2.260 (0.243)	1.610 (0.174)	2.540 (0.318)	1.810 (0.227)
9	1.350 (0.374)	0.959 (0.266)					2.910 (0.649)	2.080 (0.463)	3.080 (0.513)	2.200 (0.366)
10	1.380 (0.252)	0.986 (0.180)	1.760 (0.399)	1.250 (0.285)			2.550 (0.438)	1.810 (0.313)	3.320 (0.414)	2.370 (0.296)
11	0.997 (0.220)	0.711 (0.156)	0.978 (0.139)	0.697 (0.100)	1.280 (0.215)	0.912 (0.153)	1.500 (0.348)	1.070 (0.248)	2.300 (0.418)	1.640 (0.297)
12	0.824 (0.115)	0.589 (0.082)	0.978 (0.146)	0.699 (0.105)	1.320 (0.252)	0.941 (0.180)	1.230 (0.090)	0.880 (0.064)	1.880 (0.270)	1.350 (0.194)
13	0.857 (0.104)	0.609 (0.074)	1.130 (0.152)	0.803 (0.109)	1.630 (0.290)	1.160 (0.208)	1.370 (0.180)	0.978 (0.128)		
14	1.310 (0.285)	0.933 (0.202)	1.290 (0.263)	0.920 (0.187)	1.560 (0.588)	1.110 (0.418)	2.100 (0.319)	1.490 (0.227)	2.730 (0.407)	1.940 (0.289)
15	1.170 (0.182)	0.830 (0.129)	1.280 (0.161)	0.912 (0.115)	1.360 (0.192)	0.966 (0.136)	2.190 (0.260)	1.560 (0.186)	2.750 (0.321)	1.960 (0.229)
16	1.270 (0.204)	0.900 (0.145)	1.460 (0.233)	1.040 (0.166)	1.570 (0.288)	1.120 (0.205)	2.280 (0.206)	1.620 (0.148)	2.870 (0.382)	2.040 (0.272)
17	1.370 (0.128)	0.975 (0.091)	1.600 (0.417)	1.140 (0.297)	1.690 (0.254)	1.200 (0.181)	2.570 (0.205)	1.830 (0.146)	2.920 (0.298)	2.080 (0.213)
18	1.270 (0.168)	0.901 (0.120)	1.900 (0.319)	1.350 (0.228)	1.910 (0.433)	1.360 (0.308)	2.790 (0.603)	1.990 (0.430)	3.170 (0.370)	2.260 (0.265)
19	1.240 (0.111)	0.880 (0.079)	1.490 (0.328)	1.060 (0.234)	2.060 (0.271)	1.470 (0.193)	2.260 (0.428)	1.610 (0.305)	3.060 (0.271)	2.180 (0.193)
20	1.270 (0.299)	0.904 (0.213)	1.260 (0.206)	0.893 (0.146)	1.500 (0.147)	1.070 (0.104)			2.450 (0.338)	1.740 (0.240)
21	1.030 (0.152)	0.733 (0.108)	1.290 (0.311)	0.914 (0.221)	1.420 (0.330)	1.010 (0.235)	2.200 (0.636)	1.560 (0.453)	2.480 (0.681)	1.760 (0.485)
22	1.110 (0.160)	0.790 (0.114)	1.580 (0.276)	1.130 (0.196)	2.100 (0.372)	1.500 (0.265)	2.300 (0.340)	1.640 (0.242)	3.040 (0.306)	2.160 (0.218)
23	1.180 (0.121)	0.839 (0.086)	1.570 (0.230)	1.110 (0.163)	1.760 (0.279)	1.250 (0.198)	2.340 (0.462)	1.660 (0.328)	2.920 (0.329)	2.080 (0.234)
24	1.320 (0.095)	0.936 (0.068)	1.610 (0.246)	1.140 (0.175)	1.400 (0.335)	0.999 (0.238)	2.370 (0.231)	1.690 (0.164)	2.600 (0.312)	1.850 (0.222)
25	1.090 (0.095)	0.775 (0.068)	1.310 (0.124)	0.930 (0.088)	1.510 (0.264)	1.070 (0.188)	2.230 (0.275)	1.580 (0.196)	2.570 (0.381)	1.830 (0.271)
26	1.030 (0.184)	0.733 (0.130)	1.140 (0.135)	0.813 (0.096)	1.150 (0.207)	0.816 (0.147)	1.680 (0.234)	1.200 (0.166)	1.910 (0.280)	1.360 (0.199)
27	0.930 (0.206)	0.661 (0.147)	1.090 (0.164)	0.777 (0.116)	1.400 (0.259)	0.995 (0.185)	1.880 (0.352)	1.340 (0.250)	2.140 (0.411)	1.530 (0.292)
28	0.973 (0.170)	0.692 (0.121)	1.340 (0.252)	0.955 (0.179)			2.440 (0.254)	1.730 (0.181)	2.900 (0.552)	2.060 (0.393)
29	1.120 (0.106)	0.795 (0.076)	1.140 (0.293)	0.809 (0.208)	1.550 (0.531)	1.100 (0.378)	2.580 (0.447)	1.840 (0.318)	2.960 (0.533)	2.110 (0.379)
30	1.260 (0.139)	0.894 (0.099)	1.120 (0.250)	0.794 (0.178)	1.160 (0.208)	0.825 (0.148)	2.170 (0.194)	1.550 (0.138)	2.420 (0.170)	1.720 (0.121)
Avg	1.140	0.814	1.360	0.971	1.590	1.130	2.220	1.580	2.760	1.970
n	30	30	29	29	26	26	26	26	26	26
SD	0.180	0.128	0.265	0.189	0.408	0.291	0.517	0.368	0.550	0.392
Min	0.824	0.589	0.978	0.697	1.130	0.803	1.230	0.880	1.880	1.350
Max	1.430	1.020	1.900	1.350	3.110	2.220	3.820	2.720	4.550	3.240

ED_004549_00015841-00198

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for December, 2008.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.985 (0.158)	0.701 (0.112)			1.600 (0.285)	1.140 (0.203)	2.140 (0.207)	1.520 (0.147)	2.680 (0.381)	1.910 (0.271)
2	1.360 (0.216)	0.970 (0.154)			1.420 (0.368)	1.010 (0.262)	2.090 (0.702)	1.490 (0.501)	2.590 (0.637)	1.840 (0.455)
3	1.280 (0.128)	0.911 (0.091)	1.100 (0.203)	0.783 (0.144)	1.220 (0.236)	0.869 (0.168)	1.920 (0.319)	1.370 (0.227)	2.160 (0.285)	1.540 (0.203)
4	1.070 (0.122)	0.760 (0.087)	1.340 (0.193)	0.950 (0.137)	1.320 (0.241)	0.940 (0.171)	1.990 (0.259)	1.410 (0.184)	2.280 (0.139)	1.620 (0.099)
5	1.000 (0.122)	0.712 (0.087)	1.340 (0.166)	0.951 (0.118)	1.470 (0.265)	1.050 (0.188)	2.190 (0.343)	1.560 (0.244)	2.420 (0.440)	1.720 (0.313)
6	1.150 (0.295)	0.814 (0.210)	1.760 (0.487)	1.250 (0.346)	1.920 (0.543)	1.360 (0.386)	2.730 (0.490)	1.940 (0.349)	2.980 (0.631)	2.120 (0.449)
7	1.720 (0.420)	1.230 (0.299)			2.340 (1.090)	1.670 (0.776)	3.180 (0.931)	2.260 (0.663)	3.470 (0.500)	2.470 (0.357)
8	1.160 (0.108)	0.823 (0.077)	1.520 (0.270)	1.080 (0.192)	1.850 (0.260)	1.310 (0.185)	2.390 (0.552)	1.700 (0.393)	3.000 (0.487)	2.130 (0.347)
9	1.360 (0.147)	0.970 (0.104)	1.860 (0.471)	1.320 (0.335)	2.000 (0.378)	1.420 (0.269)	2.410 (0.346)	1.720 (0.247)	2.840 (0.490)	2.020 (0.349)
10	1.320 (0.252)	0.938 (0.179)			1.880 (0.334)	1.330 (0.238)	2.440 (0.195)	1.730 (0.139)	3.110 (0.550)	2.220 (0.392)
11	1.130 (0.146)	0.802 (0.104)	1.300 (0.395)	0.924 (0.281)	1.260 (0.202)	0.896 (0.144)	1.810 (0.214)	1.280 (0.152)	2.560 (0.286)	1.820 (0.204)
12	0.920 (0.139)	0.654 (0.099)	1.250 (0.453)	0.892 (0.323)	1.650 (0.462)	1.180 (0.330)	1.620 (0.423)	1.150 (0.301)	2.610 (0.724)	1.850 (0.516)
13	0.822 (0.175)	0.584 (0.125)	1.090 (0.144)	0.774 (0.103)			1.470 (0.349)	1.040 (0.248)	2.710 (0.866)	1.930 (0.617)
14	0.654 (0.101)	0.464 (0.072)	0.892 (0.180)	0.633 (0.128)	1.160 (0.235)	0.826 (0.167)	1.090 (0.178)	0.772 (0.126)		
15	0.785 (0.138)	0.555 (0.097)	0.980 (0.163)	0.695 (0.116)	1.250 (0.290)	0.883 (0.206)	1.540 (0.282)	1.100 (0.199)	1.760 (0.212)	1.250 (0.152)
16	0.799 (0.095)	0.566 (0.067)	1.580 (0.259)	1.120 (0.184)	1.600 (0.203)	1.130 (0.144)	2.150 (0.241)	1.520 (0.171)		
17	0.896 (0.091)	0.635 (0.065)	1.410 (0.315)	0.999 (0.224)	1.630 (0.404)	1.160 (0.287)	1.860 (0.342)	1.320 (0.243)		
18	2.240 (0.958)									
19	0.855 (0.125)	0.606 (0.089)	1.090 (0.222)	0.777 (0.157)	1.470 (0.233)	1.040 (0.166)	2.020 (0.283)	1.440 (0.201)	2.590 (0.285)	1.840 (0.203)
20	0.783 (0.059)	0.555 (0.042)	0.774 (0.214)	0.549 (0.152)	1.050 (0.305)	0.743 (0.216)	1.430 (0.268)	1.010 (0.190)	1.710 (0.200)	1.210 (0.142)
21	0.751 (0.098)	0.533 (0.070)	1.140 (0.167)	0.811 (0.119)	1.680 (0.185)	1.190 (0.132)	1.970 (0.414)	1.400 (0.294)	2.190 (0.355)	1.550 (0.252)
22	0.835 (0.167)	0.592 (0.119)	1.030 (0.286)	0.733 (0.203)	1.220 (0.368)	0.863 (0.261)	2.060 (0.247)	1.460 (0.175)	2.260 (0.348)	1.600 (0.247)
23	0.832 (0.129)	0.590 (0.092)	1.190 (0.211)	0.842 (0.150)	1.210 (0.208)	0.857 (0.148)	1.620 (0.131)	1.150 (0.093)	2.090 (0.288)	1.480 (0.204)
24	0.820 (0.133)	0.582 (0.095)	0.856 (0.177)	0.608 (0.125)	0.982 (0.203)	0.698 (0.144)	1.420 (0.243)	1.010 (0.173)	1.650 (0.161)	1.170 (0.114)
25	0.758 (0.096)	0.538 (0.068)	1.030 (0.135)	0.734 (0.096)	1.350 (0.145)	0.959 (0.103)	1.670 (0.159)	1.190 (0.113)	2.010 (0.299)	1.420 (0.212)
26	0.757 (0.097)	0.537 (0.069)	1.240 (0.303)	0.878 (0.215)						
27	0.847 (0.136)	0.603 (0.097)	1.340 (0.194)	0.951 (0.138)	1.700 (0.192)	1.210 (0.137)	1.610 (0.165)	1.150 (0.118)		
28	0.967 (0.165)	0.688 (0.117)	1.520 (0.247)	1.090 (0.175)	1.920 (0.259)	1.370 (0.184)	1.870 (0.429)	1.330 (0.305)		
29	0.949 (0.170)	0.675 (0.121)	1.340 (0.265)	0.952 (0.189)	1.560 (0.267)	1.110 (0.191)				
30	0.863 (0.127)	0.614 (0.091)	1.480 (0.273)	1.050 (0.194)	1.730 (0.281)	1.230 (0.200)	1.910 (0.601)	1.360 (0.428)	2.360 (0.582)	1.680 (0.415)
31	0.938 (0.099)	0.667 (0.070)	1.380 (0.211)	0.980 (0.150)	1.640 (0.175)	1.170 (0.124)	1.710 (0.344)	1.220 (0.245)		
Avg	1.020	0.695	1.260	0.897	1.540	1.090	1.940	1.380	2.460	1.750
n	31	30	26	26	28	28	28	28	22	22
SD	0.322	0.168	0.261	0.186	0.314	0.224	0.428	0.305	0.458	0.327
Min	0.654	0.464	0.774	0.549	0.982	0.698	1.090	0.772	1.650	1.170
Max	2.240	1.230	1.860	1.320	2.340	1.670	3.180	2.260	3.470	2.470

ED_004549_00015841-00199

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for January, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.668 (0.173)	0.476 (0.123)	1.030 (0.318)	0.735 (0.226)	1.330 (0.415)	0.947 (0.296)	1.420 (0.354)	1.010 (0.253)	1.960 (0.633)	1.400 (0.452)
2	0.569 (0.097)	0.404 (0.069)	1.220 (0.489)	0.864 (0.347)	1.680 (0.553)	1.200 (0.393)				
3	0.650 (0.139)	0.461 (0.099)	0.934 (0.504)	0.663 (0.358)	1.030 (0.544)	0.731 (0.387)	1.580 (0.558)	1.120 (0.396)		
4	0.708 (0.183)	0.502 (0.130)	0.477 (0.167)	0.339 (0.119)	0.863 (0.242)	0.612 (0.172)	1.080 (0.276)	0.764 (0.196)	1.370 (0.271)	0.970 (0.192)
5	0.498 (0.103)	0.354 (0.073)	0.971 (0.167)	0.690 (0.119)			1.670 (0.329)	1.190 (0.234)		
6	0.754 (0.105)	0.537 (0.075)	1.320 (0.445)	0.942 (0.317)	1.880 (0.459)	1.340 (0.327)	1.720 (0.469)	1.230 (0.334)	2.390 (0.272)	1.710 (0.194)
7	0.567 (0.111)	0.397 (0.077)	1.140 (0.130)	0.814 (0.093)	1.480 (0.084)	1.050 (0.061)	1.220 (0.151)	0.869 (0.109)		
8	0.526 (0.151)	0.358 (0.102)	1.240 (0.350)	0.839 (0.221)	1.650 (0.228)	1.150 (0.162)				
9	0.788 (0.158)	0.560 (0.112)	1.620 (0.436)	1.150 (0.310)	2.080 (0.532)	1.480 (0.379)	2.510 (0.449)	1.780 (0.319)		
10	0.986 (0.124)	0.701 (0.089)	1.820 (0.391)	1.300 (0.278)	1.960 (0.278)	1.390 (0.197)	2.430 (0.333)	1.730 (0.237)	3.080 (0.341)	2.190 (0.243)
11	0.961 (0.107)	0.683 (0.076)	1.740 (0.554)	1.240 (0.394)	2.060 (0.259)	1.470 (0.184)	2.600 (0.233)	1.850 (0.166)	3.250 (0.424)	2.320 (0.302)
12	1.060 (0.181)	0.758 (0.129)	2.250 (0.525)	1.600 (0.373)	2.260 (0.449)	1.610 (0.321)	2.800 (0.328)	1.990 (0.234)	3.560 (0.413)	2.540 (0.296)
13	0.986 (0.109)	0.702 (0.078)	1.230 (0.422)	0.872 (0.301)	1.780 (0.602)	1.270 (0.429)				
14	0.754 (0.180)									
15	0.594 (0.128)	0.422 (0.091)	0.958 (0.272)	0.681 (0.193)	1.370 (0.371)	0.974 (0.264)	1.490 (0.136)	1.060 (0.097)	2.200 (0.436)	1.570 (0.310)
16	0.637 (0.098)	0.452 (0.070)	0.939 (0.227)	0.667 (0.161)	1.670 (0.185)	1.190 (0.132)	1.470 (0.283)	1.040 (0.201)	2.930 (0.360)	2.080 (0.256)
17	0.497 (0.089)	0.353 (0.064)	0.958 (0.054)	0.681 (0.039)	1.830 (0.166)	1.300 (0.118)	1.540 (0.269)	1.100 (0.191)		
18	0.617 (0.193)	0.439 (0.137)	1.060 (0.184)	0.752 (0.131)	1.710 (0.194)	1.220 (0.138)	1.750 (0.121)	1.240 (0.086)		
19	0.568 (0.140)	0.403 (0.099)	1.000 (0.331)	0.712 (0.235)	1.620 (0.204)	1.150 (0.145)	2.000 (0.223)	1.420 (0.159)		
20	0.818 (0.113)		0.814 (0.165)		1.070 (0.177)		1.650 (0.267)		2.290 (0.254)	
21	0.272 (0.174)		0.300 (0.156)		0.394 (0.200)		0.815 (0.146)		1.110 (0.247)	
22	0.326 (0.047)	0.232 (0.033)	0.336 (0.268)	0.239 (0.191)	0.484 (0.159)	0.344 (0.113)	0.855 (0.184)	0.608 (0.130)	1.230 (0.192)	0.875 (0.137)
23										
24										
25										
26										
27										
28										
29										
30			0.797 (0.256)	0.567 (0.182)	0.924 (0.363)	0.658 (0.258)	1.610 (0.232)	1.140 (0.165)	2.030 (0.333)	1.440 (0.237)
31			0.884 (0.198)	0.628 (0.140)	1.040 (0.173)	0.736 (0.123)	1.290 (0.271)	0.920 (0.193)	1.820 (0.178)	1.290 (0.127)
Avg	0.673	0.484	1.090	0.808	1.460	1.090	1.670	1.230	2.250	1.670
n	22	19	23	21	22	20	20	18	13	11
SD	0.201	0.137	0.446	0.303	0.502	0.324	0.538	0.375	0.752	0.524
Min	0.272	0.232	0.300	0.239	0.394	0.344	0.815	0.608	1.110	0.875
Max	1.060	0.758	2.250	1.600	2.260	1.610	2.800	1.990	3.560	2.540

ED_004549_00015841-00200

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for February, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1			0.806 (0.301)	0.573 (0.214)	0.766 (0.178)	0.545 (0.127)	1.370 (0.250)	0.972 (0.178)	1.550 (0.239)	1.100 (0.171)
2			0.921 (0.323)	0.655 (0.230)	0.898 (0.189)	0.638 (0.135)	1.550 (0.398)	1.100 (0.283)	1.730 (0.257)	1.230 (0.183)
3			0.943 (0.280)	0.671 (0.199)	0.947 (0.181)	0.673 (0.129)	1.600 (0.303)	1.140 (0.216)	1.740 (0.341)	1.240 (0.243)
4			0.926 (0.268)	0.658 (0.190)	0.725 (0.250)	0.516 (0.178)	1.360 (0.311)	0.965 (0.221)	1.760 (0.368)	1.250 (0.262)
5										
6	0.184 (0.180)	0.131 (0.128)								
7	0.180 (0.155)	0.128 (0.111)								
8	0.116 (0.203)	0.083 (0.144)								
9	0.205 (0.228)	0.146 (0.162)								
10			0.570 (0.174)	0.405 (0.124)	0.623 (0.124)	0.443 (0.088)	0.948 (0.236)	0.674 (0.168)	1.310 (0.227)	0.929 (0.161)
11			0.488 (0.115)	0.347 (0.082)	0.661 (0.144)	0.470 (0.102)	0.940 (0.128)	0.668 (0.091)	1.330 (0.272)	0.947 (0.193)
12			0.502 (0.180)	0.357 (0.128)	0.548 (0.136)	0.390 (0.097)	0.971 (0.210)	0.690 (0.149)	1.190 (0.178)	0.848 (0.126)
13			0.390 (0.171)	0.278 (0.121)	0.674 (0.142)	0.479 (0.101)	0.724 (0.109)	0.515 (0.078)	1.480 (0.288)	1.050 (0.205)
14			0.573 (0.165)	0.407 (0.118)	0.681 (0.158)	0.485 (0.113)	1.130 (0.250)	0.807 (0.178)	1.800 (0.444)	1.280 (0.316)
15			0.571 (0.108)	0.406 (0.077)	0.677 (0.140)	0.481 (0.100)	1.240 (0.109)	0.885 (0.078)	1.470 (0.223)	1.050 (0.159)
16			0.483 (0.102)	0.344 (0.073)	0.795 (0.117)	0.566 (0.084)	0.974 (0.149)	0.693 (0.106)	1.510 (0.170)	1.080 (0.121)
17			0.504 (0.268)	0.359 (0.191)	0.693 (0.209)	0.494 (0.149)	1.160 (0.451)	0.824 (0.321)	1.630 (0.416)	1.160 (0.296)
18			0.805 (0.341)	0.573 (0.243)	0.769 (0.280)	0.548 (0.199)	1.330 (0.468)	0.947 (0.333)	2.200 (0.675)	1.570 (0.480)
19			0.297 (0.171)	0.211 (0.122)	0.304 (0.118)	0.217 (0.084)	0.689 (0.233)	0.490 (0.166)	1.100 (0.459)	0.786 (0.327)
20			0.465 (0.095)	0.331 (0.068)	0.609 (0.197)	0.433 (0.141)	0.858 (0.170)	0.610 (0.121)	1.700 (0.271)	1.210 (0.193)
21			0.432 (0.130)	0.307 (0.093)	0.648 (0.252)	0.461 (0.179)	0.950 (0.250)	0.676 (0.178)	1.510 (0.400)	1.080 (0.285)
22			0.636 (0.224)	0.452 (0.159)	0.596 (0.190)	0.424 (0.135)	1.060 (0.203)	0.752 (0.144)	1.540 (0.296)	1.100 (0.211)
23			0.461 (0.122)	0.328 (0.087)	0.620 (0.059)	0.442 (0.042)	0.960 (0.228)	0.683 (0.162)	1.360 (0.171)	0.969 (0.122)
24			0.224 (0.125)	0.160 (0.089)	0.407 (0.139)	0.290 (0.099)	0.478 (0.161)	0.341 (0.115)	0.785 (0.290)	0.559 (0.207)
25			0.154 (0.067)	0.110 (0.047)	0.328 (0.090)	0.233 (0.064)	0.424 (0.138)	0.302 (0.098)	0.787 (0.201)	0.560 (0.143)
26			0.282 (0.160)	0.201 (0.114)	0.495 (0.153)	0.352 (0.109)				
27			0.340 (0.183)	0.242 (0.130)	0.449 (0.135)	0.319 (0.096)	0.640 (0.140)	0.455 (0.100)	1.170 (0.210)	0.828 (0.149)
28			0.359 (0.111)	0.255 (0.079)	0.557 (0.081)	0.396 (0.058)	0.710 (0.155)	0.505 (0.110)	1.200 (0.156)	0.852 (0.111)
Avg	0.171	0.122	0.528	0.375	0.629	0.448	1.000	0.713	1.450	1.030
n	4	4	23	23	23	23	22	22	22	22
SD	0.033	0.024	0.219	0.156	0.157	0.112	0.313	0.222	0.325	0.232
Min	0.116	0.083	0.154	0.110	0.304	0.217	0.424	0.302	0.785	0.559
Max	0.205	0.146	0.943	0.671	0.947	0.673	1.600	1.140	2.200	1.570

ED_004549_00015841-00201

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for March, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1			0.295 (0.074)	0.210 (0.053)	0.552 (0.147)	0.393 (0.105)	0.700 (0.150)	0.498 (0.107)	1.270 (0.216)	0.903 (0.154)
2			0.253 (0.162)	0.180 (0.115)	0.372 (0.253)	0.265 (0.180)	0.650 (0.211)	0.463 (0.150)	0.938 (0.215)	0.668 (0.153)
3			0.311 (0.092)	0.222 (0.065)	0.322 (0.158)	0.229 (0.112)	0.662 (0.118)	0.472 (0.084)	1.070 (0.305)	0.760 (0.217)
4			0.334 (0.080)	0.237 (0.057)	0.576 (0.188)	0.410 (0.134)	0.678 (0.131)	0.483 (0.093)	1.400 (0.350)	0.999 (0.250)
5			0.201 (0.086)	0.143 (0.061)	0.327 (0.140)	0.232 (0.099)	0.313 (0.106)	0.223 (0.075)	0.681 (0.204)	0.485 (0.145)
6			0.332 (0.147)	0.236 (0.105)	0.481 (0.148)	0.342 (0.106)	0.551 (0.182)	0.391 (0.129)	1.140 (0.274)	0.808 (0.195)
7			0.203 (0.066)	0.144 (0.047)	0.457 (0.158)	0.325 (0.112)	0.398 (0.189)	0.283 (0.135)	0.923 (0.422)	0.656 (0.300)
8			0.282 (0.078)	0.203 (0.056)	0.499 (0.144)	0.360 (0.101)	0.601 (0.140)	0.433 (0.097)	1.180 (0.194)	0.847 (0.130)
9			0.325 (0.113)	0.231 (0.080)	0.474 (0.101)	0.337 (0.072)	0.604 (0.181)	0.429 (0.129)	1.060 (0.241)	0.756 (0.171)
10			0.096 (0.095)	0.068 (0.067)	0.122 (0.105)	0.087 (0.074)	0.209 (0.153)	0.148 (0.109)	0.436 (0.209)	0.309 (0.149)
11			0.089 (0.082)	0.063 (0.058)	0.116 (0.046)	0.082 (0.032)	0.300 (0.114)	0.213 (0.081)	0.580 (0.142)	0.412 (0.101)
12										
13										
14			0.503 (0.338)	0.358 (0.240)	0.587 (0.228)	0.418 (0.162)	0.650 (0.317)	0.462 (0.225)	1.100 (0.428)	0.781 (0.304)
15			0.134 (0.073)	0.095 (0.052)	0.306 (0.090)	0.218 (0.064)	0.307 (0.146)	0.219 (0.104)	0.647 (0.289)	0.461 (0.206)
16			0.199 (0.058)	0.141 (0.041)	0.320 (0.097)	0.228 (0.069)	0.364 (0.083)	0.259 (0.059)		
17			0.143 (0.063)	0.101 (0.045)	0.313 (0.085)	0.223 (0.060)	0.300 (0.065)	0.213 (0.046)	0.657 (0.168)	0.467 (0.120)
18			0.533 (0.195)	0.379 (0.139)	0.646 (0.218)	0.460 (0.155)	0.969 (0.221)	0.689 (0.157)	1.600 (0.274)	1.140 (0.195)
19			0.520 (0.189)	0.370 (0.134)	0.765 (0.230)	0.545 (0.164)	0.940 (0.213)	0.669 (0.152)	1.810 (0.344)	1.290 (0.245)
20			0.500 (0.190)	0.356 (0.136)	0.804 (0.225)	0.573 (0.161)	0.744 (0.140)	0.530 (0.100)	1.700 (0.393)	1.210 (0.281)
21			0.289 (0.127)	0.206 (0.090)	0.468 (0.279)	0.333 (0.199)	0.734 (0.212)	0.523 (0.151)	1.400 (0.379)	0.995 (0.270)
22			0.417 (0.147)	0.297 (0.105)	0.456 (0.151)	0.325 (0.107)	0.739 (0.328)	0.526 (0.234)	1.200 (0.383)	0.854 (0.273)
23			0.200 (0.071)	0.142 (0.051)	0.450 (0.203)	0.320 (0.144)	0.444 (0.151)	0.316 (0.107)	0.903 (0.159)	0.642 (0.113)
24			0.223 (0.154)	0.159 (0.110)	0.432 (0.204)	0.307 (0.145)	0.501 (0.271)	0.356 (0.193)	0.824 (0.267)	0.586 (0.190)
25			0.112 (0.080)	0.080 (0.057)	0.366 (0.185)	0.260 (0.131)	0.329 (0.093)	0.234 (0.066)	0.660 (0.206)	0.470 (0.147)
26							0.466 (0.135)		0.905 (0.254)	
27			0.441 (0.134)	0.313 (0.096)	0.887 (0.237)	0.631 (0.169)	0.694 (0.151)	0.493 (0.108)	1.520 (0.346)	1.080 (0.247)
28			0.334 (0.107)	0.238 (0.076)	0.439 (0.142)	0.313 (0.101)	0.749 (0.287)	0.533 (0.204)	1.150 (0.404)	0.817 (0.288)
29			0.137 (0.083)	0.097 (0.059)	0.349 (0.100)	0.248 (0.071)			0.632 (0.202)	0.449 (0.144)
30										
31										
Avg			0.285	0.203	0.457	0.325	0.561	0.402	1.050	0.754
n	0	0	26	26	26	26	26	25	26	25
SD			0.134	0.095	0.179	0.128	0.201	0.146	0.360	0.261
Min			0.089	0.063	0.116	0.082	0.209	0.148	0.436	0.309
Max			0.533	0.379	0.887	0.631	0.969	0.689	1.810	1.290

ED_004549_00015841-00202

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for April, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18			0.431 (0.215)	0.307 (0.153)			0.799 (0.251)	0.568 (0.179)	1.550 (0.479)	1.100 (0.340)
19			0.514 (0.204)	0.366 (0.145)	0.761 (0.411)	0.542 (0.293)	0.996 (0.343)	0.709 (0.244)	1.640 (0.533)	1.170 (0.380)
20			0.595 (0.318)	0.424 (0.226)	0.784 (0.614)	0.559 (0.438)	1.180 (0.728)	0.843 (0.518)	1.680 (0.817)	1.200 (0.583)
21			0.722 (0.348)	0.515 (0.248)	0.789 (0.236)	0.562 (0.168)	0.895 (0.212)	0.637 (0.151)	1.610 (0.560)	1.150 (0.399)
22			0.377 (0.207)	0.269 (0.147)	0.596 (0.300)	0.424 (0.214)			1.110 (0.430)	0.790 (0.307)
23			0.161 (0.040)	0.115 (0.028)	0.350 (0.135)	0.248 (0.096)	0.329 (0.055)	0.234 (0.039)	0.757 (0.217)	0.537 (0.154)
24			0.279 (0.115)	0.198 (0.082)	0.466 (0.217)	0.331 (0.154)	0.507 (0.216)	0.360 (0.153)	0.942 (0.352)	0.669 (0.250)
25			0.219 (0.107)	0.156 (0.076)	0.387 (0.139)	0.275 (0.099)	0.468 (0.199)	0.333 (0.141)	0.956 (0.423)	0.680 (0.300)
26			0.247 (0.147)	0.176 (0.105)	0.315 (0.083)	0.224 (0.059)	0.446 (0.106)	0.317 (0.075)	0.829 (0.282)	0.589 (0.200)
27			0.184 (0.141)	0.131 (0.100)	0.233 (0.178)	0.166 (0.126)			0.777 (0.350)	0.553 (0.249)
28			0.124 (0.074)	0.088 (0.052)	0.191 (0.126)	0.136 (0.090)	0.175 (0.073)	0.124 (0.052)	0.524 (0.195)	0.372 (0.139)
29			0.179 (0.061)	0.127 (0.044)	0.312 (0.086)	0.222 (0.061)	0.379 (0.149)	0.270 (0.106)	0.860 (0.276)	0.613 (0.197)
30			0.194 (0.076)	0.138 (0.054)	0.308 (0.071)	0.219 (0.050)	0.520 (0.092)	0.370 (0.066)	0.925 (0.174)	0.658 (0.124)
Avg			0.325	0.231	0.458	0.326	0.609	0.433	1.090	0.776
n	0	0	13	13	12	12	11	11	13	13
SD			0.181	0.129	0.210	0.150	0.299	0.213	0.378	0.270
Min			0.124	0.088	0.191	0.136	0.175	0.124	0.524	0.372
Max			0.722	0.515	0.789	0.562	1.180	0.843	1.680	1.200

ED_004549_00015841-00203

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for May, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1			0.439 (0.200)	0.313 (0.142)	0.690 (0.577)	0.492 (0.410)	0.760 (0.306)	0.541 (0.217)	1.490 (0.565)	1.060 (0.402)
2			0.502 (0.300)	0.357 (0.213)	0.633 (0.160)	0.451 (0.114)	0.862 (0.247)	0.614 (0.176)	1.270 (0.238)	0.902 (0.169)
3			0.384 (0.085)	0.273 (0.060)	0.435 (0.250)	0.310 (0.178)	0.608 (0.162)	0.433 (0.116)	1.050 (0.303)	0.746 (0.216)
4			0.186 (0.144)	0.133 (0.103)	0.472 (0.440)	0.336 (0.313)	0.604 (0.441)	0.430 (0.314)	0.902 (0.467)	0.642 (0.332)
5			0.181 (0.104)	0.129 (0.074)	0.336 (0.197)	0.239 (0.140)			0.558 (0.197)	0.397 (0.140)
6			0.161 (0.054)	0.115 (0.038)	0.321 (0.114)	0.229 (0.082)	0.402 (0.141)	0.286 (0.100)	0.720 (0.291)	0.513 (0.207)
7			0.170 (0.057)	0.121 (0.041)	0.370 (0.150)	0.263 (0.106)				
8			0.279 (0.134)	0.198 (0.095)	0.429 (0.178)	0.305 (0.127)	0.562 (0.142)	0.400 (0.101)	1.140 (0.437)	0.814 (0.311)
9			0.523 (0.295)	0.372 (0.210)	0.862 (0.417)	0.614 (0.297)	0.755 (0.173)	0.537 (0.123)	1.250 (0.327)	0.890 (0.233)
10			0.370 (0.244)	0.264 (0.173)	0.424 (0.298)	0.302 (0.212)	0.725 (0.437)	0.517 (0.311)	1.090 (0.471)	0.780 (0.335)
11			0.270 (0.081)	0.192 (0.058)	0.444 (0.068)	0.316 (0.049)				
12			0.125 (0.073)	0.088 (0.052)	0.298 (0.161)	0.211 (0.115)				
13			0.281 (0.103)	0.200 (0.073)	0.388 (0.188)	0.276 (0.134)	0.460 (0.169)	0.328 (0.120)	0.728 (0.206)	0.518 (0.147)
14			0.120 (0.068)	0.086 (0.049)	0.318 (0.191)	0.226 (0.136)			0.570 (0.235)	0.406 (0.167)
15			0.399 (0.203)	0.284 (0.145)	0.718 (0.539)	0.511 (0.384)	0.679 (0.298)	0.483 (0.212)	1.480 (0.764)	1.050 (0.544)
16			0.440 (0.196)	0.313 (0.140)	0.601 (0.336)	0.428 (0.239)	0.906 (0.492)	0.644 (0.350)	1.350 (0.710)	0.963 (0.505)
17			0.640 (0.453)	0.456 (0.323)	0.737 (0.423)	0.525 (0.301)	0.876 (0.473)	0.624 (0.337)	1.460 (0.539)	1.040 (0.384)
18			0.440 (0.166)	0.314 (0.118)	0.604 (0.149)	0.431 (0.106)	0.744 (0.210)	0.531 (0.150)	1.180 (0.179)	0.841 (0.127)
19			0.268 (0.163)	0.191 (0.116)	0.421 (0.180)	0.299 (0.129)	0.347 (0.115)	0.247 (0.082)		
20			0.390 (0.097)	0.277 (0.069)	0.502 (0.102)	0.357 (0.073)	0.525 (0.063)	0.373 (0.045)	0.808 (0.176)	0.575 (0.125)
21			0.612 (0.551)	0.435 (0.392)	0.676 (0.741)	0.481 (0.527)	0.651 (0.149)	0.463 (0.106)	1.140 (0.597)	0.808 (0.425)
22			1.070 (0.648)	0.764 (0.461)	1.460 (1.030)	1.040 (0.733)			2.660 (1.200)	1.890 (0.855)
23			0.561 (0.174)	0.400 (0.123)	0.843 (0.237)	0.601 (0.169)	0.922 (0.230)	0.656 (0.164)	1.620 (0.522)	1.150 (0.372)
24			0.271 (0.093)	0.193 (0.066)	0.450 (0.187)	0.320 (0.133)	0.484 (0.113)	0.344 (0.080)	0.931 (0.312)	0.662 (0.222)
25			0.306 (0.117)	0.218 (0.083)	0.450 (0.202)	0.320 (0.144)	0.587 (0.094)	0.418 (0.067)	0.856 (0.389)	0.610 (0.277)
26			0.341 (0.075)	0.242 (0.054)	0.543 (0.220)	0.381 (0.152)	0.634 (0.205)	0.454 (0.146)	1.130 (0.465)	0.804 (0.333)
27			0.346 (0.157)	0.247 (0.112)	0.360 (0.228)	0.257 (0.162)	0.694 (0.304)	0.495 (0.217)	0.998 (0.492)	0.712 (0.351)
28			0.450 (0.142)	0.321 (0.101)	0.576 (0.269)	0.411 (0.192)			1.130 (0.350)	0.806 (0.250)
29			0.912 (0.650)	0.651 (0.464)	1.600 (1.630)	1.140 (1.160)	1.230 (0.724)	0.876 (0.516)	2.800 (3.000)	2.000 (2.140)
30			0.617 (0.385)	0.440 (0.274)	0.684 (0.239)	0.488 (0.170)	1.010 (0.356)	0.724 (0.255)	1.310 (0.441)	0.937 (0.315)
31			0.531 (0.151)	0.378 (0.107)	0.868 (0.399)	0.619 (0.284)	0.786 (0.176)	0.560 (0.125)	1.560 (0.622)	1.110 (0.443)
Avg			0.406	0.289	0.597	0.425	0.701	0.499	1.230	0.876
n	0	0	31	31	31	31	24	24	27	27
SD			0.212	0.151	0.294	0.210	0.199	0.142	0.511	0.364
Min			0.120	0.086	0.298	0.211	0.347	0.247	0.558	0.397
Max			1.070	0.764	1.600	1.140	1.230	0.876	2.800	2.000

ED_004549_00015841-00204

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for June, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1			0.460 (0.157)	0.328 (0.112)	0.589 (0.284)	0.420 (0.202)	0.761 (0.118)	0.542 (0.084)	1.180 (0.390)	0.843 (0.279)
2			0.233 (0.236)	0.166 (0.168)	0.165 (0.186)	0.118 (0.133)	0.389 (0.160)	0.277 (0.114)	0.660 (0.480)	0.471 (0.342)
3			0.480 (0.157)	0.342 (0.112)	0.899 (0.458)	0.641 (0.327)	0.789 (0.233)	0.562 (0.166)	1.330 (0.557)	0.951 (0.398)
4			0.679 (0.336)	0.485 (0.240)	0.976 (0.452)	0.696 (0.322)	1.310 (0.519)	0.935 (0.370)	1.650 (0.774)	1.180 (0.552)
5			0.492 (0.089)	0.353 (0.064)	0.893 (0.231)	0.640 (0.165)			1.960 (0.717)	1.400 (0.514)
6			0.260 (0.094)	0.186 (0.067)	0.672 (0.342)	0.480 (0.244)			1.080 (0.305)	0.771 (0.217)
7			0.419 (0.110)	0.299 (0.079)	0.681 (0.100)	0.487 (0.072)			1.520 (0.318)	1.080 (0.227)
8			0.410 (0.175)	0.293 (0.125)	0.449 (0.289)	0.320 (0.206)				
9			0.497 (0.240)	0.355 (0.172)	0.658 (0.538)	0.470 (0.385)			1.430 (0.710)	1.020 (0.507)
10										
11			0.505 (0.140)	0.360 (0.100)	0.757 (0.380)	0.540 (0.271)	0.890 (0.193)	0.635 (0.138)		
12			0.618 (0.269)	0.442 (0.192)	0.869 (0.316)	0.621 (0.226)	1.120 (0.423)	0.801 (0.302)		
13			0.822 (0.553)		1.030 (0.721)		1.160 (0.603)			
14			0.470 (0.134)		0.843 (0.339)					
15			0.427 (0.098)		0.775 (0.372)					
16										
17										
18			0.478 (0.067)	0.341 (0.047)	0.636 (0.188)	0.454 (0.134)	0.873 (0.247)	0.623 (0.176)	1.440 (0.356)	1.030 (0.254)
19			0.547 (0.299)	0.391 (0.214)	0.904 (0.308)	0.645 (0.221)	1.060 (0.549)	0.761 (0.392)	2.620 (1.710)	1.870 (1.220)
20			0.346 (0.089)	0.246 (0.064)	0.676 (0.362)	0.482 (0.258)	0.617 (0.141)	0.440 (0.101)	1.210 (0.236)	0.860 (0.168)
21			0.307 (0.096)	0.219 (0.069)	0.628 (0.168)	0.448 (0.120)	0.568 (0.156)	0.405 (0.111)	1.250 (0.372)	0.893 (0.265)
22										
23			0.233 (0.092)	0.166 (0.065)	0.240 (0.127)	0.171 (0.090)	0.450 (0.133)	0.321 (0.095)	0.545 (0.144)	0.388 (0.103)
24			0.446 (0.315)	0.318 (0.225)	0.677 (0.294)	0.482 (0.209)	0.585 (0.329)	0.417 (0.235)		
25			0.207 (0.061)	0.147 (0.044)	0.242 (0.055)	0.173 (0.039)	0.417 (0.139)	0.297 (0.099)	0.649 (0.256)	0.463 (0.182)
26			0.306 (0.122)	0.218 (0.087)	0.601 (0.299)	0.428 (0.213)	0.570 (0.195)	0.406 (0.139)	1.100 (0.427)	0.780 (0.305)
27			0.370 (0.102)	0.264 (0.073)	0.479 (0.155)	0.341 (0.110)	0.705 (0.127)	0.501 (0.090)	1.020 (0.320)	0.722 (0.228)
28			0.358 (0.080)	0.255 (0.057)	0.511 (0.182)	0.364 (0.130)	0.613 (0.104)	0.437 (0.074)	0.855 (0.196)	0.610 (0.140)
29			0.330 (0.135)	0.235 (0.096)	0.402 (0.180)	0.286 (0.128)	0.571 (0.203)	0.407 (0.145)	0.920 (0.439)	0.655 (0.313)
30			0.365 (0.149)	0.260 (0.106)	0.515 (0.182)	0.366 (0.130)	0.614 (0.233)	0.437 (0.166)	0.883 (0.503)	0.628 (0.358)
Avg			0.426	0.290	0.645	0.438	0.740	0.511	1.230	0.875
n	0	0	26	23	26	23	19	18	19	19
SD			0.139	0.086	0.223	0.154	0.258	0.175	0.481	0.344
Min			0.207	0.147	0.165	0.118	0.389	0.277	0.545	0.388
Max			0.822	0.485	1.030	0.696	1.310	0.935	2.620	1.870

ED_004549_00015841-00205

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for July, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1			0.511 (0.284)	0.364 (0.202)	0.654 (0.222)	0.466 (0.158)	0.810 (0.140)	0.577 (0.100)	1.130 (0.514)	0.802 (0.366)
2			1.020 (0.633)	0.728 (0.451)	1.240 (0.482)	0.883 (0.343)	1.460 (0.676)	1.040 (0.482)	1.680 (0.504)	1.190 (0.359)
3			1.180 (0.817)	0.840 (0.583)	1.380 (1.040)	0.986 (0.739)	1.580 (0.841)	1.130 (0.600)	2.110 (1.740)	1.510 (1.240)
4			0.966 (0.592)	0.689 (0.422)	1.040 (0.520)	0.742 (0.371)	1.240 (0.601)	0.887 (0.429)	1.580 (0.710)	1.130 (0.507)
5			0.769 (0.410)	0.549 (0.293)	0.959 (0.366)	0.684 (0.261)	1.260 (0.473)	0.896 (0.338)		
6			0.344 (0.121)	0.245 (0.086)	0.726 (0.294)	0.518 (0.210)	0.604 (0.335)	0.430 (0.239)	0.913 (0.401)	0.652 (0.286)
7			0.486 (0.185)	0.346 (0.132)	0.652 (0.250)	0.465 (0.178)	0.922 (0.293)	0.657 (0.209)	1.010 (0.312)	0.723 (0.223)
8										
9										
10										
11										
12										
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14										
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Avg			0.753	0.537	0.951	0.678	1.120	0.802	1.400	1.000
n	0	0	7	7	7	7	7	7	6	6
SD			0.292	0.208	0.269	0.192	0.330	0.235	0.423	0.302
Min			0.344	0.245	0.652	0.465	0.604	0.430	0.913	0.652
Max			1.180	0.840	1.380	0.986	1.580	1.130	2.110	1.510

ED_004549_00015841-00206

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for August, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4										
5										
6			0.719 (0.134)	0.513 (0.096)	1.150 (0.357)	0.821 (0.255)	1.120 (0.246)	0.799 (0.175)		
7			0.569 (0.115)	0.407 (0.082)	0.844 (0.273)	0.603 (0.195)			1.680 (0.619)	1.200 (0.442)
8			0.579 (0.192)	0.413 (0.137)	0.769 (0.346)	0.549 (0.248)	1.010 (0.352)	0.724 (0.251)	1.370 (0.490)	0.977 (0.351)
9			0.827 (0.218)	0.591 (0.155)	1.040 (0.458)	0.742 (0.328)	1.150 (0.331)	0.823 (0.236)	1.660 (0.821)	1.190 (0.587)
10			0.728 (0.184)	0.520 (0.132)	0.865 (0.226)	0.618 (0.162)	0.994 (0.255)	0.710 (0.182)	1.550 (0.600)	1.110 (0.429)
11			0.958 (0.468)	0.685 (0.334)	1.240 (0.625)	0.890 (0.447)	1.160 (0.294)	0.830 (0.210)	1.920 (0.966)	1.370 (0.690)
12										
13										
14			0.607 (0.102)	0.433 (0.073)	0.943 (0.148)	0.672 (0.105)	0.949 (0.241)	0.676 (0.172)	1.370 (0.325)	0.978 (0.232)
15			0.797 (0.244)	0.568 (0.174)	0.735 (0.140)	0.524 (0.100)	1.090 (0.422)	0.780 (0.301)	1.430 (0.323)	1.020 (0.230)
16			0.768 (0.449)	0.548 (0.320)	1.190 (0.755)	0.846 (0.539)	0.970 (0.372)	0.692 (0.266)	1.390 (0.403)	0.994 (0.288)
17			0.845 (0.212)	0.603 (0.151)	1.050 (0.357)	0.746 (0.255)	1.270 (0.413)	0.904 (0.294)	1.810 (0.850)	1.300 (0.606)
18			1.090 (0.412)	0.779 (0.294)	1.150 (0.427)	0.818 (0.305)	1.610 (0.675)	1.150 (0.482)	1.890 (0.759)	1.350 (0.542)
19	1.400 (0.865)	1.000 (0.618)	1.380 (0.841)	0.987 (0.601)	1.450 (1.040)	1.040 (0.740)			1.940 (1.040)	1.390 (0.744)
20	2.410 (2.140)	1.730 (1.530)	1.590 (1.170)	1.140 (0.835)	1.530 (1.280)	1.100 (0.918)	2.230 (1.750)	1.600 (1.260)	3.100 (2.680)	2.220 (1.920)
21	0.916 (0.177)	0.654 (0.126)	0.950 (0.430)	0.678 (0.307)	1.450 (0.973)	1.040 (0.695)			1.770 (0.598)	1.260 (0.428)
22	0.659 (0.077)	0.470 (0.055)	0.654 (0.176)	0.467 (0.126)	0.848 (0.292)	0.605 (0.209)	0.980 (0.223)	0.699 (0.159)	1.390 (0.343)	0.994 (0.245)
23	0.466 (0.078)	0.332 (0.056)	0.548 (0.061)	0.390 (0.043)	0.838 (0.241)	0.597 (0.172)	0.838 (0.189)	0.597 (0.135)	1.140 (0.297)	0.814 (0.211)
24	0.645 (0.125)	0.460 (0.089)	0.729 (0.286)	0.520 (0.204)	0.892 (0.424)	0.636 (0.302)	1.080 (0.293)	0.770 (0.209)	1.500 (0.630)	1.070 (0.449)
25	1.050 (0.356)	0.747 (0.253)	0.974 (0.474)	0.694 (0.338)	1.220 (0.689)	0.867 (0.491)	1.070 (0.292)	0.766 (0.208)	1.520 (0.710)	1.090 (0.507)
26	0.885 (0.433)	0.632 (0.310)	0.803 (0.362)	0.573 (0.258)	0.998 (0.626)	0.712 (0.447)	1.200 (0.392)	0.857 (0.279)		
27	1.100 (0.542)	0.783 (0.386)	1.130 (0.518)	0.804 (0.370)	1.720 (0.787)	1.230 (0.562)			2.190 (0.653)	1.570 (0.466)
28	1.000 (0.244)	0.716 (0.174)	1.100 (0.322)	0.783 (0.229)	1.690 (0.631)	1.210 (0.449)				
29	0.857 (0.170)		0.969 (0.400)		1.060 (0.496)		1.210 (0.229)		1.960 (0.912)	
30	0.764 (0.150)		0.894 (0.245)		1.180 (0.478)		1.450 (0.398)		2.020 (0.680)	
31	1.680 (0.390)									
Avg	1.060	0.752	0.878	0.623	1.120	0.802	1.190	0.836	1.730	1.220
n	13	10	23	21	23	21	18	16	20	18
SD	0.496	0.372	0.251	0.188	0.279	0.208	0.308	0.230	0.413	0.305
Min	0.466	0.332	0.548	0.390	0.735	0.524	0.838	0.597	1.140	0.814
Max	2.410	1.730	1.590	1.140	1.720	1.230	2.230	1.600	3.100	2.220

ED_004549_00015841-00207

Table F8. Daily means (SD) of NH3 concentrations at site WA5B for September, 2009.

Day	Ambient		Barn 2 inlet		Barn 4 inlet		Barn 2 exhaust		Barn 4 exhaust	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	1.550 (0.720)		1.230 (0.502)		1.330 (0.579)		1.730 (0.643)		1.910 (0.847)	
2	1.290 (0.410)		1.020 (0.259)		1.390 (0.796)		1.570 (0.507)		2.260 (1.030)	
3	0.861 (0.288)									
4	0.983 (0.352)	0.701 (0.251)	1.400 (0.725)	0.995 (0.516)	1.620 (0.476)	1.160 (0.340)	1.710 (0.600)	1.220 (0.427)	1.880 (0.473)	1.340 (0.337)
5	1.060 (0.624)	0.758 (0.444)	1.390 (0.800)	0.992 (0.570)	1.610 (0.854)	1.150 (0.609)	1.560 (0.634)	1.110 (0.452)	2.030 (0.769)	1.450 (0.548)
6	0.518 (0.097)	0.369 (0.070)	0.625 (0.183)	0.445 (0.130)	0.819 (0.221)	0.585 (0.158)			1.240 (0.321)	0.882 (0.230)
7	0.465 (0.059)	0.331 (0.042)	0.609 (0.152)	0.434 (0.108)	0.733 (0.341)	0.522 (0.243)	0.786 (0.087)	0.561 (0.062)	1.040 (0.196)	0.741 (0.139)
8	0.712 (0.138)	0.507 (0.098)	0.696 (0.222)	0.496 (0.158)	0.758 (0.438)	0.540 (0.312)	1.040 (0.344)	0.739 (0.245)	1.410 (0.474)	1.010 (0.338)
9	0.693 (0.154)	0.494 (0.109)	0.758 (0.226)	0.540 (0.161)	0.967 (0.345)	0.690 (0.246)	0.974 (0.322)	0.695 (0.229)	1.650 (0.671)	1.180 (0.478)
10	1.020 (0.527)	0.727 (0.376)	1.060 (0.358)	0.753 (0.256)	1.170 (0.600)	0.839 (0.428)	1.350 (0.370)	0.966 (0.264)	1.820 (0.684)	1.300 (0.489)
11	1.280 (0.592)	0.911 (0.423)	1.660 (0.876)	1.180 (0.625)	1.850 (1.050)	1.320 (0.751)	1.880 (0.895)	1.340 (0.639)		
12	1.500 (0.563)	1.070 (0.401)	1.220 (0.507)	0.867 (0.362)	1.570 (0.872)	1.120 (0.623)	1.540 (0.431)	1.100 (0.307)		
13	1.810 (0.908)	1.290 (0.647)	1.420 (0.862)	1.010 (0.615)	1.840 (1.200)	1.320 (0.856)				
14										
15										
16										
17	0.664 (0.175)	0.474 (0.125)	0.732 (0.295)	0.522 (0.210)	0.858 (0.241)	0.612 (0.173)	0.967 (0.284)	0.690 (0.203)	1.510 (0.600)	1.080 (0.429)
18	0.941 (0.227)	0.670 (0.161)	1.420 (0.524)	1.010 (0.373)	1.500 (0.893)	1.070 (0.637)	1.590 (0.471)	1.140 (0.335)	2.130 (0.733)	1.520 (0.522)
19	0.883 (0.305)	0.629 (0.217)	0.852 (0.311)	0.608 (0.222)	1.020 (0.418)	0.726 (0.297)				
20	0.493 (0.043)	0.351 (0.030)	0.604 (0.106)	0.430 (0.076)	0.812 (0.203)	0.578 (0.145)	0.838 (0.134)	0.597 (0.095)	1.310 (0.250)	0.933 (0.178)
21	1.160 (0.575)	0.826 (0.409)	1.220 (0.737)	0.871 (0.525)	1.450 (1.120)	1.030 (0.797)			2.200 (0.970)	1.570 (0.691)
22	1.340 (0.569)	0.955 (0.405)	1.470 (0.645)	1.050 (0.460)	1.950 (1.260)	1.390 (0.895)			2.760 (1.180)	1.970 (0.839)
23	1.310 (0.507)	0.933 (0.360)	1.410 (0.780)	1.000 (0.556)	1.370 (0.936)	0.978 (0.667)				
24	0.914 (0.399)									
25	0.653 (0.174)	0.465 (0.124)	0.817 (0.180)	0.582 (0.128)	1.080 (0.401)	0.770 (0.286)	1.240 (0.265)	0.881 (0.189)		
26	0.529 (0.127)	0.377 (0.091)	0.800 (0.415)	0.570 (0.296)	1.140 (0.389)	0.816 (0.278)	1.530 (0.862)	1.090 (0.615)		
27	0.614 (0.137)	0.437 (0.097)	0.767 (0.398)	0.545 (0.283)	1.020 (0.364)	0.728 (0.259)	1.050 (0.285)	0.749 (0.203)	1.560 (0.460)	1.110 (0.328)
28	0.853 (0.613)	0.607 (0.436)	0.839 (0.473)	0.597 (0.336)	1.110 (0.789)	0.790 (0.561)			1.870 (1.070)	1.330 (0.763)
29	0.398 (0.057)	0.283 (0.041)	0.526 (0.100)	0.374 (0.071)	0.924 (0.272)	0.658 (0.194)	0.896 (0.165)	0.638 (0.117)		
30	0.462 (0.091)	0.328 (0.065)	0.644 (0.082)	0.451 (0.060)	0.847 (0.141)				1.280 (0.298)	
Avg	0.924	0.630	1.010	0.710	1.230	0.881	1.310	0.900	1.760	1.240
n	27	23	25	23	25	22	17	15	17	14
SD	0.372	0.265	0.337	0.249	0.361	0.267	0.344	0.243	0.431	0.311
Min	0.398	0.283	0.526	0.374	0.733	0.522	0.786	0.561	1.040	0.741
Max	1.810	1.290	1.660	1.180	1.950	1.390	1.880	1.340	2.760	1.970

ED_004549_00015841-00208

Table F9. Ammonia emissions.

Table F9. Daily means (SD) of ammonia emissions at site WA5B for November, 2007.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16	11.1 (6.7)	2.0 (1.2)	21.7 (13.2)			
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
Avg						
n	1	1	1	0	0	0
SD						
Min						
Max						

ED_004549_00015841-00209

Table F9. Daily means (SD) of ammonia emissions at site WA5B for December, 2007.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1						
2				19.7 (10.2)	2.4 (1.2)	21.0 (10.9)
3						
4	8.6 (5.4)	1.5 (0.9)	16.8 (10.5)			
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17	3.9 (5.7)	0.7 (1.0)	7.7 (11.1)			
18						
19	0.5 (7.8)	0.1 (1.4)	1.0 (15.3)			
20	7.6 (10.0)	1.3 (1.8)	14.9 (19.6)			
21						
22						
23						
24						
25	8.7 (11.4)	1.5 (2.0)	17.0 (22.2)			
26						
27						
28						
29						
30						
31						
Avg	5.9	1.0	11.46			
n	5	5	5	1	1	1
SD	3.2	0.6	6.22			
Min	0.5	0.1	1.03			
Max	8.7	1.5	16.95			

ED_004549_00015841-00210

Table F9. Daily means (SD) of ammonia emissions at site WA5B for February, 2008.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24	12.0 (7.8)	2.1 (1.4)	23.5 (15.2)			
25						
26						
27						
28						
29						
Avg						
n	1	1	1	0	0	0
SD						
Min						
Max						

ED_004549_00015841-00211

Table F9. Daily means (SD) of ammonia emissions at site WA5B for March, 2008.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14	11.9 (8.2)	2.1 (1.4)	23.3 (16.0)			
15						
16	9.8 (6.7)	1.7 (1.2)	19.2 (13.1)			
17	10.6 (11.7)	1.9 (2.1)	20.8 (22.8)			
18						
19						
20	6.7 (5.3)	1.2 (0.9)	13.1 (10.3)			
21	6.3 (7.0)	1.1 (1.2)	12.3 (13.7)			
22						
23						
24						
25						
26	7.6 (5.7)	1.3 (1.0)	14.9 (11.2)			
27	3.2 (5.8)	0.6 (1.0)	6.3 (11.4)			
28						
29	4.0 (5.1)	0.7 (0.9)	7.8 (9.9)			
30	4.8 (6.6)	0.8 (1.2)	9.3 (12.8)			
31						
Avg	7.2	1.3	14.11			
n	9	9	9	0	0	0
SD	2.9	0.5	5.61			
Min	3.2	0.6	6.28			
Max	11.9	2.1	23.31			

ED_004549_00015841-00212

Table F9. Daily means (SD) of ammonia emissions at site WA5B for April, 2008.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6	6.4 (5.0)	1.1 (0.9)	12.5 (9.7)	13.3 (9.4)	1.6 (1.1)	14.3 (10.1)
7						
8						
9						
10	15.0 (11.7)	2.6 (2.1)	29.2 (22.9)	13.2 (14.7)	1.6 (1.8)	13.9 (15.5)
11						
12						
13						
14	9.4 (8.4)	1.7 (1.5)	18.4 (16.4)	16.5 (22.9)	2.0 (2.8)	17.3 (24.0)
15	12.9 (10.1)	2.3 (1.8)	25.2 (19.7)	9.0 (10.6)	1.1 (1.3)	9.5 (11.1)
16	9.6 (4.9)	1.7 (0.9)	18.7 (9.6)			
17						
18	6.3 (6.9)	1.1 (1.2)	12.3 (13.5)	19.2 (11.1)	2.3 (1.3)	20.0 (11.6)
19						
20						
21						
22						
23	11.0 (7.1)	1.9 (1.3)	21.5 (14.0)	22.1 (15.6)	2.7 (1.9)	23.0 (16.2)
24						
25						
26						
27						
28				125.1 (116.6)	15.1 (14.0)	129.6 (120.8)
29	56.8 (45.7)	10.0 (8.0)	110.9 (89.2)	85.5 (84.4)	10.3 (10.2)	88.5 (87.4)
30						
Avg	15.9	2.8	31.1	38.0	4.6	39.5
n	8	8	8	8	8	8
SD	16.8	3.0	32.8	43.1	5.2	44.5
Min	6.3	1.1	12.3	9.0	1.1	9.5
Max	56.8	10.0	110.9	125.1	15.1	129.6

ED_004549_00015841-00213

Table F9. Daily means (SD) of ammonia emissions at site WA5B for May, 2008.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7	40.2 (39.7)	7.1 (7.0)	78.5 (77.5)	77.4 (68.3)	9.3 (8.2)	79.9 (70.5)
8	44.7 (34.6)	7.9 (6.1)	87.3 (67.5)			
9	54.3 (34.0)	9.6 (6.0)	106.1 (66.4)	117.2 (75.6)	14.1 (9.1)	120.8 (77.9)
10				137.9 (75.2)	16.6 (9.1)	142.1 (77.5)
11	36.1 (27.0)	6.4 (4.8)	70.5 (52.7)	114.0 (67.3)	13.7 (8.1)	117.4 (69.3)
12	50.7 (25.2)	8.9 (4.4)	99.1 (49.2)	80.8 (44.8)	9.7 (5.4)	83.2 (46.1)
13						
14						
15	43.3 (38.1)	7.6 (6.7)	84.5 (74.4)	71.2 (41.3)	8.6 (5.0)	73.2 (42.5)
16						
17						
18						
19						
20						
21	28.0 (31.6)	4.9 (5.6)	54.7 (61.6)	67.2 (63.9)	8.1 (7.7)	69.0 (65.6)
22	39.9 (26.0)	7.0 (4.6)	78.0 (50.7)	89.3 (76.7)	10.8 (9.2)	91.5 (78.6)
23	77.0 (52.2)	13.6 (9.2)	150.4 (101.9)			
24	50.6 (29.9)	8.9 (5.3)	98.8 (58.4)			
25						
26	61.6 (53.5)	10.9 (9.4)	120.3 (104.5)			
27	76.1 (39.1)	13.4 (6.9)	148.7 (76.3)			
28						
29	65.8 (41.0)	11.6 (7.2)	128.6 (80.1)			
30	74.3 (75.7)	13.1 (13.3)	145.1 (147.8)			
31						
Avg	53.0	9.4	103.60	94.4	11.4	97.14
n	14	14	14	8	8	8
SD	15.2	2.7	29.64	23.9	2.9	24.73
Min	28.0	4.9	54.72	67.2	8.1	68.95
Max	77.0	13.6	150.40	137.9	16.6	142.10

ED_004549_00015841-00214

Table F9. Daily means (SD) of ammonia emissions at site WA5B for June, 2008.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1	76.8 (38.6)	13.5 (6.8)	150.1 (75.5)	79.3 (72.3)	9.5 (8.7)	81.0 (73.8)
2						
3						
4						
5	77.5 (50.4)	13.7 (8.9)	151.4 (98.5)			
6	66.1 (49.0)	11.7 (8.6)	129.0 (95.6)	170.9 (93.3)	20.6 (11.2)	174.1 (95.0)
7				101.1 (79.5)	12.2 (9.6)	102.9 (81.0)
8	56.8 (30.9)	10.0 (5.4)	110.9 (60.3)	70.5 (52.2)	8.5 (6.3)	71.8 (53.2)
9				99.1 (61.3)	11.9 (7.4)	100.8 (62.3)
10	67.5 (44.8)	11.9 (7.9)	131.8 (87.6)			
11	66.3 (45.6)	11.7 (8.0)	129.5 (89.1)			
12						
13				73.3 (60.2)	8.8 (7.2)	74.5 (61.1)
14	60.4 (36.6)	10.7 (6.4)	118.0 (71.4)			
15	63.2 (50.6)	11.1 (8.9)	123.4 (98.8)	100.9 (82.7)	12.1 (10.0)	102.4 (84.0)
16	71.0 (50.3)	12.5 (8.9)	138.6 (98.2)	91.7 (54.1)	11.0 (6.5)	93.0 (54.9)
17	47.3 (30.3)	8.3 (5.3)	92.3 (59.3)	111.7 (86.3)	13.5 (10.4)	113.3 (87.5)
18						
19						
20						
21						
22	22.4 (19.8)	3.9 (3.5)	43.7 (38.7)			
23	53.2 (24.5)	9.4 (4.3)	103.9 (47.8)	70.4 (54.1)	8.5 (6.5)	71.3 (54.7)
24	51.1 (58.3)	9.0 (10.3)	99.9 (113.8)	68.0 (41.3)	8.2 (5.0)	68.7 (41.7)
25	67.8 (34.3)	12.0 (6.0)	132.5 (67.0)	90.2 (54.5)	10.9 (6.6)	91.2 (55.1)
26	89.4 (45.8)	15.8 (8.1)	174.6 (89.5)	81.2 (56.4)	9.8 (6.8)	82.1 (57.0)
27	88.5 (90.9)	15.6 (16.0)	172.9 (177.6)	124.9 (72.5)	15.0 (8.7)	126.2 (73.2)
28						
29						
30	96.6 (54.9)	17.0 (9.7)	188.7 (107.2)			
Avg	66.0	11.6	128.9	95.2	11.5	96.7
n	17	17	17	14	14	14
SD	17.7	3.1	34.7	27.6	3.3	28.1
Min	22.4	3.9	43.7	68.0	8.2	68.7
Max	96.6	17.0	188.7	170.9	20.6	174.1

ED_004549_00015841-00215

Table F9. Daily means (SD) of ammonia emissions at site WA5B for October, 2008.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1						
2						
3						
4	30.1 (26.6)	5.3 (4.7)	58.8 (51.9)	114.0 (43.1)	13.7 (5.2)	110.6 (41.8)
5						
6						
7						
8						
9						
10	26.3 (30.5)	4.6 (5.4)	51.4 (59.5)	81.1 (32.4)	9.8 (3.9)	78.5 (31.3)
11	9.7 (34.1)	1.7 (6.0)	19.0 (66.6)			
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26	28.4 (20.2)	5.0 (3.6)	55.4 (39.5)			
27						
28						
29						
30						
31						
Avg	23.6	4.2	46.14	97.6	11.7	94.56
n	4	4	4	2	2	2
SD	8.1	1.4	15.90	16.5	2.0	16.07
Min	9.7	1.7	18.98	81.1	9.8	78.49
Max	30.1	5.3	58.82	114.0	13.7	110.60

ED_004549_00015841-00216

Table F9. Daily means (SD) of ammonia emissions at site WA5B for November, 2008.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1						
2						
3				62.1 (32.2)	7.5 (3.9)	59.6 (30.8)
4						
5						
6						
7						
8						
9						
10						
11	39.7 (19.9)	7.0 (3.5)	78.5 (39.4)	105.2 (55.5)	12.7 (6.7)	133.9 (70.2)
12	39.7 (26.6)	7.0 (4.7)	78.5 (52.6)	94.3 (32.2)	11.4 (3.9)	127.3 (43.2)
13						
14						
15						
16						
17						
18						
19	24.6 (11.5)	4.3 (2.0)	47.7 (22.4)	40.8 (16.5)	4.9 (2.0)	43.1 (17.4)
20						
21	34.7 (22.0)	6.1 (3.9)	67.7 (43.0)			
22						
23						
24						
25						
26						
27						
28						
29						
30						
Avg	34.7	6.1	68.09	75.6	9.1	90.97
n	4	4	4	4	4	4
SD	6.1	1.1	12.54	25.6	3.1	40.12
Min	24.6	4.3	47.74	40.8	4.9	43.10
Max	39.7	7.0	78.46	105.2	12.7	133.90

ED_004549_00015841-00217

Table F9. Daily means (SD) of ammonia emissions at site WA5B for December, 2008.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14	27.8 (23.2)	4.9 (4.1)	56.2 (46.8)			
15						
16						
17						
18						
19						
20	24.4 (16.5)	4.3 (2.9)	49.2 (33.3)	21.8 (15.6)	2.6 (1.9)	22.3 (16.0)
21						
22						
23						
24						
25						
26						
27	18.7 (19.0)	3.3 (3.4)	37.5 (38.1)			
28	16.4 (12.8)	2.9 (2.3)	33.0 (25.7)			
29						
30						
31	15.3 (13.1)	2.7 (2.3)	30.7 (26.2)			
Avg	20.5	3.6	41.30			
n	5	5	5	1	1	1
SD	4.8	0.8	9.81			
Min	15.3	2.7	30.67			
Max	27.8	4.9	56.19			

ED_004549_00015841-00218

Table F9. Daily means (SD) of ammonia emissions at site WA5B for January, 2009.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1	24.7 (15.4)	4.4 (2.7)	49.5 (30.8)	48.1 (26.4)	5.8 (3.2)	49.2 (27.0)
2						
3						
4						
5						
6	30.0 (19.5)	5.3 (3.4)	59.9 (38.8)	59.7 (45.7)	7.2 (5.5)	61.2 (46.9)
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
Avg	27.4	4.8	54.69	53.9	6.5	55.20
n	2	2	2	2	2	2
SD	2.6	0.5	5.21	5.8	0.7	5.97
Min	24.7	4.4	49.48	48.1	5.8	49.23
Max	30.0	5.3	59.90	59.7	7.2	61.17

ED_004549_00015841-00219

Table F9. Daily means (SD) of ammonia emissions at site WA5B for February, 2009.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13	18.9 (12.7)	3.3 (2.2)	36.9 (24.8)	41.6 (19.2)	5.0 (2.3)	42.1 (19.4)
14						
15						
16	20.1 (10.5)	3.5 (1.9)	39.2 (20.5)	29.0 (12.7)	3.5 (1.5)	28.8 (12.6)
17						
18						
19	12.4 (9.8)	2.2 (1.7)	24.1 (19.1)	20.5 (12.5)	2.5 (1.5)	19.9 (12.2)
20						
21						
22						
23						
24	37.0 (19.8)	6.5 (3.5)	71.4 (38.2)	60.8 (30.2)	7.3 (3.6)	57.5 (28.6)
25	32.9 (15.5)	5.8 (2.7)	63.5 (29.9)	66.5 (33.7)	8.0 (4.1)	62.5 (31.6)
26						
27						
28						
Avg	24.3	4.3	47.01	43.7	5.3	42.16
n	5	5	5	5	5	5
SD	9.2	1.6	17.62	17.7	2.1	16.27
Min	12.4	2.2	24.10	20.5	2.5	19.93
Max	37.0	6.5	71.37	66.5	8.0	62.49

ED_004549_00015841-00220

Table F9. Daily means (SD) of ammonia emissions at site WA5B for March, 2009.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5	10.7 (6.9)	1.9 (1.2)	20.5 (13.2)	42.4 (18.7)	5.1 (2.2)	40.2 (17.7)
6						
7	15.5 (20.1)	2.7 (3.5)	29.7 (38.6)	39.6 (33.9)	4.8 (4.1)	37.7 (32.2)
8						
9						
10	4.6 (6.2)	0.8 (1.1)	8.9 (11.8)	16.2 (8.2)	2.0 (1.0)	15.5 (7.8)
11	9.7 (6.9)	1.7 (1.2)	18.7 (13.2)	17.4 (7.9)	2.1 (1.0)	16.6 (7.6)
12						
13						
14						
15	19.2 (17.7)	3.4 (3.1)	36.9 (34.0)	39.0 (26.0)	4.7 (3.1)	37.5 (24.9)
16	12.9 (10.6)	2.3 (1.9)	24.7 (20.3)			
17	16.2 (7.5)	2.9 (1.3)	31.0 (14.3)	39.5 (19.0)	4.8 (2.3)	38.1 (18.3)
18						
19						
20	15.9 (12.5)	2.8 (2.2)	30.4 (23.8)			
21						
22						
23	17.2 (17.5)	3.0 (3.1)	32.8 (33.4)	30.2 (18.0)	3.6 (2.2)	29.3 (17.5)
24						
25	19.7 (13.2)	3.5 (2.3)	37.6 (25.3)	20.7 (13.0)	2.5 (1.6)	20.2 (12.7)
26						
27						
28						
29				22.3 (13.5)	2.7 (1.6)	21.9 (13.2)
30						
31						
Avg	14.2	2.5	27.12	29.7	3.6	28.54
n	10	10	10	9	9	9
SD	4.5	0.8	8.51	10.1	1.2	9.53
Min	4.6	0.8	8.90	16.2	2.0	15.46
Max	19.7	3.5	37.58	42.4	5.1	40.18

ED_004549_00015841-00221

Table F9. Daily means (SD) of ammonia emissions at site WA5B for April, 2009.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22				47.6 (32.7)	5.7 (3.9)	48.4 (33.3)
23	16.6 (12.0)	2.9 (2.1)	31.4 (22.8)	37.7 (30.3)	4.5 (3.7)	38.4 (30.9)
24						
25	23.5 (11.8)	4.1 (2.1)	44.5 (22.3)	54.0 (33.9)	6.5 (4.1)	55.2 (34.6)
26	17.0 (13.6)	3.0 (2.4)	32.2 (25.7)	45.0 (30.0)	5.4 (3.6)	46.1 (30.7)
27				55.2 (25.5)	6.6 (3.1)	56.6 (26.1)
28	7.9 (8.9)	1.4 (1.6)	15.0 (16.8)	42.0 (24.2)	5.1 (2.9)	43.1 (24.9)
29	13.5 (10.1)	2.4 (1.8)	25.6 (19.1)	40.0 (19.2)	4.8 (2.3)	41.2 (19.7)
30				41.9 (20.0)	5.0 (2.4)	43.2 (20.6)
Avg	15.7	2.8	29.73	45.4	5.5	46.53
n	5	5	5	8	8	8
SD	5.1	0.9	9.60	6.0	0.7	6.11
Min	7.9	1.4	15.01	37.7	4.5	38.41
Max	23.5	4.1	44.52	55.2	6.6	56.59

ED_004549_00015841-00222

Table F9. Daily means (SD) of ammonia emissions at site WA5B for May, 2009.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5				40.9 (29.8)	4.9 (3.6)	42.5 (30.9)
6	23.5 (14.4)	4.1 (2.5)	44.4 (27.1)	48.5 (29.1)	5.8 (3.5)	50.4 (30.2)
7						
8	19.5 (10.2)	3.4 (1.8)	36.7 (19.3)	46.4 (25.9)	5.6 (3.1)	48.3 (26.9)
9						
10						
11						
12						
13	14.3 (10.3)	2.5 (1.8)	27.0 (19.5)	38.4 (31.3)	4.6 (3.8)	39.9 (32.6)
14				39.6 (22.8)	4.8 (2.7)	41.3 (23.7)
15	17.3 (16.0)	3.1 (2.8)	32.8 (30.3)			
16						
17						
18						
19	11.0 (12.5)	1.9 (2.2)	20.8 (23.6)			
20						
21						
22						
23						
24	21.9 (13.8)	3.9 (2.4)	41.5 (26.1)	47.7 (28.4)	5.7 (3.4)	49.7 (29.6)
25	22.1 (10.6)	3.9 (1.9)	41.8 (20.0)	32.2 (20.2)	3.9 (2.4)	33.6 (21.1)
26	19.6 (10.8)	3.5 (1.9)	37.2 (20.5)	33.5 (20.4)	4.0 (2.5)	34.9 (21.3)
27	25.0 (17.9)	4.4 (3.2)	47.4 (34.0)	43.2 (21.4)	5.2 (2.6)	45.1 (22.4)
28				33.4 (19.6)	4.0 (2.4)	34.8 (20.5)
29						
30	26.7 (22.2)	4.7 (3.9)	50.7 (42.2)	42.4 (26.8)	5.1 (3.2)	44.3 (28.0)
31						
Avg	20.1	3.5	38.04	40.6	4.9	42.26
n	10	10	10	11	11	11
SD	4.6	0.8	8.74	5.5	0.7	5.72
Min	11.0	1.9	20.78	32.2	3.9	33.64
Max	26.7	4.7	50.72	48.5	5.8	50.37

ED_004549_00015841-00223

Table F9. Daily means (SD) of ammonia emissions at site WA5B for June, 2009.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1				43.3 (31.5)	5.2 (3.8)	45.2 (32.9)
2	33.0 (19.4)	5.8 (3.4)	62.6 (36.9)	51.0 (21.0)	6.1 (2.5)	53.3 (21.9)
3	23.1 (13.3)	4.1 (2.3)	43.9 (25.2)	31.4 (32.5)	3.8 (3.9)	32.9 (34.0)
4						
5						
6						
7						
8						
9						
10						
11	26.1 (12.3)	4.6 (2.2)	49.6 (23.5)			
12						
13						
14						
15						
16						
17						
18				65.4 (35.1)	7.9 (4.2)	68.6 (36.8)
19	29.9 (16.3)	5.3 (2.9)	56.9 (31.1)	76.2 (55.0)	9.2 (6.6)	80.0 (57.7)
20	25.8 (10.9)	4.5 (1.9)	49.1 (20.8)	51.0 (48.2)	6.1 (5.8)	53.5 (50.6)
21	23.6 (14.1)	4.2 (2.5)	45.1 (26.8)	55.4 (39.2)	6.7 (4.7)	58.2 (41.2)
22						
23						
24						
25	18.3 (12.7)	3.2 (2.2)	34.9 (24.3)	30.9 (22.7)	3.7 (2.7)	32.5 (23.8)
26	18.6 (10.5)	3.3 (1.9)	35.5 (20.1)	34.8 (19.9)	4.2 (2.4)	36.5 (20.9)
27	28.9 (14.0)	5.1 (2.5)	55.2 (26.7)	45.6 (26.1)	5.5 (3.1)	48.0 (27.4)
28	19.9 (10.2)	3.5 (1.8)	37.9 (19.4)	27.9 (16.4)	3.4 (2.0)	29.3 (17.2)
29	21.0 (12.6)	3.7 (2.2)	40.1 (24.0)	40.6 (21.3)	4.9 (2.6)	42.7 (22.4)
30	19.2 (12.9)	3.4 (2.3)	36.8 (24.6)	25.8 (29.9)	3.1 (3.6)	27.2 (31.5)
Avg	23.9	4.2	45.63	44.6	5.4	46.75
n	12	12	12	13	13	13
SD	4.6	0.8	8.79	14.5	1.7	15.21
Min	18.3	3.2	34.87	25.8	3.1	27.18
Max	33.0	5.8	62.62	76.2	9.2	79.98

ED_004549_00015841-00224

Table F9. Daily means (SD) of ammonia emissions at site WA5B for July, 2009.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1	20.3 (13.2)	3.6 (2.3)	38.7 (25.2)	23.3 (14.0)	2.8 (1.7)	24.5 (14.7)
2						
3						
4						
5						
6	25.9 (21.8)	4.6 (3.8)	49.5 (41.7)	21.5 (24.2)	2.6 (2.9)	22.7 (25.5)
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
Avg	23.1	4.1	44.10	22.4	2.7	23.59
n	2	2	2	2	2	2
SD	2.8	0.5	5.39	0.9	0.1	0.91
Min	20.3	3.6	38.70	21.5	2.6	22.68
Max	25.9	4.6	49.49	23.3	2.8	24.50

ED_004549_00015841-00225

Table F9. Daily means (SD) of ammonia emissions at site WA5B for August, 2009.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7				65.9 (44.9)	7.9 (5.4)	69.9 (47.6)
8	34.0 (20.0)	6.0 (3.5)	65.5 (38.6)	54.6 (30.4)	6.6 (3.7)	57.9 (32.2)
9	18.6 (16.1)	3.3 (2.8)	35.8 (31.0)	34.3 (27.7)	4.1 (3.3)	36.4 (29.4)
10	17.6 (10.0)	3.1 (1.8)	33.9 (19.4)	46.0 (26.2)	5.5 (3.2)	48.8 (27.9)
11						
12						
13						
14	24.8 (12.2)	4.4 (2.2)	47.8 (23.6)	29.8 (21.6)	3.6 (2.6)	31.7 (23.0)
15						
16						
17						
18						
19						
20						
21				30.2 (35.5)	3.6 (4.3)	32.1 (37.8)
22	26.7 (13.0)	4.7 (2.3)	51.6 (25.2)	48.6 (29.9)	5.8 (3.6)	51.7 (31.9)
23	25.5 (15.9)	4.5 (2.8)	49.4 (30.8)	28.6 (20.1)	3.4 (2.4)	30.4 (21.3)
24						
25						
26						
27						
28						
29						
30						
31						
Avg	24.5	4.3	47.32	42.2	5.1	44.84
n	6	6	6	8	8	8
SD	5.5	1.0	10.54	12.8	1.5	13.57
Min	17.6	3.1	33.86	28.6	3.4	30.40
Max	34.0	6.0	65.48	65.9	7.9	69.87

ED_004549_00015841-00226

Table F9. Daily means (SD) of ammonia emissions at site WA5B for September, 2009.

Day	Barn 2			Barn 4		
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$
1						
2						
3						
4						
5						
6						
7	17.7 (13.3)	3.1 (2.3)	34.3 (25.9)	30.9 (26.8)	3.7 (3.2)	33.0 (28.6)
8						
9						
10						
11						
12						
13						
14						
15						
16						
17	19.9 (11.7)	3.5 (2.1)	38.8 (22.8)	45.1 (41.9)	5.4 (5.0)	48.2 (44.7)
18						
19						
20	17.6 (10.9)	3.1 (1.9)	34.3 (21.2)	38.7 (19.2)	4.7 (2.3)	41.3 (20.5)
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
Avg	18.4	3.2	35.83	38.3	4.6	40.83
n	3	3	3	3	3	3
SD	1.1	0.2	2.11	5.8	0.7	6.21
Min	17.6	3.1	34.34	30.9	3.7	32.98
Max	19.9	3.5	38.82	45.1	5.4	48.17

Table F10. Completeness of airflow and emission data.

ED_004549_00015841-00227

Table F10. Airflow and emission data completeness (%) at site WA5B for September, 2007.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	51.9	51.9	0	0	0	0	44.4	43.9	0	0	0	0
29	100	100	0	0	0	0	100	100	0	0	0	0
30	100	100	0	0	0	0	100	100	0	0	0	0
Avg	8.4	8.4	0	0	0	0	8.2	8.1	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	26.2	26.2	0	0	0	0	25.8	25.8	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	0	0	0	0	100	100	0	0	0	0

ED_004549_00015841-00228

Table F10. Airflow and emission data completeness (%) at site WA5B for October, 2007.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	100	100	0	0	0	0	100	100	0	0	0	0
2	100	100	0	0	0	0	100	100	0	0	0	0
3	100	100	0	0	0	0	100	100	0	0	0	0
4	96.7	96.7	0	0	0	0	96.8	96.8	0	0	0	0
5	100	100	0	0	0	0	100	100	0	0	0	0
6	100	100	0	0	0	0	100	100	0	0	0	0
7	100	100	0	0	0	0	100	100	0	0	0	0
8	100	100	0	0	0	0	100	100	0	0	0	0
9	100	100	0	0	0	0	100	100	0	0	0	0
10	69.2	69.2	0	0	0	0	69.2	69.2	0	0	0	0
11	100	100	0	0	0	0	100	100	0	0	0	0
12	100	100	0	0	0	0	100	100	0	0	0	0
13	100	100	0	0	0	0	100	100	0	0	0	0
14	100	100	0	0	0	0	100	100	0	0	0	0
15	100	100	0	0	0	0	100	100	0	0	0	0
16	100	100	0	0	0	0	100	100	0	0	0	0
17	100	100	0	0	0	0	100	100	0	0	0	0
18	99.4	99.4	0	0	0	0	99.4	99.4	0	0	0	0
19	66.9	66.9	23	0.2	38.1	0.4	66.9	66.9	0	0	0	0
20	100	100	61.1	37.8	61.1	37.8	100	100	0	0	0	0
21	100	100	29.7	0	29.7	0	100	100	0	0	0	0
22	100	100	26	0.1	26	0.1	100	100	0	0	0	0
23	87.2	87.2	18.8	0	18.8	0	87.2	87.2	0	0	0	0
24	100	100	37.2	28	37.2	28	100	100	0	0	0	0
25	96	96	32.3	0.1	32.3	0.1	96	96	0	0	0	0
26	59	59	4.5	0	4.5	0	59	59	0	0	0	0
27	100	100	0.2	0	0.2	0	100	100	0	0	0	0
28	100	100	27.2	0	27.2	0	100	100	0	0	0	0
29	100	100	17.4	0	17.4	0	100	100	0	0	0	0
30	100	100	15.5	0.1	15.5	0.1	100	100	0	0	0	0
31	99.1	99.1	13.3	0	13.3	0	99.1	91.3	0	0	0	0
Avg	95.9	95.9	9.9	2.1	10.4	2.2	95.9	95.7	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	10.5	10.5	15.1	8.2	15.7	8.2	10.5	10.5	0	0	0	0
Min	59	59	0	0	0	0	59	59	0	0	0	0
Max	100	100	61.1	37.8	61.1	37.8	100	100	0	0	0	0

ED_004549_00015841-00229

Table F10. Airflow and emission data completeness (%) at site WA5B for November, 2007.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	97.6	97.6	5.3	0	5.3	0	70.8	74.7	0	0	0	0
2	83.3	98.4	0	11.3	0	11.3	98.4	98.4	0	0	0	0
3	100	100	9	0	9	0	100	100	0	0	0	0
4	100	100	20.1	0.4	20.1	0.4	100	100	0	0	0	0
5	100	100	11.3	0	11.3	0	100	100	0	0	0	0
6	100	100	4.5	0	4.5	0	100	100	0	0	0	0
7	100	100	11.3	0	11.3	0	100	100	0	0	0	0
8	100	100	12.7	0	12.7	0	100	100	0	0	0	0
9	100	100	5.4	0.3	5.4	0.3	100	100	0	0	0	0
10	100	100	26.3	15.5	26.3	15.5	99.7	99.7	0	0	0	0
11	100	100	43.5	0.3	43.5	0.3	100	100	0	0	0	0
12	82.8	82.8	40.8	16.1	40.8	16.1	67.9	67.9	0	0	0	0
13	63.5	63.5	43.2	0.1	43.2	0.1	63.5	63.5	0	0	0	0
14	42.4	42.4	7.4	0	7.4	0	16.7	16.7	0	0	0	0
15	100	100	40.8	14.2	40.8	14.2	0	0	0	0	0	0
16	100	100	92.1	14.7	92.1	14.7	0	0	0	0	0	0
17	100	100	61.9	0.7	61.9	0.7	0	0	0	0	0	0
18	100	100	28.1	0.8	28.1	0.8	0	0	0	0	0	0
19	100	100	3.9	0.4	3.9	0.4	0	0	0	0	0	0
20	100	100	6.4	0	6.4	0	0	0	0	0	0	0
21	99	100	20.6	0.1	20.6	0.1	0	0	0	0	0	0
22	80.9	87.2	61.5	0	61.5	0	0	0	0	0	0	0
23	65.3	93.8	4.9	0	4.9	0	0	0	0	0	0	0
24	100	100	1.5	0	1.5	0	0	0	0	0	0	0
25	96.7	100	25.3	0.1	25.3	0.1	0	0	0	0	0	0
26	67.2	99.1	7	0	7	0	0	0	0	0	0	0
27	85.9	89.8	0	0	0	0	0	0	0	0	0	0
28	99	99.6	0	0	0	0	0	0	0	0	0	0
29	99.8	99.8	0	0	0	0	0	0	0	0	0	0
30	97.6	98.8	0.6	0.3	1	0.3	0	0	0	0	0	0
Avg	92	95.1	19.8	2.5	19.9	2.5	40.6	40.7	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	14.4	12.3	22.4	5.4	22.4	5.4	46.3	46.3	0	0	0	0
Min	42.4	42.4	0	0	0	0	0	0	0	0	0	0
Max	100	100	92.1	16.1	92.1	16.1	100	100	0	0	0	0

ED_004549_00015841-00230

Table F10. Airflow and emission data completeness (%) at site WA5B for December, 2007.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	45.8	95.7	52.8	2.8	39.1	3.2	0	0	0	0	0	0
2	98.5	100	7.4	79.1	7.6	79.1	0	0	0	0	0	0
3	100	100	38.1	39	38.6	39.6	0	0	0	0	0	0
4	100	100	97.3	29.1	97.3	29.6	0	0	0	0	0	0
5	100	100	28.8	0.1	29.4	0.1	0	0	0	0	0	0
6	100	100	23.1	0.5	17.6	0.8	0	0	0	0	0	0
7	89.4	89.4	12.2	7.4	14.8	7.6	0	0	0	0	0	0
8	32.8	33.6	13.3	0.1	13.5	0.3	0	0	0	0	0	0
9	17.1	71.1	24.7	0	25.1	0	0	0	0	0	0	0
10	21.7	96.5	16.1	0.3	14.2	0.3	0	0	0	0	0	0
11	50.7	64.6	4.5	0.1	4.7	0.2	0	0	0	0	0	0
12	50.2	51.8	0.1	0	0.2	0	0	0	0	0	0	0
13	44.4	61	0	0	0.2	0	0	0	0	0	0	0
14	79.3	100	33.5	0.1	32.4	0.1	0	0	0	0	0	0
15	83.4	95.9	33.4	14.3	26.2	7.8	0	0	0	0	0	0
16	100	100	66	7.4	66.3	7.5	0	0	0	0	0	0
17	100	100	84.7	0.5	82.5	0.8	0	0	0	0	0	0
18	100	100	7.1	15.1	2.4	15.3	0	0	0	0	0	0
19	100	100	96	8.2	75.2	9.2	0	0	0	0	0	0
20	100	100	77.8	0.6	48.5	1.1	0	0	0	0	0	0
21	100	100	47.7	0.2	41.3	0.4	0	0	0	0	0	0
22	99.6	100	52.4	0.4	40.1	0.8	0	0	0	0	0	0
23	100	100	36.9	0.1	36.2	0.1	0	0	0	0	0	0
24	100	100	36.7	0.3	37.2	0.6	0	0	0	0	0	0
25	89.9	97.6	80.8	8.9	80.8	1.3	0	0	0	0	0	0
26	100	100	24.7	0.6	25.1	0.8	0	0	0	0	0	0
27	95.2	100	51	30.7	33.9	24.5	0	0	0	0	0	0
28	100	100	52.5	8.5	43.5	9.1	0	0	0	0	0	0
29	97.8	99.4	33.1	0.6	34	0.7	0	0	0	0	0	0
30	99.8	99.8	15.2	1	8.3	1.6	0	0	0	0	0	0
31	96	100	52.7	0.2	48	0.3	0	0	0	0	0	0
Avg	83.6	92.1	38.7	8.3	34.3	7.8	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	26.1	16.6	27.4	16.3	24.8	16.1	0	0	0	0	0	0
Min	17.1	33.6	0	0	0.2	0	0	0	0	0	0	0
Max	100	100	97.3	79.1	97.3	79.1	0	0	0	0	0	0

ED_004549_00015841-00231

Table F10. Airflow and emission data completeness (%) at site WA5B for January, 2008.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	63.8	100	5.3	0	5.7	0	0	0	0	0	0	0
2	79.7	79.7	5.1	0	0.6	0	0	0	0	0	0	0
3	53.4	53.4	3.3	0	3.3	0	0	0	0	0	0	0
4	99.9	99.9	29	0	20.1	0	0	0	0	0	0	0
5	100	100	16.7	0	10.2	0	0	0	0	0	0	0
6	99.8	99.8	8.8	0	9	0	0	0	0	0	0	0
7	44.2	44.2	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	47.2	47.2	5.2	0	5.3	0	0	0	0	0	0	0
11	76	76	13.5	0	9.6	0	0	0	0	0	0	0
12	99.9	99.9	21.9	0	19.7	0	0	0	0	0	0	0
13	99.9	99.9	13.8	0	10.6	0	0	0	0	0	0	0
14	99.9	99.9	13.8	0	14.3	0	0	0	0	0	0	0
15	99.8	99.8	0.5	0	1	0	0	0	0	0	0	0
16	100	100	15.8	0	7.9	0	0	0	0	0	0	0
17	99.8	99.8	15.2	0	15.3	0	0	0	0	0	0	0
18	77.4	77.4	0	0	0	0	0	0	0	0	0	0
19	100	100	21.8	0	15.6	0	0	0	0	0	0	0
20	100	100	44	0	44.2	0	0	0	0	0	0	0
21	100	100	0	0	0.1	0	0	0	0	0	0	0
22	100	100	0	0	0	0	0	0	0	0	0	0
23	100	100	0	0	0	0	0	0	0	0	0	0
24	100	100	0.1	0	0.3	0	0	0	0	0	0	0
25	99.7	99.7	0	0	0	0	0	0	0	0	0	0
26	99.9	99.9	0	0	0	0	0	0	0	0	0	0
27	100	100	35.3	0	35.4	0	0	0	0	0	0	0
28	100	100	14.2	0	13.5	0	0	0	0	0	0	0
29	100	100	39.8	0	39.9	0	0	0	0	0	0	0
30	100	100	0.6	0	0.8	0	0	0	0	0	0	0
31	100	100	22.4	0	22.6	0	0	0	0	0	0	0
Avg	85.2	86.3	11.2	0	9.8	0	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	27.9	27.7	12.6	0	12	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	44	0	44.2	0	0	0	0	0	0	0

ED_004549_00015841-00232

Table F10. Airflow and emission data completeness (%) at site WA5B for February, 2008.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	100	100	0.1	0	0.3	0	0	0	0	0	0	0
2	100	100	15.6	0	15.9	0	0	0	0	0	0	0
3	100	100	0.1	0	0.1	0	0	0	0	0	0	0
4	100	100	0.1	0	0.1	0	0	0	0	0	0	0
5	100	100	0.4	0	0.7	0	0	0	0	0	0	0
6	100	100	0	0	0	0	0	0	0	0	0	0
7	100	100	0.2	0	0.3	0	0	0	0	0	0	0
8	99.1	99.1	0	0	0	0	0	0	0	0	0	0
9	100	100	0	0	0	0	0	0	0	0	0	0
10	100	100	0.2	0	0.3	0	0	0	0	0	0	0
11	100	100	0.2	0	0.3	0	0	0	0	0	0	0
12	100	100	0	0	0	0	0	0	0	0	0	0
13	99.7	99.7	25.6	0	25.8	0	0	0	0	0	0	0
14	72.7	72.7	7.4	0	7.7	0	62	62	62	62	0	0
15	100	100	6.9	0	7.2	0	100	100	100	100	0	0
16	100	100	4	0	3.4	0	100	100	100	100	0	0
17	100	100	15.7	0	12.2	0	100	100	71.6	71.6	0	0
18	100	100	13.1	0	8.7	0	100	100	0	0	0	0
19	99.7	99.7	11	0	3.5	0	99.7	99.7	0	0	0	0
20	100	100	29.5	0	29.7	0	100	100	0	0	0	0
21	96.3	96.3	28.9	0	25.6	0	96.3	96.3	0	0	0	0
22	100	100	27.9	0	28.2	0	100	100	0	0	0	0
23	100	100	52.2	0	51	0	100	100	0	0	0	0
24	100	100	76.9	0	77.1	0	100	100	0	0	0	0
25	100	100	0.1	0	0.3	0	100	100	0	0	0	0
26	100	100	0	0	0	0	100	100	0	0	0	0
27	100	100	0.6	0	1	0	100	100	0	0	0	0
28	100	100	9.9	0	5.1	0	100	100	0	0	0	0
29	100	100	0	0	0	0	97.3	96.7	0	0	0	0
Avg	98.9	98.9	11.3	0	10.5	0	53.6	53.6	11.5	11.5	0	0
n	29	29	29	29	29	29	29	29	29	29	29	29
SD	5	5	17.7	0	17.6	0	48.8	48.8	29.4	29.4	0	0
Min	72.7	72.7	0	0	0	0	0	0	0	0	0	0
Max	100	100	76.9	0	77.1	0	100	100	100	100	0	0

ED_004549_00015841-00233

Table F10. Airflow and emission data completeness (%) at site WA5B for March, 2008.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	100	100	0	0	0	0	100	100	0	0	0	0
2	100	100	13	0	13.2	0	100	100	0	0	0	0
3	100	100	25.6	0	16.1	0	100	100	0	0	0	0
4	100	100	0	0	0	0	100	100	0	0	0	0
5	100	100	14.4	0	14.5	0	100	100	0	0	0	0
6	100	100	27.6	0	22.2	0	100	100	0	0	0	0
7	100	100	10.7	0	5.3	0	100	100	0	0	0	0
8	100	100	46.2	0	39.8	0	100	100	0	0	0	0
9	100	100	11.7	0	11.9	0	100	100	0	0	0	0
10	100	100	11.9	0	11.9	0	100	100	0	0	0	0
11	100	100	57.8	0	58.3	0	100	100	0	0	0	0
12	92.7	92.7	59.2	0	49.7	0	92.7	92.7	0	0	0	0
13	100	100	18.3	0	8.1	0	100	100	0	0	0	0
14	99.8	99.8	87.2	0	73.8	0	99.8	99.8	0	0	0	0
15	100	100	46	0	46.5	0	100	100	0	0	0	0
16	100	100	77.9	0	77.9	0	100	100	0	0	0	0
17	100	100	79.2	0	70.5	0	100	100	0	0	0	0
18	100	100	64.6	0	46.4	0	95	95	0	0	0	0
19	100	100	45.6	0	45.5	0	100	100	0	0	0	0
20	100	100	82.6	0	82.6	0	100	100	0	0	0	0
21	100	100	91.2	0	91.2	0	100	100	0	0	0	0
22	100	100	46.5	0	40.9	0	100	100	0	0	0	0
23	100	100	70.8	0	71.2	0	100	100	0	0	0	0
24	100	100	64.6	0	50.2	0	100	100	0	0	0	0
25	100	100	51.5	0	51.9	0	100	100	0	0	0	0
26	100	100	97.4	0	97.4	0	100	100	0	0	0	0
27	97.5	97.4	82.2	0	82.3	0	97.5	97.5	0	0	0	0
28	99.9	99.9	74.4	0	66.9	0	99.9	99.9	0	0	0	0
29	100	100	86.4	0	62.8	0	100	100	0	0	0	0
30	100	100	84.9	0	85	0	100	100	0	0	0	0
31	100	100	51.3	0	40.6	0	100	100	0	0	0	0
Avg	99.7	99.7	51	0	46.3	0	99.5	99.5	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	1.4	1.4	29.7	0	29	0	1.6	1.6	0	0	0	0
Min	92.7	92.7	0	0	0	0	92.7	92.7	0	0	0	0
Max	100	100	97.4	0	97.4	0	100	100	0	0	0	0

ED_004549_00015841-00234

Table F10. Airflow and emission data completeness (%) at site WA5B for April, 2008.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	100	100	69.9	47.2	67.4	45.3	100	100	0	0	0	0
2	100	100	56.7	38.7	38.7	29.9	100	100	0	0	0	0
3	100	100	60.5	58.3	53.3	43.5	100	100	0	0	0	0
4	100	100	69.8	63.5	69.8	63.9	100	100	0	0	0	0
5	100	100	60.6	73.6	61.3	73.6	100	100	0	0	0	0
6	100	100	97.8	97.8	97.8	97.8	100	100	0	0	0	0
7	100	100	71.2	68	65.1	62	100	100	0	0	0	0
8	100	100	60.4	49.4	60.4	47.4	100	100	0	0	0	0
9	100	100	69.6	52.6	57.9	53	100	100	0	0	0	0
10	100	100	79.2	79.2	64.2	79.2	55.1	55.1	0	0	0	0
11	100	100	61.3	66.3	55.5	60.6	0	0	0	0	0	0
12	100	100	55.4	57.8	47.1	51.6	0	0	0	0	0	0
13	100	100	53.5	50.8	51.5	51.2	0	0	0	0	0	0
14	100	100	99.5	99.5	99.5	99.5	0	0	0	0	0	0
15	100	100	88.3	88.3	88.3	88.3	0	0	0	0	0	0
16	100	100	75.8	62.6	70.3	57.4	0	0	0	0	0	0
17	100	100	51	53.1	64.6	45.5	0	0	0	0	46	46
18	100	100	97.2	97.2	97.2	97.2	0	0	0	0	100	100
19	100	100	59.2	42.2	38.6	43.1	0	0	0	0	100	100
20	100	100	60.3	68.6	60.3	68.6	0	0	0	0	100	100
21	100	100	59.8	58.5	46.2	58.8	0	0	0	0	100	100
22	100	100	68.8	67.6	68.8	59.1	0	0	0	0	100	100
23	100	100	88.6	88.6	88.6	88.6	0	0	0	0	100	100
24	100	100	32.6	34.4	33.1	33.5	56.3	56.3	0	0	43.8	43.8
25	100	100	49.8	28	30	21	100	100	0	0	0	0
26	100	100	55.7	64.1	54.9	64.1	100	100	0	0	0	0
27	100	100	57.2	54.6	57.2	54.7	100	100	0	0	0	0
28	100	100	73.5	86	74	75.6	100	100	0	0	0	0
29	100	100	94.9	94.9	94.9	94.9	100	100	0	0	0	0
30	100	100	92	67.6	92	68.2	99.1	97.6	0	0	0	0
Avg	100	100	69	65.3	64.9	62.6	53.7	53.6	0	0	23	23
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	0	0	16.5	19	19.3	20.4	48.2	48.1	0	0	40.1	40.1
Min	100	100	32.6	28	30	21	0	0	0	0	0	0
Max	100	100	99.5	99.5	99.5	99.5	100	100	0	0	100	100

ED_004549_00015841-00235

Table F10. Airflow and emission data completeness (%) at site WA5B for May, 2008.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	99.9	99.9	20	20.6	20.1	20.7	99.9	99.9	0	0	0	0
2	99.2	99.2	0	0	0	0	99.2	99.2	0	0	0	0
3	100	100	0	0	0	0	100	100	0	0	0	0
4	100	100	0	0	0	0	100	100	0	0	0	0
5	100	100	0	0	0	0	100	100	0	0	0	0
6	100	100	43.1	40.1	43.3	40.4	95.1	100	0	0	0	0
7	100	100	89.9	89.9	89.9	89.9	100	100	0	0	0	0
8	100	100	78.5	71.7	55.3	72.3	100	100	0	0	0	0
9	100	100	93.1	93.1	76.7	93.1	100	100	0	0	0	0
10	100	100	65.8	77.6	66.4	76.7	100	100	0	0	0	0
11	100	100	95.4	95.4	95.4	95.4	100	100	0	0	0	0
12	100	100	78.1	88.3	68.6	88.3	100	100	0	0	0	0
13	100	100	52.9	53.9	45.8	48.4	100	100	0	0	0	0
14	100	100	67.8	67.8	67.8	60.3	100	100	0	0	0	0
15	100	100	80.6	79	80.6	79	100	100	0	0	0	0
16	52.8	52.8	9.9	12.3	8.8	12.3	52.8	52.8	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	70.4	70.4	60.8	64.3	61	64.4	68.1	68.1	0	0	0	0
21	100	100	99.1	99.1	99.1	96.7	100	100	0	0	0	0
22	100	100	99.6	95.6	95.8	95.8	100	100	0	0	0	0
23	100	100	97.7	38.1	97.7	38.2	100	100	0	0	0	0
24	100	100	80.5	4.7	61.5	5	100	100	0	0	0	0
25	100	100	71.6	24.3	69.9	24.5	100	100	0	0	0	0
26	100	100	92.2	54.4	92.4	54.6	100	100	0	0	0	0
27	100	100	82.2	74.5	82.7	68.3	100	100	0	0	0	0
28	100	100	48.5	33.1	48.8	33.1	100	100	0	0	0	0
29	100	100	80.5	73.1	80.5	73.5	100	100	0	0	0	0
30	100	100	80.7	73.6	80.8	74	100	100	0	0	0	0
31	100	100	70.3	63.9	70.4	64.2	100	100	0	0	0	0
Avg	87.8	87.8	56.1	48	53.5	47.4	87.6	87.7	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	30.3	30.3	36.5	35.4	35.3	35	30.3	30.4	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	99.6	99.1	99.1	96.7	100	100	0	0	0	0

ED_004549_00015841-00236

Table F10. Airflow and emission data completeness (%) at site WA5B for June, 2008.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	100	100	91.7	87	87.4	84	100	100	0	0	0	0
2	100	100	74.3	69.4	72.9	68.8	100	100	0	0	0	0
3	100	100	71.9	71.9	71.9	71.9	100	100	0	0	0	0
4	100	100	73.1	44.2	73.2	44.3	100	94.9	0	0	0	0
5	100	100	77.7	60.3	64	60.5	100	100	0	0	0	0
6	100	100	100	100	100	100	100	100	0	0	0	0
7	100	100	73.1	75.6	67.2	75.8	100	100	0	0	0	0
8	100	100	86.7	86.7	86.7	75.6	100	100	0	0	0	0
9	100	100	64.4	76.7	64.7	76.8	100	100	0	0	0	0
10	100	100	84.4	63.4	84.5	55.2	100	100	0	0	0	0
11	100	100	88.1	56.7	88.1	56.8	100	100	0	0	0	0
12	100	100	92	66.3	69.1	66.3	52.2	52.2	0	0	41.9	41.9
13	100	100	69.5	83.2	70.1	79.7	0	0	0	0	100	100
14	100	100	82.9	62.2	71.9	63	0	0	0	0	100	100
15	100	100	85.2	83.2	78.8	83.3	0	0	0	0	100	100
16	100	100	78.9	75.1	74.9	75.6	0	0	0	0	100	100
17	100	100	91.4	91.4	91.4	91.4	0	0	0	0	100	100
18	100	100	61.3	61.3	57.6	59.9	39.6	39.6	0	0	54.2	54.2
19	100	100	58.3	63.4	58.5	58.7	100	100	0	0	0	0
20	100	100	58	58.8	54.7	58.8	100	100	0	0	0	0
21	100	100	73	66.9	73	67.1	100	100	0	0	0	0
22	100	100	82.7	50.5	79.8	47.3	100	100	0	0	0	0
23	100	100	85.8	78.2	85.8	78.4	100	100	0	0	0	0
24	100	100	79	79.9	79.4	80.1	100	100	0	0	0	0
25	100	100	93.1	93.1	93.1	93.1	100	100	0	0	0	0
26	100	100	93.9	93.9	91.6	93.9	100	100	0	0	0	0
27	100	100	75.8	75.8	75.8	75.8	100	100	0	0	0	0
28	100	100	69.3	69.3	69.3	69.3	100	100	0	0	0	0
29	100	100	65.3	71	65.8	71.1	91.9	91.9	0	0	0	0
30	100	100	78.9	66.6	79	66.8	100	100	0	0	0	0
Avg	100	100	78.7	72.7	76	71.6	79.5	79.3	0	0	19.9	19.9
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	0	0	10.9	13.1	11.1	13.3	38	37.9	0	0	37.8	37.8
Min	100	100	58	44.2	54.7	44.3	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	100	100

ED_004549_00015841-00237

Table F10. Airflow and emission data completeness (%) at site WA5B for July, 2008.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	100	100	0.1	0.6	0.3	0.9	100	100	0	0	0	0
2	100	100	0	7.3	0.1	1.1	100	100	0	0	0	0
3	100	100	2.1	0.6	2.6	0.8	100	100	0	0	0	0
4	100	100	0.7	0.6	1.3	0.8	100	100	0	0	0	0
5	23.8	23.8	0	0	0	0	23.8	23.8	0	0	0	0
6	28.9	28.9	0	0	0.4	0.2	28.9	28.9	0	0	0	0
7	99.8	99.8	0.2	12	0.8	1	99.8	99.8	0	0	0	0
8	100	100	0.8	2.6	1.4	1.1	100	100	0	0	0	0
9	100	100	0.6	8.7	0.7	8.9	100	100	0	0	0	0
10	100	100	0.2	15.6	0.3	16	52.2	52.2	29.9	29.9	0	0
11	100	100	0	0.2	0	0.5	0	0	100	100	0	0
12	99.9	99.9	0	0.2	0	0.4	0	0	99.9	99.9	0	0
13	100	100	0	0	0.3	0.3	0	0	100	100	0	0
14	100	100	0	0	7.4	0.5	0	0	100	100	0	0
15	100	100	0	0	0.1	0.1	0	0	100	100	0	0
16	100	100	0	0	1	0.5	0	0	100	100	0	0
17	99.5	99.5	0	0	1.4	0.8	0	0	99.5	99.5	0	0
18	100	100	0	0	10.2	0.4	0	0	100	100	0	0
19	100	100	0	0	5.9	0.4	0	0	100	100	0	0
20	100	100	0	0	0.5	1.2	0	0	100	100	0	0
21	100	100	0	0	0.6	0.5	0	0	100	100	0	0
22	100	100	0	0	39.7	7.7	0	0	100	100	0	0
23	100	100	0	0	91.2	12.3	45.8	45.8	45.8	45.8	0	0
24	100	100	0	0	88.5	45.3	100	100	0	0	0	0
25	100	100	0	0	67.4	0	100	100	0	0	0	0
26	100	100	0	0	92.4	0	100	100	0	0	0	0
27	100	100	0	0	82.4	0	100	100	0	0	0	0
28	100	100	0	0	73	0	100	100	0	0	0	0
29	100	100	0	0	77.1	0	100	100	0	0	0	0
30	100	100	0	0	85.7	0	100	100	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0
Avg	92	92	0.2	1.6	23.6	3.3	50	50	41.1	41.1	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	24.7	24.7	0.4	3.8	35.5	8.6	47.1	47.1	47.7	47.7	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	2.1	15.6	92.4	45.3	100	100	100	100	0	0

ED_004549_00015841-00238

Table F10. Airflow and emission data completeness (%) at site WA5B for August, 2008.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	62.2	62.2	0	0	52.7	48.9	48.7	48.7	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	28.9	28.9	0	0	0	12.6	28.9	28.9	0	0	0	0
7	40.2	40.2	0	0	6.5	5.9	40.2	40.2	0	0	0	0
8	98.8	98.8	0	0	0	1.1	98.8	98.8	0	0	0	0
9	100	100	0	0	0	0.8	100	100	0	0	0	0
10	100	100	0	0	0	1.3	100	100	0	0	0	0
11	100	100	0	0	0	0.6	100	100	0	0	0	0
12	100	100	0	0	0	1.1	100	100	0	0	0	0
13	100	100	0	0	0	1.3	100	100	0	0	0	0
14	54.4	54.4	0	0	0	0.1	54.4	54.4	0	0	0	0
15	100	100	0	0	0	0	100	100	0	0	0	0
16	100	100	0	0	0	0	100	100	0	0	0	0
17	100	100	0	0	0	0	100	100	0	0	0	0
18	68.5	68.5	0	0	0	0	68.5	68.5	0	0	0	0
19	30.3	30.3	0	0	0	0	30.3	30.3	0	0	0	0
20	69.4	69.4	0	0	0	0	69.4	69.4	0	0	0	0
21	100	100	0	0	0	0	100	100	0	0	0	0
22	93.6	93.6	0	0	0	0	93.6	93.6	0	0	0	0
23	99.8	99.8	17.5	0	11.6	0	99.8	99.8	0	0	0	0
24	100	100	67	0	26	0	100	100	0	0	0	0
25	100	100	52.6	0	49.4	0	100	100	0	0	0	0
26	100	100	60.9	0	29.3	0	100	100	0	0	0	0
27	63.5	63.5	20.3	0	0.6	0	63.5	63.5	0	0	0	0
28	53.1	53.1	0	0	0	0	48.5	48.5	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0
Avg	63.3	63.3	7	0	5.7	2.4	62.7	62.7	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	40.5	40.5	18.1	0	13.8	8.8	40.6	40.6	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	67	0	52.7	48.9	100	100	0	0	0	0

ED_004549_00015841-00239

Table F10. Airflow and emission data completeness (%) at site WA5B for September, 2008.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	51.9	51.9	5.6	0	21.2	0.6	51.9	51.9	0	0	0	0
4	100	100	51.6	25.9	80.7	40.8	100	100	0	0	0	0
5	100	100	31.8	28.1	73.9	58.3	100	100	0	0	0	0
6	100	100	57.8	36.2	58.5	47.4	100	100	0	0	0	0
7	100	100	41.5	25.4	76.3	41.5	100	100	0	0	0	0
8	100	100	39.7	31.9	55.4	32.2	100	100	0	0	0	0
9	100	100	19	27.9	63.8	44.2	100	100	0	0	0	0
10	100	100	55.8	27.7	69.6	28.8	100	100	0	0	0	0
11	15.6	15.6	0.2	0	0.7	0	15.6	15.6	0	0	0	0
12	91.1	91.1	3.8	0.4	49.6	16.8	40.9	40.9	0	0	46	46
13	100	100	43.1	8.8	71.1	14.3	0	0	0	0	100	100
14	100	100	25.3	19.7	28.8	20.1	0	0	0	0	100	100
15	100	100	47.2	8.5	50.4	33.3	0	0	0	0	100	100
16	100	100	36.7	0.6	41.7	29.2	0	0	0	0	100	100
17	51.9	51.9	5	0	5.8	0	0	0	0	0	51.9	51.9
18	27.1	27.1	0.2	0	3.8	0	26.6	26.6	0	0	0	0
19	100	100	45.1	0	49.4	0	100	100	0	0	0	0
20	100	100	40.9	0	73.1	0	100	100	0	0	0	0
21	100	100	46.8	0	82.4	0	100	100	0	0	0	0
22	100	100	48.8	0	87.8	0	100	100	0	0	0	0
23	96.7	96.7	10.2	0.2	31.6	0.6	96.7	96.7	0	0	0	0
24	99.3	99.3	47.4	0	49.2	0	99.3	99.3	0	0	0	0
25	100	100	20.6	0	70.5	0	96.6	96.6	0	0	0	0
26	100	100	47.6	0	56.4	0	100	100	0	0	0	0
27	100	100	65.1	0	65.1	0	100	100	0	0	0	0
28	100	100	46.5	0	50.7	0	100	100	0	0	0	0
29	100	100	33.3	0	36.4	0	100	100	0	0	0	0
30	100	100	32.2	0	46.7	0	100	100	0	0	0	0
Avg	84.5	84.5	31.6	8	48.4	13.6	67.6	67.6	0	0	16.6	16.6
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	31.6	31.6	19.8	12.3	26	18.4	43.5	43.5	0	0	34.9	34.9
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	65.1	36.2	87.8	58.3	100	100	0	0	100	100

ED_004549_00015841-00240

Table F10. Airflow and emission data completeness (%) at site WA5B for October, 2008.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	95	95	29.7	0	32.6	0	94.9	94.9	0	0	0	0
2	37.1	37.1	13.6	0	0.5	0	37.1	37.1	0	0	0	0
3	51	51	15.4	15.4	15.4	14.4	51	51	0	0	0	0
4	100	100	92.3	81.1	92.3	57.2	100	100	0	0	0	0
5	99.5	99.5	47.9	68.4	42.3	57.5	99.5	99.5	0	0	0	0
6	100	100	43.8	54.9	44.1	49.5	100	100	0	0	0	0
7	100	100	68.1	42.3	52.4	40.1	100	100	0	0	0	0
8	99.3	99.3	40.5	38.5	39.4	35.1	99.3	99.3	0	0	0	0
9	100	100	72.8	73.5	73	67.6	100	100	0	0	0	0
10	100	100	82.7	84.7	50.2	71.8	100	100	0	0	0	0
11	100	100	75.8	68.5	52.8	51	100	100	0	0	0	0
12	100	100	60	68.4	55.5	66.9	100	100	0	0	0	0
13	100	100	47.6	46.4	35.1	43.1	100	100	0	0	0	0
14	100	100	42.7	32.7	18	29.6	100	100	0	0	0	0
15	100	100	27.2	28.5	21.9	22.5	100	100	0	0	0	0
16	93.3	93.3	40.3	50.8	40.6	46.5	99.9	99.9	0	0	0	0
17	99.9	99.9	48.2	43.3	48.3	33.8	99.9	99.9	0	0	0	0
18	100	100	50.3	52.2	50.4	52.4	100	100	0	0	0	0
19	100	100	43.3	37.2	42	34.9	100	100	0	0	0	0
20	100	100	29.9	56.6	22.4	16.5	90.8	90.8	0	0	0	0
21	100	100	58.7	60.7	40.8	45.1	100	100	0	0	0	0
22	99.8	99.8	11.4	18.9	16.9	19	99.8	99.8	0	0	0	0
23	99.3	99.3	43.3	47.2	31.3	47.5	99.1	99.1	0	0	0	0
24	100	100	53.9	46.5	53.4	46.5	100	100	0	0	0	0
25	100	100	49.3	48.1	49.3	42.8	100	100	0	0	0	0
26	100	100	79	63.3	74.5	52.4	100	100	0	0	0	0
27	100	100	30.8	30.8	30.9	30.3	100	100	0	0	0	0
28	100	100	25.3	31.6	11.4	29.1	100	100	0	0	0	0
29	100	100	18.5	10.4	5.4	6.5	100	100	0	0	0	0
30	99.7	99.7	30.3	30.3	26.2	30.3	99.7	99.7	0	0	0	0
31	100	100	65.1	65.1	48.1	56.4	100	100	0	0	0	0
Avg	95.9	95.9	46.4	45	39.3	38.6	95.8	95.8	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	13.8	13.8	20.7	21.7	20	18.7	13.8	13.8	0	0	0	0
Min	37.1	37.1	11.4	0	0.5	0	37.1	37.1	0	0	0	0
Max	100	100	92.3	84.7	92.3	71.8	100	100	0	0	0	0

ED_004549_00015841-00241

Table F10. Airflow and emission data completeness (%) at site WA5B for November, 2008.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	100	100	35.2	47.6	34.3	45.3	100	100	0	0	0	0
2	100	100	39.9	51.5	26.5	40.1	100	100	0	0	0	0
3	100	100	63	84	34.8	65.2	100	100	0	0	0	0
4	100	100	59.1	34.4	33	16.3	100	100	0	0	0	0
5	98.4	98.4	22.1	22.1	22.1	21.9	98.4	98.4	0	0	0	0
6	100	100	43.2	47.3	43.2	47.3	100	100	0	0	0	0
7	100	100	39.9	39.9	39.9	38.8	100	100	0	0	0	0
8	100	100	38.6	42.1	26.1	41.4	100	100	0	0	0	0
9	100	100	5.6	14.5	5.8	13.2	100	100	0	0	0	0
10	100	100	46.7	45.9	46.7	44.4	100	100	0	0	0	0
11	100	100	91.5	91.5	87.6	91.5	100	100	0	0	0	0
12	99.9	99.9	97.2	96.5	97.2	96.5	99.9	99.9	0	0	0	0
13	99.3	99.3	68.1	29.3	62	30.1	47.1	47.1	0	0	48.1	48.1
14	100	100	53.8	50.6	50.8	51.1	0	0	0	0	100	100
15	100	100	39.1	36.5	39.1	36.5	0	0	0	0	100	100
16	100	100	28.3	28.4	26.5	28.4	0	0	0	0	100	100
17	100	100	18	27.4	18.4	19.2	0	0	0	0	100	100
18	100	100	28.7	28.9	28.7	28.9	0	0	0	0	100	100
19	100	100	85.3	85.3	85.3	85.3	0	0	0	0	100	100
20	100	100	43.5	63.8	35.9	64.2	0	0	0	0	100	100
21	100	100	75.8	62.6	58.8	62.6	53	53	0	0	44.9	44.9
22	100	100	66.9	47.8	67	46.5	100	100	0	0	0	0
23	100	100	29.7	29.7	29.7	29.7	100	100	0	0	0	0
24	100	100	24.1	24.1	24.1	24.1	100	100	0	0	0	0
25	100	100	34	33.9	34	33.9	100	100	0	0	0	0
26	100	100	48.8	48.8	45.2	47.8	100	100	0	0	0	0
27	100	100	42.4	45.8	42.8	39.6	100	100	0	0	0	0
28	100	100	31.1	28.8	30.3	28.8	100	100	0	0	0	0
29	100	100	56.7	53.4	56.7	53.5	100	100	0	0	0	0
30	100	100	61	60.3	61	60.3	100	100	0	0	0	0
Avg	99.9	99.9	47.2	46.8	43.1	44.4	73.3	73.3	0	0	26.4	26.4
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	0.3	0.3	21.5	20.6	20.9	20.7	42.3	42.3	0	0	42.2	42.2
Min	98.4	98.4	5.6	14.5	5.8	13.2	0	0	0	0	0	0
Max	100	100	97.2	96.5	97.2	96.5	100	100	0	0	100	100

ED_004549_00015841-00242

Table F10. Airflow and emission data completeness (%) at site WA5B for December, 2008.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	100	100	34.8	39.2	34.3	30.8	100	100	0	0	0	0
2	100	100	31.7	40.4	31.9	40.4	100	100	0	0	0	0
3	99.8	99.8	71.1	74.1	71.1	74.1	93.1	99.8	0	0	0	0
4	100	100	56.2	63.4	56.2	62.8	100	100	0	0	0	0
5	100	100	30.6	39.2	30.7	39.2	100	100	0	0	0	0
6	100	100	29.8	34.9	30.1	34.9	100	100	0	0	0	0
7	100	100	33.3	35.8	33.1	36.2	100	100	0	0	0	0
8	100	100	72.3	69.5	59.8	69.5	100	100	0	0	0	0
9	100	100	42.8	42.2	41.3	42.4	100	100	0	0	0	0
10	100	100	39.4	39	26	39.1	100	100	0	0	0	0
11	100	100	41	49.2	37.6	47.2	100	100	0	0	0	0
12	100	100	53.9	56.3	45.8	50.2	96.3	96.3	0	0	0	0
13	100	100	62.8	53.8	62.4	43.8	98.6	98.6	0	0	0	0
14	100	100	84.6	56.3	82.6	56.5	100	100	0	0	0	0
15	99	99	69.4	46.1	67.8	46.5	99	99	0	0	0	0
16	100	100	48.4	42.4	48.4	42.5	100	100	0	0	0	0
17	99.9	99.9	46	36.9	46.2	20.8	99.9	64.5	0	0	0	0
18	47.9	47.9	17.4	21.5	5.3	17.8	47.9	0	0	0	0	0
19	100	100	35.1	33.8	34.7	32.2	100	0	0	0	0	0
20	100	100	94.7	95	94.8	88.1	100	0	0	0	0	0
21	100	100	72.6	72.6	72.6	33.2	100	0	0	0	0	0
22	100	100	43.3	42.2	43.3	42.4	100	0	0	0	0	0
23	100	100	36.3	37	36.5	37.2	100	0	0	0	0	0
24	100	100	46.7	49.9	45.3	50.2	100	0	0	0	0	0
25	100	100	45.6	41.9	39.8	41.9	100	0	0	0	0	0
26	100	100	7	1.7	5.5	1.8	100	0	0	0	0	0
27	100	100	88.9	39	87.6	26	100	0	0	0	0	0
28	100	100	94.6	58	70.8	58.3	100	0	0	0	0	0
29	99.8	99.8	53.3	34	39.4	34.3	99.8	0	0	0	0	0
30	99.6	99.6	53.8	38	53.8	38.3	99.6	0	0	0	0	0
31	100	100	85.4	58.1	58.1	42.4	100	0	0	0	0	0
Avg	98.3	98.3	52.3	46.5	48.1	42.6	97.9	53.5	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	9.2	9.2	22.1	17	20.9	16.5	9.2	48.9	0	0	0	0
Min	47.9	47.9	7	1.7	5.3	1.8	47.9	0	0	0	0	0
Max	100	100	94.7	95	94.8	88.1	100	100	0	0	0	0

ED_004549_00015841-00243

Table F10. Airflow and emission data completeness (%) at site WA5B for January, 2009.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	100	100	88.1	80	82.2	80.1	100	0	0	0	0	0
2	100	100	30.8	0.1	26.5	0.1	100	0	0	0	0	0
3	100	100	22.6	16.9	22.7	15.4	100	0	0	0	0	0
4	100	100	51.2	51.2	51.2	51.2	100	0	0	0	0	0
5	100	100	30.5	14.8	30.5	14.9	100	0	0	0	0	0
6	100	100	77.2	80.1	77.3	63	100	0	0	0	0	0
7	91.8	91.8	74	56.3	67.2	56.3	92.2	0	0	0	0	0
8	90.1	90.1	60.9	27.4	39.4	27.6	90.1	39.6	0	0	0	0
9	100	100	55.1	34.4	48.1	18.5	100	100	0	0	0	0
10	100	100	32.3	27.8	24.1	15.9	100	100	0	0	0	0
11	100	100	28	26.1	18.9	16.8	100	100	0	0	0	0
12	100	100	32.8	33.5	30.6	33.6	100	100	0	0	0	0
13	100	100	30.3	33.1	19.7	27.8	100	100	0	0	0	0
14	52.4	52.4	3.3	1.3	0.2	1	52.4	52.4	0	0	0	0
15	100	100	14	16.6	12.3	15.8	100	100	0	0	0	0
16	100	100	35.3	36.2	35.2	36.2	100	100	0	0	0	0
17	100	100	29.9	19.2	29.9	16.7	100	100	0	0	0	0
18	100	100	59.8	44.3	59.8	36.2	100	100	0	0	0	0
19	100	100	42.4	20.7	42.4	21	100	100	0	0	0	0
20	55	55	20.1	20.1	20.1	20.1	54.1	54.1	0	0	0	0
21	37.3	37.3	14.1	14.1	14.1	14.1	34	33.8	0	0	0	0
22	100	100	38.4	41.3	38.5	41.3	100	100	0	0	0	0
23	100	100	40.9	40.8	40.5	39.8	100	100	0	0	0	0
24	100	100	0	0	0	0	100	100	0	0	0	0
25	100	100	0	0	0	0	100	100	0	0	0	0
26	100	100	0	0	0	0	100	100	0	0	0	0
27	100	100	0	0	0	0	100	33.1	0	0	0	0
28	46.9	46.9	0	0	0	0	35.4	37.6	0	0	0	0
29	100	100	12	16.3	12	16.3	98.7	97.2	0	0	0	0
30	100	100	52.8	52.8	52.8	52.8	100	53.5	0	0	0	0
31	100	100	71.4	71.4	71.4	71.4	100	0	0	0	0	0
Avg	92.7	92.7	33.8	28.3	31.2	25.9	92.2	61.3	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	17.6	17.6	24.6	23	23.7	22	19	42.7	0	0	0	0
Min	37.3	37.3	0	0	0	0	34	0	0	0	0	0
Max	100	100	88.1	80.1	82.2	80.1	100	100	0	0	0	0

ED_004549_00015841-00244

Table F10. Airflow and emission data completeness (%) at site WA5B for February, 2009.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	100	100	43.3	41.6	43.2	40.8	100	0	0	0	0	0
2	100	100	19.8	19	15.3	19	100	0	0	0	0	0
3	100	100	19.4	19.4	16.7	19.4	100	0	0	0	0	0
4	100	100	34.5	34.5	34.5	34.5	100	0	0	0	0	0
5	100	100	8.7	12.2	8.8	8.6	82.6	32.1	0	0	0	0
6	100	100	0	0	0	0	100	100	0	0	0	0
7	81.3	81.5	0	0	0	0	99.2	99.2	0	0	0	0
8	43.6	43.6	0	0	0	0	43.6	2.5	0	0	0	0
9	100	100	0	0	0	0	100	0	0	0	0	0
10	100	100	67.8	67.8	67.8	67.8	100	0	0	0	0	0
11	100	100	57.2	57.2	57.2	57.2	89.2	21.5	0	0	0	0
12	99.9	99.9	56.6	56.7	56.6	56.7	36.8	36.8	58.8	58.8	0	0
13	100	100	94.6	97	94.8	97	0	0	100	100	0	0
14	100	100	54	52.6	54	52.6	0	0	100	100	0	0
15	100	100	45.1	45.1	45.1	45.1	0	0	100	100	0	0
16	100	100	91.3	91.3	91.3	91.3	0	0	100	100	0	0
17	100	100	55.7	55.7	55.7	55.7	0	0	100	100	0	0
18	99.6	99.6	51	51.4	51	51.4	0	0	99.7	99.7	0	0
19	99.8	99.8	75.3	75.3	72.6	75.3	0	0	99.9	99.9	0	0
20	100	100	64.1	67.8	64.2	67.8	0	0	100	100	0	0
21	100	100	60.9	67.5	58.8	66.5	0	0	100	100	0	0
22	100	100	42.8	42.8	40.4	42.8	0	0	100	100	0	0
23	100	100	65.3	65.3	65.3	64.3	0	0	100	100	0	0
24	99.4	99.4	99.6	99.6	99.6	99.6	0	0	100	100	0	0
25	99.9	99.9	99.9	99.9	99.9	99.9	0	0	99.9	99.9	0	0
26	100	100	70.4	70.4	67.3	70.6	0	0	41.7	41.7	61.1	61.1
27	100	100	53.5	55.5	51.5	55.5	0	0	0	0	100	100
28	100	100	67	67	67	67	0	0	0	0	100	100
Avg	97.3	97.3	49.9	50.5	49.2	50.2	37.6	10.4	50	50	9.3	9.3
n	28	28	28	28	28	28	28	28	28	28	28	28
SD	10.9	10.9	29.8	30	30	30.2	45.7	26.5	48.2	48.2	27.6	27.6
Min	43.6	43.6	0	0	0	0	0	0	0	0	0	0
Max	100	100	99.9	99.9	99.9	99.9	100	100	100	100	100	100

ED_004549_00015841-00245

Table F10. Airflow and emission data completeness (%) at site WA5B for March, 2009.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	99.9	99.9	64	64	64	64	0	0	0	0	99.9	99.9
2	100	100	71.3	71.3	71.3	64.2	0	0	0	0	100	100
3	100	100	62.5	60.3	62.5	60.5	0	0	0	0	100	100
4	99.9	99.9	63.3	63.3	63.3	63.3	50	50	0	0	46.5	46.5
5	100	100	86.2	79.4	86.2	79.4	100	100	0	0	0	0
6	100	100	66.3	69.9	66.3	70.1	100	100	0	0	0	0
7	100	100	75.1	78.9	75.3	78.9	100	100	0	0	0	0
8	95.8	95.8	50.9	61.9	51.2	50.8	95.8	95.8	0	0	0	0
9	100	100	65.5	65.5	65.5	65.5	100	100	0	0	0	0
10	100	100	96.7	95.8	91.7	95.8	100	100	0	0	0	0
11	100	100	81.3	81.3	81.3	81.3	100	100	0	0	0	0
12	64.4	64.4	11.5	11	12.9	15.8	64.7	64.7	0	0	0	0
13	75.5	75.5	0.4	1.2	1.3	4.7	75.5	75.5	0	0	0	0
14	100	100	62.4	62.6	62.6	62.6	100	100	0	0	0	0
15	100	100	94.3	94.3	94.3	94.3	100	100	0	0	0	0
16	100	100	97.8	72.2	97.8	65.9	100	100	0	0	0	0
17	100	100	94.4	94.4	94.4	94.4	100	100	0	0	0	0
18	100	100	39.1	39.1	39.1	39.1	99.7	100	0	0	0	0
19	100	100	48.8	48.8	45.2	48.8	100	100	0	0	0	0
20	99.9	99.9	78.5	62.4	78.5	62.8	99.9	99.9	0	0	0	0
21	99.9	99.9	55	58.8	55.3	58.8	99.9	99.9	0	0	0	0
22	100	100	61	61	61	61	100	100	0	0	0	0
23	100	100	85.7	85.7	85.7	78.2	100	100	0	0	0	0
24	100	100	71	71	71	41.4	100	100	0	0	0	0
25	99.8	99.8	87.7	87.7	69.5	87.7	100	99.2	0	0	0	0
26	29.9	29.9	22.4	22	22.4	22	29.9	29.9	0	0	0	0
27	100	100	57.1	58.2	57.4	58.4	100	100	0	0	0	0
28	100	100	50.6	58.4	50.8	54.9	100	100	0	0	0	0
29	100	100	73.5	100	73.8	100	100	100	0	0	0	0
30	100	100	26.9	29.6	60.5	61.8	100	100	0	0	0	0
31	100	100	0	0	33.9	23.3	100	100	0	0	0	0
Avg	95.6	95.6	61.3	61.6	62.8	61.6	84.4	84.4	0	0	11.2	11.2
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	14.2	14.2	26.4	25.9	22.8	23.1	32	32	0	0	30.2	30.2
Min	29.9	29.9	0	0	1.3	4.7	0	0	0	0	0	0
Max	100	100	97.8	100	97.8	100	100	100	0	0	100	100

ED_004549_00015841-00246

Table F10. Airflow and emission data completeness (%) at site WA5B for April, 2009.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	99.9	99.9	0	0	56.7	70.8	100	100	0	0	0	0
2	100	100	0	0	37.2	51.7	100	100	0	0	0	0
3	99.8	99.8	0	0	48.8	78.2	99.8	99.8	0	0	0	0
4	99.9	99.9	0	0	62.6	57.2	99.9	99.9	0	0	0	0
5	100	100	0	0	45.4	44.5	100	100	0	0	0	0
6	100	100	0	0	30.8	51.6	100	100	0	0	0	0
7	100	100	0	0	46.1	43.9	100	100	0	0	0	0
8	100	100	0	0	68.1	95.2	100	100	0	0	0	0
9	100	100	0	0	82.3	82.3	100	100	0	0	0	0
10	100	100	0	0	50.2	61.9	100	100	0	0	0	0
11	100	100	0	0	68.4	52.4	100	100	0	0	0	0
12	100	100	0	0	88.3	88.3	100	100	0	0	0	0
13	100	100	0	0	82.8	68.5	100	100	0	0	0	0
14	100	100	0	0	77.9	71.4	100	100	0	0	0	0
15	100	100	0	0	91.8	91.8	100	100	0	0	0	0
16	98.3	98.3	0	0	75.6	64	98.3	98.3	0	0	0	0
17	96.9	96.9	10.9	9.2	47.2	38.3	96.7	96.7	0	0	0	0
18	99.9	99.9	69.9	59.4	67.9	59.9	99.9	99.9	0	0	0	0
19	100	100	60.8	60.8	60.8	60.8	100	100	0	0	0	0
20	100	100	57.4	46.5	52.1	46.6	100	100	0	0	0	0
21	100	100	63.3	57.2	63.3	57.2	100	100	0	0	0	0
22	100	100	60.1	80.8	60.2	77.4	100	100	0	0	0	0
23	100	100	90.3	90.3	90.3	90.3	100	100	0	0	0	0
24	100	100	64	71.1	64.1	71.1	100	100	0	0	0	0
25	100	100	89.9	89.9	89.9	89.9	100	100	0	0	0	0
26	100	100	86.5	89.9	71.4	88.1	100	100	0	0	0	0
27	100	100	62.3	84.4	62.8	82	100	100	0	0	0	0
28	100	100	91.7	91.7	91.7	91.7	100	100	0	0	0	0
29	100	100	91.3	91.3	91.3	91.3	100	100	0	0	0	0
30	100	100	66.8	78.5	60.1	68.5	42.4	42.4	0	0	53.7	53.7
Avg	99.8	99.8	32.2	33.4	66.2	69.6	97.9	97.9	0	0	1.8	1.8
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	0.6	0.6	37.2	38.9	17	16.8	10.3	10.3	0	0	9.6	9.6
Min	96.9	96.9	0	0	30.8	38.3	42.4	42.4	0	0	0	0
Max	100	100	91.7	91.7	91.8	95.2	100	100	0	0	53.7	53.7

ED_004549_00015841-00247

Table F10. Airflow and emission data completeness (%) at site WA5B for May, 2009.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	99.9	99.9	42.3	58.5	41.3	58.5	0	0	0	0	99.9	99.9
2	99.9	99.9	57.8	57.8	53.4	57.8	0	0	0	0	99.9	99.9
3	100	100	51.3	48.6	41.2	42.8	0	0	0	0	100	100
4	100	100	68.6	69.4	61.1	69.4	0	0	0	0	100	100
5	100	100	71.9	99.1	72.2	72.3	0	0	0	0	100	100
6	100	100	88.3	88.3	88.3	88.3	0	0	0	0	100	100
7	100	100	50.8	69.6	44.7	56.4	53.5	53.3	0	0	41.3	41.3
8	100	100	82	80.1	79.6	80.2	100	100	0	0	0	0
9	100	100	53.5	60.6	53.7	59.7	100	100	0	0	0	0
10	100	100	47.8	62.2	48.1	62.2	100	100	0	0	0	0
11	100	100	55	40.7	55.3	40.9	100	100	0	0	0	0
12	98.4	98.4	48.5	28.8	28.8	29.7	95.6	95.6	0	0	0	0
13	100	100	77.5	77.5	77.5	63.7	100	100	0	0	0	0
14	100	100	71.6	98.9	65.5	65.3	100	100	0	0	0	0
15	99.9	99.9	77.2	64.1	77.2	44.9	99.7	99.7	0	0	0	0
16	99.9	99.9	68.6	68.6	66.8	68.6	99.9	99.9	0	0	0	0
17	100	100	58.3	61.1	58.3	56.5	99.9	98.8	0	0	0	0
18	100	100	74	74	71.7	74	100	100	0	0	0	0
19	100	100	99.5	60	48.1	60.1	99.4	98.5	0	0	0	0
20	100	100	71.4	70	64.7	55.1	99.4	99.4	0	0	0	0
21	100	100	64.9	48	52.4	48.8	100	100	0	0	0	0
22	100	100	45.2	46.5	45.2	45.4	100	100	0	0	0	0
23	100	100	69.7	71.2	69.8	70.4	100	100	0	0	0	0
24	100	100	92.1	92.1	92.1	92.1	100	100	0	0	0	0
25	100	100	89.5	90.3	89.5	90.3	97.9	97.9	0	0	0	0
26	98.5	98.5	77.3	77.9	67.4	77.9	98.5	98.5	0	0	0	0
27	100	100	78.5	78.5	78.5	78.5	100	99.8	0	0	0	0
28	100	100	64.7	81.9	65	81.9	100	100	0	0	0	0
29	100	100	71.6	71.6	71.6	68.1	100	100	0	0	0	0
30	100	100	83.5	83.5	83.5	82.2	100	100	0	0	0	0
31	100	100	67.2	67.7	67.4	53.5	100	100	0	0	0	0
Avg	99.9	99.9	68.4	69.3	63.9	64.4	78.8	78.8	0	0	20.7	20.7
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	0.4	0.4	14.5	16.3	15.5	15.2	39.5	39.4	0	0	39.5	39.5
Min	98.4	98.4	42.3	28.8	28.8	29.7	0	0	0	0	0	0
Max	100	100	99.5	99.1	92.1	92.1	100	100	0	0	100	100

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Table F10. Airflow and emission data completeness (%) at site WA5B for June, 2009.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	100	100	71.3	91.2	71.5	91.2	100	100	0	0	0	0
2	100	100	83	88.3	81.7	88.3	100	100	0	0	0	0
3	100	100	90.2	90.2	90.2	90.2	100	100	0	0	0	0
4	100	100	44.7	64.6	44.7	41.7	100	100	0	0	0	0
5	99.8	99.8	0	57.2	0	57.2	99.8	99.8	0	0	0	0
6	99.9	99.9	0	67.4	0	40.6	99.9	99.9	0	0	0	0
7	100	100	0	70	0	68.8	100	100	0	0	0	0
8	100	100	0	47.8	0	42.1	100	100	0	0	0	0
9	100	100	0	56.2	0	53.1	100	100	0	0	0	0
10	51.3	51.3	0	24.1	0	0.8	51.3	51.3	0	0	0	0
11	100	100	80.6	36.3	58.1	36.8	100	100	0	0	0	0
12	100	100	68.1	22.2	27.4	22.4	100	100	0	0	0	0
13	74	74	30.6	0	30.6	0	74	74	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	46.7	46.7	29.4	32	29.7	23.3	46.7	46.7	0	0	0	0
18	100	100	74.3	81.1	74.8	81.3	100	100	0	0	0	0
19	99.7	99.7	81.7	81	61.7	81	99.9	99.9	0	0	0	0
20	100	100	76.4	92.2	76.5	92.4	100	100	0	0	0	0
21	100	100	85.6	87.1	85.8	79.6	100	100	0	0	0	0
22	60.5	60.5	39.9	39.2	39.9	39.2	60.5	60.5	0	0	0	0
23	100	100	73.4	74.1	73.5	74.2	100	100	0	0	0	0
24	100	100	74.1	47.7	37.3	47.7	100	100	0	0	0	0
25	100	100	80.8	76.7	72.4	76.9	100	100	0	0	0	0
26	100	100	87.6	87.6	87.6	87.6	100	100	0	0	0	0
27	100	100	82.9	77.4	76	77.6	100	100	0	0	0	0
28	100	100	78.9	78.9	78.9	78.9	100	100	0	0	0	0
29	100	100	84.8	84.9	84.9	84.9	100	100	0	0	0	0
30	100	100	84.3	84.3	84.3	84.3	100	100	0	0	0	0
Avg	84.4	84.4	50.1	58	45.6	54.7	84.4	84.4	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	31.7	31.7	36.2	30.4	34.5	31.8	31.7	31.7	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	90.2	92.2	90.2	92.4	100	100	0	0	0	0

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Table F10. Airflow and emission data completeness (%) at site WA5B for July, 2009.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	100	100	79.4	79.4	79.4	79.4	100	96.6	0	0	0	0
2	100	100	40.2	39.3	40.2	39.3	100	97.6	0	0	0	0
3	99.9	99.9	58.1	56.3	58.1	56.3	99.9	97.8	0	0	0	0
4	100	100	59.9	63.7	60.1	61.2	100	97.7	0	0	0	0
5	100	100	44.8	47.8	35.8	34.4	96.9	96.9	0	0	0	0
6	100	100	78.8	79.5	79.2	79.8	95.3	94.2	0	0	0	0
7	100	100	72.4	72.4	72.4	72.4	100	100	0	0	0	0
8	53.5	53.5	29.6	34.2	29.6	34.2	48.4	48.4	3.6	3.6	0	0
9	100	100	50.5	50.5	90	90.7	100	100	100	100	0	0
10	100	100	0	0	66.6	66.3	100	100	100	99.9	0	0
11	100	100	0	0	95.6	95.6	100	100	100	99.7	0	0
12	100	100	0	0	56.3	90.4	100	100	100	98.8	0	0
13	100	100	0	0	71.1	85.4	100	100	100	100	0	0
14	100	100	0	0	59.9	69.3	100	100	100	100	0	0
15	100	100	0	0	23.5	21.9	100	100	100	100	0	0
16	68.2	68.2	0	0	20.3	9.6	68.2	68.2	68.2	68	0	0
17	100	100	0	0	52.1	54.8	100	100	100	98.1	0	0
18	100	100	0	0	64.8	82.6	100	100	100	99.7	0	0
19	100	100	0	0	76.3	73.4	100	100	100	100	0	0
20	100	100	0	0	72.4	75.1	100	100	100	99.7	0	0
21	100	100	0	0	50.8	51.7	100	100	100	100	0	0
22	100	100	0	0	86.3	86.3	94.2	94.2	46.6	46.6	46.3	46.3
23	100	100	0	0	93.3	95.8	100	99.7	0	0	100	99.7
24	100	100	0	0	67.1	67.8	100	90.8	0	0	100	90.8
25	100	100	0	0	5.6	4.2	100	99.7	0	0	100	99.7
26	100	100	0	0	0	0	100	100	0	0	100	100
27	100	100	0	0	0	0	100	100	0	0	100	100
28	100	100	0	0	0	0	100	98.3	0	0	100	98.3
29	41.3	41.3	0	0	0	0	41.3	41.3	0	0	41.3	41.3
30	100	100	0	0	46.3	42.9	91.9	91.9	0	0	77.8	79.3
31	100	100	0	0	60.2	66.9	100	100	0	0	100	100
Avg	95.6	95.6	16.6	16.9	52	54.4	94.7	94	42.5	42.4	27.9	27.6
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	13.9	13.9	27.4	27.7	29	31.4	14.4	14.2	47.8	47.6	42.4	41.9
Min	41.3	41.3	0	0	0	0	41.3	41.3	0	0	0	0
Max	100	100	79.4	79.5	95.6	95.8	100	100	100	100	100	100

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Table F10. Airflow and emission data completeness (%) at site WA5B for August, 2009.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	100	100	0	0	47.8	47.8	100	100	0	0	100	100
2	100	100	0	0	65.7	45.7	100	100	0	0	100	99.7
3	100	100	0	0	61.3	80.4	100	100	0	0	89.3	89
4	100	100	0	0	79.1	79.1	100	100	0	0	100	100
5	49.3	49.3	0	0	23.8	23.6	49.3	49.3	0	0	40.7	40.7
6	100	100	66	53.5	66.2	70.1	100	100	0	0	0	0
7	99.9	99.9	37.4	78.8	19.4	40.2	99.9	99.9	0	0	0	0
8	100	100	86.4	86.4	54.9	86.4	100	100	0	0	0	0
9	100	100	76.8	77.7	76.9	76.6	100	100	0	0	0	0
10	100	100	81.2	81.2	81.2	81.2	100	100	0	0	0	0
11	100	100	59.7	65.5	57.3	65.7	100	100	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	59.5	59.5	36.7	36.7	36.9	36.9	59.5	59.5	0	0	0	0
14	100	100	83.5	84.2	75.5	84.4	100	100	0	0	0	0
15	100	100	70	70.5	70	70.4	100	100	0	0	0	0
16	100	100	73.3	69.5	52.2	69.7	100	100	0	0	0	0
17	100	100	63.3	65.5	53.2	65.7	100	100	0	0	0	0
18	100	100	48.5	60	48.7	60.1	100	100	0	0	0	0
19	100	100	41	46.6	34.3	46.6	100	100	0	0	0	0
20	100	100	54.9	56.3	54.8	50.2	100	100	0	0	0	0
21	100	100	49.3	80.8	49.9	74.4	100	98.3	0	0	0	0
22	100	100	84.2	83.1	84.2	82.3	92.4	93.5	0	0	0	0
23	100	100	95.2	95.2	73.8	95.2	0	0	0	0	0	0
24	100	100	66.7	66	55.1	53.6	0	0	0	0	0	0
25	100	100	55.1	51.8	49.8	49.6	0	0	0	0	0	0
26	100	100	56.7	51.7	56.7	51.9	0	0	0	0	0	0
27	100	100	46.6	50.1	46.5	50.1	0	0	0	0	0	0
28	100	100	22.8	27	23.5	27.2	0	0	0	0	0	0
29	34.2	34.2	10.6	18.2	10.8	5.8	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0
Avg	85.3	85.3	44.1	47	48.7	53.9	64.6	64.5	0	0	13.9	13.9
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	32	32	31.5	32.3	24	26.6	45.9	45.9	0	0	33	32.9
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	95.2	95.2	84.2	95.2	100	100	0	0	100	100

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Table F10. Airflow and emission data completeness (%) at site WA5B for September, 2009.

Day	Airflow		Ammonia		Hydrogen sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4	B2	B4
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	99.9	99.9	55.7	50.6	55.8	50.9	99.9	0	0	0	0	0
5	100	100	58.5	60.8	58.8	60.8	100	0	0	0	0	0
6	100	100	67.1	73.8	67.6	74.1	100	0	0	0	0	0
7	100	100	90.3	89.1	90.4	89.4	100	0	0	0	0	0
8	100	100	60.9	59	60.9	59.1	100	0	0	0	0	0
9	100	100	49.8	63.4	50.4	60	100	0	0	0	0	0
10	100	100	45.5	43.2	37.7	43.2	100	0	0	0	0	0
11	100	100	31	15.2	21.7	15.6	100	0	0	0	0	0
12	100	100	30.4	28.5	29.6	25	100	0	0	0	0	0
13	100	100	39.9	32.9	39.9	31.3	100	0	0	0	0	0
14	100	100	0	0	0	0	100	0	0	0	0	0
15	100	100	0	0	0	0	100	0	0	0	0	0
16	100	100	0.4	12.3	0.7	12.6	100	47.8	0	0	0	0
17	100	100	80.5	75.8	74.1	76	100	100	0	0	0	0
18	100	100	38.6	33.4	32.6	33.5	100	100	0	0	0	0
19	100	100	23.9	40.1	18.9	23.1	100	100	0	0	0	0
20	100	100	82.8	79.9	54.8	78.3	100	100	0	0	0	0
21	100	100	33.5	35.6	33.5	32.8	100	100	0	0	0	0
22	100	100	14.6	15.3	14.6	15.3	100	100	0	0	0	0
23	100	100	21.6	14.3	21.6	14.3	100	100	0	0	0	0
24	71.5	71.5	6.4	6	4.4	6.4	71.5	71.5	0	0	0	0
25	100	100	37.1	46.7	37.6	46.8	100	100	0	0	0	0
26	100	100	51.3	44.7	51.3	44.7	100	100	0	0	0	0
27	100	100	51	56.9	51.2	41.6	100	100	0	0	0	0
28	100	100	51.6	39.2	51.7	39.4	75.9	100	0	0	0	0
29	100	100	54.6	56	55.1	39	45.9	100	0	0	0	0
30	84.5	57.5	43.2	56.1	43.4	56.3	100	100	0	0	0	0
Avg	88.5	87.6	37.3	37.6	35.3	35.6	86.4	47.3	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	30.1	30.6	26.1	26.2	24.9	25.7	31	48.4	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	90.3	89.1	90.4	89.4	100	100	0	0	0	0

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EMISSIONS DATA FROM TWO FREESTALL DAIRY BARNS IN WISCONSIN

Final Report for Site WI5B

of the

National Air Emissions Monitoring Study

Submitted to

John Thorne, Executive Director
Agricultural Air Research Council
C/O Crowell and Moring, LLP
1001 Pennsylvania Avenue, NW
Washington, DC 20004

and

Bill Schrock, Environmental Engineer
U.S. EPA Office of Air Quality Planning and Standards
Mail Code E143-03, 4930 Page Road
Durham, NC 27703

by

Albert J. Heber, Professor and NAEMS Science Advisor
Agricultural and Biological Engineering, Purdue University
225 S. University St., West Lafayette, IN 47907
Phone: 765-494-1214 Email: heber@purdue.edu.

July 22, 2010

Contributors

Larry D. Jacobson, Brian P. Hetchler, Verlyn J. Johnson
Bioproducts and Biosystems Engineering
University of Minnesota
1390 Eckles Ave.
St. Paul, MN 55108

Erin L. Cortus
Agricultural and Biosystems Engineering
South Dakota State University
Box 2120
Brookings, SD 57007

Juan Carlos Ramirez, Jiqin Ni, Claude Diehl, Changhe Xiao, Bill W. Bogan, Lilong Chai, Ilker Kilic
Agricultural and Biological Engineering
Purdue University
225 S. University St.
West Lafayette, IN 47907

Teng T. Lim
Agricultural Systems Management
University of Missouri
220 Agricultural Engineering Building
Columbia, MO 65211

Acknowledgments

This project was supported by the National Milk Producers Federation and the Agricultural Air Research Council.

Citation

Cortus, E.L., L. D. Jacobson, B.P. Hetchler, and A.J. Heber. 2010. National Air Emissions Monitoring Study: Emissions Data from Two Freestall Dairy Barns in Wisconsin - Site WI5B. Final Report. Purdue University, West Lafayette, IN, July 2.

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1. INTRODUCTION AND OBJECTIVES

1.1. Overview of the NAEMS

The primary goals of the National Air Emissions Monitoring Study (NAEMS) were to: 1) quantify aerial pollutant emissions from dairy, pork, egg, and broiler production facilities, 2) provide reliable data for developing and validating emissions models for livestock and poultry production and for comparison with government regulatory thresholds, and 3) promote a national consensus on methods and procedures for measuring emissions from livestock operations. Emissions measurements were conducted at a total of 15 different barn monitoring sites and ten open source sites in the continental US.

The NAEMS was managed by Purdue University (Purdue), in its role as Independent Monitoring Contractor for the Agricultural Air Research Council. Purdue selected equipment and methods in consultation with the U.S. EPA, and subcontracted with other universities to operate the monitoring sites. The University of Minnesota (UM) installed, maintained and calibrated equipment, collected samples, and conducted all other on-site activities. Purdue provided rapid feedback (generally within 2-4 business days) to catch aberrations in the data, and later conducted final processing of the data. Both UM and Purdue participated in reviews of the analyzed data.

The overall objective of this report is to present the quality-assured measurements of ammonia (NH3), hydrogen sulfide (H2S), particulate matter (PM) and volatile organic compounds (VOC) from two freestall barns at the Wisconsin dairy farm. The specific objectives of the report are to:

1. Describe the farm, and the monitored buildings,
2. Describe the monitoring methods and quality assurance, and
3. Present tabulated daily averages of emissions.

2. CONFINED ANIMAL FEEDING OPERATION

2.1. Farm

This 1,700-cow Holstein dairy site (WI5B) was located in Wisconsin. There were six barns in this complex constructed in the 1990's (Figure 1). The farm was located on a gently rolling landscape, above a level river valley. There was a wooded area to the south and surrounding fields of cultivated row-crops and alfalfa. Other livestock operations within 1.6 km of the farm included an open heifer lot approximately 0.4 km to the northeast, and a small (50-head) hog farm 1.6 km west of the farm.

The freestall barns denoted barns 1 and 2, located on the north side of the farm, were monitored in this study. Barns 1 and 2 were oriented east-west, and were spaced 30 m apart. The barns were connected by a covered breezeway equipped with plastic curtains on each side. The milking center for barns 1 and 2 was connected to the south side of barn 1.

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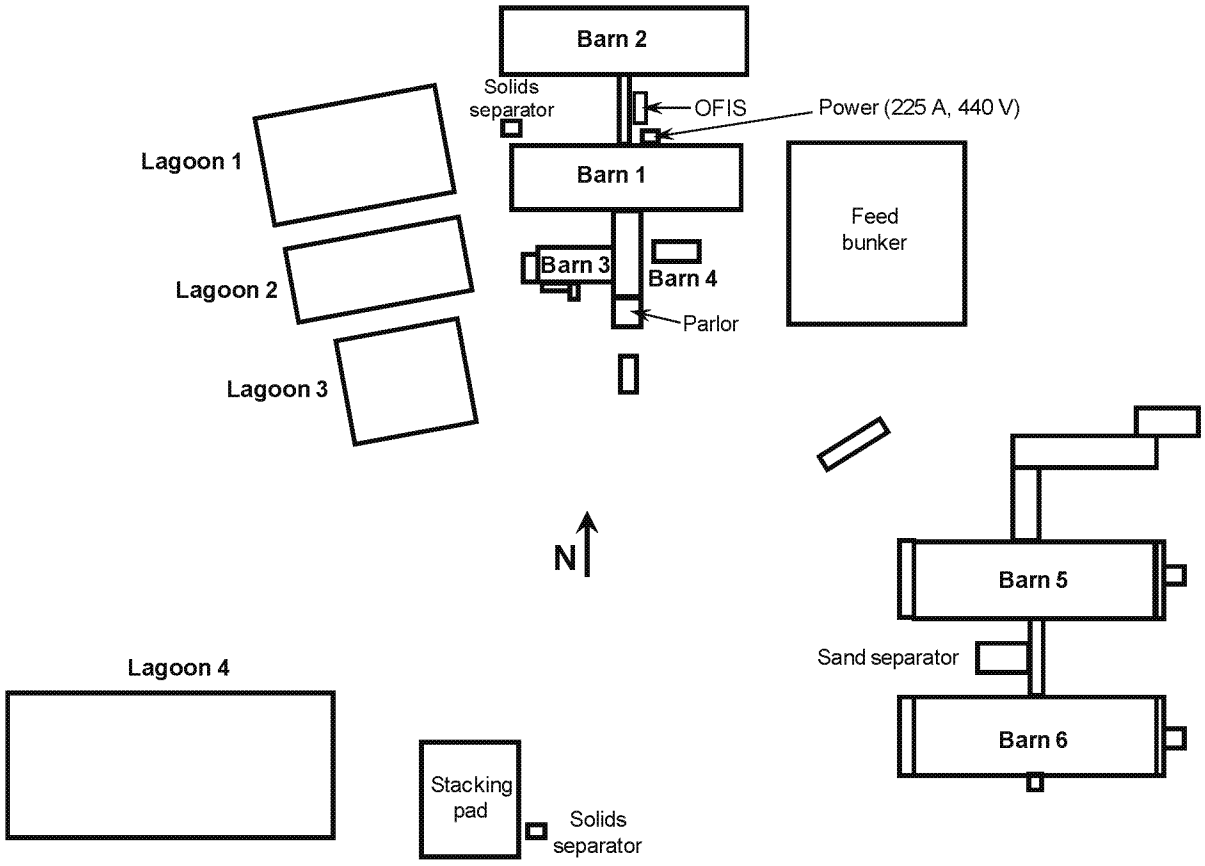

Figure 1. Facility layout. Monitored buildings were barns 1 and 2.

2.2. Monitored Buildings

Emission monitoring was conducted at barns 1 and 2. Barn 1 (B1), the more southern of the two barns, had four rows of freestalls, and was 93 m long x 28 m wide, with 4-m high sidewalls at the center cross alley. Barn 2 (B2) was located north of barn 1 and had five rows of freestalls. Barn 2 was 107 m long by 30 m wide, with 4-m sidewalls at the center cross alley. Both barn roofs had a 4:12 slope. The capacities of B1 and B2 were 275 and 375 cows, respectively. Lactating cows were milked three times per day in a double-10 parallel Bowmatic parlor, with automatic cow identification and milk weight measurement.

The feed was delivered by total mixed ration (TMR) truck, and consisted of a mixture of corn silage, finely-ground shelled corn, ground hay (haylage), cottonseed, corn gluten, molasses, protein and mineral mixes, and cows had free access to salt and sodium carbonate. The milking cows received continuous supplemental (artificial) lighting, in addition to sunlight.

The freestall barns were mechanically-cross-ventilated. There were fifty-nine 127-cm diameter fans (Model VF503GG, J&D Manufacturing, Eau Claire, WI) on the north wall of barn 1, and sixty-six such fans on the south wall of barn 2. The fans were controlled by a Phason Supra Controller, which collected information from four temperature sensors in each barn to determine fan operation (Table 1). The spacing between the wall fans was essentially zero, with only a strip of foam separating them. The walls opposite the fans (south wall of B1 and north wall of B2) had

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retractable curtains for admitting ventilation air, and were equipped with two rows of misters to cool the incoming air during summer. There was also a row of misters over one of the feed alley partitions in each barn to assist in the cooling of the barn, resulting in a 3-stage cooling system. The curtains, when maximally open, created an approximately 2-m high opening at the barn ends, and a 2.6-m high opening in the center of the barn's sidewall. The minimum opening width was 3 cm, and the top 60 cm of curtain was controlled by temperature. Each barn was also equipped with at least ten internal 91-cm diameter circulation fans. There were no sources of supplemental heat for cold weather. Each end wall of each barn had a single door. The east doors were used for the feed delivery truck and were closed year-round, except during feed delivery. The west doors remained closed and sealed throughout the study.

Table 1. Fan numbers and ventilation staging for barns 1 and 2.

Stg	Fans	
	Prior to 11/1/07	**After 11/1/07**
Barn 1		
0	**8, 20, 37, 53**	**8, 20, 37, 53**
1	**4**, 8, **12, 16,** 20, **24, 25, 29, 33,** 37, **41, 45, 49,** 53, **57**	8, **16**, 20, **29**, 37, **41**, **49**, 53
2	**3**, 4, 7, 8, **11**, 12, **15**, 16, **19**, 20, **23**, 24, 25, **26**, 29, **30**, 33, **34**, 37, **38**, 41, **42**, 45, **46**, 49, **50**, 53, **54**, 57, **58**	7, 8, **15**, 16, 20, **23**, 29, **30**, 37, **38**, 41, **46**, 49, **50**, 53, **58**
3	**2**, 3, 4, **6**, 7, 8, **10**, 11, 12, **14**, 15, 16, **18**, 19, 20, **22**, 23, 24, **25**, 26, **27**, 29, 30, **31**, 33, 34, **35**, 37, 38, **39**, 41, 42, **43**, 45, 46, **47**, 49, 50, **51**, 53, 54, **55**, 57, 58	**2**, **4**, **6**, 7, 8, **10**, **14**, 15, 16, **18**, 20, **22**, 23, **27**, 29, 30, **31**, **35**, 37, 38, **39**, 41, **43**, 46, **47**, 49, 50, **51**, 53, **55**, 58
4	**1**, 2, 3, 4, **5**, 6, 7, 8, **9**, 10, 11, 12, **13**, 14, 15, 16, **17**, 18, 19, 20, **21**, 22, 23, 24, 25, 26, 27, **28**, 29, 30, 31, **32**, 33, 34, 35, **36**, 37, 38, 39, **40**, 41, 42, 43, **44**, 45, 46, 47, **48**, 49, 50, 51, **52**, 53, 54, 55, **56**, 57, 58, **59**	**1**, 2, **3**, 4, **5**, 6, 7, 8, **9**, 10, **11**, **12**, **13**, 14, 15, 16, **17**, 18, **19**, 20, **21**, 22, 23, **24**, **25**, **26**, 27, **28**, 29, 30, 31, **32**, **33**, **34**, 35, **36**, 37, 38, 39, **40**, 41, **42**, 43, **44**, **45**, 46, 47, **48**, 49, 50, 51, **52**, 53, **54**, 55, **56**, **57**, 58, **59**
Barn 2		
0	**9**, **24**, **42**, **58**	**9**, **24**, **42**, **58**
1	**5**, 9, **13, 16, 17, 20, 21,** 24, **28, 33, 34, 38,** 42, **46, 50, 54,** 58, **62, 66**	**5**, 9, 24, **38**, 42, **46**, **54**, 58
2	**1**, **4**, 5, **7, 8**, 9, **12**, 13, 16, 17, 20, 21, 24, **25**, 28, **29**, **32**, 33, 34, **35**, 38, **39**, 42, **43**, 46, **47**, 50, **51**, 54, **55**, 58, **59**, 62, **63**, 66	**1**, 5, **8**, 9, **12**, 24, **25**, **32**, **35**, 38, 42, **43**, 46, **47**, 54, **55**, 58, **59**, **63**
3	1, **3**, 4, 5, **7**, 8, 9, **11**, 12, 13, **15**, 16, 17, **19**, 20, 21, **22**, 24, 25, **26**, 28, 29, **30**, **31**, 32, 33, 34, 35, **36**, 38, 39, **40**, 42, 43, **44**, 46, 47, **48**, 50, 51, **52**, 54, 55, **56**, 58, 59, **60**, 62, 63, **64**, 66	1, **3**, 5, **7**, 8, 9, **11**, 12, **15**, **17**, **19**, **22**, 24, 25, **26**, **30**, **31**, 32, 35, **36**, 38, **40**, 42, 43, **44**, 46, 47, **48**, **50**, **52**, 54, 55, **56**, 58, 59, **60**, 63, **64**
4	1, **2**, 3, 4, 5, **6**, 7, 8, 9, **10**, 11, 12, 13, **14**, 15, 16, 17, **18**, 19, 20, 21, 22, **23**, 24, 25, 26, **27**, 28, 29, 30, 31, 32, 33, 34, 35, 36, **37**, 38, 39, 40, **41**, 42, 43, 44, **45**, 46, 47, 48, **49**, 50, 51, 52, **53**, 54, 55, 56, **57**, 58, 59, 60, **61**, 62, 63, 64, **65**, 66	1, **2**, 3, **4**, 5, **6**, 7, 8, 9, **10**, 11, 12, **13**, **14**, 15, **16**, 17, **18**, 19, **20**, **21**, 22, **23**, 24, 25, 26, **27**, **28**, **29**, 30, 31, 32, **33**, **34**, 35, 36, **37**, 38, **39**, 40, **41**, 42, 43, 44, **45**, 46, 47, 48, **49**, 50, **51**, 52, **53**, 54, 55, 56, **57**, 58, 59, 60, **61**, **62**, 63, 64, **65**, **66**

Two manure removal systems were used sequentially in barns 1 and 2. Prior to 9/17/08, manure from the freestall barns was removed by flushing each of the four pens three times per day as each group of cows was being milked. The manure flushed from the parlor, holding pen, and freestall barns flowed to a solids separator (Figure 1), from which the solids were removed and stacked on a pad until they were spread on fields. The liquid effluent from the solids separator was pumped back into the vertical tanks to flush the barns. Once a week, enough water was

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removed from the third stage of the 3-stage lagoon or storage system and added to the flush tanks to make up for water lost in the recycled flush system. Overflow from the third-stage lagoon/storage was channeled to lagoon 4 (Figure 1). The lagoons/storages were pumped out by dragline systems or trucks twice a year to nearby cropland and injected into the soil.

After 9/19/08, the flush system was replaced with a tractor scrape system in an effort by the producer to increase milk production and reduce morbidity, based on previous experience with tractor scrape systems in barns 5 and 6. The change in manure handling systems was related to a lack of reliable sources of wood shavings for bedding and overall cow performance.

2.3. Significant Events and Modifications

Barn 1 and barn 2 were originally constructed as naturally-ventilated barns in 1990 and 1994, respectively. The conversion from natural ventilation to mechanical ventilation occurred in the spring of 2007, just prior to the NAEMS monitoring period. The fan stage assignments of fans in both barns were adjusted between 10/29/07 and 11/15/07. Airflow measurements were not available during this time.

The bedding material used in the freestalls changed along with the manure removal system change (Table 2). Shavings and digested solids were used in conjunction with the flush system. The digested manure solids were meant to replace the shavings as bedding. However, the producer observed higher disease incidences and other problems with the composted manure solids and switched back to wood shavings until the scrape manure system was installed in the fall of 2008. New sand was used from November 2008 to March 2009 because the producers observed that the recycled sand was insufficiently thawing and drying.

Table 2. Type of bedding material used in the freestalls.

Start	End	Bedding material
9/12/07	12/15/07	Wood shavings
12/15/07	5/10/08	Composted solids
5/10/08	10/21/08	Wood shavings
10/28/08	11/17/08	Recycled sand
11/25/08	3/16/09	New sand
3/16/09	10/31/09	Recycled sand

3. MONITORING AND SAMPLING METHODS

3.1. General Approach

Aerial emissions monitoring was conducted in freestall barns 1 and 2. Equipment installation and preliminary testing began on 5/15/07 and was completed on 9/12/07. The site setup and equipment installation followed an approved site monitoring plan, a quality assurance project plan, and instrument or method-specific standard operating procedures.

The monitoring period began on 9/12/07 and concluded on 10/31/09. Target pollutants were NH_3, H_2S, PM (PM_{10}, TSP, and $PM_{2.5}$) and VOC. Appendix A lists the target pollutants, and all

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measured supporting variables and metadata. The monitoring schemes for the two buildings are shown in Figures 2 and 3. Table 3 lists the major instruments used in the test, including the models, manufacturers and serial numbers.

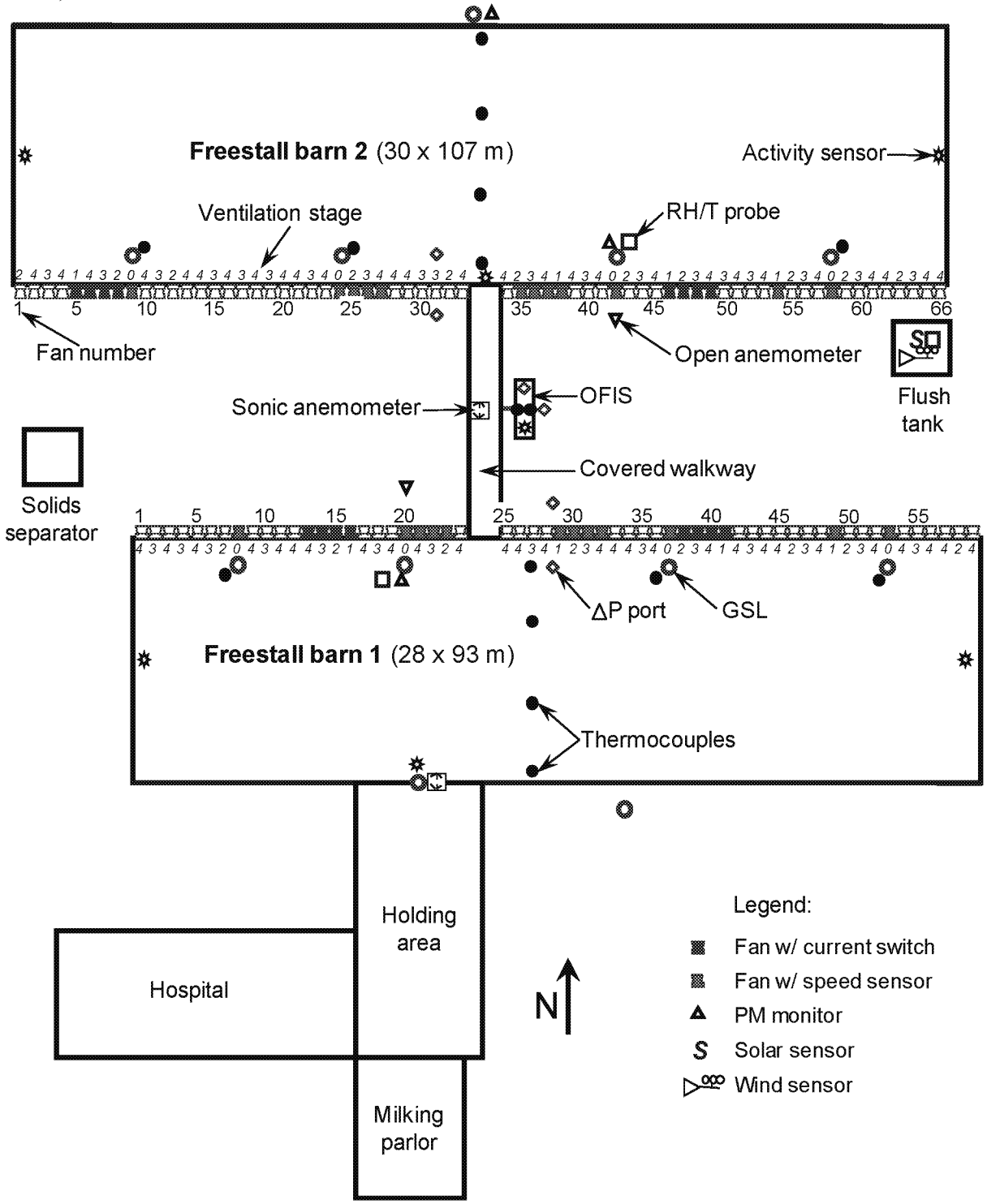

Figure 2. Overhead view of sampling and measurement locations.

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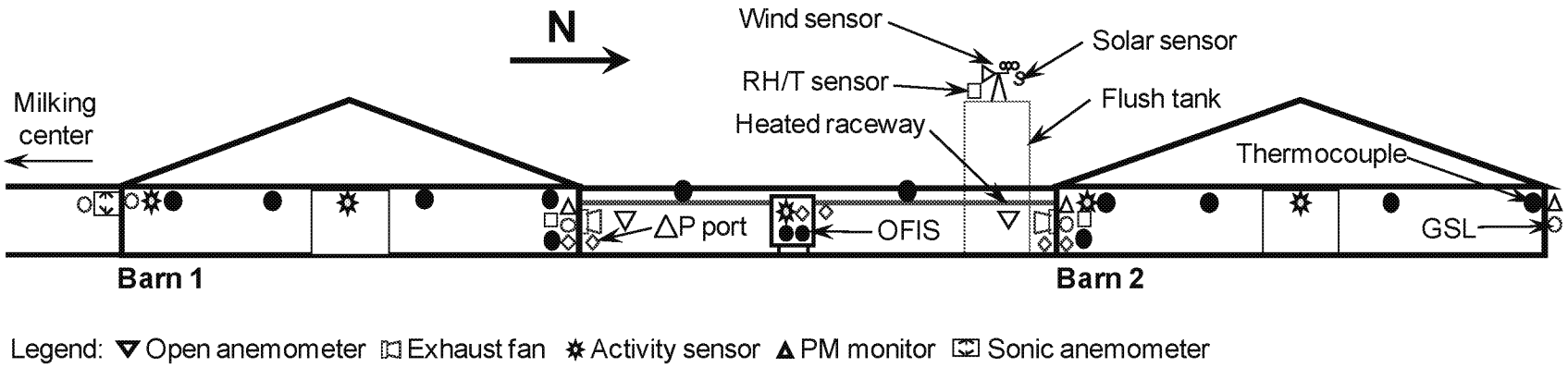

Figure 3. End view of sensor and air sampling locations.

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3.2. Instrument Shelter

The on-farm instrument shelter (OFIS) was located in a grassy area between barns 1 and 2, parallel to and east of the connecting breezeway between the two barns. A heated raceway, approximately 3 m long, connected the OFIS to the breezeway and sample lines to the two barns branched off upon entering the breezeway. Heated raceways were used to avoid condensation in the sampling lines during cold weather. The tubing in the conduit was insulated and heated for additional protection against condensation. The raceway temperature was monitored continuously.

The OFIS was supplied with 3-wire, single-phase, 240 V (50 A) electric power by the farm. The analyzers, computer, GSS, TEOM vacuum pumps, and data acquisition system in the OFIS obtained electrical power from the OFIS. The power line was shielded for outdoor exposure and included a ground wire connected to the OFIS ground.

The HVAC system of the OFIS maintained inside temperatures within the operating range for the analyzers, and created a positive pressure with a filtered outside air intake to minimize entry of unfiltered outside air. The temperature and differential static pressure in the OFIS were monitored with a thermocouple near the instrument rack and a pressure sensor. One set of gas analyzers (Table 3) in the OFIS measured gas concentrations as the gas sampling system (GSS) sequenced through all the gas sampling locations (GSLs). A personal computer collected all site monitoring data using a data acquisition and control program AirDAC.

Table 3. Major instrumentation.

Analyzer/instrument	Serial number
INNOVA 1412 Multi-gas analyzer	710-190
TEI 450i H_2S analyzer	709220683
Environics 4040 dilutor	3915
TEOM 1	26350
TEOM 2	26474
TEI FH 62C14 (Beta Gauge)	E-1274
TEC 17C NH_3 analyzer	17C-67359-358

3.3. Data Acquisition and Control System

The data acquisition and control system consisted of a personal computer, custom software (AirDAC) written in a commercial programming language (LabVIEW, National Instruments, Austin, TX), distributed I/O hardware (National Instruments FieldPoint modules), and Universal Serial Bus (USB) devices by National Instrument (NI) and Measurement Computing (MC, Norton, MA). The NI FieldPoint (FP) modules and MC USB devices (Table 4) were selected and configured to acquire data for all the on-line measurement variables (Appendix A).

The 16-channel NI FP-DO-401 digital output module was used to control: 1) sequential switching of multiple gas sampling lines, 2) the raceway heating system, and 3) gas sampling system cooling fan. Serial communication (RS232) was used to acquire data from the multi-gas

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monitor and calibration variables (calibration time, gas concentration, etc.) from the gas dilutor. Voltage analog signals from various analyzers and sensors were connected to FP-AI-112 modules. Type T thermocouples were connected to FP-TC-120 modules. Digital signals from current switches were connected to the MC USB DIO96H device. Voltage pulses from proximity sensors used to measure fan rotational speed were detected by the MC USB 4303 Counter.

Table 4. Data acquisition hardware configuration for WI5B.

Manufacturer and model	I/O type	# units	# channels/unit	Notes
NI FP-AI-112	Analog input	3	16	Single-ended, 16-bit
NI FP-TC-120	Thermocouple	3	8	
NI FP-DO-401	Digital output	1	16	2 A at 10-30 VDC
MC USB 4303 counter	Count input	3	10	
MC USB DIO 96H	Digital input	1	96	

AirDAC averaged the signals (after conversion to engineering units) over 15-s and 60-s intervals and recorded the means into two separate computer files. All real-time data were displayed in tabular and graphic forms for on-site or remote (pcAnywhere, Symantec, Mountain View, CA) viewing (Ni et al., 2009; Ni and Heber, 2010). Measurement alarms, data collection notifications, data files, graphs and statistics of the daily data sets, and modified configuration and fieldnote files were automatically emailed to several recipients after midnight.

3.4. Monitoring and Recording Farm and Building Operations

3.4.1. Animal Husbandry and Building Systems

Infrared motion sensors (activity sensors) were situated to monitor movement of cows and vehicles in the barn, with three such sensors in each freestall barn. Sensors were located at each of the two truck entrances, in the breezeway that connects the two barns, and in the area between the milking parlor holding area and barn 1.

Animal inventory for B1 and B2 were obtained weekly from the producer starting 10/21/08. The producer also provided weekly totals for mortalities and number of head sold, weekly averages for milk production and feed consumption, and information about changes to site operational procedures like bedding.

3.4.2. Thermal Environment

Weather data was collected using a solar radiation shielded capacitance-type relative humidity and temperature probe (RH/T) (Model RHT-WM, Novus Automation, Porto Alegre, Brazil), a pyranometer (Model LI-200SL, LI-COR, Lincoln, NE) and a cup anemometer (Wind Sentry, RM Young, Traverse City, MI), which were attached to a tower mounted on top of the flush water tank on the SE corner of barn 2.

Capacitance-type RH/T probes were located at the primary representative exhaust fan (PREF) in each freestall barn (fan 20 in barn 1 and fan 42 in barn 2) (Figure 2). Type T thermocouples (TCs) were used to monitor temperature at each gas sampling location (GSL) other than the two PREFs. Four TCs were also positioned at equal distances along the center axis of each barn (Figure 2).

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3.4.3. Building Airflow

Fan stage operation was monitored using 24-VDC circuits, sensing power from each ventilation stage, in conjunction with digital inputs (current and fan speed sensors) of the data acquisition system. Current sensors were also used to monitor operations of two fans per barn from each higher ventilation stage (stages 1-4) (Table 1).

Fan rotational speed and operational status was monitored using a magnetic Hall-effect sensor (speed sensor) installed on each continuously-operated fan (stage 0), and two fans per stage for stages 1 through 4, and on different fans than those monitored by current switches. The speed sensors were mounted to detect the rotational speed in revolutions per minute (rpm) of the fan pulley. The digital signal from the speed sensor was converted into a frequency measurement with a counter module in the data acquisition system.

Static pressure was measured across the north wall of B1 and the south wall of B2 with differential static pressure sensors (Model 260, Setra Systems, Boxborough, MA). The outside ports were located against the outside wall near the ventilation fans. Static pressure in the OFIS was measured with the same type of sensor.

Impeller anemometers (Model 27106RS, RM Young, Traverse City, MI) were installed on the outlet of fan 20 in B1 and fan 42 in B2 (barn PREFs).

In-situ airflow measurements were conducted with a 122-cm field-portable fan tester (Fan Assessment Numeration System or FANS, University of Kentucky, Lexington, KY), which was described by Gates et al. (2004). The field data was used to develop equations that would calculate airflow as a function of differential pressure and fan rotational speed, and to assess the uncertainty in airflow predictions. Because of inside clearances, the airflow measurements were conducted on the downstream side of the ventilation fans. The impact of using the FANs unit on the downstream side of a fan was assessed at the University of Illinois-Urbana Champaign. The offset ranged from 0.31 to 0.51 $m^3 s^{-1}$, and the in-field airflow measurements were corrected for this offset.

A total of 58 in-situ fan tests were conducted during July 2007, October 2008, and July 2009. For the October 2008 and July 2009 testing periods, 20% of the fans in each barn were assessed, and the represented stages are shown in Table 5. The downstream airflow through each fan at three static pressures was measured during each test in duplicate. The average of the duplicate tests was used in development of the airflow models.

Table 5. Record of fan tests completed.

Fan stage	Number of fans assessed during testing period					
	July, 2007		October, 2008		July, 2009	
	B1	B2	B1	B2	B1	B2
0 (continuous)	2	2	3	4	4	4
1			5	6	5	5
2			2	2	1	2
3			1	1	1	2
4			1	2	1	2
Total	2	2	12	15	12	15

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The airflow curve of a similar fan model (Model VFS503CSCA, J&D Manufacturing, Eau Claire, WI) to the farm fan model (Model VF503GG, J&D Manufacturing, Eau Claire, WI) was obtained from the Bioenvironmental and Structural Systems (BESS) Lab at the University of Illinois at Urbana-Champaign (BESS, 2007). The performance record consisted of airflow (Q1) measured at several static pressures (P1), and at a relatively constant speeds (N1 = 573).

The BESS fan curve was adjusted to 558 rpm, the mean speed (N2) of the fan tests. The new, speed-indexed baseline curves were derived using the first ($Q_2 = Q_1(N_2/N_1)$) and second ($\Delta P_2 = \Delta P_1(N_2/N_1)^{0.5}$) fan laws, where Q_2 is the speed-adjusted BESS fan curve at speed N_2. The speed-corrected airflow prediction model is $Q_4 = (a\Delta P_4 + b)\cdot(N_4/N_2)\cdot Q_2$, where ΔP_4 and N_4 are measured fan static pressure and speed. For a given test using the portable tester, the model is $Q_4 = (a\cdot\Delta P_3 + b)\cdot(N_3/N_2)\cdot Q_2$, where ΔP_3 and N_3 are the measured fan static pressure and speed during the fan test, and the fan degradation factor $k = a\cdot\Delta P_3 + b$. The values for the coefficients a and b were those which minimized the sum of square differences between Q_4 and Q_3 for all the valid fan tests within a speed regime. The resulting fan models are shown in Table 6.

Table 6. Fan airflow model.

Reference speed (N_2)	Polynomial coefficients of $Q_2=f(\Delta P_2)$ at speed N_2				Coefficients of k	
	a3	a2	a1	a0	b1	b0
558	4.40E-06	1.21E-04	5.49E-02	1.12E+01	8.21E-04	7.77e-01

The fans were assigned to emission streams based on their proximity to the gas sampling lines (Table 7).

Table 7. Fan designations to sampling streams.

Stream	Fans assigned to stream
B1 stream 1	Barn 1 fans 1 to 14
B1 stream 2	Barn 1 fans 15 to 27
B1 stream 3	Barn 1 fans 28 to 44
B1 stream 4	Barn 1 fans 45 to 59
B2 stream 1	Barn 2 fans 1 to 16
B2 stream 2	Barn 2 fans 17 to 33
B2 stream 3	Barn 2 fans 34 to 50
B2 stream 4	Barn 2 fans 51 to 66

3.4.4. Biomaterials Sampling Methods and Schedule

All analyses of biomaterials were performed by an independent laboratory (Midwest Laboratories, Omaha, NE).

Manure in the barns was sampled quarterly between 3/31/08 and 4/21/09. At each time point, four samples were collected from each of the two barns and analyzed for ammoniacal N, pH and total solids.

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3.5. Particulate Matter Monitoring

Real-time PM monitors (TEOM Model 1400a, Thermo Fisher Scientific, Waltham, MA) continuously sampled exhaust PM. A TEOM was placed in each barn adjacent to one of the continuously-running fans (fan 20 in barn 1 and fan 42 in barn 2) (Figure 2). These fans were considered the primary representative exhaust fans (PREFs) for their respective buildings.

A beta attenuation PM monitor (Beta Gauge Model FH62C-14, Thermo Fisher Scientific, Franklin, MA) continuously measured house inlet PM concentration. The Beta Gauge was located 1 m away from the center of B2's north wall, in an environmentally controlled shelter . The sampling height of the inlet PM monitor was representative of the ventilation inlet air that flowed through the side curtain of barn 2, which, for most of the year was not downwind from any obvious sources of PM. The air inlet for barn 1 was downwind from the barn exhausts for part of the year, and was downwind of the feed bunker for 1-2 months (SE and ESE winds), but also had a period where it was not downwind of any obvious PM sources (S winds). Thus, this single inlet sampling was a good representation of the barn 1 inlet during part of the year as well, and was the best single point available.

At any one time, the sampled PM size class was either PM_{10}, $PM_{2.5}$ or TSP at both TEOMs and the Beta Gauge. The $PM_{2.5}$ size class was measured in January and August, 2008, and January and July, 2009 for 14 to 21 d each time (Table 8). The TSP inlet heads were placed on the TEOMs for twelve, 5-14 d periods. The PM_{10} concentration was measured at all other times.

3.6. Continuous Gas Sampling and Monitoring

Air samples for continuous gas measurements were collected from multiple gas sampling probes with a custom-designed GSS. Each probe was connected to the GSS with Teflon tubing. Tubular raceways between the OFIS and the monitored buildings protected the sampling lines and data signal cables. The sampling lines were wrapped with insulation and heated inside the raceways and at other locations vulnerable to cold air to prevent condensation inside the tubes.

Gas-sampling locations (GSLs) were located at the continuously-run (stage 0) minimum ventilation exhaust fans (4 fans in each barn), the holding area outlet into barn 1, and two locations representing the ventilation inlet air entering B1 and B2, for a total of 11 GSLs (Table 9). The ventilation inlet air of barn 2 was sampled at the center of the north wall (approximately across from fan 33), while the inlet air of barn 1 was sampled near the center of that barn's south wall (approximately across from fan 34). The lagoon and nearby barn exhausts caused the inlet concentrations to be higher at times, but the objective of quantifying the net emission rate from the barns was still met by measuring the inlet and exhaust concentrations. It was unnecessary to differentiate the contributions of lagoon emission and barn exhaust fans to the inlet air. Each GSL was sampled individually with one tube.

Each exhaust location was sampled individually for 10 min. The ventilation inlet location was monitored at least twice daily, with a 20-min sampling period. A statistical analysis confirmed that 10 min was sufficient for the exhaust GSLs and 20 min was sufficient for the inlet GSLs.

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Table 8. Sampling periods for TSP, PM_{10} and $PM_{2.5}$.

Time and day (m/d/y)		Test duration, d		
Start	**Stop**	**PM10**	**TSP**	**PM2.5**
9/12/07	12/11/07	90.5		
12/11/07	12/17/07		6.1	
12/17/07	1/15/08	28.9		
1/15/08	2/5/08			21.0
2/5/08	2/19/08	14.0		
2/19/08	2/26/08		6.9	
2/26/08	3/17/08	20.1		
3/17/08	3/25/08		7.9	
3/25/08	4/29/08	34.9		
4/29/08	5/5/08		6.0	
5/5/08	6/19/08	45.0		
6/19/08	6/26/08		7.0	
6/26/08	8/1/08	35.9		
8/1/08	8/18/08			17.0
8/18/08	8/25/08		7.1	
8/25/08	10/14/08	50.0		
10/14/08	10/28/08		14.2	
10/28/08	12/16/08	48.8		
12/16/08	12/30/08		14.0	
12/30/08	1/13/09	13.9		
1/13/09	1/27/09			14.0
1/27/09	2/17/09	21.0		
2/17/09	2/24/09		6.9	
2/24/09	4/6/09	41.1		
4/6/09	4/14/09		7.9	
4/14/09	6/3/09	50.0		
6/3/09	6/8/09		5.3	
6/8/09	7/6/09	28.0		
7/6/09	7/21/09			14.7
7/21/09	8/4/09	14.0		
8/4/09	8/11/09		7.0	
8/11/09	9/15/09	35.0		
Totals		571.2	96.3	66.7

One set of gas analyzers in the OFIS was used to sequence through all the GSLs. Hydrogen sulfide was measured with a fluorescence H_2S analyzer (Model 450i, Thermo Fisher Scientific, Waltham, MA). Concentrations of NH_3, were measured with a photoacoustic infrared multi-gas monitor (INNOVA Model 1412, LumaSense Technologies, Ballerup, Denmark), and a chemiluminescence analyzer (Model 17c, Thermo Fisher Scientific, Waltham, MA).

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Table 9. Analyte sampling locations.

Analytes	Barn(s)	Ventilation openings/locations	Qty
NH_3, H_2S	1	B1 stream 1: fan 8 from W	1
	1	B1 stream 2: fan 20 from W	1
	1	B1 stream 3: fan 37 from W	1
	1	B1 stream 4: fan 53 from W	1
	2	B2 stream 1: fan 9 from W	1
	2	B2 stream 2: fan 24 from W	1
	2	B2 stream 3: fan 42 from W	1
	2	B2 stream 4: fan 58 from W	1
	1, HB	Holding area outlet to barn 1	1
	1	Inlet: S side of B1 (across from fan 34), 2 m from barn wall	1
	2	Inlet: N side of B2 (across from fan 33), 2 m from barn wall	
$PM_{2.5}$, PM_{10}, TSP	1	PREF: fan 20	1
	2	PREF: fan 42	1
	1,2	Inlet: N side of B2 (across from F33), 2 m from barn wall	1
VOC*	1	PREF: fan 20	1
	2	PREF: fan 42	1

**VOC samples are collected at fan hub height, adjacent to the gas-sampling port at that location.
OFIS: On farm instrument shelter
HB: Holding barn
MP: Milking parlor

3.7. PREF: Primary representative exhaust fan VOC Sampling and Analysis

Grab samples of VOC were collected at the PREFs (fan 20 in B1 and fan 42 in B2) (Table 9), using methodology based on methods TO-15 and TO-16. Sampling was conducted with 6-L stainless-steel canisters (TO-Can, Restek Corp, Bellefonte, PA), equipped with ¼″ bellows valves (Swagelok SS4H) and 207-kPa vacuum gauges. Sampling trains contained flow controllers (Veriflo Model 423XL, Parker-Hannifin Corp., Richmond, CA) with 2- to 4-sccm critical orifices and 7-µm in-line stainless steel filters. Flow controllers were pre-set to a constant flow rate of 3.4 m $L \cdot min^{-1}$. Canister sampling was conducted for 24 h, and canister pressures were recorded at the beginning and end of the sampling periods for the calculation of total sample volumes. Sampling was conducted seven times between 4/6/09 and 12/2/09, with duplicate samples typically collected at each location. All canisters were cleaned and passed QC before sample collection.

Canister samples were analyzed at Purdue University's Trace Contaminant Laboratory. The canisters were pressurized to +207 kPa with ultrapure N2, and transferred to TDS tubes (Carbotrap 300, Supelco, Bellefonte, PA). The pressurized canisters initially yielded sample flows of 50 mL min^{-1} during sample transfer to tubes. Canister heating was introduced when a canister pressure decreased to 13.8 kPa to ensure maximal transfer of nonvolatile components.

The tube samples were analyzed on a thermodesorption-gas chromatograph-mass spectrometer (TDS-GC-MS), consisting of a gas chromatograph (Model 6890, Agilent Technologies, Palo

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Alto, CA) coupled with a Model 5795 mass spectrometer detector (Agilent Model 5795) and equipped with a thermal desorption system (Model TDS-G, Gerstel, Baltimore, MD) and a cooled injection system (Gerstel CIS). The GC-MS passed a leak check prior to analyzing each set of samples. Compounds were separated on a 60 m x 0.25 mm x 1µm column. The detector utilized the full scan mode covering masses from 27-270 Daltons in 8 scans/s. The MS quad hold temperature was 150°C, and the MS source hold temperature was 230°C. The analytical results were analyzed by ChemStation, and all integrations were manually checked. This method used an external standard compound for instrument monitoring and QA to avoid losses of low-molecular-weight analytes that would occur when purging solvent used with internal standard(s). All TDS tubes were cleaned with a tube conditioning system (Gerstel TC-2 TDS) for 3.5 h at 350°C prior to each use.

3.8. Documentation of Quality Assurance

3.8.1. Oversight, Maintenance, and Calibration

University of Minnesota personnel visited the site a total of 84 person-days and 105 person-days during years 1 and 2 of the monitoring period respectively.

The Science Advisor audited the site on 8/29/07. The Environmental Protection Agency (EPA) conducted site audits on 8/5/2008 and 7/15/2009.

Various site maintenance and calibration activities were conducted by site personnel (Appendix B). Specific quality assurance tests of the GSS, gas analyzers and other sensors are discussed below.

3.8.2. Gas Sampling System

Two types of GSS leak tests were conducted. The first test examined GSS integrity, by briefly creating a "dead head" against the pump by closing all solenoid valves, while measuring exhaust airflow with a portable rotameter, and recording the leakage flow with the GSS mass flow meter. The second test consisted of monitoring GSS flow and pressure after manually setting AirDAC to sample from a particular GSL and plugging the GSL's gas sampling probe, which created a GSS manifold vacuum of about -70,000 Pa. Preliminary tests indicated that GSS flows under dead-head conditions that were 10% or less (<0.45 $L \cdot min^{-1}$) of the normal GSS flow rate of 4 $L \cdot min^{-1}$ was indicative of leak-free operation under normal GSS manifold vacuums of -5,000 to -8,000 Pa. Leak tests of the GSS were conducted on 4/29/08, 9/15/08, and 5/12/09. The dead-head leakage flows were verified within the 0.4 $L \cdot min^{-1}$ threshold, and the sampling pumps repaired if this criteria was not met. Analyte concentrations during calibration procedures also provided a weekly check of the integrity of the system.

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3.8.3. Gas analyzers

Gas measurements were evaluated using multipoint calibrations (Table 10) and zero and span checks (Appendix C). The gas concentration data output by the analyzers was adjusted to correct for bias introduced by the gas sampling and measurement system.

3.8.3.1. Correction of Ammonia Concentrations

Multipoint calibrations (MPCs), using zero gas and two or three span concentrations, were conducted through the challenge line. These MPCs (Table 10 and Table 11) conducted simultaneously with the INNOVA 1412 and TEC 17C on most dates; the MPCs for the INNOVA 1412 on 1/28/08 and 3/4/08 are only shown to demonstrate the linearity of this instrument as it pertains to the NH_3 measurements prior to 1/24/08. The MPCs on 3/9/09 and 3/17/09 were run with each point in duplicate. The MPCs used concentrations ranging from 1.5 to 20.0 ppm NH_3, delivered via the Environics dilutor. The R^2 values for all of these tests exceeded 0.99, indicating linearity in both instruments' responses to calibration gas. A linear relationship between the input ammonia concentration and analyzers' responses was therefore assumed for 0 to 20 ppm standard gas.

Precision checks were performed periodically using zero gas and a span gas (z/s checks), and responses were recorded in control chart format to monitor changes in system performance over time. All span checks prior to 5/29/08 were done with 20 ppm NH_3; from 5/29/08 to 3/24/09, 5.0 ppm was typically used as the applied span concentration; from 3/31/09 to the end of the study, 3.0 ppm was the applied span concentration. The analyzer response to the zero and span precision checks is shown graphically in Appendix D, and summarized in Table 12.

The average response of the analyzers to the zero and span gas applications was assessed, and results were combined to create linear correction models. One linear correction model was used for the INNOVA 1412 measurement that covered the period from 9/11/07 to 1/24/08, when the TEC 17C became the primary NH_3 measurement, with the linear correction models described in Table 12. The TEC 17C was used at this site as the INNOVA 1412 analyzer was not correctly configured from the manufacturer to accurately measure the low NH3 levels in the high CH4 environments of these barns until July 30, 2009. The correction model was then applied to the uncorrected NH_3 measurements to improve the accuracy of the concentration data. Based on the linear-model corrected values for the zero and span checks, the measurement accuracy was assessed and shown in Table 12. The bias and precision for the zero and span checks were below 5%, the data quality objective (DQO) defined in Table 1.4.2 of the QAPP.

3.8.3.2. Correction of Hydrogen Sulfide Concentrations

Multipoint calibrations (MPCs), using zero gas and two or three span concentrations were conducted through the challenge line six times over the course of the monitoring period. These MPCs (Table 12) used concentrations ranging from 198 to 5675 ppb H_2S, delivered via the Environics dilution system. The R^2 values for these tests range from 0.983 to 0.998, indicating linearity in the instrument's response to calibration gas. A linear relationship between the input H_2S concentration and analyzer response was therefore assumed for at least the range of 0 to 5000 ppb.

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Table 10. Multipoint calibration record and results for the NH_3 measurement (INNOVA).

Date	# points	Span concentration, ppm		R^2
		Minimum	Maximum	
1/28/08	4	5.0	20.0	1.000
3/4/08	4	5.5	20.0	0.990

*Other than zero

Table 11. Multipoint calibration record and results for the NH_3 measurements (TEC)

Date	# points	Span concentration, ppm		R^2
		Minimum	Maximum	
1/28/08	4	5.0	20.0	0.999
3/4/08	4	5.5	20.0	0.986
5/29/08	4	5.0	12.0	0.999
2/11/09	4	1.5	5.0	0.993
3/9/09	4	2.0	5.0	0.999
3/17/09	4	2.0	5.0	0.998
5/12/09	3	3.0	4.7	0.996

*Other than zero

Table 12. Concentration correction and measurement accuracy for ammonia.

Start/end dates	# checks		Linear model	Accuracy, % of Span			
				Bias		Precision	
	Zero	Span		z	s	z	s
9/11/07-5/12/08*	23	21	y = 1.070(x–0.099)	0.2	0.0	0.4	1.6
1/24/08-5/12/08	15	11	y = 1.047(x+0.125)	0.1	0.5	0.6	2.4
5/12/08-11/11/08	23	23	y = 1.019(x+0.006)	0.0	-0.1	0.8	3.1
11/11/08-2/24/09	15	15	y = 1.037(x+0.083)	-0.2	0.4	1.0	2.4
2/24/09-6/30/09	15	15	y = 1.018(x-0.043)	-0.1	-0.7	1.3	2.5
6/30/09-11/2/09	15	15	y = 1.009(x-0.095)	0.1	-5.2	0.9	4.0

* INNOVA 1412. All other models developed for TEC 17C measurement.

Table 12. Multipoint calibration record and results for the H_2S measurements.

Date	# points	Span concentration, ppb		R^2
		Minimum	Maximum	
9/26/07	3	1991	4607	0.998
5/29/08	4	1658	5675	0.996
1/6/09	3	498	997	0.987
3/3/09	3	499	984	0.976
8/31/09	4	199	498	0.983
10/21/09	4	198	498	0.997

Precision checks were performed periodically using zero gas and a span gas (z/s checks), and responses were recorded in control chart format to monitor changes in system performance over time. All span checks prior to and including 12/30/08 were done with 2000 ppb H_2S; after this the span concentration was 500 ppb until 9/8/09 when 350 ppb became the applied span

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concentration. The analyzer response to the zero and span precision checks is shown graphically in Appendix D, and summarized in Table 13.

Shifts in the instrument response to calibration gas were detected in the raw (uncorrected) measurements that typically corresponded to changes of the analyzer internal calibration coefficients. Thus, to improve the accuracy of the concentration data, zero and span checks were pooled in three intervals, appropriate zero offsets and span factors were determined, and the resulting linear models were applied to the data. Based on the linear-model corrected values for the zero and span checks, the measurement accuracy was assessed and shown in Table 13. The bias and precision for the zero and span checks were below 5%, which was the data quality objective (DQO) defined in Table 1.4.2 of the QAPP.

Table 13. Concentration correction and measurement accuracy for hydrogen sulfide.

Start/end dates	# of checks		Linear model	Accuracy, % of span			
				Bias		Precision	
	Zero	Span		z	s	z	s
9/12/07-4/26/08	20	20	y = 0.9903(x–3.165)	0.0	0.0	0.0	0.9
4/26/08-1/6/09	33	10	y = 1.0453(x–1.784)	0.0	2.5	0.1	2.0
1/6/09-11/1/09	32	36	y = 1.0458(x–3.880)	0.0	-0.4	0.2	4.1

3.8.3.3.Noise tests

Analyzer noise tests were conducted to assess the minimum detection limit (MDL) of the gas measurements. The analyzers measured CEM zero air (Praxair Cat. # AIO.OCE-T CEM) continuously for 30 to 55 min after equilibrium of the instrument readout was reached. The MDL was calculated as the t-statistic times the standard deviation of the data collected during the equilibrated period (Table 14).

Table 14. Noise test of gas analyzers with dry air on 4/6/2010.

Gas	Statistical variable				Duration, min	T_{dew}, °C
	Min	Max	SD	MDL		
INNOVA 1412 NH_3, ppm	0.01	0.17	0.03	0.08	55	-19.70
TEC 17C NH_3, ppm	0.07	0.17	0.03	0.08	55	-19.70
TEI 450i H_2S, ppb	3.8	5.9	0.6	1.4	30	-19.70

3.8.4. Particulate Matter Monitors

The quality of the exhaust PM data was assessed through periodic mass verifications and flow and leak checks of the TEOMs. The criteria for total and main flows were 16.67±1.0 and 3.0±0.2 $L \cdot min^{-1}$, respectively. Leakage criteria were total flow ≤ 0.62 $L \cdot min^{-1}$ and main flow ≤ 0.15 $L \cdot min^{-1}$, respectively. Mass verifications and flow calibrations of the inlet PM monitor were conducted periodically.

The TEOM measurements were also evaluated based on 24 to 47 h of collocated measurements of TSP with a Minivol sampler (Airmetrics; Eugene, OR) in April 2008, April 2009, and September, 2009 (Table 14.). The differences in average TSP concentrations over the collocation periods were less than 5%.

Table 14. Collocated TSP measurement results.

Date	Location	Time, h	TSP, µg m^{-3}		Difference, %
			Minivol	TEOM	
4/29/08	B1	44.0	103	1012	1.9
	B2	43.2	110	115	-3.8
4/6/09	B1	23.0	84	80	4.8
	B2	23.1	115	110	4.0
9/15/09	B1	37.6	175	179	-1.9
	B2	47.1	239	247	-3.2

3.9. Data Analysis

3.9.1. Software

All emission data processing was conducted using custom software (CAPECAB, Fibre Recovery Systems, Inc., Calgary, AB). Data was carefully inspected and validated. If a datum was invalid for a known reason, the datum was marked (flagged) invalid and all calculations dependent on that datum were also invalid unless a substitution datum was identified. All periods of invalid data that were longer than one day are listed in Appendix D.

If the QA/QC checks described above indicated a measurement bias, the data was corrected prior to calculating emissions. The CAPECAB program provided a robust method to inspect data, invalidate if necessary, and implement various corrections over specified time periods.

3.9.2. Data Substitution, Validation, Correction, and Uncertainty

3.9.2.1.Pressure

The zero measurement by the static pressure sensor zero measurements were verified nine times as within ±0.2 Pa, thus, no adjustments were made to the ΔP readings.

3.9.2.2.Environmental Sensors

The average exhaust temperature for each house was the mean of the RH/T probe temperature measurement and the TC measurements at the other three stage 0 fans in each barn.

The solar sensor signal was collocated with a reference solar sensor on 9/22/09.

3.9.2.3.Fan Operation

There were always at least two functional sensors per fan stage. Since all fans on a stage were driven by the same fan controller, airflow calculations were facilitated by substitutions of operation data from other fans of the same stage. Table 1 describes the representative operational status fan for each barn and stage.

When a fan speed signal provided the operational data, low-level noise was filtered out by setting operational status to "off" (0%) if the average speed was less than 200 rpm.

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Table 1. Representative fan operational status signals.

Fan stage	East end	West end
B1 stage 1	B1F41	B1F16
B1 stage 2	B1F38	B1F15
B1 stage 3	B1F39	B1F14
B1 stage 4	B1F40	B1F21
B2 stage 1	B2F54	B2F5
B2 stage 2	B2F47	B2F8
B2 stage 3	B2F48	B2F7
B2 stage 4	B2F49	B2F6

3.9.2.4.Gas Concentrations

Table 2 describes the time specified in the data processing software for gas concentration measurements to stabilize based on gas and sampling location, and the maximum interval for interpolating between two valid concentration measurements for a sampling location.

Table 2. Gas concentration data validation and interpolation requirements.

Gas	Equilibration period, min		Maximum interpolation interval, min	
	Inlet	Exhaust	Inlet	Exhaust
NH_3	15	7	3000	300
H_2S	10	5	3000	300

Gas and water vapor concentrations, and sample relative humidity, temperature, pressure, flow rate, and flow direction were invalidated during all gas analyzer MPCs and Z/S checks, and when sample $Q < 3.5\ L \cdot min^{-1}$. Airflow rate, and gas and PM emission data were invalidated under conditions of positive barn static pressure, because barn airflow measurements required a negative or underpressure in the barn. Positive pressure conditions occurred under high wind conditions which would pressurize the barn in spite of the exhaust fans.

There were three extended periods when the GSS signals were invalidated. From 4/22/08 to 4/25/08 and from 7/2/09 to 7/6/09, the GSS continuously sampled from one location only, and was thus invalidated. From 6/23/09 to 6/30/09, the AC system of the OFIS was under repair. To avoid heat damage to the instruments, the GSS system was offline during this period.

In the event the stream concentration data was not available for a sampling location, the stream concentration from the neighboring sampling point on the same half of the barn was substituted.

Standard gas concentrations were calculated on dry and moist bases with Eqns. 3-1 and 3-2, respectively.

$$C'' = \frac{C'}{(1-W)} \qquad (3\text{-}1)$$

and

$$C' = \frac{P' \cdot c \cdot M}{R \cdot (273 + T')} \qquad (3\text{-}2)$$

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where:

C''	Dry standard mass concentration, dry basis (mg $d^{-1}sm^3$ or μg $d^{-1}sm^3$)
C'	Standard mass concentration, moist-air basis (mg sm^{-3} or μg sm^{-3})
P'	Standard pressure (1 atm)
T'	Standard temperature (20°C)
c	Volumetric concentration of gas (ppm or ppb)
M	Molecular weight of gas (g mol^{-1})
R	Universal Gas Constant (0.08206 L atm mol^{-1} $°K^{-1}$)
W	Humidity ratio

3.9.2.5.Particulate Matter Concentrations

Prior to 2/19/08, the TEOM flow rates were erroneously internally adjusted to 16.7 L min^{-1} for standard conditions (25°C and 1 atm), regardless of the surrounding conditions. The actual flow through the TEOM was verified by correcting for the surrounding conditions and confirming the flow was maintained between 15.7 and 17.7 L min^{-1}. PM concentration data was invalidated if the calculated flow was outside this range. The TEOM settings were changed on 2/19/08 to adjust the flow to 16.7 L min^{-1} based on actual rather than standard air density.

The TEOMs were configured to output the PM concentration data at 25°C and 1 atm until 2/19/08, at which time they were reconfigured to output the PM data at standard conditions (20°C, 1 atm). All PM concentration data prior to 2/19/08 was corrected to standard conditions. Dry standard PM concentrations were obtained by dividing standard condition concentrations by the one minus the air humidity ratio.

The B1 TEOM PM data was invalid between 5/30/08 and 6/4/08 because a cow had disrupted the inlet sampling tube. Between 10/1/08 and 10/8/08 for B1, and 2/23/08 to 2/26/08 and 11/6/08 to 11/11/08 for B2, the PM data was invalid because of problems with the instrument filter loading or placement. There were two occasions during the winter season when the PREF fans were not operating, creating a false PM sampling environment; thus the B1 PM data was invalid between 12/20/08 and 12/30/08, and the B2 PM data was invalid between 2/23/08 and 2/17/08. The PM data in both barns was also invalidated between 9/17/08 and 9/19/08 during changeover of the manure removal system that generated an abnormally dusty environment.

3.9.3. Emission calculations

3.9.3.1.Particulate Matter

PM emissions were calculated with Eqn. 3-3.

——— (3-3)

where:

E	Net PM emission rate (μg s^{-1})

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Q_0 Exhaust airflow rate at To (m^3 s^{-1})
P_0 Pressure of exhaust air (atm)
C_0' PM concentration of exhaust air (µg m^{-3})
Ci′ Inlet PM concentration (µg m^{-3})
T_0 Temperature of exhaust air (°C)

3.9.3.2.Gases

Stream-specific gas emissions were determined as follows:

$$E = Q_O \cdot \frac{P_O \cdot M}{R \cdot (273 + T_O)} \cdot (c_O - c_i) \qquad (3\text{-}4)$$

where:

E Stream or barn emission rate (mg s^{-1} or µg s^{-1})
Q_O Stream or barn outlet moist airflow rate at To (m^3 s^{-1})
P_O Exhaust air pressure (atm)
M Gas molecular weight (g mol^{-1})
R Universal Gas Constant (0.08206 L atm/mol^{-1} °K^{-1})
T_O Exhaust air temperature (°C)
c_o Exhaust air concentration (ppm or ppb)
c_i Ambient or ventilation air inlet concentration (ppm or ppb)

Building emissions were the summation of the stream emissions. If the interpolated stream concentration was invalid for one stream in a house, the other stream concentration from the same half of the respective barn was substituted in the emission calculation. Building emission was divided by variables (barn inventory, animal units) or constants (floor area) to normalize emissions to site-specific characteristics.

3.9.3.3.Volatile organic compounds

The total VOC concentration was multiplied by building airflow for the 24-h canister sampling period to yield an average emission rate. If two samples were successfully collected for a building at one sampling event, the average concentration was used in the calculation.

4. RESULTS

4.1. Farm Production Information

The farm production information, including inventory, mass, density and milk production are presented in Table F2. The inventory data from 9/13/07 to 10/31/08 is estimated from the average inventory after 10/31/08 available from the producer. The cow mass was an estimate by the producer.

Milk production data from the second year of monitoring indicate milk production ranged from 27 to 34 L $d^{-1}cow^{-1}$, and the ADM was 31 L d^{-1} cow^{-1}.

4.2. Characteristics of Biomaterials

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The summarized results of lab analyses of the various biomaterials are available in Appendix E.

4.3. Environmental Conditions

4.3.1. Ambient conditions

According to historical climatic information (Table 18), daytime average high temperatures ranges from -6°C in the winter to 29°C in the summer. Average overnight lows range from -16°C in winter to 17°C in summer. Typical prevailing winds for the region are from the northwest in the winter and south and southeast during the rest of the year.

Table F1 shows the daily average outdoor temperature, relative humidity, wind speed, wind direction, solar radiation and barometric pressure. The ADM outdoor temperature during the study period was 7.2°C, while the historical annual average for the area was 7°C (Table 18). The DM temperatures ranged from -23.5°C to 27.9°C during the monitoring period.

Table 3. **Monthly averages for weather conditions in the area*.**

Month	Temperature*, °C			Wind speed $km \cdot h^{-1}$	Wind direction
	High	Low	Mean		
January	-6	-16	-11	17	NW
February	-3	-13	-7	17	NW
March	4	-5	-1	19	NW
April	14	2	7	20	N
May	21	9	14	17	ESE
June	26	14	19	17	SE
July	29	17	22	16	S
August	27	16	20	15	S
September	22	10	16	16	S
October	15	4	9	17	NW
November	5	-4	0	17	NW
December	-4	-12	-8	17	NW
Annual average	13	1	7		

* http://www.weather.com/outlook/health/allergies/wxclimatology/monthly/54002

4.3.2. Barn Conditions

The environmental conditions in B1 and B2 are shown in Table F3. Figure 4 shows the DM barn exhaust temperature dropped to -6.3°C in B1 and -7.4°C in B2 during the winter, and ice buildup on the exhaust fan shutters was noted by the site personnel.

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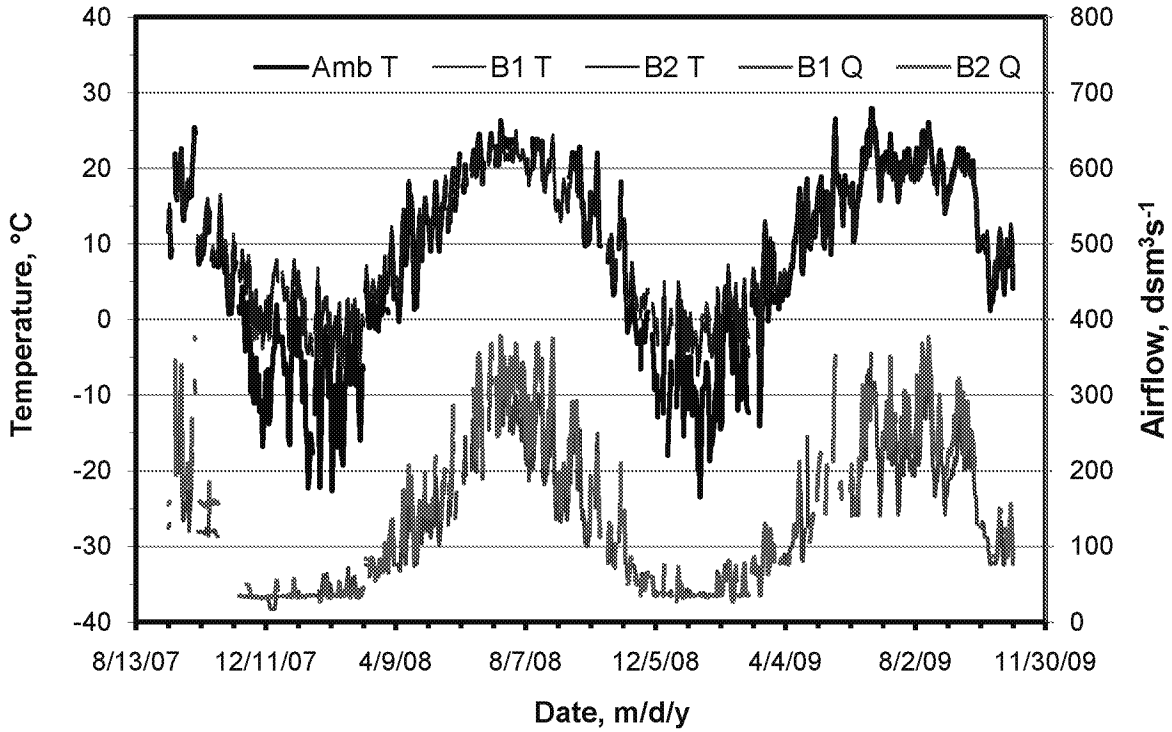

Figure 4. Inlet and exhaust temperatures (T) and airflow rates (Q) for B1 and B2.

4.3.3. Ventilation Rates

The mean (±SD) static pressure differential was -8.7±5.9 Pa in B1 and -6.7 ±5.3 Pa in B2. The fraction of time that the pressure was positive was 3.8% and 8.0% for B1 and B2, respectively. Most of the positive pressures were likely wind-induced. Static pressure was between 0 and -30 Pa over 90% of the time for both barns.

The maximum daily mean airflow measurement for B1 occurred on 6/22/09 and for B2 on 7/15/08. The ventilation rate of B1 ranged from 17 m^3s^{-1} in winter to 355 m^3s^{-1} during the summer. The ventilation rate of B2 ranged from 26 m^3s^{-1} in winter to 378 m^3s^{-1} during the summer.

4.4. Particulate Matter Concentration and Emissions

4.4.1. PM10

The DM inlet PM_{10} concentration ranged from 2 to 83 μg dsm^{-3}, whereas the DM B1 and B2 PM_{10} exhaust concentrations ranged from 0 to 196 and from -42 to 196 μg dsm^{-3}, respectively (Table F4).

The ADM inlet, B1 and B2 PM_{10} concentrations were 18±13, 39 ±28 and 45 ±35 μg dsm^{-3}, respectively (Table F4).

The overall mean PM_{10} emission rates were 363±578 g d^{-1} (1751±2761 mg $d^{-1}cow^{-1}$) for B1 and 563±818 g d^{-1} (1572±2283 mg $d^{-1}cow^{-1}$) for B2 (Figure 5 and Table F5).

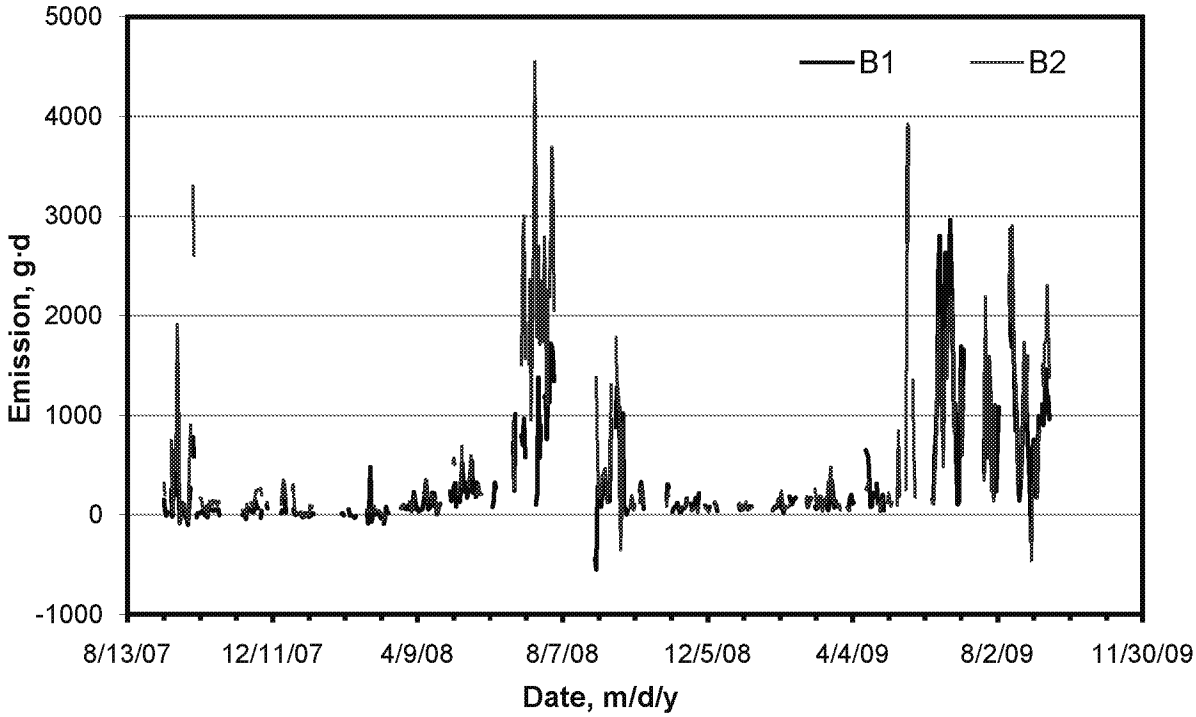

Figure 5. Daily mean PM_{10} emissions.

4.4.2. PM2.5

Data from the four $PM_{2.5}$ measurement periods are shown in Tables F4 and F6. Daily mean concentrations of $PM_{2.5}$ ranged from 2 to 33 µg dsm^{-3} in the inlet air (n=62 d), 6 to 39 µg dsm^{-3} in B1 exhaust air (n= 52 d) and from 7 to 35 µg dsm^{-3} in B2 exhaust air (n= 48 d) (Table F4).

The ADM inlet, and B1 and B2 exhaust concentrations were 10±7, 20±7 and19±8 µg dsm^{-3}, respectively (Table F4).

The mean $PM_{2.5}$ emission rates during cold weather sampling (1/16/09 to 2/4/08 and 1/14/09 to 1/26/09) were 25 and 29 g d^{-1} from B1 (n= 23 d) and B2 (n=18 d), respectively (Figure 6). The mean $PM_{2.5}$ emission rates from B1 and B2 during hot weather sampling (8/2/08 to 8/17/08 and 7/7/09 to 7/20/09) were 231 and 292 g d^{-1}, respectively.

The overall mean (±SD) $PM_{2.5}$ emission rates were 142±145 g d^{-1} (662±672 mg $d^{-1}cow^{-1}$) from B1, and 187±204 g d^{-1} (529±576 mg $d^{-1}cow^{-1}$) from B2 (Table F6 and Figure 6).

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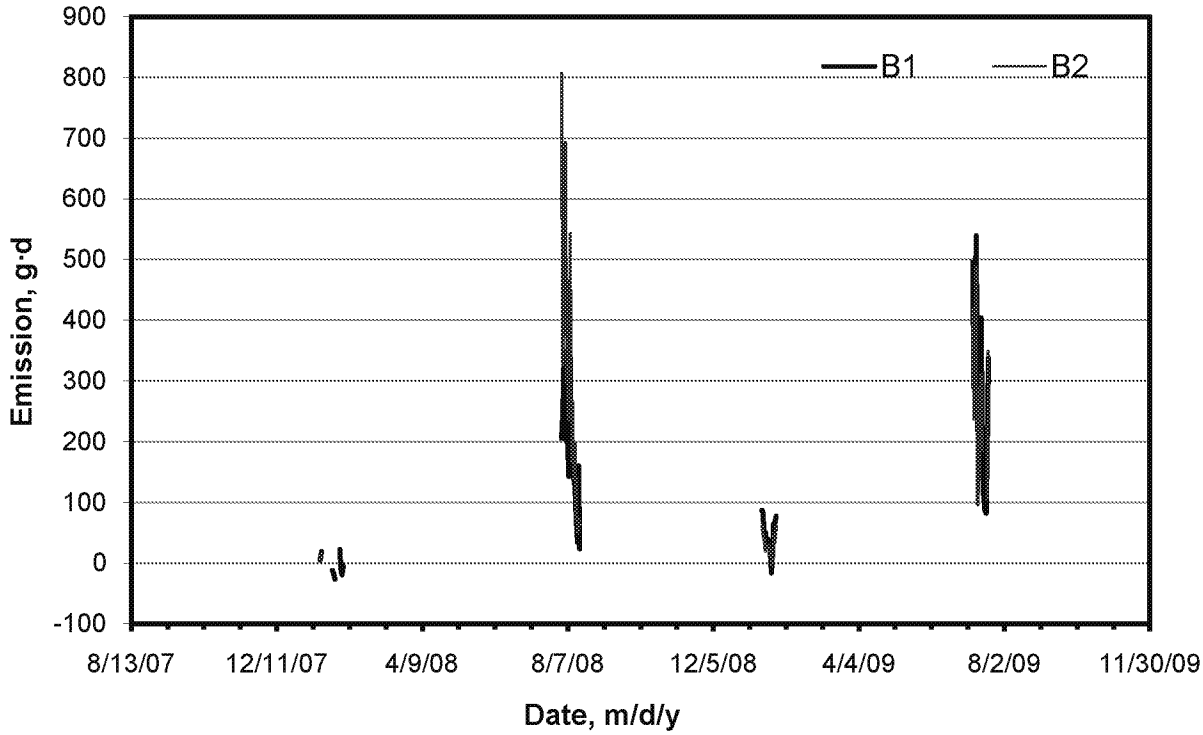

Figure 6. Daily mean $PM_{2.5}$ emissions.

4.4.3. TSP

Data from the thirteen TSP measurement periods are shown in Tables F4 and F7. Daily mean TSP concentrations ranged from 3 to 109 µg dsm^{-3} in the inlet air (n=102 d), -49 to 210 µg dsm^{-3} in B1 exhaust air (n=92 d) and from 15 to 295 µg dsm^{-3} in B2 exhaust air (n=96 d) (Table F4).

The ADM (±SD) inlet, and B1 and B2 exhaust concentrations were 22±19, 83±53 and 80±57 µg dsm^{-3}, respectively (Table F4).

Emission rates are shown in Figure 7. The ADM TSP emissions ranged from -450 to 4200 g d^{-1} (Table F7). The overall mean (±SD) TSP emission rates were 850±827 g d^{-1} (4198±4166 mg $d^{-1}cow^{-1}$) for B1 (n= 82 d), and 879±943sd g d^{-1} (2437±2601 mg $d^{-1}cow^{-1}$) for B2 (n=76 d) (Figure 7).

4.5. VOC Concentrations and Emissions

The 20 most prevalent VOCs detected in the canister samples accounted for 95.4% of the total quantified mass (Table 4). The most prevalent compound was n-Propanol, which accounted for 34.4% of the total mass.

Concentrations of total VOC in exhaust air ranged from 0.49 to 10.14 mg m^{-3} in B1 and from 0.71 to 5.97 mg m^{-3} in B2 (Table 19). The mean total VOC concentrations were 2.52±3.43 and 2.21±1.78 mg m^{-3} in B1 and B2, respectively.

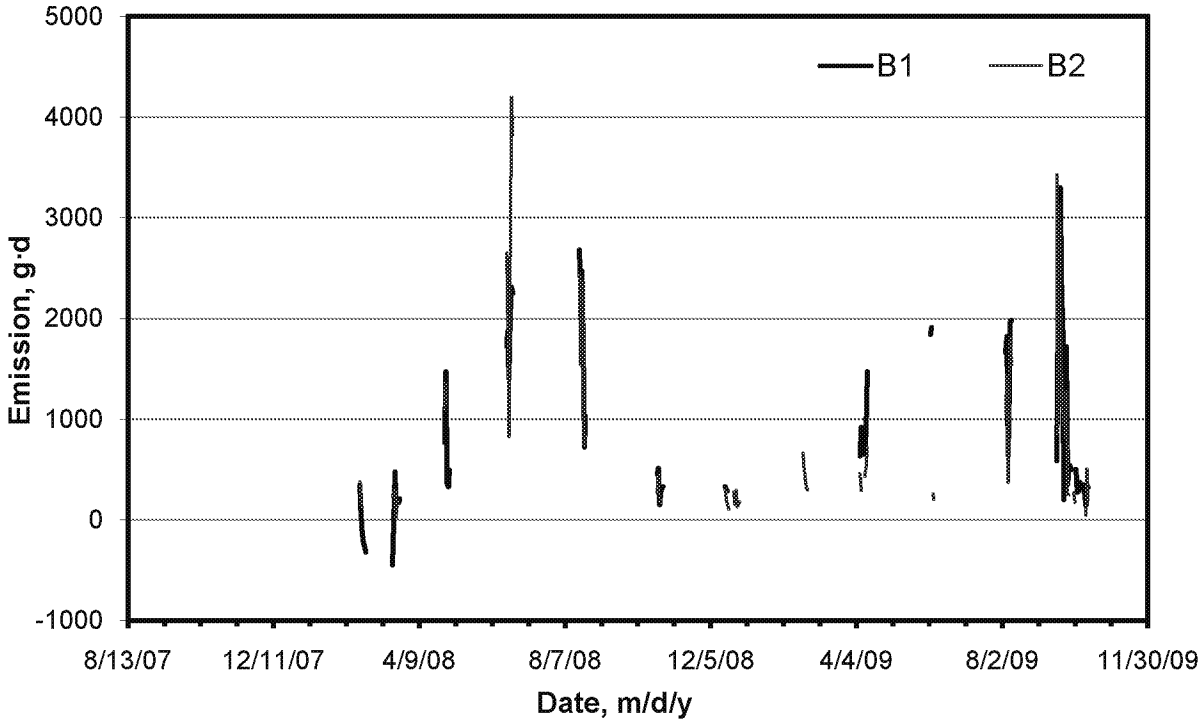

Figure 7. Daily mean TSP emissions.

Total VOC emissions (ng s^{-1}) during each sampling period were determined by multiplying the mean building airflow rate (m^3 s^{-1}) by the total mass (ng m^{-3}) and converting to kg d^{-1}. The VOC emission rate from B1 and B2 ranged from 12.2 to 20.4 kg d^{-1}, and from 14.3 to 64.4 kg d^{-1}, respectively. The mean VOC emission rates from B1 and B2 were 15.7±3.0 kg d^{-1}, and 29.5±20.5 kg d^{-1}, respectively (Table 5).

4.6. Hydrogen Sulfide Concentrations and Emissions

Daily mean inlet and exhaust H_2S concentrations for the entire test are provided in Table F8.

The average daily mean (±SD) H_2S concentrations were approximately 5±10 (n=741) and 6±14 (n=737) ppb in the south and north air inlets respectively, and 102±145 (n=699) and 97±151 (n=693) ppb in the exhausts of B1 and B2, respectively.

Daily mean H_2S emissions from B1 and B2 are tabulated in Table F9 and plotted in Figure 8 for the entire test period. A large shift in the emission levels occurred following the change from the flush manure removal system to the scrape manure removal system between 9/17/08 and 9/19/08.

The ADM H_2S emission rates from B1 and B2 were 1.04±1.29 (n=598) and 0.86±1.11 (n=555) kg d^{-1}, respectively.

The ADM cow-specific H_2S emission rates from B1 and B2 were 4.94±6.11 (n=598) and 2.42±3.14 (n=555) g d^{-1} cow^{-1}, respectively.

Table 4. Average concentrations of 20 most prevalent VOC.

Compound	Concentration, ng·m^3	% of total	Cumulative %
n-Propanol	8.15E+05	42.08%	42.1
Ethyl acetate	3.87E+05	19.96%	62.0
iso-Propanol	1.76E+05	9.06%	71.1
Acetaldehyde	1.23E+05	6.33%	77.4
n-Propyl acetate	8.70E+04	4.49%	81.9
2-Butanone	4.90E+04	2.53%	84.5
Dimethyl sulfide	4.40E+04	2.27%	86.7
2-Butanol	2.59E+04	1.34%	88.1
Acetic acid	1.50E+04	0.77%	88.8
4-Methyl-phenol	1.32E+04	0.68%	89.5
Phenol	1.31E+04	0.68%	90.2
1-Butanol	1.29E+04	0.67%	90.9
Hexane	9.95E+03	0.51%	91.4
Pentane	9.75E+03	0.50%	91.9
Pentanal	9.61E+03	0.50%	92.4
Propanoic acid	9.27E+03	0.48%	92.9
Hexanal	7.80E+03	0.40%	93.3
Nonanal	7.68E+03	0.40%	93.7
Butanal	7.68E+03	0.40%	94.0
Heptanal	7.15E+03	0.37%	94.4

Table 5. Emission of total VOC.

Date	# canisters		Concentration, mg m^{-3}		Airflow, m^3 s^{-1}		Emission, kg d^{-1}	
	B1	B2	B1	B2	B1	B2	B1	B2
04/06/09	2	2	2.39	2.41	75.3	68.8	15.5	14.3
06/15/09	2	2	1.18	1.10	158	210	16.1	20.1
07/20/09	2	2	0.85	2.27	279	329	20.4	64.4
08/24/09	2	2	0.49	1.05	291	343	12.2	31.1
09/07/09	2	2	0.73	0.71	229	288	14.4	17.6
11/09/09	2	2	1.87	1.98	N/A	N/A	N/A	N/A
12/07/09	2	2	4.13	5.97	N/A	N/A	N/A	N/A
Mean	2	2	1.66	2.21	206	248	16.6	32.5

4.7. Ammonia Concentrations and Emissions

Daily mean inlet and exhaust NH_3 concentrations for the entire test are provided in Table F10.

The average daily mean (±SD) NH_3 concentrations were approximately 0.1±0.1 (n=702) ppm in the inlet air, and 1.7±0.9 (n=661) and 1.8±1.0 (n=655) ppm in the exhausts of B1 and B2, respectively.

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Daily mean NH_3 emissions from B1 and B2 are tabulated in Table F11and plotted in Figure 9 for the entire test period. The ADM (±SD) NH_3 emission rates from B1 and B2 were 8.50±2.88 (n=564) and 11.07±4.44 (n=523) g d^{-1}, respectively.

The ADM (±SD) cow-specific NH_3 emission rates from B1 and B2 were 41.0±15.3 and 30.9±11.8 g d^{-1} cow^{-1}, respectively.

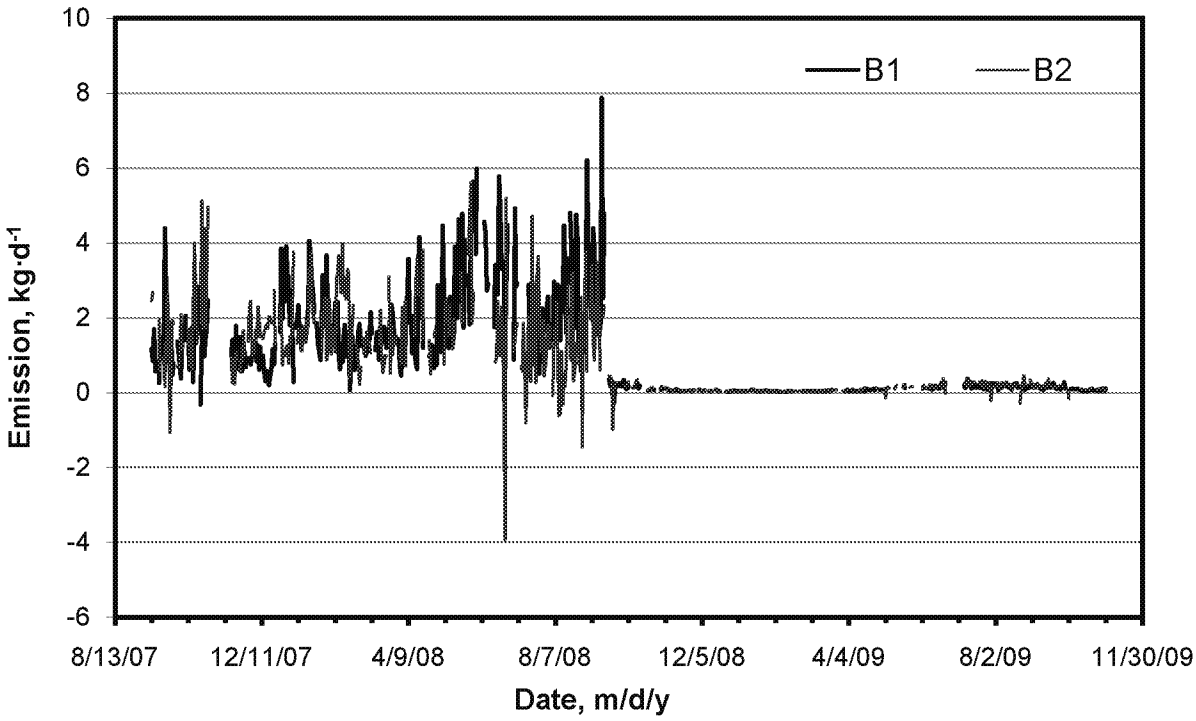

Figure 8. Daily mean H_2S emissions from barns 1 and 2.

4.8. Emission Data Completeness

Daily completeness data is given in Table 21. The number of complete data days (>75% valid required for reporting a daily mean) were calculated for emission measurements conducted from 9/12/07 to 10/31/09.

Table 21. Emission data completeness.

Location	Days with >75% valid emission data				
	NH_3	H_2S	PM_{10}	$PM_{2.5}$	TSP
Barn 1	564	598	400	53	82
Barn 2	523	555	362	45	76

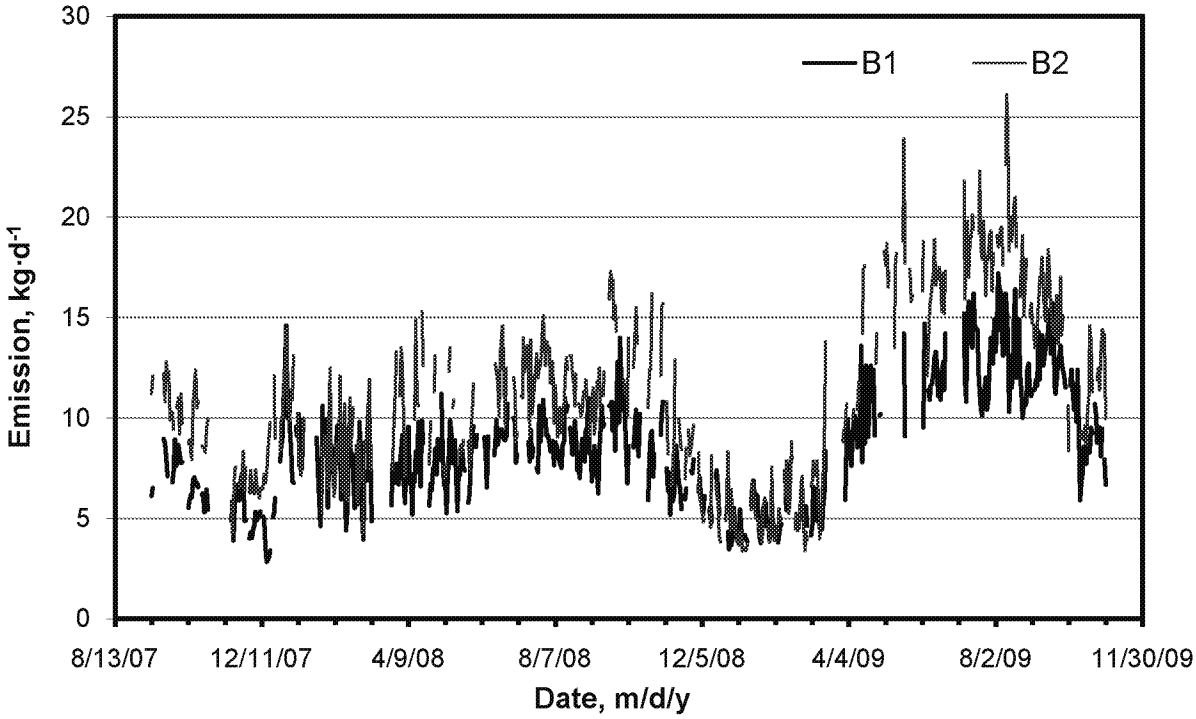

Figure 9. Daily mean NH_3 emissions.

4.9. Reconciliation with Data Quality Objectives

The data quality objectives prior to the study were to measure gas and PM emissions from mechanically-ventilated buildings with total relative uncertainties of 27% and 32%, respectively.

4.9.1. Airflow

The overall average airflows for B1 and B2 were 131 ± 88 $dsm^3 s^{-1}$ (n=630) and 150 ± 105 $dsm^3 s^{-1}$ (n=589), respectively. An average of 11.4 fans operated in all rooms at which condition the airflow measurement uncertainty was 4.8%, based on the fan model.

4.9.2. Gas Emissions

The bias and precision of NH_3 concentration measurements were derived from the NH_3 zero/span checks as compared with the NH_3 correction models (Table 11). The bias and precision of NH_3 measurements were 0.0% and 1.7%, respectively.

The bias and precision of H_2S concentration measurements were derived from the H_2S zero and span checks as compared with the H_2S correction models (Table 13). The bias and precision of H_2S measurements were 0.0% and 2.0%, respectively.

Based on these measurement errors calculated for concentrations and airflows, the uncertainties of NH_3 and H_2S emissions from B1 and B2 were 6.6 and 6.9%, respectively.

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4.9.3. PM Emissions

The precision of PM_{10}, TSP and $PM_{2.5}$ concentration measurements were 2.6, 5.3, and 5.9% based on collocation tests of TEOMs in exhaust air at a separate monitored dairy. The relative biases of the TEOMs were 0.00 and -0.24% for B1 and B2, also based on tests of TEOMs at a separate monitored dairy. The uncertainties of PM_{10}, TSP and $PM_{2.5}$ emissions from B1 and B2 were 7.7, 12.0 and 13.1%, respectively.

5. SUMMARY

The emissions of NH_3, H_2S, PM_{10}, TSP, $PM_{2.5}$ and VOCs from two freestall barns (B1 and B2) at a dairy facility in Wisconsin were measured during a two-year monitoring study. The buildings were cross-ventilated with single-speed fans.

The overall average emission rates from B1 were 2.88 kg d^{-1} of NH_3, 1.29 kg d^{-1} of H_2S, 363 g d^{-1} of PM_{10}, 141 g d^{-1} of $PM_{2.5}$, 850 g d^{-1} of TSP, and 15.7 kg d^{-1} of total VOC. The overall average emission rates from B2 were 11.1 kg d^{-1} of NH_3, 0.86 g d^{-1} of H_2S, 563 g d^{-1} of PM_{10}, 187 g d^{-1} of $PM_{2.5}$, 879 g d^{-1} of TSP, and 29.5 kg d^{-1} of total VOC.

6. REFERENCES

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Ni, J.-Q., A./J. Heber, M.J. Darr, T. T. Lim, C.A. Diehl, and B.W. Bogan. 2009. Air quality monitoring and on-site computer system for livestock and poultry environment studies. *Transactions of the ASABE* 52(3): 937-947.

Ni, J.-Q. and A.J. Heber. 2010. An on-site computer system for comprehensive agricultural air quality research. *Computers and Electronics in Agriculture* 71(1):38-49.

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7. DEFINITIONS

AirDAC	Air Data Acquisition and Control – computer program
ADM	Average daily mean
B1	Freestall barn 1
B2	Freestall barn 2
BESS	Bioenvironmental and Structural Systems
CAPECAB	Calculations of Air Pollutant Emissions from Confined Animal Buildings
CO_2	Carbon dioxide
CH_4	Methane
DM	Daily mean
ΔP	Differential pressure
DQO	Data quality objective
FANS	Fan Airflow Numeration System
GC/MS	Gas chromatograph mass spectrometer
GLS	Gas sampling location(s)
GSS	Gas sampling system
H_2S	Hydrogen sulfide
MC	Milking center
MDL	Minimum detection limit
MPC	Multipoint calibration
MS	Mass spectrometer
n	Number or count
NAEMS	National Air Emissions Monitoring Study
NCDC	National Climatic Data Center
NH_3	Ammonia
NMHC	Non-methane hydrocarbons
QA	Quality assurance
QAPP	Quality assurance project plan
QC	Quality control
OFIS	On farm instrument shelter
PM	Particulate matter
PREF	Primary representative exhaust fan
RH/T	Relative humidity/temperature
RH	Relative humidity
SD	Standard deviation
MP	Site monitoring plan
T_{dew}	Dew point temperature
TDS	Thermal desorption system
TDS-GS-MS	Thermodesorption-gas chromatograph mass spectrometer
TEOM	Tapered element oscillating microbalance
TSP	Total suspended particulate
VOC	Volatile organic compounds
Z/S	Zero/span

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APPENDIX A. MEASUREMENT VARIABLE LIST.

Table A1. Site measurement variables, instruments and sensors.

Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range / target	DAC item
1	Date & time	---			PC clock	---
2	Smpl loc#	---			LabVIEW	---
3	Cal gas #	Environics	Rack		Serial port	---
4	Cal gas, ppm	Environics	Rack		Serial port	---
5	NH3, ppm	Innova 1412	Rack	11 GSLs	Serial port	---
6	CO2, ppm	Innova 1412	Rack	11 GSLs	Serial port	---
10	WV, Tdew	Innova 1412	Rack	11 GSLs	Serial port	---
11	H2S, ppb	H2S analyzer	Rack	11 GSLs	0-10 VDC	FP-AI-112-1
12	SO2, ppb	H2S analyzer	Rack	11 GSLs	0-10 VDC	FP-AI-112-1
13	Smpl P, Pa	Setra 209 P sensor	GSS	11 GSLs	0.5-5.5 V	FP-AI-112-1
14	Smpl Q, L/m	Mass flow	GSS	11 GSLs	0-5 VDC	FP-AI-112-1
15	Smpl RH, %	Humitter 50Y, RH	GSS	11 GSLs	0-1VDC	FP-AI-112-1
16	Smpl T, C	Humitter 50Y, T	GSS	11 GSLs	0-1VDC	FP-AI-112-1
17	Smpl dir, %t	Flow dir sensor	GSS	11 GSLs	-0.1 to 0.1V	FP-AI-112-1
18	GSS T, C	AD 592D T sensor	GSS	GSS	136.5-171.5mV	FP-AI-112-1
19	B1 PM, µg/m3	TEOM #1	B1	B1 fan 20	0-10 VDC	FP-AI-112-1
20	B1 Filter, %	TEOM #1	B1	B1 fan 20	0-10 VDC	FP-AI-112-1
21	B1 Atm P, Pa	TEOM #1	B1	B1 fan 20	0-10 VDC	FP-AI-112-1
22	B2 PM, µg/m3	TEOM #2	B2	B2 fan 42	0-10 VDC	FP-AI-112-1
23	B2 Filter, %	TEOM #2	B2	B2 fan 42	0-10 VDC	FP-AI-112-1
24	Amb PM, µg/m3	Beta Gauge	Inlet	1 m outside of center of B2 N wall	0-10 VDC	FP-AI-112-1
25	Amb filter, %	Beta Gauge	Inlet	1 m outside of center of B2 N wall	0-10 VDC	FP-AI-112-1
26	B1N ΔP, Pa	Setra 260 ΔP sensor #1	B1 N	B1 N wall	0-10 VDC	FP-AI-112-1
27	B1S ΔP, Pa	Setra 260 ΔP sensor #2	B1 S	B2 S wall	0-10 VDC	FP-AI-112-2
28	OFIS ΔP, Pa	Setra 260 ΔP sensor #3	OFIS	Inside and outside of OFIS	0-10 VDC	FP-AI-112-2
29	Wind D, deg	Wind monitor 05103-5	Roof	Manure flush tank tower	0-5 VDC	FP-AI-112-2
30	Wind V, m/s	Wind monitor 05103-5	Roof	Manure flush tank tower	0-5VDC	FP-AI-112-2
31	Solar, W/m2	Solar sensor	Roof	Manure flush tank tower	0-1VDC	FP-AI-112-2
32	Amb RH, %	NOVUS RHT-WM #1	Roof	Manure flush tank tower	0-10 VDC	FP-AI-112-2

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Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range / target	DAC item
33	Amb T, C	NOVUS RHT-WM #1	Roof	Manure flush tank tower	0-10 VDC	FP-AI-112-2
34	B1F20 RH, %	NOVUS RHT-WM #2	B1F20	B1 fan 20	0-10 VDC	FP-AI-112-2
35	B1F20 T, C	NOVUS RHT-WM #2	B1F20	B1 fan 20	0-10 VDC	FP-AI-112-2
36	B2F42 RH, %	NOVUS RHT-WM #3	B2F42	B2 fan 42	0-10 VDC	FP-AI-112-2
37	B2F42 T, C	NOVUS RHT-WM #3	B2F42	B2 fan 42	0-10 VDC	FP-AI-112-2
38	B1E Act , V	Activity sensor #1	B1E	B1 middle of E wall	-2-2 VDC	FP-AI-112-2
39	B1W Act , V	Activity sensor #2	B1W	B1 middle of W wall	-2-2 VDC	FP-AI-112-2
40	B1S Act , V	Activity sensor #3	B1S	B1 S entrance to holding barn	-2-2 VDC	FP-AI-112-2
41	B2E Act , V	Activity sensor #4	B2E	B2 middle of E wall	-2-2 VDC	FP-AI-112-2
42	B2W Act , V	Activity sensor #5	B2W	B2 middle of W wall	-2-2 VDC	FP-AI-112-2
43	B2S Act , V	Activity sensor #6	B2S	B2 S entrance to hallway	-2-2 VDC	FP-AI-112-3
44	OFIS Act , V	Activity sensor #7	OFIS	OFIS	-2-2 VDC	FP-AI-112-3
45	B1S WV, m/s	81000 sonic	B1S	B1 S entrance to holding barn	0-5 VDC	FP-AI-112-3
46	B1S WD, d	81000 sonic	B1S	B1 S entrance to holding barn	0-5 VDC	FP-AI-112-3
47	B1S Elv, d	81000 sonic	B1S	B1 S entrance to holding barn	0-5 VDC	FP-AI-112-3
48	B1S T, K	81000 sonic	B1S	B1 S entrance to holding barn	0-5 VDC	FP-AI-112-3
49	N Hwy WV, m/s	81000 sonic	B1S	Hallway N end b/w barns	0-5 VDC	FP-AI-112-3
50	N Hwy WD, d	81000 sonic	B1S	Hallway N end b/w barns	0-5 VDC	FP-AI-112-3
51	N Hwy Elv, d	81000 sonic	B1S	Hallway N end b/w barns	0-5 VDC	FP-AI-112-3
52	N Hwy T, K	81000 sonic	B1S	Hallway N end b/w barns	0-5 VDC	FP-AI-112-3
53	Ane 1, V	Anemometer 1		B1 by TEOM fan 20	0-5VDC	FP-AI-112-3
54	Ane 2, V	Anemometer 2		B2 by TEOM fan 42	0-5VDC	FP-AI-112-3
59	B1F20 T, C	TC T type	B1F8	B1 fan 8		FP-TC-120-1
60	B1F53 T, C	TC T type	B1F53	B1 fan 53		FP-TC-120-1
61	B1N T, C	TC T type	B1N	B1 N end in barn center		FP-TC-120-1
62	B1MidN T, C	TC T type	B1MidN	B1 middle of N end of barn center		FP-TC-120-1
63	B1MidS T, C	TC T type	B1MidS	B1 middle of S end of barn center		FP-TC-120-1
64	B1S T, C	TC T type	B1S	B1 S end of barn center		FP-TC-120-1
65	B2F9 T, C	TC T type	B2F9	B2 fan 9		FP-TC-120-1
66	B2F25 T, C	TC T type	B2F25	B2 fan 25		FP-TC-120-1
67	B2F58 T, C	TC T type	B2F58	B2 fan 58		FP-TC-120-2
68	B2N T, C	TC T type	B2N	B2 N end of barn center		FP-TC-120-2

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Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range / target	DAC item
69	B2MidN T, C	TC T type	B2MidN	B2 middle of N end of barn center		FP-TC-120-2
70	B2MidS T, C	TC T type	B2MidS	B2 middle of S end of barn center		FP-TC-120-2
71	B2S T, C	TC T type	B2S	B2 S end of barn center		FP-TC-120-2
73	RwyB1 T, C	TC T type	RwyB1	OFIS/B1 rwy		FP-TC-120-2
74	RwyB1 HT, C	TC T type	RwyB1 HT	OFIS/B1 rwy		FP-TC-120-2
77	RwySS T, C	TC T type	RwySS	B1/B2 rwy		FP-TC-120-3
78	RwySS HT, C	TC T type	RwySS HT	B1/B2 rwy		FP-TC-120-3
79	OFIS T, C	TC T type	OFIS	DAC panel		FP-TC-120-3
80	OFIS AC T, C	TC T type	OFIS AC	Wall A/C exhaust		FP-TC-120-3
83	B1F8, rpm	Fan speed sensor #1	B1F8	Fan shaft or support	5-24VDC	USB-4303-1
84	B1F20, rpm	Fan speed sensor #2	B1F20	Fan shaft or support	5-24VDC	USB-4303-1
85	B1F21, rpm	Fan speed sensor #3	B1F21	Fan shaft or support	5-24VDC	USB-4303-1
86	B1F22, rpm	Fan speed sensor #4	B1F22	Fan shaft or support	5-24VDC	USB-4303-1
87	B1F23, rpm	Fan speed sensor #5	B1F23	Fan shaft or support	5-24VDC	USB-4303-1
88	B1F30, rpm	Fan speed sensor #6	B1F30	Fan shaft or support	5-24VDC	USB-4303-1
89	B1F31, rpm	Fan speed sensor #7	B1F31	Fan shaft or support	5-24VDC	USB-4303-1
90	B1F32, rpm	Fan speed sensor #8	B1F32	Fan shaft or support	5-24VDC	USB-4303-1
91	B1F37, rpm	Fan speed sensor #9	B1F37	Fan shaft or support	5-24VDC	USB-4303-1
92	B1F53, rpm	Fan speed sensor #10	B1F53	Fan shaft or support	5-24VDC	USB-4303-1
93	B1F29, rpm	Fan speed sensor #11	B1F29	Fan shaft or support	5-24VDC	USB-4303-2
94	B2F9, rpm	Fan speed sensor #12	B2F9	Fan shaft or support	5-24VDC	USB-4303-2
95	B2F24, rpm	Fan speed sensor #13	B2F24	Fan shaft or support	5-24VDC	USB-4303-2
96	B2F25, rpm	Fan speed sensor #14	B2F25	Fan shaft or support	5-24VDC	USB-4303-2
97	B2F26, rpm	Fan speed sensor #15	B2F26	Fan shaft or support	5-24VDC	USB-4303-2
98	B2F27, rpm	Fan speed sensor #16	B2F27	Fan shaft or support	5-24VDC	USB-4303-2
99	B2F38, rpm	Fan speed sensor #17	B2F38	Fan shaft or support	5-24VDC	USB-4303-2
100	B2F54, rpm	Fan speed sensor #18	B2F54	Fan shaft or support	5-24VDC	USB-4303-2
101	B2F35, rpm	Fan speed sensor #19	B2F35	Fan shaft or support	5-24VDC	USB-4303-2
102	B2F36, rpm	Fan speed sensor #20	B2F36	Fan shaft or support	5-24VDC	USB-4303-2
103	B2F37, rpm	Fan speed sensor #21	B2F37	Fan shaft or support	5-24VDC	USB-4303-3
104	B2F42, rpm	Fan speed sensor #22	B2F42	Fan shaft or support	5-24VDC	USB-4303-3
105	B2F58, rpm	Fan speed sensor #23	B2F58	Fan shaft or support	5-24VDC	USB-4303-3

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Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range / target	DAC item
106	B1F49, rpm	Fan speed sensor #24	B1F49	Fan shaft or support	5-24VDC	USB-4303-3
113	B1Fstg1, %t	Barn controller	B1Fstg1	Barn control cabinet	0/5 VDC	DIO 96H/50
114	B1Fstg2, %t	Barn controller	B1Fstg2	Barn control cabinet	0/5 VDC	DIO 96H/50
115	B1Fstg3, %t	Barn controller	B1Fstg3	Barn control cabinet	0/5 VDC	DIO 96H/50
116	B1Fstg4, %t	Barn controller	B1Fstg4	Barn control cabinet	0/5 VDC	DIO 96H/50
118	B2Fstg1, %t	Barn controller	B2Fstg1	Barn control cabinet	0/5 VDC	DIO 96H/50
119	B2Fstg2, %t	Barn controller	B2Fstg2	Barn control cabinet	0/5 VDC	DIO 96H/50
120	B2Fstg3, %t	Barn controller	B2Fstg3	Barn control cabinet	0/5 VDC	DIO 96H/50
121	B2Fstg4, %t	Barn controller	B2Fstg4	Barn control cabinet	0/5 VDC	DIO 96H/50
123	B1F13, %t	CR9380-NPN #1	B1F13	Current sensor for fan	0/5 VDC	DIO 96H/50
124	B1F14, %t	CR9380-NPN #2	B1F14	Current sensor for fan	0/5 VDC	DIO 96H/50
125	B1F15, %t	CR9380-NPN #3	B1F15	Current sensor for fan	0/5 VDC	DIO 96H/50
126	B1F16, %t	CR9380-NPN #4	B1F16	Current sensor for fan	0/5 VDC	DIO 96H/50
127	B1F38, %t	CR9380-NPN #5	B1F38	Current sensor for fan	0/5 VDC	DIO 96H/50
128	B1F39, %t	CR9380-NPN #6	B1F39	Current sensor for fan	0/5 VDC	DIO 96H/50
129	B1F40, %t	CR9380-NPN #7	B1F40	Current sensor for fan	0/5 VDC	DIO 96H/50
130	B1F41, %t	CR9380-NPN #8	B1F41	Current sensor for fan	0/5 VDC	DIO 96H/50
131	B2F5, %t	CR9380-NPN #9	B2F5	Current sensor for fan	0/5 VDC	DIO 96H/50
132	B2F6, %t	CR9380-NPN #10	B2F6	Current sensor for fan	0/5 VDC	DIO 96H/50
133	B2F7, %t	CR9380-NPN #11	B2F7	Current sensor for fan	0/5 VDC	DIO 96H/50
134	B2F8, %t	CR9380-NPN #12	B2F8	Current sensor for fan	0/5 VDC	DIO 96H/50
135	B2F46, %t	CR9380-NPN #13	B2F46	Current sensor for fan	0/5 VDC	DIO 96H/50
136	B2F47, %t	CR9380-NPN #14	B2F47	Current sensor for fan	0/5 VDC	DIO 96H/50
137	B2F48, %t	CR9380-NPN #15	B2F48	Current sensor for fan	0/5 VDC	DIO 96H/50
138	B2F49, %t	CR9380-NPN #16	B2F49	Current sensor for fan	0/5 VDC	DIO 96H/50

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APPENDIX B. MAINTENANCE AND CALIBRATION RECORD

Maintenance and Calibration Tasks	
Category	**Times Completed**
Environment Sensing and Other	
Clean RH/T probe	31
Calibration check of RH/T probe	2
Calibration check of thermocouples	3
Performance check of weather station	2
Direction verification of wind indicator	0
Clean solar sensor	1
Check solar sensor with collocated sensor	1
Clean motion sensors	9
Air Flow Measurement System	
Fan test events	3
Zero check of pressure sensors (ΔP)	9
Multipoint calibration of pressures sensors (ΔP)	0
Drift & accuracy check of anemometer(s)	0
Particulate Matter Measurement System	
Clean TOEM screens	36
Check/clean TEOM inlet head(s)	36
Replace TEOM filters	46
Verify TEOM mass transducer calibration	1
Leak test of TEOM	4
Verify TEOM flow rate & MFC accuracy	1
Change TEOM in-line filters	0
Check/clean Beta Gauge inlet head	15
Check Beta Gauge airflow	2
Validate Beta Gauge mass w/foil set	1
Calibrate Beta Gauge mass & airflow	0
Gas Measurement System	
Clean/replace GSS membrane filters	13
Leak check of GSS	8
Calibration check of all lines	3
Replace GSS filters	5
Calibrate GSS pressure and flow sensors	0
Flow calibration/check MFC flow of Environics Dilutor	2
Precision check of Multigas Analyzer	98
Multipoint calibration of Multigas Analyzer	7
Precision check of TEC 450I	97
Multipoint calibration of TEC 450I	6

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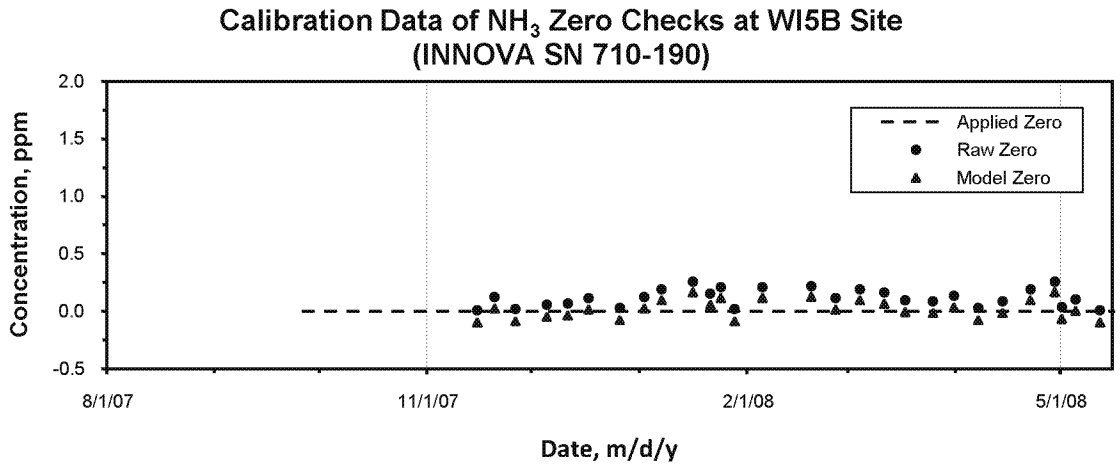
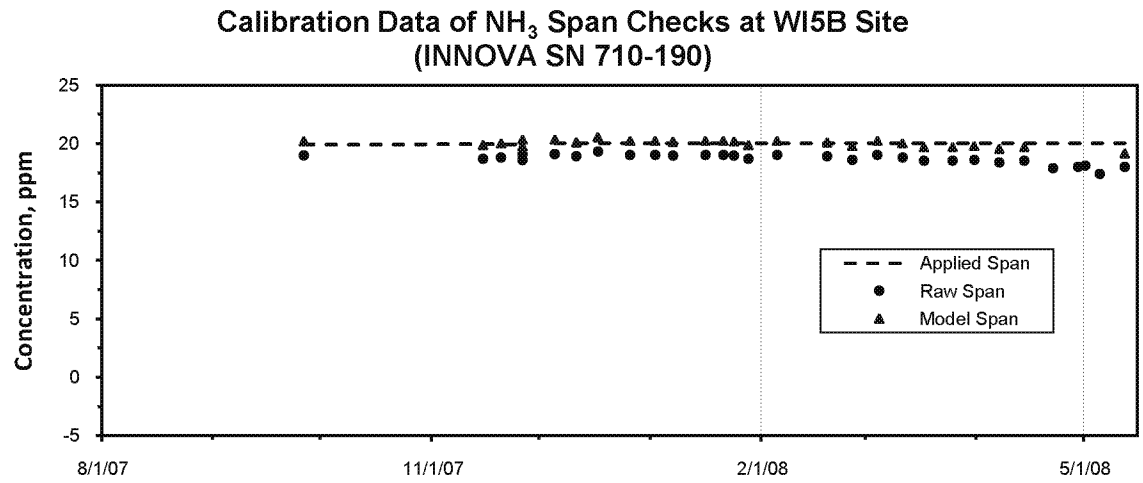
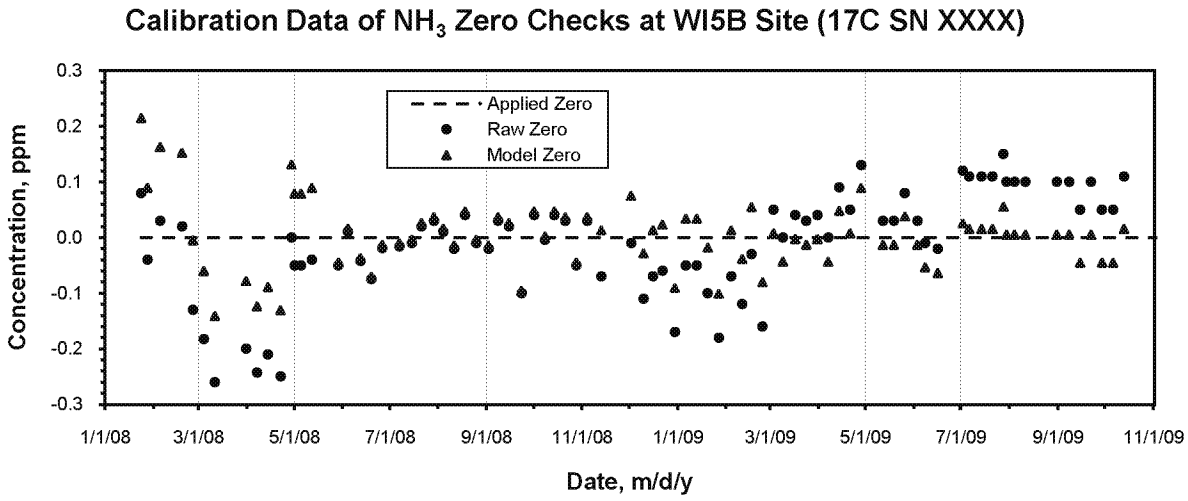
APPENDIX C. GAS ANALYZER ZERO AND SPAN PRECISION CHECKS

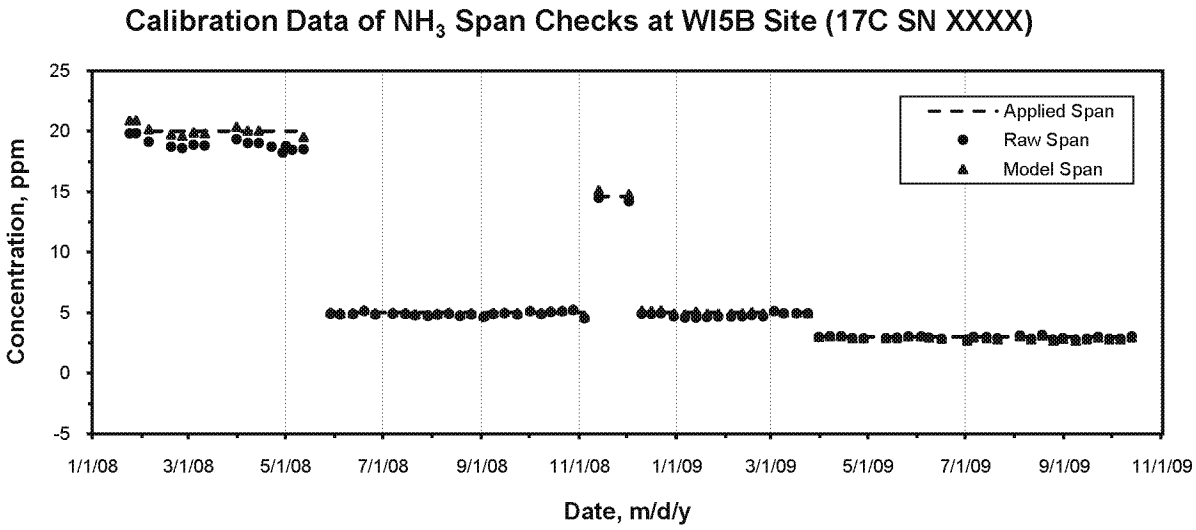
Ammonia (INNOVA 1412)



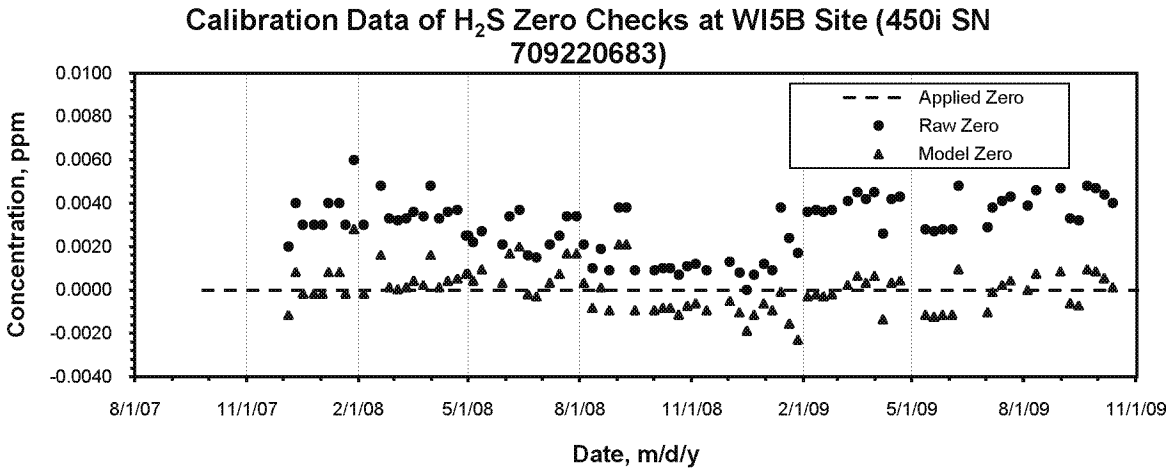


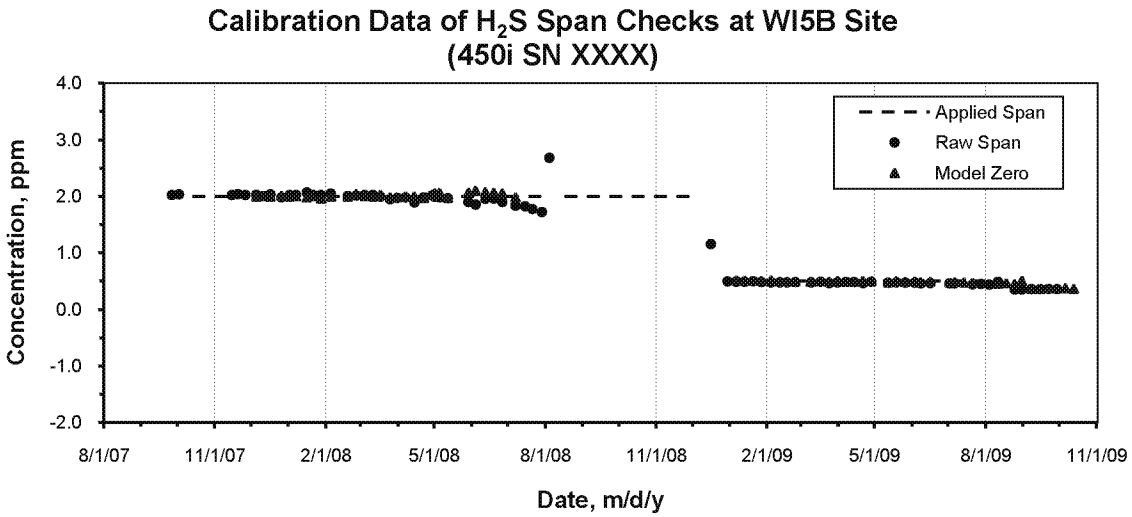
Ammonia (TEC 17C)





Hydrogen sulfide





APPENDIX D. MAJOR DATA INVALIDATIONS

Variable	Start time	End time	Min.	Comment
B2W Act	4/1/2009 8:59	11/2/2009 4:29	309331	DAQ-signal problem attributed to faulty DAC channel
OFIS dP	4/1/2009 13:28	11/2/2009 4:29	309062	Failure-sensor failure
B1F13 CS	9/12/2007 0:00	3/1/2008 0:00	246240	Failure-FN indicate sensor failure
OFIS dP	7/15/2008 12:40	12/3/2008 16:50	203291	Failure-sensor failure
B2F46 RPM	11/12/2007 11:00	3/25/2008 12:30	193050	Failure-sensor failure
B1S Act	10/2/2009 0:47	2/2/2010 4:43	177357	Failure-sensor failure
B1Fstg5	1/1/2009 0:01	5/2/2009 2:31	174391	Off-signals do not exist
B2Fstg5	1/1/2009 0:01	5/2/2009 2:31	174391	Off-signals do not exist
B2W Act	11/6/2008 12:04	3/1/2009 3:09	165066	DAQ-signal problem attributed to faulty DAQ channel
B2W Act	7/21/2008 12:01	11/7/2008 13:10	157030	DAQ-signal problem attributed to faulty DAQ channel
INNOVA NH3	3/8/2009 23:04	6/23/2009 23:36	154113	Out of Range-Analyzer calibration and compensation out of range
B1 PM and filter	10/14/2009 11:46	1/15/2010 13:41	134036	Off-FN indicate TEOMs offline following end of measurements
B2 PM and filter	10/14/2009 11:46	1/15/2010 13:41	134036	Off-FN indicate TEOMs offline following end of measurements
OFIS dP	12/3/2008 10:05	3/1/2009 3:09	126305	Failure-sensor failure
B2F36	5/22/2008 0:01	8/5/2008 15:04	108904	Failure
B2F54	2/2/2008 7:11	4/17/2008 10:51	108221	Failure-FN indicate sensor wires corroded
B1 sonic signals	8/9/2009 11:41	10/9/2009 16:00	88100	Failure-sensor failure
B1F20 RH/T	1/16/2008 18:11	3/17/2008 13:06	87536	Failure
B1F20 RH/T	1/16/2008 18:11	3/17/2008 8:02	87232	Failure-FN and HR comparison show inaccurate RH and T
B2F37	9/3/2009 4:11	11/2/2009 10:02	86752	Failure-site personnel confirm sensor failure
B1 sonic signals	1/2/2009 2:17	3/2/2009 3:47	85051	Failure-FN indicate water damage to anemometer
B2F5-1	12/16/2008 6:05	2/11/2009 11:55	82431	Failure-FN indicate current switch wires were corroded
B1F13- 4	2/29/2008 21:48	4/17/2008 10:01	68414	Failure-FN indicate sensor clip failed to hold sensor closed
Ane 2	2/19/2008 11:26	3/31/2008 9:40	58935	Off-anemometer removed for troubleshooting and repair
B1 sonic signals	9/1/2007 0:00	10/11/2007 11:35	58295	Offline-sensor removed for repairs
B1F29	4/10/2009 0:01	5/19/2009 11:49	56869	Failure-FN indicate water damage to sensor
B1F29	2/14/2009 14:38	3/20/2009 0:42	48125	Failure-FN indicate sensor is not working properly

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Variable	Start time	End time	Min.	Comment
OFIS dP	3/1/2009 1:29	4/2/2009 0:41	46033	Failure-sensor failure
B2W Act	3/1/2009 1:29	4/2/2009 0:41	46033	DAQ-signal problem attributed to faulty DAQ channel
B1 sonic signals	3/2/2009 0:54	4/2/2009 0:41	44628	Failure-FN indicate water damage to anemometer
INNOVA signals	6/30/2009 0:01	7/30/2009 9:46	43786	Off-FN indicate INNOVA offline for recalibration
B1S Act	3/12/2009 16:49	4/10/2009 2:32	40904	Failure-sensor failure
55C signals	1/20/2009 11:45	2/17/2009 10:35	40251	Off-FN indicate analyzer offline
B1F8 RPM	9/1/2007 0:00	9/26/2007 14:30	36870	Failure - FN indicate sensor failure
B1S Act	1/27/2009 15:12	2/21/2009 0:31	35120	Systematic error-signal temporarily offline
Ane 2	1/26/2008 12:09	2/19/2008 14:51	34723	Systematic error
B1 sonic signals	10/9/2009 14:29	11/2/2009 10:02	34294	Failure-sensor failure
17C NH3	12/31/2007 22:44	1/24/2008 0:15	33212	Off-17C not installed
Amb RH/T	8/24/2008 17:15	9/15/2008 9:25	31211	Failure-FN indicate sensor failure and sensor tip replaced
B1F29	3/19/2009 23:04	4/10/2009 1:25	30382	Failure-FN indicate sensor is not working properly
Fan stage signals	11/15/2007 10:00	12/5/2007 11:30	28890	DAQ-Fan stage signals incorrect
B1 sonic signals	4/1/2009 20:42	4/21/2009 12:24	28303	Failure-FN indicate water damage to anemometer
Fan stage, current switches,	10/29/2007 0:00	11/15/2007 10:00	25080	Maintenance - Farm was re-wiring fans
INNOVA signals	5/12/2008 11:59	5/29/2008 10:05	24367	Off-INNOVA offline while being recalibrated at CAI
INNOVA NH3	1/16/2008 16:22	1/31/2008 9:38	21197	Systematic error
Amb RH/T	7/28/2008 23:26	8/12/2008 11:46	20901	Failure-FN indicate sensor failure
INNOVA signals	6/5/2008 15:12	6/19/2008 9:21	19810	Off-INNOVA offline while being recalibrated at CAI
17C NH3	3/11/2008 13:39	3/25/2008 3:07	19529	Off-FN indicate 17C offline
B1S Act	4/9/2009 9:55	4/22/2009 3:01	18307	Failure-sensor failure
Fan stage, current switch	12/25/2008 4:54	1/6/2009 12:03	17710	DAQ-DIO96H signals offline following AirDAC restart
B1F53 T	1/15/2009 14:07	1/27/2009 14:30	17304	Noise-noise in TC related to new fluorescent lighting system
B1 PM	12/20/2008 15:09	12/30/2008 12:47	14259	Fan Off-the PREF fan was not working
B1F8 T	1/18/2009 14:17	1/27/2009 14:30	12974	Noise-noise in TC related to new fluorescent lighting system
Fan stage, current switch	11/5/2008 6:11	11/13/2008 11:10	11820	DAQ-DIO96H signals offline following AirDAC restart
B1F8	7/21/2008 10:19	7/29/2008 11:36	11598	Failure-sensor failure attributed to fan washing
Amb PM	8/25/2008 16:53	9/2/2008 17:21	11549	Off-FN indicate Beta Gage was offline
Fan stage, current switch	10/9/2008 6:51	10/16/2008 14:59	10569	DAQ-DIO96H board in error

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Variable	Start time	End time	Min.	Comment
All GSS signals	6/23/2009 10:15	6/30/2009 12:51	10237	Off-FN indicate GSS offline in response to AC down
GSS T	6/23/2009 10:30	6/30/2009 13:05	10236	Off-FN indicate GSS turned off while AC not working
B1 PM	10/1/2008 13:12	10/8/2008 11:28	9977	Systematic error-signal variation suggests a problem with the filter
INNOVA NH3	5/29/2008 15:55	6/5/2008 11:06	9792	Systematic error
B1MidS T	1/15/2009 1:22	1/21/2009 12:16	9295	Noise-noise in TC related to new fluorescent lighting system
B1N dP	7/9/2008 10:38	7/15/2008 12:56	8779	Failure-sensor failure
INNOVA signals	3/3/2009 9:22	3/9/2009 8:26	8585	Failure-FN indicate chopper failure
B1MidS T	1/21/2009 11:28	1/27/2009 9:53	8546	Noise-noise in TC related to new fluorescent lighting system
B2F37	6/9/2008 5:58	6/14/2008 16:44	7847	Noise-Signal shows excessive noise when fan should be off
B2 PM	2/12/2009 12:04	2/17/2009 12:36	7233	Fan Off-PREF fan not working
B1MidN T	1/15/2009 11:40	1/20/2009 12:07	7228	Noise-noise in TC related to new fluorescent lighting system
B1 Amb S T	1/15/2009 11:40	1/20/2009 12:07	7228	Noise-noise in TC related to new fluorescent lighting system
Amb RH/T	8/16/2008 4:52	8/21/2008 2:54	7083	Failure-sensor failure
Fan stage, current switch	2/19/2009 18:13	2/24/2009 13:25	6913	DAQ-DIO96H module error
B2N T	1/4/2008 21:57	1/9/2008 16:57	6901	DAQ-Suspected cause of signal variation is faulty DAQ channel
17C NH3	3/19/2009 21:04	3/24/2009 9:14	6491	Systematic error-FN indicate blown fuse in analyzer
B2 PM and filter	11/6/2008 22:46	11/11/2008 10:01	6436	Low Flow-FN indicate filter was loaded
B1 PM	5/30/2008 23:48	6/4/2008 10:13	6386	Systematic error
B1F49	2/18/2008 5:14	2/22/2008 8:08	5935	Systematic error-FN indicate shutters frozen open
Fan stage, current switch	7/2/2009 10:45	7/6/2009 13:38	5934	DAQ-DIO96H signals not working and fixed by reset
Fan stage, current switch	10/31/2008 6:41	11/4/2008 8:58	5898	DAQ-DIO96 module error
Fan stage, current switch	3/27/2009 6:55	3/31/2009 8:30	5856	DAQ-DIO96H module offline
All GSS signals	7/2/2009 12:39	7/6/2009 13:31	5813	DAQ-DAQ system not sequencing between locations
B2 PM	1/24/2008 15:52	1/28/2008 10:38	5447	Systematic error
B1F53	7/25/2008 19:33	7/29/2008 11:33	5281	Failure-sensor failure attributed to fan washing
B2F9 T	1/23/2009 5:01	1/26/2009 18:54	5154	Noise-may be related to lighting system
B2N T	1/17/2008 23:37	1/21/2008 10:19	4963	DAQ-Suspected cause of signal variation is faulty DAQ channel
B2F36	2/3/2008 11:29	2/6/2008 20:52	4884	Systematic error-FN indicate shutters frozen open
B2MidN T	1/24/2008 9:40	1/27/2008 12:01	4462	Noise-Noise in temperature signal may be linked to electric fence
Fan stage, current switch	6/2/2008 8:10	6/5/2008 10:05	4436	DAQ-DIO96H module not working

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Variable	Start time	End time	Min.	Comment
B1F49	1/29/2008 8:59	2/1/2008 9:58	4380	Systematic error-FN indicate shutters frozen open
B1MidN T	1/24/2009 16:31	1/27/2009 15:35	4265	Noise-noise in TC related to new fluorescent lighting system
B1 Amb S T	1/24/2009 16:31	1/27/2009 15:35	4265	Noise-noise in TC related to new fluorescent lighting system
B1MidS T	9/21/2009 18:10	9/24/2009 15:21	4152	Noise-common noise in B1 TCs
B2 PM	2/23/2008 12:30	2/26/2008 9:39	4150	Systematic error-noise likely from filter seating
B1F49	2/9/2008 15:23	2/12/2008 12:00	4118	Systematic error-FN indicate shutters frozen open
B1F53	7/20/2008 7:38	7/23/2008 2:05	3988	Systematic error-unstable signal attributed to fan washing
All GSS signals	4/22/2008 12:27	4/25/2008 5:39	3913	DAQ
B2F58 T	1/18/2008 21:46	1/21/2008 12:40	3775	DAQ-FN indicate faulty DAQ channel contributed to signal error
55C signals	6/6/2009 2:47	6/8/2009 14:45	3599	Systematic error-FN indicate H2 supply empty
B2MidN T	1/14/2009 22:48	1/17/2009 9:43	3536	Noise-noise is likely related to electric fence
B1MidS T	8/19/2009 3:13	8/21/2009 12:05	3413	Noise-common noise in B1 TCs
B1F49	2/14/2008 2:23	2/16/2008 10:33	3371	Systematic error-FN indicate shutters frozen open
55C signals	6/1/2009 3:46	6/3/2009 9:04	3199	Systematic error-FN indicate H2 leak
B1 PM	1/29/2008 5:18	1/31/2008 9:37	3140	Low Flow-FN indicate bypass flow restriction
B1MidS T	10/1/2009 11:15	10/3/2009 13:21	3007	Noise-common noise in B1 TCs
Fan stage, current switch	2/9/2009 7:19	2/11/2009 9:20	3002	DAQ-DIO96H module offline following AirDAC restart
B2S T	1/19/2008 9:36	1/21/2008 10:23	2928	DAQ-FN indicate the TC module may have been faulty
B1 PM	1/29/2008 10:05	1/31/2008 9:28	2844	Low Flow-FN indicate bypass flow restriction
B1 PM	3/17/2008 11:12	3/19/2008 10:06	2815	Low Flow
B1 PM	9/17/2008 9:22	9/19/2008 7:00	2739	Maintenance-site personnel noted auger installation
B2 PM	9/17/2008 9:22	9/19/2008 7:00	2739	Maintenance-site personnel noted auger installation
Fan stage, current switches, speed sensors	1/26/2008 13:38	1/28/2008 10:34	2697	Maintenance-During this period there were several fans operated manually out of stage making airflow estimations difficult
B1F8	1/3/2008 14:26	1/5/2008 10:29	2644	Systematic error-signal termporarily offline
Wind V	3/10/2009 16:52	3/12/2009 9:32	2441	Systematic error-signal temporarily offline
B1MidS T	8/7/2009 6:30	8/8/2009 23:06	2437	Noise-common noise in B1 TCs
B1 Amb S T	8/7/2009 6:44	8/8/2009 23:11	2428	Noise-common noise in B1 TCs
B2F37	5/24/2008 23:19	5/26/2008 14:34	2356	DAQ-All signals on one USB RPM module were offline
B2F42	5/24/2008 23:19	5/26/2008 14:34	2356	DAQ-All signals on one USB RPM module were offline

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Variable	Start time	End time	Min.	Comment
B2F58	5/24/2008 23:19	5/26/2008 14:34	2356	DAQ-All signals on one USB RPM module were offline
B1F49	5/24/2008 23:19	5/26/2008 14:34	2356	DAQ-All signals on one USB RPM module were offline
B1MidS T	8/12/2009 19:49	8/14/2009 10:16	2308	Noise-common noise in B1 TCs
Fan stage, current switch	6/9/2008 6:30	6/10/2008 20:50	2301	DAQ-DIO96H not working
Fan stage, current switch	6/10/2008 19:58	6/12/2008 10:05	2288	DAQ-DIO96H not working
Fan stage, current switch	6/10/2008 20:38	6/12/2008 10:05	2248	DAQ-DIO96H not working
B2N T	1/1/2008 21:50	1/3/2008 10:41	2212	DAQ-Suspected cause of signal variation is faulty DAQ channel
B1MidS T	7/3/2009 20:31	7/5/2009 8:45	2175	Noise-common noise in B1 TCs
B1MidN T	8/12/2009 21:23	8/14/2009 9:23	2161	Noise-common noise in B1 TCs
55C signals	6/30/2009 23:48	7/2/2009 11:44	2157	Noise-FN indicate noise related to loose connections
17C NH3	6/30/2009 23:55	7/2/2009 11:44	2150	Noise-FN indicate noise related to loose connection
B1MidS T	7/21/2009 3:16	7/22/2009 14:44	2129	Noise-common noise in B1 TCs
B1N T	8/12/2009 21:38	8/14/2009 8:58	2121	Noise-common noise in B1 TCs
B1MidS T	9/25/2009 3:12	9/26/2009 13:40	2069	Noise-common noise in B1 TCs
B2MidN T	7/16/2008 20:53	7/18/2008 6:28	2016	Noise-noise may be related to electric fence
B1MidN T	9/22/2009 0:14	9/23/2009 9:34	2001	Noise-common noise in B1 TCs
B1MidS T	10/29/2009 1:11	10/30/2009 10:05	1975	Noise-common noise in B1 TCs
B1F49	1/6/2008 9:57	1/7/2008 14:45	1729	Systematic error-FN indicate shutters frozen open
B1 Amb S T	10/1/2009 11:11	10/2/2009 15:50	1720	Noise-common noise in B1 TCs
Fan stage, current switch	1/7/2009 8:01	1/8/2009 11:50	1670	DAQ-DIO96H board error
B1MidN T	1/31/2009 12:26	2/1/2009 15:59	1654	Noise-common noise in B1 TCs
B1 PM and filter	7/9/2008 10:55	7/10/2008 12:07	1513	Systematic error-TEOM signal error-likely related to power outage
Fan stage, current switch	12/15/2008 9:26	12/16/2008 10:36	1511	DAQ-DIO96H signals offline following AirDAC restart
B1S Act	3/10/2009 20:03	3/11/2009 20:53	1491	Systematic error-signal temporarily unstable
B2MidN T	1/30/2008 11:22	1/31/2008 11:54	1473	Noise-Noise in signal may be linked to electric fence
Amb RH/T	4/3/2008 15:28	4/4/2008 15:45	1458	Systematic error-sensor chip periodically fails
All speed sensor signals	1/12/2009 9:28	1/13/2009 9:41	1454	DAQ-USB board error resulted in RPM data error
B1 PM and filter	10/13/2009 12:12	10/14/2009 12:23	1452	Sampling Elsewhere-FN indicate collocation outside
B2 PM and filter	10/13/2009 12:12	10/14/2009 12:23	1452	Sampling Elsewhere-FN indicate collocation outside
B1F20	7/21/2008 12:32	7/22/2008 12:43	1452	Systematic error-sensor instability attributed to fan washing

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APPENDIX E. BIOMATERIAL CHARACTERISTICS DATA

Table E1. Manure characteristics (mean ± SD).

Barn	Date	n	pH (SU)	Percent (wet weight basis)	
				Solids	Ammonia
1	3/31/08	4	7.03 ± 0.16	13.9 ± 1.13	0.04 ± 0.02
1	6/30/08	4	6.75 ± 0.67	15.9 ± 0.59	0.06 ± 0.03
1	10/14/08	4	7.15 ± 0.20	13.4 ± 1.21	0.11 ± 0.06
1	2/17/09	4	7.68 ± 0.19	33.8 ± 11.37	0.15 ± 0.03
1	4/21/09	4	7.79 ± 0.26	16.1 ± 3.57	0.14 ± 0.03
2	3/31/08	4	7.23 ± 0.25	14.9 ± 2.32	0.05 ± 0.02
2	6/30/08	4	6.75 ± 0.67	15.9 ± 0.59	0.06 ± 0.03
2	7/15/08	4	6.41 ± 0.25	21.4 ± 3.19	0.05 ± 0.02
2	10/14/08	4	7.31 ± 0.24	13.2 ± 0.74	0.09 ± 0.02
2	2/17/09	4	7.68 ± 0.22	29.1 ± 10.7	0.14 ± 0.05
2	4/21/09	4	7.76 ± 0.50	24.2 ± 14.9	0.17 ± 0.09

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APPENDIX F. DAILY MEAN DATA

Table F1. Weather variables.

Table F1. Daily means (SD) of weather parameters at Site WI5B for September, 2007.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12	11.6 (4.4)	61.8 (12.6)	2.39 (1.69)	165 (65)	237 (289)	97.5 (0.3)
13	14.5 (2.4)	64.0 (7.9)	3.88 (1.52)	242 (49)	117 (173)	96.8 (0.1)
14	8.2 (2.1)	60.6 (10.3)	3.28 (1.80)	278 (53)		97.7 (0.4)
15	9.3 (5.8)	57.8 (18.5)	2.43 (1.59)	177 (49)	237 (289)	98.0 (0.3)
16						
17						
18	21.9 (1.2)	84.0 (7.4)	3.93 (0.90)	197 (15)	35 (49)	96.7 (0.1)
19	16.6 (2.5)	78.6 (11.4)	2.89 (1.62)	289 (95)	163 (232)	97.7 (0.4)
20	15.8 (5.2)	78.2 (11.7)	4.04 (1.45)	121 (27)		97.6 (0.4)
21						
22	17.1 (4.6)	56.5 (15.4)	2.92 (0.89)	197 (32)	216 (271)	97.4 (0.1)
23	20.9 (5.2)	61.6 (7.8)	3.78 (1.21)	166 (14)	196 (256)	97.3 (0.2)
24	22.6 (2.2)	80.2 (8.0)	3.89 (1.09)	194 (15)	95 (154)	96.7 (0.2)
25	14.2 (2.3)	78.2 (8.5)	3.37 (0.97)	286 (19)	74 (117)	97.2 (0.2)
26	13.1 (3.5)	70.8 (14.0)	2.45 (1.36)	185 (58)	187 (258)	97.2 (0.3)
27	15.5 (3.4)	66.8 (17.2)	2.30 (1.41)	264 (51)	181 (248)	97.1 (0.2)
28	15.0 (3.5)	60.1 (11.4)	1.92 (1.38)	180 (70)		97.7 (0.2)
29	16.2 (2.5)	68.2 (10.5)	5.31 (1.52)	160 (14)	40 (65)	97.2 (0.2)
30	18.2 (1.3)	77.8 (13.6)	3.50 (1.30)	155 (59)	29 (53)	96.9 (0.1)
Avg	15.7	69.1	3.27	199	139	97.3
n	16	16	16	16	13	16
SD	3.9	8.9	0.85	50	75	0.4
Min	8.2	56.5	1.92	121	29	96.7
Max	22.6	84.0	5.31	289	237	98.0

ED_004549_00015842-00050

Table F1. Daily means (SD) of weather parameters at Site WI5B for October, 2007.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	16.1 (1.1)	86.6 (4.5)	2.58 (1.36)	214 (85)	48 (66)	97.3 (0.2)
2	16.2 (1.4)	87.5 (3.7)	4.87 (1.44)	184 (49)	21 (30)	96.3 (0.5)
3	16.3 (4.5)	58.3 (19.8)	3.44 (0.99)	200 (24)	194 (250)	96.8 (0.2)
4	20.3 (3.7)	60.3 (10.3)	3.32 (1.17)	183 (25)	181 (235)	96.9 (0.1)
5	22.2 (2.9)	81.6 (8.1)	3.15 (1.05)	139 (43)	89 (160)	
6	25.4 (2.8)	72.6 (10.6)	4.31 (1.02)	188 (13)	163 (229)	96.8 (0.1)
7	24.6 (1.3)	80.5 (3.7)	3.67 (0.71)	192 (11)		97.0 (0.0)
8						
9	9.5 (1.8)	71.7 (6.0)	5.47 (1.76)	275 (30)	68 (101)	97.1 (0.2)
10	7.3 (1.7)	76.2 (5.3)	3.93 (1.00)	266 (92)	63 (102)	97.6 (0.1)
11	8.3 (2.0)	71.4 (7.7)	2.94 (0.96)	42 (46)		97.6 (0.1)
12	7.9 (2.4)	74.2 (5.9)	1.23 (0.67)	111 (78)	78 (140)	97.2 (0.1)
13	11.0 (3.7)	68.1 (13.6)	1.01 (0.77)	82 (77)	166 (224)	97.2 (0.1)
14	8.6 (0.5)	81.5 (7.8)	3.10 (1.34)	75 (29)	17 (28)	97.4 (0.1)
15	9.7 (0.9)	90.0 (0.5)	5.31 (1.16)	89 (12)	19 (26)	97.1 (0.2)
16	12.2 (1.2)	91.1 (1.1)	2.91 (1.28)	128 (40)	21 (28)	96.6 (0.1)
17	14.0 (2.6)	80.9 (10.9)	3.98 (1.45)	140 (31)	87 (154)	96.2 (0.5)
18	14.9 (1.7)	87.6 (6.2)	4.03 (1.26)	171 (48)	71 (135)	94.2 (0.4)
19	11.5 (1.1)	80.9 (8.0)	6.27 (1.90)	268 (16)	36 (66)	94.7 (0.6)
20	14.2 (5.6)	61.9 (14.5)	2.74 (0.97)	184 (32)	136 (186)	95.7 (0.1)
21						
22	7.9 (2.2)	70.5 (12.8)	1.80 (1.12)	281 (61)	82 (115)	97.5 (0.1)
23	8.7 (5.4)	62.6 (15.1)	3.67 (2.58)	239 (62)	146 (204)	97.0 (0.3)
24	7.1 (3.1)	65.4 (13.2)	1.86 (1.19)	256 (81)	145 (204)	98.1 (0.2)
25	7.4 (3.9)	61.6 (14.1)	2.16 (1.59)	154 (41)	145 (201)	98.0 (0.2)
26	7.4 (3.0)	75.1 (7.5)	1.32 (0.84)	88 (92)	62 (90)	97.7 (0.1)
27	7.4 (2.4)	52.4 (9.9)	2.37 (1.26)	272 (61)	138 (197)	98.4 (0.3)
28	6.9 (5.0)	58.0 (14.3)	2.21 (1.55)	178 (53)	132 (190)	98.6 (0.3)
29	11.5 (3.2)	58.7 (6.3)	2.78 (0.84)	191 (29)	133 (186)	97.8 (0.2)
30	15.2 (3.3)	66.7 (9.2)	4.13 (0.84)	187 (15)	116 (166)	96.8 (0.3)
31	9.1 (3.1)	55.6 (9.6)	5.53 (1.83)	277 (25)	129 (188)	97.1 (0.5)
Avg	12.4	72.1	3.31	186	100	97.0
n	29	29	29	29	27	28
SD	5.3	11.1	1.33	67	53	0.9
Min	6.9	52.4	1.01	42	17	94.2
Max	25.4	91.1	6.27	281	194	98.6

ED_004549_00015842-00051

Table F1. Daily means (SD) of weather parameters at Site WI5B for November, 2007.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	7.3 (4.0)	52.1 (13.1)	2.75 (1.53)	188 (41)	126 (180)	97.6 (0.2)
2	8.0 (2.2)	48.3 (6.5)	3.64 (1.70)	228 (35)	123 (181)	97.4 (0.2)
3	6.2 (3.0)	57.0 (10.8)	2.25 (1.37)	192 (38)	103 (156)	97.4 (0.4)
4	8.4 (3.3)	56.6 (14.2)	1.90 (1.17)	199 (63)	117 (176)	96.5 (0.3)
5	4.3 (2.2)	63.3 (7.9)	5.90 (1.37)	295 (12)	53 (108)	96.7 (0.5)
6	2.1 (1.2)	60.1 (5.4)	3.51 (1.64)	289 (90)	52 (86)	98.0 (0.3)
7	0.7 (2.9)	65.0 (8.9)	2.78 (1.58)	169 (33)	74 (116)	97.5 (0.6)
8	1.4 (2.3)	71.5 (7.5)	1.19 (0.83)	268 (87)	76 (119)	97.0 (0.2)
9	0.8 (2.2)	80.3 (3.1)	1.17 (0.89)	138 (92)	29 (49)	97.5 (0.2)
10	3.1 (1.7)	77.8 (3.4)	3.61 (1.30)	145 (17)	32 (65)	97.2 (0.5)
11	9.0 (3.9)	72.8 (8.5)	2.75 (1.14)	153 (57)	88 (138)	96.4 (0.2)
12	6.6 (2.3)	56.1 (8.2)	1.92 (0.92)	258 (54)	58 (89)	97.4 (0.2)
13	7.6 (3.8)	49.8 (6.8)	3.80 (1.47)	205 (29)	61 (104)	96.3 (0.5)
14						
15						
16	1.7 (2.3)	63.4 (8.8)	3.30 (1.49)	115 (30)	57 (94)	96.6 (0.3)
17	0.8 (1.3)	66.5 (9.7)	4.20 (1.38)	60 (16)	50 (88)	97.2 (0.4)
18	0.8 (1.8)	72.1 (10.9)	3.78 (1.08)	138 (27)	25 (46)	97.6 (0.3)
19	4.3 (1.3)	89.8 (2.1)	2.11 (1.17)	184 (68)	16 (25)	96.8 (0.2)
20	2.5 (1.5)	81.7 (8.7)	2.34 (1.39)	355 (108)	28 (41)	97.2 (0.2)
21	-0.7 (0.6)	75.3 (4.9)	4.07 (1.39)	271 (95)	25 (41)	97.8 (0.1)
22	-4.2 (1.4)	70.2 (4.2)	3.02 (1.53)	290 (106)	34 (57)	98.3 (0.1)
23	-3.3 (3.8)	70.0 (7.8)	3.02 (1.51)	206 (21)	70 (118)	97.8 (0.3)
24	0.5 (1.1)	66.8 (6.6)	4.08 (1.34)	229 (18)	43 (73)	97.2 (0.1)
25	2.3 (3.4)	64.7 (13.2)	3.77 (1.53)	217 (29)	88 (137)	96.6 (0.2)
26	0.4 (1.4)	68.7 (8.0)	2.97 (1.21)	274 (35)	70 (117)	97.2 (0.2)
27	-9.6 (2.9)	58.3 (7.2)	4.01 (2.13)	299 (94)	74 (119)	97.9 (0.4)
28	-4.6 (2.8)	57.0 (6.1)	5.33 (2.13)	239 (69)	44 (76)	96.9 (0.2)
29	-10.0 (2.0)	60.9 (6.5)	4.32 (1.59)	261 (20)		97.5 (0.2)
30	-11.1 (2.0)	59.6 (9.8)	4.01 (1.77)	254 (37)	87 (137)	98.1 (0.3)
Avg	1.3	65.6	3.27	224	63	97.3
n	28	28	28	28	27	28
SD	5.3	9.8	1.09	65	30	0.5
Min	-11.1	48.3	1.17	60	16	96.3
Max	9.0	89.8	5.90	355	126	98.3

ED_004549_00015842-00052

Table F1. Daily means (SD) of weather parameters at Site WI5B for December, 2007.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	-7.3 (3.2)	81.9 (10.2)	4.59 (2.30)	123 (25)	13 (20)	97.2 (1.0)
2	-5.1 (2.8)	86.9 (5.4)	3.24 (1.45)	291 (46)	24 (39)	96.7 (0.6)
3	-11.1 (2.5)	78.7 (2.3)	1.68 (0.95)	132 (93)	56 (89)	98.0 (0.2)
4	-7.3 (0.8)	84.5 (4.2)	4.03 (1.01)	89 (20)	31 (50)	97.0 (0.4)
5	-12.2 (3.6)	75.3 (6.1)	1.75 (1.57)	297 (107)	89 (139)	97.6 (0.3)
6	-10.7 (6.6)	83.2 (5.5)	2.97 (1.60)	202 (53)	29 (49)	97.0 (0.3)
7	-11.5 (3.0)	72.4 (9.5)	2.52 (0.96)	268 (20)	83 (131)	97.3 (0.3)
8	-16.8 (2.7)	70.4 (4.6)	1.21 (0.65)	287 (91)	55 (90)	98.6 (0.2)
9	-13.4 (1.6)	68.3 (5.1)	0.78 (0.58)	269 (90)	39 (64)	98.4 (0.2)
10	-10.6 (4.6)	74.1 (7.4)	2.34 (1.48)	184 (54)	81 (129)	97.8 (0.2)
11	-7.0 (1.3)	75.8 (6.1)	2.50 (0.89)	278 (34)	47 (80)	97.7 (0.2)
12	-11.1 (3.3)	72.8 (6.8)	1.52 (1.03)	190 (65)	80 (128)	97.8 (0.3)
13	-6.6 (3.4)	74.8 (7.2)	5.09 (2.25)	248 (40)	57 (95)	96.9 (0.4)
14	-13.8 (2.8)	68.0 (7.4)	0.81 (0.64)	349 (119)	80 (130)	98.3 (0.2)
15	-12.7 (4.5)	68.7 (8.5)	0.29 (0.22)	37 (114)	71 (118)	97.7 (0.4)
16	-7.9 (1.4)	81.3 (4.3)	2.13 (1.00)	275 (39)	34 (55)	97.1 (0.1)
17	-6.1 (1.8)	78.6 (8.4)	2.59 (0.74)	179 (22)	48 (92)	96.9 (0.1)
18	-3.8 (1.1)	82.1 (1.1)	2.26 (0.94)	230 (68)	34 (57)	96.6 (0.2)
19	-3.9 (0.6)	87.1 (1.4)	2.22 (1.17)	158 (42)	32 (60)	97.1 (0.1)
20	-0.4 (2.1)	82.8 (8.1)	3.19 (1.10)	151 (21)		96.6 (0.1)
21	1.9 (0.6)	91.7 (0.8)	2.85 (0.71)	149 (19)	24 (40)	96.6 (0.0)
22	-2.9 (5.2)	85.4 (8.3)			15 (26)	96.4 (0.1)
23						
24						
25						
26	-2.3 (1.0)	84.7 (3.5)	1.51 (0.84)	320 (123)	45 (91)	96.9 (0.1)
27	-4.2 (1.6)	84.9 (3.6)	2.15 (0.89)	301 (108)	54 (99)	97.4 (0.3)
28	-7.2 (1.4)	87.7 (1.7)	2.37 (1.04)	50 (102)	39 (64)	97.1 (0.4)
29	-5.8 (1.4)	84.8 (3.3)	1.57 (0.75)	209 (33)	31 (53)	96.9 (0.0)
30	-6.6 (1.3)	85.5 (1.8)	2.52 (0.89)	157 (22)	46 (78)	96.5 (0.2)
31	-7.0 (1.6)	85.4 (3.9)	2.33 (0.84)	265 (43)	44 (84)	96.7 (0.3)
Avg	-7.6	79.9	2.33	229	47	97.2
n	28	28	27	27	27	28
SD	4.3	6.6	1.07	81	21	0.6
Min	-16.8	68.0	0.29	37	13	96.4
Max	1.9	91.7	5.09	349	89	98.6

ED_004549_00015842-00053

Table F1. Daily means (SD) of weather parameters at Site WI5B for January, 2008.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	-15.7 (1.9)	76.1 (3.6)	3.32 (0.78)	297 (9)	74 (118)	98.1 (0.4)
2	-16.6 (2.5)	73.6 (6.1)	1.58 (0.90)	274 (63)	85 (133)	99.2 (0.2)
3	-8.1 (4.0)	67.0 (8.5)	4.17 (1.33)	188 (16)	84 (138)	97.8 (0.5)
4	-3.7 (2.3)	72.0 (5.1)	3.64 (0.99)	164 (12)	78 (129)	96.7 (0.3)
5	-0.1 (1.8)	88.8 (2.6)	3.61 (0.94)	172 (13)	38 (62)	95.9 (0.1)
6	3.6 (0.8)	90.9 (3.7)	2.20 (1.16)	201 (34)	37 (69)	95.8 (0.3)
7	0.8 (1.1)	88.6 (2.1)	1.45 (0.81)	114 (58)	23 (37)	96.2 (0.1)
8	-0.2 (1.3)	90.0 (4.3)	2.26 (0.92)	281 (84)	21 (34)	96.4 (0.2)
9	-4.8 (2.5)	81.2 (5.2)	2.06 (1.13)	155 (74)	56 (105)	97.0 (0.1)
10	0.1 (1.1)	77.0 (3.0)	2.39 (1.01)	109 (76)	37 (65)	96.2 (0.4)
11	-4.1 (1.7)	85.5 (2.1)	2.60 (1.28)	272 (75)	29 (46)	96.1 (0.3)
12	-4.3 (1.1)	82.1 (2.0)	1.59 (0.85)	346 (119)	46 (77)	97.0 (0.2)
13	-5.9 (1.0)	80.4 (2.6)	2.16 (0.77)	296 (21)	55 (93)	97.2 (0.1)
14	-10.9 (2.6)	74.7 (4.6)	2.84 (1.44)	289 (23)	85 (140)	97.6 (0.2)
15	-10.5 (4.7)	75.0 (5.2)	2.86 (2.04)	169 (53)	82 (141)	97.2 (0.3)
16	-5.6 (1.7)	76.4 (3.7)	3.12 (0.99)	235 (61)	27 (48)	96.8 (0.2)
17	-14.4 (1.6)	84.7 (1.1)	2.98 (0.87)	286 (33)	39 (61)	96.5 (0.3)
18	-16.4 (3.3)	69.5 (8.0)	3.78 (1.15)	285 (28)	87 (143)	97.1 (0.5)
19	-22.3 (2.3)	68.1 (8.1)	2.54 (1.01)	264 (16)	98 (151)	97.9 (0.1)
20	-20.5 (3.3)	63.8 (8.4)	1.89 (0.70)	264 (27)	101 (155)	98.5 (0.2)
21	-15.1 (2.0)	78.5 (7.9)	1.35 (0.73)	107 (84)	47 (73)	98.3 (0.4)
22	-15.8 (1.9)	74.6 (7.3)	2.61 (1.56)	249 (24)	65 (97)	97.1 (0.3)
23	-17.7 (1.2)	66.0 (10.0)	1.88 (1.20)	296 (67)		97.4 (0.2)
24						
25	-12.5 (3.8)	77.3 (6.5)	3.16 (0.83)	162 (19)	56 (88)	97.5 (0.4)
26	-7.3 (1.8)	84.2 (3.3)	1.92 (0.89)	180 (52)	58 (92)	96.7 (0.1)
27	-5.6 (6.5)	71.0 (9.6)	2.14 (1.81)	180 (69)	93 (144)	96.7 (0.3)
28	4.3 (1.7)	72.4 (8.4)	3.89 (1.09)	182 (22)	84 (141)	94.8 (0.6)
29	-14.1 (8.6)	75.5 (9.0)	6.52 (1.36)	291 (15)	32 (50)	95.2 (0.5)
30	-22.2 (2.9)	60.3 (3.5)	3.65 (1.91)	278 (21)	110 (169)	97.2 (0.5)
31	-15.2 (3.1)	56.8 (5.0)	2.17 (0.77)	105 (59)	86 (153)	98.1 (0.3)
Avg	-9.4	76.1	2.74	230	63	97.0
n	30	30	30	30	29	30
SD	7.5	8.5	1.04	68	26	1.0
Min	-22.3	56.8	1.35	105	21	94.8
Max	4.3	90.9	6.52	346	110	99.2

ED_004549_00015842-00054

Table F1. Daily means (SD) of weather parameters at Site WI5B for February, 2008.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	-7.6 (4.2)	74.0 (4.0)	2.39 (1.00)	123 (22)	89 (142)	97.0 (0.2)
2	-2.8 (1.0)	82.5 (1.9)	2.14 (0.64)	203 (45)	35 (55)	96.9 (0.2)
3	-4.9 (1.3)	83.1 (4.9)	2.40 (0.84)	151 (39)	89 (145)	97.3 (0.2)
4	-1.9 (1.8)	89.0 (1.9)	4.07 (1.21)	75 (61)	35 (61)	96.5 (0.2)
5	-0.9 (1.2)	84.1 (3.5)	2.61 (1.18)	271 (96)	70 (102)	97.0 (0.1)
6	-5.4 (2.6)	72.2 (12.3)	3.47 (2.19)	40 (63)	107 (171)	96.6 (0.1)
7	-10.3 (3.3)	80.9 (4.5)	1.70 (1.04)	202 (43)	102 (157)	96.6 (0.2)
8	-5.6 (1.9)	83.0 (4.0)	2.07 (0.81)	105 (57)	87 (137)	96.2 (0.1)
9	-9.7 (6.6)	76.2 (11.5)	4.52 (2.70)	274 (24)	69 (108)	96.5 (0.6)
10	-22.7 (1.6)	59.4 (3.9)	5.12 (1.93)	295 (8)	134 (195)	98.3 (0.3)
11	-18.0 (3.1)	55.7 (5.3)	1.84 (1.10)	81 (87)	118 (180)	98.3 (0.2)
12	-12.5 (2.2)	59.0 (7.1)	1.47 (0.61)	136 (85)	83 (119)	97.4 (0.3)
13	-8.7 (2.1)	76.6 (7.6)	2.40 (0.77)	208 (52)		96.6 (0.2)
14	-10.3 (2.6)	75.1 (10.9)	3.14 (1.22)	301 (97)	104 (151)	96.9 (0.5)
15	-16.9 (2.8)	60.9 (4.9)	1.96 (1.06)	222 (72)	75 (104)	98.1 (0.2)
16	-6.8 (4.4)	68.4 (6.7)	4.06 (1.43)	178 (11)	129 (185)	96.7 (0.6)
17	-2.7 (2.8)	79.8 (5.1)	4.07 (2.18)	264 (85)	58 (86)	95.4 (0.2)
18	-14.4 (1.8)	80.5 (4.8)	5.01 (1.52)	299 (12)	106 (158)	96.2 (0.4)
19	-18.0 (2.7)	71.8 (6.0)	1.98 (1.11)	253 (59)	138 (200)	97.0 (0.2)
20	-19.3 (3.2)	64.4 (9.8)	1.81 (1.26)	317 (101)	161 (221)	98.3 (0.3)
21	-15.5 (5.4)	63.9 (9.4)	1.67 (1.40)	191 (62)	155 (220)	97.6 (0.4)
22	-9.1 (4.6)	65.4 (10.9)	0.54 (0.60)	243 (101)	165 (224)	97.0 (0.1)
23	-7.3 (5.6)	67.3 (9.9)	1.32 (1.09)	179 (73)	156 (221)	97.2 (0.1)
24	-2.8 (4.0)	81.3 (6.0)	2.23 (0.74)	191 (19)	143 (205)	96.8 (0.2)
25	0.2 (1.2)	82.2 (5.5)	2.49 (2.11)	261 (63)	75 (105)	96.7 (0.2)
26	-6.6 (2.1)	64.6 (3.7)	2.83 (1.17)	272 (26)	150 (216)	97.4 (0.1)
27	-8.6 (2.9)	68.5 (7.6)	1.33 (1.16)	275 (60)	175 (239)	97.4 (0.1)
28	-7.4 (4.3)	80.5 (7.6)	2.73 (1.75)	152 (48)	107 (160)	97.0 (0.2)
29	-3.8 (2.8)	73.6 (14.2)	4.46 (2.34)	269 (43)	151 (229)	96.9 (0.3)
Avg	-9.0	73.2	2.68	225	110	97.0
n	29	29	29	29	28	29
SD	5.9	8.8	1.17	74	39	0.7
Min	-22.7	55.7	0.54	40	35	95.4
Max	0.2	89.0	5.12	317	175	98.3

ED_004549_00015842-00055

Table F1. Daily means (SD) of weather parameters at Site WI5B for March, 2008.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	-6.3 (4.5)	59.8 (9.9)	2.84 (1.70)	117 (65)	155 (226)	97.3 (0.3)
2	-0.6 (2.7)	77.4 (9.2)	4.29 (1.44)	129 (82)	67 (110)	96.0 (0.3)
3	-8.7 (2.3)	64.4 (7.2)	3.56 (1.70)	285 (41)	184 (246)	97.1 (0.3)
4	-7.3 (4.3)	59.8 (7.7)	2.37 (1.37)	126 (42)	127 (187)	97.0 (0.3)
5	-5.2 (3.1)	74.8 (10.5)	2.75 (1.14)	245 (58)	94 (128)	96.8 (0.2)
6	-12.3 (2.9)	66.1 (7.4)	1.76 (0.79)	287 (72)	181 (254)	97.6 (0.2)
7	-16.0 (3.4)	52.6 (8.9)	0.94 (0.68)	15 (111)	199 (260)	98.3 (0.3)
8	-12.8 (5.7)	53.1 (12.7)	2.06 (1.48)	152 (54)	170 (226)	97.2 (0.2)
9	-6.1 (3.1)	62.7 (8.7)	1.56 (1.14)	91 (52)	180 (252)	97.7 (0.3)
10	-6.6 (4.0)	68.6 (8.9)	2.17 (1.73)	208 (64)		98.1 (0.3)
11						
12	3.7 (1.5)	70.0 (9.8)	2.72 (1.26)	135 (22)		96.1 (0.3)
13	5.1 (2.8)	73.7 (12.5)	3.24 (1.50)	244 (35)	207 (265)	95.8 (0.1)
14	1.4 (1.7)	68.3 (5.3)	3.33 (1.14)	276 (22)		96.2 (0.2)
15	-1.0 (2.1)	68.3 (8.2)	2.22 (1.13)	299 (100)	177 (252)	97.1 (0.3)
16	-1.1 (3.4)	60.0 (6.8)	2.01 (0.70)	113 (28)	210 (275)	98.2 (0.2)
17	0.1 (1.0)	84.3 (7.6)	3.52 (0.88)	121 (17)	71 (101)	97.7 (0.5)
18	1.9 (1.1)	86.5 (4.3)	1.80 (0.85)	255 (83)	91 (145)	96.7 (0.1)
19	3.1 (3.2)	68.8 (14.4)	1.65 (0.90)	263 (52)	220 (277)	97.0 (0.1)
20	1.4 (2.4)	52.2 (7.5)	2.15 (0.95)	83 (38)	198 (270)	97.7 (0.2)
21	-1.2 (1.4)	83.9 (8.1)	4.47 (1.32)	84 (23)	85 (115)	97.6 (0.2)
22	-0.1 (1.5)	82.9 (5.6)	1.38 (0.81)	254 (81)	150 (201)	98.1 (0.1)
23	-0.6 (1.6)	76.3 (12.1)	2.20 (1.49)	255 (71)	123 (158)	98.2 (0.1)
24	-1.5 (4.2)	72.9 (10.0)	3.91 (2.13)	186 (24)	201 (272)	97.3 (0.7)
25	3.2 (1.4)	73.1 (6.1)	4.16 (2.21)	258 (39)	98 (142)	96.3 (0.5)
26	2.1 (3.3)	68.3 (14.5)	3.15 (1.83)	256 (42)	226 (290)	97.2 (0.0)
27	0.6 (1.8)	52.9 (10.1)	2.73 (1.54)	49 (46)	172 (223)	97.3 (0.1)
28	1.5 (4.0)	47.1 (15.3)	1.17 (0.73)	119 (77)	247 (302)	98.0 (0.2)
29	3.3 (3.2)	48.5 (9.4)	4.35 (1.50)	146 (15)	206 (272)	97.8 (0.3)
30	6.1 (2.9)	62.0 (7.7)	3.48 (1.39)	192 (72)	148 (219)	97.4 (0.1)
31			6.13 (2.30)	42 (48)	36 (54)	96.7 (0.4)
Avg	-1.9	66.9	2.80	186	156	97.3
n	29	29	30	30	27	30
SD	5.5	10.8	1.15	83	55	0.7
Min	-16.0	47.1	0.94	15	36	95.8
Max	6.1	86.5	6.13	299	247	98.3

ED_004549_00015842-00056

Table F1. Daily means (SD) of weather parameters at Site WI5B for April, 2008.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	1.3 (2.3)	61.2 (12.8)	3.09 (1.69)	262 (40)	252 (313)	97.6 (0.5)
2	0.9 (3.9)	70.9 (11.1)	2.51 (1.19)	191 (23)	201 (265)	98.0 (0.2)
3			2.05 (0.97)	182 (23)	224 (269)	97.3 (0.2)
4			2.48 (1.97)	215 (32)	232 (301)	96.6 (0.2)
5	11.1 (4.5)	60.6 (11.3)	3.47 (1.07)	191 (22)	230 (290)	96.4 (0.1)
6	9.3 (1.6)	72.0 (11.9)	3.61 (1.60)	168 (33)	56 (83)	96.3 (0.1)
7	2.7 (0.9)	82.3 (3.4)	2.94 (1.53)	266 (32)	42 (53)	96.6 (0.5)
8	2.9 (0.8)	79.5 (5.1)	2.41 (1.06)	44 (96)	36 (48)	97.3 (0.1)
9	3.3 (1.7)	76.6 (6.1)	2.36 (0.95)	91 (96)	94 (123)	97.6 (0.2)
10	2.8 (0.9)	82.2 (6.2)	7.78 (2.95)	88 (10)	41 (61)	96.6 (0.8)
11	1.9 (1.2)	88.6 (1.5)	6.99 (1.25)	52 (27)	22 (27)	95.3 (0.3)
12	-0.3 (0.8)	77.7 (9.4)	6.90 (2.38)	44 (59)	134 (161)	96.8 (0.5)
13	2.4 (3.7)	58.4 (10.3)	3.28 (2.01)	47 (65)	263 (309)	97.9 (0.1)
14	5.5 (4.8)	55.5 (18.0)	2.21 (1.60)	181 (58)	288 (334)	97.9 (0.3)
15	11.2 (4.6)	47.3 (8.4)	6.03 (1.86)	179 (11)	271 (316)	96.5 (0.5)
16	13.8 (3.9)	57.5 (8.7)	4.91 (1.81)	218 (46)	190 (249)	96.0 (0.4)
17	7.3 (1.8)	73.6 (8.8)	2.30 (1.54)	76 (83)	52 (63)	97.3 (0.1)
18	7.2 (0.9)	76.8 (5.6)	5.03 (1.53)	51 (18)	31 (38)	96.8 (0.1)
19	8.3 (1.8)	82.9 (3.2)	3.38 (0.84)	38 (55)	66 (82)	96.8 (0.2)
20	13.0 (6.5)	69.9 (15.5)	2.08 (1.06)	104 (52)	236 (304)	97.0 (0.2)
21	18.0 (4.3)	62.0 (15.4)	4.27 (1.65)	154 (53)	227 (293)	96.8 (0.1)
22	11.5 (3.9)	66.1 (20.0)	2.54 (1.35)	266 (46)	217 (288)	97.2 (0.2)
23	16.2 (5.9)	41.5 (17.0)	2.99 (1.74)	169 (43)	288 (336)	97.6 (0.2)
24	14.6 (0.6)	74.9 (21.9)	3.27 (1.54)	151 (33)	40 (56)	96.7 (0.3)
25	9.6 (4.1)	89.5 (1.5)	4.04 (2.10)	38 (93)	37 (48)	95.7 (0.4)
26	1.3 (1.2)	76.1 (9.7)	7.63 (1.84)	265 (18)	109 (150)	96.4 (0.6)
27	2.9 (3.2)	64.8 (17.6)	3.11 (1.30)	269 (77)	221 (298)	97.4 (0.1)
28	1.6 (1.4)	69.8 (9.3)	3.83 (2.28)	181 (90)	105 (117)	97.5 (0.1)
29	4.8 (4.2)	56.0 (16.3)	1.66 (1.11)	178 (62)	294 (335)	97.4 (0.2)
30	10.5 (4.8)	49.8 (8.7)	4.11 (1.55)	125 (19)	289 (335)	96.6 (0.3)
Avg	7.0	68.7	3.77	152	160	96.9
n	28	28	30	30	30	30
SD	5.2	12.2	1.69	77	97	0.6
Min	-0.3	41.5	1.66	38	22	95.3
Max	18.0	89.5	7.78	269	294	98.0

ED_004549_00015842-00057

Table F1. Daily means (SD) of weather parameters at Site WI5B for May, 2008.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	13.7 (3.8)	55.9 (4.9)	6.19 (1.17)	97 (7)	185 (266)	95.9 (0.2)
2	9.0 (2.1)	87.3 (3.6)	5.75 (1.71)	67 (49)	30 (41)	95.3 (0.2)
3	7.8 (3.2)	58.9 (19.2)	4.70 (1.90)	265 (34)	295 (350)	96.2 (0.5)
4	12.8 (5.0)	44.6 (9.5)	3.89 (1.91)	225 (26)	291 (351)	96.8 (0.1)
5	12.8 (4.5)	49.8 (14.2)	1.71 (0.93)	216 (86)	299 (346)	97.1 (0.2)
6	16.1 (4.6)	59.6 (17.6)	2.22 (1.26)	177 (68)	189 (278)	96.4 (0.3)
7	13.8 (2.9)	61.5 (21.3)	3.60 (2.97)	249 (88)	276 (358)	96.2 (0.3)
8	13.5 (4.1)	49.8 (14.6)	1.45 (0.93)	25 (100)	231 (274)	96.6 (0.1)
9	12.9 (3.6)	48.4 (12.1)	2.49 (2.00)	57 (51)	280 (341)	96.8 (0.1)
10	11.6 (2.1)	64.6 (14.8)	2.98 (1.63)	141 (49)	129 (170)	96.6 (0.2)
11	9.0 (3.3)	65.9 (17.0)	3.92 (2.31)	248 (82)	271 (350)	96.6 (0.2)
12	11.5 (4.3)	51.8 (11.8)	3.43 (1.97)	140 (27)	271 (301)	96.7 (0.2)
13	12.6 (2.5)	70.5 (9.5)	3.82 (1.12)	206 (60)	78 (104)	96.4 (0.1)
14	12.7 (4.6)	54.9 (16.7)	2.16 (1.29)	252 (74)	336 (364)	97.0 (0.2)
15	15.9 (5.6)	46.3 (19.1)	1.74 (1.22)	192 (70)	324 (362)	97.2 (0.2)
16	18.2 (4.6)	51.6 (17.3)	2.68 (2.07)	253 (79)	282 (337)	96.4 (0.4)
17	14.9 (3.6)	48.0 (13.4)	3.75 (2.31)	285 (68)	242 (302)	96.1 (0.1)
18	10.9 (3.5)	52.2 (14.8)	2.60 (1.67)	256 (52)	322 (366)	96.2 (0.1)
19	9.0 (2.4)	65.9 (13.2)	1.82 (1.18)	98 (59)	94 (121)	96.1 (0.1)
20	11.7 (4.4)	59.3 (21.8)	3.09 (1.73)	282 (57)	309 (358)	96.3 (0.1)
21	12.6 (4.7)	53.0 (14.0)	1.99 (1.54)	246 (90)	344 (365)	96.4 (0.1)
22	15.3 (4.3)	49.8 (10.5)	2.49 (1.35)	77 (40)	319 (355)	96.9 (0.2)
23	14.6 (3.8)	56.0 (10.2)	3.84 (1.45)	99 (22)	314 (342)	97.6 (0.1)
24	16.2 (4.3)	52.0 (13.6)	4.10 (1.74)	129 (23)	285 (305)	97.5 (0.3)
25	18.3 (3.1)	76.8 (4.7)	3.63 (1.62)	168 (43)	151 (183)	96.3 (0.4)
26						
27	11.6 (3.4)	50.8 (10.5)	2.95 (2.04)	77 (50)		98.2 (0.1)
28	14.6 (4.2)	47.8 (13.0)	1.70 (1.14)	171 (50)	322 (363)	98.3 (0.2)
29	12.8 (1.1)	72.8 (12.6)	3.84 (1.79)	150 (22)	69 (98)	97.3 (0.5)
30	16.7 (2.6)	84.6 (6.7)	2.45 (1.22)	220 (60)	100 (148)	96.1 (0.1)
31	18.2 (3.3)	71.3 (15.7)	2.78 (1.26)	274 (55)	322 (368)	96.6 (0.2)
Avg	13.4	58.7	3.13	192	240	96.7
n	30	30	30	30	29	30
SD	2.7	11.1	1.14	76	93	0.6
Min	7.8	44.6	1.45	25	30	95.3
Max	18.3	87.3	6.19	285	344	98.3

ED_004549_00015842-00058

Table F1. Daily means (SD) of weather parameters at Site WI5B for June, 2008.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	20.0 (5.2)	63.1 (20.5)	1.55 (1.25)	247 (80)	336 (360)	96.9 (0.1)
2						
3	14.4 (0.9)	72.2 (8.9)	3.93 (1.47)	93 (12)	95 (133)	96.4 (0.1)
4	16.8 (2.9)	72.5 (6.4)	1.97 (0.85)	103 (48)	123 (149)	96.0 (0.1)
5	18.2 (1.8)	86.6 (3.9)	4.65 (1.96)	78 (34)	91 (135)	95.9 (0.2)
6	20.1 (1.5)	72.3 (8.2)	6.17 (2.06)	195 (29)	154 (207)	95.5 (0.4)
7	21.9 (3.3)	72.5 (8.0)	2.56 (1.41)	186 (79)	220 (304)	96.2 (0.1)
8						
9						
10	17.8 (2.5)	65.2 (10.5)	2.97 (1.69)	233 (72)	290 (334)	96.7 (0.2)
11	16.8 (1.5)	85.5 (3.4)	6.07 (1.83)	99 (20)	80 (158)	96.6 (0.3)
12	20.5 (2.9)	76.2 (14.3)	3.03 (1.66)	185 (45)	216 (311)	96.4 (0.1)
13	17.8 (1.9)	62.1 (10.0)	4.20 (2.47)	225 (32)	280 (320)	96.6 (0.1)
14						
15						
16						
17						
18	19.8 (4.5)	50.7 (20.3)	2.17 (1.77)	221 (81)	367 (371)	97.1 (0.1)
19	21.4 (5.8)	54.3 (18.0)	1.88 (1.13)	215 (73)	332 (350)	96.9 (0.1)
20	22.4 (4.2)	58.1 (17.1)	2.25 (1.46)	252 (80)	320 (358)	97.0 (0.1)
21	21.1 (3.4)	50.8 (11.2)	2.66 (1.69)	277 (39)	328 (365)	97.2 (0.1)
22	19.0 (3.1)	63.4 (9.5)	2.60 (1.79)	278 (89)	286 (333)	97.1 (0.1)
23	21.6 (4.6)	56.6 (16.8)	1.48 (0.97)	129 (79)	350 (373)	97.5 (0.1)
24	23.5 (3.8)	56.7 (10.1)	3.43 (0.91)	192 (18)	316 (355)	97.4 (0.2)
25	24.5 (3.8)	64.5 (11.5)	3.26 (1.38)	222 (42)	297 (326)	96.9 (0.1)
26	23.2 (3.2)	63.4 (10.0)	1.56 (1.13)	208 (65)	212 (216)	96.8 (0.1)
27	20.8 (2.5)	81.1 (8.2)	2.23 (1.19)	196 (61)	126 (237)	96.2 (0.2)
28	17.9 (1.6)	73.5 (8.1)	3.01 (1.58)	254 (28)	233 (290)	96.0 (0.1)
29	20.7 (3.6)	62.1 (15.4)	3.20 (1.77)	254 (41)	291 (311)	96.8 (0.3)
30						
Avg	20.0	66.5	3.04	208	243	96.6
n	22	22	22	22	22	22
SD	2.4	10.1	1.28	59	91	0.5
Min	14.4	50.7	1.48	78	80	95.5
Max	24.5	86.6	6.17	278	367	97.5

ED_004549_00015842-00059

Table F1. Daily means (SD) of weather parameters at Site WI5B for July, 2008.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1						
2						
3						
4	20.9 (4.3)	58.6 (13.5)	2.23 (1.28)	177 (48)	299 (335)	97.4 (0.2)
5	23.4 (3.4)	58.0 (7.6)	3.97 (1.11)	186 (15)	307 (336)	96.9 (0.2)
6	24.6 (3.2)	70.9 (7.0)	3.25 (1.04)	195 (44)	229 (308)	96.6 (0.1)
7	23.2 (2.7)	81.1 (6.5)	2.75 (1.24)	172 (48)	160 (186)	96.5 (0.2)
8						
9						
10	20.4 (3.2)	74.8 (9.5)	3.10 (1.55)	154 (52)	159 (232)	
11	22.9 (3.6)	82.8 (6.0)	4.58 (1.83)	164 (38)	192 (217)	96.4 (0.2)
12	20.5 (2.8)	58.4 (16.4)	4.16 (2.08)	250 (28)	302 (358)	96.7 (0.2)
13	20.4 (3.1)	54.2 (10.2)	5.31 (2.60)	278 (22)	329 (360)	96.6 (0.1)
14	22.2 (4.9)	60.8 (15.2)	2.11 (1.33)	205 (54)	334 (352)	96.8 (0.1)
15	26.3 (4.7)	59.1 (12.7)	2.15 (1.32)	178 (75)	308 (332)	96.9 (0.2)
16	25.0 (3.0)	66.7 (6.9)	2.96 (1.20)	146 (55)	238 (308)	97.3 (0.1)
17	22.5 (1.5)	84.8 (4.8)	2.80 (0.96)	187 (27)	108 (142)	97.1 (0.1)
18	24.0 (3.4)	69.7 (17.1)	1.52 (0.79)	211 (83)	289 (352)	97.1 (0.1)
19			2.49 (1.90)	137 (59)	183 (239)	96.9 (0.2)
20			1.70 (1.03)	278 (69)	261 (330)	97.0 (0.1)
21	23.8 (3.6)	70.7 (13.1)	1.49 (0.93)	311 (107)	295 (353)	97.1 (0.1)
22	22.7 (3.7)	66.5 (13.0)	2.16 (1.05)	80 (27)	302 (343)	97.5 (0.1)
23	22.7 (3.9)	65.4 (10.1)	2.03 (1.15)	156 (44)	290 (329)	97.6 (0.2)
24	23.8 (2.6)	70.3 (9.3)	3.43 (0.93)	188 (16)	251 (320)	97.2 (0.1)
25	23.5 (2.6)	77.5 (11.1)	2.66 (1.15)	231 (48)	189 (276)	97.1 (0.1)
26	23.8 (4.4)	61.8 (16.3)	1.70 (1.17)	262 (63)	302 (330)	97.2 (0.1)
27			1.59 (1.16)	181 (68)	216 (242)	96.8 (0.1)
28			2.55 (1.17)	145 (45)	285 (328)	96.7 (0.1)
29			3.13 (1.24)	237 (55)	261 (322)	96.5 (0.1)
30			1.88 (1.48)	252 (69)	309 (338)	96.4 (0.1)
31			1.20 (1.09)	185 (85)	202 (290)	96.5 (0.1)
Avg	23.0	68.0	2.65	196	254	96.9
n	19	19	26	26	26	25
SD	1.6	8.9	1.00	51	60	0.3
Min	20.4	54.2	1.20	80	108	96.4
Max	26.3	84.8	5.31	311	334	97.6

ED_004549_00015842-00060

Table F1. Daily means (SD) of weather parameters at Site WI5B for August, 2008.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1			1.94 (1.35)	238 (71)	308 (340)	96.8 (0.1)
2			1.93 (1.31)	147 (52)	280 (325)	97.1 (0.1)
3			3.65 (1.25)	137 (19)	72 (94)	96.8 (0.1)
4			1.63 (1.11)	68 (96)	160 (216)	96.8 (0.1)
5			1.70 (1.19)	248 (70)	274 (317)	97.3 (0.1)
6			1.90 (1.66)	257 (70)	241 (307)	97.4 (0.0)
7			1.68 (1.43)	198 (93)	284 (342)	97.5 (0.1)
8			1.50 (0.90)	181 (51)	212 (253)	97.4 (0.2)
9			2.17 (1.46)	70 (70)	274 (330)	97.1 (0.1)
10			1.96 (0.96)	118 (53)	303 (337)	97.5 (0.1)
11			2.33 (1.27)	173 (33)	269 (313)	97.2 (0.2)
12			2.72 (0.66)	174 (21)	79 (115)	96.7 (0.1)
13	23.9 (3.4)	76.7 (12.3)	1.29 (0.99)	232 (84)	222 (285)	96.7 (0.1)
14	21.9 (2.5)	81.9 (7.4)	1.70 (1.36)	111 (64)	162 (233)	97.1 (0.2)
15	22.9 (4.6)	63.6 (19.8)	1.21 (0.97)	202 (87)	275 (325)	97.9 (0.1)
16			2.13 (1.18)	223 (47)	271 (314)	97.6 (0.2)
17			2.49 (1.30)	215 (37)	273 (314)	97.1 (0.2)
18			2.72 (0.80)	200 (50)	273 (315)	97.0 (0.1)
19			3.14 (0.90)	141 (31)	265 (310)	97.4 (0.1)
20			2.89 (1.02)	159 (15)	220 (289)	97.5 (0.1)
21			3.70 (1.12)	160 (13)	167 (224)	97.1 (0.2)
22	23.6 (2.4)	82.3 (8.1)	4.23 (1.98)	187 (24)	182 (266)	96.7 (0.1)
23	18.4 (2.6)	64.8 (10.4)	2.64 (1.78)	273 (52)	274 (318)	97.4 (0.2)
24			1.63 (1.41)	109 (94)	270 (311)	97.7 (0.1)
25			1.40 (1.02)	135 (49)	276 (319)	97.6 (0.1)
26			2.91 (1.40)	157 (19)	262 (306)	97.3 (0.2)
27			3.03 (1.13)	161 (34)	126 (195)	96.8 (0.2)
28			2.14 (0.95)	257 (61)	208 (283)	96.5 (0.2)
29			2.32 (1.36)	204 (53)	262 (306)	97.1 (0.1)
30			2.39 (1.30)	174 (53)	258 (301)	97.4 (0.1)
31			3.94 (1.02)	174 (13)	250 (304)	97.3 (0.1)
Avg	22.1	73.9	2.35	178	234	97.2
n	5	5	31	31	31	31
SD	2.0	8.1	0.78	52	61	0.3
Min	18.4	63.6	1.21	68	72	96.5
Max	23.9	82.3	4.23	273	308	97.9

ED_004549_00015842-00061

Table F1. Daily means (SD) of weather parameters at Site WI5B for September, 2008.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1			4.30 (1.04)	178 (14)	224 (275)	97.1 (0.1)
2			4.05 (1.38)	233 (49)	99 (148)	97.1 (0.3)
3			2.84 (1.22)	319 (108)	261 (308)	97.7 (0.1)
4			1.80 (1.10)	95 (36)	120 (151)	97.2 (0.2)
5			2.08 (1.61)	194 (62)	186 (264)	97.0 (0.1)
6			2.19 (1.06)	220 (39)	202 (265)	97.1 (0.1)
7			2.28 (0.98)	238 (37)	130 (205)	97.3 (0.1)
8			1.25 (0.82)	245 (68)	143 (206)	97.7 (0.1)
9			1.67 (1.20)	165 (56)	240 (292)	97.7 (0.1)
10			3.63 (1.24)	159 (13)	130 (180)	97.6 (0.1)
11			3.50 (1.16)	185 (45)	71 (116)	96.9 (0.2)
12			2.02 (0.97)	128 (77)	195 (265)	97.1 (0.2)
13			2.22 (1.51)	80 (96)	49 (65)	96.2 (0.2)
14			2.52 (1.38)	258 (74)	65 (108)	96.6 (0.4)
15			2.15 (0.76)	235 (48)	194 (274)	97.7 (0.1)
16	18.8 (5.1)	64.3 (9.8)	2.72 (1.14)	202 (34)	226 (279)	97.4 (0.1)
17	19.0 (4.9)	62.3 (16.2)	1.26 (0.88)	85 (51)	223 (275)	97.9 (0.1)
18	20.0 (4.4)	66.0 (7.5)	4.03 (1.14)	154 (27)	208 (264)	97.8 (0.2)
19	22.1 (3.1)	63.7 (10.9)	4.01 (1.11)	201 (14)	204 (269)	97.3 (0.1)
20	21.3 (3.8)	69.1 (7.1)	1.75 (0.84)	125 (65)	178 (244)	97.6 (0.1)
21	20.8 (4.5)	69.2 (10.9)	2.48 (1.26)	149 (30)	192 (249)	97.9 (0.1)
22	21.2 (2.4)	71.5 (6.0)	4.04 (1.00)	162 (13)	138 (187)	97.9 (0.1)
23	22.0 (2.6)	72.1 (8.8)	4.47 (1.28)	182 (23)	102 (169)	97.6 (0.2)
24	16.9 (3.2)	67.4 (14.4)	2.41 (1.63)	226 (64)	211 (270)	98.1 (0.2)
25	17.9 (4.4)	67.7 (7.6)	3.08 (1.41)	154 (29)	126 (184)	98.0 (0.2)
26	22.8 (3.5)	62.1 (7.9)	4.13 (0.97)	185 (11)	193 (250)	97.4 (0.2)
27	18.1 (2.2)	77.7 (5.0)	3.22 (1.33)	226 (92)	78 (126)	97.5 (0.2)
28	14.8 (1.5)	84.2 (1.6)	1.92 (0.81)	124 (43)	45 (58)	97.8 (0.2)
29	15.4 (2.1)	72.6 (12.5)	2.62 (1.37)	272 (49)	139 (235)	97.4 (0.1)
30	10.7 (1.9)	70.9 (6.2)	2.26 (1.33)	289 (93)	97 (135)	97.4 (0.1)
Avg	18.8	69.4	2.76	188	156	97.4
n	15	15	30	30	30	30
SD	3.2	5.7	0.94	58	60	0.4
Min	10.7	62.1	1.25	80	45	96.2
Max	22.8	84.2	4.47	319	261	98.1

ED_004549_00015842-00062

Table F1. Daily means (SD) of weather parameters at Site WI5B for October, 2008.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	9.7 (3.2)	73.5 (10.2)	1.83 (1.28)	264 (93)	109 (159)	97.5 (0.1)
2	12.5 (4.8)	69.1 (11.9)	2.62 (1.56)	265 (90)	167 (243)	96.9 (0.2)
3	9.9 (4.3)	64.5 (14.9)	0.85 (0.68)	78 (85)	192 (255)	97.5 (0.2)
4	10.4 (5.0)	60.4 (14.7)	1.81 (1.33)	140 (47)	184 (241)	97.8 (0.1)
5	10.6 (1.7)	76.7 (7.9)	4.10 (1.53)	112 (12)	53 (93)	97.6 (0.1)
6	16.8 (3.3)	78.0 (7.2)	5.08 (0.94)	131 (9)		97.5 (0.1)
7						
8						
9						
10	14.0 (3.7)	59.5 (11.3)	3.08 (1.44)	108 (34)	96 (171)	97.5 (0.2)
11	18.1 (4.2)	64.5 (6.8)	3.21 (1.02)	145 (20)	139 (208)	97.6 (0.1)
12	22.0 (2.7)	70.5 (7.2)	3.92 (1.07)	165 (13)	85 (139)	97.6 (0.1)
13	15.7 (5.6)	80.0 (4.2)	3.44 (1.01)	219 (39)	19 (27)	97.5 (0.1)
14	9.8 (2.8)	67.3 (11.0)	2.45 (0.90)	219 (26)	94 (140)	97.8 (0.2)
15	9.7 (1.8)	67.4 (10.3)	3.33 (1.40)	264 (39)	90 (160)	97.5 (0.2)
16						
17						
18						
19						
20						
21						
22	7.6 (1.2)	66.0 (5.3)	5.32 (1.45)	110 (13)	20 (30)	98.1 (0.1)
23	10.0 (2.7)	59.9 (9.1)	4.11 (1.24)	114 (16)	89 (135)	97.8 (0.3)
24	9.1 (1.0)	80.0 (3.2)	1.61 (0.78)	217 (77)	32 (52)	96.8 (0.3)
25	10.7 (3.4)	66.2 (14.7)	3.89 (2.01)	237 (21)	115 (187)	95.8 (0.3)
26	5.9 (2.0)	68.2 (9.6)	6.89 (1.58)	282 (11)	43 (64)	96.5 (0.6)
27	3.2 (1.5)	61.7 (6.6)	3.76 (2.01)	286 (38)	82 (137)	98.2 (0.3)
28	3.6 (3.9)	55.0 (17.1)	1.85 (1.51)	237 (37)	123 (181)	98.2 (0.3)
29	7.8 (4.5)	44.7 (10.5)	1.30 (0.92)	166 (65)	133 (189)	97.7 (0.1)
30						
31						
Avg	10.9	66.7	3.22	188	98	97.5
n	20	20	20	20	19	20
SD	4.6	8.5	1.46	66	50	0.6
Min	3.2	44.7	0.85	78	19	95.8
Max	22.0	80.0	6.89	286	192	98.2

ED_004549_00015842-00063

Table F1. Daily means (SD) of weather parameters at Site WI5B for November, 2008.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	9.3 (3.3)	53.6 (7.0)	2.96 (1.11)	107 (22)	110 (158)	98.3 (0.2)
2	12.7 (4.1)	65.3 (6.7)	3.22 (1.79)	168 (42)	103 (162)	97.2 (0.3)
3	18.2 (4.3)	68.3 (10.6)	4.27 (1.74)	176 (24)	113 (166)	96.9 (0.2)
4						
5						
6	12.6 (2.8)	77.8 (4.9)	3.72 (1.22)	156 (27)	24 (64)	95.7 (0.2)
7	3.9 (1.6)	81.6 (3.1)	2.14 (1.06)	185 (66)	33 (48)	95.7 (0.1)
8	2.4 (1.1)	81.8 (3.7)	4.23 (1.12)	279 (24)	18 (28)	96.1 (0.4)
9	-1.7 (0.9)	69.9 (2.9)	3.37 (1.36)	289 (20)	34 (53)	97.0 (0.2)
10	-0.7 (2.3)	69.0 (6.1)	1.55 (1.02)	264 (86)	96 (160)	97.7 (0.2)
11	-0.3 (1.8)	78.8 (3.8)	3.12 (1.29)	110 (22)	21 (33)	97.6 (0.3)
12	3.0 (0.7)	87.2 (0.8)	1.75 (0.82)	156 (47)	22 (37)	96.7 (0.2)
13	5.8 (1.5)	87.8 (3.0)	3.28 (0.95)	226 (40)	12 (18)	95.4 (0.3)
14	4.5 (1.2)	79.8 (2.8)	2.56 (1.05)	278 (29)	27 (47)	96.3 (0.5)
15	0.9 (1.3)	74.7 (5.5)	3.29 (1.01)	292 (22)	37 (63)	97.2 (0.1)
16	-0.3 (1.3)	74.9 (3.1)	2.05 (0.92)	267 (78)	51 (98)	97.1 (0.3)
17	-1.5 (1.6)	69.1 (4.0)	2.77 (1.50)	281 (66)	56 (94)	98.3 (0.3)
18	-3.2 (3.2)	68.6 (7.8)	2.88 (2.08)	167 (45)	67 (113)	98.2 (0.6)
19						
20						
21	-6.6 (2.0)	64.2 (5.1)	2.10 (0.81)	234 (56)	94 (147)	98.6 (0.2)
22	-1.4 (2.7)	70.9 (4.3)	3.20 (1.06)	155 (22)	68 (117)	98.0 (0.1)
23						
24	-0.3 (1.6)	76.2 (4.9)	2.71 (1.36)	277 (30)	48 (83)	97.1 (0.2)
25	-3.0 (2.7)	70.5 (7.1)	1.06 (0.76)	232 (63)	71 (112)	97.4 (0.2)
26	-0.8 (4.1)	70.4 (6.2)	0.70 (0.59)	151 (94)	87 (136)	97.1 (0.0)
27	0.8 (3.2)	71.2 (9.7)	3.62 (2.41)	260 (54)	34 (59)	96.8 (0.1)
28	1.0 (2.7)	65.5 (8.1)	2.28 (1.16)	260 (48)		96.8 (0.0)
29						
30						
Avg	2.4	72.9	2.73	221	56	97.1
n	23	23	23	23	22	23
SD	5.8	7.7	0.91	60	32	0.9
Min	-6.6	53.6	0.70	107	12	95.4
Max	18.2	87.8	4.27	292	113	98.6

ED_004549_00015842-00064

Table F1. Daily means (SD) of weather parameters at Site WI5B for December, 2008.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1						
2	-2.0 (4.7)	73.8 (4.4)	3.43 (1.45)	204 (35)	56 (97)	96.1 (0.3)
3	-5.3 (2.3)	69.0 (7.3)	3.56 (1.45)	295 (18)	75 (129)	97.0 (0.3)
4	-9.3 (1.8)	67.9 (5.0)	2.76 (1.79)	270 (57)	68 (119)	98.0 (0.3)
5	-8.0 (3.8)	73.1 (5.4)	3.50 (1.22)	206 (25)	52 (91)	97.0 (0.9)
6	-7.4 (3.6)	69.1 (7.3)	4.38 (2.32)	299 (56)	55 (93)	96.8 (0.7)
7	-12.9 (3.4)	71.1 (3.6)	2.24 (1.51)	146 (51)	24 (41)	97.4 (0.4)
8						
9						
10						
11	-7.9 (3.2)	65.6 (4.3)	3.51 (1.32)	287 (34)	60 (104)	97.1 (0.2)
12	-12.4 (4.4)	73.3 (4.2)	2.51 (1.68)	189 (53)	34 (59)	97.1 (0.4)
13	2.9 (2.3)	73.3 (3.0)	3.24 (0.98)	149 (29)	53 (87)	95.8 (0.2)
14						
15						
16	-18.0 (3.0)	72.9 (1.5)	1.89 (1.00)	152 (37)	27 (46)	98.1 (0.6)
17	-13.2 (1.6)	74.5 (2.9)	1.93 (0.97)	220 (34)	77 (125)	97.5 (0.2)
18	-11.0 (3.9)	73.3 (2.7)	1.47 (1.17)	141 (74)	71 (120)	97.7 (0.1)
19	-5.6 (1.7)	70.9 (3.7)	3.02 (1.70)	61 (24)	53 (90)	97.4 (0.2)
20	-8.6 (4.7)	77.6 (2.6)	4.31 (1.83)	129 (74)	26 (44)	96.9 (0.3)
21						
22						
23						
24	-11.6 (2.8)	76.6 (2.3)	2.21 (1.60)	257 (50)		96.7 (0.5)
25	-8.3 (5.2)	68.3 (6.6)	5.04 (2.23)	158 (20)		97.3 (0.4)
26	2.5 (3.3)	83.4 (5.5)	4.43 (1.30)	145 (16)	19 (32)	95.9 (0.3)
27	-1.0 (3.4)	86.1 (3.4)	4.24 (0.95)	261 (21)	20 (31)	95.7 (0.1)
28	-5.8 (3.6)	75.3 (4.4)	3.54 (1.14)	215 (46)	80 (129)	96.5 (0.3)
29	-2.0 (3.2)	67.6 (9.4)	4.07 (1.94)	265 (42)	70 (123)	97.0 (0.6)
30	-8.7 (2.7)	73.9 (5.1)	3.93 (1.77)	70 (96)	19 (32)	97.2 (0.5)
31	-15.4 (3.1)	67.1 (6.4)	2.35 (1.00)	220 (60)	81 (132)	98.2 (0.5)
Avg	-7.7	72.9	3.25	203	51	97.0
n	22	22	22	22	20	22
SD	5.3	4.9	0.95	68	22	0.7
Min	-18.0	65.6	1.47	61	19	95.7
Max	2.9	86.1	5.04	299	81	98.2

ED_004549_00015842-00065

Table F1. Daily means (SD) of weather parameters at Site WI5B for January, 2009.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	-5.0 (2.6)	65.9 (3.4)	4.47 (1.34)	215 (46)	49 (83)	96.2 (0.4)
2	-11.9 (2.5)	66.3 (4.5)	2.36 (1.34)	289 (96)	80 (131)	96.7 (0.2)
3	-5.0 (3.4)	69.6 (6.6)	4.95 (2.85)	101 (42)	22 (39)	96.7 (0.2)
4	-11.8 (4.4)	72.0 (6.9)	4.01 (1.73)	264 (26)	88 (137)	97.5 (0.4)
5	-9.2 (6.0)	69.8 (4.0)	2.42 (1.05)	190 (25)	87 (136)	96.9 (0.5)
6	-4.9 (1.9)	65.2 (4.0)	3.17 (1.63)	166 (32)	63 (107)	95.5 (0.3)
7	-9.3 (1.7)	73.8 (3.5)	3.00 (1.09)	279 (33)	66 (108)	95.2 (0.3)
8	-12.7 (2.2)	70.4 (4.9)	1.56 (0.99)	273 (77)	80 (133)	96.6 (0.3)
9	-8.9 (1.5)	65.2 (2.7)	3.11 (1.46)	67 (34)	39 (62)	97.3 (0.4)
10	-9.7 (2.6)	69.6 (3.7)	1.33 (0.81)	298 (103)	86 (136)	97.7 (0.2)
11	-9.5 (1.9)	74.3 (2.2)	1.66 (1.04)	235 (59)	46 (77)	97.2 (0.1)
12	-11.3 (2.5)	77.3 (1.8)	3.08 (1.95)	143 (89)	35 (59)	97.2 (0.2)
13	-19.9 (2.4)	64.8 (3.9)	1.73 (1.13)	320 (105)	87 (143)	97.7 (0.2)
14	-19.2 (1.4)	62.8 (4.9)	3.86 (1.28)	311 (109)	93 (146)	98.1 (0.5)
15	-23.5 (2.5)	64.6 (2.7)	3.03 (1.03)	262 (22)	92 (144)	99.0 (0.1)
16	-19.3 (5.5)	65.3 (5.4)	2.57 (1.77)	185 (48)	94 (147)	98.3 (0.6)
17	-9.2 (2.4)	74.4 (4.1)	4.37 (2.36)	273 (64)	45 (73)	96.2 (0.3)
18	-9.3 (2.9)	75.6 (1.9)	1.42 (1.33)	278 (104)	49 (78)	96.6 (0.2)
19	-8.8 (3.4)	75.9 (2.7)	1.24 (1.00)	288 (107)	64 (102)	97.0 (0.2)
20	-8.5 (2.3)	75.1 (2.5)	1.85 (1.20)	219 (71)	83 (135)	97.3 (0.3)
21	-5.7 (1.6)	79.7 (1.6)	1.99 (0.82)	234 (40)	61 (96)	96.5 (0.1)
22	-6.8 (2.7)	80.3 (1.6)	0.78 (0.70)	130 (90)	72 (121)	96.3 (0.1)
23	-9.5 (4.0)	72.7 (9.7)	4.66 (2.14)	293 (22)	81 (141)	97.5 (0.8)
24	-18.7 (2.3)	66.2 (3.1)	2.81 (1.27)	255 (22)	103 (157)	98.5 (0.2)
25	-16.4 (3.1)	63.9 (7.7)	2.60 (0.71)	258 (15)	106 (162)	98.2 (0.0)
26	-16.6 (2.1)	65.3 (2.8)	1.81 (1.04)	250 (32)	79 (122)	98.4 (0.1)
27	-15.2 (2.8)	65.7 (5.2)	1.26 (1.00)	222 (50)	90 (140)	98.0 (0.4)
28	-13.1 (4.4)	71.9 (2.5)	2.09 (1.60)	191 (50)	78 (124)	96.4 (0.4)
29	-9.5 (2.0)	70.1 (7.4)	3.75 (1.12)	284 (18)	100 (162)	96.6 (0.3)
30	-13.3 (3.9)	67.8 (4.5)	1.76 (0.98)	241 (50)	103 (163)	97.2 (0.2)
31	1.8 (4.3)	71.1 (9.1)	4.79 (1.73)	227 (33)	109 (164)	95.7 (0.4)
Avg	-11.3	70.1	2.69	247	75	97.1
n	31	31	31	31	31	31
SD	5.3	4.8	1.17	61	22	0.9
Min	-23.5	62.8	0.78	67	22	95.2
Max	1.8	80.3	4.95	320	109	99.0

ED_004549_00015842-00066

Table F1. Daily means (SD) of weather parameters at Site WI5B for February, 2009.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	-0.7 (2.0)	65.9 (4.4)	4.89 (1.03)	260 (12)	114 (171)	96.5 (0.3)
2	-11.4 (3.4)	61.3 (4.2)	4.39 (1.61)	285 (18)	109 (168)	97.2 (0.2)
3	-14.5 (2.1)	67.9 (3.2)	1.85 (0.99)	286 (68)	113 (172)	98.3 (0.3)
4	-13.8 (4.4)	64.3 (6.2)	1.69 (1.54)	180 (61)	115 (175)	98.6 (0.3)
5	-4.8 (3.9)	61.6 (4.1)	2.48 (1.65)	184 (31)	119 (175)	97.3 (0.2)
6	0.7 (5.1)	70.9 (7.2)	3.28 (1.71)	149 (36)	105 (158)	96.4 (0.6)
7	2.0 (2.3)	76.8 (4.6)	3.68 (1.32)	261 (35)	83 (145)	96.5 (0.8)
8	-1.5 (3.5)	75.0 (5.9)	2.02 (0.97)	213 (34)	135 (187)	98.0 (0.1)
9						
10	6.2 (2.2)	76.0 (3.7)	7.16 (1.79)	225 (29)	15 (27)	95.1 (0.6)
11	2.2 (0.5)	81.1 (3.2)	3.84 (1.68)	274 (17)	16 (26)	95.9 (0.1)
12	-0.6 (1.2)	72.1 (3.7)	5.32 (1.31)	277 (10)	48 (98)	96.9 (0.4)
13	-3.6 (1.2)	72.1 (3.0)	2.42 (0.85)	284 (41)	69 (108)	97.7 (0.1)
14	-7.1 (1.6)	71.6 (4.6)	2.65 (0.85)	287 (55)	108 (160)	97.8 (0.1)
15	-6.8 (3.2)	66.7 (7.5)	0.92 (0.75)	265 (91)	129 (189)	98.3 (0.1)
16	-2.1 (4.3)	59.3 (8.6)	3.51 (1.61)	188 (30)	85 (133)	97.7 (0.4)
17	2.1 (2.3)	65.0 (7.9)	2.25 (1.07)	136 (42)	105 (170)	96.0 (0.5)
18	-4.5 (4.4)	73.8 (8.8)	3.92 (1.99)	267 (73)	101 (172)	96.2 (0.6)
19	-12.0 (2.8)	62.6 (5.7)	2.59 (1.35)	298 (58)		97.5 (0.1)
20	-9.1 (5.8)	66.1 (7.5)	2.01 (1.50)	127 (60)	128 (201)	97.1 (0.2)
21	-6.1 (1.5)	75.0 (5.8)	4.57 (1.09)	325 (109)	115 (173)	97.1 (0.4)
22	-10.6 (2.8)	68.5 (4.0)	1.93 (1.48)	288 (54)	155 (221)	98.4 (0.3)
23	-9.0 (5.1)	64.2 (8.0)	1.82 (1.46)	134 (70)	156 (221)	98.6 (0.4)
24	-0.2 (4.0)	64.5 (3.7)	4.01 (0.84)	161 (16)	157 (218)	97.2 (0.3)
25	3.3 (2.3)	69.4 (4.9)	3.16 (1.29)	260 (61)	146 (204)	96.9 (0.4)
26	-3.7 (2.6)	76.0 (3.8)	5.53 (3.17)	50 (42)	33 (56)	96.9 (0.4)
27	-11.2 (1.5)	63.4 (10.9)	4.71 (2.00)	34 (58)	175 (237)	98.0 (0.5)
28	-12.1 (4.7)	55.6 (7.1)	1.90 (1.48)	305 (107)	176 (237)	98.6 (0.1)
Avg	-4.8	68.4	3.28	250	108	97.3
n	27	27	27	27	26	27
SD	5.7	6.1	1.44	77	43	0.9
Min	-14.5	55.6	0.92	34	15	95.1
Max	6.2	81.1	7.16	325	176	98.6

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Table F1. Daily means (SD) of weather parameters at Site WI5B for March, 2009.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	-12.3 (3.3)	57.1 (6.3)	1.52 (1.00)	351 (110)	178 (245)	99.1 (0.2)
2						
3						
4	1.9 (3.8)	56.2 (5.5)	4.64 (1.01)	151 (9)	176 (238)	97.0 (0.3)
5	5.3 (1.2)	75.9 (8.9)	2.79 (1.09)	180 (40)	52 (69)	95.8 (0.2)
6	4.9 (2.3)	79.5 (7.9)	2.47 (1.26)	247 (32)	137 (214)	96.7 (0.4)
7	1.4 (1.6)	70.5 (7.4)	1.80 (0.74)	274 (84)	129 (192)	97.0 (0.1)
8	0.7 (1.5)	69.0 (2.7)	3.04 (1.74)	68 (64)	59 (80)	96.7 (0.2)
9	1.6 (3.3)	77.7 (4.0)	2.05 (1.79)	139 (51)	120 (163)	97.3 (0.1)
10	0.2 (4.9)	84.1 (2.8)		47 (95)	19 (29)	96.2 (0.4)
11	-14.1 (1.7)	67.2 (4.6)		280 (8)	182 (246)	98.4 (0.7)
12	-11.5 (4.8)	60.3 (7.0)		212 (62)	187 (243)	99.1 (0.3)
13	-0.9 (4.6)	65.4 (4.4)	3.17 (1.83)	209 (28)	196 (262)	98.0 (0.3)
14	5.1 (4.1)	63.6 (10.4)	3.26 (1.46)	194 (16)	200 (258)	97.2 (0.2)
15	8.8 (3.9)	56.3 (9.4)	3.54 (1.06)	172 (14)	197 (256)	97.0 (0.0)
16	12.7 (4.5)	63.2 (7.0)	4.11 (1.51)	174 (16)	198 (255)	97.0 (0.1)
17	10.3 (2.2)	65.2 (11.4)	3.27 (1.56)	243 (54)	154 (199)	96.9 (0.3)
18	5.8 (3.0)	55.8 (11.8)	3.31 (2.10)	274 (45)	209 (273)	97.8 (0.2)
19	-0.2 (2.5)	53.7 (9.5)	2.30 (1.16)	248 (94)	221 (278)	98.5 (0.1)
20	2.6 (3.0)	63.3 (11.5)	4.13 (1.55)	151 (12)	96 (156)	98.0 (0.3)
21	10.3 (4.6)	66.1 (10.5)	2.21 (0.82)	153 (45)	214 (273)	97.8 (0.1)
22	8.9 (2.8)	66.1 (6.8)	6.36 (2.14)	111 (9)	183 (251)	97.7 (0.3)
23	6.7 (0.9)	78.8 (2.7)	7.67 (1.14)	117 (8)	56 (105)	96.7 (0.3)
24	8.9 (1.3)	80.3 (4.2)	5.56 (1.64)	132 (37)	38 (63)	95.6 (0.3)
25	2.2 (1.2)	80.0 (3.2)	5.67 (1.47)	231 (22)	45 (67)	95.7 (0.3)
26						
27						
28	1.5 (3.4)	60.7 (9.3)	2.67 (1.48)	55 (56)	193 (265)	96.8 (0.3)
29	1.4 (4.1)	60.2 (12.7)	2.97 (1.75)	264 (94)	237 (302)	96.4 (0.2)
30	4.8 (2.9)	45.7 (11.1)	4.36 (2.73)	97 (31)	132 (195)	96.8 (0.3)
31	4.2 (1.9)	76.0 (9.5)	5.93 (2.05)	124 (37)	39 (67)	95.2 (0.5)
Avg	2.6	66.6	3.70	178	142	97.1
n	27	27	24	27	27	27
SD	6.5	9.6	1.54	75	66	1.0
Min	-14.1	45.7	1.52	47	19	95.2
Max	12.7	84.1	7.67	351	237	99.1

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Table F1. Daily means (SD) of weather parameters at Site WI5B for April, 2009.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	2.5 (0.6)	79.5 (4.5)	5.16 (1.66)	235 (19)	52 (79)	95.4 (0.6)
2	4.0 (2.5)	65.0 (10.1)	3.03 (1.17)	259 (36)	221 (288)	96.3 (0.1)
3	4.7 (2.7)	60.5 (7.1)	2.28 (1.03)	266 (77)	187 (251)	96.5 (0.2)
4	4.3 (3.9)	64.2 (11.8)	2.43 (1.83)	53 (71)	124 (169)	97.2 (0.1)
5	3.2 (2.2)	70.2 (15.2)	3.43 (3.11)	39 (57)	198 (279)	97.2 (0.1)
6	3.2 (2.5)	52.3 (9.1)	4.31 (1.97)	260 (70)	263 (316)	97.3 (0.1)
7	4.3 (4.2)	45.1 (13.0)	2.73 (1.34)	280 (31)	267 (317)	96.7 (0.3)
8	5.5 (3.8)	52.7 (9.3)	2.47 (1.53)	272 (36)	263 (317)	96.2 (0.1)
9	6.6 (4.2)	52.3 (13.6)	2.05 (1.32)	230 (95)	267 (316)	96.8 (0.1)
10	6.8 (4.2)	44.1 (11.9)	3.47 (1.61)	52 (37)	266 (322)	97.5 (0.2)
11	7.9 (4.6)	33.1 (9.2)	2.31 (1.05)	113 (30)	272 (322)	98.1 (0.1)
12	10.4 (3.7)	28.4 (7.5)	3.25 (1.10)	139 (20)	257 (316)	97.9 (0.2)
13	10.2 (2.9)	28.6 (6.7)	2.82 (1.33)	96 (31)	154 (190)	97.0 (0.2)
14	12.0 (5.5)	27.7 (12.2)	2.01 (1.51)	111 (88)	266 (329)	97.2 (0.1)
15	13.1 (5.1)	24.4 (7.8)	2.35 (1.20)	131 (31)	280 (328)	97.8 (0.1)
16	15.4 (4.6)	30.0 (3.9)	2.72 (1.43)	165 (27)	266 (321)	98.2 (0.1)
17	17.3 (4.5)	38.3 (7.0)	2.49 (1.07)	196 (30)	248 (307)	98.0 (0.3)
18	15.0 (4.1)	56.2 (7.6)	3.34 (1.91)	61 (78)	223 (284)	97.3 (0.2)
19	6.7 (1.3)	79.9 (2.7)	3.11 (1.32)	358 (101)	40 (50)	97.1 (0.1)
20	6.0 (1.4)	76.0 (7.3)	3.16 (1.73)	253 (39)	85 (133)	96.4 (0.1)
21	9.7 (3.9)	50.3 (15.0)	4.77 (1.59)	270 (26)	243 (314)	96.3 (0.1)
22	11.2 (3.7)	42.7 (16.9)	2.87 (1.28)	253 (82)	285 (337)	96.7 (0.2)
23	17.4 (6.3)	39.7 (5.9)	5.83 (1.43)	162 (20)	214 (260)	96.2 (0.3)
24	18.6 (5.8)	59.8 (12.1)	4.72 (1.18)	224 (55)	260 (308)	95.9 (0.3)
25	9.8 (2.6)	67.3 (9.8)	3.92 (1.41)	67 (64)	135 (175)	97.2 (0.3)
26	9.7 (3.3)	82.1 (5.8)	4.72 (1.74)	117 (36)	33 (52)	96.7 (0.5)
27	9.3 (2.4)	73.3 (9.6)	3.45 (1.56)	270 (76)	124 (169)	97.2 (0.6)
28	10.9 (5.2)	54.0 (17.9)	3.06 (1.89)	105 (48)	303 (342)	98.4 (0.1)
29	12.1 (2.6)	61.7 (9.1)	4.19 (1.12)	124 (23)	101 (116)	97.8 (0.4)
30	13.9 (2.1)	74.4 (11.6)	4.21 (1.81)	230 (46)	98 (148)	96.7 (0.2)
Avg	9.4	53.8	3.36	187	200	97.0
n	30	30	30	30	30	30
SD	4.5	17.2	0.98	86	81	0.7
Min	2.5	24.4	2.01	39	33	95.4
Max	18.6	82.1	5.83	358	303	98.4

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Table F1. Daily means (SD) of weather parameters at Site WI5B for May, 2009.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	10.9 (2.7)	51.0 (16.3)	4.00 (1.55)	273 (26)	242 (318)	97.0 (0.1)
2	12.3 (3.7)	44.2 (10.3)	3.43 (2.11)	252 (42)	250 (321)	96.7 (0.1)
3	14.7 (3.8)	43.0 (13.0)	2.00 (1.44)	255 (64)	294 (341)	96.8 (0.1)
4	16.8 (5.3)	38.9 (10.0)	2.80 (1.40)	152 (53)	255 (309)	97.0 (0.2)
5	17.5 (3.0)	60.2 (11.9)	4.48 (1.81)	183 (22)	213 (300)	96.4 (0.3)
6	18.1 (3.2)	67.9 (8.7)	3.23 (1.10)	200 (22)	212 (255)	96.0 (0.1)
7	18.9 (3.9)	46.9 (19.2)	3.02 (1.85)	238 (36)	276 (322)	96.0 (0.1)
8	14.2 (3.3)	59.5 (11.1)	2.11 (1.35)	270 (92)	201 (274)	96.2 (0.1)
9	10.3 (1.9)	62.2 (8.7)	2.80 (1.44)	267 (74)	162 (189)	97.1 (0.3)
10	9.4 (2.3)	64.7 (9.6)	2.08 (1.18)	258 (82)	137 (164)	97.7 (0.1)
11	12.9 (6.2)	50.7 (18.9)	1.84 (1.19)	201 (64)	299 (352)	97.6 (0.2)
12	16.9 (3.4)	50.0 (10.3)	5.61 (1.74)	173 (11)	192 (243)	96.8 (0.4)
13	16.6 (2.6)	70.8 (16.0)	4.47 (1.56)	210 (43)	97 (150)	95.8 (0.2)
14	12.4 (3.1)	55.2 (8.6)	4.50 (2.27)	254 (54)	309 (352)	97.0 (0.5)
15	15.6 (3.2)	67.2 (9.3)	4.77 (1.85)	175 (55)	197 (259)	96.8 (0.3)
16	8.6 (2.8)	48.5 (15.3)	5.55 (2.24)	293 (17)	298 (355)	97.7 (0.3)
17	13.1 (5.1)	38.7 (14.6)	2.00 (1.10)	207 (48)	332 (360)	98.1 (0.2)
18	18.6 (4.9)	43.7 (8.6)	4.79 (1.58)	187 (21)	308 (337)	97.3 (0.2)
19	24.4 (5.1)	49.9 (10.0)	3.80 (1.53)	173 (41)	311 (340)	97.0 (0.2)
20	26.5 (4.2)	38.3 (12.9)	6.59 (1.43)	206 (9)	299 (324)	96.6 (0.2)
21	19.5 (2.4)	48.5 (7.5)	3.14 (1.69)	252 (80)	204 (262)	97.5 (0.4)
22	18.1 (3.7)	44.0 (11.3)	3.39 (0.86)	146 (53)	267 (313)	97.8 (0.2)
23	19.0 (3.3)	51.3 (22.2)	2.44 (1.34)	211 (77)	267 (324)	97.5 (0.1)
24	17.4 (5.4)	39.5 (15.1)	1.76 (1.19)	110 (50)	342 (363)	97.6 (0.1)
25	18.3 (3.9)	43.6 (6.1)	4.83 (1.80)	127 (18)	299 (330)	97.2 (0.3)
26	15.7 (1.3)	72.0 (7.6)	3.14 (1.24)	111 (43)	95 (116)	96.6 (0.1)
27	12.4 (1.3)	80.1 (2.4)	4.29 (1.80)	31 (81)	47 (48)	96.6 (0.1)
28	17.8 (5.3)	62.1 (16.6)	1.99 (1.02)	267 (48)	323 (361)	96.6 (0.1)
29	19.0 (3.3)	42.5 (11.6)	3.35 (1.47)	247 (71)	313 (365)	96.9 (0.2)
30	16.8 (3.1)	48.0 (22.9)	3.79 (1.99)	251 (69)	335 (370)	96.7 (0.1)
31	17.5 (6.9)	44.1 (15.2)	3.43 (2.24)	172 (44)	318 (362)	96.6 (0.4)
Avg	16.1	52.5	3.53	214	248	96.9
n	31	31	31	31	31	31
SD	3.9	11.1	1.22	59	77	0.5
Min	8.6	38.3	1.76	31	47	95.8
Max	26.5	80.1	6.59	293	342	98.1

ED_004549_00015842-00070

Table F1. Daily means (SD) of weather parameters at Site WI5B for June, 2009.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	17.4 (4.1)	52.7 (14.4)	3.38 (1.62)	69 (73)	319 (358)	96.9 (0.4)
2	17.2 (4.5)	49.2 (14.3)	3.00 (1.81)	184 (80)	299 (336)	97.5 (0.2)
3	15.3 (4.8)	44.5 (14.2)	1.66 (1.11)	88 (91)	326 (353)	97.8 (0.2)
4	17.5 (6.5)	45.2 (18.8)	2.25 (1.51)	211 (59)	335 (355)	97.2 (0.3)
5	18.0 (3.6)	41.9 (13.5)	3.53 (1.42)	254 (71)	327 (348)	96.8 (0.1)
6	10.3 (0.5)	74.4 (10.2)	3.40 (1.40)	84 (27)	40 (42)	96.9 (0.2)
7	11.2 (1.2)	83.7 (2.2)	3.99 (1.03)	82 (15)	56 (71)	96.8 (0.1)
8	12.6 (1.1)	84.3 (2.0)	2.81 (1.47)	298 (94)	60 (77)	96.5 (0.2)
9	15.3 (2.5)	76.2 (7.2)	1.27 (0.76)	213 (73)	156 (192)	97.0 (0.1)
10	15.8 (1.7)	76.7 (5.2)	1.34 (0.70)	211 (79)	92 (95)	96.9 (0.1)
11	17.6 (4.3)	59.0 (19.8)	1.61 (1.10)	116 (96)	264 (325)	96.9 (0.1)
12	17.3 (4.9)	59.0 (17.0)	1.51 (0.95)	172 (57)	223 (278)	97.1 (0.0)
13	18.8 (5.5)	60.9 (16.0)	2.03 (1.30)	200 (67)	339 (356)	97.2 (0.1)
14	22.5 (5.3)	56.6 (15.2)	1.58 (0.94)	214 (69)	308 (356)	97.1 (0.1)
15	22.7 (3.8)	59.7 (11.5)	2.27 (1.34)	163 (42)	245 (283)	97.1 (0.1)
16	20.9 (2.7)	66.2 (10.9)	3.42 (1.34)	121 (25)	142 (198)	96.8 (0.1)
17	20.5 (2.9)	78.4 (6.5)	2.40 (1.13)	129 (29)	203 (272)	96.7 (0.1)
18	24.1 (2.8)	75.2 (7.2)	3.60 (1.33)	168 (35)	224 (302)	96.1 (0.2)
19	24.7 (2.1)	74.2 (10.8)	2.67 (1.12)	237 (47)	209 (251)	95.9 (0.1)
20	25.1 (4.0)	60.3 (16.0)	1.58 (1.07)	253 (64)	312 (352)	96.5 (0.1)
21	22.6 (2.0)	74.9 (8.8)	3.35 (1.57)	136 (36)	109 (140)	96.5 (0.2)
22	27.9 (4.2)	74.1 (13.3)	2.47 (1.11)	187 (48)	290 (351)	96.3 (0.1)
23	27.9 (4.3)	67.3 (13.9)	1.77 (1.32)	188 (62)	287 (325)	96.8 (0.1)
24	25.4 (2.6)	66.0 (9.9)	1.85 (1.10)	221 (94)	204 (239)	96.9 (0.1)
25	25.4 (3.8)	67.5 (13.9)	1.72 (1.14)	275 (94)	312 (363)	96.7 (0.1)
26	24.8 (4.3)	56.0 (14.6)	1.87 (1.14)	145 (60)	345 (356)	96.8 (0.1)
27	23.1 (2.5)	70.9 (7.2)	3.98 (1.79)	216 (55)	162 (235)	96.3 (0.2)
28	20.9 (2.9)	57.6 (11.1)	5.73 (1.87)	271 (17)	313 (348)	96.2 (0.1)
29	19.1 (1.3)	65.8 (4.4)	4.45 (1.22)	280 (35)	136 (180)	96.1 (0.1)
30	15.7 (1.3)	75.2 (3.7)	3.40 (0.96)	257 (69)	92 (126)	96.3 (0.0)
Avg	19.9	65.1	2.66	192	224	96.8
n	30	30	30	30	30	30
SD	4.7	11.4	1.06	63	96	0.4
Min	10.3	41.9	1.27	69	40	95.9
Max	27.9	84.3	5.73	298	345	97.8

ED_004549_00015842-00071

Table F1. Daily means (SD) of weather parameters at Site WI5B for July, 2009.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	16.3 (1.8)	75.7 (5.8)	2.91 (1.20)	267 (99)	151 (181)	96.7 (0.1)
2	19.0 (4.3)	73.5 (9.3)	1.56 (1.09)	230 (76)	180 (242)	97.2 (0.1)
3	21.6 (4.0)	69.4 (11.5)	1.12 (0.87)	156 (71)	240 (279)	97.4 (0.1)
4	20.8 (2.0)	79.7 (4.2)	1.14 (0.89)	209 (75)	109 (134)	97.1 (0.1)
5	21.8 (4.7)	64.1 (16.6)	1.56 (1.21)	245 (78)	305 (340)	97.0 (0.1)
6	22.2 (4.7)	60.4 (15.9)	1.38 (0.95)	182 (93)	305 (347)	96.8 (0.1)
7	22.1 (4.3)	57.6 (13.3)	1.82 (1.04)	117 (45)	290 (338)	96.7 (0.1)
8	19.8 (2.3)	67.6 (5.7)	3.57 (1.05)	124 (26)	248 (300)	97.0 (0.1)
9	21.5 (3.7)	72.2 (9.2)	4.17 (1.59)	170 (20)	277 (332)	97.1 (0.1)
10	24.5 (3.6)	67.5 (15.6)	2.88 (1.01)	240 (41)	269 (334)	97.1 (0.1)
11	20.1 (3.0)	55.2 (16.6)	2.46 (1.33)	276 (49)	324 (348)	97.5 (0.1)
12	19.9 (4.3)	58.0 (12.7)	1.23 (0.76)	111 (78)	248 (295)	97.5 (0.1)
13	21.1 (4.2)	50.5 (17.4)	1.73 (1.02)	93 (45)	306 (343)	97.5 (0.1)
14	21.9 (1.9)	62.6 (8.0)	4.45 (1.72)	153 (22)	138 (196)	96.8 (0.3)
15	21.1 (2.2)	66.6 (12.6)	4.07 (1.78)	264 (37)	235 (311)	96.7 (0.2)
16	17.5 (2.0)	61.3 (9.9)	3.79 (2.41)	274 (41)	251 (307)	96.9 (0.1)
17	15.6 (1.3)	73.3 (5.2)	3.64 (1.34)	291 (25)	83 (104)	97.0 (0.2)
18	16.9 (1.5)	68.8 (8.9)	2.07 (1.03)	277 (38)	115 (138)	97.4 (0.1)
19	19.1 (3.9)	59.8 (13.0)	1.39 (0.92)	159 (80)	308 (349)	97.5 (0.1)
20	20.8 (3.9)	63.0 (7.8)	3.39 (1.16)	175 (13)	294 (336)	97.2 (0.1)
21	19.6 (2.2)	77.8 (5.5)	2.36 (1.16)	190 (45)	146 (268)	97.0 (0.1)
22	19.2 (4.5)	75.7 (10.9)	1.45 (1.10)	170 (63)	259 (319)	97.1 (0.1)
23	22.2 (5.4)	65.4 (15.4)	1.70 (1.17)	231 (73)	284 (320)	96.9 (0.1)
24	21.6 (2.9)	70.0 (8.8)	2.52 (1.29)	226 (64)	146 (245)	96.3 (0.2)
25	20.2 (2.5)	73.1 (6.1)	3.05 (1.79)	285 (33)	188 (243)	96.4 (0.1)
26	22.6 (3.8)	67.3 (12.7)	2.17 (1.30)	278 (49)	280 (323)	96.7 (0.1)
27	22.5 (3.4)	72.8 (7.2)	1.66 (1.08)	184 (86)	155 (192)	96.5 (0.1)
28	19.6 (2.4)	63.2 (8.5)	2.31 (1.56)	272 (49)	239 (280)	96.6 (0.1)
29	19.4 (4.4)	63.1 (13.7)	1.85 (1.29)	241 (57)	228 (299)	96.7 (0.0)
30	19.0 (2.7)	69.7 (11.7)	1.96 (1.34)	262 (50)	218 (293)	96.6 (0.1)
31	20.2 (4.3)	68.7 (12.6)	2.75 (1.51)	203 (37)	265 (305)	96.7 (0.2)
Avg	20.3	66.9	2.39	216	229	97.0
n	31	31	31	31	31	31
SD	1.9	6.8	0.96	57	67	0.3
Min	15.6	50.5	1.12	93	83	96.3
Max	24.5	79.7	4.45	291	324	97.5

ED_004549_00015842-00072

Table F1. Daily means (SD) of weather parameters at Site WI5B for August, 2009.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	18.4 (2.0)	64.4 (13.8)	4.17 (1.97)	266 (41)	234 (297)	96.6 (0.2)
2	20.9 (4.5)	66.9 (10.0)	2.83 (1.14)	187 (33)	231 (299)	96.4 (0.3)
3	22.7 (3.0)	70.5 (12.9)	2.36 (1.42)	252 (75)	242 (291)	96.2 (0.2)
4	20.7 (2.5)	63.4 (12.1)	2.05 (1.12)	260 (83)	280 (332)	97.0 (0.2)
5	19.6 (4.4)	61.4 (14.2)	1.44 (1.06)	233 (83)	270 (324)	97.5 (0.1)
6	20.8 (4.1)	59.3 (16.6)	1.28 (0.83)	164 (81)	257 (310)	97.5 (0.1)
7	19.3 (0.7)	77.2 (9.5)	3.22 (1.39)	138 (15)	54 (96)	97.0 (0.3)
8	24.7 (3.4)	83.4 (5.2)	3.03 (1.43)	171 (53)	142 (240)	96.4 (0.1)
9	25.0 (2.0)	75.7 (10.5)	1.69 (1.11)	282 (65)	200 (269)	96.8 (0.2)
10	23.0 (3.0)	72.8 (11.1)	1.40 (1.14)	260 (79)	232 (303)	97.1 (0.1)
11	22.7 (5.0)	64.6 (17.7)	0.97 (0.69)	208 (82)	271 (311)	97.4 (0.1)
12	24.1 (4.8)	71.0 (9.3)	2.68 (1.11)	185 (21)	266 (315)	97.3 (0.1)
13	23.9 (2.5)	78.9 (5.9)	3.21 (1.04)	170 (25)	178 (238)	97.2 (0.1)
14	26.1 (3.4)	73.4 (11.8)	3.58 (1.14)	194 (23)	252 (300)	97.0 (0.1)
15	24.4 (1.7)	75.0 (8.3)	3.79 (0.68)	176 (13)	127 (183)	96.8 (0.1)
16	23.4 (2.1)	77.7 (7.4)	3.78 (1.92)	199 (43)	175 (259)	96.5 (0.3)
17	21.6 (3.9)	68.3 (11.4)	2.53 (1.42)	206 (39)	245 (281)	97.0 (0.1)
18	19.9 (3.4)	61.9 (11.1)	2.89 (1.34)	227 (37)	272 (311)	97.0 (0.1)
19	19.1 (1.4)	82.6 (5.1)	2.87 (1.58)	169 (38)	50 (63)	96.2 (0.4)
20	17.9 (0.6)	87.9 (0.6)	2.70 (0.98)	244 (41)	48 (73)	95.6 (0.1)
21	18.1 (2.5)	74.4 (13.3)	2.69 (1.38)	259 (72)	164 (229)	96.5 (0.4)
22	17.8 (4.7)	66.6 (13.5)	1.20 (0.86)	188 (90)	268 (307)	97.4 (0.1)
23	19.3 (4.8)	72.0 (9.8)	2.11 (1.19)	178 (37)	255 (296)	97.3 (0.1)
24	21.9 (3.3)	71.9 (8.3)	4.18 (1.20)	183 (12)	244 (288)	97.1 (0.2)
25	22.4 (2.2)	77.5 (9.5)	2.29 (1.44)	238 (83)	129 (205)	97.1 (0.2)
26	20.8 (3.7)	68.2 (12.2)	1.35 (0.99)	102 (41)	209 (254)	97.6 (0.1)
27	20.7 (3.8)	68.2 (13.1)	1.66 (1.23)	116 (51)	254 (304)	97.5 (0.1)
28	18.9 (3.0)	75.7 (7.4)	2.69 (1.64)	241 (65)	176 (239)	97.2 (0.1)
29	14.0 (2.1)	74.9 (7.4)	3.91 (1.62)	265 (99)	154 (230)	97.3 (0.2)
30	14.8 (4.1)	67.0 (15.9)	1.56 (1.26)	197 (93)	252 (301)	97.9 (0.1)
31	15.3 (5.2)	69.0 (13.1)	1.14 (0.84)	180 (69)	219 (277)	98.0 (0.1)
Avg	20.7	71.7	2.49	205	205	97.0
n	31	31	31	31	31	31
SD	3.0	6.7	0.94	45	67	0.5
Min	14.0	59.3	0.97	102	48	95.6
Max	26.1	87.9	4.18	282	280	98.0

ED_004549_00015842-00073

Table F1. Daily means (SD) of weather parameters at Site WI5B for September, 2009.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	16.5 (4.5)	69.5 (11.7)	1.98 (1.26)	172 (45)	225 (277)	98.0 (0.1)
2	17.5 (4.2)	70.2 (9.9)	2.10 (1.30)	171 (22)	230 (280)	97.9 (0.1)
3	17.8 (4.8)	70.1 (11.6)	1.32 (0.99)	164 (53)	218 (276)	97.7 (0.1)
4	18.1 (5.3)	70.2 (12.9)	1.21 (0.95)	162 (58)	233 (286)	97.7 (0.1)
5	19.2 (5.3)	68.7 (12.6)	1.62 (0.98)	170 (43)	221 (275)	97.8 (0.1)
6	19.8 (4.3)	68.1 (10.8)	1.70 (1.03)	174 (48)	203 (261)	97.8 (0.1)
7	19.9 (4.9)	72.2 (10.0)	2.02 (1.29)	157 (39)	210 (262)	97.6 (0.1)
8	20.7 (3.5)	68.9 (11.8)	2.57 (1.49)	157 (22)	215 (264)	97.4 (0.1)
9	21.3 (3.2)	73.0 (6.2)	2.36 (0.92)	173 (20)	134 (180)	97.6 (0.1)
10	22.5 (3.4)	73.3 (9.2)	2.21 (1.08)	179 (29)	197 (249)	97.8 (0.1)
11	22.7 (2.7)	75.0 (7.5)	2.82 (0.91)	170 (20)	173 (225)	97.6 (0.1)
12	22.4 (3.6)	71.0 (10.8)	1.92 (1.07)	176 (46)	174 (237)	97.7 (0.0)
13	21.7 (5.3)	70.7 (13.5)	0.98 (0.77)	194 (70)	189 (240)	97.6 (0.1)
14	21.0 (4.7)	70.1 (12.6)	1.29 (0.91)	181 (56)	162 (217)	97.5 (0.1)
15	22.6 (5.8)	65.7 (13.9)	1.47 (1.00)	77 (69)	169 (220)	97.6 (0.1)
16	19.8 (3.2)	71.8 (8.9)	2.19 (0.81)	114 (39)	169 (232)	98.0 (0.1)
17	20.3 (4.7)	73.6 (10.8)	1.88 (0.96)	189 (46)	171 (222)	97.7 (0.1)
18	21.6 (4.2)	72.2 (9.5)	1.76 (0.95)	143 (49)	152 (206)	97.7 (0.1)
19	21.8 (3.4)	73.8 (8.6)	2.82 (0.72)	170 (22)	153 (207)	97.7 (0.1)
20	20.1 (2.3)	72.1 (8.7)	2.96 (0.97)	156 (13)	133 (174)	97.2 (0.3)
21	20.0 (2.7)	74.4 (5.0)	3.15 (0.98)	161 (15)	136 (191)	96.8 (0.1)
22	19.1 (0.9)	86.9 (0.9)	0.92 (0.71)	272 (93)	31 (45)	97.1 (0.1)
23	20.9 (2.0)	80.3 (6.4)	0.98 (0.82)	16 (110)	88 (123)	97.7 (0.1)
24	21.0 (3.8)	67.4 (9.1)	1.17 (0.72)	112 (55)	169 (227)	97.7 (0.1)
25	17.8 (1.3)	84.7 (5.1)	2.09 (1.24)	141 (52)	28 (39)	97.4 (0.1)
26	17.2 (3.9)	79.0 (11.0)	1.82 (1.14)	180 (49)	166 (234)	96.7 (0.4)
27	15.8 (3.5)	71.6 (9.7)	5.12 (1.84)	245 (43)	122 (185)	95.4 (0.2)
28	12.2 (1.1)	69.6 (3.7)	6.64 (1.62)	282 (61)	56 (84)	96.2 (0.5)
29	9.0 (1.7)	70.4 (3.4)	3.21 (1.77)	59 (88)	76 (101)	97.5 (0.2)
30	9.1 (4.1)	67.2 (13.8)	2.94 (1.54)	109 (23)	192 (248)	97.4 (0.3)
Avg	19.0	72.4	2.24	163	160	97.5
n	30	30	30	30	30	30
SD	3.5	4.7	1.19	53	56	0.5
Min	9.0	65.7	0.92	16	28	95.4
Max	22.7	86.9	6.64	282	233	98.0

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Table F1. Daily means (SD) of weather parameters at Site WI5B for October, 2009.

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^{-2}$	Atm P, kPa
1	9.6 (1.3)	79.2 (5.4)	5.79 (1.55)	104 (21)	26 (48)	96.3 (0.5)
2	10.0 (0.6)	86.8 (1.1)	5.07 (1.34)	64 (25)	36 (49)	95.3 (0.3)
3	9.8 (1.0)	82.4 (3.4)	3.14 (1.08)	267 (89)	54 (84)	96.3 (0.3)
4	10.2 (1.3)	82.6 (3.3)	2.27 (1.10)	282 (32)	59 (106)	97.1 (0.2)
5	10.0 (2.2)	80.6 (6.0)	0.89 (0.54)	177 (81)	73 (126)	97.2 (0.2)
6	8.8 (0.7)	86.8 (0.6)	3.76 (1.31)	52 (101)	18 (24)	95.9 (0.5)
7	10.8 (4.2)	72.7 (12.5)	2.65 (1.64)	227 (35)	165 (225)	96.5 (0.2)
8	7.8 (2.0)	69.7 (7.2)	2.09 (1.31)	277 (38)	106 (167)	97.0 (0.1)
9	4.3 (2.8)	70.2 (10.6)	1.21 (1.00)	246 (90)	147 (207)	97.2 (0.1)
10	1.2 (1.6)	66.0 (9.4)	4.51 (1.65)	264 (21)	99 (169)	97.7 (0.2)
11	2.9 (1.3)	63.3 (7.8)	1.79 (0.92)	242 (71)	70 (99)	98.1 (0.1)
12	2.3 (0.7)	81.0 (3.7)	0.81 (0.60)	171 (94)	37 (62)	97.8 (0.1)
13	3.6 (2.5)	75.2 (8.9)	1.22 (0.90)	77 (89)	106 (172)	98.4 (0.1)
14	5.5 (1.2)	75.6 (3.0)	2.53 (1.24)	103 (27)	46 (66)	97.8 (0.3)
15	4.1 (1.1)	84.6 (1.3)	2.28 (0.96)	84 (18)	40 (55)	97.3 (0.1)
16	6.1 (2.2)	76.6 (9.2)	0.77 (0.63)	17 (103)	84 (132)	97.8 (0.1)
17	6.7 (2.5)	70.9 (13.2)	2.01 (0.92)	237 (68)	129 (206)	98.1 (0.2)
18	9.9 (4.9)	66.4 (10.3)	3.98 (1.12)	187 (13)	127 (181)	97.1 (0.4)
19	11.6 (2.2)	72.5 (4.4)	2.48 (1.16)	240 (91)	127 (197)	96.7 (0.2)
20	10.3 (0.8)	79.2 (3.3)	2.81 (1.43)	78 (32)	36 (65)	97.2 (0.1)
21	7.9 (1.4)	86.0 (1.0)	4.19 (1.38)	56 (27)	13 (18)	97.1 (0.1)
22	5.8 (1.3)	78.4 (4.9)	5.24 (1.07)	50 (14)	58 (86)	97.3 (0.2)
23	3.3 (0.5)	85.0 (2.8)	4.30 (1.49)	7 (111)	10 (10)	96.0 (0.4)
24	7.6 (3.6)	79.6 (6.2)	2.30 (0.94)	231 (48)	95 (151)	95.9 (0.2)
25	9.4 (0.8)	85.2 (1.8)	1.58 (0.69)	193 (58)	18 (24)	96.7 (0.4)
26	7.0 (1.4)	83.0 (4.8)	1.73 (0.83)	267 (72)	37 (61)	97.2 (0.1)
27	7.8 (3.3)	68.8 (11.5)	3.49 (1.14)	159 (20)	134 (189)	96.6 (0.2)
28	8.5 (2.5)	80.2 (2.4)	3.07 (0.92)	125 (13)	31 (49)	96.8 (0.2)
29	11.7 (0.4)	86.2 (1.2)	4.54 (2.04)	127 (18)	18 (26)	96.4 (0.4)
30	10.6 (4.5)	80.0 (10.6)	5.66 (1.80)	208 (49)	62 (121)	94.7 (0.3)
31	4.1 (1.5)	70.8 (10.0)	4.52 (1.89)	271 (33)	66 (115)	96.3 (0.7)
Avg	7.4	77.6	2.99	190	69	96.9
n	31	31	31	31	31	31
SD	2.9	6.7	1.46	86	43	0.8
Min	1.2	63.3	0.77	7	10	94.7
Max	11.7	86.8	5.79	282	165	98.4

ED_004549_00015842-00075

Table F2. Animal characteristics.

Table F2. Daily means of animal characteristics at Site WI5B for September, 2007.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1							
2							
3							
4							
5							
6							
7							
8							
9							
10		211			355		
11		211			355		
12		211	703	57	355	703	78
13		211	703	57	355	703	78
14		211	703	57	355	703	78
15		211	703	57	355	703	78
16		211	703	57	355	703	78
17		211	703	57	355	703	78
18		211	703	57	355	703	78
19		211	703	57	355	703	78
20		211	703	57	355	703	78
21		211	703	57	355	703	78
22		211	703	57	355	703	78
23		211	703	57	355	703	78
24		211	703	57	355	703	78
25		211	703	57	355	703	78
26		211	703	57	355	703	78
27		211	703	57	355	703	78
28		211	703	57	355	703	78
29		211	703	57	355	703	78
30		211	703	57	355	703	78
Avg		211	703	57	355	703	78
n	0.0	21	19	19	21	19	19
SD		0	0	0	0	0	0
Min		211	703	57	355	703	78
Max		211	703	57	355	703	78

ED_004549_00015842-00076

Table F2. Daily means of animal characteristics at Site WI5B for October, 2007.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1		211	703	57	355	703	78
2		211	703	57	355	703	78
3		211	703	57	355	703	78
4		211	703	57	355	703	78
5		211	703	57	355	703	78
6		211	703	57	355	703	78
7		211	703	57	355	703	78
8		211	703	57	355	703	78
9		211	703	57	355	703	78
10		211	703	57	355	703	78
11		211	703	57	355	703	78
12		211	703	57	355	703	78
13		211	703	57	355	703	78
14		211	703	57	355	703	78
15		211	703	57	355	703	78
16		211	703	57	355	703	78
17		211	703	57	355	703	78
18		211	703	57	355	703	78
19		211	703	57	355	703	78
20		211	703	57	355	703	78
21		211	703	57	355	703	78
22		211	703	57	355	703	78
23		211	703	57	355	703	78
24		211	703	57	355	703	78
25		211	703	57	355	703	78
26		211	703	57	355	703	78
27		211	703	57	355	703	78
28		211	703	57	355	703	78
29		211	703	57	355	703	78
30		211	703	57	355	703	78
31		211	703	57	355	703	78
Avg		211	703	57	355	703	78
n	0.0	31	31	31	31	31	31
SD		0	0	0	0	0	0
Min		211	703	57	355	703	78
Max		211	703	57	355	703	78

ED_004549_00015842-00077

Table F2. Daily means of animal characteristics at Site WI5B for November, 2007.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1		211	703	57	355	703	78
2		211	703	57	355	703	78
3		211	703	57	355	703	78
4		211	703	57	355	703	78
5		211	703	57	355	703	78
6		211	703	57	355	703	78
7		211	703	57	355	703	78
8		211	703	57	355	703	78
9		211	703	57	355	703	78
10		211	703	57	355	703	78
11		211	703	57	355	703	78
12		211	703	57	355	703	78
13		211	703	57	355	703	78
14		211	703	57	355	703	78
15		211	703	57	355	703	78
16		211	703	57	355	703	78
17		211	703	57	355	703	78
18		211	703	57	355	703	78
19		211	703	57	355	703	78
20		211	703	57	355	703	78
21		211	703	57	355	703	78
22		211	703	57	355	703	78
23		211	703	57	355	703	78
24		211	703	57	355	703	78
25		211	703	57	355	703	78
26		211	703	57	355	703	78
27		211	703	57	355	703	78
28		211	703	57	355	703	78
29		211	703	57	355	703	78
30		211	703	57	355	703	78
Avg		211	703	57	355	703	78
n	0.0	30	30	30	30	30	30
SD		0	0	0	0	0	0
Min		211	703	57	355	703	78
Max		211	703	57	355	703	78

ED_004549_00015842-00078

Table F2. Daily means of animal characteristics at Site WI5B for December, 2007.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1		211	703	57	355	703	78
2		211	703	57	355	703	78
3		211	703	57	355	703	78
4		211	703	57	355	703	78
5		211	703	57	355	703	78
6		211	703	57	355	703	78
7		211	703	57	355	703	78
8		211	703	57	355	703	78
9		211	703	57	355	703	78
10		211	703	57	355	703	78
11		211	703	57	355	703	78
12		211	703	57	355	703	78
13		211	703	57	355	703	78
14		211	703	57	355	703	78
15		211	703	57	355	703	78
16		211	703	57	355	703	78
17		211	703	57	355	703	78
18		211	703	57	355	703	78
19		211	703	57	355	703	78
20		211	703	57	355	703	78
21		211	703	57	355	703	78
22		211	703	57	355	703	78
23		211	703	57	355	703	78
24		211	703	57	355	703	78
25		211	703	57	355	703	78
26		211	703	57	355	703	78
27		211	703	57	355	703	78
28		211	703	57	355	703	78
29		211	703	57	355	703	78
30		211	703	57	355	703	78
31		211	703	57	355	703	78
Avg		211	703	57	355	703	78
n	0.0	31	31	31	31	31	31
SD		0	0	0	0	0	0
Min		211	703	57	355	703	78
Max		211	703	57	355	703	78

ED_004549_00015842-00079

Table F2. Daily means of animal characteristics at Site WI5B for January, 2008.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1		211	703	57	355	703	78
2		211	703	57	355	703	78
3		211	703	57	355	703	78
4		211	703	57	355	703	78
5		211	703	57	355	703	78
6		211	703	57	355	703	78
7		211	703	57	355	703	78
8		211	703	57	355	703	78
9		211	703	57	355	703	78
10		211	703	57	355	703	78
11		211	703	57	355	703	78
12		211	703	57	355	703	78
13		211	703	57	355	703	78
14		211	703	57	355	703	78
15		211	703	57	355	703	78
16		211	703	57	355	703	78
17		211	703	57	355	703	78
18		211	703	57	355	703	78
19		211	703	57	355	703	78
20		211	703	57	355	703	78
21		211	703	57	355	703	78
22		211	703	57	355	703	78
23		211	703	57	355	703	78
24		211	703	57	355	703	78
25		211	703	57	355	703	78
26		211	703	57	355	703	78
27		211	703	57	355	703	78
28		211	703	57	355	703	78
29		211	703	57	355	703	78
30		211	703	57	355	703	78
31		211	703	57	355	703	78
Avg		211	703	57	355	703	78
n	0.0	31	31	31	31	31	31
SD		0	0	0	0	0	0
Min		211	703	57	355	703	78
Max		211	703	57	355	703	78

ED_004549_00015842-00080

Table F2. Daily means of animal characteristics at Site WI5B for February, 2008.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1		211	703	57	355	703	78
2		211	703	57	355	703	78
3		211	703	57	355	703	78
4		211	703	57	355	703	78
5		211	703	57	355	703	78
6		211	703	57	355	703	78
7		211	703	57	355	703	78
8		211	703	57	355	703	78
9		211	703	57	355	703	78
10		211	703	57	355	703	78
11		211	703	57	355	703	78
12		211	703	57	355	703	78
13		211	703	57	355	703	78
14		211	703	57	355	703	78
15		211	703	57	355	703	78
16		211	703	57	355	703	78
17		211	703	57	355	703	78
18		211	703	57	355	703	78
19		211	703	57	355	703	78
20		211	703	57	355	703	78
21		211	703	57	355	703	78
22		211	703	57	355	703	78
23		211	703	57	355	703	78
24		211	703	57	355	703	78
25		211	703	57	355	703	78
26		211	703	57	355	703	78
27		211	703	57	355	703	78
28		211	703	57	355	703	78
29		211	703	57	355	703	78
Avg		211	703	57	355	703	78
n	0.0	29	29	29	29	29	29
SD		0	0	0	0	0	0
Min		211	703	57	355	703	78
Max		211	703	57	355	703	78

ED_004549_00015842-00081

Table F2. Daily means of animal characteristics at Site WI5B for March, 2008.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1		211	703	57	355	703	78
2		211	703	57	355	703	78
3		211	703	57	355	703	78
4		211	703	57	355	703	78
5		211	703	57	355	703	78
6		211	703	57	355	703	78
7		211	703	57	355	703	78
8		211	703	57	355	703	78
9		211	703	57	355	703	78
10		211	703	57	355	703	78
11		211	703	57	355	703	78
12		211	703	57	355	703	78
13		211	703	57	355	703	78
14		211	703	57	355	703	78
15		211	703	57	355	703	78
16		211	703	57	355	703	78
17		211	703	57	355	703	78
18		211	703	57	355	703	78
19		211	703	57	355	703	78
20		211	703	57	355	703	78
21		211	703	57	355	703	78
22		211	703	57	355	703	78
23		211	703	57	355	703	78
24		211	703	57	355	703	78
25		211	703	57	355	703	78
26		211	703	57	355	703	78
27		211	703	57	355	703	78
28		211	703	57	355	703	78
29		211	703	57	355	703	78
30		211	703	57	355	703	78
31		211	703	57	355	703	78
Avg		211	703	57	355	703	78
n	0.0	31	31	31	31	31	31
SD		0	0	0	0	0	0
Min		211	703	57	355	703	78
Max		211	703	57	355	703	78

ED_004549_00015842-00082

Table F2. Daily means of animal characteristics at Site WI5B for April, 2008.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1		211	703	57	355	703	78
2		211	703	57	355	703	78
3		211	703	57	355	703	78
4		211	703	57	355	703	78
5		211	703	57	355	703	78
6		211	703	57	355	703	78
7		211	703	57	355	703	78
8		211	703	57	355	703	78
9		211	703	57	355	703	78
10		211	703	57	355	703	78
11		211	703	57	355	703	78
12		211	703	57	355	703	78
13		211	703	57	355	703	78
14		211	703	57	355	703	78
15		211	703	57	355	703	78
16		211	703	57	355	703	78
17		211	703	57	355	703	78
18		211	703	57	355	703	78
19		211	703	57	355	703	78
20		211	703	57	355	703	78
21		211	703	57	355	703	78
22		211	703	57	355	703	78
23		211	703	57	355	703	78
24		211	703	57	355	703	78
25		211	703	57	355	703	78
26		211	703	57	355	703	78
27		211	703	57	355	703	78
28		211	703	57	355	703	78
29		211	703	57	355	703	78
30		211	703	57	355	703	78
Avg		211	703	57	355	703	78
n	0.0	30	30	30	30	30	30
SD		0	0	0	0	0	0
Min		211	703	57	355	703	78
Max		211	703	57	355	703	78

ED_004549_00015842-00083

Table F2. Daily means of animal characteristics at Site WI5B for May, 2008.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1		211	703	57	355	703	78
2		211	703	57	355	703	78
3		211	703	57	355	703	78
4		211	703	57	355	703	78
5		211	703	57	355	703	78
6		211	703	57	355	703	78
7		211	703	57	355	703	78
8		211	703	57	355	703	78
9		211	703	57	355	703	78
10		211	703	57	355	703	78
11		211	703	57	355	703	78
12		211	703	57	355	703	78
13		211	703	57	355	703	78
14		211	703	57	355	703	78
15		211	703	57	355	703	78
16		211	703	57	355	703	78
17		211	703	57	355	703	78
18		211	703	57	355	703	78
19		211	703	57	355	703	78
20		211	703	57	355	703	78
21		211	703	57	355	703	78
22		211	703	57	355	703	78
23		211	703	57	355	703	78
24		211	703	57	355	703	78
25		211	703	57	355	703	78
26		211	703	57	355	703	78
27		211	703	57	355	703	78
28		211	703	57	355	703	78
29		211	703	57	355	703	78
30		211	703	57	355	703	78
31		211	703	57	355	703	78
Avg		211	703	57	355	703	78
n	0.0	31	31	31	31	31	31
SD		0	0	0	0	0	0
Min		211	703	57	355	703	78
Max		211	703	57	355	703	78

ED_004549_00015842-00084

Table F2. Daily means of animal characteristics at Site WI5B for June, 2008.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1		211	703	57	355	703	78
2		211	703	57	355	703	78
3		211	703	57	355	703	78
4		211	703	57	355	703	78
5		211	703	57	355	703	78
6		211	703	57	355	703	78
7		211	703	57	355	703	78
8		211	703	57	355	703	78
9		211	703	57	355	703	78
10		211	703	57	355	703	78
11		211	703	57	355	703	78
12		211	703	57	355	703	78
13		211	703	57	355	703	78
14		211	703	57	355	703	78
15		211	703	57	355	703	78
16		211	703	57	355	703	78
17		211	703	57	355	703	78
18		211	703	57	355	703	78
19		211	703	57	355	703	78
20		211	703	57	355	703	78
21		211	703	57	355	703	78
22		211	703	57	355	703	78
23		211	703	57	355	703	78
24		211	703	57	355	703	78
25		211	703	57	355	703	78
26		211	703	57	355	703	78
27		211	703	57	355	703	78
28		211	703	57	355	703	78
29		211	703	57	355	703	78
30		211	703	57	355	703	78
Avg		211	703	57	355	703	78
n	0.0	30	30	30	30	30	30
SD		0	0	0	0	0	0
Min		211	703	57	355	703	78
Max		211	703	57	355	703	78

ED_004549_00015842-00085

Table F2. Daily means of animal characteristics at Site WI5B for July, 2008.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1		211	703	57	355	703	78
2		211	703	57	355	703	78
3		211	703	57	355	703	78
4		211	703	57	355	703	78
5		211	703	57	355	703	78
6		211	703	57	355	703	78
7		211	703	57	355	703	78
8		211	703	57	355	703	78
9		211	703	57	355	703	78
10		211	703	57	355	703	78
11		211	703	57	355	703	78
12		211	703	57	355	703	78
13		211	703	57	355	703	78
14		211	703	57	355	703	78
15		211	703	57	355	703	78
16		211	703	57	355	703	78
17		211	703	57	355	703	78
18		211	703	57	355	703	78
19		211	703	57	355	703	78
20		211	703	57	355	703	78
21		211	703	57	355	703	78
22		211	703	57	355	703	78
23		211	703	57	355	703	78
24		211	703	57	355	703	78
25		211	703	57	355	703	78
26		211	703	57	355	703	78
27		211	703	57	355	703	78
28		211	703	57	355	703	78
29		211	703	57	355	703	78
30		211	703	57	355	703	78
31		211	703	57	355	703	78
Avg		211	703	57	355	703	78
n	0.0	31	31	31	31	31	31
SD		0	0	0	0	0	0
Min		211	703	57	355	703	78
Max		211	703	57	355	703	78

ED_004549_00015842-00086

Table F2. Daily means of animal characteristics at Site WI5B for August, 2008.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1		211	703	57	355	703	78
2		211	703	57	355	703	78
3		211	703	57	355	703	78
4		211	703	57	355	703	78
5		211	703	57	355	703	78
6		211	703	57	355	703	78
7		211	703	57	355	703	78
8		211	703	57	355	703	78
9		211	703	57	355	703	78
10		211	703	57	355	703	78
11		211	703	57	355	703	78
12		211	703	57	355	703	78
13		211	703	57	355	703	78
14		211	703	57	355	703	78
15		211	703	57	355	703	78
16		211	703	57	355	703	78
17		211	703	57	355	703	78
18		211	703	57	355	703	78
19		211	703	57	355	703	78
20		211	703	57	355	703	78
21		211	703	57	355	703	78
22		211	703	57	355	703	78
23		211	703	57	355	703	78
24		211	703	57	355	703	78
25		211	703	57	355	703	78
26		211	703	57	355	703	78
27		211	703	57	355	703	78
28		211	703	57	355	703	78
29		211	703	57	355	703	78
30		211	703	57	355	703	78
31		211	703	57	355	703	78
Avg		211	703	57	355	703	78
n	0.0	31	31	31	31	31	31
SD		0	0	0	0	0	0
Min		211	703	57	355	703	78
Max		211	703	57	355	703	78

ED_004549_00015842-00087

Table F2. Daily means of animal characteristics at Site WI5B for September, 2008.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1		211	703	57	355	703	78
2		211	703	57	355	703	78
3		211	703	57	355	703	78
4		211	703	57	355	703	78
5		211	703	57	355	703	78
6		211	703	57	355	703	78
7		211	703	57	355	703	78
8		211	703	57	355	703	78
9		211	703	57	355	703	78
10		211	703	57	355	703	78
11		211	703	57	355	703	78
12		211	703	57	355	703	78
13		211	703	57	355	703	78
14		211	703	57	355	703	78
15		211	703	57	355	703	78
16		211	703	57	355	703	78
17		211	703	57	355	703	78
18		211	703	57	355	703	78
19		211	703	57	355	703	78
20		211	703	57	355	703	78
21		211	703	57	355	703	78
22		211	703	57	355	703	78
23		211	703	57	355	703	78
24		211	703	57	355	703	78
25		211	703	57	355	703	78
26		211	703	57	355	703	78
27		211	703	57	355	703	78
28		211	703	57	355	703	78
29		211	703	57	355	703	78
30		211	703	57	355	703	78
Avg		211	703	57	355	703	78
n	0.0	30	30	30	30	30	30
SD		0	0	0	0	0	0
Min		211	703	57	355	703	78
Max		211	703	57	355	703	78

ED_004549_00015842-00088

Table F2. Daily means of animal characteristics at Site WI5B for October, 2008.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1		211	703	57	355	703	78
2		211	703	57	355	703	78
3		211	703	57	355	703	78
4		211	703	57	355	703	78
5		211	703	57	355	703	78
6		211	703	57	355	703	78
7		211	703	57	355	703	78
8		211	703	57	355	703	78
9		211	703	57	355	703	78
10		211	703	57	355	703	78
11		211	703	57	355	703	78
12		211	703	57	355	703	78
13	27.9	211	703	57	355	703	78
14	27.8	211	703	57	355	703	78
15	27.6	211	703	57	355	703	78
16	27.5	211	703	57	355	703	78
17	27.4	211	703	57	355	703	78
18	27.3	211	703	57	355	703	78
19	27.1	211	703	57	355	703	78
20	27.0	211	703	57	355	703	78
21	27.0	220	703	59	355	703	78
22	27.1	218	703	59	355	703	78
23	27.2	215	703	58	355	703	78
24	27.3	213	703	58	355	703	78
25	27.4	211	703	57	355	703	78
26	27.5	208	703	56	355	703	78
27	27.7	206	703	56	355	703	78
28	27.8	206	703	56	349	703	77
29	28.0	207	703	56	345	703	76
30	28.3	208	703	56	341	703	75
31	28.5	209	703	57	338	703	74
Avg	27.6	211	703	57	353	703	77
n	19.0	31	31	31	31	31	31
SD	0.4	3	0	1	4	0	1
Min	27.0	206	703	56	338	703	74
Max	28.5	220	703	59	355	703	78

ED_004549_00015842-00089

Table F2. Daily means of animal characteristics at Site WI5B for November, 2008.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1	28.7	210	703	57	334	703	73
2	28.9	211	703	57	330	703	72
3	29.1	212	703	57	328	703	72
4	29.2	213	703	57	329	703	72
5	29.4	213	703	58	330	703	72
6	29.5	213	703	58	331	703	73
7	29.7	214	703	58	332	703	73
8	29.8	214	703	58	333	703	73
9	29.9	215	703	58	334	703	73
10	30.1	215	703	58	335	703	74
11	30.2	216	703	58	336	703	74
12	30.4	216	703	58	337	703	74
13	30.5	216	703	59	338	703	74
14	30.6	217	703	59	339	703	74
15	30.8	217	703	59	340	703	75
16	30.9	218	703	59	341	703	75
17	31.1	218	703	59	342	703	75
18	31.2	219	703	59	341	703	75
19	31.3	219	703	59	340	703	75
20	31.5	220	703	59	339	703	74
21	31.6	220	703	60	339	703	74
22	31.8	221	703	60	338	703	74
23	31.9	221	703	60	337	703	74
24	32.0	222	703	60	336	703	74
25	32.2	222	703	60	335	703	73
26	32.3	223	703	60	333	703	73
27	32.4	224	703	61	331	703	73
28	32.5	225	703	61	330	703	72
29	32.6	226	703	61	328	703	72
30	32.8	227	703	61	326	703	71
Avg	30.8	218	703	59	335	703	73
n	30.0	30	30	30	30	30	30
SD	1.2	4	0	1	4	0	1
Min	28.7	210	703	57	326	703	71
Max	32.8	227	703	61	342	703	75

ED_004549_00015842-00090

Table F2. Daily means of animal characteristics at Site WI5B for December, 2008.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1	32.9	228	703	61	324	703	71
2	32.7	229	703	62	324	703	71
3	32.1	230	703	62	326	703	71
4	31.6	231	703	62	327	703	72
5	31.1	232	703	63	329	703	72
6	30.6	234	703	63	331	703	72
7	30.0	235	703	64	332	703	73
8	29.5	236	703	64	334	703	73
9	29.4	236	703	64	335	703	73
10	29.6	234	703	63	334	703	73
11	29.8	232	703	63	334	703	73
12	30.1	230	703	62	334	703	73
13	30.3	227	703	61	333	703	73
14	30.5	225	703	61	333	703	73
15	30.8	223	703	60	332	703	73
16	30.9	223	703	60	332	703	73
17	31.0	224	703	60	333	703	73
18	31.2	225	703	61	334	703	73
19	31.3	226	703	61	335	703	74
20	31.4	227	703	61	336	703	74
21	31.5	228	703	62	337	703	74
22	31.5	227	703	61	339	703	74
23	31.4	224	703	61	342	703	75
24	31.4	221	703	60	344	703	75
25	31.3	218	703	59	347	703	76
26	31.3	215	703	58	349	703	76
27	31.2	211	703	57	351	703	77
28	31.2	208	703	56	354	703	78
29	31.1	205	703	55	356	703	78
30	31.1	202	703	54	359	703	79
31	30.9	201	703	54	358	703	78
Avg	31.0	224	703	61	338	703	74
n	31.0	31	31	31	31	31	31
SD	0.8	10	0	3	10	0	2
Min	29.4	201	703	54	324	703	71
Max	32.9	236	703	64	359	703	79

ED_004549_00015842-00091

Table F2. Daily means of animal characteristics at Site WI5B for January, 2009.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1	30.6	202	703	55	354	703	78
2	30.3	203	703	55	350	703	77
3	30.0	204	703	55	346	703	76
4	29.6	205	703	56	342	703	75
5	29.6	207	703	56	340	703	74
6	29.7	208	703	56	339	703	74
7	29.9	209	703	57	339	703	74
8	30.0	210	703	57	339	703	74
9	30.2	212	703	57	338	703	74
10	30.4	213	703	58	338	703	74
11	30.5	214	703	58	338	703	74
12	30.7	215	703	58	337	703	74
13	30.8	216	703	58	337	703	74
14	30.8	217	703	59	337	703	74
15	30.8	217	703	59	338	703	74
16	30.8	218	703	59	338	703	74
17	30.9	218	703	59	338	703	74
18	30.9	219	703	59	338	703	74
19	30.9	219	703	59	338	703	74
20	30.9	220	703	59	339	703	74
21	31.0	220	703	60	339	703	74
22	31.0	221	703	60	339	703	74
23	31.0	221	703	60	339	703	74
24	31.1	222	703	60	339	703	74
25	31.1	222	703	60	340	703	74
26	31.1	223	703	60	340	703	74
27	31.0	222	703	60	340	703	74
28	30.7	221	703	60	339	703	74
29	30.4	220	703	59	338	703	74
30	30.1	218	703	59	337	703	74
31	29.8	217	703	59	336	703	74
Avg	30.5	215	703	58	340	703	74
n	31.0	31	31	31	31	31	31
SD	0.5	6	0	2	4	0	1
Min	29.6	202	703	55	336	703	74
Max	31.1	223	703	60	354	703	78

ED_004549_00015842-00092

Table F2. Daily means of animal characteristics at Site WI5B for February, 2009.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1	29.5	216	703	58	335	703	73
2	29.3	215	703	58	335	703	73
3	29.4	214	703	58	336	703	74
4	29.5	213	703	58	338	703	74
5	29.6	213	703	57	339	703	74
6	29.7	212	703	57	340	703	75
7	29.8	211	703	57	342	703	75
8	29.9	211	703	57	343	703	75
9	29.9	210	703	57	345	703	76
10	30.0	209	703	57	346	703	76
11	30.2	210	703	57	346	703	76
12	30.4	212	703	57	343	703	75
13	30.6	214	703	58	340	703	75
14	30.8	217	703	59	337	703	74
15	31.0	219	703	59	334	703	73
16	31.1	220	703	60	334	703	73
17	31.0	221	703	60	336	703	74
18	30.9	222	703	60	338	703	74
19	30.8	222	703	60	339	703	74
20	30.7	223	703	60	341	703	75
21	30.6	224	703	61	343	703	75
22	30.5	225	703	61	345	703	76
23	30.5	225	703	61	345	703	76
24	30.6	224	703	61	344	703	75
25	30.6	224	703	60	343	703	75
26	30.7	223	703	60	342	703	75
27	30.7	223	703	60	341	703	75
28	30.8	222	703	60	340	703	74
Avg	30.3	218	703	59	340	703	75
n	28.0	28	28	28	28	28	28
SD	0.5	5	0	1	4	0	1
Min	29.3	209	703	57	334	703	73
Max	31.1	225	703	61	346	703	76

ED_004549_00015842-00093

Table F2. Daily means of animal characteristics at Site WI5B for March, 2009.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1	30.8	222	703	60	339	703	74
2	30.9	221	703	60	338	703	74
3	30.9	221	703	60	336	703	74
4	30.8	222	703	60	335	703	73
5	30.7	223	703	60	333	703	73
6	30.6	224	703	61	331	703	73
7	30.5	225	703	61	330	703	72
8	30.5	226	703	61	328	703	72
9	30.5	226	703	61	328	703	72
10	30.7	224	703	61	331	703	73
11	30.8	222	703	60	334	703	73
12	31.0	220	703	59	337	703	74
13	31.2	218	703	59	340	703	74
14	31.3	216	703	58	343	703	75
15	31.5	214	703	58	346	703	76
16	31.5	214	703	58	346	703	76
17	31.4	215	703	58	343	703	75
18	31.2	216	703	58	341	703	75
19	31.1	217	703	59	339	703	74
20	31.0	218	703	59	336	703	74
21	30.9	219	703	59	334	703	73
22	30.7	220	703	60	331	703	73
23	30.7	221	703	60	331	703	73
24	30.8	220	703	59	333	703	73
25	30.9	219	703	59	335	703	73
26	31.0	218	703	59	336	703	74
27	31.1	217	703	59	338	703	74
28	31.2	216	703	58	340	703	75
29	31.3	215	703	58	342	703	75
30	31.3	215	703	58	343	703	75
31	31.0	216	703	58	343	703	75
Avg	31.0	219	703	59	337	703	74
n	31.0	31	31	31	31	31	31
SD	0.3	4	0	1	5	0	1
Min	30.5	214	703	58	328	703	72
Max	31.5	226	703	61	346	703	76

ED_004549_00015842-00094

Table F2. Daily means of animal characteristics at Site WI5B for April, 2009.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1	30.8	217	703	59	342	703	75
2	30.5	218	703	59	342	703	75
3	30.3	220	703	59	342	703	75
4	30.1	221	703	60	341	703	75
5	29.8	222	703	60	341	703	75
6	29.8	223	703	60	341	703	75
7	30.1	223	703	60	341	703	75
8	30.3	223	703	60	341	703	75
9	30.5	223	703	60	341	703	75
10	30.8	223	703	60	341	703	75
11	31.0	223	703	60	341	703	75
12	31.2	223	703	60	341	703	75
13	31.3	222	703	60	341	703	75
14	31.2	221	703	60	342	703	75
15	31.1	219	703	59	342	703	75
16	30.9	218	703	59	343	703	75
17	30.8	217	703	59	344	703	75
18	30.7	215	703	58	344	703	75
19	30.6	214	703	58	345	703	76
20	30.5	213	703	58	345	703	76
21	30.6	214	703	58	346	703	76
22	30.6	215	703	58	347	703	76
23	30.7	216	703	59	348	703	76
24	30.7	217	703	59	349	703	77
25	30.8	218	703	59	350	703	77
26	30.8	219	703	59	351	703	77
27	30.7	219	703	59	354	703	78
28	30.5	218	703	59	359	703	79
29	30.3	216	703	58	364	703	80
30	30.0	214	703	58	368	703	81
Avg	30.6	219	703	59	346	703	76
n	30.0	30	30	30	30	30	30
SD	0.4	3	0	1	7	0	2
Min	29.8	213	703	58	341	703	75
Max	31.3	223	703	60	368	703	81

ED_004549_00015842-00095

Table F2. Daily means of animal characteristics at Site WI5B for May, 2009.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1	29.8	213	703	57	373	703	82
2	29.5	211	703	57	378	703	83
3	29.3	209	703	57	382	703	84
4	29.1	208	703	56	387	703	85
5	28.8	206	703	56	392	703	86
6	28.8	206	703	56	391	703	86
7	28.8	209	703	56	386	703	85
8	28.9	211	703	57	381	703	83
9	29.0	214	703	58	376	703	82
10	29.1	217	703	59	371	703	81
11	29.2	218	703	59	367	703	80
12	29.3	218	703	59	365	703	80
13	29.4	219	703	59	363	703	80
14	29.6	219	703	59	361	703	79
15	29.7	219	703	59	359	703	79
16	29.8	220	703	59	357	703	78
17	29.9	220	703	59	355	703	78
18	30.1	220	703	59	354	703	78
19	30.3	220	703	60	354	703	78
20	30.5	221	703	60	353	703	77
21	30.7	221	703	60	353	703	77
22	31.0	221	703	60	353	703	77
23	31.2	221	703	60	353	703	77
24	31.4	222	703	60	352	703	77
25	31.6	222	703	60	352	703	77
26	31.7	222	703	60	352	703	77
27	31.8	223	703	60	352	703	77
28	31.8	223	703	60	352	703	77
29	31.9	224	703	60	352	703	77
30	31.9	224	703	61	352	703	77
31	32.0	225	703	61	352	703	77
Avg	30.2	218	703	59	364	703	80
n	31.0	31	31	31	31	31	31
SD	1.1	6	0	2	14	0	3
Min	28.8	206	703	56	352	703	77
Max	32.0	225	703	61	392	703	86

ED_004549_00015842-00096

Table F2. Daily means of animal characteristics at Site WI5B for June, 2009.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1	32.1	225	703	61	351	703	77
2	32.1	226	703	61	350	703	77
3	32.2	227	703	61	348	703	76
4	32.3	228	703	62	347	703	76
5	32.3	229	703	62	345	703	76
6	32.4	230	703	62	343	703	75
7	32.5	231	703	62	342	703	75
8	32.5	230	703	62	340	703	75
9	32.6	229	703	62	339	703	74
10	32.6	228	703	61	338	703	74
11	32.7	226	703	61	336	703	74
12	32.7	225	703	61	335	703	73
13	32.8	223	703	60	333	703	73
14	32.8	222	703	60	332	703	73
15	32.9	221	703	60	331	703	72
16	32.9	220	703	59	331	703	72
17	33.0	220	703	60	332	703	73
18	33.2	220	703	60	333	703	73
19	33.3	221	703	60	334	703	73
20	33.4	221	703	60	335	703	73
21	33.5	221	703	60	336	703	74
22	33.5	221	703	60	337	703	74
23	33.4	222	703	60	337	703	74
24	33.4	223	703	60	338	703	74
25	33.3	224	703	61	338	703	74
26	33.2	225	703	61	338	703	74
27	33.1	226	703	61	338	703	74
28	33.1	227	703	61	339	703	74
29	33.0	228	703	61	339	703	74
30	33.1	228	703	62	338	703	74
Avg	32.9	225	703	61	338	703	74
n	30.0	30	30	30	30	30	30
SD	0.4	3	0	1	5	0	1
Min	32.1	220	703	59	331	703	72
Max	33.5	231	703	62	351	703	77

ED_004549_00015842-00097

Table F2. Daily means of animal characteristics at Site WI5B for July, 2009.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1	33.3	227	703	61	337	703	74
2	33.5	227	703	61	336	703	74
3	33.7	226	703	61	335	703	73
4	33.9	226	703	61	334	703	73
5	34.1	225	703	61	333	703	73
6	34.1	225	703	61	333	703	73
7	34.0	224	703	61	336	703	74
8	33.8	224	703	60	339	703	74
9	33.7	223	703	60	342	703	75
10	33.6	222	703	60	345	703	76
11	33.4	222	703	60	348	703	76
12	33.3	221	703	60	351	703	77
13	33.2	219	703	59	355	703	78
14	33.2	214	703	58	359	703	79
15	33.2	210	703	57	363	703	79
16	33.2	206	703	56	366	703	80
17	33.2	201	703	54	370	703	81
18	33.2	197	703	53	374	703	82
19	33.2	192	703	52	378	703	83
20	33.1	190	703	51	380	703	83
21	32.9	190	703	51	380	703	83
22	32.7	189	703	51	381	703	83
23	32.5	189	703	51	381	703	83
24	32.3	189	703	51	381	703	84
25	32.1	188	703	51	382	703	84
26	31.9	188	703	51	382	703	84
27	31.8	189	703	51	381	703	84
28	31.7	191	703	52	380	703	83
29	31.7	193	703	52	379	703	83
30	31.6	195	703	53	378	703	83
31	31.6	198	703	53	376	703	82
Avg	33.0	207	703	56	361	703	79
n	31.0	31	31	31	31	31	31
SD	0.8	16	0	4	19	0	4
Min	31.6	188	703	51	333	703	73
Max	34.1	227	703	61	382	703	84

ED_004549_00015842-00098

Table F2. Daily means of animal characteristics at Site WI5B for August, 2009.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1	31.5	200	703	54	375	703	82
2	31.4	202	703	55	374	703	82
3	31.4	202	703	55	374	703	82
4	31.5	199	703	54	375	703	82
5	31.6	197	703	53	377	703	83
6	31.7	195	703	53	378	703	83
7	31.7	192	703	52	379	703	83
8	31.8	190	703	51	381	703	83
9	31.9	187	703	51	382	703	84
10	31.9	186	703	50	384	703	84
11	31.7	186	703	50	385	703	84
12	31.6	186	703	50	386	703	85
13	31.4	186	703	50	387	703	85
14	31.3	185	703	50	389	703	85
15	31.1	185	703	50	390	703	85
16	31.0	185	703	50	391	703	86
17	31.0	185	703	50	392	703	86
18	31.0	185	703	50	392	703	86
19	31.1	185	703	50	393	703	86
20	31.2	185	703	50	393	703	86
21	31.3	185	703	50	393	703	86
22	31.3	185	703	50	394	703	86
23	31.4	185	703	50	394	703	86
24	31.5	185	703	50	394	703	86
25	31.6	185	703	50	394	703	86
26	31.6	185	703	50	395	703	87
27	31.7	185	703	50	395	703	87
28	31.8	184	703	50	395	703	87
29	31.9	184	703	50	396	703	87
30	31.9	184	703	50	396	703	87
31	32.0	184	703	50	396	703	87
Avg	31.5	188	703	51	388	703	85
n	31.0	31	31	31	31	31	31
SD	0.3	6	0	2	8	0	2
Min	31.0	184	703	50	374	703	82
Max	32.0	202	703	55	396	703	87

ED_004549_00015842-00099

Table F2. Daily means of animal characteristics at Site WI5B for September, 2009.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1	32.1	184	703	50	396	703	87
2	32.1	184	703	50	397	703	87
3	32.2	184	703	50	397	703	87
4	32.3	184	703	50	397	703	87
5	32.4	184	703	50	398	703	87
6	32.4	184	703	50	398	703	87
7	32.5	184	703	50	397	703	87
8	32.6	185	703	50	395	703	87
9	32.7	186	703	50	393	703	86
10	32.7	187	703	51	391	703	86
11	32.8	188	703	51	388	703	85
12	32.9	189	703	51	386	703	85
13	32.9	190	703	51	384	703	84
14	33.0	190	703	51	382	703	84
15	33.1	189	703	51	380	703	83
16	33.2	188	703	51	378	703	83
17	33.3	187	703	51	376	703	82
18	33.4	186	703	50	374	703	82
19	33.5	185	703	50	372	703	82
20	33.6	184	703	50	370	703	81
21	33.5	183	703	50	369	703	81
22	33.3	184	703	50	370	703	81
23	33.0	185	703	50	370	703	81
24	32.8	185	703	50	371	703	81
25	32.5	186	703	50	372	703	81
26	32.3	187	703	51	372	703	82
27	32.0	188	703	51	373	703	82
28	31.8	189	703	51	373	703	82
29	31.5	190	703	51	374	703	82
30	31.3	191	703	52	375	703	82
Avg	32.7	186	703	50	382	703	84
n	30.0	30	30	30	30	30	30
SD	0.6	2	0	1	11	0	2
Min	31.3	183	703	50	369	703	81
Max	33.6	191	703	52	398	703	87

ED_004549_00015842-00100

Table F2. Daily means of animal characteristics at Site WI5B for October, 2009.

Day	Milk, $L \cdot d^{-1} cow^{-1}$	Barn 1			Barn 2		
		Inv., cows	Mass, kg	$kg \cdot m^{-2}$	Inv., cows	Mass, kg	$kg \cdot m^{-2}$
1	31.0	192	703	52	375	703	82
2	30.8	194	703	52	376	703	82
3	30.5	195	703	53	377	703	83
4	30.2	196	703	53	378	703	83
5	30.2	197	703	53	378	703	83
6	30.2	198	703	53	379	703	83
7	30.3	198	703	54	379	703	83
8	30.4	199	703	54	379	703	83
9	30.5	200	703	54	380	703	83
10	30.6	200	703	54	380	703	83
11	30.7	201	703	54	381	703	83
12	30.6	202	703	54	381	703	83
13	30.5	203	703	55	380	703	83
14	30.3	204	703	55	379	703	83
15	30.1	205	703	56	378	703	83
16	30.0	207	703	56	377	703	83
17	29.8	208	703	56	376	703	82
18	29.7	209	703	57	375	703	82
19	29.6	208	703	56	375	703	82
20	29.5	205	703	55	377	703	83
21	29.5	202	703	55	378	703	83
22	29.5	199	703	54	380	703	83
23	29.5	196	703	53	382	703	84
24	29.5	193	703	52	383	703	84
25	29.4	190	703	51	385	703	84
26	29.7	189	703	51	385	703	84
27	30.1	190	703	51	383	703	84
28	30.6	192	703	52	381	703	83
29	31.1	193	703	52	379	703	83
30	31.6	195	703	53	377	703	83
31	32.0	197	703	53	375	703	82
Avg	30.3	199	703	54	379	703	83
n	31.0	31	31	31	31	31	31
SD	0.6	6	0	2	3	0	1
Min	29.4	189	703	51	375	703	82
Max	32.0	209	703	57	385	703	84

ED_004549_00015842-00101

Table F3. Building environment.

Table F3. Daily means (SD) of environmental parameters at Site WI5B for September, 2007.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12	11.7 (4.7)		-7.30 (1.00)	124.0 (2.1)	12.1 (4.8)	65.2 (11.7)	-8.70 (2.50)	155.0 (4.5)
13	14.9 (2.4)		-8.10 (2.30)	130.0 (28.7)	15.3 (2.4)	65.8 (6.5)	-8.90 (3.10)	159.0 (25.6)
14	9.1 (2.4)		-10.10 (2.10)		8.9 (2.3)	63.3 (8.7)	-4.60 (4.20)	
15	10.1 (5.7)		-9.00 (1.40)		10.2 (5.9)	60.6 (16.0)	-8.30 (2.20)	150.0 (28.5)
16								
17								
18	21.3 (0.8)		-19.80 (3.10)		21.6 (0.8)	84.6 (5.4)	-13.40 (7.50)	346.0 (46.4)
19	17.0 (2.0)		-9.80 (3.10)		16.7 (2.0)	79.8 (7.4)	-2.70 (2.10)	194.0 (52.8)
20	16.1 (4.4)		-11.40 (6.60)		16.2 (4.6)	78.1 (8.8)	-10.60 (11.80)	215.0 (82.7)
21								
22	17.0 (4.0)		-13.60 (6.50)	197.0 (82.9)	17.0 (4.1)	57.9 (13.7)	-4.80 (5.70)	243.0 (95.1)
23	20.3 (4.2)		-16.40 (6.70)	243.0 (89.9)	20.5 (4.4)	65.1 (6.8)	-13.00 (9.50)	288.0 (97.5)
24	21.9 (1.8)		-20.40 (3.70)	289.0 (37.7)	22.2 (1.8)	81.5 (5.5)	-17.30 (3.70)	340.0 (55.7)
25	15.1 (2.0)		-8.40 (2.10)	134.0 (34.6)	15.2 (2.1)	77.5 (7.1)	-7.90 (3.70)	165.0 (29.6)
26	13.8 (3.7)		-10.50 (3.40)	134.0 (35.0)	13.8 (3.6)	70.7 (12.4)	-4.30 (2.90)	169.0 (34.1)
27	15.7 (3.3)	68.6 (14.1)	-13.50 (4.60)	157.0 (59.5)	15.6 (3.2)	68.1 (15.1)	-2.70 (1.80)	190.0 (50.7)
28	14.9 (3.5)	64.2 (11.7)	-12.60 (3.70)	148.0 (45.5)	14.6 (3.5)	64.0 (11.6)	-3.10 (1.80)	182.0 (45.4)
29	16.9 (2.0)	67.6 (8.1)	-11.60 (4.10)	151.0 (47.2)	16.8 (2.1)	68.6 (8.2)	-10.40 (6.50)	181.0 (50.4)
30	18.6 (0.8)	75.8 (11.0)	-14.60 (4.20)	173.0 (51.2)	18.5 (0.9)	76.6 (11.6)	-4.30 (3.40)	210.0 (58.4)
Avg	15.9	69.0	-12.30	171.0	16.0	70.5	-7.80	212.0
n	16	4	16	11	16	16	16	15
SD	3.5	4.2	3.80	50.0	3.6	7.9	4.20	62.0
Min	9.1	64.2	-20.40	124.0	8.9	57.9	-17.30	150.0
Max	21.9	75.8	-7.30	289.0	22.2	84.6	-2.70	346.0

ED_004549_00015842-00102

Table F3. Daily means (SD) of environmental parameters at Site WI5B for October, 2007.

Day	Barn 1				Barn 2			
	Temp., ºC	RH, %	ΔP, Pa	Airflow, $ds\,m^3s^{-1}$	Temp., ºC	RH, %	ΔP, Pa	Airflow, $ds\,m^3s^{-1}$
1	17.0 (0.8)	83.8 (2.6)	-10.10 (1.10)	120.0 (10.0)	16.6 (0.9)	85.3 (2.7)	0.70 (3.40)	
2	17.1 (1.2)	83.6 (2.4)	-12.40 (3.50)	146.0 (45.3)	16.9 (1.3)	84.4 (2.8)	-5.10 (3.20)	178.0 (44.3)
3	16.6 (3.8)	59.5 (16.5)	-15.30 (5.90)	174.0 (74.2)	16.4 (4.1)	59.7 (16.9)	-5.70 (7.20)	214.0 (78.1)
4	20.3 (3.1)	61.0 (7.7)	-19.70 (7.50)	224.0 (81.4)	20.3 (3.2)	61.5 (8.0)	-9.40 (6.50)	269.0 (92.5)
5	21.8 (2.3)	81.3 (5.1)	-22.40 (5.20)		21.9 (2.5)	82.2 (5.4)	-14.70 (8.90)	
6	24.4 (2.2)	75.3 (7.8)	-28.30 (3.80)	319.0 (31.1)	24.4 (2.2)	77.2 (7.3)	-22.70 (7.40)	377.0 (23.8)
7	23.9 (1.1)	81.8 (2.9)	-26.10 (1.30)	303.0 (3.4)	23.9 (1.1)	83.6 (2.8)	-16.20 (4.30)	374.0 (10.4)
8								
9	11.1 (1.4)	70.6 (4.7)	-13.60 (2.50)	119.0 (1.5)	10.6 (1.5)	71.2 (4.9)	-3.20 (2.80)	160.0 (2.2)
10	9.0 (1.5)	73.7 (3.8)	-14.20 (2.50)	120.0 (1.7)	8.2 (1.5)	75.3 (3.9)	-0.90 (3.10)	
11	9.7 (1.9)	71.1 (5.5)	-14.30 (1.30)	119.0 (1.6)	9.0 (1.7)	73.2 (5.4)	-6.60 (2.20)	159.0 (2.4)
12	9.0 (2.0)	73.2 (3.6)	-14.00 (1.20)	120.0 (1.4)	8.6 (2.1)	74.6 (4.0)	-7.00 (1.70)	158.0 (2.3)
13	11.2 (3.2)	70.6 (9.6)	-13.70 (1.30)	119.0 (1.8)	10.7 (3.0)	72.3 (9.9)	-7.40 (1.50)	156.0 (2.5)
14	10.1 (0.6)	77.5 (5.3)	-13.90 (1.50)	119.0 (1.3)	9.6 (0.6)	79.3 (5.6)	-7.90 (1.50)	156.0 (1.8)
15	11.2 (0.8)	83.9 (0.8)	-14.10 (1.40)	118.0 (1.3)	10.8 (0.8)	85.3 (0.5)	-9.00 (2.60)	154.0 (2.8)
16	13.4 (1.0)	85.5 (1.0)	-13.50 (1.10)	117.0 (1.0)	13.2 (1.1)	86.8 (1.1)	-7.70 (1.30)	153.0 (1.4)
17	15.0 (2.1)	77.5 (7.5)	-14.30 (3.80)	124.0 (26.4)	15.0 (2.3)	78.7 (8.1)	-10.80 (6.40)	157.0 (21.8)
18	15.9 (1.5)	82.9 (4.5)	-13.60 (3.40)	120.0 (23.1)	16.0 (1.5)	83.9 (4.9)	-9.70 (4.50)	152.0 (21.0)
19	12.8 (1.0)	77.5 (5.6)	-15.60 (1.70)	114.0 (1.4)	12.6 (1.0)	78.1 (6.4)	-8.40 (1.40)	150.0 (1.8)
20	14.7 (5.0)	62.7 (11.2)	-20.20 (8.40)	157.0 (52.9)	14.7 (5.1)	62.9 (11.6)	-13.30 (9.20)	185.0 (50.9)
21								
22	8.9 (2.3)	71.5 (8.9)	-14.00 (1.10)	120.0 (1.1)	8.6 (2.2)	71.7 (9.7)	-7.80 (1.40)	158.0 (1.5)
23	9.7 (5.3)	63.8 (13.0)	-15.20 (3.40)	120.0 (11.5)	9.2 (5.3)	63.8 (13.3)	-5.60 (5.40)	156.0 (22.6)
24	8.0 (2.9)	67.3 (9.3)	-13.40 (1.10)	121.0 (1.6)	7.3 (2.6)	67.9 (9.6)	-5.60 (2.70)	161.0 (2.6)
25	8.3 (4.1)	63.1 (12.2)	-14.60 (1.20)	120.0 (2.3)	8.1 (4.1)	63.6 (12.4)	-8.60 (1.90)	158.0 (3.7)
26	8.4 (2.9)	74.4 (5.7)	-14.60 (1.40)	116.0 (10.9)	8.0 (2.9)	75.3 (5.3)	-9.50 (2.10)	157.0 (3.3)
27	8.5 (2.6)	58.1 (8.3)	-14.50 (1.20)	113.0 (1.3)	7.8 (2.4)	57.2 (8.6)	-8.30 (3.70)	159.0 (3.4)
28	7.9 (5.1)	60.8 (12.6)	-14.40 (1.00)	113.0 (2.4)	7.6 (5.1)	61.2 (12.6)	-12.00 (2.00)	156.0 (4.4)
29	12.5 (3.0)	60.2 (5.3)	-14.20 (1.00)		12.2 (3.0)	60.8 (5.1)	-11.70 (1.50)	
30	16.5 (3.0)	63.9 (8.3)	-4.60 (5.90)		15.9 (2.9)	66.0 (7.2)	-9.30 (3.10)	
31	11.5 (2.8)	53.3 (6.6)	-4.10 (2.30)		10.7 (2.8)	57.6 (7.2)	-3.10 (1.60)	
Avg	13.3	71.4	-14.90	143.0	12.9	72.4	-8.50	185.0
n	29	29	29	25	29	29	29	23
SD	4.8	9.1	4.90	55.0	4.9	9.3	4.60	64.1
Min	7.9	53.3	-28.30	113.0	7.3	57.2	-22.70	150.0
Max	24.4	85.5	-4.10	319.0	24.4	86.8	0.70	377.0

ED_004549_00015842-00103

Table F3. Daily means (SD) of environmental parameters at Site WI5B for November, 2007.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	9.3 (4.0)	50.5 (8.9)	-1.00 (0.90)		8.6 (4.1)	57.9 (10.4)	-4.40 (1.60)	
2	10.4 (2.2)	46.4 (3.7)	-2.10 (1.60)		9.6 (2.5)	53.1 (5.4)	-4.80 (1.20)	
3	8.4 (3.2)	52.8 (7.5)	-1.40 (0.60)		7.6 (3.3)	60.4 (8.8)	-4.30 (1.10)	
4	10.4 (3.2)	53.2 (9.2)	-1.40 (0.60)		9.5 (3.2)	60.1 (10.9)	-4.20 (1.00)	
5	7.9 (1.6)	56.7 (4.2)	-6.80 (3.30)		6.8 (1.8)	61.7 (5.4)	-2.40 (2.20)	
6	6.0 (1.2)	55.3 (3.2)	-7.00 (3.60)		4.0 (1.3)	59.9 (4.5)	-0.20 (3.90)	
7	4.1 (2.6)	57.6 (5.6)	-3.60 (0.90)		2.7 (3.1)	65.1 (6.2)	-5.40 (2.00)	
8	4.3 (2.4)	62.9 (4.7)	-3.80 (0.60)		2.8 (2.2)	70.7 (5.5)	-4.10 (1.40)	
9	3.6 (2.3)	68.4 (1.7)	-3.90 (0.60)		2.2 (2.3)	77.4 (2.0)	-4.70 (0.80)	
10	6.2 (1.3)	66.1 (1.6)	-3.30 (0.80)		5.0 (1.5)	73.8 (2.1)	-6.00 (3.10)	
11	11.3 (3.5)	65.4 (4.6)	-2.90 (1.00)		10.2 (3.7)	72.3 (6.4)	-4.60 (1.80)	
12	8.9 (2.4)	55.4 (5.7)	-3.80 (0.60)		7.3 (2.6)	62.5 (7.9)	-4.30 (0.80)	
13	10.0 (3.3)	49.6 (4.7)	-3.00 (1.40)		9.5 (4.1)	55.5 (5.8)	-6.10 (3.30)	
14								
15								
16	6.0 (1.8)	65.7 (5.7)	-2.40 (1.40)	34.7 (0.4)	6.5 (1.7)	67.9 (5.1)	-4.00 (2.70)	34.1 (0.7)
17	6.0 (1.0)	68.5 (5.0)	-4.20 (1.60)	34.5 (0.4)	5.0 (0.8)	67.5 (5.6)	-1.50 (0.90)	35.0 (0.2)
18	5.3 (1.4)	69.5 (5.6)	-2.50 (1.00)	35.1 (0.4)	6.1 (1.8)	71.9 (4.8)	-5.00 (2.50)	34.2 (0.6)
19	9.1 (1.3)	80.2 (1.9)	-2.80 (0.80)	34.3 (0.2)	9.2 (0.9)	81.5 (1.3)	-2.10 (1.40)	34.1 (0.3)
20	8.1 (1.4)	76.3 (4.3)	-4.80 (2.30)	33.2 (4.7)	8.0 (1.9)	78.5 (3.7)	-3.10 (2.60)	33.7 (3.8)
21	6.1 (1.0)	73.7 (2.1)	-5.10 (2.70)	34.5 (0.5)	7.3 (1.4)	73.2 (2.9)	-0.20 (3.20)	
22	3.9 (2.0)	72.2 (2.3)	-7.20 (3.20)	34.5 (0.5)	4.4 (2.4)	69.7 (2.5)	-4.00 (4.20)	
23	4.4 (3.4)	72.9 (4.0)	-10.80 (2.30)	33.6 (0.9)	3.4 (2.8)	68.9 (5.9)	-11.60 (4.00)	49.8 (1.8)
24	7.3 (0.9)	71.5 (3.1)	-11.20 (2.30)	32.9 (0.5)	6.3 (1.0)	66.6 (4.9)	-11.50 (2.80)	48.9 (0.9)
25	8.5 (2.4)	69.8 (6.2)	-11.40 (2.30)	32.5 (0.6)	7.8 (2.6)	63.7 (10.1)	-12.60 (5.50)	48.1 (1.9)
26	7.0 (1.3)	70.8 (3.6)	-10.80 (3.10)	33.0 (0.6)	6.4 (1.0)	69.2 (4.5)	-7.60 (6.00)	42.1 (9.4)
27	-0.8 (2.2)	70.8 (3.0)	-12.40 (3.70)	33.9 (1.0)	-0.2 (2.3)	72.3 (2.5)	-10.50 (3.70)	34.0 (1.0)
28	2.2 (2.3)	65.8 (3.1)	-14.20 (5.70)	32.7 (1.2)	3.6 (1.9)	69.3 (3.2)	-13.80 (4.20)	32.6 (0.9)
29	-2.2 (1.5)	69.3 (3.6)	-15.00 (3.50)	33.4 (0.7)	0.0 (1.7)	74.0 (2.8)	-13.30 (4.40)	33.3 (1.1)
30	-2.7 (1.7)	70.4 (5.2)	-14.70 (3.20)	33.7 (0.7)	-0.7 (1.7)	73.7 (4.4)	-13.30 (3.70)	33.6 (0.9)
Avg	6.0	64.6	-6.20	33.8	5.7	67.8	-6.10	38.0
n	28	28	28	15	28	28	28	13
SD	3.6	8.8	4.40	0.8	3.0	6.9	4.00	6.4
Min	-2.7	46.4	-15.00	32.5	-0.7	53.1	-13.80	32.6
Max	11.3	80.2	-1.00	35.1	10.2	81.5	-0.20	49.8

ED_004549_00015842-00104

Table F3. Daily means (SD) of environmental parameters at Site WI5B for December, 2007.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, $ds\,m^3s^{-1}$	Temp., °C	RH, %	ΔP, Pa	Airflow, $ds\,m^3s^{-1}$
1	-0.5 (2.5)	76.7 (2.7)	-9.90 (3.60)	34.1 (1.1)	1.4 (2.5)	78.7 (3.2)	-14.80 (5.20)	32.7 (1.5)
2	2.5 (2.0)	78.0 (1.7)	-15.70 (3.50)	32.4 (0.8)	3.9 (1.8)	80.2 (1.7)	-13.80 (3.70)	32.4 (0.9)
3	-2.5 (2.2)		-13.90 (2.70)	33.8 (0.6)	-1.0 (2.0)	80.3 (1.6)	-14.50 (3.10)	33.3 (0.9)
4	0.7 (1.0)	77.3 (1.1)	-11.50 (3.80)	33.6 (0.9)	1.5 (1.1)	79.3 (1.2)	-14.60 (4.00)	32.7 (0.9)
5	-1.8 (2.8)	78.9 (3.1)	-19.90 (6.50)	32.3 (1.2)	-1.4 (2.3)	78.9 (2.8)	-17.90 (7.60)	32.5 (1.6)
6	0.0 (3.4)	80.0 (3.4)	-18.30 (6.30)	32.3 (1.7)	1.7 (3.5)	83.0 (2.0)	-20.30 (6.30)	31.5 (1.8)
7	-0.5 (2.6)	76.9 (2.5)	-22.00 (6.40)	31.7 (1.4)	0.6 (2.2)	80.0 (2.4)	-22.60 (6.20)	31.2 (1.4)
8	-3.9 (1.7)		-18.30 (4.50)	33.3 (1.0)	-3.0 (1.9)	83.5 (1.3)	-17.90 (5.40)	33.0 (1.3)
9	-1.9 (1.6)	76.7 (2.2)	-17.50 (5.00)	33.1 (1.1)	-2.2 (1.7)	80.8 (1.9)	-17.80 (5.30)	32.9 (1.3)
10	0.1 (3.3)	77.3 (4.0)	-18.80 (4.00)	32.4 (0.9)	-0.3 (3.2)	79.5 (3.8)	-19.90 (4.30)	32.0 (1.0)
11	2.5 (1.5)	76.8 (2.1)	-14.80 (4.90)	32.9 (1.1)	2.3 (1.4)	78.8 (2.1)	-14.70 (4.90)	32.7 (1.1)
12	-1.6 (2.5)		-10.90 (2.10)	34.3 (0.6)	-1.3 (3.1)	80.0 (2.7)	-11.20 (2.60)	34.0 (0.9)
13	1.5 (2.0)	75.7 (3.0)	-13.90 (4.10)	33.0 (1.0)	3.1 (2.0)	78.4 (2.7)	-13.50 (3.10)	32.6 (0.9)
14	-2.7 (2.7)	80.4 (2.7)	-9.10 (2.70)	25.1 (8.5)	-1.9 (2.1)	82.0 (1.9)	-8.40 (2.40)	34.2 (3.1)
15	-2.3 (2.4)		-7.20 (1.40)	17.6 (0.3)	-1.2 (2.4)	83.5 (2.2)	-6.90 (2.00)	34.8 (0.7)
16	2.2 (1.3)	78.6 (1.2)	-8.80 (1.40)	17.0 (0.2)	3.0 (1.5)	81.5 (1.6)	-8.10 (2.00)	33.8 (0.5)
17	3.9 (1.3)	77.2 (3.4)	-8.00 (1.10)	17.0 (0.1)	4.8 (1.4)	80.8 (2.7)	-9.70 (1.50)	33.2 (0.5)
18	5.6 (1.2)	79.1 (0.7)	-7.10 (1.50)	16.9 (0.3)	6.0 (0.9)	82.6 (0.6)	-8.60 (2.40)	33.7 (4.5)
19	5.8 (0.9)	79.2 (1.1)	-5.90 (1.30)	17.1 (0.3)	6.3 (0.6)	82.5 (1.2)	-8.60 (1.90)	33.5 (2.8)
20	6.3 (0.8)		-5.90 (3.00)	29.4 (7.5)	7.3 (0.9)	80.2 (3.9)	-9.20 (4.90)	42.8 (17.9)
21	7.5 (0.5)	79.4 (0.8)	-3.90 (1.60)	34.2 (0.3)	7.9 (0.5)	83.5 (0.6)	-7.70 (3.10)	55.1 (22.7)
22	5.2 (3.3)	78.2 (1.9)	-6.00 (2.70)	34.0 (0.4)	5.0 (3.4)	81.2 (3.1)	-4.40 (3.20)	42.6 (17.3)
23								
24								
25								
26	6.3 (1.0)	77.8 (1.4)	-7.60 (4.20)	33.7 (0.9)	5.5 (1.2)	82.7 (1.5)	-7.00 (4.30)	33.7 (1.0)
27	5.2 (1.3)		-7.20 (2.00)	34.1 (0.5)	4.2 (0.8)	82.3 (1.1)	-5.70 (1.90)	34.3 (0.5)
28	3.3 (1.7)	80.0 (1.2)	-7.00 (2.00)	34.3 (0.6)	2.5 (0.9)	83.4 (1.0)	-6.70 (2.00)	34.1 (0.4)
29	4.2 (1.0)	80.8 (1.5)	-6.90 (1.50)	34.1 (0.3)	3.6 (1.4)	83.9 (0.7)	-7.50 (1.70)	33.8 (0.4)
30	4.3 (1.2)	81.6 (1.0)	-6.90 (1.20)	34.0 (0.4)	3.5 (1.0)	84.4 (0.4)	-8.70 (1.70)	33.4 (0.4)
31	4.3 (1.4)	82.7 (1.4)	-7.60 (1.90)	33.9 (0.5)	2.5 (1.8)	85.2 (0.6)	-7.30 (1.80)	33.9 (0.5)
Avg	1.9	78.6	-11.10	30.1	2.3	81.5	-11.70	34.7
n	28	22	28	28	28	28	28	28
SD	3.3	1.7	5.10	6.3	3.0	1.9	5.00	4.7
Min	-3.9	75.7	-22.00	16.9	-3.0	78.4	-22.60	31.2
Max	7.5	82.7	-3.90	34.3	7.9	85.2	-4.40	55.1

ED_004549_00015842-00105

Table F3. Daily means (SD) of environmental parameters at Site WI5B for January, 2008.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	-1.7 (1.8)	84.0 (1.5)	-7.60 (2.00)	35.1 (0.6)	-3.4 (1.5)	85.3 (0.4)	-6.10 (1.40)	35.4 (0.4)
2	-1.6 (1.5)	84.0 (2.2)	-6.50 (1.10)	35.8 (0.3)	-4.0 (1.5)	85.3 (0.4)	-5.70 (1.50)	36.0 (0.4)
3	1.7 (2.0)		-9.60 (2.40)	34.2 (0.8)	0.3 (2.3)	82.9 (3.5)	-12.50 (3.50)	33.5 (1.1)
4	3.2 (1.0)	74.7 (4.6)	-7.10 (6.10)	34.0 (1.9)	3.4 (2.0)	79.8 (3.9)	-10.50 (5.90)	33.1 (1.3)
5	4.9 (0.9)	80.8 (1.6)	-3.00 (5.60)	34.3 (1.2)	6.1 (1.2)	84.9 (1.0)	-6.60 (5.50)	33.9 (5.2)
6	7.9 (0.8)	80.1 (2.2)	-0.90 (0.70)	34.4 (0.2)	7.6 (0.5)	86.3 (1.1)	-3.10 (1.20)	57.1 (24.1)
7	6.1 (0.9)	82.1 (1.7)	-1.20 (1.00)	35.3 (4.2)	6.1 (1.0)	86.5 (1.2)	-2.10 (0.80)	35.3 (6.4)
8	5.7 (1.0)	82.1 (2.2)	-3.80 (4.80)	34.8 (4.0)	5.2 (0.7)	87.0 (1.4)	-1.20 (6.40)	
9	3.6 (1.5)	80.3 (2.9)	-11.50 (6.00)	33.2 (1.2)	2.9 (2.3)	86.1 (2.6)	-14.10 (6.10)	32.5 (1.4)
10	6.4 (0.5)	77.0 (1.9)	-11.40 (6.20)	40.1 (13.4)	6.1 (0.8)	82.2 (1.9)	-12.50 (4.70)	32.3 (1.7)
11	4.6 (1.3)	79.1 (1.1)	-9.50 (2.30)	33.9 (4.3)	4.0 (1.2)	84.4 (0.9)	-9.90 (2.20)	33.0 (0.5)
12	4.0 (1.0)	79.9 (1.2)	-8.40 (1.90)	33.8 (0.4)	2.8 (0.9)	84.0 (1.5)	-8.10 (2.40)	33.8 (0.6)
13	3.1 (1.0)	78.1 (2.0)	-9.20 (2.20)	33.8 (0.5)	1.9 (1.1)	82.9 (1.7)	-8.40 (2.30)	33.9 (0.5)
14	-0.1 (2.0)	79.7 (2.2)	-11.50 (3.00)	33.9 (0.8)	-2.0 (2.0)	82.9 (2.4)	-6.70 (3.10)	34.9 (0.6)
15	-0.6 (2.6)	73.7 (9.1)	-7.60 (1.90)	34.5 (0.7)	-1.1 (3.2)	83.9 (2.5)	-11.00 (4.30)	33.8 (1.4)
16	2.7 (1.4)		-10.00 (2.10)	33.5 (0.4)	2.4 (1.3)	82.5 (1.1)	-11.80 (2.10)	33.0 (0.5)
17	-3.5 (1.6)		-10.60 (2.20)	34.1 (0.5)	-3.5 (1.3)	85.5 (0.7)	-10.40 (2.10)	33.9 (0.5)
18	-3.8 (1.8)		-10.50 (3.20)	34.4 (0.7)	-4.3 (2.0)	85.2 (2.6)	-10.00 (2.30)	34.4 (0.6)
19	-4.6 (1.4)		-5.80 (1.90)	35.9 (0.5)	-4.2 (2.0)	86.1 (0.4)	-5.40 (2.20)	35.7 (0.4)
20	-3.4 (1.5)		-6.60 (1.90)	35.7 (0.3)	-3.7 (1.7)	86.3 (0.4)	-5.90 (2.20)	35.7 (0.4)
21	-1.9 (1.1)		-7.30 (1.30)	35.2 (0.5)	-2.6 (1.2)	87.2 (0.5)	-7.40 (1.30)	35.1 (0.4)
22	-2.3 (1.5)		-8.00 (1.20)	34.7 (0.3)	-3.6 (1.0)	87.7 (0.5)	-9.90 (1.90)	34.3 (0.5)
23	-2.9 (1.1)		-8.00 (1.90)	34.9 (0.5)	-4.8 (1.1)	87.4 (0.6)	-6.10 (1.50)	35.4 (0.4)
24								
25	-1.8 (1.8)		-5.70 (1.90)	35.3 (0.5)	-1.2 (2.2)	87.8 (0.5)	-10.00 (2.10)	34.1 (0.7)
26	0.7 (2.4)		-4.50 (5.10)	34.8 (0.9)	0.1 (2.7)	87.6 (1.2)	-8.40 (11.50)	
27	0.7 (3.5)		-4.80 (1.20)	34.8 (0.7)	-0.3 (5.5)	81.5 (5.8)	-5.90 (3.60)	
28	6.6 (1.4)		-6.30 (4.10)		6.8 (1.8)	76.5 (4.9)	-7.20 (3.60)	
29	-4.1 (4.6)		-13.70 (6.30)	40.5 (15.5)	-3.2 (4.7)	83.7 (0.7)	-6.30 (6.10)	31.0 (15.0)
30	-5.9 (1.7)		-6.20 (1.60)	35.8 (0.4)	-5.0 (1.3)	85.7 (0.9)	-3.80 (1.10)	26.9 (0.2)
31	-2.9 (1.1)		-5.70 (1.40)	35.6 (0.4)	-2.6 (1.2)	86.0 (2.0)	-6.90 (3.00)	30.6 (4.4)
Avg	0.7	79.7	-7.40	35.1	0.2	84.7	-7.80	34.6
n	30	14	30	29	30	30	30	26
SD	3.9	3.0	3.00	1.6	4.0	2.5	3.10	4.9
Min	-5.9	73.7	-13.70	33.2	-5.0	76.5	-14.10	26.9
Max	7.9	84.0	-0.90	40.5	7.6	87.8	-1.20	57.1

ED_004549_00015842-00106

Table F3. Daily means (SD) of environmental parameters at Site WI5B for February, 2008.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	-0.3 (2.1)		-13.80 (8.40)	46.3 (15.9)	-0.1 (2.4)	84.0 (2.8)	-16.30 (8.00)	34.1 (7.5)
2	1.6 (0.6)		-26.00 (7.60)	62.3 (11.2)	2.4 (0.8)		-25.10 (8.40)	36.3 (12.7)
3	1.1 (0.5)		-19.30 (8.40)	46.9 (16.2)	1.6 (0.8)	83.7 (3.4)	-19.90 (9.00)	35.8 (11.3)
4	2.6 (0.8)		-29.10 (11.00)	56.5 (12.5)	2.9 (1.0)		-30.40 (11.20)	52.1 (17.6)
5	2.7 (0.7)		-33.20 (6.50)	64.0 (4.1)	3.0 (0.7)	82.9 (2.4)	-30.50 (9.10)	55.7 (17.8)
6	0.4 (1.9)		-20.80 (7.80)	50.8 (16.7)	0.5 (1.8)		-16.40 (5.90)	32.4 (2.9)
7	-2.0 (2.5)		-11.70 (3.20)	34.8 (5.7)	-1.5 (2.9)		-11.90 (3.30)	33.4 (1.0)
8	0.7 (0.9)		-19.10 (7.30)	51.1 (17.0)	0.9 (1.0)		-18.80 (6.50)	31.6 (2.5)
9	-2.0 (4.1)		-19.90 (6.20)	45.2 (16.0)	-1.6 (4.0)		-15.30 (6.30)	32.7 (1.8)
10	-6.3 (1.5)		-7.70 (2.60)	35.9 (0.5)	-6.2 (1.3)		-3.50 (1.80)	36.5 (0.4)
11	-3.1 (1.0)		-4.00 (0.80)	36.1 (0.3)	-3.8 (1.3)		-5.50 (2.20)	35.7 (0.6)
12	-1.1 (1.2)		-4.60 (1.90)	36.3 (5.1)	-2.1 (1.6)		-7.40 (1.70)	34.7 (0.5)
13	0.0 (0.6)		-5.20 (2.60)		0.4 (1.7)		-10.50 (4.80)	
14	-1.2 (1.9)		-10.20 (3.30)	34.1 (1.4)	-0.6 (1.8)		-7.20 (3.00)	34.3 (0.8)
15	-4.5 (1.5)		-5.80 (1.70)	35.9 (0.5)	-3.6 (1.6)		-8.00 (2.40)	35.0 (0.8)
16	0.2 (1.9)		-15.40 (11.50)	45.3 (14.8)	0.8 (1.9)		-19.90 (12.10)	42.7 (15.7)
17	2.0 (1.5)		-26.40 (12.90)	51.1 (14.6)	2.2 (1.3)		-22.80 (11.30)	52.9 (18.6)
18	-4.9 (1.7)		-14.50 (3.30)	33.3 (0.8)	-3.6 (1.6)		-10.30 (2.40)	33.8 (0.5)
19	-5.6 (1.5)		-8.30 (2.30)	35.1 (0.6)	-4.7 (1.6)	86.1 (1.4)	-8.80 (2.40)	34.5 (1.1)
20	-6.3 (2.0)		-7.90 (1.70)	35.8 (0.5)	-5.0 (1.8)	85.9 (1.0)	-5.90 (2.70)	35.8 (0.7)
21	-5.6 (3.4)		-7.10 (2.20)	35.6 (1.1)	-2.5 (2.2)	85.2 (2.6)	-8.40 (3.50)	34.6 (1.1)
22	-2.6 (3.3)		-10.70 (7.10)	40.9 (13.0)	-2.0 (2.5)	80.6 (6.4)	-11.50 (8.40)	36.2 (8.5)
23	-1.1 (3.3)		-15.30 (10.40)	46.2 (15.9)	-0.7 (3.0)	75.4 (6.6)	-15.50 (11.80)	40.0 (13.0)
24	2.0 (2.3)		-25.80 (12.80)	51.7 (14.3)	2.5 (2.7)	77.7 (3.5)	-27.60 (14.20)	51.3 (16.5)
25	2.7 (0.9)		-12.10 (14.50)	71.4 (10.1)	2.4 (0.9)		-8.30 (18.10)	
26	-0.1 (1.1)		-23.40 (11.20)	33.9 (8.5)	0.4 (0.9)		-16.60 (12.50)	38.9 (17.2)
27	-0.9 (2.0)		-21.60 (7.80)	39.5 (13.9)	-1.7 (1.7)		-18.20 (8.20)	32.7 (4.2)
28	-0.7 (2.8)		-20.90 (10.40)	48.2 (16.0)	-1.0 (3.3)	80.2 (5.0)	-21.80 (11.80)	41.4 (15.4)
29	2.0 (1.8)		-29.90 (9.70)	57.8 (12.8)	1.5 (1.7)	74.7 (9.0)	-25.40 (10.30)	44.6 (17.8)
Avg	-1.0		-16.20	45.1	-0.7	81.5	-15.40	38.5
n	29	0	29	28	29	11	29	27
SD	2.8		8.30	10.3	2.5	3.9	7.60	6.8
Min	-6.3		-33.20	33.3	-6.2	74.7	-30.50	31.6
Max	2.7		-4.00	71.4	3.0	86.1	-3.50	55.7

ED_004549_00015842-00107

Table F3. Daily means (SD) of environmental parameters at Site WI5B for March, 2008.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, $ds\,m^3s^{-1}$	Temp., °C	RH, %	ΔP, Pa	Airflow, $ds\,m^3s^{-1}$
1	0.0 (2.4)		-12.60 (6.80)	48.0 (18.0)	-1.0 (2.8)	71.1 (10.0)	-12.40 (7.40)	38.5 (13.3)
2	2.7 (1.4)		-7.60 (5.60)	60.7 (19.4)	2.5 (1.8)	75.2 (5.0)	-5.40 (9.80)	
3	-0.1 (1.5)		-31.20 (11.80)	34.7 (12.2)	-0.1 (1.1)	75.2 (5.1)	-23.40 (13.90)	33.6 (9.5)
4	-0.2 (2.2)		-16.80 (11.90)	38.1 (12.2)	-0.4 (2.4)	73.0 (8.1)	-18.70 (12.50)	41.3 (19.0)
5	0.7 (1.1)		-10.20 (9.10)	42.7 (16.9)	1.3 (0.9)	76.0 (4.0)	-8.20 (9.00)	40.1 (16.3)
6	-2.8 (2.1)		-23.00 (6.50)	31.7 (1.5)	-1.8 (2.2)	79.4 (4.7)	-23.30 (9.20)	35.2 (9.9)
7	-6.0 (2.7)		-14.60 (4.10)	34.2 (1.4)	-4.8 (2.2)	82.0 (4.0)	-14.70 (4.20)	33.7 (1.4)
8	-1.3 (2.3)		-9.80 (5.20)	34.8 (3.8)	-1.6 (2.2)	78.8 (5.7)	-10.90 (6.40)	34.1 (3.5)
9	0.7 (1.8)		-22.70 (11.70)	45.2 (14.8)	-0.3 (1.7)	74.4 (6.7)	-22.40 (12.10)	38.6 (12.7)
10	-0.6 (2.2)		-10.90 (6.80)	43.4 (16.0)	-0.9 (3.3)	74.6 (8.8)	-12.50 (7.90)	45.1 (19.5)
11								
12	5.3 (1.3)		-5.60 (0.50)	75.7 (0.5)	6.0 (1.6)	68.5 (7.3)	-4.80 (2.20)	83.3 (5.5)
13	7.0 (2.6)		-5.80 (1.00)	75.0 (0.7)	7.1 (2.4)	70.4 (9.9)	-4.10 (0.90)	83.8 (0.8)
14	4.0 (1.7)		-7.40 (1.20)		3.9 (1.3)	68.0 (4.0)	-1.60 (2.30)	
15	2.2 (1.3)		-6.20 (1.60)	59.8 (19.7)	2.2 (0.9)	70.3 (5.9)	-2.70 (7.90)	
16	2.4 (1.7)		-9.50 (8.80)	61.4 (20.6)	2.8 (1.7)	65.0 (8.0)	-8.10 (11.00)	66.8 (25.2)
17	3.0 (1.0)		-7.40 (3.60)	70.2 (14.1)	3.3 (0.8)	73.6 (3.0)	-5.90 (3.80)	82.1 (12.2)
18	4.5 (1.0)	76.4 (0.8)	-7.20 (0.70)	75.7 (0.5)	4.2 (0.7)	76.5 (1.1)	-3.10 (1.40)	85.1 (5.4)
19	5.3 (2.9)	69.3 (7.9)	-7.20 (2.50)	74.3 (16.4)	4.9 (2.4)	67.4 (9.0)	-2.30 (3.70)	80.7 (32.5)
20	4.3 (1.7)	60.5 (5.1)	-9.20 (8.30)	68.3 (15.4)	4.3 (1.5)	56.3 (7.7)	-6.10 (9.60)	71.5 (22.7)
21	3.2 (0.7)	71.0 (4.2)	-9.30 (9.70)	60.6 (18.4)	2.9 (0.9)	69.3 (4.8)	-5.80 (10.80)	54.6 (23.6)
22	3.0 (1.1)	74.8 (1.8)	-6.30 (1.10)	70.2 (15.1)	2.7 (0.5)	73.7 (1.7)	-1.90 (1.70)	68.7 (24.5)
23	2.7 (0.9)	72.7 (5.5)	-8.90 (9.40)	70.9 (14.2)	2.6 (0.5)	71.2 (6.2)	-2.10 (10.70)	
24	3.2 (1.7)	68.5 (5.6)	-19.00 (17.40)	60.0 (21.3)	4.1 (1.9)	68.0 (6.4)	-21.30 (17.50)	65.0 (23.2)
25	5.8 (1.5)	68.9 (2.1)	-8.30 (3.30)	74.6 (1.9)	5.8 (1.4)	66.4 (2.9)	-4.10 (2.80)	82.6 (11.6)
26	5.3 (2.9)	66.8 (6.9)	-9.80 (7.60)	72.4 (16.9)	5.1 (2.7)	63.3 (9.0)	-6.80 (8.60)	77.4 (16.6)
27	3.8 (1.5)	61.3 (5.2)	-8.80 (5.30)	70.1 (13.4)	3.5 (0.8)	55.5 (7.7)	-3.40 (7.50)	66.6 (26.6)
28	4.4 (2.7)	57.7 (9.3)	-12.60 (12.40)	65.8 (22.2)	4.4 (1.9)	53.5 (11.4)	-10.60 (15.10)	69.6 (27.2)
29	5.8 (2.6)	53.2 (6.2)	-5.30 (1.00)	73.4 (11.4)	6.4 (2.7)	50.8 (6.8)	-8.50 (5.00)	76.2 (16.6)
30	8.1 (2.1)	58.6 (4.4)	-7.40 (2.80)	91.2 (26.1)	8.4 (2.0)	56.9 (5.1)	-5.70 (4.70)	104.0 (33.9)
31	4.6 (1.6)	72.0 (3.2)	-11.00 (4.10)	70.4 (11.3)	4.2 (1.4)	70.6 (4.4)	-1.20 (4.70)	
Avg	2.7	66.5	-11.10	60.5	2.7	69.2	-8.70	62.3
n	30	14	30	29	30	30	30	25
SD	3.0	6.8	5.90	15.8	2.9	7.8	6.80	20.5
Min	-6.0	53.2	-31.20	31.7	-4.8	50.8	-23.40	33.6
Max	8.1	76.4	-5.30	91.2	8.4	82.0	-1.20	104.0

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Table F3. Daily means (SD) of environmental parameters at Site WI5B for April, 2008.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	3.5 (1.8)	68.4 (7.1)	-9.70 (8.40)	69.4 (14.9)	3.5 (1.0)	63.9 (8.5)	-2.90 (10.80)	
2	4.7 (2.5)	67.9 (5.5)	-13.10 (14.90)	64.5 (19.4)	5.0 (2.7)	64.9 (6.1)	-12.20 (17.60)	69.4 (22.7)
3	8.2 (2.5)	63.0 (6.9)	-6.70 (2.00)	98.3 (29.4)	8.5 (2.7)	59.5 (7.6)	-4.30 (2.60)	109.0 (35.6)
4	9.2 (3.7)	66.0 (8.3)	-6.10 (1.90)	105.0 (30.6)	9.3 (3.6)	62.0 (10.5)	-3.80 (2.40)	118.0 (38.8)
5	12.1 (3.8)	59.5 (8.7)	-6.90 (2.50)	118.0 (34.7)	12.3 (3.9)	56.0 (8.8)	-4.30 (2.60)	134.0 (37.1)
6	10.5 (1.2)	65.2 (8.4)	-6.30 (1.60)	127.0 (24.3)	10.7 (1.2)	64.8 (8.9)	-7.10 (3.50)	136.0 (36.5)
7	5.5 (0.7)	73.8 (1.4)	-6.10 (1.70)	75.9 (0.8)	5.3 (0.6)	70.8 (1.7)	-1.90 (0.90)	86.1 (0.7)
8	5.5 (0.7)	73.2 (1.7)	-5.30 (1.40)	76.7 (0.6)	5.0 (0.8)	69.8 (2.7)	-0.60 (2.40)	
9	5.8 (1.5)	72.2 (2.7)	-5.40 (1.30)	76.8 (0.7)	5.3 (1.6)	68.5 (3.8)	-0.10 (2.50)	
10	5.3 (0.9)	73.3 (2.0)	-5.20 (3.20)	76.2 (1.5)	5.3 (0.9)	69.4 (3.5)	-4.40 (2.50)	84.8 (1.6)
11	4.9 (1.0)	77.3 (0.6)	-8.00 (4.00)	74.1 (2.1)	4.6 (0.6)	74.4 (1.1)	-1.20 (2.80)	
12	3.0 (0.6)	72.1 (3.1)	-5.80 (5.00)	70.2 (14.8)	3.3 (0.6)	66.9 (3.3)	-0.70 (4.80)	
13	5.2 (2.9)	64.6 (5.5)	-8.50 (4.60)	67.8 (16.8)	4.8 (2.4)	57.5 (7.3)	-2.40 (4.70)	
14	7.3 (3.8)	58.4 (12.2)	-5.60 (3.90)	91.8 (37.8)	7.6 (3.9)	53.5 (13.7)	-3.90 (3.40)	99.4 (43.6)
15	12.1 (3.9)	49.7 (7.3)	-3.40 (1.70)	116.0 (30.0)	12.6 (3.9)	47.7 (7.1)	-10.40 (6.20)	130.0 (33.5)
16	14.3 (3.5)	54.9 (5.3)	-7.80 (4.30)	156.0 (45.5)	14.6 (3.5)	53.2 (6.3)	-9.40 (8.60)	174.0 (52.2)
17	8.8 (1.4)	68.9 (4.5)	-4.50 (2.10)	92.0 (34.7)	8.8 (1.4)	66.8 (5.7)	-1.80 (2.60)	92.5 (22.9)
18	9.3 (0.7)	71.5 (2.4)	-8.10 (3.40)	76.3 (10.9)	8.8 (0.7)	68.4 (3.5)	-0.80 (2.00)	
19	9.9 (1.2)	76.2 (1.4)	-6.10 (1.70)	99.6 (31.3)	9.6 (1.3)	74.3 (1.8)	-1.00 (1.80)	
20	13.6 (5.2)	68.2 (10.2)	-5.70 (2.00)	143.0 (69.6)	13.6 (5.5)	65.1 (11.4)	-7.10 (6.20)	156.0 (71.4)
21	18.0 (3.9)	60.5 (10.3)	-8.50 (6.80)	193.0 (62.1)	18.4 (4.1)	56.9 (11.6)	-14.70 (10.70)	207.0 (57.1)
22	12.3 (3.1)	64.6 (12.9)	-8.10 (2.00)	121.0 (31.2)	12.4 (3.3)	59.8 (15.4)	-2.20 (4.00)	
23	16.0 (5.6)	46.2 (15.7)	-9.90 (3.80)	167.0 (69.6)	16.6 (5.7)	40.7 (16.3)	-6.00 (4.10)	193.0 (80.1)
24	15.2 (0.6)	67.2 (16.0)	-6.60 (1.50)	137.0 (1.8)	15.6 (0.6)	65.2 (16.5)	-6.40 (4.10)	161.0 (4.3)
25	11.1 (3.2)	80.5 (1.4)	-7.40 (2.70)	120.0 (26.0)	11.4 (2.8)	76.3 (2.3)	-5.30 (5.50)	136.0 (38.8)
26	4.3 (1.1)	72.3 (4.7)	-9.20 (3.80)	74.3 (3.4)	4.7 (0.9)	63.8 (5.9)	-5.60 (4.00)	82.7 (8.5)
27	5.7 (2.7)	63.3 (9.5)	-7.70 (2.00)	84.4 (22.7)	5.8 (2.7)	58.0 (11.4)	-1.10 (2.90)	88.2 (21.5)
28	4.3 (1.3)	67.9 (5.1)	-4.70 (2.30)	76.4 (6.4)	3.9 (1.0)	63.0 (6.3)	4.50 (5.00)	
29	6.7 (3.4)	59.1 (11.8)	-7.30 (1.20)	89.8 (35.5)	7.3 (3.3)	53.6 (12.8)	-2.10 (1.40)	93.1 (41.8)
30	11.6 (4.1)	51.9 (6.9)	-6.00 (1.10)	116.0 (29.9)	12.1 (4.0)	47.8 (7.1)	-6.00 (4.00)	133.0 (35.7)
Avg	8.8	65.9	-7.00	102.0	8.9	62.1	-4.20	124.0
n	30	30	30	30	30	30	30	20
SD	4.0	8.1	1.90	32.2	4.2	8.3	3.90	38.0
Min	3.0	46.2	-13.10	64.5	3.3	40.7	-14.70	69.4
Max	18.0	80.5	-3.40	193.0	18.4	76.3	4.50	207.0

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Table F3. Daily means (SD) of environmental parameters at Site WI5B for May, 2008.

Day	Barn 1				Barn 2			
	Temp., ºC	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., ºC	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	14.4 (3.3)	54.7 (3.4)	-6.00 (2.80)	140.0 (40.4)	14.6 (3.3)	52.2 (3.5)	-7.80 (4.00)	160.0 (47.3)
2	10.8 (1.5)	76.0 (3.9)	-7.10 (4.00)	118.0 (28.3)	10.3 (1.9)	75.9 (3.9)	-0.70 (8.00)	
3	9.3 (2.6)	60.4 (12.9)	-9.80 (6.20)	104.0 (30.1)	8.8 (2.9)	57.0 (14.1)	4.80 (7.40)	
4	13.3 (4.3)	47.0 (8.3)	-9.80 (3.80)	140.0 (56.9)	13.8 (4.1)	44.1 (8.9)	-7.20 (6.20)	153.0 (60.0)
5	13.1 (3.5)	50.9 (9.5)	-7.80 (1.60)	124.0 (29.5)	13.1 (3.6)	49.6 (10.3)	-4.20 (2.90)	141.0 (35.9)
6	16.1 (4.1)	56.9 (12.0)	-10.10 (4.20)	169.0 (50.4)	16.2 (4.2)	55.4 (14.5)	-6.30 (3.90)	198.0 (61.1)
7	14.1 (2.7)	60.8 (15.1)	-6.60 (2.70)	135.0 (11.7)	14.0 (2.6)	58.2 (17.1)	3.70 (8.20)	
8	13.5 (3.4)	53.0 (10.8)	-7.50 (1.10)	120.0 (27.0)	13.5 (3.4)	50.0 (11.7)	-3.00 (1.80)	139.0 (36.6)
9	13.3 (3.2)	50.8 (8.9)	-8.20 (2.00)	123.0 (25.4)	13.2 (3.0)	48.7 (9.4)	-2.70 (2.80)	139.0 (36.8)
10	12.3 (2.1)	60.4 (9.0)	-6.90 (1.30)	136.0 (10.8)	12.6 (2.3)	59.5 (11.2)	-4.50 (2.70)	154.0 (26.0)
11	10.3 (2.5)	63.4 (10.8)	-5.40 (3.90)	111.0 (30.9)	9.5 (2.9)	61.6 (12.6)	7.20 (7.80)	
12	12.2 (4.0)	53.8 (10.4)	-5.90 (1.10)	119.0 (28.9)	12.6 (4.1)	50.9 (11.0)	-5.50 (3.80)	138.0 (34.5)
13	13.5 (2.2)	64.5 (6.7)	-7.40 (1.40)	137.0 (1.7)	13.6 (2.4)	63.6 (7.1)	-3.80 (3.80)	163.0 (2.7)
14	13.1 (3.8)	56.3 (11.6)	-7.80 (1.80)	127.0 (30.7)	13.0 (3.8)	52.7 (12.5)	-0.20 (4.00)	
15	15.7 (5.0)	48.4 (15.8)	-10.50 (4.00)	165.0 (70.3)	16.0 (5.1)	44.5 (17.8)	-5.80 (3.70)	195.0 (82.3)
16	17.9 (4.6)	51.2 (14.0)	-12.00 (5.50)	192.0 (60.0)	18.1 (4.5)	48.1 (16.1)	-6.90 (4.30)	219.0 (70.7)
17	15.1 (3.3)	49.1 (10.4)	-9.30 (4.70)	161.0 (43.0)	15.1 (3.4)	46.4 (11.4)	-1.00 (7.00)	
18	11.8 (2.9)	52.2 (10.5)	-7.00 (2.00)	116.0 (28.9)	11.5 (2.9)	49.7 (11.4)	1.00 (4.20)	
19	10.3 (1.8)	62.3 (8.1)	-6.70 (1.00)	101.0 (30.7)	10.3 (2.0)	60.7 (10.0)	-2.90 (1.50)	114.0 (37.8)
20	12.7 (3.8)	58.3 (15.5)	-7.90 (2.70)	117.0 (27.9)	12.5 (3.6)	55.5 (16.4)	0.10 (4.00)	
21	13.1 (4.1)	53.9 (9.9)	-7.50 (2.00)	126.0 (37.3)	13.0 (4.2)	51.3 (10.9)	-1.80 (3.10)	135.0 (46.5)
22	15.2 (3.7)	52.0 (8.7)	-8.70 (2.90)	160.0 (56.7)	15.1 (3.6)	49.8 (8.4)	-5.50 (2.60)	183.0 (64.4)
23	15.2 (3.3)	54.4 (7.0)	-7.90 (3.00)	169.0 (49.5)	15.1 (3.3)	52.4 (7.4)	-5.40 (2.70)	183.0 (52.4)
24	16.6 (4.0)	51.1 (10.5)	-8.50 (3.10)	190.0 (53.9)	16.8 (4.1)	48.6 (11.6)	-9.00 (6.70)	202.0 (59.9)
25	18.7 (2.7)	69.9 (3.4)	-11.10 (6.80)	201.0 (75.6)	19.0 (2.9)	68.6 (3.9)	-8.10 (9.50)	
26								
27	12.3 (2.6)	53.8 (8.3)	-7.90 (1.70)	128.0 (24.6)	12.1 (2.7)	49.5 (7.9)	-2.60 (2.40)	
28	14.6 (3.8)	51.0 (11.8)	-8.90 (3.10)	160.0 (58.7)	15.0 (3.9)	45.7 (12.3)	-3.70 (2.60)	181.0 (75.2)
29	13.5 (1.3)	66.5 (7.4)	-5.60 (2.00)	140.0 (1.2)	13.7 (1.4)	64.7 (8.5)	-5.50 (5.00)	162.0 (10.9)
30	17.1 (2.1)	78.0 (3.4)	-9.10 (3.00)	164.0 (47.2)	17.2 (2.1)	75.7 (5.1)	-3.40 (2.60)	192.0 (50.9)
31	18.3 (3.0)	69.7 (10.4)	-10.60 (3.40)	183.0 (52.1)	18.5 (3.0)	65.9 (12.0)	-5.90 (5.20)	213.0 (58.0)
Avg	13.9	57.7	-8.20	143.0	13.9	55.2	-3.20	168.0
n	30	30	30	30	30	30	30	20
SD	2.3	8.0	1.60	27.0	2.5	8.5	3.80	28.6
Min	9.3	47.0	-12.00	101.0	8.8	44.1	-9.00	114.0
Max	18.7	78.0	-5.40	201.0	19.0	75.9	7.20	219.0

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Table F3. Daily means (SD) of environmental parameters at Site WI5B for June, 2008.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	19.3 (4.7)	63.3 (15.0)	-16.60 (11.30)	237.0 (103.0)	19.6 (4.7)	59.3 (16.7)	-9.40 (6.50)	286.0 (131.0)
2								
3	15.3 (0.8)	67.9 (5.1)	-5.80 (1.00)	137.0 (0.9)	15.2 (0.7)	65.3 (6.8)	-4.00 (0.90)	
4	16.9 (2.3)	68.8 (4.5)	-8.20 (2.70)	171.0 (50.3)	17.1 (2.3)	66.8 (5.1)	-5.20 (2.60)	
5	18.7 (1.5)	78.9 (2.1)	-10.40 (4.50)		18.6 (1.5)	78.6 (2.0)	-5.70 (4.20)	
6	20.4 (1.3)	69.8 (7.2)	-13.10 (4.00)		20.5 (1.4)	65.8 (8.2)	-15.10 (8.10)	
7	21.4 (2.4)	70.9 (4.0)	-16.00 (6.70)	264.0 (82.0)	21.5 (2.4)	68.5 (4.1)	-9.40 (6.00)	299.0 (100.0)
8								
9								
10	18.1 (2.4)	63.0 (7.3)	-8.50 (2.60)	196.0 (55.2)	18.1 (2.3)	59.3 (8.5)	-4.40 (2.90)	
11	17.6 (1.3)	77.0 (2.5)	-5.90 (2.70)	183.0 (54.9)	17.6 (1.4)	75.9 (2.4)	-8.40 (7.60)	
12	20.2 (2.3)	73.5 (10.1)	-10.60 (4.80)	245.0 (56.7)	20.5 (2.2)	70.2 (11.6)	-6.80 (5.40)	
13	18.2 (1.8)	59.8 (7.1)	-8.10 (2.50)	194.0 (55.2)	18.4 (1.8)	55.6 (8.6)	-5.30 (5.00)	217.0 (58.3)
14								
15								
16								
17								
18	18.9 (4.0)	52.5 (16.0)	-8.50 (1.90)	202.0 (54.0)	18.9 (3.9)	50.0 (16.5)	-2.60 (3.70)	
19	20.4 (5.0)	54.6 (13.2)	-14.70 (8.10)	268.0 (107.0)	20.6 (4.9)	52.7 (14.4)	-9.60 (6.60)	308.0 (125.0)
20	21.4 (3.5)	58.6 (12.1)	-13.70 (7.10)	268.0 (96.8)	21.5 (3.3)	56.3 (12.9)	-9.00 (6.30)	304.0 (115.0)
21	20.2 (3.3)	53.2 (9.5)	-10.70 (5.50)	217.0 (76.8)	20.6 (3.0)	49.2 (8.3)	-6.20 (4.80)	262.0 (101.0)
22	18.7 (3.0)	62.8 (7.3)	-8.70 (2.10)	198.0 (54.4)	18.9 (2.8)	59.4 (7.2)	-2.50 (3.30)	214.0 (61.5)
23	20.3 (3.7)	58.0 (12.6)	-11.40 (5.90)	243.0 (88.6)	20.4 (3.6)	55.1 (13.0)	-9.00 (5.40)	284.0 (107.0)
24	22.8 (3.3)	55.4 (8.1)	-17.20 (7.90)	312.0 (90.5)	23.1 (3.3)	53.0 (8.0)	-16.10 (11.50)	349.0 (95.5)
25	23.6 (3.2)	62.9 (8.1)	-16.70 (7.50)	311.0 (77.0)	23.9 (3.1)	60.3 (8.5)	-14.30 (8.90)	355.0 (87.0)
26	21.8 (2.7)	63.6 (7.3)	-13.70 (6.50)	273.0 (85.5)	22.1 (2.7)	60.8 (7.8)	-10.90 (5.90)	329.0 (110.0)
27	20.4 (2.1)	76.1 (4.6)	-11.10 (4.10)	253.0 (48.2)	20.5 (2.0)	74.2 (5.1)	-7.90 (5.00)	284.0 (76.9)
28	18.0 (1.5)	70.7 (6.2)	-8.40 (2.20)	189.0 (54.6)	18.4 (1.6)	65.8 (7.5)	-4.00 (3.20)	203.0 (56.2)
29	20.1 (2.8)	62.8 (10.9)	-8.70 (3.80)	210.0 (59.8)	20.1 (2.9)	59.6 (11.6)	1.00 (6.00)	
30								
Avg	19.7	64.7	-11.20	229.0	19.8	61.9	-7.50	284.0
n	22	22	22	20	22	22	22	13
SD	1.9	7.6	3.40	45.1	2.0	8.0	4.10	47.1
Min	15.3	52.5	-17.20	137.0	15.2	49.2	-16.10	203.0
Max	23.6	78.9	-5.80	312.0	23.9	78.6	1.00	355.0

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Table F3. Daily means (SD) of environmental parameters at Site WI5B for July, 2008.

Day	Barn 1				Barn 2			
	Temp., ºC	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., ºC	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1								
2								
3								
4	20.4 (4.0)	57.4 (11.0)	-11.90 (7.10)	254.0 (96.5)	20.6 (4.1)	55.1 (12.1)	-10.10 (8.40)	295.0 (111.0)
5	22.8 (3.0)	56.6 (5.6)	-15.30 (7.20)	313.0 (79.0)	23.0 (2.9)	55.8 (4.3)	-16.90 (12.70)	340.0 (81.3)
6	23.8 (2.5)	67.8 (6.3)	-16.40 (7.20)	325.0 (80.0)	23.9 (2.4)	68.3 (8.1)	-14.90 (9.20)	368.0 (87.9)
7	22.6 (2.3)	77.2 (3.4)	-15.30 (7.10)	316.0 (83.4)	22.8 (2.3)	75.3 (3.9)	-14.60 (9.80)	348.0 (87.9)
8								
9								
10	20.2 (2.6)	70.5 (6.0)			20.3 (2.7)	69.7 (6.8)	-9.10 (8.30)	
11	22.5 (2.9)	78.8 (3.3)			22.6 (2.8)	78.2 (2.4)	-21.70 (12.50)	323.0 (74.8)
12	20.2 (2.5)	59.3 (13.7)			20.5 (2.4)	54.7 (14.4)	-6.90 (5.50)	245.0 (54.8)
13	20.2 (2.7)	54.6 (7.2)			20.4 (2.5)	51.1 (6.6)	-3.90 (3.00)	248.0 (54.0)
14	21.2 (4.3)	60.3 (11.5)			21.3 (4.4)	58.7 (12.0)	-9.80 (7.70)	319.0 (132.0)
15	24.4 (3.3)	61.3 (8.3)			24.4 (3.3)	60.1 (7.9)	-11.90 (5.40)	378.0 (98.0)
16	23.9 (2.5)	66.7 (4.2)	-13.10 (7.10)	316.0 (80.4)	23.9 (2.5)	65.6 (4.8)	-13.80 (9.70)	349.0 (84.7)
17	22.0 (1.2)	79.8 (2.3)	-9.40 (3.60)	260.0 (42.5)	22.3 (1.2)	77.8 (2.7)	-7.30 (4.40)	295.0 (46.5)
18	22.3 (2.3)	72.3 (11.7)	-12.80 (6.40)	307.0 (79.6)	22.4 (2.2)	70.2 (11.6)	-9.20 (4.20)	350.0 (96.6)
19	21.0 (2.6)	73.0 (7.0)	-11.10 (6.20)	287.0 (76.0)	21.2 (2.6)	70.2 (8.0)	-12.10 (9.40)	305.0 (97.3)
20	21.8 (2.5)	76.7 (7.0)	-12.40 (6.70)	296.0 (73.2)	21.9 (2.6)	74.0 (7.3)	-9.30 (3.90)	336.0 (89.7)
21	21.5 (2.6)	72.6 (9.4)	-17.50 (10.00)		21.7 (2.5)	69.5 (8.0)	-8.60 (4.10)	319.0 (99.0)
22	21.1 (2.6)	66.0 (9.1)	-18.10 (8.80)		21.1 (2.5)	63.7 (8.8)	-8.30 (4.40)	275.0 (101.0)
23	21.1 (3.2)	63.9 (8.2)	-20.40 (10.30)	253.0 (95.1)	21.3 (3.3)	61.0 (7.9)	-9.30 (6.40)	315.0 (128.0)
24	22.4 (2.2)	67.3 (6.6)	-22.00 (8.60)	284.0 (67.1)	22.8 (2.1)	64.2 (6.5)	-12.50 (8.80)	350.0 (87.8)
25	22.0 (1.9)	76.5 (7.2)	-20.10 (7.70)	261.0 (51.8)	22.4 (1.9)	71.9 (7.7)	-9.30 (7.70)	311.0 (67.3)
26	20.8 (3.6)	64.1 (12.9)	-21.70 (11.10)	249.0 (96.8)	21.0 (3.4)	60.0 (12.0)	-9.30 (6.40)	303.0 (129.0)
27	21.2 (3.6)	74.1 (6.5)	-22.60 (10.80)	264.0 (99.8)	21.2 (3.8)	71.4 (7.1)	-10.70 (7.00)	322.0 (130.0)
28	23.1 (3.3)	71.7 (8.1)	-24.80 (9.90)	301.0 (76.3)	23.2 (3.4)	68.9 (8.5)	-14.60 (10.10)	337.0 (120.0)
29	24.9 (3.2)	66.7 (15.9)	-26.10 (10.60)	299.0 (65.7)	25.0 (3.0)	64.4 (15.7)	-13.70 (7.50)	368.0 (91.8)
30	22.6 (3.9)	63.4 (10.7)	-24.90 (11.00)	282.0 (81.0)	22.7 (3.6)	61.3 (9.4)	-11.20 (6.10)	345.0 (117.0)
31	21.5 (3.2)	74.7 (7.8)	-20.80 (9.40)	262.0 (81.0)	21.6 (3.1)	72.3 (7.4)	-9.90 (5.90)	308.0 (116.0)
Avg	22.0	68.2	-17.80	285.0	22.1	65.9	-11.10	322.0
n	26	26	20	18	26	26	26	25
SD	1.3	7.1	4.90	24.5	1.3	7.3	3.50	33.3
Min	20.2	54.6	-26.10	249.0	20.3	51.1	-21.70	245.0
Max	24.9	79.8	-9.40	325.0	25.0	78.2	-3.90	378.0

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Table F3. Daily means (SD) of environmental parameters at Site WI5B for August, 2008.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	21.7 (3.3)	65.3 (15.2)	-24.70 (13.30)	268.0 (79.0)	21.7 (3.2)	63.4 (14.1)	-8.80 (5.20)	334.0 (127.0)
2	21.1 (4.3)	62.8 (12.0)	-21.50 (10.70)	262.0 (101.0)	21.0 (4.6)	60.7 (12.8)	-12.40 (9.80)	317.0 (125.0)
3	21.2 (1.2)	72.1 (2.5)	-14.80 (0.70)	239.0 (1.6)	21.4 (1.2)	68.6 (2.9)	-9.70 (3.70)	276.0 (12.9)
4	22.3 (2.4)	79.4 (5.3)	-22.10 (9.80)	283.0 (64.7)	22.5 (2.3)	76.9 (5.3)	-11.40 (4.80)	343.0 (92.0)
5	21.8 (3.1)	68.3 (14.9)	-25.00 (11.50)	284.0 (72.8)	21.9 (3.0)	65.6 (14.3)	-9.60 (5.80)	334.0 (127.0)
6	20.8 (2.7)	71.2 (11.0)	-19.30 (7.90)	259.0 (62.2)	21.0 (2.4)	67.4 (10.3)	-7.80 (5.10)	299.0 (92.9)
7	20.0 (3.3)	67.4 (11.4)	-14.60 (6.60)	216.0 (79.6)	20.1 (3.1)	63.3 (11.3)	-4.90 (3.00)	244.0 (82.9)
8	19.2 (3.8)	68.0 (9.9)	-14.30 (2.70)	207.0 (47.9)	19.3 (4.0)	63.5 (11.5)	-5.20 (1.80)	242.0 (56.4)
9	21.3 (3.3)	62.3 (11.2)	-19.80 (9.90)	270.0 (87.6)	21.3 (3.1)	58.6 (11.0)	-9.30 (6.30)	299.0 (130.0)
10	17.7 (3.8)	60.0 (8.5)	-12.00 (2.30)	187.0 (53.2)	17.7 (3.9)	56.2 (9.7)	-5.20 (2.10)	218.0 (58.8)
11	19.0 (4.4)	66.2 (8.5)	-14.60 (4.90)	213.0 (62.2)	19.1 (4.6)	62.5 (9.9)	-6.50 (5.80)	253.0 (70.1)
12	19.3 (1.0)	77.4 (4.3)	-15.20 (1.30)	233.0 (23.7)	19.6 (1.0)	73.8 (4.1)	-5.70 (2.30)	270.0 (38.5)
13	21.1 (2.9)	75.7 (9.6)	-20.70 (8.50)	266.0 (65.0)	21.5 (2.9)	71.1 (10.6)	-8.70 (6.10)	290.0 (117.0)
14	19.8 (2.4)	77.6 (6.0)	-13.80 (2.80)	203.0 (51.7)	19.9 (2.4)	74.4 (6.6)	-5.70 (2.50)	229.0 (58.6)
15	20.2 (3.8)	63.3 (15.8)	-19.30 (10.20)	235.0 (103.0)	20.3 (4.0)	59.2 (17.2)	-8.10 (6.20)	287.0 (132.0)
16	22.0 (4.3)	64.9 (9.5)	-22.30 (10.80)	262.0 (101.0)	22.1 (4.5)	61.1 (10.4)	-9.80 (7.90)	320.0 (129.0)
17	23.7 (3.5)	64.1 (12.3)	-24.00 (8.50)	302.0 (71.3)	24.0 (3.5)	59.7 (12.6)	-11.90 (7.60)	366.0 (91.8)
18	23.8 (3.5)	61.8 (11.2)	-24.70 (10.00)	302.0 (68.2)	24.0 (3.4)	58.6 (11.4)	-12.50 (7.70)	369.0 (91.9)
19	22.4 (3.0)	70.1 (6.1)	-20.30 (9.70)	285.0 (79.2)	22.5 (3.0)	67.5 (6.2)	-12.50 (8.90)	327.0 (105.0)
20	22.7 (2.4)	71.3 (9.5)	-21.50 (8.50)	293.0 (70.4)	23.0 (2.4)	68.0 (9.8)	-15.70 (11.90)	341.0 (75.0)
21	21.7 (2.1)	75.3 (5.7)	-19.70 (7.80)	274.0 (62.0)	22.1 (2.1)	72.2 (6.4)	-14.70 (10.80)	319.0 (68.3)
22	23.4 (2.6)	78.1 (6.4)	-24.40 (9.50)	298.0 (69.0)	23.6 (2.5)	75.4 (6.7)	-17.30 (12.40)	348.0 (75.7)
23	18.6 (2.5)	64.2 (9.0)	-14.50 (3.10)	192.0 (51.6)	18.5 (2.5)	60.3 (8.8)	-4.40 (2.50)	223.0 (60.1)
24	17.1 (3.9)	63.2 (11.1)	-12.30 (2.20)	182.0 (52.7)	16.9 (4.0)	60.8 (12.5)	-3.50 (2.70)	214.0 (60.1)
25	16.8 (5.0)	55.6 (16.4)	-12.00 (2.10)	184.0 (53.2)	17.0 (5.1)	52.5 (18.3)	-4.70 (2.80)	204.0 (75.2)
26	18.9 (4.1)	61.7 (10.1)	-14.60 (6.30)	214.0 (74.8)	19.0 (4.4)	58.5 (12.0)	-9.30 (9.30)	253.0 (84.7)
27	19.3 (2.6)	71.5 (5.0)	-13.00 (2.40)	196.0 (51.4)	19.6 (2.8)	68.8 (5.7)	-5.80 (4.10)	230.0 (56.6)
28	20.8 (2.1)	72.4 (10.5)	-16.90 (6.00)	238.0 (51.6)	21.1 (1.9)	68.2 (12.1)	-6.60 (3.00)	279.0 (61.1)
29	19.5 (4.0)	63.9 (9.8)	-16.50 (8.00)	219.0 (80.1)	19.6 (4.0)	60.6 (10.3)	-8.10 (8.70)	256.0 (91.7)
30	21.2 (4.2)	62.7 (13.4)	-19.40 (9.90)	253.0 (101.0)	21.3 (4.3)	60.4 (14.3)	-12.30 (11.30)	299.0 (116.0)
31	22.9 (2.8)	64.0 (9.8)	-20.80 (8.00)	297.0 (72.5)	23.0 (2.7)	61.4 (9.7)	-16.40 (12.10)	340.0 (73.5)
Avg	20.7	67.8	-18.30	246.0	20.8	64.5	-9.20	288.0
n	31	31	31	31	31	31	31	31
SD	1.8	6.0	4.10	38.4	1.9	6.0	3.70	47.6
Min	16.8	55.6	-25.00	182.0	16.9	52.5	-17.30	204.0
Max	23.8	79.4	-12.00	302.0	24.0	76.9	-3.50	369.0

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Table F3. Daily means (SD) of environmental parameters at Site WI5B for September, 2008.

Day	Barn 1				Barn 2			
	Temp., ºC	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., ºC	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	24.4 (2.8)	71.4 (5.4)	-25.80 (9.20)	328.0 (68.9)	24.4 (2.8)	69.4 (5.4)	-21.60 (11.20)	375.0 (75.7)
2	21.4 (3.3)	76.2 (5.7)	-18.80 (8.00)	251.0 (81.0)	21.4 (3.3)	73.7 (7.3)	-10.20 (10.10)	281.0 (87.5)
3	15.5 (2.5)	65.1 (8.7)	-11.60 (2.20)	160.0 (45.2)	15.1 (2.6)	63.1 (8.9)	-0.30 (3.90)	
4	14.4 (2.3)	68.0 (5.2)	-9.60 (1.00)	136.0 (8.8)	14.3 (2.3)	65.6 (5.9)	-3.50 (0.80)	163.0 (11.4)
5	15.0 (4.2)	69.1 (8.5)	-12.10 (2.70)	161.0 (58.9)	15.3 (4.1)	65.6 (9.8)	-3.00 (3.00)	177.0 (78.0)
6	15.7 (2.9)	68.8 (10.5)	-12.40 (2.10)	170.0 (50.1)	15.8 (2.9)	65.3 (12.0)	-3.90 (2.90)	198.0 (54.4)
7	14.7 (2.2)	72.9 (8.1)	-11.60 (1.60)	153.0 (40.1)	14.8 (2.2)	69.0 (9.7)	-3.00 (3.10)	165.0 (7.0)
8	12.9 (2.9)	68.5 (8.9)	-10.50 (0.60)	132.0 (14.3)	13.0 (2.7)	64.8 (9.5)	-2.10 (1.40)	147.0 (34.2)
9	13.7 (4.4)	61.3 (13.7)	-11.40 (2.60)	143.0 (62.6)	13.6 (4.7)	57.9 (14.9)	-2.60 (2.00)	164.0 (70.8)
10	16.1 (2.3)	60.3 (4.7)	-10.40 (2.10)	155.0 (41.6)	16.4 (2.5)	57.4 (5.2)	-5.00 (4.50)	185.0 (43.6)
11	18.2 (2.1)	78.4 (6.1)	-12.30 (3.90)	178.0 (50.5)	18.6 (2.2)	75.5 (5.8)	-7.50 (6.20)	210.0 (56.0)
12	17.5 (2.2)	74.1 (7.3)	-12.20 (2.20)	167.0 (49.5)	17.6 (2.1)	70.9 (8.1)	-5.40 (2.40)	197.0 (55.3)
13	17.0 (1.1)	81.9 (1.1)	-11.10 (2.40)	154.0 (42.4)	17.1 (1.2)	79.6 (1.1)	-2.20 (4.10)	177.0 (39.5)
14	14.9 (1.6)	80.6 (2.5)	-10.20 (1.20)	135.0 (8.7)	14.7 (1.7)	77.9 (3.1)	0.20 (3.50)	
15	14.2 (2.2)	71.1 (9.1)	-10.90 (1.70)	145.0 (29.1)	14.2 (2.4)	66.5 (10.8)	-1.40 (1.20)	168.0 (1.4)
16	17.7 (4.3)	65.4 (8.3)	-14.90 (7.80)	195.0 (77.3)	18.0 (4.5)	60.3 (9.1)	-5.60 (6.30)	242.0 (102.0)
17	17.6 (3.9)	64.9 (12.6)	-11.20 (1.80)	182.0 (53.6)	17.4 (3.9)	62.2 (13.7)	-5.10 (2.10)	215.0 (58.6)
18	19.1 (3.8)	67.6 (5.3)	-12.80 (6.00)	219.0 (74.5)	19.4 (3.8)	63.3 (5.8)	-9.10 (7.60)	250.0 (76.3)
19	21.0 (2.6)	64.4 (9.2)	-17.40 (8.10)	255.0 (74.8)	21.3 (2.5)	60.3 (8.7)	-10.00 (9.40)	291.0 (94.8)
20	20.0 (2.9)	70.5 (4.6)	-15.60 (7.40)	224.0 (84.5)	20.0 (3.0)	67.6 (5.0)	-5.80 (4.30)	260.0 (94.5)
21	19.8 (3.8)	69.3 (8.4)	-16.50 (8.40)	234.0 (93.8)	20.0 (3.8)	66.2 (8.8)	-8.30 (8.10)	255.0 (72.6)
22	20.3 (1.9)	71.6 (3.8)	-12.70 (2.00)	223.0 (42.3)	20.5 (1.9)	68.2 (4.2)	-7.40 (4.00)	250.0 (51.6)
23	21.1 (2.2)	72.0 (6.6)	-17.10 (6.70)	276.0 (62.3)	21.4 (2.3)	68.3 (7.3)	-12.30 (8.80)	292.0 (24.8)
24	16.2 (3.0)	67.9 (11.6)	-12.50 (3.20)	175.0 (50.8)	16.3 (3.1)	62.9 (13.4)	-3.10 (2.30)	204.0 (56.6)
25	17.1 (4.0)	67.4 (5.7)	-12.50 (2.80)	198.0 (51.8)	17.5 (4.2)	62.8 (6.9)	-5.80 (3.40)	229.0 (59.0)
26	21.5 (3.0)	63.3 (6.0)	-18.60 (8.90)	255.0 (95.9)	22.0 (2.9)	59.6 (6.0)	-10.40 (9.60)	222.0 (46.3)
27	17.7 (1.7)	75.5 (3.6)	-11.70 (2.40)	178.0 (52.2)	17.8 (2.0)	72.6 (4.8)	1.00 (4.30)	
28	14.8 (1.3)	79.7 (1.3)	-9.50 (0.90)	136.0 (1.1)	15.0 (1.4)	76.3 (2.1)	-2.80 (1.10)	166.0 (1.4)
29	15.3 (1.9)	70.5 (10.7)	-11.00 (2.00)	146.0 (33.0)	15.3 (1.9)	65.8 (11.5)	0.00 (3.00)	
30	11.2 (1.6)	68.5 (5.0)	-10.30 (0.90)	125.0 (23.7)	11.3 (1.4)	64.1 (5.3)	-0.80 (1.90)	127.0 (41.2)
Avg	17.2	70.2	-13.20	186.0	17.3	66.8	-5.20	216.0
n	30	30	30	30	30	30	30	26
SD	3.0	5.4	3.50	49.3	3.0	5.7	4.60	54.8
Min	11.2	60.3	-25.80	125.0	11.3	57.4	-21.60	127.0
Max	24.4	81.9	-9.50	328.0	24.4	79.6	1.00	375.0

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Table F3. Daily means (SD) of environmental parameters at Site WI5B for October, 2008.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	10.3 (2.4)	70.3 (8.2)	-9.70 (1.10)	104.0 (30.9)	10.2 (2.4)	65.5 (8.8)	0.10 (2.60)	
2	12.7 (4.2)	67.6 (9.1)	-10.80 (2.10)	118.0 (40.1)	12.8 (4.1)	62.5 (9.9)	-1.30 (1.40)	127.0 (39.6)
3	10.1 (3.1)	64.9 (11.0)	-9.60 (1.00)	100.0 (30.4)	9.8 (3.0)	60.6 (11.9)	-2.00 (1.20)	117.0 (39.3)
4	10.6 (4.4)	60.8 (11.9)	-9.10 (0.70)	115.0 (29.7)	10.6 (4.5)	56.3 (12.9)	-2.10 (1.20)	132.0 (39.6)
5	11.1 (1.2)	73.4 (6.0)	-6.90 (2.00)	114.0 (31.7)	11.2 (1.3)	70.0 (6.3)	-3.00 (1.90)	132.0 (39.6)
6	16.4 (2.9)	75.2 (5.3)	-8.20 (4.50)	173.0 (48.3)	16.7 (3.0)	70.3 (6.3)	-7.80 (3.60)	193.0 (50.0)
7								
8								
9								
10	13.7 (3.3)	60.4 (9.0)	-9.40 (2.00)	151.0 (36.3)	13.8 (3.3)	55.5 (9.8)	-4.10 (3.30)	168.0 (50.9)
11	17.5 (3.8)	64.4 (5.4)	-12.00 (3.00)	201.0 (52.1)	17.8 (4.0)	60.7 (6.3)	-5.10 (2.60)	198.0 (28.9)
12	21.2 (2.4)	69.4 (5.9)	-16.00 (7.40)	249.0 (79.8)	21.6 (2.5)	65.7 (6.7)	-8.60 (7.90)	222.0 (39.1)
13	15.7 (4.8)	76.4 (3.0)	-12.30 (1.90)	182.0 (64.5)	15.9 (5.0)	73.2 (3.0)	-3.00 (2.50)	179.0 (58.3)
14	10.2 (2.0)	64.9 (9.0)	-10.10 (0.70)	113.0 (30.4)	10.2 (2.2)	59.6 (10.1)	-1.60 (1.00)	135.0 (41.1)
15	10.2 (1.6)	66.1 (7.7)	-10.40 (1.30)	116.0 (29.4)	10.4 (1.4)	61.6 (8.4)	-1.00 (1.40)	112.0 (38.7)
16								
17								
18								
19								
20								
21								
22	8.5 (1.0)	65.2 (3.5)	-2.50 (1.70)	77.5 (2.5)	8.6 (1.2)	60.3 (3.5)	-4.20 (2.70)	85.2 (5.6)
23	10.2 (2.2)	60.5 (7.3)	-4.40 (1.50)	113.0 (31.7)	10.6 (2.1)	55.6 (7.5)	-4.40 (2.00)	131.0 (39.4)
24	9.9 (0.6)	76.2 (2.3)	-4.90 (1.10)	97.8 (30.2)	10.3 (0.4)	71.8 (2.2)	-2.60 (1.50)	105.0 (34.2)
25	10.9 (2.8)	65.0 (11.2)	-5.30 (1.20)	109.0 (30.9)	11.3 (2.5)	59.9 (11.8)	-4.60 (3.80)	126.0 (39.1)
26	7.0 (1.5)	65.7 (6.0)	-8.80 (2.80)	78.9 (17.2)	7.4 (1.6)	61.5 (6.6)	-0.20 (1.10)	
27	4.9 (1.4)	63.0 (4.8)	-6.70 (1.90)	75.4 (6.9)	4.8 (1.1)	57.8 (5.0)	1.20 (3.90)	
28	5.1 (2.8)	60.1 (12.0)	-7.50 (5.30)	80.1 (54.1)	5.7 (2.4)	54.3 (13.3)	-4.70 (4.90)	71.4 (22.4)
29	7.8 (3.7)	53.7 (9.3)	-6.30 (1.90)	93.7 (30.1)	7.9 (3.5)	47.0 (8.9)	-4.80 (2.80)	103.0 (38.1)
30								
31								
Avg	11.2	66.2	-8.60	123.0	11.4	61.5	-3.20	137.0
n	20	20	20	20	20	20	20	17
SD	4.0	5.8	3.00	44.6	4.0	6.4	2.40	40.1
Min	4.9	53.7	-16.00	75.4	4.8	47.0	-8.60	71.4
Max	21.2	76.4	-2.50	249.0	21.6	73.2	1.20	222.0

ED_004549_00015842-00115

Table F3. Daily means (SD) of environmental parameters at Site WI5B for November, 2008.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	9.6 (2.6)	57.3 (4.7)	-4.00 (0.90)	106.0 (32.5)	9.7 (2.7)	52.5 (5.4)	-2.90 (1.30)	116.0 (38.9)
2	12.4 (3.6)	64.8 (5.4)	-4.50 (2.20)	128.0 (51.5)	12.8 (3.5)	61.0 (6.0)	-4.20 (2.40)	131.0 (45.2)
3	17.3 (4.1)	68.1 (8.6)	-6.50 (2.70)	201.0 (58.9)	17.5 (4.2)	63.3 (9.2)	-9.10 (5.20)	210.0 (64.8)
4								
5								
6	13.0 (2.4)	74.2 (3.9)	-3.50 (1.20)	131.0 (22.9)	13.3 (2.3)	70.7 (4.9)	-4.00 (1.90)	147.0 (31.1)
7	6.1 (1.2)	75.6 (2.1)	-5.10 (1.40)	76.7 (0.4)	6.1 (1.5)	71.0 (2.0)	-2.20 (0.80)	85.5 (0.7)
8	4.6 (1.1)	75.6 (2.4)	-7.60 (2.00)	75.9 (2.5)	4.3 (1.0)	71.3 (2.8)	4.60 (3.20)	
9	1.7 (0.4)	69.0 (1.6)	-7.60 (2.20)	57.1 (20.1)	3.1 (0.4)	65.7 (2.0)	-3.10 (3.00)	50.3 (22.0)
10	2.4 (1.1)	69.8 (4.2)	-8.10 (3.10)	62.9 (18.5)	3.1 (0.6)	64.9 (5.1)	-3.20 (2.00)	51.4 (23.4)
11	2.8 (0.5)	75.7 (2.1)	-6.30 (2.40)	65.3 (19.2)	3.1 (0.6)	70.8 (2.3)	-5.60 (3.10)	69.0 (23.8)
12	4.9 (0.6)	80.5 (0.9)	-5.80 (0.60)	77.5 (0.5)	5.0 (0.7)	75.9 (1.1)	-3.40 (0.70)	86.0 (0.5)
13	7.4 (1.3)	80.4 (1.8)	-5.80 (0.90)	75.3 (1.1)	7.6 (1.2)	75.7 (1.9)	-4.10 (1.70)	83.4 (1.0)
14	6.7 (1.2)	74.9 (2.4)	-6.80 (1.20)	75.7 (2.7)	6.3 (1.2)	69.8 (2.4)	-0.80 (3.20)	
15	3.7 (1.0)	71.5 (3.2)	-7.90 (3.60)	73.4 (10.1)	3.7 (0.5)	66.8 (3.7)	-1.20 (6.00)	
16	2.6 (0.7)	72.4 (2.3)	-9.70 (3.80)	67.4 (17.0)	3.2 (0.5)	67.9 (2.9)	-6.40 (8.60)	60.7 (23.6)
17	1.8 (0.5)	69.1 (3.4)	-9.30 (4.30)	60.2 (20.1)	2.9 (0.8)	64.9 (3.2)	-6.90 (6.40)	50.6 (21.6)
18	1.2 (1.2)	70.6 (6.6)	-8.30 (5.10)	48.7 (18.8)	1.7 (1.7)	65.8 (6.9)	-8.90 (4.00)	53.7 (24.4)
19								
20								
21	0.1 (1.8)	72.9 (3.7)	-12.10 (4.00)	40.0 (12.3)	0.7 (1.4)	68.0 (5.2)	-9.10 (3.50)	35.0 (4.0)
22	2.4 (0.8)	71.5 (3.4)	-10.40 (5.80)	63.5 (19.3)	2.9 (1.1)	67.2 (4.3)	-10.40 (7.40)	56.7 (25.9)
23								
24	2.5 (1.1)	74.8 (3.2)	-8.50 (3.90)	63.5 (18.7)	3.3 (0.6)	69.1 (3.8)	-5.70 (6.90)	59.9 (24.2)
25	1.4 (1.1)	73.1 (5.0)	-11.00 (7.20)	54.4 (19.8)	1.4 (1.4)	68.1 (5.9)	-9.40 (6.20)	42.5 (18.6)
26	2.6 (2.1)	73.9 (4.8)	-7.80 (5.70)	58.1 (20.4)	2.4 (2.1)	68.4 (5.9)	-7.70 (5.60)	52.3 (24.7)
27	3.5 (1.8)	72.8 (5.3)	-8.70 (3.90)	65.8 (17.5)	4.0 (1.6)	67.4 (7.9)	-5.70 (4.70)	62.1 (25.9)
28	3.5 (2.2)	69.3 (5.1)	-5.50 (4.90)	64.9 (18.5)	4.0 (1.2)	62.7 (7.0)	-5.40 (6.60)	59.8 (24.8)
29								
30								
Avg	5.0	72.1	-7.40	77.9	5.3	67.3	-5.00	78.2
n	23	23	23	23	23	23	23	20
SD	4.3	4.8	2.20	34.0	4.2	4.8	3.40	41.8
Min	0.1	57.3	-12.10	40.0	0.7	52.5	-10.40	35.0
Max	17.3	80.5	-3.50	201.0	17.5	75.9	4.60	210.0

ED_004549_00015842-00116

Table F3. Daily means (SD) of environmental parameters at Site WI5B for December, 2008.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1								
2	2.1 (2.1)	75.7 (4.7)	-6.80 (4.00)	58.8 (20.4)	2.0 (2.4)	69.7 (4.6)	-8.50 (5.00)	60.2 (25.5)
3	1.2 (0.9)	74.8 (2.2)	-13.40 (7.10)	50.0 (18.1)	0.6 (1.5)	68.1 (3.1)	-8.80 (5.20)	37.4 (10.7)
4	-0.8 (1.6)	78.1 (2.4)	-10.10 (3.30)	36.6 (5.3)	-1.9 (1.6)	71.8 (3.0)	-8.70 (2.70)	35.1 (0.7)
5	-0.1 (2.0)	78.9 (2.2)	-10.10 (3.70)	40.2 (11.4)	-0.9 (2.9)	73.3 (2.3)	-12.00 (3.50)	34.9 (6.5)
6	0.1 (1.9)	77.5 (1.3)	-13.10 (5.10)	37.8 (10.5)	-0.9 (3.0)	70.7 (2.5)	-5.20 (4.10)	35.8 (5.4)
7	-2.2 (2.0)	81.8 (0.9)	-4.60 (2.50)	36.4 (0.8)	-3.4 (2.2)	76.1 (1.2)	-8.50 (2.70)	35.1 (1.0)
8								
9								
10								
11	-0.1 (1.2)	76.6 (1.2)	-10.50 (3.10)	36.2 (5.8)	-0.7 (1.9)	68.7 (1.6)	-9.20 (4.40)	39.2 (12.8)
12	-2.2 (2.3)	81.9 (1.2)	-6.20 (2.50)	36.5 (2.9)	-2.8 (2.7)	75.5 (1.5)	-8.90 (3.10)	34.9 (1.2)
13	4.3 (1.4)	74.4 (3.0)	-4.20 (5.20)	71.5 (14.3)	5.0 (1.4)	68.1 (4.1)	-8.60 (6.50)	75.4 (18.2)
14								
15								
16	-3.1 (1.3)	83.6 (0.6)	-3.40 (1.10)	37.2 (0.7)	-3.3 (1.3)	76.9 (0.6)	-5.70 (1.40)	35.8 (0.6)
17	-1.4 (1.5)	83.7 (1.3)	-3.80 (0.80)	36.8 (0.3)	-2.3 (1.6)	77.3 (0.9)	-6.60 (1.10)	35.4 (0.5)
18	-0.9 (2.1)	83.7 (1.1)	-4.70 (2.10)	36.7 (2.7)	-1.4 (1.6)	76.7 (1.4)	-6.80 (2.20)	35.2 (0.7)
19	1.4 (0.7)	80.5 (1.7)	-9.60 (4.50)	40.6 (12.2)	0.4 (0.8)	73.0 (2.5)	-9.80 (3.70)	34.4 (2.4)
20	0.1 (2.8)	80.5 (0.5)	-10.50 (3.70)	36.8 (12.2)	-0.7 (2.6)	74.5 (0.6)	-10.40 (3.40)	34.1 (0.9)
21								
22								
23								
24	-1.2 (1.8)	79.5 (1.2)	-7.10 (1.20)	26.6 (0.4)	-2.6 (1.4)	75.8 (0.8)	-7.70 (1.40)	34.8 (0.6)
25	0.2 (2.3)	78.8 (2.3)	-7.50 (4.30)	30.1 (10.3)	-0.2 (2.9)	75.3 (2.2)	-14.20 (8.40)	34.8 (6.9)
26	4.5 (2.3)	78.2 (2.4)	-5.80 (6.80)	61.6 (14.1)	5.0 (2.1)	74.7 (2.3)	-12.20 (10.40)	73.1 (18.1)
27	2.8 (2.0)	78.0 (1.6)	-6.40 (5.20)	50.0 (19.9)	3.7 (1.6)	76.4 (1.6)	-6.20 (4.60)	49.9 (22.6)
28	1.0 (1.2)	75.8 (2.6)	-10.00 (4.20)	39.0 (17.8)	0.7 (2.4)	71.6 (3.0)	-10.20 (3.40)	35.1 (7.2)
29	2.2 (0.9)	70.9 (3.6)	-9.60 (4.20)	50.0 (19.8)	2.5 (1.6)	67.6 (4.5)	-8.50 (6.60)	48.9 (21.9)
30	0.0 (1.8)	76.4 (1.7)	-11.20 (4.40)	30.9 (6.2)	-1.8 (2.2)	71.6 (1.1)	-7.60 (3.50)	34.9 (0.9)
31	-3.8 (1.3)	81.0 (1.1)	-8.70 (2.70)	36.3 (0.8)	-5.2 (1.8)	73.9 (0.9)	-8.40 (3.10)	35.7 (0.9)
Avg	0.2	78.7	-8.00	41.7	-0.4	73.1	-8.80	41.4
n	22	22	22	22	22	22	22	22
SD	2.1	3.2	2.90	10.7	2.6	3.1	2.10	12.2
Min	-3.8	70.9	-13.40	26.6	-5.2	67.6	-14.20	34.1
Max	4.5	83.7	-3.40	71.5	5.0	77.3	-5.20	75.4

ED_004549_00015842-00117

Table F3. Daily means (SD) of environmental parameters at Site WI5B for January, 2009.

Day	Barn 1				Barn 2			
	Temp., ºC	RH, %	ΔP, Pa	Airflow, $ds\,m^3s^{-1}$	Temp., ºC	RH, %	ΔP, Pa	Airflow, $ds\,m^3s^{-1}$
1	0.8 (1.2)	75.9 (2.0)	-12.30 (5.00)	39.8 (12.6)	1.1 (1.8)	69.8 (1.8)	-12.20 (3.20)	33.4 (1.9)
2	-2.6 (1.7)	79.2 (1.4)	-11.60 (2.60)	35.0 (0.7)	-4.1 (1.4)	72.0 (1.5)	-10.10 (2.10)	34.6 (0.5)
3	0.0 (1.8)	76.9 (1.8)	-9.70 (7.60)	43.4 (15.0)	0.2 (2.5)	71.1 (2.0)	-14.10 (6.10)	36.2 (10.4)
4	-3.0 (2.7)	79.2 (0.9)	-10.40 (3.40)	37.4 (7.5)	-4.2 (3.7)	71.6 (2.6)	-9.00 (3.40)	35.9 (5.5)
5	-1.1 (2.8)	79.6 (3.2)	-10.40 (6.40)	41.0 (12.0)	-1.7 (3.2)	72.0 (3.5)	-9.80 (4.90)	34.3 (1.5)
6	0.9 (0.9)	74.9 (2.3)	-10.30 (3.40)	38.6 (11.6)	0.7 (1.3)	68.6 (2.4)	-11.20 (3.30)	33.7 (3.8)
7	-1.0 (1.3)	78.8 (0.8)	-10.00 (1.90)	34.6 (0.5)	-2.2 (1.3)	72.9 (1.2)	-8.80 (1.70)	34.1 (0.4)
8	-4.0 (1.2)	79.9 (1.4)	-8.70 (2.70)	35.7 (0.6)	-4.4 (1.7)	73.9 (1.6)	-8.30 (2.30)	35.0 (0.4)
9	-1.8 (1.5)	77.8 (1.6)	-10.80 (3.20)	35.2 (0.8)	-2.4 (1.1)	71.4 (2.5)	-10.00 (2.20)	34.6 (0.5)
10	-1.8 (1.8)	78.3 (1.8)	-11.60 (2.10)	35.4 (1.4)	-3.2 (1.9)	71.6 (2.7)	-10.20 (1.80)	34.8 (0.5)
11	-1.6 (1.7)	78.2 (0.8)	-10.40 (2.00)	35.3 (0.8)	-2.6 (1.7)	72.4 (1.4)	-8.80 (2.80)	34.9 (0.6)
12	-2.5 (1.6)	80.6 (1.0)	-11.70 (5.10)		-3.7 (1.8)	74.2 (1.2)	-5.20 (3.70)	
13	-5.7 (1.5)	81.9 (1.1)	-6.60 (2.90)		-7.4 (2.0)	74.5 (1.1)	-5.30 (1.70)	
14	-4.3 (1.3)	83.7 (0.2)	-5.80 (2.80)	37.0 (0.7)	-5.7 (1.4)	75.5 (0.5)	-3.20 (2.00)	36.6 (0.5)
15	-5.1 (1.1)	83.9 (0.3)	-2.80 (1.90)	38.1 (0.3)	-3.9 (2.1)	76.1 (0.4)	-4.20 (1.50)	36.4 (0.4)
16	-2.9 (1.9)	84.4 (0.4)	-3.00 (0.90)	37.4 (0.4)	-2.5 (2.0)	76.8 (0.5)	-5.50 (2.60)	35.5 (0.9)
17	0.6 (1.2)	83.3 (1.7)	-6.00 (4.90)	35.4 (4.2)	-0.4 (1.3)	77.5 (1.0)	-6.10 (2.10)	34.1 (0.4)
18	0.2 (1.8)	81.8 (0.8)	-4.40 (3.60)	38.0 (9.5)	-1.1 (1.7)	76.7 (0.7)	-6.80 (2.20)	34.0 (0.4)
19	0.7 (1.9)	81.8 (1.3)	-5.60 (4.00)	37.2 (8.1)	-1.3 (1.8)	76.5 (1.1)	-8.00 (2.30)	33.9 (0.5)
20	0.6 (1.8)	80.5 (1.3)	-7.90 (3.20)	35.9 (6.3)	-1.6 (2.0)	75.3 (1.1)	-9.30 (2.40)	33.8 (0.7)
21	2.2 (0.5)	80.1 (1.1)	-10.20 (4.00)	35.5 (12.3)	0.4 (1.2)	76.1 (0.8)	-8.90 (3.20)	33.5 (1.9)
22	1.4 (1.2)	80.8 (1.2)	-10.00 (3.20)	32.0 (13.7)	-0.5 (1.5)	77.3 (0.9)	-8.50 (2.70)	33.8 (2.3)
23	0.6 (2.3)	78.7 (2.1)	-13.60 (4.80)	34.1 (10.4)	-2.3 (2.7)	74.2 (3.2)	-7.40 (2.60)	34.6 (0.7)
24	-3.3 (1.2)	81.6 (1.1)	-5.40 (2.90)	36.3 (0.7)	-4.2 (1.9)	75.0 (1.1)	-5.60 (2.00)	35.4 (0.5)
25	-2.1 (1.7)	82.2 (1.5)	-5.80 (3.40)	35.9 (0.8)	-3.4 (1.8)	74.9 (0.9)	-5.40 (2.20)	35.2 (0.4)
26	-2.7 (1.2)	82.5 (1.0)	-7.30 (3.20)	35.8 (0.7)	-5.0 (1.1)	75.4 (0.4)	-5.90 (1.90)	35.4 (0.5)
27	-2.9 (1.6)	82.4 (1.4)	-8.30 (1.80)	35.5 (0.7)	-4.2 (1.7)	75.3 (0.8)	-6.30 (2.10)	35.1 (0.7)
28	-1.4 (1.6)	83.0 (1.2)	-5.40 (3.00)	35.4 (0.9)	-1.4 (1.8)	76.4 (0.6)	-6.80 (3.40)	34.1 (1.1)
29	-0.5 (1.6)	79.6 (2.1)	-10.10 (1.70)	34.6 (3.1)	-1.3 (1.5)	73.4 (3.2)	-8.20 (1.70)	33.8 (0.4)
30	-2.3 (2.2)	80.4 (1.7)	-9.50 (2.20)	34.9 (1.4)	-3.3 (2.2)	73.7 (1.0)	-8.00 (2.70)	34.3 (0.8)
31	3.9 (2.2)	74.2 (5.2)	-9.10 (7.40)	66.9 (15.9)	4.2 (2.2)	68.3 (6.4)	-9.50 (7.10)	60.4 (25.0)
Avg	-1.3	80.2	-8.50	37.5	-2.3	73.9	-8.00	35.6
n	31	31	31	29	31	31	31	29
SD	2.2	2.6	2.80	6.0	2.3	2.5	2.40	4.8
Min	-5.7	74.2	-13.60	32.0	-7.4	68.3	-14.10	33.4
Max	3.9	84.4	-2.80	66.9	4.2	77.5	-3.20	60.4

ED_004549_00015842-00118

Table F3. Daily means (SD) of environmental parameters at Site WI5B for February, 2009.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	1.9 (0.9)	70.3 (2.5)	-5.80 (6.70)	61.6 (19.9)	3.2 (1.0)	64.7 (4.1)	-7.60 (5.60)	46.6 (21.5)
2	-2.1 (2.0)	74.3 (1.8)	-10.80 (3.30)	36.5 (6.1)	-4.0 (2.6)	66.5 (2.0)	-8.10 (2.80)	35.1 (0.9)
3	-4.3 (1.8)	78.5 (1.4)	-9.40 (2.20)	36.0 (0.7)	-6.9 (1.7)	71.5 (1.1)	-6.40 (3.20)	36.1 (0.8)
4	-2.7 (2.3)	79.7 (2.3)	-5.80 (3.20)	36.9 (0.9)	-3.9 (2.5)	71.7 (2.5)	-7.30 (3.80)	35.7 (1.1)
5	0.2 (1.9)	73.2 (4.1)	-7.40 (3.60)	43.8 (16.1)	0.2 (2.6)	66.3 (5.1)	-10.30 (4.80)	39.6 (14.6)
6	3.4 (2.9)	73.8 (4.8)	-6.20 (5.10)	61.9 (20.2)	3.4 (3.4)	67.7 (5.9)	-9.10 (5.10)	61.6 (24.4)
7	4.1 (1.6)	75.5 (2.5)	-3.10 (3.10)	75.3 (10.8)	4.5 (1.3)	70.0 (3.1)	-3.50 (4.00)	67.1 (23.6)
8	2.2 (1.6)	74.4 (4.1)	-7.40 (5.90)	60.8 (20.8)	2.4 (2.0)	68.7 (5.0)	-9.20 (5.60)	54.0 (24.7)
9								
10	6.9 (1.7)	74.3 (2.0)	-0.10 (3.60)		7.2 (1.9)	68.2 (2.2)	-12.30 (7.50)	80.2 (9.4)
11	4.2 (0.5)	77.5 (1.4)	-3.30 (1.60)	78.0 (0.8)	4.1 (0.3)	71.6 (1.8)	-2.70 (1.10)	80.7 (14.1)
12	2.2 (0.5)	73.8 (2.0)	-6.60 (4.60)	61.2 (20.3)	3.3 (0.5)	65.6 (3.8)	-9.90 (8.90)	53.8 (22.7)
13	1.6 (0.5)	74.8 (2.3)	-11.00 (7.20)	52.6 (18.0)	2.4 (0.7)	64.5 (3.2)	-10.90 (5.50)	33.1 (16.5)
14	1.1 (0.8)	76.2 (2.2)	-9.70 (5.00)	41.6 (12.6)	0.9 (0.8)	63.8 (5.9)	-7.60 (2.20)	26.1 (0.7)
15	0.1 (1.7)	75.2 (4.4)	-7.40 (4.10)	40.9 (11.8)	0.3 (2.2)	62.9 (7.4)	-7.40 (3.10)	28.2 (8.5)
16	2.0 (1.7)	68.2 (8.1)	-5.80 (5.20)	57.9 (21.0)	2.5 (2.2)	56.9 (9.3)	-11.90 (5.80)	49.5 (23.9)
17	4.3 (1.8)	68.1 (5.1)	-4.10 (2.20)	68.3 (16.5)	4.8 (1.7)	59.6 (7.3)	-8.40 (6.70)	73.9 (16.5)
18	1.4 (2.1)	76.1 (2.7)	-13.30 (9.20)	53.6 (19.9)	0.8 (2.4)	69.2 (4.1)	-1.50 (3.30)	
19	-2.6 (2.3)	76.8 (2.5)	-8.90 (2.40)		-3.7 (2.2)	67.8 (5.1)	-7.30 (2.70)	35.4 (0.9)
20	-0.7 (3.2)	76.8 (4.4)	-8.80 (4.90)		-0.8 (3.4)	69.7 (4.6)	-8.70 (3.80)	34.6 (2.3)
21	1.3 (0.8)	75.6 (2.3)	-13.40 (5.80)		0.6 (1.0)	70.4 (2.9)	-7.40 (4.30)	34.5 (1.0)
22	-1.9 (2.4)	76.1 (2.7)	-9.80 (2.30)		-3.0 (2.3)	70.5 (3.6)	-8.90 (2.90)	35.2 (0.5)
23	-0.9 (3.2)	75.8 (5.0)	-10.80 (5.70)		-1.5 (3.2)	69.3 (5.5)	-10.50 (5.00)	34.7 (1.4)
24	3.4 (1.7)	70.1 (3.9)	-6.60 (5.40)		3.5 (2.0)	64.5 (4.9)	-9.10 (5.50)	63.0 (25.3)
25	5.3 (1.9)	71.0 (3.0)	-3.80 (2.40)	74.8 (11.8)	5.4 (1.3)	65.1 (3.6)	-3.80 (3.70)	77.5 (18.3)
26	1.9 (0.7)	76.1 (1.7)	-13.10 (7.40)	44.8 (15.3)	1.8 (1.7)	71.3 (1.6)	-11.70 (8.60)	42.3 (16.2)
27	-1.0 (1.5)	77.2 (2.6)	-10.20 (2.80)	35.5 (0.6)	-4.0 (1.3)	68.7 (4.0)	-7.00 (3.40)	35.5 (0.8)
28	-1.7 (2.9)	77.0 (4.0)	-8.70 (4.00)	38.1 (7.6)	-3.6 (2.8)	67.5 (6.0)	-7.50 (3.10)	35.6 (0.9)
Avg	1.1	74.7	-7.80	53.0	0.7	67.2	-8.00	47.3
n	27	27	27	20	27	27	27	26
SD	2.7	2.9	3.30	14.0	3.5	3.6	2.70	16.8
Min	-4.3	68.1	-13.40	35.5	-6.9	56.9	-12.30	26.1
Max	6.9	79.7	-0.10	78.0	7.2	71.7	-1.50	80.7

ED_004549_00015842-00119

Table F3. Daily means (SD) of environmental parameters at Site WI5B for March, 2009.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, $ds\,m^3s^{-1}$	Temp., °C	RH, %	ΔP, Pa	Airflow, $ds\,m^3s^{-1}$
1	-2.4 (2.6)	75.9 (2.6)	-9.80 (1.90)	36.1 (3.5)	-4.9 (2.2)	66.7 (5.1)	-8.80 (2.20)	35.4 (0.7)
2								
3								
4	4.1 (2.1)	63.8 (4.9)	-5.80 (6.60)	66.2 (18.7)	4.7 (1.9)	58.9 (6.4)	-11.20 (6.70)	65.7 (23.1)
5	6.7 (1.2)	74.2 (5.2)	-2.50 (1.00)	77.8 (0.7)	6.8 (1.2)	69.3 (5.9)	-3.90 (1.20)	84.0 (0.9)
6	6.5 (1.9)	75.8 (4.8)	-2.50 (1.80)	86.7 (21.1)	6.4 (2.0)	70.6 (6.2)	-3.70 (0.90)	84.6 (3.9)
7	3.7 (1.4)	70.4 (4.9)	-4.10 (1.60)	75.3 (11.4)	3.9 (0.7)	65.5 (5.5)	-3.80 (5.70)	66.7 (23.1)
8	3.2 (1.2)	70.1 (1.8)	-7.10 (5.20)	66.1 (17.6)	3.5 (0.5)	64.9 (2.7)	-8.50 (9.70)	62.7 (22.6)
9	4.1 (2.2)	74.9 (2.7)	-4.60 (3.50)	66.0 (18.5)	4.7 (1.7)	69.5 (4.0)	-7.60 (5.40)	67.8 (23.2)
10	3.7 (2.3)	79.4 (1.0)	-6.20 (3.30)	68.7 (17.2)	3.2 (2.3)	74.9 (1.3)	-5.40 (4.00)	72.5 (22.2)
11	-3.7 (1.6)	77.8 (1.6)	-12.40 (3.30)	35.3 (1.2)	-5.1 (1.9)	69.2 (2.8)	-10.10 (2.00)	35.1 (0.9)
12	-2.2 (3.2)	76.0 (4.2)	-9.40 (2.60)	37.0 (4.5)	-3.1 (3.5)	68.0 (4.7)	-9.50 (2.40)	35.3 (1.1)
13	2.5 (2.3)	70.3 (4.9)	-4.90 (5.10)	61.6 (21.4)	3.0 (2.4)	63.2 (6.0)	-7.80 (3.60)	61.9 (25.2)
14	6.3 (3.2)	66.4 (6.9)	-3.40 (2.30)	89.2 (32.7)	7.0 (3.0)	59.4 (7.8)	-5.30 (3.20)	79.8 (26.2)
15	9.5 (3.2)	60.8 (7.1)	-5.10 (2.60)	109.0 (30.7)	9.7 (3.3)	54.2 (7.5)	-5.90 (3.10)	116.0 (37.2)
16	12.9 (3.7)	65.0 (4.5)	-5.90 (4.00)	128.0 (45.2)	13.1 (3.7)	59.8 (5.6)	-8.20 (4.00)	130.0 (35.5)
17	10.8 (1.9)	66.1 (7.2)	-5.90 (2.90)	122.0 (27.7)	10.8 (1.8)	60.9 (8.7)	-5.70 (2.70)	126.0 (39.1)
18	7.3 (2.7)	60.9 (6.9)	-4.00 (2.40)	97.9 (28.3)	7.2 (2.7)	54.7 (8.2)	-3.10 (2.00)	96.9 (27.6)
19	3.1 (1.6)	61.0 (5.4)	-5.20 (5.00)	66.9 (18.7)	3.3 (0.8)	56.2 (6.9)	-4.70 (5.70)	63.0 (25.0)
20	4.9 (2.1)	66.1 (6.1)	-2.10 (1.90)	71.0 (16.4)	5.4 (2.1)	60.4 (7.3)	-6.60 (3.80)	73.5 (19.8)
21	10.6 (3.6)	67.2 (6.7)	-3.70 (1.80)	116.0 (31.5)	10.8 (3.7)	61.1 (7.7)	-5.30 (2.30)	123.0 (38.5)
22	9.2 (2.3)	65.7 (4.9)	1.10 (2.60)		9.8 (2.2)	61.1 (4.9)	-8.80 (4.40)	106.0 (35.5)
23	7.4 (0.8)	74.1 (2.1)	3.30 (1.50)		8.2 (0.9)	68.9 (1.8)	-11.40 (4.50)	80.7 (2.2)
24	9.6 (0.9)	76.2 (2.9)	0.70 (1.90)		10.1 (0.9)	71.3 (3.2)	-8.60 (4.00)	102.0 (33.8)
25	3.7 (1.2)	74.4 (1.7)	1.80 (2.40)		4.5 (1.1)	69.7 (2.1)	-6.60 (3.80)	79.5 (12.5)
26								
27								
28	4.4 (2.3)	66.9 (6.1)	-4.40 (3.10)		4.2 (1.5)	59.3 (8.4)	-2.10 (3.80)	
29	4.4 (2.8)	65.0 (7.7)	-3.90 (3.40)		4.1 (2.1)	57.2 (9.7)	0.30 (3.40)	
30	6.2 (2.4)	56.6 (7.4)	-2.80 (1.40)		6.2 (2.2)	47.6 (9.8)	-4.40 (2.40)	76.9 (17.8)
31	5.8 (1.8)	71.2 (6.3)	-1.50 (1.40)		5.8 (1.7)	66.6 (6.7)	-7.30 (3.30)	83.3 (13.6)
Avg	5.3	69.3	-4.10	77.7	5.3	63.3	-6.40	80.4
n	27	27	27	19	27	27	27	25
SD	3.9	6.0	3.40	26.8	4.3	6.3	2.80	26.0
Min	-3.7	56.6	-12.40	35.3	-5.1	47.6	-11.40	35.1
Max	12.9	79.4	3.30	128.0	13.1	74.9	0.30	130.0

ED_004549_00015842-00120

Table F3. Daily means (SD) of environmental parameters at Site WI5B for April, 2009.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	4.2 (0.5)	74.2 (2.3)	-1.10 (1.70)	78.6 (0.7)	4.4 (0.6)	69.6 (2.9)	-5.30 (1.80)	82.7 (6.8)
2	6.1 (2.5)	66.4 (6.0)	-3.30 (1.80)	84.8 (18.5)	5.9 (2.4)	59.6 (7.5)	-2.90 (1.50)	81.4 (12.7)
3	6.6 (2.2)	63.3 (4.9)	-4.40 (2.30)	89.3 (23.7)	6.0 (2.2)	56.8 (5.2)	-1.00 (2.50)	
4	6.1 (3.1)	67.0 (7.2)	-5.10 (3.10)	77.0 (22.7)	6.1 (2.5)	60.0 (9.4)	-3.80 (6.10)	74.7 (19.7)
5	5.3 (1.6)	69.2 (7.7)	-5.60 (3.60)	77.6 (1.1)	4.3 (1.3)	62.0 (11.0)	1.70 (4.70)	
6	4.9 (2.1)	58.8 (6.0)	-5.40 (4.30)	77.2 (5.9)	4.4 (1.4)	50.2 (7.4)	3.90 (5.90)	
7	5.9 (3.4)	55.2 (9.3)	-4.90 (3.00)	89.3 (30.2)	6.2 (2.9)	47.2 (10.3)	-3.10 (6.10)	75.6 (22.8)
8	6.8 (3.4)	59.2 (7.5)	-5.00 (2.90)	95.8 (27.8)	6.7 (3.1)	52.3 (7.4)	-2.10 (3.00)	87.3 (36.7)
9	7.6 (3.5)	59.1 (9.4)	-3.10 (1.60)	98.8 (31.1)	7.2 (3.1)	51.5 (10.5)	-1.30 (2.70)	
10	7.8 (3.3)	52.8 (9.7)	-3.70 (2.30)	99.3 (30.3)	7.3 (3.1)	45.4 (9.8)	0.20 (3.40)	
11	8.3 (3.8)	44.8 (9.2)	-1.90 (1.30)	108.0 (33.2)	8.3 (3.8)	38.2 (9.7)	-2.60 (1.30)	110.0 (44.3)
12	10.6 (3.1)	39.3 (6.9)	-1.50 (1.90)	123.0 (30.7)	10.9 (3.2)	33.0 (6.9)	-3.70 (2.00)	129.0 (39.8)
13	10.4 (2.2)	39.2 (5.2)	-2.40 (1.20)	117.0 (32.0)	10.4 (2.2)	33.4 (5.9)	-3.30 (1.40)	122.0 (39.6)
14	11.9 (4.5)	40.1 (10.9)	-2.80 (1.90)	113.0 (31.7)	11.5 (4.4)	33.6 (10.5)	-2.00 (2.00)	119.0 (38.7)
15	12.7 (4.3)	37.6 (8.6)	-2.60 (1.60)	131.0 (52.9)	12.8 (4.6)	30.9 (8.2)	-3.20 (1.60)	133.0 (39.2)
16	14.5 (4.4)	40.4 (6.5)	-3.30 (2.70)	165.0 (66.7)	15.1 (4.4)	34.4 (5.5)	-3.90 (3.10)	176.0 (73.2)
17	16.1 (4.3)	45.0 (6.8)	-4.00 (3.00)	191.0 (54.4)	16.5 (4.4)	39.8 (7.5)	-3.60 (2.70)	212.0 (66.2)
18	14.5 (3.6)	58.7 (5.5)	-4.40 (2.30)	166.0 (49.6)	14.5 (3.4)	55.1 (5.8)	-0.30 (4.20)	
19	8.4 (1.2)	74.3 (1.8)	-2.10 (1.90)	82.8 (15.7)	7.9 (0.9)	71.3 (1.9)	2.90 (3.60)	
20	7.3 (1.1)	71.6 (5.0)	-4.90 (3.60)	80.5 (14.1)	7.1 (1.0)	66.6 (5.8)	4.00 (4.90)	
21	10.1 (3.0)	54.4 (10.1)	-7.00 (5.30)	113.0 (31.3)	9.7 (3.0)	46.8 (11.3)	9.40 (7.80)	
22	11.4 (2.7)	48.9 (12.6)	-2.20 (2.00)	122.0 (30.8)	11.1 (2.8)	42.3 (12.5)	1.50 (4.70)	
23	16.8 (5.6)	45.0 (4.9)	-2.40 (5.40)		17.3 (5.6)	40.7 (5.4)	-10.70 (8.60)	217.0 (113.0)
24	18.1 (5.0)	59.7 (9.1)	-5.40 (6.90)	245.0 (111.0)	18.4 (5.2)	56.0 (10.3)	-2.00 (9.50)	
25	10.6 (1.6)	65.5 (6.5)	-1.90 (2.70)	126.0 (26.6)	10.5 (2.0)	61.8 (6.7)	-2.00 (6.50)	
26	10.5 (2.7)	76.3 (4.5)	-0.40 (1.60)		11.4 (2.6)	72.0 (4.3)	-5.60 (3.40)	106.0 (36.5)
27	10.0 (1.8)	71.0 (7.6)	-1.70 (1.60)	122.0 (30.7)	10.8 (1.7)	65.5 (7.4)	-1.80 (2.70)	113.0 (39.6)
28	11.0 (4.5)	57.7 (12.6)	-1.70 (1.20)	123.0 (31.0)	11.5 (4.0)	50.6 (14.1)	-3.40 (1.90)	136.0 (42.4)
29	12.2 (2.2)	62.5 (6.5)	-1.10 (1.20)	135.0 (24.2)	12.5 (2.2)	57.9 (7.3)	-2.90 (2.00)	141.0 (36.9)
30	13.9 (1.9)	72.8 (7.9)	-1.20 (1.80)	143.0 (1.7)	14.3 (1.8)	67.1 (10.2)	0.30 (1.10)	
Avg	10.0	57.7	-3.20	117.0	10.0	51.7	-1.60	124.0
n	30	30	30	28	30	30	30	17
SD	3.7	11.9	1.70	38.0	3.9	12.3	3.60	42.0
Min	4.2	37.6	-7.00	77.0	4.3	30.9	-10.70	74.7
Max	18.1	76.3	-0.40	245.0	18.4	72.0	9.40	217.0

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Table F3. Daily means (SD) of environmental parameters at Site WI5B for May, 2009.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	11.4 (2.4)	54.8 (11.9)	-0.30 (1.70)		11.7 (2.0)	48.0 (12.5)	0.90 (1.50)	
2	12.3 (3.4)	49.7 (8.0)	-0.70 (2.10)		12.6 (3.2)	43.5 (8.7)	0.00 (1.30)	
3	14.1 (3.6)	49.0 (10.6)	-1.00 (2.20)		14.4 (3.5)	42.6 (10.8)	-1.50 (2.10)	161.0 (53.0)
4	16.1 (4.8)	45.4 (10.1)	-0.80 (2.10)		16.5 (4.9)	40.1 (10.0)	-3.20 (2.80)	196.0 (82.7)
5	17.1 (2.6)	60.5 (8.9)	0.30 (2.50)		17.5 (2.7)	56.6 (9.9)	-5.40 (6.20)	207.0 (53.6)
6	17.4 (2.8)	67.2 (6.4)	-0.50 (2.00)		17.9 (3.0)	61.8 (7.9)	-2.30 (2.10)	224.0 (60.2)
7	17.8 (3.8)	50.7 (15.5)	-1.70 (3.50)		18.3 (3.6)	44.2 (15.7)	-3.10 (2.60)	220.0 (59.0)
8	14.0 (2.9)	61.3 (8.0)	0.00 (1.40)		14.0 (2.7)	57.8 (8.4)	0.00 (2.90)	
9	10.7 (1.5)	62.4 (6.2)	-1.00 (2.00)		10.7 (1.6)	57.8 (6.6)	2.70 (4.00)	
10	9.9 (1.6)	64.4 (6.9)	0.10 (1.60)		9.9 (1.8)	59.9 (7.4)	1.80 (3.40)	
11	12.8 (5.3)	53.5 (15.1)	0.30 (1.80)		13.0 (5.4)	47.9 (15.9)	-0.70 (1.30)	143.0 (44.4)
12	16.5 (3.1)	52.2 (7.4)	0.90 (2.50)		16.9 (3.2)	48.5 (8.3)	-8.00 (7.10)	208.0 (52.3)
13	16.3 (2.1)	69.0 (11.0)	-0.40 (3.30)		16.6 (2.2)	65.0 (13.4)	-2.70 (3.00)	200.0 (56.9)
14	12.7 (2.7)	56.1 (6.3)	-1.20 (3.70)		12.9 (2.5)	51.4 (7.2)	0.40 (2.60)	
15	15.5 (3.0)	65.7 (6.8)	0.20 (2.40)		16.0 (3.1)	62.5 (8.0)	-5.20 (6.90)	189.0 (45.2)
16	9.6 (2.3)	52.5 (11.4)	-2.30 (3.70)		9.5 (2.3)	46.8 (11.7)	3.10 (3.40)	
17	12.9 (4.6)	45.2 (13.5)	0.60 (1.60)		13.4 (4.7)	40.5 (13.9)	-0.60 (1.50)	
18	17.9 (4.4)	47.1 (7.3)	-0.70 (2.80)		18.2 (4.4)	46.2 (9.0)	-7.10 (5.50)	212.0 (62.0)
19	22.8 (4.4)	54.0 (7.4)	-8.10 (6.90)	341.0 (107.0)	23.0 (4.3)	50.6 (7.8)	-17.20 (14.40)	332.0 (109.0)
20	24.7 (3.7)	43.9 (10.9)	-9.30 (7.70)	352.0 (83.0)	24.9 (3.7)	41.0 (10.5)	-24.70 (12.10)	348.0 (73.0)
21	18.6 (2.0)	52.3 (5.4)	-1.40 (2.10)		18.7 (2.1)	48.4 (6.1)	-0.50 (6.10)	
22	17.6 (3.3)	48.6 (8.4)	-0.60 (1.50)		17.7 (3.5)	45.0 (9.4)	-4.20 (3.00)	192.0 (28.3)
23	17.9 (2.9)	55.1 (16.5)	-0.30 (2.10)		18.2 (2.8)	50.7 (18.3)	-1.30 (3.20)	
24	16.5 (4.5)	45.8 (12.3)	-0.30 (1.90)		16.7 (4.5)	41.8 (12.3)	-4.10 (2.30)	177.0 (48.3)
25	17.6 (3.5)	48.0 (5.1)	-0.50 (2.00)		17.9 (3.6)	44.9 (5.4)	-10.20 (7.60)	185.0 (23.1)
26	15.8 (1.1)	69.4 (6.0)	0.60 (1.60)		15.9 (1.0)	67.6 (6.2)	-3.60 (2.80)	163.0 (3.9)
27	12.9 (1.2)	75.8 (2.3)	-0.40 (2.40)		12.5 (1.2)	72.8 (2.6)	2.80 (4.30)	
28	16.9 (4.3)	64.5 (11.4)	-0.10 (1.60)		17.1 (4.6)	59.1 (13.1)	-3.20 (3.20)	219.0 (58.0)
29	18.2 (2.7)	47.3 (9.1)	-1.10 (2.40)		18.2 (2.9)	42.5 (10.4)	-0.50 (5.20)	
30	16.4 (2.8)	51.1 (17.5)	-0.80 (3.60)		16.4 (2.8)	46.6 (19.3)	0.90 (5.90)	
31	17.1 (5.8)	48.8 (11.8)	-1.10 (4.00)		17.3 (5.9)	44.7 (12.8)	-7.40 (7.80)	216.0 (92.0)
Avg	15.8	55.2	-1.00	347.0	16.0	50.9	-3.40	211.0
n	31	31	31	2	31	31	31	18
SD	3.3	8.4	2.10	5.4	3.4	8.7	5.70	50.6
Min	9.6	43.9	-9.30	341.0	9.5	40.1	-24.70	143.0
Max	24.7	75.8	0.90	352.0	24.9	72.8	3.10	348.0

ED_004549_00015842-00122

Table F3. Daily means (SD) of environmental parameters at Site WI5B for June, 2009.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	17.0 (3.3)	55.3 (10.2)	-1.40 (2.80)		16.8 (3.5)	51.7 (11.9)	-0.90 (4.90)	
2	16.6 (3.9)	52.8 (10.7)	-0.40 (2.30)		16.6 (4.1)	48.3 (12.3)	-0.10 (4.20)	
3	14.8 (4.0)	51.4 (11.5)	-1.50 (2.70)		14.9 (4.0)	44.7 (12.1)	-2.60 (2.30)	173.0 (71.8)
4	16.9 (5.3)	49.6 (16.0)	-3.30 (2.50)	140.0 (47.2)	17.1 (5.5)	44.0 (16.0)	-2.80 (3.10)	208.0 (88.2)
5	17.5 (3.4)	46.8 (10.9)	-3.20 (2.50)	190.0 (64.4)	17.6 (3.4)	41.8 (11.3)	-1.30 (3.10)	
6	10.7 (0.5)	71.8 (7.8)	-0.40 (1.00)		10.8 (0.3)	69.4 (8.2)	-2.60 (1.50)	145.0 (35.3)
7	11.6 (1.1)	78.7 (1.8)	-0.50 (1.00)		11.7 (0.9)	75.3 (1.8)	-2.40 (1.50)	147.0 (33.8)
8	12.9 (1.0)	79.9 (1.6)	-1.40 (1.30)	141.0 (1.0)	12.8 (1.0)	76.1 (1.8)	-2.00 (1.90)	166.0 (1.6)
9	15.0 (2.3)	74.8 (5.5)	-1.90 (0.70)	143.0 (11.6)	14.9 (2.4)	69.7 (6.9)	-1.70 (1.30)	165.0 (5.9)
10	15.4 (1.5)	75.5 (3.8)	-1.60 (0.40)	141.0 (1.0)	15.5 (1.5)	70.8 (4.4)	-1.80 (1.30)	165.0 (1.2)
11	16.5 (3.6)	61.9 (15.0)	-2.80 (1.60)	195.0 (56.9)	16.6 (3.6)	57.0 (16.3)	-4.10 (1.90)	216.0 (60.5)
12	16.3 (4.2)	61.5 (12.9)	-3.00 (1.80)	193.0 (56.4)	16.5 (4.2)	56.3 (14.9)	-3.40 (2.60)	215.0 (70.4)
13	17.6 (4.8)	63.1 (12.1)	-3.40 (2.10)	204.0 (58.1)	18.0 (4.8)	57.6 (14.0)	-3.20 (2.20)	220.0 (70.4)
14	20.6 (4.4)	61.1 (11.5)	-8.20 (6.20)	292.0 (120.0)	21.0 (4.6)	55.7 (12.4)	-7.90 (5.70)	313.0 (126.0)
15	21.2 (3.3)	63.5 (8.7)	-6.80 (5.60)	281.0 (110.0)	21.5 (3.5)	58.4 (9.9)	-10.30 (9.40)	266.0 (65.5)
16	20.0 (2.0)	68.4 (6.5)	-3.10 (1.50)	237.0 (42.8)	20.2 (2.1)	63.9 (8.2)	-7.40 (3.30)	253.0 (48.7)
17	19.8 (2.3)	78.0 (3.4)	-2.50 (1.50)	214.0 (54.5)	20.0 (2.5)	73.3 (5.1)	-5.60 (3.00)	234.0 (56.6)
18	23.1 (2.6)	75.7 (6.4)	-7.90 (5.90)	325.0 (85.5)	23.6 (2.7)	69.9 (7.5)	-14.50 (8.70)	298.0 (30.4)
19	23.3 (1.7)	75.6 (7.4)	-9.80 (6.20)	326.0 (86.1)	23.7 (1.9)	69.7 (9.0)	-10.00 (6.40)	312.0 (36.0)
20	22.9 (3.4)	65.3 (12.7)	-9.20 (5.20)	333.0 (88.5)	23.5 (3.4)	59.2 (13.4)	-9.50 (3.90)	307.0 (34.7)
21	21.5 (1.7)	76.1 (6.6)	-4.80 (4.00)	282.0 (65.2)	21.7 (1.8)	72.2 (8.2)	-10.10 (7.00)	267.0 (33.6)
22	25.6 (3.3)	77.4 (10.3)	-12.80 (7.40)	355.0 (79.3)	26.4 (3.7)	72.0 (12.5)	-13.00 (6.40)	304.0 (35.0)
23	25.8 (4.0)	71.6 (12.1)	-14.10 (7.70)		26.1 (4.2)	66.6 (13.9)	-12.20 (6.10)	304.0 (35.3)
24	23.3 (2.1)	71.5 (7.6)	-11.40 (7.30)	302.0 (76.3)	23.7 (2.2)	66.1 (8.7)	-9.90 (4.60)	292.0 (37.0)
25	23.6 (3.2)	72.4 (10.4)	-12.50 (7.20)	317.0 (80.2)	23.8 (3.3)	68.0 (11.3)	-10.90 (4.30)	305.0 (41.4)
26	22.8 (3.7)	61.6 (12.6)	-12.30 (8.60)	304.0 (102.0)	23.1 (3.8)	56.7 (13.7)	-11.10 (5.80)	289.0 (70.4)
27	21.9 (2.1)	73.5 (5.2)	-9.80 (7.00)	270.0 (55.0)	22.2 (2.3)	69.4 (6.1)	-10.00 (6.90)	287.0 (26.5)
28	20.0 (2.4)	61.5 (7.8)	-8.60 (4.00)	217.0 (45.4)	20.3 (2.4)	55.7 (8.0)	-3.60 (3.30)	
29	18.8 (1.0)	65.6 (2.9)	-5.70 (2.80)	220.0 (48.2)	18.8 (1.1)	62.0 (3.6)	0.50 (4.10)	
30	16.1 (1.2)	72.4 (2.8)	-1.90 (1.30)	140.0 (7.4)	15.6 (1.3)	69.7 (3.4)	3.80 (3.20)	
Avg	19.0	67.1	-5.50	240.0	19.2	62.4	-5.70	244.0
n	30	30	30	24	30	30	30	24
SD	3.9	9.2	4.30	69.6	4.1	9.6	4.70	58.1
Min	10.7	46.8	-14.10	140.0	10.8	41.8	-14.50	145.0
Max	25.8	79.9	-0.40	355.0	26.4	76.1	3.80	313.0

ED_004549_00015842-00123

Table F3. Daily means (SD) of environmental parameters at Site WI5B for July, 2009.

Day	Barn 1				Barn 2			
	Temp., ºC	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., ºC	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	16.3 (1.6)	73.8 (4.2)	-2.60 (1.80)	157.0 (38.9)	16.0 (1.7)	70.3 (4.6)	1.60 (3.10)	
2	18.1 (3.5)	74.4 (5.2)	-5.00 (2.90)	198.0 (54.6)	18.1 (3.6)	70.7 (6.2)	-3.60 (2.60)	221.0 (59.9)
3	20.0 (3.1)	72.2 (7.2)	-5.50 (3.70)	227.0 (63.6)	20.1 (3.3)	68.1 (8.9)	-6.10 (3.40)	251.0 (59.4)
4	19.6 (1.7)	80.2 (2.5)	-5.20 (2.10)	231.0 (44.0)	19.8 (1.7)	75.8 (4.1)	-4.90 (2.10)	245.0 (56.5)
5	20.2 (4.0)	68.4 (12.5)	-8.30 (8.30)	261.0 (114.0)	20.2 (4.2)	64.4 (12.9)	-7.10 (5.00)	251.0 (79.0)
6	20.5 (3.7)	64.7 (11.4)	-8.10 (7.70)	261.0 (107.0)	20.4 (3.8)	61.9 (12.1)	-7.90 (5.40)	276.0 (108.0)
7	20.6 (3.4)	61.3 (10.0)	-7.70 (7.50)	263.0 (99.9)	20.6 (3.6)	57.6 (11.4)	-9.10 (6.20)	292.0 (110.0)
8	19.3 (1.9)	68.0 (4.3)	-3.50 (2.20)	216.0 (53.6)	19.4 (2.0)	64.9 (4.9)	-7.00 (4.40)	225.0 (57.3)
9	20.8 (3.1)	72.6 (6.1)	-7.50 (7.80)	260.0 (101.0)	21.1 (3.2)	69.1 (7.5)	-13.60 (13.00)	272.0 (97.4)
10	22.8 (2.9)	70.3 (12.1)	-13.70 (8.10)	312.0 (77.0)	23.1 (3.0)	66.0 (13.5)	-12.50 (8.90)	351.0 (89.2)
11	19.1 (2.6)	59.3 (13.1)	-4.50 (2.50)	210.0 (54.4)	19.2 (2.6)	55.2 (13.6)	-4.10 (3.30)	229.0 (60.0)
12	18.5 (3.4)	61.8 (8.9)	-4.20 (2.60)	208.0 (54.8)	18.4 (3.5)	59.7 (10.2)	-6.30 (3.10)	231.0 (57.5)
13	19.7 (3.3)	55.2 (13.0)	-4.30 (3.00)	224.0 (59.3)	19.6 (3.5)	52.0 (14.3)	-7.30 (3.80)	252.0 (78.4)
14	20.9 (1.7)	64.6 (7.6)	-4.80 (2.70)	255.0 (33.3)	21.2 (1.8)	61.1 (7.7)	-12.70 (8.10)	275.0 (58.3)
15	20.3 (2.1)	68.2 (9.9)	-7.10 (2.30)	237.0 (33.9)	20.4 (2.0)	63.8 (10.6)	-4.60 (2.10)	265.0 (44.7)
16	17.2 (2.3)	62.4 (8.7)	-5.20 (5.10)	182.0 (64.7)	17.4 (2.1)	57.9 (9.0)	-1.50 (2.70)	
17	15.9 (1.0)	70.3 (4.3)	-1.70 (1.10)	142.0 (11.2)	15.8 (1.0)	67.7 (4.6)	1.90 (3.20)	
18	16.6 (1.3)	68.1 (7.1)	-1.90 (1.50)	156.0 (36.6)	16.8 (1.3)	64.3 (7.6)	-0.20 (2.10)	
19	17.8 (3.4)	62.9 (10.1)	-3.40 (2.60)	196.0 (55.9)	18.0 (3.5)	59.0 (11.1)	-4.70 (2.40)	223.0 (59.5)
20	19.9 (3.6)	64.9 (5.7)	-5.60 (5.20)	231.0 (77.4)	20.3 (3.7)	61.3 (6.8)	-8.90 (9.70)	271.0 (90.8)
21	18.9 (1.9)	76.3 (4.0)	-5.80 (2.50)	227.0 (45.6)	19.2 (2.1)	72.9 (4.9)	-4.40 (2.30)	261.0 (49.8)
22	18.2 (3.7)	75.8 (7.2)	-3.70 (2.70)	194.0 (54.8)	18.5 (3.9)	71.6 (8.9)	-5.00 (4.20)	234.0 (78.7)
23	20.6 (4.4)	68.7 (10.9)	-9.60 (8.50)	263.0 (105.0)	20.9 (4.5)	64.5 (11.4)	-9.40 (7.70)	306.0 (122.0)
24	20.4 (2.4)	71.2 (5.9)	-9.20 (6.70)	267.0 (68.4)	20.7 (2.4)	67.8 (6.2)	-9.40 (6.10)	301.0 (80.2)
25	19.4 (2.3)	73.9 (4.1)	-5.30 (2.40)	217.0 (50.6)	19.6 (2.2)	70.2 (4.6)	-5.00 (3.40)	247.0 (53.0)
26	21.2 (3.2)	70.2 (8.9)	-9.10 (7.60)	273.0 (104.0)	21.4 (3.1)	66.6 (9.1)	-10.00 (7.80)	299.0 (121.0)
27	21.0 (2.6)	75.1 (4.2)	-7.20 (5.90)	240.0 (76.3)	21.3 (2.8)	71.1 (5.1)	-9.20 (6.10)	285.0 (95.0)
28	18.8 (2.5)	65.3 (7.4)	-4.10 (2.50)	202.0 (55.4)	19.0 (2.3)	61.0 (7.0)	-4.40 (3.20)	232.0 (58.6)
29	18.4 (4.2)	64.6 (11.5)	-5.40 (4.80)	213.0 (66.5)	18.7 (4.3)	59.8 (13.0)	-5.50 (4.70)	238.0 (69.5)
30	18.6 (2.5)	69.9 (9.1)	-3.90 (2.60)	194.0 (55.5)	18.7 (2.4)	65.5 (10.3)	-3.40 (3.00)	225.0 (59.0)
31	19.1 (3.8)	69.5 (9.1)	-4.70 (2.80)	214.0 (50.8)	19.5 (4.0)	65.3 (11.0)	-3.30 (2.70)	242.0 (56.4)
Avg	19.3	68.5	-5.70	224.0	19.5	64.7	-6.00	259.0
n	31	31	31	31	31	31	31	27
SD	1.5	5.5	2.50	37.1	1.6	5.4	3.70	31.0
Min	15.9	55.2	-13.70	142.0	15.8	52.0	-13.60	221.0
Max	22.8	80.2	-1.70	312.0	23.1	75.8	1.90	351.0

ED_004549_00015842-00124

Table F3. Daily means (SD) of environmental parameters at Site WI5B for August, 2009.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	18.1 (1.9)	65.6 (10.6)	-4.60 (3.00)	193.0 (55.5)	18.3 (1.9)	60.6 (11.7)	-1.80 (3.00)	
2	19.9 (4.1)	67.8 (7.3)	-6.70 (6.20)	245.0 (97.3)	20.2 (4.1)	64.0 (8.7)	-7.40 (10.60)	
3	21.6 (2.5)	71.6 (9.3)	-10.50 (7.90)	287.0 (83.0)	21.8 (2.5)	68.1 (10.6)	-7.80 (5.90)	326.0 (102.0)
4	19.8 (2.1)	65.8 (9.1)	-4.00 (2.20)	221.0 (50.5)	19.6 (2.0)	62.7 (9.9)	-3.30 (2.70)	247.0 (57.5)
5	18.5 (3.8)	64.9 (10.3)	-3.60 (2.40)	207.0 (55.1)	18.4 (3.9)	61.3 (11.8)	-3.90 (2.20)	234.0 (60.0)
6	19.4 (3.2)	63.7 (11.5)	-4.30 (2.30)	219.0 (51.8)	19.5 (3.3)	59.6 (13.6)	-4.50 (2.20)	235.0 (59.0)
7	18.9 (0.6)	74.5 (7.4)	-5.40 (0.80)	254.0 (11.0)	19.2 (0.6)	72.3 (8.3)	-8.40 (4.90)	258.0 (45.0)
8	23.4 (2.8)	83.6 (2.6)	-13.10 (7.70)	338.0 (80.2)	23.6 (2.8)	80.6 (4.1)	-15.30 (9.60)	368.0 (86.9)
9	23.1 (1.5)	80.2 (7.3)	-11.40 (7.90)	308.0 (80.4)	23.4 (1.5)	76.6 (9.2)	-10.10 (5.40)	351.0 (93.5)
10	21.4 (2.7)	75.6 (8.3)	-9.30 (7.40)	278.0 (86.2)	21.7 (2.5)	72.0 (9.0)	-8.20 (5.20)	310.0 (105.0)
11	20.6 (3.7)	69.1 (12.2)	-8.50 (8.00)	269.0 (113.0)	20.8 (3.8)	65.1 (13.6)	-8.40 (6.40)	300.0 (136.0)
12	22.5 (4.3)	73.0 (7.1)	-11.40 (9.00)	301.0 (114.0)	22.6 (4.6)	70.0 (8.4)	-12.60 (10.90)	335.0 (122.0)
13	22.9 (2.0)	79.1 (3.7)	-10.50 (6.70)	304.0 (77.7)	23.0 (2.0)	76.9 (4.6)	-14.10 (10.60)	334.0 (75.9)
14	24.6 (2.8)	74.4 (8.4)	-16.60 (8.60)	343.0 (76.9)	24.9 (3.0)	71.5 (10.4)	-18.20 (11.30)	377.0 (79.7)
15	23.1 (1.3)	76.4 (6.1)	-13.30 (8.20)	302.0 (75.7)	23.4 (1.3)	73.4 (7.5)	-14.80 (10.70)	346.0 (81.2)
16	22.2 (1.9)	78.3 (5.1)	-12.30 (8.90)	277.0 (64.3)	22.6 (1.9)	74.2 (7.0)	-12.40 (7.90)	325.0 (81.5)
17	20.3 (3.3)	69.3 (9.4)	-7.30 (7.30)	248.0 (95.6)	20.5 (3.7)	64.8 (10.7)	-9.00 (10.70)	296.0 (109.0)
18	19.0 (2.9)	63.7 (8.6)	-5.60 (3.60)	207.0 (52.4)	19.2 (2.9)	58.1 (9.7)	-2.90 (3.20)	252.0 (53.4)
19	18.7 (1.2)	79.4 (4.0)	-4.50 (3.30)	200.0 (53.5)	19.0 (1.3)	76.8 (4.4)	-5.20 (5.80)	224.0 (56.3)
20	17.8 (0.4)	83.8 (0.4)	-3.80 (2.60)	166.0 (46.6)	18.2 (0.4)	80.1 (1.0)	0.30 (1.40)	
21	17.5 (2.0)	74.1 (9.5)	-3.80 (3.00)	184.0 (54.1)	17.6 (2.0)	68.8 (10.6)	1.10 (3.80)	
22	16.5 (4.0)	69.4 (9.6)	-3.70 (2.90)	186.0 (53.6)	16.7 (4.0)	65.1 (10.7)	-4.00 (2.20)	214.0 (60.1)
23	18.2 (4.3)	72.6 (6.9)	-5.40 (3.20)	209.0 (51.8)	18.6 (4.6)	67.9 (8.8)	-3.80 (2.00)	242.0 (57.3)
24	21.0 (2.7)	72.3 (5.5)	-8.00 (6.90)	242.0 (86.8)	21.5 (2.7)	68.1 (6.1)	-10.00 (11.00)	301.0 (98.2)
25	21.1 (1.6)	78.1 (5.6)	-7.70 (1.90)	241.0 (26.2)	21.4 (1.6)	74.8 (6.4)	-7.20 (2.20)	270.0 (33.5)
26	19.4 (3.0)	70.7 (8.2)	-5.20 (3.00)	210.0 (52.9)	19.6 (3.1)	67.0 (9.4)	-6.60 (3.10)	229.0 (57.3)
27	19.5 (3.0)	70.2 (8.9)	-5.00 (3.10)	205.0 (53.8)	19.6 (3.3)	66.8 (10.4)	-6.00 (3.10)	229.0 (57.4)
28	18.4 (2.5)	75.2 (5.2)	-4.40 (3.40)	189.0 (54.0)	18.4 (2.7)	71.3 (6.0)	-0.90 (4.30)	
29	14.5 (1.9)	72.0 (5.7)	-1.10 (1.40)	142.0 (1.2)	14.1 (1.8)	68.4 (6.5)	3.90 (4.20)	
30	14.4 (3.6)	67.1 (12.0)	-2.90 (2.70)	165.0 (50.6)	14.2 (3.5)	63.8 (12.8)	-2.60 (3.10)	193.0 (54.8)
31	14.7 (4.3)	69.0 (9.6)	-3.70 (3.40)	167.0 (64.6)	14.8 (4.3)	65.0 (11.4)	-3.20 (2.90)	201.0 (77.2)
Avg	19.7	72.6	-7.00	236.0	19.9	68.9	-6.70	280.0
n	31	31	31	31	31	31	31	25
SD	2.6	5.5	3.70	52.9	2.7	5.8	5.10	54.1
Min	14.4	63.7	-16.60	142.0	14.1	58.1	-18.20	193.0
Max	24.6	83.8	-1.10	343.0	24.9	80.6	3.90	377.0

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Table F3. Daily means (SD) of environmental parameters at Site WI5B for September, 2009.

Day	Barn 1				Barn 2			
	Temp., ºC	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., ºC	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	15.8 (4.2)	69.2 (8.9)	-4.30 (3.40)	186.0 (54.3)	15.8 (4.6)	65.0 (11.2)	-2.60 (2.20)	219.0 (62.4)
2	16.6 (4.2)	70.4 (7.7)	-4.40 (3.30)	189.0 (53.5)	16.8 (4.5)	66.2 (9.9)	-2.40 (2.60)	228.0 (61.5)
3	16.7 (4.1)	71.0 (8.5)	-4.40 (3.40)	189.0 (53.4)	16.8 (4.5)	67.0 (11.2)	-3.10 (2.40)	222.0 (60.2)
4	17.0 (4.5)	70.8 (9.1)	-4.50 (3.50)	191.0 (53.3)	17.0 (4.7)	67.2 (11.3)	-3.20 (1.80)	224.0 (60.4)
5	17.9 (4.7)	69.9 (9.1)	-5.10 (3.30)	202.0 (53.4)	18.0 (5.0)	66.3 (11.2)	-3.50 (2.30)	237.0 (65.4)
6	18.5 (3.7)	69.9 (7.8)	-4.60 (3.30)	195.0 (54.1)	18.5 (4.3)	66.6 (10.4)	-3.20 (2.80)	234.0 (78.1)
7	18.9 (4.4)	72.4 (7.0)	-6.70 (5.50)	217.0 (63.4)	19.0 (4.7)	68.8 (8.8)	-6.60 (6.60)	273.0 (105.0)
8	19.7 (3.1)	69.6 (8.7)	-5.60 (5.10)	208.0 (67.1)	20.0 (3.3)	65.6 (10.2)	-6.80 (7.30)	257.0 (96.5)
9	20.2 (2.8)	73.8 (4.0)	-6.20 (3.20)	216.0 (50.1)	20.5 (3.1)	69.7 (5.5)	-4.30 (4.20)	269.0 (90.6)
10	21.0 (2.9)	74.1 (7.1)	-12.30 (9.20)	277.0 (89.7)	21.2 (3.2)	70.5 (8.4)	-7.90 (7.70)	317.0 (120.0)
11	21.5 (2.3)	75.5 (5.5)	-11.80 (7.50)	281.0 (67.9)	21.8 (2.4)	71.6 (6.2)	-8.90 (8.20)	322.0 (86.7)
12	20.9 (2.8)	72.1 (8.1)	-11.50 (8.80)	268.0 (84.6)	21.3 (3.0)	68.0 (9.3)	-7.10 (5.70)	313.0 (119.0)
13	19.9 (4.0)	72.7 (9.1)	-9.90 (10.30)	244.0 (109.0)	20.0 (4.2)	69.1 (10.6)	-6.30 (5.30)	291.0 (137.0)
14	19.5 (3.7)	71.4 (8.8)	-8.50 (9.00)	223.0 (91.7)	19.7 (4.0)	67.1 (11.1)	-6.50 (6.10)	276.0 (128.0)
15	20.6 (4.3)	69.4 (8.4)	-11.40 (10.20)	267.0 (108.0)	20.5 (4.5)	66.7 (9.2)	-9.10 (6.20)	304.0 (129.0)
16	19.0 (2.4)	71.8 (5.4)	-5.10 (3.40)	201.0 (54.5)	19.0 (2.5)	69.1 (6.7)	-4.70 (2.50)	220.0 (59.4)
17	19.0 (3.8)	73.5 (7.2)	-7.80 (7.40)	222.0 (77.9)	19.0 (4.3)	70.4 (9.3)	-4.10 (5.20)	269.0 (107.0)
18	20.3 (3.4)	73.1 (6.6)	-10.20 (9.30)	245.0 (98.4)	20.4 (3.6)	70.2 (7.9)	-8.30 (6.80)	292.0 (118.0)
19	20.9 (2.6)	73.1 (6.0)	-9.80 (8.40)	248.0 (85.7)	21.2 (2.6)	70.0 (6.9)	-7.40 (6.80)	291.0 (110.0)
20	19.6 (1.9)	71.1 (6.3)	-5.40 (2.80)	205.0 (52.4)	19.9 (1.9)	67.3 (7.5)	-5.80 (4.30)	231.0 (57.2)
21	19.6 (2.2)	73.1 (3.0)	-5.10 (2.70)	204.0 (52.4)	19.8 (2.4)	69.8 (4.6)	-5.70 (4.20)	239.0 (55.1)
22	18.7 (0.7)	83.4 (1.2)	-6.00 (2.30)	219.0 (46.2)	18.7 (0.7)	81.4 (1.0)	-5.80 (3.20)	254.0 (51.4)
23	19.7 (1.4)	80.9 (3.7)	-7.20 (1.70)	237.0 (27.0)	19.9 (1.5)	76.6 (4.9)	-5.90 (2.50)	249.0 (54.4)
24	19.6 (2.8)	70.4 (5.5)	-5.30 (3.40)	210.0 (57.1)	19.7 (2.9)	65.8 (6.5)	-4.50 (2.20)	237.0 (58.6)
25	17.8 (1.1)	80.6 (3.7)	-3.40 (2.70)	184.0 (56.8)	17.9 (1.2)	79.0 (3.6)	-2.70 (3.30)	202.0 (55.9)
26	16.7 (3.1)	77.0 (7.8)	-3.30 (2.80)	169.0 (51.6)	17.0 (3.3)	72.4 (10.5)	-1.60 (1.80)	218.0 (60.0)
27	15.8 (2.9)	69.9 (6.5)	-4.90 (3.70)	162.0 (49.7)	16.0 (3.0)	65.2 (8.3)	-1.40 (2.80)	
28	12.5 (1.1)	68.7 (2.8)	-5.50 (4.20)	129.0 (3.4)	12.5 (1.1)	63.3 (3.2)	4.00 (4.80)	
29	9.9 (1.3)	68.9 (2.9)	-1.00 (2.10)		9.6 (1.3)	64.7 (3.3)	4.10 (4.50)	
30	10.0 (3.4)	67.0 (10.3)	-0.70 (0.70)	111.0 (27.9)	9.9 (3.3)	61.6 (11.5)	-1.90 (1.70)	128.0 (39.5)
Avg	18.1	72.5	-6.40	210.0	18.3	68.7	-4.40	253.0
n	30	30	30	29	30	30	30	27
SD	2.9	3.7	3.00	39.1	3.0	4.2	3.10	41.5
Min	9.9	67.0	-12.30	111.0	9.6	61.6	-9.10	128.0
Max	21.5	83.4	-0.70	281.0	21.8	81.4	4.10	322.0

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Table F3. Daily means (SD) of environmental parameters at Site WI5B for October, 2009.

Day	Barn 1				Barn 2			
	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}	Temp., °C	RH, %	ΔP, Pa	Airflow, dsm^3s^{-1}
1	10.3 (1.0)	74.3 (4.2)	1.10 (1.90)		10.3 (1.1)	71.5 (4.8)	-5.40 (2.80)	125.0 (39.2)
2	11.0 (0.6)	80.0 (1.0)	-4.00 (3.50)	124.0 (18.0)	10.6 (0.7)	78.1 (1.4)	1.10 (4.70)	
3	10.5 (0.8)	77.7 (2.5)	-1.60 (1.40)	132.0 (8.5)	10.6 (0.8)	73.7 (3.0)	3.40 (3.30)	
4	10.9 (1.1)	78.4 (2.5)	-2.70 (0.80)	128.0 (16.8)	11.2 (0.9)	73.9 (3.0)	-0.10 (1.30)	
5	10.8 (1.6)	76.7 (4.0)	-1.70 (0.90)	112.0 (27.5)	10.8 (1.6)	72.6 (5.5)	-0.90 (1.30)	
6	9.8 (0.7)	80.4 (0.5)	-1.30 (2.00)		10.1 (0.6)	76.6 (0.6)	1.90 (4.70)	
7	11.4 (3.5)	70.8 (9.1)	-1.60 (1.10)	112.0 (26.7)	11.7 (3.4)	64.8 (10.5)	-0.60 (2.40)	
8	9.3 (1.7)	68.6 (5.3)	-1.80 (1.20)	106.0 (28.1)	9.4 (1.6)	63.8 (6.2)	0.70 (1.60)	
9	6.2 (2.5)	69.2 (7.3)	-1.30 (1.00)	86.0 (19.3)	5.9 (2.3)	64.7 (9.0)	1.10 (2.80)	
10	3.9 (1.3)	67.6 (5.0)	-3.90 (2.00)	76.4 (7.0)	4.4 (1.1)	61.1 (7.0)	-1.30 (1.60)	86.3 (6.8)
11	5.3 (1.6)	65.2 (4.6)	-2.40 (0.60)	78.2 (0.5)	5.3 (1.2)	59.0 (5.8)	-1.80 (0.70)	87.3 (0.5)
12	4.7 (0.6)	76.1 (2.5)	-2.40 (0.50)	78.1 (0.3)	4.7 (0.7)	72.4 (2.7)	-1.90 (0.50)	87.1 (0.4)
13	5.8 (1.8)	73.7 (4.9)	-2.30 (0.60)	78.3 (0.6)	5.2 (1.9)	68.5 (6.5)	-1.80 (1.10)	86.7 (5.1)
14	7.7 (1.1)	72.7 (1.8)	-1.60 (0.70)	77.6 (0.5)	7.5 (1.3)	68.3 (2.5)	-2.70 (1.00)	85.8 (1.0)
15	6.8 (1.0)	78.2 (0.6)	-1.70 (0.80)	77.4 (0.5)	6.3 (1.1)	74.9 (0.9)	-2.60 (0.70)	85.8 (0.5)
16	7.8 (1.6)	73.8 (6.0)	-2.70 (1.00)	83.3 (17.1)	7.6 (1.8)	69.8 (7.6)	-2.20 (1.00)	88.0 (10.7)
17	8.2 (1.6)	69.7 (8.8)	-3.00 (1.70)	90.0 (23.0)	8.3 (1.5)	64.9 (10.4)	-2.30 (2.30)	99.0 (28.3)
18	10.8 (3.9)	65.7 (7.3)	-4.60 (2.40)	108.0 (25.5)	11.2 (3.9)	61.5 (7.7)	-6.60 (3.70)	130.0 (35.9)
19	11.9 (2.4)	70.6 (3.6)	-6.20 (1.00)	130.0 (4.5)	12.1 (2.0)	67.2 (4.2)	-6.30 (2.80)	150.0 (26.9)
20	10.9 (0.8)	75.6 (2.1)	-5.60 (1.30)	132.0 (3.2)	11.0 (0.7)	72.6 (2.9)	-7.70 (2.70)	145.0 (30.4)
21	9.6 (0.8)	79.5 (0.7)	-4.80 (2.20)	108.0 (27.3)	9.4 (1.5)	76.0 (1.0)	-0.40 (4.50)	
22	8.2 (1.2)	74.6 (2.8)	-4.60 (2.40)	76.6 (6.7)	7.4 (1.3)	68.9 (3.9)	-0.30 (2.50)	
23	6.2 (0.6)	78.2 (1.5)	-3.10 (2.30)	75.8 (0.8)	5.1 (0.5)	75.0 (2.3)	2.80 (3.10)	
24	8.6 (2.5)	75.3 (4.3)	-4.50 (1.70)	106.0 (26.9)	9.0 (2.8)	70.6 (5.3)	-3.90 (2.80)	123.0 (38.1)
25	10.0 (0.4)	80.0 (1.2)	-4.30 (2.00)	114.0 (25.6)	10.7 (0.4)	76.3 (1.5)	-3.90 (2.40)	117.0 (38.1)
26	8.7 (1.1)	77.7 (3.4)	-2.60 (1.40)	87.2 (21.8)	9.2 (1.2)	73.7 (4.2)	-1.60 (0.80)	85.8 (6.3)
27	8.9 (2.8)	68.5 (8.3)	-2.80 (1.90)	99.3 (26.6)	9.5 (2.5)	63.1 (8.9)	-5.50 (4.20)	110.0 (34.8)
28	9.6 (1.8)	76.1 (1.8)	-3.70 (2.20)	107.0 (27.3)	10.1 (1.9)	72.1 (2.1)	-6.20 (3.50)	127.0 (37.3)
29	12.0 (0.3)	81.3 (0.9)	-1.30 (2.90)		12.6 (0.5)	77.5 (0.8)	-12.20 (5.20)	156.0 (5.2)
30	11.3 (3.8)	76.8 (7.5)	-1.60 (1.80)	115.0 (24.8)	12.1 (3.6)	72.3 (8.5)	-10.10 (7.20)	130.0 (32.1)
31	5.7 (1.3)	70.3 (5.7)	-3.50 (1.70)	76.2 (1.1)	6.8 (1.3)	64.7 (6.8)	-1.40 (0.70)	85.4 (0.7)
Avg	8.8	74.3	-2.80	99.1	8.9	70.0	-2.50	109.0
n	31	31	31	28	31	31	31	20
SD	2.2	4.5	1.50	19.5	2.4	5.2	3.50	24.0
Min	3.9	65.2	-6.20	75.8	4.4	59.0	-12.20	85.4
Max	12.0	81.3	1.10	132.0	12.6	78.1	3.40	156.0

ED_004549_00015842-00127

Table F4. PM concentrations.

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for September, 2007.

Day	PM_{10}, µg·dsm^{-3}			$PM_{2.5}$, µg·dsm^{-3}			TSP, µg·dsm^{-3}		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12	27 (32)	43 (40)	50 (32)						
13	21 (12)	23 (13)	34 (19)						
14	13 (6)		19 (8)						
15	20 (10)		32 (17)						
16									
17									
18	48 (30)		69 (49)						
19	17 (7)		18 (8)						
20	26 (15)		50 (47)						
21									
22	23 (12)	28 (22)	35 (29)						
23	52 (31)	87 (67)	114 (88)						
24	47 (40)	63 (38)	90 (57)						
25	12 (8)	5 (11)	5 (13)						
26	13 (8)	12 (13)	15 (17)						
27	10 (7)	16 (12)	15 (17)						
28	11 (5)	13 (13)	16 (16)						
29	22 (10)	23 (12)	30 (13)						
30	27 (19)	23 (13)	25 (11)						
Avg	24	30	39						
n	16	11	16	0	0	0	0	0	0
SD	13	23	29						
Min	10	5	5						
Max	52	87	114						

ED_004549_00015842-00128

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for October, 2007.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	24 (10)	20 (10)	24 (10)						
2	21 (16)	13 (11)	18 (10)						
3	14 (7)	18 (17)	32 (27)						
4	23 (14)	34 (28)	56 (47)						
5	36 (28)								
6	43 (27)	72 (35)	145 (64)						
7	44 (20)	66 (17)	125 (35)						
8									
9	7 (4)	5 (14)	11 (21)						
10	6 (5)	10 (96)	16 (120)						
11	5 (4)								
12	9 (7)	11 (5)	21 (10)						
13	11 (6)	14 (8)	23 (12)						
14	10 (6)	13 (7)	17 (12)						
15	10 (6)	12 (6)	14 (5)						
16	11 (6)	11 (4)	15 (5)						
17	12 (7)	11 (3)	18 (6)						
18	10 (10)	7 (4)	10 (4)						
19	4 (5)	13 (42)	12 (5)						
20	9 (6)	13 (6)	18 (5)						
21									
22	8 (4)	12 (8)	14 (6)						
23	9 (8)	13 (6)	19 (9)						
24	7 (6)	12 (4)	17 (9)						
25	8 (5)	12 (5)	18 (7)						
26	9 (10)	13 (10)	15 (6)						
27	9 (9)	14 (5)	19 (8)						
28	17 (8)	17 (4)	26 (5)						
29	28 (13)	25 (8)	40 (13)						
30	30 (15)	28 (6)	42 (7)						
31	18 (13)	15 (7)	29 (12)						
Avg	16	19	30						
n	29	27	27	0	0	0	0	0	0
SD	11	16	32						
Min	4	5	10						
Max	44	72	145						

ED_004549_00015842-00129

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for November, 2007.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	21 (16)	21 (12)	43 (25)						
2	19 (6)	18 (7)	34 (15)						
3	17 (10)	18 (12)	32 (13)						
4	19 (12)	19 (8)	34 (13)						
5	16 (14)	13 (6)	23 (12)						
6	6 (7)	10 (5)	14 (9)						
7		22 (11)	39 (19)						
8		25 (10)	38 (12)						
9		18 (7)	25 (11)						
10		17 (6)	24 (7)						
11	38 (20)	39 (75)	37 (11)						
12	10 (6)	9 (9)	16 (9)						
13	22 (11)	18 (9)	37 (18)						
14									
15									
16	20 (7)	19 (12)	35 (19)						
17	10 (6)	14 (13)	23 (13)						
18	13 (9)	14 (10)	28 (19)						
19	66 (30)	52 (19)	67 (27)						
20	13 (11)	37 (51)	53 (41)						
21	4 (4)	26 (14)							
22	5 (4)	21 (8)							
23	11 (5)	26 (14)	39 (13)						
24	13 (4)	22 (14)	36 (11)						
25	16 (6)	24 (22)	37 (13)						
26	12 (5)	32 (30)	51 (26)						
27	12 (8)	58 (74)	95 (70)						
28	24 (12)	47 (31)	108 (72)						
29	13 (6)	37 (22)	102 (135)						
30	15 (5)								
Avg	17	25	43						
n	24	27	25	0	0	0	0	0	0
SD	12	12	24						
Min	4	9	14						
Max	66	58	108						

ED_004549_00015842-00130

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for December, 2007.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	55 (74)	45 (45)	155 (89)						
2	11 (4)	24 (32)	82 (34)						
3	11 (6)								
4	10 (7)	17 (11)	48 (29)						
5	8 (6)								
6	17 (6)	52 (166)	63 (26)						
7	15 (5)	37 (60)	57 (36)						
8	16 (5)								
9	21 (6)								
10	25 (9)	28 (19)							
11									
12							32 (11)		
13							24 (16)	61 (30)	295 (153)
14							13 (7)		
15							26 (9)		
16							22 (5)	42 (27)	266 (86)
17									
18	40 (9)	48 (36)	74 (68)						
19	42 (7)	76 (126)	132 (180)						
20	50 (12)		133 (81)						
21	30 (8)	104 (357)	94 (106)						
22	10 (7)	18 (44)	57 (83)						
23									
24									
25									
26	24 (5)	31 (34)							
27	8 (7)		93 (66)						
28	9 (4)	27 (34)	111 (153)						
29	18 (6)	22 (13)	48 (31)						
30	31 (7)	30 (12)	37 (16)						
31	27 (9)	32 (28)	35 (32)						
Avg	23	39	81				23	52	281
n	21	15	15	0	0	0	5	2	2
SD	14	23	36				6	10	14
Min	8	17	35				13	42	266
Max	55	104	155				32	61	295

ED_004549_00015842-00131

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for January, 2008.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	8 (5)	10 (9)							
2	8 (6)								
3	13 (7)		22 (14)						
4	16 (6)	13 (11)	25 (17)						
5	28 (6)	19 (9)	26 (10)						
6	22 (10)	16 (6)	19 (8)						
7	21 (7)	27 (81)	18 (14)						
8	15 (6)	15 (13)	23 (19)						
9	22 (8)	19 (12)	24 (16)						
10	22 (9)	17 (11)	22 (18)						
11	27 (8)	30 (18)	61 (63)						
12	24 (10)	22 (14)	44 (19)						
13	9 (5)	14 (10)	38 (15)						
14	10 (6)	13 (10)							
15									
16				16 (9)	19 (13)	18 (15)			
17				7 (4)	13 (12)	12 (14)			
18				6 (4)					
19				6 (5)					
20				7 (5)					
21				8 (4)					
22				10 (7)	18 (20)				
23				7 (5)					
24									
25				15 (5)					
26				27 (8)	22 (7)				
27				18 (9)	11 (11)				
28				13 (6)					
29				11 (7)		30 (31)			
30				7 (4)					
31				8 (4)					
Avg	18	18	29	11	17	20			
n	14	12	11	15	5	3	0	0	0
SD	7	5	13	6	4	7			
Min	8	10	18	6	11	12			
Max	28	30	61	27	22	30			

ED_004549_00015842-00132

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for February, 2008.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1				15 (5)	23 (20)	26 (19)			
2				28 (10)	26 (22)				
3				33 (5)	30 (36)	35 (28)			
4				20 (10)	19 (12)				
5									
6	7 (5)	10 (6)							
7	17 (6)	23 (18)							
8	24 (4)	23 (15)							
9	31 (11)								
10	18 (11)								
11	9 (6)								
12	11 (5)	28 (25)							
13	23 (6)								
14	14 (11)	14 (10)							
15	9 (6)								
16	20 (6)	15 (7)							
17	20 (11)	13 (14)							
18	14 (5)	12 (8)							
19									
20							10 (7)	121 (377)	133 (691)
21							20 (8)	50 (113)	109 (520)
22							31 (8)	2 (60)	62 (247)
23							46 (9)	-9 (96)	
24							49 (9)	-10 (68)	
25							40 (19)	-6 (56)	
26									
27	8 (6)	19 (65)	20 (9)						
28	18 (7)	0 (17)	28 (16)						
29	14 (9)	18 (148)	25 (14)						
Avg	16	16	24	24	25	31	33	25	102
n	16	11	3	4	4	2	6	6	3
SD	6	7	3	7	4	5	14	48	30
Min	7	0	20	15	19	26	10	-10	62
Max	31	28	28	33	30	35	49	121	133

ED_004549_00015842-00133

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for March, 2008.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	9 (5)	93 (626)	19 (11)						
2	28 (17)	16 (17)	27 (18)						
3	9 (5)	14 (16)	35 (28)						
4	14 (5)	17 (15)	40 (25)						
5	15 (6)	16 (11)	24 (9)						
6	11 (5)	17 (17)	27 (13)						
7	8 (6)	11 (15)	22 (15)						
8	13 (7)	14 (10)	26 (16)						
9	18 (6)	14 (8)	25 (9)						
10	26 (8)	16 (9)	28 (13)						
11									
12	28 (11)	14 (8)	22 (9)						
13	12 (11)	8 (10)	12 (6)						
14	6 (4)		12 (6)						
15	6 (4)	11 (11)	15 (7)						
16	9 (5)	13 (10)	24 (16)						
17									
18							20 (8)	-49 (51)	53 (23)
19							16 (20)	12 (47)	57 (96)
20							9 (5)	91 (78)	60 (34)
21							44 (61)	63 (28)	51 (23)
22							7 (4)	36 (24)	38 (14)
23							8 (6)	36 (16)	42 (19)
24							12 (6)	55 (30)	64 (24)
25									
26	9 (5)	19 (11)	18 (9)						
27	7 (4)	20 (16)	21 (16)						
28	6 (4)	20 (23)	25 (30)						
29	13 (6)	23 (19)	28 (20)						
30	14 (6)	24 (13)	25 (18)						
31	5 (4)	14 (12)	10 (8)						
Avg	13	20	23				17	35	52
n	21	20	21	0	0	0	7	7	7
SD	7	17	7				12	41	9
Min	5	8	10				7	-49	38
Max	28	93	40				44	91	64

ED_004549_00015842-00134

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for April, 2008.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	7 (5)	22 (24)	27 (41)						
2	11 (4)	30 (43)	39 (95)						
3	15 (5)	22 (13)	23 (8)						
4	16 (9)	21 (13)	19 (14)						
5	15 (6)	26 (15)	22 (9)						
6	18 (5)	38 (17)	34 (14)						
7	5 (4)	26 (17)	25 (20)						
8	6 (3)	14 (9)	13 (7)						
9	7 (4)	18 (13)	17 (9)						
10	7 (7)	12 (12)	10 (8)						
11	3 (5)	11 (11)	11 (9)						
12	4 (3)	12 (11)	16 (8)						
13	5 (4)	15 (13)	21 (14)						
14	7 (5)	21 (15)	32 (20)						
15	20 (13)	40 (26)	37 (20)						
16	24 (10)	48 (24)	46 (17)						
17	7 (5)	23 (23)	24 (23)						
18	6 (4)	14 (13)	10 (7)						
19	6 (4)	14 (11)	12 (6)						
20	13 (10)	24 (18)	23 (13)						
21	22 (7)	33 (16)	32 (15)						
22	9 (7)	18 (19)	18 (19)						
23	16 (6)	30 (16)	26 (14)						
24	15 (8)	24 (20)	27 (23)						
25	3 (3)	3 (14)	3 (12)						
26	4 (4)	12 (12)	11 (8)						
27	7 (5)	20 (15)	21 (19)						
28	5 (4)	23 (20)	16 (12)						
29									
30							31 (19)	104 (68)	123 (68)
Avg	10	22	22						
n	28	28	28	0	0	0	1	1	1
SD	6	10	10						
Min	3	3	3						
Max	24	48	46						

ED_004549_00015842-00135

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for May, 2008.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1							40 (19)	155 (96)	137 (69)
2							8 (8)	42 (18)	56 (41)
3							5 (5)	39 (21)	43 (34)
4							15 (6)	54 (24)	61 (44)
5									
6	18 (10)	33 (25)	41 (25)						
7	13 (9)	25 (21)	35 (25)						
8	12 (5)	33 (17)	55 (23)						
9	15 (10)	42 (23)	63 (29)						
10	19 (9)	46 (34)	57 (38)						
11	5 (5)	14 (13)	16 (22)						
12	9 (6)	31 (22)	27 (29)						
13	15 (10)	32 (25)	30 (33)						
14	8 (7)	19 (17)	19 (31)						
15	19 (9)	42 (24)	37 (34)						
16	22 (9)	53 (30)	56 (38)						
17	11 (10)	33 (28)	55 (58)						
18	6 (4)	29 (19)	40 (36)						
19	11 (10)	46 (34)	41 (34)						
20	8 (8)	25 (20)	26 (32)						
21	13 (14)	35 (20)	39 (40)						
22	17 (12)	39 (29)	41 (51)						
23	26 (20)	55 (45)	66 (53)						
24	22 (13)	54 (50)	46 (39)						
25	21 (9)	34 (21)	46 (44)						
26									
27	14 (12)	30 (25)	41 (48)						
28	18 (9)	42 (35)	34 (51)						
29	25 (16)	50 (50)	46 (48)						
30	11 (7)	26 (16)	27 (41)						
31	8 (5)		19 (36)						
Avg	15	36	40				17	73	74
n	25	24	25	0	0	0	4	4	4
SD	6	11	13				14	48	37
Min	5	14	16				5	39	43
Max	26	55	66				40	155	137

ED_004549_00015842-00136

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for June, 2008.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	10 (5)		20 (51)						
2									
3	10 (5)		33 (49)						
4	20 (11)		57 (41)						
5	13 (7)	33 (14)	33 (21)						
6	11 (8)	28 (17)	29 (25)						
7	15 (10)	44 (28)	56 (38)						
8									
9									
10	15 (20)	20 (11)	32 (51)						
11	10 (6)	19 (7)	23 (10)						
12	11 (10)	26 (23)	39 (39)						
13	8 (4)	24 (9)	26 (11)						
14									
15									
16									
17									
18	13 (6)	53 (36)	51 (34)						
19									
20							23 (22)	87 (58)	104 (85)
21							21 (15)	114 (78)	101 (71)
22							9 (6)	84 (111)	58 (38)
23							18 (17)	106 (77)	111 (77)
24							62 (31)	142 (79)	188 (105)
25							46 (24)	125 (65)	158 (94)
26									
27	19 (15)	49 (53)	50 (58)						
28	9 (5)	23 (30)	23 (29)						
29	7 (5)	55 (54)	49 (45)						
30									
Avg	12	34	37				30	110	120
n	14	11	14	0	0	0	6	6	6
SD	4	13	13				18	20	42
Min	7	19	20				9	84	58
Max	20	55	57				62	142	188

ED_004549_00015842-00137

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for July, 2008.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1									
2									
3									
4	32 (21)	66 (55)	80 (70)						
5	46 (19)	70 (45)	130 (76)						
6	40 (19)	69 (53)	124 (95)						
7	31 (24)	50 (63)	77 (93)						
8									
9									
10									
11	27 (18)	67 (62)	104 (86)						
12	17 (8)	51 (81)	54 (86)						
13	10 (7)	68 (65)	75 (79)						
14	31 (21)	92 (65)	116 (94)						
15	34 (19)	27 (180)	163 (87)						
16	46 (23)	45 (80)	156 (64)						
17	29 (17)	38 (38)	98 (52)						
18	10 (6)	54 (47)	87 (61)						
19	27 (27)	45 (58)	78 (88)						
20	13 (8)	45 (40)	82 (69)						
21	11 (9)	63 (51)	71 (60)						
22	10 (6)	67 (61)	71 (66)						
23	33 (23)	80 (62)	114 (91)						
24	34 (14)	80 (48)	94 (79)						
25	15 (8)	46 (48)	51 (69)						
26	32 (20)	74 (56)	98 (77)						
27	30 (13)	72 (51)	93 (71)						
28	52 (27)	113 (69)	131 (85)						
29	36 (17)	102 (61)	146 (83)						
30	41 (54)	98 (69)	143 (135)						
31	22 (20)	73 (62)	85 (78)						
Avg	28	66	101						
n	25	25	25	0	0	0	0	0	0
SD	12	21	30						
Min	10	27	51						
Max	52	113	163						

ED_004549_00015842-00138

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for August, 2008.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1									
2				12 (7)	20 (36)	35 (24)			
3				12 (6)	24 (19)	26 (12)			
4				11 (5)	25 (27)	31 (15)			
5				6 (5)	15 (39)	25 (15)			
6				6 (5)	15 (34)	19 (14)			
7				4 (4)	13 (29)	15 (10)			
8				9 (8)	16 (35)	19 (15)			
9				5 (4)	15 (33)	21 (17)			
10				5 (5)	13 (32)	12 (12)			
11				8 (6)	17 (28)	19 (15)			
12				8 (4)	15 (14)	14 (5)			
13				7 (4)	13 (38)	15 (12)			
14				7 (4)	10 (25)	11 (6)			
15				5 (4)	6 (40)	8 (9)			
16				8 (4)	15 (21)	11 (5)			
17				8 (4)	9 (18)	10 (5)			
18									
19							40 (27)	148 (130)	119 (95)
20							54 (35)	144 (112)	104 (82)
21							51 (27)	152 (106)	108 (75)
22							52 (24)	114 (91)	126 (72)
23							15 (8)	57 (51)	51 (53)
24							18 (27)	80 (60)	59 (76)
25									
26		86 (84)	57 (47)						
27		39 (36)	40 (29)						
28		20 (52)	29 (45)						
29		55 (69)	73 (72)						
30		103 (95)	156 (119)						
31		100 (64)	148 (95)						
Avg		67	84	7	15	18	38	116	94
n	0	6	6	16	16	16	6	6	6
SD		32	50	2	5	8	16	36	29
Min		20	29	4	6	8	15	57	51
Max		103	156	12	25	35	54	152	126

ED_004549_00015842-00139

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for September, 2008.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1		131 (52)	176 (62)						
2		63 (65)	108 (63)						
3	39 (46)	10 (34)	42 (64)						
4	83 (79)	36 (30)	181 (181)						
5	14 (9)	32 (24)	42 (46)						
6	8 (5)	16 (14)	20 (10)						
7	9 (6)	16 (11)	20 (11)						
8	14 (19)	22 (23)	33 (34)						
9	14 (15)	29 (27)	42 (40)						
10	22 (12)	47 (46)	49 (32)						
11	17 (13)	30 (26)	39 (35)						
12	10 (10)	27 (24)	29 (29)						
13	7 (6)	19 (14)	15 (12)						
14	6 (5)	21 (23)	16 (15)						
15	9 (8)	20 (20)	24 (21)						
16	25 (23)	70 (69)	72 (68)						
17	20 (21)								
18	35 (23)								
19	65 (75)								
20	47 (29)	85 (66)	109 (99)						
21	43 (30)	95 (79)	96 (77)						
22	37 (12)	84 (50)	91 (53)						
23	32 (18)	72 (57)	70 (53)						
24	26 (25)	15 (24)	8 (21)						
25	19 (14)	31 (34)	26 (28)						
26	33 (14)	73 (41)	75 (53)						
27	16 (12)	20 (25)	16 (20)						
28	8 (5)	13 (15)	11 (7)						
29	9 (5)	9 (17)	12 (17)						
30	7 (5)	10 (14)	13 (12)						
Avg	24	41	53						
n	28	27	27	0	0	0	0	0	0
SD	18	31	47						
Min	6	9	8						
Max	83	131	181						

ED_004549_00015842-00140

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for October, 2008.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	24 (46)		-42 (93)						
2	32 (32)		34 (63)						
3	13 (14)		34 (54)						
4	13 (10)		28 (30)						
5	12 (5)		18 (9)						
6	15 (5)		22 (7)						
7									
8									
9									
10	10 (6)	28 (18)	19 (7)						
11	21 (8)	39 (20)	37 (16)						
12	19 (4)	29 (19)	31 (12)						
13	8 (6)	11 (31)	14 (10)						
14									
15							12 (8)	54 (29)	52 (29)
16									
17									
18									
19									
20									
21									
22							19 (17)	89 (93)	55 (75)
23							22 (16)	69 (80)	60 (78)
24							14 (6)	33 (23)	36 (14)
25							12 (6)	39 (31)	30 (14)
26							11 (11)	59 (37)	36 (27)
27							7 (7)	58 (57)	43 (63)
28									
29	18 (10)	42 (36)	34 (24)						
30									
31									
Avg	17	30	21				14	57	45
n	11	5	11	0	0	0	7	7	7
SD	7	11	21				5	17	11
Min	8	11	-42				7	33	30
Max	32	42	37				22	89	60

ED_004549_00015842-00141

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for November, 2008.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	10 (7)	26 (20)	19 (13)						
2	29 (16)	54 (49)	45 (31)						
3	28 (6)	44 (18)	39 (14)						
4									
5									
6	9 (8)	12 (25)	11 (17)						
7	3 (3)	14 (19)							
8	2 (2)	15 (18)							
9	3 (3)	22 (27)							
10	6 (5)	29 (23)							
11	13 (7)	28 (18)							
12	11 (6)	15 (8)	20 (10)						
13	10 (5)	15 (7)	19 (13)						
14	4 (4)	16 (7)	13 (5)						
15	4 (3)	13 (5)	12 (6)						
16	5 (5)	17 (6)	20 (9)						
17	4 (4)	23 (14)	26 (13)						
18	18 (11)	55 (74)	48 (26)						
19									
20									
21	20 (16)	51 (38)	34 (23)						
22	23 (6)	35 (14)	32 (10)						
23									
24	10 (6)	23 (15)	19 (13)						
25	19 (17)	50 (49)	35 (35)						
26	22 (9)	51 (38)	36 (20)						
27	17 (9)	32 (23)	23 (19)						
28	17 (15)	53 (49)	32 (25)						
29									
30									
Avg	13	30	27						
n	23	23	18	0	0	0	0	0	0
SD	8	15	11						
Min	2	12	11						
Max	29	55	48						

ED_004549_00015842-00142

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for December, 2008.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1									
2	9 (4)								
3	9 (5)	31 (19)	32 (16)						
4	13 (13)	34 (18)	32 (25)						
5	10 (6)	29 (14)	27 (19)						
6	13 (10)	32 (17)	21 (7)						
7	10 (8)	35 (25)	24 (19)						
8									
9									
10									
11	9 (5)	47 (64)	48 (49)						
12	11 (6)	41 (29)	37 (26)						
13	11 (4)	17 (13)	25 (20)						
14									
15									
16									
17							18 (6)	122 (44)	117 (34)
18							29 (6)	121 (51)	95 (59)
19							17 (14)	96 (42)	68 (25)
20							38 (44)		73 (26)
21									
22									
23									
24							19 (8)		112 (30)
25							52 (48)		104 (33)
26							19 (21)		64 (40)
27							13 (6)		47 (24)
28							13 (5)		63 (24)
29							9 (5)		52 (25)
30									
31	9 (4)	39 (24)	47 (33)						
Avg	10	34	33				23	113	80
n	10	9	9	0	0	0	10	3	10
SD	1	8	9				13	12	24
Min	9	17	21				9	96	47
Max	13	47	48				52	122	117

ED_004549_00015842-00143

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for January, 2009.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	13 (8)	27 (11)	32 (13)						
2	8 (6)	38 (24)	34 (12)						
3	15 (7)	30 (18)	33 (21)						
4	10 (8)	37 (22)	31 (11)						
5	9 (5)	37 (19)	31 (11)						
6	12 (5)	38 (26)	56 (39)						
7	15 (6)	33 (13)	32 (10)						
8	11 (7)	38 (25)	27 (10)						
9	9 (6)	38 (18)	29 (10)						
10	8 (5)	37 (15)	33 (10)						
11	15 (4)	42 (17)	43 (12)						
12	18 (8)	47 (32)	40 (13)						
13									
14				5 (4)	33 (27)	28 (21)			
15				9 (5)	35 (20)	25 (42)			
16				9 (4)	28 (19)	22 (22)			
17				10 (4)	27 (20)	17 (10)			
18				9 (5)	20 (11)	19 (12)			
19				7 (5)	19 (11)	16 (9)			
20				7 (4)	17 (20)	17 (20)			
21				15 (7)	20 (16)	23 (12)			
22				33 (11)	28 (10)	32 (17)			
23				12 (15)	17 (12)	13 (13)			
24				7 (4)	27 (17)	23 (21)			
25				9 (4)	30 (18)	20 (11)			
26				14 (5)	39 (21)	34 (27)			
27									
28	26 (7)	40 (16)	42 (12)						
29	13 (10)	36 (15)	35 (9)						
30	8 (6)	36 (17)	39 (15)						
31	9 (6)	22 (12)	27 (16)						
Avg	13	36	35	11	26	22			
n	16	16	16	13	13	13	0	0	0
SD	5	6	7	7	7	6			
Min	8	22	27	5	17	13			
Max	26	47	56	33	39	34			

ED_004549_00015842-00144

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for February, 2009.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	4 (3)	25 (10)	33 (14)						
2	5 (4)	55 (21)	54 (15)						
3	5 (4)	44 (24)	54 (26)						
4	12 (5)	34 (15)	90 (59)						
5	19 (7)	36 (14)	61 (29)						
6	33 (5)	38 (12)	47 (13)						
7	21 (6)	34 (14)	32 (8)						
8	8 (5)	24 (13)	28 (14)						
9									
10	4 (4)	14 (8)	15 (8)						
11	7 (4)	34 (17)	21 (11)						
12	8 (4)	33 (15)							
13	9 (3)	33 (16)							
14	8 (4)	49 (21)							
15	9 (5)	54 (22)							
16	18 (8)	56 (30)							
17									
18							12 (7)	103 (46)	191 (70)
19							5 (5)	155 (70)	222 (79)
20							17 (10)	177 (87)	191 (54)
21							11 (13)	178 (65)	148 (82)
22							8 (5)	191 (83)	111 (36)
23							15 (8)	210 (107)	115 (48)
24									
25	16 (7)	40 (25)	44 (16)						
26	13 (9)	32 (14)	35 (16)						
27	5 (3)	50 (23)	39 (11)						
28	9 (6)	61 (26)	52 (16)						
Avg	11	39	43				11	169	163
n	19	19	14	0	0	0	6	6	6
SD	7	12	18				4	34	41
Min	4	14	15				5	103	111
Max	33	61	90				17	210	222

ED_004549_00015842-00145

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for March, 2009.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	8 (5)	61 (21)	64 (15)						
2									
3									
4	20 (7)	36 (15)	74 (26)						
5	28 (7)	37 (10)	48 (12)						
6	25 (9)	34 (12)	35 (11)						
7	9 (6)	30 (13)	32 (13)						
8	9 (5)	40 (19)	44 (18)						
9	15 (5)	37 (22)	53 (30)						
10	11 (7)	23 (13)	18 (10)						
11	11 (5)	56 (29)	40 (17)						
12	13 (6)	60 (32)	56 (27)						
13	18 (4)	41 (24)	48 (23)						
14	15 (4)	28 (16)	44 (17)						
15	20 (5)	25 (7)	54 (17)						
16	20 (7)	30 (10)	54 (23)						
17	12 (6)	32 (29)	55 (34)						
18	8 (5)	49 (37)	29 (12)						
19	7 (4)	44 (33)	39 (31)						
20	16 (7)	28 (15)	36 (14)						
21	20 (4)	34 (20)	31 (12)						
22	23 (8)	25 (6)	34 (10)						
23	18 (4)	20 (6)	29 (8)						
24	15 (9)	21 (10)	26 (13)						
25	5 (4)	18 (10)	12 (6)						
26									
27									
28	6 (4)	28 (20)	16 (13)						
29	6 (4)	26 (13)	16 (9)						
30	12 (5)	37 (29)	24 (15)						
31	9 (5)	21 (12)	18 (11)						
Avg	14	34	38						
n	27	27	27	0	0	0	0	0	0
SD	6	12	16						
Min	5	18	12						
Max	28	61	74						

ED_004549_00015842-00146

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for April, 2009.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	5 (4)	16 (11)	11 (5)						
2	6 (3)	29 (25)	13 (5)						
3	5 (4)	30 (36)	13 (7)						
4	5 (4)	22 (12)	16 (10)						
5	3 (3)	20 (19)	9 (7)						
6									
7							12 (8)	96 (72)	88 (90)
8							12 (7)	116 (124)	55 (36)
9							9 (5)	93 (57)	47 (30)
10							12 (11)	92 (69)	59 (66)
11							12 (9)	92 (70)	59 (74)
12							22 (15)	110 (74)	69 (55)
13							18 (10)	159 (166)	80 (77)
14									
15	20 (10)	80 (77)	42 (29)						
16	27 (12)	76 (74)	46 (27)						
17	34 (14)	72 (59)	53 (30)						
18	22 (16)	44 (42)	41 (34)						
19	3 (3)	13 (19)	11 (6)						
20	3 (3)	16 (19)	13 (9)						
21	7 (7)	30 (24)	20 (15)						
22	5 (3)	27 (30)	16 (11)						
23	26 (15)	51 (30)	45 (20)						
24	26 (32)	36 (28)	32 (16)						
25	3 (3)	13 (20)	12 (10)						
26	5 (4)	16 (16)	16 (10)						
27	3 (3)	8 (18)	10 (11)						
28	5 (4)	19 (23)	18 (12)						
29	8 (5)	25 (21)	22 (11)						
30	13 (9)	15 (23)	15 (15)						
Avg	11	31	22				14	108	65
n	21	21	21	0	0	0	7	7	7
SD	10	21	14				4	23	13
Min	3	8	9				9	92	47
Max	34	80	53				22	159	88

ED_004549_00015842-00147

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for May, 2009.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	7 (4)	17 (20)	13 (11)						
2	16 (7)	31 (27)	25 (17)						
3	15 (8)	31 (25)	24 (16)						
4	22 (11)	53 (37)	36 (21)						
5	13 (7)	22 (25)	21 (14)						
6	13 (7)	19 (25)	17 (12)						
7	12 (5)	27 (26)	19 (15)						
8	14 (8)	27 (28)	25 (17)						
9	4 (4)	12 (19)	13 (12)						
10	4 (4)	12 (18)	14 (10)						
11	14 (8)	34 (34)	23 (14)						
12	25 (11)	47 (31)	64 (67)						
13	11 (6)	18 (6)	21 (33)						
14	10 (6)	25 (14)	22 (7)						
15	13 (8)	30 (29)	19 (66)						
16	8 (6)	22 (12)	18 (12)						
17	16 (14)	26 (16)	34 (126)						
18	25 (12)	53 (43)	40 (34)						
19	41 (19)	120 (67)	113 (72)						
20	74 (51)	196 (110)	196 (108)						
21	15 (10)	38 (30)	32 (33)						
22	21 (12)	72 (58)	59 (44)						
23	14 (7)	41 (30)	41 (31)						
24	68 (86)	75 (66)	144 (171)						
25	45 (27)	76 (55)	77 (53)						
26	17 (10)	29 (19)	30 (21)						
27	5 (4)	14 (13)	10 (6)						
28	12 (7)	43 (46)	27 (30)						
29	19 (28)	38 (37)	32 (34)						
30	11 (6)	18 (19)	14 (17)						
31	25 (14)	82 (69)	69 (61)						
Avg	20	44	42						
n	31	31	31	0	0	0	0	0	0
SD	16	37	41						
Min	4	12	10						
Max	74	196	196						

ED_004549_00015842-00148

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for June, 2009.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	12 (8)	35 (33)	26 (27)						
2	16 (13)	38 (33)	30 (25)						
3									
4							36 (21)	184 (140)	113 (88)
5							24 (12)	124 (92)	75 (54)
6							6 (6)	39 (34)	29 (25)
7							5 (4)	34 (20)	21 (8)
8									
9	8 (5)	20 (15)	16 (6)						
10	7 (5)	20 (25)	15 (8)						
11	9 (5)	39 (32)	23 (17)						
12	13 (7)	52 (47)	39 (32)						
13	16 (9)	70 (61)	65 (62)						
14	19 (17)	95 (99)	79 (57)						
15	40 (27)	137 (107)	110 (75)						
16	27 (20)	119 (108)	74 (74)						
17	24 (12)	83 (66)	76 (60)						
18	12 (7)	42 (50)	32 (40)						
19	13 (6)	63 (52)	54 (44)						
20	21 (13)	102 (68)	89 (62)						
21	24 (15)	98 (71)	81 (58)						
22	32 (15)	91 (51)	105 (54)						
23	34 (22)	114 (88)	112 (85)						
24	29 (21)	141 (76)	115 (69)						
25	13 (7)	97 (66)	75 (61)						
26	50 (39)	114 (101)	125 (108)						
27	50 (59)	85 (75)	80 (67)						
28	15 (8)	69 (69)	60 (63)						
29	6 (4)	32 (38)	9 (24)						
30	5 (4)	13 (30)	5 (20)						
Avg	21	74	62				18	95	59
n	24	24	24	0	0	0	4	4	4
SD	13	37	36				13	62	37
Min	5	13	5				5	34	21
Max	50	141	125				36	184	113

ED_004549_00015842-00149

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for July, 2009.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	4 (3)	13 (33)	6 (24)						
2	9 (5)	62 (51)	51 (49)						
3	17 (10)	96 (79)	78 (63)						
4	14 (11)	54 (46)	40 (35)						
5	12 (5)	71 (51)	61 (43)						
6									
7				7 (5)	27 (20)	22 (16)			
8				7 (5)	22 (14)	19 (10)			
9				10 (4)	26 (15)	25 (12)			
10				6 (5)	25 (17)	21 (14)			
11				4 (4)	15 (14)	9 (10)			
12				4 (4)	19 (16)	11 (10)			
13				5 (4)	24 (22)	15 (16)			
14				11 (7)	30 (17)	24 (14)			
15				4 (4)	15 (14)	12 (11)			
16				3 (3)	11 (11)	7 (6)			
17				2 (3)	10 (8)	7 (5)			
18				4 (3)	9 (8)	8 (6)			
19				5 (4)	13 (12)	10 (9)			
20				8 (6)	24 (15)	22 (12)			
21									
22	27 (57)	49 (50)	44 (48)						
23	17 (10)	79 (58)	83 (60)						
24	12 (6)	47 (39)	42 (37)						
25	9 (7)	43 (38)	33 (30)						
26	9 (5)	63 (49)	58 (45)						
27	18 (13)	72 (59)	62 (52)						
28	8 (5)	35 (36)	21 (22)						
29	20 (11)	60 (57)	35 (27)						
30	9 (6)	20 (17)	18 (14)						
31	16 (12)	69 (54)	60 (52)						
Avg	13	55	46	6	19	15			
n	15	15	15	14	14	14	0	0	0
SD	6	21	21	2	7	6			
Min	4	13	6	2	9	7			
Max	27	96	83	11	30	25			

ED_004549_00015842-00150

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for August, 2009.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	6 (4)	19 (19)	18 (18)						
2	20 (17)	52 (43)	68 (53)						
3	13 (6)	50 (39)	55 (40)						
4									
5							15 (10)	101 (58)	63 (37)
6							14 (8)	106 (62)	77 (59)
7							16 (11)	45 (39)	32 (18)
8							25 (17)	70 (33)	72 (48)
9							9 (7)	81 (40)	65 (39)
10							12 (4)	88 (53)	62 (40)
11									
12	39 (19)	121 (67)	123 (72)						
13	32 (20)	94 (71)	91 (63)						
14	32 (15)	84 (48)	115 (60)						
15	38 (10)	105 (37)	111 (44)						
16	15 (9)	67 (38)	62 (39)						
17	16 (12)	49 (47)	59 (56)						
18	14 (9)	66 (58)	50 (49)						
19	11 (7)	29 (31)	26 (29)						
20	5 (3)	15 (13)	14 (19)						
21	6 (4)	21 (24)	13 (22)						
22	6 (3)	33 (35)	24 (29)						
23	15 (10)	59 (57)	63 (64)						
24	24 (14)	87 (64)	79 (56)						
25	11 (6)	55 (49)	51 (47)						
26	9 (5)	62 (63)	50 (52)						
27	39 (45)	74 (69)	109 (118)						
28	9 (5)	35 (45)	27 (42)						
29	4 (3)	13 (32)	8 (22)						
30	39 (145)	16 (36)	11 (33)						
31	18 (21)	55 (75)	31 (40)						
Avg	18	55	55				15	82	62
n	23	23	23	0	0	0	6	6	6
SD	12	29	35				5	21	14
Min	4	13	8				9	45	32
Max	39	121	123				25	106	77

ED_004549_00015842-00151

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for September, 2009.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1	19 (12)	61 (52)	35 (32)						
2	35 (32)	70 (60)	63 (68)						
3	68 (72)	73 (70)	95 (123)						
4	63 (39)	79 (80)	68 (70)						
5	47 (35)	102 (90)	78 (71)						
6	44 (35)	97 (90)	83 (74)						
7	60 (39)								
8	51 (34)	103 (77)	111 (79)						
9	55 (37)	101 (64)	104 (79)						
10	60 (38)	102 (64)	112 (74)						
11	54 (31)	111 (73)	112 (76)						
12	62 (49)	101 (64)	132 (116)						
13	59 (56)	113 (99)	120 (102)						
14	75 (71)	120 (98)	127 (150)						
15									
16							109 (92)	142 (116)	266 (256)
17							69 (63)	148 (117)	88 (73)
18							84 (63)	184 (140)	193 (197)
19							62 (43)	199 (185)	138 (150)
20							47 (35)	166 (154)	100 (81)
21							42 (22)	140 (106)	88 (65)
22							19 (13)	30 (16)	59 (57)
23							14 (5)	62 (42)	51 (22)
24							14 (8)	99 (85)	70 (52)
25							17 (18)	39 (24)	26 (10)
26							22 (20)	52 (40)	30 (17)
27							12 (13)	50 (30)	34 (18)
28							8 (4)	50 (38)	31 (36)
29							3 (3)	47 (57)	32 (60)
30							9 (9)	73 (43)	34 (31)
Avg	54	95	95				35	99	83
n	14	13	13	0	0	0	15	15	15
SD	14	17	27				31	57	67
Min	19	61	35				3	30	26
Max	75	120	132				109	199	266

ED_004549_00015842-00152

Table F4. Daily means (SD) of particulate matter concentrations at Site WI5B for October, 2009.

Day	PM_{10} Concentration, $\mu g \cdot dsm^{-3}$			$PM_{2.5}$ Concentration, $\mu g \cdot dsm^{-3}$			TSP Concentration, $\mu g \cdot dsm^{-3}$		
	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2	Inlet	Barn 1	Barn 2
1							10 (8)	46 (64)	27 (25)
2							3 (2)	48 (52)	16 (9)
3							3 (3)	28 (21)	16 (4)
4							3 (3)	29 (17)	16 (5)
5							6 (4)	43 (46)	23 (11)
6							3 (3)	34 (22)	15 (5)
7							8 (5)	39 (25)	24 (9)
8							5 (4)	42 (34)	26 (19)
9							6 (4)	42 (43)	31 (32)
10							29 (94)	47 (36)	33 (28)
11							7 (4)	54 (37)	73 (420)
12							6 (4)	55 (54)	33 (16)
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
Avg							7	42	28
n	0	0	0	0	0	0	12	12	12
SD							7	8	15
Min							3	28	15
Max							29	55	73

ED_004549_00015842-00153

Table F5. PM10 emissions.

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for September, 2007.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12	151.0 (472.0)	58.0 (181.0)	716 (2230)	509 (1590)	315.0 (542.0)	98.0 (169.0)	886 (1530)	630 (1090)
13	38.1 (164.0)	14.6 (63.0)	181 (778)	128 (553)	198.0 (298.0)	61.7 (93.0)	558 (841)	397 (598)
14	-9.1 (84.2)	-3.5 (32.3)	-43 (399)	-31 (284)				
15	25.7 (155.0)	9.9 (59.6)	122 (736)	87 (523)	154.0 (204.0)	48.0 (63.5)	434 (574)	308 (408)
16								
17								
18	248.0 (1070.0)	95.1 (411.0)	1170 (5070)	834 (3600)	746.0 (1550.0)	233.0 (483.0)	2100 (4360)	1500 (3100)
19	-18.0 (114.0)	-6.9 (43.7)	-85 (539)	-61 (383)	12.9 (180.0)	4.0 (56.2)	36 (508)	26 (362)
20	319.0 (687.0)	123.0 (264.0)	1510 (3260)	1080 (2320)	646.0 (1100.0)	201.0 (344.0)	1820 (3110)	1290 (2210)
21								
22	195.0 (492.0)	75.0 (189.0)	926 (2330)	659 (1660)	445.0 (841.0)	139.0 (262.0)	1250 (2370)	891 (1680)
23	941.0 (1140.0)	361.0 (438.0)	4460 (5400)	3170 (3840)	1910.0 (2050.0)	594.0 (637.0)	5370 (5760)	3820 (4100)
24	442.0 (1430.0)	170.0 (550.0)	2090 (6790)	1490 (4830)	1400.0 (2190.0)	435.0 (684.0)	3930 (6180)	2800 (4400)
25	-84.5 (152.0)	-32.4 (58.5)	-400 (722)	-285 (514)	-93.6 (207.0)	-29.2 (64.4)	-264 (582)	-188 (414)
26	0.6 (170.0)	0.2 (65.3)	3 (806)	2 (573)	36.2 (238.0)	11.3 (74.1)	102 (670)	73 (476)
27	118.0 (258.0)	45.2 (99.1)	558 (1220)	396 (870)	66.4 (308.0)	20.7 (96.1)	187 (869)	133 (618)
28	22.8 (206.0)	8.8 (79.0)	108 (975)	77 (694)	82.4 (303.0)	25.7 (94.4)	232 (854)	165 (607)
29	6.6 (155.0)	2.5 (59.5)	31 (735)	22 (522)	110.0 (166.0)	34.4 (51.7)	311 (467)	221 (332)
30	-32.2 (252.0)	-12.4 (96.8)	-153 (1190)	-109 (849)	19.2 (335.0)	6.0 (104.0)	54 (943)	38 (671)
Avg	148.0	56.7	700	498	403.0	125.0	1130	807
n	16	16	16	16	15	15	15	15
SD	248.0	95.1	1170	834	549.0	171.0	1550	1100
Min	-84.5	-32.4	-400	-285	-93.6	-29.2	-264	-188
Max	941.0	361.0	4460	3170	1910.0	594.0	5370	3820

ED_004549_00015842-00154

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for October, 2007.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	-36.3 (126.0)	-13.9 (48.3)	-172 (596)	-122 (424)				
2	-104.0 (273.0)	-39.8 (105.0)	-491 (1290)	-349 (920)	-61.3 (252.0)	-19.1 (78.5)	-173 (709)	-123 (505)
3	109.0 (344.0)	41.8 (132.0)	516 (1630)	367 (1160)	449.0 (767.0)	140.0 (239.0)	1260 (2160)	899 (1540)
4	270.0 (634.0)	104.0 (243.0)	1280 (3000)	910 (2140)	903.0 (1400.0)	281.0 (436.0)	2540 (3940)	1810 (2800)
5								
6	782.0 (1100.0)	300.0 (424.0)	3710 (5230)	2630 (3720)	3300.0 (2210.0)	1030.0 (688.0)	9300 (6220)	6620 (4420)
7	581.0 (838.0)	223.0 (322.0)	2750 (3970)	1960 (2820)	2600.0 (1470.0)	811.0 (457.0)	7340 (4130)	5220 (2940)
8								
9	-24.0 (148.0)	-9.2 (57.0)	-114 (703)	-81 (500)	60.0 (275.0)	18.7 (85.5)	169 (773)	120 (550)
10	13.0 (161.0)	5.0 (61.7)	61 (761)	44 (541)				
11								
12	23.5 (75.3)	9.0 (28.9)	111 (357)	79 (254)	167.0 (155.0)	51.9 (48.2)	469 (436)	334 (310)
13	24.4 (108.0)	9.4 (41.4)	116 (511)	82 (364)	157.0 (186.0)	48.9 (58.1)	442 (525)	314 (373)
14	40.2 (86.6)	15.4 (33.2)	190 (410)	135 (292)	95.1 (164.0)	29.6 (51.1)	268 (462)	190 (328)
15	16.9 (70.3)	6.5 (27.0)	80 (333)	57 (237)	56.7 (81.9)	17.7 (25.5)	160 (231)	114 (164)
16	-4.1 (58.1)	-1.6 (22.3)	-19 (275)	-14 (196)	45.5 (88.4)	14.2 (27.5)	128 (249)	91 (177)
17	-7.9 (71.3)	-3.0 (27.4)	-37 (338)	-27 (240)	85.8 (135.0)	26.7 (42.0)	242 (379)	172 (270)
18	-25.2 (99.7)	-9.7 (38.3)	-119 (472)	-85 (336)	2.2 (114.0)	0.7 (35.6)	6 (322)	4 (229)
19	86.1 (414.0)	33.1 (159.0)	408 (1960)	290 (1400)	98.5 (62.2)	30.7 (19.4)	278 (175)	197 (125)
20	52.7 (111.0)	20.3 (42.5)	250 (525)	178 (373)	139.0 (78.0)	43.4 (24.3)	392 (220)	279 (156)
21								
22	42.1 (102.0)	16.2 (39.1)	199 (483)	142 (343)	92.9 (103.0)	29.0 (32.1)	262 (290)	186 (206)
23	39.4 (83.7)	15.1 (32.1)	187 (397)	133 (282)	146.0 (120.0)	45.4 (37.5)	411 (339)	292 (241)
24	54.3 (79.0)	20.9 (30.3)	257 (374)	183 (266)	136.0 (139.0)	42.3 (43.3)	382 (392)	272 (279)
25	48.2 (80.5)	18.5 (30.9)	228 (381)	162 (271)	136.0 (128.0)	42.4 (39.8)	384 (360)	273 (256)
26	40.8 (144.0)	15.7 (55.4)	193 (684)	137 (486)	92.8 (155.0)	28.9 (48.2)	261 (436)	186 (310)
27	51.7 (77.3)	19.9 (29.7)	245 (366)	174 (261)	140.0 (117.0)	43.5 (36.5)	393 (330)	280 (235)
28	-5.3 (79.4)	-2.0 (30.5)	-25 (376)	-18 (268)	124.0 (110.0)	38.6 (34.3)	349 (310)	248 (220)
29								
30								
31								
Avg	86.2	33.1	408	291	408.0	127.0	1150	817
n	24	24	24	24	22	22	22	22
SD	193.0	74.2	915	651	833.0	260.0	2350	1670
Min	-104.0	-39.8	-491	-349	-61.3	-19.1	-173	-123
Max	782.0	300.0	3710	2630	3300.0	1030.0	9300	6620

ED_004549_00015842-00155

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for November, 2007.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16	-1.6 (32.7)	-0.6 (12.6)	-8 (155)	-6 (110)	46.4 (53.0)	14.4 (16.5)	131 (149)	93 (106)
17	10.6 (35.3)	4.1 (13.6)	50 (167)	36 (119)	37.8 (38.9)	11.8 (12.1)	107 (110)	76 (78)
18	3.8 (31.3)	1.5 (12.0)	18 (148)	13 (106)	43.9 (56.2)	13.7 (17.5)	124 (158)	88 (112)
19	-41.6 (109.0)	-16.0 (42.0)	-197 (519)	-140 (369)	2.6 (140.0)	0.8 (43.7)	7 (395)	5 (281)
20	59.3 (136.0)	22.8 (52.3)	281 (646)	200 (459)	105.0 (114.0)	32.6 (35.4)	295 (320)	210 (228)
21	65.8 (43.7)	25.3 (16.8)	312 (207)	222 (147)				
22	47.7 (24.2)	18.3 (9.3)	226 (115)	161 (82)				
23	42.1 (41.9)	16.2 (16.1)	200 (199)	142 (141)	121.0 (68.1)	37.8 (21.2)	342 (192)	243 (136)
24	25.7 (40.5)	9.9 (15.5)	122 (192)	87 (136)	96.6 (49.1)	30.1 (15.3)	272 (138)	193 (98)
25	22.3 (65.4)	8.6 (25.1)	106 (310)	75 (220)	88.7 (63.4)	27.6 (19.8)	250 (179)	178 (127)
26	56.8 (86.5)	21.8 (33.2)	269 (410)	191 (292)	140.0 (91.7)	43.5 (28.6)	394 (258)	280 (184)
27	133.0 (214.0)	51.0 (82.2)	629 (1010)	447 (721)	241.0 (210.0)	75.2 (65.5)	680 (593)	484 (421)
28	68.9 (92.1)	26.5 (35.4)	327 (436)	232 (310)	237.0 (204.0)	74.0 (63.6)	669 (575)	476 (409)
29	67.2 (64.1)	25.8 (24.6)	318 (304)	226 (216)	254.0 (400.0)	79.1 (125.0)	715 (1130)	508 (801)
30								
Avg	40.0	15.4	189	135	118.0	36.7	332	236
n	14	14	14	14	12	12	12	12
SD	40.2	15.4	191	136	81.8	25.5	230	164
Min	-41.6	-16.0	-197	-140	2.6	0.8	7	5
Max	133.0	51.0	629	447	254.0	79.1	715	508

ED_004549_00015842-00156

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for December, 2007.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	-30.3 (254.0)	-11.6 (97.6)	-144 (1200)	-102 (857)	264.0 (251.0)	82.2 (78.1)	743 (706)	528 (502)
2	37.7 (85.2)	14.5 (32.7)	179 (404)	127 (287)	198.0 (93.8)	61.6 (29.2)	557 (264)	396 (188)
3								
4	18.3 (33.8)	7.0 (13.0)	87 (160)	62 (114)	107.0 (84.0)	33.2 (26.2)	301 (237)	214 (168)
5								
6	93.5 (450.0)	35.9 (173.0)	443 (2130)	315 (1520)	125.0 (79.9)	38.9 (24.9)	351 (225)	250 (160)
7	60.0 (160.0)	23.0 (61.3)	284 (756)	202 (538)	112.0 (96.6)	34.9 (30.1)	315 (272)	224 (193)
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18	14.4 (50.7)	5.5 (19.5)	68 (240)	48 (171)	99.1 (208.0)	30.9 (64.9)	279 (587)	199 (417)
19	47.3 (184.0)	18.2 (70.8)	224 (874)	159 (621)	260.0 (525.0)	81.0 (164.0)	732 (1480)	521 (1050)
20					348.0 (410.0)	108.0 (128.0)	979 (1150)	696 (821)
21	216.0 (1040.0)	82.9 (399.0)	1020 (4920)	728 (3500)	302.0 (477.0)	94.1 (149.0)	851 (1340)	605 (956)
22	20.1 (130.0)	7.7 (50.1)	95 (618)	68 (440)	174.0 (345.0)	54.2 (108.0)	490 (973)	349 (692)
23								
24								
25								
26	23.9 (94.7)	9.2 (36.4)	113 (449)	81 (319)				
27					252.0 (203.0)	78.4 (63.1)	709 (571)	504 (406)
28	55.1 (103.0)	21.2 (39.7)	261 (490)	186 (348)	304.0 (457.0)	94.7 (142.0)	856 (1290)	609 (916)
29	12.4 (34.7)	4.8 (13.3)	59 (164)	42 (117)	87.6 (92.4)	27.3 (28.8)	247 (260)	175 (185)
30	-2.8 (39.2)	-1.1 (15.1)	-13 (186)	-10 (132)	18.6 (48.7)	5.8 (15.2)	52 (137)	37 (98)
31	13.2 (78.3)	5.1 (30.1)	63 (371)	45 (264)	22.8 (92.2)	7.1 (28.7)	64 (260)	46 (185)
Avg	41.3	15.9	196	139	178.0	55.5	502	357
n	14	14	14	14	15	15	15	15
SD	56.4	21.7	267	190	102.0	31.8	287	204
Min	-30.3	-11.6	-144	-102	18.6	5.8	52	37
Max	216.0	82.9	1020	728	348.0	108.0	979	696

ED_004549_00015842-00157

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for January, 2008.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	7.9 (33.2)	3.0 (12.7)	38 (157)	27 (112)				
2								
3					23.8 (42.9)	7.4 (13.4)	67 (121)	48 (86)
4	-7.7 (35.8)	-3.0 (13.8)	-37 (170)	-26 (121)	25.2 (51.5)	7.9 (16.0)	71 (145)	51 (103)
5	-24.4 (29.9)	-9.4 (11.5)	-115 (142)	-82 (101)	-5.9 (34.7)	-1.8 (10.8)	-17 (98)	-12 (70)
6	-17.7 (32.6)	-6.8 (12.5)	-84 (155)	-60 (110)	-10.8 (62.2)	-3.4 (19.4)	-30 (175)	-22 (125)
7	16.9 (256.0)	6.5 (98.3)	80 (1210)	57 (863)	-9.5 (49.0)	-3.0 (15.3)	-27 (138)	-19 (98)
8	0.1 (36.9)	0.0 (14.2)	0 (175)	0 (124)				
9	-7.4 (36.0)	-2.8 (13.8)	-35 (171)	-25 (121)	4.7 (47.3)	1.5 (14.7)	13 (133)	10 (95)
10	-21.2 (52.7)	-8.1 (20.3)	-100 (250)	-71 (178)	1.1 (52.7)	0.3 (16.4)	3 (148)	2 (106)
11	5.7 (44.5)	2.2 (17.1)	27 (211)	19 (150)	97.6 (177.0)	30.4 (55.0)	275 (497)	196 (354)
12	-6.2 (25.5)	-2.4 (9.8)	-29 (121)	-21 (86)	57.4 (46.1)	17.9 (14.4)	162 (130)	115 (92)
13	16.6 (34.2)	6.4 (13.1)	79 (162)	56 (115)	84.6 (46.6)	26.4 (14.5)	238 (131)	170 (93)
14	8.3 (34.3)	3.2 (13.2)	39 (162)	28 (116)				
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
Avg	-2.4	-0.9	-12	-8	26.8	8.4	76	54
n	12	12	12	12	10	10	10	10
SD	13.4	5.2	64	45	37.8	11.8	106	76
Min	-24.4	-9.4	-115	-82	-10.8	-3.4	-30	-22
Max	16.9	6.5	80	57	97.6	30.4	275	196

ED_004549_00015842-00158

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for February, 2008.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6	10.3 (35.2)	4.0 (13.5)	49 (167)	35 (119)				
7	15.2 (55.9)	5.8 (21.5)	72 (265)	51 (189)				
8	-5.0 (84.9)	-1.9 (32.6)	-24 (402)	-17 (286)				
9								
10								
11								
12	53.6 (93.1)	20.6 (35.7)	254 (441)	181 (314)				
13	-10.7 (32.2)	-4.1 (12.4)	-51 (153)	-36 (109)				
14	-7.4 (23.1)	-2.8 (8.9)	-35 (110)	-25 (78)				
15								
16	-19.1 (36.2)	-7.3 (13.9)	-90 (172)	-64 (122)				
17	-30.4 (68.2)	-11.7 (26.2)	-144 (323)	-102 (230)				
18	-10.4 (26.6)	-4.0 (10.2)	-50 (126)	-35 (90)				
19								
20								
21								
22								
23								
24								
25								
26								
27	43.4 (222.0)	16.7 (85.2)	206 (1050)	146 (748)	32.7 (27.4)	10.2 (8.5)	92 (77)	66 (55)
28	-86.5 (92.5)	-33.2 (35.5)	-410 (438)	-292 (312)	32.2 (73.1)	10.0 (22.8)	91 (206)	65 (146)
29	38.7 (845.0)	14.9 (324.0)	183 (4000)	130 (2850)	45.5 (50.7)	14.2 (15.8)	128 (143)	91 (102)
Avg	-0.7	-0.3	-3	-2	36.8	11.5	104	74
n	12	12	12	12	3	3	3	3
SD	36.1	13.9	171	122	6.2	1.9	17	12
Min	-86.5	-33.2	-410	-292	32.2	10.0	91	65
Max	53.6	20.6	254	181	45.5	14.2	128	91

ED_004549_00015842-00159

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for March, 2008.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	479.0 (3680.0)	184.0 (1410.0)	2270 (17400)	1610 (12400)	33.7 (40.4)	10.5 (12.6)	95 (114)	68 (81)
2	-68.7 (137.0)	-26.4 (52.5)	-326 (648)	-232 (461)				
3	15.1 (48.3)	5.8 (18.5)	71 (229)	51 (163)	76.3 (86.3)	23.8 (26.9)	215 (243)	153 (173)
4	12.2 (58.2)	4.7 (22.3)	58 (276)	41 (196)	84.6 (74.8)	26.3 (23.3)	238 (211)	169 (150)
5	3.1 (42.8)	1.2 (16.4)	15 (203)	10 (144)	25.8 (34.0)	8.0 (10.6)	73 (96)	52 (68)
6	16.1 (51.6)	6.2 (19.8)	76 (244)	54 (174)	49.4 (46.0)	15.4 (14.3)	139 (130)	99 (92)
7	8.2 (45.6)	3.2 (17.5)	39 (216)	28 (154)	40.4 (49.7)	12.6 (15.5)	114 (140)	81 (100)
8	5.1 (40.3)	2.0 (15.5)	24 (191)	17 (136)	39.8 (53.6)	12.4 (16.7)	112 (151)	80 (107)
9	-15.8 (38.6)	-6.1 (14.8)	-75 (183)	-53 (130)	21.5 (31.4)	6.7 (9.8)	61 (88)	43 (63)
10	-37.2 (33.7)	-14.3 (12.9)	-176 (160)	-125 (114)	9.3 (38.9)	2.9 (12.1)	26 (109)	19 (78)
11								
12	-91.7 (86.8)	-35.2 (33.3)	-435 (411)	-309 (292)	-43.5 (89.0)	-13.6 (27.7)	-123 (251)	-87 (178)
13	-31.0 (84.4)	-11.9 (32.4)	-147 (400)	-104 (284)	-5.5 (68.3)	-1.7 (21.3)	-16 (192)	-11 (137)
14	76.9 (338.0)	29.5 (130.0)	364 (1600)	259 (1140)				
15	26.4 (65.5)	10.2 (25.2)	125 (311)	89 (221)				
16	15.1 (53.4)	5.8 (20.5)	72 (253)	51 (180)	75.3 (96.2)	23.4 (30.0)	212 (271)	151 (193)
17								
18								
19								
20								
21								
22								
23								
24								
25								
26	62.1 (77.3)	23.9 (29.7)	294 (366)	209 (260)	60.2 (60.7)	18.8 (18.9)	170 (171)	121 (122)
27	79.6 (97.1)	30.6 (37.3)	377 (460)	268 (327)	84.6 (99.8)	26.3 (31.1)	238 (281)	169 (200)
28	74.8 (126.0)	28.7 (48.3)	354 (597)	252 (424)	108.0 (178.0)	33.7 (55.4)	305 (501)	217 (356)
29	63.0 (118.0)	24.2 (45.4)	299 (560)	212 (398)	93.2 (122.0)	29.0 (38.1)	262 (345)	187 (245)
30	69.1 (103.0)	26.5 (39.5)	328 (488)	233 (347)	93.9 (142.0)	29.3 (44.1)	265 (399)	188 (284)
31	55.6 (73.0)	21.4 (28.0)	263 (346)	187 (246)				
Avg	38.9	14.9	184	131	49.8	15.5	140	100
n	21	21	21	21	17	17	17	17
SD	109.0	41.8	516	367	39.4	12.3	111	79
Min	-91.7	-35.2	-435	-309	-43.5	-13.6	-123	-87
Max	479.0	184.0	2270	1610	108.0	33.7	305	217

ED_004549_00015842-00160

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for April, 2008.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	91.3 (161.0)	35.1 (62.0)	433 (765)	308 (544)				
2	89.9 (196.0)	34.5 (75.1)	426 (927)	303 (659)	129.0 (413.0)	40.1 (129.0)	362 (1160)	258 (827)
3	56.4 (105.0)	21.7 (40.1)	267 (495)	190 (352)	68.3 (77.6)	21.3 (24.2)	192 (219)	137 (156)
4	39.3 (124.0)	15.1 (47.8)	186 (590)	132 (420)	26.3 (116.0)	8.2 (36.2)	74 (327)	53 (233)
5	117.0 (170.0)	45.0 (65.1)	555 (804)	395 (572)	84.3 (110.0)	26.3 (34.4)	237 (311)	169 (221)
6	229.0 (188.0)	87.9 (72.1)	1090 (890)	772 (633)	180.0 (143.0)	56.0 (44.5)	507 (402)	360 (286)
7	142.0 (111.0)	54.4 (42.8)	672 (528)	478 (376)	148.0 (154.0)	46.1 (48.0)	417 (434)	297 (309)
8	50.5 (65.2)	19.4 (25.1)	239 (309)	170 (220)				
9	70.1 (85.7)	26.9 (32.9)	332 (406)	236 (289)				
10	33.1 (81.7)	12.7 (31.4)	157 (387)	111 (275)	23.3 (70.9)	7.3 (22.1)	66 (200)	47 (142)
11	47.1 (74.3)	18.1 (28.5)	223 (352)	159 (250)				
12	48.9 (67.6)	18.8 (26.0)	232 (320)	165 (228)				
13	62.6 (85.8)	24.0 (32.9)	296 (406)	211 (289)				
14	116.0 (156.0)	44.5 (60.0)	549 (741)	391 (527)	216.0 (248.0)	67.4 (77.1)	609 (697)	433 (496)
15	204.0 (208.0)	78.4 (79.8)	967 (985)	688 (700)	187.0 (158.0)	58.3 (49.4)	527 (446)	375 (317)
16	349.0 (288.0)	134.0 (111.0)	1650 (1370)	1180 (972)	351.0 (234.0)	109.0 (72.7)	987 (658)	702 (468)
17	118.0 (185.0)	45.2 (71.2)	558 (879)	397 (625)	134.0 (182.0)	41.9 (56.6)	379 (512)	269 (364)
18	56.0 (86.0)	21.5 (33.0)	265 (408)	189 (290)				
19	66.1 (95.9)	25.4 (36.8)	313 (454)	223 (323)				
20	123.0 (228.0)	47.3 (87.4)	584 (1080)	415 (767)	112.0 (175.0)	35.0 (54.6)	316 (494)	225 (351)
21	222.0 (306.0)	85.2 (117.0)	1050 (1450)	748 (1030)	195.0 (249.0)	60.8 (77.5)	550 (701)	391 (499)
22	92.0 (196.0)	35.3 (75.4)	436 (930)	310 (661)				
23	216.0 (282.0)	82.8 (108.0)	1020 (1340)	726 (952)	124.0 (198.0)	38.6 (61.7)	349 (558)	248 (397)
24	99.4 (189.0)	38.2 (72.5)	471 (895)	335 (637)	160.0 (243.0)	49.8 (75.7)	451 (684)	320 (487)
25	3.0 (154.0)	1.1 (59.2)	14 (731)	10 (520)	9.4 (167.0)	2.9 (52.1)	27 (471)	19 (335)
26	52.0 (77.9)	20.0 (29.9)	246 (369)	175 (262)	50.1 (57.6)	15.6 (17.9)	141 (162)	100 (115)
27	86.2 (122.0)	33.1 (47.0)	409 (580)	291 (413)	113.0 (142.0)	35.4 (44.2)	320 (400)	227 (284)
28	112.0 (133.0)	43.1 (51.1)	532 (631)	378 (449)				
29								
30								
Avg	107.0	41.0	506	360	128.0	40.0	362	257
n	28	28	28	28	18	18	18	18
SD	74.4	28.6	353	251	80.6	25.1	227	161
Min	3.0	1.1	14	10	9.4	2.9	27	19
Max	349.0	134.0	1650	1180	351.0	109.0	987	702

ED_004549_00015842-00161

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for May, 2008.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6	234.0 (395.0)	89.8 (152.0)	1110 (1870)	788 (1330)	400.0 (443.0)	124.0 (138.0)	1130 (1250)	800 (887)
7	139.0 (204.0)	53.4 (78.3)	658 (967)	468 (688)				
8	215.0 (204.0)	82.5 (78.2)	1020 (965)	724 (686)	518.0 (347.0)	161.0 (108.0)	1460 (977)	1040 (695)
9	284.0 (253.0)	109.0 (97.3)	1350 (1200)	958 (854)	570.0 (363.0)	178.0 (113.0)	1610 (1020)	1140 (727)
10	317.0 (347.0)	122.0 (133.0)	1500 (1640)	1070 (1170)	498.0 (418.0)	155.0 (130.0)	1400 (1180)	998 (838)
11	81.1 (141.0)	31.1 (54.3)	384 (670)	273 (476)				
12	239.0 (246.0)	91.9 (94.4)	1130 (1160)	807 (828)	210.0 (367.0)	65.5 (114.0)	592 (1030)	421 (735)
13	198.0 (230.0)	76.0 (88.2)	938 (1090)	667 (775)	237.0 (425.0)	73.8 (133.0)	667 (1200)	474 (852)
14	128.0 (187.0)	49.0 (71.9)	605 (888)	430 (631)				
15	333.0 (364.0)	128.0 (140.0)	1580 (1730)	1120 (1230)	290.0 (627.0)	90.3 (195.0)	816 (1760)	581 (1260)
16	521.0 (500.0)	200.0 (192.0)	2470 (2370)	1760 (1680)	691.0 (995.0)	215.0 (310.0)	1950 (2800)	1390 (1990)
17	298.0 (337.0)	114.0 (130.0)	1410 (1600)	1000 (1140)				
18	233.0 (216.0)	89.5 (83.0)	1110 (1020)	786 (728)				
19	321.0 (343.0)	123.0 (132.0)	1520 (1620)	1080 (1150)	287.0 (367.0)	89.6 (114.0)	810 (1030)	576 (735)
20	172.0 (195.0)	66.2 (74.7)	817 (922)	581 (656)				
21	227.0 (276.0)	87.1 (106.0)	1070 (1310)	764 (931)	287.0 (507.0)	89.3 (158.0)	808 (1430)	574 (1020)
22	294.0 (401.0)	113.0 (154.0)	1390 (1900)	991 (1350)	390.0 (888.0)	122.0 (277.0)	1100 (2500)	782 (1780)
23	382.0 (604.0)	147.0 (232.0)	1810 (2860)	1290 (2030)	595.0 (825.0)	185.0 (257.0)	1670 (2320)	1190 (1650)
24	540.0 (805.0)	208.0 (309.0)	2560 (3810)	1820 (2710)	369.0 (702.0)	115.0 (219.0)	1040 (1980)	739 (1410)
25	219.0 (435.0)	84.2 (167.0)	1040 (2060)	739 (1470)				
26								
27	177.0 (309.0)	68.1 (119.0)	841 (1470)	598 (1040)				
28	326.0 (515.0)	125.0 (198.0)	1540 (2440)	1100 (1740)	199.0 (855.0)	61.9 (266.0)	559 (2410)	398 (1710)
29	304.0 (555.0)	117.0 (213.0)	1440 (2630)	1030 (1870)	294.0 (641.0)	91.7 (200.0)	829 (1800)	590 (1280)
30	211.0 (284.0)	81.0 (109.0)	1000 (1340)	711 (956)	235.0 (650.0)	73.3 (202.0)	662 (1830)	471 (1300)
31					203.0 (728.0)	63.3 (227.0)	572 (2050)	407 (1460)
Avg	266.0	102.0	1260	898	369.0	115.0	1040	739
n	24	24	24	24	17	17	17	17
SD	107.0	41.0	506	360	149.0	46.5	420	299
Min	81.1	31.1	384	273	199.0	61.9	559	398
Max	540.0	208.0	2560	1820	691.0	215.0	1950	1390

ED_004549_00015842-00162

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for June, 2008.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1					206.0 (1350.0)	64.2 (421.0)	581 (3800)	413 (2700)
2								
3								
4								
5								
6								
7	721.0 (679.0)	277.0 (261.0)	3420 (3220)	2430 (2290)	1150.0 (1020.0)	359.0 (319.0)	3250 (2890)	2310 (2050)
8								
9								
10	76.5 (354.0)	29.4 (136.0)	362 (1680)	258 (1190)				
11	133.0 (125.0)	51.1 (48.1)	631 (594)	449 (422)				
12	323.0 (422.0)	124.0 (162.0)	1530 (2000)	1090 (1420)				
13	267.0 (211.0)	103.0 (81.0)	1270 (999)	901 (711)	347.0 (282.0)	108.0 (87.9)	978 (794)	696 (565)
14								
15								
16								
17								
18	783.0 (814.0)	301.0 (312.0)	3710 (3860)	2640 (2740)				
19								
20								
21								
22								
23								
24								
25								
26								
27	725.0 (1080.0)	278.0 (415.0)	3440 (5120)	2440 (3640)	936.0 (1490.0)	292.0 (464.0)	2640 (4200)	1880 (2980)
28	241.0 (537.0)	92.7 (206.0)	1140 (2550)	814 (1810)	263.0 (553.0)	81.8 (172.0)	740 (1560)	526 (1110)
29	1010.0 (1160.0)	386.0 (446.0)	4770 (5500)	3390 (3910)				
30								
Avg	475.0	182.0	2250	1600	581.0	181.0	1640	1160
n	9	9	9	9	5	5	5	5
SD	316.0	121.0	1500	1060	387.0	121.0	1090	775
Min	76.5	29.4	362	258	206.0	64.2	581	413
Max	1010.0	386.0	4770	3390	1150.0	359.0	3250	2310

ED_004549_00015842-00163

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for July, 2008.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4	799.0 (1060.0)	307.0 (409.0)	3790 (5050)	2690 (3590)	1500.0 (1760.0)	467.0 (550.0)	4220 (4970)	3000 (3540)
5	700.0 (1260.0)	269.0 (484.0)	3320 (5970)	2360 (4250)	2730.0 (2350.0)	851.0 (733.0)	7690 (6630)	5470 (4720)
6	964.0 (1310.0)	370.0 (502.0)	4570 (6190)	3250 (4400)	3000.0 (3000.0)	934.0 (935.0)	8440 (8450)	6010 (6010)
7	577.0 (1390.0)	222.0 (534.0)	2740 (6590)	1950 (4680)	1570.0 (2460.0)	488.0 (767.0)	4410 (6940)	3140 (4930)
8								
9								
10					1510.0 (2890.0)	472.0 (899.0)	4270 (8130)	3030 (5780)
11					2360.0 (2350.0)	734.0 (731.0)	6640 (6610)	4720 (4700)
12					950.0 (1850.0)	296.0 (577.0)	2670 (5220)	1900 (3710)
13					1650.0 (1840.0)	516.0 (574.0)	4660 (5190)	3320 (3690)
14					2880.0 (3240.0)	898.0 (1010.0)	8120 (9130)	5770 (6500)
15					4550.0 (3700.0)	1420.0 (1150.0)	12800 (10400)	9120 (7410)
16	98.5 (1730.0)	37.8 (665.0)	467 (8210)	332 (5840)	3510.0 (2100.0)	1090.0 (655.0)	9880 (5920)	7030 (4210)
17	195.0 (750.0)	75.0 (288.0)	925 (3560)	658 (2530)	1780.0 (1200.0)	555.0 (374.0)	5010 (3380)	3570 (2410)
18	1380.0 (1530.0)	528.0 (586.0)	6520 (7230)	4640 (5140)	2700.0 (2580.0)	840.0 (805.0)	7600 (7280)	5400 (5180)
19	572.0 (1030.0)	220.0 (394.0)	2710 (4870)	1930 (3460)	1710.0 (2300.0)	533.0 (715.0)	4820 (6470)	3430 (4600)
20	893.0 (1020.0)	343.0 (392.0)	4230 (4840)	3010 (3440)	2350.0 (2540.0)	733.0 (790.0)	6620 (7140)	4710 (5080)
21					1940.0 (2140.0)	603.0 (666.0)	5450 (6020)	3880 (4280)
22					1740.0 (1930.0)	542.0 (601.0)	4900 (5430)	3480 (3860)
23	1180.0 (1190.0)	454.0 (458.0)	5610 (5660)	3990 (4020)	2790.0 (2860.0)	869.0 (891.0)	7860 (8050)	5590 (5730)
24	1200.0 (1110.0)	461.0 (425.0)	5690 (5240)	4040 (3730)	1940.0 (2330.0)	604.0 (725.0)	5460 (6560)	3880 (4670)
25	758.0 (1200.0)	291.0 (460.0)	3590 (5670)	2560 (4030)	1110.0 (2050.0)	347.0 (638.0)	3130 (5770)	2230 (4100)
26	1180.0 (1590.0)	451.0 (611.0)	5570 (7540)	3960 (5360)	2260.0 (2790.0)	703.0 (871.0)	6350 (7870)	4520 (5600)
27	1130.0 (1340.0)	435.0 (515.0)	5370 (6360)	3820 (4520)	2180.0 (2420.0)	679.0 (753.0)	6140 (6810)	4370 (4840)
28	1720.0 (1610.0)	661.0 (618.0)	8160 (7620)	5800 (5420)	2750.0 (2440.0)	855.0 (761.0)	7730 (6880)	5500 (4890)
29	1690.0 (1720.0)	651.0 (659.0)	8030 (8130)	5710 (5780)	3690.0 (3380.0)	1150.0 (1050.0)	10400 (9510)	7390 (6760)
30	1620.0 (2140.0)	623.0 (822.0)	7690 (10100)	5470 (7210)	3530.0 (4050.0)	1100.0 (1260.0)	9960 (11400)	7080 (8120)
31	1340.0 (1870.0)	516.0 (718.0)	6370 (8870)	4530 (6310)	2050.0 (2740.0)	639.0 (853.0)	5780 (7710)	4110 (5480)
Avg	1000.0	384.0	4740	3370	2340.0	728.0	6580	4680
n	18	18	18	18	26	26	26	26
SD	459.0	176.0	2180	1550	839.0	261.0	2360	1680
Min	98.5	37.8	467	332	950.0	296.0	2670	1900
Max	1720.0	661.0	8160	5800	4550.0	1420.0	12800	9120

ED_004549_00015842-00164

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for September, 2008.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3	-438.0 (718.0)	-168.0 (276.0)	-2080 (3400)	-1480 (2420)				
4	-553.0 (802.0)	-212.0 (308.0)	-2620 (3800)	-1860 (2700)	1380.0 (1770.0)	429.0 (551.0)	3880 (4990)	2760 (3550)
5	284.0 (416.0)	109.0 (160.0)	1350 (1970)	958 (1400)	527.0 (1100.0)	164.0 (342.0)	1490 (3100)	1060 (2200)
6	140.0 (266.0)	53.6 (102.0)	661 (1260)	470 (895)	184.0 (157.0)	57.3 (48.9)	519 (442)	369 (315)
7	95.7 (149.0)	36.7 (57.0)	454 (704)	323 (501)	169.0 (174.0)	52.7 (54.4)	477 (492)	339 (350)
8	79.8 (307.0)	30.6 (118.0)	378 (1450)	269 (1030)	251.0 (459.0)	78.1 (143.0)	706 (1290)	502 (920)
9	213.0 (446.0)	81.6 (171.0)	1010 (2120)	716 (1500)	392.0 (519.0)	122.0 (162.0)	1100 (1460)	786 (1040)
10	345.0 (572.0)	132.0 (220.0)	1630 (2710)	1160 (1930)	421.0 (384.0)	131.0 (120.0)	1190 (1080)	844 (769)
11	230.0 (403.0)	88.2 (155.0)	1090 (1910)	774 (1360)	465.0 (700.0)	145.0 (218.0)	1310 (1970)	931 (1400)
12	307.0 (455.0)	118.0 (175.0)	1450 (2160)	1030 (1530)	369.0 (548.0)	115.0 (171.0)	1040 (1540)	740 (1100)
13	147.0 (164.0)	56.4 (63.1)	697 (779)	495 (554)	120.0 (169.0)	37.3 (52.6)	337 (476)	240 (338)
14	172.0 (245.0)	66.2 (94.2)	817 (1160)	581 (827)				
15	135.0 (223.0)	51.9 (85.5)	641 (1060)	456 (751)	217.0 (278.0)	67.6 (86.6)	611 (783)	435 (557)
16	964.0 (1280.0)	370.0 (492.0)	4570 (6070)	3250 (4320)	1310.0 (1620.0)	408.0 (505.0)	3690 (4570)	2630 (3250)
17								
18								
19								
20	878.0 (1100.0)	337.0 (421.0)	4160 (5190)	2960 (3690)	1780.0 (2450.0)	554.0 (762.0)	5010 (6890)	3560 (4900)
21	1280.0 (1490.0)	492.0 (573.0)	6070 (7070)	4320 (5030)	1370.0 (1430.0)	428.0 (446.0)	3870 (4040)	2750 (2870)
22	954.0 (904.0)	366.0 (347.0)	4520 (4280)	3210 (3050)	1250.0 (1070.0)	388.0 (334.0)	3510 (3020)	2490 (2150)
23	1080.0 (1360.0)	416.0 (522.0)	5130 (6440)	3650 (4580)	1000.0 (1050.0)	312.0 (327.0)	2820 (2950)	2000 (2100)
24	-148.0 (493.0)	-56.6 (189.0)	-699 (2340)	-497 (1660)	-354.0 (653.0)	-110.0 (203.0)	-998 (1840)	-710 (1310)
25	261.0 (570.0)	100.0 (219.0)	1240 (2700)	880 (1920)	144.0 (537.0)	44.9 (167.0)	406 (1510)	289 (1080)
26	1020.0 (961.0)	392.0 (369.0)	4840 (4560)	3440 (3240)	923.0 (1020.0)	288.0 (318.0)	2600 (2880)	1850 (2040)
27	86.2 (350.0)	33.1 (134.0)	409 (1660)	291 (1180)				
28	60.0 (185.0)	23.1 (71.0)	285 (876)	202 (623)	45.3 (120.0)	14.1 (37.5)	128 (339)	91 (241)
29	2.1 (243.0)	0.8 (93.5)	10 (1150)	7 (820)				
30	39.4 (163.0)	15.1 (62.8)	187 (775)	133 (551)	61.1 (135.0)	19.0 (42.0)	172 (380)	122 (270)
Avg	306.0	117.0	1450	1030	572.0	178.0	1610	1150
n	25	25	25	25	21	21	21	21
SD	457.0	176.0	2170	1540	556.0	173.0	1570	1110
Min	-553.0	-212.0	-2620	-1860	-354.0	-110.0	-998	-710
Max	1280.0	492.0	6070	4320	1780.0	554.0	5010	3560

ED_004549_00015842-00165

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for October, 2008.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2					63.3 (509.0)	19.7 (159.0)	178 (1440)	127 (1020)
3					194.0 (550.0)	60.5 (171.0)	547 (1550)	389 (1100)
4					155.0 (250.0)	48.4 (78.0)	437 (705)	311 (501)
5					50.1 (87.0)	15.6 (27.1)	141 (245)	100 (174)
6					108.0 (112.0)	33.7 (34.9)	305 (316)	217 (224)
7								
8								
9								
10	236.0 (254.0)	90.7 (97.5)	1120 (1200)	796 (856)	120.0 (111.0)	37.3 (34.5)	337 (312)	240 (222)
11	327.0 (382.0)	126.0 (147.0)	1550 (1810)	1100 (1290)	275.0 (255.0)	85.6 (79.5)	774 (719)	550 (511)
12	214.0 (508.0)	82.3 (195.0)	1020 (2410)	723 (1710)	204.0 (183.0)	63.5 (57.0)	574 (515)	408 (367)
13	57.4 (436.0)	22.0 (167.0)	272 (2060)	193 (1470)	102.0 (148.0)	31.8 (46.1)	287 (417)	204 (296)
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29	185.0 (329.0)	71.0 (126.0)	895 (1590)	636 (1130)	128.0 (184.0)	39.9 (57.3)	371 (532)	264 (379)
30								
31								
Avg	204.0	78.3	970	690	140.0	43.6	395	281
n	5	5	5	5	10	10	10	10
SD	87.3	33.5	413	294	65.1	20.3	183	130
Min	57.4	22.0	272	193	50.1	15.6	141	100
Max	327.0	126.0	1550	1100	275.0	85.6	774	550

ED_004549_00015842-00166

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for November, 2008.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	147.0 (211.0)	56.5 (81.0)	700 (1000)	497 (714)	83.3 (164.0)	25.9 (51.2)	249 (493)	177 (350)
2	307.0 (569.0)	118.0 (218.0)	1450 (2690)	1030 (1910)	208.0 (353.0)	64.7 (110.0)	631 (1070)	448 (763)
3	273.0 (306.0)	105.0 (117.0)	1290 (1440)	914 (1030)	193.0 (203.0)	60.0 (63.4)	587 (619)	417 (440)
4								
5								
6	27.8 (274.0)	10.7 (105.0)	130 (1280)	93 (912)	19.7 (219.0)	6.1 (68.1)	59 (660)	42 (469)
7	69.3 (128.0)	26.6 (49.2)	324 (599)	230 (426)				
8	80.3 (122.0)	30.8 (46.9)	374 (569)	266 (405)				
9	81.0 (134.0)	31.1 (51.6)	377 (626)	268 (445)				
10	118.0 (125.0)	45.3 (47.9)	548 (579)	390 (412)				
11	75.5 (97.6)	29.0 (37.5)	350 (452)	249 (322)				
12	26.5 (64.5)	10.2 (24.8)	123 (298)	87 (212)	69.4 (84.3)	21.6 (26.3)	206 (250)	146 (178)
13	29.8 (47.2)	11.4 (18.1)	138 (218)	98 (155)	63.4 (85.4)	19.7 (26.6)	187 (252)	133 (179)
14	71.9 (48.0)	27.6 (18.4)	331 (221)	236 (157)				
15	58.8 (34.5)	22.6 (13.3)	270 (159)	192 (113)				
16	68.9 (47.0)	26.5 (18.1)	316 (216)	225 (153)	74.8 (63.7)	23.3 (19.8)	219 (187)	156 (133)
17	90.3 (73.9)	34.7 (28.4)	414 (339)	294 (241)	98.9 (80.9)	30.8 (25.2)	289 (237)	206 (168)
18	165.0 (420.0)	63.2 (161.0)	752 (1920)	535 (1360)	142.0 (162.0)	44.4 (50.5)	418 (476)	297 (338)
19								
20								
21	114.0 (149.0)	43.6 (57.1)	516 (675)	367 (480)	43.3 (62.2)	13.5 (19.4)	128 (184)	91 (131)
22	69.0 (93.0)	26.5 (35.7)	313 (421)	222 (300)	43.7 (62.7)	13.6 (19.5)	129 (186)	92 (132)
23								
24	75.5 (97.3)	29.0 (37.4)	340 (439)	242 (312)	58.6 (87.6)	18.2 (27.3)	174 (260)	124 (185)
25	167.0 (267.0)	64.1 (103.0)	750 (1200)	534 (853)	70.0 (183.0)	21.8 (56.9)	209 (545)	148 (388)
26	143.0 (203.0)	54.9 (77.9)	640 (908)	455 (646)	58.5 (98.3)	18.2 (30.6)	176 (295)	125 (210)
27	76.8 (104.0)	29.5 (39.9)	342 (464)	244 (330)	22.1 (75.3)	6.9 (23.5)	67 (227)	47 (162)
28	215.0 (277.0)	82.6 (106.0)	956 (1230)	680 (875)	83.0 (162.0)	25.9 (50.5)	252 (492)	179 (350)
29								
30								
Avg	111.0	42.6	511	363	83.2	25.9	249	177
n	23	23	23	23	16	16	16	16
SD	72.3	27.7	338	240	52.6	16.4	160	113
Min	26.5	10.2	123	87	19.7	6.1	59	42
Max	307.0	118.0	1450	1030	208.0	64.7	631	448

ED_004549_00015842-00167

Table F5. Daily means (SD) of PM10 emissions at Site WISB for December, 2008.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3	92.6 (105.0)	35.6 (40.2)	403 (456)	286 (324)	73.3 (53.3)	22.8 (16.6)	225 (164)	160 (116)
4	66.3 (70.7)	25.5 (27.1)	287 (306)	204 (217)	57.1 (92.3)	17.8 (28.7)	175 (282)	124 (201)
5	65.1 (67.2)	25.0 (25.8)	280 (289)	199 (206)	48.9 (59.4)	15.2 (18.5)	149 (180)	106 (128)
6	62.9 (64.4)	24.1 (24.7)	269 (276)	191 (196)	28.3 (28.1)	8.8 (8.7)	86 (85)	61 (60)
7	79.0 (71.5)	30.3 (27.4)	336 (304)	239 (216)	44.4 (59.0)	13.8 (18.4)	134 (178)	95 (126)
8								
9								
10								
11	117.0 (193.0)	45.0 (74.1)	505 (833)	359 (592)	132.0 (163.0)	41.0 (50.6)	394 (487)	280 (346)
12	96.0 (91.4)	36.9 (35.1)	418 (398)	298 (283)	77.3 (78.3)	24.1 (24.4)	232 (235)	165 (167)
13	37.3 (69.9)	14.3 (26.8)	164 (307)	117 (218)	87.9 (100.0)	27.4 (31.3)	264 (301)	188 (214)
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31	95.2 (77.7)	36.5 (29.8)	474 (387)	337 (276)	119.0 (104.0)	37.2 (32.3)	334 (290)	237 (206)
Avg	79.1	30.4	349	248	74.3	23.1	221	157
n	9	9	9	9	9	9	9	9
SD	22.5	8.6	104	74	32.5	10.1	93	66
Min	37.3	14.3	164	117	28.3	8.8	86	61
Max	117.0	45.0	505	359	132.0	41.0	394	280

ED_004549_00015842-00168

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for January, 2009.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	45.7 (44.0)	17.6 (16.9)	226 (218)	161 (155)	51.9 (42.7)	16.2 (13.3)	147 (121)	104 (86)
2	91.3 (77.3)	35.0 (29.7)	450 (381)	320 (271)	77.9 (38.3)	24.3 (11.9)	223 (109)	158 (78)
3	56.0 (57.8)	21.5 (22.2)	274 (283)	195 (201)	52.6 (59.6)	16.4 (18.6)	152 (172)	108 (122)
4	85.3 (72.9)	32.8 (28.0)	415 (355)	295 (252)	64.3 (46.5)	20.0 (14.5)	188 (136)	134 (97)
5	96.9 (71.5)	37.2 (27.5)	469 (346)	334 (246)	63.7 (35.4)	19.9 (11.0)	188 (104)	133 (74)
6	83.0 (90.5)	31.9 (34.8)	399 (436)	284 (310)	129.0 (123.0)	40.3 (38.4)	382 (363)	271 (258)
7	54.8 (46.9)	21.0 (18.0)	262 (224)	186 (159)	51.1 (32.1)	15.9 (10.0)	151 (95)	107 (67)
8	82.7 (82.1)	31.7 (31.5)	393 (390)	279 (277)	48.9 (32.9)	15.2 (10.2)	144 (97)	103 (69)
9	86.7 (59.7)	33.3 (22.9)	410 (282)	291 (201)	60.3 (37.7)	18.8 (11.8)	178 (112)	127 (79)
10	87.3 (49.5)	33.5 (19.0)	410 (233)	292 (165)	71.8 (34.6)	22.4 (10.8)	212 (102)	151 (73)
11	81.8 (55.0)	31.4 (21.1)	382 (257)	272 (183)	82.3 (34.6)	25.6 (10.8)	244 (103)	173 (73)
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28	41.3 (56.4)	15.9 (21.7)	187 (255)	133 (181)	46.7 (43.3)	14.5 (13.5)	138 (128)	98 (91)
29	67.7 (52.1)	26.0 (20.0)	308 (237)	219 (169)	64.1 (35.3)	20.0 (11.0)	190 (105)	135 (75)
30	82.1 (54.5)	31.5 (20.9)	376 (250)	267 (178)	90.7 (41.3)	28.3 (12.9)	270 (123)	192 (87)
31	74.0 (69.7)	28.4 (26.7)	341 (321)	243 (228)	77.2 (59.2)	24.0 (18.4)	230 (176)	164 (125)
Avg	74.4	28.6	354	251	68.9	21.5	202	144
n	15	15	15	15	15	15	15	15
SD	16.7	6.4	81	58	20.6	6.4	61	44
Min	41.3	15.9	187	133	46.7	14.5	138	98
Max	96.9	37.2	469	334	129.0	40.3	382	271

ED_004549_00015842-00169

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for February, 2009.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	107.0 (68.3)	41.2 (26.2)	497 (317)	353 (225)	104.0 (46.4)	32.3 (14.4)	310 (139)	221 (99)
2	156.0 (65.1)	59.8 (25.0)	726 (303)	516 (216)	148.0 (45.9)	46.2 (14.3)	443 (137)	315 (98)
3	121.0 (77.6)	46.3 (29.8)	564 (362)	401 (258)	151.0 (84.3)	47.0 (26.3)	449 (251)	319 (178)
4	72.4 (53.0)	27.8 (20.4)	339 (248)	241 (177)	239.0 (178.0)	74.5 (55.6)	708 (528)	504 (376)
5	57.8 (54.3)	22.2 (20.9)	272 (255)	193 (182)	138.0 (99.2)	42.9 (30.9)	406 (293)	289 (208)
6	20.0 (62.1)	7.7 (23.9)	95 (293)	67 (208)	70.3 (76.0)	21.9 (23.7)	206 (223)	147 (159)
7	80.7 (97.9)	31.0 (37.6)	382 (463)	271 (329)	50.4 (52.7)	15.7 (16.4)	148 (154)	105 (110)
8	73.9 (62.6)	28.4 (24.0)	351 (297)	249 (211)	81.7 (43.3)	25.5 (13.5)	238 (126)	169 (90)
9								
10					75.8 (57.6)	23.6 (17.9)	219 (166)	156 (118)
11	182.0 (121.0)	69.9 (46.3)	866 (575)	616 (409)	98.4 (89.6)	30.7 (27.9)	284 (259)	202 (184)
12	133.0 (103.0)	51.0 (39.6)	625 (486)	445 (346)				
13	107.0 (77.4)	41.2 (29.7)	500 (361)	355 (257)				
14	145.0 (90.9)	55.6 (34.9)	668 (419)	475 (298)				
15	158.0 (97.3)	60.6 (37.4)	721 (444)	513 (316)				
16	170.0 (114.0)	65.1 (43.9)	770 (518)	547 (369)				
17								
18								
19								
20								
21								
22								
23								
24								
25	154.0 (152.0)	59.3 (58.4)	690 (679)	491 (483)	184.0 (98.3)	57.4 (30.6)	536 (286)	382 (204)
26	76.7 (74.2)	29.5 (28.5)	344 (332)	244 (236)	81.1 (61.6)	25.3 (19.2)	237 (180)	169 (128)
27	138.0 (70.6)	52.8 (27.1)	618 (317)	439 (225)	105.0 (34.3)	32.6 (10.7)	307 (101)	218 (72)
28	168.0 (91.9)	64.3 (35.3)	754 (414)	536 (294)	133.0 (52.9)	41.3 (16.5)	391 (156)	278 (111)
Avg	118.0	45.2	543	386	118.0	36.9	349	248
n	18	18	18	18	14	14	14	14
SD	44.4	17.0	203	144	49.1	15.3	146	104
Min	20.0	7.7	95	67	50.4	15.7	148	105
Max	182.0	69.9	866	616	239.0	74.5	708	504

ED_004549_00015842-00170

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for March, 2009.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	167.0 (70.1)	63.9 (26.9)	751 (316)	534 (225)	171.0 (49.7)	53.2 (15.5)	504 (147)	359 (104)
2								
3								
4	79.7 (95.6)	30.6 (36.7)	358 (430)	255 (306)	258.0 (128.0)	80.3 (39.7)	770 (381)	548 (271)
5	59.7 (53.2)	22.9 (20.4)	267 (238)	190 (169)	139.0 (83.2)	43.3 (25.9)	418 (250)	297 (178)
6	69.0 (65.6)	26.5 (25.2)	307 (292)	219 (208)	74.2 (58.1)	23.1 (18.1)	224 (175)	159 (125)
7	133.0 (77.8)	51.0 (29.9)	589 (345)	419 (245)	129.0 (78.9)	40.0 (24.6)	390 (239)	277 (170)
8	176.0 (120.0)	67.4 (46.1)	775 (530)	551 (377)	188.0 (97.3)	58.7 (30.3)	574 (296)	409 (211)
9	111.0 (118.0)	42.5 (45.2)	490 (520)	348 (370)	180.0 (129.0)	56.0 (40.3)	548 (394)	390 (280)
10	66.3 (56.7)	25.5 (21.8)	296 (253)	211 (180)	34.8 (46.2)	10.8 (14.4)	105 (140)	75 (99)
11	135.0 (93.0)	51.9 (35.7)	608 (419)	433 (298)	87.4 (52.9)	27.2 (16.5)	261 (158)	186 (113)
12	149.0 (104.0)	57.2 (39.8)	677 (471)	481 (335)	131.0 (80.7)	40.9 (25.1)	389 (239)	277 (170)
13	118.0 (121.0)	45.2 (46.5)	540 (555)	384 (395)	131.0 (76.2)	40.9 (23.7)	386 (224)	275 (159)
14	72.0 (90.5)	27.7 (34.8)	333 (418)	237 (298)	188.0 (120.0)	58.7 (37.3)	549 (349)	391 (249)
15	47.0 (70.6)	18.0 (27.1)	219 (330)	156 (235)	331.0 (173.0)	103.0 (53.8)	957 (499)	681 (355)
16	109.0 (108.0)	42.0 (41.5)	512 (505)	364 (359)	344.0 (144.0)	107.0 (44.8)	994 (416)	707 (296)
17	208.0 (337.0)	79.9 (129.0)	969 (1570)	689 (1120)	480.0 (499.0)	149.0 (155.0)	1400 (1450)	993 (1030)
18	340.0 (277.0)	130.0 (106.0)	1570 (1280)	1120 (912)	169.0 (103.0)	52.7 (32.1)	496 (302)	353 (215)
19	204.0 (190.0)	78.2 (72.9)	939 (875)	668 (622)	173.0 (206.0)	53.8 (64.2)	510 (609)	363 (433)
20	71.4 (102.0)	27.4 (39.0)	327 (466)	233 (332)	120.0 (108.0)	37.3 (33.7)	356 (321)	253 (228)
21	135.0 (156.0)	51.8 (59.8)	615 (710)	438 (505)	106.0 (95.2)	32.9 (29.7)	317 (285)	225 (203)
22					103.0 (113.0)	32.1 (35.1)	311 (341)	221 (242)
23					78.8 (56.1)	24.5 (17.5)	238 (169)	169 (120)
24					105.0 (92.5)	32.7 (28.8)	316 (278)	224 (198)
25					46.3 (45.8)	14.4 (14.3)	138 (137)	99 (97)
26								
27								
28								
29								
30					81.3 (110.0)	25.3 (34.1)	237 (320)	169 (227)
31					60.1 (74.8)	18.7 (23.3)	176 (218)	125 (155)
Avg	129.0	49.5	587	417	156.0	48.7	462	329
n	19	19	19	19	25	25	25	25
SD	68.5	26.3	318	226	101.0	31.4	292	208
Min	47.0	18.0	219	156	34.8	10.8	105	75
Max	340.0	130.0	1570	1120	480.0	149.0	1400	993

ED_004549_00015842-00171

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for April, 2009.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	76.4 (78.5)	29.3 (30.2)	352 (362)	250 (257)	42.0 (42.4)	13.1 (13.2)	123 (124)	87 (88)
2	164.0 (201.0)	62.8 (77.3)	749 (922)	533 (656)	49.3 (44.4)	15.4 (13.8)	144 (130)	102 (92)
3	201.0 (345.0)	77.0 (133.0)	913 (1570)	649 (1120)				
4	114.0 (117.0)	43.9 (44.9)	517 (528)	368 (376)	66.2 (62.7)	20.6 (19.5)	194 (184)	138 (131)
5	118.0 (133.0)	45.5 (51.1)	533 (599)	379 (426)				
6								
7								
8								
9								
10								
11								
12								
13								
14								
15	649.0 (746.0)	249.0 (286.0)	2960 (3400)	2100 (2420)	252.0 (349.0)	78.4 (109.0)	735 (1020)	523 (725)
16	615.0 (995.0)	236.0 (382.0)	2820 (4560)	2000 (3250)	270.0 (446.0)	84.2 (139.0)	788 (1300)	560 (925)
17	576.0 (806.0)	221.0 (310.0)	2660 (3720)	1890 (2650)	333.0 (534.0)	104.0 (166.0)	968 (1560)	688 (1110)
18	299.0 (450.0)	115.0 (173.0)	1390 (2090)	989 (1480)				
19	76.6 (144.0)	29.4 (55.2)	358 (672)	255 (478)				
20	85.3 (147.0)	32.7 (56.5)	399 (689)	284 (490)				
21	221.0 (231.0)	84.9 (88.9)	1030 (1080)	733 (767)				
22	210.0 (327.0)	80.8 (126.0)	977 (1520)	695 (1080)				
23					317.0 (278.0)	98.8 (86.6)	910 (797)	647 (567)
24	313.0 (843.0)	120.0 (324.0)	1440 (3870)	1030 (2750)				
25	113.0 (223.0)	43.5 (85.8)	518 (1020)	368 (726)				
26					110.0 (101.0)	34.3 (31.4)	313 (286)	223 (204)
27	40.4 (193.0)	15.5 (74.0)	185 (879)	132 (625)	55.9 (118.0)	17.4 (36.8)	157 (333)	112 (237)
28	142.0 (265.0)	54.6 (102.0)	654 (1220)	465 (868)	133.0 (147.0)	41.5 (45.9)	371 (410)	264 (291)
29	199.0 (239.0)	76.2 (91.9)	920 (1110)	654 (788)	156.0 (148.0)	48.5 (46.0)	428 (406)	304 (289)
30	45.2 (208.0)	17.4 (80.0)	211 (973)	150 (692)				
Avg	224.0	86.1	1030	733	162.0	50.5	467	332
n	19	19	19	19	11	11	11	11
SD	184.0	70.8	845	601	106.0	33.1	309	220
Min	40.4	15.5	185	132	42.0	13.1	123	87
Max	649.0	249.0	2960	2100	333.0	104.0	968	688

ED_004549_00015842-00172

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for May, 2009.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3					122.0 (203.0)	38.1 (63.3)	319 (531)	227 (378)
4					220.0 (313.0)	68.6 (97.6)	568 (809)	404 (576)
5					113.0 (217.0)	35.1 (67.7)	287 (554)	204 (394)
6					87.5 (228.0)	27.3 (71.2)	223 (584)	159 (416)
7					126.0 (327.0)	39.4 (102.0)	328 (848)	233 (603)
8								
9								
10								
11					93.3 (181.0)	29.1 (56.5)	254 (495)	181 (352)
12					844.0 (1550.0)	263.0 (482.0)	2310 (4240)	1650 (3020)
13					186.0 (430.0)	57.9 (134.0)	511 (1190)	364 (843)
14								
15					141.0 (992.0)	43.8 (309.0)	391 (2760)	278 (1960)
16								
17								
18					248.0 (628.0)	77.1 (196.0)	700 (1770)	498 (1260)
19	2740.0 (1890.0)	1050.0 (727.0)	12400 (8590)	8840 (6110)	2640.0 (2100.0)	823.0 (655.0)	7470 (5950)	5320 (4230)
20	3890.0 (2910.0)	1490.0 (1120.0)	17600 (13200)	12500 (9380)	3920.0 (2510.0)	1220.0 (782.0)	11100 (7100)	7890 (5050)
21								
22					699.0 (694.0)	218.0 (216.0)	1980 (1970)	1410 (1400)
23								
24					1350.0 (2470.0)	420.0 (769.0)	3820 (7000)	2720 (4980)
25					539.0 (599.0)	168.0 (187.0)	1530 (1700)	1090 (1210)
26					175.0 (253.0)	54.6 (78.8)	498 (719)	354 (511)
27								
28					360.0 (707.0)	112.0 (220.0)	1020 (2010)	727 (1430)
29								
30								
31					1020.0 (1260.0)	316.0 (393.0)	2880 (3580)	2050 (2550)
Avg	3310.0	1270.0	15000	10700	715.0	223.0	2010	1430
n	2	2	2	2	18	18	18	18
SD	575.0	221.0	2600	1850	996.0	310.0	2820	2010
Min	2740.0	1050.0	12400	8840	87.5	27.3	223	159
Max	3890.0	1490.0	17600	12500	3920.0	1220.0	11100	7890

ED_004549_00015842-00173

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for June, 2009.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7								
8								
9	150.0 (177.0)	57.6 (68.0)	655 (775)	466 (551)	112.0 (90.1)	34.8 (28.1)	330 (266)	234 (189)
10	153.0 (303.0)	58.9 (116.0)	674 (1330)	479 (947)	108.0 (106.0)	33.7 (33.1)	320 (314)	228 (224)
11	604.0 (735.0)	232.0 (282.0)	2670 (3250)	1900 (2310)	299.0 (433.0)	93.1 (135.0)	890 (1290)	633 (917)
12	797.0 (992.0)	306.0 (381.0)	3550 (4410)	2520 (3140)	609.0 (745.0)	190.0 (232.0)	1820 (2220)	1290 (1580)
13	1150.0 (1230.0)	441.0 (472.0)	5140 (5510)	3650 (3920)	1230.0 (1420.0)	382.0 (443.0)	3680 (4270)	2610 (3040)
14	2460.0 (3630.0)	945.0 (1390.0)	11100 (16400)	7880 (11600)	1990.0 (1780.0)	620.0 (553.0)	5990 (5350)	4260 (3800)
15	2800.0 (2990.0)	1080.0 (1150.0)	12700 (13500)	9040 (9630)	1830.0 (1420.0)	571.0 (441.0)	5550 (4280)	3940 (3050)
16	2070.0 (2040.0)	796.0 (784.0)	9420 (9280)	6700 (6600)	1100.0 (1360.0)	343.0 (422.0)	3330 (4100)	2370 (2920)
17	1260.0 (1250.0)	485.0 (480.0)	5730 (5680)	4070 (4040)	1190.0 (1200.0)	370.0 (373.0)	3580 (3600)	2550 (2560)
18	696.0 (1150.0)	267.0 (440.0)	3160 (5200)	2250 (3700)	483.0 (902.0)	151.0 (281.0)	1450 (2710)	1030 (1930)
19	1620.0 (1790.0)	622.0 (688.0)	7340 (8130)	5220 (5780)	1150.0 (1220.0)	360.0 (381.0)	3450 (3660)	2460 (2600)
20	2630.0 (2390.0)	1010.0 (916.0)	11900 (10800)	8460 (7690)	1860.0 (1540.0)	578.0 (481.0)	5530 (4600)	3940 (3270)
21	1880.0 (1640.0)	720.0 (631.0)	8490 (7440)	6040 (5290)	1370.0 (1200.0)	426.0 (374.0)	4070 (3570)	2890 (2540)
22	1870.0 (1820.0)	719.0 (700.0)	8450 (8230)	6010 (5850)	1980.0 (1440.0)	615.0 (450.0)	5860 (4280)	4170 (3040)
23	2520.0 (2770.0)	968.0 (1060.0)	11300 (12400)	8060 (8840)	2090.0 (2090.0)	650.0 (650.0)	6180 (6190)	4400 (4400)
24	2960.0 (2200.0)	1140.0 (844.0)	13300 (9850)	9430 (7000)	2190.0 (1610.0)	682.0 (501.0)	6490 (4760)	4610 (3390)
25	2400.0 (2060.0)	922.0 (791.0)	10700 (9190)	7620 (6530)	1720.0 (1720.0)	535.0 (536.0)	5080 (5090)	3610 (3620)
26	1880.0 (2430.0)	722.0 (935.0)	8360 (10800)	5940 (7700)	2150.0 (2510.0)	671.0 (781.0)	6370 (7420)	4530 (5270)
27	890.0 (2320.0)	342.0 (893.0)	3940 (10300)	2800 (7320)	819.0 (2210.0)	255.0 (688.0)	2420 (6530)	1720 (4640)
28	1110.0 (1340.0)	428.0 (516.0)	4910 (5930)	3490 (4210)				
29	518.0 (770.0)	199.0 (296.0)	2280 (3380)	1620 (2410)				
30	102.0 (362.0)	39.2 (139.0)	449 (1590)	319 (1130)				
Avg	1480.0	568.0	6650	4730	1280.0	398.0	3810	2710
n	22	22	22	22	19	19	19	19
SD	900.0	346.0	4070	2890	693.0	216.0	2060	1470
Min	102.0	39.2	449	319	108.0	33.7	320	228
Max	2960.0	1140.0	13300	9430	2190.0	682.0	6490	4610

ED_004549_00015842-00174

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for July, 2009.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	124.0 (450.0)	47.6 (173.0)	546 (1980)	388 (1410)				
2	1030.0 (1040.0)	394.0 (398.0)	4530 (4580)	3220 (3260)	929.0 (1150.0)	289.0 (359.0)	2770 (3430)	1970 (2440)
3	1690.0 (1670.0)	648.0 (640.0)	7460 (7370)	5300 (5240)	1480.0 (1430.0)	461.0 (445.0)	4420 (4270)	3150 (3040)
4	842.0 (888.0)	323.0 (341.0)	3730 (3930)	2650 (2800)	603.0 (723.0)	188.0 (225.0)	1810 (2170)	1290 (1540)
5	1660.0 (1570.0)	637.0 (604.0)	7370 (6980)	5240 (4960)	1280.0 (1260.0)	400.0 (391.0)	3860 (3780)	2750 (2690)
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22	425.0 (1230.0)	163.0 (474.0)	2240 (6520)	1600 (4640)	346.0 (1380.0)	108.0 (431.0)	910 (3630)	647 (2580)
23	1770.0 (1840.0)	678.0 (707.0)	9340 (9740)	6640 (6930)	2190.0 (2120.0)	682.0 (661.0)	5740 (5570)	4080 (3960)
24	906.0 (1040.0)	348.0 (399.0)	4800 (5500)	3420 (3910)	878.0 (1100.0)	274.0 (343.0)	2300 (2890)	1640 (2050)
25	710.0 (833.0)	273.0 (320.0)	3770 (4420)	2680 (3150)	568.0 (779.0)	177.0 (243.0)	1490 (2040)	1060 (1450)
26	1540.0 (1540.0)	592.0 (590.0)	8200 (8160)	5830 (5800)	1590.0 (1620.0)	494.0 (506.0)	4160 (4250)	2960 (3020)
27	1240.0 (1220.0)	477.0 (470.0)	6560 (6470)	4670 (4600)	1230.0 (1310.0)	382.0 (407.0)	3220 (3430)	2290 (2440)
28	504.0 (726.0)	194.0 (279.0)	2640 (3800)	1870 (2700)	243.0 (506.0)	75.6 (158.0)	639 (1330)	454 (947)
29	736.0 (1020.0)	283.0 (393.0)	3810 (5290)	2710 (3760)	281.0 (570.0)	87.4 (178.0)	741 (1510)	527 (1070)
30	183.0 (348.0)	70.2 (134.0)	935 (1780)	665 (1260)	137.0 (336.0)	42.8 (105.0)	364 (891)	259 (634)
31	1100.0 (998.0)	424.0 (383.0)	5580 (5040)	3970 (3590)	1100.0 (1100.0)	344.0 (343.0)	2930 (2930)	2090 (2080)
Avg	964.0	370.0	4770	3390	918.0	286.0	2530	1800
n	15	15	15	15	14	14	14	14
SD	519.0	199.0	2540	1810	577.0	180.0	1580	1120
Min	124.0	47.6	546	388	137.0	42.8	364	259
Max	1770.0	678.0	9340	6640	2190.0	682.0	5740	4080

ED_004549_00015842-00175

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for August, 2009.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	235.0 (402.0)	90.2 (154.0)	1170 (2010)	835 (1430)				
2	742.0 (968.0)	285.0 (372.0)	3670 (4790)	2610 (3410)				
3	1080.0 (1250.0)	413.0 (479.0)	5340 (6190)	3800 (4400)	1350.0 (1410.0)	421.0 (438.0)	3620 (3760)	2570 (2680)
4								
5								
6								
7								
8								
9								
10								
11								
12	2410.0 (1890.0)	926.0 (725.0)	13000 (10200)	9240 (7230)	2870.0 (2220.0)	894.0 (693.0)	7430 (5750)	5280 (4090)
13	1790.0 (1810.0)	687.0 (695.0)	9650 (9750)	6860 (6940)	1940.0 (1810.0)	604.0 (563.0)	5000 (4660)	3560 (3320)
14	1680.0 (1250.0)	643.0 (479.0)	9040 (6730)	6430 (4790)	2900.0 (1880.0)	905.0 (586.0)	7470 (4830)	5310 (3440)
15	1770.0 (1000.0)	681.0 (384.0)	9570 (5410)	6800 (3840)	2260.0 (1410.0)	704.0 (440.0)	5790 (3620)	4120 (2570)
16	1260.0 (981.0)	485.0 (377.0)	6830 (5300)	4860 (3770)	1430.0 (1320.0)	444.0 (412.0)	3640 (3380)	2590 (2400)
17	847.0 (1120.0)	325.0 (430.0)	4580 (6050)	3260 (4300)	1400.0 (1510.0)	437.0 (471.0)	3580 (3860)	2550 (2740)
18	1040.0 (1120.0)	401.0 (432.0)	5640 (6080)	4010 (4320)	1040.0 (1190.0)	326.0 (369.0)	2660 (3020)	1890 (2150)
19	350.0 (587.0)	134.0 (225.0)	1890 (3170)	1350 (2260)	308.0 (625.0)	95.8 (195.0)	783 (1590)	557 (1130)
20	141.0 (210.0)	54.1 (80.6)	762 (1140)	542 (808)				
21	260.0 (454.0)	100.0 (175.0)	1410 (2460)	1000 (1750)				
22	509.0 (754.0)	196.0 (290.0)	2760 (4080)	1960 (2900)	362.0 (655.0)	113.0 (204.0)	919 (1660)	654 (1180)
23	890.0 (1050.0)	342.0 (402.0)	4820 (5670)	3430 (4030)	1150.0 (1370.0)	358.0 (428.0)	2920 (3490)	2070 (2480)
24	1530.0 (1440.0)	588.0 (555.0)	8290 (7820)	5900 (5560)	1730.0 (1480.0)	538.0 (462.0)	4380 (3770)	3120 (2680)
25	945.0 (1020.0)	363.0 (393.0)	5120 (5540)	3640 (3940)	964.0 (1110.0)	300.0 (347.0)	2450 (2820)	1740 (2010)
26	1120.0 (1310.0)	432.0 (502.0)	6100 (7090)	4330 (5040)	947.0 (1200.0)	295.0 (374.0)	2400 (3040)	1710 (2160)
27	744.0 (1520.0)	286.0 (582.0)	4030 (8220)	2870 (5840)	1600.0 (2300.0)	499.0 (717.0)	4050 (5830)	2880 (4140)
28	505.0 (888.0)	194.0 (341.0)	2740 (4810)	1950 (3420)				
29	112.0 (375.0)	43.1 (144.0)	609 (2030)	433 (1450)				
30	-269.0 (1860.0)	-103.0 (713.0)	-1460 (10100)	-1040 (7160)	-463.0 (2350.0)	-144.0 (733.0)	-1170 (5940)	-831 (4220)
31	643.0 (1380.0)	247.0 (529.0)	3490 (7470)	2480 (5320)	265.0 (844.0)	82.6 (263.0)	669 (2130)	476 (1520)
Avg	884.0	340.0	4740	3370	1300.0	404.0	3330	2370
n	23	23	23	23	17	17	17	17
SD	633.0	243.0	3420	2430	876.0	273.0	2260	1600
Min	-269.0	-103.0	-1460	-1040	-463.0	-144.0	-1170	-831
Max	2410.0	926.0	13000	9240	2900.0	905.0	7470	5310

ED_004549_00015842-00176

Table F5. Daily means (SD) of PM10 emissions at Site WI5B for September, 2009.

Day	PM_{10}							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	752.0 (915.0)	289.0 (351.0)	4080 (4970)	2900 (3530)	326.0 (597.0)	102.0 (186.0)	823 (1510)	585 (1070)
2	608.0 (1140.0)	233.0 (437.0)	3300 (6180)	2350 (4400)	695.0 (1240.0)	217.0 (385.0)	1750 (3120)	1250 (2220)
3	176.0 (1330.0)	67.6 (510.0)	955 (7210)	680 (5130)	742.0 (2380.0)	231.0 (741.0)	1870 (5990)	1330 (4260)
4	253.0 (1120.0)	97.0 (429.0)	1370 (6070)	976 (4320)	167.0 (1180.0)	52.1 (369.0)	421 (2980)	299 (2120)
5	990.0 (1350.0)	380.0 (520.0)	5380 (7360)	3820 (5230)	714.0 (1100.0)	222.0 (344.0)	1790 (2780)	1280 (1970)
6	978.0 (1460.0)	376.0 (562.0)	5310 (7950)	3780 (5650)	855.0 (1240.0)	266.0 (387.0)	2150 (3120)	1530 (2220)
7								
8	1110.0 (1550.0)	428.0 (596.0)	6010 (8370)	4270 (5950)	1510.0 (1490.0)	471.0 (463.0)	3830 (3770)	2720 (2680)
9	901.0 (1120.0)	346.0 (430.0)	4830 (6000)	3440 (4270)	1300.0 (1380.0)	404.0 (429.0)	3300 (3510)	2350 (2490)
10	1080.0 (1510.0)	415.0 (581.0)	5760 (8070)	4100 (5740)	1720.0 (1800.0)	537.0 (561.0)	4420 (4610)	3140 (3280)
11	1460.0 (1690.0)	559.0 (650.0)	7730 (8970)	5490 (6380)	1750.0 (1690.0)	546.0 (526.0)	4510 (4350)	3210 (3090)
12	1060.0 (1800.0)	405.0 (689.0)	5570 (9470)	3960 (6730)	2300.0 (2910.0)	716.0 (905.0)	5950 (7530)	4230 (5360)
13	1190.0 (2120.0)	459.0 (815.0)	6270 (11100)	4460 (7920)	1910.0 (2440.0)	595.0 (759.0)	4980 (6350)	3540 (4520)
14	958.0 (2150.0)	368.0 (825.0)	5030 (11300)	3580 (8020)	1380.0 (3130.0)	431.0 (974.0)	3620 (8190)	2580 (5830)
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
Avg	886.0	340.0	4740	3370	1180.0	368.0	3030	2160
n	13	13	13	13	13	13	13	13
SD	347.0	133.0	1830	1300	625.0	195.0	1630	1160
Min	176.0	67.6	955	680	167.0	52.1	421	299
Max	1460.0	559.0	7730	5490	2300.0	716.0	5950	4230

ED_004549_00015842-00177

Table F6. PM 2.5 emissions.

Table F6. Daily means (SD) of PM2.5 emissions at Site WI5B for January, 2008.

Day	$PM_{2.5}$							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16	4.3 (33.9)	1.6 (13.0)	20 (161)	14 (114)	5.7 (43.0)	1.8 (13.4)	16 (121)	12 (86)
17	18.9 (38.6)	7.3 (14.8)	90 (183)	64 (130)	14.8 (41.7)	4.6 (13.0)	42 (118)	30 (84)
18								
19								
20								
21								
22	26.4 (60.9)	10.1 (23.4)	125 (289)	89 (205)				
23								
24								
25								
26	-12.3 (29.8)	-4.7 (11.4)	-58 (141)	-42 (100)				
27	-17.8 (28.9)	-6.8 (11.1)	-84 (137)	-60 (97)				
28	-27.1 (45.4)	-10.4 (17.4)	-129 (215)	-91 (153)				
29					47.2 (75.2)	14.7 (23.4)	133 (212)	95 (151)
30								
31								
Avg	-1.3	-0.5	-6	-4	22.6	7.0	64	45
n	6	6	6	6	3	3	3	3
SD	19.4	7.5	92	66	17.8	5.6	50	36
Min	-27.1	-10.4	-129	-91	5.7	1.8	16	12
Max	26.4	10.1	125	89	47.2	14.7	133	95

ED_004549_00015842-00178

Table F6. Daily means (SD) of PM2.5 emissions at Site WI5B for February, 2008.

Day	$PM_{2.5}$							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	22.3 (83.5)	8.6 (32.1)	105 (396)	75 (281)	30.7 (59.2)	9.6 (18.4)	87 (167)	62 (119)
2	-11.1 (122.0)	-4.3 (46.8)	-53 (578)	-38 (411)				
3	-19.7 (118.0)	-7.6 (45.3)	-94 (559)	-67 (398)	7.7 (89.8)	2.4 (28.0)	22 (253)	15 (180)
4	-5.6 (55.8)	-2.2 (21.4)	-27 (265)	-19 (188)				
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
Avg	-3.6	-1.4	-17	-12	19.2	6.0	54	39
n	4	4	4	4	2	2	2	2
SD	15.7	6.0	75	53	11.5	3.6	33	23
Min	-19.7	-7.6	-94	-67	7.7	2.4	22	15
Max	22.3	8.6	105	75	30.7	9.6	87	62

ED_004549_00015842-00179

Table F6. Daily means (SD) of PM2.5 emissions at Site WI5B for August, 2008.

Day	$PM_{2.5}$							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2	205.0 (909.0)	78.6 (349.0)	970 (4310)	690 (3060)	806.0 (804.0)	251.0 (251.0)	2270 (2270)	1610 (1610)
3	244.0 (367.0)	93.9 (141.0)	1160 (1740)	824 (1240)	328.0 (199.0)	102.0 (62.1)	923 (562)	657 (400)
4	348.0 (709.0)	134.0 (272.0)	1650 (3360)	1170 (2390)	651.0 (542.0)	203.0 (169.0)	1830 (1530)	1300 (1090)
5	286.0 (1130.0)	110.0 (435.0)	1350 (5370)	963 (3820)	692.0 (684.0)	215.0 (213.0)	1950 (1930)	1390 (1370)
6	201.0 (858.0)	77.3 (330.0)	955 (4070)	679 (2890)	411.0 (538.0)	128.0 (167.0)	1160 (1510)	823 (1080)
7	198.0 (618.0)	76.2 (237.0)	940 (2930)	668 (2080)	254.0 (285.0)	79.0 (88.9)	714 (804)	508 (572)
8	142.0 (646.0)	54.5 (248.0)	672 (3060)	478 (2180)	236.0 (314.0)	73.4 (97.7)	664 (884)	472 (628)
9	339.0 (882.0)	130.0 (339.0)	1610 (4180)	1140 (2970)	543.0 (642.0)	169.0 (200.0)	1530 (1810)	1090 (1290)
10	150.0 (560.0)	57.7 (215.0)	712 (2650)	506 (1890)	169.0 (234.0)	52.6 (73.0)	476 (660)	338 (470)
11	175.0 (478.0)	67.3 (184.0)	830 (2270)	591 (1610)	266.0 (281.0)	82.9 (87.5)	749 (791)	533 (563)
12	141.0 (284.0)	54.2 (109.0)	669 (1350)	476 (959)	137.0 (111.0)	42.7 (34.6)	386 (313)	275 (222)
13	125.0 (1070.0)	48.0 (411.0)	593 (5070)	422 (3610)	197.0 (404.0)	61.3 (126.0)	554 (1140)	394 (810)
14	71.6 (441.0)	27.5 (169.0)	340 (2090)	241 (1490)	85.0 (133.0)	26.5 (41.5)	239 (375)	170 (267)
15	33.3 (1090.0)	12.8 (417.0)	158 (5150)	112 (3660)	49.2 (276.0)	15.3 (85.9)	138 (777)	99 (552)
16	160.0 (516.0)	61.6 (198.0)	760 (2440)	540 (1740)	75.3 (174.0)	23.4 (54.1)	212 (489)	151 (348)
17	23.2 (563.0)	8.9 (216.0)	110 (2670)	78 (1900)	62.7 (213.0)	19.5 (66.2)	177 (599)	126 (426)
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
Avg	178.0	68.2	842	599	310.0	96.6	873	621
n	16	16	16	16	16	16	16	16
SD	91.9	35.3	436	310	235.0	73.1	661	470
Min	23.2	8.9	110	78	49.2	15.3	138	99
Max	348.0	134.0	1650	1170	806.0	251.0	2270	1610

ED_004549_00015842-00180

Table F6. Daily means (SD) of PM2.5 emissions at Site WI5B for January, 2009.

Day	$PM_{2.5}$							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14	86.9 (88.6)	33.4 (34.0)	401 (409)	285 (291)	62.5 (53.5)	19.5 (16.7)	185 (159)	132 (113)
15	83.6 (66.2)	32.1 (25.4)	385 (305)	274 (217)	49.4 (131.0)	15.4 (40.8)	146 (389)	104 (276)
16	52.5 (51.8)	20.2 (19.9)	241 (238)	171 (169)	37.7 (73.2)	11.8 (22.8)	112 (217)	79 (154)
17	50.4 (61.1)	19.4 (23.5)	231 (280)	164 (199)	19.3 (29.6)	6.0 (9.2)	57 (88)	41 (62)
18	32.6 (40.7)	12.5 (15.6)	149 (186)	106 (132)	27.0 (40.1)	8.4 (12.5)	80 (119)	57 (84)
19	39.5 (37.7)	15.2 (14.5)	180 (172)	128 (122)	27.0 (29.1)	8.4 (9.1)	80 (86)	57 (61)
20	33.2 (68.8)	12.8 (26.4)	151 (313)	108 (223)	29.1 (60.8)	9.1 (18.9)	86 (180)	61 (128)
21	18.9 (53.5)	7.3 (20.5)	86 (243)	61 (173)	24.2 (38.0)	7.5 (11.8)	71 (112)	51 (80)
22	-16.5 (30.5)	-6.4 (11.7)	-75 (138)	-53 (98)	-4.3 (47.4)	-1.3 (14.8)	-13 (140)	-9 (99)
23	17.7 (37.1)	6.8 (14.3)	80 (168)	57 (119)	3.9 (29.2)	1.2 (9.1)	11 (86)	8 (61)
24	64.0 (55.2)	24.6 (21.2)	288 (249)	205 (177)	48.3 (65.9)	15.0 (20.5)	142 (194)	101 (138)
25	65.9 (56.5)	25.3 (21.7)	296 (254)	211 (181)	33.7 (38.0)	10.5 (11.8)	99 (112)	71 (80)
26	77.3 (66.5)	29.7 (25.5)	347 (299)	247 (212)	60.0 (84.4)	18.7 (26.3)	177 (248)	126 (177)
27								
28								
29								
30								
31								
Avg	46.6	17.9	212	151	32.1	10.0	95	68
n	13	13	13	13	13	13	13	13
SD	28.7	11.0	131	93	19.0	5.9	56	40
Min	-16.5	-6.4	-75	-53	-4.3	-1.3	-13	-9
Max	86.9	33.4	401	285	62.5	19.5	185	132

ED_004549_00015842-00181

Table F6. Daily means (SD) of PM2.5 emissions at Site WI5B for July, 2009.

Day	$PM_{2.5}$							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7	496.0 (488.0)	190.0 (187.0)	2210 (2180)	1570 (1550)	420.0 (462.0)	131.0 (144.0)	1250 (1370)	888 (976)
8	288.0 (279.0)	111.0 (107.0)	1290 (1250)	917 (887)	237.0 (204.0)	74.0 (63.6)	699 (601)	497 (427)
9	439.0 (387.0)	168.0 (149.0)	1970 (1730)	1400 (1230)	392.0 (343.0)	122.0 (107.0)	1140 (1000)	814 (712)
10	539.0 (569.0)	207.0 (218.0)	2420 (2560)	1720 (1820)	489.0 (527.0)	152.0 (164.0)	1410 (1520)	1010 (1080)
11	218.0 (312.0)	83.6 (120.0)	982 (1400)	698 (999)	95.7 (233.0)	29.8 (72.6)	274 (668)	195 (475)
12	283.0 (342.0)	109.0 (131.0)	1280 (1540)	911 (1100)	137.0 (227.0)	42.7 (70.6)	390 (645)	277 (458)
13	395.0 (461.0)	152.0 (177.0)	1810 (2110)	1290 (1500)	198.0 (384.0)	61.5 (120.0)	556 (1080)	395 (769)
14	404.0 (273.0)	155.0 (105.0)	1890 (1280)	1340 (908)	311.0 (250.0)	96.9 (77.7)	866 (695)	616 (494)
15	226.0 (277.0)	86.8 (106.0)	1080 (1320)	767 (940)	185.0 (232.0)	57.6 (72.2)	510 (638)	362 (454)
16	111.0 (219.0)	42.6 (84.2)	541 (1070)	385 (759)				
17	87.3 (99.3)	33.5 (38.1)	434 (494)	309 (351)				
18	81.4 (127.0)	31.3 (48.9)	415 (649)	295 (462)				
19	167.0 (269.0)	64.2 (103.0)	871 (1400)	619 (996)	106.0 (212.0)	32.9 (65.9)	280 (559)	199 (398)
20	338.0 (298.0)	130.0 (115.0)	1780 (1570)	1270 (1120)	349.0 (312.0)	109.0 (97.3)	917 (822)	652 (584)
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
Avg	291.0	112.0	1360	964	265.0	82.7	754	536
n	14	14	14	14	11	11	11	11
SD	145.0	55.6	643	457	128.0	40.0	377	268
Min	81.4	31.3	415	295	95.7	29.8	274	195
Max	539.0	207.0	2420	1720	489.0	152.0	1410	1010

ED_004549_00015842-00182

Table F7. TSP emissions.

Table F7. Daily means (SD) of particulate matter emissions at Site WI5B for December, 2007.

Day	TSP							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13	107.0 (92.3)	41.3 (35.4)	509 (437)	362 (311)	764.0 (425.0)	238.0 (133.0)	2150 (1200)	1530 (852)
14								
15								
16	29.4 (39.6)	11.3 (15.2)	139 (188)	99 (134)	713.0 (257.0)	222.0 (80.0)	2010 (724)	1430 (515)
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
Avg	68.4	26.3	324	231	738.0	230.0	2080	1480
n	2	2	2	2	2	2	2	2
SD	39.0	15.0	185	132	25.5	8.0	72	51
Min	29.4	11.3	139	99	713.0	222.0	2010	1430
Max	107.0	41.3	509	362	764.0	238.0	2150	1530

ED_004549_00015842-00183

Table F7. Daily means (SD) of particulate matter emissions at Site WI5B for February, 2008.

Day	TSP							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20	345.0 (1170.0)	132.0 (451.0)	1630 (5560)	1160 (3950)	373.0 (2070.0)	116.0 (646.0)	1050 (5840)	747 (4150)
21	94.5 (361.0)	36.3 (138.0)	448 (1710)	319 (1220)	255.0 (1510.0)	79.5 (469.0)	719 (4240)	511 (3020)
22	-110.0 (220.0)	-42.4 (84.3)	-523 (1040)	-372 (740)	110.0 (780.0)	34.4 (243.0)	311 (2200)	221 (1560)
23	-220.0 (501.0)	-84.5 (193.0)	-1040 (2380)	-742 (1690)				
24	-269.0 (251.0)	-103.0 (96.4)	-1270 (1190)	-906 (846)				
25	-322.0 (269.0)	-124.0 (103.0)	-1530 (1280)	-1090 (907)				
26								
27								
28								
29								
Avg	-80.4	-30.9	-381	-271	246.0	76.7	693	493
n	6	6	6	6	3	3	3	3
SD	233.0	89.5	1100	785	107.0	33.5	303	215
Min	-322.0	-124.0	-1530	-1090	110.0	34.4	311	221
Max	345.0	132.0	1630	1160	373.0	116.0	1050	747

ED_004549_00015842-00184

Table F7. Daily means (SD) of particulate matter emissions at Site WI5B for March, 2008.

Day	TSP							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18	-450.0 (339.0)	-173.0 (130.0)	-2130 (1610)	-1520 (1140)	232.0 (159.0)	72.4 (49.7)	655 (449)	466 (319)
19	-26.2 (367.0)	-10.1 (141.0)	-124 (1740)	-88 (1240)	265.0 (347.0)	82.6 (108.0)	747 (979)	531 (696)
20	476.0 (504.0)	183.0 (194.0)	2260 (2390)	1600 (1700)	291.0 (212.0)	90.8 (65.9)	821 (596)	584 (424)
21	126.0 (296.0)	48.5 (114.0)	599 (1410)	426 (999)	15.0 (354.0)	4.7 (110.0)	42 (997)	30 (709)
22	177.0 (163.0)	68.1 (62.6)	841 (773)	598 (550)	178.0 (98.0)	55.3 (30.5)	500 (276)	356 (196)
23	168.0 (113.0)	64.5 (43.3)	797 (534)	567 (380)				
24	209.0 (194.0)	80.2 (74.4)	990 (918)	704 (653)	283.0 (176.0)	88.1 (54.7)	797 (495)	567 (352)
25								
26								
27								
28								
29								
30								
31								
Avg	97.2	37.3	461	328	211.0	65.6	594	422
n	7	7	7	7	6	6	6	6
SD	263.0	101.0	1250	886	95.3	29.7	268	191
Min	-450.0	-173.0	-2130	-1520	15.0	4.7	42	30
Max	476.0	183.0	2260	1600	291.0	90.8	821	584

ED_004549_00015842-00185

Table F7. Daily means (SD) of particulate matter emissions at Site WI5B for April, 2008.

Day	TSP							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30	764.0 (732.0)	293.0 (281.0)	3620 (3470)	2580 (2470)	1080.0 (833.0)	335.0 (260.0)	3030 (2350)	2150 (1670)
Avg								
n	1	1	1	1	1	1	1	1
SD								
Min								
Max								

ED_004549_00015842-00186

Table F7. Daily means (SD) of particulate matter emissions at Site WI5B for May, 2008.

Day	TSP							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	1470.0 (1550.0)	566.0 (595.0)	6980 (7340)	4960 (5220)	1360.0 (1200.0)	423.0 (373.0)	3830 (3380)	2720 (2400)
2	354.0 (222.0)	136.0 (85.1)	1680 (1050)	1190 (747)				
3	326.0 (223.0)	125.0 (85.5)	1540 (1060)	1100 (751)				
4	492.0 (381.0)	189.0 (146.0)	2330 (1810)	1660 (1280)	565.0 (563.0)	176.0 (175.0)	1590 (1590)	1130 (1130)
5								
6								
7								
8								
9								
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31								
Avg	661.0	254.0	3130	2230	962.0	300.0	2710	1930
n	4	4	4	4	2	2	2	2
SD	473.0	182.0	2240	1590	396.0	124.0	1120	794
Min	326.0	125.0	1540	1100	565.0	176.0	1590	1130
Max	1470.0	566.0	6980	4960	1360.0	423.0	3830	2720

ED_004549_00015842-00187

Table F7. Daily means (SD) of particulate matter emissions at Site WI5B for June, 2008.

Day	TSP							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
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19								
20	1720.0 (1740.0)	662.0 (668.0)	8170 (8250)	5810 (5870)	2650.0 (3170.0)	826.0 (988.0)	7470 (8930)	5310 (6350)
21	1870.0 (1690.0)	720.0 (647.0)	8880 (7990)	6320 (5680)	2040.0 (2030.0)	636.0 (631.0)	5750 (5710)	4090 (4060)
22	1400.0 (2360.0)	538.0 (908.0)	6640 (11200)	4720 (7970)	824.0 (712.0)	257.0 (222.0)	2320 (2010)	1650 (1430)
23	2030.0 (1920.0)	778.0 (739.0)	9610 (9120)	6830 (6480)	2610.0 (2410.0)	812.0 (750.0)	7340 (6780)	5220 (4820)
24	2310.0 (2090.0)	888.0 (804.0)	11000 (9920)	7790 (7060)	4200.0 (3190.0)	1310.0 (994.0)	11800 (8990)	8410 (6390)
25	2250.0 (1790.0)	866.0 (686.0)	10700 (8460)	7600 (6020)	3820.0 (3330.0)	1190.0 (1040.0)	10800 (9370)	7650 (6660)
26								
27								
28								
29								
30								
Avg	1930.0	742.0	9160	6510	2690.0	838.0	7580	5390
n	6	6	6	6	6	6	6	6
SD	313.0	120.0	1480	1050	1120.0	347.0	3140	2230
Min	1400.0	538.0	6640	4720	824.0	257.0	2320	1650
Max	2310.0	888.0	11000	7790	4200.0	1310.0	11800	8410

ED_004549_00015842-00188

Table F7. Daily means (SD) of particulate matter emissions at Site WI5B for August, 2008.

Day	TSP							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
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18								
19	2680.0 (2840.0)	1030.0 (1090.0)	12700 (13500)	9020 (9570)	2440.0 (2610.0)	761.0 (813.0)	6880 (7350)	4890 (5230)
20	2320.0 (2660.0)	891.0 (1020.0)	11000 (12600)	7820 (8950)	1540.0 (2110.0)	481.0 (656.0)	4350 (5930)	3090 (4220)
21	2470.0 (2540.0)	949.0 (974.0)	11700 (12000)	8330 (8550)	1560.0 (1740.0)	487.0 (542.0)	4400 (4910)	3130 (3490)
22	1780.0 (2260.0)	683.0 (867.0)	8430 (10700)	6000 (7610)	2370.0 (2090.0)	738.0 (651.0)	6680 (5880)	4750 (4190)
23	721.0 (995.0)	277.0 (382.0)	3420 (4710)	2430 (3350)	740.0 (1030.0)	230.0 (321.0)	2080 (2900)	1480 (2060)
24	1030.0 (1210.0)	397.0 (464.0)	4900 (5720)	3490 (4070)	837.0 (1370.0)	261.0 (427.0)	2360 (3860)	1680 (2750)
25								
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28								
29								
30								
31								
Avg	1830.0	704.0	8690	6180	1580.0	493.0	4460	3170
n	6	6	6	6	6	6	6	6
SD	734.0	282.0	3480	2470	662.0	206.0	1860	1330
Min	721.0	277.0	3420	2430	740.0	230.0	2080	1480
Max	2680.0	1030.0	12700	9020	2440.0	761.0	6880	4890

ED_004549_00015842-00189

Table F7. Daily means (SD) of particulate matter emissions at Site WI5B for October, 2008.

Day	TSP							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
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15	413.0 (309.0)	159.0 (118.0)	1960 (1460)	1390 (1040)	341.0 (217.0)	106.0 (67.7)	962 (612)	684 (436)
16								
17								
18								
19								
20								
21								
22	450.0 (586.0)	173.0 (225.0)	2070 (2690)	1470 (1920)	264.0 (539.0)	82.3 (168.0)	745 (1520)	530 (1080)
23	511.0 (939.0)	196.0 (361.0)	2380 (4380)	1690 (3110)	441.0 (659.0)	137.0 (205.0)	1240 (1860)	884 (1320)
24	149.0 (191.0)	57.1 (73.2)	697 (894)	496 (636)	200.0 (149.0)	62.3 (46.3)	563 (419)	401 (298)
25	283.0 (337.0)	109.0 (129.0)	1340 (1600)	956 (1140)	175.0 (156.0)	54.4 (48.6)	492 (439)	350 (313)
26	314.0 (190.0)	121.0 (73.0)	1510 (911)	1070 (648)				
27	329.0 (370.0)	126.0 (142.0)	1590 (1790)	1130 (1270)				
28								
29								
30								
31								
Avg	350.0	134.0	1650	1170	284.0	88.6	801	570
n	7	7	7	7	5	5	5	5
SD	111.0	42.7	510	363	97.4	30.3	274	195
Min	149.0	57.1	697	496	175.0	54.4	492	350
Max	511.0	196.0	2380	1690	441.0	137.0	1240	884

ED_004549_00015842-00190

Table F7. Daily means (SD) of particulate matter emissions at Site WI5B for December, 2008.

Day	TSP							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
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16								
17	330.0 (139.0)	127.0 (53.3)	1470 (620)	1050 (441)	303.0 (103.0)	94.4 (32.0)	908 (307)	646 (219)
18	291.0 (167.0)	112.0 (64.1)	1290 (742)	919 (528)	200.0 (176.0)	62.3 (55.0)	598 (528)	425 (375)
19	285.0 (204.0)	109.0 (78.3)	1260 (902)	895 (642)	151.0 (85.3)	46.9 (26.6)	449 (254)	319 (181)
20					103.0 (126.0)	32.1 (39.1)	306 (373)	218 (265)
21								
22								
23								
24					276.0 (89.5)	86.0 (27.9)	802 (260)	571 (185)
25					155.0 (180.0)	48.1 (56.0)	446 (519)	317 (369)
26					290.0 (259.0)	90.5 (80.5)	833 (741)	592 (527)
27					130.0 (102.0)	40.4 (31.8)	368 (290)	262 (207)
28					154.0 (90.0)	47.9 (28.0)	435 (254)	309 (181)
29					177.0 (125.0)	55.2 (38.8)	497 (349)	353 (249)
30								
31								
Avg	302.0	116.0	1340	954	194.0	60.4	564	401
n	3	3	3	3	10	10	10	10
SD	20.0	7.7	94	67	67.6	21.1	200	143
Min	285.0	109.0	1260	895	103.0	32.1	306	218
Max	330.0	127.0	1470	1050	303.0	94.4	908	646

ED_004549_00015842-00191

Table F7. Daily means (SD) of particulate matter emissions at Site WI5B for February, 2009.

Day	TSP							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
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17								
18	387.0 (211.0)	149.0 (81.0)	1740 (951)	1240 (677)				
19					661.0 (239.0)	206.0 (74.5)	1950 (705)	1380 (501)
20					519.0 (164.0)	162.0 (51.2)	1520 (482)	1080 (343)
21					403.0 (228.0)	125.0 (71.0)	1170 (665)	834 (473)
22					314.0 (104.0)	97.7 (32.3)	909 (301)	646 (214)
23					298.0 (142.0)	92.8 (44.2)	863 (411)	613 (292)
24								
25								
26								
27								
28								
Avg					439.0	137.0	1280	912
n	1	1	1	1	5	5	5	5
SD					136.0	42.4	407	289
Min					298.0	92.8	863	613
Max					661.0	206.0	1950	1380

ED_004549_00015842-00192

Table F7. Daily means (SD) of particulate matter emissions at Site WI5B for April, 2009.

Day	TSP							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7	632.0 (518.0)	243.0 (199.0)	2830 (2320)	2010 (1650)	461.0 (562.0)	144.0 (175.0)	1350 (1650)	961 (1170)
8	917.0 (1330.0)	352.0 (510.0)	4110 (5960)	2930 (4240)	288.0 (230.0)	89.7 (71.7)	844 (675)	601 (480)
9	740.0 (577.0)	284.0 (221.0)	3320 (2590)	2360 (1840)				
10	650.0 (573.0)	250.0 (220.0)	2910 (2570)	2070 (1830)				
11	692.0 (640.0)	266.0 (246.0)	3100 (2870)	2210 (2040)	429.0 (680.0)	134.0 (212.0)	1260 (1990)	895 (1420)
12	871.0 (789.0)	335.0 (303.0)	3910 (3540)	2780 (2520)	520.0 (702.0)	162.0 (219.0)	1530 (2060)	1090 (1460)
13	1470.0 (2000.0)	566.0 (769.0)	6630 (9020)	4710 (6410)	714.0 (1070.0)	222.0 (333.0)	2090 (3130)	1490 (2220)
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29								
30								
Avg	854.0	328.0	3830	2720	482.0	150.0	1410	1010
n	7	7	7	7	5	5	5	5
SD	272.0	104.0	1230	872	139.0	43.2	406	289
Min	632.0	243.0	2830	2010	288.0	89.7	844	601
Max	1470.0	566.0	6630	4710	714.0	222.0	2090	1490

ED_004549_00015842-00193

Table F7. Daily means (SD) of particulate matter emissions at Site WI5B for June, 2009.

Day	TSP							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4	1840.0 (1480.0)	705.0 (570.0)	8050 (6510)	5730 (4630)	1670.0 (2170.0)	520.0 (676.0)	4820 (6260)	3420 (4450)
5	1910.0 (1890.0)	734.0 (727.0)	8350 (8280)	5940 (5890)				
6					256.0 (254.0)	79.8 (79.1)	746 (739)	531 (526)
7					199.0 (124.0)	61.9 (38.5)	581 (362)	413 (258)
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29								
30								
Avg	1870.0	720.0	8200	5830	708.0	220.0	2050	1460
n	2	2	2	2	3	3	3	3
SD	37.7	14.5	150	107	680.0	212.0	1960	1390
Min	1840.0	705.0	8050	5730	199.0	61.9	581	413
Max	1910.0	734.0	8350	5940	1670.0	520.0	4820	3420

ED_004549_00015842-00194

Table F7. Daily means (SD) of particulate matter emissions at Site WI5B for August, 2009.

Day	TSP							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5	1660.0 (1240.0)	639.0 (474.0)	8450 (6280)	6010 (4470)	1050.0 (958.0)	328.0 (298.0)	2790 (2540)	1990 (1810)
6	1820.0 (1340.0)	697.0 (514.0)	9340 (6890)	6640 (4900)	1440.0 (1460.0)	447.0 (454.0)	3800 (3850)	2700 (2740)
7	636.0 (748.0)	244.0 (287.0)	3310 (3880)	2350 (2760)	372.0 (380.0)	116.0 (118.0)	982 (1000)	698 (712)
8	1320.0 (818.0)	506.0 (314.0)	6950 (4320)	4940 (3070)	1630.0 (1400.0)	509.0 (438.0)	4290 (3690)	3050 (2620)
9	1970.0 (1410.0)	757.0 (542.0)	10500 (7560)	7500 (5380)	1810.0 (1450.0)	565.0 (452.0)	4740 (3790)	3370 (2700)
10	1980.0 (1590.0)	760.0 (610.0)	10600 (8550)	7570 (6080)	1540.0 (1480.0)	479.0 (462.0)	4000 (3860)	2850 (2750)
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30								
31								
Avg	1560.0	601.0	8210	5840	1310.0	407.0	3430	2440
n	6	6	6	6	6	6	6	6
SD	471.0	181.0	2530	1800	478.0	149.0	1250	887
Min	636.0	244.0	3310	2350	372.0	116.0	982	698
Max	1980.0	760.0	10600	7570	1810.0	565.0	4740	3370

ED_004549_00015842-00195

Table F7. Daily means (SD) of particulate matter emissions at Site WI5B for September, 2009.

Day	TSP							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
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16	585.0 (1690.0)	225.0 (648.0)	3110 (8970)	2210 (6380)	3430.0 (4360.0)	1070.0 (1360.0)	9090 (11500)	6460 (8200)
17	1660.0 (2210.0)	638.0 (848.0)	8890 (11800)	6330 (8390)	846.0 (2050.0)	263.0 (638.0)	2250 (5450)	1600 (3870)
18	2190.0 (2650.0)	841.0 (1020.0)	11800 (14300)	8380 (10200)	3130.0 (4370.0)	975.0 (1360.0)	8370 (11700)	5950 (8310)
19	3300.0 (3860.0)	1270.0 (1480.0)	17900 (20900)	12700 (14800)	2400.0 (4770.0)	747.0 (1490.0)	6450 (12800)	4580 (9120)
20	2330.0 (2680.0)	894.0 (1030.0)	12700 (14600)	9010 (10400)	1140.0 (1300.0)	356.0 (406.0)	3090 (3520)	2200 (2500)
21	1880.0 (1940.0)	723.0 (745.0)	10300 (10600)	7300 (7530)	1020.0 (1270.0)	317.0 (396.0)	2750 (3440)	1960 (2450)
22	198.0 (284.0)	76.0 (109.0)	1070 (1540)	764 (1100)	1010.0 (1490.0)	315.0 (464.0)	2730 (4030)	1940 (2860)
23	998.0 (858.0)	383.0 (330.0)	5400 (4640)	3840 (3300)	824.0 (551.0)	257.0 (172.0)	2220 (1490)	1580 (1060)
24	1720.0 (1780.0)	661.0 (683.0)	9270 (9580)	6600 (6810)	1270.0 (1200.0)	394.0 (374.0)	3410 (3240)	2430 (2300)
25	350.0 (390.0)	134.0 (150.0)	1880 (2090)	1340 (1490)	253.0 (197.0)	78.8 (61.2)	681 (529)	485 (376)
26	523.0 (750.0)	201.0 (288.0)	2800 (4010)	1990 (2860)	243.0 (598.0)	75.7 (186.0)	652 (1610)	464 (1140)
27	538.0 (469.0)	207.0 (180.0)	2870 (2500)	2040 (1780)				
28	494.0 (421.0)	190.0 (162.0)	2620 (2230)	1860 (1590)				
29								
30	621.0 (416.0)	239.0 (160.0)	3250 (2170)	2310 (1540)	266.0 (264.0)	82.8 (82.3)	709 (705)	504 (501)
Avg	1240.0	477.0	6700	4760	1320.0	411.0	3530	2510
n	14	14	14	14	12	12	12	12
SD	905.0	348.0	4920	3500	1040.0	324.0	2770	1970
Min	198.0	76.0	1070	764	243.0	75.7	652	464
Max	3300.0	1270.0	17900	12700	3430.0	1070.0	9090	6460

Table F7. Daily means (SD) of particulate matter emissions at Site WI5B for October, 2009.

Day	TSP							
	Barn 1				Barn 2			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1					171.0 (285.0)	53.2 (88.9)	454 (759)	323 (540)
2	501.0 (601.0)	192.0 (231.0)	2590 (3110)	1840 (2210)				
3	273.0 (249.0)	105.0 (95.6)	1400 (1280)	994 (909)				
4	282.0 (196.0)	108.0 (75.3)	1440 (999)	1020 (710)				
5	371.0 (536.0)	142.0 (206.0)	1880 (2710)	1340 (1930)				
6								
7	303.0 (267.0)	116.0 (102.0)	1520 (1340)	1080 (956)				
8	349.0 (405.0)	134.0 (155.0)	1750 (2030)	1250 (1450)				
9	260.0 (298.0)	99.8 (115.0)	1300 (1500)	926 (1060)				
10	139.0 (629.0)	53.3 (242.0)	693 (3150)	492 (2240)	44.1 (765.0)	13.7 (238.0)	116 (2010)	82 (1430)
11	321.0 (244.0)	123.0 (93.8)	1600 (1220)	1140 (866)	504.0 (3190.0)	157.0 (993.0)	1320 (8370)	941 (5950)
12	323.0 (365.0)	124.0 (140.0)	1600 (1810)	1140 (1290)	200.0 (118.0)	62.3 (36.7)	526 (310)	374 (220)
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18								
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21								
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24								
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26								
27								
28								
29								
30								
31								
Avg	312.0	120.0	1580	1120	230.0	71.5	605	430
n	10	10	10	10	4	4	4	4
SD	87.2	33.5	453	322	169.0	52.6	443	315
Min	139.0	53.3	693	492	44.1	13.7	116	82
Max	501.0	192.0	2590	1840	504.0	157.0	1320	941

ED_004549_00015842-00197

Table F8. Hydrogen sulfide concentrations.

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for September, 2007. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12	7 (16)	10 (23)	89 (123)	129 (179)	7 (9)	9 (13)	124 (152)	177 (216)
13	17 (24)	24 (34)	75 (101)	107 (145)	20 (22)	28 (31)	142 (82)	203 (116)
14	6 (7)	9 (11)	124 (142)		2 (9)	3 (14)	98 (94)	120 (124)
15	0 (2)	1 (3)	42 (84)		7 (8)	10 (12)	112 (88)	160 (125)
16	0 (1)				30 (32)			
17	-1 (0)				17 (16)			
18	1 (3)	1 (4)	8 (7)		5 (4)	7 (5)	53 (52)	77 (74)
19	3 (4)	5 (5)	79 (73)		0 (2)	0 (3)	25 (36)	35 (51)
20	0 (1)	0 (2)	102 (127)		1 (2)	1 (3)		
21	5 (3)	6 (5)			6 (3)	9 (4)		
22	0 (2)	1 (3)	51 (105)	73 (150)	16 (18)	23 (25)	56 (48)	80 (69)
23	0 (1)	0 (1)	163 (251)	234 (359)	31 (30)	45 (43)	35 (45)	50 (65)
24	0 (1)	0 (1)	74 (84)	106 (121)			59 (85)	85 (122)
25	49 (66)	70 (94)	105 (122)	150 (174)			152 (105)	218 (150)
26	3 (8)	4 (11)	54 (66)	77 (94)			85 (71)	121 (101)
27	102 (160)	146 (228)	175 (150)	249 (214)			56 (51)	80 (73)
28	3 (5)	5 (6)	93 (114)	142 (165)			32 (39)	50 (57)
29	0 (0)	-1 (0)	22 (29)	32 (42)	2 (5)	3 (7)	92 (93)	132 (133)
30	1 (2)	1 (2)	37 (90)	54 (129)	7 (12)	10 (17)	77 (91)	110 (130)
Avg	10	17	81	123	11	12	80	113
n	19	17	16	11	14	12	15	15
SD	24	36	45	66	10	13	39	54
Min	-1	-1	8	32	0	0	25	35
Max	102	146	175	249	31	45	152	218

ED_004549_00015842-00198

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for October, 2007. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	7 (1)	10 (2)			1 (1)	2 (1)		
2	10 (2)	14 (3)			3 (1)	4 (1)		
3	2 (1)	3 (2)	80 (185)	114 (265)	22 (21)	31 (30)	45 (38)	64 (54)
4	1 (0)	1 (0)	36 (75)	51 (107)	37 (44)	54 (63)	58 (69)	83 (98)
5	1 (0)	2 (1)	24 (36)		9 (12)	14 (17)	27 (51)	
6	0 (0)	1 (1)	10 (11)	15 (16)	2 (1)	3 (1)	49 (51)	70 (74)
7	0 (0)	1 (0)	42 (83)	60 (119)	9 (6)	13 (8)	34 (39)	49 (56)
8	1 (0)	1 (1)			9 (4)	12 (6)		
9	11 (11)	16 (16)	103 (224)	147 (320)	3 (5)	5 (8)	114 (204)	163 (290)
10	6 (17)	8 (24)	161 (223)	227 (320)	0 (0)	-1 (1)	16 (20)	24 (28)
11	0 (1)	1 (1)			0 (1)	0 (1)		
12	1 (1)	1 (1)	98 (95)	140 (136)	1 (0)	1 (0)	73 (73)	104 (104)
13	11 (16)	15 (22)	54 (58)	77 (83)	1 (1)	1 (1)	36 (43)	51 (61)
14	0 (1)	0 (1)	86 (106)	123 (151)	0 (1)	0 (1)	81 (136)	115 (194)
15	1 (1)	1 (1)	137 (221)	196 (316)	0 (1)	0 (1)	30 (27)	44 (38)
16	0 (1)	1 (1)	19 (19)	27 (28)	13 (27)	19 (39)	114 (117)	164 (167)
17	0 (1)	0 (1)	119 (152)	170 (218)	4 (3)	5 (4)	187 (159)	267 (227)
18	1 (2)	1 (3)	115 (148)	164 (212)	4 (4)	6 (5)	150 (179)	214 (256)
19	18 (6)	26 (8)	217 (225)	310 (322)	5 (9)	7 (12)	64 (80)	91 (115)
20	0 (1)	-1 (1)	83 (129)	118 (183)	19 (17)	27 (25)	84 (67)	119 (95)
21	3 (9)	4 (12)			-1 (1)	-1 (1)		
22	61 (109)	87 (155)	39 (26)	56 (38)	2 (6)	3 (8)	97 (132)	138 (188)
23	25 (32)	36 (45)	111 (140)	159 (200)	3 (5)	4 (6)	212 (233)	303 (332)
24	28 (49)	39 (69)	172 (136)	246 (194)	2 (7)	3 (10)	83 (99)	118 (142)
25	5 (11)	6 (15)	68 (63)	97 (89)	37 (30)	53 (42)	269 (233)	383 (332)
26	13 (21)	18 (30)	107 (97)	152 (139)	7 (12)	10 (18)	101 (136)	145 (193)
27	37 (34)	53 (49)	153 (165)	218 (236)	25 (41)	35 (59)	158 (155)	225 (220)
28	5 (7)	8 (11)	182 (229)	258 (325)	36 (25)	51 (36)	297 (309)	423 (439)
29	-1 (0)	-1 (1)	90 (120)	128 (171)	46 (32)	66 (45)	107 (142)	153 (202)
30	-1 (1)	-1 (1)	102 (226)	146 (323)	8 (8)	11 (11)	131 (122)	187 (175)
31	16 (14)	22 (21)	178 (221)	254 (316)	1 (4)	1 (5)	230 (256)	328 (366)
Avg	8	12	99	146	10	14	109	161
n	31	31	26	25	31	31	26	25
SD	13	19	54	75	13	19	75	106
Min	-1	-1	10	15	-1	-1	16	24
Max	61	87	217	310	46	66	297	423

ED_004549_00015842-00199

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for November, 2007. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	-1 (2)	-1 (2)	158 (191)	225 (272)	18 (23)	26 (32)	269 (198)	383 (282)
2	7 (9)	10 (12)	124 (132)	176 (188)	20 (22)	29 (31)	235 (256)	335 (364)
3	-1 (5)	-1 (7)	52 (57)	73 (81)	28 (26)	39 (38)	237 (214)	337 (305)
4	17 (32)	24 (46)	142 (151)	202 (216)	18 (21)	26 (30)	210 (210)	300 (299)
5	13 (6)	19 (8)	225 (171)	320 (243)	-1 (1)	-2 (1)	85 (206)	121 (294)
6	9 (6)	12 (9)	294 (262)	418 (373)	-1 (1)	-1 (1)	130 (262)	185 (372)
7	-1 (1)	-1 (2)	117 (127)	166 (181)	1 (3)	1 (4)	63 (39)	90 (55)
8	5 (6)	7 (8)	110 (121)	157 (173)	5 (13)	8 (19)	98 (119)	139 (169)
9	4 (7)	6 (10)	71 (89)	101 (127)	6 (8)	8 (11)	137 (143)	195 (204)
10	-1 (0)	-2 (0)	144 (153)	205 (218)	8 (18)	11 (26)	150 (150)	213 (213)
11	2 (2)	2 (3)	161 (210)	229 (300)	0 (1)	0 (1)	197 (178)	281 (254)
12	2 (2)	3 (3)	73 (87)	104 (123)	63 (141)	90 (201)	97 (92)	138 (131)
13								
14								
15								
16	1 (5)	2 (7)	235 (163)	335 (232)	64 (106)	91 (151)	284 (178)	404 (253)
17	0 (2)	0 (2)	334 (308)	476 (439)	2 (6)	2 (8)	68 (109)	97 (155)
18	-1 (1)	-2 (1)	154 (214)	219 (305)	1 (3)	2 (4)	207 (188)	294 (268)
19	0 (2)	0 (2)	134 (225)	191 (321)	4 (11)	6 (16)	69 (90)	99 (128)
20	11 (19)	16 (26)	458 (302)	653 (431)	3 (9)	4 (12)	209 (200)	316 (286)
21	7 (7)	10 (10)	157 (144)	224 (205)	-1 (0)	-1 (1)		
22	8 (10)	12 (14)	266 (235)	379 (335)	-1 (0)	-2 (1)		
23	0 (1)	0 (1)	364 (310)	519 (442)	6 (4)	9 (5)	126 (140)	179 (199)
24	10 (23)	14 (32)	196 (211)	279 (300)	9 (11)	13 (15)	185 (234)	263 (333)
25	18 (39)	25 (55)	158 (152)	226 (216)	8 (6)	11 (9)	189 (193)	270 (275)
26	4 (4)	5 (6)	278 (177)	396 (253)	1 (3)	1 (5)	357 (324)	508 (461)
27	3 (5)	4 (6)	264 (223)	375 (317)	-1 (1)	-1 (1)	242 (140)	344 (199)
28	5 (7)	7 (9)	166 (156)	250 (222)	-1 (1)	-1 (1)	251 (146)	357 (207)
29	64 (54)	91 (77)	196 (151)	278 (215)	-1 (0)	-2 (0)		
30	-1 (1)	-1 (1)	217 (249)	309 (354)	0 (2)	0 (2)	329 (285)	468 (406)
Avg	7	10	194	277	10	14	184	263
n	27	27	27	27	27	27	24	24
SD	13	18	93	132	17	24	82	116
Min	-1	-2	52	73	-1	-2	63	90
Max	64	91	458	653	64	91	357	508

ED_004549_00015842-00200

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for December, 2007. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	0 (1)	0 (2)	192 (202)	273 (287)	-1 (1)	-1 (1)	559 (345)	794 (491)
2	2 (2)	3 (3)	188 (148)	268 (211)	-1 (0)	-2 (0)	612 (514)	872 (733)
3	11 (13)	16 (18)	246 (200)	350 (285)	-1 (1)	-1 (1)	264 (175)	376 (250)
4	-1 (1)	-1 (1)	246 (215)	350 (306)	-1 (0)	-2 (0)	247 (135)	352 (192)
5	33 (63)	47 (90)	332 (308)	472 (438)	2 (5)	3 (8)	258 (132)	366 (187)
6	8 (17)	12 (25)	347 (266)	494 (379)	5 (5)	7 (7)	431 (394)	613 (561)
7	6 (3)	8 (5)	216 (217)	308 (309)	2 (5)	3 (6)	385 (360)	547 (512)
8	4 (3)	5 (4)	311 (284)	442 (403)	1 (3)	1 (4)	565 (322)	803 (457)
9	4 (4)	6 (5)	153 (103)	217 (147)	1 (3)	2 (4)	470 (483)	668 (686)
10	9 (10)	12 (14)	319 (232)	453 (330)	3 (2)	5 (3)	385 (290)	547 (412)
11	5 (5)	7 (7)	506 (652)	721 (927)	0 (1)	0 (1)	395 (203)	562 (288)
12	1 (1)	1 (2)	236 (262)	335 (373)	1 (1)	2 (2)	346 (214)	492 (304)
13	1 (2)	2 (3)	145 (185)	207 (263)	1 (3)	2 (5)	400 (223)	569 (317)
14	6 (9)	8 (13)	134 (101)	190 (143)	-1 (1)	-1 (1)	412 (258)	585 (367)
15	8 (14)	12 (20)	181 (222)	257 (315)	1 (1)	1 (1)	421 (177)	599 (251)
16	1 (1)	1 (2)	107 (117)	152 (167)	0 (2)	0 (3)	412 (231)	587 (328)
17	0 (1)	0 (1)	95 (106)	135 (152)	5 (5)	7 (7)	483 (456)	688 (649)
18	1 (1)	1 (1)	221 (389)	315 (554)	1 (1)	1 (2)	486 (254)	692 (363)
19	1 (1)	1 (1)	294 (444)	405 (620)	1 (1)	2 (2)	462 (236)	651 (336)
20	1 (0)	1 (1)	323 (473)	461 (674)	1 (1)	1 (1)	419 (211)	597 (300)
21	0 (1)	0 (1)	181 (446)	257 (636)	1 (1)	1 (1)	433 (402)	617 (573)
22	4 (5)	5 (7)	314 (450)	447 (640)	0 (1)	0 (2)	211 (299)	301 (426)
23								
24								
25								
26	4 (4)	5 (5)	384 (546)	548 (778)	0 (0)	0 (1)	425 (363)	606 (517)
27	8 (11)	11 (15)	923 (972)	1320 (1390)	0 (0)	0 (1)	546 (595)	777 (847)
28	4 (7)	6 (9)	473 (548)	674 (781)	0 (0)	0 (1)	176 (238)	250 (339)
29	0 (1)	0 (1)	839 (769)	1190 (1100)	16 (25)	23 (35)	283 (242)	403 (344)
30	0 (1)	0 (1)	585 (477)	833 (679)	18 (30)	25 (43)	256 (228)	365 (324)
31	2 (1)	2 (2)	937 (829)	1340 (1180)	2 (4)	3 (6)	291 (302)	414 (430)
Avg	4	6	337	479	2	3	394	561
n	28	28	28	28	28	28	28	28
SD	6	9	227	323	4	6	111	157
Min	-1	-1	95	135	-1	-2	176	250
Max	33	47	937	1340	18	25	612	872

ED_004549_00015842-00201

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for January, 2008. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	3 (2)	5 (3)	729 (714)	1040 (1020)	-1 (1)	-1 (1)	293 (313)	417 (445)
2	3 (3)	5 (4)	709 (563)	1010 (800)	0 (1)	0 (1)	176 (167)	251 (237)
3	0 (1)	0 (1)	427 (241)	608 (343)	2 (6)	3 (9)	362 (292)	514 (416)
4	0 (1)	0 (1)	436 (364)	620 (518)	8 (8)	12 (11)	335 (266)	477 (379)
5	1 (1)	1 (1)	422 (401)	602 (571)	17 (17)	24 (25)	535 (342)	763 (487)
6	2 (2)	3 (3)	70 (70)	99 (100)	11 (12)	16 (17)	519 (339)	740 (483)
7	2 (1)	2 (1)	298 (295)	424 (421)	62 (127)	88 (180)	196 (307)	280 (437)
8	5 (6)	7 (8)	415 (224)	591 (319)	0 (0)	0 (1)	472 (409)	672 (583)
9	1 (0)	1 (0)	464 (414)	660 (590)	0 (0)	1 (1)	333 (289)	474 (412)
10	3 (2)	4 (2)	436 (311)	621 (443)	0 (1)	1 (1)	420 (373)	599 (532)
11	3 (4)	4 (6)	348 (257)	495 (365)	0 (0)	0 (1)	420 (376)	597 (536)
12	1 (1)	1 (2)	428 (237)	609 (337)	0 (1)	-1 (1)	275 (329)	392 (468)
13	3 (3)	5 (4)	385 (349)	549 (497)	-1 (1)	-1 (1)	267 (323)	380 (460)
14	2 (1)	2 (1)	378 (290)	538 (413)	0 (0)	0 (1)	406 (379)	577 (538)
15	4 (4)	6 (6)	411 (237)	507 (323)	2 (1)	3 (2)	392 (317)	538 (455)
16	1 (1)	1 (1)	338 (336)	548 (508)	1 (1)	2 (2)	330 (290)	472 (413)
17	2 (2)	2 (2)	458 (350)	651 (498)	1 (1)	1 (2)	468 (361)	664 (513)
18	2 (2)	3 (3)	531 (456)	755 (649)	0 (1)	0 (2)	420 (424)	597 (603)
19	4 (4)	6 (5)	880 (549)	1250 (781)	4 (5)	5 (7)	660 (570)	937 (809)
20	3 (3)	4 (4)	794 (552)	1130 (785)	3 (4)	4 (5)	850 (640)	1210 (909)
21	3 (2)	4 (3)	729 (759)	1040 (1080)	2 (2)	2 (2)	610 (555)	866 (789)
22	2 (2)	3 (3)	618 (404)	879 (575)	2 (3)	3 (4)	500 (372)	711 (529)
23	13 (9)	18 (13)	533 (391)	759 (556)	0 (0)	0 (1)	413 (449)	587 (637)
24	2 (2)	2 (2)			2 (1)	3 (1)		
25	0 (0)	0 (1)	429 (295)	610 (419)	7 (7)	10 (11)	383 (332)	544 (473)
26	1 (2)	2 (2)	306 (200)	436 (285)	12 (16)	16 (23)		
27	2 (3)	3 (4)	256 (310)	364 (441)	7 (6)	10 (8)		
28	1 (0)	1 (0)	147 (231)		6 (11)	9 (16)		
29	3 (3)	4 (4)	369 (490)	525 (696)	-1 (0)	-1 (1)	288 (279)	410 (397)
30	6 (4)	9 (5)	619 (363)	879 (516)	-1 (1)	-1 (1)	598 (383)	850 (544)
31	1 (1)	1 (2)	435 (364)	619 (518)	0 (0)	0 (1)	525 (318)	746 (452)
Avg	3	4	460	669	5	7	424	602
n	31	31	30	29	31	31	27	27
SD	2	3	179	244	11	16	145	207
Min	0	0	70	99	-1	-1	176	251
Max	13	18	880	1250	62	88	850	1210

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for February, 2008. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	$\mu g \cdot dsm^{-3}$	ppb	$\mu g \cdot dsm^{-3}$	ppb	$\mu g \cdot dsm^{-3}$	ppb	$\mu g \cdot dsm^{-3}$
1	0 (1)	0 (1)	350 (245)	498 (349)	1 (1)	1 (2)	612 (369)	870 (525)
2	1 (1)	1 (1)	484 (414)	688 (589)	10 (12)	14 (17)	228 (220)	325 (313)
3	1 (1)	2 (1)	349 (314)	497 (447)	9 (13)	13 (18)	279 (300)	397 (426)
4	3 (5)	4 (7)	202 (269)	287 (383)	2 (4)	3 (6)	307 (254)	437 (361)
5	4 (6)	5 (9)	192 (237)	273 (338)	0 (1)	0 (1)	312 (341)	445 (486)
6	5 (6)	7 (8)	227 (186)	322 (265)	1 (1)	1 (2)	258 (280)	368 (398)
7	3 (3)	4 (4)	297 (275)	422 (391)	7 (7)	10 (10)	420 (288)	596 (409)
8	3 (3)	4 (5)	246 (205)	349 (292)	0 (1)	0 (1)	437 (372)	622 (529)
9	3 (3)	4 (4)	467 (377)	664 (535)	1 (1)	1 (1)	271 (225)	386 (320)
10	5 (4)	7 (6)	475 (369)	675 (524)	1 (1)	1 (1)	697 (497)	990 (706)
11	3 (6)	5 (8)	548 (360)	779 (512)	1 (1)	2 (1)	717 (387)	1020 (550)
12	1 (1)	2 (1)	241 (303)	343 (431)	18 (24)	25 (34)	874 (413)	1240 (587)
13	2 (1)	3 (1)	127 (169)	216 (260)	3 (3)	5 (4)	763 (765)	
14	10 (12)	14 (17)	269 (315)	382 (449)	1 (0)	1 (1)	628 (400)	894 (569)
15	2 (2)	3 (3)	195 (193)	278 (275)	4 (3)	5 (4)	931 (489)	1320 (695)
16	1 (1)	1 (1)	318 (366)	452 (521)	9 (11)	13 (15)	595 (435)	846 (619)
17	8 (8)	12 (11)	358 (417)	509 (594)	1 (2)	1 (2)	468 (334)	666 (476)
18	5 (5)	6 (7)	241 (224)	343 (319)	0 (1)	0 (1)	601 (287)	855 (408)
19	5 (6)	8 (8)	352 (326)	500 (463)	3 (1)	4 (2)	776 (426)	1100 (605)
20	8 (4)	11 (6)	378 (218)	537 (310)	2 (2)	3 (2)	724 (489)	1030 (694)
21	1 (1)	2 (1)	15 (13)	21 (18)	2 (2)	2 (3)	87 (183)	124 (260)
22	2 (2)	3 (2)	142 (292)	201 (416)	1 (1)	2 (2)	214 (362)	305 (514)
23	6 (10)	9 (14)	328 (477)	467 (679)	6 (4)	8 (6)	384 (270)	546 (384)
24	1 (1)	2 (1)	135 (170)	193 (243)	5 (3)	7 (4)	404 (350)	575 (497)
25	7 (8)	10 (11)	82 (87)	117 (124)	1 (1)	2 (1)	151 (225)	216 (320)
26	9 (10)	13 (14)	278 (275)	396 (392)	1 (1)	1 (1)	303 (224)	431 (319)
27	9 (7)	12 (10)	211 (257)	300 (365)	1 (0)	1 (1)	285 (327)	405 (465)
28	3 (4)	4 (6)	284 (266)	404 (379)	1 (1)	1 (1)	175 (194)	249 (276)
29	1 (1)	2 (1)	256 (227)	365 (322)	1 (2)	2 (2)	46 (42)	65 (60)
Avg	4	5	277	396	3	4	447	619
n	29	29	29	29	29	29	29	28
SD	3	4	121	171	4	6	241	338
Min	0	0	15	21	0	0	46	65
Max	10	14	548	779	18	25	931	1320

ED_004549_00015842-00203

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for March, 2008. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	0 (0)	0 (1)	234 (192)	333 (273)	0 (0)	0 (0)	143 (130)	203 (184)
2	1 (1)	1 (1)	235 (257)	335 (365)	1 (0)	1 (1)	89 (104)	126 (148)
3	1 (1)	2 (1)	312 (288)	444 (410)	0 (1)	0 (2)	296 (182)	421 (259)
4	1 (1)	1 (1)	226 (182)	322 (259)	2 (2)	3 (2)	229 (208)	326 (295)
5	1 (1)	1 (1)	186 (148)	265 (210)	1 (1)	1 (1)	291 (229)	414 (326)
6	2 (1)	3 (1)	290 (245)	412 (349)	0 (0)	0 (1)	333 (237)	474 (337)
7	4 (2)	6 (3)	319 (294)	454 (417)	0 (0)	1 (1)	325 (270)	462 (384)
8	2 (2)	4 (3)	309 (267)	440 (380)	1 (1)	2 (1)	308 (349)	438 (495)
9	3 (4)	4 (5)	317 (327)	451 (466)	2 (2)	2 (2)	250 (206)	356 (294)
10	3 (5)	5 (6)	291 (229)	414 (326)	6 (2)	8 (4)	352 (354)	575 (504)
11	5 (5)	7 (6)	120 (117)		2 (1)	3 (2)	211 (416)	301 (591)
12	1 (0)	1 (1)	165 (222)	235 (316)	9 (10)	13 (14)	177 (211)	252 (301)
13	1 (1)	2 (1)	106 (119)	151 (170)	3 (7)	5 (10)	161 (141)	229 (201)
14	8 (9)	12 (14)	149 (136)		2 (4)	3 (6)	181 (160)	258 (228)
15	10 (13)	14 (18)	203 (172)	289 (244)	0 (0)	1 (0)	174 (267)	247 (380)
16	0 (0)	0 (0)	131 (107)	186 (152)	0 (0)	0 (1)	205 (215)	291 (306)
17	1 (1)	1 (1)	179 (202)	254 (288)	0 (0)	1 (0)	288 (322)	410 (458)
18	3 (2)	4 (3)	125 (87)	178 (123)	0 (1)	1 (1)	81 (112)	115 (160)
19	2 (1)	3 (1)	206 (184)	293 (262)	2 (3)	3 (4)	76 (100)	108 (143)
20	1 (0)	1 (1)	215 (188)	306 (268)	0 (0)	0 (0)	74 (112)	105 (159)
21	1 (1)	1 (1)	226 (204)	322 (291)	0 (0)	0 (1)	172 (244)	244 (347)
22	5 (2)	7 (3)	159 (113)	226 (160)	0 (0)	1 (1)	158 (262)	225 (373)
23	12 (9)	16 (13)	249 (260)	354 (370)	3 (5)	5 (7)	213 (314)	303 (447)
24	3 (5)	4 (7)	217 (220)	308 (313)	2 (3)	3 (4)	351 (330)	499 (470)
25	4 (3)	6 (4)	228 (290)	325 (412)	9 (8)	13 (11)	56 (81)	80 (116)
26	5 (3)	7 (4)	299 (217)	426 (309)	3 (3)	4 (4)	210 (186)	299 (265)
27	3 (4)	4 (6)	269 (201)	383 (286)	0 (0)	0 (1)	155 (190)	221 (270)
28	1 (0)	1 (1)	250 (319)	355 (454)	2 (6)	3 (8)	208 (239)	296 (340)
29	0 (0)	0 (1)	176 (193)	251 (275)	23 (26)	33 (37)	142 (123)	201 (174)
30	1 (2)	2 (2)	119 (156)	169 (223)	3 (4)	5 (6)	99 (103)	141 (147)
31	2 (2)	2 (3)	176 (198)	251 (281)	0 (0)	0 (0)	122 (165)	174 (234)
Avg	3	4	216	315	3	4	198	284
n	31	31	31	29	31	31	31	31
SD	3	4	64	88	4	6	86	127
Min	0	0	106	151	0	0	56	80
Max	12	16	319	454	23	33	352	575

ED_004549_00015842-00204

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for April, 2008. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	6 (4)	8 (5)	164 (175)	234 (249)	0 (1)	1 (1)	202 (199)	288 (283)
2	1 (0)	1 (1)	130 (168)	185 (239)	9 (3)	13 (4)	119 (82)	169 (117)
3	2 (2)	3 (2)	39 (34)	55 (49)	25 (22)	36 (31)	79 (89)	113 (127)
4	2 (1)	3 (1)	114 (127)	162 (181)	6 (5)	8 (7)	196 (169)	279 (241)
5	1 (0)	2 (1)	100 (132)	142 (188)	10 (10)	15 (15)	91 (97)	130 (139)
6	1 (0)	2 (1)	58 (86)	83 (123)	5 (5)	8 (7)	140 (135)	200 (192)
7	5 (2)	7 (3)	262 (248)	373 (353)	2 (2)	2 (2)	65 (76)	92 (109)
8	4 (4)	5 (5)	290 (289)	413 (411)	1 (0)	1 (1)	142 (239)	202 (340)
9	3 (5)	5 (7)	339 (238)	483 (339)	1 (0)	1 (1)	120 (159)	171 (226)
10	1 (0)	1 (0)	240 (157)	342 (223)	1 (1)	1 (1)	42 (59)	59 (83)
11	9 (16)	12 (22)	276 (260)	394 (371)	0 (1)	0 (1)	168 (176)	239 (250)
12	4 (7)	5 (10)	152 (163)	217 (232)	0 (0)	0 (1)	130 (131)	185 (186)
13	5 (8)	7 (12)	247 (172)	352 (245)	1 (1)	2 (2)	135 (140)	192 (199)
14	3 (2)	4 (3)	178 (228)	253 (324)	17 (20)	24 (29)	190 (182)	270 (259)
15	1 (0)	1 (1)	66 (96)	94 (136)	20 (16)	28 (23)	197 (154)	281 (220)
16	3 (2)	4 (4)	35 (48)	49 (69)	14 (14)	20 (21)	192 (211)	274 (300)
17	20 (30)	29 (42)	278 (281)	396 (400)	1 (1)	2 (1)	161 (229)	229 (327)
18	4 (3)	5 (5)	542 (307)	773 (438)	0 (0)	0 (0)	100 (141)	142 (200)
19	1 (1)	2 (1)	204 (127)	291 (182)	1 (0)	1 (1)	168 (191)	240 (272)
20	1 (1)	1 (1)	186 (178)	265 (255)	1 (1)	2 (1)	102 (122)	145 (174)
21	3 (4)	4 (6)	60 (78)	86 (112)	3 (2)	4 (3)	132 (135)	189 (193)
22								
23								
24								
25	1 (0)	1 (1)	59 (48)	84 (68)			122 (237)	174 (337)
26	1 (2)	2 (2)	97 (92)	138 (131)	0 (1)	0 (1)	161 (144)	230 (206)
27	1 (1)	2 (1)	105 (128)	150 (182)	0 (0)	0 (1)	39 (57)	55 (81)
28	5 (5)	7 (7)	118 (135)	168 (192)	0 (0)	0 (0)	18 (20)	26 (29)
29	0 (1)	0 (1)	58 (84)	83 (120)	1 (0)	1 (1)	144 (185)	205 (263)
30	1 (0)	1 (0)	58 (64)	83 (91)	1 (0)	1 (1)	98 (105)	140 (149)
Avg	3	5	165	235	5	7	128	182
n	27	27	27	27	26	26	27	27
SD	4	5	115	164	7	10	50	71
Min	0	0	35	49	0	0	18	26
Max	20	29	542	773	25	36	202	288

ED_004549_00015842-00205

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for May, 2008. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	1 (0)	1 (1)	79 (80)	113 (114)	2 (1)	2 (1)	93 (86)	133 (122)
2	1 (0)	1 (0)	65 (76)	93 (109)	1 (0)	2 (1)	29 (46)	42 (65)
3	2 (1)	2 (1)	205 (195)	291 (278)	1 (0)	1 (0)	60 (101)	85 (144)
4	4 (6)	6 (8)	81 (156)	115 (222)	11 (9)	15 (12)	270 (336)	384 (478)
5	10 (10)	14 (15)	86 (124)	123 (177)	3 (3)	4 (4)	24 (83)	34 (118)
6	1 (1)	2 (1)	54 (77)	77 (110)	1 (1)	2 (1)	64 (83)	92 (118)
7	10 (18)	15 (26)	212 (206)	302 (294)	2 (0)	2 (0)	24 (35)	34 (50)
8	32 (61)	45 (87)	250 (304)	356 (433)	1 (0)	1 (1)	38 (53)	54 (76)
9	3 (2)	4 (3)	117 (93)	167 (132)	1 (0)	1 (1)	157 (378)	224 (539)
10	4 (7)	6 (10)	89 (113)	127 (162)	1 (1)	2 (1)	141 (181)	201 (258)
11	27 (34)	38 (48)	185 (121)	264 (173)	0 (1)	1 (1)	51 (80)	72 (114)
12	8 (19)	11 (28)	116 (196)	166 (279)	3 (2)	4 (2)	89 (91)	126 (130)
13	3 (2)	4 (3)	133 (182)	189 (259)	2 (1)	2 (1)	103 (113)	147 (161)
14	12 (9)	17 (12)	156 (205)	222 (292)	5 (8)	7 (11)	47 (71)	68 (101)
15	12 (23)	17 (32)	100 (139)	143 (199)	21 (15)	29 (22)	63 (59)	90 (84)
16	27 (30)	38 (43)	113 (135)	161 (192)	6 (6)	9 (9)	80 (122)	114 (174)
17	37 (44)	52 (63)	261 (173)	372 (247)	1 (0)	2 (1)	94 (103)	133 (146)
18	41 (36)	58 (51)	240 (148)	342 (211)	28 (90)	40 (128)	95 (124)	135 (177)
19	12 (18)	18 (26)	214 (249)	305 (355)	32 (70)	48 (101)	125 (157)	178 (223)
20	5 (5)	8 (7)	427 (362)	609 (516)	10 (26)	14 (37)	91 (146)	129 (208)
21	40 (62)	56 (89)	239 (189)	340 (270)	96 (128)	136 (182)	235 (193)	335 (276)
22	1 (0)	1 (0)	201 (229)	287 (327)	1 (1)	2 (1)	113 (170)	162 (243)
23	1 (0)	2 (1)	258 (379)	367 (541)	3 (2)	5 (4)	79 (112)	113 (160)
24	1 (0)	2 (1)	75 (69)	107 (99)	6 (6)	9 (9)	134 (188)	191 (267)
25	5 (8)	7 (12)	147 (193)	211 (277)	61 (81)	88 (117)	149 (159)	213 (229)
26	47 (11)				70 (93)			
27	18 (27)	27 (44)	286 (165)	407 (235)	6 (8)	11 (12)	50 (73)	72 (104)
28	25 (43)	35 (61)	219 (225)	312 (321)	22 (12)	31 (18)	210 (241)	299 (343)
29	1 (1)	2 (2)	107 (154)	152 (220)	22 (31)	31 (44)	226 (248)	323 (354)
30	20 (33)	29 (47)	223 (183)	320 (263)	8 (14)	11 (19)	258 (246)	369 (352)
31	39 (19)	55 (27)	278 (282)	398 (403)	24 (28)	34 (40)	98 (112)	140 (161)
Avg	14	19	174	248	15	18	110	156
n	31	30	30	30	31	30	30	30
SD	14	19	85	121	22	29	68	98
Min	1	1	54	77	0	1	24	34
Max	47	58	427	609	96	136	270	384

ED_004549_00015842-00206

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for June, 2008. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	44 (41)	62 (58)	268 (159)	384 (228)	21 (27)	31 (39)	108 (152)	154 (218)
2	2 (1)	3 (2)			1 (0)	1 (0)		
3	1 (1)	2 (1)	231 (199)	330 (285)	2 (2)	3 (3)	199 (309)	283 (441)
4	4 (4)	6 (5)	271 (249)	388 (356)	12 (22)	18 (31)	113 (169)	161 (241)
5	2 (1)	3 (1)	177 (154)	254 (221)	5 (11)	8 (16)	100 (178)	143 (255)
6	3 (1)	4 (1)	137 (184)	196 (264)	27 (23)	38 (33)	95 (135)	136 (193)
7	3 (7)	5 (10)	191 (151)	274 (217)	13 (18)	19 (25)	121 (240)	174 (344)
8	61 (53)				7 (4)			
9	7 (4)				48 (41)			
10	12 (7)	17 (10)	189 (161)	273 (230)	5 (7)	7 (9)	209 (203)	300 (292)
11	2 (1)	3 (1)	174 (220)	250 (315)	3 (2)	4 (3)	151 (152)	216 (218)
12	4 (2)	5 (3)	102 (101)	146 (147)	22 (25)	31 (35)	145 (149)	208 (215)
13	8 (4)	12 (6)	130 (198)	185 (283)	8 (7)	12 (11)	124 (146)	177 (209)
14	8 (5)				16 (17)			
15	17 (2)				1 (1)			
16	53 (61)				0 (0)			
17	52 (47)				7 (15)			
18	47 (24)	67 (35)	117 (68)	167 (99)	28 (33)	38 (46)	59 (69)	84 (100)
19	20 (20)	28 (29)	134 (134)	192 (192)	51 (81)	73 (116)	52 (41)	74 (58)
20	28 (32)	40 (46)	140 (118)	201 (169)	5 (6)	7 (9)	36 (32)	52 (46)
21	33 (33)	47 (47)	145 (119)	207 (171)	4 (5)	6 (7)	74 (101)	106 (144)
22	13 (9)	18 (13)	233 (252)	333 (361)	10 (15)	14 (21)	51 (112)	72 (160)
23	1 (1)	1 (1)	207 (242)	296 (346)	14 (23)	21 (33)	42 (37)	61 (53)
24	1 (1)	1 (1)	80 (114)	114 (163)	27 (17)	38 (25)	85 (83)	122 (119)
25	9 (9)	12 (13)	97 (75)	140 (107)	5 (2)	7 (3)	53 (55)	76 (79)
26	8 (8)	12 (11)	140 (252)	201 (361)	52 (84)	74 (120)	49 (46)	71 (66)
27	10 (9)	15 (13)	49 (35)	70 (50)	159 (220)	228 (316)	37 (29)	52 (42)
28	43 (52)	62 (74)	178 (168)	254 (241)	11 (14)	16 (21)	209 (187)	300 (268)
29	14 (19)	21 (27)	201 (240)	288 (343)	9 (13)	13 (19)	21 (33)	31 (48)
30								
Avg	18	19	163	234	20	31	97	139
n	29	23	22	22	29	23	22	22
SD	18	21	57	82	30	46	56	80
Min	1	1	49	70	0	1	21	31
Max	61	67	271	388	159	228	209	300

ED_004549_00015842-00207

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for July, 2008. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1								
2								
3								
4	21 (31)	29 (44)	61 (85)	86 (121)	45 (39)	65 (56)	81 (91)	115 (130)
5	1 (1)	1 (1)	113 (190)	161 (273)	19 (26)	27 (38)	64 (63)	91 (90)
6	2 (2)	2 (3)	84 (160)	120 (230)	26 (31)	37 (44)	69 (49)	99 (70)
7	4 (2)	5 (4)	97 (134)	139 (193)	8 (4)	11 (6)	53 (35)	76 (50)
8	17 (4)				7 (8)			
9	19 (12)				11 (14)			
10	8 (13)		194 (285)		40 (87)		69 (68)	
11	5 (6)	7 (8)	32 (37)	47 (54)	29 (39)	42 (56)	44 (38)	64 (55)
12	14 (11)	20 (15)	57 (44)	82 (63)	9 (5)	13 (7)	64 (93)	91 (133)
13	12 (10)	17 (14)	117 (106)	167 (152)	6 (18)	9 (26)	29 (48)	42 (69)
14	14 (20)	20 (28)	64 (56)	91 (80)	78 (90)	112 (129)	57 (58)	81 (83)
15	4 (8)	6 (12)	78 (86)	111 (124)	16 (25)	23 (36)	33 (66)	47 (95)
16	4 (7)	6 (10)	85 (87)	122 (125)	7 (27)	10 (39)	56 (66)	80 (94)
17	3 (1)	4 (1)	57 (69)	82 (99)	34 (33)	49 (48)	64 (89)	92 (128)
18	30 (40)	43 (57)	91 (149)	130 (214)	5 (6)	7 (8)	13 (13)	19 (18)
19	3 (1)	4 (2)	91 (114)	131 (164)	7 (8)	10 (11)	129 (182)	185 (262)
20	4 (1)	6 (2)	64 (67)	91 (96)	8 (10)	11 (15)	29 (48)	42 (69)
21	11 (7)	16 (11)	132 (152)	189 (218)	6 (8)	9 (11)	96 (170)	138 (244)
22	3 (2)	4 (3)	103 (145)	148 (207)	2 (4)	3 (5)	11 (11)	15 (16)
23	1 (1)	2 (1)	78 (106)	111 (152)	20 (25)	29 (35)	79 (65)	113 (93)
24	1 (1)	2 (1)	58 (102)	84 (147)	12 (17)	17 (24)	102 (173)	146 (249)
25	15 (20)	21 (29)	31 (35)	45 (50)	5 (3)	7 (4)	76 (116)	109 (166)
26	11 (5)	15 (7)	68 (44)	97 (64)	36 (53)	52 (76)	64 (51)	92 (73)
27	6 (6)	9 (8)	114 (150)	164 (214)	16 (29)	23 (42)	47 (59)	67 (84)
28	4 (4)	6 (5)	39 (45)	56 (64)	4 (7)	6 (10)	53 (60)	77 (86)
29	11 (9)	15 (13)	58 (45)	84 (66)	20 (32)	29 (47)	31 (43)	45 (61)
30	7 (4)	10 (6)	59 (53)	85 (76)	10 (9)	14 (14)	31 (39)	44 (56)
31	4 (2)	6 (3)	78 (47)	112 (67)	7 (5)	10 (7)	45 (57)	64 (82)
Avg	8	11	81	109	18	25	57	81
n	28	25	26	25	28	25	26	25
SD	7	10	34	37	17	24	27	39
Min	1	1	31	45	2	3	11	15
Max	30	43	194	189	78	112	129	185

ED_004549_00015842-00208

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for August, 2008. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	9 (19)	14 (27)	91 (79)	130 (114)	14 (20)	21 (29)	66 (92)	94 (132)
2	30 (58)	43 (84)	71 (96)	101 (138)	15 (29)	22 (42)	40 (54)	57 (77)
3	1 (1)	1 (1)	57 (58)	82 (84)	2 (1)	4 (1)	56 (83)	80 (119)
4	90 (72)	129 (103)	75 (116)	108 (166)	12 (21)	17 (30)	19 (16)	27 (23)
5	51 (56)	73 (81)	114 (115)	163 (164)	46 (64)	66 (92)	52 (110)	74 (157)
6	13 (10)	18 (15)	111 (90)	159 (128)	57 (50)	82 (72)	95 (100)	136 (144)
7	7 (6)	11 (8)	89 (78)	128 (112)	22 (42)	31 (60)	64 (71)	92 (102)
8	9 (11)	13 (16)	92 (92)	131 (132)	7 (3)	10 (4)	86 (109)	124 (157)
9	2 (1)	3 (1)	124 (209)	177 (298)	2 (3)	3 (4)	31 (32)	44 (46)
10	3 (4)	4 (6)	111 (132)	159 (189)	41 (56)	59 (80)	35 (80)	50 (114)
11	6 (8)	9 (11)	71 (92)	101 (132)	52 (83)	74 (119)	47 (40)	67 (57)
12	4 (6)	5 (9)	106 (162)	152 (233)	48 (46)	69 (66)	73 (81)	105 (116)
13	11 (7)	15 (10)	95 (112)	137 (160)	63 (65)	91 (93)	57 (92)	82 (132)
14	3 (1)	4 (2)	169 (235)	243 (337)	19 (28)	28 (41)	42 (79)	61 (114)
15	6 (3)	9 (4)	139 (133)	199 (191)	22 (18)	32 (25)	46 (51)	66 (73)
16	11 (11)	15 (15)	64 (84)	92 (121)	19 (21)	27 (30)	40 (26)	57 (37)
17	6 (2)	9 (3)	100 (145)	143 (209)	38 (41)	54 (59)	100 (121)	143 (173)
18	3 (2)	5 (3)	53 (84)	76 (121)	92 (83)	131 (119)	140 (239)	200 (343)
19	2 (1)	2 (1)	153 (273)	220 (393)	4 (2)	6 (3)	27 (45)	38 (64)
20	1 (1)	2 (1)	99 (98)	143 (141)	4 (2)	6 (3)	71 (58)	102 (83)
21	2 (1)	4 (1)	33 (40)	47 (58)	20 (32)	29 (46)	106 (117)	153 (168)
22	2 (1)	3 (1)	76 (78)	109 (112)	75 (140)	108 (201)	70 (84)	101 (121)
23	43 (40)	61 (57)	142 (132)	203 (189)	6 (7)	8 (10)	31 (38)	44 (54)
24	50 (41)	72 (58)	268 (220)	383 (315)	2 (2)	3 (2)	48 (72)	68 (103)
25	9 (5)	13 (7)	246 (361)	351 (515)	1 (1)	2 (2)	179 (235)	256 (336)
26	3 (3)	4 (4)	65 (66)	93 (95)	13 (15)	18 (22)	42 (53)	59 (76)
27	1 (1)	2 (1)	77 (142)	111 (202)	8 (7)	11 (10)	45 (42)	64 (61)
28	17 (23)	24 (34)	41 (36)	58 (52)	6 (5)	8 (8)	89 (129)	128 (184)
29	6 (9)	9 (13)	47 (43)	67 (62)	59 (66)	85 (94)	20 (21)	29 (30)
30	2 (1)	3 (2)	50 (77)	72 (111)	32 (39)	46 (57)	106 (146)	152 (209)
31	1 (1)	1 (1)	49 (55)	70 (79)	3 (0)	4 (1)	38 (42)	55 (60)
Avg	13	19	99	142	26	37	63	91
n	31	31	31	31	31	31	31	31
SD	20	28	53	76	24	35	35	51
Min	1	1	33	47	1	2	19	27
Max	90	129	268	383	92	131	179	256

ED_004549_00015842-00209

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for September, 2008. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	μg·dsm^{-3}	ppb	μg·dsm^{-3}	ppb	μg·dsm^{-3}	ppb	μg·dsm^{-3}
1	1 (0)	2 (1)	60 (87)	86 (126)	8 (10)	12 (15)	94 (136)	136 (196)
2	4 (2)	6 (2)	215 (320)	308 (461)	30 (36)	43 (51)	43 (43)	62 (62)
3	39 (47)	55 (67)	215 (203)	307 (290)	1 (0)	2 (1)	33 (38)	47 (54)
4	2 (2)	3 (2)	126 (144)	180 (206)	8 (17)	12 (24)	138 (201)	197 (287)
5	5 (5)	7 (7)	165 (168)	236 (239)	23 (27)	33 (39)	90 (129)	129 (185)
6	2 (1)	3 (1)	136 (175)	195 (250)	12 (13)	17 (19)	156 (178)	223 (254)
7	3 (1)	4 (1)	228 (252)	326 (361)	19 (33)	28 (47)	91 (150)	129 (215)
8	9 (6)	13 (9)	285 (312)	407 (446)	11 (4)	15 (5)	64 (101)	92 (144)
9	3 (3)	4 (5)	144 (160)	206 (228)	3 (1)	4 (1)	103 (111)	147 (159)
10	1 (1)	2 (2)	78 (146)	112 (208)	21 (23)	30 (33)	164 (171)	235 (244)
11	1 (0)	2 (1)	115 (134)	165 (192)	18 (23)	25 (33)	123 (159)	176 (228)
12	3 (1)	4 (2)	79 (85)	113 (122)	12 (19)	17 (27)	84 (92)	121 (132)
13	7 (9)	11 (13)	107 (169)	153 (243)	3 (2)	4 (2)	31 (29)	45 (41)
14	27 (29)	39 (42)	512 (461)	733 (659)	2 (1)	3 (1)	115 (149)	164 (213)
15	33 (46)	47 (65)	182 (141)	260 (202)	1 (2)	2 (3)	88 (132)	126 (188)
16	9 (8)	13 (12)	211 (225)	302 (322)	74 (73)	106 (104)	166 (189)	237 (270)
17	3 (4)	4 (6)			1 (1)	2 (1)		
18	1 (0)	1 (0)			2 (1)	3 (2)		
19	1 (0)	1 (1)			21 (23)	30 (33)		
20	3 (3)	5 (5)	17 (11)	24 (16)	1 (1)	2 (1)	16 (5)	24 (7)
21	1 (1)	2 (1)	8 (3)	11 (4)	3 (2)	4 (3)	17 (8)	25 (12)
22	1 (0)	1 (0)	8 (3)	12 (4)	2 (1)	3 (2)	13 (5)	19 (7)
23	0 (1)	0 (1)	9 (7)	13 (9)	39 (40)	57 (57)	13 (7)	18 (10)
24	66 (57)	94 (81)	54 (48)	77 (68)	41 (47)	58 (67)	37 (50)	53 (72)
25	2 (3)	3 (4)	7 (5)	11 (7)	1 (1)	2 (1)	10 (3)	14 (4)
26	0 (1)	1 (1)	6 (2)	9 (2)	2 (1)	3 (2)	12 (4)	18 (6)
27	1 (1)	1 (1)	12 (2)	17 (3)	0 (0)	0 (1)	10 (2)	14 (2)
28	1 (1)	2 (1)	12 (3)	17 (5)	0 (1)	1 (2)	11 (3)	15 (4)
29	1 (1)	2 (1)	15 (5)	22 (7)	0 (1)	0 (2)	11 (3)	16 (5)
30	1 (1)	1 (2)	13 (4)	18 (6)	0 (0)	0 (1)	13 (7)	18 (10)
Avg	8	11	112	160	12	17	65	93
n	30	30	27	27	30	30	27	27
SD	14	21	115	164	16	23	53	75
Min	0	0	6	9	0	0	10	14
Max	66	94	512	733	74	106	166	237

ED_004549_00015842-00210

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for October, 2008. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	1 (1)	2 (2)	20 (10)	29 (14)	2 (5)	3 (7)	12 (6)	18 (8)
2	13 (17)	18 (24)	44 (33)	63 (47)	4 (8)	6 (12)	15 (7)	22 (9)
3	0 (1)	0 (1)	14 (6)	21 (9)	1 (2)	1 (3)	15 (5)	21 (8)
4	3 (4)	5 (6)	10 (6)	15 (8)	0 (1)	0 (2)	12 (5)	17 (8)
5	0 (0)	0 (1)	9 (3)	13 (5)	0 (0)	0 (0)	11 (4)	16 (5)
6	0 (0)	0 (0)	9 (3)	13 (5)	0 (0)	0 (1)	11 (4)	16 (6)
7	1 (0)	1 (1)			0 (0)	-1 (1)		
8	1 (1)	1 (1)			1 (1)	1 (1)		
9	2 (2)	3 (2)			1 (1)	1 (2)		
10	0 (1)	0 (1)	7 (2)	10 (3)	1 (2)	1 (3)	9 (3)	12 (4)
11	0 (1)	0 (1)	7 (2)	10 (3)	2 (3)	3 (4)	10 (3)	14 (4)
12	1 (1)	1 (1)	8 (3)	11 (4)	3 (1)	4 (1)	14 (5)	20 (8)
13	3 (3)	4 (4)	17 (13)	24 (18)	4 (5)	6 (6)	21 (8)	30 (12)
14	1 (1)	1 (1)	10 (4)	14 (6)	8 (10)	12 (15)	23 (12)	32 (17)
15	48 (74)	68 (106)	81 (163)	116 (233)	1 (2)	1 (3)	17 (7)	24 (10)
16								
17								
18								
19								
20								
21								
22	0 (0)	0 (1)	6 (3)	9 (5)	0 (1)	0 (1)	8 (3)	11 (5)
23	0 (0)	-1 (0)	5 (1)	7 (2)	0 (0)	0 (1)	5 (1)	7 (2)
24	1 (1)	1 (2)	9 (3)	12 (4)	3 (4)	4 (5)	10 (4)	15 (6)
25	0 (1)	0 (1)	7 (2)	11 (3)	1 (2)	1 (3)	9 (3)	13 (5)
26	2 (1)	3 (1)	12 (4)	17 (6)	-1 (1)	-1 (1)	8 (3)	11 (4)
27	0 (1)	0 (1)	8 (3)	12 (4)	0 (1)	0 (1)	6 (3)	9 (5)
28	1 (1)	1 (2)	8 (2)	11 (3)	0 (1)	0 (1)	12 (4)	17 (6)
29	0 (2)	0 (2)	7 (3)	9 (4)	0 (1)	1 (1)	8 (2)	11 (3)
30	0 (0)	0 (1)			0 (1)	0 (1)		
31	0 (0)	0 (1)			-1 (0)	-1 (0)		
Avg	3	4	15	21	1	2	12	17
n	25	25	20	20	25	25	20	20
SD	9	14	17	25	2	3	4	6
Min	0	-1	5	7	-1	-1	5	7
Max	48	68	81	116	8	12	23	32

ED_004549_00015842-00211

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for November, 2008. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	$\mu g \cdot dsm^{-3}$	ppb	$\mu g \cdot dsm^{-3}$	ppb	$\mu g \cdot dsm^{-3}$	ppb	$\mu g \cdot dsm^{-3}$
1	0 (0)	0 (1)	6 (2)	9 (3)	-1 (0)	-1 (0)	6 (2)	9 (3)
2	1 (2)	1 (2)	7 (4)	10 (5)	0 (1)	1 (2)	10 (4)	14 (5)
3	0 (1)	0 (1)	4 (2)	6 (3)	1 (1)	1 (1)	6 (2)	9 (3)
4	0 (0)	-1 (1)			0 (1)	1 (1)		
5	-1 (0)	-1 (1)			0 (0)	0 (0)		
6	0 (0)	-1 (1)	6 (2)	9 (2)	0 (1)	0 (1)	8 (2)	11 (3)
7	0 (1)	0 (2)	8 (2)	11 (3)	1 (1)	1 (2)	9 (3)	12 (4)
8	0 (1)	0 (1)	7 (2)	10 (3)	-1 (0)	-1 (1)	4 (1)	6 (2)
9	1 (1)	1 (2)	6 (3)	9 (5)	-1 (1)	-1 (1)	8 (4)	12 (5)
10	0 (1)	-1 (1)	7 (2)	10 (3)	-1 (1)	-1 (1)	10 (5)	15 (7)
11	0 (0)	-1 (1)	6 (3)	8 (4)	0 (0)	-1 (1)	6 (2)	9 (3)
12	-1 (1)	-1 (1)	5 (2)	6 (3)	0 (0)	0 (1)	6 (3)	9 (4)
13	0 (1)	-1 (1)	6 (3)	8 (4)	0 (1)	0 (1)	7 (2)	10 (3)
14	0 (0)	0 (1)	10 (4)	14 (6)	0 (0)	-1 (1)	7 (3)	11 (4)
15	-1 (0)	-1 (1)	6 (2)	8 (2)	-1 (0)	-1 (1)	6 (2)	8 (3)
16	0 (0)	-1 (1)	5 (2)	7 (3)	-1 (0)	-1 (1)	8 (4)	12 (6)
17	-1 (0)	-1 (0)	7 (3)	9 (5)	0 (1)	-1 (1)	9 (5)	13 (7)
18	-1 (0)	-1 (0)	7 (4)	9 (5)	0 (1)	0 (1)	10 (4)	14 (6)
19	-1 (0)	-1 (0)			-1 (1)	-2 (1)		
20	-1 (0)	-1 (0)			-1 (0)	-2 (0)		
21	-1 (0)	-1 (1)	10 (4)	14 (6)	-1 (1)	-1 (1)	12 (5)	17 (7)
22	-1 (0)	-1 (1)	6 (2)	9 (3)	0 (1)	0 (1)	8 (2)	12 (3)
23	0 (2)	0 (3)			0 (0)	0 (1)		
24	-1 (0)	-1 (1)	6 (2)	9 (3)	-1 (0)	-2 (0)	9 (3)	13 (4)
25	1 (2)	1 (3)	9 (2)	13 (3)	-1 (0)	-1 (0)	12 (4)	17 (6)
26	2 (2)	3 (3)	9 (2)	12 (3)	1 (1)	1 (1)	9 (3)	13 (5)
27	1 (2)	1 (3)	7 (3)	9 (4)	-1 (0)	-1 (0)	7 (3)	10 (5)
28	-1 (0)	-1 (1)	7 (4)	10 (5)	-1 (0)	-1 (1)	9 (3)	13 (4)
29	-1 (0)	-1 (0)			0 (0)	-1 (0)		
30	-1 (0)	-1 (0)			0 (1)	-1 (1)		
Avg	0	0	7	10	0	0	8	12
n	30	30	23	23	30	30	23	23
SD	1	1	1	2	1	1	2	3
Min	-1	-1	4	6	-1	-2	4	6
Max	2	3	10	14	1	1	12	17

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for December, 2008. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	0 (0)	0 (0)			0 (0)	-1 (0)		
2	-1 (0)	-1 (0)	8 (2)	11 (3)	-1 (0)	-1 (0)	7 (2)	11 (3)
3	-1 (0)	-1 (0)	10 (5)	15 (7)	-1 (0)	-1 (0)	9 (3)	13 (4)
4	0 (1)	-1 (1)	11 (2)	16 (3)	-1 (0)	-1 (1)	10 (3)	15 (4)
5	-1 (0)	-1 (0)	10 (4)	14 (5)	-1 (0)	-1 (0)	8 (4)	12 (5)
6	0 (0)	-1 (1)	9 (5)	13 (8)	0 (1)	-1 (1)	9 (3)	12 (4)
7	-1 (0)	-1 (0)	13 (3)	18 (4)	-1 (0)	-1 (0)	10 (2)	14 (3)
8								
9								
10								
11	0 (1)	0 (1)	9 (3)	13 (4)	-1 (0)	-1 (0)	9 (3)	12 (4)
12	0 (1)	1 (1)	10 (3)	14 (4)	-1 (0)	-1 (1)	9 (3)	13 (4)
13	-1 (0)	-1 (0)	3 (2)	5 (2)	-1 (0)	-1 (1)	4 (2)	6 (2)
14	0 (0)	0 (1)			-1 (0)	-1 (0)		
15	0 (0)	0 (0)			-1 (0)	-1 (0)		
16	1 (2)	1 (3)	18 (6)	25 (9)	0 (1)	0 (1)	16 (5)	22 (8)
17	-1 (1)	-1 (1)	13 (4)	18 (6)	0 (1)	0 (1)	12 (4)	17 (6)
18	0 (1)	1 (1)	11 (3)	16 (5)	0 (1)	0 (1)	11 (3)	15 (4)
19	0 (0)	-1 (1)	7 (3)	10 (4)	-1 (0)	-1 (1)	6 (3)	9 (4)
20	0 (0)	-1 (1)	9 (4)	13 (5)	0 (0)	-1 (1)	8 (3)	11 (5)
21								
22								
23								
24	0 (1)	1 (1)	12 (3)	18 (5)	0 (1)	0 (1)	11 (3)	16 (4)
25	-1 (0)	-1 (1)	11 (4)	15 (6)	0 (0)	0 (1)	9 (3)	13 (4)
26	0 (1)	0 (1)	4 (1)	6 (2)	0 (1)	0 (1)	4 (2)	6 (2)
27	0 (0)	-1 (1)	6 (3)	8 (4)	0 (0)	0 (1)	7 (3)	10 (5)
28	-1 (0)	-1 (1)	7 (1)	9 (2)	0 (0)	-1 (0)	8 (3)	12 (4)
29	0 (0)	-1 (0)	6 (5)	9 (8)	-1 (0)	-1 (0)	7 (4)	11 (5)
30	-1 (0)	-1 (1)	10 (3)	14 (4)	-1 (0)	-1 (0)	7 (2)	9 (2)
31	0 (0)	0 (1)	14 (6)	19 (8)	-1 (0)	-1 (0)	10 (5)	15 (7)
Avg	0	0	10	14	-1	-1	9	12
n	25	25	22	22	25	25	22	22
SD	0	1	3	5	0	0	2	4
Min	-1	-1	3	5	-1	-1	4	6
Max	1	1	18	25	0	0	16	22

ED_004549_00015842-00213

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for January, 2009. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	-1 (0)	-1 (1)	7 (3)	11 (4)	0 (1)	0 (1)	8 (3)	11 (5)
2	0 (0)	-1 (1)	10 (4)	15 (5)	-1 (0)	-1 (1)	7 (2)	11 (3)
3	-1 (0)	-1 (0)	6 (2)	9 (3)	-1 (1)	-1 (1)	6 (2)	9 (3)
4	0 (1)	0 (2)	9 (5)	13 (7)	-1 (0)	-1 (0)	8 (3)	11 (4)
5	1 (2)	2 (3)	10 (3)	14 (4)	-1 (1)	-1 (1)	9 (2)	13 (4)
6	0 (1)	-1 (1)	7 (2)	10 (3)	0 (1)	0 (1)	8 (2)	11 (3)
7	0 (0)	0 (0)	9 (3)	12 (5)	-1 (0)	-1 (1)	7 (3)	10 (4)
8	0 (1)	-1 (1)	8 (3)	12 (4)	0 (2)	1 (3)	8 (4)	11 (5)
9	-1 (0)	-1 (1)	7 (3)	11 (5)	-1 (0)	-1 (1)	6 (2)	9 (3)
10	-1 (0)	-1 (1)	8 (3)	11 (5)	-1 (1)	-1 (1)	7 (3)	10 (5)
11	0 (1)	-1 (1)	8 (3)	11 (4)	-1 (1)	-1 (1)	7 (3)	11 (4)
12	0 (1)	-1 (1)	9 (4)	13 (6)	0 (0)	-1 (1)	8 (2)	11 (3)
13	-1 (1)	-1 (1)	11 (6)	16 (9)	-1 (1)	-1 (1)	10 (5)	14 (7)
14	-1 (1)	-2 (1)	11 (4)	16 (6)	-1 (0)	-1 (1)	11 (4)	15 (6)
15	0 (0)	0 (0)	15 (6)	21 (9)	-1 (0)	-1 (1)	16 (6)	23 (9)
16	0 (1)	0 (1)	15 (4)	22 (5)	-1 (0)	-1 (0)	15 (5)	22 (7)
17	0 (0)	0 (0)	11 (3)	16 (5)	-1 (0)	-1 (0)	10 (3)	15 (4)
18	0 (1)	-1 (1)	12 (3)	17 (5)	-1 (0)	-1 (1)	11 (4)	16 (5)
19	0 (1)	0 (1)	11 (4)	16 (5)	-1 (0)	-2 (1)	9 (3)	13 (4)
20	-1 (0)	-1 (1)	9 (2)	13 (3)	-1 (1)	-1 (1)	8 (3)	11 (4)
21	-1 (0)	-1 (1)	7 (2)	10 (4)	-1 (0)	-1 (0)	7 (3)	10 (4)
22	0 (0)	-1 (0)	9 (2)	13 (2)	-1 (0)	-2 (1)	9 (2)	12 (3)
23	-1 (0)	-2 (1)	7 (2)	11 (3)	-1 (1)	-2 (1)	7 (2)	9 (3)
24	-1 (0)	-1 (0)	10 (2)	15 (3)	-1 (0)	-1 (0)	11 (2)	16 (3)
25	-1 (0)	-1 (1)	12 (3)	16 (4)	-1 (0)	-1 (1)	11 (3)	15 (5)
26	-1 (1)	-2 (1)	12 (3)	16 (4)	0 (0)	-1 (0)	9 (3)	13 (4)
27	1 (1)	1 (2)	11 (3)	15 (5)	0 (1)	-1 (1)	10 (3)	14 (4)
28	0 (1)	-1 (1)	10 (3)	14 (4)	-1 (0)	-1 (0)	10 (2)	15 (4)
29	-1 (0)	-1 (1)	7 (2)	10 (3)	-1 (1)	-2 (1)	7 (2)	9 (2)
30	-1 (0)	-1 (0)	9 (3)	13 (4)	-1 (1)	-2 (1)	9 (3)	12 (4)
31	-1 (0)	-1 (1)	3 (2)	5 (3)	-1 (0)	-1 (1)	4 (1)	5 (2)
Avg	-1	-1	9	13	-1	-1	9	13
n	31	31	31	31	31	31	31	31
SD	0	1	2	3	0	1	2	4
Min	-1	-2	3	5	-1	-2	4	5
Max	1	2	15	22	0	1	16	23

ED_004549_00015842-00214

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for February, 2009. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	-1 (1)	-2 (1)	3 (1)	4 (2)	-1 (0)	-2 (1)	5 (2)	7 (3)
2	-1 (0)	-2 (0)	8 (3)	11 (4)	-2 (1)	-2 (1)	7 (2)	10 (3)
3	-1 (1)	-2 (1)	6 (1)	9 (2)	-1 (0)	-1 (1)	5 (1)	7 (2)
4	-1 (0)	-1 (1)	8 (2)	12 (3)	-1 (0)	-1 (1)	7 (2)	10 (2)
5	0 (1)	0 (2)	5 (2)	7 (2)	-1 (0)	-2 (0)	5 (2)	8 (2)
6	0 (1)	0 (1)	3 (2)	5 (3)	-1 (0)	-1 (1)	4 (1)	5 (2)
7	0 (0)	0 (1)	3 (1)	4 (2)	-1 (0)	-2 (0)	3 (1)	5 (2)
8	-1 (0)	-1 (1)	3 (1)	5 (2)	-1 (0)	-2 (0)	4 (1)	6 (1)
9	-1 (0)	-1 (0)			-1 (0)	-1 (1)		
10	-1 (0)	-2 (0)	2 (1)	3 (1)	-1 (0)	-1 (0)	2 (0)	3 (1)
11	-1 (0)	-1 (1)	3 (1)	4 (2)	-1 (0)	-2 (1)	3 (1)	4 (2)
12	-1 (0)	-2 (1)	3 (2)	5 (2)	-1 (0)	-2 (1)	5 (2)	7 (3)
13	-1 (0)	-1 (1)	5 (1)	7 (1)	-1 (1)	-2 (1)	7 (2)	10 (3)
14	-1 (0)	-2 (1)	8 (3)	11 (4)	-2 (0)	-3 (0)	8 (3)	12 (4)
15	-1 (0)	-2 (1)	8 (2)	11 (3)	-2 (0)	-2 (1)	10 (3)	14 (4)
16	-1 (0)	-1 (1)	5 (3)	8 (4)	-1 (1)	-2 (1)	7 (2)	9 (3)
17	-1 (1)	-1 (1)	8 (9)	11 (13)	-1 (0)	-1 (1)	5 (2)	7 (2)
18	-1 (0)	-1 (1)	6 (3)	9 (5)	-1 (0)	-2 (1)	7 (4)	11 (5)
19	0 (1)	-1 (1)	11 (6)	16 (9)	-1 (0)	-2 (1)	9 (4)	13 (6)
20	0 (0)	0 (1)	8 (3)	12 (4)	-1 (0)	-1 (1)	9 (2)	13 (3)
21	-1 (0)	-1 (1)	8 (4)	12 (5)	-1 (1)	-1 (1)	8 (3)	11 (4)
22	-1 (0)	-1 (0)	8 (3)	12 (4)	-1 (1)	-1 (1)	8 (2)	12 (3)
23	-1 (0)	-1 (0)	9 (3)	13 (4)	-1 (1)	-1 (1)	8 (1)	12 (2)
24	-1 (0)	-1 (0)	5 (2)	8 (2)	-1 (0)	-1 (1)	5 (1)	7 (1)
25	0 (1)	-1 (1)	4 (1)	6 (2)	-1 (0)	-1 (1)	4 (2)	6 (2)
26	-1 (1)	-1 (1)	8 (5)	11 (8)	-1 (0)	-1 (1)	7 (2)	10 (3)
27	-1 (0)	-1 (0)	10 (3)	14 (4)	-1 (0)	-1 (0)	8 (3)	11 (4)
28	-1 (1)	-2 (1)	9 (2)	13 (3)	-1 (0)	-1 (1)	8 (2)	12 (2)
Avg	-1	-1	6	9	-1	-1	6	9
n	28	28	27	27	28	28	27	27
SD	0	1	3	4	0	0	2	3
Min	-1	-2	2	3	-2	-3	2	3
Max	0	0	11	16	-1	-1	10	14

ED_004549_00015842-00215

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for March, 2009. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	-1 (0)	-2 (0)	9 (4)	13 (6)	-1 (0)	-1 (0)	7 (4)	10 (5)
2	-1 (1)				-1 (0)			
3	0 (0)				-1 (0)			
4	0 (1)	0 (1)	5 (4)	7 (6)	0 (0)	0 (1)	5 (1)	7 (1)
5	0 (0)	-1 (1)	4 (2)	6 (2)	0 (1)	0 (1)	5 (2)	7 (2)
6	0 (0)	0 (1)	4 (1)	6 (1)	0 (0)	0 (1)	4 (1)	6 (2)
7	1 (1)	1 (1)	4 (1)	6 (2)	-1 (1)	-1 (1)	5 (1)	7 (2)
8	-1 (0)	-1 (1)	4 (1)	6 (2)	0 (0)	0 (1)	5 (1)	7 (2)
9	1 (0)	1 (0)	5 (2)	7 (2)	0 (0)	0 (0)	5 (2)	7 (2)
10	0 (0)	1 (0)	5 (2)	7 (3)	-1 (0)	-1 (1)	4 (2)	5 (3)
11	-1 (0)	-1 (1)	8 (2)	12 (3)	-1 (0)	-1 (0)	8 (3)	11 (5)
12	-1 (0)	-1 (1)	8 (3)	12 (4)	0 (0)	-1 (1)	8 (3)	11 (4)
13	0 (0)	0 (1)	5 (2)	7 (4)	0 (1)	-1 (1)	5 (1)	7 (1)
14	0 (0)	0 (1)	3 (1)	4 (1)	0 (0)	0 (1)	4 (1)	6 (1)
15	-1 (1)	-1 (1)	2 (0)	3 (1)	-1 (0)	-1 (1)	3 (1)	4 (1)
16	0 (1)	0 (1)	3 (1)	4 (1)	-1 (0)	-1 (1)	4 (1)	6 (2)
17	0 (1)	0 (1)	4 (1)	5 (2)	0 (1)	-1 (1)	4 (1)	6 (2)
18	0 (1)	0 (1)	5 (1)	6 (2)	0 (1)	0 (1)	5 (2)	8 (3)
19	-1 (0)	-1 (1)	6 (1)	9 (2)	0 (0)	-1 (0)	7 (2)	10 (3)
20	0 (1)	-1 (1)	4 (1)	6 (1)	0 (1)	-1 (1)	5 (1)	7 (1)
21	-1 (0)	-1 (0)	4 (3)	6 (4)	0 (1)	0 (2)	6 (3)	8 (5)
22	0 (0)	0 (1)	3 (1)	4 (1)	-1 (0)	-1 (0)	4 (1)	6 (2)
23	-1 (1)	-1 (1)	3 (1)	4 (2)	0 (0)	0 (1)	5 (1)	8 (2)
24	0 (0)	1 (0)	3 (1)	5 (2)	0 (0)	-1 (1)	5 (1)	7 (2)
25	0 (1)	-1 (1)	4 (1)	6 (1)	0 (0)	0 (1)	6 (2)	9 (3)
26	0 (0)	0 (0)			-1 (1)	-1 (1)		
27	0 (0)	0 (0)			-1 (0)	-1 (0)		
28	-1 (0)	-1 (1)	6 (1)	8 (2)	-1 (0)	-1 (0)	5 (1)	7 (2)
29	-1 (1)	-1 (1)	6 (3)	8 (4)	0 (0)	-1 (1)	5 (2)	7 (2)
30	0 (0)	0 (1)	6 (2)	8 (2)	-1 (0)	-1 (0)	4 (1)	6 (1)
31	0 (0)	0 (1)	4 (1)	6 (2)	0 (0)	-1 (1)	5 (2)	7 (3)
Avg	0	0	5	7	0	-1	5	7
n	31	29	27	27	31	29	27	27
SD	0	1	2	2	0	0	1	2
Min	-1	-2	2	3	-1	-1	3	4
Max	1	1	9	13	0	0	8	11

ED_004549_00015842-00216

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for April, 2009. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	-1 (0)	-1 (0)	4 (1)	6 (1)	0 (0)	0 (1)	5 (2)	7 (2)
2	0 (0)	-1 (1)	6 (2)	9 (4)	-1 (0)	-1 (1)	6 (2)	8 (2)
3	0 (0)	0 (1)	7 (4)	9 (6)	-1 (0)	-1 (0)	4 (1)	6 (2)
4	0 (1)	-1 (1)	5 (1)	7 (2)	-1 (1)	-1 (1)	4 (1)	6 (2)
5	-1 (0)	-1 (1)	4 (1)	6 (2)	-1 (0)	-2 (0)	3 (1)	4 (1)
6	0 (0)	-1 (1)	4 (1)	6 (2)	-1 (0)	-1 (1)	3 (1)	5 (2)
7	0 (1)	0 (1)	6 (4)	9 (5)	-1 (1)	-1 (1)	5 (2)	8 (2)
8	0 (0)	-1 (1)	4 (1)	6 (2)	-1 (0)	-1 (0)	4 (1)	5 (2)
9	0 (0)	0 (1)	4 (2)	5 (3)	0 (1)	-1 (1)	4 (1)	5 (2)
10	0 (1)	-1 (1)	3 (1)	5 (1)	-1 (0)	-1 (1)	3 (1)	4 (1)
11	-1 (0)	-1 (0)	3 (2)	5 (3)	-1 (1)	-1 (1)	3 (2)	5 (2)
12	0 (0)	0 (0)	2 (1)	3 (1)	0 (0)	-1 (0)	3 (1)	4 (1)
13	0 (0)	0 (1)	3 (1)	4 (1)	-1 (0)	-1 (0)	3 (1)	5 (2)
14	0 (1)	0 (1)	5 (1)	7 (2)	-1 (1)	-1 (1)	5 (2)	6 (3)
15	1 (1)	1 (2)	4 (1)	6 (2)	-1 (0)	-1 (1)	5 (1)	7 (2)
16	0 (1)	1 (2)	4 (2)	5 (3)	0 (1)	0 (1)	5 (2)	7 (3)
17	2 (1)	3 (2)	4 (2)	6 (3)	1 (1)	1 (1)	5 (2)	8 (3)
18	0 (1)	0 (2)	6 (2)	8 (3)	0 (0)	0 (0)	5 (2)	7 (3)
19	0 (1)	0 (1)	8 (2)	12 (3)	-1 (0)	-1 (1)	7 (3)	10 (4)
20	0 (1)	0 (1)	8 (3)	11 (4)	0 (0)	0 (1)	6 (2)	9 (3)
21	0 (0)	0 (0)	5 (1)	7 (2)	-1 (0)	-1 (1)	3 (1)	5 (2)
22	0 (1)	0 (1)	5 (1)	7 (2)	0 (0)	0 (1)	5 (1)	7 (2)
23	0 (1)	0 (1)	3 (1)	4 (1)	0 (0)	0 (1)	5 (2)	7 (3)
24	0 (1)	0 (1)	4 (1)	6 (2)	1 (1)	1 (1)	5 (1)	7 (2)
25	0 (0)	0 (1)	5 (2)	7 (3)	0 (0)	0 (1)	6 (3)	9 (4)
26	1 (0)	1 (0)	5 (1)	7 (1)	0 (1)	0 (1)	9 (2)	12 (3)
27	1 (0)	1 (0)	6 (1)	9 (2)	0 (0)	0 (1)	8 (2)	12 (3)
28	0 (1)	0 (1)	5 (2)	8 (3)	1 (1)	1 (1)	6 (3)	9 (4)
29	0 (0)	0 (1)	5 (2)	7 (3)	1 (1)	1 (1)	5 (1)	7 (1)
30	1 (0)	1 (0)	6 (3)	9 (4)	1 (1)	1 (1)	7 (2)	9 (3)
Avg	0	0	5	7	0	0	5	7
n	30	30	30	30	30	30	30	30
SD	1	1	1	2	1	1	1	2
Min	-1	-1	2	3	-1	-2	3	4
Max	2	3	8	12	1	1	9	12

ED_004549_00015842-00217

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for May, 2009. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	1 (0)	1 (0)	6 (1)	8 (2)	0 (0)	0 (1)	6 (2)	8 (2)
2	1 (1)	1 (1)	6 (1)	8 (2)	0 (1)	0 (1)	6 (1)	8 (2)
3	0 (1)	1 (1)	5 (2)	7 (2)	-1 (0)	-1 (0)	5 (2)	8 (3)
4	1 (1)	1 (1)	4 (3)	6 (4)	9 (8)	12 (12)	6 (2)	8 (3)
5	0 (0)	0 (0)	4 (2)	6 (2)	1 (0)	1 (0)	6 (2)	9 (3)
6	1 (1)	1 (1)	5 (2)	7 (3)	1 (1)	1 (1)	7 (2)	10 (3)
7	1 (1)	1 (1)	6 (1)	8 (2)	1 (1)	1 (1)	6 (2)	8 (3)
8	1 (0)	1 (1)	8 (2)	11 (3)	0 (0)	0 (0)	8 (3)	12 (5)
9	1 (0)	1 (0)	6 (1)	8 (2)	0 (1)	0 (1)	6 (3)	9 (4)
10	0 (0)	0 (1)	6 (3)	9 (4)	0 (1)	0 (1)	7 (4)	9 (6)
11	0 (1)	0 (1)	6 (2)	8 (3)	1 (0)	1 (0)	6 (1)	9 (2)
12	-1 (0)	-1 (1)	4 (1)	5 (2)	0 (1)	1 (1)	6 (2)	8 (3)
13	0 (1)	0 (1)	6 (3)	8 (4)	0 (0)	-1 (0)	8 (4)	12 (5)
14	1 (1)	1 (2)	7 (3)	10 (4)	0 (1)	1 (1)	7 (3)	10 (4)
15	0 (1)	0 (1)	5 (2)	8 (3)	1 (1)	1 (1)	6 (2)	9 (2)
16	2 (1)	3 (1)	8 (2)	11 (3)	0 (1)	0 (1)	6 (3)	8 (4)
17	0 (1)	0 (1)	5 (2)	7 (3)	0 (1)	0 (1)	8 (2)	11 (3)
18	0 (1)	0 (1)	3 (1)	5 (1)	1 (0)	1 (1)	7 (2)	9 (3)
19	0 (0)	0 (0)	4 (1)	6 (2)	1 (0)	1 (1)	6 (1)	9 (1)
20	0 (0)	1 (0)	3 (1)	5 (1)	1 (1)	1 (1)	6 (1)	9 (2)
21	1 (1)	1 (1)	6 (1)	9 (2)	1 (1)	1 (2)	7 (2)	9 (3)
22	0 (0)	0 (1)	4 (1)	5 (2)	1 (1)	1 (1)	7 (2)	10 (3)
23	1 (1)	1 (1)	6 (3)	9 (4)	0 (1)	1 (1)	8 (3)	12 (4)
24	1 (1)	1 (1)	4 (2)	6 (4)	0 (1)	0 (1)	7 (2)	10 (3)
25	0 (0)	0 (1)	3 (1)	4 (1)	0 (0)	1 (1)	8 (3)	11 (4)
26	0 (0)	0 (1)	6 (2)	9 (3)	0 (0)	0 (0)	8 (2)	12 (3)
27	0 (0)	0 (1)	8 (2)	11 (4)	-1 (0)	-1 (1)	5 (2)	7 (2)
28	1 (1)	2 (1)	7 (2)	10 (3)	1 (2)	1 (3)	7 (4)	10 (5)
29	1 (0)	1 (0)	6 (2)	8 (3)	1 (2)	2 (3)	7 (4)	10 (5)
30	1 (1)	1 (1)	6 (2)	8 (2)	1 (2)	1 (3)	7 (4)	10 (6)
31	1 (2)	2 (3)	5 (4)	8 (6)	0 (1)	1 (1)	9 (6)	13 (8)
Avg	0	1	5	8	1	1	7	10
n	31	31	31	31	31	31	31	31
SD	1	1	1	2	2	2	1	1
Min	-1	-1	3	4	-1	-1	5	7
Max	2	3	8	11	9	12	9	13

ED_004549_00015842-00218

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for June, 2009. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	0 (1)	0 (1)	7 (5)	10 (7)	-1 (1)	-1 (1)	7 (2)	10 (3)
2	0 (0)	0 (1)	6 (3)	8 (4)	1 (1)	1 (1)	5 (2)	8 (3)
3	1 (1)	1 (2)	7 (2)	10 (3)	4 (8)	6 (11)	9 (4)	13 (5)
4	3 (2)	4 (2)	14 (15)	19 (21)	5 (5)	7 (7)	14 (8)	20 (11)
5	1 (1)	2 (2)	8 (3)	11 (4)	1 (1)	1 (1)	9 (5)	12 (7)
6	0 (0)	0 (1)	5 (2)	7 (3)	0 (0)	0 (1)	6 (2)	9 (3)
7	0 (0)	0 (1)	6 (2)	8 (3)	0 (0)	-1 (1)	6 (1)	9 (2)
8	2 (2)	3 (2)	8 (3)	11 (5)	0 (0)	0 (1)	6 (1)	9 (2)
9	1 (1)	1 (1)	9 (5)	13 (7)	1 (1)	1 (1)	11 (3)	15 (5)
10	1 (1)	1 (1)	7 (2)	11 (3)	2 (1)	3 (2)	9 (2)	13 (3)
11	2 (0)	2 (0)	6 (3)	8 (4)	0 (1)	0 (1)	8 (5)	12 (7)
12	1 (1)	1 (1)	8 (5)	11 (7)	3 (3)	4 (5)	9 (3)	12 (4)
13	2 (3)	3 (4)	9 (4)	12 (6)	6 (4)	9 (6)	10 (2)	14 (3)
14	2 (1)	3 (2)	9 (5)	12 (7)	8 (4)	11 (5)	10 (4)	14 (6)
15	3 (3)	4 (4)	7 (8)	10 (11)	2 (3)	3 (4)	8 (2)	12 (3)
16	1 (0)	1 (0)	5 (2)	7 (2)	0 (1)	1 (1)	7 (2)	9 (2)
17	1 (1)	1 (1)	5 (1)	7 (2)	0 (0)	1 (1)	6 (1)	9 (2)
18	1 (0)	1 (0)	4 (2)	6 (2)	3 (1)	4 (1)	7 (2)	10 (3)
19	8 (5)	11 (8)	15 (8)	21 (12)	5 (3)	8 (4)	11 (4)	15 (6)
20	7 (4)	10 (6)	13 (6)	19 (9)	1 (1)	1 (1)	11 (6)	15 (8)
21	3 (3)	5 (5)	7 (3)	9 (4)	1 (0)	2 (1)	9 (4)	12 (6)
22	2 (2)	2 (3)	7 (3)	10 (5)	9 (6)	13 (8)	9 (3)	13 (5)
23								
24								
25								
26								
27								
28								
29								
30								
Avg	2	3	8	11	2	3	8	12
n	22	22	22	22	22	22	22	22
SD	2	3	3	4	3	4	2	3
Min	0	0	4	6	-1	-1	5	8
Max	8	11	15	21	9	13	14	20

ED_004549_00015842-00219

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for July, 2009. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	$\mu g \cdot dsm^{-3}$	ppb	$\mu g \cdot dsm^{-3}$	ppb	$\mu g \cdot dsm^{-3}$	ppb	$\mu g \cdot dsm^{-3}$
1	0 (0)	0 (0)	8 (5)	12 (7)	0 (1)	0 (1)	7 (3)	10 (4)
2								
3								
4								
5								
6								
7	1 (1)	2 (1)	8 (6)	12 (8)	0 (0)	1 (1)	8 (6)	12 (9)
8	1 (0)	1 (1)	6 (2)	8 (2)	0 (1)	0 (1)	8 (2)	11 (3)
9	1 (1)	1 (1)	5 (1)	8 (2)	1 (2)	2 (2)	7 (2)	10 (3)
10	2 (1)	3 (2)	11 (4)	16 (5)	6 (4)	9 (6)	14 (14)	21 (20)
11	2 (2)	3 (2)	15 (8)	22 (11)	2 (2)	4 (3)	8 (4)	12 (6)
12	2 (3)	3 (4)	12 (8)	17 (11)	2 (3)	3 (4)	14 (9)	20 (13)
13	1 (1)	2 (1)	6 (3)	9 (5)	0 (1)	0 (1)	7 (3)	11 (5)
14	0 (1)	0 (1)	4 (1)	6 (1)	1 (0)	1 (0)	7 (2)	10 (3)
15	3 (2)	5 (2)	13 (3)	19 (5)	1 (1)	2 (1)	9 (4)	13 (6)
16	3 (1)	4 (2)	14 (6)	20 (9)	1 (1)	2 (2)	11 (6)	15 (9)
17	2 (1)	3 (2)	9 (2)	13 (3)	0 (0)	0 (1)	7 (2)	9 (2)
18	0 (1)	1 (1)	10 (4)	14 (6)	-1 (1)	-1 (1)	8 (3)	11 (4)
19	1 (1)	1 (1)	9 (7)	13 (9)	0 (0)	1 (1)	10 (6)	14 (9)
20	1 (0)	1 (1)	6 (5)	9 (7)	1 (0)	1 (0)	10 (2)	14 (2)
21	3 (1)	4 (1)	11 (6)	15 (9)	6 (5)	9 (6)	12 (4)	17 (5)
22	4 (2)	5 (3)	14 (10)	20 (14)	2 (1)	3 (1)	12 (4)	17 (6)
23	7 (3)	10 (4)	11 (5)	16 (7)	7 (5)	10 (7)	10 (3)	14 (5)
24	3 (1)	4 (1)	7 (3)	10 (4)	4 (2)	5 (3)	12 (5)	17 (8)
25	4 (1)	5 (1)	10 (3)	15 (4)	2 (2)	2 (3)	9 (4)	12 (6)
26	6 (4)	9 (5)	9 (3)	13 (5)	0 (1)	0 (1)	8 (6)	12 (9)
27	4 (3)	6 (4)	10 (4)	15 (6)	3 (3)	5 (5)	8 (2)	12 (2)
28	7 (2)	10 (3)	13 (4)	18 (6)	6 (8)	8 (12)	14 (7)	19 (10)
29	7 (1)	10 (1)	17 (5)	24 (7)	22 (8)	32 (11)	15 (4)	21 (6)
30	6 (1)	8 (1)	17 (5)	25 (7)	10 (8)	15 (12)	13 (4)	18 (6)
31	5 (1)	7 (1)	16 (8)	22 (11)	7 (1)	10 (2)	13 (2)	19 (3)
Avg	3	4	10	15	3	5	10	14
n	26	26	26	26	26	26	26	26
SD	2	3	4	5	5	7	3	4
Min	0	0	4	6	-1	-1	7	9
Max	7	10	17	25	22	32	15	21

ED_004549_00015842-00220

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for August, 2009. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}	ppb	µg·dsm^{-3}
1	7 (1)	9 (2)	19 (7)	27 (10)	5 (2)	7 (4)	14 (7)	20 (10)
2	5 (1)	7 (1)	13 (12)	19 (18)	6 (1)	9 (1)	12 (4)	18 (6)
3	6 (1)	9 (2)	14 (6)	20 (8)	5 (1)	7 (2)	11 (3)	16 (4)
4	8 (5)	12 (8)	11 (3)	16 (5)	5 (5)	7 (7)	10 (3)	14 (4)
5	6 (1)	8 (1)	14 (6)	20 (9)	6 (4)	9 (5)	12 (6)	17 (9)
6	6 (3)	9 (5)	14 (3)	20 (4)	5 (3)	7 (4)	12 (5)	17 (7)
7	3 (0)	4 (0)	7 (1)	10 (2)	4 (1)	5 (1)	12 (5)	17 (8)
8	4 (1)	5 (1)	9 (2)	13 (3)	5 (1)	7 (1)	9 (1)	12 (2)
9	5 (0)	7 (1)	11 (3)	16 (4)	4 (1)	5 (1)	8 (3)	11 (4)
10	6 (1)	8 (1)	13 (3)	19 (5)	5 (3)	8 (5)	12 (4)	17 (5)
11	10 (5)	14 (8)	16 (4)	23 (6)	6 (4)	8 (6)	14 (5)	20 (7)
12	5 (2)	7 (2)	12 (8)	17 (11)	6 (2)	9 (3)	12 (2)	17 (3)
13	3 (1)	5 (1)	7 (1)	10 (2)	5 (1)	7 (1)	10 (3)	15 (5)
14	3 (1)	5 (1)	8 (2)	11 (3)	8 (1)	12 (2)	11 (3)	16 (4)
15	4 (0)	5 (1)	6 (1)	8 (2)	5 (2)	7 (3)	9 (2)	13 (2)
16	6 (3)	9 (5)	11 (5)	16 (7)	10 (6)	15 (9)	14 (6)	20 (9)
17	7 (3)	10 (4)	16 (7)	23 (9)	7 (1)	10 (2)	12 (3)	18 (4)
18	6 (3)	8 (4)	14 (5)	20 (7)	6 (2)	8 (3)	13 (3)	18 (4)
19	5 (3)	7 (5)	14 (13)	21 (19)	5 (1)	7 (2)	13 (3)	18 (4)
20	11 (8)	16 (12)	18 (7)	26 (11)	3 (1)	4 (1)	12 (3)	18 (5)
21	4 (1)	6 (2)	11 (3)	15 (4)	7 (7)	10 (10)	9 (3)	13 (4)
22	4 (1)	6 (1)	12 (5)	17 (7)	25 (15)	35 (21)	12 (5)	18 (7)
23	4 (2)	5 (2)	10 (4)	14 (6)	13 (10)	18 (14)	13 (5)	18 (7)
24	3 (1)	5 (1)	6 (1)	8 (1)	4 (1)	6 (1)	10 (3)	15 (4)
25	5 (1)	7 (1)	12 (6)	18 (9)	3 (1)	4 (1)	18 (21)	26 (30)
26	5 (1)	8 (2)	8 (2)	11 (3)	3 (0)	4 (0)	10 (1)	14 (2)
27	4 (1)	6 (2)	12 (7)	17 (10)	6 (5)	8 (7)	13 (6)	19 (8)
28	5 (2)	7 (2)	13 (4)	18 (5)	11 (8)	16 (11)	12 (5)	17 (7)
29	3 (1)	4 (1)	9 (1)	13 (2)	3 (0)	4 (0)	8 (1)	12 (2)
30	9 (9)	12 (12)	17 (16)	25 (22)	3 (2)	5 (2)	17 (12)	24 (17)
31	8 (6)	11 (8)	20 (11)	29 (16)	6 (1)	8 (2)	19 (7)	28 (10)
Avg	5	8	12	17	6	9	12	17
n	31	31	31	31	31	31	31	31
SD	2	3	4	5	4	6	3	4
Min	3	4	6	8	3	4	8	11
Max	11	16	20	29	25	35	19	28

ED_004549_00015842-00221

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for September, 2009. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	$\mu g \cdot dsm^{-3}$	ppb	$\mu g \cdot dsm^{-3}$	ppb	$\mu g \cdot dsm^{-3}$	ppb	$\mu g \cdot dsm^{-3}$
1	4 (1)	6 (1)	14 (5)	20 (7)	3 (0)	4 (0)	11 (2)	16 (3)
2	5 (2)	7 (3)	12 (5)	17 (7)	5 (2)	7 (3)	10 (1)	15 (2)
3	6 (4)	8 (5)	14 (7)	20 (9)	5 (2)	7 (2)	13 (4)	18 (6)
4	6 (3)	8 (4)	13 (5)	19 (8)	4 (1)	6 (1)	11 (4)	16 (6)
5	6 (5)	8 (7)	12 (5)	17 (6)	3 (0)	5 (1)	12 (3)	17 (4)
6	4 (1)	6 (2)	13 (6)	19 (9)	7 (3)	10 (4)	12 (3)	17 (4)
7	5 (2)	7 (3)	10 (4)	14 (6)	4 (1)	6 (1)	10 (2)	14 (3)
8	6 (8)	9 (12)	10 (5)	14 (7)	5 (2)	7 (2)	10 (3)	15 (4)
9	5 (5)	8 (7)	11 (5)	16 (8)	5 (1)	7 (1)	10 (3)	15 (4)
10	8 (3)	12 (4)	10 (4)	15 (5)	6 (3)	9 (4)	9 (1)	14 (2)
11	4 (1)	5 (2)	9 (3)	13 (4)	5 (2)	7 (3)	8 (1)	12 (2)
12	5 (3)	8 (4)	11 (5)	16 (7)	7 (3)	9 (4)	13 (6)	18 (9)
13	10 (2)	14 (2)	16 (8)	23 (11)	8 (5)	11 (7)	14 (4)	19 (5)
14	7 (2)	10 (3)	16 (5)	22 (8)	5 (1)	7 (1)	16 (6)	22 (9)
15	4 (1)	6 (2)	11 (4)	15 (5)	4 (3)	6 (4)	9 (2)	13 (3)
16	3 (2)	4 (3)	9 (2)	12 (4)	3 (2)	4 (2)	9 (2)	13 (2)
17	6 (3)	9 (4)	14 (6)	19 (9)	10 (5)	14 (7)	11 (3)	16 (5)
18	4 (1)	6 (1)	16 (14)	23 (20)	9 (7)	13 (10)	12 (6)	17 (9)
19	3 (1)	4 (1)	10 (7)	14 (10)	5 (1)	7 (1)	10 (2)	14 (2)
20	3 (0)	4 (0)	8 (3)	12 (4)	4 (1)	6 (1)	10 (2)	14 (3)
21	3 (1)	4 (2)	7 (2)	11 (3)	3 (1)	5 (1)	10 (2)	14 (3)
22	4 (2)	6 (4)	10 (3)	14 (4)	3 (0)	4 (1)	8 (2)	12 (3)
23	4 (1)	6 (1)	9 (2)	13 (3)	4 (2)	6 (2)	9 (2)	13 (3)
24	6 (3)	9 (4)	9 (2)	13 (3)	3 (1)	4 (1)	10 (2)	14 (3)
25	3 (1)	5 (1)	9 (4)	14 (5)	3 (0)	4 (1)	11 (2)	15 (3)
26	4 (1)	6 (1)	11 (4)	16 (6)	4 (1)	5 (1)	11 (2)	15 (3)
27	15 (10)	22 (14)	33 (22)	46 (32)	3 (1)	4 (1)	13 (5)	19 (7)
28	20 (17)	28 (24)	31 (20)	44 (29)	2 (1)	3 (1)	8 (1)	11 (1)
29	5 (2)	7 (3)			2 (0)	3 (0)		
30	3 (1)	5 (2)	8 (3)	12 (4)	2 (1)	3 (1)	9 (2)	13 (3)
Avg	6	8	13	18	4	6	11	15
n	30	30	29	29	30	30	29	29
SD	4	5	6	8	2	3	2	2
Min	3	4	7	11	2	3	8	11
Max	20	28	33	46	10	14	16	22

ED_004549_00015842-00222

Table F8. Daily means (SD) of H2S concentrations at Site WI5B for October, 2009. MDL = 5 ppb.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppb	$\mu g \cdot dsm^{-3}$	ppb	$\mu g \cdot dsm^{-3}$	ppb	$\mu g \cdot dsm^{-3}$	ppb	$\mu g \cdot dsm^{-3}$
1	5 (2)	7 (3)	7 (1)	10 (2)	16 (16)	22 (23)	8 (3)	11 (4)
2	3 (0)	4 (0)	9 (2)	13 (3)	2 (0)	3 (1)	7 (1)	10 (2)
3	4 (1)	5 (1)	9 (1)	13 (2)	2 (0)	3 (1)	8 (2)	11 (2)
4	5 (1)	7 (2)	13 (2)	18 (3)	2 (0)	3 (1)	10 (2)	14 (2)
5	3 (1)	5 (2)	10 (4)	14 (5)	2 (0)	3 (1)	9 (2)	13 (3)
6	4 (3)	6 (4)	10 (3)	14 (4)	2 (0)	3 (0)	9 (3)	13 (4)
7	5 (3)	8 (4)	12 (3)	17 (4)	4 (1)	6 (2)	12 (2)	16 (3)
8	4 (1)	6 (1)	13 (5)	19 (7)	4 (1)	5 (2)	11 (3)	16 (4)
9	3 (1)	5 (1)	11 (3)	15 (5)	4 (3)	6 (5)	11 (4)	16 (5)
10	9 (3)	12 (5)	19 (11)	27 (15)	3 (2)	4 (2)	12 (3)	18 (5)
11	7 (3)	9 (4)	11 (3)	15 (4)	4 (3)	6 (4)	12 (3)	17 (4)
12	4 (1)	6 (2)	9 (3)	13 (4)	3 (1)	4 (1)	10 (3)	14 (4)
13	4 (1)	5 (1)	8 (1)	12 (2)	3 (1)	4 (1)	10 (2)	14 (3)
14	5 (1)	7 (1)	11 (7)	16 (10)	3 (0)	5 (0)	11 (4)	16 (6)
15	4 (1)	5 (1)	9 (2)	12 (3)	3 (0)	4 (1)	10 (2)	14 (3)
16	4 (1)	5 (1)	8 (1)	12 (2)	3 (0)	4 (1)	10 (2)	15 (4)
17	3 (0)	5 (0)	8 (1)	11 (1)	3 (1)	5 (1)	10 (2)	14 (2)
18	3 (0)	4 (1)	7 (1)	10 (1)	4 (1)	5 (1)	10 (2)	15 (3)
19	4 (1)	5 (1)	8 (2)	12 (3)	3 (1)	5 (1)	9 (2)	13 (2)
20	3 (1)	5 (1)	7 (1)	10 (1)	3 (0)	4 (0)	9 (3)	13 (4)
21	3 (1)	4 (1)			2 (1)	3 (1)	9 (2)	12 (3)
22	1 (1)	2 (1)	8 (2)	11 (3)	1 (0)	2 (1)	6 (1)	8 (2)
23	1 (1)	2 (1)	7 (1)	10 (2)	1 (0)	1 (0)	6 (2)	8 (3)
24	2 (1)	3 (1)	10 (12)	14 (17)	2 (1)	2 (1)	8 (2)	11 (3)
25	4 (4)	6 (5)	8 (3)	11 (4)	3 (1)	4 (2)	9 (2)	13 (4)
26	3 (1)	4 (2)	10 (2)	15 (3)	1 (0)	2 (0)	11 (4)	16 (6)
27	2 (0)	2 (1)	5 (1)	8 (2)	1 (0)	2 (0)	9 (2)	13 (3)
28	1 (1)	1 (1)	6 (2)	9 (3)	1 (1)	2 (1)	8 (2)	12 (3)
29	2 (0)	2 (1)	4 (1)	6 (1)	1 (0)	2 (1)	8 (2)	11 (3)
30			12 (9)	17 (12)	9 (5)	13 (7)	11 (3)	16 (4)
31			14 (6)	21 (8)	1 (1)	2 (1)	9 (3)	13 (4)
Avg	4	5	9	13	3	4	9	14
n	29	29	30	30	31	31	31	31
SD	2	2	3	4	3	4	2	2
Min	1	1	4	6	1	1	6	8
Max	9	12	19	27	16	22	12	18

ED_004549_00015842-00223

Table F9. Hydrogen sulfide emissions.

Table F9. Daily means (SD) of H2S emissions at Site WI5B for September, 2007.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12	1.17 (1.66)	448 (636)	5.53 (7.85)	3.93 (5.58)	2.45 (3.29)	764 (1030)	6.91 (9.28)	4.91 (6.60)
13	0.84 (1.51)	324 (580)	4.00 (7.15)	2.84 (5.09)	2.67 (1.97)	831 (613)	7.52 (5.54)	5.35 (3.94)
14	1.70 (2.33)	655 (897)	8.08 (11.10)	5.75 (7.87)				
15	0.56 (1.05)	215 (404)	2.66 (4.98)	1.89 (3.54)	2.09 (1.82)	651 (568)	5.89 (5.13)	4.19 (3.65)
16								
17								
18	0.25 (0.18)	98 (70)	1.20 (0.86)	0.86 (0.62)	1.95 (1.95)	608 (607)	5.50 (5.49)	3.91 (3.90)
19	1.48 (1.40)	570 (538)	7.03 (6.64)	5.00 (4.72)	0.60 (0.89)	187 (277)	1.69 (2.50)	1.20 (1.78)
20								
21								
22	0.97 (1.68)	371 (644)	4.58 (7.95)	3.26 (5.65)	0.94 (1.04)	294 (325)	2.66 (2.94)	1.89 (2.09)
23	4.39 (5.61)	1690 (2150)	20.80 (26.60)	14.80 (18.90)	0.16 (2.08)	50 (649)	0.45 (5.87)	0.32 (4.17)
24	2.66 (3.01)	1020 (1160)	12.60 (14.30)	8.95 (10.20)	1.71 (2.86)	532 (892)	4.81 (8.07)	3.42 (5.74)
25	1.09 (1.73)	419 (666)	5.17 (8.22)	3.68 (5.84)	2.64 (3.04)	824 (946)	7.45 (8.55)	5.30 (6.08)
26	0.80 (0.98)	305 (376)	3.77 (4.64)	2.68 (3.30)	1.67 (1.67)	519 (520)	4.69 (4.71)	3.34 (3.35)
27	1.31 (3.24)	502 (1240)	6.20 (15.40)	4.41 (10.90)	-1.06 (3.35)	-331 (1040)	-3.00 (9.43)	-2.13 (6.71)
28	1.84 (2.12)	706 (816)	8.71 (10.10)	6.19 (7.16)	0.20 (0.92)	61 (286)	0.55 (2.58)	0.39 (1.84)
29	0.47 (0.75)	182 (287)	2.25 (3.55)	1.60 (2.52)	1.92 (1.80)	599 (560)	5.42 (5.07)	3.85 (3.60)
30	0.77 (1.76)	294 (676)	3.63 (8.34)	2.58 (5.93)	1.84 (2.26)	572 (703)	5.17 (6.35)	3.68 (4.52)
Avg	1.35	520	6.41	4.56	1.41	440	3.98	2.83
n	15	15	15	15	14	14	14	14
SD	1.00	385	4.75	3.38	1.06	329	2.97	2.11
Min	0.25	98	1.20	0.86	-1.06	-331	-3.00	-2.13
Max	4.39	1690	20.80	14.80	2.67	831	7.52	5.35

ED_004549_00015842-00224

Table F9. Daily means (SD) of H2S emissions at Site WI5B for October, 2007.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3	1.36 (2.99)	522 (1150)	6.45 (14.20)	4.59 (10.10)	0.71 (1.26)	220 (391)	1.99 (3.54)	1.41 (2.52)
4	1.12 (2.56)	430 (983)	5.30 (12.10)	3.77 (8.63)	0.68 (3.33)	212 (1040)	1.92 (9.37)	1.37 (6.67)
5	0.73 (1.10)	279 (421)	3.45 (5.20)	2.45 (3.70)	0.78 (2.32)	244 (724)	2.21 (6.55)	1.57 (4.66)
6	0.37 (0.40)	143 (155)	1.77 (1.91)	1.26 (1.36)	2.08 (2.22)	647 (690)	5.85 (6.24)	4.16 (4.44)
7	1.47 (2.90)	563 (1110)	6.95 (13.70)	4.94 (9.76)	1.14 (1.73)	355 (539)	3.21 (4.88)	2.28 (3.47)
8								
9	1.40 (3.49)	538 (1340)	6.64 (16.50)	4.72 (11.70)	2.11 (3.63)	658 (1130)	5.95 (10.20)	4.23 (7.28)
10	2.05 (2.82)	789 (1080)	9.73 (13.40)	6.92 (9.52)				
11								
12	1.39 (1.42)	532 (546)	6.57 (6.74)	4.67 (4.79)	1.69 (1.72)	527 (535)	4.77 (4.84)	3.39 (3.44)
13	0.61 (0.91)	233 (350)	2.88 (4.32)	2.05 (3.07)	0.76 (0.95)	237 (296)	2.14 (2.68)	1.52 (1.90)
14	1.32 (1.65)	507 (635)	6.25 (7.84)	4.45 (5.58)	1.48 (2.32)	460 (721)	4.16 (6.52)	2.96 (4.64)
15	1.73 (2.65)	663 (1020)	8.18 (12.60)	5.82 (8.94)	0.62 (0.57)	194 (178)	1.75 (1.61)	1.25 (1.14)
16	0.28 (0.30)	106 (116)	1.31 (1.43)	0.93 (1.02)	2.08 (2.25)	649 (700)	5.87 (6.33)	4.17 (4.50)
17	1.59 (1.98)	612 (762)	7.56 (9.41)	5.37 (6.69)	3.99 (3.53)	1240 (1100)	11.20 (9.95)	7.99 (7.07)
18	1.70 (2.24)	652 (858)	8.04 (10.60)	5.72 (7.53)	2.90 (3.52)	905 (1100)	8.18 (9.91)	5.82 (7.05)
19	2.84 (3.26)	1090 (1250)	13.50 (15.40)	9.57 (11.00)	1.31 (1.91)	407 (595)	3.68 (5.38)	2.62 (3.83)
20	1.69 (2.54)	647 (977)	7.99 (12.10)	5.68 (8.57)	1.60 (1.97)	498 (613)	4.50 (5.54)	3.20 (3.94)
21								
22	-0.32 (1.66)	-124 (638)	-1.52 (7.88)	-1.08 (5.60)	1.88 (2.37)	585 (740)	5.29 (6.69)	3.76 (4.76)
23	1.25 (2.39)	481 (920)	5.94 (11.30)	4.23 (8.07)	5.12 (5.56)	1600 (1730)	14.40 (15.70)	10.30 (11.10)
24	2.23 (2.45)	858 (941)	10.60 (11.60)	7.53 (8.26)	1.74 (2.09)	543 (651)	4.91 (5.89)	3.49 (4.19)
25	0.97 (0.92)	372 (355)	4.59 (4.38)	3.27 (3.11)	4.39 (3.98)	1370 (1240)	12.40 (11.20)	8.78 (7.97)
26	1.37 (1.48)	525 (567)	6.47 (7.00)	4.60 (4.98)	1.74 (2.42)	543 (753)	4.91 (6.81)	3.49 (4.84)
27	1.65 (2.39)	634 (919)	7.82 (11.30)	5.56 (8.06)	2.66 (2.89)	828 (902)	7.48 (8.15)	5.32 (5.80)
28	2.47 (3.47)	948 (1330)	11.70 (16.40)	8.32 (11.70)	4.95 (5.41)	1540 (1690)	14.00 (15.20)	9.92 (10.80)
29								
30								
31								
Avg	1.36	522	6.44	4.58	2.11	657	5.94	4.23
n	23	23	23	23	22	22	22	22
SD	0.70	270	3.33	2.37	1.34	417	3.77	2.68
Min	-0.32	-124	-1.52	-1.08	0.62	194	1.75	1.25
Max	2.84	1090	13.50	9.57	5.12	1600	14.40	10.30

7.1.

Table F9. Daily means (SD) of H2S emissions at Site WI5B for November, 2007.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16	0.99 (0.70)	381 (269)	4.70 (3.33)	3.34 (2.36)	0.92 (0.81)	288 (253)	2.60 (2.29)	1.85 (1.63)
17	1.41 (1.30)	543 (498)	6.70 (6.15)	4.76 (4.37)	0.27 (0.43)	83 (133)	0.75 (1.20)	0.53 (0.86)
18	0.66 (0.92)	255 (352)	3.15 (4.34)	2.24 (3.09)	0.87 (0.81)	271 (254)	2.45 (2.29)	1.74 (1.63)
19	0.57 (0.94)	218 (362)	2.69 (4.46)	1.91 (3.17)	0.23 (0.32)	72 (100)	0.65 (0.90)	0.46 (0.64)
20	1.78 (1.20)	683 (461)	8.43 (5.69)	5.99 (4.05)	1.06 (0.84)	331 (261)	2.99 (2.36)	2.13 (1.68)
21	0.64 (0.61)	245 (235)	3.03 (2.90)	2.15 (2.07)				
22	1.10 (1.00)	423 (386)	5.22 (4.76)	3.71 (3.38)				
23	1.48 (1.25)	570 (479)	7.03 (5.91)	5.00 (4.20)	0.54 (0.62)	169 (193)	1.53 (1.75)	1.08 (1.24)
24	0.75 (0.85)	287 (324)	3.55 (4.00)	2.52 (2.85)	0.86 (0.95)	269 (295)	2.43 (2.67)	1.73 (1.90)
25	0.57 (0.63)	217 (240)	2.68 (2.97)	1.90 (2.11)	0.82 (0.80)	254 (248)	2.29 (2.24)	1.63 (1.59)
26	1.12 (0.73)	429 (281)	5.29 (3.46)	3.76 (2.46)	1.65 (1.29)	514 (403)	4.64 (3.65)	3.30 (2.59)
27	1.08 (0.92)	416 (352)	5.14 (4.34)	3.65 (3.09)	1.02 (0.60)	316 (186)	2.86 (1.68)	2.04 (1.20)
28	0.68 (0.66)	262 (254)	3.24 (3.13)	2.30 (2.23)	1.00 (0.61)	312 (190)	2.82 (1.72)	2.01 (1.22)
29								
30	0.91 (1.04)	348 (398)	4.30 (4.91)	3.06 (3.49)	1.36 (1.17)	422 (364)	3.82 (3.29)	2.72 (2.34)
Avg	0.98	377	4.65	3.31	0.88	275	2.49	1.77
n	14	14	14	14	12	12	12	12
SD	0.36	139	1.71	1.22	0.39	121	1.09	0.78
Min	0.57	217	2.68	1.90	0.23	72	0.65	0.46
Max	1.78	683	8.43	5.99	1.65	514	4.64	3.30

ED_004549_00015842-00226

Table F9. Daily means (SD) of H2S emissions at Site WI5B for December, 2007.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	0.81 (0.86)	309 (329)	3.82 (4.06)	2.71 (2.89)	2.26 (1.43)	705 (446)	6.38 (4.03)	4.53 (2.87)
2	0.75 (0.60)	287 (230)	3.54 (2.84)	2.52 (2.02)	2.44 (2.00)	759 (623)	6.86 (5.63)	4.88 (4.01)
3	0.98 (0.84)	375 (322)	4.63 (3.97)	3.29 (2.82)	1.08 (0.71)	336 (221)	3.04 (2.00)	2.16 (1.42)
4	1.03 (0.90)	394 (345)	4.87 (4.26)	3.46 (3.03)	1.00 (0.55)	311 (170)	2.81 (1.54)	2.00 (1.09)
5	1.21 (1.27)	463 (488)	5.71 (6.02)	4.06 (4.28)	1.02 (0.50)	316 (154)	2.86 (1.39)	2.03 (0.99)
6	1.35 (1.09)	519 (417)	6.41 (5.15)	4.56 (3.66)	1.67 (1.61)	519 (502)	4.69 (4.54)	3.34 (3.23)
7	0.83 (0.86)	317 (329)	3.91 (4.07)	2.78 (2.89)	1.46 (1.37)	456 (425)	4.12 (3.85)	2.93 (2.74)
8	1.25 (1.14)	480 (440)	5.92 (5.42)	4.21 (3.86)	2.29 (1.32)	713 (410)	6.45 (3.71)	4.58 (2.64)
9	0.61 (0.42)	232 (160)	2.87 (1.98)	2.04 (1.41)	1.87 (1.90)	581 (590)	5.26 (5.34)	3.74 (3.80)
10	1.22 (0.94)	468 (361)	5.78 (4.45)	4.11 (3.17)	1.49 (1.17)	464 (363)	4.20 (3.28)	2.99 (2.33)
11								
12	0.99 (1.10)	380 (421)	4.69 (5.19)	3.34 (3.69)	1.43 (0.89)	447 (277)	4.04 (2.50)	2.87 (1.78)
13	0.57 (0.72)	220 (276)	2.72 (3.41)	1.93 (2.43)	1.59 (0.89)	496 (278)	4.49 (2.51)	3.19 (1.79)
14	0.30 (0.25)	115 (97)	1.42 (1.19)	1.01 (0.85)	1.74 (1.09)	543 (341)	4.91 (3.08)	3.49 (2.19)
15	0.58 (0.95)	221 (366)	2.73 (4.51)	1.94 (3.21)	1.80 (0.75)	560 (234)	5.07 (2.12)	3.60 (1.51)
16	0.35 (0.46)	136 (175)	1.68 (2.16)	1.19 (1.54)	1.71 (0.94)	532 (292)	4.81 (2.64)	3.42 (1.88)
17	0.20 (0.23)	78 (88)	0.96 (1.09)	0.68 (0.78)	2.03 (1.86)	634 (580)	5.73 (5.24)	4.08 (3.73)
18	0.46 (0.82)	177 (314)	2.18 (3.88)	1.55 (2.76)	2.01 (1.05)	625 (327)	5.65 (2.96)	4.02 (2.10)
19	0.66 (0.97)	254 (371)	3.13 (4.58)	2.23 (3.26)	1.87 (0.96)	583 (299)	5.27 (2.71)	3.75 (1.93)
20	1.16 (1.88)	446 (722)	5.51 (8.92)	3.92 (6.34)				
21	0.76 (1.89)	293 (727)	3.62 (8.97)	2.57 (6.38)	2.73 (2.62)	849 (817)	7.68 (7.39)	5.46 (5.25)
22	1.30 (1.86)	499 (716)	6.15 (8.84)	4.38 (6.28)	1.28 (2.19)	397 (683)	3.59 (6.17)	2.55 (4.39)
23								
24								
25								
26	1.61 (2.34)	618 (897)	7.63 (11.10)	5.42 (7.87)	1.77 (1.55)	552 (483)	4.99 (4.37)	3.55 (3.11)
27	3.84 (4.06)	1470 (1560)	18.20 (19.20)	12.90 (13.70)	2.31 (2.53)	719 (789)	6.50 (7.14)	4.62 (5.08)
28	1.97 (2.30)	758 (884)	9.35 (10.90)	6.65 (7.75)	0.74 (1.00)	230 (312)	2.08 (2.82)	1.48 (2.01)
29	3.52 (3.23)	1350 (1240)	16.70 (15.30)	11.80 (10.90)	1.11 (1.04)	346 (325)	3.13 (2.94)	2.22 (2.09)
30	2.43 (1.98)	933 (759)	11.50 (9.37)	8.18 (6.66)	0.99 (0.93)	307 (291)	2.78 (2.63)	1.97 (1.87)
31	3.90 (3.48)	1500 (1330)	18.50 (16.50)	13.10 (11.70)	1.20 (1.23)	374 (385)	3.38 (3.48)	2.41 (2.47)
Avg	1.28	492	6.08	4.32	1.65	514	4.64	3.30
n	27	27	27	27	26	26	26	26
SD	1.00	384	4.74	3.37	0.50	157	1.42	1.01
Min	0.20	78	0.96	0.68	0.74	230	2.08	1.48
Max	3.90	1500	18.50	13.10	2.73	849	7.68	5.46

ED_004549_00015842-00227

Table F9. Daily means (SD) of H2S emissions at Site WI5B for January, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	3.12 (3.06)	1200 (1180)	14.80 (14.50)	10.50 (10.30)	1.27 (1.34)	396 (419)	3.58 (3.78)	2.55 (2.69)
2	3.10 (2.46)	1190 (946)	14.70 (11.70)	10.50 (8.30)	0.78 (0.74)	243 (231)	2.20 (2.09)	1.56 (1.49)
3	1.80 (1.02)	690 (393)	8.52 (4.86)	6.06 (3.45)	1.48 (1.20)	460 (375)	4.16 (3.39)	2.96 (2.41)
4	1.86 (1.52)	715 (582)	8.82 (7.19)	6.28 (5.11)	1.32 (1.08)	412 (338)	3.73 (3.06)	2.65 (2.17)
5	1.84 (1.65)	707 (635)	8.72 (7.84)	6.20 (5.57)	2.17 (1.46)	675 (454)	6.11 (4.11)	4.34 (2.92)
6	0.28 (0.30)	108 (114)	1.34 (1.41)	0.95 (1.00)	3.75 (3.52)	1170 (1100)	10.60 (9.91)	7.52 (7.05)
7								
8	1.73 (0.96)	665 (367)	8.21 (4.53)	5.84 (3.22)				
9	1.93 (1.75)	741 (671)	9.14 (8.28)	6.50 (5.89)	1.31 (1.11)	410 (345)	3.70 (3.12)	2.63 (2.22)
10	2.33 (2.10)	894 (807)	11.00 (9.96)	7.85 (7.09)	1.68 (1.50)	522 (466)	4.72 (4.22)	3.36 (3.00)
11	1.45 (1.11)	558 (426)	6.88 (5.26)	4.89 (3.74)	1.70 (1.53)	531 (476)	4.80 (4.31)	3.41 (3.06)
12	1.77 (0.99)	682 (379)	8.41 (4.67)	5.98 (3.32)	1.14 (1.35)	354 (421)	3.20 (3.81)	2.28 (2.71)
13	1.58 (1.44)	608 (551)	7.51 (6.81)	5.34 (4.84)	1.11 (1.34)	346 (417)	3.13 (3.77)	2.23 (2.68)
14	1.56 (1.21)	600 (466)	7.40 (5.75)	5.26 (4.09)	1.76 (1.61)	548 (501)	4.95 (4.53)	3.52 (3.22)
15	1.72 (1.05)	660 (402)	8.15 (4.97)	5.79 (3.53)	1.54 (1.30)	478 (404)	4.32 (3.66)	3.08 (2.60)
16	1.42 (1.39)	546 (532)	6.74 (6.57)	4.79 (4.67)	1.34 (1.20)	419 (372)	3.79 (3.37)	2.69 (2.39)
17	1.92 (1.49)	738 (572)	9.11 (7.06)	6.48 (5.02)	1.94 (1.50)	606 (467)	5.48 (4.22)	3.89 (3.00)
18	2.27 (2.01)	872 (773)	10.80 (9.54)	7.66 (6.79)	1.77 (1.79)	553 (558)	5.00 (5.05)	3.56 (3.59)
19	4.05 (2.52)	1560 (967)	19.20 (11.90)	13.70 (8.49)	2.89 (2.52)	900 (786)	8.14 (7.11)	5.79 (5.06)
20	3.71 (2.58)	1420 (991)	17.60 (12.20)	12.50 (8.70)	3.71 (2.80)	1160 (874)	10.40 (7.90)	7.43 (5.62)
21	3.00 (2.52)	1150 (966)	14.20 (11.90)	10.10 (8.48)	2.68 (2.07)	836 (645)	7.56 (5.83)	5.38 (4.15)
22	2.63 (1.73)	1010 (666)	12.50 (8.21)	8.87 (5.84)	2.10 (1.58)	654 (492)	5.92 (4.45)	4.21 (3.16)
23	2.14 (1.56)	823 (597)	10.20 (7.37)	7.23 (5.24)	1.86 (2.00)	580 (624)	5.25 (5.64)	3.73 (4.01)
24								
25	1.86 (1.29)	716 (495)	8.84 (6.11)	6.28 (4.35)	1.56 (1.36)	486 (423)	4.40 (3.82)	3.13 (2.72)
26	1.31 (0.87)	502 (333)	6.19 (4.11)	4.41 (2.92)				
27	1.10 (1.35)	422 (519)	5.21 (6.41)	3.71 (4.56)				
28	0.87 (1.13)	332 (434)	4.10 (5.36)	2.91 (3.81)				
29	1.71 (2.32)	657 (890)	8.11 (11.00)	5.77 (7.81)	1.13 (0.96)	351 (298)	3.18 (2.70)	2.26 (1.92)
30	3.13 (1.97)	1200 (757)	14.80 (9.34)	10.50 (6.64)	2.14 (1.70)	666 (530)	6.02 (4.79)	4.28 (3.41)
31					2.09 (1.53)	650 (475)	5.88 (4.30)	4.18 (3.06)
Avg	2.04	785	9.68	6.89	1.85	576	5.21	3.70
n	28	28	28	28	25	25	25	25
SD	0.83	319	3.94	2.80	0.73	228	2.06	1.47
Min	0.28	108	1.34	0.95	0.78	243	2.20	1.56
Max	4.05	1560	19.20	13.70	3.75	1170	10.60	7.52

ED_004549_00015842-00228

Table F9. Daily means (SD) of H2S emissions at Site WI5B for February, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	2.34 (2.16)	899 (830)	11.10 (10.20)	7.89 (7.28)	2.55 (1.61)	793 (502)	7.17 (4.54)	5.10 (3.23)
2	3.66 (3.42)	1410 (1310)	17.40 (16.20)	12.30 (11.50)	0.87 (0.89)	272 (276)	2.46 (2.50)	1.75 (1.78)
3	2.17 (2.08)	834 (801)	10.30 (9.88)	7.32 (7.03)	1.07 (1.09)	333 (340)	3.01 (3.07)	2.14 (2.19)
4	1.20 (1.90)	461 (728)	5.69 (8.99)	4.05 (6.39)	2.49 (2.87)	777 (895)	7.02 (8.10)	4.99 (5.76)
5	1.82 (2.51)	700 (963)	8.64 (11.90)	6.14 (8.45)	2.09 (2.35)	652 (733)	5.89 (6.63)	4.19 (4.71)
6	1.26 (1.17)	484 (448)	5.97 (5.53)	4.25 (3.93)	1.03 (1.13)	322 (352)	2.91 (3.18)	2.07 (2.26)
7	1.26 (1.17)	483 (451)	5.97 (5.56)	4.24 (3.96)	1.70 (1.19)	528 (370)	4.78 (3.34)	3.40 (2.38)
8	1.66 (1.45)	638 (557)	7.87 (6.87)	5.60 (4.89)	1.72 (1.50)	537 (466)	4.85 (4.21)	3.45 (3.00)
9	2.40 (1.72)	922 (660)	11.40 (8.14)	8.09 (5.79)	1.08 (0.89)	337 (277)	3.05 (2.50)	2.17 (1.78)
10	2.07 (1.64)	797 (631)	9.83 (7.78)	6.99 (5.54)	3.06 (2.22)	953 (692)	8.61 (6.26)	6.13 (4.45)
11	2.42 (1.60)	929 (614)	11.50 (7.58)	8.16 (5.39)	3.14 (1.69)	978 (527)	8.84 (4.76)	6.29 (3.39)
12	1.03 (1.33)	396 (510)	4.89 (6.29)	3.48 (4.48)	3.65 (1.79)	1140 (558)	10.30 (5.05)	7.31 (3.59)
13	0.62 (0.90)	239 (345)	2.95 (4.25)	2.10 (3.02)	3.11 (3.30)	968 (1030)	8.76 (9.28)	6.23 (6.60)
14	1.31 (1.94)	502 (744)	6.20 (9.18)	4.41 (6.53)	2.66 (1.69)	830 (527)	7.50 (4.77)	5.34 (3.39)
15	0.82 (0.84)	315 (324)	3.89 (4.00)	2.77 (2.84)	3.98 (2.10)	1240 (656)	11.20 (5.93)	7.98 (4.22)
16	1.45 (1.33)	557 (512)	6.87 (6.32)	4.89 (4.50)	2.72 (2.13)	847 (664)	7.66 (6.00)	5.45 (4.27)
17	1.81 (2.11)	694 (812)	8.56 (10.00)	6.09 (7.13)	2.61 (1.44)	814 (450)	7.36 (4.07)	5.23 (2.89)
18	0.96 (0.93)	370 (357)	4.56 (4.41)	3.25 (3.13)	2.49 (1.18)	776 (369)	7.02 (3.34)	4.99 (2.37)
19	1.55 (1.49)	594 (571)	7.33 (7.04)	5.21 (5.01)	3.29 (1.82)	1030 (566)	9.27 (5.11)	6.59 (3.64)
20	1.63 (0.96)	625 (370)	7.71 (4.57)	5.49 (3.25)	3.19 (2.20)	994 (686)	8.98 (6.20)	6.39 (4.41)
21	0.06 (0.06)	23 (22)	0.28 (0.28)	0.20 (0.20)	0.38 (0.81)	118 (253)	1.07 (2.28)	0.76 (1.62)
22	0.60 (1.24)	230 (474)	2.84 (5.85)	2.02 (4.16)	0.88 (1.49)	275 (464)	2.49 (4.19)	1.77 (2.98)
23	1.50 (2.00)	576 (770)	7.10 (9.50)	5.05 (6.76)	1.76 (1.20)	548 (375)	4.95 (3.39)	3.52 (2.41)
24	1.01 (1.62)	389 (622)	4.81 (7.68)	3.42 (5.46)	2.34 (1.77)	730 (552)	6.60 (4.99)	4.70 (3.55)
25	0.60 (0.77)	230 (295)	2.84 (3.64)	2.02 (2.59)				
26	1.06 (1.03)	405 (395)	5.00 (4.88)	3.56 (3.47)	1.25 (0.92)	388 (285)	3.51 (2.58)	2.49 (1.83)
27	0.90 (0.96)	345 (368)	4.26 (4.54)	3.03 (3.23)	1.10 (1.21)	342 (378)	3.09 (3.42)	2.20 (2.43)
28	1.59 (1.43)	610 (547)	7.52 (6.76)	5.35 (4.80)	0.80 (0.87)	249 (271)	2.25 (2.45)	1.60 (1.74)
29	1.83 (1.11)	701 (428)	8.66 (5.28)	6.16 (3.75)	0.22 (0.18)	67 (56)	0.61 (0.51)	0.43 (0.36)
Avg	1.47	564	6.96	4.95	2.04	637	5.76	4.09
n	29	29	29	29	28	28	28	28
SD	0.71	273	3.37	2.39	1.03	320	2.90	2.06
Min	0.06	23	0.28	0.20	0.22	67	0.61	0.43
Max	3.66	1410	17.40	12.30	3.98	1240	11.20	7.98

ED_004549_00015842-00229

Table F9. Daily means (SD) of H2S emissions at Site WI5B for March, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	1.25 (0.91)	482 (351)	5.95 (4.33)	4.23 (3.08)	0.67 (0.65)	209 (203)	1.89 (1.84)	1.34 (1.31)
2	1.44 (1.57)	553 (602)	6.82 (7.43)	4.85 (5.29)				
3	1.28 (1.10)	493 (423)	6.09 (5.22)	4.33 (3.71)	1.43 (1.54)	445 (481)	4.02 (4.35)	2.86 (3.09)
4	1.17 (1.32)	448 (507)	5.52 (6.25)	3.93 (4.45)	1.03 (0.91)	321 (284)	2.91 (2.57)	2.07 (1.83)
5	0.98 (0.88)	375 (338)	4.63 (4.17)	3.29 (2.96)	1.34 (1.10)	417 (342)	3.77 (3.10)	2.68 (2.20)
6	1.11 (0.97)	425 (373)	5.24 (4.60)	3.73 (3.27)	1.62 (1.68)	504 (523)	4.56 (4.73)	3.24 (3.37)
7	1.33 (1.23)	510 (474)	6.29 (5.85)	4.48 (4.16)	1.35 (1.13)	420 (352)	3.80 (3.18)	2.70 (2.26)
8	1.41 (1.27)	543 (489)	6.70 (6.03)	4.76 (4.29)	1.30 (1.53)	405 (477)	3.66 (4.31)	2.60 (3.07)
9	2.14 (2.71)	823 (1040)	10.20 (12.90)	7.23 (9.15)	1.06 (0.88)	330 (273)	2.98 (2.47)	2.12 (1.76)
10	1.57 (1.29)	603 (495)	7.44 (6.10)	5.29 (4.34)				
11								
12								
13	1.12 (1.43)	430 (549)	5.31 (6.77)	3.78 (4.82)	1.53 (1.41)	478 (440)	4.32 (3.98)	3.07 (2.83)
14	1.61 (1.56)	617 (601)	7.61 (7.41)	5.41 (5.27)				
15	1.30 (1.13)	500 (435)	6.17 (5.36)	4.39 (3.81)				
16	0.88 (0.53)	337 (204)	4.16 (2.52)	2.96 (1.79)	1.29 (1.18)	402 (368)	3.64 (3.33)	2.59 (2.37)
17	1.20 (1.38)	460 (532)	5.68 (6.56)	4.04 (4.67)	2.20 (2.20)	685 (684)	6.19 (6.18)	4.40 (4.40)
18	1.30 (0.91)	498 (351)	6.14 (4.33)	4.37 (3.08)	0.96 (1.34)	300 (416)	2.71 (3.76)	1.93 (2.67)
19	1.71 (1.33)	659 (512)	8.13 (6.32)	5.78 (4.49)	0.54 (0.79)	167 (245)	1.51 (2.22)	1.07 (1.58)
20	1.75 (1.49)	671 (572)	8.27 (7.06)	5.88 (5.02)	0.75 (1.31)	232 (409)	2.10 (3.70)	1.49 (2.63)
21	1.62 (1.60)	624 (614)	7.70 (7.58)	5.48 (5.39)	0.99 (1.28)	310 (397)	2.80 (3.59)	1.99 (2.55)
22	1.19 (0.86)	459 (328)	5.66 (4.05)	4.02 (2.88)	0.98 (1.52)	306 (472)	2.77 (4.27)	1.97 (3.04)
23	1.69 (1.38)	648 (531)	8.00 (6.55)	5.69 (4.66)				
24	1.41 (1.39)	543 (535)	6.70 (6.61)	4.76 (4.70)	3.09 (3.08)	962 (960)	8.69 (8.68)	6.18 (6.17)
25	2.09 (2.94)	804 (1130)	9.92 (13.90)	7.06 (9.89)	0.51 (0.91)	158 (282)	1.43 (2.55)	1.02 (1.82)
26	2.35 (1.69)	901 (649)	11.10 (8.01)	7.90 (5.69)	1.74 (1.56)	543 (486)	4.91 (4.40)	3.49 (3.13)
27	2.15 (1.72)	826 (662)	10.20 (8.17)	7.25 (5.81)	1.01 (1.30)	316 (404)	2.86 (3.65)	2.03 (2.60)
28	1.70 (1.77)	653 (679)	8.05 (8.37)	5.73 (5.96)	1.32 (1.40)	413 (437)	3.73 (3.95)	2.65 (2.81)
29	1.33 (1.44)	512 (554)	6.31 (6.84)	4.49 (4.86)	1.34 (1.58)	419 (491)	3.78 (4.44)	2.69 (3.16)
30	1.36 (1.70)	523 (651)	6.45 (8.04)	4.59 (5.72)	1.51 (1.56)	471 (487)	4.26 (4.40)	3.03 (3.13)
31								
Avg	1.48	568	7.02	4.99	1.29	400	3.62	2.58
n	28	28	28	28	23	23	23	23
SD	0.36	139	1.71	1.22	0.55	170	1.54	1.09
Min	0.88	337	4.16	2.96	0.51	158	1.43	1.02
Max	2.35	901	11.10	7.90	3.09	962	8.69	6.18

ED_004549_00015842-00230

Table F9. Daily means (SD) of H2S emissions at Site WI5B for April, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	1.42 (1.35)	544 (519)	6.71 (6.41)	4.77 (4.56)				
2	0.70 (0.86)	269 (331)	3.32 (4.08)	2.36 (2.90)	1.04 (1.01)	325 (313)	2.93 (2.83)	2.09 (2.02)
3	0.45 (0.43)	171 (163)	2.11 (2.02)	1.50 (1.43)	0.77 (1.15)	238 (357)	2.16 (3.23)	1.53 (2.29)
4	1.22 (1.45)	470 (555)	5.80 (6.85)	4.12 (4.87)	2.27 (1.74)	708 (543)	6.41 (4.91)	4.56 (3.49)
5	1.34 (1.64)	514 (631)	6.34 (7.79)	4.51 (5.54)	1.48 (2.10)	461 (654)	4.17 (5.91)	2.97 (4.20)
6	0.87 (1.31)	336 (505)	4.14 (6.23)	2.95 (4.43)	2.41 (2.46)	750 (765)	6.78 (6.92)	4.82 (4.92)
7	2.09 (1.83)	801 (705)	9.88 (8.70)	7.03 (6.18)	0.70 (0.71)	218 (222)	1.97 (2.01)	1.40 (1.43)
8	2.57 (1.90)	988 (729)	12.20 (8.99)	8.67 (6.40)				
9	3.57 (2.61)	1370 (1000)	16.90 (12.40)	12.00 (8.79)				
10	1.86 (1.49)	713 (573)	8.81 (7.07)	6.26 (5.03)	0.50 (0.74)	155 (231)	1.40 (2.09)	1.00 (1.49)
11	2.05 (2.06)	785 (792)	9.69 (9.77)	6.89 (6.95)				
12	1.05 (1.19)	404 (457)	4.98 (5.64)	3.54 (4.01)				
13	2.04 (1.42)	784 (546)	9.68 (6.74)	6.88 (4.79)				
14	1.11 (1.25)	427 (478)	5.27 (5.91)	3.75 (4.20)	1.52 (1.78)	473 (554)	4.27 (5.01)	3.04 (3.57)
15	0.78 (1.01)	300 (389)	3.70 (4.80)	2.63 (3.41)	2.92 (3.11)	909 (969)	8.22 (8.76)	5.84 (6.23)
16	0.62 (0.98)	237 (376)	2.92 (4.64)	2.08 (3.30)	3.58 (3.54)	1110 (1100)	10.10 (9.97)	7.17 (7.09)
17	3.44 (4.47)	1320 (1720)	16.30 (21.20)	11.60 (15.10)	2.61 (4.22)	813 (1320)	7.35 (11.90)	5.23 (8.46)
18	4.15 (2.29)	1590 (881)	19.70 (10.90)	14.00 (7.73)				
19	2.56 (1.74)	984 (668)	12.10 (8.25)	8.63 (5.86)				
20	2.70 (2.90)	1030 (1110)	12.80 (13.80)	9.08 (9.78)	1.40 (1.45)	435 (452)	3.93 (4.09)	2.80 (2.91)
21	1.19 (1.73)	457 (664)	5.64 (8.20)	4.01 (5.83)	3.80 (4.56)	1180 (1420)	10.70 (12.80)	7.62 (9.13)
22								
23								
24								
25								
26	0.98 (1.04)	377 (399)	4.65 (4.93)	3.31 (3.51)	1.39 (1.15)	433 (359)	3.91 (3.24)	2.78 (2.31)
27	0.93 (1.18)	356 (454)	4.39 (5.60)	3.12 (3.98)	0.50 (1.00)	156 (310)	1.41 (2.80)	1.00 (1.99)
28	1.27 (1.63)	487 (627)	6.01 (7.74)	4.27 (5.50)				
29	0.75 (1.28)	286 (493)	3.53 (6.08)	2.51 (4.33)				
30	0.65 (0.65)	250 (251)	3.08 (3.09)	2.19 (2.20)	1.48 (1.35)	460 (421)	4.16 (3.81)	2.96 (2.71)
Avg	1.63	625	7.72	5.49	1.77	552	4.99	3.55
n	26	26	26	26	16	16	16	16
SD	0.99	379	4.68	3.33	1.02	317	2.86	2.04
Min	0.45	171	2.11	1.50	0.50	155	1.40	1.00
Max	4.15	1590	19.70	14.00	3.80	1180	10.70	7.62

ED_004549_00015842-00231

Table F9. Daily means (SD) of H2S emissions at Site WI5B for May, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	1.22 (1.35)	469 (517)	5.78 (6.38)	4.11 (4.54)	1.66 (1.48)	519 (462)	4.69 (4.18)	3.34 (2.97)
2	0.74 (0.81)	285 (309)	3.52 (3.82)	2.50 (2.71)				
3	2.87 (3.00)	1100 (1150)	13.60 (14.20)	9.66 (10.10)				
4	1.12 (2.00)	430 (767)	5.30 (9.46)	3.77 (6.73)	3.24 (3.51)	1010 (1090)	9.13 (9.89)	6.49 (7.03)
5								
6	1.07 (1.64)	411 (631)	5.07 (7.79)	3.60 (5.54)	1.28 (1.46)	397 (454)	3.59 (4.11)	2.56 (2.92)
7	4.46 (5.22)	1710 (2010)	21.10 (24.70)	15.00 (17.60)				
8	2.58 (3.35)	991 (1290)	12.20 (15.90)	8.70 (11.30)	0.76 (1.24)	238 (385)	2.15 (3.48)	1.53 (2.48)
9	1.65 (1.53)	634 (588)	7.82 (7.25)	5.56 (5.16)	2.24 (4.49)	697 (1400)	6.30 (12.60)	4.48 (8.99)
10	1.51 (1.85)	581 (711)	7.17 (8.77)	5.10 (6.24)	2.51 (2.72)	783 (847)	7.08 (7.66)	5.03 (5.45)
11	2.42 (2.13)	931 (818)	11.50 (10.10)	8.17 (7.18)				
12	1.19 (1.79)	458 (688)	5.65 (8.49)	4.02 (6.03)	1.54 (2.02)	479 (629)	4.33 (5.68)	3.08 (4.04)
13	2.55 (3.87)	979 (1490)	12.10 (18.30)	8.59 (13.00)	2.33 (2.84)	727 (885)	6.58 (8.00)	4.68 (5.69)
14	2.30 (3.39)	884 (1300)	10.90 (16.10)	7.76 (11.40)				
15	1.27 (1.67)	490 (643)	6.04 (7.93)	4.30 (5.64)	1.16 (1.93)	360 (600)	3.26 (5.43)	2.31 (3.86)
16	1.58 (2.09)	606 (804)	7.48 (9.93)	5.32 (7.06)	1.95 (3.43)	608 (1070)	5.50 (9.66)	3.91 (6.87)
17	3.89 (3.24)	1490 (1240)	18.40 (15.30)	13.10 (10.90)				
18	3.30 (2.90)	1270 (1110)	15.60 (13.80)	11.10 (9.78)				
19	1.99 (2.83)	764 (1090)	9.42 (13.40)	6.70 (9.54)	1.17 (1.37)	365 (427)	3.30 (3.86)	2.35 (2.75)
20	4.63 (3.82)	1780 (1470)	22.00 (18.10)	15.60 (12.90)				
21	2.44 (2.52)	938 (966)	11.60 (11.90)	8.23 (8.48)	3.16 (5.15)	984 (1600)	8.90 (14.50)	6.33 (10.30)
22	2.92 (2.98)	1120 (1140)	13.90 (14.10)	9.85 (10.00)	3.20 (5.50)	997 (1710)	9.01 (15.50)	6.41 (11.00)
23	4.77 (7.51)	1830 (2880)	22.60 (35.60)	16.10 (25.30)	1.86 (2.85)	579 (887)	5.24 (8.02)	3.72 (5.70)
24	1.73 (1.80)	664 (692)	8.19 (8.55)	5.83 (6.08)	2.14 (2.69)	668 (837)	6.04 (7.56)	4.29 (5.38)
25	4.08 (6.34)	1570 (2440)	19.30 (30.10)	13.80 (21.40)				
26								
27								
28	3.13 (3.15)	1200 (1210)	14.80 (14.90)	10.60 (10.60)	3.67 (5.06)	1140 (1580)	10.30 (14.30)	7.34 (10.10)
29	1.82 (2.86)	701 (1100)	8.65 (13.60)	6.15 (9.64)	4.67 (6.15)	1450 (1920)	13.20 (17.30)	9.35 (12.30)
30	4.10 (3.83)	1570 (1470)	19.40 (18.10)	13.80 (12.90)	5.60 (5.58)	1740 (1740)	15.80 (15.70)	11.20 (11.20)
31	4.77 (5.00)	1830 (1920)	22.60 (23.70)	16.10 (16.80)	1.86 (2.61)	580 (812)	5.25 (7.34)	3.73 (5.22)
Avg	2.58	989	12.20	8.68	2.42	754	6.82	4.85
n	28	28	28	28	19	19	19	19
SD	1.23	474	5.85	4.16	1.22	379	3.42	2.43
Min	0.74	285	3.52	2.50	0.76	238	2.15	1.53
Max	4.77	1830	22.60	16.10	5.60	1740	15.80	11.20

ED_004549_00015842-00232

Table F9. Daily means (SD) of H2S emissions at Site WI5B for June, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	5.64 (4.30)	2160 (1650)	26.70 (20.40)	19.00 (14.50)	2.65 (4.50)	826 (1400)	7.47 (12.70)	5.31 (9.01)
2								
3	3.70 (3.42)	1420 (1310)	17.50 (16.20)	12.50 (11.50)				
4	5.98 (7.30)	2300 (2800)	28.30 (34.60)	20.10 (24.60)				
5								
6								
7	6.06 (4.91)	2330 (1890)	28.70 (23.30)	20.40 (16.60)	4.17 (8.08)	1300 (2520)	11.70 (22.80)	8.35 (16.20)
8								
9								
10	4.56 (4.24)	1750 (1630)	21.60 (20.10)	15.40 (14.30)				
11	4.25 (5.45)	1630 (2090)	20.10 (25.80)	14.30 (18.40)				
12	2.72 (2.75)	1040 (1060)	12.90 (13.00)	9.16 (9.27)				
13	2.90 (5.06)	1110 (1940)	13.70 (24.00)	9.76 (17.10)	2.95 (3.83)	920 (1190)	8.32 (10.80)	5.92 (7.66)
14								
15								
16								
17								
18	1.75 (1.99)	671 (764)	8.28 (9.43)	5.89 (6.71)				
19	3.41 (3.47)	1310 (1330)	16.20 (16.40)	11.50 (11.70)	0.81 (2.65)	252 (826)	2.28 (7.47)	1.62 (5.31)
20	2.90 (2.58)	1110 (992)	13.70 (12.20)	9.76 (8.70)	0.93 (0.98)	290 (305)	2.62 (2.76)	1.86 (1.96)
21	2.62 (2.79)	1010 (1070)	12.40 (13.20)	8.82 (9.40)	2.43 (4.01)	756 (1250)	6.83 (11.30)	4.86 (8.04)
22	5.77 (7.80)	2220 (3000)	27.40 (37.00)	19.50 (26.30)	1.00 (2.36)	310 (736)	2.81 (6.65)	2.00 (4.73)
23	4.94 (4.75)	1900 (1820)	23.40 (22.50)	16.70 (16.00)	1.00 (1.05)	311 (328)	2.81 (2.97)	2.00 (2.11)
24	3.30 (5.06)	1270 (1940)	15.70 (24.00)	11.10 (17.00)	2.29 (3.41)	714 (1060)	6.46 (9.62)	4.59 (6.84)
25	3.35 (3.26)	1290 (1250)	15.90 (15.40)	11.30 (11.00)	1.78 (1.88)	555 (587)	5.02 (5.31)	3.57 (3.77)
26	3.49 (5.85)	1340 (2250)	16.60 (27.70)	11.80 (19.70)	-0.25 (3.26)	-79 (1010)	-0.71 (9.18)	-0.51 (6.53)
27	1.14 (1.06)	439 (408)	5.41 (5.04)	3.85 (3.58)	-3.93 (7.60)	-1220 (2370)	-11.10 (21.40)	-7.87 (15.20)
28	2.98 (4.19)	1140 (1610)	14.10 (19.90)	10.00 (14.10)	5.19 (5.99)	1620 (1870)	14.60 (16.90)	10.40 (12.00)
29	4.47 (5.32)	1720 (2040)	21.20 (25.20)	15.10 (17.90)				
30								
Avg	3.80	1460	18.00	12.80	1.62	504	4.55	3.24
n	20	20	20	20	13	13	13	13
SD	1.35	519	6.40	4.55	2.14	666	6.02	4.28
Min	1.14	439	5.41	3.85	-3.93	-1220	-11.10	-7.87
Max	6.06	2330	28.70	20.40	5.19	1620	14.60	10.40

ED_004549_00015842-00233

Table F9. Daily means (SD) of H2S emissions at Site WI5B for July, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4	0.88 (1.56)	337 (599)	4.16 (7.39)	2.96 (5.26)	1.10 (3.17)	343 (987)	3.10 (8.93)	2.21 (6.35)
5	4.92 (8.65)	1890 (3320)	23.30 (41.00)	16.60 (29.10)	1.41 (2.95)	439 (920)	3.97 (8.32)	2.82 (5.92)
6	2.83 (5.27)	1090 (2030)	13.40 (25.00)	9.55 (17.80)	1.69 (2.59)	526 (806)	4.76 (7.28)	3.38 (5.18)
7	2.91 (4.04)	1120 (1550)	13.80 (19.10)	9.82 (13.60)	1.84 (1.42)	575 (442)	5.20 (4.00)	3.70 (2.84)
8								
9								
10					0.70 (4.19)	218 (1310)	1.97 (11.80)	1.40 (8.39)
11					0.57 (1.63)	179 (508)	1.62 (4.59)	1.15 (3.27)
12					1.85 (3.40)	577 (1060)	5.22 (9.58)	3.71 (6.81)
13					0.76 (1.12)	238 (350)	2.15 (3.17)	1.53 (2.25)
14					-0.81 (3.67)	-253 (1140)	-2.29 (10.30)	-1.63 (7.35)
15					0.79 (2.87)	246 (894)	2.22 (8.08)	1.58 (5.75)
16	2.88 (3.55)	1110 (1360)	13.70 (16.80)	9.72 (12.00)	2.04 (2.73)	635 (850)	5.74 (7.68)	4.08 (5.46)
17	1.75 (2.32)	671 (890)	8.28 (11.00)	5.89 (7.81)	1.22 (3.85)	381 (1200)	3.44 (10.80)	2.45 (7.71)
18	2.04 (5.27)	784 (2030)	9.68 (25.00)	6.89 (17.80)	0.30 (0.39)	95 (121)	0.85 (1.09)	0.61 (0.78)
19	2.96 (3.37)	1140 (1300)	14.00 (16.00)	9.97 (11.40)	4.71 (6.53)	1470 (2040)	13.30 (18.40)	9.43 (13.10)
20	1.81 (1.80)	693 (693)	8.56 (8.55)	6.09 (6.08)	0.75 (1.50)	232 (467)	2.10 (4.23)	1.49 (3.01)
21					2.88 (5.38)	898 (1680)	8.12 (15.20)	5.78 (10.80)
22					0.27 (0.31)	85 (97)	0.77 (0.88)	0.55 (0.62)
23	2.31 (3.28)	888 (1260)	11.00 (15.60)	7.80 (11.10)	2.99 (3.85)	931 (1200)	8.42 (10.80)	5.99 (7.72)
24	1.99 (3.57)	762 (1370)	9.41 (16.90)	6.69 (12.00)	3.64 (6.92)	1130 (2160)	10.30 (19.50)	7.29 (13.90)
25	0.50 (1.06)	193 (407)	2.39 (5.03)	1.70 (3.57)	2.44 (4.12)	761 (1280)	6.88 (11.60)	4.89 (8.26)
26	1.62 (1.33)	620 (509)	7.66 (6.29)	5.44 (4.47)	1.09 (2.97)	339 (927)	3.06 (8.38)	2.18 (5.96)
27	2.25 (2.60)	865 (997)	10.70 (12.30)	7.59 (8.75)	1.19 (2.18)	370 (680)	3.35 (6.14)	2.38 (4.37)
28	1.44 (1.99)	551 (764)	6.80 (9.43)	4.84 (6.71)	1.93 (2.32)	601 (722)	5.43 (6.53)	3.86 (4.64)
29	1.91 (1.91)	732 (733)	9.03 (9.04)	6.42 (6.43)	0.45 (1.98)	140 (615)	1.26 (5.56)	0.90 (3.96)
30	1.76 (1.88)	676 (723)	8.35 (8.93)	5.94 (6.35)	0.71 (1.48)	221 (461)	2.00 (4.17)	1.42 (2.96)
31	2.25 (1.49)	865 (571)	10.70 (7.05)	7.59 (5.01)	1.15 (1.65)	359 (514)	3.24 (4.65)	2.31 (3.31)
Avg	2.17	832	10.30	7.30	1.45	451	4.08	2.90
n	18	18	18	18	26	26	26	26
SD	0.93	357	4.41	3.14	1.15	358	3.24	2.30
Min	0.50	193	2.39	1.70	-0.81	-253	-2.29	-1.63
Max	4.92	1890	23.30	16.60	4.71	1470	13.30	9.43

ED_004549_00015842-00234

Table F9. Daily means (SD) of H2S emissions at Site WI5B for August, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	2.56 (2.27)	984 (872)	12.10 (10.80)	8.64 (7.65)	1.80 (3.10)	559 (967)	5.06 (8.75)	3.60 (6.22)
2	1.20 (1.31)	459 (504)	5.66 (6.22)	4.03 (4.42)	1.26 (2.20)	392 (686)	3.55 (6.20)	2.52 (4.41)
3	1.53 (1.56)	588 (598)	7.25 (7.37)	5.16 (5.24)	1.75 (2.95)	545 (918)	4.93 (8.30)	3.51 (5.90)
4								
5	1.50 (4.26)	574 (1640)	7.09 (20.20)	5.04 (14.40)	-0.08 (2.33)	-26 (724)	-0.23 (6.55)	-0.17 (4.66)
6	2.96 (3.17)	1140 (1220)	14.00 (15.00)	9.97 (10.70)	1.70 (4.13)	531 (1290)	4.80 (11.60)	3.41 (8.27)
7	1.98 (1.99)	762 (764)	9.40 (9.43)	6.69 (6.71)	1.53 (2.55)	476 (795)	4.30 (7.19)	3.06 (5.11)
8	1.74 (1.81)	669 (696)	8.26 (8.59)	5.87 (6.11)	2.41 (3.82)	751 (1190)	6.79 (10.80)	4.83 (7.65)
9	2.88 (4.32)	1100 (1660)	13.60 (20.50)	9.70 (14.50)	1.17 (1.48)	364 (461)	3.29 (4.16)	2.34 (2.96)
10	2.20 (2.23)	843 (856)	10.40 (10.60)	7.40 (7.51)	-0.62 (2.34)	-192 (729)	-1.73 (6.60)	-1.23 (4.69)
11	1.40 (1.73)	539 (664)	6.66 (8.20)	4.73 (5.83)	-0.57 (3.37)	-177 (1050)	-1.60 (9.51)	-1.14 (6.76)
12	2.83 (4.23)	1090 (1620)	13.40 (20.00)	9.54 (14.30)	1.10 (2.69)	344 (837)	3.11 (7.56)	2.21 (5.38)
13	2.27 (2.88)	871 (1100)	10.80 (13.60)	7.65 (9.69)	-0.33 (3.92)	-101 (1220)	-0.92 (11.00)	-0.65 (7.84)
14	4.46 (7.22)	1710 (2770)	21.20 (34.20)	15.00 (24.30)	0.48 (1.70)	150 (529)	1.35 (4.78)	0.96 (3.40)
15	3.44 (2.88)	1320 (1100)	16.30 (13.60)	11.60 (9.70)	0.17 (1.32)	52 (411)	0.47 (3.71)	0.34 (2.64)
16	1.58 (3.23)	607 (1240)	7.50 (15.30)	5.33 (10.90)	0.74 (0.81)	232 (253)	2.09 (2.28)	1.49 (1.62)
17	3.59 (5.79)	1380 (2220)	17.00 (27.50)	12.10 (19.50)	2.88 (5.07)	897 (1580)	8.11 (14.30)	5.77 (10.20)
18								
19	4.80 (8.84)	1840 (3390)	22.80 (41.90)	16.20 (29.80)	0.92 (1.61)	286 (502)	2.58 (4.54)	1.84 (3.23)
20	3.88 (4.23)	1490 (1620)	18.40 (20.00)	13.10 (14.20)	2.73 (2.34)	851 (730)	7.70 (6.61)	5.47 (4.70)
21	0.87 (1.17)	334 (448)	4.12 (5.53)	2.93 (3.93)	3.18 (3.95)	991 (1230)	8.96 (11.10)	6.37 (7.92)
22	2.51 (2.88)	965 (1100)	11.90 (13.60)	8.47 (9.69)	0.31 (6.71)	97 (2090)	0.88 (18.90)	0.63 (13.40)
23	1.73 (1.98)	666 (760)	8.22 (9.39)	5.85 (6.67)	0.64 (1.01)	199 (314)	1.80 (2.84)	1.28 (2.02)
24	4.75 (5.07)	1820 (1950)	22.50 (24.00)	16.00 (17.10)	1.30 (1.97)	406 (613)	3.67 (5.54)	2.61 (3.94)
25	4.16 (4.05)	1600 (1550)	19.70 (19.20)	14.00 (13.60)				
26	1.26 (1.40)	486 (538)	5.99 (6.64)	4.26 (4.72)	0.78 (1.92)	242 (598)	2.19 (5.41)	1.55 (3.85)
27	1.17 (1.50)	449 (576)	5.54 (7.11)	3.94 (5.05)	1.03 (1.18)	322 (367)	2.91 (3.31)	2.07 (2.36)
28	0.58 (1.06)	221 (409)	2.73 (5.04)	1.94 (3.59)	2.55 (3.49)	795 (1090)	7.19 (9.84)	5.11 (7.00)
29	1.02 (1.19)	392 (457)	4.84 (5.65)	3.44 (4.01)	-1.46 (2.18)	-454 (678)	-4.10 (6.13)	-2.92 (4.36)
30	1.09 (1.62)	417 (624)	5.15 (7.70)	3.66 (5.47)	2.13 (4.74)	663 (1480)	5.99 (13.40)	4.26 (9.50)
31	1.45 (1.56)	558 (599)	6.89 (7.39)	4.90 (5.26)	1.30 (1.41)	404 (440)	3.65 (3.98)	2.60 (2.83)
Avg	2.32	893	11.00	7.83	1.10	343	3.10	2.20
n	29	29	29	29	28	28	28	28
SD	1.21	466	5.75	4.09	1.11	347	3.13	2.23
Min	0.58	221	2.73	1.94	-1.46	-454	-4.10	-2.92
Max	4.80	1840	22.80	16.20	3.18	991	8.96	6.37

ED_004549_00015842-00235

Table F9. Daily means (SD) of H2S emissions at Site WI5B for September, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	3.04 (4.93)	1170 (1890)	14.40 (23.40)	10.30 (16.60)	3.73 (5.16)	1160 (1610)	10.50 (14.50)	7.47 (10.30)
2	6.20 (8.56)	2380 (3290)	29.40 (40.50)	20.90 (28.80)	0.57 (1.24)	178 (385)	1.61 (3.49)	1.14 (2.48)
3	3.92 (4.54)	1500 (1740)	18.60 (21.50)	13.20 (15.30)				
4	2.32 (2.89)	890 (1110)	11.00 (13.70)	7.81 (9.74)	2.43 (4.02)	756 (1250)	6.84 (11.30)	4.86 (8.06)
5	3.01 (2.64)	1160 (1010)	14.30 (12.50)	10.10 (8.90)	1.96 (3.70)	612 (1150)	5.53 (10.40)	3.93 (7.42)
6	2.78 (3.78)	1070 (1450)	13.20 (17.90)	9.37 (12.70)	3.37 (4.02)	1050 (1250)	9.49 (11.30)	6.75 (8.05)
7	4.39 (5.44)	1690 (2090)	20.80 (25.80)	14.80 (18.30)	1.34 (2.69)	416 (837)	3.77 (7.56)	2.68 (5.38)
8	3.88 (3.66)	1490 (1410)	18.40 (17.30)	13.10 (12.30)	0.87 (1.62)	270 (504)	2.45 (4.56)	1.74 (3.24)
9	2.45 (3.42)	941 (1310)	11.60 (16.20)	8.26 (11.50)	1.99 (2.30)	619 (715)	5.60 (6.47)	3.98 (4.60)
10	1.70 (3.46)	654 (1330)	8.07 (16.40)	5.74 (11.60)	3.47 (3.68)	1080 (1150)	9.78 (10.40)	6.95 (7.38)
11	1.84 (1.61)	706 (618)	8.71 (7.62)	6.19 (5.42)	2.59 (3.24)	808 (1010)	7.30 (9.13)	5.19 (6.50)
12	1.51 (1.60)	580 (615)	7.16 (7.59)	5.09 (5.40)	1.71 (2.14)	534 (666)	4.83 (6.02)	3.44 (4.28)
13	1.84 (3.19)	708 (1220)	8.74 (15.10)	6.21 (10.70)	0.59 (0.56)	185 (175)	1.67 (1.59)	1.19 (1.13)
14	7.87 (6.67)	3020 (2560)	37.30 (31.60)	26.50 (22.50)				
15	2.52 (1.97)	968 (756)	11.90 (9.33)	8.49 (6.64)	2.04 (3.14)	634 (979)	5.73 (8.85)	4.08 (6.29)
16	4.77 (5.29)	1830 (2030)	22.60 (25.10)	16.10 (17.80)	2.31 (4.05)	718 (1260)	6.50 (11.40)	4.62 (8.12)
17								
18								
19								
20	0.35 (0.23)	134 (88)	1.66 (1.09)	1.18 (0.78)	0.45 (0.15)	141 (47)	1.28 (0.43)	0.91 (0.30)
21	0.17 (0.05)	66 (19)	0.81 (0.24)	0.58 (0.17)	0.43 (0.25)	132 (78)	1.20 (0.71)	0.85 (0.50)
22	0.21 (0.05)	81 (19)	1.00 (0.24)	0.71 (0.17)	0.36 (0.20)	113 (63)	1.02 (0.57)	0.73 (0.40)
23	0.28 (0.18)	106 (68)	1.31 (0.84)	0.93 (0.60)	-0.98 (1.39)	-306 (433)	-2.77 (3.91)	-1.97 (2.78)
24	-0.29 (1.00)	-111 (382)	-1.37 (4.71)	-0.97 (3.35)	0.04 (0.85)	11 (264)	0.10 (2.39)	0.07 (1.70)
25	0.12 (0.05)	45 (20)	0.55 (0.24)	0.39 (0.17)	0.23 (0.08)	71 (24)	0.64 (0.21)	0.45 (0.15)
26	0.18 (0.07)	67 (27)	0.83 (0.33)	0.59 (0.23)	0.26 (0.11)	80 (36)	0.72 (0.32)	0.51 (0.23)
27	0.24 (0.08)	92 (30)	1.13 (0.37)	0.81 (0.26)				
28	0.18 (0.07)	68 (25)	0.84 (0.31)	0.60 (0.22)	0.21 (0.06)	65 (19)	0.59 (0.17)	0.42 (0.12)
29	0.24 (0.09)	93 (34)	1.14 (0.42)	0.81 (0.30)				
30	0.17 (0.05)	66 (19)	0.81 (0.24)	0.58 (0.17)	0.19 (0.08)	59 (24)	0.53 (0.21)	0.38 (0.15)
Avg	2.07	795	9.81	6.98	1.31	408	3.69	2.63
n	27	27	27	27	23	23	23	23
SD	2.05	787	9.71	6.91	1.24	387	3.50	2.49
Min	-0.29	-111	-1.37	-0.97	-0.98	-306	-2.77	-1.97
Max	7.87	3020	37.30	26.50	3.73	1160	10.50	7.47

ED_004549_00015842-00236

Table F9. Daily means (SD) of H2S emissions at Site WI5B for October, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	0.24 (0.15)	93 (59)	1.15 (0.73)	0.82 (0.52)				
2	0.34 (0.32)	130 (124)	1.61 (1.53)	1.15 (1.09)	0.17 (0.10)	54 (32)	0.49 (0.29)	0.35 (0.20)
3	0.16 (0.05)	62 (18)	0.76 (0.22)	0.54 (0.15)	0.19 (0.09)	60 (28)	0.54 (0.26)	0.39 (0.18)
4	0.09 (0.03)	33 (13)	0.41 (0.15)	0.29 (0.11)	0.17 (0.05)	52 (15)	0.47 (0.14)	0.34 (0.10)
5	0.11 (0.04)	42 (17)	0.51 (0.21)	0.37 (0.15)	0.19 (0.08)	59 (25)	0.54 (0.23)	0.38 (0.16)
6	0.17 (0.08)	65 (32)	0.80 (0.40)	0.57 (0.28)	0.28 (0.11)	87 (34)	0.79 (0.31)	0.56 (0.22)
7								
8								
9								
10	0.13 (0.03)	48 (12)	0.59 (0.15)	0.42 (0.11)	0.16 (0.06)	49 (20)	0.45 (0.18)	0.32 (0.13)
11	0.16 (0.06)	62 (24)	0.76 (0.30)	0.54 (0.21)	0.18 (0.07)	55 (22)	0.49 (0.20)	0.35 (0.14)
12	0.22 (0.07)	82 (29)	1.02 (0.35)	0.72 (0.25)	0.29 (0.15)	91 (48)	0.83 (0.43)	0.59 (0.31)
13	0.26 (0.18)	101 (69)	1.24 (0.86)	0.88 (0.61)	0.35 (0.18)	109 (56)	0.98 (0.51)	0.70 (0.36)
14	0.11 (0.04)	42 (14)	0.52 (0.18)	0.37 (0.13)				
15	0.18 (1.02)	68 (392)	0.84 (4.84)	0.60 (3.44)	0.21 (0.09)	67 (27)	0.60 (0.25)	0.43 (0.18)
16								
17								
18								
19								
20								
21								
22	0.05 (0.03)	21 (13)	0.25 (0.15)	0.18 (0.11)	0.07 (0.03)	23 (9)	0.21 (0.08)	0.15 (0.06)
23	0.07 (0.04)	28 (15)	0.34 (0.19)	0.24 (0.13)	0.08 (0.02)	25 (6)	0.22 (0.06)	0.16 (0.04)
24	0.09 (0.04)	33 (15)	0.41 (0.18)	0.29 (0.13)	0.09 (0.05)	27 (17)	0.24 (0.15)	0.17 (0.11)
25	0.09 (0.04)	36 (17)	0.45 (0.21)	0.32 (0.15)	0.15 (0.11)	45 (34)	0.41 (0.31)	0.29 (0.22)
26	0.08 (0.05)	32 (18)	0.40 (0.23)	0.29 (0.16)				
27	0.07 (0.04)	28 (14)	0.36 (0.18)	0.25 (0.13)				
28								
29	0.07 (0.03)	25 (10)	0.32 (0.13)	0.23 (0.09)	0.09 (0.04)	27 (11)	0.25 (0.11)	0.18 (0.08)
30								
31								
Avg	0.14	54	0.67	0.48	0.18	55	0.50	0.36
n	19	19	19	19	15	15	15	15
SD	0.08	29	0.36	0.26	0.08	25	0.22	0.16
Min	0.05	21	0.25	0.18	0.07	23	0.21	0.15
Max	0.34	130	1.61	1.15	0.35	109	0.98	0.70

ED_004549_00015842-00237

Table F9. Daily means (SD) of H2S emissions at Site WI5B for November, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	0.08 (0.03)	32 (11)	0.40 (0.13)	0.28 (0.09)	0.10 (0.05)	32 (17)	0.31 (0.17)	0.22 (0.12)
2	0.08 (0.04)	32 (16)	0.40 (0.20)	0.28 (0.14)	0.16 (0.09)	49 (29)	0.47 (0.28)	0.34 (0.20)
3	0.10 (0.03)	37 (12)	0.46 (0.14)	0.33 (0.10)	0.15 (0.07)	46 (22)	0.45 (0.21)	0.32 (0.15)
4								
5								
6	0.10 (0.04)	39 (15)	0.47 (0.18)	0.34 (0.13)	0.14 (0.03)	42 (10)	0.41 (0.10)	0.29 (0.07)
7	0.07 (0.02)	27 (6)	0.32 (0.07)	0.23 (0.05)	0.08 (0.03)	26 (9)	0.25 (0.09)	0.18 (0.06)
8	0.07 (0.02)	25 (8)	0.31 (0.10)	0.22 (0.07)				
9	0.04 (0.02)	14 (6)	0.17 (0.08)	0.12 (0.05)	0.06 (0.03)	18 (8)	0.17 (0.08)	0.12 (0.05)
10	0.06 (0.02)	22 (8)	0.26 (0.10)	0.19 (0.07)	0.06 (0.03)	20 (10)	0.19 (0.09)	0.13 (0.06)
11	0.05 (0.02)	19 (8)	0.23 (0.09)	0.16 (0.07)	0.05 (0.02)	16 (7)	0.16 (0.07)	0.11 (0.05)
12	0.05 (0.02)	19 (7)	0.23 (0.09)	0.16 (0.06)	0.07 (0.03)	22 (9)	0.21 (0.08)	0.15 (0.06)
13	0.06 (0.02)	23 (9)	0.28 (0.10)	0.20 (0.07)	0.07 (0.02)	22 (5)	0.21 (0.05)	0.15 (0.04)
14	0.09 (0.04)	34 (16)	0.41 (0.19)	0.29 (0.13)				
15	0.05 (0.01)	21 (5)	0.25 (0.07)	0.18 (0.05)				
16	0.05 (0.02)	18 (8)	0.21 (0.09)	0.15 (0.07)	0.07 (0.03)	21 (9)	0.19 (0.08)	0.14 (0.06)
17	0.05 (0.02)	19 (8)	0.22 (0.09)	0.16 (0.07)	0.05 (0.02)	16 (6)	0.15 (0.06)	0.11 (0.04)
18	0.04 (0.02)	16 (6)	0.19 (0.07)	0.13 (0.05)	0.06 (0.02)	20 (7)	0.19 (0.07)	0.13 (0.05)
19								
20								
21	0.05 (0.03)	20 (12)	0.24 (0.14)	0.17 (0.10)	0.05 (0.02)	16 (6)	0.16 (0.06)	0.11 (0.04)
22	0.05 (0.02)	20 (8)	0.24 (0.09)	0.17 (0.07)	0.06 (0.03)	18 (9)	0.17 (0.08)	0.12 (0.06)
23								
24	0.05 (0.02)	19 (7)	0.23 (0.08)	0.16 (0.06)	0.07 (0.03)	22 (9)	0.21 (0.09)	0.15 (0.06)
25					0.07 (0.04)	20 (12)	0.19 (0.11)	0.14 (0.08)
26	0.05 (0.02)	19 (9)	0.22 (0.11)	0.16 (0.08)	0.05 (0.02)	16 (7)	0.15 (0.07)	0.11 (0.05)
27	0.04 (0.03)	17 (10)	0.19 (0.12)	0.14 (0.09)	0.05 (0.01)	15 (4)	0.14 (0.04)	0.10 (0.03)
28	0.06 (0.04)	23 (15)	0.27 (0.17)	0.19 (0.12)	0.07 (0.03)	21 (10)	0.21 (0.10)	0.15 (0.07)
29								
30								
Avg	0.06	23	0.28	0.20	0.08	24	0.23	0.16
n	22	22	22	22	20	20	20	20
SD	0.02	7	0.09	0.06	0.03	10	0.10	0.07
Min	0.04	14	0.17	0.12	0.05	15	0.14	0.10
Max	0.10	39	0.47	0.34	0.16	49	0.47	0.34

ED_004549_00015842-00238

Table F9. Daily means (SD) of H2S emissions at Site WI5B for December, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2	0.06 (0.02)	22 (7)	0.25 (0.08)	0.18 (0.05)	0.05 (0.02)	17 (5)	0.17 (0.05)	0.12 (0.04)
3	0.07 (0.03)	26 (13)	0.29 (0.15)	0.21 (0.11)	0.05 (0.01)	14 (5)	0.14 (0.05)	0.10 (0.03)
4	0.05 (0.02)	20 (6)	0.23 (0.07)	0.16 (0.05)	0.05 (0.01)	15 (4)	0.15 (0.04)	0.10 (0.03)
5	0.05 (0.03)	21 (11)	0.23 (0.12)	0.16 (0.09)	0.04 (0.02)	12 (5)	0.12 (0.05)	0.08 (0.03)
6	0.04 (0.02)	17 (9)	0.19 (0.10)	0.13 (0.07)	0.04 (0.02)	13 (5)	0.13 (0.05)	0.09 (0.03)
7	0.06 (0.01)	23 (5)	0.26 (0.06)	0.18 (0.04)	0.05 (0.01)	14 (3)	0.14 (0.03)	0.10 (0.02)
8								
9								
10								
11	0.04 (0.01)	15 (5)	0.17 (0.06)	0.12 (0.04)	0.04 (0.02)	14 (5)	0.13 (0.05)	0.09 (0.03)
12	0.04 (0.01)	16 (5)	0.19 (0.06)	0.13 (0.04)	0.04 (0.01)	13 (3)	0.13 (0.03)	0.09 (0.02)
13	0.03 (0.01)	13 (6)	0.15 (0.06)	0.11 (0.05)	0.04 (0.01)	14 (5)	0.13 (0.04)	0.09 (0.03)
14								
15								
16	0.08 (0.02)	30 (8)	0.35 (0.10)	0.25 (0.07)	0.07 (0.02)	22 (8)	0.21 (0.07)	0.15 (0.05)
17	0.06 (0.02)	23 (8)	0.27 (0.09)	0.19 (0.07)	0.05 (0.02)	17 (6)	0.16 (0.05)	0.11 (0.04)
18	0.05 (0.02)	19 (6)	0.22 (0.07)	0.16 (0.05)	0.05 (0.01)	15 (3)	0.14 (0.03)	0.10 (0.02)
19	0.04 (0.02)	15 (8)	0.17 (0.09)	0.12 (0.06)	0.03 (0.01)	9 (4)	0.09 (0.04)	0.06 (0.03)
20					0.03 (0.02)	11 (5)	0.10 (0.05)	0.07 (0.03)
21								
22								
23								
24	0.04 (0.01)	15 (4)	0.18 (0.05)	0.13 (0.04)	0.05 (0.01)	15 (4)	0.14 (0.04)	0.10 (0.03)
25					0.04 (0.01)	13 (4)	0.12 (0.04)	0.08 (0.03)
26	0.03 (0.01)	12 (5)	0.15 (0.06)	0.11 (0.04)	0.04 (0.01)	12 (3)	0.11 (0.03)	0.08 (0.02)
27	0.03 (0.02)	13 (8)	0.17 (0.10)	0.12 (0.07)	0.04 (0.02)	11 (5)	0.10 (0.05)	0.07 (0.03)
28	0.04 (0.02)	14 (7)	0.17 (0.09)	0.12 (0.07)	0.04 (0.02)	12 (5)	0.11 (0.04)	0.08 (0.03)
29	0.03 (0.02)	12 (8)	0.15 (0.10)	0.11 (0.07)	0.05 (0.02)	14 (6)	0.13 (0.05)	0.09 (0.04)
30	0.04 (0.01)	15 (5)	0.19 (0.07)	0.14 (0.05)	0.03 (0.01)	10 (2)	0.09 (0.02)	0.06 (0.02)
31	0.06 (0.02)	24 (9)	0.31 (0.12)	0.22 (0.09)	0.05 (0.02)	15 (7)	0.13 (0.06)	0.10 (0.04)
Avg	0.05	18	0.21	0.15	0.04	14	0.13	0.09
n	20	20	20	20	22	22	22	22
SD	0.01	5	0.06	0.04	0.01	3	0.03	0.02
Min	0.03	12	0.15	0.11	0.03	9	0.09	0.06
Max	0.08	30	0.35	0.25	0.07	22	0.21	0.15

ED_004549_00015842-00239

Table F9. Daily means (SD) of H2S emissions at Site WI5B for January, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	0.04 (0.02)	15 (8)	0.20 (0.10)	0.14 (0.07)	0.03 (0.01)	10 (4)	0.09 (0.04)	0.06 (0.03)
2	0.05 (0.02)	18 (6)	0.23 (0.08)	0.16 (0.06)	0.03 (0.01)	11 (3)	0.10 (0.03)	0.07 (0.02)
3	0.04 (0.02)	15 (7)	0.19 (0.08)	0.13 (0.06)	0.03 (0.01)	9 (4)	0.09 (0.04)	0.06 (0.03)
4	0.04 (0.02)	16 (7)	0.20 (0.09)	0.14 (0.06)	0.04 (0.01)	12 (4)	0.11 (0.04)	0.08 (0.03)
5	0.05 (0.03)	18 (11)	0.22 (0.13)	0.16 (0.09)	0.04 (0.01)	13 (3)	0.12 (0.03)	0.09 (0.02)
6	0.04 (0.01)	14 (5)	0.18 (0.06)	0.12 (0.05)	0.03 (0.01)	10 (3)	0.10 (0.03)	0.07 (0.02)
7	0.04 (0.01)	15 (5)	0.19 (0.07)	0.13 (0.05)	0.04 (0.01)	11 (4)	0.11 (0.04)	0.08 (0.03)
8	0.04 (0.01)	14 (5)	0.18 (0.06)	0.13 (0.04)	0.03 (0.01)	10 (4)	0.09 (0.04)	0.07 (0.03)
9	0.04 (0.01)	13 (5)	0.17 (0.07)	0.12 (0.05)	0.03 (0.01)	9 (4)	0.09 (0.03)	0.06 (0.02)
10	0.04 (0.01)	14 (5)	0.17 (0.07)	0.12 (0.05)	0.03 (0.02)	11 (5)	0.10 (0.05)	0.07 (0.03)
11	0.04 (0.01)	14 (5)	0.17 (0.06)	0.12 (0.04)	0.04 (0.01)	11 (4)	0.11 (0.04)	0.08 (0.03)
12								
13								
14	0.06 (0.02)	21 (6)	0.26 (0.08)	0.18 (0.05)	0.05 (0.02)	17 (5)	0.16 (0.05)	0.11 (0.03)
15	0.07 (0.03)	27 (12)	0.32 (0.14)	0.23 (0.10)	0.07 (0.03)	23 (9)	0.22 (0.08)	0.16 (0.06)
16	0.07 (0.02)	27 (7)	0.33 (0.08)	0.23 (0.06)	0.07 (0.02)	21 (6)	0.20 (0.06)	0.14 (0.04)
17	0.05 (0.01)	19 (5)	0.23 (0.06)	0.16 (0.05)	0.05 (0.01)	14 (4)	0.14 (0.03)	0.10 (0.02)
18	0.05 (0.03)	21 (10)	0.25 (0.12)	0.18 (0.09)	0.05 (0.02)	15 (5)	0.15 (0.05)	0.10 (0.03)
19	0.05 (0.03)	20 (11)	0.24 (0.12)	0.17 (0.09)	0.04 (0.01)	14 (4)	0.13 (0.03)	0.09 (0.02)
20	0.05 (0.02)	18 (7)	0.21 (0.08)	0.15 (0.06)	0.04 (0.01)	11 (3)	0.11 (0.03)	0.07 (0.02)
21	0.03 (0.01)	13 (4)	0.15 (0.05)	0.11 (0.04)	0.03 (0.01)	10 (4)	0.09 (0.04)	0.07 (0.03)
22	0.04 (0.02)	14 (6)	0.16 (0.07)	0.12 (0.05)	0.04 (0.01)	13 (3)	0.12 (0.03)	0.09 (0.02)
23	0.04 (0.01)	14 (5)	0.16 (0.06)	0.12 (0.04)	0.03 (0.01)	10 (3)	0.10 (0.03)	0.07 (0.02)
24	0.05 (0.01)	19 (3)	0.22 (0.04)	0.16 (0.03)	0.05 (0.01)	16 (4)	0.15 (0.03)	0.11 (0.02)
25	0.05 (0.01)	21 (5)	0.24 (0.06)	0.17 (0.04)	0.05 (0.01)	15 (4)	0.15 (0.04)	0.10 (0.03)
26	0.06 (0.01)	21 (4)	0.25 (0.05)	0.18 (0.03)	0.04 (0.01)	13 (4)	0.13 (0.03)	0.09 (0.02)
27	0.05 (0.01)	18 (4)	0.21 (0.05)	0.15 (0.03)				
28	0.05 (0.01)	18 (3)	0.21 (0.04)	0.15 (0.03)	0.05 (0.01)	15 (4)	0.14 (0.03)	0.10 (0.02)
29	0.03 (0.01)	13 (3)	0.15 (0.04)	0.11 (0.03)	0.03 (0.01)	10 (3)	0.10 (0.03)	0.07 (0.02)
30	0.04 (0.01)	17 (4)	0.20 (0.05)	0.14 (0.04)	0.04 (0.01)	13 (4)	0.12 (0.04)	0.09 (0.03)
31	0.03 (0.01)	12 (5)	0.14 (0.06)	0.10 (0.04)	0.03 (0.01)	9 (3)	0.09 (0.02)	0.06 (0.02)
Avg	0.04	17	0.21	0.15	0.04	13	0.12	0.09
n	29	29	29	29	28	28	28	28
SD	0.01	4	0.05	0.03	0.01	3	0.03	0.02
Min	0.03	12	0.14	0.10	0.03	9	0.09	0.06
Max	0.07	27	0.33	0.23	0.07	23	0.22	0.16

ED_004549_00015842-00240

Table F9. Daily means (SD) of H2S emissions at Site WI5B for February, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	0.03 (0.01)	11 (4)	0.13 (0.05)	0.09 (0.03)	0.03 (0.01)	10 (4)	0.09 (0.04)	0.07 (0.03)
2	0.04 (0.01)	15 (5)	0.19 (0.06)	0.13 (0.04)	0.04 (0.01)	11 (4)	0.11 (0.03)	0.08 (0.02)
3	0.03 (0.01)	13 (3)	0.16 (0.03)	0.12 (0.02)	0.03 (0.01)	8 (2)	0.08 (0.02)	0.06 (0.01)
4	0.04 (0.01)	15 (3)	0.19 (0.03)	0.13 (0.02)	0.03 (0.01)	10 (2)	0.10 (0.02)	0.07 (0.01)
5	0.03 (0.01)	11 (3)	0.13 (0.04)	0.09 (0.03)	0.03 (0.01)	10 (4)	0.09 (0.04)	0.07 (0.03)
6	0.02 (0.01)	10 (2)	0.12 (0.03)	0.08 (0.02)	0.03 (0.01)	9 (3)	0.09 (0.03)	0.06 (0.02)
7	0.02 (0.01)	9 (4)	0.12 (0.05)	0.08 (0.03)	0.03 (0.01)	10 (3)	0.10 (0.03)	0.07 (0.02)
8	0.03 (0.01)	12 (3)	0.15 (0.04)	0.11 (0.03)	0.04 (0.02)	11 (5)	0.10 (0.05)	0.07 (0.03)
9								
10					0.03 (0.01)	9 (2)	0.09 (0.02)	0.06 (0.02)
11	0.03 (0.01)	13 (4)	0.16 (0.05)	0.11 (0.04)	0.04 (0.02)	13 (5)	0.12 (0.04)	0.08 (0.03)
12	0.03 (0.01)	12 (6)	0.15 (0.07)	0.11 (0.05)	0.04 (0.02)	12 (6)	0.11 (0.06)	0.08 (0.04)
13	0.04 (0.01)	14 (5)	0.17 (0.06)	0.12 (0.04)	0.03 (0.02)	11 (7)	0.10 (0.06)	0.07 (0.05)
14	0.05 (0.03)	18 (10)	0.22 (0.12)	0.16 (0.08)	0.03 (0.01)	10 (3)	0.09 (0.03)	0.07 (0.02)
15	0.05 (0.02)	18 (8)	0.21 (0.09)	0.15 (0.07)	0.04 (0.02)	12 (5)	0.12 (0.05)	0.08 (0.03)
16	0.04 (0.01)	14 (4)	0.17 (0.05)	0.12 (0.03)	0.04 (0.01)	13 (4)	0.12 (0.04)	0.09 (0.03)
17								
18	0.04 (0.02)	16 (6)	0.19 (0.07)	0.13 (0.05)				
19					0.04 (0.01)	13 (4)	0.13 (0.04)	0.09 (0.03)
20					0.04 (0.01)	13 (4)	0.12 (0.03)	0.09 (0.02)
21					0.04 (0.01)	12 (4)	0.11 (0.04)	0.08 (0.03)
22					0.04 (0.01)	12 (3)	0.12 (0.03)	0.08 (0.02)
23					0.04 (0.01)	11 (2)	0.11 (0.02)	0.08 (0.01)
24					0.04 (0.01)	13 (5)	0.12 (0.04)	0.08 (0.03)
25	0.04 (0.02)	15 (6)	0.18 (0.07)	0.13 (0.05)	0.04 (0.01)	13 (3)	0.13 (0.03)	0.09 (0.02)
26	0.05 (0.03)	18 (12)	0.20 (0.15)	0.15 (0.10)	0.04 (0.02)	12 (5)	0.11 (0.05)	0.08 (0.03)
27	0.05 (0.01)	18 (5)	0.21 (0.05)	0.15 (0.04)	0.04 (0.01)	12 (4)	0.11 (0.03)	0.08 (0.02)
28	0.05 (0.02)	19 (7)	0.22 (0.08)	0.16 (0.05)	0.04 (0.01)	12 (2)	0.11 (0.02)	0.08 (0.02)
Avg	0.04	14	0.17	0.12	0.04	11	0.11	0.08
n	19	19	19	19	25	25	25	25
SD	0.01	3	0.03	0.02	0.00	1	0.01	0.01
Min	0.02	9	0.12	0.08	0.03	8	0.08	0.06
Max	0.05	19	0.22	0.16	0.04	13	0.13	0.09

ED_004549_00015842-00241

Table F9. Daily means (SD) of H2S emissions at Site WI5B for March, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	0.05 (0.02)	18 (8)	0.21 (0.09)	0.15 (0.06)	0.03 (0.02)	11 (5)	0.10 (0.05)	0.07 (0.03)
2								
3								
4	0.04 (0.03)	15 (11)	0.17 (0.12)	0.12 (0.09)	0.04 (0.02)	12 (5)	0.11 (0.05)	0.08 (0.03)
5	0.04 (0.01)	16 (5)	0.18 (0.06)	0.13 (0.04)	0.04 (0.02)	14 (5)	0.13 (0.05)	0.09 (0.03)
6	0.04 (0.02)	16 (6)	0.18 (0.07)	0.13 (0.05)	0.04 (0.01)	13 (4)	0.13 (0.04)	0.09 (0.03)
7	0.04 (0.02)	14 (6)	0.16 (0.07)	0.11 (0.05)	0.04 (0.02)	13 (5)	0.13 (0.05)	0.09 (0.03)
8	0.04 (0.02)	14 (6)	0.17 (0.07)	0.12 (0.05)	0.04 (0.02)	11 (5)	0.11 (0.05)	0.08 (0.03)
9	0.03 (0.01)	12 (4)	0.14 (0.05)	0.10 (0.04)	0.04 (0.01)	11 (3)	0.11 (0.03)	0.08 (0.02)
10	0.03 (0.01)	13 (5)	0.16 (0.06)	0.11 (0.04)	0.03 (0.01)	11 (4)	0.10 (0.04)	0.07 (0.03)
11	0.04 (0.01)	15 (5)	0.18 (0.05)	0.13 (0.04)	0.04 (0.01)	12 (4)	0.11 (0.04)	0.08 (0.03)
12	0.04 (0.01)	16 (6)	0.19 (0.07)	0.13 (0.05)	0.04 (0.01)	11 (4)	0.11 (0.04)	0.08 (0.03)
13	0.04 (0.01)	14 (4)	0.16 (0.05)	0.12 (0.03)	0.04 (0.01)	12 (4)	0.11 (0.04)	0.08 (0.03)
14	0.03 (0.01)	13 (5)	0.16 (0.06)	0.11 (0.04)	0.04 (0.01)	14 (4)	0.13 (0.04)	0.09 (0.03)
15	0.04 (0.02)	17 (8)	0.21 (0.10)	0.15 (0.07)	0.05 (0.01)	16 (4)	0.14 (0.04)	0.10 (0.03)
16	0.04 (0.01)	17 (6)	0.21 (0.07)	0.15 (0.05)	0.07 (0.02)	22 (7)	0.21 (0.06)	0.15 (0.04)
17								
18	0.06 (0.03)	21 (11)	0.26 (0.13)	0.18 (0.09)	0.06 (0.02)	19 (5)	0.18 (0.05)	0.13 (0.04)
19	0.05 (0.02)	20 (6)	0.24 (0.08)	0.17 (0.06)	0.05 (0.02)	17 (6)	0.16 (0.06)	0.11 (0.04)
20	0.04 (0.01)	16 (4)	0.19 (0.05)	0.13 (0.04)	0.05 (0.01)	15 (5)	0.15 (0.04)	0.10 (0.03)
21	0.07 (0.03)	26 (13)	0.31 (0.15)	0.22 (0.11)	0.07 (0.02)	23 (8)	0.22 (0.07)	0.15 (0.05)
22					0.06 (0.02)	20 (6)	0.19 (0.06)	0.14 (0.04)
23					0.06 (0.02)	17 (6)	0.17 (0.06)	0.12 (0.04)
24					0.07 (0.02)	23 (6)	0.22 (0.06)	0.16 (0.04)
25					0.06 (0.02)	19 (7)	0.18 (0.06)	0.13 (0.04)
26								
27								
28								
29								
30					0.04 (0.01)	14 (4)	0.13 (0.03)	0.09 (0.02)
31					0.05 (0.01)	16 (4)	0.15 (0.04)	0.11 (0.03)
Avg	0.04	16	0.19	0.14	0.05	15	0.15	0.10
n	18	18	18	18	24	24	24	24
SD	0.01	3	0.04	0.03	0.01	4	0.04	0.03
Min	0.03	12	0.14	0.10	0.03	11	0.10	0.07
Max	0.07	26	0.31	0.22	0.07	23	0.22	0.16

ED_004549_00015842-00242

Table F9. Daily means (SD) of H2S emissions at Site WI5B for April, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	0.04 (0.01)	16 (3)	0.19 (0.03)	0.14 (0.02)	0.05 (0.01)	14 (4)	0.13 (0.04)	0.09 (0.03)
2	0.06 (0.03)	25 (12)	0.30 (0.14)	0.21 (0.10)	0.06 (0.02)	18 (7)	0.17 (0.07)	0.12 (0.05)
3	0.07 (0.04)	26 (15)	0.31 (0.17)	0.22 (0.12)				
4	0.05 (0.02)	20 (7)	0.23 (0.08)	0.16 (0.06)	0.05 (0.01)	14 (4)	0.13 (0.04)	0.10 (0.03)
5	0.04 (0.01)	17 (5)	0.20 (0.06)	0.14 (0.04)				
6	0.04 (0.02)	17 (8)	0.20 (0.09)	0.14 (0.07)				
7	0.07 (0.04)	28 (15)	0.33 (0.18)	0.23 (0.13)	0.06 (0.02)	18 (7)	0.17 (0.07)	0.12 (0.05)
8	0.05 (0.02)	21 (7)	0.24 (0.08)	0.17 (0.06)	0.05 (0.01)	15 (4)	0.14 (0.04)	0.10 (0.03)
9	0.05 (0.02)	19 (8)	0.22 (0.10)	0.16 (0.07)				
10	0.04 (0.02)	17 (6)	0.20 (0.07)	0.14 (0.05)				
11	0.05 (0.02)	19 (8)	0.23 (0.09)	0.16 (0.07)	0.05 (0.02)	16 (7)	0.15 (0.07)	0.11 (0.05)
12	0.04 (0.02)	16 (6)	0.19 (0.07)	0.14 (0.05)	0.05 (0.02)	16 (5)	0.15 (0.05)	0.11 (0.04)
13	0.04 (0.02)	17 (7)	0.20 (0.08)	0.14 (0.06)	0.05 (0.02)	17 (6)	0.16 (0.06)	0.11 (0.04)
14	0.08 (0.03)	30 (11)	0.35 (0.13)	0.25 (0.09)	0.07 (0.02)	21 (6)	0.20 (0.06)	0.14 (0.04)
15	0.05 (0.02)	18 (7)	0.21 (0.08)	0.15 (0.06)	0.09 (0.03)	27 (10)	0.25 (0.09)	0.18 (0.07)
16	0.06 (0.02)	22 (7)	0.26 (0.09)	0.19 (0.06)	0.08 (0.04)	26 (14)	0.25 (0.13)	0.18 (0.09)
17	0.04 (0.04)	16 (15)	0.19 (0.18)	0.14 (0.13)	0.12 (0.04)	36 (12)	0.33 (0.11)	0.24 (0.08)
18	0.11 (0.04)	44 (16)	0.53 (0.19)	0.37 (0.14)				
19	0.09 (0.03)	33 (11)	0.41 (0.14)	0.29 (0.10)				
20	0.08 (0.04)	31 (15)	0.37 (0.18)	0.27 (0.13)				
21	0.07 (0.03)	28 (11)	0.34 (0.14)	0.24 (0.10)				
22	0.07 (0.03)	27 (10)	0.33 (0.12)	0.23 (0.08)				
23					0.14 (0.10)	43 (33)	0.40 (0.30)	0.28 (0.21)
24	0.10 (0.03)	39 (11)	0.47 (0.13)	0.33 (0.09)				
25	0.06 (0.02)	25 (7)	0.30 (0.09)	0.21 (0.06)				
26					0.12 (0.06)	37 (19)	0.34 (0.18)	0.24 (0.13)
27	0.08 (0.03)	30 (10)	0.35 (0.12)	0.25 (0.08)	0.11 (0.03)	34 (10)	0.31 (0.09)	0.22 (0.07)
28								
29	0.08 (0.03)	30 (12)	0.36 (0.15)	0.26 (0.10)	0.07 (0.03)	23 (9)	0.20 (0.08)	0.14 (0.05)
30	0.08 (0.03)	31 (13)	0.38 (0.16)	0.27 (0.12)				
Avg	0.06	24	0.29	0.21	0.08	23	0.22	0.16
n	27	27	27	27	16	16	16	16
SD	0.02	7	0.09	0.06	0.03	9	0.08	0.06
Min	0.04	16	0.19	0.14	0.05	14	0.13	0.09
Max	0.11	44	0.53	0.37	0.14	43	0.40	0.28

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Table F9. Daily means (SD) of H2S emissions at Site WI5B for May, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3					0.11 (0.03)	35 (11)	0.29 (0.09)	0.21 (0.06)
4					-0.14 (0.27)	-45 (83)	-0.37 (0.68)	-0.26 (0.49)
5					0.14 (0.05)	44 (14)	0.36 (0.12)	0.26 (0.08)
6					0.15 (0.04)	46 (12)	0.38 (0.10)	0.27 (0.07)
7					0.12 (0.03)	38 (9)	0.32 (0.07)	0.23 (0.05)
8								
9								
10								
11					0.09 (0.02)	27 (7)	0.24 (0.07)	0.17 (0.05)
12					0.13 (0.05)	41 (15)	0.36 (0.13)	0.25 (0.09)
13					0.19 (0.05)	58 (16)	0.51 (0.14)	0.36 (0.10)
14								
15					0.12 (0.04)	36 (12)	0.33 (0.11)	0.23 (0.08)
16								
17								
18					0.15 (0.05)	45 (15)	0.41 (0.13)	0.29 (0.10)
19	0.14 (0.05)	54 (18)	0.64 (0.21)	0.45 (0.15)	0.22 (0.08)	70 (24)	0.63 (0.22)	0.45 (0.16)
20	0.12 (0.03)	45 (11)	0.53 (0.13)	0.38 (0.09)	0.22 (0.06)	69 (18)	0.62 (0.16)	0.44 (0.12)
21								
22					0.14 (0.04)	44 (11)	0.40 (0.10)	0.29 (0.07)
23								
24					0.14 (0.04)	45 (13)	0.41 (0.12)	0.29 (0.08)
25					0.15 (0.05)	47 (16)	0.43 (0.14)	0.31 (0.10)
26					0.16 (0.04)	51 (13)	0.47 (0.12)	0.33 (0.08)
27								
28					0.15 (0.07)	47 (22)	0.43 (0.20)	0.30 (0.14)
29								
30								
31					0.18 (0.06)	57 (19)	0.52 (0.17)	0.37 (0.12)
Avg	0.13	49	0.58	0.41	0.13	42	0.37	0.27
n	2	2	2	2	18	18	18	18
SD	0.01	5	0.06	0.04	0.08	24	0.21	0.15
Min	0.12	45	0.53	0.38	-0.14	-45	-0.37	-0.26
Max	0.14	54	0.64	0.45	0.22	70	0.63	0.45

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Table F9. Daily means (SD) of H2S emissions at Site WI5B for June, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3					0.09 (0.09)	28 (30)	0.25 (0.27)	0.18 (0.19)
4	0.11 (0.11)	43 (40)	0.49 (0.46)	0.35 (0.33)	0.20 (0.10)	61 (30)	0.56 (0.28)	0.40 (0.20)
5	0.13 (0.07)	51 (25)	0.58 (0.29)	0.41 (0.21)				
6					0.10 (0.04)	32 (12)	0.30 (0.11)	0.22 (0.08)
7					0.11 (0.04)	35 (12)	0.33 (0.11)	0.24 (0.08)
8	0.10 (0.03)	38 (11)	0.43 (0.12)	0.31 (0.09)	0.13 (0.03)	39 (11)	0.37 (0.10)	0.26 (0.07)
9	0.14 (0.07)	52 (26)	0.59 (0.29)	0.42 (0.21)	0.21 (0.07)	64 (21)	0.60 (0.20)	0.43 (0.14)
10	0.11 (0.03)	41 (12)	0.47 (0.14)	0.34 (0.10)	0.14 (0.04)	45 (11)	0.43 (0.11)	0.30 (0.07)
11	0.08 (0.04)	33 (14)	0.37 (0.17)	0.27 (0.12)	0.20 (0.10)	63 (32)	0.61 (0.31)	0.43 (0.22)
12	0.13 (0.06)	51 (23)	0.59 (0.26)	0.42 (0.19)	0.14 (0.06)	43 (17)	0.41 (0.16)	0.29 (0.12)
13	0.13 (0.08)	50 (30)	0.58 (0.35)	0.41 (0.25)	0.10 (0.17)	32 (52)	0.31 (0.50)	0.22 (0.36)
14	0.18 (0.13)	70 (48)	0.82 (0.56)	0.58 (0.40)	0.10 (0.14)	30 (45)	0.29 (0.43)	0.21 (0.31)
15	0.12 (0.14)	45 (52)	0.53 (0.62)	0.38 (0.44)	0.20 (0.09)	62 (29)	0.60 (0.29)	0.43 (0.20)
16	0.11 (0.05)	44 (19)	0.52 (0.23)	0.37 (0.16)	0.20 (0.08)	61 (24)	0.60 (0.23)	0.42 (0.17)
17	0.11 (0.05)	41 (17)	0.49 (0.21)	0.35 (0.15)	0.17 (0.06)	54 (19)	0.52 (0.18)	0.37 (0.13)
18	0.12 (0.05)	46 (21)	0.54 (0.25)	0.39 (0.18)	0.15 (0.07)	47 (23)	0.46 (0.22)	0.33 (0.16)
19	0.27 (0.15)	102 (57)	1.21 (0.67)	0.86 (0.48)	0.19 (0.14)	58 (45)	0.55 (0.43)	0.39 (0.31)
20	0.25 (0.23)	97 (88)	1.14 (1.04)	0.81 (0.74)	0.37 (0.19)	116 (58)	1.11 (0.55)	0.79 (0.39)
21	0.12 (0.07)	44 (25)	0.52 (0.30)	0.37 (0.21)	0.24 (0.12)	74 (38)	0.71 (0.37)	0.50 (0.26)
22	0.26 (0.13)	100 (50)	1.17 (0.58)	0.84 (0.41)	-0.01 (0.12)	-5 (39)	-0.04 (0.37)	-0.03 (0.26)
23								
24								
25								
26								
27								
28								
29								
30								
Avg	0.15	56	0.65	0.46	0.16	49	0.47	0.34
n	17	17	17	17	19	19	19	19
SD	0.06	22	0.26	0.18	0.08	24	0.23	0.16
Min	0.08	33	0.37	0.27	-0.01	-5	-0.04	-0.03
Max	0.27	102	1.21	0.86	0.37	116	1.11	0.79

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Table F9. Daily means (SD) of H2S emissions at Site WI5B for July, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	0.15 (0.08)	57 (30)	0.65 (0.35)	0.46 (0.25)				
2								
3								
4								
5								
6								
7	0.18 (0.08)	71 (32)	0.82 (0.37)	0.59 (0.26)	0.24 (0.12)	73 (38)	0.70 (0.37)	0.50 (0.26)
8	0.12 (0.04)	48 (15)	0.55 (0.17)	0.39 (0.12)	0.21 (0.08)	66 (26)	0.63 (0.25)	0.45 (0.18)
9	0.14 (0.07)	55 (26)	0.65 (0.31)	0.46 (0.22)	0.19 (0.06)	60 (18)	0.56 (0.17)	0.40 (0.12)
10	0.37 (0.18)	140 (69)	1.64 (0.81)	1.17 (0.57)	0.34 (0.54)	107 (169)	1.00 (1.58)	0.71 (1.12)
11	0.28 (0.11)	109 (41)	1.27 (0.48)	0.91 (0.34)	0.14 (0.06)	45 (20)	0.41 (0.18)	0.29 (0.13)
12	0.20 (0.11)	78 (44)	0.92 (0.52)	0.65 (0.37)	0.30 (0.19)	93 (59)	0.85 (0.54)	0.60 (0.38)
13	0.11 (0.05)	41 (19)	0.49 (0.22)	0.35 (0.16)	0.21 (0.09)	67 (28)	0.60 (0.26)	0.43 (0.18)
14	0.13 (0.04)	52 (14)	0.63 (0.17)	0.45 (0.12)	0.23 (0.10)	71 (30)	0.63 (0.27)	0.45 (0.19)
15	0.27 (0.11)	103 (42)	1.28 (0.51)	0.91 (0.37)	0.25 (0.12)	78 (37)	0.69 (0.33)	0.49 (0.24)
16	0.21 (0.10)	80 (37)	1.01 (0.46)	0.72 (0.33)				
17	0.13 (0.05)	48 (17)	0.62 (0.23)	0.44 (0.16)				
18	0.16 (0.06)	62 (24)	0.82 (0.31)	0.58 (0.22)				
19	0.16 (0.08)	59 (30)	0.80 (0.40)	0.57 (0.29)	0.24 (0.13)	76 (40)	0.65 (0.34)	0.46 (0.24)
20	0.12 (0.06)	44 (23)	0.61 (0.31)	0.43 (0.22)	0.29 (0.08)	91 (25)	0.77 (0.21)	0.55 (0.15)
21	0.20 (0.16)	77 (62)	1.06 (0.85)	0.75 (0.60)	0.17 (0.17)	51 (54)	0.43 (0.45)	0.31 (0.32)
22	0.19 (0.18)	75 (68)	1.03 (0.94)	0.73 (0.67)	0.31 (0.15)	95 (48)	0.80 (0.40)	0.57 (0.29)
23	0.09 (0.13)	34 (49)	0.47 (0.67)	0.33 (0.48)	0.11 (0.13)	33 (42)	0.28 (0.35)	0.20 (0.25)
24	0.14 (0.10)	54 (40)	0.75 (0.55)	0.53 (0.39)	0.30 (0.19)	93 (58)	0.78 (0.49)	0.56 (0.35)
25	0.16 (0.07)	63 (26)	0.87 (0.36)	0.62 (0.25)	0.21 (0.10)	66 (32)	0.55 (0.27)	0.39 (0.19)
26	0.08 (0.07)	30 (27)	0.41 (0.38)	0.29 (0.27)	0.27 (0.16)	85 (49)	0.71 (0.41)	0.51 (0.29)
27	0.14 (0.10)	53 (37)	0.73 (0.51)	0.52 (0.36)	0.14 (0.11)	44 (34)	0.37 (0.29)	0.26 (0.21)
28	0.12 (0.08)	47 (31)	0.64 (0.42)	0.46 (0.30)	0.23 (0.12)	70 (38)	0.59 (0.33)	0.42 (0.23)
29	0.25 (0.11)	97 (42)	1.30 (0.56)	0.93 (0.40)	-0.21 (0.22)	-65 (69)	-0.55 (0.58)	-0.39 (0.42)
30	0.24 (0.11)	92 (44)	1.23 (0.58)	0.87 (0.41)	0.09 (0.16)	28 (49)	0.24 (0.42)	0.17 (0.30)
31	0.25 (0.19)	95 (74)	1.25 (0.97)	0.89 (0.69)	0.16 (0.09)	51 (27)	0.44 (0.23)	0.31 (0.17)
Avg	0.18	68	0.86	0.62	0.20	63	0.55	0.39
n	26	26	26	26	22	22	22	22
SD	0.07	26	0.31	0.22	0.11	35	0.30	0.22
Min	0.08	30	0.41	0.29	-0.21	-65	-0.55	-0.39
Max	0.37	140	1.64	1.17	0.34	107	1.00	0.71

ED_004549_00015842-00246

Table F9. Daily means (SD) of H2S emissions at Site WI5B for August, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	0.23 (0.10)	89 (37)	1.15 (0.47)	0.82 (0.34)				
2	0.21 (0.35)	81 (134)	1.04 (1.72)	0.74 (1.22)				
3	0.25 (0.19)	98 (72)	1.26 (0.92)	0.90 (0.66)	0.25 (0.09)	77 (28)	0.66 (0.24)	0.47 (0.17)
4	0.06 (0.14)	23 (53)	0.30 (0.69)	0.22 (0.49)	0.13 (0.11)	41 (34)	0.35 (0.29)	0.25 (0.20)
5	0.17 (0.08)	64 (32)	0.85 (0.42)	0.60 (0.30)	0.17 (0.16)	52 (51)	0.45 (0.43)	0.32 (0.31)
6	0.20 (0.11)	77 (42)	1.03 (0.56)	0.73 (0.40)	0.19 (0.10)	60 (32)	0.51 (0.27)	0.36 (0.20)
7	0.13 (0.03)	49 (12)	0.67 (0.16)	0.48 (0.11)	0.27 (0.15)	83 (47)	0.70 (0.39)	0.50 (0.28)
8	0.20 (0.06)	76 (25)	1.04 (0.34)	0.74 (0.24)	0.18 (0.07)	57 (23)	0.48 (0.19)	0.34 (0.14)
9	0.23 (0.12)	87 (44)	1.21 (0.62)	0.86 (0.44)				
10	0.23 (0.10)	89 (38)	1.24 (0.53)	0.88 (0.38)	0.21 (0.12)	64 (39)	0.53 (0.32)	0.38 (0.23)
11	0.17 (0.23)	67 (87)	0.94 (1.22)	0.67 (0.87)	0.29 (0.19)	92 (59)	0.76 (0.49)	0.54 (0.35)
12	0.15 (0.12)	56 (46)	0.78 (0.64)	0.56 (0.46)	0.21 (0.11)	65 (33)	0.54 (0.28)	0.38 (0.20)
13	0.13 (0.06)	50 (23)	0.70 (0.32)	0.50 (0.23)	0.23 (0.15)	70 (46)	0.58 (0.38)	0.41 (0.27)
14	0.19 (0.11)	72 (41)	1.01 (0.57)	0.72 (0.41)	0.15 (0.13)	46 (42)	0.38 (0.34)	0.27 (0.24)
15	0.07 (0.03)	28 (10)	0.40 (0.15)	0.28 (0.10)	0.19 (0.14)	59 (44)	0.48 (0.36)	0.34 (0.26)
16	0.18 (0.11)	70 (44)	0.99 (0.62)	0.70 (0.44)	0.11 (0.31)	35 (96)	0.28 (0.78)	0.20 (0.56)
17	0.23 (0.09)	89 (34)	1.25 (0.48)	0.89 (0.34)	0.22 (0.14)	69 (42)	0.56 (0.34)	0.40 (0.24)
18	0.19 (0.10)	72 (37)	1.01 (0.52)	0.72 (0.37)	0.22 (0.07)	67 (22)	0.55 (0.18)	0.39 (0.13)
19	0.25 (0.35)	96 (132)	1.36 (1.86)	0.96 (1.33)	0.22 (0.06)	67 (20)	0.55 (0.16)	0.39 (0.12)
20	0.13 (0.21)	50 (82)	0.70 (1.15)	0.50 (0.82)				
21	0.14 (0.05)	52 (20)	0.73 (0.29)	0.52 (0.20)				
22	0.17 (0.07)	64 (26)	0.91 (0.37)	0.64 (0.26)	-0.29 (0.27)	-89 (84)	-0.73 (0.69)	-0.52 (0.49)
23	0.15 (0.04)	58 (17)	0.82 (0.23)	0.58 (0.17)	0.06 (0.19)	17 (58)	0.14 (0.47)	0.10 (0.34)
24	0.07 (0.04)	27 (16)	0.38 (0.23)	0.27 (0.16)	0.21 (0.06)	65 (20)	0.53 (0.16)	0.38 (0.11)
25	0.23 (0.18)	88 (71)	1.25 (1.00)	0.89 (0.71)	0.46 (0.60)	143 (186)	1.17 (1.52)	0.83 (1.08)
26	0.07 (0.04)	26 (16)	0.36 (0.22)	0.26 (0.16)	0.20 (0.06)	64 (19)	0.52 (0.16)	0.37 (0.11)
27	0.17 (0.12)	64 (44)	0.90 (0.62)	0.64 (0.44)	0.20 (0.09)	64 (27)	0.52 (0.22)	0.37 (0.16)
28	0.18 (0.07)	68 (27)	0.95 (0.38)	0.68 (0.27)				
29	0.12 (0.02)	45 (9)	0.63 (0.13)	0.45 (0.09)				
30	0.14 (0.12)	54 (46)	0.76 (0.65)	0.54 (0.46)	0.33 (0.21)	103 (64)	0.84 (0.52)	0.60 (0.37)
31	0.20 (0.11)	75 (43)	1.06 (0.61)	0.76 (0.43)	0.27 (0.16)	84 (50)	0.68 (0.41)	0.49 (0.29)
Avg	0.17	65	0.89	0.64	0.19	61	0.50	0.36
n	31	31	31	31	24	24	24	24
SD	0.05	21	0.28	0.20	0.13	39	0.32	0.23
Min	0.06	23	0.30	0.22	-0.29	-89	-0.73	-0.52
Max	0.25	98	1.36	0.96	0.46	143	1.17	0.83

ED_004549_00015842-00247

Table F9. Daily means (SD) of H2S emissions at Site WI5B for September, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	0.20 (0.07)	78 (27)	1.09 (0.38)	0.78 (0.27)	0.22 (0.08)	68 (25)	0.55 (0.20)	0.39 (0.14)
2	0.13 (0.05)	51 (19)	0.72 (0.27)	0.52 (0.19)	0.15 (0.07)	46 (21)	0.38 (0.17)	0.27 (0.12)
3	0.17 (0.07)	65 (29)	0.92 (0.41)	0.65 (0.29)	0.22 (0.14)	68 (45)	0.55 (0.36)	0.39 (0.26)
4	0.16 (0.08)	60 (31)	0.85 (0.44)	0.61 (0.32)	0.19 (0.08)	58 (25)	0.47 (0.20)	0.34 (0.15)
5	0.14 (0.08)	53 (31)	0.75 (0.43)	0.53 (0.31)	0.24 (0.09)	75 (28)	0.60 (0.22)	0.43 (0.16)
6	0.18 (0.09)	69 (36)	0.97 (0.51)	0.69 (0.36)	0.13 (0.06)	39 (20)	0.32 (0.16)	0.23 (0.12)
7	0.12 (0.04)	47 (16)	0.66 (0.23)	0.47 (0.17)	0.17 (0.06)	53 (19)	0.43 (0.16)	0.31 (0.11)
8	0.09 (0.15)	33 (58)	0.46 (0.82)	0.33 (0.58)	0.17 (0.06)	54 (19)	0.44 (0.16)	0.31 (0.11)
9	0.15 (0.09)	57 (33)	0.79 (0.46)	0.56 (0.32)	0.18 (0.07)	56 (21)	0.46 (0.18)	0.33 (0.12)
10	0.07 (0.08)	26 (30)	0.36 (0.41)	0.26 (0.29)	0.12 (0.12)	37 (36)	0.31 (0.30)	0.22 (0.21)
11	0.17 (0.09)	67 (33)	0.92 (0.46)	0.65 (0.32)	0.15 (0.13)	47 (40)	0.39 (0.33)	0.28 (0.24)
12	0.15 (0.11)	57 (41)	0.78 (0.57)	0.56 (0.40)	0.25 (0.25)	79 (77)	0.66 (0.64)	0.47 (0.46)
13	0.13 (0.20)	49 (77)	0.67 (1.05)	0.48 (0.75)	0.17 (0.18)	54 (57)	0.45 (0.47)	0.32 (0.34)
14	0.22 (0.11)	86 (41)	1.17 (0.56)	0.83 (0.40)	0.36 (0.20)	112 (62)	0.94 (0.52)	0.67 (0.37)
15	0.20 (0.14)	76 (52)	1.05 (0.72)	0.75 (0.51)	0.21 (0.12)	65 (39)	0.55 (0.33)	0.39 (0.23)
16	0.13 (0.05)	50 (19)	0.70 (0.26)	0.50 (0.19)	0.16 (0.06)	50 (20)	0.42 (0.17)	0.30 (0.12)
17	0.20 (0.16)	77 (60)	1.07 (0.84)	0.76 (0.59)	0.12 (0.16)	36 (48)	0.31 (0.41)	0.22 (0.29)
18	0.26 (0.21)	100 (79)	1.40 (1.11)	0.99 (0.79)	0.12 (0.21)	37 (66)	0.32 (0.56)	0.23 (0.40)
19	0.18 (0.12)	69 (47)	0.98 (0.66)	0.70 (0.47)	0.17 (0.07)	54 (21)	0.47 (0.18)	0.33 (0.13)
20	0.13 (0.06)	51 (24)	0.72 (0.34)	0.51 (0.25)	0.17 (0.08)	53 (24)	0.46 (0.21)	0.32 (0.15)
21	0.10 (0.06)	39 (22)	0.56 (0.31)	0.40 (0.22)	0.17 (0.04)	53 (14)	0.46 (0.12)	0.33 (0.09)
22	0.14 (0.11)	55 (40)	0.78 (0.57)	0.55 (0.40)	0.16 (0.03)	51 (11)	0.44 (0.09)	0.31 (0.06)
23	0.15 (0.06)	58 (23)	0.81 (0.32)	0.58 (0.23)	0.17 (0.07)	52 (21)	0.45 (0.18)	0.32 (0.13)
24	0.08 (0.04)	30 (15)	0.42 (0.21)	0.30 (0.15)	0.20 (0.07)	62 (22)	0.54 (0.19)	0.38 (0.14)
25	0.13 (0.06)	51 (24)	0.71 (0.33)	0.51 (0.24)	0.18 (0.05)	55 (16)	0.47 (0.14)	0.34 (0.10)
26	0.14 (0.05)	55 (20)	0.76 (0.28)	0.54 (0.20)	0.17 (0.09)	54 (27)	0.46 (0.23)	0.33 (0.16)
27	0.28 (0.22)	106 (85)	1.47 (1.17)	1.04 (0.83)				
28	0.11 (0.18)	42 (69)	0.58 (0.95)	0.41 (0.68)				
29								
30	0.07 (0.02)	26 (7)	0.36 (0.10)	0.25 (0.07)	0.10 (0.05)	32 (15)	0.28 (0.13)	0.20 (0.09)
Avg	0.15	58	0.81	0.58	0.18	56	0.47	0.33
n	29	29	29	29	27	27	27	27
SD	0.05	19	0.27	0.19	0.05	16	0.13	0.09
Min	0.07	26	0.36	0.25	0.10	32	0.28	0.20
Max	0.28	106	1.47	1.04	0.36	112	0.94	0.67

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Table F9. Daily means (SD) of H2S emissions at Site WI5B for October, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1					-0.17 (0.29)	-53 (92)	-0.45 (0.78)	-0.32 (0.56)
2	0.09 (0.03)	34 (11)	0.45 (0.14)	0.32 (0.10)				
3	0.09 (0.03)	34 (11)	0.46 (0.15)	0.32 (0.10)				
4	0.11 (0.04)	42 (17)	0.56 (0.22)	0.40 (0.16)				
5	0.09 (0.02)	33 (9)	0.43 (0.13)	0.31 (0.09)				
6								
7	0.08 (0.03)	30 (13)	0.40 (0.18)	0.28 (0.12)				
8	0.11 (0.05)	40 (19)	0.53 (0.25)	0.38 (0.18)				
9	0.08 (0.03)	29 (12)	0.38 (0.16)	0.27 (0.11)				
10	0.08 (0.07)	30 (27)	0.40 (0.35)	0.28 (0.25)	0.09 (0.02)	29 (6)	0.25 (0.05)	0.18 (0.04)
11	0.04 (0.02)	14 (9)	0.18 (0.11)	0.13 (0.08)	0.09 (0.04)	27 (12)	0.23 (0.10)	0.16 (0.07)
12	0.05 (0.02)	19 (6)	0.24 (0.08)	0.17 (0.05)	0.08 (0.03)	24 (10)	0.21 (0.08)	0.15 (0.06)
13	0.04 (0.01)	17 (4)	0.21 (0.06)	0.15 (0.04)	0.08 (0.03)	24 (9)	0.20 (0.08)	0.14 (0.06)
14	0.06 (0.06)	21 (22)	0.27 (0.28)	0.19 (0.20)	0.08 (0.04)	24 (13)	0.21 (0.11)	0.15 (0.08)
15	0.04 (0.02)	17 (7)	0.22 (0.09)	0.15 (0.06)	0.07 (0.02)	22 (6)	0.19 (0.05)	0.14 (0.04)
16	0.05 (0.01)	18 (4)	0.23 (0.06)	0.16 (0.04)	0.08 (0.03)	26 (9)	0.22 (0.07)	0.16 (0.05)
17	0.05 (0.01)	18 (5)	0.23 (0.07)	0.16 (0.05)	0.08 (0.03)	24 (9)	0.21 (0.07)	0.15 (0.05)
18	0.05 (0.02)	20 (6)	0.25 (0.07)	0.18 (0.05)	0.10 (0.04)	32 (12)	0.28 (0.10)	0.20 (0.07)
19	0.07 (0.04)	26 (14)	0.32 (0.18)	0.23 (0.13)	0.11 (0.04)	35 (11)	0.30 (0.10)	0.21 (0.07)
20	0.06 (0.02)	23 (8)	0.30 (0.10)	0.21 (0.07)	0.12 (0.06)	37 (19)	0.32 (0.16)	0.23 (0.12)
21								
22	0.06 (0.02)	23 (8)	0.30 (0.11)	0.22 (0.08)				
23	0.05 (0.01)	19 (3)	0.26 (0.05)	0.18 (0.03)				
24	0.06 (0.06)	24 (23)	0.32 (0.31)	0.23 (0.22)	0.08 (0.03)	26 (11)	0.22 (0.09)	0.16 (0.06)
25	0.05 (0.04)	19 (16)	0.26 (0.22)	0.19 (0.15)	0.09 (0.03)	28 (11)	0.24 (0.09)	0.17 (0.06)
26	0.08 (0.04)	31 (14)	0.43 (0.19)	0.31 (0.14)	0.11 (0.05)	34 (14)	0.28 (0.12)	0.20 (0.08)
27	0.04 (0.01)	16 (5)	0.22 (0.06)	0.15 (0.04)	0.11 (0.04)	33 (11)	0.28 (0.09)	0.20 (0.07)
28	0.06 (0.02)	24 (7)	0.33 (0.09)	0.24 (0.06)	0.11 (0.05)	35 (15)	0.30 (0.12)	0.21 (0.09)
29					0.13 (0.04)	40 (13)	0.34 (0.11)	0.24 (0.08)
30	0.03 (0.12)	10 (46)	0.14 (0.62)	0.10 (0.44)	0.03 (0.06)	9 (18)	0.08 (0.16)	0.05 (0.11)
31	0.11 (0.04)	42 (16)	0.56 (0.22)	0.40 (0.15)	0.08 (0.02)	25 (6)	0.22 (0.05)	0.15 (0.04)
Avg	0.07	25	0.33	0.23	0.08	24	0.20	0.15
n	27	27	27	27	20	20	20	20
SD	0.02	8	0.11	0.08	0.06	19	0.16	0.11
Min	0.03	10	0.14	0.10	-0.17	-53	-0.45	-0.32
Max	0.11	42	0.56	0.40	0.13	40	0.34	0.24

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Table F10. Ammonia concentrations.

Table F10. Daily means (SD) of NH_3 concentrations at Site WI5B for September, 2007. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12	0.4 (0.0)	0.3 (0.0)	1.2 (0.1)	0.8 (0.1)	0.4 (0.0)	0.3 (0.0)	1.5 (0.3)	1.1 (0.2)
13	0.5 (0.1)	0.3 (0.1)	1.3 (0.1)	0.9 (0.1)	0.4 (0.0)	0.3 (0.0)	1.7 (0.1)	1.2 (0.1)
14								
15								
16								
17								
18								
19								
20								
21	0.2 (0.0)	0.2 (0.0)			0.3 (0.1)	0.2 (0.1)		
22	0.2 (0.0)	0.1 (0.0)	1.0 (0.3)	0.7 (0.2)	0.2 (0.1)	0.1 (0.1)	1.2 (0.3)	0.8 (0.2)
23	0.2 (0.1)	0.2 (0.0)	0.9 (0.2)	0.6 (0.2)	0.3 (0.1)	0.2 (0.0)	1.0 (0.2)	0.7 (0.1)
24	0.3 (0.0)	0.2 (0.0)	0.7 (0.1)	0.5 (0.1)			0.9 (0.2)	0.7 (0.2)
25	0.2 (0.0)	0.2 (0.0)	1.1 (0.3)	0.8 (0.2)			1.4 (0.2)	1.0 (0.1)
26	0.2 (0.0)	0.2 (0.0)	1.2 (0.2)	0.8 (0.2)			1.4 (0.1)	1.0 (0.1)
27	0.3 (0.1)	0.2 (0.1)	1.1 (0.2)	0.8 (0.1)			1.2 (0.3)	0.8 (0.2)
28	0.2 (0.1)	0.2 (0.0)	1.1 (0.2)	0.8 (0.2)			1.2 (0.2)	0.9 (0.2)
29	0.2 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.1)	0.2 (0.0)	0.2 (0.0)	1.2 (0.3)	0.9 (0.2)
30	0.2 (0.1)	0.2 (0.0)	1.0 (0.3)	0.7 (0.2)	0.2 (0.0)	0.2 (0.0)	1.1 (0.3)	0.7 (0.2)
Avg	0.3	0.2	1	0.7	0.3	0.2	1.3	0.9
n	12	12	11	11	7	7	11	11
SD	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2
Min	0.2	0.1	0.7	0.5	0.2	0.1	0.9	0.7
Max	0.5	0.3	1.3	0.9	0.4	0.3	1.7	1.2

ED_004549_00015842-00250

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for October, 2007. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.2 (0.0)	0.2 (0.0)	1.4 (0.1)	1.0 (0.1)	0.2 (0.0)	0.2 (0.0)	1.3 (0.2)	0.9 (0.1)
2	0.3 (0.0)	0.2 (0.0)	1.1 (0.2)	0.8 (0.1)	0.3 (0.0)	0.2 (0.0)	1.3 (0.3)	0.9 (0.2)
3	0.1 (0.0)	0.1 (0.0)	1.0 (0.3)	0.7 (0.2)	0.2 (0.0)	0.2 (0.0)	1.1 (0.3)	0.8 (0.2)
4	0.2 (0.0)	0.1 (0.0)	0.8 (0.2)	0.6 (0.1)	0.3 (0.1)	0.2 (0.1)	1.1 (0.2)	0.8 (0.2)
5	0.2 (0.0)	0.2 (0.0)	0.7 (0.1)		0.4 (0.1)	0.3 (0.1)	0.8 (0.1)	
6	0.3 (0.0)	0.2 (0.0)	0.7 (0.0)	0.5 (0.0)	0.4 (0.0)	0.3 (0.0)	0.8 (0.1)	0.6 (0.1)
7	0.3 (0.0)	0.2 (0.0)	0.7 (0.1)	0.5 (0.1)	0.5 (0.1)	0.3 (0.0)	0.8 (0.1)	0.6 (0.1)
8	0.3 (0.0)	0.2 (0.0)			0.3 (0.1)	0.2 (0.1)		
9	0.2 (0.0)	0.1 (0.0)	1.1 (0.1)	0.8 (0.1)	0.1 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.1)
10	0.1 (0.0)	0.1 (0.0)			0.1 (0.0)	0.1 (0.0)		
11	0.1 (0.0)	0.1 (0.0)			0.1 (0.0)	0.1 (0.0)		
12	0.1 (0.0)	0.1 (0.0)	0.8 (0.1)	0.6 (0.1)	0.1 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.1)
13	0.2 (0.1)	0.1 (0.0)	1.0 (0.1)	0.7 (0.1)	0.1 (0.0)	0.1 (0.0)	1.0 (0.1)	0.7 (0.1)
14	0.1 (0.0)	0.1 (0.0)	0.9 (0.1)	0.7 (0.0)	0.1 (0.0)	0.1 (0.0)	1.0 (0.1)	0.7 (0.1)
15	0.1 (0.0)	0.1 (0.0)	1.0 (0.1)	0.7 (0.1)	0.2 (0.0)	0.1 (0.0)	1.0 (0.1)	0.7 (0.1)
16	0.2 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.1)	0.2 (0.0)	0.1 (0.0)	1.3 (0.2)	0.9 (0.1)
17	0.2 (0.0)	0.1 (0.0)	1.1 (0.1)	0.8 (0.1)	0.2 (0.0)	0.2 (0.0)	1.4 (0.2)	1.0 (0.1)
18	0.2 (0.0)	0.1 (0.0)	1.1 (0.1)	0.8 (0.1)	0.2 (0.0)	0.1 (0.0)	1.5 (0.2)	1.1 (0.2)
19	0.2 (0.1)	0.1 (0.0)	1.2 (0.1)	0.8 (0.1)	0.1 (0.0)	0.1 (0.0)	1.3 (0.2)	0.9 (0.2)
20	0.2 (0.1)	0.1 (0.1)	0.9 (0.1)	0.6 (0.1)	0.2 (0.1)	0.2 (0.0)	1.2 (0.2)	0.8 (0.2)
21	0.2 (0.0)	0.2 (0.0)			0.4 (0.0)	0.3 (0.0)		
22	0.2 (0.0)	0.2 (0.0)			0.3 (0.2)	0.2 (0.1)		
23	0.2 (0.0)	0.2 (0.0)	1.1 (0.2)	0.8 (0.1)	0.1 (0.0)	0.1 (0.0)	1.0 (0.1)	0.7 (0.1)
24	0.1 (0.0)	0.1 (0.0)	1.0 (0.1)	0.7 (0.1)	0.1 (0.0)	0.1 (0.0)	0.9 (0.1)	0.7 (0.1)
25	0.1 (0.0)	0.1 (0.0)	0.9 (0.1)	0.6 (0.1)	0.1 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.1)
26	0.2 (0.0)	0.1 (0.0)	0.9 (0.2)	0.6 (0.1)	0.1 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.1)
27	0.1 (0.0)	0.1 (0.0)	1.1 (0.1)	0.7 (0.1)	0.1 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.1)
28	0.2 (0.0)	0.1 (0.0)	1.0 (0.1)	0.7 (0.1)	0.2 (0.0)	0.1 (0.0)	1.2 (0.3)	0.8 (0.2)
29	0.2 (0.0)	0.1 (0.0)	1.1 (0.1)	0.8 (0.1)	0.2 (0.0)	0.1 (0.0)	1.4 (0.2)	1.0 (0.1)
30	0.3 (0.1)	0.2 (0.1)	1.4 (0.3)	1.0 (0.2)	0.3 (0.0)	0.2 (0.0)	1.5 (0.2)	1.1 (0.1)
31	0.2 (0.0)	0.2 (0.0)	1.4 (0.2)	1.0 (0.2)	0.1 (0.1)	0.1 (0.0)	1.5 (0.3)	1.0 (0.2)
Avg	0.2	0.1	1	0.7	0.2	0.1	1.1	0.8
n	31	31	26	25	31	31	26	25
SD	0.1	0	0.2	0.1	0.1	0.1	0.2	0.1
Min	0.1	0.1	0.7	0.5	0.1	0.1	0.8	0.6
Max	0.3	0.2	1.4	1.0	0.5	0.3	1.5	1.1

Table F10. Daily means (SD) of NH_3 concentrations at Site WI5B for November, 2007. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	$mg \cdot ds\, m^{-3}$	ppm	$mg \cdot ds\, m^{-3}$	ppm	$mg \cdot ds\, m^{-3}$	ppm	$mg \cdot ds\, m^{-3}$
1	0.2 (0.0)	0.1 (0.0)	1.2 (0.1)	0.9 (0.0)	0.2 (0.0)	0.1 (0.0)	1.5 (0.1)	1.1 (0.1)
2	0.2 (0.0)	0.1 (0.0)	1.4 (0.1)	1.0 (0.1)	0.1 (0.0)	0.1 (0.0)	1.6 (0.2)	1.2 (0.2)
3	0.2 (0.0)	0.1 (0.0)	1.4 (0.2)	1.0 (0.1)	0.2 (0.0)	0.2 (0.0)	1.5 (0.1)	1.1 (0.1)
4	0.2 (0.0)	0.1 (0.0)	1.5 (0.2)	1.0 (0.1)	0.2 (0.1)	0.2 (0.0)	1.6 (0.2)	1.1 (0.2)
5	0.2 (0.0)	0.1 (0.0)	1.3 (0.1)	1.0 (0.1)	0.1 (0.0)	0.1 (0.0)	1.4 (0.1)	1.0 (0.1)
6	0.1 (0.0)	0.1 (0.0)	1.4 (0.2)	1.0 (0.1)	0.1 (0.0)	0.1 (0.0)	1.0 (0.1)	0.7 (0.1)
7	0.2 (0.0)	0.1 (0.0)	1.1 (0.1)	0.8 (0.1)	0.2 (0.0)	0.1 (0.0)	1.0 (0.1)	0.7 (0.1)
8	0.2 (0.1)	0.2 (0.1)	1.3 (0.1)	1.0 (0.1)	0.1 (0.0)	0.1 (0.0)	1.0 (0.1)	0.7 (0.0)
9	0.3 (0.1)	0.2 (0.1)	1.3 (0.1)	0.9 (0.1)	0.2 (0.0)	0.1 (0.0)	1.0 (0.1)	0.7 (0.1)
10	0.2 (0.0)	0.1 (0.0)	1.1 (0.1)	0.8 (0.1)	0.2 (0.0)	0.1 (0.0)	1.0 (0.1)	0.7 (0.1)
11	0.2 (0.0)	0.2 (0.0)	1.5 (0.2)	1.1 (0.2)	0.2 (0.1)	0.1 (0.0)	1.2 (0.2)	0.9 (0.1)
12	0.2 (0.0)	0.1 (0.0)	1.6 (0.1)	1.1 (0.1)	0.2 (0.0)	0.1 (0.0)	1.2 (0.2)	0.9 (0.1)
13								
14								
15								
16	0.2 (0.0)	0.2 (0.0)	2.5 (0.5)	1.8 (0.3)	0.3 (0.1)	0.2 (0.1)	3.1 (0.3)	2.2 (0.2)
17	0.2 (0.0)	0.2 (0.0)	2.8 (0.2)	2.0 (0.1)	0.2 (0.0)	0.1 (0.0)	2.2 (0.3)	1.5 (0.2)
18	0.2 (0.0)	0.1 (0.0)	2.0 (0.3)	1.4 (0.2)	0.2 (0.0)	0.2 (0.0)	3.0 (0.4)	2.1 (0.3)
19	0.3 (0.0)	0.2 (0.0)	3.0 (0.6)	2.2 (0.5)	0.3 (0.0)	0.2 (0.0)	3.8 (0.3)	2.7 (0.2)
20	0.3 (0.0)	0.2 (0.0)	3.2 (0.4)	2.3 (0.3)	0.2 (0.0)	0.2 (0.0)	3.8 (0.8)	2.7 (0.6)
21	0.3 (0.0)	0.2 (0.0)	3.4 (0.8)	2.4 (0.6)	0.2 (0.0)	0.1 (0.0)		
22	0.3 (0.0)	0.2 (0.0)	3.3 (0.7)	2.4 (0.5)	0.2 (0.0)	0.1 (0.0)		
23	0.3 (0.0)	0.2 (0.0)	3.2 (0.5)	2.2 (0.4)	0.2 (0.0)	0.1 (0.0)	2.7 (0.3)	1.9 (0.2)
24	0.3 (0.0)	0.2 (0.0)	3.7 (0.2)	2.6 (0.1)	0.2 (0.0)	0.2 (0.0)	3.0 (0.2)	2.2 (0.2)
25	0.3 (0.0)	0.2 (0.0)	3.9 (0.2)	2.8 (0.2)	0.2 (0.0)	0.2 (0.0)	3.1 (0.6)	2.2 (0.4)
26	0.3 (0.0)	0.2 (0.0)	3.7 (0.5)	2.7 (0.3)	0.2 (0.0)	0.1 (0.0)	3.7 (0.5)	2.6 (0.3)
27	0.2 (0.0)	0.1 (0.0)	2.5 (0.3)	1.8 (0.2)	0.1 (0.0)	0.1 (0.0)	3.2 (0.4)	2.2 (0.3)
28	0.1 (0.0)	0.1 (0.0)	2.6 (0.4)	1.8 (0.2)	0.1 (0.1)	0.1 (0.0)	3.8 (0.4)	2.7 (0.3)
29	0.1 (0.0)	0.1 (0.0)			0.1 (0.0)	0.1 (0.0)		
30	0.1 (0.0)	0.1 (0.0)			0.1 (0.0)	0.1 (0.0)		
Avg	0.2	0.2	2.2	1.6	0.2	0.1	2.2	1.6
n	27	27	25	25	27	27	23	23
SD	0.1	0	0.9	0.7	0.1	0	1.1	0.7
Min	0.1	0.1	1.1	0.8	0.1	0.1	1.0	0.7
Max	0.3	0.2	3.9	2.8	0.3	0.2	3.8	2.7

ED_004549_00015842-00252

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for December, 2007. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.2 (0.0)	0.1 (0.0)	2.1 (0.2)	1.5 (0.2)	0.2 (0.0)	0.1 (0.0)	3.3 (0.4)	2.3 (0.3)
2	0.2 (0.0)	0.1 (0.0)	2.3 (0.2)	1.7 (0.1)	0.1 (0.0)	0.1 (0.0)	3.9 (0.3)	2.8 (0.2)
3	0.1 (0.0)	0.1 (0.0)	2.1 (0.1)	1.5 (0.1)	0.1 (0.0)	0.1 (0.0)	3.2 (0.2)	2.3 (0.1)
4	0.2 (0.0)	0.1 (0.0)	2.3 (0.2)	1.7 (0.2)	0.1 (0.0)	0.1 (0.0)	3.3 (0.3)	2.3 (0.2)
5	0.1 (0.0)	0.1 (0.0)	2.4 (0.3)	1.7 (0.2)	0.1 (0.0)	0.1 (0.0)	3.2 (0.3)	2.3 (0.2)
6	0.2 (0.1)	0.2 (0.0)	2.9 (0.3)	2.1 (0.2)	0.1 (0.0)	0.1 (0.0)	4.0 (0.4)	2.8 (0.3)
7	0.2 (0.0)	0.1 (0.0)	2.7 (0.3)	1.9 (0.2)	0.1 (0.0)	0.1 (0.0)	3.6 (0.4)	2.6 (0.3)
8	0.1 (0.0)	0.1 (0.0)	2.6 (0.3)	1.9 (0.2)	0.1 (0.0)	0.0 (0.0)	3.2 (0.2)	2.3 (0.1)
9	0.1 (0.0)	0.1 (0.0)	2.6 (0.3)	1.9 (0.2)	0.1 (0.0)	0.1 (0.0)	3.1 (0.2)	2.2 (0.2)
10	0.2 (0.1)	0.2 (0.0)	2.9 (0.4)	2.1 (0.3)	0.1 (0.1)	0.1 (0.0)	3.4 (0.6)	2.4 (0.4)
11	0.2 (0.0)	0.2 (0.0)	2.9 (0.3)	2.1 (0.2)	0.1 (0.0)	0.1 (0.0)	3.5 (0.5)	2.5 (0.3)
12	0.1 (0.0)	0.1 (0.0)	2.6 (0.2)	1.8 (0.2)	0.1 (0.0)	0.1 (0.0)	3.2 (0.4)	2.3 (0.3)
13	0.2 (0.0)	0.1 (0.0)	2.6 (0.2)	1.9 (0.2)	0.1 (0.0)	0.1 (0.0)	3.7 (0.3)	2.7 (0.2)
14	0.1 (0.0)	0.1 (0.0)	2.3 (0.4)	1.6 (0.3)	0.1 (0.0)	0.1 (0.0)	3.3 (0.5)	2.4 (0.3)
15	0.1 (0.0)	0.1 (0.0)	2.3 (0.3)	1.6 (0.2)	0.1 (0.0)	0.1 (0.0)	3.5 (0.4)	2.5 (0.3)
16	0.2 (0.0)	0.1 (0.0)	2.4 (0.2)	1.7 (0.1)	0.1 (0.0)	0.1 (0.0)	4.1 (0.4)	2.9 (0.3)
17	0.2 (0.0)	0.2 (0.0)	2.9 (0.4)	2.1 (0.3)	0.2 (0.1)	0.2 (0.0)	4.6 (0.4)	3.3 (0.3)
18	0.2 (0.0)	0.2 (0.0)	3.5 (0.3)	2.5 (0.2)	0.2 (0.0)	0.1 (0.0)	4.9 (0.3)	3.5 (0.2)
19	0.4 (0.1)	0.2 (0.1)			0.2 (0.0)	0.2 (0.0)		
20	0.3 (0.0)	0.2 (0.0)	3.1 (0.3)	2.2 (0.2)	0.2 (0.0)	0.2 (0.0)	4.6 (0.3)	3.3 (0.2)
21	0.3 (0.0)	0.2 (0.0)	2.8 (0.5)	2.0 (0.4)	0.3 (0.0)	0.2 (0.0)	3.9 (0.3)	2.8 (0.2)
22	0.2 (0.1)	0.2 (0.0)	3.1 (0.3)	2.2 (0.2)	0.2 (0.1)	0.1 (0.0)	3.6 (0.3)	2.6 (0.2)
23								
24								
25								
26	0.3 (0.0)	0.2 (0.0)	4.1 (0.3)	2.9 (0.2)	0.3 (0.0)	0.2 (0.0)	4.3 (0.4)	3.1 (0.3)
27	0.3 (0.0)	0.2 (0.0)	4.4 (0.6)	3.1 (0.4)	0.3 (0.0)	0.2 (0.0)	5.0 (0.9)	3.5 (0.7)
28	0.3 (0.0)	0.2 (0.0)	4.6 (1.0)	3.3 (0.7)	0.3 (0.0)	0.2 (0.0)	5.1 (0.7)	3.6 (0.5)
29	0.3 (0.0)	0.2 (0.0)	5.6 (0.8)	4.0 (0.6)	0.3 (0.0)	0.2 (0.0)	5.8 (0.9)	4.1 (0.6)
30	0.4 (0.1)	0.3 (0.0)	6.3 (0.9)	4.5 (0.6)	0.4 (0.0)	0.3 (0.0)	6.4 (0.8)	4.6 (0.6)
31	0.4 (0.0)	0.3 (0.0)	7.4 (1.5)	5.3 (1.1)	0.4 (0.0)	0.2 (0.0)	7.3 (1.4)	5.2 (1.0)
Avg	0.2	0.2	3.3	2.3	0.2	0.1	4.1	2.9
n	28	28	27	27	28	28	27	27
SD	0.1	0.1	1.3	0.9	0.1	0.1	1	0.7
Min	0.1	0.1	2.1	1.5	0.1	0.0	3.1	2.2
Max	0.4	0.3	7.4	5.3	0.4	0.3	7.3	5.2

ED_004549_00015842-00253

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for January, 2008. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.2 (0.0)	0.1 (0.0)	4.9 (0.8)	3.5 (0.6)	0.2 (0.0)	0.1 (0.0)	5.0 (0.7)	3.6 (0.5)
2	0.3 (0.1)	0.2 (0.0)	5.3 (0.6)	3.8 (0.4)	0.2 (0.0)	0.1 (0.0)	5.1 (0.7)	3.6 (0.5)
3	0.3 (0.0)	0.2 (0.0)	4.8 (0.4)	3.4 (0.3)	0.3 (0.0)	0.2 (0.0)	5.1 (0.5)	3.6 (0.4)
4	0.3 (0.0)	0.2 (0.0)	4.4 (0.4)	3.1 (0.3)	0.4 (0.1)	0.3 (0.0)	6.0 (1.6)	4.3 (1.1)
5	0.4 (0.0)	0.3 (0.0)	3.5 (0.7)	2.5 (0.5)	0.5 (0.0)	0.3 (0.0)	5.7 (0.5)	4.1 (0.4)
6	0.5 (0.0)	0.3 (0.0)	3.7 (0.6)	2.6 (0.5)	0.5 (0.0)	0.3 (0.0)	4.4 (0.7)	3.1 (0.5)
7	0.4 (0.0)	0.3 (0.0)	3.4 (0.3)	2.4 (0.2)	0.4 (0.1)	0.3 (0.1)	4.2 (0.3)	3.0 (0.2)
8	0.5 (0.0)	0.3 (0.0)	4.9 (1.0)	3.5 (0.7)	0.4 (0.0)	0.3 (0.0)	5.4 (1.5)	3.8 (1.0)
9	0.3 (0.0)	0.2 (0.0)	4.8 (0.3)	3.4 (0.2)	0.3 (0.0)	0.2 (0.0)	5.4 (0.6)	3.9 (0.4)
10	0.4 (0.0)	0.3 (0.0)	4.4 (0.2)	3.2 (0.2)	0.4 (0.0)	0.3 (0.0)	4.8 (0.3)	3.4 (0.2)
11	0.3 (0.0)	0.2 (0.0)	3.9 (0.3)	2.8 (0.2)	0.3 (0.0)	0.2 (0.0)	4.1 (0.3)	2.9 (0.2)
12	0.3 (0.0)	0.2 (0.0)	3.9 (0.4)	2.8 (0.3)	0.3 (0.0)	0.2 (0.0)	3.7 (0.2)	2.6 (0.2)
13	0.3 (0.0)	0.2 (0.0)	3.9 (0.5)	2.8 (0.4)	0.2 (0.0)	0.2 (0.0)	4.0 (0.6)	2.9 (0.5)
14	0.2 (0.0)	0.2 (0.0)	5.0 (1.0)	3.5 (0.7)	0.2 (0.0)	0.2 (0.0)	4.9 (0.7)	3.5 (0.5)
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25	0.2 (0.0)	0.1 (0.0)	4.4 (0.8)	3.1 (0.6)	0.2 (0.0)	0.1 (0.0)	5.6 (0.7)	4.0 (0.5)
26	0.2 (0.0)	0.1 (0.0)	3.6 (0.6)	2.6 (0.4)	0.2 (0.0)	0.1 (0.0)		
27	0.2 (0.0)	0.1 (0.0)	2.9 (0.6)	2.1 (0.4)	0.2 (0.0)	0.1 (0.0)		
28	0.2 (0.0)	0.1 (0.0)	1.6 (0.4)		0.2 (0.0)	0.1 (0.0)		
29	0.1 (0.0)	0.1 (0.0)	3.1 (1.5)	2.2 (1.1)	0.1 (0.0)	0.1 (0.0)	3.0 (1.3)	2.1 (0.9)
30	0.2 (0.0)	0.1 (0.0)	5.0 (0.6)	3.6 (0.4)	0.2 (0.0)	0.1 (0.0)	5.2 (0.7)	3.7 (0.5)
31	0.2 (0.1)	0.1 (0.0)	5.0 (0.9)	3.6 (0.6)	0.1 (0.0)	0.1 (0.0)	4.9 (0.5)	3.5 (0.4)
Avg	0.3	0.2	4.1	3.0	0.3	0.2	4.8	3.4
n	21	21	21	20	21	21	18	18
SD	0.1	0.1	0.9	0.5	0.1	0.1	0.7	0.5
Min	0.1	0.1	1.6	2.1	0.1	0.1	3.0	2.1
Max	0.5	0.3	5.3	3.8	0.5	0.3	6.0	4.3

ED_004549_00015842-00254

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for February, 2008. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.2 (0.0)	0.1 (0.0)	3.7 (0.4)	2.7 (0.3)	0.2 (0.0)	0.1 (0.0)	4.6 (0.5)	3.2 (0.3)
2	0.0 (0.1)	0.0 (0.1)	2.3 (0.4)	1.6 (0.3)	0.0 (0.1)	0.0 (0.0)	3.6 (0.3)	2.6 (0.2)
3	-0.1 (0.0)	-0.1 (0.0)	1.8 (0.2)	1.3 (0.2)	-0.1 (0.0)	-0.1 (0.0)	2.9 (0.3)	2.1 (0.2)
4	-0.1 (0.0)	0.0 (0.0)	2.1 (0.3)	1.5 (0.2)	-0.1 (0.0)	-0.1 (0.0)	3.2 (0.4)	2.3 (0.3)
5	0.0 (0.0)	0.0 (0.0)	2.1 (0.2)	1.5 (0.1)	-0.1 (0.0)	0.0 (0.0)	3.6 (0.8)	2.6 (0.6)
6	-0.1 (0.0)	-0.1 (0.0)	2.7 (0.4)	1.9 (0.3)	-0.1 (0.0)	-0.1 (0.0)	3.7 (0.8)	2.6 (0.6)
7	-0.1 (0.0)	-0.1 (0.0)	3.3 (0.5)	2.3 (0.4)	-0.1 (0.0)	-0.1 (0.0)	3.8 (0.6)	2.7 (0.4)
8	-0.1 (0.0)	-0.1 (0.0)	2.3 (0.4)	1.6 (0.3)	-0.1 (0.0)	-0.1 (0.0)	3.0 (0.4)	2.1 (0.3)
9	-0.1 (0.0)	-0.1 (0.0)	2.6 (0.4)	1.8 (0.3)	-0.1 (0.0)	-0.1 (0.0)	3.2 (0.6)	2.3 (0.5)
10	-0.2 (0.0)	-0.1 (0.0)	3.9 (0.3)	2.8 (0.2)	-0.2 (0.0)	-0.1 (0.0)	3.7 (0.3)	2.6 (0.2)
11	-0.1 (0.0)	-0.1 (0.0)	4.2 (0.8)	3.0 (0.5)	-0.1 (0.0)	-0.1 (0.0)	3.8 (0.8)	2.7 (0.6)
12	-0.1 (0.0)	-0.1 (0.0)	3.3 (0.6)	2.4 (0.4)	-0.1 (0.0)	-0.1 (0.0)	3.5 (1.0)	2.5 (0.7)
13	0.0 (0.1)	0.0 (0.1)	4.3 (1.1)	2.8 (0.7)	-0.1 (0.0)	-0.1 (0.0)	5.3 (0.6)	
14	-0.1 (0.0)	-0.1 (0.0)	2.8 (0.4)	2.0 (0.3)	-0.1 (0.0)	-0.1 (0.0)	3.4 (0.5)	2.4 (0.4)
15	-0.2 (0.0)	-0.1 (0.0)	2.7 (0.2)	1.9 (0.2)	-0.2 (0.0)	-0.1 (0.0)	2.8 (0.2)	2.0 (0.2)
16	-0.1 (0.0)	-0.1 (0.0)	2.6 (0.1)	1.8 (0.1)	-0.1 (0.0)	-0.1 (0.0)	3.3 (0.6)	2.4 (0.4)
17	-0.1 (0.0)	-0.1 (0.0)	2.0 (0.5)	1.4 (0.4)	-0.1 (0.0)	-0.1 (0.0)	3.2 (0.3)	2.3 (0.2)
18	-0.1 (0.0)	-0.1 (0.0)	2.1 (0.5)	1.5 (0.4)	-0.1 (0.0)	-0.1 (0.0)	2.7 (0.3)	1.9 (0.2)
19	-0.2 (0.0)	-0.1 (0.0)	2.4 (0.4)	1.7 (0.3)	-0.2 (0.0)	-0.1 (0.0)	2.6 (0.4)	1.9 (0.3)
20	-0.1 (0.0)	-0.1 (0.0)	3.6 (0.7)	2.6 (0.5)	-0.2 (0.0)	-0.1 (0.0)	4.1 (1.2)	2.9 (0.9)
21	-0.1 (0.0)	-0.1 (0.0)	3.9 (0.4)	2.7 (0.3)	-0.1 (0.0)	-0.1 (0.0)	5.1 (0.7)	3.6 (0.5)
22	-0.1 (0.0)	-0.1 (0.0)	3.2 (0.6)	2.3 (0.4)	-0.1 (0.0)	-0.1 (0.0)	3.7 (0.3)	2.6 (0.2)
23	-0.1 (0.0)	0.0 (0.0)	3.0 (1.0)	2.1 (0.7)	-0.1 (0.0)	0.0 (0.0)	3.8 (0.5)	2.7 (0.3)
24	-0.1 (0.0)	-0.1 (0.0)	2.0 (0.6)	1.4 (0.5)	-0.1 (0.0)	-0.1 (0.0)	3.2 (0.7)	2.3 (0.5)
25	-0.1 (0.0)	-0.1 (0.0)	1.2 (0.3)	0.8 (0.2)	-0.1 (0.0)	-0.1 (0.0)	1.5 (0.4)	1.1 (0.3)
26	-0.1 (0.0)	-0.1 (0.0)	2.7 (0.5)	1.9 (0.3)	-0.2 (0.0)	-0.1 (0.0)	3.3 (0.8)	2.3 (0.6)
27	-0.1 (0.0)	-0.1 (0.0)	3.0 (0.5)	2.1 (0.4)	-0.2 (0.0)	-0.1 (0.0)	2.8 (0.4)	2.0 (0.3)
28	-0.1 (0.0)	-0.1 (0.0)	2.1 (0.5)	1.5 (0.3)	-0.2 (0.0)	-0.1 (0.0)	2.1 (0.3)	1.5 (0.2)
29	-0.1 (0.0)	-0.1 (0.0)	2.6 (0.7)	1.9 (0.5)	-0.2 (0.0)	-0.1 (0.0)	2.9 (0.8)	2.0 (0.6)
Avg	-0.1	-0.1	2.8	2	-0.1	-0.1	3.4	2.4
n	29	29	29	29	29	29	29	28
SD	0.1	0	0.8	0.5	0.1	0	0.8	0.5
Min	-0.2	-0.1	1.2	0.8	-0.2	-0.1	1.5	1.1
Max	0.2	0.1	4.3	3.0	0.2	0.1	5.3	3.6

ED_004549_00015842-00255

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for March, 2008. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	-0.1 (0.0)	-0.1 (0.0)	2.7 (0.6)	1.9 (0.4)	-0.2 (0.0)	-0.1 (0.0)	2.7 (0.4)	1.9 (0.3)
2	-0.1 (0.0)	-0.1 (0.0)	1.4 (0.6)	1.0 (0.4)	-0.2 (0.0)	-0.1 (0.0)	1.6 (0.6)	1.2 (0.4)
3	-0.1 (0.0)	-0.1 (0.0)	1.7 (0.3)	1.2 (0.2)	-0.2 (0.0)	-0.1 (0.0)	1.8 (0.2)	1.3 (0.1)
4	-0.1 (0.0)	0.0 (0.0)	2.7 (0.8)	1.9 (0.6)	-0.1 (0.0)	-0.1 (0.0)	3.1 (1.1)	2.2 (0.8)
5	-0.1 (0.0)	-0.1 (0.0)	2.7 (0.6)	1.9 (0.4)	-0.2 (0.0)	-0.1 (0.0)	3.2 (0.3)	2.3 (0.2)
6	-0.1 (0.0)	-0.1 (0.0)	3.5 (0.7)	2.5 (0.5)	-0.2 (0.0)	-0.1 (0.0)	4.2 (0.9)	3.0 (0.7)
7	-0.1 (0.0)	-0.1 (0.0)	3.2 (0.2)	2.3 (0.2)	-0.1 (0.0)	-0.1 (0.0)	5.1 (0.7)	3.6 (0.5)
8	0.0 (0.0)	0.0 (0.0)	4.6 (0.9)	3.3 (0.6)	-0.1 (0.0)	0.0 (0.0)	5.6 (1.1)	4.0 (0.8)
9	-0.1 (0.0)	-0.1 (0.0)	2.7 (0.6)	1.9 (0.4)	-0.1 (0.0)	-0.1 (0.0)	3.0 (0.6)	2.2 (0.4)
10	-0.1 (0.0)	0.0 (0.0)	1.8 (0.5)	1.3 (0.4)	-0.1 (0.0)	-0.1 (0.0)	2.7 (0.4)	1.9 (0.3)
11								
12								
13								
14								
15								
16								
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26	-0.1 (0.0)	0.0 (0.0)	1.3 (0.2)	0.9 (0.1)	-0.1 (0.0)	-0.1 (0.0)	1.6 (0.3)	1.1 (0.2)
27	-0.1 (0.0)	0.0 (0.0)	1.8 (0.4)	1.3 (0.3)	-0.1 (0.0)	-0.1 (0.0)	1.7 (0.4)	1.2 (0.3)
28	-0.1 (0.0)	-0.1 (0.0)	1.9 (0.5)	1.4 (0.4)	-0.1 (0.0)	-0.1 (0.0)	2.3 (0.6)	1.6 (0.4)
29	-0.1 (0.0)	0.0 (0.0)	1.5 (0.3)	1.1 (0.2)	0.0 (0.0)	0.0 (0.0)	2.3 (0.4)	1.6 (0.3)
30	-0.1 (0.0)	-0.1 (0.0)	1.3 (0.3)	0.9 (0.2)	-0.1 (0.0)	-0.1 (0.0)	2.0 (0.5)	1.4 (0.4)
31	-0.1 (0.0)	-0.1 (0.0)	1.1 (0.4)	0.8 (0.3)	-0.1 (0.1)	-0.1 (0.0)	0.9 (0.3)	0.6 (0.2)
Avg	-0.1	-0.1	2.3	1.6	-0.1	-0.1	2.7	1.9
n	16	16	16	16	16	16	16	16
SD	0	0	0.9	0.7	0	0	1.3	0.9
Min	-0.1	-0.1	1.1	0.8	-0.2	-0.1	0.9	0.6
Max	0.0	0.0	4.6	3.3	0.0	0.0	5.6	4.0

ED_004549_00015842-00256

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for April, 2008. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	-0.1 (0.0)	-0.1 (0.0)	1.4 (0.6)	1.0 (0.4)	-0.1 (0.0)	-0.1 (0.0)	1.7 (0.9)	1.2 (0.6)
2	0.0 (0.0)	0.0 (0.0)	2.2 (1.0)	1.5 (0.7)	-0.1 (0.0)	0.0 (0.0)	2.7 (0.7)	1.9 (0.5)
3	0.0 (0.0)	0.0 (0.0)	1.4 (0.2)	1.0 (0.2)	0.0 (0.0)	0.0 (0.0)	2.1 (0.6)	1.5 (0.4)
4	0.0 (0.0)	0.0 (0.0)	1.4 (0.3)	1.0 (0.2)	0.0 (0.0)	0.0 (0.0)	1.7 (0.4)	1.2 (0.3)
5	0.0 (0.0)	0.0 (0.0)	1.0 (0.2)	0.7 (0.1)	0.0 (0.0)	0.0 (0.0)	1.3 (0.2)	0.9 (0.1)
6	0.0 (0.0)	0.0 (0.0)	0.8 (0.1)	0.5 (0.1)	0.0 (0.0)	0.0 (0.0)	0.9 (0.2)	0.6 (0.2)
7	0.0 (0.0)	0.0 (0.0)	1.6 (0.6)	1.1 (0.5)	-0.1 (0.0)	0.0 (0.0)	1.7 (0.7)	1.2 (0.5)
8	0.0 (0.0)	0.0 (0.0)	1.6 (0.3)	1.2 (0.2)	-0.1 (0.0)	0.0 (0.0)	1.4 (0.4)	1.0 (0.3)
9	-0.1 (0.0)	-0.1 (0.0)	1.9 (0.7)	1.3 (0.5)	-0.1 (0.0)	-0.1 (0.0)	1.6 (0.9)	1.2 (0.6)
10	-0.1 (0.0)	0.0 (0.0)	1.5 (0.4)	1.1 (0.3)	-0.1 (0.0)	0.0 (0.0)	1.4 (0.6)	1.0 (0.4)
11	-0.1 (0.0)	-0.1 (0.0)	1.6 (0.5)	1.1 (0.3)	-0.1 (0.0)	-0.1 (0.0)	1.1 (0.2)	0.8 (0.1)
12	-0.1 (0.0)	-0.1 (0.0)	1.2 (0.2)	0.9 (0.2)	-0.1 (0.0)	-0.1 (0.0)	1.7 (0.3)	1.2 (0.2)
13	-0.1 (0.0)	-0.1 (0.0)	1.7 (0.4)	1.2 (0.3)	-0.1 (0.0)	-0.1 (0.0)	1.4 (0.4)	1.0 (0.3)
14	0.0 (0.0)	0.0 (0.0)	1.5 (0.5)	1.0 (0.3)	0.0 (0.1)	0.0 (0.1)	1.6 (0.6)	1.1 (0.4)
15	0.0 (0.0)	0.0 (0.0)	1.3 (0.4)	0.9 (0.3)	0.0 (0.0)	0.0 (0.0)	1.9 (0.4)	1.4 (0.3)
16	0.0 (0.0)	0.0 (0.0)	0.8 (0.1)	0.6 (0.1)	0.0 (0.0)	0.0 (0.0)	1.0 (0.1)	0.7 (0.1)
17	0.1 (0.1)	0.1 (0.1)	1.9 (0.5)	1.4 (0.4)	0.1 (0.1)	0.1 (0.1)	2.0 (0.5)	1.4 (0.4)
18	0.2 (0.0)	0.1 (0.0)	2.0 (0.2)	1.4 (0.1)	0.1 (0.0)	0.1 (0.0)	1.5 (0.2)	1.1 (0.1)
19	0.2 (0.0)	0.1 (0.0)	1.3 (0.2)	0.9 (0.2)	0.1 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.1)
20	0.2 (0.0)	0.1 (0.0)	1.5 (0.4)	1.0 (0.3)	0.2 (0.0)	0.1 (0.0)	1.8 (0.5)	1.3 (0.4)
21	0.2 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.2)	0.2 (0.1)	0.2 (0.0)	1.2 (0.2)	0.9 (0.2)
22								
23								
24								
25	0.2 (0.0)	0.1 (0.0)	1.4 (0.3)	1.0 (0.2)				
26	0.1 (0.0)	0.1 (0.0)	1.4 (0.1)	1.0 (0.1)	0.1 (0.0)	0.1 (0.0)	1.7 (0.2)	1.2 (0.2)
27	0.2 (0.0)	0.1 (0.0)	1.5 (0.1)	1.0 (0.1)	0.1 (0.0)	0.1 (0.0)	1.8 (0.4)	1.3 (0.3)
28	0.2 (0.0)	0.1 (0.0)	1.5 (0.4)	1.1 (0.3)	0.1 (0.0)	0.1 (0.0)	1.5 (0.7)	1.1 (0.5)
29	0.2 (0.0)	0.1 (0.0)	1.7 (0.3)	1.2 (0.2)	0.2 (0.0)	0.2 (0.0)	2.7 (0.5)	1.9 (0.4)
30	0.2 (0.0)	0.1 (0.0)	1.2 (0.2)	0.9 (0.1)	0.2 (0.0)	0.1 (0.0)	1.6 (0.3)	1.2 (0.2)
Avg	0	0	1.4	1	0	0	1.6	1.2
n	27	27	27	27	26	26	26	26
SD	0.1	0.1	0.3	0.2	0.1	0.1	0.4	0.3
Min	-0.1	-0.1	0.8	0.5	-0.1	-0.1	0.9	0.6
Max	0.2	0.1	2.2	1.5	0.2	0.2	2.7	1.9

ED_004549_00015842-00257

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for May, 2008. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.2 (0.0)	0.1 (0.0)	1.2 (0.2)	0.8 (0.1)	0.2 (0.0)	0.1 (0.0)	1.5 (0.3)	1.1 (0.2)
2	0.1 (0.0)	0.1 (0.0)	1.2 (0.2)	0.8 (0.2)	0.1 (0.0)	0.1 (0.0)	0.8 (0.1)	0.6 (0.1)
3	0.1 (0.0)	0.1 (0.0)	1.5 (0.2)	1.1 (0.2)	0.1 (0.0)	0.1 (0.0)	1.5 (0.5)	1.0 (0.4)
4	0.2 (0.0)	0.1 (0.0)	1.2 (0.3)	0.8 (0.2)	0.2 (0.0)	0.1 (0.0)	1.6 (0.5)	1.1 (0.3)
5	0.2 (0.0)	0.2 (0.0)	1.4 (0.3)	1.0 (0.2)	0.2 (0.1)	0.1 (0.0)	1.5 (0.2)	1.0 (0.2)
6	0.2 (0.0)	0.1 (0.0)	1.3 (0.2)	0.9 (0.1)	0.2 (0.0)	0.1 (0.0)	1.4 (0.3)	1.0 (0.2)
7	0.2 (0.1)	0.2 (0.1)	1.2 (0.1)	0.8 (0.0)	0.1 (0.0)	0.1 (0.0)	1.0 (0.1)	0.7 (0.1)
8	0.2 (0.1)	0.1 (0.1)	1.1 (0.2)	0.8 (0.1)	0.1 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.1)
9	0.2 (0.1)	0.1 (0.1)	1.1 (0.1)	0.8 (0.1)	0.1 (0.0)	0.1 (0.0)	0.9 (0.2)	0.7 (0.1)
10	0.2 (0.0)	0.1 (0.0)	0.8 (0.1)	0.6 (0.1)	0.1 (0.0)	0.1 (0.0)	0.9 (0.2)	0.6 (0.1)
11	0.1 (0.0)	0.1 (0.0)	1.2 (0.1)	0.8 (0.1)	0.1 (0.0)	0.1 (0.0)	1.0 (0.3)	0.7 (0.2)
12	0.1 (0.1)	0.1 (0.0)	1.2 (0.2)	0.9 (0.2)	0.2 (0.0)	0.1 (0.0)	1.6 (0.2)	1.1 (0.2)
13	0.1 (0.0)	0.1 (0.0)	1.2 (0.3)	0.9 (0.2)	0.1 (0.0)	0.1 (0.0)	1.4 (0.4)	1.0 (0.3)
14	0.4 (0.4)	0.3 (0.3)	1.6 (0.4)	1.1 (0.3)	0.0 (0.1)	0.0 (0.0)	1.5 (0.4)	1.1 (0.3)
15	0.3 (0.2)	0.2 (0.2)	1.1 (0.4)	0.8 (0.3)	0.1 (0.1)	0.1 (0.0)	1.1 (0.3)	0.8 (0.2)
16	0.2 (0.1)	0.1 (0.1)	1.0 (0.1)	0.7 (0.1)	0.1 (0.0)	0.0 (0.0)	0.9 (0.2)	0.6 (0.1)
17	0.1 (0.0)	0.0 (0.0)	1.0 (0.2)	0.7 (0.1)	0.0 (0.0)	0.0 (0.0)	0.7 (0.1)	0.5 (0.1)
18	0.1 (0.2)	0.1 (0.2)	1.1 (0.1)	0.8 (0.1)	0.0 (0.0)	0.0 (0.0)	0.8 (0.1)	0.6 (0.1)
19	0.2 (0.2)	0.1 (0.2)	1.1 (0.2)	0.8 (0.1)	0.1 (0.0)	0.0 (0.0)	1.0 (0.2)	0.7 (0.1)
20	0.1 (0.0)	0.0 (0.0)	1.1 (0.1)	0.8 (0.1)	0.0 (0.0)	0.0 (0.0)	1.0 (0.2)	0.7 (0.1)
21	0.1 (0.1)	0.1 (0.0)	1.1 (0.2)	0.8 (0.1)	0.0 (0.0)	0.0 (0.0)	1.0 (0.1)	0.7 (0.1)
22	0.0 (0.0)	0.0 (0.0)	1.0 (0.2)	0.7 (0.2)	0.0 (0.0)	0.0 (0.0)	0.8 (0.2)	0.6 (0.1)
23	0.0 (0.0)	0.0 (0.0)	0.9 (0.1)	0.6 (0.1)	0.0 (0.0)	0.0 (0.0)	0.8 (0.1)	0.6 (0.1)
24	0.0 (0.0)	0.0 (0.0)	0.7 (0.1)	0.5 (0.1)	0.1 (0.1)	0.1 (0.0)	0.8 (0.1)	0.6 (0.1)
25	0.2 (0.1)	0.1 (0.0)	0.8 (0.2)	0.6 (0.1)	0.2 (0.0)	0.1 (0.0)	0.9 (0.2)	0.7 (0.2)
26	0.1 (0.1)				0.1 (0.0)			
27	0.1 (0.2)	0.1 (0.2)	1.0 (0.3)	0.7 (0.2)	0.0 (0.0)	0.0 (0.0)	0.9 (0.1)	0.6 (0.1)
28	0.3 (0.2)	0.2 (0.1)	0.9 (0.2)	0.6 (0.1)	0.1 (0.0)	0.1 (0.0)	1.0 (0.3)	0.7 (0.2)
29	0.1 (0.0)	0.1 (0.0)	0.9 (0.1)	0.6 (0.0)	0.1 (0.0)	0.1 (0.0)	0.8 (0.1)	0.6 (0.1)
30	0.1 (0.0)	0.1 (0.0)	0.9 (0.2)	0.7 (0.1)	0.1 (0.0)	0.1 (0.0)	0.9 (0.1)	0.7 (0.1)
31	0.1 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.1)	0.1 (0.0)	0.1 (0.0)	0.9 (0.2)	0.7 (0.1)
Avg	0.2	0.1	1.1	0.8	0.1	0.1	1.1	0.8
n	31	30	30	30	31	30	30	30
SD	0.1	0.1	0.2	0.1	0.1	0	0.3	0.2
Min	0.0	0.0	0.7	0.5	0.0	0.0	0.7	0.5
Max	0.4	0.3	1.6	1.1	0.2	0.1	1.6	1.1

ED_004549_00015842-00258

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for June, 2008. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.2 (0.1)	0.2 (0.1)	1.0 (0.2)	0.7 (0.2)	0.1 (0.1)	0.1 (0.1)	0.8 (0.2)	0.6 (0.2)
2	0.2 (0.1)	0.1 (0.1)			0.1 (0.0)	0.0 (0.0)		
3	0.1 (0.0)	0.0 (0.0)	1.1 (0.1)	0.8 (0.1)	0.1 (0.0)	0.0 (0.0)	0.9 (0.1)	0.7 (0.1)
4	0.1 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.1)	0.1 (0.0)	0.1 (0.0)	0.9 (0.1)	0.7 (0.1)
5	0.1 (0.0)	0.1 (0.0)	1.0 (0.4)	0.7 (0.3)	0.1 (0.0)	0.1 (0.0)	0.8 (0.2)	0.6 (0.1)
6	0.1 (0.0)	0.1 (0.0)	0.8 (0.2)	0.6 (0.1)	0.2 (0.0)	0.1 (0.0)	0.9 (0.1)	0.6 (0.1)
7	0.1 (0.0)	0.1 (0.0)	0.8 (0.2)	0.6 (0.2)	0.2 (0.0)	0.1 (0.0)	0.8 (0.2)	0.6 (0.1)
8	0.1 (0.1)				0.1 (0.0)			
9	0.1 (0.1)				0.1 (0.1)			
10	0.1 (0.0)	0.1 (0.0)	0.9 (0.1)	0.6 (0.1)	0.1 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.2)
11	0.1 (0.0)	0.1 (0.0)	0.9 (0.2)	0.7 (0.2)	0.1 (0.0)	0.1 (0.0)	0.9 (0.1)	0.7 (0.1)
12	0.2 (0.1)	0.1 (0.0)	0.6 (0.1)	0.5 (0.1)	0.1 (0.0)	0.1 (0.0)	0.8 (0.1)	0.6 (0.1)
13	0.2 (0.0)	0.1 (0.0)	0.9 (0.1)	0.7 (0.1)	0.1 (0.1)	0.1 (0.0)	1.2 (0.3)	0.9 (0.2)
14	0.2 (0.0)				0.1 (0.1)			
15	0.2 (0.0)				0.1 (0.0)			
16	0.1 (0.0)				0.0 (0.0)			
17	0.2 (0.2)				0.1 (0.1)			
18	0.4 (0.3)	0.3 (0.2)	1.1 (0.4)	0.7 (0.3)	0.1 (0.1)	0.1 (0.1)	1.0 (0.3)	0.7 (0.2)
19	0.4 (0.3)	0.3 (0.2)	0.9 (0.3)	0.6 (0.2)	0.2 (0.1)	0.1 (0.1)	0.9 (0.2)	0.7 (0.2)
20	0.2 (0.1)	0.1 (0.1)	0.8 (0.2)	0.6 (0.1)	0.1 (0.1)	0.1 (0.0)	0.8 (0.2)	0.6 (0.2)
21	0.1 (0.0)	0.1 (0.0)	0.8 (0.2)	0.6 (0.1)	0.0 (0.0)	0.0 (0.0)	0.8 (0.3)	0.6 (0.2)
22	0.1 (0.0)	0.1 (0.0)	0.9 (0.2)	0.6 (0.1)	0.1 (0.0)	0.1 (0.0)	0.9 (0.2)	0.6 (0.1)
23	0.1 (0.0)	0.1 (0.0)	0.8 (0.2)	0.6 (0.1)	0.1 (0.1)	0.0 (0.0)	0.8 (0.2)	0.6 (0.1)
24	0.2 (0.0)	0.1 (0.0)	0.7 (0.1)	0.5 (0.1)	0.2 (0.0)	0.2 (0.0)	0.9 (0.2)	0.7 (0.1)
25	0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	0.5 (0.1)	0.2 (0.0)	0.1 (0.0)	0.8 (0.1)	0.6 (0.1)
26	0.2 (0.0)	0.1 (0.0)	0.7 (0.2)	0.5 (0.1)	0.2 (0.0)	0.1 (0.0)	0.8 (0.2)	0.6 (0.1)
27	0.1 (0.0)	0.1 (0.0)	0.7 (0.2)	0.5 (0.1)	0.2 (0.0)	0.1 (0.0)	0.8 (0.1)	0.5 (0.1)
28	0.1 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.1)	0.1 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.2)
29	0.1 (0.1)	0.1 (0.0)	1.0 (0.3)	0.7 (0.2)	0.1 (0.0)	0.1 (0.0)	0.9 (0.2)	0.6 (0.1)
30								
Avg	0.2	0.1	0.9	0.6	0.1	0.1	0.9	0.6
n	29	23	22	22	29	23	22	22
SD	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1
Min	0.1	0.0	0.6	0.5	0.0	0.0	0.8	0.5
Max	0.4	0.3	1.1	0.8	0.2	0.2	1.2	0.9

ED_004549_00015842-00259

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for July, 2008. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1								
2								
3								
4	0.1 (0.1)	0.1 (0.0)	0.9 (0.3)	0.6 (0.2)	0.2 (0.1)	0.1 (0.0)	0.9 (0.2)	0.7 (0.2)
5	0.1 (0.0)	0.1 (0.0)	0.6 (0.1)	0.4 (0.1)	0.1 (0.0)	0.1 (0.0)	0.7 (0.1)	0.5 (0.1)
6	0.1 (0.0)	0.1 (0.0)	0.5 (0.1)	0.4 (0.1)	0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	0.4 (0.0)
7	0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	0.4 (0.1)	0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	0.5 (0.1)
8	0.2 (0.0)				0.1 (0.0)			
9	0.2 (0.0)				0.1 (0.1)			
10	0.2 (0.0)		0.8 (0.2)		0.2 (0.0)		0.9 (0.2)	
11	0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	0.4 (0.1)	0.2 (0.0)	0.1 (0.0)	0.8 (0.1)	0.6 (0.1)
12	0.1 (0.0)	0.1 (0.0)	0.9 (0.1)	0.6 (0.1)	0.1 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.2)
13	0.1 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.2)	0.1 (0.0)	0.1 (0.0)	0.9 (0.2)	0.7 (0.2)
14	0.2 (0.0)	0.1 (0.0)	0.8 (0.3)	0.6 (0.2)	0.1 (0.0)	0.1 (0.0)	0.9 (0.2)	0.6 (0.1)
15	0.2 (0.0)	0.1 (0.0)	0.7 (0.1)	0.5 (0.1)	0.2 (0.0)	0.1 (0.0)	0.8 (0.1)	0.5 (0.1)
16	0.2 (0.0)	0.1 (0.0)	0.7 (0.1)	0.5 (0.1)	0.2 (0.1)	0.1 (0.1)	0.8 (0.1)	0.6 (0.1)
17	0.2 (0.0)	0.1 (0.0)	0.7 (0.1)	0.5 (0.1)	0.3 (0.0)	0.2 (0.0)	0.8 (0.1)	0.6 (0.0)
18	0.2 (0.0)	0.2 (0.0)	0.7 (0.1)	0.5 (0.1)	0.2 (0.1)	0.1 (0.0)	0.8 (0.1)	0.6 (0.1)
19	0.2 (0.0)	0.1 (0.0)	0.7 (0.2)	0.5 (0.1)	0.2 (0.1)	0.2 (0.1)	0.8 (0.2)	0.6 (0.1)
20	0.2 (0.0)	0.2 (0.0)	0.7 (0.1)	0.5 (0.1)	0.2 (0.0)	0.1 (0.0)	0.7 (0.1)	0.5 (0.1)
21	0.2 (0.0)	0.2 (0.0)	0.7 (0.1)	0.5 (0.1)	0.1 (0.1)	0.1 (0.0)	0.8 (0.1)	0.5 (0.1)
22	0.2 (0.0)	0.1 (0.0)	0.7 (0.2)	0.5 (0.1)	0.1 (0.0)	0.1 (0.0)	0.9 (0.2)	0.6 (0.1)
23	0.3 (0.0)	0.2 (0.0)	0.8 (0.2)	0.6 (0.2)	0.2 (0.1)	0.2 (0.1)	1.0 (0.2)	0.7 (0.2)
24	0.2 (0.0)	0.2 (0.0)	0.7 (0.1)	0.5 (0.1)	0.3 (0.0)	0.2 (0.0)	0.8 (0.1)	0.6 (0.1)
25	0.2 (0.0)	0.1 (0.0)	0.8 (0.1)	0.6 (0.1)	0.2 (0.1)	0.2 (0.0)	0.9 (0.2)	0.6 (0.1)
26	0.2 (0.0)	0.1 (0.0)	0.9 (0.3)	0.6 (0.2)	0.2 (0.1)	0.1 (0.0)	1.0 (0.4)	0.7 (0.3)
27	0.3 (0.1)	0.2 (0.0)	1.0 (0.5)	0.7 (0.4)	0.2 (0.0)	0.1 (0.0)	1.0 (0.4)	0.7 (0.3)
28	0.2 (0.0)	0.2 (0.0)	0.9 (0.2)	0.6 (0.1)	0.3 (0.1)	0.2 (0.0)	1.1 (0.2)	0.8 (0.2)
29	0.3 (0.0)	0.2 (0.0)	0.8 (0.1)	0.6 (0.1)	0.3 (0.1)	0.2 (0.1)	0.9 (0.2)	0.6 (0.1)
30	0.3 (0.1)	0.2 (0.0)	0.9 (0.3)	0.6 (0.2)	0.2 (0.1)	0.2 (0.1)	0.9 (0.2)	0.6 (0.2)
31	0.4 (0.0)	0.3 (0.0)	1.0 (0.3)	0.7 (0.2)	0.2 (0.0)	0.2 (0.0)	1.0 (0.3)	0.7 (0.2)
Avg	0.2	0.1	0.8	0.5	0.2	0.1	0.9	0.6
n	28	25	26	25	28	25	26	25
SD	0.1	0	0.1	0.1	0.1	0	0.1	0.1
Min	0.1	0.1	0.5	0.4	0.1	0.1	0.6	0.4
Max	0.4	0.3	1.0	0.7	0.3	0.2	1.1	0.8

ED_004549_00015842-00260

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for August, 2008. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.3 (0.1)	0.2 (0.1)	0.9 (0.3)	0.7 (0.2)	0.2 (0.1)	0.1 (0.1)	0.9 (0.3)	0.7 (0.2)
2	0.3 (0.1)	0.2 (0.1)	0.9 (0.4)	0.7 (0.3)	0.3 (0.1)	0.2 (0.0)	1.0 (0.2)	0.7 (0.2)
3	0.2 (0.0)	0.1 (0.0)	0.8 (0.0)	0.5 (0.0)	0.2 (0.0)	0.2 (0.0)	0.9 (0.1)	0.7 (0.1)
4	0.3 (0.1)	0.2 (0.1)	0.7 (0.1)	0.5 (0.1)	0.2 (0.1)	0.1 (0.1)	0.8 (0.1)	0.5 (0.1)
5	0.3 (0.1)	0.2 (0.1)	0.8 (0.2)	0.6 (0.2)	0.3 (0.1)	0.2 (0.1)	0.9 (0.2)	0.7 (0.2)
6	0.2 (0.1)	0.2 (0.1)	0.7 (0.2)	0.5 (0.1)	0.2 (0.1)	0.2 (0.1)	0.8 (0.2)	0.6 (0.1)
7	0.2 (0.0)	0.2 (0.0)	1.0 (0.2)	0.7 (0.2)	0.2 (0.1)	0.1 (0.0)	1.0 (0.3)	0.7 (0.2)
8	0.2 (0.1)	0.2 (0.1)	1.0 (0.3)	0.7 (0.2)	0.2 (0.0)	0.1 (0.0)	0.9 (0.2)	0.7 (0.1)
9	0.2 (0.0)	0.1 (0.0)	0.7 (0.2)	0.5 (0.1)	0.1 (0.1)	0.1 (0.0)	0.7 (0.2)	0.5 (0.1)
10	0.1 (0.1)	0.1 (0.1)	0.9 (0.2)	0.6 (0.1)	0.2 (0.1)	0.1 (0.1)	0.9 (0.2)	0.6 (0.1)
11	0.3 (0.1)	0.2 (0.1)	0.9 (0.2)	0.6 (0.2)	0.2 (0.1)	0.2 (0.0)	1.0 (0.1)	0.7 (0.1)
12	0.2 (0.0)	0.1 (0.0)	0.7 (0.1)	0.5 (0.1)	0.3 (0.0)	0.2 (0.0)	0.8 (0.1)	0.6 (0.1)
13	0.2 (0.0)	0.2 (0.0)	0.8 (0.1)	0.6 (0.1)	0.2 (0.0)	0.2 (0.0)	0.9 (0.1)	0.6 (0.1)
14	0.2 (0.0)	0.1 (0.0)	0.9 (0.2)	0.7 (0.2)	0.2 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.1)
15	0.2 (0.0)	0.1 (0.0)	1.1 (0.3)	0.7 (0.2)	0.2 (0.0)	0.2 (0.0)	1.0 (0.3)	0.7 (0.2)
16	0.2 (0.0)	0.2 (0.0)	1.0 (0.4)	0.7 (0.3)	0.2 (0.0)	0.2 (0.0)	1.0 (0.3)	0.7 (0.2)
17	0.2 (0.0)	0.1 (0.0)	0.8 (0.1)	0.6 (0.1)	0.2 (0.1)	0.2 (0.0)	0.8 (0.1)	0.6 (0.1)
18	0.2 (0.0)	0.1 (0.0)	0.9 (0.2)	0.6 (0.2)	0.3 (0.1)	0.2 (0.1)	0.9 (0.1)	0.6 (0.1)
19	0.2 (0.0)	0.1 (0.0)	0.7 (0.1)	0.5 (0.1)	0.2 (0.1)	0.2 (0.1)	0.9 (0.1)	0.6 (0.1)
20	0.2 (0.0)	0.2 (0.0)	0.7 (0.1)	0.5 (0.1)	0.3 (0.0)	0.2 (0.0)	1.0 (0.1)	0.7 (0.1)
21	0.2 (0.0)	0.2 (0.0)	0.7 (0.1)	0.5 (0.1)	0.3 (0.1)	0.2 (0.0)	0.9 (0.1)	0.7 (0.1)
22	0.2 (0.0)	0.2 (0.0)	0.7 (0.1)	0.5 (0.1)	0.3 (0.0)	0.2 (0.0)	0.8 (0.1)	0.6 (0.1)
23	0.2 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.2)	0.1 (0.0)	0.1 (0.0)	1.0 (0.3)	0.7 (0.2)
24	0.3 (0.1)	0.2 (0.0)	1.1 (0.2)	0.8 (0.1)	0.1 (0.0)	0.1 (0.0)	1.2 (0.3)	0.8 (0.2)
25	0.4 (0.2)	0.3 (0.1)	1.1 (0.3)	0.8 (0.2)	0.1 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.2)
26	0.2 (0.1)	0.2 (0.1)	0.8 (0.2)	0.6 (0.2)	0.3 (0.1)	0.2 (0.1)	1.0 (0.2)	0.7 (0.1)
27	0.2 (0.0)	0.1 (0.0)	0.8 (0.1)	0.6 (0.1)	0.3 (0.0)	0.2 (0.0)	1.1 (0.2)	0.8 (0.1)
28	0.2 (0.0)	0.1 (0.0)	0.7 (0.2)	0.5 (0.2)	0.2 (0.0)	0.1 (0.0)	0.8 (0.1)	0.6 (0.1)
29	0.2 (0.0)	0.1 (0.0)	0.9 (0.2)	0.6 (0.2)	0.3 (0.1)	0.2 (0.0)	1.0 (0.2)	0.7 (0.2)
30	0.2 (0.0)	0.2 (0.0)	0.9 (0.3)	0.6 (0.2)	0.3 (0.0)	0.2 (0.0)	1.0 (0.2)	0.7 (0.1)
31	0.2 (0.0)	0.1 (0.0)	0.6 (0.1)	0.4 (0.1)	0.3 (0.1)	0.2 (0.0)	0.9 (0.2)	0.6 (0.1)
Avg	0.2	0.2	0.8	0.6	0.2	0.2	0.9	0.7
n	31	31	31	31	31	31	31	31
SD	0.1	0	0.1	0.1	0.1	0	0.1	0.1
Min	0.1	0.1	0.6	0.4	0.1	0.1	0.7	0.5
Max	0.4	0.3	1.1	0.8	0.3	0.2	1.2	0.8

ED_004549_00015842-00261

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for September, 2008. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.2 (0.0)	0.1 (0.0)	0.7 (0.1)	0.5 (0.1)	0.3 (0.1)	0.2 (0.0)	0.8 (0.1)	0.6 (0.1)
2	0.2 (0.0)	0.1 (0.0)	0.9 (0.3)	0.7 (0.2)	0.3 (0.1)	0.2 (0.1)	1.0 (0.3)	0.7 (0.2)
3	0.2 (0.0)	0.1 (0.0)	1.3 (0.2)	0.9 (0.2)	0.1 (0.0)	0.1 (0.0)	1.1 (0.1)	0.8 (0.1)
4	0.2 (0.1)	0.2 (0.1)	1.2 (0.2)	0.9 (0.1)	0.2 (0.0)	0.1 (0.0)	1.1 (0.1)	0.8 (0.1)
5	0.3 (0.1)	0.2 (0.1)	1.2 (0.3)	0.9 (0.2)	0.2 (0.1)	0.2 (0.0)	1.4 (0.4)	1.0 (0.3)
6	0.2 (0.0)	0.2 (0.0)	0.9 (0.2)	0.6 (0.1)	0.2 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.2)
7	0.2 (0.0)	0.1 (0.0)	1.0 (0.1)	0.7 (0.1)	0.2 (0.0)	0.1 (0.0)	1.3 (0.2)	0.9 (0.1)
8	0.2 (0.0)	0.2 (0.0)	1.3 (0.2)	0.9 (0.1)	0.2 (0.0)	0.1 (0.0)	1.3 (0.4)	0.9 (0.3)
9	0.3 (0.1)	0.2 (0.0)	1.3 (0.5)	0.9 (0.3)	0.2 (0.1)	0.2 (0.0)	1.4 (0.3)	1.0 (0.2)
10	0.2 (0.0)	0.2 (0.0)	1.0 (0.2)	0.7 (0.1)	0.3 (0.0)	0.2 (0.0)	1.3 (0.2)	0.9 (0.1)
11	0.2 (0.0)	0.2 (0.0)	0.8 (0.2)	0.6 (0.1)	0.2 (0.0)	0.2 (0.0)	1.2 (0.2)	0.8 (0.1)
12	0.2 (0.0)	0.2 (0.0)	1.0 (0.1)	0.7 (0.1)	0.2 (0.0)	0.1 (0.0)	1.4 (0.3)	1.0 (0.2)
13	0.2 (0.0)	0.2 (0.0)	1.2 (0.3)	0.9 (0.2)	0.2 (0.0)	0.1 (0.0)	1.2 (0.2)	0.9 (0.1)
14	0.2 (0.0)	0.2 (0.0)	1.5 (0.1)	1.0 (0.1)	0.2 (0.0)	0.1 (0.0)	1.2 (0.2)	0.9 (0.1)
15	0.2 (0.0)	0.2 (0.0)	1.3 (0.1)	0.9 (0.1)	0.2 (0.0)	0.1 (0.0)	1.3 (0.1)	0.9 (0.1)
16	0.2 (0.0)	0.2 (0.0)	1.1 (0.2)	0.8 (0.2)	0.3 (0.1)	0.2 (0.1)	1.2 (0.2)	0.8 (0.1)
17	0.2 (0.1)	0.1 (0.0)			0.1 (0.0)	0.1 (0.0)		
18	0.2 (0.0)	0.1 (0.0)			0.3 (0.1)	0.2 (0.1)		
19	0.2 (0.0)	0.2 (0.0)			0.4 (0.0)	0.3 (0.0)		
20	0.2 (0.0)	0.2 (0.0)	1.1 (0.3)	0.8 (0.2)	0.2 (0.1)	0.2 (0.0)	1.3 (0.3)	0.9 (0.2)
21	0.2 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.2)	0.3 (0.1)	0.2 (0.1)	1.5 (0.2)	1.1 (0.1)
22	0.2 (0.0)	0.2 (0.0)	1.0 (0.1)	0.7 (0.1)	0.3 (0.1)	0.2 (0.0)	1.4 (0.2)	1.0 (0.2)
23	0.2 (0.1)	0.2 (0.1)	0.8 (0.1)	0.6 (0.0)	0.3 (0.0)	0.2 (0.0)	1.2 (0.1)	0.8 (0.1)
24	0.3 (0.1)	0.2 (0.1)	1.4 (0.2)	1.0 (0.2)	0.3 (0.1)	0.2 (0.1)	1.5 (0.3)	1.1 (0.2)
25	0.3 (0.1)	0.2 (0.0)	1.0 (0.2)	0.7 (0.2)	0.2 (0.0)	0.2 (0.0)	1.4 (0.2)	1.0 (0.1)
26	0.2 (0.0)	0.2 (0.0)	1.0 (0.1)	0.7 (0.1)	0.3 (0.0)	0.2 (0.0)	1.4 (0.2)	1.0 (0.1)
27	0.2 (0.0)	0.2 (0.0)	1.4 (0.3)	1.0 (0.2)	0.2 (0.0)	0.1 (0.0)	1.3 (0.2)	1.0 (0.2)
28	0.2 (0.0)	0.1 (0.0)	1.3 (0.2)	1.0 (0.1)	0.2 (0.1)	0.1 (0.0)	1.5 (0.1)	1.1 (0.1)
29	0.2 (0.1)	0.2 (0.0)	1.8 (0.2)	1.3 (0.2)	0.1 (0.1)	0.1 (0.0)	1.6 (0.2)	1.2 (0.2)
30	0.2 (0.0)	0.1 (0.0)	1.7 (0.2)	1.2 (0.1)	0.2 (0.1)	0.1 (0.0)	1.7 (0.4)	1.2 (0.3)
Avg	0.2	0.2	1.2	0.8	0.2	0.2	1.3	0.9
n	30	30	27	27	30	30	27	27
SD	0	0	0.3	0.2	0.1	0	0.2	0.1
Min	0.2	0.1	0.7	0.5	0.1	0.1	0.8	0.6
Max	0.3	0.2	1.8	1.3	0.4	0.3	1.7	1.2

ED_004549_00015842-00262

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for October, 2008. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.2 (0.0)	0.1 (0.0)	1.9 (0.4)	1.3 (0.3)	0.1 (0.1)	0.1 (0.0)	1.7 (0.4)	1.2 (0.3)
2	0.3 (0.1)	0.2 (0.1)	1.9 (0.3)	1.4 (0.2)	0.2 (0.1)	0.1 (0.1)	1.8 (0.4)	1.3 (0.3)
3	0.2 (0.1)	0.2 (0.1)	1.9 (0.4)	1.3 (0.3)	0.1 (0.1)	0.1 (0.0)	1.8 (0.3)	1.3 (0.2)
4	0.3 (0.2)	0.2 (0.1)	1.5 (0.5)	1.1 (0.3)	0.2 (0.0)	0.1 (0.0)	1.6 (0.1)	1.1 (0.1)
5	0.1 (0.0)	0.1 (0.0)	1.3 (0.3)	0.9 (0.2)	0.2 (0.0)	0.1 (0.0)	1.5 (0.4)	1.1 (0.3)
6	0.1 (0.0)	0.1 (0.0)	1.0 (0.1)	0.7 (0.1)	0.2 (0.0)	0.1 (0.0)	1.4 (0.2)	1.0 (0.1)
7	0.1 (0.0)	0.0 (0.0)			0.1 (0.0)	0.1 (0.0)		
8	0.3 (0.1)	0.2 (0.1)			0.2 (0.1)	0.1 (0.0)		
9	0.2 (0.0)	0.2 (0.0)			0.2 (0.1)	0.1 (0.0)		
10	0.1 (0.0)	0.1 (0.0)	1.1 (0.1)	0.8 (0.1)	0.1 (0.1)	0.1 (0.0)	1.4 (0.2)	1.0 (0.1)
11	0.1 (0.0)	0.1 (0.0)	0.9 (0.1)	0.7 (0.1)	0.2 (0.1)	0.2 (0.1)	1.4 (0.1)	1.0 (0.1)
12	0.2 (0.0)	0.1 (0.0)	0.9 (0.2)	0.7 (0.1)	0.3 (0.0)	0.2 (0.0)	1.5 (0.2)	1.1 (0.1)
13	0.2 (0.0)	0.1 (0.0)	1.1 (0.4)	0.8 (0.3)	0.2 (0.1)	0.2 (0.1)	1.5 (0.4)	1.1 (0.3)
14	0.2 (0.1)	0.1 (0.0)	1.4 (0.3)	1.0 (0.2)	0.1 (0.0)	0.1 (0.0)	1.9 (0.4)	1.3 (0.3)
15	0.2 (0.0)	0.1 (0.0)	1.6 (0.3)	1.2 (0.2)	0.2 (0.0)	0.1 (0.0)	2.0 (0.4)	1.4 (0.3)
16								
17								
18								
19								
20								
21								
22	0.1 (0.0)	0.1 (0.0)	1.5 (0.2)	1.0 (0.1)	0.1 (0.0)	0.1 (0.0)	2.1 (0.2)	1.5 (0.1)
23	0.1 (0.0)	0.1 (0.0)	1.3 (0.3)	1.0 (0.2)	0.1 (0.0)	0.1 (0.0)	1.7 (0.3)	1.2 (0.2)
24	0.2 (0.0)	0.1 (0.0)	1.7 (0.3)	1.2 (0.2)	0.2 (0.0)	0.1 (0.0)	2.2 (0.5)	1.6 (0.3)
25	0.2 (0.0)	0.1 (0.0)	1.6 (0.2)	1.2 (0.1)	0.2 (0.0)	0.1 (0.0)	2.4 (0.5)	1.7 (0.4)
26	0.2 (0.0)	0.1 (0.0)	1.8 (0.2)	1.3 (0.1)	0.1 (0.0)	0.1 (0.0)	2.2 (0.2)	1.5 (0.1)
27	0.1 (0.0)	0.1 (0.0)	2.0 (0.2)	1.4 (0.1)	0.1 (0.0)	0.1 (0.0)	2.0 (0.3)	1.4 (0.2)
28	0.2 (0.0)	0.1 (0.0)	2.2 (0.4)	1.5 (0.3)	0.1 (0.0)	0.1 (0.0)	3.1 (0.8)	2.2 (0.5)
29	0.2 (0.1)	0.2 (0.0)	1.8 (0.3)	1.3 (0.2)	0.2 (0.1)	0.1 (0.0)	2.4 (0.4)	1.7 (0.3)
30	0.3 (0.0)	0.2 (0.0)			0.2 (0.0)	0.2 (0.0)		
31	0.2 (0.1)	0.2 (0.1)			0.1 (0.0)	0.1 (0.0)		
Avg	0.2	0.1	1.5	1.1	0.2	0.1	1.9	1.3
n	25	25	20	20	25	25	20	20
SD	0.1	0	0.4	0.3	0	0	0.4	0.3
Min	0.1	0.0	0.9	0.7	0.1	0.1	1.4	1.0
Max	0.3	0.2	2.2	1.5	0.3	0.2	3.1	2.2

ED_004549_00015842-00263

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for November, 2008. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.1 (0.0)	0.1 (0.0)	1.7 (0.4)	1.2 (0.3)	0.1 (0.0)	0.1 (0.0)	1.9 (0.3)	1.3 (0.2)
2	0.2 (0.1)	0.2 (0.0)	1.5 (0.2)	1.1 (0.1)	0.2 (0.0)	0.2 (0.0)	2.2 (0.2)	1.5 (0.2)
3	0.3 (0.1)	0.2 (0.0)	1.2 (0.3)	0.8 (0.2)	0.2 (0.0)	0.2 (0.0)	1.5 (0.4)	1.1 (0.3)
4	0.2 (0.1)	0.2 (0.0)			0.2 (0.0)	0.1 (0.0)		
5	0.2 (0.1)	0.1 (0.0)			0.2 (0.0)	0.2 (0.0)		
6	0.2 (0.0)	0.1 (0.0)	1.1 (0.1)	0.8 (0.1)	0.2 (0.0)	0.2 (0.0)	1.4 (0.3)	1.0 (0.2)
7	0.1 (0.0)	0.1 (0.0)	1.5 (0.2)	1.1 (0.1)	0.1 (0.0)	0.1 (0.0)	1.7 (0.2)	1.2 (0.1)
8	0.1 (0.0)	0.1 (0.0)	1.7 (0.2)	1.2 (0.1)	0.1 (0.0)	0.1 (0.0)	1.4 (0.2)	1.0 (0.1)
9	0.1 (0.0)	0.1 (0.0)	1.6 (0.3)	1.2 (0.2)	0.0 (0.0)	0.0 (0.0)	2.2 (0.3)	1.6 (0.2)
10	0.1 (0.0)	0.1 (0.0)	1.9 (0.3)	1.3 (0.2)	0.1 (0.0)	0.1 (0.0)	2.3 (0.4)	1.6 (0.3)
11	0.0 (0.0)	0.0 (0.0)	1.6 (0.5)	1.2 (0.4)	0.1 (0.1)	0.0 (0.0)	2.2 (0.6)	1.5 (0.4)
12	0.0 (0.0)	0.0 (0.0)	1.3 (0.1)	0.9 (0.1)	0.0 (0.0)	0.0 (0.0)	1.7 (0.2)	1.2 (0.1)
13	0.1 (0.0)	0.0 (0.0)	1.6 (0.3)	1.1 (0.2)	0.0 (0.0)	0.0 (0.0)	2.5 (0.2)	1.8 (0.2)
14	0.1 (0.0)	0.0 (0.0)	1.9 (0.2)	1.4 (0.1)	0.0 (0.0)	0.0 (0.0)	2.2 (0.3)	1.6 (0.2)
15	0.0 (0.0)	0.0 (0.0)	1.7 (0.1)	1.2 (0.1)	0.0 (0.0)	0.0 (0.0)	2.1 (0.5)	1.5 (0.4)
16	0.0 (0.0)	0.0 (0.0)	1.7 (0.2)	1.2 (0.1)	-0.1 (0.0)	0.0 (0.0)	2.6 (0.7)	1.8 (0.5)
17	0.0 (0.0)	0.0 (0.0)	1.9 (0.3)	1.3 (0.2)	-0.1 (0.0)	-0.1 (0.0)	2.8 (0.3)	2.0 (0.2)
18	0.0 (0.0)	0.0 (0.0)	1.9 (0.6)	1.4 (0.4)	0.0 (0.0)	0.0 (0.0)	2.7 (0.6)	1.9 (0.4)
19	0.0 (0.0)	0.0 (0.0)			0.0 (0.0)	0.0 (0.0)		
20	0.0 (0.0)	0.0 (0.0)			-0.1 (0.0)	0.0 (0.0)		
21	0.0 (0.0)	0.0 (0.0)	2.4 (0.3)	1.7 (0.2)	-0.1 (0.0)	0.0 (0.0)	3.2 (0.2)	2.3 (0.2)
22	0.0 (0.0)	0.0 (0.0)	1.8 (0.6)	1.3 (0.4)	0.0 (0.0)	0.0 (0.0)	2.6 (0.6)	1.8 (0.4)
23	0.0 (0.0)	0.0 (0.0)			0.0 (0.0)	0.0 (0.0)		
24	0.0 (0.0)	0.0 (0.0)	1.9 (0.4)	1.3 (0.3)	0.0 (0.0)	0.0 (0.0)	2.6 (0.6)	1.9 (0.4)
25	0.0 (0.0)	0.0 (0.0)	2.5 (0.6)	1.8 (0.4)	0.0 (0.0)	0.0 (0.0)	3.2 (0.3)	2.2 (0.2)
26	0.1 (0.1)	0.1 (0.0)	2.3 (0.6)	1.6 (0.4)	0.0 (0.0)	0.0 (0.0)	2.8 (0.6)	2.0 (0.4)
27	0.1 (0.1)	0.1 (0.0)	2.0 (0.5)	1.5 (0.3)	0.0 (0.0)	0.0 (0.0)	2.7 (0.8)	1.9 (0.5)
28	0.1 (0.0)	0.0 (0.0)	2.1 (0.3)	1.5 (0.2)	0.0 (0.0)	0.0 (0.0)	2.7 (0.5)	2.0 (0.3)
29	0.1 (0.0)	0.0 (0.0)			0.0 (0.0)	0.0 (0.0)		
30	0.0 (0.0)	0.0 (0.0)			0.0 (0.0)	0.0 (0.0)		
Avg	0.1	0.1	1.8	1.3	0	0	2.3	1.6
n	30	30	23	23	30	30	23	23
SD	0.1	0.1	0.3	0.2	0.1	0.1	0.5	0.4
Min	0.0	0.0	1.1	0.8	-0.1	-0.1	1.4	1.0
Max	0.3	0.2	2.5	1.8	0.2	0.2	3.2	2.3

ED_004549_00015842-00264

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for December, 2008. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.0 (0.0)	0.0 (0.0)			0.0 (0.0)	0.0 (0.0)		
2	0.0 (0.0)	0.0 (0.0)	2.0 (0.7)	1.4 (0.5)	0.0 (0.0)	0.0 (0.0)	2.5 (0.7)	1.8 (0.5)
3	0.0 (0.0)	0.0 (0.0)	2.3 (0.4)	1.6 (0.3)	-0.1 (0.0)	-0.1 (0.0)	2.6 (0.2)	1.8 (0.1)
4	0.0 (0.0)	0.0 (0.0)	2.6 (0.3)	1.9 (0.2)	-0.1 (0.0)	-0.1 (0.0)	2.6 (0.3)	1.8 (0.2)
5	0.0 (0.0)	0.0 (0.0)	2.3 (0.4)	1.6 (0.3)	-0.1 (0.0)	0.0 (0.0)	2.4 (0.2)	1.7 (0.1)
6	0.0 (0.0)	0.0 (0.0)	2.3 (0.4)	1.6 (0.3)	-0.1 (0.0)	-0.1 (0.0)	2.1 (0.3)	1.5 (0.2)
7	0.0 (0.0)	0.0 (0.0)	2.6 (0.4)	1.9 (0.3)	-0.1 (0.0)	-0.1 (0.0)	2.2 (0.3)	1.6 (0.2)
8								
9								
10								
11	0.0 (0.0)	0.0 (0.0)	2.4 (0.4)	1.7 (0.3)	-0.1 (0.0)	-0.1 (0.0)	2.1 (0.3)	1.5 (0.2)
12	0.0 (0.0)	0.0 (0.0)	2.5 (0.3)	1.8 (0.2)	-0.1 (0.0)	0.0 (0.0)	2.1 (0.2)	1.5 (0.2)
13	0.0 (0.0)	0.0 (0.0)	1.1 (0.3)	0.8 (0.2)	0.0 (0.0)	0.0 (0.0)	1.7 (0.2)	1.2 (0.2)
14	0.0 (0.0)	0.0 (0.0)			0.0 (0.0)	0.0 (0.0)		
15	0.0 (0.0)	0.0 (0.0)			-0.1 (0.0)	-0.1 (0.0)		
16	0.0 (0.0)	0.0 (0.0)	3.1 (0.2)	2.2 (0.1)	-0.1 (0.0)	-0.1 (0.0)	3.0 (0.3)	2.1 (0.2)
17	0.0 (0.0)	0.0 (0.0)	3.3 (0.4)	2.3 (0.3)	-0.1 (0.0)	-0.1 (0.0)	2.8 (0.4)	2.0 (0.3)
18	0.0 (0.0)	0.0 (0.0)	2.9 (0.6)	2.0 (0.4)	-0.1 (0.0)	0.0 (0.0)	2.6 (0.5)	1.9 (0.4)
19	0.0 (0.0)	0.0 (0.0)	2.0 (0.2)	1.5 (0.1)	-0.1 (0.0)	-0.1 (0.0)	1.9 (0.1)	1.3 (0.0)
20	0.0 (0.0)	0.0 (0.0)	1.9 (0.3)	1.4 (0.2)	-0.1 (0.0)	-0.1 (0.0)	1.7 (0.1)	1.2 (0.1)
21								
22								
23								
24	0.0 (0.0)	0.0 (0.0)	2.5 (0.4)	1.7 (0.2)	-0.1 (0.0)	0.0 (0.0)	2.2 (0.1)	1.6 (0.1)
25	0.0 (0.0)	0.0 (0.0)	2.4 (0.3)	1.7 (0.2)	-0.1 (0.0)	0.0 (0.0)	2.5 (0.2)	1.8 (0.1)
26	0.0 (0.0)	0.0 (0.0)	1.2 (0.4)	0.9 (0.3)	0.0 (0.0)	0.0 (0.0)	1.8 (0.4)	1.3 (0.3)
27	0.0 (0.0)	0.0 (0.0)	1.2 (0.2)	0.8 (0.1)	0.0 (0.0)	0.0 (0.0)	1.9 (0.3)	1.4 (0.2)
28	0.0 (0.0)	0.0 (0.0)	1.6 (0.3)	1.1 (0.2)	-0.1 (0.0)	-0.1 (0.0)	2.0 (0.2)	1.4 (0.1)
29	0.0 (0.0)	0.0 (0.0)	1.3 (0.4)	0.9 (0.3)	-0.1 (0.0)	0.0 (0.0)	2.1 (0.2)	1.5 (0.2)
30	0.0 (0.0)	0.0 (0.0)	2.1 (0.1)	1.5 (0.1)	-0.1 (0.0)	-0.1 (0.0)	2.0 (0.2)	1.4 (0.1)
31	0.0 (0.0)	0.0 (0.0)	2.4 (0.4)	1.7 (0.3)	-0.1 (0.0)	-0.1 (0.0)	2.4 (0.5)	1.7 (0.3)
Avg	0	0	2.2	1.6	-0.1	0	2.2	1.6
n	25	25	22	22	25	25	22	22
SD	0	0	0.6	0.4	0	0	0.3	0.2
Min	0.0	0.0	1.1	0.8	-0.1	-0.1	1.7	1.2
Max	0.0	0.0	3.3	2.3	0.0	0.0	3.0	2.1

ED_004549_00015842-00265

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for January, 2009. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.0 (0.0)	0.0 (0.0)	1.7 (0.2)	1.2 (0.2)	-0.1 (0.0)	-0.1 (0.0)	2.1 (0.2)	1.5 (0.2)
2	0.0 (0.0)	0.0 (0.0)	1.9 (0.2)	1.3 (0.2)	-0.1 (0.0)	-0.1 (0.0)	1.8 (0.2)	1.3 (0.1)
3	0.0 (0.0)	0.0 (0.0)	1.5 (0.3)	1.1 (0.2)	0.0 (0.1)	0.0 (0.1)	1.7 (0.2)	1.2 (0.1)
4	0.0 (0.0)	0.0 (0.0)	1.8 (0.2)	1.3 (0.2)	-0.1 (0.0)	-0.1 (0.0)	1.6 (0.3)	1.1 (0.2)
5	0.0 (0.0)	0.0 (0.0)	2.2 (0.4)	1.5 (0.3)	-0.1 (0.0)	0.0 (0.0)	2.0 (0.2)	1.4 (0.1)
6	0.0 (0.0)	0.0 (0.0)	1.9 (0.2)	1.4 (0.1)	-0.1 (0.0)	0.0 (0.0)	2.0 (0.2)	1.4 (0.2)
7	0.0 (0.0)	0.0 (0.0)	1.9 (0.1)	1.3 (0.1)	-0.1 (0.0)	0.0 (0.0)	1.6 (0.1)	1.1 (0.1)
8	0.0 (0.0)	0.0 (0.0)	1.9 (0.2)	1.3 (0.1)	-0.1 (0.0)	-0.1 (0.0)	1.6 (0.2)	1.1 (0.2)
9	0.0 (0.0)	0.0 (0.0)	1.9 (0.3)	1.4 (0.2)	-0.1 (0.0)	-0.1 (0.0)	1.5 (0.1)	1.1 (0.1)
10	0.0 (0.0)	0.0 (0.0)	1.8 (0.2)	1.3 (0.1)	-0.1 (0.0)	-0.1 (0.0)	1.5 (0.1)	1.1 (0.1)
11	0.0 (0.0)	0.0 (0.0)	1.7 (0.1)	1.2 (0.1)	-0.1 (0.0)	-0.1 (0.0)	1.7 (0.1)	1.2 (0.1)
12	0.0 (0.0)	0.0 (0.0)	2.0 (0.3)	1.4 (0.2)	-0.1 (0.0)	-0.1 (0.0)	1.8 (0.3)	1.3 (0.2)
13	-0.1 (0.0)	0.0 (0.0)	2.1 (0.3)	1.5 (0.2)	-0.1 (0.0)	-0.1 (0.0)	2.1 (0.4)	1.5 (0.3)
14	0.0 (0.0)	0.0 (0.0)	2.5 (0.2)	1.8 (0.1)	-0.1 (0.0)	-0.1 (0.0)	2.4 (0.2)	1.7 (0.1)
15	0.0 (0.0)	0.0 (0.0)	2.7 (0.2)	1.9 (0.1)	-0.1 (0.0)	-0.1 (0.0)	3.0 (0.2)	2.1 (0.2)
16	0.0 (0.0)	0.0 (0.0)	3.0 (0.3)	2.1 (0.2)	-0.1 (0.0)	-0.1 (0.0)	3.0 (0.4)	2.2 (0.3)
17	0.0 (0.0)	0.0 (0.0)	2.7 (0.2)	1.9 (0.2)	-0.1 (0.0)	-0.1 (0.0)	2.5 (0.2)	1.8 (0.2)
18	0.0 (0.0)	0.0 (0.0)	2.7 (0.1)	1.9 (0.1)	-0.1 (0.0)	-0.1 (0.0)	2.4 (0.2)	1.7 (0.1)
19	0.0 (0.0)	0.0 (0.0)	2.7 (0.3)	1.9 (0.2)	-0.1 (0.0)	-0.1 (0.0)	2.4 (0.1)	1.7 (0.1)
20	0.0 (0.0)	0.0 (0.0)	2.3 (0.4)	1.6 (0.3)	-0.1 (0.0)	-0.1 (0.0)	2.2 (0.2)	1.6 (0.1)
21	0.0 (0.0)	0.0 (0.0)	1.8 (0.2)	1.3 (0.2)	-0.1 (0.0)	-0.1 (0.0)	2.0 (0.1)	1.4 (0.1)
22	0.0 (0.0)	0.0 (0.0)	1.9 (0.2)	1.3 (0.1)	-0.1 (0.0)	-0.1 (0.0)	1.9 (0.1)	1.3 (0.1)
23	-0.1 (0.0)	0.0 (0.0)	2.0 (0.2)	1.4 (0.1)	-0.1 (0.0)	-0.1 (0.0)	1.7 (0.2)	1.2 (0.1)
24	0.0 (0.0)	0.0 (0.0)	2.4 (0.4)	1.7 (0.3)	-0.1 (0.0)	-0.1 (0.0)	2.5 (0.4)	1.8 (0.3)
25	0.0 (0.0)	0.0 (0.0)	2.6 (0.4)	1.8 (0.3)	-0.1 (0.0)	-0.1 (0.0)	2.7 (0.5)	1.9 (0.3)
26	0.0 (0.0)	0.0 (0.0)	2.6 (0.5)	1.8 (0.3)	-0.1 (0.0)	-0.1 (0.0)	2.6 (0.4)	1.8 (0.3)
27	0.0 (0.0)	0.0 (0.0)	2.2 (0.4)	1.6 (0.3)	-0.1 (0.0)	-0.1 (0.0)	2.4 (0.5)	1.7 (0.4)
28	0.0 (0.0)	0.0 (0.0)	2.2 (0.3)	1.6 (0.2)	-0.1 (0.0)	-0.1 (0.0)	2.1 (0.3)	1.5 (0.2)
29	0.0 (0.0)	0.0 (0.0)	1.8 (0.2)	1.3 (0.1)	-0.1 (0.0)	-0.1 (0.0)	1.7 (0.2)	1.2 (0.1)
30	0.0 (0.0)	0.0 (0.0)	2.0 (0.4)	1.4 (0.3)	-0.1 (0.0)	-0.1 (0.0)	1.8 (0.2)	1.3 (0.2)
31	0.0 (0.0)	0.0 (0.0)	1.3 (0.3)	0.9 (0.2)	-0.1 (0.0)	0.0 (0.0)	1.9 (0.4)	1.3 (0.3)
Avg	0	0	2.1	1.5	-0.1	-0.1	2.1	1.5
n	31	31	31	31	31	31	31	31
SD	0	0	0.4	0.3	0	0	0.4	0.3
Min	-0.1	0.0	1.3	0.9	-0.1	-0.1	1.5	1.1
Max	0.0	0.0	3.0	2.1	0.0	0.0	3.0	2.2

ED_004549_00015842-00266

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for February, 2009. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.0 (0.0)	0.0 (0.0)	1.3 (0.3)	0.9 (0.2)	-0.1 (0.0)	-0.1 (0.0)	1.7 (0.2)	1.2 (0.2)
2	-0.1 (0.0)	0.0 (0.0)	2.0 (0.2)	1.4 (0.1)	-0.1 (0.0)	-0.1 (0.0)	1.7 (0.1)	1.2 (0.1)
3	-0.1 (0.0)	0.0 (0.0)	2.0 (0.2)	1.4 (0.1)	-0.1 (0.0)	-0.1 (0.0)	1.7 (0.3)	1.2 (0.2)
4	0.0 (0.0)	0.0 (0.0)	2.3 (0.6)	1.6 (0.4)	-0.1 (0.0)	-0.1 (0.0)	2.0 (0.4)	1.4 (0.3)
5	0.0 (0.0)	0.0 (0.0)	1.5 (0.3)	1.0 (0.2)	-0.1 (0.0)	-0.1 (0.0)	1.7 (0.2)	1.2 (0.1)
6	0.0 (0.0)	0.0 (0.0)	1.2 (0.3)	0.8 (0.2)	-0.1 (0.0)	0.0 (0.0)	1.4 (0.2)	1.0 (0.1)
7	0.0 (0.0)	0.0 (0.0)	1.0 (0.1)	0.7 (0.1)	0.0 (0.0)	0.0 (0.0)	1.2 (0.2)	0.9 (0.1)
8	0.0 (0.0)	0.0 (0.0)	1.3 (0.3)	0.9 (0.2)	-0.1 (0.0)	0.0 (0.0)	1.5 (0.2)	1.1 (0.2)
9	0.0 (0.0)	0.0 (0.0)			-0.1 (0.0)	0.0 (0.0)		
10	0.0 (0.0)	0.0 (0.0)	0.9 (0.1)	0.7 (0.1)	-0.1 (0.0)	0.0 (0.0)	1.5 (0.2)	1.1 (0.1)
11	0.0 (0.1)	0.0 (0.1)	1.4 (0.2)	1.0 (0.1)	0.2 (0.2)	0.2 (0.2)	1.5 (0.1)	1.1 (0.1)
12	0.1 (0.1)	0.1 (0.0)	1.6 (0.2)	1.1 (0.1)	0.0 (0.0)	0.0 (0.0)	2.5 (0.4)	1.7 (0.3)
13	0.0 (0.0)	0.0 (0.0)	2.1 (0.4)	1.5 (0.3)	0.0 (0.0)	0.0 (0.0)	3.0 (0.2)	2.1 (0.1)
14	0.0 (0.0)	0.0 (0.0)	2.9 (0.3)	2.1 (0.2)	0.0 (0.0)	0.0 (0.0)	3.3 (0.2)	2.3 (0.1)
15	0.1 (0.0)	0.1 (0.0)	3.1 (0.4)	2.2 (0.3)	0.0 (0.0)	0.0 (0.0)	3.5 (0.2)	2.5 (0.2)
16	0.1 (0.0)	0.1 (0.0)	2.5 (0.9)	1.8 (0.6)	0.0 (0.0)	0.0 (0.0)	3.3 (0.7)	2.3 (0.5)
17	0.1 (0.0)	0.0 (0.0)	1.6 (0.4)	1.1 (0.3)	0.0 (0.0)	0.0 (0.0)	2.3 (1.0)	1.6 (0.7)
18	0.0 (0.0)	0.0 (0.0)	1.7 (0.3)	1.2 (0.2)	-0.1 (0.0)	-0.1 (0.0)	1.9 (0.4)	1.3 (0.3)
19	0.0 (0.0)	0.0 (0.0)	1.9 (0.1)	1.4 (0.1)	-0.1 (0.0)	-0.1 (0.0)	2.0 (0.1)	1.4 (0.1)
20	0.0 (0.0)	0.0 (0.0)	2.2 (0.3)	1.5 (0.2)	-0.1 (0.0)	-0.1 (0.0)	2.4 (0.3)	1.7 (0.2)
21	0.0 (0.0)	0.0 (0.0)	2.1 (0.1)	1.5 (0.1)	-0.1 (0.0)	-0.1 (0.0)	2.0 (0.2)	1.4 (0.1)
22	0.0 (0.0)	0.0 (0.0)	2.1 (0.1)	1.5 (0.1)	-0.1 (0.0)	-0.1 (0.0)	2.0 (0.2)	1.4 (0.1)
23	0.0 (0.0)	0.0 (0.0)	2.6 (0.4)	1.8 (0.3)	-0.1 (0.0)	-0.1 (0.0)	2.4 (0.4)	1.7 (0.3)
24	0.0 (0.0)	0.0 (0.0)	1.8 (0.7)	1.3 (0.5)	0.0 (0.0)	0.0 (0.0)	2.0 (0.4)	1.4 (0.3)
25	0.0 (0.0)	0.0 (0.0)	1.3 (0.2)	0.9 (0.2)	0.0 (0.0)	0.0 (0.0)	1.5 (0.2)	1.1 (0.2)
26	0.0 (0.0)	0.0 (0.0)	1.7 (0.3)	1.2 (0.2)	0.0 (0.0)	0.0 (0.0)	1.7 (0.2)	1.2 (0.2)
27	0.0 (0.0)	0.0 (0.0)	2.2 (0.2)	1.6 (0.2)	0.0 (0.0)	0.0 (0.0)	1.5 (0.1)	1.1 (0.1)
28	0.0 (0.0)	0.0 (0.0)	2.4 (0.4)	1.7 (0.3)	0.0 (0.0)	0.0 (0.0)	1.9 (0.3)	1.4 (0.2)
Avg	0	0	1.9	1.3	0	0	2	1.5
n	28	28	27	27	28	28	27	27
SD	0	0	0.6	0.4	0.1	0	0.6	0.4
Min	-0.1	0.0	0.9	0.7	-0.1	-0.1	1.2	0.9
Max	0.1	0.1	3.1	2.2	0.2	0.2	3.5	2.5

ED_004549_00015842-00267

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for March, 2009. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.0 (0.0)	0.0 (0.0)	2.1 (0.2)	1.5 (0.1)	0.0 (0.0)	0.0 (0.0)	1.8 (0.1)	1.3 (0.1)
2	0.0 (0.0)				0.0 (0.0)			
3	0.0 (0.0)				0.0 (0.0)			
4	0.0 (0.0)	0.0 (0.0)	1.1 (0.3)	0.8 (0.2)	0.0 (0.0)	0.0 (0.0)	1.7 (0.4)	1.2 (0.3)
5	0.0 (0.0)	0.0 (0.0)	1.0 (0.1)	0.7 (0.1)	0.0 (0.0)	0.0 (0.0)	1.3 (0.0)	0.9 (0.0)
6	0.0 (0.0)	0.0 (0.0)	1.3 (0.2)	0.9 (0.1)	0.0 (0.0)	0.0 (0.0)	1.5 (0.1)	1.1 (0.1)
7	0.0 (0.0)	0.0 (0.0)	1.4 (0.2)	1.0 (0.1)	0.0 (0.0)	0.0 (0.0)	1.7 (0.3)	1.2 (0.2)
8	0.0 (0.0)	0.0 (0.0)	1.3 (0.2)	1.0 (0.1)	0.0 (0.0)	0.0 (0.0)	1.9 (0.5)	1.3 (0.3)
9	0.1 (0.0)	0.1 (0.0)	1.4 (0.4)	1.0 (0.3)	0.0 (0.0)	0.0 (0.0)	2.2 (0.7)	1.6 (0.5)
10	0.0 (0.0)	0.0 (0.0)	1.4 (0.4)	1.0 (0.2)	0.0 (0.0)	0.0 (0.0)	1.4 (0.3)	1.0 (0.2)
11	0.0 (0.0)	0.0 (0.0)	2.1 (0.2)	1.5 (0.1)	-0.1 (0.0)	0.0 (0.0)	1.8 (0.1)	1.3 (0.1)
12	0.0 (0.0)	0.0 (0.0)	2.1 (0.3)	1.5 (0.2)	-0.1 (0.0)	0.0 (0.0)	2.0 (0.2)	1.4 (0.1)
13	0.0 (0.0)	0.0 (0.0)	1.3 (0.4)	0.9 (0.3)	0.0 (0.0)	0.0 (0.0)	1.6 (0.3)	1.1 (0.2)
14	0.0 (0.0)	0.0 (0.0)	1.1 (0.2)	0.8 (0.1)	0.0 (0.0)	0.0 (0.0)	1.5 (0.2)	1.1 (0.1)
15	0.0 (0.0)	0.0 (0.0)	1.0 (0.1)	0.7 (0.1)	0.0 (0.0)	0.0 (0.0)	1.4 (0.2)	1.0 (0.1)
16	0.1 (0.0)	0.1 (0.0)	1.2 (0.1)	0.8 (0.1)	0.1 (0.0)	0.0 (0.0)	1.8 (0.1)	1.3 (0.1)
17	0.2 (0.1)	0.2 (0.1)	1.5 (0.2)	1.1 (0.2)	0.0 (0.0)	0.0 (0.0)	1.9 (0.3)	1.4 (0.2)
18	0.1 (0.1)	0.1 (0.1)	1.6 (0.3)	1.2 (0.2)	0.0 (0.0)	0.0 (0.0)	2.0 (0.3)	1.4 (0.2)
19			2.1 (0.3)	1.5 (0.2)			2.4 (0.6)	1.7 (0.4)
20								
21								
22								
23								
24								
25	0.0 (0.0)	0.0 (0.0)	1.2 (0.2)	0.9 (0.1)	0.0 (0.0)	0.0 (0.0)	2.2 (0.2)	1.5 (0.1)
26	0.1 (0.0)	0.0 (0.0)			0.0 (0.0)	0.0 (0.0)		
27	0.1 (0.0)	0.0 (0.0)			0.0 (0.0)	0.0 (0.0)		
28	0.1 (0.0)	0.0 (0.0)	2.2 (0.3)	1.5 (0.2)	0.0 (0.0)	0.0 (0.0)	2.4 (0.6)	1.7 (0.5)
29	0.0 (0.0)	0.0 (0.0)	2.0 (0.3)	1.4 (0.2)	0.0 (0.0)	0.0 (0.0)	2.2 (0.5)	1.6 (0.3)
30	0.0 (0.0)	0.0 (0.0)	1.8 (0.2)	1.3 (0.1)	0.0 (0.0)	0.0 (0.0)	1.9 (0.3)	1.3 (0.2)
31	0.1 (0.0)	0.1 (0.0)	1.5 (0.2)	1.1 (0.1)	0.0 (0.0)	0.0 (0.0)	1.9 (0.4)	1.4 (0.3)
Avg	0	0	1.5	1.1	0	0	1.8	1.3
n	25	23	22	22	25	23	22	22
SD	0	0	0.4	0.3	0	0	0.3	0.2
Min	0.0	0.0	1.0	0.7	-0.1	0.0	1.3	0.9
Max	0.2	0.2	2.2	1.5	0.1	0.0	2.4	1.7

ED_004549_00015842-00268

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for April, 2009. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.1 (0.0)	0.0 (0.0)	1.4 (0.1)	1.0 (0.1)	0.0 (0.0)	0.0 (0.0)	2.0 (0.1)	1.4 (0.1)
2	0.1 (0.0)	0.0 (0.0)	1.8 (0.2)	1.3 (0.1)	0.0 (0.0)	0.0 (0.0)	2.1 (0.2)	1.5 (0.1)
3	0.1 (0.0)	0.0 (0.0)	1.9 (0.2)	1.3 (0.1)	0.0 (0.0)	0.0 (0.0)	1.9 (0.1)	1.3 (0.1)
4	0.1 (0.0)	0.0 (0.0)	1.9 (0.2)	1.4 (0.1)	0.0 (0.0)	0.0 (0.0)	2.1 (0.6)	1.5 (0.4)
5	0.0 (0.0)	0.0 (0.0)	1.7 (0.1)	1.2 (0.1)	0.0 (0.0)	0.0 (0.0)	1.2 (0.2)	0.9 (0.1)
6	0.0 (0.0)	0.0 (0.0)	1.6 (0.2)	1.1 (0.2)	0.0 (0.0)	0.0 (0.0)	1.4 (0.4)	1.0 (0.3)
7	0.1 (0.1)	0.1 (0.1)	1.8 (0.1)	1.3 (0.1)	0.0 (0.0)	0.0 (0.0)	2.1 (0.3)	1.5 (0.2)
8	0.1 (0.0)	0.1 (0.0)	1.8 (0.2)	1.3 (0.2)	0.0 (0.0)	0.0 (0.0)	2.0 (0.4)	1.4 (0.3)
9	0.1 (0.0)	0.1 (0.0)	1.9 (0.2)	1.3 (0.1)	0.0 (0.0)	0.0 (0.0)	2.0 (0.3)	1.4 (0.2)
10	0.0 (0.0)	0.0 (0.0)	1.7 (0.2)	1.2 (0.2)	0.0 (0.0)	0.0 (0.0)	1.6 (0.3)	1.1 (0.2)
11	0.1 (0.0)	0.1 (0.0)	1.4 (0.3)	1.0 (0.2)	0.0 (0.0)	0.0 (0.0)	1.7 (0.4)	1.2 (0.3)
12	0.1 (0.0)	0.0 (0.0)	1.3 (0.1)	0.9 (0.1)	0.0 (0.0)	0.0 (0.0)	1.6 (0.3)	1.1 (0.2)
13	0.0 (0.0)	0.0 (0.0)	1.5 (0.2)	1.1 (0.2)	0.0 (0.0)	0.0 (0.0)	1.6 (0.4)	1.2 (0.3)
14	0.1 (0.0)	0.1 (0.0)	2.1 (0.3)	1.5 (0.2)	0.0 (0.0)	0.0 (0.0)	2.0 (0.3)	1.4 (0.2)
15	0.5 (0.6)	0.4 (0.4)	1.7 (0.4)	1.2 (0.3)	0.0 (0.0)	0.0 (0.0)	1.9 (0.4)	1.3 (0.3)
16	0.4 (0.3)	0.3 (0.2)	1.4 (0.4)	1.0 (0.3)	0.1 (0.0)	0.1 (0.0)	1.9 (0.4)	1.3 (0.3)
17	0.5 (0.3)	0.4 (0.2)	1.3 (0.3)	0.9 (0.2)	0.2 (0.1)	0.1 (0.0)	1.7 (0.3)	1.2 (0.2)
18	0.3 (0.3)	0.2 (0.2)	1.6 (0.3)	1.1 (0.2)	0.1 (0.1)	0.0 (0.1)	1.4 (0.3)	1.0 (0.2)
19	0.1 (0.0)	0.1 (0.0)	2.1 (0.3)	1.5 (0.2)	0.0 (0.0)	0.0 (0.0)	1.7 (0.3)	1.2 (0.2)
20	0.1 (0.0)	0.1 (0.0)	1.9 (0.2)	1.3 (0.1)	0.0 (0.0)	0.0 (0.0)	1.8 (0.3)	1.3 (0.2)
21	0.1 (0.0)	0.0 (0.0)	1.8 (0.2)	1.3 (0.1)	0.0 (0.0)	0.0 (0.0)	1.5 (0.4)	1.0 (0.3)
22	0.1 (0.0)	0.0 (0.0)	1.9 (0.5)	1.3 (0.3)	0.0 (0.1)	0.0 (0.0)	1.7 (0.3)	1.2 (0.2)
23	0.1 (0.0)	0.1 (0.0)	1.1 (0.3)	0.8 (0.2)	0.1 (0.0)	0.1 (0.0)	1.8 (0.4)	1.3 (0.3)
24	0.1 (0.0)	0.1 (0.0)	1.1 (0.3)	0.8 (0.2)	0.1 (0.1)	0.1 (0.0)	1.4 (0.4)	1.0 (0.3)
25	0.1 (0.0)	0.0 (0.0)	1.4 (0.4)	1.0 (0.3)	0.0 (0.0)	0.0 (0.0)	1.6 (0.2)	1.1 (0.1)
26	0.1 (0.0)	0.0 (0.0)	1.3 (0.2)	0.9 (0.1)	0.0 (0.0)	0.0 (0.0)	1.9 (0.2)	1.4 (0.2)
27	0.1 (0.0)	0.1 (0.0)	1.4 (0.3)	1.0 (0.2)	0.0 (0.0)	0.0 (0.0)	2.2 (0.4)	1.6 (0.3)
28	0.1 (0.0)	0.0 (0.0)	1.5 (0.2)	1.0 (0.1)	0.0 (0.0)	0.0 (0.0)	1.9 (0.4)	1.4 (0.3)
29	0.1 (0.0)	0.1 (0.0)	1.4 (0.3)	1.0 (0.2)	0.1 (0.0)	0.1 (0.0)	1.8 (0.2)	1.3 (0.2)
30	0.1 (0.0)	0.1 (0.0)	1.3 (0.2)	0.9 (0.1)	0.1 (0.1)	0.0 (0.0)	1.8 (0.1)	1.3 (0.1)
Avg	0.1	0.1	1.6	1.1	0	0	1.8	1.3
n	30	30	30	30	30	30	30	30
SD	0.1	0.1	0.3	0.2	0.1	0	0.2	0.2
Min	0.0	0.0	1.1	0.8	0.0	0.0	1.2	0.9
Max	0.5	0.4	2.1	1.5	0.2	0.1	2.2	1.6

ED_004549_00015842-00269

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for May, 2009. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.1 (0.0)	0.1 (0.0)	1.6 (0.3)	1.1 (0.2)	0.0 (0.0)	0.0 (0.0)	1.9 (0.5)	1.4 (0.3)
2	0.1 (0.0)	0.1 (0.0)	1.6 (0.3)	1.1 (0.2)	0.0 (0.0)	0.0 (0.0)	1.9 (0.5)	1.4 (0.3)
3	0.2 (0.1)	0.1 (0.1)	1.4 (0.3)	1.0 (0.2)	0.0 (0.0)	0.0 (0.0)	1.9 (0.3)	1.4 (0.2)
4	0.4 (0.3)	0.3 (0.2)	1.4 (0.5)	1.0 (0.3)	0.1 (0.1)	0.1 (0.0)	1.7 (0.4)	1.2 (0.3)
5	0.1 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.2)	0.1 (0.0)	0.1 (0.0)	1.6 (0.2)	1.2 (0.2)
6	0.1 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.2)	0.2 (0.1)	0.1 (0.0)	1.4 (0.2)	1.0 (0.1)
7	0.1 (0.0)	0.1 (0.0)	1.1 (0.2)	0.7 (0.1)	0.0 (0.1)	0.0 (0.1)	1.4 (0.3)	1.0 (0.2)
8	0.1 (0.0)	0.1 (0.0)	1.6 (0.2)	1.1 (0.1)	0.0 (0.0)	0.0 (0.0)	1.7 (0.2)	1.2 (0.1)
9	0.1 (0.0)	0.1 (0.0)	1.6 (0.3)	1.1 (0.2)	0.0 (0.0)	0.0 (0.0)	1.5 (0.4)	1.1 (0.3)
10	0.1 (0.0)	0.1 (0.0)	1.7 (0.4)	1.2 (0.3)	0.0 (0.0)	0.0 (0.0)	1.7 (0.4)	1.2 (0.3)
11	0.2 (0.0)	0.1 (0.0)	1.5 (0.5)	1.1 (0.3)	0.2 (0.1)	0.1 (0.1)	1.7 (0.2)	1.2 (0.2)
12	0.1 (0.0)	0.0 (0.0)	1.1 (0.1)	0.8 (0.1)	0.1 (0.1)	0.1 (0.0)	1.5 (0.2)	1.1 (0.2)
13	0.1 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.1)	0.0 (0.0)	0.0 (0.0)	1.5 (0.2)	1.1 (0.1)
14	0.1 (0.0)	0.1 (0.0)	1.4 (0.1)	1.0 (0.1)	0.0 (0.1)	0.0 (0.1)	1.5 (0.1)	1.1 (0.1)
15	0.1 (0.0)	0.0 (0.0)	1.2 (0.2)	0.8 (0.1)	0.1 (0.1)	0.0 (0.0)	1.5 (0.2)	1.1 (0.1)
16	0.1 (0.0)	0.1 (0.0)	1.5 (0.3)	1.1 (0.2)	0.0 (0.0)	0.0 (0.0)	1.4 (0.4)	1.0 (0.3)
17	0.1 (0.0)	0.1 (0.0)	1.4 (0.4)	1.0 (0.3)	0.0 (0.1)	0.0 (0.0)	2.0 (0.4)	1.4 (0.3)
18	0.1 (0.0)	0.0 (0.0)	1.0 (0.2)	0.7 (0.1)	0.1 (0.0)	0.1 (0.0)	1.6 (0.3)	1.1 (0.2)
19	0.1 (0.0)	0.1 (0.0)	0.9 (0.3)	0.6 (0.2)	0.1 (0.0)	0.1 (0.0)	1.4 (0.3)	1.0 (0.2)
20	0.1 (0.0)	0.1 (0.0)	0.5 (0.3)	0.4 (0.2)	0.1 (0.0)	0.1 (0.0)	0.9 (0.3)	0.7 (0.2)
21	0.0 (0.0)	0.0 (0.0)	0.5 (0.3)	0.3 (0.2)	-0.1 (0.0)	0.0 (0.0)	0.5 (0.4)	0.4 (0.3)
22	0.1 (0.0)	0.1 (0.0)	0.9 (0.3)	0.7 (0.2)	0.1 (0.1)	0.1 (0.1)	1.2 (0.2)	0.9 (0.1)
23	0.2 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.2)	0.0 (0.1)	0.0 (0.1)	1.3 (0.3)	0.9 (0.2)
24	0.2 (0.0)	0.1 (0.0)	1.3 (0.4)	0.9 (0.3)	0.0 (0.0)	0.0 (0.0)	1.6 (0.2)	1.2 (0.1)
25	0.2 (0.0)	0.2 (0.0)	0.9 (0.3)	0.7 (0.2)	0.0 (0.1)	0.0 (0.1)	1.4 (0.3)	1.0 (0.2)
26	0.1 (0.0)	0.1 (0.0)	1.4 (0.2)	1.0 (0.1)	0.1 (0.1)	0.1 (0.0)	1.7 (0.2)	1.2 (0.1)
27	0.1 (0.0)	0.1 (0.0)	1.7 (0.2)	1.2 (0.1)	0.0 (0.0)	0.0 (0.0)	1.2 (0.2)	0.8 (0.1)
28	0.2 (0.0)	0.1 (0.0)	1.3 (0.2)	1.0 (0.2)	0.0 (0.1)	0.0 (0.1)	1.3 (0.2)	0.9 (0.1)
29	0.1 (0.0)	0.1 (0.0)	1.3 (0.3)	1.0 (0.2)	0.0 (0.0)	0.0 (0.0)	1.2 (0.2)	0.9 (0.1)
30	0.1 (0.1)	0.1 (0.0)	1.4 (0.3)	1.0 (0.2)	0.0 (0.0)	0.0 (0.0)	1.3 (0.3)	0.9 (0.2)
31	0.2 (0.1)	0.1 (0.0)	1.3 (0.6)	0.9 (0.4)	0.1 (0.0)	0.1 (0.0)	1.9 (0.5)	1.4 (0.4)
Avg	0.1	0.1	1.2	0.9	0	0	1.5	1.1
n	31	31	31	31	31	31	31	31
SD	0.1	0.1	0.3	0.2	0.1	0	0.3	0.2
Min	0.0	0.0	0.5	0.3	-0.1	0.0	0.5	0.4
Max	0.4	0.3	1.7	1.2	0.2	0.1	2.0	1.4

ED_004549_00015842-00270

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for June, 2009. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.1 (0.0)	0.1 (0.0)	1.3 (0.3)	1.0 (0.2)	0.0 (0.0)	0.0 (0.0)	1.4 (0.2)	1.0 (0.2)
2	0.1 (0.0)	0.1 (0.0)	1.2 (0.1)	0.8 (0.1)	0.0 (0.1)	0.0 (0.0)	1.3 (0.3)	0.9 (0.2)
3	0.1 (0.1)	0.1 (0.1)	1.4 (0.3)	1.0 (0.2)	0.0 (0.1)	0.0 (0.0)	1.7 (0.4)	1.2 (0.3)
4	0.2 (0.1)	0.1 (0.1)	1.5 (0.5)	1.1 (0.4)	0.1 (0.1)	0.0 (0.0)	1.8 (0.5)	1.3 (0.4)
5	0.2 (0.1)	0.1 (0.0)	1.5 (0.2)	1.1 (0.1)	0.0 (0.1)	0.0 (0.1)	1.5 (0.3)	1.1 (0.2)
6	0.1 (0.0)	0.0 (0.0)	1.4 (0.3)	1.0 (0.2)	0.0 (0.0)	0.0 (0.0)	1.6 (0.5)	1.1 (0.4)
7	0.1 (0.0)	0.0 (0.0)	1.3 (0.1)	1.0 (0.1)	0.0 (0.0)	0.0 (0.0)	1.4 (0.2)	1.0 (0.2)
8	0.1 (0.0)	0.1 (0.0)	1.4 (0.1)	1.0 (0.1)	0.0 (0.0)	0.0 (0.0)	1.3 (0.1)	1.0 (0.1)
9	0.1 (0.0)	0.1 (0.0)	1.4 (0.1)	1.0 (0.1)	0.1 (0.1)	0.0 (0.1)	1.6 (0.2)	1.1 (0.1)
10	0.1 (0.0)	0.1 (0.0)	1.5 (0.2)	1.1 (0.1)	0.1 (0.1)	0.1 (0.0)	1.7 (0.2)	1.2 (0.1)
11	0.2 (0.0)	0.1 (0.0)	1.2 (0.2)	0.9 (0.1)	0.0 (0.0)	0.0 (0.0)	1.4 (0.4)	1.0 (0.3)
12	0.1 (0.0)	0.1 (0.0)	1.2 (0.3)	0.9 (0.2)	0.1 (0.0)	0.1 (0.0)	1.5 (0.3)	1.1 (0.2)
13	0.1 (0.0)	0.1 (0.0)	1.3 (0.3)	0.9 (0.2)	0.1 (0.1)	0.1 (0.0)	1.6 (0.3)	1.2 (0.2)
14	0.2 (0.0)	0.2 (0.0)	1.1 (0.4)	0.8 (0.3)	0.3 (0.2)	0.2 (0.1)	1.3 (0.4)	0.9 (0.3)
15	0.2 (0.0)	0.1 (0.0)	1.0 (0.3)	0.7 (0.2)	0.2 (0.1)	0.2 (0.1)	1.3 (0.2)	0.9 (0.2)
16	0.1 (0.0)	0.1 (0.0)	0.9 (0.2)	0.6 (0.1)	0.0 (0.0)	0.0 (0.0)	1.1 (0.1)	0.8 (0.1)
17	0.1 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.2)	0.1 (0.0)	0.0 (0.0)	1.3 (0.1)	0.9 (0.1)
18	0.2 (0.0)	0.1 (0.0)	0.7 (0.1)	0.5 (0.1)	0.2 (0.0)	0.1 (0.0)	1.1 (0.1)	0.8 (0.1)
19	0.2 (0.0)	0.2 (0.0)	0.8 (0.1)	0.6 (0.1)	0.2 (0.1)	0.1 (0.1)	1.0 (0.1)	0.7 (0.1)
20	0.2 (0.0)	0.2 (0.0)	0.9 (0.1)	0.6 (0.1)	0.1 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.1)
21	0.3 (0.1)	0.2 (0.0)	1.0 (0.2)	0.7 (0.1)	0.2 (0.1)	0.1 (0.0)	1.1 (0.1)	0.8 (0.1)
22	0.3 (0.0)	0.2 (0.0)	1.0 (0.2)	0.7 (0.1)	0.4 (0.1)	0.3 (0.1)	1.3 (0.2)	0.9 (0.1)
23								
24								
25								
26								
27								
28								
29								
30								
Avg	0.2	0.1	1.2	0.8	0.1	0.1	1.4	1
n	22	22	22	22	22	22	22	22
SD	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2
Min	0.1	0.0	0.7	0.5	0.0	0.0	1.0	0.7
Max	0.3	0.2	1.5	1.1	0.4	0.3	1.8	1.3

ED_004549_00015842-00271

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for July, 2009. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1								
2								
3								
4								
5								
6								
7	0.2 (0.1)	0.2 (0.0)	1.3 (0.4)	0.9 (0.3)	0.1 (0.0)	0.1 (0.0)	1.4 (0.3)	1.0 (0.2)
8	0.2 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.1)	0.1 (0.1)	0.1 (0.1)	1.3 (0.2)	0.9 (0.1)
9	0.2 (0.0)	0.2 (0.0)	1.0 (0.3)	0.7 (0.2)	0.2 (0.0)	0.2 (0.0)	1.3 (0.3)	1.0 (0.2)
10	0.3 (0.0)	0.2 (0.0)	1.1 (0.2)	0.8 (0.1)	0.2 (0.1)	0.2 (0.1)	1.1 (0.2)	0.8 (0.1)
11	0.2 (0.0)	0.1 (0.0)	1.5 (0.3)	1.1 (0.2)	0.1 (0.1)	0.1 (0.1)	1.5 (0.4)	1.0 (0.3)
12	0.2 (0.0)	0.1 (0.0)	1.3 (0.3)	1.0 (0.2)	0.1 (0.1)	0.1 (0.0)	1.5 (0.3)	1.1 (0.2)
13	0.1 (0.0)	0.1 (0.0)	1.2 (0.2)	0.8 (0.2)	0.1 (0.0)	0.1 (0.0)	1.3 (0.2)	1.0 (0.2)
14	0.2 (0.1)	0.1 (0.0)	1.0 (0.1)	0.7 (0.0)	0.2 (0.0)	0.1 (0.0)	1.4 (0.1)	1.0 (0.1)
15	0.2 (0.0)	0.2 (0.0)	1.4 (0.2)	1.0 (0.1)	0.1 (0.0)	0.1 (0.0)	1.3 (0.2)	0.9 (0.1)
16	0.2 (0.0)	0.2 (0.0)	1.6 (0.3)	1.2 (0.2)	0.1 (0.0)	0.0 (0.0)	1.6 (0.2)	1.2 (0.2)
17	0.2 (0.0)	0.1 (0.0)	1.8 (0.2)	1.3 (0.1)	0.0 (0.0)	0.0 (0.0)	1.5 (0.2)	1.1 (0.1)
18	0.2 (0.0)	0.2 (0.0)	1.7 (0.1)	1.2 (0.1)	0.1 (0.0)	0.0 (0.0)	2.0 (0.2)	1.4 (0.1)
19	0.2 (0.0)	0.2 (0.0)	1.3 (0.3)	0.9 (0.2)	0.2 (0.1)	0.1 (0.1)	1.6 (0.3)	1.1 (0.2)
20	0.2 (0.1)	0.2 (0.0)	1.1 (0.3)	0.8 (0.2)	0.2 (0.0)	0.2 (0.0)	1.6 (0.2)	1.1 (0.2)
21	0.2 (0.0)	0.2 (0.0)	1.0 (0.2)	0.7 (0.1)	0.1 (0.0)	0.1 (0.0)	1.3 (0.2)	0.9 (0.1)
22	0.3 (0.0)	0.2 (0.0)	1.3 (0.3)	0.9 (0.2)	0.1 (0.0)	0.1 (0.0)	1.4 (0.2)	1.0 (0.2)
23	0.4 (0.0)	0.3 (0.0)	1.2 (0.3)	0.9 (0.2)	0.2 (0.0)	0.1 (0.0)	1.3 (0.3)	0.9 (0.2)
24	0.3 (0.0)	0.2 (0.0)	1.0 (0.1)	0.7 (0.1)	0.2 (0.0)	0.1 (0.0)	1.1 (0.1)	0.8 (0.1)
25	0.3 (0.0)	0.2 (0.0)	1.3 (0.2)	0.9 (0.1)	0.1 (0.0)	0.1 (0.0)	1.3 (0.3)	0.9 (0.2)
26	0.4 (0.0)	0.3 (0.0)	1.1 (0.2)	0.8 (0.1)	0.1 (0.0)	0.1 (0.0)	1.2 (0.3)	0.8 (0.2)
27	0.4 (0.0)	0.3 (0.0)	1.2 (0.3)	0.8 (0.2)	0.1 (0.0)	0.1 (0.0)	1.2 (0.2)	0.9 (0.2)
28	0.3 (0.0)	0.2 (0.0)	1.4 (0.1)	1.0 (0.1)	0.1 (0.0)	0.1 (0.0)	1.4 (0.3)	1.0 (0.2)
29	0.3 (0.0)	0.2 (0.0)	1.4 (0.2)	1.0 (0.2)	0.2 (0.1)	0.1 (0.0)	1.6 (0.3)	1.1 (0.2)
30	0.3 (0.0)	0.2 (0.0)	1.5 (0.2)	1.0 (0.1)	0.2 (0.1)	0.1 (0.0)	1.4 (0.3)	1.0 (0.2)
31	0.3 (0.1)	0.2 (0.0)	1.3 (0.3)	0.9 (0.2)	0.2 (0.0)	0.1 (0.0)	1.5 (0.2)	1.1 (0.1)
Avg	0.3	0.2	1.3	0.9	0.1	0.1	1.4	1
n	25	25	25	25	25	25	25	25
SD	0.1	0	0.2	0.2	0.1	0	0.2	0.1
Min	0.1	0.1	1.0	0.7	0.0	0.0	1.1	0.8
Max	0.4	0.3	1.8	1.3	0.2	0.2	2.0	1.4

ED_004549_00015842-00272

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for August, 2009. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.2 (0.0)	0.2 (0.0)	1.5 (0.3)	1.1 (0.2)	0.1 (0.0)	0.0 (0.0)	1.7 (0.4)	1.2 (0.3)
2	0.2 (0.0)	0.2 (0.0)	1.2 (0.3)	0.9 (0.2)	0.3 (0.0)	0.2 (0.0)	1.5 (0.3)	1.1 (0.2)
3	0.3 (0.0)	0.2 (0.0)	1.1 (0.2)	0.8 (0.1)	0.2 (0.0)	0.1 (0.0)	1.2 (0.2)	0.8 (0.2)
4	0.3 (0.1)	0.3 (0.0)	1.7 (0.2)	1.2 (0.2)	0.1 (0.0)	0.0 (0.0)	1.4 (0.3)	1.0 (0.2)
5	0.3 (0.0)	0.2 (0.0)	1.7 (0.3)	1.2 (0.2)	0.1 (0.0)	0.1 (0.0)	1.5 (0.3)	1.0 (0.2)
6	0.3 (0.1)	0.2 (0.0)	1.6 (0.2)	1.1 (0.1)	0.1 (0.1)	0.1 (0.1)	1.5 (0.3)	1.1 (0.2)
7	0.2 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.1)	0.2 (0.0)	0.1 (0.0)	1.4 (0.1)	1.0 (0.1)
8	0.3 (0.1)	0.2 (0.1)	1.0 (0.2)	0.7 (0.1)	0.3 (0.1)	0.2 (0.1)	1.1 (0.1)	0.8 (0.1)
9	0.5 (0.0)	0.3 (0.0)	1.2 (0.2)	0.9 (0.1)	0.2 (0.1)	0.1 (0.0)	1.2 (0.2)	0.9 (0.1)
10	0.5 (0.0)	0.4 (0.0)	1.6 (0.3)	1.1 (0.2)	0.2 (0.0)	0.1 (0.0)	1.4 (0.3)	1.0 (0.2)
11	0.5 (0.0)	0.4 (0.0)	1.6 (0.5)	1.1 (0.3)	0.1 (0.0)	0.1 (0.0)	1.7 (0.4)	1.2 (0.3)
12	0.4 (0.1)	0.3 (0.0)	1.3 (0.7)	1.0 (0.5)	0.3 (0.1)	0.2 (0.0)	1.6 (0.4)	1.2 (0.3)
13	0.3 (0.0)	0.2 (0.0)	0.8 (0.1)	0.6 (0.1)	0.3 (0.0)	0.2 (0.0)	1.2 (0.2)	0.8 (0.1)
14	0.3 (0.0)	0.2 (0.0)	0.9 (0.1)	0.6 (0.1)	0.3 (0.0)	0.2 (0.0)	1.1 (0.1)	0.8 (0.1)
15	0.2 (0.0)	0.2 (0.0)	0.9 (0.2)	0.6 (0.1)	0.2 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.1)
16	0.3 (0.0)	0.2 (0.0)	1.0 (0.1)	0.7 (0.1)	0.2 (0.1)	0.1 (0.0)	1.2 (0.2)	0.8 (0.1)
17	0.2 (0.1)	0.2 (0.0)	1.4 (0.5)	1.0 (0.4)	0.2 (0.0)	0.2 (0.0)	1.4 (0.2)	1.0 (0.2)
18	0.2 (0.0)	0.2 (0.0)	1.6 (0.2)	1.1 (0.2)	0.2 (0.1)	0.1 (0.1)	1.7 (0.3)	1.2 (0.2)
19	0.2 (0.0)	0.2 (0.0)	1.3 (0.3)	0.9 (0.2)	0.2 (0.0)	0.2 (0.0)	1.7 (0.4)	1.2 (0.3)
20	0.2 (0.0)	0.2 (0.0)	1.5 (0.2)	1.1 (0.1)	0.1 (0.0)	0.1 (0.0)	1.8 (0.2)	1.3 (0.2)
21	0.2 (0.0)	0.2 (0.0)	1.6 (0.3)	1.1 (0.2)	0.0 (0.0)	0.0 (0.0)	1.5 (0.2)	1.1 (0.2)
22	0.2 (0.0)	0.2 (0.0)	1.3 (0.2)	1.0 (0.1)	0.1 (0.1)	0.1 (0.1)	1.4 (0.3)	1.0 (0.2)
23	0.2 (0.0)	0.2 (0.0)	1.2 (0.2)	0.8 (0.2)	0.2 (0.1)	0.2 (0.1)	1.4 (0.2)	1.0 (0.1)
24	0.2 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.2)	0.2 (0.1)	0.1 (0.0)	1.3 (0.4)	0.9 (0.3)
25	0.2 (0.0)	0.2 (0.0)	0.9 (0.1)	0.7 (0.1)	0.1 (0.1)	0.1 (0.1)	1.0 (0.1)	0.7 (0.1)
26	0.2 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.1)	0.0 (0.0)	0.0 (0.0)	1.2 (0.2)	0.9 (0.2)
27	0.2 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.2)	0.1 (0.1)	0.0 (0.0)	1.4 (0.2)	1.0 (0.1)
28	0.2 (0.0)	0.2 (0.0)	1.3 (0.2)	0.9 (0.1)	0.1 (0.1)	0.1 (0.1)	1.2 (0.3)	0.9 (0.2)
29	0.2 (0.0)	0.1 (0.0)	1.6 (0.2)	1.1 (0.1)	0.0 (0.0)	0.0 (0.0)	1.2 (0.1)	0.9 (0.1)
30	0.2 (0.0)	0.1 (0.0)	1.4 (0.2)	1.0 (0.2)	0.0 (0.0)	0.0 (0.0)	1.3 (0.2)	0.9 (0.1)
31	0.3 (0.1)	0.2 (0.0)	1.5 (0.4)	1.0 (0.3)	0.1 (0.0)	0.1 (0.0)	1.5 (0.3)	1.1 (0.2)
Avg	0.3	0.2	1.3	0.9	0.2	0.1	1.4	1
n	31	31	31	31	31	31	31	31
SD	0.1	0.1	0.3	0.2	0.1	0.1	0.2	0.1
Min	0.2	0.1	0.8	0.6	0.0	0.0	1.0	0.7
Max	0.5	0.4	1.7	1.2	0.3	0.2	1.8	1.3

ED_004549_00015842-00273

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for September, 2009. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.2 (0.0)	0.2 (0.0)	1.3 (0.2)	0.9 (0.2)	0.1 (0.0)	0.1 (0.0)	1.2 (0.2)	0.9 (0.1)
2	0.3 (0.1)	0.2 (0.0)	1.3 (0.3)	0.9 (0.2)	0.2 (0.1)	0.1 (0.1)	1.3 (0.2)	0.9 (0.1)
3	0.3 (0.1)	0.2 (0.1)	1.3 (0.3)	1.0 (0.2)	0.2 (0.1)	0.1 (0.0)	1.2 (0.2)	0.9 (0.1)
4	0.3 (0.1)	0.2 (0.1)	1.4 (0.3)	1.0 (0.2)	0.2 (0.1)	0.1 (0.1)	1.2 (0.2)	0.9 (0.1)
5	0.3 (0.1)	0.2 (0.1)	1.3 (0.3)	0.9 (0.2)	0.2 (0.1)	0.1 (0.1)	1.2 (0.1)	0.9 (0.1)
6	0.2 (0.1)	0.2 (0.0)	1.5 (0.4)	1.1 (0.3)	0.2 (0.1)	0.1 (0.0)	1.3 (0.2)	0.9 (0.1)
7	0.4 (0.2)	0.3 (0.2)	1.3 (0.4)	0.9 (0.3)	0.1 (0.0)	0.1 (0.0)	1.2 (0.2)	0.9 (0.2)
8	0.2 (0.0)	0.1 (0.0)	1.3 (0.3)	0.9 (0.2)	0.2 (0.0)	0.2 (0.0)	1.4 (0.2)	1.0 (0.2)
9	0.2 (0.0)	0.1 (0.0)	1.3 (0.3)	0.9 (0.2)	0.2 (0.0)	0.2 (0.0)	1.4 (0.2)	1.0 (0.2)
10	0.4 (0.1)	0.3 (0.1)	1.2 (0.4)	0.9 (0.3)	0.3 (0.1)	0.2 (0.1)	1.2 (0.3)	0.9 (0.2)
11	0.2 (0.1)	0.2 (0.0)	1.0 (0.2)	0.7 (0.2)	0.3 (0.1)	0.2 (0.1)	1.0 (0.2)	0.8 (0.1)
12	0.3 (0.1)	0.2 (0.1)	1.2 (0.4)	0.8 (0.3)	0.3 (0.0)	0.2 (0.0)	1.1 (0.2)	0.8 (0.2)
13	0.5 (0.2)	0.4 (0.1)	1.6 (0.6)	1.1 (0.4)	0.2 (0.0)	0.1 (0.0)	1.3 (0.3)	0.9 (0.2)
14	0.4 (0.2)	0.3 (0.1)	1.5 (0.5)	1.1 (0.4)	0.2 (0.1)	0.1 (0.0)	1.4 (0.3)	1.0 (0.2)
15	0.4 (0.1)	0.3 (0.1)	1.4 (0.4)	1.0 (0.3)	0.1 (0.1)	0.1 (0.1)	1.1 (0.3)	0.8 (0.2)
16	0.2 (0.1)	0.2 (0.1)	1.3 (0.3)	1.0 (0.2)	0.1 (0.1)	0.0 (0.1)	1.2 (0.2)	0.8 (0.1)
17	0.3 (0.1)	0.2 (0.1)	1.4 (0.4)	1.0 (0.3)	0.3 (0.0)	0.2 (0.0)	1.3 (0.3)	0.9 (0.2)
18	0.3 (0.1)	0.2 (0.1)	1.5 (0.6)	1.1 (0.5)	0.3 (0.1)	0.2 (0.1)	1.2 (0.3)	0.8 (0.2)
19	0.2 (0.0)	0.2 (0.0)	1.0 (0.2)	0.7 (0.1)	0.3 (0.1)	0.2 (0.0)	1.1 (0.2)	0.8 (0.1)
20	0.2 (0.1)	0.1 (0.0)	1.1 (0.2)	0.8 (0.1)	0.2 (0.1)	0.2 (0.0)	1.3 (0.2)	0.9 (0.1)
21	0.2 (0.0)	0.1 (0.0)	1.2 (0.2)	0.9 (0.1)	0.2 (0.0)	0.1 (0.0)	1.3 (0.2)	0.9 (0.2)
22	0.2 (0.0)	0.2 (0.0)	1.2 (0.2)	0.9 (0.2)	0.1 (0.0)	0.1 (0.0)	1.0 (0.2)	0.7 (0.1)
23	0.3 (0.0)	0.2 (0.0)	1.2 (0.2)	0.9 (0.1)	0.1 (0.0)	0.1 (0.0)	1.1 (0.2)	0.8 (0.1)
24	0.3 (0.1)	0.2 (0.1)	1.3 (0.3)	1.0 (0.2)	0.1 (0.0)	0.0 (0.0)	1.3 (0.2)	0.9 (0.2)
25	0.2 (0.0)	0.1 (0.0)	1.3 (0.2)	0.9 (0.1)	0.1 (0.0)	0.1 (0.0)	1.3 (0.3)	0.9 (0.2)
26	0.2 (0.0)	0.1 (0.0)	1.4 (0.1)	1.0 (0.1)	0.1 (0.0)	0.1 (0.0)	1.3 (0.2)	1.0 (0.1)
27	0.2 (0.0)	0.1 (0.0)	1.5 (0.3)	1.0 (0.2)	0.1 (0.0)	0.0 (0.0)	1.4 (0.2)	1.0 (0.2)
28	0.2 (0.0)	0.1 (0.0)	1.7 (0.1)	1.2 (0.1)	0.0 (0.0)	0.0 (0.0)	1.2 (0.1)	0.9 (0.1)
29	0.2 (0.0)	0.1 (0.0)			0.0 (0.0)	0.0 (0.0)		
30	0.1 (0.0)	0.1 (0.0)	1.6 (0.4)	1.1 (0.3)	0.0 (0.0)	0.0 (0.0)	1.5 (0.3)	1.1 (0.2)
Avg	0.3	0.2	1.3	1	0.2	0.1	1.2	0.9
n	30	30	29	29	30	30	29	29
SD	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
Min	0.1	0.1	1.0	0.7	0.0	0.0	1.0	0.7
Max	0.5	0.4	1.7	1.2	0.3	0.2	1.5	1.1

ED_004549_00015842-00274

Table F10. Daily means (SD) of NH3 concentrations at Site WI5B for October, 2009. MDL = 0.2 ppm.

Day	South inlet		Barn 1		North inlet		Barn 2	
	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}	ppm	mg·ds m^{-3}
1	0.1 (0.0)	0.1 (0.0)	1.3 (0.2)	1.0 (0.2)	0.1 (0.0)	0.1 (0.0)	1.2 (0.3)	0.9 (0.2)
2	0.1 (0.0)	0.1 (0.0)	1.7 (0.3)	1.2 (0.2)	0.0 (0.0)	0.0 (0.0)	1.0 (0.1)	0.7 (0.1)
3	0.1 (0.0)	0.1 (0.0)	1.7 (0.3)	1.2 (0.2)	0.0 (0.0)	0.0 (0.0)	1.3 (0.2)	0.9 (0.2)
4	0.2 (0.0)	0.1 (0.0)	1.6 (0.3)	1.2 (0.2)	0.0 (0.0)	0.0 (0.0)	1.4 (0.3)	1.0 (0.2)
5	0.2 (0.0)	0.1 (0.0)	1.7 (0.3)	1.2 (0.2)	0.0 (0.0)	0.0 (0.0)	1.5 (0.4)	1.1 (0.3)
6	0.1 (0.0)	0.1 (0.0)	1.6 (0.2)	1.2 (0.2)	0.0 (0.0)	0.0 (0.0)	1.3 (0.2)	1.0 (0.1)
7	0.2 (0.0)	0.1 (0.0)	1.6 (0.3)	1.2 (0.2)	0.1 (0.0)	0.1 (0.0)	1.8 (0.2)	1.3 (0.1)
8	0.2 (0.0)	0.1 (0.0)	2.1 (0.3)	1.5 (0.2)	0.0 (0.0)	0.0 (0.0)	2.1 (0.4)	1.5 (0.3)
9	0.2 (0.0)	0.1 (0.0)	1.9 (0.2)	1.4 (0.1)	0.1 (0.1)	0.0 (0.1)	1.8 (0.3)	1.2 (0.2)
10	0.5 (0.2)	0.3 (0.1)	1.8 (0.2)	1.3 (0.1)	0.0 (0.0)	0.0 (0.0)	1.7 (0.2)	1.2 (0.2)
11	0.3 (0.1)	0.2 (0.1)	1.8 (0.1)	1.3 (0.1)	0.0 (0.0)	0.0 (0.0)	1.7 (0.1)	1.2 (0.1)
12	0.3 (0.2)	0.2 (0.1)	1.7 (0.2)	1.2 (0.1)	0.0 (0.0)	0.0 (0.0)	1.7 (0.2)	1.2 (0.1)
13	0.2 (0.1)	0.1 (0.0)	2.0 (0.2)	1.4 (0.1)	0.0 (0.0)	0.0 (0.0)	1.7 (0.2)	1.2 (0.1)
14	0.2 (0.0)	0.1 (0.0)	1.9 (0.2)	1.3 (0.1)	0.1 (0.0)	0.0 (0.0)	1.9 (0.1)	1.3 (0.1)
15	0.2 (0.0)	0.1 (0.0)	1.8 (0.1)	1.3 (0.1)	0.1 (0.0)	0.0 (0.0)	1.7 (0.2)	1.2 (0.1)
16	0.2 (0.0)	0.1 (0.0)	1.9 (0.2)	1.4 (0.1)	0.1 (0.0)	0.0 (0.0)	1.9 (0.2)	1.4 (0.1)
17	0.2 (0.0)	0.1 (0.0)	1.8 (0.2)	1.3 (0.2)	0.1 (0.1)	0.1 (0.0)	2.0 (0.3)	1.4 (0.2)
18	0.2 (0.0)	0.1 (0.0)	1.5 (0.2)	1.0 (0.1)	0.1 (0.0)	0.1 (0.0)	2.0 (0.2)	1.4 (0.1)
19	0.2 (0.0)	0.1 (0.0)	1.4 (0.1)	1.0 (0.1)	0.1 (0.0)	0.1 (0.0)	1.6 (0.2)	1.1 (0.1)
20	0.2 (0.0)	0.1 (0.0)	1.3 (0.1)	0.9 (0.1)	0.1 (0.0)	0.0 (0.0)	1.3 (0.1)	0.9 (0.1)
21	0.2 (0.0)	0.1 (0.0)			0.1 (0.1)	0.1 (0.0)		
22	0.2 (0.0)	0.1 (0.0)	2.5 (0.2)	1.8 (0.2)	0.1 (0.0)	0.0 (0.0)	1.6 (0.1)	1.2 (0.1)
23	0.2 (0.0)	0.1 (0.0)	2.3 (0.3)	1.6 (0.2)	0.1 (0.0)	0.0 (0.0)	1.4 (0.2)	1.0 (0.1)
24	0.2 (0.0)	0.1 (0.0)	1.6 (0.4)	1.2 (0.3)	0.1 (0.0)	0.1 (0.0)	1.7 (0.1)	1.2 (0.1)
25	0.2 (0.0)	0.1 (0.0)	1.5 (0.2)	1.1 (0.2)	0.1 (0.0)	0.1 (0.0)	1.9 (0.3)	1.4 (0.2)
26	0.2 (0.0)	0.2 (0.0)	2.0 (0.2)	1.4 (0.2)	0.1 (0.0)	0.0 (0.0)	2.2 (0.3)	1.6 (0.2)
27	0.2 (0.0)	0.2 (0.0)	1.6 (0.2)	1.1 (0.1)	0.2 (0.0)	0.1 (0.0)	2.2 (0.3)	1.6 (0.2)
28	0.2 (0.0)	0.1 (0.0)	1.7 (0.3)	1.2 (0.2)	0.1 (0.0)	0.0 (0.0)	1.9 (0.3)	1.4 (0.2)
29	0.2 (0.0)	0.1 (0.0)	1.2 (0.2)	0.8 (0.1)	0.1 (0.0)	0.1 (0.0)	1.6 (0.1)	1.1 (0.1)
30			1.4 (0.2)	1.0 (0.1)	0.1 (0.0)	0.1 (0.0)	2.0 (0.2)	1.4 (0.2)
31			1.7 (0.1)	1.2 (0.1)	0.1 (0.0)	0.1 (0.0)	2.0 (0.2)	1.5 (0.1)
Avg	0.2	0.1	1.7	1.2	0.1	0	1.7	1.2
n	29	29	30	30	31	31	30	30
SD	0.1	0	0.3	0.2	0	0	0.3	0.2
Min	0.1	0.1	1.2	0.8	0.0	0.0	1.0	0.7
Max	0.5	0.3	2.5	1.8	0.2	0.1	2.2	1.6

Table F11. Ammonia emissions.

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for September, 2007.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12	6.11 (0.97)	2.35 (0.37)	28.90 (4.59)	20.60 (3.26)	11.20 (2.14)	3.48 (0.67)	31.50 (6.02)	22.40 (4.28)
13	6.52 (1.28)	2.50 (0.49)	30.90 (6.07)	22.00 (4.31)	12.10 (1.76)	3.78 (0.55)	34.20 (4.94)	24.30 (3.52)
14								
15								
16								
17								
18								
19								
20								
21								
22	8.96 (2.06)	3.44 (0.79)	42.50 (9.78)	30.20 (6.96)	12.20 (2.96)	3.80 (0.92)	34.40 (8.33)	24.40 (5.92)
23	8.75 (2.11)	3.36 (0.81)	41.40 (10.00)	29.50 (7.11)	10.80 (1.53)	3.35 (0.48)	30.30 (4.30)	21.60 (3.06)
24	8.05 (1.95)	3.09 (0.75)	38.10 (9.25)	27.10 (6.58)	12.80 (3.52)	4.00 (1.10)	36.20 (9.93)	25.70 (7.06)
25	7.09 (1.30)	2.72 (0.50)	33.60 (6.18)	23.90 (4.39)	12.20 (1.23)	3.81 (0.38)	34.50 (3.46)	24.50 (2.46)
26					12.30 (2.82)	3.82 (0.88)	34.60 (7.95)	24.60 (5.65)
27	8.03 (2.77)	3.08 (1.06)	38.00 (13.10)	27.10 (9.33)	9.89 (1.60)	3.08 (0.50)	27.90 (4.50)	19.80 (3.20)
28								
29	6.79 (1.15)	2.61 (0.44)	32.20 (5.45)	22.90 (3.88)	10.30 (1.67)	3.22 (0.52)	29.10 (4.70)	20.70 (3.34)
30	7.33 (1.54)	2.81 (0.59)	34.70 (7.28)	24.70 (5.18)	9.40 (1.27)	2.93 (0.40)	26.50 (3.58)	18.80 (2.55)
Avg	7.5	2.9	35.6	25.3	11.3	3.5	31.9	22.7
n	9	9	9	9	10	10	10	10
SD	0.9	0.4	4.4	3.2	1.1	0.4	3.2	2.2
Min	6.1	2.4	28.9	20.6	9.4	2.9	26.5	18.8
Max	9.0	3.4	42.5	30.2	12.8	4.0	36.2	25.7

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Table F11. Daily means (SD) of NH3 emissions at Site WI5B for October, 2007.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	8.93 (1.30)	3.43 (0.50)	42.30 (6.14)	30.10 (4.37)				
2	7.61 (1.49)	2.92 (0.57)	36.10 (7.05)	25.70 (5.01)	10.60 (1.78)	3.30 (0.55)	29.80 (5.01)	21.20 (3.56)
3	7.78 (1.26)	2.99 (0.49)	36.90 (5.98)	26.20 (4.25)	10.50 (1.66)	3.28 (0.52)	29.70 (4.67)	21.10 (3.32)
4	8.65 (1.70)	3.32 (0.65)	41.00 (8.07)	29.20 (5.74)	11.00 (1.42)	3.42 (0.44)	31.00 (3.99)	22.00 (2.83)
5	8.18 (1.56)	3.14 (0.60)	38.80 (7.41)	27.60 (5.27)	9.19 (1.65)	2.86 (0.52)	25.90 (4.66)	18.40 (3.31)
6	7.76 (0.84)	2.98 (0.32)	36.80 (3.98)	26.20 (2.83)	11.20 (2.22)	3.50 (0.69)	31.70 (6.25)	22.50 (4.45)
7	7.79 (1.53)	2.99 (0.59)	36.90 (7.27)	26.30 (5.17)	9.69 (1.41)	3.02 (0.44)	27.30 (3.98)	19.40 (2.83)
8								
9	6.90 (0.86)	2.65 (0.33)	32.70 (4.09)	23.30 (2.91)	9.44 (1.66)	2.94 (0.52)	26.60 (4.68)	18.90 (3.33)
10								
11								
12	5.51 (1.00)	2.12 (0.38)	26.10 (4.71)	18.60 (3.35)	8.72 (1.42)	2.72 (0.44)	24.60 (4.01)	17.50 (2.85)
13	5.91 (1.13)	2.27 (0.44)	28.00 (5.37)	19.90 (3.82)	8.91 (1.23)	2.78 (0.39)	25.10 (3.48)	17.90 (2.47)
14	6.16 (0.53)	2.37 (0.20)	29.20 (2.49)	20.80 (1.77)	8.29 (1.12)	2.58 (0.35)	23.30 (3.14)	16.60 (2.23)
15	6.04 (0.71)	2.32 (0.27)	28.60 (3.38)	20.40 (2.40)	7.92 (1.10)	2.47 (0.34)	22.30 (3.09)	15.90 (2.20)
16	6.92 (1.18)	2.66 (0.45)	32.80 (5.58)	23.30 (3.97)	10.70 (1.41)	3.32 (0.44)	30.00 (3.98)	21.30 (2.83)
17	7.05 (1.00)	2.71 (0.38)	33.40 (4.72)	23.80 (3.36)	11.60 (2.03)	3.63 (0.63)	32.80 (5.73)	23.30 (4.08)
18	6.65 (1.18)	2.55 (0.45)	31.50 (5.58)	22.40 (3.97)	12.40 (2.08)	3.86 (0.65)	34.90 (5.87)	24.80 (4.17)
19	6.77 (0.86)	2.60 (0.33)	32.10 (4.07)	22.80 (2.90)	10.50 (2.36)	3.26 (0.73)	29.50 (6.64)	21.00 (4.72)
20	6.55 (1.33)	2.51 (0.51)	31.00 (6.28)	22.10 (4.47)	10.80 (2.86)	3.37 (0.89)	30.50 (8.04)	21.70 (5.72)
21								
22								
23	6.15 (1.44)	2.36 (0.55)	29.10 (6.84)	20.70 (4.87)	8.61 (1.58)	2.68 (0.49)	24.20 (4.46)	17.20 (3.17)
24	6.24 (0.75)	2.40 (0.29)	29.60 (3.53)	21.00 (2.51)	8.52 (1.32)	2.66 (0.41)	24.00 (3.73)	17.10 (2.65)
25	5.31 (0.65)	2.04 (0.25)	25.20 (3.07)	17.90 (2.18)	8.53 (1.79)	2.66 (0.56)	24.00 (5.05)	17.10 (3.59)
26	5.33 (1.16)	2.05 (0.44)	25.30 (5.48)	18.00 (3.90)	8.27 (1.63)	2.58 (0.51)	23.30 (4.60)	16.60 (3.27)
27	6.43 (0.76)	2.47 (0.29)	30.50 (3.60)	21.70 (2.56)	9.44 (1.22)	2.94 (0.38)	26.60 (3.43)	18.90 (2.44)
28	5.41 (0.72)	2.08 (0.28)	25.60 (3.40)	18.20 (2.42)	9.95 (2.60)	3.10 (0.81)	28.00 (7.33)	19.90 (5.21)
29								
30								
31								
Avg	6.8	2.6	32.2	22.9	9.8	3.0	27.5	19.6
n	23	23	23	23	22	22	22	22
SD	1.0	0.4	4.9	3.5	1.2	0.4	3.4	2.4
Min	5.3	2.0	25.2	17.9	7.9	2.5	22.3	15.9
Max	8.9	3.4	42.3	30.1	12.4	3.9	34.9	24.8

ED_004549_00015842-00277

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for November, 2007.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16	4.87 (0.97)	1.87 (0.37)	23.10 (4.57)	16.40 (3.25)	5.86 (0.66)	1.82 (0.21)	16.50 (1.87)	11.70 (1.33)
17	5.53 (0.40)	2.12 (0.15)	26.20 (1.89)	18.60 (1.35)	4.25 (0.60)	1.32 (0.19)	12.00 (1.68)	8.51 (1.20)
18	3.89 (0.57)	1.49 (0.22)	18.40 (2.71)	13.10 (1.93)	5.80 (0.83)	1.81 (0.26)	16.30 (2.34)	11.60 (1.66)
19	5.75 (1.28)	2.21 (0.49)	27.30 (6.09)	19.40 (4.33)	7.43 (0.53)	2.31 (0.16)	20.90 (1.48)	14.90 (1.05)
20	5.94 (0.92)	2.28 (0.35)	28.20 (4.37)	20.00 (3.11)	7.56 (1.83)	2.36 (0.57)	21.30 (5.15)	15.20 (3.66)
21	6.68 (1.74)	2.57 (0.67)	31.70 (8.25)	22.50 (5.87)				
22	6.53 (1.51)	2.51 (0.58)	31.00 (7.15)	22.00 (5.08)				
23	5.89 (0.97)	2.26 (0.37)	27.90 (4.62)	19.90 (3.28)	6.55 (0.64)	2.04 (0.20)	18.40 (1.81)	13.10 (1.29)
24	6.93 (0.29)	2.66 (0.11)	32.80 (1.39)	23.30 (0.99)	6.85 (0.61)	2.14 (0.19)	19.30 (1.70)	13.70 (1.21)
25	7.22 (0.47)	2.77 (0.18)	34.20 (2.25)	24.30 (1.60)	7.03 (1.44)	2.19 (0.45)	19.80 (4.04)	14.10 (2.88)
26	6.96 (0.97)	2.67 (0.37)	33.00 (4.61)	23.50 (3.28)	8.34 (0.90)	2.60 (0.28)	23.50 (2.54)	16.70 (1.80)
27	4.88 (0.40)	1.87 (0.15)	23.10 (1.90)	16.40 (1.35)	6.32 (0.66)	1.97 (0.20)	17.80 (1.84)	12.70 (1.31)
28	4.89 (0.73)	1.88 (0.28)	23.20 (3.45)	16.50 (2.45)	7.52 (0.98)	2.34 (0.30)	21.20 (2.75)	15.10 (1.96)
29								
30								
Avg	5.8	2.2	27.7	19.7	6.7	2.1	18.8	13.4
n	13	13	13	13	11	11	11	11
SD	1.0	0.4	4.6	3.3	1.1	0.3	3.0	2.1
Min	3.9	1.5	18.4	13.1	4.3	1.3	12.0	8.5
Max	7.2	2.8	34.2	24.3	8.3	2.6	23.5	16.7

ED_004549_00015842-00278

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for December, 2007.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	3.98 (0.37)	1.53 (0.14)	18.90 (1.76)	13.40 (1.25)	6.24 (0.69)	1.94 (0.22)	17.60 (1.95)	12.50 (1.38)
2	4.32 (0.30)	1.66 (0.11)	20.50 (1.41)	14.60 (1.00)	7.40 (0.50)	2.31 (0.15)	20.90 (1.39)	14.80 (0.99)
3	4.02 (0.28)	1.54 (0.11)	19.00 (1.31)	13.50 (0.93)	6.27 (0.33)	1.95 (0.10)	17.70 (0.93)	12.60 (0.66)
4	4.49 (0.45)	1.72 (0.17)	21.30 (2.11)	15.10 (1.50)	6.26 (0.48)	1.95 (0.15)	17.60 (1.35)	12.50 (0.96)
5	4.60 (0.59)	1.77 (0.23)	21.80 (2.81)	15.50 (2.00)	6.22 (0.52)	1.94 (0.16)	17.50 (1.47)	12.50 (1.05)
6	5.32 (0.67)	2.04 (0.26)	25.20 (3.15)	17.90 (2.24)	7.41 (0.57)	2.31 (0.18)	20.90 (1.62)	14.80 (1.15)
7	4.90 (0.47)	1.88 (0.18)	23.20 (2.22)	16.50 (1.58)	6.73 (0.62)	2.10 (0.19)	19.00 (1.75)	13.50 (1.24)
8	5.11 (0.68)	1.96 (0.26)	24.20 (3.23)	17.20 (2.30)	6.31 (0.46)	1.97 (0.14)	17.80 (1.28)	12.60 (0.91)
9	5.08 (0.70)	1.95 (0.27)	24.10 (3.31)	17.10 (2.36)	6.00 (0.43)	1.87 (0.13)	16.90 (1.21)	12.00 (0.86)
10	5.34 (0.82)	2.05 (0.31)	25.30 (3.88)	18.00 (2.76)	6.49 (0.98)	2.02 (0.31)	18.30 (2.76)	13.00 (1.96)
11								
12	5.10 (0.42)	1.96 (0.16)	24.20 (2.00)	17.20 (1.43)	6.46 (0.73)	2.01 (0.23)	18.20 (2.05)	12.90 (1.46)
13	4.92 (0.42)	1.89 (0.16)	23.30 (1.98)	16.60 (1.41)	7.20 (0.41)	2.24 (0.13)	20.30 (1.15)	14.40 (0.82)
14	3.60 (0.78)	1.38 (0.30)	17.10 (3.68)	12.10 (2.62)	6.76 (1.05)	2.11 (0.33)	19.10 (2.95)	13.60 (2.09)
15	2.81 (0.21)	1.08 (0.08)	13.30 (0.97)	9.47 (0.69)	7.27 (0.66)	2.26 (0.21)	20.50 (1.86)	14.60 (1.32)
16	2.92 (0.24)	1.12 (0.09)	13.80 (1.12)	9.85 (0.80)	8.12 (0.73)	2.53 (0.23)	22.90 (2.05)	16.30 (1.46)
17	3.06 (0.23)	1.18 (0.09)	14.50 (1.09)	10.30 (0.78)	9.02 (0.61)	2.81 (0.19)	25.40 (1.71)	18.10 (1.22)
18	3.39 (0.29)	1.30 (0.11)	16.10 (1.36)	11.40 (0.97)	9.77 (1.55)	3.04 (0.48)	27.50 (4.36)	19.60 (3.10)
19								
20	5.03 (1.13)	1.93 (0.44)	23.90 (5.37)	17.00 (3.82)				
21	5.26 (1.04)	2.02 (0.40)	24.90 (4.93)	17.70 (3.51)	12.10 (4.89)	3.76 (1.52)	34.00 (13.80)	24.20 (9.80)
22	6.00 (0.70)	2.31 (0.27)	28.50 (3.31)	20.20 (2.35)	8.98 (3.69)	2.80 (1.15)	25.30 (10.40)	18.00 (7.40)
23								
24								
25								
26	7.83 (0.70)	3.01 (0.27)	37.10 (3.33)	26.40 (2.37)	8.35 (0.69)	2.60 (0.22)	23.50 (1.95)	16.70 (1.39)
27	8.50 (1.19)	3.26 (0.46)	40.30 (5.62)	28.70 (4.00)	9.84 (2.07)	3.07 (0.64)	27.70 (5.82)	19.70 (4.14)
28	8.99 (1.92)	3.45 (0.74)	42.60 (9.08)	30.30 (6.46)	10.10 (1.40)	3.14 (0.44)	28.40 (3.94)	20.20 (2.80)
29	11.00 (1.60)	4.24 (0.62)	52.30 (7.60)	37.20 (5.41)	11.30 (1.76)	3.52 (0.55)	31.80 (4.95)	22.60 (3.52)
30	12.40 (1.83)	4.77 (0.70)	58.80 (8.67)	41.90 (6.16)	12.40 (1.55)	3.87 (0.48)	35.00 (4.37)	24.90 (3.11)
31	14.60 (3.06)	5.61 (1.17)	69.20 (14.50)	49.20 (10.30)	14.40 (2.94)	4.48 (0.92)	40.50 (8.28)	28.80 (5.89)
Avg	5.9	2.3	27.8	19.8	8.3	2.6	23.4	16.6
n	26	26	26	26	25	25	25	25
SD	2.9	1.1	13.8	9.9	2.3	0.7	6.4	4.5
Min	2.8	1.1	13.3	9.5	6.0	1.9	16.9	12.0
Max	14.6	5.6	69.2	49.2	14.4	4.5	40.5	28.8

ED_004549_00015842-00279

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for January, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	10.00 (1.55)	3.86 (0.60)	47.60 (7.35)	33.90 (5.23)	10.40 (1.43)	3.25 (0.45)	29.40 (4.04)	20.90 (2.87)
2	11.00 (1.28)	4.23 (0.49)	52.20 (6.08)	37.10 (4.32)	10.70 (1.60)	3.35 (0.50)	30.30 (4.51)	21.50 (3.21)
3	9.53 (0.87)	3.66 (0.33)	45.20 (4.12)	32.10 (2.93)	9.83 (0.97)	3.06 (0.30)	27.70 (2.73)	19.70 (1.94)
4	8.51 (0.86)	3.27 (0.33)	40.30 (4.08)	28.70 (2.90)	11.40 (3.19)	3.56 (0.99)	32.20 (8.98)	22.90 (6.39)
5	6.86 (1.32)	2.63 (0.51)	32.50 (6.24)	23.10 (4.44)	10.90 (1.58)	3.39 (0.49)	30.70 (4.46)	21.80 (3.17)
6	6.76 (1.26)	2.60 (0.49)	32.10 (5.98)	22.80 (4.25)	13.10 (5.10)	4.08 (1.59)	36.90 (14.40)	26.20 (10.20)
7								
8	9.57 (2.57)	3.68 (0.99)	45.40 (12.20)	32.30 (8.65)				
9	9.10 (0.58)	3.50 (0.22)	43.10 (2.77)	30.70 (1.97)	10.20 (0.80)	3.17 (0.25)	28.70 (2.24)	20.40 (1.59)
10	10.20 (3.71)	3.91 (1.43)	48.20 (17.60)	34.30 (12.50)	8.81 (0.75)	2.75 (0.23)	24.80 (2.11)	17.70 (1.50)
11	7.57 (1.24)	2.91 (0.48)	35.90 (5.86)	25.50 (4.17)	7.69 (0.55)	2.40 (0.17)	21.70 (1.54)	15.40 (1.09)
12	7.47 (0.81)	2.87 (0.31)	35.40 (3.84)	25.20 (2.73)	7.13 (0.39)	2.22 (0.12)	20.10 (1.09)	14.30 (0.78)
13	7.44 (1.08)	2.86 (0.41)	35.30 (5.10)	25.10 (3.63)	7.84 (1.32)	2.44 (0.41)	22.10 (3.72)	15.70 (2.64)
14	9.95 (1.94)	3.82 (0.75)	47.20 (9.21)	33.50 (6.55)	10.00 (1.63)	3.12 (0.51)	28.20 (4.60)	20.10 (3.27)
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25	9.02 (1.78)	3.47 (0.68)	42.80 (8.43)	30.40 (5.99)	11.30 (1.38)	3.50 (0.43)	31.70 (3.87)	22.50 (2.76)
26	7.41 (1.33)	2.85 (0.51)	35.10 (6.28)	25.00 (4.47)				
27	5.86 (1.32)	2.25 (0.51)	27.80 (6.23)	19.80 (4.43)				
28	4.60 (1.08)	1.76 (0.41)	21.80 (5.10)	15.50 (3.63)				
29	6.79 (2.84)	2.61 (1.09)	32.20 (13.50)	22.90 (9.57)	5.28 (2.16)	1.65 (0.67)	14.90 (6.08)	10.60 (4.32)
30	10.60 (1.48)	4.07 (0.57)	50.30 (7.03)	35.70 (5.00)	8.58 (1.16)	2.67 (0.36)	24.20 (3.26)	17.20 (2.32)
31					8.71 (1.58)	2.71 (0.49)	24.50 (4.46)	17.40 (3.17)
Avg	8.3	3.2	39.5	28.1	9.5	3.0	26.8	19.0
n	19	19	19	19	16	16	16	16
SD	1.7	0.7	8.1	5.7	1.9	0.6	5.3	3.7
Min	4.6	1.8	21.8	15.5	5.3	1.7	14.9	10.6
Max	11.0	4.2	52.2	37.1	13.1	4.1	36.9	26.2

ED_004549_00015842-00280

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for February, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	9.94 (3.25)	3.82 (1.25)	47.10 (15.40)	33.50 (10.90)	9.15 (2.16)	2.85 (0.67)	25.80 (6.07)	18.30 (4.32)
2	9.09 (2.06)	3.49 (0.79)	43.10 (9.79)	30.60 (6.96)	7.80 (2.55)	2.43 (0.80)	22.00 (7.19)	15.60 (5.12)
3	5.55 (1.81)	2.13 (0.69)	26.30 (8.56)	18.70 (6.09)	6.49 (2.48)	2.02 (0.77)	18.30 (6.98)	13.00 (4.97)
4	8.11 (2.42)	3.11 (0.93)	38.40 (11.50)	27.30 (8.16)	10.30 (3.94)	3.21 (1.23)	29.00 (11.10)	20.60 (7.89)
5	8.73 (0.87)	3.35 (0.34)	41.40 (4.13)	29.40 (2.94)	12.50 (5.27)	3.89 (1.64)	35.20 (14.80)	25.00 (10.60)
6	8.65 (2.98)	3.32 (1.15)	41.00 (14.10)	29.20 (10.10)	7.45 (1.68)	2.32 (0.52)	21.00 (4.73)	14.90 (3.36)
7	7.27 (1.87)	2.79 (0.72)	34.50 (8.88)	24.50 (6.31)	7.97 (1.09)	2.48 (0.34)	22.40 (3.08)	16.00 (2.19)
8	7.37 (1.87)	2.83 (0.72)	34.90 (8.86)	24.80 (6.30)	6.08 (0.87)	1.90 (0.27)	17.10 (2.45)	12.20 (1.74)
9	7.69 (2.86)	2.95 (1.10)	36.40 (13.60)	25.90 (9.65)	6.61 (1.18)	2.06 (0.37)	18.60 (3.32)	13.20 (2.36)
10	8.84 (0.59)	3.39 (0.23)	41.90 (2.81)	29.80 (2.00)	8.65 (0.61)	2.70 (0.19)	24.40 (1.73)	17.30 (1.23)
11	9.61 (1.69)	3.69 (0.65)	45.60 (8.02)	32.40 (5.70)	8.73 (1.87)	2.72 (0.58)	24.60 (5.27)	17.50 (3.75)
12	7.74 (1.66)	2.97 (0.64)	36.70 (7.86)	26.10 (5.59)	7.78 (2.13)	2.42 (0.66)	21.90 (5.99)	15.60 (4.26)
13	8.85 (2.18)	3.40 (0.84)	41.90 (10.30)	29.80 (7.35)	12.10 (3.99)	3.77 (1.24)	34.10 (11.20)	24.20 (7.99)
14	5.94 (0.72)	2.28 (0.28)	28.20 (3.41)	20.00 (2.43)	7.42 (1.00)	2.31 (0.31)	20.90 (2.82)	14.90 (2.00)
15	5.99 (0.57)	2.30 (0.22)	28.40 (2.68)	20.20 (1.90)	6.33 (0.55)	1.97 (0.17)	17.80 (1.54)	12.70 (1.10)
16	7.48 (2.86)	2.87 (1.10)	35.40 (13.60)	25.20 (9.65)	9.30 (4.49)	2.90 (1.40)	26.20 (12.70)	18.60 (9.00)
17	6.59 (2.00)	2.53 (0.77)	31.20 (9.46)	22.20 (6.73)	10.70 (3.80)	3.32 (1.18)	30.00 (10.70)	21.40 (7.62)
18	4.40 (0.86)	1.69 (0.33)	20.80 (4.06)	14.80 (2.89)	5.97 (0.61)	1.86 (0.19)	16.80 (1.73)	12.00 (1.23)
19	5.43 (0.76)	2.08 (0.29)	25.70 (3.61)	18.30 (2.57)	5.88 (0.95)	1.83 (0.30)	16.60 (2.67)	11.80 (1.90)
20	8.24 (1.55)	3.17 (0.59)	39.10 (7.34)	27.80 (5.22)	9.28 (2.59)	2.89 (0.81)	26.10 (7.31)	18.60 (5.20)
21	8.67 (0.91)	3.33 (0.35)	41.10 (4.33)	29.20 (3.08)	11.00 (1.68)	3.43 (0.52)	31.10 (4.73)	22.10 (3.36)
22	8.17 (2.40)	3.14 (0.92)	38.70 (11.40)	27.50 (8.10)	8.52 (2.30)	2.65 (0.72)	24.00 (6.47)	17.10 (4.60)
23	8.21 (2.60)	3.15 (1.00)	38.90 (12.30)	27.70 (8.77)	9.55 (3.14)	2.98 (0.98)	26.90 (8.84)	19.10 (6.29)
24	6.78 (2.20)	2.60 (0.84)	32.10 (10.40)	22.80 (7.41)	10.50 (4.44)	3.26 (1.38)	29.50 (12.50)	21.00 (8.89)
25	5.52 (0.91)	2.12 (0.35)	26.20 (4.31)	18.60 (3.07)				
26	5.89 (2.06)	2.26 (0.79)	27.90 (9.75)	19.90 (6.93)	8.63 (5.37)	2.69 (1.67)	24.30 (15.10)	17.30 (10.80)
27	7.43 (2.57)	2.85 (0.99)	35.20 (12.20)	25.00 (8.66)	5.94 (0.91)	1.85 (0.28)	16.70 (2.55)	11.90 (1.82)
28	6.28 (1.57)	2.41 (0.60)	29.80 (7.46)	21.20 (5.30)	5.67 (2.22)	1.77 (0.69)	16.00 (6.27)	11.40 (4.46)
29	9.80 (2.69)	3.76 (1.03)	46.40 (12.70)	33.00 (9.05)	8.83 (5.37)	2.75 (1.67)	24.90 (15.10)	17.70 (10.80)
Avg	7.5	2.9	35.7	25.4	8.4	2.6	23.6	16.8
n	29	29	29	29	28	28	28	28
SD	1.4	0.6	6.8	4.8	1.9	0.6	5.3	3.8
Min	4.4	1.7	20.8	14.8	5.7	1.8	16.0	11.4
Max	9.9	3.8	47.1	33.5	12.5	3.9	35.2	25.0

ED_004549_00015842-00281

Table F11. Daily means (SD) of NH_3 emissions at Site WI5B for March, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	7.82 (2.24)	3.00 (0.86)	37.10 (10.60)	26.40 (7.57)	6.85 (2.99)	2.14 (0.93)	19.30 (8.43)	13.70 (6.00)
2	5.17 (1.06)	1.98 (0.41)	24.50 (5.01)	17.40 (3.56)				
3	3.93 (1.40)	1.51 (0.54)	18.60 (6.62)	13.30 (4.71)	4.21 (1.38)	1.31 (0.43)	11.90 (3.88)	8.43 (2.76)
4	6.79 (3.65)	2.61 (1.40)	32.20 (17.30)	22.90 (12.30)	8.80 (6.24)	2.74 (1.94)	24.80 (17.60)	17.60 (12.50)
5	7.32 (2.87)	2.81 (1.10)	34.70 (13.60)	24.70 (9.67)	8.29 (3.09)	2.58 (0.96)	23.40 (8.71)	16.60 (6.19)
6	6.92 (1.51)	2.66 (0.58)	32.80 (7.14)	23.30 (5.08)	9.51 (4.39)	2.96 (1.37)	26.80 (12.40)	19.10 (8.80)
7	6.92 (0.60)	2.66 (0.23)	32.80 (2.85)	23.30 (2.03)	10.70 (1.38)	3.35 (0.43)	30.30 (3.89)	21.50 (2.77)
8	9.98 (2.14)	3.83 (0.82)	47.30 (10.10)	33.60 (7.21)	11.90 (3.01)	3.71 (0.94)	33.60 (8.47)	23.90 (6.02)
9	7.41 (1.89)	2.85 (0.73)	35.10 (8.97)	25.00 (6.38)	7.44 (2.43)	2.32 (0.76)	20.90 (6.84)	14.90 (4.86)
10	4.85 (1.64)	1.86 (0.63)	23.00 (7.77)	16.40 (5.53)				
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26	5.64 (1.29)	2.17 (0.50)	26.70 (6.10)	19.00 (4.34)	7.61 (1.77)	2.37 (0.55)	21.40 (4.97)	15.20 (3.54)
27	7.65 (2.16)	2.94 (0.83)	36.30 (10.20)	25.80 (7.29)	7.38 (3.37)	2.30 (1.05)	20.80 (9.50)	14.80 (6.75)
28	7.58 (2.51)	2.91 (0.96)	35.90 (11.90)	25.50 (8.46)	9.52 (3.54)	2.97 (1.10)	26.80 (9.97)	19.10 (7.09)
29	6.77 (1.89)	2.60 (0.73)	32.10 (8.98)	22.80 (6.39)	11.00 (3.11)	3.43 (0.97)	31.00 (8.75)	22.10 (6.23)
30	7.70 (1.46)	2.96 (0.56)	36.50 (6.92)	25.90 (4.92)	13.30 (3.96)	4.14 (1.24)	37.50 (11.20)	26.60 (7.94)
31								
Avg	6.8	2.6	32.4	23.0	9.0	2.8	25.3	18.0
n	15	15	15	15	13	13	13	13
SD	1.4	0.5	6.7	4.8	2.3	0.7	6.5	4.6
Min	3.9	1.5	18.6	13.3	4.2	1.3	11.9	8.4
Max	10.0	3.8	47.3	33.6	13.3	4.1	37.5	26.6

ED_004549_00015842-00282

Table F11. Daily means (SD) of NH_3 emissions at Site WI5B for April, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	6.68 (2.67)	2.57 (1.03)	31.70 (12.70)	22.50 (9.00)				
2	7.61 (2.80)	2.92 (1.07)	36.00 (13.20)	25.60 (9.42)	11.10 (2.78)	3.45 (0.87)	31.20 (7.82)	22.20 (5.56)
3	8.36 (2.41)	3.21 (0.93)	39.60 (11.40)	28.20 (8.13)	13.50 (5.15)	4.20 (1.60)	38.00 (14.50)	27.00 (10.30)
4	9.14 (2.90)	3.51 (1.11)	43.30 (13.70)	30.80 (9.77)	12.60 (5.09)	3.93 (1.59)	35.60 (14.40)	25.30 (10.20)
5	6.89 (1.27)	2.65 (0.49)	32.70 (6.00)	23.20 (4.27)	9.88 (2.41)	3.08 (0.75)	27.80 (6.79)	19.80 (4.83)
6	5.75 (0.93)	2.21 (0.36)	27.30 (4.40)	19.40 (3.13)	7.11 (1.48)	2.22 (0.46)	20.00 (4.16)	14.20 (2.96)
7	7.44 (2.93)	2.86 (1.13)	35.30 (13.90)	25.10 (9.87)	9.31 (3.76)	2.90 (1.17)	26.20 (10.60)	18.70 (7.53)
8	7.80 (0.95)	3.00 (0.36)	37.00 (4.49)	26.30 (3.19)				
9	9.56 (2.81)	3.67 (1.08)	45.30 (13.30)	32.20 (9.46)				
10	6.73 (1.99)	2.58 (0.77)	31.90 (9.44)	22.70 (6.71)	7.57 (2.83)	2.36 (0.88)	21.30 (7.98)	15.20 (5.68)
11	7.20 (1.95)	2.76 (0.75)	34.10 (9.27)	24.30 (6.59)				
12	5.19 (1.08)	1.99 (0.41)	24.60 (5.11)	17.50 (3.64)				
13	7.14 (2.07)	2.74 (0.79)	33.80 (9.79)	24.10 (6.97)				
14	6.81 (2.08)	2.61 (0.80)	32.30 (9.87)	22.90 (7.02)	9.91 (5.13)	3.09 (1.60)	27.90 (14.50)	19.80 (10.30)
15	8.34 (1.37)	3.20 (0.52)	39.50 (6.47)	28.10 (4.60)	14.90 (4.00)	4.63 (1.25)	41.90 (11.30)	29.80 (8.01)
16	7.39 (1.16)	2.84 (0.45)	35.00 (5.49)	24.90 (3.91)	10.80 (2.45)	3.38 (0.76)	30.50 (6.89)	21.70 (4.90)
17	9.80 (4.60)	3.76 (1.77)	46.50 (21.80)	33.00 (15.50)	10.60 (3.76)	3.29 (1.17)	29.70 (10.60)	21.10 (7.53)
18	7.84 (1.18)	3.01 (0.45)	37.20 (5.58)	26.40 (3.96)				
19	6.59 (1.00)	2.53 (0.39)	31.20 (4.75)	22.20 (3.38)				
20	9.87 (3.62)	3.79 (1.39)	46.80 (17.10)	33.30 (12.20)	15.30 (7.25)	4.77 (2.26)	43.10 (20.40)	30.70 (14.50)
21	8.73 (1.77)	3.35 (0.68)	41.40 (8.41)	29.40 (5.98)	12.60 (3.89)	3.93 (1.21)	35.60 (10.90)	25.30 (7.79)
22								
23								
24								
25								
26	5.63 (0.59)	2.16 (0.23)	26.70 (2.81)	19.00 (2.00)	7.70 (1.14)	2.40 (0.35)	21.70 (3.20)	15.40 (2.28)
27	6.73 (1.46)	2.59 (0.56)	31.90 (6.93)	22.70 (4.93)	9.82 (3.19)	3.06 (1.00)	27.70 (9.00)	19.70 (6.40)
28	6.39 (1.71)	2.45 (0.66)	30.30 (8.10)	21.50 (5.76)				
29	7.51 (2.43)	2.88 (0.93)	35.60 (11.50)	25.30 (8.20)				
30	7.24 (2.22)	2.78 (0.85)	34.30 (10.50)	24.40 (7.47)	11.30 (2.57)	3.51 (0.80)	31.70 (7.23)	22.50 (5.14)
Avg	7.5	2.9	35.4	25.2	10.9	3.4	30.6	21.8
n	26	26	26	26	16	16	16	16
SD	1.2	0.5	5.7	4.1	2.4	0.7	6.7	4.7
Min	5.2	2.0	24.6	17.5	7.1	2.2	20.0	14.2
Max	9.9	3.8	46.8	33.3	15.3	4.8	43.1	30.7

ED_004549_00015842-00283

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for May, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	8.46 (2.51)	3.25 (0.97)	40.10 (11.90)	28.50 (8.48)	13.10 (5.20)	4.07 (1.62)	36.80 (14.60)	26.20 (10.40)
2	7.19 (1.61)	2.76 (0.62)	34.10 (7.62)	24.20 (5.42)				
3	8.94 (2.58)	3.43 (0.99)	42.40 (12.20)	30.10 (8.71)				
4	7.92 (2.55)	3.04 (0.98)	37.50 (12.10)	26.70 (8.58)	11.70 (2.67)	3.65 (0.83)	33.00 (7.53)	23.50 (5.36)
5								
6	11.20 (3.16)	4.31 (1.21)	53.20 (15.00)	37.80 (10.70)	15.20 (7.10)	4.73 (2.21)	42.70 (20.00)	30.40 (14.20)
7	8.13 (0.98)	3.12 (0.38)	38.60 (4.66)	27.40 (3.31)				
8	6.65 (1.32)	2.56 (0.51)	31.50 (6.24)	22.40 (4.44)	7.58 (1.17)	2.36 (0.37)	21.40 (3.30)	15.20 (2.34)
9	6.78 (1.25)	2.60 (0.48)	32.10 (5.91)	22.90 (4.20)	6.99 (1.22)	2.18 (0.38)	19.70 (3.42)	14.00 (2.43)
10	5.24 (0.60)	2.01 (0.23)	24.80 (2.84)	17.70 (2.02)	7.57 (1.89)	2.36 (0.59)	21.30 (5.31)	15.20 (3.78)
11	6.75 (1.85)	2.59 (0.71)	32.00 (8.78)	22.80 (6.25)				
12	8.08 (2.01)	3.10 (0.77)	38.30 (9.50)	27.20 (6.76)	12.30 (3.75)	3.83 (1.17)	34.60 (10.60)	24.60 (7.52)
13	9.86 (1.98)	3.79 (0.76)	46.70 (9.36)	33.20 (6.66)	13.50 (3.65)	4.21 (1.14)	38.10 (10.30)	27.10 (7.32)
14	9.22 (4.36)	3.54 (1.67)	43.70 (20.70)	31.10 (14.70)				
15	7.74 (2.29)	2.97 (0.88)	36.70 (10.80)	26.10 (7.71)	10.50 (2.38)	3.28 (0.74)	29.70 (6.70)	21.10 (4.76)
16	8.66 (2.21)	3.33 (0.85)	41.00 (10.50)	29.20 (7.44)	10.90 (2.35)	3.38 (0.73)	30.60 (6.62)	21.80 (4.71)
17	8.90 (1.50)	3.42 (0.58)	42.20 (7.11)	30.00 (5.06)				
18	7.07 (1.95)	2.72 (0.75)	33.50 (9.25)	23.80 (6.58)				
19	5.35 (1.65)	2.06 (0.63)	25.40 (7.82)	18.00 (5.56)	6.58 (1.53)	2.05 (0.48)	18.50 (4.31)	13.20 (3.07)
20	7.40 (1.59)	2.84 (0.61)	35.10 (7.51)	24.90 (5.34)				
21	7.14 (1.59)	2.74 (0.61)	33.80 (7.55)	24.10 (5.37)	8.10 (2.50)	2.52 (0.78)	22.80 (7.04)	16.20 (5.01)
22	8.51 (1.62)	3.27 (0.62)	40.30 (7.69)	28.70 (5.47)	8.66 (2.11)	2.70 (0.66)	24.40 (5.94)	17.40 (4.23)
23	8.43 (1.72)	3.24 (0.66)	40.00 (8.17)	28.40 (5.81)	8.33 (1.92)	2.59 (0.60)	23.50 (5.40)	16.70 (3.84)
24	7.50 (1.46)	2.88 (0.56)	35.60 (6.90)	25.30 (4.91)	8.89 (2.12)	2.77 (0.66)	25.00 (5.98)	17.80 (4.25)
25	7.37 (1.06)	2.83 (0.41)	34.90 (5.02)	24.80 (3.57)				
26								
27								
28	5.76 (1.99)	2.21 (0.77)	27.30 (9.45)	19.40 (6.72)	8.84 (1.91)	2.75 (0.60)	24.90 (5.39)	17.70 (3.83)
29	6.22 (0.65)	2.39 (0.25)	29.50 (3.08)	21.00 (2.19)	7.36 (1.10)	2.29 (0.34)	20.70 (3.11)	14.80 (2.21)
30	7.95 (1.71)	3.05 (0.66)	37.70 (8.11)	26.80 (5.77)	9.29 (1.91)	2.89 (0.59)	26.20 (5.37)	18.60 (3.82)
31	9.06 (2.29)	3.48 (0.88)	42.90 (10.90)	30.50 (7.72)	10.20 (1.51)	3.19 (0.47)	28.80 (4.27)	20.50 (3.03)
Avg	7.8	3.0	36.8	26.2	9.8	3.0	27.5	19.6
n	28	28	28	28	19	19	19	19
SD	1.3	0.5	6.3	4.5	2.4	0.7	6.7	4.8
Min	5.2	2.0	24.8	17.7	6.6	2.1	18.5	13.2
Max	11.2	4.3	53.2	37.8	15.2	4.7	42.7	30.4

ED_004549_00015842-00284

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for June, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	9.59 (1.94)	3.68 (0.75)	45.50 (9.21)	32.30 (6.55)	11.70 (3.80)	3.65 (1.18)	33.00 (10.70)	23.50 (7.62)
2								
3	8.54 (1.13)	3.28 (0.43)	40.50 (5.33)	28.80 (3.79)				
4	9.15 (1.58)	3.51 (0.61)	43.40 (7.49)	30.80 (5.33)				
5								
6								
7	9.88 (2.01)	3.79 (0.77)	46.80 (9.52)	33.30 (6.77)	11.20 (3.04)	3.49 (0.95)	31.50 (8.56)	22.40 (6.09)
8								
9								
10	9.04 (2.08)	3.47 (0.80)	42.80 (9.85)	30.50 (7.00)				
11	8.32 (1.49)	3.19 (0.57)	39.40 (7.05)	28.00 (5.01)				
12	6.54 (1.74)	2.51 (0.67)	31.00 (8.24)	22.10 (5.86)				
13	9.08 (2.24)	3.49 (0.86)	43.00 (10.60)	30.60 (7.56)	13.60 (2.07)	4.23 (0.65)	38.30 (5.84)	27.20 (4.15)
14								
15								
16								
17								
18	8.14 (1.87)	3.13 (0.72)	38.60 (8.87)	27.50 (6.31)				
19	8.64 (3.85)	3.32 (1.48)	40.90 (18.20)	29.10 (13.00)	12.70 (3.92)	3.96 (1.22)	35.80 (11.00)	25.50 (7.85)
20	9.89 (2.86)	3.80 (1.10)	46.90 (13.60)	33.30 (9.65)	12.30 (3.01)	3.84 (0.94)	34.70 (8.47)	24.70 (6.02)
21	8.67 (1.51)	3.33 (0.58)	41.10 (7.15)	29.20 (5.08)	11.80 (2.95)	3.68 (0.92)	33.30 (8.32)	23.70 (5.92)
22	9.07 (1.47)	3.48 (0.57)	43.00 (6.97)	30.60 (4.95)	10.10 (1.56)	3.16 (0.49)	28.60 (4.39)	20.30 (3.12)
23	9.23 (1.79)	3.55 (0.69)	43.80 (8.48)	31.10 (6.03)	13.20 (3.18)	4.10 (0.99)	37.10 (8.96)	26.40 (6.37)
24	9.44 (2.34)	3.62 (0.90)	44.70 (11.10)	31.80 (7.89)	14.10 (3.41)	4.39 (1.06)	39.70 (9.60)	28.20 (6.83)
25	9.29 (1.68)	3.57 (0.65)	44.00 (7.98)	31.30 (5.67)	14.60 (3.60)	4.54 (1.12)	41.10 (10.10)	29.20 (7.21)
26	8.95 (1.32)	3.44 (0.51)	42.40 (6.25)	30.20 (4.44)	12.40 (3.23)	3.85 (1.01)	34.80 (9.09)	24.80 (6.47)
27	8.90 (2.36)	3.42 (0.91)	42.20 (11.20)	30.00 (7.96)	9.72 (2.33)	3.03 (0.73)	27.40 (6.55)	19.50 (4.66)
28	9.08 (1.91)	3.49 (0.73)	43.00 (9.06)	30.60 (6.44)	12.50 (2.73)	3.90 (0.85)	35.30 (7.68)	25.10 (5.46)
29	10.70 (1.57)	4.12 (0.61)	50.80 (7.46)	36.20 (5.31)				
30								
Avg	9.0	3.5	42.7	30.4	12.3	3.8	34.7	24.6
n	20	20	20	20	13	13	13	13
SD	0.8	0.3	3.8	2.7	1.4	0.4	3.8	2.7
Min	6.5	2.5	31.0	22.1	9.7	3.0	27.4	19.5
Max	10.7	4.1	50.8	36.2	14.6	4.5	41.1	29.2

ED_004549_00015842-00285

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for July, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4	10.00 (1.48)	3.85 (0.57)	47.50 (6.99)	33.80 (4.97)	12.00 (3.35)	3.73 (1.04)	33.70 (9.43)	24.00 (6.70)
5	9.74 (1.62)	3.74 (0.62)	46.20 (7.70)	32.80 (5.47)	11.20 (2.52)	3.48 (0.79)	31.50 (7.11)	22.40 (5.06)
6	7.78 (1.91)	2.99 (0.74)	36.90 (9.07)	26.20 (6.45)	8.82 (1.26)	2.75 (0.39)	24.90 (3.56)	17.70 (2.53)
7	8.18 (1.71)	3.14 (0.66)	38.80 (8.10)	27.60 (5.76)	9.28 (2.18)	2.89 (0.68)	26.10 (6.15)	18.60 (4.38)
8								
9								
10					11.10 (3.38)	3.47 (1.05)	31.40 (9.52)	22.30 (6.77)
11					11.00 (2.56)	3.44 (0.80)	31.10 (7.22)	22.10 (5.13)
12					14.00 (2.35)	4.35 (0.73)	39.30 (6.61)	28.00 (4.70)
13					12.30 (2.16)	3.82 (0.67)	34.50 (6.09)	24.60 (4.33)
14					13.30 (4.05)	4.14 (1.26)	37.40 (11.40)	26.60 (8.11)
15					13.60 (4.32)	4.24 (1.35)	38.40 (12.20)	27.30 (8.65)
16	8.79 (1.79)	3.38 (0.69)	41.70 (8.50)	29.60 (6.05)	12.10 (2.51)	3.77 (0.78)	34.10 (7.07)	24.20 (5.02)
17	7.82 (1.46)	3.00 (0.56)	37.10 (6.93)	26.40 (4.93)	9.09 (1.70)	2.83 (0.53)	25.60 (4.79)	18.20 (3.41)
18	9.41 (2.13)	3.61 (0.82)	44.60 (10.10)	31.70 (7.19)	13.90 (5.74)	4.34 (1.79)	39.20 (16.20)	27.90 (11.50)
19	8.03 (2.12)	3.08 (0.82)	38.00 (10.10)	27.10 (7.15)	10.20 (3.80)	3.16 (1.18)	28.60 (10.70)	20.30 (7.61)
20	8.48 (2.10)	3.25 (0.81)	40.20 (9.94)	28.60 (7.07)	10.80 (3.65)	3.37 (1.14)	30.50 (10.30)	21.70 (7.30)
21					11.80 (3.45)	3.67 (1.07)	33.20 (9.71)	23.60 (6.91)
22					12.60 (3.78)	3.91 (1.18)	35.40 (10.60)	25.10 (7.57)
23	7.51 (1.26)	2.88 (0.48)	35.60 (5.95)	25.30 (4.23)	13.20 (3.43)	4.12 (1.07)	37.20 (9.67)	26.50 (6.88)
24	7.28 (1.00)	2.80 (0.39)	34.50 (4.75)	24.50 (3.38)	12.00 (3.08)	3.73 (0.96)	33.70 (8.67)	24.00 (6.16)
25	10.60 (2.84)	4.07 (1.09)	50.20 (13.50)	35.70 (9.57)	12.50 (4.06)	3.91 (1.26)	35.30 (11.40)	25.10 (8.13)
26	8.81 (1.71)	3.38 (0.66)	41.80 (8.12)	29.70 (5.77)	12.60 (3.12)	3.91 (0.97)	35.40 (8.78)	25.20 (6.25)
27	9.81 (2.42)	3.77 (0.93)	46.50 (11.50)	33.10 (8.14)	13.90 (3.18)	4.32 (0.99)	39.10 (8.97)	27.80 (6.38)
28	10.90 (2.63)	4.18 (1.01)	51.60 (12.50)	36.70 (8.88)	15.10 (4.75)	4.69 (1.48)	42.40 (13.40)	30.20 (9.51)
29	9.78 (1.76)	3.75 (0.68)	46.30 (8.36)	32.90 (5.95)	13.90 (4.90)	4.33 (1.53)	39.10 (13.80)	27.80 (9.82)
30	9.93 (2.08)	3.81 (0.80)	47.10 (9.85)	33.50 (7.01)	12.60 (3.02)	3.92 (0.94)	35.40 (8.52)	25.20 (6.06)
31	9.11 (2.36)	3.50 (0.91)	43.20 (11.20)	30.70 (7.94)	13.80 (4.67)	4.31 (1.45)	39.00 (13.10)	27.70 (9.35)
Avg	9.0	3.5	42.6	30.3	12.2	3.8	34.3	24.4
n	18	18	18	18	26	26	26	26
SD	1.1	0.4	5.0	3.6	1.6	0.5	4.5	3.2
Min	7.3	2.8	34.5	24.5	8.8	2.8	24.9	17.7
Max	10.9	4.2	51.6	36.7	15.1	4.7	42.4	30.2

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Table F11. Daily means (SD) of NH3 emissions at Site WI5B for August, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	9.13 (2.08)	3.51 (0.80)	43.30 (9.84)	30.80 (7.00)	13.50 (3.37)	4.21 (1.05)	38.10 (9.50)	27.10 (6.76)
2	8.78 (1.40)	3.37 (0.54)	41.60 (6.64)	29.60 (4.72)	13.50 (3.77)	4.21 (1.17)	38.10 (10.60)	27.10 (7.55)
3	8.34 (0.79)	3.20 (0.31)	39.50 (3.76)	28.10 (2.67)	11.70 (1.54)	3.66 (0.48)	33.10 (4.34)	23.50 (3.08)
4								
5	8.84 (1.87)	3.39 (0.72)	41.90 (8.87)	29.80 (6.30)	12.80 (4.61)	3.97 (1.44)	35.90 (13.00)	25.60 (9.23)
6	7.63 (1.64)	2.93 (0.63)	36.20 (7.78)	25.70 (5.53)	9.74 (3.08)	3.03 (0.96)	27.40 (8.67)	19.50 (6.17)
7	8.80 (1.41)	3.38 (0.54)	41.70 (6.67)	29.70 (4.75)	11.60 (2.72)	3.62 (0.85)	32.80 (7.66)	23.30 (5.45)
8	8.61 (1.16)	3.31 (0.44)	40.80 (5.48)	29.00 (3.89)	10.20 (2.07)	3.18 (0.65)	28.80 (5.84)	20.50 (4.15)
9	8.41 (1.48)	3.23 (0.57)	39.80 (7.03)	28.30 (5.00)	9.03 (2.52)	2.81 (0.78)	25.40 (7.09)	18.10 (5.04)
10	7.97 (1.27)	3.06 (0.49)	37.80 (6.01)	26.90 (4.28)	9.37 (1.94)	2.92 (0.60)	26.40 (5.46)	18.80 (3.88)
11	7.71 (1.09)	2.96 (0.42)	36.50 (5.15)	26.00 (3.66)	10.50 (2.58)	3.26 (0.80)	29.50 (7.26)	21.00 (5.16)
12	7.50 (0.97)	2.88 (0.37)	35.50 (4.58)	25.30 (3.26)	9.25 (1.90)	2.88 (0.59)	26.00 (5.35)	18.50 (3.81)
13	8.64 (1.56)	3.32 (0.60)	40.90 (7.42)	29.10 (5.27)	10.30 (3.08)	3.21 (0.96)	29.00 (8.66)	20.60 (6.16)
14	8.83 (1.58)	3.39 (0.61)	41.80 (7.48)	29.70 (5.32)	10.70 (2.42)	3.32 (0.76)	30.00 (6.82)	21.30 (4.85)
15	11.00 (2.64)	4.24 (1.01)	52.30 (12.50)	37.20 (8.88)	11.80 (2.71)	3.69 (0.85)	33.30 (7.65)	23.70 (5.44)
16	10.30 (1.62)	3.96 (0.62)	48.80 (7.68)	34.70 (5.46)	13.00 (3.48)	4.05 (1.08)	36.60 (9.80)	26.00 (6.97)
17	10.60 (1.53)	4.07 (0.59)	50.20 (7.25)	35.70 (5.15)	12.40 (3.19)	3.86 (1.00)	34.90 (9.00)	24.80 (6.40)
18								
19	9.51 (1.87)	3.65 (0.72)	45.10 (8.86)	32.10 (6.30)	13.10 (3.39)	4.09 (1.06)	36.90 (9.56)	26.30 (6.80)
20	8.96 (1.10)	3.44 (0.42)	42.50 (5.23)	30.20 (3.72)	13.10 (2.31)	4.09 (0.72)	36.90 (6.52)	26.30 (4.64)
21	8.19 (1.43)	3.15 (0.55)	38.80 (6.76)	27.60 (4.81)	12.30 (1.99)	3.83 (0.62)	34.60 (5.60)	24.60 (3.98)
22	8.19 (1.62)	3.15 (0.62)	38.80 (7.65)	27.60 (5.44)	11.80 (2.73)	3.68 (0.85)	33.20 (7.68)	23.60 (5.46)
23	9.83 (1.53)	3.77 (0.59)	46.60 (7.26)	33.10 (5.16)	10.60 (1.61)	3.30 (0.50)	29.80 (4.55)	21.20 (3.23)
24	8.84 (1.64)	3.40 (0.63)	41.90 (7.77)	29.80 (5.53)	12.20 (1.65)	3.81 (0.51)	34.50 (4.65)	24.50 (3.31)
25	7.39 (1.93)	2.84 (0.74)	35.00 (9.14)	24.90 (6.50)				
26	7.73 (1.47)	2.97 (0.56)	36.60 (6.95)	26.10 (4.94)	10.70 (2.55)	3.32 (0.79)	30.00 (7.18)	21.30 (5.11)
27	6.99 (1.27)	2.68 (0.49)	33.10 (6.01)	23.60 (4.27)	10.60 (2.15)	3.30 (0.67)	29.80 (6.06)	21.20 (4.31)
28	8.18 (2.90)	3.14 (1.12)	38.70 (13.80)	27.60 (9.79)	10.10 (3.05)	3.14 (0.95)	28.40 (8.60)	20.20 (6.11)
29	8.96 (1.81)	3.44 (0.70)	42.50 (8.59)	30.20 (6.11)	10.30 (2.38)	3.22 (0.74)	29.10 (6.69)	20.70 (4.76)
30	8.48 (1.00)	3.26 (0.39)	40.20 (4.75)	28.60 (3.38)	11.30 (2.61)	3.53 (0.81)	32.00 (7.35)	22.70 (5.23)
31	7.82 (1.29)	3.00 (0.49)	37.00 (6.09)	26.30 (4.33)	11.10 (1.34)	3.46 (0.42)	31.30 (3.78)	22.20 (2.69)
Avg	8.6	3.3	40.9	29.1	11.3	3.5	31.9	22.7
n	29	29	29	29	28	28	28	28
SD	0.9	0.4	4.4	3.2	1.3	0.4	3.7	2.6
Min	7.0	2.7	33.1	23.6	9.0	2.8	25.4	18.1
Max	11.0	4.2	52.3	37.2	13.5	4.2	38.1	27.1

ED_004549_00015842-00287

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for September, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	9.36 (1.76)	3.59 (0.68)	44.40 (8.34)	31.50 (5.93)	11.90 (1.80)	3.70 (0.56)	33.50 (5.06)	23.80 (3.60)
2	9.49 (2.40)	3.65 (0.92)	45.00 (11.40)	32.00 (8.09)	10.90 (1.92)	3.40 (0.60)	30.70 (5.41)	21.90 (3.84)
3	11.00 (1.56)	4.23 (0.60)	52.20 (7.38)	37.10 (5.25)				
4	8.22 (1.27)	3.16 (0.49)	39.00 (6.02)	27.70 (4.28)	9.09 (1.17)	2.83 (0.37)	25.60 (3.30)	18.20 (2.35)
5	8.31 (1.54)	3.19 (0.59)	39.40 (7.28)	28.00 (5.18)	10.50 (2.73)	3.28 (0.85)	29.60 (7.69)	21.10 (5.47)
6	6.83 (1.36)	2.62 (0.52)	32.40 (6.44)	23.00 (4.58)	10.70 (1.59)	3.34 (0.50)	30.20 (4.49)	21.40 (3.19)
7	7.77 (1.97)	2.99 (0.76)	36.80 (9.32)	26.20 (6.63)	11.50 (1.98)	3.58 (0.62)	32.30 (5.58)	23.00 (3.97)
8	8.61 (1.36)	3.31 (0.52)	40.80 (6.47)	29.00 (4.60)	9.19 (2.00)	2.86 (0.62)	25.90 (5.64)	18.40 (4.01)
9	7.90 (1.49)	3.03 (0.57)	37.40 (7.08)	26.60 (5.04)	10.00 (2.02)	3.12 (0.63)	28.20 (5.68)	20.00 (4.04)
10	7.22 (1.21)	2.77 (0.47)	34.20 (5.75)	24.30 (4.09)	11.80 (2.36)	3.67 (0.74)	33.20 (6.64)	23.60 (4.72)
11	6.23 (0.84)	2.39 (0.32)	29.50 (3.99)	21.00 (2.84)	11.60 (1.84)	3.63 (0.58)	32.80 (5.20)	23.30 (3.70)
12	8.18 (2.00)	3.14 (0.77)	38.80 (9.50)	27.60 (6.76)	12.50 (1.83)	3.89 (0.57)	35.20 (5.15)	25.00 (3.66)
13	9.32 (1.89)	3.58 (0.73)	44.20 (8.96)	31.40 (6.37)	10.50 (1.63)	3.28 (0.51)	29.70 (4.59)	21.10 (3.26)
14	10.60 (1.49)	4.07 (0.57)	50.30 (7.08)	35.70 (5.03)				
15	9.57 (2.05)	3.67 (0.79)	45.30 (9.72)	32.20 (6.91)	11.10 (0.90)	3.44 (0.28)	31.10 (2.53)	22.10 (1.80)
16	9.69 (2.24)	3.72 (0.86)	45.90 (10.60)	32.60 (7.55)	12.30 (3.03)	3.82 (0.94)	34.50 (8.52)	24.60 (6.06)
17								
18								
19								
20	10.60 (2.09)	4.08 (0.80)	50.40 (9.90)	35.80 (7.04)	15.90 (3.63)	4.96 (1.13)	44.90 (10.20)	31.90 (7.27)
21	10.60 (2.09)	4.06 (0.80)	50.10 (9.92)	35.60 (7.06)	17.30 (3.58)	5.40 (1.11)	48.90 (10.10)	34.80 (7.17)
22	10.80 (1.79)	4.15 (0.69)	51.20 (8.50)	36.40 (6.04)	16.90 (2.32)	5.27 (0.72)	47.60 (6.53)	33.90 (4.65)
23	9.37 (0.99)	3.60 (0.38)	44.40 (4.71)	31.60 (3.35)	16.90 (2.99)	5.26 (0.93)	47.60 (8.41)	33.80 (5.98)
24	10.70 (2.77)	4.10 (1.06)	50.60 (13.10)	36.00 (9.32)	14.90 (3.63)	4.63 (1.13)	41.90 (10.20)	29.80 (7.27)
25	8.37 (0.93)	3.21 (0.36)	39.70 (4.40)	28.20 (3.13)	15.60 (2.92)	4.85 (0.91)	43.80 (8.23)	31.20 (5.85)
26	10.80 (2.72)	4.14 (1.04)	51.10 (12.90)	36.30 (9.17)	14.30 (1.95)	4.44 (0.61)	40.20 (5.49)	28.60 (3.91)
27	12.80 (2.32)	4.93 (0.89)	60.80 (11.00)	43.20 (7.81)				
28	9.79 (1.52)	3.76 (0.58)	46.40 (7.20)	33.00 (5.12)	13.50 (1.15)	4.20 (0.36)	38.00 (3.24)	27.00 (2.30)
29	14.00 (2.80)	5.39 (1.07)	66.60 (13.30)	47.30 (9.43)				
30	12.00 (2.22)	4.61 (0.85)	56.90 (10.50)	40.50 (7.50)	11.80 (2.09)	3.66 (0.65)	33.10 (5.90)	23.50 (4.19)
Avg	9.6	3.7	45.3	32.2	12.6	3.9	35.6	25.3
n	27	27	27	27	23	23	23	23
SD	1.8	0.7	8.4	6.0	2.5	0.8	7.0	5.0
Min	6.2	2.4	29.5	21.0	9.1	2.8	25.6	18.2
Max	14.0	5.4	66.6	47.3	17.3	5.4	48.9	34.8

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Table F11. Daily means (SD) of NH3 emissions at Site WI5B for October, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	10.40 (1.92)	4.01 (0.74)	49.50 (9.12)	35.20 (6.48)				
2	11.50 (2.88)	4.43 (1.11)	54.60 (13.60)	38.80 (9.70)	11.90 (2.21)	3.70 (0.69)	33.50 (6.23)	23.80 (4.43)
3	9.82 (1.58)	3.77 (0.61)	46.50 (7.47)	33.10 (5.31)	11.10 (2.28)	3.46 (0.71)	31.30 (6.43)	22.30 (4.57)
4	7.97 (0.90)	3.06 (0.34)	37.70 (4.24)	26.80 (3.02)	11.50 (3.07)	3.58 (0.96)	32.40 (8.65)	23.00 (6.16)
5	6.74 (1.07)	2.59 (0.41)	32.00 (5.09)	22.70 (3.62)	10.10 (1.35)	3.16 (0.42)	28.50 (3.80)	20.30 (2.70)
6	8.60 (1.99)	3.30 (0.77)	40.80 (9.45)	29.00 (6.72)	14.00 (1.92)	4.35 (0.60)	39.40 (5.40)	28.00 (3.84)
7								
8								
9								
10	8.52 (1.57)	3.27 (0.60)	40.40 (7.43)	28.70 (5.28)	12.50 (3.06)	3.89 (0.95)	35.10 (8.61)	25.00 (6.12)
11	9.33 (1.78)	3.58 (0.68)	44.20 (8.44)	31.50 (6.00)	13.80 (1.64)	4.29 (0.51)	38.80 (4.62)	27.60 (3.29)
12	10.40 (1.44)	4.00 (0.55)	49.40 (6.84)	35.10 (4.86)	15.50 (2.50)	4.84 (0.78)	43.70 (7.03)	31.10 (5.00)
13	8.94 (1.01)	3.43 (0.39)	42.40 (4.78)	30.10 (3.40)	13.70 (3.23)	4.26 (1.00)	38.50 (9.09)	27.40 (6.46)
14	8.08 (1.05)	3.10 (0.40)	38.30 (4.96)	27.20 (3.53)				
15	10.20 (2.07)	3.91 (0.80)	48.20 (9.81)	34.30 (6.97)	11.70 (2.19)	3.65 (0.68)	33.00 (6.18)	23.50 (4.39)
16								
17								
18								
19								
20								
21								
22	5.89 (0.74)	2.26 (0.29)	27.10 (3.42)	19.30 (2.43)	10.50 (1.25)	3.28 (0.39)	29.70 (3.52)	21.10 (2.50)
23	7.98 (1.83)	3.06 (0.70)	37.10 (8.59)	26.40 (6.11)	12.40 (2.22)	3.86 (0.69)	34.90 (6.26)	24.90 (4.45)
24	9.15 (1.74)	3.51 (0.67)	43.00 (8.21)	30.60 (5.84)	12.40 (2.55)	3.85 (0.79)	34.80 (7.18)	24.80 (5.11)
25	9.35 (1.91)	3.59 (0.73)	44.40 (9.14)	31.60 (6.50)	16.20 (2.97)	5.04 (0.93)	45.60 (8.38)	32.40 (5.96)
26	7.07 (1.43)	2.71 (0.55)	33.90 (6.83)	24.10 (4.85)				
27	8.21 (1.10)	3.15 (0.42)	39.80 (5.31)	28.30 (3.77)				
28								
29	8.41 (1.92)	3.23 (0.74)	40.70 (9.27)	28.90 (6.59)	13.50 (3.14)	4.19 (0.98)	39.00 (9.14)	27.70 (6.50)
30								
31								
Avg	8.8	3.4	41.6	29.6	12.7	4.0	35.9	25.5
n	19	19	19	19	15	15	15	15
SD	1.4	0.5	6.5	4.6	1.7	0.5	4.7	3.4
Min	5.9	2.3	27.1	19.3	10.1	3.2	28.5	20.3
Max	11.5	4.4	54.6	38.8	16.2	5.0	45.6	32.4

ED_004549_00015842-00289

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for November, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	9.14 (1.64)	3.51 (0.63)	43.50 (7.83)	30.90 (5.57)	12.10 (2.22)	3.77 (0.69)	36.30 (6.69)	25.80 (4.76)
2	10.10 (3.20)	3.88 (1.23)	47.80 (15.10)	34.00 (10.80)	15.50 (3.94)	4.83 (1.23)	47.00 (12.00)	33.40 (8.52)
3	10.80 (1.44)	4.14 (0.56)	50.90 (6.81)	36.20 (4.84)	15.70 (3.02)	4.91 (0.94)	47.90 (9.19)	34.10 (6.54)
4								
5								
6	7.49 (1.54)	2.88 (0.59)	35.10 (7.21)	25.00 (5.13)	10.80 (1.78)	3.37 (0.55)	32.60 (5.38)	23.20 (3.83)
7	6.37 (0.81)	2.45 (0.31)	29.80 (3.77)	21.20 (2.68)	8.19 (1.11)	2.55 (0.35)	24.60 (3.35)	17.50 (2.38)
8	7.28 (0.78)	2.80 (0.30)	34.00 (3.67)	24.20 (2.61)				
9	5.18 (1.77)	1.99 (0.68)	24.10 (8.24)	17.20 (5.86)	6.61 (2.53)	2.06 (0.79)	19.80 (7.58)	14.00 (5.39)
10	6.85 (1.91)	2.63 (0.73)	31.80 (8.86)	22.60 (6.30)	6.63 (2.41)	2.07 (0.75)	19.80 (7.18)	14.10 (5.11)
11	5.85 (1.76)	2.24 (0.68)	27.10 (8.15)	19.30 (5.80)	7.53 (2.20)	2.34 (0.69)	22.40 (6.53)	15.90 (4.64)
12	6.22 (0.65)	2.39 (0.25)	28.80 (2.98)	20.50 (2.12)	8.96 (0.83)	2.79 (0.26)	26.50 (2.43)	18.90 (1.73)
13	7.26 (1.18)	2.79 (0.45)	33.50 (5.44)	23.80 (3.87)	12.90 (1.48)	4.03 (0.46)	38.20 (4.36)	27.20 (3.10)
14	8.62 (0.71)	3.31 (0.27)	39.70 (3.27)	28.20 (2.32)				
15	7.64 (1.16)	2.93 (0.45)	35.20 (5.35)	25.00 (3.80)				
16	6.74 (1.64)	2.59 (0.63)	30.90 (7.52)	22.00 (5.35)	9.96 (3.61)	3.10 (1.13)	29.20 (10.60)	20.70 (7.53)
17	6.49 (1.86)	2.49 (0.71)	29.70 (8.51)	21.10 (6.05)	8.93 (3.65)	2.78 (1.14)	26.10 (10.70)	18.60 (7.60)
18	5.45 (1.89)	2.09 (0.73)	24.90 (8.66)	17.70 (6.16)	8.41 (2.70)	2.62 (0.84)	24.70 (7.94)	17.60 (5.65)
19								
20								
21	5.94 (2.12)	2.28 (0.82)	27.00 (9.64)	19.20 (6.86)	6.95 (0.94)	2.17 (0.29)	20.50 (2.77)	14.60 (1.97)
22	6.48 (1.92)	2.49 (0.74)	29.40 (8.72)	20.90 (6.20)	8.50 (2.88)	2.65 (0.90)	25.20 (8.54)	17.90 (6.07)
23								
24	6.74 (1.77)	2.59 (0.68)	30.40 (7.97)	21.60 (5.67)	9.41 (3.32)	2.93 (1.03)	28.00 (9.87)	19.90 (7.02)
25					8.13 (2.97)	2.53 (0.93)	24.30 (8.87)	17.30 (6.31)
26	7.36 (2.08)	2.83 (0.80)	33.00 (9.34)	23.40 (6.64)	8.45 (2.72)	2.63 (0.85)	25.40 (8.18)	18.00 (5.82)
27	7.24 (1.67)	2.78 (0.64)	32.30 (7.45)	23.00 (5.30)	9.07 (2.14)	2.83 (0.67)	27.40 (6.47)	19.50 (4.60)
28	7.94 (2.19)	3.05 (0.84)	35.30 (9.74)	25.10 (6.93)	9.64 (3.09)	3.00 (0.96)	29.20 (9.39)	20.80 (6.68)
29								
30								
Avg	7.2	2.8	33.4	23.7	9.6	3.0	28.8	20.4
n	22	22	22	22	20	20	20	20
SD	1.4	0.5	6.7	4.8	2.6	0.8	7.8	5.6
Min	5.2	2.0	24.1	17.2	6.6	2.1	19.8	14.0
Max	10.8	4.1	50.9	36.2	15.7	4.9	47.9	34.1

ED_004549_00015842-00290

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for December, 2008.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2	6.32 (1.63)	2.43 (0.63)	27.70 (7.15)	19.70 (5.08)	8.29 (2.15)	2.58 (0.67)	25.60 (6.61)	18.20 (4.70)
3	7.02 (2.36)	2.70 (0.91)	30.50 (10.30)	21.70 (7.30)	6.10 (1.77)	1.90 (0.55)	18.70 (5.44)	13.30 (3.87)
4	5.96 (1.18)	2.29 (0.45)	25.80 (5.11)	18.30 (3.63)	5.67 (0.71)	1.77 (0.22)	17.30 (2.17)	12.30 (1.54)
5	5.68 (1.71)	2.18 (0.66)	24.40 (7.34)	17.40 (5.22)	5.24 (1.06)	1.63 (0.33)	15.90 (3.23)	11.30 (2.29)
6	5.18 (1.05)	1.99 (0.40)	22.10 (4.49)	15.70 (3.19)	4.81 (1.06)	1.50 (0.33)	14.50 (3.21)	10.30 (2.28)
7	6.12 (0.93)	2.35 (0.36)	26.00 (3.96)	18.50 (2.81)	4.91 (0.80)	1.53 (0.25)	14.80 (2.40)	10.50 (1.71)
8								
9								
10								
11	5.30 (0.97)	2.03 (0.37)	22.90 (4.17)	16.30 (2.97)	5.31 (2.25)	1.65 (0.70)	15.90 (6.73)	11.30 (4.79)
12	5.60 (0.95)	2.15 (0.37)	24.40 (4.13)	17.30 (2.94)	4.56 (0.49)	1.42 (0.15)	13.70 (1.47)	9.73 (1.05)
13	4.82 (1.38)	1.85 (0.53)	21.20 (6.04)	15.10 (4.30)	8.11 (1.99)	2.53 (0.62)	24.30 (5.99)	17.30 (4.26)
14								
15								
16	7.02 (0.33)	2.70 (0.13)	31.60 (1.49)	22.40 (1.06)	6.76 (0.70)	2.11 (0.22)	20.30 (2.12)	14.50 (1.51)
17	7.39 (0.75)	2.84 (0.29)	33.00 (3.39)	23.50 (2.41)	6.27 (0.82)	1.95 (0.26)	18.80 (2.48)	13.40 (1.76)
18	6.56 (1.37)	2.52 (0.53)	29.20 (6.14)	20.70 (4.37)	5.82 (1.20)	1.81 (0.37)	17.40 (3.59)	12.40 (2.56)
19	5.20 (1.50)	2.00 (0.58)	23.00 (6.64)	16.40 (4.72)	4.12 (0.29)	1.28 (0.09)	12.30 (0.87)	8.73 (0.62)
20					3.80 (0.29)	1.18 (0.09)	11.30 (0.85)	8.04 (0.61)
21								
22								
23								
24	3.74 (0.16)	1.44 (0.06)	16.90 (0.75)	12.00 (0.53)	4.87 (0.16)	1.52 (0.05)	14.10 (0.47)	10.10 (0.33)
25					5.58 (1.18)	1.74 (0.37)	16.10 (3.40)	11.40 (2.42)
26	4.32 (1.58)	1.66 (0.61)	20.10 (7.30)	14.30 (5.19)	8.32 (1.99)	2.59 (0.62)	23.80 (5.71)	17.00 (4.06)
27	3.46 (1.37)	1.33 (0.53)	16.40 (6.48)	11.70 (4.61)	5.66 (1.93)	1.76 (0.60)	16.10 (5.51)	11.50 (3.92)
28	3.79 (1.56)	1.45 (0.60)	18.20 (7.50)	12.90 (5.34)	4.47 (1.08)	1.39 (0.34)	12.60 (3.05)	8.97 (2.17)
29	3.67 (1.11)	1.41 (0.43)	17.90 (5.39)	12.70 (3.83)	6.44 (2.54)	2.01 (0.79)	18.10 (7.16)	12.90 (5.09)
30	4.09 (0.82)	1.57 (0.31)	20.30 (4.07)	14.40 (2.89)	4.52 (0.29)	1.41 (0.09)	12.60 (0.82)	8.96 (0.58)
31	5.51 (0.97)	2.11 (0.37)	27.40 (4.86)	19.50 (3.46)	5.40 (1.11)	1.68 (0.35)	15.10 (3.09)	10.70 (2.19)
Avg	5.3	2.1	24.0	17.0	5.7	1.8	16.8	11.9
n	20	20	20	20	22	22	22	22
SD	1.2	0.5	4.8	3.4	1.3	0.4	3.8	2.7
Min	3.5	1.3	16.4	11.7	3.8	1.2	11.3	8.0
Max	7.4	2.8	33.0	23.5	8.3	2.6	25.6	18.2

ED_004549_00015842-00291

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for January, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	4.21 (1.07)	1.62 (0.41)	20.80 (5.27)	14.80 (3.75)	4.55 (0.53)	1.42 (0.17)	12.90 (1.50)	9.14 (1.07)
2	4.10 (0.50)	1.58 (0.19)	20.20 (2.46)	14.40 (1.75)	3.92 (0.39)	1.22 (0.12)	11.20 (1.13)	7.97 (0.80)
3	3.99 (0.96)	1.53 (0.37)	19.50 (4.70)	13.90 (3.34)	3.81 (1.34)	1.19 (0.42)	11.00 (3.90)	7.83 (2.78)
4	4.09 (0.71)	1.57 (0.27)	19.90 (3.48)	14.20 (2.47)	3.66 (1.06)	1.14 (0.33)	10.70 (3.08)	7.60 (2.19)
5	5.44 (1.46)	2.09 (0.56)	26.30 (7.06)	18.70 (5.02)	4.38 (0.59)	1.36 (0.19)	12.90 (1.74)	9.16 (1.24)
6	4.48 (1.15)	1.72 (0.44)	21.50 (5.54)	15.30 (3.94)	4.31 (0.69)	1.34 (0.22)	12.70 (2.03)	9.02 (1.45)
7	4.02 (0.25)	1.54 (0.10)	19.20 (1.19)	13.70 (0.85)	3.38 (0.21)	1.05 (0.06)	9.98 (0.61)	7.10 (0.43)
8	4.13 (0.49)	1.59 (0.19)	19.70 (2.36)	14.00 (1.68)	3.53 (0.47)	1.10 (0.15)	10.40 (1.38)	7.42 (0.98)
9	4.17 (0.52)	1.60 (0.20)	19.70 (2.47)	14.00 (1.76)	3.41 (0.23)	1.06 (0.07)	10.10 (0.66)	7.18 (0.47)
10	3.96 (0.50)	1.52 (0.19)	18.60 (2.34)	13.20 (1.66)	3.39 (0.22)	1.06 (0.07)	10.00 (0.66)	7.14 (0.47)
11	3.82 (0.25)	1.47 (0.09)	17.80 (1.14)	12.70 (0.81)	3.69 (0.22)	1.15 (0.07)	10.90 (0.64)	7.78 (0.45)
12								
13								
14	5.67 (0.45)	2.18 (0.17)	26.20 (2.07)	18.60 (1.47)	5.42 (0.47)	1.69 (0.15)	16.10 (1.39)	11.40 (0.99)
15	6.42 (0.46)	2.47 (0.18)	29.60 (2.13)	21.00 (1.52)	6.77 (0.52)	2.11 (0.16)	20.10 (1.53)	14.30 (1.09)
16	6.89 (0.79)	2.65 (0.30)	31.70 (3.65)	22.50 (2.59)	6.78 (0.93)	2.11 (0.29)	20.10 (2.75)	14.30 (1.95)
17	5.92 (1.02)	2.27 (0.39)	27.10 (4.68)	19.30 (3.33)	5.46 (0.45)	1.70 (0.14)	16.20 (1.33)	11.50 (0.95)
18	6.18 (1.41)	2.37 (0.54)	28.20 (6.46)	20.10 (4.59)	5.05 (0.39)	1.57 (0.12)	14.90 (1.17)	10.60 (0.83)
19	6.13 (1.38)	2.36 (0.53)	28.00 (6.31)	19.90 (4.49)	5.05 (0.29)	1.57 (0.09)	14.90 (0.85)	10.60 (0.60)
20	5.08 (1.38)	1.95 (0.53)	23.10 (6.27)	16.40 (4.46)	4.82 (0.45)	1.50 (0.14)	14.20 (1.33)	10.10 (0.94)
21	4.08 (1.50)	1.57 (0.58)	18.50 (6.82)	13.20 (4.85)	4.32 (0.39)	1.35 (0.12)	12.80 (1.15)	9.08 (0.82)
22	3.76 (1.64)	1.45 (0.63)	17.00 (7.43)	12.10 (5.29)	4.10 (0.34)	1.28 (0.11)	12.10 (1.01)	8.60 (0.72)
23	4.23 (1.46)	1.62 (0.56)	19.10 (6.62)	13.60 (4.70)	3.80 (0.30)	1.18 (0.09)	11.20 (0.90)	7.96 (0.64)
24	5.48 (0.92)	2.11 (0.36)	24.70 (4.17)	17.60 (2.97)	5.57 (0.93)	1.74 (0.29)	16.40 (2.75)	11.70 (1.96)
25	5.73 (0.91)	2.20 (0.35)	25.80 (4.11)	18.30 (2.92)	6.00 (1.01)	1.87 (0.31)	17.70 (2.96)	12.60 (2.11)
26	5.76 (1.11)	2.21 (0.43)	25.90 (5.00)	18.40 (3.55)	5.80 (0.82)	1.81 (0.26)	17.10 (2.42)	12.10 (1.72)
27	4.59 (0.84)	1.76 (0.32)	20.60 (3.74)	14.70 (2.66)				
28	4.81 (0.79)	1.85 (0.30)	21.80 (3.53)	15.50 (2.51)	4.66 (0.64)	1.45 (0.20)	13.80 (1.88)	9.79 (1.34)
29	3.98 (0.60)	1.53 (0.23)	18.10 (2.71)	12.90 (1.93)	3.80 (0.33)	1.18 (0.10)	11.30 (0.96)	8.01 (0.68)
30	4.28 (0.83)	1.64 (0.32)	19.60 (3.77)	13.90 (2.68)	4.03 (0.53)	1.25 (0.16)	12.00 (1.56)	8.51 (1.11)
31	5.29 (1.29)	2.03 (0.49)	24.40 (5.91)	17.30 (4.21)	7.55 (3.95)	2.35 (1.23)	22.50 (11.80)	16.00 (8.39)
Avg	4.9	1.9	22.5	16.0	4.7	1.5	13.8	9.8
n	29	29	29	29	28	28	28	28
SD	0.9	0.4	4.0	2.8	1.1	0.4	3.3	2.4
Min	3.8	1.5	17.0	12.1	3.4	1.1	10.0	7.1
Max	6.9	2.7	31.7	22.5	7.6	2.4	22.5	16.0

ED_004549_00015842-00292

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for February, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	4.78 (1.57)	1.84 (0.60)	22.20 (7.29)	15.80 (5.18)	5.12 (2.27)	1.59 (0.71)	15.30 (6.78)	10.90 (4.82)
2	4.57 (0.73)	1.75 (0.28)	21.30 (3.38)	15.10 (2.41)	3.90 (0.28)	1.22 (0.09)	11.70 (0.84)	8.29 (0.59)
3	4.44 (0.50)	1.70 (0.19)	20.70 (2.31)	14.70 (1.64)	3.91 (0.64)	1.22 (0.20)	11.60 (1.90)	8.27 (1.35)
4	4.57 (1.00)	1.76 (0.39)	21.40 (4.69)	15.20 (3.34)	4.46 (1.00)	1.39 (0.31)	13.20 (2.98)	9.39 (2.12)
5	3.79 (1.18)	1.46 (0.45)	17.80 (5.55)	12.70 (3.95)	4.25 (1.62)	1.32 (0.50)	12.50 (4.76)	8.92 (3.39)
6	4.16 (0.83)	1.60 (0.32)	19.60 (3.93)	13.90 (2.80)	5.48 (2.19)	1.71 (0.68)	16.10 (6.42)	11.50 (4.56)
7	4.59 (0.73)	1.76 (0.28)	21.70 (3.44)	15.50 (2.45)	4.86 (1.48)	1.51 (0.46)	14.20 (4.33)	10.10 (3.08)
8	4.71 (1.11)	1.81 (0.43)	22.40 (5.27)	15.90 (3.75)	5.03 (1.93)	1.57 (0.60)	14.60 (5.62)	10.40 (4.00)
9								
10					7.37 (1.27)	2.30 (0.40)	21.30 (3.70)	15.10 (2.63)
11	6.25 (0.90)	2.40 (0.34)	29.80 (4.25)	21.20 (3.03)	6.17 (1.61)	1.92 (0.50)	17.80 (4.64)	12.70 (3.30)
12	5.40 (1.90)	2.07 (0.73)	25.40 (8.95)	18.10 (6.36)	7.87 (3.60)	2.45 (1.12)	23.00 (10.50)	16.30 (7.47)
13	6.99 (2.84)	2.69 (1.09)	32.60 (13.20)	23.20 (9.41)	5.95 (2.87)	1.85 (0.89)	17.50 (8.45)	12.50 (6.01)
14	7.42 (2.45)	2.85 (0.94)	34.20 (11.30)	24.30 (8.03)	5.24 (0.37)	1.63 (0.12)	15.50 (1.11)	11.10 (0.79)
15	7.66 (2.02)	2.94 (0.78)	35.00 (9.23)	24.90 (6.56)	6.10 (1.64)	1.90 (0.51)	18.20 (4.91)	13.00 (3.50)
16	8.05 (2.26)	3.09 (0.87)	36.50 (10.30)	26.00 (7.30)	8.82 (2.86)	2.75 (0.89)	26.40 (8.53)	18.80 (6.06)
17								
18	5.60 (1.85)	2.15 (0.71)	25.30 (8.36)	18.00 (5.94)				
19					4.47 (0.30)	1.39 (0.09)	13.20 (0.88)	9.36 (0.62)
20					5.26 (0.86)	1.64 (0.27)	15.40 (2.52)	10.90 (1.80)
21					4.37 (0.39)	1.36 (0.12)	12.70 (1.15)	9.06 (0.82)
22					4.49 (0.42)	1.40 (0.13)	13.00 (1.22)	9.26 (0.87)
23					5.36 (0.98)	1.67 (0.31)	15.50 (2.84)	11.00 (2.02)
24					6.76 (1.79)	2.11 (0.56)	19.60 (5.21)	14.00 (3.71)
25	5.51 (1.17)	2.11 (0.45)	24.60 (5.21)	17.50 (3.71)	7.09 (1.64)	2.21 (0.51)	20.70 (4.76)	14.70 (3.39)
26	4.86 (1.97)	1.87 (0.76)	21.80 (8.82)	15.50 (6.27)	4.61 (1.69)	1.44 (0.53)	13.50 (4.93)	9.59 (3.50)
27	4.78 (0.48)	1.84 (0.19)	21.50 (2.16)	15.30 (1.54)	3.38 (0.25)	1.05 (0.08)	9.92 (0.75)	7.05 (0.54)
28	5.59 (1.54)	2.15 (0.59)	25.10 (6.92)	17.90 (4.92)	4.32 (0.78)	1.35 (0.24)	12.70 (2.29)	9.05 (1.63)
Avg	5.5	2.1	25.2	17.9	5.4	1.7	15.8	11.2
n	19	19	19	19	25	25	25	25
SD	1.2	0.5	5.5	3.9	1.3	0.4	3.9	2.8
Min	3.8	1.5	17.8	12.7	3.4	1.1	9.9	7.1
Max	8.1	3.1	36.5	26.0	8.8	2.8	26.4	18.8

ED_004549_00015842-00293

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for March, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	4.62 (0.68)	1.77 (0.26)	20.80 (3.05)	14.80 (2.17)	3.92 (0.27)	1.22 (0.08)	11.60 (0.81)	8.23 (0.58)
2								
3								
4	4.14 (1.21)	1.59 (0.47)	18.60 (5.45)	13.20 (3.88)	6.59 (1.87)	2.05 (0.58)	19.70 (5.61)	14.00 (3.99)
5	4.67 (0.35)	1.79 (0.13)	20.90 (1.54)	14.90 (1.10)	6.83 (0.25)	2.13 (0.08)	20.50 (0.74)	14.60 (0.52)
6	6.56 (1.80)	2.52 (0.69)	29.20 (8.02)	20.80 (5.70)	7.85 (0.52)	2.44 (0.16)	23.70 (1.57)	16.80 (1.12)
7	6.39 (1.21)	2.45 (0.47)	28.30 (5.37)	20.20 (3.82)	7.10 (2.43)	2.21 (0.76)	21.60 (7.36)	15.30 (5.23)
8	5.34 (1.30)	2.05 (0.50)	23.60 (5.71)	16.80 (4.06)	7.30 (2.38)	2.27 (0.74)	22.30 (7.26)	15.80 (5.16)
9	4.86 (1.14)	1.87 (0.44)	21.50 (5.04)	15.30 (3.58)	7.88 (1.68)	2.46 (0.53)	24.00 (5.11)	17.10 (3.64)
10	5.49 (0.89)	2.11 (0.34)	24.50 (3.95)	17.40 (2.81)	5.97 (1.18)	1.86 (0.37)	18.00 (3.61)	12.80 (2.57)
11	4.65 (0.37)	1.78 (0.14)	20.90 (1.63)	14.90 (1.16)	3.97 (0.28)	1.24 (0.09)	11.90 (0.83)	8.45 (0.59)
12	4.83 (0.84)	1.85 (0.32)	21.90 (3.80)	15.60 (2.70)	4.52 (0.46)	1.41 (0.14)	13.40 (1.37)	9.53 (0.97)
13	4.44 (1.01)	1.71 (0.39)	20.40 (4.65)	14.50 (3.31)	5.73 (1.60)	1.79 (0.50)	16.90 (4.70)	12.00 (3.34)
14	5.62 (1.66)	2.16 (0.64)	26.00 (7.72)	18.50 (5.49)	7.29 (2.17)	2.27 (0.68)	21.30 (6.33)	15.10 (4.50)
15	6.30 (1.06)	2.42 (0.41)	29.50 (4.99)	20.90 (3.55)	9.46 (2.25)	2.95 (0.70)	27.40 (6.48)	19.50 (4.61)
16	8.34 (2.07)	3.20 (0.80)	39.00 (9.65)	27.80 (6.87)	13.80 (2.87)	4.31 (0.89)	40.00 (8.34)	28.50 (5.93)
17								
18	8.33 (1.56)	3.20 (0.60)	38.60 (7.21)	27.40 (5.12)	12.10 (1.90)	3.77 (0.59)	35.50 (5.55)	25.20 (3.95)
19								
20								
21								
22								
23								
24								
25					10.30 (1.96)	3.21 (0.61)	30.80 (5.89)	21.90 (4.19)
26								
27								
28								
29								
30					8.81 (1.91)	2.74 (0.60)	25.70 (5.58)	18.30 (3.97)
31					9.38 (2.06)	2.92 (0.64)	27.40 (6.03)	19.50 (4.29)
Avg	5.6	2.2	25.6	18.2	7.7	2.4	22.9	16.3
n	15	15	15	15	18	18	18	18
SD	1.3	0.5	6.1	4.4	2.6	0.8	7.4	5.3
Min	4.1	1.6	18.6	13.2	3.9	1.2	11.6	8.2
Max	8.3	3.2	39.0	27.8	13.8	4.3	40.0	28.5

ED_004549_00015842-00294

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for April, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	5.91 (0.66)	2.27 (0.25)	27.20 (3.06)	19.40 (2.17)	9.57 (1.02)	2.98 (0.32)	27.90 (2.99)	19.90 (2.12)
2	8.77 (2.41)	3.37 (0.93)	40.10 (11.00)	28.50 (7.82)	10.70 (1.70)	3.32 (0.53)	31.20 (4.97)	22.20 (3.53)
3	9.95 (1.81)	3.82 (0.69)	45.30 (8.20)	32.20 (5.83)				
4	8.79 (2.46)	3.38 (0.94)	39.80 (11.10)	28.30 (7.89)	9.66 (2.60)	3.01 (0.81)	28.30 (7.63)	20.10 (5.42)
5	8.16 (0.62)	3.13 (0.24)	36.70 (2.77)	26.10 (1.97)				
6	7.61 (1.20)	2.92 (0.46)	34.10 (5.38)	24.30 (3.83)				
7	9.06 (2.52)	3.48 (0.97)	40.60 (11.30)	28.90 (8.03)	9.88 (2.72)	3.08 (0.85)	29.00 (7.99)	20.60 (5.68)
8	9.93 (2.43)	3.81 (0.93)	44.50 (10.90)	31.70 (7.74)	10.40 (2.76)	3.23 (0.86)	30.40 (8.11)	21.60 (5.77)
9	10.10 (2.52)	3.87 (0.97)	45.20 (11.30)	32.10 (8.02)				
10	9.77 (2.36)	3.75 (0.91)	43.80 (10.60)	31.20 (7.53)				
11	8.52 (1.64)	3.27 (0.63)	38.20 (7.35)	27.20 (5.23)	10.40 (2.52)	3.24 (0.78)	30.50 (7.38)	21.70 (5.25)
12	8.99 (1.74)	3.45 (0.67)	40.30 (7.82)	28.70 (5.56)	11.80 (2.42)	3.67 (0.75)	34.60 (7.09)	24.60 (5.05)
13	9.97 (2.19)	3.83 (0.84)	44.80 (9.91)	31.90 (7.05)	11.60 (2.47)	3.61 (0.77)	33.90 (7.24)	24.10 (5.15)
14	13.60 (2.79)	5.22 (1.07)	61.60 (12.70)	43.80 (9.01)				
15	7.79 (3.87)	2.99 (1.48)	35.50 (17.60)	25.20 (12.50)	14.20 (2.44)	4.42 (0.76)	41.40 (7.12)	29.40 (5.06)
16	9.55 (3.00)	3.67 (1.15)	43.80 (13.80)	31.20 (9.81)	17.40 (4.27)	5.42 (1.33)	50.80 (12.40)	36.10 (8.85)
17	8.72 (3.48)	3.35 (1.33)	40.20 (16.00)	28.60 (11.40)	17.60 (3.51)	5.49 (1.09)	51.30 (10.20)	36.50 (7.26)
18	12.60 (2.71)	4.84 (1.04)	58.60 (12.70)	41.70 (9.02)				
19	10.80 (2.36)	4.16 (0.91)	50.70 (11.00)	36.10 (7.82)				
20	9.05 (1.23)	3.47 (0.47)	42.40 (5.75)	30.10 (4.09)				
21	11.30 (2.72)	4.36 (1.04)	52.90 (12.60)	37.60 (8.98)				
22	12.60 (1.65)	4.83 (0.63)	58.40 (7.67)	41.50 (5.45)				
23					20.00 (5.70)	6.24 (1.78)	57.50 (16.30)	40.90 (11.60)
24	12.40 (2.25)	4.75 (0.86)	56.90 (10.30)	40.40 (7.34)				
25	9.12 (1.87)	3.50 (0.72)	41.70 (8.56)	29.70 (6.08)				
26					12.70 (3.58)	3.96 (1.11)	36.10 (10.10)	25.70 (7.22)
27	9.14 (1.56)	3.51 (0.60)	41.70 (7.10)	29.70 (5.05)	14.20 (2.81)	4.42 (0.88)	40.10 (8.00)	28.50 (5.69)
28								
29	10.10 (1.55)	3.90 (0.60)	47.00 (7.19)	33.40 (5.11)	14.40 (2.81)	4.49 (0.88)	39.60 (7.63)	28.20 (5.43)
30	10.20 (1.30)	3.93 (0.50)	47.80 (6.17)	34.00 (4.39)				
Avg	9.7	3.7	44.4	31.6	13.0	4.0	37.5	26.7
n	27	27	27	27	15	15	15	15
SD	1.7	0.6	7.9	5.6	3.2	1.0	9.0	6.4
Min	5.9	2.3	27.2	19.4	9.6	3.0	27.9	19.9
Max	13.6	5.2	61.6	43.8	20.0	6.2	57.5	40.9

ED_004549_00015842-00295

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for May, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3					18.30 (3.82)	5.71 (1.19)	47.90 (9.95)	34.10 (7.08)
4					17.60 (4.36)	5.48 (1.36)	45.40 (11.20)	32.30 (7.94)
5					18.70 (2.99)	5.83 (0.93)	47.80 (7.61)	34.00 (5.41)
6					16.50 (2.57)	5.15 (0.80)	42.30 (6.57)	30.10 (4.67)
7					17.30 (3.42)	5.37 (1.06)	44.70 (8.90)	31.80 (6.33)
8								
9								
10								
11					13.50 (2.85)	4.19 (0.89)	36.70 (7.79)	26.10 (5.54)
12					17.70 (2.49)	5.53 (0.78)	48.60 (6.87)	34.60 (4.89)
13					18.20 (3.49)	5.66 (1.09)	50.00 (9.65)	35.60 (6.86)
14								
15					16.20 (3.23)	5.04 (1.01)	45.00 (9.02)	32.00 (6.41)
16								
17								
18					18.80 (4.16)	5.85 (1.30)	53.10 (11.80)	37.80 (8.37)
19	14.20 (2.50)	5.46 (0.96)	64.60 (11.30)	45.90 (8.06)	23.90 (4.99)	7.45 (1.55)	67.60 (14.10)	48.10 (10.00)
20	9.08 (5.19)	3.49 (1.99)	41.20 (23.50)	29.30 (16.70)	17.70 (6.82)	5.52 (2.12)	50.10 (19.30)	35.60 (13.70)
21								
22					13.60 (2.93)	4.23 (0.91)	38.40 (8.32)	27.30 (5.91)
23								
24					17.40 (3.89)	5.41 (1.21)	49.30 (11.00)	35.10 (7.85)
25					15.80 (2.32)	4.93 (0.72)	44.90 (6.60)	31.90 (4.69)
26					16.10 (1.44)	5.02 (0.45)	45.80 (4.11)	32.50 (2.92)
27								
28					16.10 (3.11)	5.00 (0.97)	45.60 (8.83)	32.40 (6.28)
29								
30								
31					21.30 (5.49)	6.64 (1.71)	60.50 (15.60)	43.10 (11.10)
Avg	11.7	4.5	52.9	37.6	17.5	5.4	48.0	34.1
n	2	2	2	2	18	18	18	18
SD	2.6	1.0	11.7	8.3	2.4	0.7	7.0	5.0
Min	9.1	3.5	41.2	29.3	13.5	4.2	36.7	26.1
Max	14.2	5.5	64.6	45.9	23.9	7.5	67.6	48.1

ED_004549_00015842-00296

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for June, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3					16.30 (3.92)	5.09 (1.22)	46.90 (11.30)	33.40 (8.02)
4	9.52 (1.22)	3.65 (0.47)	41.70 (5.37)	29.70 (3.82)	18.80 (4.44)	5.87 (1.38)	54.40 (12.80)	38.70 (9.13)
5	14.70 (4.68)	5.66 (1.80)	64.40 (20.40)	45.80 (14.50)				
6					13.00 (2.46)	4.05 (0.77)	37.90 (7.13)	26.90 (5.07)
7					12.10 (2.08)	3.76 (0.65)	35.40 (6.10)	25.10 (4.34)
8	11.40 (1.12)	4.37 (0.43)	49.40 (4.94)	35.10 (3.51)	13.70 (1.50)	4.28 (0.47)	40.40 (4.44)	28.70 (3.15)
9	10.90 (1.19)	4.19 (0.46)	47.60 (5.22)	33.90 (3.71)	15.60 (1.38)	4.85 (0.43)	46.00 (4.09)	32.70 (2.91)
10	11.60 (1.17)	4.44 (0.45)	50.90 (5.17)	36.20 (3.67)	15.90 (1.73)	4.96 (0.54)	47.20 (5.14)	33.50 (3.66)
11	11.70 (2.20)	4.49 (0.85)	51.70 (9.75)	36.80 (6.93)	16.60 (2.48)	5.18 (0.77)	49.50 (7.38)	35.20 (5.25)
12	12.20 (1.90)	4.67 (0.73)	54.10 (8.40)	38.50 (5.98)	17.20 (3.42)	5.35 (1.06)	51.30 (10.20)	36.50 (7.26)
13	13.00 (2.02)	4.99 (0.78)	58.20 (9.06)	41.40 (6.44)	18.90 (3.93)	5.88 (1.23)	56.60 (11.80)	40.20 (8.41)
14	13.30 (2.85)	5.10 (1.09)	59.80 (12.90)	42.60 (9.15)	16.60 (4.87)	5.18 (1.52)	50.10 (14.70)	35.60 (10.40)
15	12.50 (2.36)	4.81 (0.91)	56.70 (10.70)	40.30 (7.60)	17.30 (4.07)	5.39 (1.27)	52.30 (12.30)	37.20 (8.76)
16	11.10 (1.58)	4.25 (0.61)	50.30 (7.19)	35.80 (5.11)	16.90 (2.61)	5.27 (0.81)	51.20 (7.92)	36.40 (5.63)
17	11.10 (1.99)	4.28 (0.76)	50.60 (9.02)	36.00 (6.41)	17.50 (3.37)	5.45 (1.05)	52.70 (10.10)	37.50 (7.21)
18	10.90 (2.12)	4.18 (0.81)	49.40 (9.62)	35.10 (6.84)	16.80 (1.86)	5.22 (0.58)	50.40 (5.59)	35.80 (3.98)
19	12.20 (3.29)	4.69 (1.26)	55.40 (14.90)	39.40 (10.60)	15.30 (1.95)	4.77 (0.61)	45.80 (5.82)	32.60 (4.14)
20	12.80 (4.68)	4.92 (1.80)	58.00 (21.20)	41.30 (15.10)	17.20 (2.57)	5.35 (0.80)	51.20 (7.65)	36.40 (5.44)
21	11.40 (2.02)	4.37 (0.77)	51.50 (9.13)	36.60 (6.49)	15.20 (2.09)	4.74 (0.65)	45.20 (6.23)	32.10 (4.43)
22	14.20 (5.44)	5.46 (2.09)	64.20 (24.50)	45.60 (17.50)	17.30 (2.77)	5.40 (0.86)	51.40 (8.21)	36.50 (5.84)
23								
24								
25								
26								
27								
28								
29								
30								
Avg	12.0	4.6	53.8	38.2	16.2	5.1	48.2	34.3
n	17	17	17	17	19	19	19	19
SD	1.3	0.5	5.8	4.1	1.7	0.5	5.4	3.8
Min	9.5	3.7	41.7	29.7	12.1	3.8	35.4	25.1
Max	14.7	5.7	64.4	45.8	18.9	5.9	56.6	40.2

ED_004549_00015842-00297

Table F11. Daily means (SD) of NH3 emissions at Site WI5B for July, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1								
2								
3								
4								
5								
6								
7	15.20 (2.73)	5.84 (1.05)	67.90 (12.20)	48.30 (8.66)	21.80 (6.01)	6.80 (1.87)	64.90 (17.80)	46.10 (12.70)
8	11.90 (2.35)	4.57 (0.90)	53.20 (10.50)	37.80 (7.48)	15.90 (3.02)	4.94 (0.94)	46.70 (8.91)	33.20 (6.34)
9	10.80 (2.11)	4.14 (0.81)	48.30 (9.44)	34.40 (6.71)	17.70 (3.96)	5.50 (1.23)	51.60 (11.60)	36.70 (8.22)
10	15.00 (4.49)	5.78 (1.72)	67.70 (20.20)	48.10 (14.40)	19.80 (6.02)	6.18 (1.87)	57.40 (17.40)	40.80 (12.40)
11	15.80 (3.06)	6.06 (1.18)	71.10 (13.80)	50.50 (9.81)	17.00 (3.09)	5.29 (0.96)	48.70 (8.90)	34.70 (6.33)
12	13.70 (1.65)	5.25 (0.63)	61.80 (7.48)	44.00 (5.32)	18.90 (2.58)	5.88 (0.80)	53.70 (7.31)	38.20 (5.20)
13	13.80 (2.50)	5.28 (0.96)	62.90 (11.50)	44.70 (8.18)	19.00 (6.63)	5.93 (2.07)	53.60 (18.70)	38.10 (13.30)
14	13.50 (2.13)	5.20 (0.82)	63.20 (9.79)	44.90 (6.96)	20.10 (4.47)	6.25 (1.39)	55.90 (12.40)	39.80 (8.84)
15	16.20 (3.23)	6.21 (1.24)	77.00 (15.40)	54.80 (10.90)	19.40 (2.84)	6.03 (0.89)	53.40 (7.87)	38.00 (5.60)
16	14.60 (5.13)	5.62 (1.97)	71.20 (25.00)	50.60 (17.80)				
17	14.40 (2.46)	5.52 (0.95)	71.50 (12.30)	50.80 (8.73)				
18	14.40 (3.14)	5.53 (1.21)	73.30 (16.00)	52.10 (11.40)				
19	12.10 (1.58)	4.63 (0.61)	62.70 (8.13)	44.60 (5.78)	19.20 (2.37)	5.98 (0.74)	50.70 (6.22)	36.10 (4.42)
20	11.30 (1.92)	4.34 (0.74)	59.60 (10.10)	42.40 (7.18)	22.30 (5.14)	6.94 (1.60)	58.60 (13.50)	41.70 (9.61)
21	10.40 (1.64)	3.99 (0.63)	54.80 (8.67)	39.00 (6.17)	18.40 (2.83)	5.73 (0.88)	48.40 (7.44)	34.40 (5.29)
22	10.10 (1.54)	3.89 (0.59)	53.50 (8.11)	38.10 (5.77)	17.90 (4.32)	5.59 (1.35)	47.10 (11.40)	33.50 (8.07)
23	11.20 (2.78)	4.29 (1.07)	59.10 (14.70)	42.10 (10.40)	19.80 (4.67)	6.16 (1.45)	51.90 (12.20)	36.90 (8.71)
24	11.50 (3.45)	4.41 (1.32)	60.80 (18.30)	43.20 (13.00)	17.80 (4.69)	5.53 (1.46)	46.60 (12.30)	33.10 (8.74)
25	12.00 (2.81)	4.60 (1.08)	63.60 (14.90)	45.20 (10.60)	16.10 (1.65)	5.03 (0.52)	42.30 (4.34)	30.10 (3.08)
26	10.40 (2.69)	4.00 (1.03)	55.30 (14.30)	39.30 (10.20)	17.80 (3.75)	5.53 (1.17)	46.50 (9.82)	33.10 (6.99)
27	10.90 (2.48)	4.19 (0.95)	57.70 (13.10)	41.00 (9.33)	18.10 (4.12)	5.65 (1.28)	47.60 (10.80)	33.80 (7.69)
28	12.70 (3.69)	4.86 (1.42)	66.20 (19.30)	47.10 (13.70)	19.10 (2.74)	5.96 (0.85)	50.30 (7.22)	35.80 (5.13)
29	14.00 (3.87)	5.39 (1.49)	72.60 (20.00)	51.60 (14.20)	19.30 (4.41)	6.00 (1.37)	50.80 (11.60)	36.10 (8.28)
30	13.30 (3.40)	5.09 (1.31)	67.80 (17.40)	48.20 (12.40)	16.30 (1.92)	5.07 (0.60)	43.10 (5.06)	30.70 (3.60)
31	12.70 (2.02)	4.86 (0.78)	64.10 (10.20)	45.60 (7.26)	18.20 (3.62)	5.66 (1.13)	48.30 (9.63)	34.40 (6.85)
Avg	12.9	4.9	63.5	45.1	18.6	5.8	50.8	36.2
n	25	25	25	25	22	22	22	22
SD	1.8	0.7	7.1	5.1	1.6	0.5	5.1	3.7
Min	10.1	3.9	48.3	34.4	15.9	4.9	42.3	30.1
Max	16.2	6.2	77.0	54.8	22.3	6.9	64.9	46.1

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Table F11. Daily means (SD) of NH3 emissions at Site WI5B for August, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	14.90 (3.83)	5.71 (1.47)	74.40 (19.20)	52.90 (13.60)				
2	13.30 (2.20)	5.11 (0.85)	65.90 (10.80)	46.90 (7.67)				
3	14.60 (3.26)	5.62 (1.25)	72.50 (16.20)	51.60 (11.50)	19.10 (3.91)	5.95 (1.22)	51.10 (10.50)	36.30 (7.44)
4	17.20 (3.51)	6.61 (1.35)	86.40 (17.50)	61.40 (12.50)	18.50 (3.12)	5.76 (0.97)	49.20 (8.30)	35.00 (5.90)
5	16.40 (3.16)	6.30 (1.21)	83.30 (16.00)	59.20 (11.40)	18.80 (2.95)	5.86 (0.92)	49.90 (7.80)	35.50 (5.55)
6	16.30 (2.96)	6.26 (1.14)	83.80 (15.40)	59.60 (10.90)	19.40 (3.34)	6.04 (1.04)	51.30 (8.80)	36.50 (6.26)
7	14.30 (2.66)	5.49 (1.02)	74.40 (13.70)	52.90 (9.74)	19.50 (2.90)	6.08 (0.90)	51.40 (7.63)	36.60 (5.43)
8	13.10 (2.33)	5.05 (0.90)	69.30 (12.30)	49.30 (8.78)	17.60 (2.68)	5.49 (0.84)	46.30 (7.02)	32.90 (4.99)
9	13.20 (3.42)	5.07 (1.31)	70.50 (18.20)	50.10 (12.90)				
10	16.20 (3.30)	6.20 (1.27)	86.90 (17.80)	61.80 (12.60)	22.60 (5.93)	7.03 (1.85)	58.80 (15.50)	41.80 (11.00)
11	15.60 (5.22)	5.98 (2.00)	83.90 (28.10)	59.60 (20.00)	26.10 (7.33)	8.13 (2.28)	67.80 (19.00)	48.20 (13.50)
12	14.10 (3.74)	5.42 (1.44)	76.10 (20.10)	54.10 (14.30)	24.60 (6.42)	7.65 (2.00)	63.60 (16.60)	45.20 (11.80)
13	10.30 (1.84)	3.97 (0.71)	55.80 (9.90)	39.60 (7.04)	18.30 (2.52)	5.71 (0.79)	47.30 (6.53)	33.60 (4.65)
14	12.40 (2.77)	4.76 (1.06)	66.90 (15.00)	47.60 (10.60)	20.00 (4.16)	6.24 (1.30)	51.50 (10.70)	36.60 (7.61)
15	11.50 (1.49)	4.40 (0.57)	61.90 (8.03)	44.00 (5.71)	18.80 (2.04)	5.85 (0.64)	48.20 (5.22)	34.30 (3.71)
16	12.40 (2.46)	4.77 (0.94)	67.10 (13.30)	47.70 (9.45)	19.80 (3.74)	6.18 (1.16)	50.70 (9.54)	36.00 (6.78)
17	14.90 (3.09)	5.71 (1.19)	80.40 (16.70)	57.20 (11.90)	20.60 (5.97)	6.41 (1.86)	52.50 (15.20)	37.30 (10.80)
18	16.40 (2.94)	6.31 (1.13)	88.80 (15.90)	63.20 (11.30)	21.00 (4.10)	6.55 (1.28)	53.60 (10.50)	38.10 (7.44)
19	12.00 (2.72)	4.59 (1.05)	64.70 (14.70)	46.00 (10.50)	18.50 (2.92)	5.76 (0.91)	47.10 (7.45)	33.50 (5.30)
20	12.20 (3.28)	4.69 (1.26)	66.10 (17.70)	47.00 (12.60)				
21	14.90 (3.05)	5.72 (1.17)	80.60 (16.50)	57.30 (11.70)				
22	12.20 (2.57)	4.69 (0.99)	66.10 (13.90)	47.00 (9.90)	16.00 (2.87)	4.99 (0.90)	40.70 (7.31)	28.90 (5.20)
23	11.40 (1.52)	4.36 (0.59)	61.50 (8.24)	43.70 (5.86)	17.50 (3.54)	5.45 (1.10)	44.40 (8.98)	31.60 (6.39)
24	10.00 (1.68)	3.84 (0.65)	54.10 (9.10)	38.50 (6.47)	19.10 (4.35)	5.94 (1.36)	48.40 (11.00)	34.40 (7.85)
25	10.60 (2.08)	4.06 (0.80)	57.20 (11.20)	40.70 (8.00)	15.10 (2.28)	4.71 (0.71)	38.30 (5.78)	27.30 (4.11)
26	10.60 (1.46)	4.07 (0.56)	57.50 (7.93)	40.90 (5.64)	16.50 (3.41)	5.15 (1.06)	41.90 (8.64)	29.80 (6.15)
27	10.80 (1.76)	4.14 (0.68)	58.40 (9.54)	41.50 (6.79)	17.90 (3.85)	5.59 (1.20)	45.40 (9.75)	32.30 (6.94)
28	12.40 (2.83)	4.75 (1.09)	67.00 (15.30)	47.70 (10.90)				
29	12.70 (1.62)	4.88 (0.62)	68.90 (8.81)	49.00 (6.27)				
30	11.20 (2.25)	4.29 (0.87)	60.60 (12.20)	43.10 (8.69)	15.10 (2.64)	4.69 (0.82)	38.00 (6.66)	27.10 (4.73)
31	11.10 (1.87)	4.25 (0.72)	60.00 (10.10)	42.70 (7.21)	15.70 (3.31)	4.89 (1.03)	39.60 (8.34)	28.20 (5.93)
Avg	13.2	5.1	70.0	49.8	19.0	5.9	49.0	34.9
n	31	31	31	31	24	24	24	24
SD	2.1	0.8	10.0	7.1	2.6	0.8	7.1	5.1
Min	10.0	3.8	54.1	38.5	15.1	4.7	38.0	27.1
Max	17.2	6.6	88.8	63.2	26.1	8.1	67.8	48.2

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Table F11. Daily means (SD) of NH3 emissions at Site WI5B for September, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	11.40 (1.44)	4.37 (0.55)	61.80 (7.81)	44.00 (5.55)	14.70 (3.66)	4.57 (1.14)	37.00 (9.24)	26.30 (6.57)
2	11.40 (1.66)	4.37 (0.64)	61.70 (8.99)	43.90 (6.39)	14.60 (2.59)	4.54 (0.81)	36.70 (6.54)	26.10 (4.65)
3	11.40 (1.65)	4.38 (0.63)	61.90 (8.96)	44.00 (6.37)	13.50 (2.93)	4.21 (0.91)	34.00 (7.39)	24.20 (5.26)
4	11.90 (2.17)	4.56 (0.83)	64.50 (11.80)	45.90 (8.36)	13.90 (2.97)	4.34 (0.92)	35.10 (7.47)	25.00 (5.31)
5	11.60 (1.72)	4.47 (0.66)	63.20 (9.37)	44.90 (6.66)	14.50 (2.72)	4.52 (0.85)	36.50 (6.84)	25.90 (4.86)
6	14.30 (2.36)	5.48 (0.91)	77.60 (12.80)	55.20 (9.11)	15.80 (3.87)	4.92 (1.21)	39.70 (9.74)	28.20 (6.92)
7	11.90 (2.24)	4.56 (0.86)	64.40 (12.20)	45.80 (8.65)	17.00 (3.98)	5.30 (1.24)	42.90 (10.00)	30.50 (7.15)
8	13.70 (2.68)	5.26 (1.03)	73.80 (14.50)	52.50 (10.30)	17.10 (4.17)	5.33 (1.30)	43.30 (10.60)	30.80 (7.52)
9	14.10 (2.11)	5.41 (0.81)	75.60 (11.30)	53.70 (8.02)	18.00 (4.69)	5.60 (1.46)	45.80 (11.90)	32.60 (8.50)
10	12.60 (2.37)	4.85 (0.91)	67.30 (12.70)	47.90 (9.02)	16.50 (5.53)	5.13 (1.72)	42.20 (14.10)	30.00 (10.10)
11	13.10 (2.22)	5.04 (0.85)	69.70 (11.80)	49.60 (8.42)	15.00 (2.66)	4.68 (0.83)	38.70 (6.88)	27.50 (4.89)
12	13.60 (2.39)	5.22 (0.92)	71.70 (12.60)	51.00 (8.95)	14.80 (3.60)	4.61 (1.12)	38.40 (9.34)	27.30 (6.65)
13	13.90 (2.73)	5.35 (1.05)	73.20 (14.40)	52.10 (10.20)	17.20 (4.09)	5.35 (1.27)	44.70 (10.70)	31.80 (7.60)
14	14.40 (2.63)	5.53 (1.01)	75.60 (13.70)	53.80 (9.78)	18.40 (5.19)	5.73 (1.62)	48.10 (13.60)	34.20 (9.66)
15	15.40 (3.91)	5.90 (1.50)	81.20 (20.70)	57.70 (14.70)	17.30 (4.94)	5.40 (1.54)	45.60 (13.00)	32.40 (9.25)
16	13.20 (2.72)	5.07 (1.04)	70.20 (14.40)	49.90 (10.20)	15.50 (4.45)	4.82 (1.39)	41.00 (11.80)	29.10 (8.41)
17	13.40 (2.62)	5.16 (1.01)	71.90 (14.10)	51.10 (10.00)	14.70 (2.99)	4.59 (0.93)	39.20 (7.98)	27.80 (5.67)
18	15.70 (2.93)	6.02 (1.13)	84.40 (15.70)	60.00 (11.20)	14.10 (3.30)	4.40 (1.03)	37.70 (8.83)	26.80 (6.28)
19	11.60 (2.20)	4.45 (0.84)	62.70 (11.90)	44.60 (8.44)	14.10 (3.64)	4.40 (1.13)	38.00 (9.79)	27.00 (6.96)
20	11.20 (2.58)	4.31 (0.99)	61.20 (14.10)	43.50 (10.00)	14.90 (2.62)	4.64 (0.82)	40.30 (7.12)	28.60 (5.06)
21	11.90 (1.78)	4.59 (0.68)	65.10 (9.68)	46.30 (6.89)	16.10 (2.20)	5.03 (0.69)	43.70 (5.96)	31.10 (4.24)
22	12.90 (2.59)	4.97 (0.99)	70.30 (14.10)	50.00 (10.00)	13.70 (1.67)	4.28 (0.52)	37.20 (4.50)	26.40 (3.20)
23	13.10 (1.95)	5.05 (0.75)	71.10 (10.60)	50.60 (7.52)	15.30 (3.06)	4.78 (0.96)	41.40 (8.26)	29.50 (5.88)
24	13.60 (2.55)	5.22 (0.98)	73.20 (13.70)	52.10 (9.73)	17.00 (3.08)	5.30 (0.96)	45.90 (8.31)	32.60 (5.91)
25	12.80 (2.70)	4.90 (1.04)	68.50 (14.60)	48.70 (10.40)	14.10 (2.40)	4.41 (0.75)	38.10 (6.46)	27.10 (4.59)
26	12.40 (2.40)	4.77 (0.92)	66.50 (12.80)	47.30 (9.13)	15.10 (3.39)	4.71 (1.06)	40.60 (9.11)	28.90 (6.48)
27	12.10 (2.06)	4.65 (0.79)	64.60 (10.90)	45.90 (7.77)				
28	11.50 (1.76)	4.43 (0.68)	61.20 (9.27)	43.50 (6.59)				
29								
30	9.76 (1.12)	3.75 (0.43)	51.10 (5.88)	36.30 (4.19)	10.60 (1.91)	3.30 (0.60)	28.20 (5.10)	20.10 (3.63)
Avg	12.8	4.9	68.5	48.7	15.3	4.8	40.0	28.4
n	29	29	29	29	27	27	27	27
SD	1.3	0.5	6.9	4.9	1.6	0.5	4.2	3.0
Min	9.8	3.8	51.1	36.3	10.6	3.3	28.2	20.1
Max	15.7	6.0	84.4	60.0	18.4	5.7	48.1	34.2

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Table F11. Daily means (SD) of NH3 emissions at Site WI5B for October, 2009.

Day	Barn 1				Barn 2			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1					8.35 (1.35)	2.60 (0.42)	22.20 (3.60)	15.80 (2.56)
2	11.60 (2.12)	4.45 (0.81)	59.80 (10.90)	42.50 (7.72)				
3	12.40 (2.03)	4.76 (0.78)	63.60 (10.50)	45.20 (7.47)				
4	11.30 (0.95)	4.32 (0.37)	57.30 (4.89)	40.80 (3.48)				
5	10.40 (1.46)	4.01 (0.56)	52.90 (7.39)	37.60 (5.26)				
6								
7	9.80 (2.10)	3.76 (0.81)	49.40 (10.50)	35.10 (7.49)				
8	12.40 (2.84)	4.75 (1.09)	62.10 (14.20)	44.20 (10.10)				
9	9.28 (1.42)	3.56 (0.55)	46.50 (7.13)	33.10 (5.07)				
10	5.90 (1.39)	2.26 (0.54)	29.50 (6.98)	21.00 (4.96)	8.92 (1.51)	2.78 (0.47)	23.50 (3.98)	16.70 (2.83)
11	6.82 (0.83)	2.62 (0.32)	34.00 (4.11)	24.20 (2.93)	9.32 (0.54)	2.90 (0.17)	24.50 (1.43)	17.40 (1.02)
12	7.16 (1.09)	2.75 (0.42)	35.50 (5.44)	25.20 (3.87)	9.06 (0.78)	2.82 (0.24)	23.80 (2.05)	16.90 (1.46)
13	8.56 (0.85)	3.29 (0.33)	42.20 (4.14)	30.00 (2.94)	8.93 (1.00)	2.78 (0.31)	23.50 (2.65)	16.70 (1.88)
14	8.02 (0.95)	3.08 (0.37)	39.30 (4.68)	27.90 (3.33)	9.61 (0.41)	2.99 (0.13)	25.40 (1.08)	18.10 (0.77)
15	7.72 (0.69)	2.96 (0.27)	37.60 (3.35)	26.70 (2.38)	8.66 (0.83)	2.70 (0.26)	23.00 (2.19)	16.30 (1.55)
16	8.83 (1.27)	3.39 (0.49)	42.70 (6.12)	30.40 (4.35)	10.20 (1.45)	3.17 (0.45)	27.10 (3.87)	19.20 (2.75)
17	8.73 (1.04)	3.35 (0.40)	42.00 (5.00)	29.80 (3.56)	11.10 (1.74)	3.46 (0.54)	29.60 (4.65)	21.10 (3.31)
18	8.27 (1.88)	3.18 (0.72)	39.50 (8.92)	28.10 (6.34)	14.60 (2.93)	4.56 (0.91)	39.10 (7.86)	27.80 (5.59)
19	9.52 (1.02)	3.65 (0.39)	45.70 (4.82)	32.50 (3.43)	13.80 (2.22)	4.31 (0.69)	36.90 (5.94)	26.20 (4.23)
20	9.23 (0.98)	3.54 (0.38)	45.00 (4.92)	32.00 (3.50)	11.30 (2.07)	3.53 (0.65)	30.10 (5.51)	21.40 (3.92)
21								
22	10.70 (1.09)	4.09 (0.42)	53.50 (5.54)	38.10 (3.94)				
23	10.10 (1.02)	3.89 (0.39)	51.70 (5.04)	36.70 (3.58)				
24	8.76 (1.00)	3.37 (0.38)	45.50 (5.20)	32.30 (3.70)	11.90 (3.04)	3.71 (0.95)	31.00 (7.89)	22.10 (5.61)
25	9.16 (2.10)	3.52 (0.81)	48.30 (11.20)	34.40 (7.96)	12.50 (2.71)	3.90 (0.85)	32.50 (7.03)	23.10 (5.00)
26	9.52 (2.22)	3.66 (0.85)	50.50 (11.80)	35.90 (8.42)	11.40 (1.50)	3.56 (0.47)	29.70 (3.92)	21.10 (2.79)
27	8.09 (1.84)	3.11 (0.71)	42.50 (9.61)	30.20 (6.83)	13.30 (2.28)	4.13 (0.71)	34.60 (5.97)	24.60 (4.24)
28	9.47 (0.82)	3.64 (0.32)	49.40 (4.24)	35.10 (3.02)	14.40 (2.64)	4.48 (0.82)	37.70 (6.97)	26.80 (4.96)
29					14.30 (1.54)	4.46 (0.48)	37.70 (4.09)	26.80 (2.91)
30	7.94 (1.31)	3.05 (0.50)	40.70 (6.75)	28.90 (4.80)	14.10 (2.44)	4.38 (0.76)	37.30 (6.43)	26.50 (4.57)
31	6.66 (0.61)	2.56 (0.23)	33.90 (3.08)	24.10 (2.19)	9.96 (0.92)	3.10 (0.29)	26.60 (2.46)	18.90 (1.75)
Avg	9.1	3.5	45.9	32.7	11.3	3.5	29.8	21.2
n	27	27	27	27	20	20	20	20
SD	1.6	0.6	8.6	6.1	2.1	0.7	5.6	4.0
Min	5.9	2.3	29.5	21.0	8.4	2.6	22.2	15.8
Max	12.4	4.8	63.6	45.2	14.6	4.6	39.1	27.8

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Table F12. Completeness of airflow and emission data.

Table F12. Completeness of airflow and emission data at Site WI5B for September, 2007.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	100	100	100	100	100	100	100	100	0	0	0	0
13	100	100	100	100	100	100	100	100	0	0	0	0
14	89	75	14	14	89	75	89	75	0	0	0	0
15	100	100	0	2	100	100	100	100	0	0	0	0
16	75	75	0	0	71	70	75	75	0	0	0	0
17	67	67	0	0	65	63	67	67	0	0	0	0
18	100	99	0	0	100	99	100	99	0	0	0	0
19	100	97	0	0	100	97	97	94	0	0	0	0
20	75	75	25	25	72	71	75	75	0	0	0	0
21	53	50	51	46	51	46	53	50	0	0	0	0
22	100	93	100	93	100	93	100	93	0	0	0	0
23	100	100	100	100	100	100	100	100	0	0	0	0
24	100	100	100	100	100	100	97	97	0	0	0	0
25	98	98	98	98	98	98	98	98	0	0	0	0
26	95	92	69	92	95	92	95	92	0	0	0	0
27	100	98	100	98	100	98	100	98	0	0	0	0
28	88	88	70	70	88	88	88	88	0	0	0	0
29	100	100	100	100	100	100	100	100	0	0	0	0
30	100	99	100	99	89	90	100	99	0	0	0	0
Avg	58	57	38	38	57	56	58	57	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	45	45	45	45	45	44	45	45	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	0	0

ED_004549_00015842-00302

Table F12. Completeness of airflow and emission data at Site WI5B for October, 2007.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	100	64	100	64	0	0	100	64	0	0	0	0
2	98	97	98	97	37	35	98	97	0	0	0	0
3	100	100	100	100	100	100	100	100	0	0	0	0
4	100	100	100	100	100	100	100	100	0	0	0	0
5	96	94	96	94	96	94	45	46	0	0	0	0
6	100	100	100	100	100	100	85	95	0	0	0	0
7	84	84	82	79	82	79	84	84	0	0	0	0
8	38	37	28	28	28	28	38	37	0	0	0	0
9	100	93	100	93	100	93	100	93	0	0	0	0
10	98	59	51	25	98	59	98	59	0	0	0	0
11	77	76	61	59	71	68	68	54	0	0	0	0
12	100	100	100	100	100	100	100	100	0	0	0	0
13	100	100	100	100	100	100	100	100	0	0	0	0
14	100	100	100	100	100	100	100	100	0	0	0	0
15	100	100	100	100	100	100	100	100	0	0	0	0
16	100	100	100	100	100	100	100	100	0	0	0	0
17	100	100	100	100	100	100	100	100	0	0	0	0
18	100	100	100	100	100	100	100	100	0	0	0	0
19	99	99	99	99	99	99	98	95	0	0	0	0
20	92	92	89	86	89	86	92	92	0	0	0	0
21	58	33	0	0	56	28	58	33	0	0	0	0
22	100	100	54	52	100	100	96	96	0	0	0	0
23	100	87	100	87	100	87	100	87	0	0	0	0
24	100	98	100	98	100	98	100	98	0	0	0	0
25	100	100	100	100	100	100	100	100	0	0	0	0
26	100	100	100	100	100	100	100	100	0	0	0	0
27	100	99	100	99	100	99	100	99	0	0	0	0
28	100	100	100	100	100	100	100	95	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0
Avg	85	81	79	76	79	76	83	78	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	31	32	35	36	36	36	32	32	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	0	0

ED_004549_00015842-00303

Table F12. Completeness of airflow and emission data at Site WI5B for November, 2007.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	58	44	42	38	43	38	58	44	0	0	0	0
16	93	100	93	100	93	100	93	100	0	0	0	0
17	100	94	100	94	100	94	100	94	0	0	0	0
18	99	100	99	100	99	100	99	100	0	0	0	0
19	100	93	100	93	100	93	100	93	0	0	0	0
20	100	96	100	79	100	80	94	92	0	0	0	0
21	96	43	96	42	96	42	95	43	0	0	0	0
22	100	66	100	64	100	65	100	66	0	0	0	0
23	100	100	100	100	100	100	100	100	0	0	0	0
24	100	100	100	100	100	100	100	100	0	0	0	0
25	100	100	100	100	100	100	100	100	0	0	0	0
26	100	89	100	89	100	89	100	89	0	0	0	0
27	100	100	100	100	100	100	88	76	0	0	0	0
28	99	100	99	100	99	100	85	85	0	0	0	0
29	78	78	37	36	72	69	78	76	0	0	0	0
30	100	100	55	53	100	100	61	74	0	0	0	0
Avg	51	47	47	43	50	46	48	44	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	48	46	47	44	48	45	46	44	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	0	0

ED_004549_00015842-00304

Table F12. Completeness of airflow and emission data at Site WI5B for December, 2007.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	99	100	99	100	99	100	97	89	0	0	0	0
2	100	100	100	100	100	100	100	100	0	0	0	0
3	100	100	100	100	100	100	69	67	0	0	0	0
4	100	100	100	100	100	100	100	100	0	0	0	0
5	100	100	100	100	100	100	73	74	0	0	0	0
6	100	100	100	100	100	100	88	95	0	0	0	0
7	100	100	100	100	100	100	94	96	0	0	0	0
8	100	100	100	100	100	100	10	7	0	0	0	0
9	100	100	100	100	100	100	73	39	0	0	0	0
10	98	98	98	98	98	98	74	65	0	0	0	0
11	100	100	74	74	74	74	43	45	0	0	53	48
12	100	100	100	100	100	100	0	0	0	0	71	54
13	100	100	100	100	100	100	0	0	0	0	100	100
14	100	100	100	100	100	100	0	0	0	0	43	41
15	100	100	100	100	100	100	0	0	0	0	65	56
16	100	100	100	100	100	100	0	0	0	0	100	100
17	90	90	76	77	76	80	39	39	0	0	47	47
18	100	100	100	100	100	100	82	100	0	0	0	0
19	92	92	66	68	92	92	82	92	0	0	0	0
20	81	81	75	73	76	73	54	81	0	0	0	0
21	100	100	100	100	100	100	86	100	0	0	0	0
22	100	95	100	95	100	95	94	95	0	0	0	0
23	43	41	38	36	38	36	34	41	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	51	51	47	47	47	47	51	0	0	0	0	0
26	100	100	100	100	100	100	78	54	0	0	0	0
27	100	100	100	100	100	100	73	100	0	0	0	0
28	100	100	100	100	100	100	89	100	0	0	0	0
29	100	100	100	100	100	100	97	100	0	0	0	0
30	100	100	100	100	100	100	100	100	0	0	0	0
31	100	100	100	100	100	100	98	100	0	0	0	0
Avg	92	92	89	89	90	90	61	61	0	0	16	14
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	21	22	23	23	23	23	36	40	0	0	30	29
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	100	100

ED_004549_00015842-00305

Table F12. Completeness of airflow and emission data at Site WI5B for January, 2008.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	100	100	100	100	100	100	96	23	0	0	0	0
2	100	100	100	100	100	100	21	0	0	0	0	0
3	100	100	100	100	100	100	44	77	0	0	0	0
4	95	100	95	100	95	100	91	100	0	0	0	0
5	82	100	82	100	82	100	82	100	0	0	0	0
6	92	100	92	100	92	100	92	100	0	0	0	0
7	93	100	68	65	70	65	91	98	0	0	0	0
8	94	62	94	62	94	62	94	62	0	0	0	0
9	100	100	100	100	100	100	100	100	0	0	0	0
10	100	100	100	100	100	100	100	100	0	0	0	0
11	100	100	100	100	100	100	100	100	0	0	0	0
12	100	100	100	100	100	100	100	100	0	0	0	0
13	100	100	100	100	100	100	100	100	0	0	0	0
14	100	98	95	93	100	98	100	48	0	0	0	0
15	95	95	0	0	95	95	33	2	51	52	0	0
16	99	99	0	0	99	99	0	0	99	99	0	0
17	100	100	0	0	100	100	0	0	100	100	0	0
18	100	100	0	0	100	100	0	0	70	52	0	0
19	100	100	0	0	100	100	0	0	0	11	0	0
20	100	100	0	0	100	100	0	0	0	15	0	0
21	100	100	0	0	79	79	0	0	48	25	0	0
22	100	100	0	0	100	100	0	0	85	73	0	0
23	89	89	0	0	84	86	0	0	73	25	0	0
24	57	57	0	0	54	52	0	0	4	0	0	0
25	100	100	0	0	100	100	0	0	63	0	0	0
26	99	57	0	0	99	53	0	0	95	0	0	0
27	100	0	0	0	100	0	0	0	89	0	0	0
28	98	55	0	0	98	33	0	0	98	53	0	0
29	100	94	0	0	100	94	0	0	22	87	0	0
30	100	100	0	0	100	100	0	0	0	46	0	0
31	93	93	40	40	74	93	0	0	13	45	0	0
Avg	96	90	44	44	94	87	40	36	29	22	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	8	22	47	47	11	24	45	45	39	32	0	0
Min	57	0	0	0	54	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	0	0

ED_004549_00015842-00306

Table F12. Completeness of airflow and emission data at Site WI5B for February, 2008.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	100	100	100	100	100	100	0	0	85	89	0	0
2	100	100	100	100	100	100	0	0	100	6	0	0
3	100	100	100	100	100	100	0	0	100	100	0	0
4	100	100	100	100	100	100	0	0	100	51	0	0
5	100	100	100	100	100	100	56	43	43	34	0	0
6	100	100	100	100	100	100	98	55	0	0	0	0
7	100	100	100	100	100	100	81	68	0	0	0	0
8	100	100	100	100	100	100	100	75	0	0	0	0
9	100	100	100	100	100	100	73	4	0	0	0	0
10	100	96	100	96	100	96	0	0	0	0	0	0
11	100	100	100	100	100	100	9	0	0	0	0	0
12	100	100	100	100	100	100	82	0	0	0	0	0
13	84	85	69	69	84	85	84	0	0	0	0	0
14	100	98	100	98	100	98	81	66	0	0	0	0
15	100	100	100	100	100	100	2	0	0	0	0	0
16	100	100	100	100	100	100	100	0	0	0	0	0
17	100	100	100	100	100	100	100	0	0	0	0	0
18	100	100	100	100	100	100	82	59	0	0	0	0
19	100	100	100	100	100	100	1	27	0	0	47	42
20	100	100	100	100	100	100	0	0	0	0	90	100
21	100	100	100	100	100	100	0	0	0	0	100	96
22	100	100	100	100	100	100	0	0	0	0	100	100
23	100	100	100	100	100	100	0	0	0	0	100	52
24	100	100	100	100	100	100	0	0	0	0	100	0
25	92	59	92	59	92	59	0	0	0	0	92	0
26	100	86	100	86	100	86	54	43	0	0	40	0
27	100	100	100	100	100	100	100	100	0	0	0	0
28	100	100	100	100	100	100	100	100	0	0	0	0
29	100	100	100	100	100	100	100	100	0	0	0	0
Avg	99	97	99	97	99	97	45	26	15	10	23	14
n	29	29	29	29	29	29	29	29	29	29	29	29
SD	3	8	6	10	3	8	44	36	34	26	39	31
Min	84	59	69	59	84	59	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100

ED_004549_00015842-00307

Table F12. Completeness of airflow and emission data at Site WI5B for March, 2008.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	100	100	100	100	100	100	100	100	0	0	0	0
2	100	73	100	73	100	73	99	72	0	0	0	0
3	100	91	100	91	100	91	100	91	0	0	0	0
4	100	100	100	100	100	100	98	98	0	0	0	0
5	100	99	100	99	100	99	100	99	0	0	0	0
6	98	98	98	98	98	98	98	98	0	0	0	0
7	100	100	100	100	100	100	100	100	0	0	0	0
8	100	100	100	100	100	100	100	100	0	0	0	0
9	100	100	100	100	100	100	100	100	0	0	0	0
10	76	76	76	69	76	69	76	76	0	0	0	0
11	74	68	63	59	63	59	74	68	0	0	0	0
12	77	77	74	72	74	72	77	77	0	0	0	0
13	100	100	100	100	100	100	100	100	0	0	0	0
14	81	64	76	63	76	63	81	64	0	0	0	0
15	100	62	100	62	100	62	100	62	0	0	0	0
16	100	100	100	100	100	100	100	100	0	0	0	0
17	100	100	78	76	78	77	45	45	0	0	50	50
18	100	94	100	94	100	94	0	0	0	0	100	94
19	100	82	100	82	100	82	0	0	0	0	78	82
20	100	100	100	100	100	100	0	0	0	0	100	100
21	98	99	98	99	98	99	0	0	0	0	89	89
22	100	87	100	87	100	87	0	0	0	0	100	87
23	100	56	100	56	100	56	0	0	0	0	100	56
24	100	100	100	100	100	100	0	0	0	0	100	100
25	100	97	100	97	100	97	48	46	0	0	40	40
26	100	99	100	99	100	99	100	99	0	0	0	0
27	100	87	100	87	100	87	100	87	0	0	0	0
28	100	100	100	100	100	100	100	100	0	0	0	0
29	100	100	100	100	100	100	100	100	0	0	0	0
30	100	87	100	87	100	87	100	87	0	0	0	0
31	93	71	73	56	74	56	93	71	0	0	0	0
Avg	97	89	95	87	95	87	71	66	0	0	24	23
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	8	14	11	15	11	15	41	39	0	0	40	37
Min	74	56	63	56	63	56	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	100	100

ED_004549_00015842-00308

Table F12. Completeness of airflow and emission data at Site WI5B for April, 2008.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	85	67	85	67	85	67	85	67	0	0	0	0
2	100	100	100	100	100	100	100	100	0	0	0	0
3	100	100	100	100	100	100	100	100	0	0	0	0
4	100	100	100	100	100	100	100	100	0	0	0	0
5	100	100	100	100	100	100	100	100	0	0	0	0
6	100	100	100	100	100	100	100	100	0	0	0	0
7	100	98	100	98	100	98	100	98	0	0	0	0
8	100	65	100	65	100	65	100	65	0	0	0	0
9	100	59	100	59	100	59	100	59	0	0	0	0
10	95	100	95	100	95	100	95	100	0	0	0	0
11	100	68	100	68	100	68	100	68	0	0	0	0
12	96	43	96	43	96	43	96	43	0	0	0	0
13	100	71	100	71	100	71	100	71	0	0	0	0
14	100	99	76	77	76	77	100	99	0	0	0	0
15	96	100	96	100	96	100	96	100	0	0	0	0
16	99	87	99	87	99	87	99	87	0	0	0	0
17	100	87	100	87	100	87	100	87	0	0	0	0
18	100	73	100	73	100	73	100	73	0	0	0	0
19	100	73	100	73	100	73	100	73	0	0	0	0
20	100	99	100	99	100	99	100	99	0	0	0	0
21	97	100	97	100	97	100	97	100	0	0	0	0
22	100	73	46	19	46	19	100	73	0	0	0	0
23	100	100	0	0	0	0	100	100	0	0	0	0
24	100	100	0	0	0	0	100	100	0	0	0	0
25	100	88	74	67	74	67	100	88	0	0	0	0
26	100	100	100	100	100	100	100	100	0	0	0	0
27	100	79	100	79	100	79	100	79	0	0	0	0
28	98	28	98	28	98	28	98	28	0	0	0	0
29	100	97	100	72	100	72	39	39	0	0	56	53
30	100	100	100	100	100	100	0	0	0	0	100	100
Avg	99	85	89	74	89	74	93	80	0	0	5	5
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	3	19	26	29	26	29	21	25	0	0	20	20
Min	85	28	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	100	100

ED_004549_00015842-00309

Table F12. Completeness of airflow and emission data at Site WI5B for May, 2008.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	100	100	100	100	100	100	0	0	0	0	100	100
2	97	68	97	68	97	68	0	0	0	0	97	68
3	92	36	92	36	92	36	0	0	0	0	92	36
4	100	100	100	100	100	100	0	0	0	0	100	100
5	100	90	74	68	74	68	56	55	0	0	43	34
6	100	100	100	100	100	100	100	100	0	0	0	0
7	91	45	91	45	91	45	91	45	0	0	0	0
8	100	94	100	94	100	94	100	94	0	0	0	0
9	100	89	100	89	100	89	100	89	0	0	0	0
10	100	100	100	100	100	100	100	100	0	0	0	0
11	91	29	91	29	91	29	91	29	0	0	0	0
12	100	100	31	30	100	100	100	100	0	0	0	0
13	100	90	0	0	100	90	100	90	0	0	0	0
14	100	60	0	0	100	60	100	60	0	0	0	0
15	100	100	0	0	100	100	100	100	0	0	0	0
16	100	98	0	0	100	98	100	98	0	0	0	0
17	98	70	0	0	98	70	98	70	0	0	0	0
18	100	44	0	0	100	44	100	44	0	0	0	0
19	100	99	0	0	100	99	100	99	0	0	0	0
20	100	62	0	0	100	62	100	62	0	0	0	0
21	100	79	0	0	100	79	100	79	0	0	0	0
22	100	100	0	0	100	100	100	100	0	0	0	0
23	100	100	0	0	100	100	100	100	0	0	0	0
24	100	97	0	0	100	97	100	97	0	0	0	0
25	100	0	0	0	100	0	100	0	0	0	0	0
26	61	0	0	0	59	0	61	0	0	0	0	0
27	77	66	0	0	75	63	77	66	0	0	0	0
28	100	99	0	0	100	99	100	99	0	0	0	0
29	99	99	0	0	99	99	99	99	0	0	0	0
30	100	97	0	0	100	97	99	97	0	0	0	0
31	100	94	0	0	100	94	0	94	0	0	0	0
Avg	97	78	35	28	96	77	80	67	0	0	14	11
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	8	29	45	39	10	29	37	38	0	0	33	28
Min	61	0	0	0	59	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	100	100

ED_004549_00015842-00310

Table F12. Completeness of airflow and emission data at Site WI5B for June, 2008.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	100	100	0	0	98	100	0	100	0	0	0	0
2	65	1	0	0	62	0	0	1	0	0	0	0
3	100	0	0	0	100	0	0	0	0	0	0	0
4	98	0	0	0	98	0	53	0	0	0	0	0
5	72	29	0	0	72	29	72	29	0	0	0	0
6	39	39	0	0	39	39	39	39	0	0	0	0
7	100	100	0	0	100	100	100	100	0	0	0	0
8	41	41	0	0	38	37	41	41	0	0	0	0
9	70	0	0	0	67	0	70	0	0	0	0	0
10	99	0	0	0	99	0	99	0	0	0	0	0
11	97	0	0	0	97	0	97	0	0	0	0	0
12	99	58	0	0	99	58	99	58	0	0	0	0
13	100	100	0	0	100	100	100	100	0	0	0	0
14	65	64	0	0	60	61	65	64	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	62	39	0	0	54	32	62	39	0	0	0	0
17	73	68	0	0	70	64	73	68	0	0	0	0
18	96	75	0	0	96	75	96	75	0	0	0	0
19	100	100	42	42	100	100	48	48	0	0	49	49
20	100	99	100	99	100	99	0	0	0	0	100	99
21	100	97	100	97	100	97	0	0	0	0	100	97
22	100	80	100	80	100	80	0	0	0	0	100	80
23	100	100	100	100	100	100	0	0	0	0	100	100
24	100	100	100	100	100	100	0	0	0	0	100	100
25	100	100	100	100	100	100	0	0	0	0	100	100
26	100	100	100	100	100	100	50	50	0	0	47	47
27	100	99	100	99	100	99	100	99	0	0	0	0
28	100	97	100	97	100	97	100	97	0	0	0	0
29	100	38	100	38	100	38	100	38	0	0	0	0
30	74	73	70	68	70	68	74	73	0	0	0	0
Avg	85	60	37	34	84	59	51	37	0	0	23	22
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	24	40	47	44	25	40	40	38	0	0	40	39
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	100	100

ED_004549_00015842-00311

Table F12. Completeness of airflow and emission data at Site WI5B for July, 2008.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	49	49	46	44	47	44	49	49	0	0	0	0
4	100	99	100	99	100	99	100	99	0	0	0	0
5	100	100	100	100	100	100	100	100	0	0	0	0
6	100	100	100	100	100	100	100	100	0	0	0	0
7	100	100	100	100	100	100	96	100	0	0	0	0
8	50	48	45	42	45	42	48	48	0	0	0	0
9	0	54	0	49	0	50	0	54	0	0	0	0
10	0	97	0	97	0	97	0	97	0	0	0	0
11	0	99	0	99	0	99	0	97	0	0	0	0
12	0	99	0	99	0	99	0	99	0	0	0	0
13	0	89	0	89	0	89	0	89	0	0	0	0
14	0	99	0	99	0	99	0	99	0	0	0	0
15	46	100	46	100	46	100	43	97	0	0	0	0
16	100	99	100	99	100	99	100	99	0	0	0	0
17	100	100	100	100	100	100	100	100	0	0	0	0
18	100	100	100	100	100	100	100	100	0	0	0	0
19	100	99	100	99	100	99	100	99	0	0	0	0
20	100	100	100	100	100	100	100	100	0	0	0	0
21	52	100	36	79	36	79	52	100	0	0	0	0
22	47	100	47	100	47	100	47	100	0	0	0	0
23	100	100	100	100	100	100	100	100	0	0	0	0
24	100	100	100	100	100	100	100	100	0	0	0	0
25	100	100	100	100	100	100	100	100	0	0	0	0
26	100	100	100	100	100	100	100	100	0	0	0	0
27	100	100	100	100	100	100	100	100	0	0	0	0
28	100	100	100	100	100	100	100	100	0	0	0	0
29	100	100	100	100	100	100	96	96	0	0	0	0
30	100	100	100	100	100	100	100	100	0	0	0	0
31	100	100	100	100	100	100	100	100	0	0	0	0
Avg	66	88	65	87	65	87	66	88	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	43	27	43	28	43	28	43	27	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	0	0

ED_004549_00015842-00312

Table F12. Completeness of airflow and emission data at Site WI5B for August, 2008.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	100	100	100	100	100	100	36	36	59	58	0	0
2	100	100	100	100	100	100	0	0	100	100	0	0
3	100	100	100	100	100	100	0	0	100	100	0	0
4	97	100	73	66	73	71	0	0	97	100	0	0
5	100	100	100	100	100	100	0	0	100	100	0	0
6	100	99	100	99	100	99	0	0	100	99	0	0
7	100	96	100	96	100	96	0	0	100	96	0	0
8	100	100	100	100	100	100	0	0	100	100	0	0
9	100	99	100	99	100	99	0	0	100	99	0	0
10	100	100	100	100	100	100	0	0	100	100	0	0
11	100	99	100	99	100	99	0	0	100	99	0	0
12	100	97	100	97	100	97	0	0	100	97	0	0
13	100	100	100	100	100	100	0	0	100	100	0	0
14	100	100	100	100	100	100	0	0	100	100	0	0
15	100	100	100	100	100	100	0	0	100	100	0	0
16	100	100	100	100	100	100	0	0	100	100	0	0
17	100	100	100	100	100	100	0	0	100	100	0	0
18	99	99	74	74	74	74	0	0	35	35	62	62
19	100	100	100	100	100	100	0	0	0	0	100	100
20	100	100	100	100	100	100	0	0	0	0	100	100
21	100	100	100	100	100	100	0	0	0	0	100	100
22	100	100	100	100	100	100	0	0	0	0	99	99
23	100	97	100	97	100	97	0	0	0	0	100	97
24	100	89	100	89	100	89	0	0	0	0	100	89
25	100	99	78	73	78	73	20	20	0	0	48	48
26	100	100	100	100	100	100	0	0	0	0	0	0
27	100	98	100	98	100	98	0	0	0	0	0	0
28	100	100	100	100	100	100	0	0	0	0	0	0
29	100	100	100	100	100	100	0	0	0	0	0	0
30	100	100	100	100	100	100	0	0	0	0	0	0
31	100	100	100	100	100	100	0	0	0	0	0	0
Avg	100	99	98	96	98	97	2	2	55	54	23	22
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	1	2	7	9	7	8	7	7	48	48	40	39
Min	97	89	73	66	73	71	0	0	0	0	0	0
Max	100	100	100	100	100	100	36	36	100	100	100	100

ED_004549_00015842-00313

Table F12. Completeness of airflow and emission data at Site WI5B for September, 2008.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	100	100	100	100	100	100	0	0	0	0	0	0
2	99	99	80	77	80	77	28	28	0	0	0	0
3	100	64	100	64	100	64	100	64	0	0	0	0
4	100	100	100	100	100	100	100	100	0	0	0	0
5	100	96	100	96	100	96	100	96	0	0	0	0
6	100	94	100	94	100	94	100	94	0	0	0	0
7	100	87	100	87	100	87	100	87	0	0	0	0
8	100	94	100	94	100	94	97	92	0	0	0	0
9	100	97	100	97	100	97	100	97	0	0	0	0
10	100	99	100	99	100	99	100	99	0	0	0	0
11	100	100	100	100	100	100	100	100	0	0	0	0
12	100	99	100	99	100	99	100	99	0	0	0	0
13	100	89	100	89	100	89	100	89	0	0	0	0
14	100	61	100	61	100	61	100	61	0	0	0	0
15	100	89	100	89	100	89	100	89	0	0	0	0
16	100	94	100	94	100	94	100	94	0	0	0	0
17	100	100	36	35	36	35	39	39	0	0	0	0
18	100	100	0	0	0	0	0	0	0	0	0	0
19	100	96	67	69	67	69	71	70	0	0	0	0
20	100	95	100	95	100	95	100	95	0	0	0	0
21	100	100	100	100	100	100	100	100	0	0	0	0
22	100	100	100	100	100	100	100	100	0	0	0	0
23	97	97	97	97	97	97	97	97	0	0	0	0
24	100	91	100	91	100	91	100	91	0	0	0	0
25	97	97	97	97	97	97	97	97	0	0	0	0
26	100	99	100	99	100	99	100	99	0	0	0	0
27	100	40	100	40	100	40	100	40	0	0	0	0
28	100	99	100	99	100	99	100	99	0	0	0	0
29	100	56	100	56	100	56	100	56	0	0	0	0
30	100	76	100	76	100	76	100	76	0	0	0	0
Avg	100	90	93	83	93	83	88	78	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	1	15	22	24	22	24	29	29	0	0	0	0
Min	97	40	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	0	0

ED_004549_00015842-00314

Table F12. Completeness of airflow and emission data at Site WI5B for October, 2008.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	100	69	100	69	100	69	53	68	0	0	0	0
2	100	86	100	86	100	86	0	86	0	0	0	0
3	100	98	100	98	100	98	0	98	0	0	0	0
4	100	98	100	98	100	98	0	98	0	0	0	0
5	100	99	100	99	100	99	0	99	0	0	0	0
6	81	81	77	76	77	76	0	81	0	0	0	0
7	22	20	19	17	20	17	0	20	0	0	0	0
8	73	67	72	64	72	64	13	67	0	0	0	0
9	70	51	68	47	68	47	70	51	0	0	0	0
10	100	100	100	100	100	100	100	100	0	0	0	0
11	100	100	100	100	100	100	100	100	0	0	0	0
12	100	100	100	100	100	100	100	100	0	0	0	0
13	100	85	100	85	100	85	100	85	0	0	0	0
14	97	92	77	70	77	70	48	46	0	0	30	44
15	100	84	100	84	100	84	0	0	0	0	100	84
16	61	58	57	54	57	54	0	0	0	0	61	58
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	65	65	62	60	62	61	0	0	0	0	65	65
22	93	100	93	100	93	100	0	0	0	0	93	100
23	100	100	100	100	100	100	0	0	0	0	100	100
24	100	100	100	100	100	100	0	0	0	0	100	100
25	100	100	100	100	100	100	0	0	0	0	100	100
26	100	60	100	60	100	60	0	0	0	0	100	60
27	100	43	100	43	100	43	0	0	0	0	100	43
28	100	100	69	66	69	67	30	30	0	0	65	65
29	100	100	100	100	100	100	100	100	0	0	0	0
30	49	49	44	46	44	46	49	49	0	0	0	0
31	71	45	68	41	68	41	71	45	0	0	0	0
Avg	77	69	74	67	74	67	27	43	0	0	30	26
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	35	34	35	34	35	34	39	41	0	0	42	38
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	100	100

ED_004549_00015842-00315

Table F12. Completeness of airflow and emission data at Site WI5B for November, 2008.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	100	100	100	100	100	100	100	100	0	0	0	0
2	100	100	100	100	100	100	100	100	0	0	0	0
3	99	99	99	99	99	99	99	99	0	0	0	0
4	74	73	71	46	71	46	74	73	0	0	0	0
5	55	56	53	51	53	51	55	56	0	0	0	0
6	99	99	99	99	99	99	99	94	0	0	0	0
7	100	100	100	100	100	100	100	0	0	0	0	0
8	99	12	99	12	99	12	99	0	0	0	0	0
9	100	88	100	88	100	88	100	0	0	0	0	0
10	100	99	100	99	100	99	100	0	0	0	0	0
11	100	100	80	79	80	80	86	54	0	0	0	0
12	100	100	100	100	100	100	100	100	0	0	0	0
13	97	97	97	97	79	97	97	97	0	0	0	0
14	100	72	100	72	100	72	100	72	0	0	0	0
15	100	54	100	54	100	54	100	54	0	0	0	0
16	100	76	100	76	100	76	100	76	0	0	0	0
17	100	90	100	90	100	90	100	90	0	0	0	0
18	100	100	100	100	100	100	100	100	0	0	0	0
19	63	45	60	45	60	45	63	45	0	0	0	0
20	48	46	46	42	46	42	48	46	0	0	0	0
21	100	100	100	100	100	100	100	100	0	0	0	0
22	100	100	100	100	100	100	100	100	0	0	0	0
23	47	47	35	40	35	40	47	47	0	0	0	0
24	100	89	100	89	100	89	100	89	0	0	0	0
25	100	100	69	100	69	100	100	100	0	0	0	0
26	100	100	100	100	100	100	100	100	0	0	0	0
27	100	99	100	99	100	99	100	99	0	0	0	0
28	85	85	82	81	82	81	85	85	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0
30	22	8	17	6	17	6	22	0	0	0	0	0
Avg	86	78	84	75	83	76	86	66	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	26	30	27	31	27	31	26	38	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	0	0

ED_004549_00015842-00316

Table F12. Completeness of airflow and emission data at Site WI5B for December, 2008.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	39	39	38	36	38	36	0	0	0	0	0	0
2	100	99	100	99	100	99	53	53	0	0	0	0
3	100	98	100	98	100	98	100	98	0	0	0	0
4	100	100	100	100	100	100	95	95	0	0	0	0
5	100	100	100	100	100	100	99	99	0	0	0	0
6	100	90	100	90	100	90	98	88	0	0	0	0
7	99	100	99	100	99	100	99	100	0	0	0	0
8	46	46	28	28	28	28	45	45	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	57	57	34	34	34	35	52	54	0	0	0	0
11	100	100	100	100	100	100	100	100	0	0	0	0
12	100	100	100	100	100	100	100	100	0	0	0	0
13	99	100	99	100	99	100	99	100	0	0	0	0
14	33	34	29	31	31	31	33	34	0	0	0	0
15	59	59	57	55	57	55	59	59	0	0	0	0
16	99	100	99	100	99	100	44	44	0	0	40	40
17	100	100	100	100	100	100	0	0	0	0	100	100
18	100	100	100	100	100	100	0	0	0	0	100	100
19	100	100	100	100	100	100	0	0	0	0	100	100
20	100	100	61	100	61	100	0	0	0	0	63	100
21	16	16	0	4	0	4	0	0	0	0	0	15
22	15	15	0	0	0	0	0	0	0	0	0	11
23	57	57	44	44	44	44	0	0	0	0	0	57
24	87	87	78	79	78	80	0	0	0	0	0	87
25	83	84	75	76	75	77	0	0	0	0	0	83
26	97	100	97	100	97	100	0	0	0	0	0	100
27	100	100	100	100	100	100	0	0	0	0	0	100
28	100	100	100	100	100	100	0	0	0	0	0	100
29	100	90	100	90	100	90	0	0	0	0	0	90
30	100	97	100	97	100	97	41	39	0	0	0	53
31	100	100	100	100	100	100	99	99	0	0	0	0
Avg	80	80	75	76	75	76	39	39	0	0	13	37
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	31	30	35	34	35	34	43	42	0	0	31	44
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	100	100

ED_004549_00015842-00317

Table F12. Completeness of airflow and emission data at Site WI5B for January, 2009.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	100	100	100	100	100	100	100	100	0	0	0	0
2	100	100	100	100	100	100	100	100	0	0	0	0
3	87	100	87	100	87	100	87	99	0	0	0	0
4	100	100	100	100	100	100	100	100	0	0	0	0
5	100	100	100	100	100	100	99	99	0	0	0	0
6	99	99	99	99	99	99	95	96	0	0	0	0
7	92	92	92	92	92	92	92	92	0	0	0	0
8	99	99	99	99	99	99	99	99	0	0	0	0
9	100	100	100	100	100	100	100	100	0	0	0	0
10	100	100	100	100	100	100	100	100	0	0	0	0
11	100	100	100	100	100	100	100	100	0	0	0	0
12	39	39	39	39	39	39	39	39	0	0	0	0
13	59	59	36	36	36	36	7	7	43	29	0	0
14	100	90	100	90	100	90	0	0	100	90	0	0
15	96	100	96	100	96	100	0	0	96	100	0	0
16	100	100	100	100	100	100	0	0	82	82	0	0
17	100	99	100	99	100	99	0	0	100	99	0	0
18	91	100	91	100	91	100	0	0	91	100	0	0
19	96	100	96	100	96	100	0	0	96	100	0	0
20	100	100	100	100	100	100	0	0	96	100	0	0
21	100	100	100	100	100	100	0	0	100	100	0	0
22	100	100	100	89	100	89	0	0	100	100	0	0
23	100	99	100	99	100	99	0	0	100	99	0	0
24	100	100	100	100	100	100	0	0	100	100	0	0
25	100	100	100	100	100	100	0	0	100	100	0	0
26	100	100	100	100	100	100	0	0	100	100	0	0
27	100	100	79	74	79	74	43	43	51	51	0	0
28	99	99	99	99	99	99	99	99	0	0	0	0
29	100	100	100	100	100	100	100	100	0	0	0	0
30	100	100	100	100	100	100	100	100	0	0	0	0
31	99	99	99	99	99	99	99	99	0	0	0	0
Avg	95	96	94	94	94	94	50	51	44	44	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	13	13	16	16	16	16	47	48	47	47	0	0
Min	39	39	36	36	36	36	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	0	0

ED_004549_00015842-00318

Table F12. Completeness of airflow and emission data at Site WI5B for February, 2009.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	95	99	95	99	95	99	85	89	0	0	0	0
2	100	100	100	100	100	100	95	95	0	0	0	0
3	100	98	100	98	100	98	99	97	0	0	0	0
4	99	99	85	80	86	80	96	96	0	0	0	0
5	100	100	100	100	100	100	100	100	0	0	0	0
6	100	100	100	100	100	100	100	100	0	0	0	0
7	99	95	99	95	99	95	99	95	0	0	0	0
8	90	90	86	88	86	88	90	90	0	0	0	0
9	67	69	65	65	65	65	67	69	0	0	0	0
10	49	100	49	100	49	100	49	100	0	0	0	0
11	99	97	99	97	99	97	98	97	0	0	0	0
12	100	94	100	94	100	94	95	41	0	0	0	0
13	100	100	100	100	100	100	100	0	0	0	0	0
14	100	100	100	100	100	100	100	0	0	0	0	0
15	100	100	100	100	100	100	98	0	0	0	0	0
16	94	100	94	100	94	100	94	0	0	0	0	0
17	95	95	58	61	58	61	50	3	0	0	41	41
18	95	68	95	68	95	68	0	0	0	0	95	68
19	67	90	67	90	67	90	0	0	0	0	67	89
20	0	100	0	100	0	100	0	0	0	0	0	100
21	0	97	0	97	0	97	0	0	0	0	0	97
22	0	99	0	99	0	99	0	0	0	0	0	99
23	0	100	0	100	0	100	0	0	0	0	0	100
24	44	100	42	79	42	79	44	55	0	0	0	41
25	100	93	100	93	100	93	100	93	0	0	0	0
26	100	95	100	95	100	95	100	95	0	0	0	0
27	100	97	100	97	100	97	100	97	0	0	0	0
28	100	100	100	100	100	100	100	100	0	0	0	0
Avg	78	96	76	93	76	93	70	54	0	0	7	23
n	28	28	28	28	28	28	28	28	28	28	28	28
SD	35	8	35	11	35	11	40	45	0	0	22	38
Min	0	68	0	61	0	61	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	95	100

ED_004549_00015842-00319

Table F12. Completeness of airflow and emission data at Site WI5B for March, 2009.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	100	100	100	100	100	100	100	100	0	0	0	0
2	73	73	48	48	68	70	73	73	0	0	0	0
3	49	55	0	0	38	39	49	52	0	0	0	0
4	96	100	0	0	96	100	96	99	0	0	0	0
5	98	100	0	0	98	100	97	99	0	0	0	0
6	93	100	0	0	93	100	93	100	0	0	0	0
7	100	84	0	0	100	84	100	84	0	0	0	0
8	99	88	0	0	99	88	99	88	0	0	0	0
9	100	100	0	0	76	77	100	100	0	0	0	0
10	100	98	0	0	100	98	100	98	0	0	0	0
11	100	100	0	0	100	100	100	100	0	0	0	0
12	100	100	0	0	100	100	100	100	0	0	0	0
13	86	100	0	0	86	100	86	100	0	0	0	0
14	96	100	0	0	96	100	96	100	0	0	0	0
15	100	100	0	0	100	100	100	100	0	0	0	0
16	99	100	0	0	99	100	99	100	0	0	0	0
17	99	98	0	0	72	70	96	94	0	0	0	0
18	100	93	0	0	100	93	100	93	0	0	0	0
19	100	88	0	0	100	88	100	88	0	0	0	0
20	93	100	0	0	93	100	93	100	0	0	0	0
21	100	100	0	0	100	100	100	100	0	0	0	0
22	40	100	0	0	40	100	40	100	0	0	0	0
23	2	100	0	0	2	100	2	100	0	0	0	0
24	39	98	0	0	39	98	39	98	0	0	0	0
25	27	100	0	0	27	100	27	100	0	0	0	0
26	40	34	0	0	39	32	40	34	0	0	0	0
27	0	67	0	0	0	64	0	67	0	0	0	0
28	0	71	0	0	0	71	0	71	0	0	0	0
29	0	55	0	0	0	55	0	55	0	0	0	0
30	0	100	0	0	0	100	0	100	0	0	0	0
31	56	100	0	0	42	79	56	100	0	0	0	0
Avg	71	90	5	5	68	87	70	90	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	38	17	19	19	38	19	38	17	0	0	0	0
Min	0	34	0	0	0	32	0	34	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	0	0

ED_004549_00015842-00320

Table F12. Completeness of airflow and emission data at Site WI5B for April, 2009.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	79	100	0	0	79	100	79	100	0	0	0	0
2	100	95	0	0	100	95	100	95	0	0	0	0
3	99	70	0	0	99	70	99	70	0	0	0	0
4	99	85	0	0	99	85	99	85	0	0	0	0
5	90	48	0	0	90	48	90	48	0	0	0	0
6	93	30	0	0	93	30	51	18	0	0	39	11
7	100	76	0	0	100	76	0	0	0	0	100	76
8	100	80	0	0	100	80	0	0	0	0	100	80
9	99	73	0	0	99	73	0	0	0	0	99	73
10	99	66	0	0	99	66	0	0	0	0	99	66
11	98	99	0	0	98	99	0	0	0	0	98	99
12	82	99	0	0	82	99	0	0	0	0	82	99
13	99	100	0	0	99	100	0	0	0	0	99	100
14	100	89	0	0	100	76	57	50	0	0	41	37
15	99	100	0	0	99	100	99	100	0	0	0	0
16	97	99	0	0	97	99	97	99	0	0	0	0
17	94	94	0	0	94	94	94	94	0	0	0	0
18	99	58	0	0	99	58	99	58	0	0	0	0
19	87	23	0	0	87	23	87	23	0	0	0	0
20	99	28	0	0	99	28	99	28	0	0	0	0
21	96	11	0	0	96	11	96	11	0	0	0	0
22	92	47	0	0	92	47	92	47	0	0	0	0
23	62	99	0	0	62	99	62	99	0	0	0	0
24	80	59	0	0	80	59	80	59	0	0	0	0
25	76	60	0	0	76	60	76	60	0	0	0	0
26	65	100	0	0	65	100	65	100	0	0	0	0
27	87	84	0	0	87	84	87	84	0	0	0	0
28	95	100	0	0	70	74	95	100	0	0	0	0
29	83	99	0	0	83	99	83	99	0	0	0	0
30	79	41	0	0	79	41	79	41	0	0	0	0
Avg	91	74	0	0	90	72	66	52	0	0	25	21
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	10	27	0	0	11	26	38	39	0	0	41	36
Min	62	11	0	0	62	11	0	0	0	0	0	0
Max	100	100	0	0	100	100	100	100	0	0	100	100

ED_004549_00015842-00321

Table F12. Completeness of airflow and emission data at Site WI5B for May, 2009.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	50	27	0	0	50	27	50	27	0	0	0	0
2	57	49	0	0	57	49	57	49	0	0	0	0
3	61	79	0	0	61	79	61	79	0	0	0	0
4	57	97	0	0	57	97	57	97	0	0	0	0
5	35	90	0	0	35	90	35	90	0	0	0	0
6	53	87	0	0	53	87	53	87	0	0	0	0
7	56	97	0	0	56	97	56	97	0	0	0	0
8	43	65	0	0	43	65	43	65	0	0	0	0
9	67	30	0	0	67	30	67	30	0	0	0	0
10	41	43	0	0	41	43	41	43	0	0	0	0
11	33	77	0	0	33	77	33	77	0	0	0	0
12	30	93	0	0	30	93	28	89	0	0	0	0
13	49	76	0	0	49	75	49	76	0	0	0	0
14	65	42	0	0	65	42	65	42	0	0	0	0
15	48	81	0	0	48	81	48	81	0	0	0	0
16	67	19	0	0	67	19	67	19	0	0	0	0
17	28	74	0	0	28	74	28	74	0	0	0	0
18	56	99	0	0	56	99	56	99	0	0	0	0
19	88	91	0	0	88	91	88	91	0	0	0	0
20	95	100	0	0	95	100	95	100	0	0	0	0
21	75	57	0	0	75	57	75	57	0	0	0	0
22	68	98	0	0	68	98	68	98	0	0	0	0
23	45	69	0	0	45	69	45	69	0	0	0	0
24	48	100	0	0	48	100	48	100	0	0	0	0
25	52	100	0	0	52	100	52	100	0	0	0	0
26	26	100	0	0	26	100	26	100	0	0	0	0
27	52	32	0	0	52	32	52	32	0	0	0	0
28	49	85	0	0	49	85	49	85	0	0	0	0
29	69	52	0	0	69	52	69	52	0	0	0	0
30	50	60	0	0	50	60	50	60	0	0	0	0
31	53	98	0	0	53	98	53	98	0	0	0	0
Avg	54	73	0	0	54	73	54	73	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	16	25	0	0	16	25	16	25	0	0	0	0
Min	26	19	0	0	26	19	26	19	0	0	0	0
Max	95	100	0	0	95	100	95	100	0	0	0	0

ED_004549_00015842-00322

Table F12. Completeness of airflow and emission data at Site WI5B for June, 2009.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	58	62	0	0	58	62	58	62	0	0	0	0
2	45	63	0	0	45	63	45	63	0	0	0	0
3	63	93	0	0	63	93	3	38	0	0	57	52
4	99	88	0	0	99	88	0	0	0	0	99	88
5	97	64	0	0	97	64	0	0	0	0	97	64
6	71	97	0	0	71	97	0	0	0	0	71	97
7	70	94	0	0	70	94	0	0	0	0	70	94
8	87	84	0	0	87	84	28	24	0	0	53	56
9	100	87	0	0	100	87	100	87	0	0	0	0
10	100	90	0	0	100	90	100	90	0	0	0	0
11	100	98	0	0	100	98	100	98	0	0	0	0
12	100	92	0	0	100	92	100	92	0	0	0	0
13	98	93	0	0	98	93	98	93	0	0	0	0
14	100	98	0	0	100	98	100	98	0	0	0	0
15	100	98	0	0	100	98	100	98	0	0	0	0
16	97	100	0	0	97	100	97	100	0	0	0	0
17	99	100	0	0	99	100	99	100	0	0	0	0
18	99	100	0	0	99	100	99	100	0	0	0	0
19	100	100	0	0	100	100	100	100	0	0	0	0
20	100	100	0	0	100	100	100	100	0	0	0	0
21	100	100	0	0	100	100	100	100	0	0	0	0
22	100	100	0	0	94	100	100	100	0	0	0	0
23	100	100	0	0	14	37	100	100	0	0	0	0
24	100	100	0	0	0	0	100	100	0	0	0	0
25	100	100	0	0	0	0	100	100	0	0	0	0
26	100	100	0	0	0	0	100	100	0	0	0	0
27	100	97	0	0	0	0	100	97	0	0	0	0
28	100	73	0	0	0	0	100	73	0	0	0	0
29	99	47	0	0	0	0	99	47	0	0	0	0
30	97	9	0	0	42	2	84	8	0	0	0	0
Avg	93	88	0	0	68	68	77	72	0	0	15	15
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	15	20	0	0	40	40	38	37	0	0	31	31
Min	45	9	0	0	0	0	0	0	0	0	0	0
Max	100	100	0	0	100	100	100	100	0	0	99	97

ED_004549_00015842-00323

Table F12. Completeness of airflow and emission data at Site WI5B for July, 2009.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	98	29	0	0	98	29	98	29	0	0	0	0
2	95	92	0	0	25	24	88	83	0	0	0	0
3	100	100	0	0	0	0	100	100	0	0	0	0
4	100	99	0	0	0	0	100	99	0	0	0	0
5	100	100	0	0	0	0	100	100	0	0	0	0
6	100	100	0	0	25	25	62	62	32	32	0	0
7	100	100	0	0	100	100	0	0	100	100	0	0
8	97	100	0	0	97	100	0	0	97	100	0	0
9	95	98	0	0	95	98	0	0	95	98	0	0
10	100	100	0	0	100	100	0	0	100	100	0	0
11	100	92	0	0	100	92	0	0	100	92	0	0
12	100	100	0	0	100	100	0	0	100	100	0	0
13	100	98	0	0	100	98	0	0	100	98	0	0
14	97	100	0	0	97	100	0	0	97	100	0	0
15	100	98	0	0	100	98	0	0	100	98	0	0
16	100	71	0	0	79	52	0	0	100	71	0	0
17	97	36	0	0	97	36	0	0	97	36	0	0
18	99	59	0	0	99	59	0	0	99	59	0	0
19	100	100	0	0	100	100	0	0	100	100	0	0
20	97	99	0	0	97	99	0	0	97	99	0	0
21	100	94	0	0	100	94	61	60	34	29	0	0
22	100	97	0	0	100	97	100	97	0	0	0	0
23	100	99	0	0	100	99	100	99	0	0	0	0
24	100	100	0	0	100	100	100	100	0	0	0	0
25	100	91	0	0	100	91	100	91	0	0	0	0
26	100	100	0	0	100	100	100	100	0	0	0	0
27	100	100	0	0	100	100	100	100	0	0	0	0
28	100	94	0	0	100	94	100	94	0	0	0	0
29	100	98	0	0	100	98	100	98	0	0	0	0
30	100	84	47	44	100	84	100	84	0	0	0	0
31	99	91	99	91	99	91	99	91	0	0	0	0
Avg	99	91	5	4	84	76	52	48	47	42	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	1	18	19	18	33	35	48	46	48	45	0	0
Min	95	29	0	0	0	0	0	0	0	0	0	0
Max	100	100	99	91	100	100	100	100	100	100	0	0

ED_004549_00015842-00324

Table F12. Completeness of airflow and emission data at Site WI5B for August, 2009.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	100	60	100	60	100	60	100	60	0	0	0	0
2	100	69	100	69	100	69	100	69	0	0	0	0
3	100	98	100	98	100	98	100	98	0	0	0	0
4	99	88	99	88	99	88	35	26	0	0	61	59
5	100	98	100	98	100	98	0	0	0	0	100	98
6	100	100	100	100	100	100	0	0	0	0	100	100
7	100	100	100	100	100	100	0	0	0	0	100	100
8	100	100	95	100	95	100	0	0	0	0	100	100
9	100	100	100	66	100	66	0	0	0	0	100	100
10	100	100	100	100	100	100	0	0	0	0	100	100
11	98	99	98	99	98	99	51	52	0	0	41	41
12	98	98	98	98	98	98	98	98	0	0	0	0
13	100	100	100	100	100	100	100	100	0	0	0	0
14	100	100	100	100	100	100	100	100	0	0	0	0
15	100	100	100	100	100	100	100	100	0	0	0	0
16	100	100	100	100	100	100	100	100	0	0	0	0
17	100	94	100	94	100	94	100	94	0	0	0	0
18	100	76	100	76	100	76	100	76	0	0	0	0
19	96	87	96	87	96	87	96	87	0	0	0	0
20	100	35	100	35	100	35	100	35	0	0	0	0
21	99	45	99	45	99	45	99	45	0	0	0	0
22	100	99	100	99	100	99	100	99	0	0	0	0
23	100	97	100	97	100	97	100	97	0	0	0	0
24	100	91	100	91	100	91	100	91	0	0	0	0
25	100	100	100	100	100	100	100	100	0	0	0	0
26	100	100	100	100	100	100	100	100	0	0	0	0
27	100	100	100	100	100	100	100	100	0	0	0	0
28	99	57	99	57	99	57	99	57	0	0	0	0
29	81	23	81	23	81	23	81	23	0	0	0	0
30	99	82	99	82	99	82	99	82	0	0	0	0
31	100	89	100	89	100	89	100	89	0	0	0	0
Avg	99	87	99	85	99	86	76	64	0	0	23	23
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	3	21	4	21	4	21	40	39	0	0	40	40
Min	81	23	81	23	81	23	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	100	100

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Table F12. Completeness of airflow and emission data at Site WI5B for September, 2009.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	100	93	100	93	100	93	100	93	0	0	0	0
2	100	87	100	87	100	87	100	87	0	0	0	0
3	100	94	100	94	100	94	100	94	0	0	0	0
4	100	96	100	96	100	96	100	96	0	0	0	0
5	100	99	100	99	100	99	100	99	0	0	0	0
6	100	98	100	98	100	98	100	88	0	0	0	0
7	100	99	100	99	100	99	66	64	0	0	0	0
8	100	99	100	99	100	99	100	99	0	0	0	0
9	100	93	100	93	100	93	100	93	0	0	0	0
10	100	97	100	97	100	97	100	97	0	0	0	0
11	100	99	100	99	100	99	100	99	0	0	0	0
12	100	100	100	100	100	100	100	100	0	0	0	0
13	100	99	100	99	100	99	100	99	0	0	0	0
14	100	99	100	99	100	99	100	99	0	0	0	0
15	100	100	100	100	100	100	36	36	0	0	59	59
16	97	100	97	100	97	100	0	0	0	0	97	100
17	100	87	100	87	100	87	0	0	0	0	100	87
18	100	98	100	98	100	98	0	0	0	0	100	98
19	100	99	100	99	100	99	0	0	0	0	100	99
20	100	100	100	100	100	100	0	0	0	0	100	100
21	100	99	100	99	100	99	0	0	0	0	100	99
22	100	96	100	76	100	76	0	0	0	0	97	92
23	100	100	100	100	100	100	0	0	0	0	100	100
24	100	100	100	100	100	100	0	0	0	0	100	100
25	97	81	97	81	97	81	0	0	0	0	97	81
26	100	79	100	79	100	79	0	0	0	0	100	79
27	96	64	96	64	96	64	0	0	0	0	96	64
28	89	20	89	20	89	20	0	0	0	0	88	20
29	74	32	40	19	40	19	0	0	0	0	74	32
30	85	93	85	93	85	93	0	0	0	0	85	93
Avg	98	90	97	89	97	89	47	45	0	0	50	43
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	6	19	11	20	11	20	48	46	0	0	47	44
Min	74	20	40	19	40	19	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	0	0	100	100

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Table F12. Completeness of airflow and emission data at Site WI5B for October, 2009.

Day	Airflow		Ammonia		Hydrogen Sulfide		PM_{10}		$PM_{2.5}$		TSP	
	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2	B1	B2
1	27	99	27	99	27	99	0	0	0	0	27	99
2	95	56	95	56	95	56	0	0	0	0	94	55
3	85	20	85	20	85	20	0	0	0	0	84	20
4	100	54	100	54	100	54	0	0	0	0	99	54
5	100	71	100	71	100	71	0	0	0	0	99	71
6	73	44	73	44	73	44	0	0	0	0	71	42
7	95	50	95	50	95	50	0	0	0	0	94	50
8	100	45	100	45	100	45	0	0	0	0	100	45
9	96	53	96	53	96	53	0	0	0	0	96	53
10	99	84	99	84	99	84	0	0	0	0	99	84
11	100	99	100	99	100	99	0	0	0	0	100	99
12	100	100	100	100	100	100	0	0	0	0	100	100
13	97	90	97	90	97	90	0	0	0	0	34	28
14	98	100	98	100	98	100	0	0	0	0	0	0
15	98	100	98	100	98	100	0	0	0	0	0	0
16	100	100	100	100	100	100	0	0	0	0	0	0
17	98	91	98	91	98	91	0	0	0	0	0	0
18	99	100	99	100	99	100	0	0	0	0	0	0
19	100	100	100	100	100	100	0	0	0	0	0	0
20	100	100	100	100	100	100	0	0	0	0	0	0
21	99	61	70	49	71	49	0	0	0	0	0	0
22	100	72	100	72	100	72	0	0	0	0	0	0
23	93	25	93	25	93	25	0	0	0	0	0	0
24	100	98	100	98	100	98	0	0	0	0	0	0
25	100	100	100	100	100	100	0	0	0	0	0	0
26	100	98	100	98	100	98	0	0	0	0	0	0
27	99	100	99	100	99	100	0	0	0	0	0	0
28	99	100	99	100	99	100	0	0	0	0	0	0
29	70	100	70	100	70	100	0	0	0	0	0	0
30	85	100	85	100	85	100	0	0	0	0	0	0
31	100	97	100	97	100	97	0	0	0	0	0	0
Avg	94	81	93	80	93	80	0	0	0	0	35	26
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	14	25	15	25	15	25	0	0	0	0	45	35
Min	27	20	27	20	27	20	0	0	0	0	0	0
Max	100	100	100	100	100	100	0	0	0	0	100	100

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EMISSIONS DATA FROM FOUR SWINE FINISHING ROOMS IN INDIANA

Final Report for Site IN3B

of the

National Air Emissions Monitoring Study

Submitted to

John Thorne, Executive Director
Agricultural Air Research Council
C/O Crowell and Moring, LLP
1001 Pennsylvania Avenue, NW
Washington, DC 20004

and

Bill Schrock, Environmental Engineer
U.S. EPA Office of Air Quality Planning and Standards
Mail Code E143-03, 4930 Page Road
Durham, NC 27703

by

Albert J. Heber, Professor and NAEMS Science Advisor
Agricultural and Biological Engineering, Purdue University
225 S. University St., West Lafayette, IN 47907
Phone: 765-494-1214 Email: [HYPERLINK "mailto:heber@purdue.edu" \h]

July 21, 2010

Contributors

Teng T. Lim
Agricultural Systems Management
University of Missouri
220 Agricultural Engineering Building
Columbia, MO 65211

Lide Chen
Department of Biological and Agricultural Engineering
CSI Evergreen Building, 315 Falls Avenue
P.O. Box 1827, University of Idaho,
Twin Falls, ID 83303-1827

Yaomin Jin, Cheong Ha, Jiqin Ni, Bill W. Bogan, Juan Carlos Ramirez, Claude Diehl, Changhe Xiao,
Agricultural and Biological Engineering, Purdue University
225 S. University St., West Lafayette, IN 47907

Erin L. Cortus
Agricultural and Biosystems Engineering,
South Dakota State University
Box 2120, Brookings, SD 57007

Acknowledgments

This project was supported by the National Pork Board and the Agricultural Air Research Council.

Citation

Lim, T.T., L. Chen, Y. Jin, C. Ha, J.-Q. Ni, B.W. Bogan, J.C. Ramirez, C. Diehl, C. Xiao, and A.J. Heber. 2010. National Air Emissions Monitoring Study: Emissions Data from Four Swine Finishing Rooms - Site IN3B. Final Report. Purdue University, West Lafayette, IN, July 21.

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1. INTRODUCTION AND OBJECTIVES

1.1. Overview of NAEMS

The primary goals of the National Air Emissions Monitoring Study (NAEMS) were to: 1) quantify aerial pollutant emissions from dairy, pork, egg, and broiler production facilities, 2) provide reliable data for developing and validating emissions models for livestock and poultry production and for comparison with government regulatory thresholds, and 3) promote a national consensus on methods and procedures for measuring emissions from livestock operations. Emissions measurements were conducted at a total of 15 different barn monitoring sites and ten open source sites in the continental US.

The NAEMS was managed by Purdue University (Purdue), in its role as Independent Research Contractor for the Agricultural Air Research Council. Purdue selected equipment and methods in consultation with the U.S. EPA, and subcontracted with other universities to operate the monitoring sites. Purdue maintained and calibrated equipment, collected samples, and conducted all other on-site activities. Other researchers at Purdue analyzed the data, and conducted two levels of data analysis and inspection, provided rapid feedback (generally within 2-4 business days) to catch aberrations in the data, and later conducted final processing and review of the data.

The overall objective of this report is to present the quality-assured measurements of ammonia (NH_3), hydrogen sulfide (H_2S), non-methane hydrocarbons (NMHC), particulate matter (PM) and volatile organic compounds (VOCs) from a swine finishing facility in Indiana. The specific objectives of the report are to:

1. Describe the farm, and the monitored buildings,
2. Describe the monitoring methods and quality assurance, and
3. Present tabulated daily averages of emissions.

2. CONFINED ANIMAL FEEDING OPERATION

2.1. Farm

The farm consisted of two "quad" barns constructed in 2003. The farm was located among flat agricultural fields, with some wooded areas about 1.6 km to the south. A 130 m^2 wooded area was located to the north-northeast. There were no other livestock farms within 1.6 km of the site.

The farm had a capacity of 8,000 head, which was divided among two 126 m x 25.5 m barns (east and west barns) that were separated by a distance of 28.7 m (Figure 1).

2.2. Monitored Buildings

Emission monitoring was conducted at the west barn. Each barn consisted of four 1,000-head, 61 m long x 12 m rooms. There was a 3.2-m wide hallway in the center of the barn between rooms 5 and 6 in the SE and SW quadrants and rooms 7 and 8 in the NW and NE quadrants, respectively (Figure 1).

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Quad 1 Quad 2

Figure 1. Facility layout. Rooms 5 to 8 in quad 2 were monitored.

Typical practice at the site was that, while rooms 7 and 8 stayed empty, all new weaner pigs were started in rooms 5 and 6, which were equipped with radiant gas heaters. After 3 or 4 weeks, half the pigs were moved to rooms 7 and 8. Rooms 5 and 6 therefore housed twice as many pigs at the beginning of each growth cycle. The producer sometimes practiced double-stocking whereby rooms 5 and 6 would be stocked at about 69 pigs/pen for the first two months, while the hogs in rooms 7 and 8 finished out. After rooms 7 and 8 were emptied and cleaned, half the pigs in rooms 5 and 6 would be moved into rooms 7 and 8. However, during this study, all finished pigs were removed from the rooms before new nursery pigs of the next growth cycle were introduced.

There were two rows of lights within each room, each row had eight lights distributed along the length of the room. The light bulbs were either 60- or 75-W incandescent or fluorescent bulbs. There were also two "always-on" lights installed at the center of the aisle. A diesel-powered generator set was used for backup electricity and it was tested every month. The producer inventoried the contents of the feed bins every week.

The finishing barns were tunnel-ventilated, with each room ventilated separately. Ventilation air entered each room through a 12-m long air inlet curtain that was located on the sidewalls at the end opposite the tunnel ventilation fans. All of the ventilation fans and fan controllers were manufactured by Airstream Ventilation Systems (Assumption, IL). There were five single-speed ventilation fans in the south walls of rooms 5 and 6 and the north walls of rooms 7 and 8. There were also three evenly-spaced variable-speed 0.61-m diameter pit fans (Airstream Model #APP-24F) in the sidewalls of each room. These pit fans constituted the first two stages (Stages 1A and 1B), with the three pit fans running slow as stage 1A and 100% as stage 1B. One single-speed direct-drive 0.91-m diameter fan (Airstream Model # APP-36X), located in the center of the end

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wall opposite the hallway of each room, was the lone third-stage fan. Four 1.22-m diameter fans (Airstream Model # CS54C1-P) located in the end wall opposite the hallway of each room, made up stages 4 through 6. Fan staging information in each barn is summarized in Table 1.

Table 1. Fan numbers and ventilation stages for rooms 6, 7, and 8 in the finishing barn.

Stage	Quantity	ID of additional fans
1A	3	**1**,**2**,**3** at variable speeds lower than 100%
1B	3	**1**,**2**,**3** at 100% capacity
2	3+1=4	1,2,3,**6**
3	4+1=5	1,2,3,**5***,6
4	5+1=6	1,2,3,5,6,**7***
5	6+2=8	1,2,3,**4**,5,6,7,**8**

The finishing barns had concrete slatted floors. Each room had two rows of pens on each side of the center walkway. Each row had 16 pens and eight feeders. The manure was stored in a 2.4-m deep pit located underneath the floor. There were reinforced concrete walls separating the pits under each side of the barn, so that there were two distinct pits beneath each barn. At the bottom of the center concrete walls, there were 1.2 m x 0.15 m liquid level equalization ports that ensured all four pits had equal volumes of manure. Manure accumulated in the pit for 180 d before it was pumped out.

2.3. Significant Events and Modifications

There were no significant weather events that affected emissions or the monitoring effort. The site management remained the same, and no changes to the facility were made during the study.

An identical double-quad facility was constructed 305 m north of the monitoring site in the summer of 2008 and was populated with pigs on September 22, 2008.

The ventilation scheme remained the same throughout the study. Site personnel alerted farm personnel when the monitoring system indicated malfunctioning fans.

The rooms were completely empty on 8/27-9/4, 8/20-8/28, 8/27-9/21, and 8/27-9/28 in 2007 for rooms 5 to 8, respectively. After the second group of pigs was removed, the rooms were again empty on 2/18-2/26, 2/19-3/4, 2/12-3/31, and 2/18-3/21 in 2008 for rooms 5 to 8, respectively. The next set of empty room periods were 8/19-8/26, 8/22-9/2, 8/22-9/5, and 8/22-9/9 in 2008 for rooms 5 to 8, respectively. The last empty room periods occurred in 2009, and were 2/16-2/24, 2/16-3/3, 2/16-4/1, and 2/16-3/19 for rooms 5 to 8, respectively. The longer periods for rooms 7 and 8 occurred because new pigs were initially housed in rooms 5 and 6.

Manure was removed from barn 2 on 10/14/07, 4/26/08, 8/22/08, 11/8/08, and 5/9/09. These dates were estimated based on weekly manure depth measurement records because the exact duration and completion of manure removals were not recorded.

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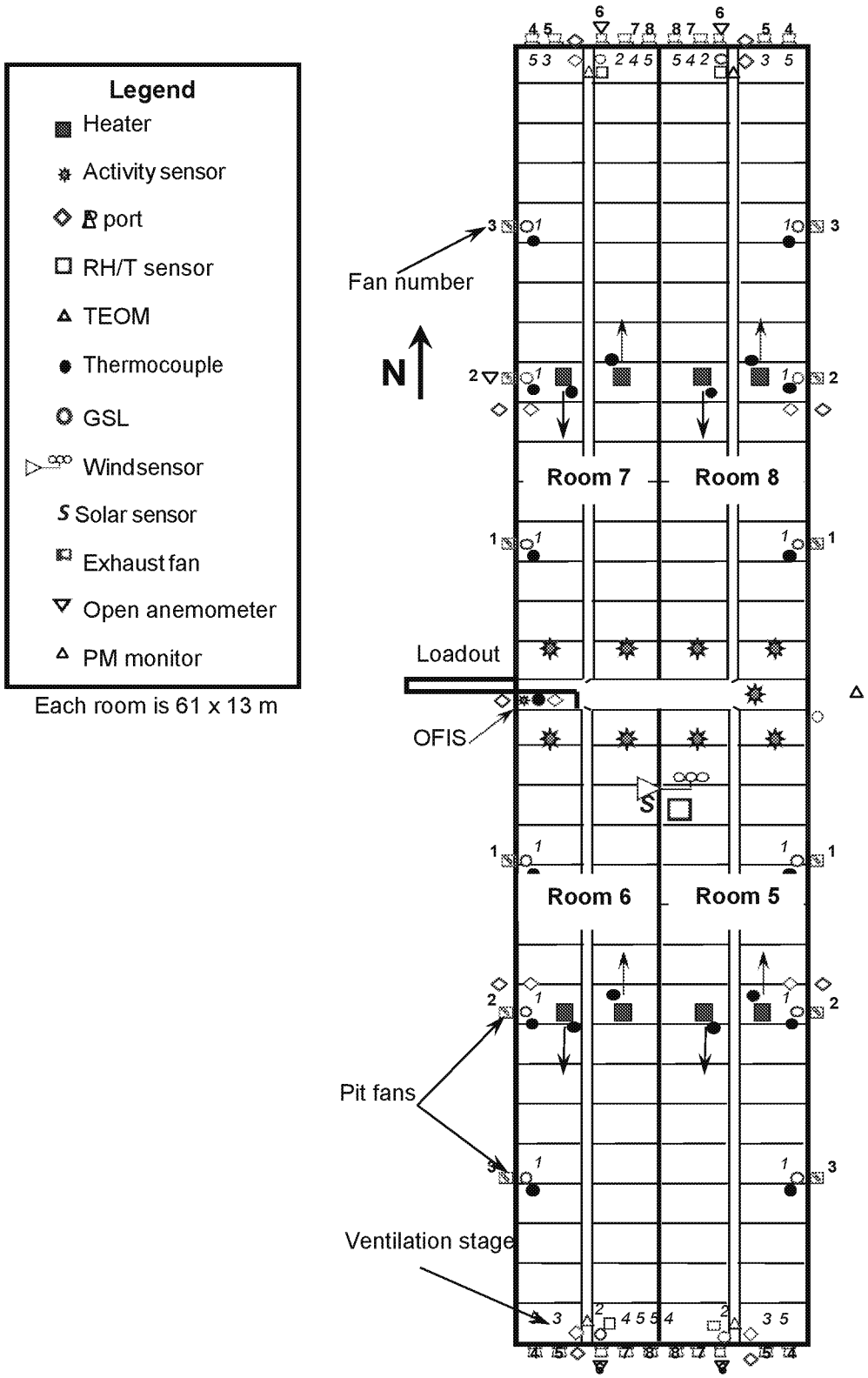

Figure 2. Floor plan of the barns, showing the sampling and measurement locations for barn 2 (rooms 5 to 8).

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3. MONITORING AND SAMPLING METHODS

3.1. General Approach

Equipment installation and preliminary testing began on 5/29/07 and was completed on 9/27/07. The site setup and equipment installation followed an approved site monitoring plan, a quality assurance project plan, and instrument or method-specific standard operating procedures.

The monitoring period began on 7/14/07 and concluded on 7/24/09. Target pollutants for this site were NH_3, H_2S, NMHC, PM (PM_{10}, TSP, and $PM_{2.5}$), and VOC. Appendix A lists the target pollutants, and all measured supporting variables and metadata monitored at the site. The monitoring schemes for the two structures are shown in Figures 2 and 3. Table 2 lists the major equipment used at site IN3B, including the models, manufacturers and instrument specifications.

3.2. Instrument Shelter

The on-farm instrument shelter (OFIS) was converted from a 5.4 m x 1.7 m utility room located at the southwest corner of the barn center walkway. Heated raceways were used to connect the OFIS with the monitoring rooms to avoid condensation in sampling lines during cold weather.

The OFIS was supplied with 120 VAC electric power by the farm. The analyzers, computer, GSS, and data acquisition system in the OFIS obtained electrical power from three additional 20-A circuits that were installed for the study. The TEOM vacuum pumps were connected to another additionally-installed power outlet in the hallway outside of the OFIS. An extension cord was connected to a nearby outlet in the hallway, to provide power to the inlet PM monitor (Beta-Gauge).

A 5-kW thru-wall/window air conditioner was installed at the east wall of the OFIS. Heating was provided using an electric 1.5-kW oil-filled heater. The temperature and differential static pressure in the OFIS were monitored with a thermocouple near the instrument rack and a pressure sensor, respectively. One set of gas analyzers (Table 2) in the OFIS measured gas concentrations as the gas sampling system (GSS) sequenced through all the gas sampling locations (GSLs). A personal computer collected all site monitoring data using a data acquisition and control program AirDAC.

Table 2. Major instrumentation.

Analyzer/Instrument	Serial number
INNOVA 1412 Multi-gas analyzer	710-194
TEI 450i H_2S analyzer	0709220685
Environics 4040 dilutor	3917
TEOM 1	263750609
TEOM 2	265130701
TEOM 3	265020701
TEOM 4	265110701
TEI FH 62C14 (Beta Gauge)	E-1304

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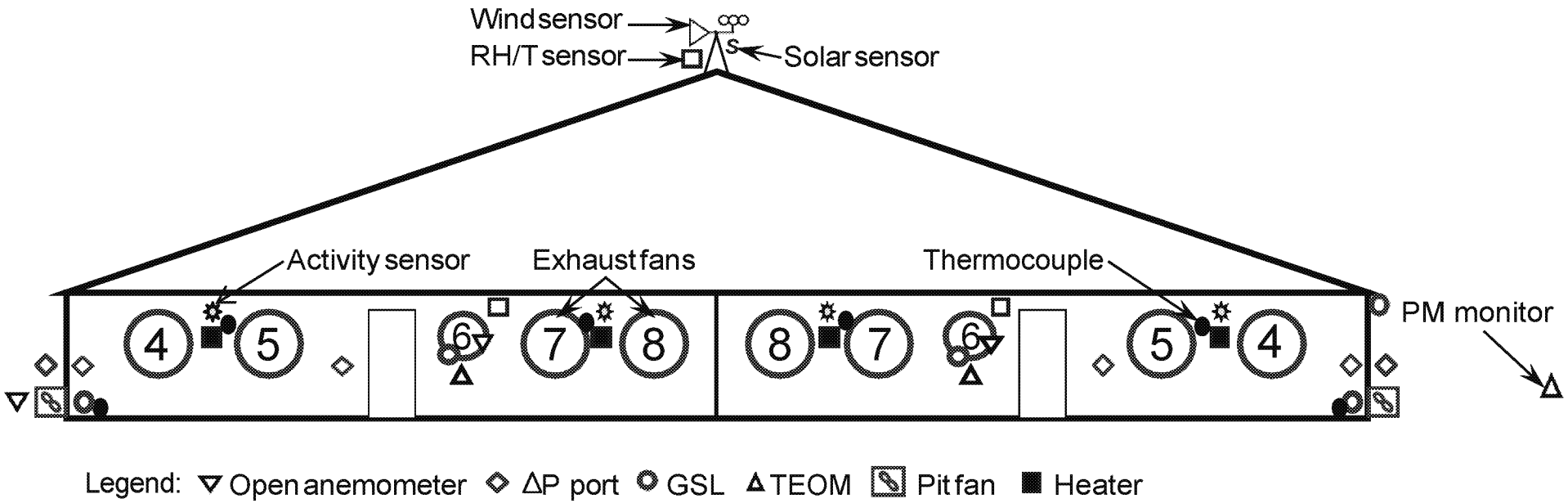

Figure 3. End (south view of barn) monitoring plan for continuous emission testing at barn 2.

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3.3. Data Acquisition and Control System

The data acquisition and control system consisted of a personal computer, custom software (AirDAC) written in a commercial programming language (LabVIEW, National Instruments, Austin, TX), distributed I/O hardware (National Instruments FieldPoint modules), and Universal Serial Bus (USB) devices by National Instrument (NI) and Measurement Computing (MC, Norton, MA). The NI FieldPoint (FP) modules and MC USB devices (Table 3) were selected and configured to acquire data for all the on-line measurement variables (Appendix A).

Table 3. Data acquisition hardware configuration for IN3B.

Manufacturer and model	I/O type	# units	# channels	Notes
NI FP-AI-112	Analog input	4	16	Single-ended, 16-bit
NI FP-TC-120	Thermocouple	3	8	
NI FP-DO-401	Digital output	2	16	2 A at 10-30 VDC
MC USB 4303 counter	Count input	4	10	
MC USB DIO 96H	Digital input	1	96	

The 16-channel NI FP-DO-401 digital output module was used to control: 1) sequential switching of multiple gas sampling lines, 2) the raceway heating system, and 3) the gas sampling system cooling fan. Serial communication (RS232) was used to acquire data from the multi-gas monitor and calibration variables (calibration time, gas concentration, etc.) from the gas dilutor. Voltage or current analog signals from various analyzers and sensors were connected to FP-AI-112 modules. Type T thermocouples were connected to FP-TC-120 modules. Digital signals from fan stage relays were connected to the MC USB DIO96H device. Voltage pulses from proximity sensors used to measure fan rotational speed were detected by the MC USB 4303 counters.

AirDAC averaged the signals (after conversion to engineering units) over 15-s and 60-s intervals and recorded the means into two separate computer files. All real-time data were displayed in tabular and graphic forms for on-site or remote (pcAnywhere, Symantec, Mountain View, CA) viewing (Ni et al., 2009; Ni and Heber, 2010). Measurement alarms, data collection notifications, data files, graphs and statistics of the daily data sets, and modified configuration and fieldnote files were automatically emailed to several recipients after midnight.

3.4. Monitoring and Recording Farm and Building Operation

3.4.1. Animal Husbandry and Building Systems

Two infrared motion sensors (activity sensors) were mounted to ceilings of each of the finishing rooms to monitor movements of pigs and workers. An activity sensor was used to monitor researcher presence in the OFIS, and another one was installed in the east end of the center walkway of the barn.

Data on animal inventory and mortalities were recorded manually and on a daily-basis by the producer, and provided to site personnel. Animal inventory was determined by comparing on-farm inventory records and sales reports. The sales reports usually contained information such as

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the date, packing plant name, number of pigs delivered to the plant, and total weight of each truck load. Average incoming nursery pig weights were also provided by the farm. Each room was divided into sub-groups of pigs according to truck loads, because each had a specific date and average weight. A growth curve was applied to estimate the weight gain per week, for each pig subgroup, following the "standard" growth rate given in the MWPS-8, Swine Housing and Equipment Handbook (MWPS 1983). For each sub-group, the curve was fitted to the beginning and final weights to estimate the weight gain (in percentage with respect to the final weight and age). The average pig weights were estimated based on daily gains of each subgroup, while the total inventory and total weight were the summation of each subgroup within the room. Weekly mortality records were also included in this calculation. The calculated average pig weight within the room was used to estimate unknown weights, because mortalities were not weighed when removed from the rooms.

Relays that controlled lights and feeders were monitored in each room, using auxiliary contacts in 5-VDC circuits in conjunction with the digital inputs of the data acquisition system.

3.4.2. Thermal Environmental

Weather data was collected using a solar radiation shielded capacitance-type relative humidity and temperature probe (RH/T) (Model RHT-WM, Novus Automation, Porto Alegre, Brazil), a pyranometer (Model LI-200SL, LI-COR, Lincoln, NE) and a cup anemometer (Wind Sentry, RM Young, Traverse City, MI), which were mounted on a 1-m aluminum tower located on the ridge of barn 2.

For the room environment conditions, RH/T probes were located at fan 6 of each room. Type T thermocouples (TCs) were used to measure temperatures at the three pit fan exhausts. The TC's were positioned about 15 cm below the concrete slats in the air inlets to the manure pump-out ports.

Thermocouples were also located in the heated raceways between room 7 and the OFIS. Two TCs were located in the OFIS to measure the temperature of the OFIS and the temperature-controlled TEOM tubing bundle. One TC monitored the temperature conditions in the inlet PM monitor enclosure.

3.4.3. Building Airflow

Auxiliary contacts of fan stage relays were monitored with 5-VDC circuits, in conjunction with digital inputs of the data acquisition system, for stages 2 through 5 in each room. Fan rotational speed and operational status was monitored using a magnetic Hall-effect sensor (speed sensor) installed on each fan. The speed sensors were mounted to detect the rotational speed in revolutions per minute (rpm) of either the fan shaft or the fan pulley. The digital signal from the speed sensor was converted into a frequency measurement with a counter module in the data acquisition system.

Static pressure differences were measured across the side and end walls of each room with differential static pressure sensors (Model 260, Setra Systems, Boxborough, MA). The outside port was located against the outside wall near the ventilation fans of the side and end walls. Static pressure in the OFIS was measured with the same type of sensor, to ensure that positive pressure was maintained.

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Impeller anemometers (Model 27106RS, RM Young, Traverse City, MI) were installed on the outlet of each of the PREFs of each room and fan 2 of room 7.

In-situ airflow measurements were conducted with either a 122-cm or a 137-cm field-portable fan tester (Fan Assessment Numeration System or FANS, University of Kentucky, Lexington, KY), which was described by Gates et al. (2004). The field data was used to develop equations that would calculate airflow as a function of differential pressure and fan rotational speed, and to assess the uncertainty in airflow predictions. For the smaller pit fans that were inaccessible (much smaller in diameter) to the FANS analyzers, the traversing method was used to test these fans. A three-impeller-anemometer airflow measurement system (TIAMS) was constructed and calibrated in the BESS Laboratory for measuring the pit fan airflow rates.

The TIAMS was custom designed and constructed to fit the exhaust cones of 61-cm diameter pit ventilation fans, and to mount three impeller anemometers (Model 27106R, R.M. Young, Traverse City, MI). The dimensions of the TIAMS was 69 cm x 69 cm x 61 cm. The heights and distances between the anemometers were distributed to allow the anemometers to evenly measure the air speed through the cross-sectional area. A data acquisition module (USB-1208FS, Measurement Computing, Norton, MA) measured the voltage outputs of the anemometers. A custom LabVIEW program was written to receive and log the voltages. The measured airflow rate was calculated with the cross-sectional area of the TIAMS and the mean measured air velocity. The TIAMS was calibrated at the BESS Laboratory twice to develop the calibration factors, and to evaluate its repeatability and linearity. Calibration results of the TIAMS indicated that the measurements were linear (R^2>0.999) and repeatable for airflow rates > 1.0 m^3/s.

A total of four groups of in-situ fan tests with replication were conducted during: 1) August and September of 2007, 2) May to September of 2008, 3) April to June of 2009, and 4) August and September, 2009. Each of the wall fans was tested at least once during the four testing periods, and was tested with the FANS. The pit fans were tested with the traverse method using either the hot-wire anemometer or the TIAMS. However, only the 2008 and 2009 traverses were used in developing the airflow curves because the traverses conducted with the hot-wire anemometer were not calibrated with the fan test chamber.

The airflow curves of the 0.91-m and 1.22-m diameter wall fans and 0.61-m diameter pit fan were obtained from the Bioenvironmental and Structural Systems (BESS) Lab at the University of Illinois at Urbana-Champaign (BESS, 2003; BESS, 2004). Each performance record consisted of airflow (Q1) measured at several static pressures (P1), and at relatively constant speeds (N1 = 822, 598, and 1050 rpm for 0.91-m, 1.22-m, and 0.61-m diameter fans, respectively).

For each fan type, the BESS fan curve was adjusted to the mean speed (N2) of the fan tests. The mean speeds were 572 and 848 rpm for the 0.91-m and 1.22-m diameter wall fans, respectively. Three fan curves were used for the variable speed, 0.61-m diameter pit fans, and the mean speeds were 461, 732, and 1074 rpm. The new, speed-indexed baseline curves were derived using the first ($Q_2 = Q_1(N_2/N_1)$) and second ($\Delta P_2 = \Delta P_1(N_2/N_1)^{0.5}$) fan laws, where Q_2 is the speed-adjusted BESS fan curve at speed N_2. The speed-corrected airflow prediction model is $Q_4 = (a\Delta P_4 + b)\cdot(N_4/N_2)\cdot Q_2$, where ΔP_4 and N_4 are measured fan static pressure and speed. For a given test using the portable tester, the model is $Q_4 = k\cdot(a\cdot\Delta P_3 + b)\cdot(N_3/N_2)\cdot Q_2$, where ΔP_3 and N_3 are the

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measured fan static pressure and speed during the fan test, and the fan degradation factor $k = a \cdot \Delta P_3 + b$. The values for coefficients a and b were those which minimized the sum of square differences between Q_4 and Q_3 for all the valid fan tests within a speed regime. The resulting fan models are shown in Table 4.

Fans were assigned to a sampling stream based on their proximity to the four sampling locations in each room. For each room, fans 1, 2, and 3 represented streams 1 to 3, respectively, and fans 4 to 8 made up stream 4 (wall fan stream). The airflow rate of stream 4 was calculated by summing the individual airflows of all fans (4 to 8) in the stream.

Table 4. Fan airflow models.

Fan dia, cm	Reference speed (N_2)	Polynomial coefficients of $Q_2=f(\Delta P_2)$ at speed N_2				Coefficients of k	
		a3	a2	a1	a0	b1	b0
122	598	1.88E-05	5.85E-04	6.94E-02	1.08E+01	1.563E-03	0.988
91	822	7.80E-06	3.97E-04	3.77E-02	5.89E+00	1.391E-03	0.967
66	1074	1.00E-05	8.60E-04	3.32E-02	3.58E+00	6.869E-04	0.623
66	732	7.00E-05	2.73E-03	4.87E-02	2.44E+00	2.520E-03	0.622
66	461	1.30E-04	1.74E-03	4.12E-02	1.52E+00	1.702E-03	0.575

3.4.4. Biomaterials Sampling Methods and Schedule

All analyses of biomaterials were performed by an independent laboratory (Midwest Laboratories, Omaha, NE).

Water was evaluated based on analyses of three samples of water provided to the pigs, taken on 11/10/08, 1/5/09, and 2/16/09.

On ten occasions, two composite feed samples were collected from each finishing room and analyzed for nitrogen and solids content by Midwest Labs (Table D1). For each side of the walkway, equal subsamples from each of the eight feeders were collected and combined into a composite sample.

Manure in the barns was sampled 15 times from 4/4/08 to 8/21/09 (Table D2) to determine pH, solids content, and ammoniacal N. Ash content was determined starting in November 2008 for the surface manure samples. During each sampling event, four surface samples were collected from locations along the walkway in each room. The center walkway was divided into four equal areas, and the surface manure samples were collected from the top 31 cm of the pit at the center point of each area. The samples were collected using a 2.7-m long Coliwasa sampler (Southeastern Liquid Analyzers, Inc., York, SC).

One core and two gradient samples were taken from each of the four rooms. The gradient samples were taken from the 1/3 and 2/3 depth sections of the stored manure. The gradient

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samples were taken when the manure depth was greater than 1 m, and when the manure's solids content was not too high for sampling with the manure sampler. The core and gradient samples were collected from the second or third area sampling locations of each room. The core and gradient samples were analyzed for pH, solids content, and ammoniacal N. Thus there were a total of four core, eight gradient, and 16 surface samples for each sampling event.

Additional core and surface samples were collected from the center pit-access (where second pit fan was located) of each room. These samples were analyzed for the same variables as inside surface samples.

A total of eight core (load-out) samples (two per room) of manure were collected each time before the pits were emptied. The samples were analyzed for solids content, total N, and ash. Each room had north and south composite core samples. Each sample consisted of four subsamples taken from either the north or south barn locations along the walkway.

3.5. Particulate Matter Monitoring

Real-time PM monitors (TEOM Model 1400a, Thermo Fisher Scientific, Waltham, MA) continuously sampled exhaust PM. A TEOM was placed at the end of the walkway of each finishing room, about 2 m in front of the inlet of fan 6, which was the PREF (Figures 2 and 3).

A beta attenuation PM monitor (Beta Gauge Model FH62C-14, Thermo Fisher Scientific, Franklin, MA) continuously measured barn inlet PM concentration. The Beta Gauge was enclosed in a protective outdoor enclosure and located at the inlet gas-sampling location of room 5 (Figure 2). The inlet PM monitor was very near the barn ventilation inlets and more than 13 m away from the pit exhaust fan 1 of room 5. The driveway between the two barns were graveled, and the space surrounding the two barns was grassed and well maintained. Infrequent vehicle traffic, mowing activities, and the machinery in the nearby corn field could have caused "spikes" of measured inlet PM.

At any one time, the sampled PM size class was either PM_{10}, $PM_{2.5}$ or TSP at both TEOMs and the Beta Gauge. The $PM_{2.5}$ size class was monitored for eleven, 1-14 d periods (Table 5). The TSP inlet heads were placed on the TEOMs for nine, 3-12 d periods. The PM_{10} concentration was measured at all other times.

3.6. Continuous Gas Sampling and Monitoring

Air samples for continuous gas measurements were collected from multiple gas sampling probes with a custom-designed gas sampling system (GSS). Each probe was connected to the GSS with Teflon tubing. The sampling lines were heated and wrapped with insulation at locations vulnerable to cold air to prevent condensation inside the tubes.

For each of the finishing rooms, three gas sampling probes were placed 15 cm under the concrete slats, inside the finishing room near the pit exhaust fans (Figure 2). One gas sampling probe was located in front of the inlet of fan 6 (Figure 3). The probe for sampling inlet air was located near the inlet PM measurement location just east of room 5.

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Table 5. Sampling schedule for PM_{10}, TSP and $PM_{2.5}$.

Time and day, m/d/y		Test duration, d		
Start	Stop	PM_{10}	TSP	$PM_{2.5}$
7/13/07	10/2/07	81.0		
10/2/07	10/10/07		7.9	
10/10/07	12/11/07	62.0		
12/11/07	12/19/07		8.0	
12/19/07	1/10/08	22.0		
1/10/08	1/24/08			13.9
4/23/08	5/7/08		14.0	
5/7/08	6/30/08	53.9		
6/30/08	7/7/08		7.1	
7/7/08	9/22/08	77.2		
9/22/08	10/8/08			16.0
10/8/08	10/17/08	8.7		
10/17/08	10/21/08			4.0
10/21/08	10/28/08		7.1	
10/28/08	12/8/08	40.9		
10/28/08	10/31/08	2.9		
10/31/08	11/3/08			3.0
11/3/08	11/14/08		10.9	
11/14/08	12/8/08	24.0		
12/8/08	12/11/08		3.0	
12/8/08	12/15/08		6.8	
12/15/08	12/18/08			3.0
12/11/08	2/4/09	55.1		
2/4/09	2/12/09			8.1
2/12/09	3/9/09	24.9		
3/9/09	3/11/09			2.0
3/11/09	3/23/09		12.0	
3/23/09	3/27/09			3.9
3/27/09	6/1/09	66.1		
6/1/09	6/4/09		3.0	
6/4/09	7/1/09	26.8		
7/1/09	7/13/09			12.2
7/13/09	7/14/09	0.7		
7/14/09	7/14/09		0.3	
7/14/09	7/20/09			5.9
7/20/09	7/24/09		4.1	

Each exhaust location was sampled individually for 10 min. The ventilation inlet location was monitored at least twice daily, with a 30-min sampling period.

One set of gas analyzers in the OFIS was used to sequence through all the GSLs. Hydrogen sulfide was measured with a fluorescence H_2S analyzer (Model 450i, Thermo Fisher Scientific,

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Waltham, MA). Concentrations of NH_3 were measured with a photoacoustic infrared multi-gas monitor (INNOVA Model 1412, LumaSense Technologies, Ballerup, Denmark). Concentrations of NMHC were measured using a chromatography system (Model 55C, Thermo Fisher Scientific).

The INNOVA analyzed non-methane hydrocarbon (NMHC) concentrations by measuring THC and subtracting ethanol (manufacturer error) and methane. The THC data was questionable, however, due to irreconcilable interferences by water vapor and other gases. Therefore, the VOC-related gas emissions measured by the INNOVA are not included in this report.

Table 6. Analyte sampling locations.

Analyte	Room	Sampling location*	Qty
NH_3 H_2S NMHC	5, 6, 7, 8	Three pit fans, and directly in front of fan 6 inlet	16
	5	**INLET:** In front of curtain inlet area of room 5	1
$PM_{2.5}$ PM_{10} TSP	5, 6, 7, 8	TEOM located 2 m in front of fan 6	4
	5	**INLET:** Beta-Gauge in front of the curtain inlet of room 5	1
VOC	5, 6, 7, 8	2 m in front of fan 6	4

*Gas sampling probes were located at fan hub height, suspended from the ceiling.

3.7. VOC Sampling and Analysis

Grab samples of VOC were collected at the PREFs (fan 6 in each room) (Table 6), using methodology based on methods TO-15 and TO-16. Sampling was conducted with 6-L stainless-steel canisters (TO-Can, Restek Corp, Bellefonte, PA), equipped with ¼″ bellows valves (Swagelok SS4H) and 207-kPa vacuum gauges. Sampling trains contained flow controllers (Veriflo Model 423XL, Parker-Hannifin Corp., Richmond, CA) with 2- to 4-sccm critical orifices and 7-µm in-line stainless steel filters. Flow controllers were pre-set to a constant flow rate of 3.4 mL/min. Canister sampling was conducted for 24 h, and canister pressures were recorded at the beginning and end of the sampling periods for the calculation of total sample volumes. Sampling was conducted six times between 6/1/09 and 7/23/09, with duplicate samples typically collected at each location. All canisters were cleaned and passed QC before sample collection.

Canister samples were analyzed at Purdue University's Trace Contaminant Laboratory. The canisters were pressurized to +207 kPa with ultrapure N2, and transferred to TDS tubes (Carbotrap 300, Supelco, Bellefonte, PA). The pressurized canisters initially yielded sample flows of 50 mL min^{-1} during sample transfer to tubes. Canister heating was introduced when a canister pressure decreased to 13.8 kPa to ensure maximal transfer of nonvolatile components.

The TDS tubes were analyzed on a thermodesorption-gas chromatograph-mass spectrometer (TDS-GC-MS), consisting of a gas chromatograph (Model 6890, Agilent Technologies, Palo Alto, CA) coupled with a Model 5795 mass spectrometer detector (Agilent Model 5795) and equipped with a thermal desorption system (Model TDS-G, Gerstel, Baltimore, MD) and a cooled injection system (Gerstel CIS). The GC-MS passed a leak check prior to analyzing each

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set of samples. Compounds were separated on a 60 m x 0.25 mm x 1 μm column. The detector utilized the full scan mode covering masses from 27-270 Daltons in 8 scans/s. The MS quad hold temperature was 150°C, and the MS source hold temperature was 230°C. The analytical results were analyzed by ChemStation, and all integrations were manually checked. This method used an external standard compound for instrument monitoring and QA to avoid losses of low-molecular-weight analytes that would occur when purging solvent used with internal standard(s). All TDS tubes were cleaned with a tube conditioning system (Gerstel TC-2 TDS) for 3.5 h at 350°C prior to each use.

Response curves were generated at both the beginning and the end of the VOC analysis period. The response curves of all chemical standards reached good linearity as 55% of the response curves had $R^2 > 99\%$ and over 98% had $R^2 > 95\%$. Toluene was used as an external standard that was analyzed during each batch of samples to assure quality. The relative bias and standard deviation of 97 toluene checks were -4.3% and 18.8%, respectively. The uncertainty of the mean of duplicate field samples was calculated as 27%, based on the toluene checks.

3.8. Documentation of Quality Assurance

3.8.1. Oversight, Maintenance, and Calibration

Purdue University visited the site frequently during the first few months of the study; that frequency declined as site operation became more routine. A total of 152 and 132 visits were made during years 1 and 2 of the monitoring period. Remote access to the site computer was used to check the site during the majority of the monitoring period. Data files and correspondence were emailed from the site computer on a regular basis.

The NAEMS Science Advisor audited the site on 8/24/07. The Environmental Protection Agency (EPA) conducted site audits on 9/27/07 and 9/1/09.

Various site maintenance and calibration activities were conducted by site personnel (Appendix B). Specific quality assurance tests of the GSS, gas analyzers and other sensors are discussed below.

3.8.2. Gas Sampling System

Two types of GSS leak tests were conducted. The first test examined GSS integrity, by briefly creating a "dead head" against the pump by closing all solenoid valves, while measuring exhaust airflow with a portable rotameter, and recording the leakage flow with the GSS mass flow meter. The second test consisted of monitoring GSS flow and pressure after manually setting AirDAC to sample from a particular GSL and plugging the GSL's gas sampling probe, which created a GSS manifold vacuum of about -70,000 Pa or 0.31 atm. Preliminary tests indicated that GSS flows under dead-head conditions that were 10% or less (<0.45 L/min) of the normal GSS flow rate of 4.5 L/min was indicative of leak-free operation under normal GSS manifold vacuums of -10,000 to -4,000 Pa (0.90-0.96 atm). Leak tests of the GSS were conducted on 2/6/09, 3/18/09, 3/27/09, and 7/18/09. The dead-head leakage flows were always less than the 0.45 L/min threshold. Systematic checking of individual sampling lines was conducted on 9/14/07, 2/19/08, 3/8/08, 4/25/08, 9/8/08, 1/7/09, 3/27/09, and 7/20/09, while checks of some lines were conducted

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more frequently. Data was only invalidated when leaks occurred away from the sampling location. If gas sampling probe filter maintenance eliminated a leak, no data was invalidated since leakage air would be the same as sampled air.

3.8.3. Gas Analyzers

Gas measurements were evaluated using multipoint calibrations and zero and span checks (Appendix C). The gas concentration data output by the analyzers was adjusted to correct for bias introduced by the gas sampling and measurement system.

3.8.3.1. Correction of Ammonia Concentrations

A multipoint calibration (MPC) was conducted through the challenge line five times using purified air (Cat. # AIO.OCE-T, CEM zero-grade, Praxair, Indianapolis, IN) and three (typical) span concentrations of NH_3 (Cat. # NI-AM5MP-AS, Praxair Primary Standard). Each MPC was conducted with replication (Table 7). The NH_3 was delivered using a 6-port gas dilutor (Model 4040, Environics, Tolland, CT). The R^2 values of each MPC exceeded 0.996, indicating linearity of instrument response to standard gas between 0 and 36 ppm.

Table 7. Multipoint calibration record and results for the NH_3 measurements.

Date	# of points	Span concentration, ppm		R^2
		Minimum	Maximum	
7/11/07	4	12	36	0.9983
1/5/09	4	12	36	0.9960
1/15/09	4	12	36	0.9987
5/15/09	4	12	36	0.9969
7/6/09	4	12	36	0.9967

Precision checks were conducted periodically using zero and span gases (Z/S checks), delivered via the dilutor through the challenge line, and responses were recorded to monitor changes in system performance over time. Span checks were conducted with 36 ppm of NH_3 (Appendix C).

Significant downtime occurred due to factory repair and calibration from 10/16/08 to 1/5/09 and from 6/11/09 to 7/14/09. Another significant downtime that occurred from 1/1/2008 to 2/25/08 and affected all gas concentration measurements was due to a potential GSS pump leakage.

The average response of the analyzer to the zero and span gas applications was assessed, and the results were combined based on changes to the instrument or gas sampling system to create linear correction models (Table 8). The models were used to correct instrument readout data. The measurement accuracy was assessed based on model-corrected zero and span checks (Table 8).

3.8.3.2. Correction of Hydrogen Sulfide Concentration

A MPC was conducted through the challenge line four times using purified air (Cat. # AIO.OCE-T, Praxair CEM zero air) and three span concentrations (Cat. # NI-HSR1E-AS, Praxair EPA Protocol Standard). Except for 9/10/07, each MPC was conducted with replication (Table 9). The H_2S was delivered using a 6-port dilutor (Model 040, Environics, Tolland, CT). The R^2 values of

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each MPC exceeded 0.9961, indicating excellent linearity of instrument response to standard gas between 0 and 4000 ppb (or 3600 ppb after 10/21/08, and 3000 ppb after 5/22/09).

Table 8. Concentration correction and measurement accuracy for ammonia.

Start/end dates	# of checks		Linear model	Accuracy, % of span			
				Bias		Precision	
	Zero	Span		z	s	z	s
7/13/07-11/30/07	18	16	y =1.098(x–0.724)	0.1	-0.9	1.2	3.5
11/30/07-1/15/09	42	41	y =1.090(x-1.057)	-0.1	-0.5	1.4	2.7
1/15/09-5/22/09	16	14	y =1.055(x-0.968)	-1.5	2.3	0.5	3.9
5/22/09-7/12/09	8	8	y =1.124(x-0.775)	0.0	-0.1	0.7	2.
7/12/09-9/7/09	9	9	y =1.145(x+0.385)	-0.1	-0.1	0.5	1.6
All	93	88					

Table 9. Multipoint calibration record and results for the H_2S measurements.

Date	# of points	Span concentration, ppb		R^2
		Minimum	Maximum	
7/12/07	4	1333	4000	0.9961
9/10/07	4	1333	4000	1.0000
10/21/08	4	1200	3600	0.9986
5/22/09	4	1000	3000	0.9982

Precision checks were conducted periodically (Table 9) using zero and span gases (Z/S checks), delivered via the dilutor through the challenge line, and responses were recorded to monitor changes in system performance over time. Span checks were conducted with 150, 450 or 500 ppb of H_2S (Appendix C).

The average response of the analyzer to the zero and span gas applications was assessed, and the results were combined based on changes to the instrument or GSS to create linear correction models (Table 10). The H_2S/air blend used from 1/29/09 degraded significantly prior to the expiration date and was replaced with H_2S/nitrogen blends by Praxair. However, an expired H_2S/nitrogen blend cylinder (expired 1/9/09) was kept at the site for the calibration checks, and was used until a new span cylinder was delivered on 7/16/09. A comparison test (n=2) indicated that the expired span cylinder did not degrade compared with the new span gas. Therefore all span check data obtained from the expired but stable H_2S/nitrogen blends were included in the development of the gas correction models. The models were used to correct instrument readout data. The measurement accuracy was assessed based on model-corrected zero and span checks (Table 10).

3.8.3.3. Non-Methane Total Hydrocarbons

A MPC was conducted through the challenge line nine times using purified air (Cat. # AIO.OCE-T, CEM zero-grade, Praxair) and three (typical) span concentrations of C_3H_8 (Cat. # NIME50P1E-AS, Praxair Primary Standard), which was a C_3H_8 and CH_4 mixture in nitrogen gas. Each MPC was conducted with replication (Table 12). The C_3H_8 was delivered using a 6-port gas dilutor (Model 4040, Environics, Tolland, CT). The R^2 values of each MPC exceeded 0.9995,

indicating linearity of instrument response to standard gas between 0 and 3.0 ppm (4.5 ppm after 8/26/08, and 1.9 ppm after 6/25/09).

Table 10. Concentration correction and measurement accuracy for hydrogen sulfide.

Start/end dates	# of checks		Linear models	Accuracy, % of span			
				Bias		Precision	
	Zero	Span		z	s	z	s
7/13/07-9/12/07	9	9	y =0.942(x–5.406)	0.0	1.9	0.2	3.3
9/12/07-11/23/07	13	13	y =0.801(x–3.160)	0.0	-1.1	0.1	3.9
11/23/07-10/28/08	44	44	y =0.771(x–4.385)	0.0	1.4	0.1	3.3
10/28/08-9/7/09	48	44	y =1.045(x–3.394)	0.0	-0.7	0.1	3.0
All	114	110					

Table 11. Multipoint calibration record and results for the C_3H_8 measurements.

Date	# of points	Span concentration, ppm		R^2
		Minimum	Maximum	
10/18/07	4	1.0	3.0	1.0000
1/9/07	4	1.0	3.0	0.9997
2/4/07	4	1.0	3.0	1.0000
4/11/07	4	1.0	3.0	0.9999
10/8/07	4	1.0	3.0	0.9997
8/26/08	4	1.5	4.5	0.9998
12/11/08	4	1.5	4.5	0.9999
5/12/09	4	1.5	4.5	1.0000
6/25/09	4	0.6	1.9	0.9995

Precision checks were conducted periodically using zero and span gases (Z/S checks), delivered via the dilutor through the challenge line, and responses were recorded to monitor changes in system performance over time. Span checks were conducted with 2.0, 1.5, and 0.6 ppm of C_3H_8 (Appendix C).

Significant downtime occurred due to malfunctioning of the analyzer from 5/9/08 to 8/15/09.

The average response of the analyzer to the zero and span gas applications was assessed, and the results were combined based on changes to the instrument or gas sampling system to create linear correction models (Table 12).

3.8.3.4. Noise Tests

Analyzer noise tests were conducted to assess the minimum detection limit (MDL) of the gas measurements. The analyzers measured CEM zero air (Praxair Cat. # AIO.OCE-T CEM) continuously for 32 to 52 min after equilibrium of the instrument readout was reached. The MDL was defined as three times the standard deviation of the data collected during the equilibrated period (Table 13).

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Table 12. Concentration correction and measurement accuracy for C_3H_8.

Start/end dates	# of checks		Linear models	Accuracy, % of span			
				Bias		Precision	
	Zero	Span		z	s	z	s
7/13/07-9/9/08	13	15	y =0.811(x–0.002)	0.0	5.7	1.8	3.0
9/9/08-12/5/08	12	12	y =1.014(x–0.006)	0.7	-0.4	6.0	3.5
12/5/08-5/15/09	20	20	y =1.031(x+0.014)	0.3	-0.2	0.9	1.6
5/15/09-6/25/09	7	7	y =1.089(x+0.021)	-0.1	-0.4	0.2	2.6
6/25/09-7/23/09	6	6	y =1.123(x+0.019)	0.0	0.5	0.0	4.0
All	58	60					

Table 13. Noise tests of gas analyzers with dry air on 9/9/09.

Concentration	Statistical variable				Duration, min	T_{dew},°C
	Min	Max	SD	MDL		
NH3, ppm	0.36	0.51	0.04	0.09	19	-6.97
H2S, ppb	-4.7	-1.7	0.88	2.24	19	N/A

3.8.4. Particulate Matter Monitors

The quality of the exhaust PM data was assessed through periodic mass verifications and flow and leak checks of the TEOMs (Tables 14-17). The TEOMs met or exceeded the mass verification criteria (Ko actual within ±2.5% of Ko audit) except on 10/8/08 for all TEOMs, and 10/31/08 for the room 5 TEOM. The criteria for total and main flows were 16.67±1.0 and 3.0±0.2 L/min, respectively, and were met on all dates except 2/24/07 in rooms 5 and 8, but were retested and passed within one week.. Another flow audit that failed the criteria was 5/4/09 in room 5, caused by a bad signal cable connection.

Leakage criteria were total flow ≤ 0.62 L/min and main flow ≤ 0.15 L/min, respectively. All leak and flow tests of both TEOMs were acceptable on all dates.

Mass verifications and flow calibrations of the inlet and exhaust PM monitors were conducted periodically (Tables 14-17). The TEOMs met or exceeded the mass verification criteria (Ko actual within ±2.5% of Ko audit) for each test period, except on 10/8/08 and 10/31/08. The failure was most likely caused by an old calibration filter and inexperienced site personnel. The subsequent verification tests conducted with a new calibration filter met the criteria.

The criteria for total and main flows were 16.67±1.0 and 3.0±0.2 L/min, respectively, and were met on all dates except 2/24/09 and 5/4/09 for the TEOMs in rooms 5 and 8, respectively. However, the failed flow audits were caused by a malfunctioning flow meter, and measurements within seven or eleven days of these tests indicated acceptable flows with another flow meter. Leakage criteria were total flow ≤ 0.62 L/min and main flow ≤ 0.15 L/min, respectively. All TEOM leakage tests were acceptable on all dates.

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Table 14. Quality assurance tests of room 5 TEOM.

Date	Time since last test, d	Mass error, %	TEOM flows, L/min		Leak test flows, L/min	
			Main	Total	Main	Auxiliary
07/16/07		0.38	3.13	16.71	0.03	0.19
01/24/08	192		3.10	16.63	0.03	0.05
07/11/08	169	2.19				
07/24/08	13		3.15	16.93	0.12	0.32
09/15/08	53	2.5	3.05	16.70	0.1	0.38
10/08/08	23	3.25				`
10/31/08	23	2.98				
11/03/08	3	2.46				
12/15/08	42	2.38	3.07	16.77	0.11	0.45
02/12/09	59	2.47	3.07	16.77	0.12	0.38
02/24/09	12		2.55	15.50	0.12	0.44
02/27/09	3		2.94	16.23		
03/23/09	24	2.47				
05/04/09	42		3.04	16.70		
05/07/09	3	2.2				
06/01/09	25	2.49				
06/25/09	24				0.08	0.39
07/13/09	18		N/A	17.12		
07/18/09	5	2.04	3.08	16.84	0.08	0.51

Table 15. Quality assurance tests of room 6 TEOM.

Date	Time since last test, d	Mass error, %	TEOM flows, L/min		Leak test flows, L/min	
			Main	Total	Main	Aux.
07/30/07			3.25	17.10	0	-0.01
08/02/07	3	1.16				
01/08/08	159	0.44	3.09	17.06	-0.02	0.03
07/11/08	185	1.98				
07/24/08	13		3.24	16.33	0.09	0.13
09/15/08	53	2.45			0.09	0.3
10/08/08	23	3.71				
10/31/08	23	2.28				
12/18/08	48	2.28	3.08	16.81	0.07	0.21
02/12/09	56	2.11	3.08	16.78	0.09	0.29
02/27/09	15				0.06	0.32
03/03/09	4		3.14	17.14	0.07	0.22
03/23/09	20	1.79				
05/04/09	42		3.10	15.52		
05/07/09	3	1.75				
06/01/09	25	2.21				
06/25/09	24				0.06	0.24
07/06/09	11		N/A	17.39		
07/18/09	12	2.33	3.14	16.75	0.07	0.36

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Table 16. Quality assurance tests of room 7 TEOM.

Date	Time since last test, d	Mass error, %	TEOM flows, L/min		Leak test flows, L/min	
			Main	Total	Main	Aux.
07/30/07			3.17	16.86	0.12	0.25
08/02/07	3	0.19				
01/24/08	175		3.01	16.52	0.04	0.43
02/08/08	15	1.1				
07/24/08	167	1.43	3.16	17.51	0.05	0.13
09/15/08	53	2.32	3.08	16.96	0.07	0.14
10/08/08	23	2.8				
11/03/08	26	1.76				
12/18/08	45	2.26	2.95	16.96	0.05	0.17
02/12/09	56	1.78	3.00	16.86	0.05	0.12
03/03/09	19		3.17	17.44	0.08	0.22
03/27/09	24	1.78	3.04	16.89	0.07	0.45
05/04/09	38		3.02	16.80		
05/07/09	3	1.69				
06/01/09	25	1.56				
06/25/09	24				0.06	0.23
07/06/09	11		2.94	16.40		
07/07/09	1		3.05	16.73		
07/18/09	11	1.69	3.03	16.67	0.05	0.25

Table 17. Quality assurance tests of room 8 TEOM.

Date	Time since last test, d	Mass error, %	TEOM flows, L/min		Leak test flows, L/min	
			Main	Total	Main	Aux.
07/30/07			3.18	16.80	0	0.03
08/02/07	3	0.04				
01/03/08	154		2.93	16.39	0.02	0.04
01/08/08	5	0.66				
07/24/08	198	1.95	3.07	16.97	0.05	0.21
09/22/08	60	1.74	3.00	16.35	0.11	0.31
10/08/08	16	3.1				
11/03/08	26	1.65				
12/18/08	45	1.58	3.04	16.61	0.05	0.13
02/12/09	56	1.38	3.02	16.74	0.05	0.12
02/24/09	12		2.62	14.60	0.04	0.07
03/03/09	7		3.13	17.24	0.04	0.11
03/23/09	20	1.61				
05/04/09	42		1.08	7.97		
05/15/09	11		3.08	16.95	0.08	0.11
06/25/09	41				0.05	0.32
07/09/09	14		3.13	16.85	0.01	0.09
07/13/09	4		3.03	16.90		
07/14/09	1		3.10	17.02		
07/18/09	4	0.94	3.19	16.90	0.03	0.12

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The quality assurance tests of the inlet PM monitor are summarized in Table 18. Both the calibration and flow rate tests passed the criteria specified by the manufacturer.

Table 18. Quality assurance parameters of the inlet PM monitor.

Date	Time since last test, d	Mass verification, %	Total flow check, L/min
9/13/07		-0.2	16.76
1/31/08	140	-1.7	
8/15/08	197		16.85
2/6/09	175	0.1	
5/22/09	105		16.45

The TEOM measurements were also evaluated based on collocated measurements of all three PM types (Table 19). When the room 7 TEOM was collocated with the room 6 TEOM for 27 h from 7/6/09 to 7/7/09, the differences in average PM_{10}, TSP and $PM_{2.5}$ concentrations over the collocation periods were 4.5, 19.1 and 154.2%, respectively. The differences in average PM_{10}, TSP and $PM_{2.5}$ concentrations between room 8 and room 9 TEOM's over a 29-h collocation period starting 7/13/09 were 1.0, 24.7 and 62.2%, respectively.

Table 19. TEOM collocation tests conducted in room 5.

PM type	Average concentration, µg/m³		Difference, %
	Room 5 TEOM	Room 8 TEOM	
PM_{10}	338	323	-4.5
TSP	840	1000	19.1
$PM_{2.5}$	11	27	154.2
TEOM collocation tests conducted in room 6.			
PM type	**Average concentration, µg/m³**		**Difference, %**
	Room 6 TEOM	**Room 7 TEOM**	
PM_{10}	166	167	1.0
TSP	471	355	-24.7
$PM_{2.5}$	12	4	-62.2

3.9. Data Analysis

3.9.1. Software

All emission data processing was conducted using custom software (CAPECAB, Fibre Recovery Systems, Inc., Calgary, AB). Data was carefully inspected and validated. If a datum was invalid for a known reason, the datum was marked (flagged) invalid and all calculations dependent on that datum were also invalid unless a substitution datum was identified.

If the QA/QC checks described above indicated a measurement bias, the data was corrected prior to calculating emissions. The CAPECAB program provided a robust method to inspect data, invalidate if necessary, and implement various corrections over specified time periods.

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3.9.2. Data substitution, validation, correction and uncertainty

3.9.2.1. Pressure

All static pressures were corrected based on the zero-pressure check results.

The average static pressures for each room were determined using data from all properly-operating sensors among the north, west, and south ΔP sensors. For calculating airflow, the other functioning sensor in the same room was used whenever the sensor on the fan's actual wall failed.

Calibration offsets were assigned to the different sensors based on time-weighted averages of the zero checks. Two sets of calibration factors were developed for the static pressure sensors based on 26 zero checks. Prior to 12/6/08, calibration offsets were 0.05 Pa (R5 E wall), -0.11 Pa (R5 S wall), 0.57 Pa (R6 S wall), -1.23 Pa (R6 W wall), -0.92 Pa (R7 N wall), 0.16 Pa (R7 W wall), 0.15 Pa (R8 E wall), and -0.05 Pa (R8 N wall). After 12/6/08, calibration offsets were -0.21 Pa (R5 E wall), -0.54 Pa (R5 S wall), -0.01 Pa (R6 S wall), -1.57 Pa (R6 W wall), -1.36 Pa (R7 N wall), -0.20 Pa (R7 W wall), 1.70 Pa (R8 E wall), and -0.36 Pa (R8 N wall).

The atmospheric pressure measurement was unavailable between cycles, as the TEOMs were offline during barn cleaning. To facilitate emission-related calculations, an average atmospheric pressure measurement of 98.6 kPa was substituted in the calculations.

3.9.2.2. Environmental sensors

Exhaust air temperatures for each building were defined as the average of the RH/T probe temperature measurement and the thermocouple measurements at fans 1 to 3.

Barn relative humidity (RH) was derived from the OMNI/NOVUS sensor at fan 6. The INNOVA T_{dew} readings for the inlet location were converted to RH, and RH was converted to humidity ratio using the standard conversion equations.

The solar sensor signal was collocated with a reference solar sensor on 10/15/07 and 6/16/09. No calibration offset was applied to correct the raw data.

3.9.2.3. Fan operation

The pit fans ran continuously as first-stage fans. The pit fan operation status (percentage of sixty, 1-s readings) was calculated based on the measured fan speed. In the event a pit fan speed sensor signal was invalid due to failure, the operational status was confirmed and substituted with the signals of the other pit fans of the same room.

The operational status and speed of each wall fan were monitored. Similar to the pit fans, the fan operation status was calculated by the fan speed signal, and when the fan speed sensors reported invalid data, the fan operation status signal was first consulted and substituted. Low-level fan speed signal noise was filtered out by setting operational status to "off" (0%) when the average recorded speed was less than 150 rpm.

3.9.2.4. Gas concentrations

The first 7 min of the 10-min exhaust gas concentration data were discarded for NH_3 and NMHC, because the system needed that much time to reach equilibrium after switching from one

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sampling location to another. The first 5 min of the 10-min exhaust gas concentration data were discarded for H_2S. Thus, the last three min of data of each sampling period were validated for NH_3 and NMHC, and the last five min of data of each sampling period were validated for H_2S.

Table 20 describes the time specified in the data processing software for gas concentration measurements to stabilize, based on gas and sampling location, and the maximum interval for interpolating between two valid concentration measurements for a sampling location.

Table 20. Gas concentration data validation and interpolation requirements.

Gas	Exhaust sampling locations		Inlet sampling location	
	Equilibration period, min	Maximum interpolation interval, min	Equilibration period, min	Maximum interpolation interval, min
NH_3	7	300	17	3000
NMHC	7	300	17	3000
H_2S	5	300	10	3000

Gas and water vapor concentrations, and sample relative humidity, temperature, pressure, flow rate, and flow direction were invalidated or automatically excluded during all gas analyzer MPCs and Z/S checks. Airflow rate, and gas and PM emission data were invalidated under conditions of positive barn static pressure, because barn airflow measurements required a negative or underpressure in the barn.

Gas concentration data were invalidated due to problems with the INNOVA 1412. The analyzer sustained chopper motor errors in November 2007, September 2008, and February and March 2009. The analyzer was also returned to the manufacturer for repair and calibration from 10/13/08 to 1/5/09, 3/19/09 to 4/29/09, and 5/12/09 to 7/1/09.

Standard gas concentrations were calculated on dry and moist bases with Eqns. 3-1 and 3-2, respectively.

$$C'' = \frac{C'}{(1-W)} \qquad (3\text{-}1)$$

and

$$C' = \frac{P' \cdot c\, M}{R \cdot (273 + T')} \qquad (3\text{-}2)$$

where:

- C'' Dry standard mass concentration, dry basis (mg $d^{-1}sm^3$ or µg $d^{-1}sm^3$)
- C' Standard mass concentration, moist-air basis (mg sm^{-3} or µg sm^{-3})
- P' Standard pressure (1 atm)
- T' Standard temperature (20°C)
- c Volumetric concentration of gas (ppm or ppb)
- M Molecular weight of gas (g mol^{-1})
- R Universal Gas Constant (0.08206 L atm mol^{-1} $°K^{-1}$)
- W Humidity ratio

3.9.2.5. PM concentrations

Prior to 2/21/08, the TEOM flow rates were internally adjusted to 16.7 L min^{-1} for standard conditions (25°C and 1 atm), regardless of the surrounding conditions. The actual flow through the TEOM was verified by correcting for the surrounding conditions and confirming the flow was maintained between 15.7 and 17.7 L min^{-1}. The quality of the PM data was therefore acceptable based on QAQC requirements. The internal TEOM settings were changed on 2/21/08 to adjust the flow to 16.7 L min^{-1} based on actual rather than standard air density.

The TEOMs were configured to output the PM concentration data at the surrounding temperature and atmospheric pressure until 2/21/08, at which time they were reconfigured to output the PM data at standard conditions (20°C, 1 atm). All PM concentration data prior to 2/21/08 was corrected to standard conditions.

Dry standard PM concentrations were obtained by dividing raw concentrations by the air humidity ratio.

PM concentration data was invalidated if the calculated flow was outside the range of 16.67±1.00 L min^{-1}.

3.9.3. Emission calculations

3.9.3.1. Particulate matter

PM emissions were calculated with Eqn. 3-3.

$$E = \left(Q_0 * P_0 * \left(\frac{273+20}{273+T_0}\right)\right) * (C'_0 - C'_i) \qquad (3\text{-}3)$$

Where:

- E Net PM emission rate (µg s^{-1})
- Q_0 Exhaust airflow rate at To (m^3 s^{-1})
- P_0 Pressure of exhaust air (atm)
- C_0' PM concentration of exhaust air (µg m^{-3})
- C_i' Inlet PM concentration (µg m^{-3})
- T_0 Temperature of exhaust air (°C)

3.9.3.2. Gases

Stream-specific gas emissions were determined as follows:

$$E = Q_O \cdot \frac{P_O M}{R \cdot (273+T_O)} \cdot (c_O - c_i) \qquad (3\text{-}4)$$

Where:

- E Stream or barn emission rate (mg s^{-1} or µg s^{-1})
- Q_O Stream or barn outlet moist airflow rate at To (m^3 s^{-1})

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P_O Exhaust air pressure (atm)
M Gas molecular weight (g mol^{-1})
R Universal Gas Constant (0.08206 L atm/mol^{-1} $°K^{-1}$)
T_O Exhaust air temperature (°C)
c_o Exhaust air concentration (ppm or ppb)
c_i Inlet or ventilation air inlet concentration (ppm or ppb)

Building emissions were the summation of the stream emissions. If the interpolated stream concentration was invalid for one stream in a barn, the average of the other two stream concentrations was substituted in the emission calculation. Building emission was divided by variables (barn inventory, feed consumption) or constants (floor area) to normalize emissions to site-specific characteristics.

3.9.3.3. Volatile Organic Compounds

The total VOC concentration was multiplied by building airflow for the 24-h canister sampling period to yield an average emission rate. If two samples were successfully collected for a building at one sampling event, the average concentration was used in the calculation.

4. RESULTS

4.1. Farm Production Information

The farm production information, including inventory, pig mass and density is presented in Table E2.

The monitoring period extended across five growth cycles, while three complete growth cycles occurred within the two-year monitoring period. Based on the three growth cycles, the average growth cycles lasted 172, 171, 151, and 152 d for rooms 5 to 8, respectively. The shorter growth cycle days for rooms 7 and 8 were because the rooms were only stocked with larger pigs from rooms 5 and 6. The time between pig groups averaged 8, 12, 33, and 28 d and ranged from 6 to 25 d.

4.2. Characteristics of Biomaterials

The pH, solids and ash (added to analysis later in the study) content, and Total N and NH_3-N concentrations of the surface manure samples, and the solids, ash (added to analysis later in the study) and total N contents of the feed are presented in Appendix D. The loadout manure and water sample analysis are also presented.

The nitrogen content of the surface manure ranged from 0.20 to 0.86% nitrogen (wet-basis), and the mean was 0.48%. The nitrogen content of the feed ranged from 1.83 to 3.17% nitrogen (wet-basis) and averaged 2.43%.

The nitrogen content of the loadout manure samples averaged 0.48% (wet-basis), and ranged from 0.24 to 0.66% nitrogen.

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Water samples showed non-detectable nitrate/nitrite nitrogen, and lower than 1.5 mg/L or non-detectable TKN concentrations, while the total sulfur concentrations ranged from 9.6 to 10.0 mg/L for the three water samples.

4.3. Environmental Conditions

4.3.1. Ambient conditions

The weather conditions monitored at the site are shown in Table E1. According to historical climatic information, daytime average high temperatures ranges from 0°C in the winter to 29°C in the summer. Average overnight lows range from -9°C in winter to 17°C in summer. Typical prevailing winds for the region are from the west-southwest in the winter to early summer, and southwest during the rest of the year.

Table E1 shows the daily average outdoor temperature, relative humidity, wind speed, wind direction, solar radiation and barometric pressure. The ADM outdoor temperature was 12.0°C, while the historical annual average for the area shown in Table 21 was 10.3°C.

Table 21. Monthly averages for weather conditions in the area*.

Month	Temperature*,°C			Wind speed**, km/h	Wind direction**
	High	Low	Mean		
January	0	-9	-4	18	WSW
February	3	-7	-2	18	WSW
March	9	-1	4	19	SW
April	16	4	10	19	SW
May	22	10	16	16	WSW
June	27	15	21	14	WSW
July	29	17	23	13	SW
August	28	16	22	11	SW
September	24	12	18	13	SW
October	18	6	12	14	SW
November	10	1	5	18	SW
December	3	-6	-1	18	SW
Annual Average	16	5	10		

*[HYPERLINK "http://www.weather.com/weather/wxclimatology/monthly/USIN0144" \h]
** Data collected at Indianapolis, IN (55 mi. S of the site), NOAA National Climate Data Center.

4.3.2. Barn Conditions

The daily average PREF temperatures are plotted in Figure 4 are presented along with RH in Table E3. The average PREF temperatures for rooms 5 to 8 were 23±5, 23±4, 22±5, and 24±4 °C, respectively. The average PREF RH for rooms 5 to 8 were 68±11, 58±7, 57±7, and 59±8 %, respectively. The average pit exhaust temperatures for rooms 5 to 8 were 22±4, 22±5, 21±6, and 21±5 °C, respectively.

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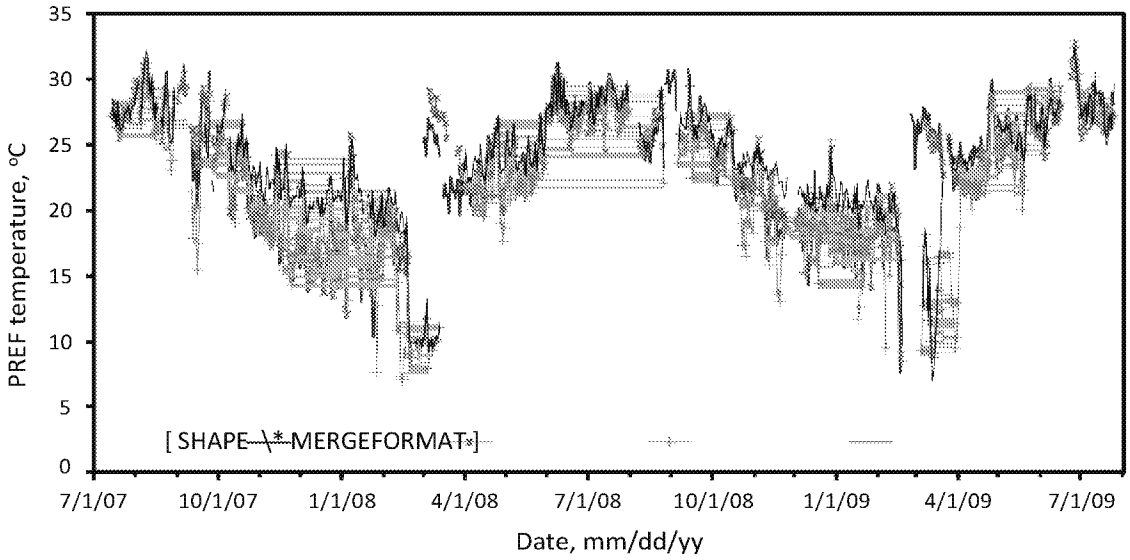

Figure 4. Primary representative exhaust fan temperatures for rooms 5-8.

4.3.3. Ventilation Rates

The median static pressure differential was -15±5 Pa in all cases. The fraction of time that the pressure was positive ranged from 3.5 to 12.3%. Most of the positive pressures were likely wind-induced. Static pressure was greater than -30 Pa over 90% of the time.

The ventilation rate of all four rooms ranged from 0 m^3 s^{-1} when fans were shut down for cleaning, to 47.1 dsm^3 s^{-1} during the summer with the room-full of pigs (Figure 5). The overall average ventilation rates were 13.7, 14.1, 14.7, and 13.9 dsm^3 s^{-1} for rooms 5 to 8, respectively.

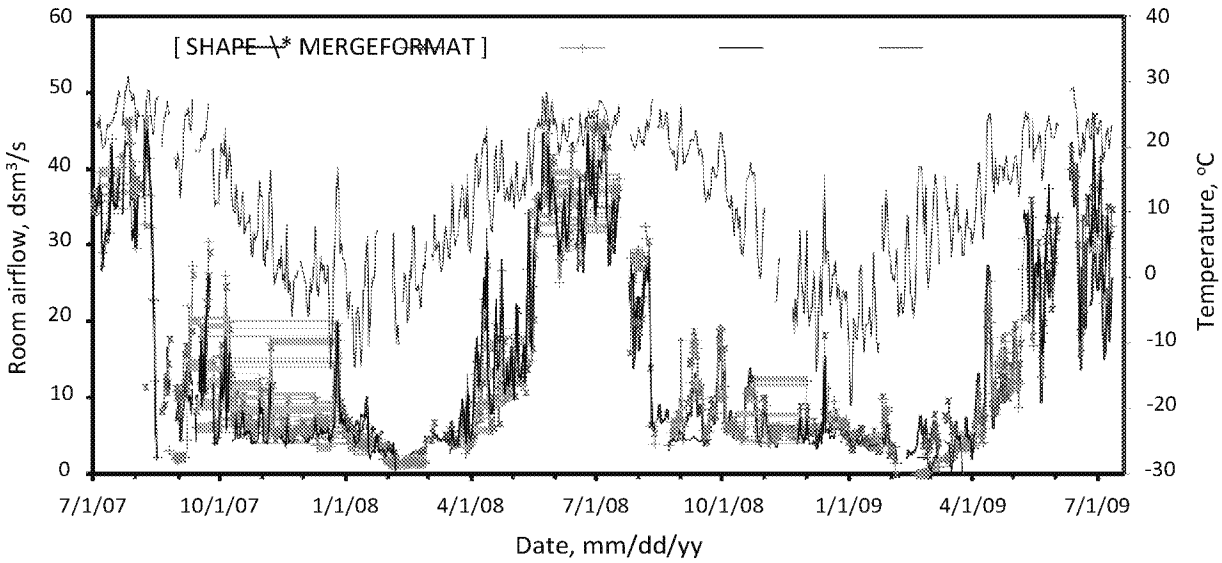

Figure 5. Ambient temperature and dry standard barn airflow rates.

4.4. Particulate Matter Concentration and Emission

4.4.1. PM_{10}

The DM inlet PM_{10} concentration ranged from 4 to 84 μg dsm^{-3} (n=22 d), whereas the DM PM_{10} exhaust concentrations of rooms 5 to 8 ranged from -54 to 1051, -6 to 1228, -54 to 1149, and -46 to 1200 μg dsm^{-3}, respectively (Table E4).

The ADM PM_{10} concentrations of the inlet and rooms 5 to 8 were 274±187, 303±222 and 238±199, and 225±218 μg dsm^{-3}, respectively (Table E4).

The overall mean PM_{10} emission rates were 212±117, 226±134, 185±132, and 172±175 g d^{-1} (235±193, 232±150 and 183±123, and 252±483 mg $d^{-1}pig^{-1}$) for rooms 5 to 8, respectively (Table E5 and Figure 6).

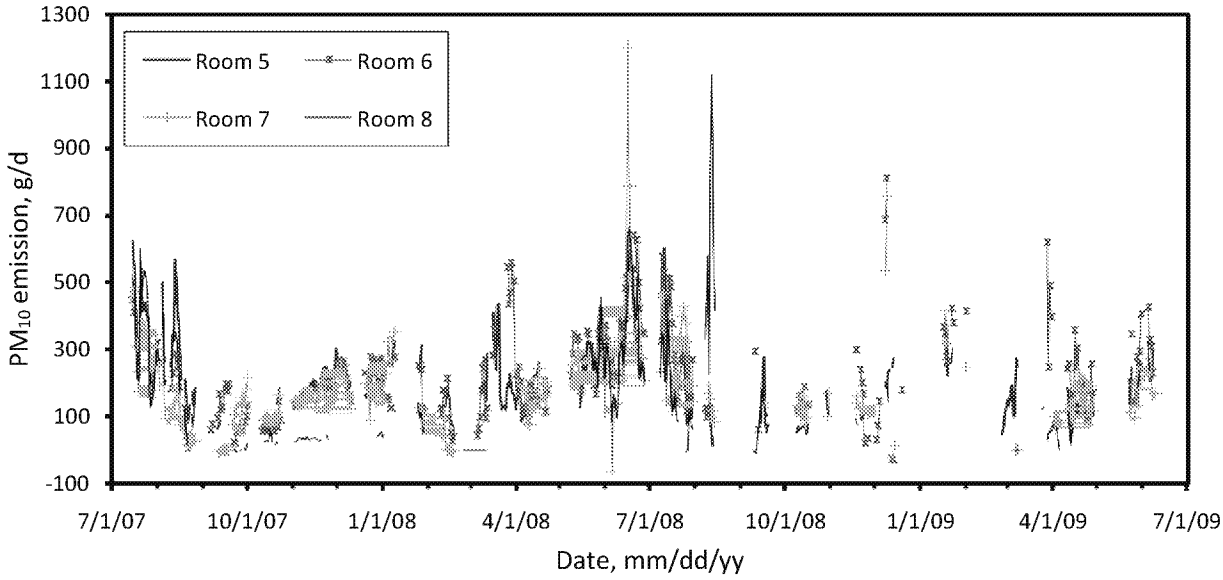

Figure 6. Daily mean PM_{10} emissions.

4.4.2. $PM_{2.5}$

Daily mean concentrations of $PM_{2.5}$ ranged from 2.4 to 31.4 μg dsm^{-3} in the inlet air (n=34 d) . Daily mean concentrations of $PM_{2.5}$ were -34 to 83, -28 to 134, -35 to 69, and -76 to 113 μg dsm^{-3} in the exhaust air of rooms 5 to 8, respectively (Table E4).

The ADM concentrations of the inlet, and exhaust air of rooms 5 to 8 were 13.2±7.1, 17.4±17.9, 26.9±31.1, 15.1±24.8, and 17.8±27.2 μg dsm^{-3}, respectively (Table E4).

The mean $PM_{2.5}$ emission rates during cold weather (1/11/08 to 1/23/08) were 22, 18, 11, and 6 g d^{-1} from rooms 5 (n=12 d), 6 (n=12 d), 7 (n=12 d), and 8 (n=11 d), respectively (Figure 7). The mean $PM_{2.5}$ emission rates during warm weather from rooms 5 to 8 (9/23/08 and 10/17/08) were -1, -5, 36, and -1 g d^{-1} (n=15, 15, 15, and 13 d), respectively.

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The overall mean $PM_{2.5}$ emission rates were 9.5±14.4, 5.2±17.0, -14.9±45.9, and 2.4±5.5 g d^{-1} (9.2±14.1, 6.6±17.8, -11.4±44.7, and 2.7±5.8 mg $d^{-1}pig^{-1}$), from rooms 5 to 8, respectively.

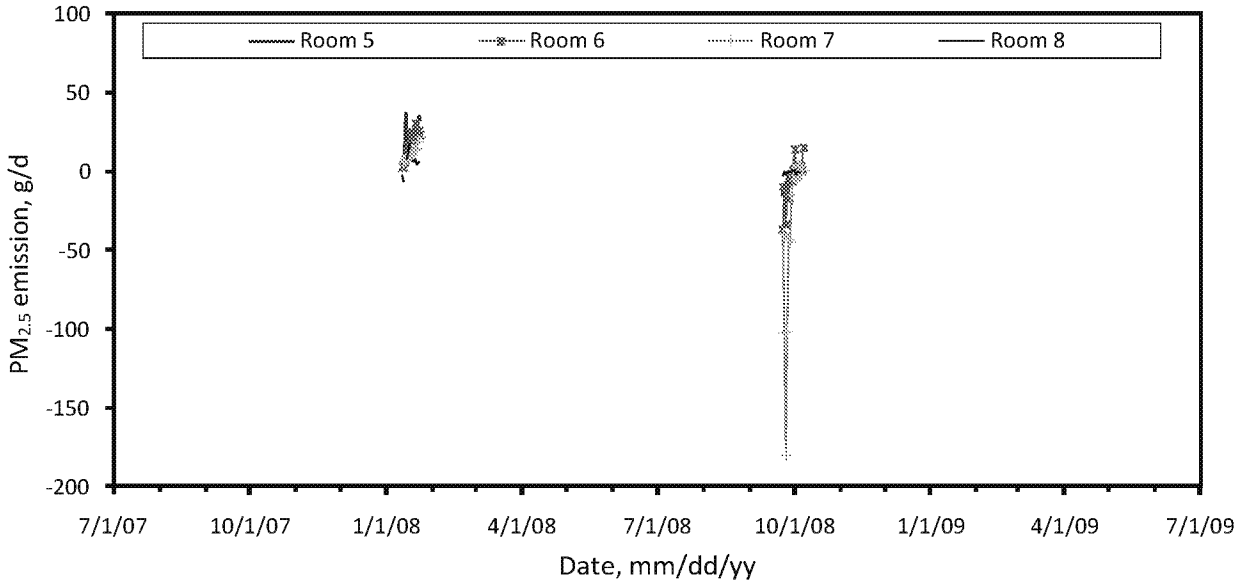

Figure 7. Daily mean $PM_{2.5}$ emissions.

4.4.3. TSP

Daily mean TSP concentrations ranged from 7 to 85 µg dsm^{-3} in the inlet air (n= 72 d), 291 to 2580 µg dsm^{-3} in room 5 exhaust air (n=34 d), 273 to 2075 µg dsm^{-3} in room 6 exhaust air (n=40 d), 202 to 3105 µg dsm^{-3} in room 7 exhaust air (n=44 d), and from 99 to 2762 µg dsm^{-3} in room 8 exhaust air (n=38 d) (Table E4).

The ADM concentrations of the inlet, and exhaust air of rooms 5 to 8 were 28±14, 1147±644, 1109±518, 1015±602, and 826±549 µg dsm^{-3}, respectively (Table E4).

The ADM TSP emissions ranged from 225 to 1699 g d^{-1} (Table E7 and Figure 8**Error! Reference source not found.**). The overall mean TSP emission rates were 899±387 g d^{-1} (853±377 mg $d^{-1}pig^{-1}$) for room 5 (n= 24 d), 1093±281 g d^{-1} (1034±258 mg $d^{-1}pig^{-1}$) for room 978±284 g d^{-1} (852±227 mg $d^{-1}pig^{-1}$) for room 7 (n= 34 d), and 1042±242 g d^{-1} (967±221 mg $d^{-1}pig^{-1}$) for room 8 (n= 22 d), respectively.

4.5. VOC Concentrations and Emissions

The 20 most prevalent VOCs detected in the canister samples accounted for 90% of the total quantified mass (Table 22). The most prevalent compound was pentane, which was 27% of the total mass.

Concentrations of total VOC in exhaust air ranged from 0.29 to 1.23 mg m^{-3} in R5, 0.79 to 4.41 mg m^{-3} in R6, 0.44 to 1.12 mg m^{-3} in R7, and 0.46 to 7.48 mg m^{-3} in R8. The mean total VOC

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concentration were 0.77 ± 0.30, 1.56 ± 1.42, 0.77 ± 0.30, and 1.89 ± 2.76 mg m^{-3} in rooms 5-8, respectively.

Total VOC emissions (ng s^{-1}) during each sampling period were determined by multiplying the mean building airflow rate (m^3 s^{-1}) by the total mass (ng m^{-3}) and converting to kg d^{-1}. The VOC emission rates of R5, R6, R7 and R8 ranged from 0.66 to 3.43 kg d^{-1}, 2.43 to 18.2 kg d^{-1}, 1.35 to 4.12 kg d^{-1} and 1.31 to 21.2 kg d^{-1}, respectively. The mean VOC emission rates from R5, R6, R7, and R8 were 2.16 ± 0.96, 5.48 ± 6.24, 2.53± 1.18 and 5.52 ± 7.73 kg d^{-1} or 2.16 ± 0.96, 5.48 ± 6.24, 2.53± 1.18 and 5.52 ± 7.73 g d^{-1} hd^{-1}.

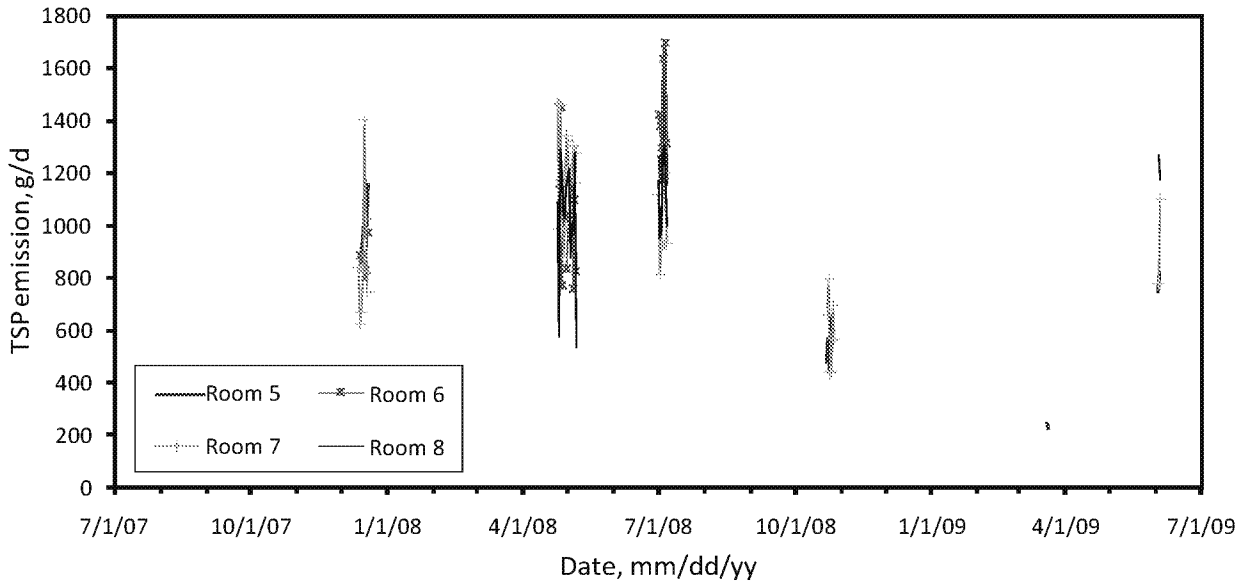

Figure 8. Daily mean TSP emissions.

4.6. Hydrogen Sulfide Concentrations and Emissions

Daily mean inlet and exhaust H_2S concentrations for the entire test are provided in Table E10.

The average daily mean H_2S concentrations were 22±20 (n=608 d) ppb in the inlet air, and 387±399 (n=539 d), 684±770 (n=522 d), 527±693 (n=512 d), and 784±821 (n=499 d) ppb in the exhausts of rooms 5-8, respectively.

Daily mean H_2S emissions from rooms 5-8 are tabulated in Table E11 and plotted in Figure 9 for the entire test period.

The ADM H_2S emission rates from rooms 5-8 were 419±489 (n=500), 618±598 (n=449 d), 401±506 (n=440 d), and 637±627 (n=419 d) mg d^{-1}, respectively.

The ADM pig-specific H_2S emission rates from rooms 5-8 were 525±1032 (n=500 d), 680±1045 (n=449 d), 419±572 (n=440 d), and 855±1186 (n=419 d) mg d^{-1} pig^{-1}, respectively.

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Table 22. Average concentration of 20 most prevalent VOC.

Compound	Concentration, ng m^{-3}	% of total	Cumulative %
iso-Propanol	1.38E+05	14.33%	14.3
Propanoic acid	1.13E+05	11.78%	26.1
Acetic acid	9.12E+04	9.49%	35.6
4-Methyl-phenol	8.84E+04	9.20%	44.8
Acetaldehyde	6.09E+04	6.34%	51.1
Pentane	5.67E+04	5.90%	57.0
Phenol	5.14E+04	5.35%	62.4
2-Butanone	3.98E+04	4.14%	66.5
Dimethyl sulfide	3.40E+04	3.54%	70.1
Butanoic acid	3.16E+04	3.29%	73.4
2,3-Butanedione	2.49E+04	2.59%	75.9
Ethyl acetate	1.61E+04	1.67%	77.6
1-Butanol	1.53E+04	1.59%	79.2
Hexanal	1.36E+04	1.41%	80.6
Dimethyl disulfide	1.18E+04	1.23%	81.9
4-Ethyl-phenol	1.17E+04	1.22%	83.1
Dimethyl sulfone	1.02E+04	1.06%	84.1
Nonanal	1.00E+04	1.04%	85.2
Dimethyl trisulfide	9.55E+03	0.99%	86.2
Heptanal	9.05E+03	0.94%	87.1

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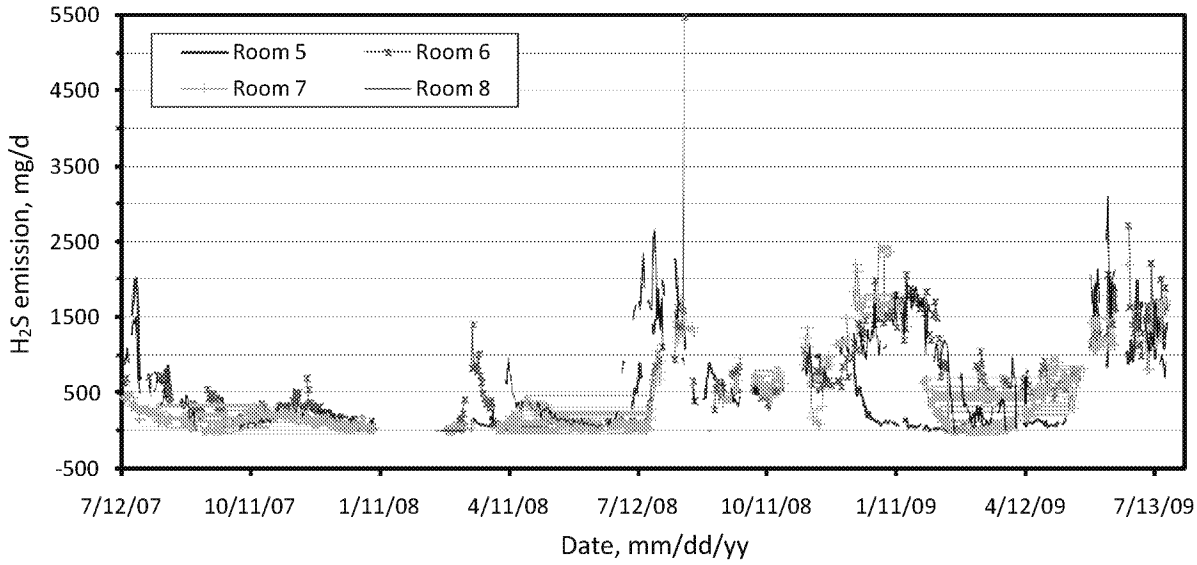

Figure 9. Daily mean H_2S emissions from rooms 5-8.

Table 18. Emission of total VOC (one canister per room per sampling day).

Date	Concentration, mg m^{-3}				Airflow, m^{3}s^{-1}				Emission, kg d^{-1}			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
06/01/09	1	1	1	1	0.66	0.95	0.95	1.01	34.5	32.4	32.2	32.8
06/08/09	1	1	1	1	0.81	4.06	1.03	0.58	41.7	47.7	42.2	41.2
06/24/09	1	1	1	1	0.81	0.88	0.44	0.52	48.8	48.4	50.5	46.7
07/13/09	1	1	1	1	0.29	0.79	1.12	1.48	26.6	35.8	42.6	33.6
07/22/09	1	1	1	1	1.23	1.49	0.62	0.46	20.9	26.0	26.8	32.9
07/23/09	1	1	1	1	0.80	0.83	0.46	0.81	26.3	36.2	33.8	30.9
Mean	1	1	1	1	0.77	1.50	0.77	0.81	33.1	37.7	38.0	36.3

4.7. Ammonia Concentrations and Emissions

Daily mean inlet and exhaust NH_3 concentrations for the entire test are provided in Table E12.

The average daily mean NH_3 concentrations were 0.2±0.4 (n=451 d) ppm in the inlet air, and 14.6±11.0 (n=405 d), 12.7±7.9 (n=379 d), 12.8±8.8 (n=368 d), and 13.2±9.1 (n=368) ppm in the exhausts of rooms 5-8, respectively.

Daily mean NH_3 emissions from rooms 5-8 are tabulated in Table E13 and plotted in Figure 12 for the entire test period.

The ADM NH_3 emission rates from rooms 5-8 were 7.4±2.7 (n=375 d), 7.7±3.0 (n=340 d), 6.6±3.3 (n=334 d), and 6.2±3.6 (n=337 d) kg d^{-1}, respectively.

The ADM pig-specific NH_3 emission rates from rooms 5-8 were 8.3±6.5 (n=375 d), 8.0±4.5 (n=340 d), 6.7±4.7 (n=334 d), and 7.2±5.6 (n=337 d) g d^{-1} pig^{-1}, respectively.

4.8. NMHC Concentrations and Emissions

Daily mean inlet and exhaust NMHC concentrations for the entire test are provided in Table E8.

The average daily mean NMHC concentrations were -0.009±0.027 (n=488 d) ppm in the inlet air, and 0.21±0.14 (n=442 d), 0.21±0.14 (n=423 d), 0.17±0.13 (n=406 d), and 0.18±0.14 (n=396) ppm in the exhausts of rooms 5-8, respectively.

Daily mean NMHC emissions from rooms 5-8 are tabulated in Table E9 and plotted in Figure 11. The ADM NMHC emission rates from rooms 5-8 were 0.23±0.14 (n=422 d), 0.27±0.16 (n=367 d), 0.21±0.19 (n=349 d), and 0.17±0.15 (n=326 d) kg d^{-1}, respectively.

The ADM pig-specific NMHC emission rates from rooms 5-8 were 213±133 (n=422 d), 257±327 (n=367 d), 217±315 (n=349 d), and 185±175 (n=326 d) mg d^{-1} pig^{-1}, respectively.

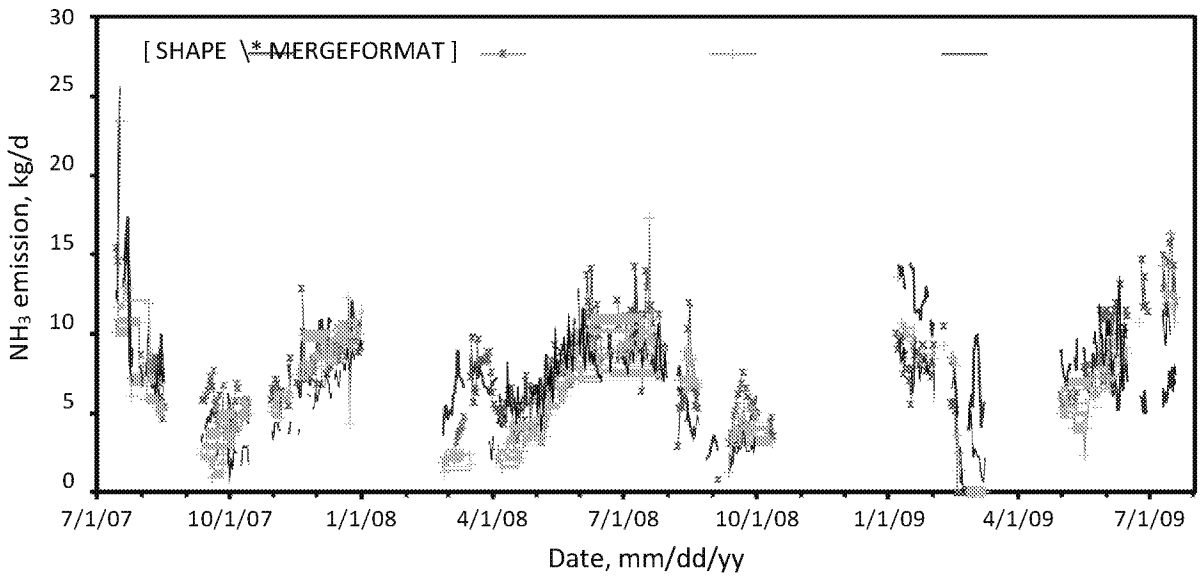

Figure 10. Daily mean NH_3 emissions from rooms 5-8.

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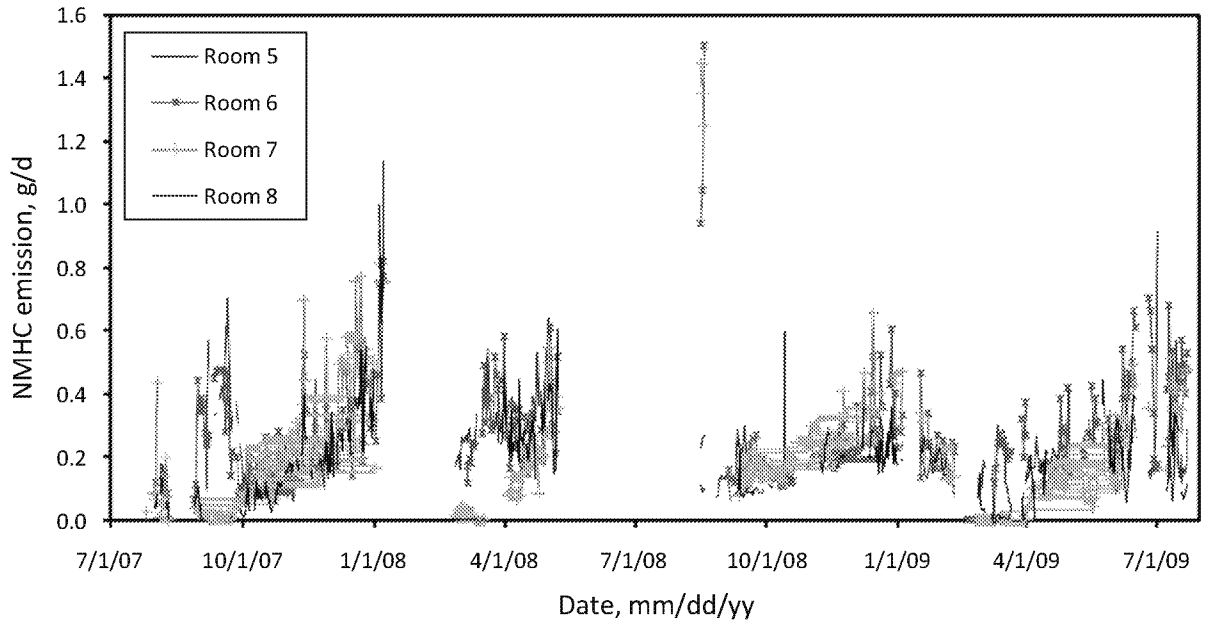

Figure 11. Daily mean NMHC emissions from rooms 5-8.

4.9. Emission Data Completeness

Daily completeness data is given in Table E14. The number of complete data (>75% valid required for reporting a daily mean) were calculated for emission measurements conducted from 7/14/07-7/24/09 (Table 19). The number of daily means of NH_3 emissions was reduced by the INNOVA 1412 recalibrations and maintenance of the instrument. The PM completeness was affected by TEOM failures.

Table 23. Completeness of emissions data (7/14/07-7/24/09).

Location	Days with >75% valid emission data				
	NH_3	H_2S	PM_{10}	$PM_{2.5}$	TSP
Room 5	375	500	303	27	24
Room 6	340	449	271	27	24
Room 7	334	440	296	27	34
Room 8	337	419	230	24	22

4.10. Reconciliation with Data Quality Objectives

The data quality objectives prior to the study were to measure gas and PM emissions from mechanically-ventilated buildings with total relative uncertainties of 27% and 32%, respectively.

4.10.1. Airflow

The overall average airflows for R5, R6, R7 and R8 were 13.7 ± 11.6 $dsm^3\ s^{-1}$ (n=604), 14.1 ± 11.9 $dsm^3\ s^{-1}$ (n=548), 14.7 ± 13.2 $dsm^3\ s^{-1}$ (n=580) and 13.9 ± 13.2 $dsm^3\ s^{-1}$ (n=545) respectively.

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An average of 6.38 fans operated in all rooms at which condition the airflow measurement uncertainty was 16.7%, based on the fan models.

4.10.2. Gas Emissions

The bias and precision of NH_3 concentration measurements were derived from the NH_3 zero/span checks as compared with the NH_3 correction models (Table 8). The bias and precision of NH_3 measurements were -0.35% and 4.02%, respectively.

The bias and precision of H_2S concentration measurements were derived from the H_2S zero and span checks as compared with the H_2S correction models (Table 10**Error! Reference source not found.**). The bias and precision of H_2S measurements were 0.29% and 3.34%, respectively.

Based on these measurement errors calculated for concentrations and airflows, the uncertainties of NH_3 and H_2S emissions from R5, R6, R7 and R8 were 18.4 and 18.2%, respectively.

4.10.3. PM Emissions

The precision of PM_{10}, TSP and $PM_{2.5}$ concentration measurements were 0.85, 5.41, and 34.05% based on collocation tests of the three TEOMs in inlet air (Table 19). The relative biases of the TEOMs were 1.21, 2.11, 1.23 and -0.05% for R5, R6, R7 and R8 (Tables 14-17). The uncertainties of PM_{10}, TSP and $PM_{2.5}$ emissions from R5 were 17.1, 20.1, and 70.2%, respectively. The uncertainties of PM_{10}, TSP and $PM_{2.5}$ emissions from R6 were 17.1, 20.2, and 70.2%, respectively. The uncertainties of PM_{10}, TSP and $PM_{2.5}$ emissions from R7 were 16.8, 20.1 and 68.1%, respectively. The uncertainties of PM_{10}, TSP and $PM_{2.5}$ emissions from R8 were 16.7, 20.1 and 68.1%, respectively.

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5. SUMMARY

The emissions of NH_3, H_2S, NMHC, PM_{10}, TSP, $PM_{2.5}$ and VOCs from four 1,000-hd swine finishing rooms at an 8,000-hd in Indiana were measured during a two-year monitoring study. Manure was accumulated into deep underfloor pits in the barn. The buildings were mechanically-ventilated with variable-speed pit fans and endwall tunnel fans.

The overall average emission rates from finishing room 5 were 7.4 kg d^{-1} of NH_3, 419 mg d^{-1} of H_2S, 0.23 kg d^{-1} of NMHC, 212 g d^{-1} of PM_{10}, 9.5 g d^{-1} of $PM_{2.5}$, 899 g d^{-1} of TSP, and 2.2 kg d^{-1} of total VOC. The overall average emission rates from finishing room 6 were 7.7 kg d^{-1} of NH_3, 618 mg d^{-1} of H_2S, 0.27 kg d^{-1} of NMHC, 226 g d^{-1} of PM_{10}, 5.2 g d^{-1} of $PM_{2.5}$, 1093 g d^{-1} of TSP, and 5.5 kg d^{-1} of total VOC. The overall average emission rates from finishing room 7 were 6.6 kg d^{-1} of NH_3, 401 mg d^{-1} of H_2S, 0.21 kg d^{-1} of NMHC, 185 g d^{-1} of PM_{10}, -14.9 g d^{-1} of $PM_{2.5}$, 978 g d^{-1} of TSP, and 2.5 kg d^{-1} of total VOC. The overall average emission rates from finishing room 8 were 6.2 kg d^{-1} of NH_3, 637 mg d^{-1} of H_2S, 0.17 kg d^{-1} of NMHC, 172 g d^{-1} of PM_{10}, 2.4 g d^{-1} of $PM_{2.5}$, 1042 g d^{-1} of TSP, and 5.5 kg d^{-1} of total VOC.

6. REFERENCES

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7. DEFINITIONS

AARC	Agricultural Air Research Council
AirDAC	Air Data Acquisition and Control – computer program
ADM	Average daily mean
B1	Barn 1
B2	Barn 2
BESS	Bioenvironmental and Structural Systems
CAPECAB	Calculations of Air Pollutant Emissions from Confined Animal Buildings
CO_2	Carbon dioxide
DM	Daily mean
ΔP	Differential pressure
DQO	Data quality objective
FANS	Fan Airflow Numeration System
GC/MS	Gas chromatograph mass spectrometer
GLS	Gas sampling location(s)
GSS	Gas sampling system
H_2S	Hydrogen sulfide
MDL	Minimum detection limit
MPC	Multipoint calibration
MS	Mass spectrometer
n	Number or count
NAEMS	National Air Emissions Monitoring Study
NH_3	Ammonia
NMHC	Non-methane hydrocarbons
QA	Quality assurance
QAPP	Quality Assurance Project Plan
QC	Quality control
OFIS	On farm instrument shelter
PM	Particulate matter
PREF	Primary representative exhaust fan
RH/T	Relative humidity/temperature
RH	Relative humidity
SD	Standard deviation
T_{dew}	Dew point temperature
TDS	Thermal desorption system
TDS-GS-MS	Thermodesorption-gas chromatograph mass spectrometer
TEOM	Tapered element oscillating microbalance
TSP	Total suspended particulate
VOC	Volatile organic compounds
Z/S	Zero/span

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APPENDIX A. MEASUREMENT VARIABLE LIST.

Col #	Data heading	Instrument/sensor	Sensor location	Monitoring/control location	Range / target	DAC hardware
1	Date & time	---				---
2	Smpl loc#	---				---
3	Cal gas #	Environics	Rack	Calibration gases	0-7 gas #	---
4	Cal gas, ppm	Environics	Rack	Calibration gases	From 0	---
5	NH3, ppm	Innova 1412: Ammonia	Rack	13 GSLs	From 0.2	---
6	CH3OH, ppm	Innova 1412: Methanol	Rack	13 GSLs	From 0.08	---
7	CO2, ppm	Innova 1412: Methane	Rack	13 GSLs	From 0.4	---
8	THC, ppm	Innova 1412: Total VOC	Rack	13 GSLs	Varies	---
9	CH4, ppm	Innova 1412: Ethanol	Rack	13 GSLs	From 0.03	---
10	WV, Tdew	Innova 1412: Water	Rack	13 GSLs	N/A	---
11	CH4, 55c, ppm	55C NH3 analyzer	Rack	13 GSLs	0-2000	FP-AI-112-1
12	NMH-55C, ppm	55C NH3 analyzer	Rack	13 GSLs	0-20	FP-AI-112-1
13	H2S, ppb	H2S analyzer	Rack	13 GSLs	0-5000	FP-AI-112-1
14	SO2, ppb	H2S analyzer	Rack	13 GSLs	0-10000	FP-AI-112-1
15	CO2, ppm	MSA CO2 monitor	Rack	13 GSLs	0-10000	FP-AI-112-1
16	Smpl P, Pa	Setra 209 P sensor	GSS	13 GSLs	0-101353	FP-AI-112-1
17	Smpl Q, L/m	Mass flow	GSS	13 GSLs	0-10	FP-AI-112-1
18	Smpl RH, %	Humitter 50Y	GSS	13 GSLs	0-100	FP-AI-112-1
19	Smpl T, C	Humitter 50Y	GSS	13 GSLs	-40 to 60	FP-AI-112-1
20	Smpl dir, uV	Flow direction sensor	GSS	GSS exhaust	0 - 1000000	FP-AI-112-1
21	GSS T, C	AD 592D T sensor	GSS	GSS	0-70	FP-AI-112-1
22	5 PM, ug/m3	TEOM #1	R5 F6	Room 5 fan 6	-1000-9000	FP-AI-112-1
23	5 Filter, %	TEOM #1	R5 F6	Room 5 fan 6	0-140	FP-AI-112-1
24	5 Atm P, atm	TEOM #1	R5 F6	Room 5 fan 6	0.8-1.3	FP-AI-112-1
25	6 PM, ug/m3	TEOM #2	R6 F6	Room 6 fan 6	-1000-9000	FP-AI-112-1
26	6 Filter, %	TEOM #2	R6 F6	Room 6 fan 6	0-140	FP-AI-112-2
27	7 PM, ug/m3	TEOM #3	R7 F6	Room 7 fan 6	-1000-9000	FP-AI-112-2
28	7 Filter, %	TEOM #3	R7 F6	Room 7 fan 6	0-140	FP-AI-112-2
29	8 PM, ug/m3	TEOM #4	R8 F6	Room 8 fan 6	-1000-9000	FP-AI-112-2
30	8 Filter, %	TEOM #4	R8 F6	Room 8 fan 6	0-140	FP-AI-112-2
31	Amb PM, ug/m3	TEOM #5	Amb	10 m East of B2	-100-900	FP-AI-112-2

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Col #	Data heading	Instrument/sensor	Sensor location	Monitoring/control location	Range / target	DAC hardware
32	CS, ppb	H2S analyzer	Rack	13 gas sampling locations	0-10000	FP-AI-112-2
33	5S dP, Pa	Setra 260 P sensor #1	5S	Across S wall at fan 6	-100 to 100	FP-AI-112-2
34	5E dP, Pa	Setra 260 P sensor #2	5E	Across E wall at fan 2	-100 to 100	FP-AI-112-2
35	6S dP, Pa	Setra 260 P sensor #3	6S	Across S wall at fan 6	-100 to 100	FP-AI-112-2
36	6W dP, Pa	Setra 260 P sensor #4	6W	Across W wall at fan 2	-100 to 100	FP-AI-112-2
37	7N dP, Pa	Setra 260 P sensor #5	7N	Across N wall at fan 6	-100 to 100	FP-AI-112-2
38	7W dP, Pa	Setra 260 P sensor #6	7W	Across W wall at fan 2	-100 to 100	FP-AI-112-2
39	8N dP, Pa	Setra 260 P sensor #7	8N	Across N wall at fan 6	-100 to 100	FP-AI-112-2
40	8E dP, Pa	Setra 260 P sensor #8	8E	Across E wall at fan 2	-100 to 100	FP-AI-112-2
41	Lab dP, Pa	Setra 260 P sensor #9	Lab	Inside & outdoor of OFIS	-100 to 100	FP-AI-112-2
42	Wind D, deg	05103-5 Wind Monitor	Roof	Roof top tower	0-360	FP-AI-112-3
43	Wind V, m/s	05103-5 Wind Monitor	Roof	Roof top tower	0-60	FP-AI-112-3
44	Solar, W/m2	LiSOR SL Solar sensor	Roof	Roof top tower		FP-AI-112-3
45	Amb RH, %	NOVUS RHT-WM #1	Roof	Roof top tower	0-100	FP-AI-112-3
46	Amb T, C	NOVUS RHT-WM #1	Roof	Roof top tower	-40 - 120	FP-AI-112-3
47	5F6 RH, %	NOVUS RHT-WM #2	5F6	At air sampling probe	0-100	FP-AI-112-3
48	5F6 T, C	NOVUS RHT-WM #2	5F6	At air sampling probe	-40 - 120	FP-AI-112-3
49	6F6 RH, %	NOVUS RHT-WM #3	6F6	At air sampling probe	0-100	FP-AI-112-3
50	6F6 T, C	NOVUS RHT-WM #3	6F6	At air sampling probe	-40 - 120	FP-AI-112-3
51	7F6 RH, %	NOVUS RHT-WM #4	7F6	At air sampling probe	0-100	FP-AI-112-3
52	7F6 T, C	NOVUS RHT-WM #4	7F6	At air sampling probe	-40 - 120	FP-AI-112-3
53	8F6 RH, %	NOVUS RHT-WM #5	8F6	At air sampling probe	0-100	FP-AI-112-3
54	8F6 T, C	NOVUS RHT-WM #5	8F6	At air sampling probe	-40 - 120	FP-AI-112-3
55	Lab Act , V	Activity sensor #1	OFIS	End wall	0 to 2	FP-AI-112-3
56	Hallway, V	Activity sensor #2	Hallway	Hallway center near E wall	0 to 2	FP-AI-112-3
57	5W act, V	Activity sensor #3	R5 W pen	Centered btw N wall & alley	0 to 2	FP-AI-112-3
58	5E act, V	Activity sensor #4	R5 E pen	Centered btw N wall & alley	0 to 2	FP-AI-112-4
59	6W act, V	Activity sensor #5	R6 W pen	Centered btw N wall & alley	0 to 2	FP-AI-112-4
60	6E act, V	Activity sensor #6	R6 E pen	Centered btw N wall & alley	0 to 2	FP-AI-112-4
61	7W act, V	Activity sensor #7	R7 W pen	Centered btw S wall & alley	0 to 2	FP-AI-112-4
62	7E act, V	Activity sensor #8	R7 E pen	Centered btw S wall & alley	0 to 2	FP-AI-112-4
63	8W act, V	Activity sensor #9	R8 W pen	Centered btw S wall & alley	0 to 2	FP-AI-112-4
64	8E act, V	Activity sensor #10	R8 E pen	Centered btw S wall & alley	0 to 2	FP-AI-112-4
65	5F6 Ane, V	Anemometer 1	Fan	Room 5 fan 6	-0.5 to 0.5	FP-AI-112-4

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Col #	Data heading	Instrument/sensor	Sensor location	Monitoring/control location	Range / target	DAC hardware
66	6F6 Ane, V	Anemometer 2	Fan	Room 6 fan 6	-0.5 to 0.5	FP-AI-112-4
67	7F6 Ane, V	Anemometer 3	Fan	Room 7 fan 6	-0.5 to 0.5	FP-AI-112-4
68	7F2 Ane, V	Anemometer 4	Fan	Room 7 fan 2	-0.5 to 0.5	FP-AI-112-4
69	8F6 Ane, V	Anemometer 5	Fan	Room 8 fan 6	-0.5 to 0.5	FP-AI-112-4
71	FID, V	TE 55C	Rack	17 GSLs	0-10	FP-AI-112-4
75	R5F1 T, C	TC T type	R5	Center of room parallel F1	-270 to 390	FP-TC-120-1
76	R5F2 T, C	TC T type	R5	Center of room parallel F2	-270 to 390	FP-TC-120-1
77	R5F3 T, C	TC T type	R5	Center of room parallel F3	-270 to 390	FP-TC-120-1
78	R6F1 T, C	TC T type	R6	Center of room parallel F1	-270 to 390	FP-TC-120-1
79	R6F2 T, C	TC T type	R6	Center of room parallel F2	-270 to 390	FP-TC-120-1
80	R6F3 T, C	TC T type	R6	Center of room parallel F3	-270 to 390	FP-TC-120-1
81	R7F1 T, C	TC T type	R7	Center of room parallel F1	-270 to 390	FP-TC-120-1
82	R7F2 T, C	TC T type	R7	Center of room parallel F2	-270 to 390	FP-TC-120-1
83	R7F3 T, C	TC T type	R7	Center of room parallel F3	-270 to 390	FP-TC-120-2
84	R8F1 T, C	TC T type	R8	Center of room parallel F1	-270 to 390	FP-TC-120-2
85	R8F2 T, C	TC T type	R8	Center of room parallel F2	-270 to 390	FP-TC-120-2
86	R8F3 T, C	TC T type	R8	Center of room parallel F3	-270 to 390	FP-TC-120-2
87	TEOM-Tube T, C	TC T type	OFIS	TEOM tube heat tape	-270 to 390	FP-TC-120-2
88	Lab T, C	TC T type	OFIS	DAC panel	-270 to 390	FP-TC-120-2
89	Rwy T, C	TC T type	OFIS	Raceway tubing	-270 to 390	FP-TC-120-2
90	Rwy H T, C	TC T type	OFIS	Raceway heating tape	-270 to 390	FP-TC-120-2
91	R5HtS T, C	TC T type	R5	South heater exhaust	-270 to 390	FP-TC-120-3
92	R5HtN T, C	TC T type	R5	North heater exhaust	-270 to 390	FP-TC-120-3
93	R6HtS T, C	TC T type	R6	South heater exhaust	-270 to 390	FP-TC-120-3
94	R6HtN T, C	TC T type	R6	North heater exhaust	-270 to 390	FP-TC-120-3
95	R7HtS T, C	TC T type	R7	South heater exhaust	-270 to 390	FP-TC-120-3
96	R7HtN T, C	TC T type	R7	North heater exhaust	-270 to 390	FP-TC-120-3
97	R8HtS T, C	TC T type	R8	South heater exhaust	-270 to 390	FP-TC-120-3
98	R8HtN T, C	TC T type	R8	North heater exhaust	-270 to 390	FP-TC-120-3
99	R5F1, rpm	RPM sensor #1	R5F1	Fan shaft or support	0 to 5000	USB-4303-1
100	R5F2, rpm	RPM sensor #2	R5F2	Fan shaft or support	0 to 5000	USB-4303-1
101	R5F3, rpm	RPM sensor #3	R5F3	Fan shaft or support	0 to 5000	USB-4303-1
102	R5F4, rpm	RPM sensor #4	R5F4	Fan shaft or support	0 to 5000	USB-4303-1
103	R5F5, rpm	RPM sensor #5	R5F5	Fan shaft or support	0 to 5000	USB-4303-1

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Col #	Data heading	Instrument/sensor	Sensor location	Monitoring/control location	Range / target	DAC hardware
104	R5F6, rpm	RPM sensor #6	R5F6	Fan shaft or support	0 to 5000	USB-4303-1
105	R5F7, rpm	RPM sensor #7	R5F7	Fan shaft or support	0 to 5000	USB-4303-1
106	R5F8, rpm	RPM sensor #8	R5F8	Fan shaft or support	0 to 5000	USB-4303-1
107	R6F1, rpm	RPM sensor #9	R6F1	Fan shaft or support	0 to 5000	USB-4303-1
108	R6F2, rpm	RPM sensor #10	R6F2	Fan shaft or support	0 to 5000	USB-4303-1
109	R6F3, rpm	RPM sensor #11	R6F3	Fan shaft or support	0 to 5000	USB-4303-2
110	R6F4, rpm	RPM sensor #12	R6F4	Fan shaft or support	0 to 5000	USB-4303-2
111	R6F5, rpm	RPM sensor #13	R6F5	Fan shaft or support	0 to 5000	USB-4303-2
112	R6F6, rpm	RPM sensor #14	R6F6	Fan shaft or support	0 to 5000	USB-4303-2
113	R6F7, rpm	RPM sensor #15	R6F7	Fan shaft or support	0 to 5000	USB-4303-2
114	R6F8, rpm	RPM sensor #16	R6F8	Fan shaft or support	0 to 5000	USB-4303-2
115	R7F1, rpm	RPM sensor #17	R7F1	Fan shaft or support	0 to 5000	USB-4303-2
116	R7F2, rpm	RPM sensor #18	R7F2	Fan shaft or support	0 to 5000	USB-4303-2
117	R7F3, rpm	RPM sensor #19	R7F3	Fan shaft or support	0 to 5000	USB-4303-2
118	R7F4, rpm	RPM sensor #20	R7F4	Fan shaft or support	0 to 5000	USB-4303-2
119	R7F5, rpm	RPM sensor #21	R7F5	Fan shaft or support	0 to 5000	USB-4303-3
120	R7F6, rpm	RPM sensor #22	R7F6	Fan shaft or support	0 to 5000	USB-4303-3
121	R7F7, rpm	RPM sensor #23	R7F7	Fan shaft or support	0 to 5000	USB-4303-3
122	R7F8, rpm	RPM sensor #24	R7F8	Fan shaft or support	0 to 5000	USB-4303-3
123	R8F1, rpm	RPM sensor #25	R8F1	Fan shaft or support	0 to 5000	USB-4303-3
124	R8F2, rpm	RPM sensor #26	R8F2	Fan shaft or support	0 to 5000	USB-4303-3
125	R8F3, rpm	RPM sensor #27	R8F3	Fan shaft or support	0 to 5000	USB-4303-3
126	R8F4, rpm	RPM sensor #28	R8F4	Fan shaft or support	0 to 5000	USB-4303-3
127	R8F5, rpm	RPM sensor #29	R8F5	Fan shaft or support	0 to 5000	USB-4303-3
128	R8F6, rpm	RPM sensor #30	R8F6	Fan shaft or support	0 to 5000	USB-4303-3
129	R8F7, rpm	RPM sensor #31	R8F7	Fan shaft or support	0 to 5000	USB-4303-4
130	R8F8, rpm	RPM sensor #32	R8F8	Fan shaft or support	0 to 5000	USB-4303-4
139	5Fstg2, %t	Barn controller	B6	Barn 36" fan	0-100	DIO 96H/50
140	5Fstg3, %t	Barn controller	B6	Barn 48" fan	0-100	DIO 96H/50
141	5Fstg4, %t	Barn controller	B6	Barn 48" fan	0-100	DIO 96H/50
142	5Fstg5, %t	Barn controller	B6	Barn 2 x 48" fans	0-100	DIO 96H/50
143	5F mist, %t	Barn controller	B6	5F mist	0-100	DIO 96H/50
144	5F soak, %t	Barn controller	B6	5F soak	0-100	DIO 96H/50
145	5F light, %t	Barn controller	B6	5F light	0-100	DIO 96H/50

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Col #	Data heading	Instrument/sensor	Sensor location	Monitoring/control location	Range / target	DAC hardware
146	5F feed, %t	Barn controller	B6	5F feed	0-100	DIO 96H/50
147	6Fstg2, %t	Barn controller	B6	Barn 36" fan	0-100	DIO 96H/50
148	6Fstg3, %t	Barn controller	B6	Barn 48" fan	0-100	DIO 96H/50
149	6Fstg4, %t	Barn controller	B6	Barn 48" fan	0-100	DIO 96H/50
150	6Fstg5, %t	Barn controller	B6	Barn 2 x 48" fans	0-100	DIO 96H/50
151	6F mist, %t	Barn controller	B6	6F mist	0-100	DIO 96H/50
152	6F soak, %t	Barn controller	B6	6F soak	0-100	DIO 96H/50
153	6F light, %t	Barn controller	B7	6F light	0-100	DIO 96H/50
154	6F feed, %t	Barn controller	B7	6F feed	0-100	DIO 96H/50
155	7Fstg2, %t	Barn controller	B6	Barn 36" fan	0-100	DIO 96H/50
156	7Fstg3, %t	Barn controller	B7	Barn 48" fan	0-100	DIO 96H/50
157	7Fstg4, %t	Barn controller	B7	Barn 48" fan	0-100	DIO 96H/50
158	7Fstg5, %t	Barn controller	B7	Barn 2 x 48" fans	0-100	DIO 96H/50
159	7F mist, %t	Barn controller	B7	7F mist	0-100	DIO 96H/50
160	7F soak, %t	Barn controller	B7	7F soak	0-100	DIO 96H/50
161	7F light, %t	Barn controller	B7	7F light	0-100	DIO 96H/50
162	7F feed, %t	Barn controller	B7	7F feed	0-100	DIO 96H/50
163	8Fstg2, %t	Barn controller	B7	Barn 36" fan	0-100	DIO 96H/50
164	8Fstg3, %t	Barn controller	B7	Barn 48" fan	0-100	DIO 96H/50
165	8Fstg4, %t	Barn controller	B7	Barn 48" fan	0-100	DIO 96H/50
166	8Fstg5, %t	Barn controller	B7	Barn 2 x 48" fans	0-100	DIO 96H/50
167	8F mist, %t	Barn controller	B7	8F mist	0-100	DIO 96H/50
168	8F soak, %t	Barn controller	B7	8F soak	0-100	DIO 96H/50
169	8F light, %t	Barn controller	B7	8F light	0-100	DIO 96H/50
170	8F feed, %t	Barn controller	B7	8F feed	0-100	DIO 96H/50

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APPENDIX B. RECORD OF MAINTENANCE AND CALIBRATION

Maintenance and Calibration Tasks	
Category	**Times Completed**
Environment Sensing and Other	
Clean RH/T probe	101
Calibration check of RH/T probe	9
Calibration check of thermocouples	2
Performance check of weather station	3
Direction verification of wind indicator	1
Clean solar sensor	22
Check solar sensor with collocated sensor	4
Clean motion sensors	23
Airflow Measurement System	
Fan test events	4
Zero check of pressure sensors (ΔP)	18
Multipoint calibration of pressures sensors (ΔP)	5
Drift & accuracy check of anemometer(s)	9
Particulate Matter Measurement System	
Clean TOEM screens	93
Check/clean TEOM inlet head(s)	92
Replace TEOM filters	80
Verify TEOM mass transducer calibration	15
Leak test of TEOM	9
Verify TEOM flow rate & MFC accuracy	8
Change TEOM in-line filters	2
Check/clean Beta Gauge inlet head	40
Check Beta Gauge airflow	3
Validate Beta Gauge mass w/foil set	5
Calibrate Beta Gauge mass & airflow	2
Gas Measurement System	
Clean/replace GSS membrane filters	82
Leak check of GSS	7
Calibration check of all lines	2
Replace GSS filters	2
Calibrate GSS pressure and flow sensors	1
Flow calibration/check MFC flow of Environics Dilutor	1
Precision check of Multigas Analyzer	79
Multipoint calibration of Multigas Analyzer	5
Precision check of TEC 450I	102
Multipoint calibration of TEC 450I	2

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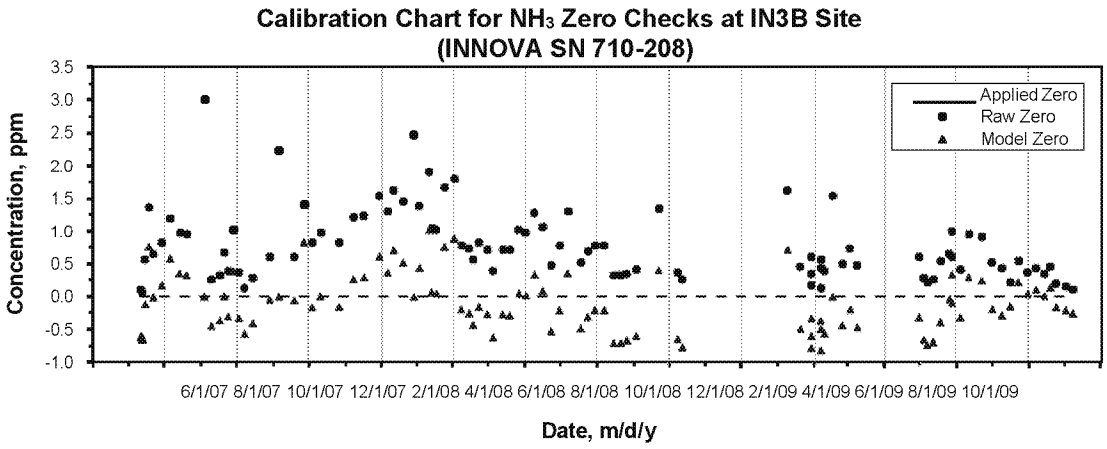
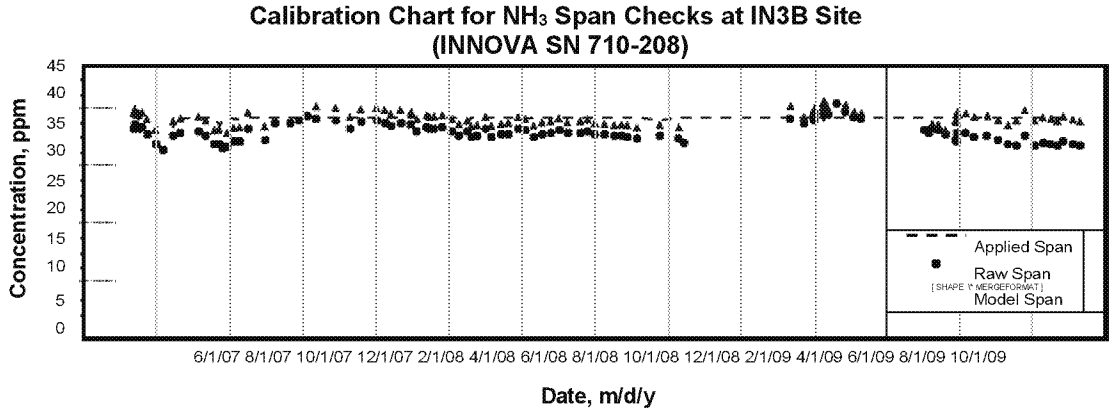
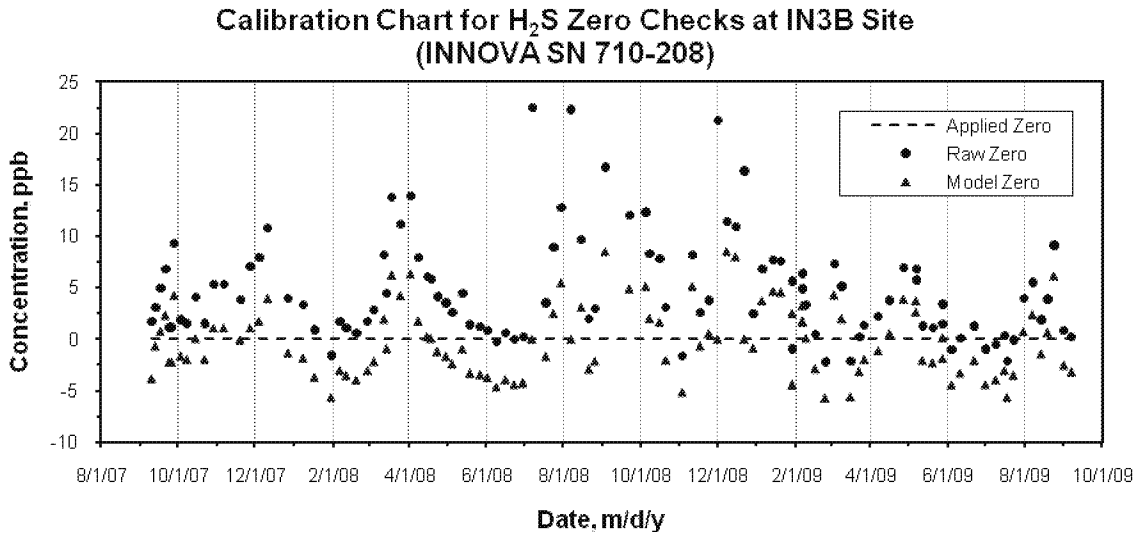
APPENDIX C. GAS ANALYZER CONTROL CHARTS

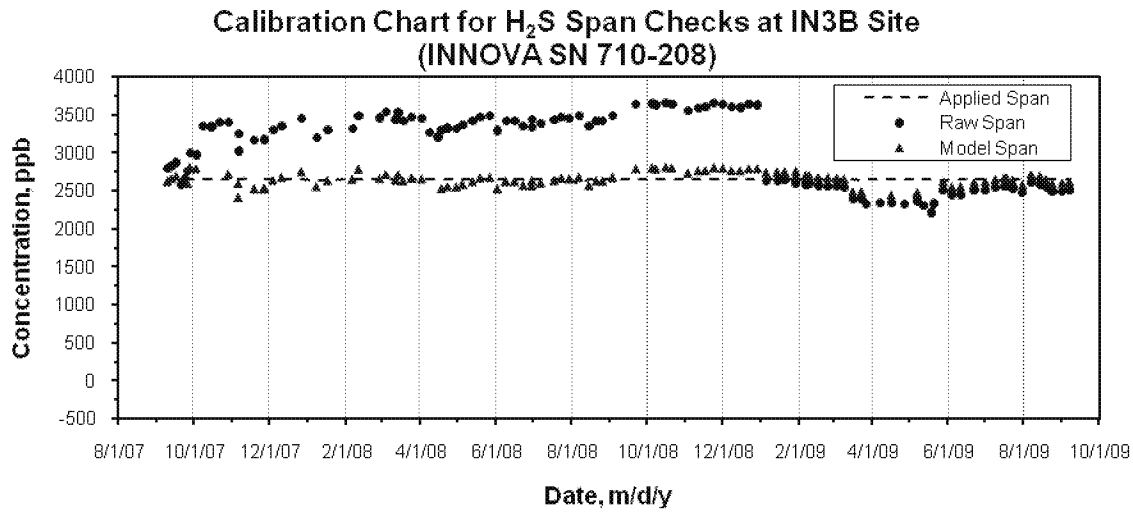
Ammonia



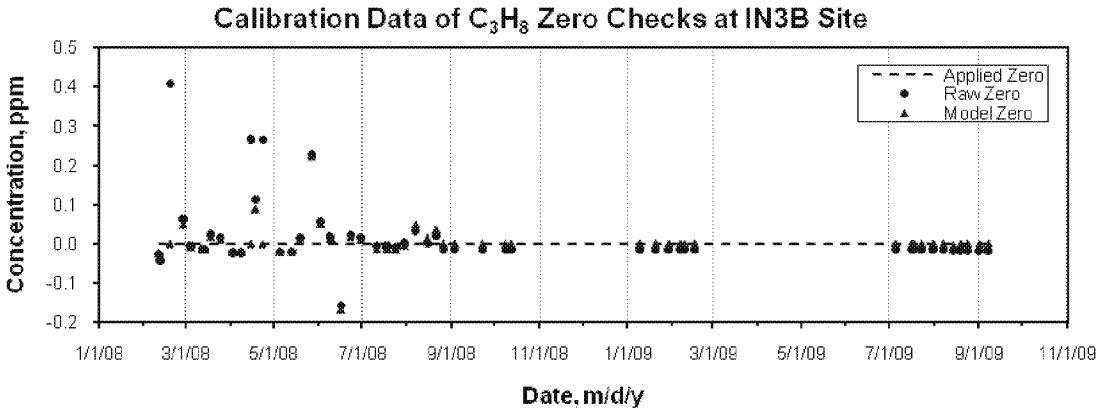


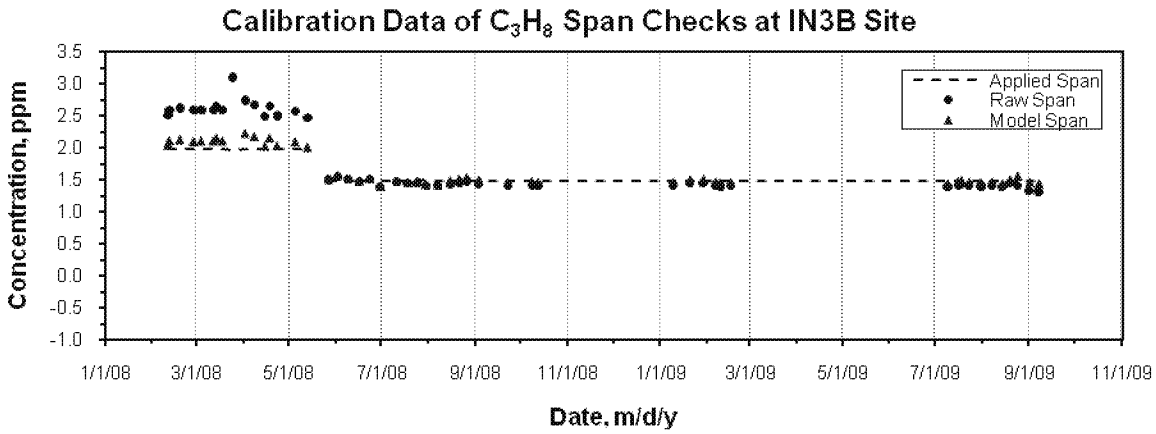
Hydrogen Sulfide





Non-Methane Hydrocarbons





APPENDIX D. BIOMATERIAL CHARACTERISTICS

Table D1. Feed characteristics (mean ± SD).

Room	Date	n	Percent (wet weight basis)		
			Nitrogen	Solids	Ash
5	7/18/08	2	2.38 ± 0.04	88.2 ± 0.07	
5	8/1/08	2	2.41 ± 0.04	82.5 ± 0.07	
5	10/1/08	2	2.90 ± 0.18	86.1 ± 0.14	
5	10/10/08	2	2.78 ± 0.18	86.2 ± 0.14	
5	11/10/08	2	3.14 ± 0.14	86.8 ± 0.00	
5	11/21/08	2	3.17 ± 0.04	86.8 ± 0.00	
5	1/5/09	2	2.25 ± 0.01	85.1 ± 0.21	
5	6/30/09	5	2.38 ± 0.13	86.9 ± 1.70	4.51 ± 1.10
5	7/7/09	4	2.51 ± 0.16	87.7 ± 1.22	4.87 ± 0.03
5	8/21/09	2	2.21 ± 0.03	88.6 ± 0.04	3.94 ± 0.08
6	7/18/08	2	2.33 ± 0.11	88.2 ± 0.00	
6	8/1/08	2	2.25 ± 0.11	88.2 ± 0.00	
6	10/1/08	2	2.28 ± 0.06	85.9 ± 0.07	
6	10/10/08	2	2.33 ± 0.06	86.0 ± 0.07	
6	11/10/08	2	2.79 ± 0.05	87.0 ± 0.28	
6	11/21/08	2	2.83 ± 0.05	87.0 ± 0.28	
6	1/5/09	2	1.92 ± 0.23	84.6 ± 0.28	
6	6/30/09	5	2.38 ± 0.38	86.7 ± 2.31	4.74 ± 1.34
6	7/7/09	4	1.83 ± 0.79	88.2 ± 0.44	2.88 ± 0.06
6	8/21/09	2	2.25 ± 0.08	88.6 ± 0.14	4.32 ± 0.08
7	7/18/08	2	2.18 ± 0.16	88.0 ± 0.07	
7	8/1/08	2	2.30 ± 0.16	88.0 ± 0.07	
7	10/1/08	2	2.71 ± 0.18	86.1 ± 0.35	
7	10/10/08	2	2.58 ± 0.18	85.9 ± 0.35	
7	11/10/08	2	2.74 ± 0.24	87.1 ± 0.21	
7	11/21/08	2	2.57 ± 0.24	87.0 ± 0.21	
7	1/5/09	2	2.01 ± 0.09	85.0 ± 0.00	
7	6/30/09	3	1.94 ± 0.24	85.9 ± 0.23	4.00 ± 0.03
7	7/7/09	4	2.38 ± 0.17	88.1 ± 0.08	2.94 ± 0.15
7	8/21/09	2	2.26 ± 0.04	88.9 ± 0.14	4.18 ± 0.03
8	7/18/08	2	2.40 ± 0.04	88.3 ± 0.07	
8	8/1/08	2	2.43 ± 0.04	88.3 ± 0.07	
8	10/1/08	2	2.44 ± 0.05	86.3 ± 0.14	
8	10/10/08	2	2.41 ± 0.05	86.4 ± 0.14	
8	11/10/08	2	2.79 ± 0.01	86.9 ± 0.03	
8	11/21/08	2	2.80 ± 0.01	86.9 ± 0.07	
8	1/5/09	2	1.99 ± 0.23	86.8 ± 0.07	
8	6/30/09	3	2.14 ± 0.17	86.6 ± 0.38	4.12 ± 0.38
8	7/7/09	4	2.41 ± 0.16	88.4 ± 0.67	4.45 ± 0.27
8	8/21/09	2	2.22 ± 0.08	88.4 ± 0.14	4.31 ± 0.08

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Table D2. Surface manure characteristics (mean ± SD).

Room	Date	n	pH (SU)	Percent (wet weight basis)			
				Nitrogen	Solids	Ammonia	Ash
5	4/4/08	8	7.71 ± 0.19	-	5.13 ± 1.82	0.37 ± 0.02	-
5	7/14/08	4	7.56 ± 0.04	-	5.53 ± 1.72	0.35 ± 0.01	-
5	10/1/08	4	7.61 ± 0.10	-	3.97 ± 0.64	0.29 ± 0.00	-
5	11/10/08	5	7.40 ± 0.07	0.58 ± 0.09	5.37 ± 3.53	0.33 ± 0.30	2.69 ± 3.37
5	1/20/09	1	7.64	0.82	10.7	0.45	2.77
5	2/16/09	5	8.14 ± 0.28	0.67 ± 0.09	6.49 ± 2.39	0.49 ± 0.02	1.84 ± 0.52
5	3/16/09	5	7.80 ± 0.10	0.55 ± 0.05	5.56 ± 2.10	0.42 ± 0.02	1.46 ± 0.07
5	4/21/09	5	7.85 ± 0.06	0.60 ± 0.02	4.79 ± 0.44	0.41 ± 0.03	1.51 ± 0.04
5	6/22/09	5	7.66 ± 0.04	0.45 ± 0.01	2.54 ± 0.45	0.35 ± 0.01	1.00 ± 0.06
5	7/14/09	5	7.72 ± 0.07	0.41 ± 0.02	1.76 ± 0.63	0.33 ± 0.01	0.44 ± 0.04
6	3/31/08	8	7.68 ± 0.23	-	5.85 ± 2.58	0.36 ± 0.01	-
6	7/14/08	4	7.75 ± 0.05	-	4.87 ± 0.61	0.38 ± 0.01	-
6	11/10/08	5	7.32 ± 0.10	0.51 ± 0.07	4.46 ± 2.06	0.34 ± 0.02	1.30 ± 0.40
6	1/20/09	1	7.33	0.81	16.7	0.35	3.53
6	2/16/09	5	8.03 ± 0.39	0.53 ± 0.16	5.63 ± 6.20	0.39 ± 0.02	1.49 ± 1.14
6	3/16/09	5	7.69 ± 0.09	0.42 ± 0.02	3.85 ± 1.25	0.32 ± 0.02	0.98 ± 0.12
6	4/21/09	5	7.90 ± 0.09	0.48 ± 0.03	3.75 ± 0.78	0.36 ± 0.01	1.13 ± 0.11
6	6/22/09	5	7.63 ± 0.05	0.46 ± 0.02	3.62 ± 0.67	0.35 ± 0.01	1.18 ± 0.17
6	7/14/09	5	7.76 ± 0.06	0.42 ± 0.06	2.70 ± 1.37	0.34 ± 0.04	0.60 ± 0.18
7	4/4/08	8	7.99 ± 0.10	-	1.88 ± 1.77	0.29 ± 0.04	-
7	7/14/08	4	7.59 ± 0.10	-	3.97 ± 0.17	0.32 ± 0.05	-
7	11/10/08	5	7.37 ± 0.05	0.52 ± 0.04	4.24 ± 0.87	0.34 ± 0.01	1.33 ± 0.25
7	1/20/09	1	7.27	0.65	10.6	0.42	2.41
7	2/16/09	4	8.20 ± 0.05	0.43 ± 0.03	2.61 ± 0.25	0.37 ± 0.01	0.93 ± 0.10
7	3/16/09	1	7.76	0.46	3.09	0.33	1.02
7	4/21/09	5	7.81 ± 0.03	0.45 ± 0.04	3.39 ± 0.91	0.33 ± 0.02	1.05 ± 0.20
7	6/22/09	5	7.48 ± 0.02	0.28 ± 0.03	1.61 ± 0.46	0.22 ± 0.01	0.68 ± 0.01
7	7/14/09	5	7.69 ± 0.13	0.31 ± 0.13	1.91 ± 1.67	0.25 ± 0.10	0.43 ± 0.25
8	4/4/08	8	7.91 ± 0.09	-	2.90 ± 2.29	0.34 ± 0.03	-
8	7/14/08	4	7.56 ± 0.03	-	3.86 ± 0.10	0.33 ± 0.00	-
8	10/1/08	1	7.52	-	6.16	0.32	-
8	11/10/08	5	7.49 ± 0.10	0.54 ± 0.04	4.75 ± 1.12	0.37 ± 0.02	1.41 ± 0.21
8	1/20/09	1	7.49	0.86	13.0	0.44	3.40
8	2/16/09	4	8.20 ± 0.05	0.43 ± 0.03	2.61 ± 0.25	0.37 ± 0.01	0.93 ± 0.10
8	3/16/09	1	7.77	0.40	2.34	0.31	0.86
8	4/21/09	5	7.82 ± 0.07	0.45 ± 0.04	3.87 ± 0.97	0.35 ± 0.03	1.14 ± 0.20
8	6/22/09	5	7.46 ± 0.04	0.31 ± 0.03	2.44 ± 0.73	0.24 ± 0.02	0.83 ± 0.18
8	7/14/09	5	7.74 ± 0.15	0.27 ± 0.03	1.60 ± 0.38	0.21 ± 0.02	0.27 ± 0.09

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Table D3. Loadout manure characteristics (mean ± SD).

Room	Date	n	Percent (wet weight basis)		
			Nitrogen	Solids	Ash
5	7/30/08	2	0.40 ± 0.12	3.00 ± 0.21	0.94 ± 0.01
5	11/10/08	4	0.53 ± 0.03	5.19 ± 0.82	1.61 ± 0.29
5	11/21/08	6	0.49 ± 0.09	4.46 ± 1.31	1.39 ± 0.41
5	2/25/09	2	0.66 ± 0.00	6.81 ± 0.16	1.90 ± 0.18
5	4/13/09	2	0.56 ± 0.06	87.0 ± 1.13	1.26 ± 0.24
5	5/4/09	2	0.57 ± 0.01	5.88 ± 0.24	1.71 ± 0.06
5	6/2/09	3	0.65 ± 0.05	5.25 ± 0.67	1.49 ± 0.17
5	7/7/09	2	0.53 ± 0.01	2.57 ± 0.68	1.20 ± 0.40
5	8/21/09	2	0.47 ± 0.02	4.46 ± 0.54	0.85 ± 0.28
6	7/30/08	2	0.51 ± 0.40	3.42 ± 0.07	1.13 ± 0.01
6	11/10/08	4	0.53 ± 0.07	5.98 ± 1.09	1.69 ± 0.34
6	11/21/08	6	0.52 ± 0.06	5.12 ± 1.57	1.50 ± 0.39
6	2/25/09	2	0.51 ± 0.06	3.90 ± 1.73	1.27 ± 0.22
6	4/13/09	2	0.47 ± 0.04	87.1 ± 0.49	1.31 ± 0.16
6	5/4/09	2	0.47 ± 0.11	4.74 ± 0.08	1.38 ± 0.04
6	6/2/09	3	0.53 ± 0.02	5.61 ± 0.53	1.20 ± 0.05
6	7/7/09	2	0.52 ± 0.02	4.37 ± 0.13	1.31 ± 0.11
6	8/21/09	2	0.40 ± 0.00	4.03 ± 1.35	0.79 ± 0.04
7	7/30/08	2	0.49 ± 0.05	3.58 ± 0.03	1.22 ± 0.04
7	11/10/08	4	0.46 ± 0.09	5.39 ± 0.93	1.53 ± 0.19
7	11/21/08	6	0.47 ± 0.08	4.78 ± 1.18	1.43 ± 0.22
7	2/25/09	2	0.56 ± 0.01	6.01 ± 0.99	1.56 ± 0.18
7	4/13/09	1	0.50	85.6	1.42
7	5/4/09	2	0.50 ± 0.01	4.74 ± 0.08	1.38 ± 0.04
7	6/2/09	3	0.41 ± 0.03	4.21 ± 0.30	0.92 ± 0.26
7	7/7/09	2	0.24 ± 0.01	1.79 ± 0.21	0.71 ± 0.08
7	8/21/09	2	0.30 ± 0.06	3.58 ± 2.53	0.61 ± 0.28
8	7/30/08	2	0.43 ± 0.03	2.75 ± 0.11	1.00 ± 0.13
8	11/10/08	4	0.52 ± 0.06	6.07 ± 0.57	1.64 ± 0.14
8	11/21/08	6	0.49 ± 0.07	4.96 ± 1.77	1.43 ± 0.35
8	2/25/09	1	0.48	4.95	1.24
8	4/13/09	1	0.43	89.3	1.20
8	5/4/09	3	0.47 ± 0.05	4.68 ± 0.57	1.27 ± 0.10
8	6/2/09	3	0.38 ± 0.06	3.04 ± 0.61	0.72 ± 0.17
8	7/7/09	2	0.36 ± 0.01	3.52 ± 0.48	1.02 ± 0.18
8	8/21/09	2	0.31 ± 0.04	2.67 ± 0.69	0.75 ± 0.45

Table D4. Water characteristics (mean ± SD).

Barn	Date	n	mg/L		
			Nitrate/Nitrite Nitrogen	TKN + NO_3	Sulfur (total)
2	11/10/08	1	n.d.	1.50	10.0
2	1/5/09	1	n.d.	n.d.	9.8
2	2/16/09	1	n.d.	0.30	9.6

ED_004549_00015928-00053

APPENDIX E. DAILY MEANS

Table E1. Weather variables.

Table E1. Daily means (SD) of weather parameters at Site IN3B for July, 2007

Day	Temperature, °C	RH, %	Wind speed, m·s^{-1}	Wind direction, °	Solar, W·m^2	Atm P, kPa
1	21.7 (4.8)	63.4 (18.6)		348 (146)		
2	19.6 (4.7)	60.6 (18.2)		19 (124)		
3	22.8 (5.9)	58.3 (19.9)		106 (69)		
4	24.3 (3.6)	69.6 (7.0)		187 (26)		
5	25.2 (4.1)	73.2 (18.3)		218 (53)		
6	25.3 (5.6)	63.9 (20.0)		255 (82)		
7	25.5 (6.0)	59.4 (20.8)	1.3 (1.0)	157 (59)	239.0 (268.0)	
8	27.3 (4.5)	62.5 (10.7)	3.1 (1.2)	175 (15)	234.0 (261.0)	
9	27.4 (3.9)	67.6 (13.2)	2.6 (1.0)	164 (22)	209.0 (235.0)	
10	26.7 (3.4)	71.2 (11.2)	3.0 (1.3)	169 (42)	197.0 (218.0)	
11	23.5 (2.4)	57.4 (16.1)	3.0 (1.6)			
12	21.4 (4.5)	60.0 (19.0)	3.5 (1.9)	209 (26)	231.0 (263.0)	
13	22.1 (4.3)	63.7 (21.7)	1.7 (1.2)	218 (52)	221.0 (258.0)	
14	22.8 (5.4)	59.4 (17.4)	3.7 (2.4)	173 (34)	228.0 (256.0)	98.1 (0.2)
15	23.5 (4.3)	61.0 (17.8)	1.8 (1.0)	275 (99)	222.0 (262.0)	98.2 (0.2)
16	23.7 (6.9)	57.7 (22.4)	1.0 (0.8)	151 (82)	211.0 (234.0)	98.5 (0.1)
17	22.8 (2.1)	77.3 (8.0)	1.8 (1.0)	165 (65)	103.0 (124.0)	98.4 (0.1)
18	10.3 (8.9)	79.8 (10.8)	3.0 (1.0)	186 (22)	135.0 (159.0)	98.3 (0.2)
19	-4.2 (4.2)	82.7 (11.6)	2.9 (1.6)	216 (59)	89.0 (83.0)	98.1 (0.1)
20	2.2 (19.0)	63.4 (18.8)	1.8 (1.5)	311 (103)	240.0 (274.0)	98.8 (0.1)
21	20.1 (5.3)	64.8 (19.0)	1.6 (1.0)	342 (130)	215.0 (255.0)	99.2 (0.1)
22	20.4 (5.5)	63.1 (19.3)	1.9 (1.5)	22 (97)	235.0 (267.0)	99.3 (0.1)
23	22.3 (6.1)	59.0 (22.6)	1.4 (1.1)	36 (97)	240.0 (264.0)	98.9 (0.1)
24	23.4 (6.5)	63.7 (21.3)	0.9 (0.9)	346 (118)	201.0 (244.0)	98.7 (0.1)
25	23.0 (5.5)	71.1 (21.5)	1.1 (1.0)	28 (111)	175.0 (208.0)	98.7 (0.1)
26	23.6 (3.9)	76.4 (13.4)	2.5 (0.9)	156 (45)	162.0 (186.0)	98.5 (0.1)
27	23.7 (1.0)	83.3 (3.7)	2.3 (0.9)	180 (23)	82.0 (64.0)	98.0 (0.1)
28	24.2 (3.2)	82.6 (10.7)	1.8 (1.0)	334 (139)	121.0 (157.0)	98.1 (0.1)
29	25.1 (4.5)	68.7 (18.3)	1.8 (1.1)	343 (139)	231.0 (261.0)	98.3 (0.1)
30	25.2 (5.5)	66.6 (18.8)	1.6 (1.0)	345 (149)	203.0 (240.0)	98.5 (0.1)
31	27.1 (6.7)	65.3 (19.8)	0.7 (0.6)	321 (116)	227.0 (252.0)	98.6 (0.1)
Avg	21.7	67.0	2.1	217.0	194.0	98.5
n	31	31	25	30	24	18
SD	6.7	7.7	0.82	100	50	0.4
Min	-4.2	57.4	0.7	19.0	82.0	98.0
Max	27.4	83.3	3.74	348	240	99.3

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Table E1. Daily means (SD) of weather parameters at Site IN3B for August, 2007

Day	Temperature, °C	RH, %	Wind speed, m·s^{-1}	Wind direction, °	Solar, W·m^2	Atm P, kPa
1	28.6 (6.2)	65.1 (20.2)	0.9 (0.6)	20 (137)	219.0 (241.0)	98.6 (0.1)
2	27.6 (4.8)	69.0 (18.4)	1.1 (0.8)	185 (72)	268.0 (344.0)	98.5 (0.1)
3						
4	23.2 (3.4)	69.8 (11.0)	1.3 (0.7)	27 (129)	115.0 (139.0)	98.6 (0.1)
5	26.3 (3.4)	77.9 (8.8)	2.6 (1.2)	164 (50)	99.0 (134.0)	98.0 (0.2)
6	28.3 (3.6)	76.1 (10.1)	1.9 (1.0)	173 (62)	210.0 (299.0)	98.0 (0.1)
7	29.6 (3.5)	72.5 (13.2)	3.1 (1.3)	169 (38)	178.0 (284.0)	97.9 (0.1)
8	30.8 (4.2)	67.6 (15.1)	1.5 (0.9)	241 (86)	258.0 (342.0)	98.0 (0.1)
9	28.6 (2.7)	75.7 (10.8)	2.6 (1.3)	202 (71)	235.0 (308.0)	97.9 (0.1)
10	28.1 (4.9)	70.7 (19.3)	1.4 (0.8)	275 (73)	262.0 (356.0)	98.3 (0.1)
11	27.0 (5.9)	67.0 (20.1)	1.1 (0.8)	67 (103)	271.0 (352.0)	98.6 (0.1)
12	28.3 (5.6)	65.3 (16.3)	1.6 (0.9)	97 (103)	248.0 (321.0)	98.7 (0.1)
13	25.6 (4.8)	59.5 (22.5)	1.9 (1.3)	351 (155)	288.0 (363.0)	98.8 (0.1)
14	22.2 (4.2)	72.0 (11.4)	1.7 (1.1)	100 (72)	153.0 (262.0)	98.4 (0.2)
15	25.6 (3.8)	72.2 (10.5)	1.7 (1.0)	52 (66)	129.0 (202.0)	98.1 (0.1)
16	24.3 (2.4)	83.4 (6.3)	1.8 (1.4)	264 (97)	91.0 (121.0)	98.2 (0.2)
17						
18						
19	24.3 (3.3)	69.1 (10.4)	2.0 (1.3)	31 (117)		98.5 (0.1)
20	23.4 (1.0)	90.1 (4.0)	2.3 (1.2)	130 (58)	25.0 (54.0)	98.1 (0.1)
21	26.3 (2.4)	83.2 (10.1)	2.4 (1.1)	170 (37)	137.0 (203.0)	98.3 (0.1)
22	28.7 (3.5)	73.2 (12.2)	2.7 (1.3)	170 (32)	234.0 (322.0)	98.4 (0.1)
23	28.6 (4.5)	69.2 (14.7)	2.8 (1.4)	137 (72)	270.0 (346.0)	98.3 (0.1)
24	25.6 (4.1)	77.1 (12.3)	2.9 (1.8)	118 (76)	169.0 (245.0)	98.0 (0.1)
25	23.7 (2.4)	83.8 (12.4)	1.7 (1.1)	216 (68)	114.0 (198.0)	98.1 (0.1)
26	21.8 (4.5)	69.3 (19.4)	1.4 (1.1)	348 (151)	281.0 (369.0)	98.7 (0.1)
27	22.8 (6.3)	71.5 (18.7)	1.4 (0.7)	37 (79)	254.0 (335.0)	
28	27.0 (6.4)	62.5 (19.8)	1.7 (0.8)	103 (41)	277.0 (344.0)	
29	27.7 (5.8)	65.3 (17.4)	1.4 (1.0)	161 (79)	239.0 (308.0)	
30			2.1 (1.3)	322 (60)	174.0 (280.0)	
31			2.2 (1.6)	348 (151)	295.0 (357.0)	
Avg	26.3	72.2	1.9	123.0	203.0	98.3
n	26	26	28	28	27	23
SD	2.4	7	0.58	99	72	0.3
Min	21.8	59.5	0.9	20.0	25.0	97.9
Max	30.8	90.1	3.06	351	295	98.8

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Table E1. Daily means (SD) of weather parameters at Site IN3B for September, 2007

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^2$	Atm P, kPa
1	20.2 (5.8)	67.1 (19.5)	2.4 (1.6)	10 (142)	288.0 (350.0)	
2	23.2 (7.5)	62.9 (24.7)	1.3 (0.7)	56 (76)	292.0 (352.0)	
3	24.2 (6.9)	60.0 (22.2)	1.2 (1.1)	153 (79)	289.0 (346.0)	
4	25.6 (7.1)	59.2 (22.6)	1.1 (1.1)	102 (83)	274.0 (337.0)	
5	27.0 (7.1)	57.6 (23.1)	1.6 (1.0)	82 (40)	245.0 (314.0)	98.4 (0.1)
6	24.9 (2.1)	71.4 (6.5)	3.0 (1.7)	127 (26)	109.0 (164.0)	98.5 (0.1)
7	25.4 (3.0)	74.1 (9.2)	4.3 (1.7)	153 (24)	125.0 (179.0)	98.3 (0.1)
8						
9						
10						
11	18.5 (3.2)	67.2 (20.0)	3.8 (2.1)	235 (32)	239.0 (339.0)	98.1 (0.1)
12	16.6 (6.2)	61.2 (22.0)	1.1 (0.6)	248 (97)	274.0 (344.0)	98.7 (0.1)
13	19.3 (6.9)	56.5 (23.3)	1.8 (0.7)	106 (48)	274.0 (339.0)	98.6 (0.2)
14	17.9 (2.9)	56.5 (11.6)	3.2 (1.6)	211 (55)	187.0 (246.0)	98.3 (0.2)
15	12.3 (5.3)	62.8 (20.0)	1.4 (0.8)	288 (108)	217.0 (305.0)	99.3 (0.2)
16	15.6 (5.6)	52.2 (20.8)	2.0 (0.9)	75 (30)	256.0 (325.0)	99.2 (0.1)
17	18.6 (6.2)	52.8 (13.5)	2.5 (1.0)	91 (22)	152.0 (218.0)	99.1 (0.1)
18	23.9 (6.6)	53.6 (11.7)	2.2 (0.7)	110 (32)	239.0 (306.0)	98.9 (0.1)
19	25.2 (4.9)	62.6 (12.9)	2.0 (1.3)	171 (63)	214.0 (297.0)	98.8 (0.1)
20	24.6 (5.6)	65.3 (19.3)	1.7 (0.8)	23 (129)	211.0 (293.0)	98.8 (0.2)
21	25.9 (5.5)	53.7 (20.2)	2.3 (0.9)	117 (36)	220.0 (281.0)	98.3 (0.2)
22	23.5 (4.4)	46.8 (16.5)	2.1 (0.9)	305 (112)	255.0 (323.0)	98.6 (0.3)
23	22.2 (7.3)	55.9 (17.9)	2.5 (1.0)	29 (82)	238.0 (305.0)	99.0 (0.2)
24	27.2 (5.3)	56.2 (10.3)	2.8 (1.0)	121 (40)	191.0 (273.0)	98.7 (0.2)
25						
26	19.4 (1.5)	88.1 (3.3)	1.8 (0.9)	256 (71)		98.4 (0.1)
27	19.0 (3.7)	73.0 (20.8)	1.3 (0.9)	223 (83)	145.0 (242.0)	98.3 (0.1)
28						
29	19.1 (6.9)	52.1 (20.6)	2.2 (1.0)	81 (40)	206.0 (266.0)	99.3 (0.1)
30	21.4 (6.4)	49.1 (14.0)	3.4 (1.4)	112 (35)	226.0 (293.0)	99.1 (0.2)
Avg	21.6	60.7	2.2	115.0	224.0	98.7
n	25	25	25	25	24	21
SD	3.8	9	0.83	81	50	0.4
Min	12.3	46.8	1.1	10.0	109.0	98.1
Max	27.2	88.1	4.28	305	292	99.3

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Table E1. Daily means (SD) of weather parameters at Site IN3B for October, 2007

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^2$	Atm P, kPa
1	20.7 (1.8)	62.7 (11.3)	4.5 (2.0)	165 (34)	127.0 (209.0)	98.6 (0.1)
2	21.7 (5.3)	67.1 (20.1)	2.6 (1.4)	144 (27)	173.0 (242.0)	98.5 (0.3)
3	21.1 (4.2)	66.0 (20.8)	2.2 (1.6)	183 (72)	181.0 (277.0)	98.3 (0.2)
4	23.0 (6.5)	66.0 (20.5)	1.6 (0.9)	91 (52)	203.0 (278.0)	98.6 (0.1)
5	25.5 (4.9)	68.8 (14.4)	1.5 (0.9)	98 (46)	151.0 (238.0)	98.8 (0.1)
6	26.6 (4.1)	68.9 (14.9)	1.9 (0.8)	141 (37)	167.0 (236.0)	98.7 (0.1)
7						
8						
9	19.8 (3.6)	62.5 (22.1)	3.5 (1.8)	217 (28)	217.0 (285.0)	98.3 (0.2)
10	10.6 (1.8)	63.8 (8.4)	4.2 (1.1)	233 (12)	66.0 (111.0)	98.0 (0.0)
11	11.8 (2.6)	77.5 (9.9)	3.4 (1.4)	251 (30)	55.0 (99.0)	98.1 (0.1)
12	11.3 (2.9)	70.9 (15.3)	1.4 (0.9)	277 (100)	93.0 (159.0)	98.3 (0.1)
13	11.1 (5.2)	68.7 (18.2)	1.1 (1.1)	127 (73)	127.0 (217.0)	98.5 (0.1)
14	16.8 (3.3)	58.5 (10.2)	2.3 (1.0)	67 (29)	69.0 (108.0)	98.6 (0.1)
15	20.4 (4.0)	53.6 (9.9)	3.3 (0.8)	91 (31)	129.0 (202.0)	98.4 (0.2)
16	19.0 (1.8)	74.4 (9.9)	2.7 (1.0)	139 (36)	63.0 (110.0)	98.1 (0.1)
17	18.7 (4.3)	77.3 (13.2)	3.1 (1.8)	93 (41)	142.0 (245.0)	98.1 (0.3)
18	22.9 (3.1)	74.8 (13.6)	6.7 (1.4)	118 (26)	148.0 (226.0)	96.6 (0.3)
19	15.1 (1.4)	77.2 (5.6)	5.6 (1.5)	189 (9)	28.0 (49.0)	96.8 (0.3)
20	16.5 (4.4)	56.5 (16.6)	4.2 (1.0)	173 (21)	192.0 (263.0)	97.7 (0.2)
21	20.1 (4.1)	47.8 (10.8)	4.9 (1.5)	140 (13)	189.0 (257.0)	98.1 (0.1)
22	17.0 (2.8)	67.1 (15.0)	2.7 (0.9)	145 (76)	67.0 (117.0)	98.2 (0.2)
23	11.3 (1.2)	83.4 (7.5)	2.5 (1.5)	330 (124)	43.0 (77.0)	97.9 (0.1)
24	10.0 (1.9)	77.3 (11.3)	2.4 (1.6)	328 (119)	67.0 (130.0)	98.5 (0.3)
25	9.8 (3.9)	76.2 (7.2)	5.6 (2.1)	2 (166)	88.0 (164.0)	98.7 (0.1)
26	14.3 (3.8)	78.2 (15.6)	3.1 (1.3)	77 (60)	98.0 (188.0)	98.5 (0.1)
27	11.1 (1.9)	85.1 (8.4)	3.6 (2.0)	222 (61)	28.0 (66.0)	99.0 (0.5)
28	7.8 (5.0)	67.8 (23.9)	0.9 (0.9)	164 (73)	175.0 (250.0)	100.1 (0.1)
29	8.1 (4.7)	61.7 (14.5)	1.9 (1.5)	151 (36)	153.0 (235.0)	99.9 (0.2)
30	11.6 (5.2)	58.6 (12.2)	2.4 (1.0)	136 (22)	173.0 (248.0)	99.3 (0.2)
31	13.3 (3.5)	65.2 (8.3)	4.9 (1.6)	179 (35)	121.0 (202.0)	98.6 (0.2)
Avg	16.1	68.4	3.1	148.0	122.0	98.4
n	29	29	29	29	29	29
SD	5.3	8.7	1.44	74	55	0.7
Min	7.8	47.8	0.9	2.0	28.0	96.6
Max	26.6	85.1	6.71	330	217	100.1

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Table E1. Daily means (SD) of weather parameters at Site IN3B for November, 2007

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^2$	Atm P, kPa
1	6.8 (4.2)	60.1 (16.4)	2.0 (1.2)	231 (69)	172.0 (248.0)	99.1 (0.1)
2	7.8 (5.6)	58.6 (18.9)	1.4 (1.1)	83 (54)	166.0 (243.0)	99.1 (0.1)
3	8.4 (3.8)	57.0 (13.5)	1.9 (1.8)	205 (49)	157.0 (231.0)	98.8 (0.1)
4	8.5 (2.6)	53.9 (7.7)		195 (53)	154.0 (229.0)	98.1 (0.2)
5	9.8 (3.3)	53.8 (5.1)		195 (42)	48.0 (79.0)	97.7 (0.3)
6	3.8 (2.0)	59.3 (6.3)		241 (13)	66.0 (134.0)	98.7 (0.3)
7	3.0 (2.5)	61.3 (10.7)		197 (49)	134.0 (205.0)	99.2 (0.2)
8	7.0 (3.2)	56.9 (9.0)		144 (34)	95.0 (165.0)	98.2 (0.3)
9	5.7 (2.7)	66.5 (11.2)		230 (46)	131.0 (206.0)	98.3 (0.2)
10	6.2 (4.7)	64.7 (14.8)		145 (95)	138.0 (216.0)	98.9 (0.2)
11	7.7 (2.1)	81.5 (5.1)		107 (29)	8.0 (24.0)	98.4 (0.2)
12	15.0 (2.3)	83.6 (7.6)		182 (43)	74.0 (154.0)	98.4 (0.1)
13	12.4 (3.2)	74.8 (13.0)		89 (95)	136.0 (212.0)	98.2 (0.3)
14	12.6 (3.1)	68.5 (19.3)	5.4 (1.2)	222 (25)	97.0 (170.0)	97.5 (0.2)
15	2.9 (1.8)	67.2 (6.5)	5.3 (2.9)	241 (21)		98.4 (0.3)
16	1.7 (3.0)	71.9 (10.4)	2.2 (0.8)	185 (41)	56.0 (109.0)	98.4 (0.3)
17	5.7 (2.6)	69.8 (10.2)	2.1 (0.9)	167 (98)	45.0 (87.0)	97.9 (0.2)
18	4.3 (0.6)	84.6 (3.8)	3.6 (0.9)	63 (117)	21.0 (43.0)	99.0 (0.2)
19	10.3 (4.8)	85.3 (2.1)	4.6 (1.1)	167 (37)	27.0 (55.0)	98.5 (0.4)
20	16.4 (0.8)	84.2 (2.6)	4.3 (1.1)	217 (21)	28.0 (54.0)	98.1 (0.1)
21	11.4 (4.1)	91.9 (4.2)	3.7 (1.5)	341 (111)	4.0 (18.0)	97.6 (0.2)
22	1.8 (1.4)	86.5 (4.5)	4.6 (2.3)	311 (55)	12.0 (27.0)	98.7 (0.6)
23	-1.0 (1.3)	74.9 (7.6)	2.9 (1.5)	285 (31)	111.0 (195.0)	99.6 (0.1)
24	0.0 (1.9)	76.5 (7.7)	2.0 (1.1)	196 (39)	62.0 (122.0)	99.3 (0.2)
25	1.1 (1.8)	80.6 (8.3)	1.7 (0.7)	175 (71)	32.0 (69.0)	98.9 (0.3)
26	2.8 (0.5)	92.3 (1.3)	2.5 (1.3)	333 (84)	5.0 (27.0)	98.1 (0.2)
27	1.4 (2.2)	79.0 (9.3)	4.3 (2.0)	269 (73)	115.0 (187.0)	99.2 (0.3)
28	4.8 (5.1)	64.2 (12.3)	5.0 (1.2)	169 (45)	77.0 (146.0)	98.7 (0.6)
29	-0.9 (2.0)	66.5 (7.3)	5.5 (2.4)	262 (29)	122.0 (194.0)	99.0 (0.3)
30	0.4 (2.6)	61.0 (8.1)	4.3 (2.1)	263 (40)	118.0 (186.0)	99.4 (0.2)
Avg	5.9	71.2	3.5	204.0	83.0	98.6
n	30	30	20	30	29	30
SD	4.6	11.4	1.36	68	53	0.5
Min	-1.0	53.8	1.4	63.0	4.0	97.5
Max	16.4	92.3	5.54	341	172	99.6

ED_004549_00015928-00058

Table E1. Daily means (SD) of weather parameters at Site IN3B for December, 2007

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^2$	Atm P, kPa
1	-1.7 (2.6)	62.2 (5.4)	4.6 (2.7)	97 (79)	14.0 (35.0)	99.3 (0.6)
2	8.3 (5.2)	82.7 (8.6)	6.4 (2.2)	222 (43)	4.0 (26.0)	97.7 (0.3)
3	-2.3 (1.7)	80.9 (3.1)	6.6 (2.0)	276 (14)	55.0 (127.0)	99.0 (0.2)
4	-0.3 (1.9)	80.7 (6.9)	1.9 (1.3)	144 (94)	52.0 (123.0)	98.1 (0.4)
5	-2.9 (2.5)	78.5 (13.5)	3.6 (2.5)	357 (118)	95.0 (179.0)	97.8 (0.7)
6	-6.0 (3.7)	77.7 (7.1)	2.3 (1.1)	172 (57)	100.0 (184.0)	98.9 (0.2)
7	-0.4 (1.0)	85.5 (2.5)	2.0 (0.9)	221 (32)	28.0 (58.0)	98.7 (0.1)
8	0.3 (0.8)	83.5 (5.5)	2.2 (1.1)	7 (136)	39.0 (80.0)	99.3 (0.2)
9	0.0 (0.6)	89.8 (1.6)		44 (134)	6.0 (29.0)	99.1 (0.1)
10	1.2 (0.8)	88.6 (2.9)		13 (125)	19.0 (45.0)	99.2 (0.1)
11						
12	2.9 (0.9)	86.2 (5.8)	2.5 (1.4)	24 (137)	54.0 (106.0)	99.0 (0.2)
13	1.5 (1.1)	87.9 (3.3)	4.4 (2.0)	244 (70)	3.0 (21.0)	98.4 (0.2)
14	-0.1 (1.4)	78.4 (7.6)	3.2 (1.6)	318 (98)	61.0 (124.0)	99.3 (0.2)
15	-1.2 (0.4)	87.9 (3.6)	5.7 (1.6)	55 (115)	8.0 (31.0)	98.3 (0.8)
16	-5.2 (2.5)	88.6 (3.9)	6.0 (2.5)	292 (31)	85.0 (159.0)	97.6 (0.8)
17	-6.1 (0.8)	86.4 (2.4)	3.9 (1.2)	234 (32)	49.0 (98.0)	99.0 (0.1)
18	0.0 (3.7)	76.9 (6.8)	3.9 (1.0)	181 (19)	77.0 (136.0)	98.5 (0.3)
19	-2.1 (3.2)	81.5 (4.3)	3.0 (1.6)	255 (70)	103.0 (175.0)	98.6 (0.3)
20	-0.1 (3.3)	77.9 (5.9)	4.7 (1.5)	108 (14)	85.0 (150.0)	98.4 (0.3)
21	2.6 (0.9)	81.2 (4.7)	3.4 (1.2)	94 (35)	20.0 (44.0)	98.2 (0.1)
22	7.8 (1.8)	75.4 (7.7)	3.4 (1.1)	136 (26)	13.0 (34.0)	98.0 (0.4)
23	-0.9 (5.9)	66.6 (2.3)	9.2 (1.1)	230 (33)	41.0 (104.0)	97.4 (0.5)
24	-2.8 (1.2)	71.9 (1.7)	5.6 (2.2)	248 (13)	13.0 (36.0)	98.4 (0.3)
25	0.5 (4.2)	64.7 (3.2)	1.6 (0.6)	167 (43)	109.0 (178.0)	98.9 (0.1)
26	3.2 (3.1)	64.2 (3.8)	2.0 (0.7)	124 (50)	104.0 (178.0)	98.3 (0.3)
27	1.2 (0.5)	56.0 (1.1)	1.7 (0.9)	262 (67)	12.0 (26.0)	98.4 (0.4)
28	2.1 (1.4)	50.8 (3.8)	4.8 (2.0)	112 (80)	5.0 (16.0)	98.1 (0.5)
29	-1.2 (0.8)	47.4 (0.9)	3.8 (2.0)	265 (28)	19.0 (37.0)	98.6 (0.2)
30	-0.4 (1.3)	46.3 (1.2)	2.2 (1.1)	125 (43)	34.0 (78.0)	98.2 (0.4)
31	2.0 (1.8)	46.3 (4.0)	3.4 (1.8)	200 (52)	77.0 (146.0)	97.6 (0.3)
Avg	0.0	74.4	3.9	194.0	46.0	98.5
n	30	30	28	30	30	30
SD	3.2	13.4	1.78	93	35	0.5
Min	-6.1	46.3	1.6	7.0	3.0	97.4
Max	8.3	89.8	9.24	357	109	99.3

ED_004549_00015928-00059

Table E1. Daily means (SD) of weather parameters at Site IN3B for January, 2008

Day	Temperature, °C	RH, %	Wind speed, m·s^{-1}	Wind direction, °	Solar, W·m^2	Atm P, kPa
1	-6.7 (3.0)	50.3 (2.3)	8.3 (1.1)	269 (9)	49.0 (88.0)	98.6 (0.5)
2	-14.0 (1.8)	59.7 (3.1)	6.2 (1.2)	269 (11)	73.0 (140.0)	100.1 (0.4)
3	-10.3 (4.7)	65.2 (3.9)	3.1 (1.4)	206 (29)	104.0 (177.0)	100.4 (0.3)
4	-0.8 (2.8)	60.3 (5.9)	5.2 (1.0)	199 (13)	97.0 (156.0)	99.3 (0.3)
5	4.8 (1.3)	48.5 (10.4)	4.6 (1.0)	196 (11)	10.0 (21.0)	98.3 (0.2)
6	12.0 (2.8)	33.4 (5.5)	4.4 (1.0)	182 (19)	11.0 (16.0)	97.9 (0.1)
7	16.9 (1.4)	28.6 (4.8)	5.8 (1.3)	204 (13)	49.0 (89.0)	98.1 (0.1)
8	13.2 (2.7)	27.2 (4.6)	4.6 (2.4)	211 (45)	13.0 (24.0)	97.3 (0.3)
9	3.7 (1.8)	66.4 (10.3)	4.0 (2.4)	236 (63)	92.0 (164.0)	98.5 (0.4)
10	5.4 (2.7)	63.8 (12.9)	5.5 (2.1)	116 (50)	27.0 (53.0)	97.4 (0.9)
11	2.8 (1.3)	68.5 (6.6)	6.3 (2.3)	255 (12)	8.0 (23.0)	97.3 (0.5)
12	2.8 (2.6)	72.6 (5.1)	2.4 (1.1)	152 (42)	104.0 (166.0)	98.2 (0.1)
13	1.5 (2.0)	64.5 (11.6)	4.1 (2.2)	247 (59)	7.0 (19.0)	98.1 (0.1)
14	-3.3 (1.3)	73.7 (8.0)	6.0 (1.2)	270 (12)	15.0 (30.0)	98.4 (0.1)
15	-6.1 (2.2)	77.4 (2.3)	3.4 (1.6)	251 (54)	99.0 (175.0)	98.7 (0.1)
16	-2.2 (3.7)	72.0 (8.8)	3.2 (1.3)	137 (18)		98.8 (0.1)
17						
18	-4.1 (3.0)	67.8 (8.6)	5.3 (1.7)	241 (24)	130.0 (202.0)	98.4 (0.1)
19	-13.2 (2.1)	72.0 (5.9)	6.2 (1.1)	293 (11)	119.0 (197.0)	99.1 (0.2)
20	-13.6 (3.3)	63.8 (10.5)	4.1 (1.7)	265 (22)	135.0 (209.0)	99.9 (0.3)
21	-5.7 (4.9)	56.5 (14.9)	3.4 (2.0)	157 (28)	132.0 (204.0)	99.9 (0.6)
22	-4.4 (4.3)	59.1 (13.6)	5.6 (2.3)	251 (26)	82.0 (145.0)	98.6 (0.2)
23	-7.1 (3.2)	69.8 (5.7)	2.7 (1.4)	241 (31)	129.0 (200.0)	98.5 (0.2)
24	-13.5 (3.2)	69.3 (6.1)	4.5 (1.6)	287 (19)	137.0 (210.0)	99.2 (0.6)
25	-10.4 (6.1)	64.0 (10.8)	2.1 (1.1)	181 (37)	123.0 (211.0)	99.7 (0.4)
26	-2.0 (1.8)	69.5 (4.8)	3.7 (1.0)	208 (27)	22.0 (44.0)	98.4 (0.2)
27	-1.3 (5.3)	68.4 (6.1)	2.3 (1.2)	234 (56)	138.0 (211.0)	98.6 (0.1)
28	4.2 (2.6)	62.8 (9.0)	5.2 (1.8)	180 (17)	34.0 (66.0)	97.8 (0.6)
29	6.3 (6.8)	48.4 (15.6)	6.9 (1.9)	208 (36)	11.0 (21.0)	96.2 (0.5)
30	-10.6 (2.5)	58.1 (3.6)	6.0 (3.5)	262 (16)	148.0 (220.0)	
31	-6.1 (2.2)	61.6 (4.1)	6.3 (3.0)		24.0 (45.0)	
Avg	-2.1	60.8	4.7	224.0	73.0	98.6
n	30	30	30	29	29	28
SD	8	12.5	1.49	45	50	0.9
Min	-14.0	27.2	2.1	116.0	7.0	96.2
Max	16.9	77.4	8.32	293	148	100.4

ED_004549_00015928-00060

Table E1. Daily means (SD) of weather parameters at Site IN3B for February, 2008

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^2$	Atm P, kPa
1	-1.6 (1.3)		5.9 (2.1)		53.0 (92.0)	
2	0.0 (2.8)		3.5 (1.4)	204 (40)	126.0 (208.0)	
3	-0.2 (1.0)		3.4 (2.0)	91 (91)	66.0 (110.0)	
4	6.6 (4.6)		3.6 (1.3)	132 (37)	32.0 (49.0)	
5	7.2 (4.2)		4.1 (2.6)		19.0 (32.0)	
6			6.1 (2.6)		11.0 (23.0)	96.6 (0.3)
7			3.7 (2.1)	247 (27)	23.0 (41.0)	98.0 (0.2)
8			3.1 (1.2)	200 (26)	103.0 (186.0)	97.9 (0.1)
9			5.9 (2.4)	247 (33)	110.0 (198.0)	97.7 (0.2)
10			8.7 (1.4)	292 (11)	147.0 (218.0)	99.2 (0.5)
11		61.4 (9.5)	3.3 (1.9)		54.0 (98.0)	99.6 (0.3)
12		76.9 (1.0)	5.3 (2.4)		27.0 (48.0)	98.1 (0.4)
13		72.9 (6.8)	2.8 (1.3)	267 (53)	173.0 (261.0)	98.2 (0.2)
14		74.1 (3.0)	4.5 (1.5)	195 (23)	126.0 (181.0)	98.3 (0.2)
15		69.0 (5.8)	2.9 (1.5)	295 (31)	132.0 (215.0)	99.1 (0.4)
16	-2.1 (5.5)	70.4 (8.5)	2.1 (1.4)	121 (73)	176.0 (256.0)	98.9 (0.5)
17	6.9 (3.9)	82.7 (7.4)	6.9 (2.1)	187 (51)	58.0 (173.0)	96.4 (0.7)
18	-2.2 (3.0)	74.1 (8.8)	7.3 (1.4)	267 (18)	91.0 (155.0)	97.4 (0.4)
19	-10.1 (2.2)	71.5 (5.5)	5.7 (2.5)	263 (26)	88.0 (158.0)	
20	-7.2 (2.5)	74.7 (9.5)	1.9 (1.7)	270 (86)	156.0 (255.0)	
21	-10.3 (4.1)	76.7 (10.8)	3.8 (2.4)		76.0 (119.0)	
22						
23	-3.6 (3.9)	68.5 (15.5)	1.2 (0.5)		192.0 (286.0)	
24	-3.7 (5.0)	75.6 (5.4)	1.7 (0.9)		109.0 (167.0)	
25	0.6 (0.8)	82.9 (3.4)	3.2 (1.0)		41.0 (68.0)	
26	-0.5 (3.1)	79.3 (8.7)	4.0 (2.5)		77.0 (137.0)	
27	-6.9 (1.7)	70.7 (4.1)	4.2 (1.9)		123.0 (187.0)	
28	-6.4 (4.2)	65.5 (12.6)	1.9 (0.9)		189.0 (267.0)	
29	1.4 (2.0)	78.9 (6.2)	5.5 (1.4)	225 (54)	73.0 (115.0)	
Avg	-1.8	73.6	4.2	229.0	95.0	98.1
n	18	18	28	16	28	13
SD	5.1	5.5	1.79	60	53	0.9
Min	-10.3	61.4	1.2	91.0	11.0	96.4
Max	7.2	82.9	8.7	295	192	99.6

ED_004549_00015928-00061

Table E1. Daily means (SD) of weather parameters at Site IN3B for March, 2008

Day	Temperature, °C	RH, %	Wind speed, m·s^{-1}	Wind direction, °	Solar, W·m^2	Atm P, kPa
1	0.1 (1.7)	68.0 (7.5)	3.4 (1.7)	279 (81)	128.0 (194.0)	
2	8.1 (5.2)	69.0 (5.2)	4.6 (0.8)	144 (16)	123.0 (191.0)	
3	7.7 (5.6)	76.7 (6.9)	4.0 (2.2)		13.0 (20.0)	
4	-1.4 (0.7)	80.3 (3.0)	5.3 (2.4)		18.0 (31.0)	
5	-1.9 (2.6)	74.2 (7.7)	1.8 (1.2)	242 (56)	179.0 (257.0)	
6	-0.9 (1.3)	75.4 (5.2)	2.9 (1.7)	255 (60)	125.0 (177.0)	
7	-2.8 (0.7)	67.7 (6.1)	4.4 (2.4)		114.0 (174.0)	
8	-4.7 (1.6)	61.7 (6.1)	4.0 (1.9)		215.0 (313.0)	98.2 (0.3)
9	0.1 (4.8)	64.3 (6.1)	2.4 (1.0)	193 (33)	205.0 (291.0)	99.1 (0.1)
10	2.1 (1.6)	74.8 (4.3)	2.2 (1.5)	294 (83)	153.0 (253.0)	99.3 (0.1)
11	1.3 (3.1)	71.9 (8.0)	3.1 (1.8)	246 (31)	203.0 (279.0)	98.6 (0.6)
12	5.5 (4.0)	68.9 (10.0)	2.4 (1.3)	180 (79)	213.0 (291.0)	97.9 (0.2)
13						
14						
15						
16	3.6 (3.4)	68.1 (11.7)	1.7 (1.1)		194.0 (281.0)	99.2 (0.5)
17	2.8 (1.2)	73.1 (5.4)	5.3 (1.1)	99 (17)	50.0 (92.0)	99.4 (0.4)
18	9.6 (2.9)	81.7 (3.8)	3.9 (2.2)	180 (53)	17.0 (33.0)	97.8 (0.3)
19	4.1 (1.4)	79.4 (5.2)	2.4 (0.9)		29.0 (44.0)	97.5 (0.2)
20	4.8 (4.2)	65.7 (15.1)	2.6 (1.4)	284 (74)	251.0 (328.0)	98.8 (0.3)
21	5.7 (4.2)	68.3 (8.3)	5.3 (2.0)	94 (29)	132.0 (258.0)	98.4 (0.6)
22	1.7 (1.8)	74.5 (10.7)	2.7 (1.9)		105.0 (176.0)	98.6 (0.5)
23	0.9 (2.8)	70.2 (9.9)	2.1 (1.6)	301 (30)	182.0 (276.0)	99.1 (0.1)
24	2.0 (3.2)	64.6 (12.2)	1.6 (1.0)		193.0 (299.0)	99.3 (0.1)
25	6.2 (4.5)	60.4 (6.4)	6.7 (2.0)	219 (27)	101.0 (145.0)	98.2 (0.4)
26	7.8 (3.2)	59.7 (11.5)	2.8 (1.4)	273 (45)	209.0 (286.0)	98.6 (0.1)
27	5.8 (1.4)	77.5 (8.0)	4.8 (2.1)		23.0 (41.0)	97.8 (0.3)
28	3.7 (3.1)	68.4 (14.7)	4.0 (1.8)		258.0 (342.0)	98.6 (0.5)
29	2.8 (3.6)	68.1 (9.3)	5.3 (2.3)		213.0 (285.0)	99.4 (0.2)
30	6.8 (4.2)	76.8 (5.3)	4.6 (1.2)	69 (32)	52.0 (102.0)	98.8 (0.2)
31	14.3 (1.0)	84.1 (3.0)	5.1 (1.3)	133 (14)	42.0 (79.0)	98.0 (0.4)
Avg	3.4	71.2	3.6	220.0	134.0	98.6
n	28	28	28	17	28	21
SD	4.1	6.3	1.35	73	77	0.6
Min	-4.7	59.7	1.6	69.0	13.0	97.5
Max	14.3	84.1	6.65	301	258	99.4

ED_004549_00015928-00062

Table E1. Daily means (SD) of weather parameters at Site IN3B for April, 2008

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^2$	Atm P, kPa
1	7.1 (4.0)	74.4 (4.1)	6.3 (2.9)	234 (49)	28.0 (48.0)	98.3 (0.8)
2	4.9 (2.9)	62.2 (11.7)	2.9 (1.8)	34 (69)	258.0 (324.0)	99.6 (0.2)
3	6.1 (3.2)	67.6 (6.0)	3.8 (1.6)	33 (42)	85.0 (148.0)	98.5 (0.6)
4	6.4 (1.0)	75.7 (2.2)	1.7 (0.9)	282 (83)	16.0 (26.0)	97.6 (0.3)
5	9.4 (5.8)	62.1 (12.9)	1.9 (1.0)	94 (65)	278.0 (347.0)	98.3 (0.1)
6	11.9 (5.1)	58.2 (11.4)	2.5 (1.1)	63 (22)	268.0 (344.0)	98.2 (0.2)
7	14.1 (3.7)	58.9 (12.5)	3.9 (2.2)	183 (45)	277.0 (341.0)	98.1 (0.2)
8	13.4 (6.0)	64.1 (7.8)	4.2 (2.0)	58 (98)	107.0 (144.0)	98.2 (0.3)
9	9.0 (3.6)	67.2 (4.0)	4.1 (2.3)	250 (88)	116.0 (173.0)	98.5 (0.4)
10	9.2 (3.4)	72.5 (1.7)	7.4 (1.5)	38 (27)	15.0 (27.0)	98.0 (0.6)
11	16.0 (3.9)	65.1 (6.3)	6.9 (2.2)	156 (43)	238.0 (328.0)	96.7 (0.2)
12	4.8 (1.4)	65.4 (4.3)	6.7 (1.6)	211 (17)	38.0 (58.0)	97.2 (0.3)
13	3.8 (1.0)	66.2 (5.3)	3.1 (1.6)	293 (45)	37.0 (63.0)	98.1 (0.4)
14	5.8 (4.5)	57.9 (12.4)	2.0 (1.6)	317 (81)	260.0 (359.0)	98.9 (0.2)
15	8.7 (5.5)	51.7 (13.5)	2.3 (1.7)	144 (51)	294.0 (375.0)	99.1 (0.2)
16	13.7 (5.5)	46.2 (11.2)	5.0 (1.7)	136 (17)	288.0 (367.0)	98.4 (0.2)
17	17.6 (4.8)	52.6 (6.2)	3.6 (1.4)	155 (22)	247.0 (329.0)	98.3 (0.1)
18	19.1 (4.2)	54.0 (11.3)	3.6 (1.7)	120 (30)	264.0 (339.0)	97.9 (0.2)
19	13.9 (1.1)	65.2 (2.4)	2.6 (1.0)	166 (53)	144.0 (261.0)	97.6 (0.1)
20	14.8 (3.3)	66.3 (3.0)	2.5 (1.1)	195 (37)	155.0 (209.0)	97.9 (0.1)
21	17.6 (4.3)	55.7 (8.7)	2.7 (0.9)	76 (24)	242.0 (353.0)	98.4 (0.1)
22	19.7 (5.0)	55.7 (12.2)	2.0 (1.2)	84 (58)	251.0 (327.0)	98.4 (0.1)
23	21.3 (4.1)	56.5 (9.4)	3.1 (2.1)	19 (133)	250.0 (335.0)	98.7 (0.1)
24	20.5 (3.5)	45.8 (11.8)	5.8 (2.1)	74 (35)	166.0 (206.0)	98.5 (0.3)
25	23.0 (3.5)	58.9 (8.0)	5.9 (2.1)	150 (23)	205.0 (262.0)	97.7 (0.2)
26	11.7 (3.2)	59.3 (10.1)	5.7 (2.3)	216 (17)	255.0 (367.0)	98.3 (0.3)
27	11.8 (3.7)	52.6 (15.2)	2.3 (1.4)	260 (62)	213.0 (288.0)	98.6 (0.2)
28	7.8 (2.7)	64.5 (6.9)	3.5 (2.3)	223 (48)	144.0 (248.0)	97.9 (0.1)
29	6.9 (3.3)	59.9 (8.3)	2.3 (1.4)	284 (91)	217.0 (310.0)	98.5 (0.2)
30	10.6 (6.2)	55.9 (12.0)	3.2 (1.3)	67 (25)	257.0 (349.0)	
Avg	12.0	60.6	3.8	137.0	187.0	98.2
n	30	30	30	30	30	29
SD	5.4	7.3	1.64	87	91	0.5
Min	3.8	45.8	1.7	19.0	15.0	96.7
Max	23	75.7	7.36	317	294	99.6

ED_004549_00015928-00063

Table E1. Daily means (SD) of weather parameters at Site IN3B for May, 2008

Day	Temperature, °C	RH, %	Wind speed, m·s^{-1}	Wind direction, °	Solar, W·m^2	Atm P, kPa
1	18.2 (4.3)	62.5 (5.6)	4.6 (1.5)	129 (32)	146.0 (257.0)	
2	20.1 (1.7)	66.2 (7.7)	6.1 (1.6)	150 (15)	93.0 (157.0)	
3	13.1 (2.6)	65.8 (6.9)	5.6 (2.6)	186 (39)	147.0 (253.0)	
4	13.4 (5.1)	51.3 (10.8)	2.3 (1.1)	180 (25)	295.0 (390.0)	
5	17.1 (4.5)	50.3 (11.0)	3.5 (1.4)	186 (27)	234.0 (347.0)	
6	20.9 (5.0)	50.1 (13.8)	3.3 (1.2)	175 (20)	242.0 (344.0)	98.1 (0.2)
7	18.3 (0.8)	58.5 (11.6)	4.5 (1.6)	171 (22)	38.0 (65.0)	97.3 (0.2)
8	11.6 (1.7)	40.2 (1.8)	5.0 (1.8)	353 (160)	32.0 (49.0)	97.4 (0.1)
9	12.5 (1.9)	61.5 (6.1)	2.1 (1.1)	330 (134)	69.0 (99.0)	97.5 (0.1)
10	14.0 (4.9)	59.7 (6.4)	2.6 (1.7)	56 (92)	233.0 (318.0)	97.8 (0.3)
11	11.8 (1.4)	49.0 (11.1)	4.8 (2.5)	68 (100)	36.0 (81.0)	96.2 (0.7)
12	11.9 (4.1)	58.4 (7.5)	2.7 (1.7)	271 (95)	292.0 (388.0)	98.0 (0.3)
13	15.8 (4.5)	57.1 (7.4)	3.8 (1.9)	87 (39)	278.0 (352.0)	98.3 (0.2)
14	13.8 (1.5)	43.7 (7.0)	3.4 (1.5)	188 (74)	33.0 (42.0)	97.9 (0.2)
15	10.5 (2.0)	48.5 (8.9)	4.3 (2.3)	358 (163)	71.0 (107.0)	98.2 (0.1)
16	14.4 (4.1)	52.3 (8.8)	3.5 (1.4)	234 (51)	288.0 (397.0)	97.9 (0.2)
17	17.8 (3.7)	58.3 (13.4)	5.2 (2.8)	218 (71)	252.0 (376.0)	97.0 (0.2)
18	12.7 (2.5)	58.0 (8.1)	3.0 (1.9)	287 (102)	222.0 (308.0)	96.9 (0.2)
19	11.6 (3.3)	57.3 (10.6)	1.9 (0.9)	189 (83)	148.0 (203.0)	97.2 (0.1)
20	12.4 (2.0)	62.4 (6.6)	2.3 (1.3)	243 (77)	85.0 (101.0)	97.1 (0.1)
21	13.5 (3.2)	58.0 (11.2)	2.6 (1.9)	243 (73)	293.0 (397.0)	97.1 (0.1)
22	15.3 (5.0)	55.1 (12.5)	1.9 (1.2)	278 (92)	284.0 (360.0)	97.8 (0.2)
23	12.2 (1.6)	60.9 (7.9)	1.2 (1.0)	300 (110)	55.0 (83.0)	98.4 (0.1)
24	15.6 (4.1)	56.3 (9.3)	3.0 (1.8)	16 (122)	298.0 (361.0)	98.7 (0.1)
25	19.5 (5.7)	53.5 (9.8)	3.2 (1.5)	108 (51)	256.0 (308.0)	98.3 (0.3)
26	22.7 (2.4)	60.4 (8.4)	3.8 (1.5)	176 (25)	184.0 (246.0)	97.8 (0.1)
27	16.3 (3.6)	54.7 (11.4)	3.4 (1.3)	315 (114)	170.0 (271.0)	98.4 (0.4)
28	14.0 (4.6)	51.9 (14.4)	4.2 (2.2)	13 (127)	311.0 (403.0)	99.2 (0.1)
29	18.6 (6.4)	44.0 (16.6)	1.2 (0.9)	45 (99)	277.0 (356.0)	98.8 (0.2)
30	22.5 (4.9)	52.1 (8.6)	4.1 (1.8)	142 (46)	216.0 (316.0)	97.9 (0.4)
31	22.9 (2.3)	56.6 (11.6)	5.5 (1.9)	210 (16)	283.0 (382.0)	97.7 (0.1)
Avg	15.6	55.3	3.5	202.0	189.0	97.8
n	31	31	31	31	31	26
SD	3.6	6.2	1.27	94	96	0.7
Min	10.5	40.2	1.2	13.0	32.0	96.2
Max	22.9	66.2	6.13	358	311	99.2

ED_004549_00015928-00064

Table E1. Daily means (SD) of weather parameters at Site IN3B for June, 2008

Day	Temperature, °C	RH, %	Wind speed, m·s^{-1}	Wind direction, °	Solar, W·m^2	Atm P, kPa
1	23.1 (4.4)	56.9 (11.4)	1.6 (1.1)	281 (104)	298.0 (383.0)	98.0 (0.1)
2	24.2 (5.1)	57.6 (11.2)	1.9 (1.1)	117 (61)	263.0 (338.0)	98.1 (0.2)
3	22.8 (1.7)	60.8 (10.8)	2.9 (1.5)	143 (67)	90.0 (173.0)	97.3 (0.3)
4	23.7 (3.3)	56.1 (11.6)	3.2 (1.3)	144 (52)	213.0 (308.0)	97.1 (0.2)
5	27.6 (2.6)	65.5 (3.5)	4.8 (1.6)	158 (21)	217.0 (299.0)	97.7 (0.2)
6	26.8 (3.2)	69.2 (7.7)	5.6 (1.7)	158 (22)	227.0 (298.0)	98.0 (0.1)
7	23.9 (2.4)	77.3 (6.5)	4.4 (1.1)	139 (25)	48.0 (109.0)	98.2 (0.1)
8	28.5 (3.1)	70.3 (10.2)	4.7 (1.6)	168 (13)	278.0 (374.0)	98.0 (0.2)
9	26.0 (2.7)	71.9 (7.4)	3.5 (1.8)	182 (46)	241.0 (340.0)	
10	22.4 (3.4)	62.0 (10.7)	3.2 (2.0)	193 (38)	285.0 (400.0)	
11	25.4 (3.9)	57.9 (15.7)	2.9 (1.2)	109 (42)	299.0 (391.0)	98.4 (0.1)
12	27.3 (4.4)	61.5 (7.5)	3.9 (0.8)	111 (25)	228.0 (298.0)	98.3 (0.1)
13	23.3 (1.9)	79.0 (3.0)	3.3 (1.1)	146 (46)	64.0 (107.0)	98.2 (0.1)
14	24.4 (4.1)	51.2 (12.5)	1.8 (0.6)	191 (41)	311.0 (402.0)	98.2 (0.1)
15	23.2 (4.4)	52.1 (12.0)	3.2 (1.5)	160 (64)	271.0 (361.0)	97.9 (0.2)
16	20.9 (3.6)	52.2 (11.2)	3.1 (2.4)	238 (56)	263.0 (359.0)	97.9 (0.2)
17	18.6 (3.9)	55.8 (11.1)	3.3 (2.3)	226 (32)	300.0 (398.0)	98.2 (0.1)
18	19.8 (4.7)	58.6 (14.5)	2.6 (1.3)	252 (86)	280.0 (381.0)	97.9 (0.0)
19	21.7 (6.1)	52.1 (13.0)	1.2 (1.0)	50 (114)	293.0 (389.0)	98.0 (0.1)
20	24.3 (5.2)	50.4 (15.4)	1.5 (0.8)	124 (79)	295.0 (378.0)	98.2 (0.1)
21	22.7 (2.7)	65.9 (8.9)	3.5 (1.7)	200 (31)	187.0 (266.0)	98.2 (0.1)
22	21.2 (3.7)	62.7 (12.8)	2.6 (1.6)	174 (52)	245.0 (329.0)	97.9 (0.1)
23	20.6 (4.1)	60.5 (11.6)	2.1 (1.3)	245 (60)	264.0 (369.0)	98.3 (0.2)
24	22.1 (5.9)	55.6 (14.3)	1.1 (0.8)	192 (72)	292.0 (374.0)	98.8 (0.1)
25	24.3 (3.3)	67.3 (10.4)	2.9 (1.6)	152 (61)	139.0 (221.0)	98.4 (0.3)
26	24.6 (3.2)	63.5 (18.4)	1.9 (1.1)	179 (65)	176.0 (274.0)	98.0 (0.2)
27	24.1 (3.3)	65.1 (10.2)	2.7 (1.3)	160 (23)	166.0 (222.0)	97.7 (0.1)
28						
29						
30	20.3 (4.6)	54.6 (11.4)	2.6 (1.5)	261 (62)	248.0 (342.0)	98.1 (0.2)
Avg	23.5	61.2	2.9	172.0	232.0	98.0
n	28	28	28	28	28	26
SD	2.4	7.5	1.08	51	72	0.3
Min	18.6	50.4	1.1	50.0	48.0	97.1
Max	28.5	79	5.6	281	311	98.8

ED_004549_00015928-00065

Table E1. Daily means (SD) of weather parameters at Site IN3B for July, 2008

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^2$	Atm P, kPa
1	21.6 (6.2)	55.8 (16.1)	1.9 (1.0)	175 (43)	305.0 (397.0)	98.3 (0.1)
2	25.1 (4.2)	64.8 (7.6)	4.7 (1.8)	167 (17)	290.0 (354.0)	97.9 (0.2)
3	22.0 (2.6)	57.7 (13.8)	2.5 (1.3)	303 (111)	133.0 (222.0)	98.1 (0.2)
4	20.1 (2.8)	66.1 (8.9)	2.5 (1.5)	22 (136)	224.0 (309.0)	98.4 (0.1)
5	21.6 (3.7)	65.9 (8.8)	1.9 (1.1)	10 (152)	242.0 (350.0)	98.3 (0.1)
6	24.4 (5.6)	61.9 (10.2)	1.6 (0.8)	95 (74)	272.0 (365.0)	98.2 (0.1)
7	23.9 (2.7)	70.2 (16.4)	3.1 (1.3)	136 (44)	152.0 (259.0)	98.1 (0.1)
8	25.7 (2.7)	75.3 (7.1)	3.6 (1.3)	184 (24)	172.0 (267.0)	97.8 (0.1)
9	24.2 (3.1)	61.0 (12.4)	2.6 (1.2)	226 (61)	274.0 (386.0)	98.2 (0.2)
10	24.3 (4.7)	66.5 (13.1)	2.1 (1.4)	160 (39)	290.0 (377.0)	98.5 (0.1)
11	25.5 (4.3)	73.9 (8.9)	2.3 (1.1)	154 (59)	260.0 (351.0)	98.3 (0.1)
12	25.4 (2.8)	73.2 (10.0)	3.2 (1.3)	179 (48)	193.0 (328.0)	98.1 (0.2)
13	22.1 (3.1)	68.0 (13.6)	4.1 (1.9)	223 (17)	307.0 (396.0)	97.9 (0.1)
14	22.7 (4.4)	67.3 (14.9)	2.6 (1.4)	204 (49)	295.0 (388.0)	98.1 (0.2)
15	26.0 (5.0)	66.8 (14.2)	1.8 (0.8)	155 (43)	296.0 (388.0)	98.5 (0.1)
16	26.9 (3.7)	72.5 (10.9)	2.1 (0.9)	167 (23)	258.0 (349.0)	98.8 (0.1)
17	27.0 (4.0)	70.4 (13.2)	1.9 (0.8)	156 (48)	259.0 (339.0)	98.7 (0.1)
18	26.6 (4.0)	68.0 (12.7)	2.0 (1.0)	149 (36)	278.0 (372.0)	98.3 (0.1)
19	26.1 (2.2)	76.0 (5.7)	2.4 (0.9)	162 (26)	123.0 (171.0)	98.1 (0.1)
20	25.8 (2.3)	73.5 (6.6)	2.5 (1.2)	201 (38)	180.0 (264.0)	98.0 (0.1)
21	25.4 (3.2)	62.5 (9.6)	2.0 (1.5)	205 (78)	160.0 (254.0)	98.0 (0.1)
22	23.4 (4.4)	68.7 (10.4)	1.5 (1.0)	262 (89)	217.0 (312.0)	98.1 (0.1)
23	22.2 (5.4)	57.7 (12.4)	1.6 (1.0)	274 (68)	283.0 (383.0)	98.5 (0.1)
24	21.4 (5.1)	62.8 (16.7)	1.6 (1.0)	206 (37)	281.0 (368.0)	98.5 (0.1)
25	22.6 (5.3)	68.9 (9.7)	1.9 (1.0)	132 (43)	224.0 (339.0)	98.4 (0.1)
26	24.9 (3.7)	65.4 (9.7)	2.4 (1.5)	215 (29)	245.0 (351.0)	98.1 (0.1)
27	23.2 (4.8)	61.9 (13.7)	1.1 (0.8)	179 (52)	253.0 (339.0)	98.0 (0.1)
28	24.3 (4.0)	71.5 (7.9)	1.7 (1.0)	144 (78)	181.0 (258.0)	97.8 (0.1)
29	26.3 (5.5)	62.3 (10.3)	1.4 (1.4)	129 (78)	271.0 (365.0)	97.9 (0.1)
30	24.1 (2.5)	68.9 (8.4)	3.1 (1.7)	180 (46)	162.0 (213.0)	97.6 (0.1)
31						
Avg	24.2	66.8	2.3	177.0	236.0	98.2
n	30	30	30	30	30	30
SD	1.8	5.2	0.8	60	55	0.3
Min	20.1	55.8	1.1	10.0	123.0	97.6
Max	27	76	4.7	303	307	98.8

ED_004549_00015928-00066

Table E1. Daily means (SD) of weather parameters at Site IN3B for August, 2008

Day	Temperature, °C	RH, %	Wind speed, m·s^{-1}	Wind direction, °	Solar, W·m^2	Atm P, kPa
1						
2						
3						
4						
5						
6						
7	21.8 (4.0)	71.8 (15.2)	2.3 (1.4)	242 (50)	279.0 (371.0)	98.1 (0.0)
8	20.7 (5.1)	70.8 (17.5)	1.4 (1.1)	247 (59)	267.0 (366.0)	98.2 (0.1)
9	20.3 (4.0)	76.0 (12.5)	1.8 (1.5)	184 (59)	178.0 (248.0)	98.0 (0.1)
10	19.6 (3.9)	70.4 (16.1)	1.6 (1.1)	295 (87)	279.0 (373.0)	98.2 (0.1)
11	20.1 (5.9)	72.3 (18.0)	1.1 (0.9)	292 (97)	262.0 (361.0)	98.3 (0.1)
12	21.4 (5.3)	71.3 (18.6)	0.8 (0.8)	38 (102)	212.0 (280.0)	97.9 (0.2)
13	22.8 (4.7)	70.4 (18.1)	0.9 (0.9)	318 (122)	241.0 (339.0)	97.7 (0.0)
14	21.9 (3.6)	76.2 (11.0)	1.0 (0.7)	331 (121)	144.0 (225.0)	97.9 (0.2)
15	20.6 (5.0)	71.3 (17.6)	1.6 (1.3)	317 (120)	278.0 (367.0)	98.6 (0.2)
16	21.0 (5.4)	71.0 (18.0)	1.2 (1.0)	227 (46)	286.0 (371.0)	98.7 (0.1)
17	20.0 (4.5)	75.1 (15.2)	1.6 (1.1)	190 (40)	269.0 (366.0)	98.5 (0.1)
18	22.7 (4.4)	70.6 (12.8)	1.9 (1.2)	194 (22)	260.0 (354.0)	98.3 (0.0)
19	24.3 (5.5)	69.7 (17.1)	1.2 (1.0)	358 (127)	254.0 (344.0)	
20	22.0 (4.3)	74.6 (10.9)	3.0 (0.9)	17 (83)	245.0 (326.0)	
21	23.4 (5.0)	71.1 (9.6)	2.2 (0.9)	57 (59)	165.0 (212.0)	
22	24.7 (2.3)	81.5 (5.9)	1.6 (1.1)	101 (52)	88.0 (149.0)	
23	27.3 (4.1)	72.6 (14.7)	1.5 (0.9)	151 (53)	248.0 (330.0)	
24			1.3 (1.0)	262 (62)	268.0 (348.0)	
25			2.6 (1.8)	354 (153)	235.0 (325.0)	
26			3.5 (1.6)	12 (128)	289.0 (370.0)	
27	23.2 (6.3)	69.9 (15.8)	1.5 (0.9)	356 (154)	228.0 (307.0)	
28	22.8 (4.5)	77.4 (12.4)	1.5 (0.9)	90 (65)	159.0 (223.0)	
29	25.7 (4.7)	66.8 (14.7)	1.5 (0.9)	275 (80)	225.0 (307.0)	
30	23.0 (6.9)	63.7 (22.7)	0.9 (0.9)	329 (126)	285.0 (355.0)	
31	22.7 (6.5)	62.2 (21.9)	1.8 (1.2)	41 (83)	283.0 (351.0)	
Avg	22.4	71.7	1.7	321.0	237.0	98.2
n	22	22	25	25	25	12
SD	1.9	4.2	0.64	115	51	0.3
Min	19.6	62.2	0.8	12.0	88.0	97.7
Max	27.3	81.5	3.49	358	289	98.7

ED_004549_00015928-00067

Table E1. Daily means (SD) of weather parameters at Site IN3B for September, 2008

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^2$	Atm P, kPa
1	23.5 (6.5)	56.8 (19.3)	1.6 (1.0)	47 (49)	293.0 (356.0)	
2	25.2 (7.9)	67.1 (18.1)	1.1 (0.7)	40 (95)	254.0 (331.0)	
3	25.3 (5.3)	74.1 (16.4)	1.4 (1.4)	241 (88)	208.0 (302.0)	
4	21.7 (2.1)	85.5 (6.0)	3.1 (1.5)	50 (109)	49.0 (76.0)	97.6 (0.3)
5	19.6 (2.0)	84.2 (8.5)	2.6 (1.4)	239 (36)	82.0 (160.0)	97.8 (0.3)
6	19.5 (4.3)	69.9 (18.6)	1.3 (1.2)	243 (56)	260.0 (338.0)	98.2 (0.1)
7	18.9 (3.2)	71.4 (16.9)	1.6 (1.3)	213 (53)	217.0 (328.0)	98.5 (0.1)
8	19.5 (4.3)	72.5 (14.7)	1.5 (1.0)	127 (95)	160.0 (255.0)	98.6 (0.2)
9	17.4 (3.9)	68.0 (19.6)	1.3 (1.0)	307 (73)	197.0 (316.0)	98.7 (0.2)
10	16.3 (5.4)	65.0 (19.7)	2.1 (1.3)	32 (91)	262.0 (335.0)	98.9 (0.1)
11	20.2 (5.8)	70.4 (12.3)	2.3 (0.8)	89 (44)	162.0 (271.0)	98.7 (0.2)
12	22.2 (1.0)	89.2 (2.0)	1.9 (1.0)	158 (46)	45.0 (68.0)	98.3 (0.1)
13	26.4 (3.1)	74.0 (13.5)	4.0 (1.7)	150 (35)	159.0 (243.0)	97.6 (0.2)
14	21.2 (4.0)	83.2 (5.3)	4.4 (2.2)	172 (65)	20.0 (37.0)	96.9 (0.6)
15	17.5 (2.7)	78.3 (12.6)	2.2 (1.3)	253 (44)	128.0 (250.0)	98.5 (0.3)
16	17.6 (4.0)	69.2 (18.7)	1.0 (0.9)	240 (74)	229.0 (311.0)	98.9 (0.1)
17	18.9 (5.8)	67.8 (16.0)	1.6 (1.1)	181 (37)	249.0 (319.0)	98.9 (0.1)
18	19.0 (4.5)	66.8 (15.4)	2.7 (1.4)	10 (145)	245.0 (313.0)	99.1 (0.1)
19	19.7 (6.5)	62.4 (17.8)	1.6 (1.0)	54 (63)	202.0 (277.0)	99.0 (0.2)
20	20.7 (6.1)	68.1 (17.0)	0.9 (0.7)	81 (104)	159.0 (225.0)	98.8 (0.1)
21	21.1 (5.1)	68.1 (16.1)	1.0 (1.0)	39 (109)	159.0 (239.0)	99.1 (0.1)
22	21.0 (5.2)	67.7 (18.2)	2.4 (0.9)	26 (94)	213.0 (293.0)	99.3 (0.1)
23	21.6 (5.9)	62.7 (18.7)	2.0 (0.8)	55 (38)	228.0 (300.0)	99.3 (0.2)
24	22.7 (6.6)	56.6 (19.3)	1.3 (0.7)	65 (86)	225.0 (299.0)	99.2 (0.1)
25	21.2 (5.7)	53.3 (17.7)	1.8 (0.9)	37 (107)	230.0 (300.0)	99.1 (0.1)
26	18.7 (5.8)	56.4 (23.3)	2.6 (1.4)	356 (166)	231.0 (306.0)	98.7 (0.2)
27	19.6 (6.2)	61.6 (20.8)	1.7 (1.3)	341 (135)	236.0 (308.0)	98.3 (0.1)
28	19.5 (6.8)	59.9 (15.5)	0.8 (0.8)	298 (110)	189.0 (261.0)	98.5 (0.1)
29	18.1 (4.4)	69.2 (8.9)	2.4 (2.1)	220 (95)	122.0 (182.0)	98.2 (0.2)
30	13.8 (2.3)	65.3 (9.1)	2.6 (1.4)	232 (23)	103.0 (173.0)	98.0 (0.1)
Avg	20.3	68.8	2.0	45.0	184.0	98.6
n	30	30	30	30	30	27
SD	2.7	8.6	0.84	104	69	0.6
Min	13.8	53.3	0.8	10.0	20.0	96.9
Max	26.4	89.2	4.4	356	293	99.3

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Table E1. Daily means (SD) of weather parameters at Site IN3B for October, 2008

Day	Temperature, °C	RH, %	Wind speed, m·s^{-1}	Wind direction, °	Solar, W·m^2	Atm P, kPa
1	11.5 (3.1)	70.0 (7.6)	2.3 (1.4)	239 (39)	121.0 (200.0)	97.9 (0.1)
2	12.1 (4.0)	59.8 (14.0)	3.1 (1.6)	209 (18)	221.0 (292.0)	98.0 (0.2)
3	13.4 (3.6)	65.0 (9.8)	2.2 (1.2)	3 (130)	154.0 (238.0)	98.2 (0.2)
4	11.8 (5.7)	56.7 (18.9)	1.5 (0.7)	345 (146)	218.0 (296.0)	98.9 (0.1)
5	13.8 (7.4)	53.4 (19.4)	1.8 (0.8)	27 (65)	192.0 (271.0)	99.0 (0.1)
6	17.0 (5.1)	52.0 (11.1)	3.6 (1.0)	34 (26)		99.0 (0.1)
7	16.7 (3.3)	66.3 (11.2)	4.0 (0.8)	76 (32)	65.0 (118.0)	98.5 (0.4)
8	15.5 (2.4)	76.0 (3.6)	3.1 (1.8)	173 (68)	67.0 (115.0)	97.8 (0.2)
9	15.3 (6.0)	59.0 (16.8)	1.3 (0.8)	208 (94)	208.0 (281.0)	98.4 (0.1)
10	16.3 (6.6)	51.3 (17.5)	2.2 (1.1)	42 (21)	205.0 (282.0)	98.8 (0.1)
11	20.7 (6.7)	57.9 (12.1)	1.4 (0.7)	79 (48)	178.0 (256.0)	99.1 (0.1)
12	22.3 (5.6)	50.6 (13.9)	2.1 (0.8)	81 (23)	199.0 (276.0)	99.3 (0.1)
13	22.2 (4.0)	55.0 (8.2)	2.5 (1.0)	133 (35)	159.0 (263.0)	99.2 (0.1)
14	19.2 (2.5)	68.9 (8.6)	1.6 (1.1)	236 (98)	63.0 (114.0)	98.9 (0.1)
15	19.3 (4.0)	72.8 (5.9)	2.8 (1.8)	169 (77)	55.0 (125.0)	98.4 (0.2)
16	13.1 (2.1)	65.0 (11.5)	2.0 (0.9)	293 (67)	105.0 (183.0)	98.8 (0.2)
17	11.8 (2.8)	62.3 (13.6)	1.2 (1.0)	323 (130)	132.0 (236.0)	98.9 (0.1)
18	11.1 (3.8)	63.9 (15.1)	0.8 (0.7)	355 (138)	107.0 (211.0)	99.2 (0.1)
19	10.4 (4.6)	56.8 (15.2)	1.9 (0.7)	96 (27)	170.0 (247.0)	99.2 (0.2)
20	12.7 (4.8)	60.4 (12.0)	2.7 (1.3)	172 (72)	149.0 (240.0)	98.8 (0.1)
21	9.1 (4.0)	61.4 (14.8)	1.5 (1.1)	326 (122)	164.0 (249.0)	99.3 (0.1)
22	6.2 (4.5)	57.9 (16.5)	3.9 (2.0)	30 (40)	179.0 (257.0)	99.5 (0.1)
23	10.6 (6.0)	52.0 (12.7)	4.1 (1.0)	49 (15)	152.0 (239.0)	99.1 (0.2)
24	10.7 (1.6)	68.6 (6.8)	2.8 (1.2)	105 (46)	15.0 (44.0)	98.2 (0.3)
25	7.4 (1.5)	68.8 (1.1)	3.7 (1.0)	176 (14)	29.0 (59.0)	97.8 (0.1)
26	9.6 (3.5)	58.2 (13.2)	6.4 (2.1)	210 (30)	133.0 (234.0)	97.7 (0.3)
27	4.2 (1.8)	67.1 (5.0)	5.7 (1.6)	259 (20)	44.0 (93.0)	98.7 (0.3)
28	3.3 (2.5)	61.2 (9.7)	4.3 (1.5)	251 (20)	122.0 (201.0)	99.1 (0.2)
29	5.0 (4.1)	55.8 (13.3)	3.5 (2.0)	255 (77)	162.0 (241.0)	98.7 (0.2)
30	7.8 (6.7)	53.0 (13.7)	2.3 (1.2)	104 (28)	159.0 (236.0)	99.4 (0.1)
31	15.1 (4.8)	54.2 (6.1)	3.3 (0.9)	165 (14)	152.0 (225.0)	99.4 (0.1)
Avg	12.7	60.7	2.8	120.0	136.0	98.7
n	31	31	31	31	30	31
SD	5	6.7	1.27	102	57	0.5
Min	3.3	50.6	0.8	3.0	15.0	97.7
Max	22.3	76	6.42	355	221	99.5

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Table E1. Daily means (SD) of weather parameters at Site IN3B for November, 2008

Day	Temperature, °C	RH, %	Wind speed, m·s^{-1}	Wind direction, °	Solar, W·m^2	Atm P, kPa
1	15.3 (4.1)	61.7 (6.4)	2.0 (0.8)	199 (94)	132.0 (208.0)	99.2 (0.1)
2	15.7 (4.5)	58.7 (9.0)	3.2 (0.9)	101 (51)	104.0 (183.0)	99.0 (0.2)
3	17.6 (3.4)	50.8 (9.7)	2.8 (1.0)	158 (23)	133.0 (214.0)	98.9 (0.1)
4	15.7 (4.7)	52.8 (11.4)	2.3 (0.9)	126 (38)	142.0 (213.0)	98.8 (0.2)
5	16.2 (4.9)	53.1 (10.2)	2.7 (1.2)	103 (25)	148.0 (221.0)	98.3 (0.2)
6	15.9 (4.0)	58.1 (6.3)	3.9 (1.6)	113 (31)	87.0 (159.0)	97.9 (0.2)
7	10.5 (3.1)	60.4 (5.3)	4.1 (1.9)	184 (24)	140.0 (223.0)	97.4 (0.2)
8	4.0 (1.2)	66.1 (2.2)	5.9 (1.2)	215 (16)	24.0 (77.0)	97.2 (0.2)
9	1.3 (0.7)	64.6 (2.1)	5.4 (0.8)	230 (13)	7.0 (27.0)	97.9 (0.3)
10	-0.1 (2.1)	64.1 (5.5)	2.7 (1.6)	229 (64)	113.0 (206.0)	98.9 (0.2)
11	1.1 (3.4)	65.9 (2.0)	3.1 (1.4)	68 (21)	16.0 (43.0)	99.1 (0.2)
12	7.9 (2.5)	61.9 (3.4)	3.5 (0.7)	97 (27)	9.0 (35.0)	98.2 (0.3)
13	10.6 (1.2)	64.4 (4.0)	4.7 (1.4)	174 (20)	51.0 (99.0)	97.4 (0.2)
14			3.4 (1.3)	192 (53)	7.0 (100.0)	97.1 (0.1)
15			4.0 (2.1)	273 (38)	10.0 (28.0)	97.5 (0.3)
16			4.8 (2.1)	223 (68)	47.0 (89.0)	98.1 (0.1)
17			4.8 (1.8)	286 (23)	18.0 (41.0)	98.8 (0.3)
18			2.6 (1.4)	257 (66)	91.0 (167.0)	99.6 (0.2)
19			4.0 (1.8)	174 (45)	85.0 (172.0)	98.4 (0.5)
20			5.9 (1.2)	286 (7)	30.0 (78.0)	98.7 (0.5)
21	-3.7 (2.1)	58.8 (10.3)	4.0 (1.4)	265 (35)	103.0 (175.0)	99.7 (0.3)
22	-3.7 (2.8)	63.5 (8.7)	2.0 (0.8)	127 (36)	26.0 (66.0)	99.8 (0.2)
23	0.2 (4.6)	60.3 (12.9)	2.7 (0.9)	128 (30)	104.0 (176.0)	99.1 (0.3)
24	2.9 (1.0)	83.6 (11.0)	4.3 (1.5)	206 (58)	0.0 (22.0)	97.8 (0.2)
25			4.6 (1.6)	270 (27)	95.0 (176.0)	98.2 (0.2)
26	1.3 (3.0)	71.6 (12.5)	1.9 (0.9)	189 (34)	114.0 (190.0)	98.3 (0.1)
27						
28				7 (5)	265.0 (18.0)	98.2 (0.1)
29				1 (3)	144.0 (67.0)	97.8 (0.4)
30			3.9 (1.5)	74 (76)	7.0 (33.0)	95.9 (0.4)
Avg	7.2	62.2	3.7	186.0	78.0	98.3
n	18	18	27	29	29	29
SD	7.4	7.2	1.13	78	62	0.9
Min	-3.7	50.8	1.9	1.0	0.0	95.9
Max	17.6	83.6	5.89	286	265	99.8

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Table E1. Daily means (SD) of weather parameters at Site IN3B for December, 2008

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^2$	Atm P, kPa
1			-7.2 (12.0)	323 (112)	184.0 (144.0)	96.8 (0.7)
2			4.4 (1.2)	179 (35)	84.0 (153.0)	98.3 (0.1)
3			4.1 (1.2)	177 (41)	24.0 (62.0)	97.9 (0.2)
4	-4.5 (2.0)	77.0 (7.1)	5.2 (1.2)	260 (20)	106.0 (188.0)	99.1 (0.4)
5	-8.6 (1.3)	72.8 (5.9)	4.1 (1.1)	209 (33)	68.0 (144.0)	99.2 (0.4)
6	-3.3 (1.7)	78.7 (5.9)	6.4 (1.5)	211 (48)	3.0 (24.0)	97.7 (0.4)
7	-7.4 (2.8)	67.2 (5.5)	3.3 (1.4)	199 (74)	93.0 (169.0)	98.8 (0.2)
8	0.7 (3.4)	66.0 (5.7)	3.8 (0.7)	110 (19)	22.0 (49.0)	98.1 (0.3)
9	7.2 (2.3)	82.2 (12.4)	4.4 (1.6)	169 (55)	-4.0 (10.0)	97.4 (0.2)
10	0.1 (1.3)	79.4 (6.8)	3.2 (1.2)	332 (90)		98.5 (0.3)
11	-1.8 (2.2)	82.7 (4.2)	2.0 (1.0)	304 (106)	44.0 (91.0)	98.2 (0.3)
12	-5.5 (2.0)	77.4 (4.5)	4.2 (1.9)	240 (45)	51.0 (118.0)	98.5 (0.3)
13	-0.5 (4.6)	67.7 (10.5)	5.3 (1.5)	136 (12)	11.0 (33.0)	98.5 (0.3)
14	7.2 (2.9)	73.3 (8.0)	5.8 (0.9)	153 (9)	1.0 (19.0)	97.7 (0.2)
15	-5.2 (7.7)	83.2 (3.9)	5.8 (1.4)	253 (32)	17.0 (52.0)	99.1 (0.9)
16	-7.4 (2.3)	85.3 (2.9)	4.2 (2.2)	7 (136)	5.0 (27.0)	99.4 (0.7)
17	-5.4 (1.3)	87.7 (1.8)		241 (35)	25.0 (63.0)	98.8 (0.4)
18	-4.5 (1.8)	87.4 (1.3)	1.6 (1.0)	16 (133)	27.0 (66.0)	99.1 (0.2)
19	1.2 (2.2)	92.3 (3.0)		281 (96)	7.0 (36.0)	97.6 (0.6)
20	-2.2 (0.7)	86.7 (2.2)	4.5 (2.1)	21 (121)	5.0 (28.0)	97.9 (0.4)
21	-14.2 (4.2)	74.8 (7.1)	9.3 (1.1)	220 (12)	67.0 (134.0)	98.3 (0.5)
22	-12.8 (3.3)	74.5 (5.6)	4.4 (2.2)	190 (30)	97.0 (176.0)	
23	-3.3 (3.5)	79.6 (10.0)	3.4 (2.3)	120 (18)	1.0 (23.0)	
24	1.7 (4.7)	89.0 (8.9)	6.0 (2.6)	177 (48)	5.0 (46.0)	97.8 (0.6)
25	-5.7 (3.5)	71.9 (6.6)	3.2 (1.7)	141 (82)	96.0 (174.0)	99.4 (0.2)
26	4.6 (4.6)	86.7 (10.2)	4.6 (1.2)	106 (21)	-2.0 (16.0)	98.3 (0.3)
27	15.7 (2.5)	90.3 (6.5)	5.2 (1.2)	134 (25)	13.0 (49.0)	97.5 (0.4)
28	2.2 (3.2)	77.2 (9.1)	6.3 (3.0)	187 (16)	65.0 (142.0)	98.3 (0.6)
29	4.0 (2.9)	71.1 (10.6)	5.2 (1.5)	192 (27)	106.0 (176.0)	98.4 (0.2)
30	3.9 (3.9)	75.6 (10.0)	4.4 (2.8)	153 (68)	103.0 (175.0)	97.8 (0.7)
31	-4.0 (2.5)	74.2 (8.1)	4.9 (3.1)	273 (84)	85.0 (164.0)	99.0 (0.6)
Avg	-1.7	79.0	4.2	196.0	47.0	98.3
n	28	28	29	31	30	29
SD	6.2	7.2	2.58	81	46	0.6
Min	-14.2	66.0	-7.2	7.0	-4.0	96.8
Max	15.7	92.3	9.3	332	184	99.4

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Table E1. Daily means (SD) of weather parameters at Site IN3B for January, 2009

Day	Temperature, °C	RH, %	Wind speed, m·s^{-1}	Wind direction, °	Solar, W·m^2	Atm P, kPa
1	-2.4 (3.5)	65.2 (12.0)	4.4 (1.3)	110 (35)	46.0 (98.0)	98.4 (0.6)
2	0.5 (1.9)	68.8 (7.7)	3.7 (1.5)	217 (58)	41.0 (83.0)	97.8 (0.2)
3	0.3 (3.5)	71.0 (6.9)	5.6 (2.0)	42 (43)	55.0 (114.0)	98.1 (0.2)
4	2.5 (3.4)	90.2 (5.6)	5.6 (1.4)	219 (80)	-1.0 (17.0)	98.2 (0.5)
5	-3.2 (2.5)	67.4 (9.0)	2.5 (1.5)	271 (99)	89.0 (160.0)	98.7 (0.4)
6	-1.0 (1.2)	85.0 (7.9)	3.4 (1.7)	44 (47)	2.0 (21.0)	97.0 (0.5)
7	-2.1 (1.8)	90.8 (3.8)	5.2 (1.7)	206 (14)	18.0 (68.0)	96.0 (0.3)
8	-7.7 (1.7)	83.7 (1.4)	4.9 (1.7)	217 (21)	34.0 (73.0)	97.5 (0.5)
9	-2.1 (3.9)	80.4 (8.4)	3.6 (1.7)	88 (46)	64.0 (142.0)	98.2 (0.1)
10	-2.0 (1.1)	88.9 (3.0)	3.9 (2.1)	333 (142)	-5.0 (13.0)	98.0 (0.2)
11	-3.5 (0.9)	86.6 (2.9)	3.0 (0.9)	207 (24)	22.0 (55.0)	98.5 (0.1)
12	-2.0 (2.3)	84.2 (2.8)	3.1 (1.1)	168 (59)	28.0 (66.0)	98.4 (0.3)
13	-6.4 (5.3)	83.1 (6.2)	5.8 (2.4)	226 (25)	51.0 (115.0)	98.3 (0.5)
14	-10.4 (3.0)	83.1 (1.8)	3.5 (1.4)	68 (98)	25.0 (58.0)	98.3 (0.5)
15	-19.6 (2.8)	74.7 (6.9)	5.5 (1.0)	221 (9)	126.0 (207.0)	99.9 (0.6)
16	-19.4 (4.8)	65.1 (10.0)	2.5 (0.8)	161 (49)	121.0 (201.0)	100.3 (0.4)
17	-6.2 (5.4)	65.9 (12.3)	5.8 (1.4)	157 (35)	71.0 (156.0)	98.1 (0.8)
18	-6.8 (1.6)	80.2 (7.0)	4.0 (2.0)	232 (20)	104.0 (183.0)	97.4 (0.1)
19	-9.1 (2.5)	82.4 (4.5)	2.7 (1.0)	228 (16)	95.0 (172.0)	97.5 (0.1)
20	-9.6 (3.2)	77.2 (10.8)	2.0 (0.9)	239 (22)	124.0 (205.0)	98.2 (0.3)
21	-5.9 (4.9)	74.2 (9.8)	3.4 (1.1)	175 (12)	103.0 (181.0)	98.2 (0.2)
22	1.1 (3.7)	72.4 (7.3)	2.9 (1.1)	163 (28)	128.0 (205.0)	97.9 (0.1)
23	2.0 (2.8)	75.8 (3.9)	5.7 (1.4)	216 (40)	101.0 (177.0)	97.9 (0.5)
24	-7.9 (2.9)	70.3 (5.4)	3.8 (1.5)	256 (10)	116.0 (201.0)	99.4 (0.2)
25	-11.5 (2.0)	74.7 (3.0)	2.4 (0.8)	225 (20)	59.0 (118.0)	99.4 (0.0)
26	-7.7 (2.1)	64.5 (8.6)	1.2 (0.6)	307 (109)	55.0 (96.0)	99.5 (0.1)
27	-6.9 (0.7)	76.8 (7.5)	3.6 (1.0)	3 (164)	17.0 (42.0)	99.1 (0.5)
28	-7.1 (2.5)	79.7 (7.0)	3.3 (1.5)	240 (61)	119.0 (210.0)	97.9 (0.2)
29	-4.5 (2.4)	82.1 (3.6)	6.3 (1.3)	189 (18)	63.0 (114.0)	98.0 (0.1)
30	-8.9 (2.7)	74.5 (7.3)	4.7 (1.6)	217 (11)	149.0 (236.0)	98.3 (0.2)
31	-5.6 (7.7)	74.6 (7.1)	5.0 (2.5)	159 (16)	126.0 (210.0)	98.0 (0.5)
Avg	-5.6	77.2	4.0	207.0	69.0	98.3
n	31	31	31	31	31	31
SD	5.2	7.6	1.29	75	44	0.8
Min	-19.6	64.5	1.2	3.0	-5.0	96.0
Max	2.5	90.8	6.32	333	149	100.3

ED_004549_00015928-00072

Table E1. Daily means (SD) of weather parameters at Site IN3B for February, 2009

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^2$	Atm P, kPa
1	3.8 (2.0)	72.3 (6.0)	4.0 (1.8)	211 (20)	114.0 (193.0)	97.8 (0.3)
2	-2.4 (2.2)	74.2 (6.7)	3.7 (1.5)	210 (19)	114.0 (183.0)	98.3 (0.0)
3	-8.8 (0.9)	79.5 (7.2)	4.6 (2.8)	246 (49)	111.0 (205.0)	98.3 (0.3)
4	-11.4 (2.5)	76.6 (8.0)	3.9 (1.1)	231 (16)	135.0 (219.0)	99.5 (0.3)
5	-9.9 (5.4)	64.7 (11.6)	3.2 (1.7)	130 (28)	157.0 (235.0)	99.4 (0.4)
6						
7	11.2 (2.0)	81.3 (4.7)	6.1 (1.2)	173 (11)	93.0 (155.0)	98.1 (0.2)
8	4.1 (3.1)	80.4 (9.2)	2.0 (1.3)	285 (107)	101.0 (163.0)	99.1 (0.3)
9	6.1 (5.1)	84.5 (4.7)	4.1 (1.2)	75 (20)	58.0 (117.0)	98.6 (0.5)
10	13.5 (1.9)	81.5 (4.7)	4.7 (1.1)	146 (19)	77.0 (141.0)	97.6 (0.1)
11	10.8 (3.8)	94.2 (2.7)	5.6 (3.0)	130 (61)	11.0 (66.0)	96.5 (0.7)
12	4.2 (2.6)	74.7 (9.8)	7.0 (2.0)	215 (17)	160.0 (247.0)	98.2 (0.3)
13	3.1 (2.9)	69.0 (10.8)	2.3 (0.9)	251 (90)	174.0 (251.0)	98.6 (0.2)
14	0.9 (1.2)	81.3 (4.5)	2.0 (1.3)	277 (61)	45.0 (106.0)	98.4 (0.3)
15	-0.4 (2.7)	73.1 (11.9)	1.4 (0.9)	259 (37)	111.0 (183.0)	99.0 (0.1)
16	-0.6 (3.2)	70.4 (13.8)	1.2 (0.7)	283 (97)	128.0 (212.0)	99.4 (0.1)
17	1.7 (3.5)	67.0 (8.3)	3.9 (1.4)	111 (18)	69.0 (134.0)	98.2 (0.7)
18	4.5 (2.3)	90.0 (5.5)	5.5 (1.8)	191 (46)	-1.0 (26.0)	
19	-6.0 (2.0)	70.3 (9.0)	7.5 (1.6)	248 (11)	144.0 (239.0)	
20	-4.5 (2.6)	65.3 (12.1)	2.9 (1.2)	202 (59)	128.0 (200.0)	
21	-2.2 (2.4)	79.6 (8.2)	6.5 (1.8)	159 (57)	23.0 (64.0)	
22	-5.5 (1.9)	78.8 (5.1)	5.6 (1.4)	235 (14)	103.0 (206.0)	
23	-4.7 (4.4)	72.8 (10.3)	1.7 (0.7)	229 (95)	159.0 (267.0)	
24	-0.2 (4.0)	68.6 (10.2)	3.6 (1.1)	83 (15)	163.0 (241.0)	
25	7.3 (5.2)	63.8 (11.3)	3.9 (0.9)	135 (27)	124.0 (218.0)	98.4 (0.2)
26	9.5 (2.6)	91.8 (5.1)	4.5 (2.4)	111 (32)	11.0 (40.0)	97.9 (0.7)
27	1.8 (5.2)	87.6 (6.5)	5.2 (2.3)	261 (61)	20.0 (49.0)	97.9 (0.9)
28	-2.4 (1.2)	76.5 (5.1)	5.3 (2.0)	349 (159)	74.0 (141.0)	99.0 (0.1)
Avg	0.9	76.7	4.1	205.0	96.0	98.4
n	27	27	27	27	27	20
SD	6.4	8.1	1.67	68	51	0.7
Min	-11.4	63.8	1.2	75.0	-1.0	96.5
Max	13.5	94.2	7.5	349	174	99.5

ED_004549_00015928-00073

Table E1. Daily means (SD) of weather parameters at Site IN3B for March, 2009

Day	Temperature, °C	RH, %	Wind speed, m·s^{-1}	Wind direction, °	Solar, W·m^2	Atm P, kPa
1	-3.2 (2.9)	68.0 (13.0)	3.4 (1.9)	312 (44)	158.0 (254.0)	99.2 (0.2)
2	-6.2 (2.9)	57.9 (11.0)	3.5 (1.3)	334 (109)	204.0 (289.0)	99.6 (0.1)
3	-4.3 (4.1)	58.7 (15.2)	1.8 (0.9)	58 (100)	197.0 (285.0)	99.7 (0.2)
4	2.6 (4.2)	50.0 (12.5)	3.0 (1.0)	95 (20)	187.0 (274.0)	99.1 (0.3)
5	12.5 (5.1)	55.9 (10.0)	6.2 (1.5)	136 (23)	131.0 (232.0)	98.0 (0.4)
6	16.9 (2.5)	74.6 (4.9)	4.2 (2.1)	174 (41)	63.0 (96.0)	97.8 (0.2)
7	17.0 (4.2)	76.9 (13.5)	3.8 (2.2)	155 (87)	73.0 (134.0)	97.8 (0.2)
8	12.3 (4.2)	86.9 (13.4)	6.2 (3.1)	118 (97)	75.0 (157.0)	97.3 (0.4)
9	6.6 (3.5)	78.5 (8.3)	3.9 (2.1)	7 (117)	94.0 (177.0)	98.6 (0.2)
10	14.1 (4.1)	90.4 (7.8)	4.2 (2.0)	135 (55)	41.0 (96.0)	97.5 (0.3)
11	0.5 (2.7)	72.8 (8.4)	7.5 (1.5)	237 (13)	172.0 (244.0)	99.2 (0.7)
12	-1.7 (3.9)	65.2 (12.1)	2.7 (1.4)	311 (101)	144.0 (198.0)	100.1 (0.1)
13	1.5 (6.4)	65.8 (18.5)	2.7 (1.4)	3 (162)	234.0 (308.0)	99.5 (0.2)
14	5.7 (6.9)	62.7 (20.2)	2.4 (1.0)	28 (90)	199.0 (271.0)	98.8 (0.2)
15	9.4 (7.6)	60.0 (20.3)	3.2 (1.5)	20 (84)	239.0 (314.0)	98.6 (0.1)
16	13.2 (6.9)	57.5 (13.1)	1.7 (1.1)	35 (100)	199.0 (288.0)	
17	15.7 (5.6)	60.5 (16.0)	3.7 (1.6)	159 (23)	238.0 (313.0)	
18	13.5 (3.1)	62.3 (7.7)	2.8 (1.6)	232 (60)	143.0 (226.0)	
19	7.4 (4.8)	51.9 (18.6)	2.3 (1.6)	277 (44)	256.0 (332.0)	99.2 (0.2)
20	2.2 (4.8)	60.3 (13.1)	2.3 (1.4)	3 (138)	243.0 (321.0)	99.6 (0.1)
21						
22						
23						
24	15.6 (5.4)	39.6 (7.6)	6.7 (1.1)	79 (17)	152.0 (246.0)	98.1 (0.4)
25	13.0 (3.5)	69.8 (15.6)	4.6 (2.2)	188 (46)	189.0 (286.0)	97.5 (0.1)
26	10.2 (4.6)	61.8 (15.6)	1.7 (1.1)	301 (107)	184.0 (294.0)	97.8 (0.1)
27	10.7 (6.0)	63.1 (15.8)	1.9 (1.2)	5 (141)	143.0 (199.0)	97.9 (0.1)
28	6.7 (4.5)	74.0 (9.0)	6.9 (3.0)	7 (153)	93.0 (160.0)	97.0 (0.7)
29	3.3 (1.6)	86.2 (4.9)	5.6 (2.2)	204 (49)	28.0 (60.0)	96.5 (0.7)
30	7.2 (5.7)	64.8 (18.4)	2.4 (1.1)	155 (83)	209.0 (313.0)	98.1 (0.2)
31	10.0 (2.1)	69.0 (9.9)	5.6 (1.3)	91 (46)	35.0 (61.0)	97.3 (0.4)
Avg	7.6	65.9	3.8	54.0	154.0	98.4
n	28	28	28	28	28	25
SD	6.6	11.2	1.69	106	67	0.9
Min	-6.2	39.6	1.7	3.0	28.0	96.5
Max	17	90.4	7.52	334	256	100.1

ED_004549_00015928-00074

Table E1. Daily means (SD) of weather parameters at Site IN3B for April, 2009

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^2$	Atm P, kPa
1	9.6 (3.9)	54.0 (14.9)	4.8 (2.8)	170 (28)	283.0 (355.0)	97.5 (0.2)
2	14.4 (4.4)	55.7 (17.4)	4.1 (1.9)	44 (108)	153.0 (253.0)	96.9 (0.7)
3	7.0 (2.0)	79.6 (11.0)	5.0 (3.2)	270 (38)	82.0 (127.0)	96.7 (0.7)
4	8.1 (5.6)	63.5 (17.9)	1.9 (1.0)	259 (104)	283.0 (354.0)	98.1 (0.2)
5	7.7 (1.4)	84.1 (10.0)	5.2 (1.9)	26 (116)	13.0 (34.0)	97.1 (0.5)
6	3.4 (2.6)	79.7 (13.2)	3.3 (1.4)	266 (31)	129.0 (198.0)	97.2 (0.3)
7	3.3 (2.8)	63.6 (13.5)	6.1 (2.2)	243 (22)	188.0 (278.0)	97.4 (0.1)
8	7.3 (4.3)	53.2 (12.4)	3.3 (1.5)	203 (25)	250.0 (339.0)	97.3 (0.1)
9	10.7 (5.0)	52.2 (17.4)	1.9 (1.0)	186 (75)	257.0 (350.0)	97.6 (0.1)
10	7.5 (1.0)	80.4 (8.2)	5.3 (1.9)	360 (158)	32.0 (52.0)	97.7 (0.2)
11	7.6 (4.9)	57.9 (18.4)	2.4 (1.2)	319 (60)	283.0 (362.0)	98.9 (0.3)
12	7.6 (5.1)	58.3 (14.8)	5.1 (3.0)	22 (98)	272.0 (350.0)	99.0 (0.3)
13	5.0 (1.3)	81.7 (14.0)	7.3 (2.0)	31 (14)	19.0 (43.0)	97.6 (0.4)
14	6.7 (0.9)	92.2 (2.1)	2.2 (1.2)	288 (100)	15.0 (36.0)	97.4 (0.3)
15	8.4 (3.0)	82.1 (8.2)	1.8 (1.1)	311 (103)	71.0 (104.0)	98.5 (0.3)
16	11.9 (5.1)	63.8 (18.7)	3.5 (1.5)	13 (128)	303.0 (378.0)	99.4 (0.1)
17	15.1 (7.3)	48.1 (19.8)	1.3 (0.8)	64 (86)	310.0 (384.0)	99.3 (0.2)
18	17.5 (7.0)	54.6 (16.1)	1.2 (0.8)	113 (76)	162.0 (226.0)	98.5 (0.3)
19	14.0 (2.0)	87.1 (6.8)	3.0 (1.8)	43 (89)	30.0 (55.0)	97.5 (0.4)
20	9.4 (2.3)	84.9 (12.5)	5.8 (2.1)	236 (38)	98.0 (226.0)	96.9 (0.2)
21	5.9 (1.0)	86.4 (4.0)	5.8 (1.5)	218 (22)	111.0 (197.0)	97.1 (0.3)
22	10.3 (5.5)	61.4 (18.4)	4.6 (2.8)	233 (60)	225.0 (343.0)	97.7 (0.2)
23	13.1 (6.7)	56.9 (17.3)	4.1 (2.4)	70 (44)	240.0 (304.0)	98.3 (0.2)
24	23.4 (5.0)	48.4 (12.9)	5.5 (1.7)	158 (27)	249.0 (329.0)	97.9 (0.1)
25	24.9 (3.9)	51.4 (7.4)	6.0 (1.7)	167 (15)	252.0 (334.0)	98.3 (0.1)
26	25.2 (4.4)	50.5 (11.1)	4.6 (2.0)	151 (22)	231.0 (301.0)	98.5 (0.1)
27	22.8 (3.8)	60.2 (17.9)	5.5 (2.1)	165 (27)	178.0 (254.0)	98.5 (0.1)
28	15.1 (2.3)	92.9 (3.9)	3.9 (2.4)	326 (127)	49.0 (81.0)	99.1 (0.2)
29	12.7 (2.6)	89.7 (4.5)	5.2 (1.0)	23 (37)	76.0 (120.0)	99.1 (0.2)
30	18.3 (2.6)	89.4 (6.4)	4.6 (2.0)	139 (61)	66.0 (120.0)	97.9 (0.3)
Avg	11.8	68.8	4.1	266.0	164.0	98.0
n	30	30	30	30	30	30
SD	6.1	15.3	1.58	104	100	0.8
Min	3.3	48.1	1.2	13.0	13.0	96.7
Max	25.2	92.9	7.33	360	310	99.4

ED_004549_00015928-00075

Table E1. Daily means (SD) of weather parameters at Site IN3B for May, 2009

Day	Temperature, °C	RH, %	Wind speed, m·s^{-1}	Wind direction, °	Solar, W·m^2	Atm P, kPa
1	14.8 (3.0)	88.6 (8.9)	3.5 (1.4)	230 (28)	71.0 (145.0)	98.1 (0.2)
2	14.1 (4.5)	65.4 (20.0)	2.5 (1.6)	199 (38)	245.0 (345.0)	98.1 (0.1)
3	17.3 (5.5)	52.8 (22.6)	0.8 (0.8)	178 (102)	250.0 (313.0)	98.0 (0.1)
4	17.0 (4.5)	52.3 (15.4)	2.4 (2.0)	358 (150)	224.0 (287.0)	98.2 (0.1)
5	17.1 (5.1)	57.2 (14.2)	2.6 (0.9)	48 (59)	233.0 (316.0)	98.1 (0.1)
6	15.0 (1.2)	77.6 (9.1)	2.8 (1.4)	72 (32)	56.0 (64.0)	97.6 (0.1)
7	17.6 (4.8)	78.7 (16.1)	3.2 (1.8)	157 (55)	182.0 (270.0)	97.5 (0.1)
8	18.7 (2.3)	82.7 (5.0)	1.9 (1.1)	166 (72)		97.3 (0.1)
9	15.8 (1.9)	72.2 (9.7)	5.1 (3.2)	232 (45)	111.0 (157.0)	97.7 (0.5)
10	14.6 (4.1)	64.3 (18.7)	2.4 (1.7)	222 (46)	241.0 (310.0)	98.6 (0.1)
11	14.3 (4.4)	54.2 (18.7)	1.9 (1.1)	303 (109)	304.0 (388.0)	98.7 (0.1)
12	15.3 (5.7)	48.7 (21.5)	2.4 (1.6)	65 (45)	284.0 (381.0)	98.8 (0.3)
13	16.5 (2.7)	79.1 (12.3)	5.4 (1.7)	106 (29)	20.0 (42.0)	97.8 (0.3)
14	18.6 (2.4)	69.4 (16.3)	4.7 (2.4)	211 (57)	294.0 (384.0)	98.2 (0.5)
15	18.6 (5.0)	76.0 (12.7)	2.5 (1.5)	52 (71)	114.0 (176.0)	98.4 (0.4)
16	16.5 (2.6)	79.4 (13.7)	5.1 (3.0)	230 (48)	162.0 (295.0)	98.2 (0.4)
17	12.4 (4.4)	51.4 (20.2)	2.1 (1.2)	313 (113)		99.2 (0.1)
18	14.2 (6.0)	48.8 (21.7)	2.1 (1.4)	94 (48)		99.3 (0.1)
19	18.7 (5.8)	44.7 (12.2)	2.8 (1.2)	136 (29)		99.2 (0.1)
20	22.7 (6.2)	40.2 (13.9)	2.7 (1.1)	126 (22)		98.9 (0.2)
21	23.9 (5.1)	49.3 (9.5)	3.1 (1.6)	169 (29)		98.7 (0.1)
22	25.2 (4.7)	54.1 (15.5)	2.1 (1.3)	108 (89)	206.0 (298.0)	98.6 (0.1)
23	24.2 (6.0)	54.9 (14.3)	2.0 (1.1)	79 (98)	222.0 (319.0)	98.4 (0.2)
24	25.0 (5.5)	60.9 (17.8)	2.3 (1.8)	357 (147)	248.0 (295.0)	98.1 (0.1)
25	19.7 (1.7)	54.7 (13.2)	7.3 (1.5)	25 (24)	100.0 (105.0)	98.1 (0.1)
26						
27	24.3 (2.8)	75.4 (9.8)	3.5 (1.4)	171 (38)	202.0 (310.0)	97.2 (0.1)
28	17.9 (1.6)	79.9 (7.2)	3.2 (1.7)	249 (39)	125.0 (191.0)	97.3 (0.1)
29	19.5 (5.4)	65.5 (18.3)	3.2 (1.9)	232 (75)	288.0 (375.0)	97.8 (0.1)
30	20.2 (5.6)	58.6 (24.2)	2.1 (1.2)	146 (55)	260.0 (324.0)	97.6 (0.2)
31	20.6 (4.9)	50.0 (18.4)	1.5 (0.8)	297 (109)	357.0 (394.0)	98.0 (0.2)
Avg	18.3	62.9	3.0	157.0	200.0	98.2
n	30	30	30	30	24	30
SD	3.5	13	1.32	91	86	0.6
Min	12.4	40.2	0.8	25.0	20.0	97.2
Max	25.2	88.6	7.26	358	357	99.3

ED_004549_00015928-00076

Table E1. Daily means (SD) of weather parameters at Site IN3B for June, 2009

Day	Temperature, °C	RH, %	Wind speed, m·s^{-1}	Wind direction, °	Solar, W·m^2	Atm P, kPa
1	22.4 (5.1)	64.1 (17.3)	3.6 (1.7)	157 (61)	175.0 (270.0)	97.9 (0.1)
2	21.2 (3.5)	81.8 (10.3)	2.5 (1.5)	329 (130)	256.0 (353.0)	98.2 (0.1)
3	15.0 (1.2)	84.1 (6.5)	3.9 (1.9)	9 (142)	76.0 (104.0)	98.4 (0.1)
4	16.7 (4.3)	67.4 (15.1)	2.6 (1.8)	358 (157)	297.0 (346.0)	98.2 (0.1)
5	19.2 (6.0)	55.8 (21.0)	1.4 (1.0)	206 (92)	352.0 (392.0)	98.0 (0.1)
6	22.5 (4.5)	53.0 (9.7)	3.0 (0.9)	167 (36)	278.0 (314.0)	98.0 (0.1)
7	23.4 (3.5)	62.0 (6.3)	2.9 (1.2)	125 (60)	196.0 (234.0)	97.9 (0.1)
8	24.7 (2.5)	69.5 (9.1)	4.0 (1.3)	157 (40)	167.0 (230.0)	97.6 (0.1)
9	23.4 (3.5)	71.5 (14.8)	1.5 (0.9)	277 (109)	259.0 (342.0)	
10	21.6 (4.1)	78.2 (8.5)	2.9 (1.2)	36 (95)	157.0 (247.0)	
11	21.3 (2.1)	86.0 (6.0)	2.8 (1.1)	22 (136)	111.0 (208.0)	
12	21.4 (3.8)	69.6 (16.0)	2.6 (1.1)	2 (163)	315.0 (375.0)	98.7 (0.1)
13	22.3 (3.7)	68.1 (12.9)	1.7 (0.8)	61 (55)	200.0 (257.0)	98.8 (0.0)
14	23.9 (5.2)	66.3 (13.9)	2.1 (0.7)	12 (147)	289.0 (348.0)	98.8 (0.1)
15	23.3 (3.9)	61.0 (15.5)	3.1 (1.2)	14 (117)	222.0 (244.0)	98.9 (0.1)
16						
17						
18						
19						
20						
21						
22	27.0 (3.8)	77.5 (12.6)	2.1 (1.2)	48 (65)	234.0 (348.0)	98.3 (0.1)
23						
24	28.6 (5.1)	69.7 (15.8)	1.5 (1.1)	177 (64)	285.0 (369.0)	98.6 (0.1)
25	29.1 (4.2)	70.2 (13.5)	3.0 (1.5)	201 (24)	310.0 (375.0)	98.4 (0.2)
26	29.1 (5.0)	63.6 (19.4)	1.6 (0.9)	289 (95)	308.0 (370.0)	98.4 (0.1)
27	26.9 (5.9)	58.2 (18.1)	1.2 (0.7)	198 (90)	316.0 (369.0)	98.5 (0.1)
28	25.8 (2.5)	55.7 (18.6)	5.5 (2.3)	234 (31)	344.0 (394.0)	98.2 (0.1)
29	22.8 (3.4)	57.2 (13.1)	5.5 (2.4)	230 (28)	276.0 (371.0)	97.7 (0.1)
30	19.7 (2.3)	70.1 (10.2)	3.2 (1.8)	245 (43)	146.0 (191.0)	97.8 (0.1)
Avg	23.1	67.8	2.8	287.0	242.0	98.3
n	23	23	23	23	23	20
SD	3.6	9	1.14	108	75	0.4
Min	15.0	53.0	1.2	2.0	76.0	97.6
Max	29.1	86	5.51	358	352	98.9

ED_004549_00015928-00077

Table E1. Daily means (SD) of weather parameters at Site IN3B for July, 2009

Day	Temperature, °C	RH, %	Wind speed, $m \cdot s^{-1}$	Wind direction, °	Solar, $W \cdot m^2$	Atm P, kPa
1	17.8 (1.4)	78.3 (7.7)	2.6 (1.6)	244 (54)	81.0 (129.0)	98.1 (0.2)
2	19.5 (2.6)	73.9 (10.2)	2.8 (1.8)	251 (63)	127.0 (167.0)	98.7 (0.2)
3	22.3 (3.0)	68.5 (12.3)	2.4 (1.6)	220 (65)	250.0 (316.0)	99.2 (0.1)
4	19.2 (1.6)	83.6 (6.4)	2.0 (1.1)	61 (53)	55.0 (76.0)	99.0 (0.2)
5	22.7 (4.4)	73.1 (17.1)	2.8 (1.7)	360 (136)	286.0 (369.0)	98.6 (0.1)
6	24.1 (4.5)	62.8 (20.8)	2.0 (1.3)	214 (38)	306.0 (374.0)	98.5 (0.1)
7	24.4 (4.7)	58.5 (20.1)	1.7 (0.8)	277 (108)	312.0 (379.0)	98.5 (0.1)
8	21.2 (2.3)	61.8 (11.3)	2.0 (0.7)	12 (139)	111.0 (145.0)	98.8 (0.1)
9	21.3 (3.4)	77.4 (10.9)	2.2 (1.0)	37 (104)	148.0 (219.0)	99.2 (0.1)
10	25.3 (4.9)	74.5 (9.8)	2.0 (0.7)	131 (66)	220.0 (275.0)	99.3 (0.1)
11	25.0 (1.6)	83.8 (4.8)	2.9 (0.9)	190 (28)	100.0 (157.0)	99.1 (0.1)
12	23.4 (4.5)	63.0 (21.6)	1.5 (0.7)	251 (84)	300.0 (357.0)	99.2 (0.1)
13	22.8 (5.3)	59.7 (17.2)	1.5 (1.3)	16 (116)	304.0 (360.0)	99.1 (0.1)
14	21.8 (6.2)	58.6 (15.5)	2.1 (1.3)	59 (55)	266.0 (316.0)	99.3 (0.1)
15	24.0 (4.0)	75.4 (8.5)	3.4 (1.4)	169 (58)	191.0 (281.0)	98.8 (0.1)
16	24.0 (3.4)	68.3 (16.3)	3.2 (1.3)	212 (27)	326.0 (378.0)	98.7 (0.1)
17	19.7 (2.1)	71.2 (13.8)	3.9 (2.0)	247 (27)	219.0 (327.0)	98.5 (0.1)
18	18.1 (2.4)	74.7 (7.9)	2.5 (1.1)	231 (63)	137.0 (227.0)	98.9 (0.2)
19	19.3 (2.9)	77.5 (9.5)	1.0 (0.8)	134 (75)	138.0 (218.0)	99.3 (0.1)
20	21.7 (6.3)	68.2 (20.2)	1.1 (0.8)	74 (68)	307.0 (374.0)	99.3 (0.1)
21	22.8 (5.3)	69.0 (17.3)	1.5 (0.9)	74 (53)	254.0 (335.0)	99.0 (0.1)
22	19.6 (1.1)	86.9 (3.0)	1.9 (1.2)	31 (110)	36.0 (64.0)	98.8 (0.1)
23	21.6 (3.4)	80.2 (13.3)	2.2 (1.2)	239 (64)	218.0 (333.0)	98.7 (0.0)
24	23.3 (5.5)	70.0 (17.1)	1.7 (1.1)	158 (44)	303.0 (368.0)	92.4 (8.5)
25						
26						
27						
28						
29						
30						
31						
Avg	21.9	71.6	2.2	197.0	208.0	98.6
n	24	24	24	24	24	24
SD	2.1	8	0.7	95	90	1.3
Min	17.8	58.5	1.0	12.0	36.0	92.4
Max	25.3	86.9	3.89	360	326	99.3

ED_004549_00015928-00078

Table E2. Animal characteristics.

Table E2. Daily means of animal characteristics at Site IN3B for July, 2007.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	1080	99	120	1070	100	118	1090	96	116	1060	94	114
2	1080	99	121	1070	101	119	1090	97	117	1050	95	115
3	1080	100	122	1060	102	119	1090	98	117	1050	96	116
4	1080	100	123	1060	102	120	1090	98	118	1050	96	117
5	1080	101	123	1060	103	121	1090	99	119	1050	97	118
6	1070	101	124	1060	103	122	1090	99	120	1050	98	118
7	1070	102	125	1060	104	123	1080	100	121	1050	98	119
8	1070	103	126	1060	104	123	1080	101	122	1050	99	120
9	1070	103	127	1060	105	124	1080	101	122	1050	99	121
10	1070	104	127	1060	105	125	1080	102	123	1050	100	122
11	1070	104	128	1060	106	126	1080	102	124	1050	101	123
12	1070	104	129	1050	106	127	1080	103	125	1040	101	124
13	1070	105	153	1050	107	154	1080	103	152	1040	102	145
14	1060	105	153	1050	107	154	1070	104	152	1040	102	146
15	1060	106	154	1050	108	155	1070	104	153	1040	103	146
16	1060	106	154	1040	108	154	1070	105	153	1040	103	147
17	1060	107	155	988	109	147	1070	105	154	1040	104	147
18	1060	107	155	932	109	139	1040	106	150	1040	104	148
19	1060	108	155	885	109	131	913	105	131	1040	105	148
20	1060	108	156	878	109	130	897	105	128	1040	105	149
21	1060	108	156	876	109	131	896	105	129	1040	105	149
22	1050	109	157	874	110	131	894	106	129	1030	106	150
23	1040	109	155	872	110	131	893	106	129	1030	106	150
24	986	110	148	871	110	131	891	106	129	1030	107	151
25	927	110	139	870	111	132	890	107	130	1030	107	152
26	877	110	132	868	111	132	888	107	130	924	107	135
27	870	111	132	867	112	132	887	108	130	851	107	125
28	868	111	132	866	112	132	886	108	130	849	108	125
29	866	112	132	865	112	133	884	108	131	848	108	125
30	853	112	131	853	113	132	883	109	131	846	108	125
31	802	112	123	802	113	124	881	109	131	845	109	126
Avg	1020	106	138	971	107	131	1000	104	131	1010	103	133
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	86	4	14	94	4	11	93	4	12	74	4	14
Min	802	99	120	802	100	118	881	96	116	845	94	114
Max	1080	112	157	1070	113	155	1090	109	154	1060	109	152

ED_004549_00015928-00079

Table E2. Daily means of animal characteristics at Site IN3B for August, 2007.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	747	113	115	746	114	116	880	109	131	844	109	126
2	700	112	107	699	113	108	879	110	132	843	110	126
3	694	112	106	693	113	107	877	110	132	842	110	127
4	691	112	106	691	113	107	876	111	132	841	110	127
5	689	112	106	689	114	107	875	111	132	840	111	127
6	676	113	104	584	112	90	873	111	133	828	111	126
7	624	113	97	516	111	79	872	112	133	776	112	118
8	568	114	88	515	112	79	840	112	129	720	112	110
9	522	112	80	514	112	79	717	111	109	674	111	102
10	515	112	79	513	113	79	701	111	106	667	110	101
11	513	112	79	512	113	79	700	111	106	666	111	101
12	511	113	79	511	114	79	698	111	106	664	111	101
13	498	113	77	499	114	78	697	112	106	652	112	99
14	446	113	69	447	115	70	695	112	107	600	112	92
15	390	114	61	391	115	61	662	113	102	544	113	84
16	343	112	52	344	114	53	531	111	81	498	111	76
17	336	111	51	337	113	52	475	111	72	491	110	74
18	333	111	51	335	113	52	430	111	65	489	111	74
19	331	112	51	333	114	52	385	111	59	488	111	74
20	213	108	32	131	94	21	347	109	52	453	112	69
21	136	106	20	0	8	0	339	108	50	322	109	48
22	134	107	20	0	0	0	335	108	50	306	108	45
23	133	107	20	0	0	0	333	109	50	305	109	45
24	132	107	19	0	0	0	331	109	50	303	109	45
25	130	108	19	0	0	0	329	110	50	302	110	45
26	129	109	19	0	0	0	328	110	49	301	110	45
27	51	89	8	0	1	0	129	90	20	119	90	18
28	0	7	0	1400	6	11	0	7	0	0	7	0
29	0	0	0	2160	6	18	0	0	0	0	0	0
30	0	0	0	2160	7	20	0	0	0	0	0	0
31	0	0	0	2160	7	22	0	0	0	0	0	0
Avg	361	96	55	577	74	52	520	96	79	496	96	75
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	246	37	38	600	52	39	296	37	45	275	37	42
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	747	114	115	2160	115	116	880	113	133	844	113	127

ED_004549_00015928-00080

Table E2. Daily means of animal characteristics at Site IN3B for September, 2007.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	0	0	0	2160	8	24	0	0	0	0	0	0
2	0	0	0	2160	8	25	0	0	0	0	0	0
3	0	1	0	2160	9	27	0	0	0	0	0	0
4	1460	6	12	2160	9	28	0	0	0	0	0	0
5	2260	6	19	2160	10	29	0	0	0	0	0	0
6	2260	7	21	2160	11	31	0	0	0	0	0	0
7	2260	7	22	2160	11	32	0	0	0	0	0	0
8	2250	8	24	2160	11	34	0	0	0	0	0	0
9	2250	8	26	2160	12	35	0	0	0	0	0	0
10	2250	9	28	2160	12	36	0	0	0	0	0	0
11	2250	9	29	2160	13	38	0	0	0	0	0	0
12	2250	10	31	2160	13	39	0	0	0	0	0	0
13	2250	10	32	2160	14	40	0	0	0	0	0	0
14	2250	11	33	2160	14	41	0	0	0	0	0	0
15	2250	11	35	2160	14	43	0	0	0	0	0	0
16	2250	12	36	2160	15	44	0	0	0	0	0	0
17	2250	12	37	2160	15	45	0	0	0	0	0	0
18	2250	13	39	2090	16	45	0	0	0	0	0	0
19	2250	13	40	1740	16	38	0	0	0	0	0	0
20	2250	13	41	1370	17	31	0	4	0	0	0	0
21	2250	14	42	1060	17	25	724	16	17	0	0	0
22	2250	14	44	1040	18	25	1120	18	27	0	0	0
23	2250	15	45	1040	18	25	1120	18	28	0	0	0
24	2250	15	46	1040	19	26	1120	19	29	0	0	0
25	2170	15	46	1040	19	27	1120	19	30	0	0	0
26	1820	16	39	1040	20	28	1120	20	31	0	0	0
27	1430	16	32	1040	20	28	1120	21	32	0	4	0
28	1120	17	26	1040	21	29	1120	21	32	717	19	20
29	1090	17	26	1040	21	30	1120	22	33	1110	21	32
30	1090	18	26	1040	22	31	1120	22	34	1110	21	32
Avg	1840	11	29	1750	15	33	360	7	10	98	2	3
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	722	5	13	524	4	7	514	9	14	300	6	9
Min	0	0	0	1040	8	24	0	0	0	0	0	0
Max	2260	18	46	2160	22	45	1120	22	34	1110	21	32

ED_004549_00015928-00081

Table E2. Daily means of animal characteristics at Site IN3B for October, 2007.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	1090	18	27	1040	22	32	1120	23	35	1110	22	33
2	1090	19	28	1030	23	33	1120	24	36	1110	23	34
3	1090	19	29	1030	24	34	1120	24	37	1110	23	35
4	1090	20	29	1030	24	34	1120	25	38	1110	24	36
5	1090	20	30	1030	25	35	1120	26	39	1110	24	37
6	1090	21	31	1030	26	36	1120	27	40	1110	25	38
7	1090	21	32	1030	26	37	1120	27	42	1110	26	39
8	1090	22	33	1030	27	38	1120	28	43	1110	27	40
9	1090	23	34	1030	28	39	1120	29	44	1110	27	41
10	1090	23	35	1030	29	40	1120	30	45	1110	28	42
11	1090	24	35	1030	29	42	1120	31	47	1110	29	44
12	1080	25	36	1030	30	43	1110	31	48	1110	30	45
13	1080	25	37	1030	31	44	1110	32	49	1110	30	46
14	1080	26	38	1030	32	45	1110	33	51	1110	31	47
15	1080	27	39	1030	33	46	1110	34	52	1110	32	48
16	1080	27	40	1030	34	47	1110	35	53	1110	33	50
17	1080	28	42	1030	35	49	1110	36	55	1110	34	51
18	1080	29	43	1030	35	50	1110	37	56	1110	35	52
19	1080	30	44	1030	36	51	1110	38	58	1110	35	54
20	1080	31	45	1030	37	53	1110	39	59	1110	36	55
21	1080	31	46	1030	38	54	1110	40	61	1110	37	56
22	1080	32	48	1030	39	55	1110	41	62	1110	38	58
23	1080	33	49	1030	40	57	1110	42	64	1110	39	59
24	1080	34	50	1030	41	58	1110	43	65	1110	40	61
25	1080	35	51	1030	42	60	1110	44	67	1110	41	62
26	1080	36	53	1030	43	61	1110	45	69	1110	42	64
27	1080	37	54	1030	44	63	1110	46	70	1110	43	65
28	1080	38	56	1030	45	64	1110	48	72	1110	44	67
29	1080	39	57	1030	47	66	1110	49	74	1110	45	69
30	1080	40	58	1030	48	67	1110	50	76	1110	46	70
31	1080	41	60	1030	49	69	1110	51	77	1110	47	72
Avg	1080	28	42	1030	34	48	1110	36	54	1110	33	51
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	3	7	10	1	8	11	3	8	13	1	8	12
Min	1080	18	27	1030	22	32	1110	23	35	1110	22	33
Max	1090	41	60	1040	49	69	1120	51	77	1110	47	72

ED_004549_00015928-00082

Table E2. Daily means of animal characteristics at Site IN3B for November, 2007.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	1080	42	61	1030	50	70	1110	52	79	1110	48	73
2	1080	43	63	1030	51	72	1110	53	81	1110	50	75
3	1080	44	64	1030	52	73	1110	55	82	1110	51	77
4	1080	45	66	1030	53	75	1110	56	84	1110	52	78
5	1080	46	67	1030	54	77	1110	57	86	1110	53	80
6	1080	47	69	1030	55	78	1110	58	88	1110	54	82
7	1080	48	70	1030	57	80	1110	59	90	1110	55	83
8	1080	49	72	1030	58	81	1110	60	91	1110	56	85
9	1080	50	73	1030	59	83	1100	62	93	1110	57	87
10	1080	51	75	1030	60	85	1100	63	95	1110	58	88
11	1080	52	77	1030	61	86	1100	64	97	1110	60	90
12	1080	53	78	1030	62	88	1100	65	98	1110	61	92
13	1070	54	80	1030	64	89	1100	66	100	1110	62	94
14	1070	56	82	1030	65	91	1100	68	102	1110	63	95
15	1070	57	83	1030	66	93	1100	69	104	1110	64	97
16	1070	58	85	1030	67	94	1100	70	105	1110	65	99
17	1070	59	86	1030	68	96	1100	71	107	1110	66	100
18	1070	60	88	1030	69	97	1100	72	109	1110	67	102
19	1070	61	90	1030	70	99	1100	73	110	1110	69	104
20	1070	62	91	1030	72	101	1100	75	112	1110	70	105
21	1070	63	93	1030	73	102	1100	76	114	1110	71	107
22	1070	65	95	1030	74	104	1100	77	115	1110	72	109
23	1070	66	96	1030	75	105	1100	78	117	1110	73	110
24	1070	67	98	1030	76	107	1100	79	119	1110	74	112
25	1070	68	100	1030	77	108	1100	80	120	1110	75	114
26	1070	69	101	1030	78	110	1100	81	122	1110	76	115
27	1070	70	103	1030	79	112	1100	82	123	1110	77	117
28	1070	71	104	1030	80	113	1100	83	125	1110	78	118
29	1070	72	106	1030	82	115	1100	84	127	1110	79	120
30	1070	74	108	1030	83	116	1100	85	128	1110	80	122
Avg	1070	57	84	1030	66	93	1100	69	104	1110	65	98
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	2	10	14	1	10	14	3	10	15	1	10	15
Min	1070	42	61	1030	50	70	1100	52	79	1110	48	73
Max	1080	74	108	1030	83	116	1110	85	128	1110	80	122

ED_004549_00015928-00083

Table E2. Daily means of animal characteristics at Site IN3B for December, 2007.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	1070	75	109	1030	84	117	1100	86	129	1110	81	123
2	1070	76	111	1030	85	119	1100	87	131	1110	82	125
3	1070	77	112	1030	86	120	1100	88	132	1110	83	126
4	1070	78	114	1030	87	122	1100	89	134	1110	84	127
5	1070	79	115	1030	88	123	1100	90	135	1110	85	129
6	1070	80	117	1030	89	124	1100	91	136	1110	86	130
7	1070	81	118	1030	89	126	1100	92	138	1110	87	132
8	1070	82	120	1030	90	127	1100	93	139	1110	88	133
9	1070	83	121	1030	91	128	1100	94	140	1110	89	134
10	1070	84	122	1030	92	129	1090	95	141	1110	90	136
11	1070	85	124	1030	93	131	1090	95	142	1110	91	137
12	1070	86	125	1030	94	132	1090	96	144	1110	92	138
13	1070	87	126	1030	95	133	1090	97	145	1110	92	140
14	1070	88	128	1030	96	134	1090	98	146	1110	93	141
15	1070	89	129	1030	96	135	1090	98	147	1110	94	142
16	1070	89	130	1030	97	136	1090	99	148	1110	95	143
17	1070	90	131	1030	98	137	1090	100	149	1110	96	144
18	1060	91	133	1030	99	138	1090	100	150	1110	96	145
19	1060	92	134	1030	99	139	1090	101	151	1110	97	147
20	1060	93	135	1030	100	140	1090	102	152	1110	98	148
21	1060	94	136	1030	101	141	1090	102	153	1110	99	149
22	1060	94	137	1030	101	142	1090	103	154	1110	99	150
23	1060	95	138	1030	102	143	1090	104	154	1110	100	151
24	1060	96	139	1030	103	144	1090	104	155	1110	100	152
25	1060	97	140	1030	103	145	1090	105	156	1110	101	153
26	1060	97	141	1030	104	146	1090	105	157	1110	102	153
27	1060	98	142	1030	105	146	1090	106	158	1110	102	154
28	1060	99	143	1030	105	147	1090	106	158	1100	103	155
29	1060	99	144	1030	106	148	1090	107	159	1100	103	156
30	1060	100	145	1030	106	149	1090	107	160	1100	104	157
31	1060	100	146	1030	107	149	1090	108	160	1100	104	158
Avg	1070	89	129	1030	96	135	1090	98	147	1110	94	142
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	3	8	11	1	7	10	3	6	9	1	7	10
Min	1060	75	109	1030	84	117	1090	86	129	1100	81	123
Max	1070	100	146	1030	107	149	1100	108	160	1110	104	158

ED_004549_00015928-00084

Table E2. Daily means of animal characteristics at Site IN3B for January, 2008.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	1060	101	146	1020	107	150	1090	108	161	1100	105	159
2	1060	102	147	1020	108	151	1090	109	162	1100	106	159
3	1060	102	148	1020	108	152	1090	109	162	1100	106	160
4	1060	103	149	1020	109	152	1080	110	162	1100	107	161
5	1060	103	150	1020	109	153	1050	110	159	1100	107	161
6	1060	104	150	1020	110	154	1030	111	155	1100	107	162
7	1060	104	151	1020	110	154	998	111	152	1100	108	163
8	1060	105	152	1020	111	155	970	112	148	1100	108	164
9	1060	105	152	1020	111	155	942	112	144	1100	109	164
10	1060	106	153	1020	112	156	918	112	140	1100	109	165
11	1060	106	153	1020	112	157	909	112	139	1100	110	165
12	1060	107	154	1020	112	157	883	112	135	1070	110	161
13	1060	107	155	1020	113	158	855	113	132	1040	111	158
14	1060	108	155	1020	113	159	827	113	128	1020	111	154
15	1060	108	156	1010	114	157	799	114	124	989	112	151
16	1060	108	156	930	114	145	771	114	120	961	112	147
17	1060	109	157	862	114	134	748	114	116	938	112	143
18	1050	109	158	855	114	133	738	114	115	929	112	142
19	1050	110	158	855	115	134	710	114	111	901	112	138
20	1050	110	159	854	115	134	679	115	106	870	112	134
21	1040	111	158	854	116	135	648	115	102	839	113	129
22	986	111	150	836	116	133	618	116	98	809	113	125
23	925	112	141	753	116	120	587	116	93	778	114	121
24	874	111	133	671	117	107	561	116	89	745	114	116
25	869	111	132	624	117	100	545	116	87	704	114	109
26	868	111	132	581	117	93	493	117	79	661	114	103
27	868	112	132	538	118	87	437	117	70	618	114	97
28	867	112	133	503	117	80	391	116	62	583	113	90
29	856	113	132	498	116	79	385	115	60	579	112	89
30	805	113	124	496	117	79	385	115	61	578	113	89
31	750	113	116	494	117	79	384	116	61	578	113	89
Avg	995	108	146	856	113	132	761	113	117	914	111	138
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	95	4	11	198	3	28	233	2	34	194	3	27
Min	750	101	116	494	107	79	384	108	60	578	105	89
Max	1060	113	159	1020	118	159	1090	117	162	1100	114	165

ED_004549_00015928-00085

Table E2. Daily means of animal characteristics at Site IN3B for February, 2008.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	703	113	109	492	117	79	383	116	61	577	114	90
2	695	113	107	490	118	79	380	116	60	574	114	89
3	691	113	107	489	118	79	376	117	60	570	114	89
4	687	114	107	487	119	79	363	118	58	558	115	88
5	669	115	105	471	120	77	311	118	50	506	116	80
6	591	115	93	394	120	65	255	119	41	450	116	71
7	522	114	81	325	119	53	207	117	33	403	115	63
8	515	113	79	318	119	52	200	116	32	401	114	62
9	514	113	80	318	119	52	199	116	32	413	114	64
10	514	114	80	317	120	52	199	117	32	427	115	67
11	513	114	80	317	120	52	198	117	32	440	115	69
12	502	115	79	306	121	51	79	97	13	451	116	71
13	449	115	71	253	121	42	0	9	0	451	117	72
14	392	116	62	195	122	33	0	0	0	417	116	66
15	345	113	53	148	118	24	0	0	0	289	111	44
16	339	111	51	143	116	23	0	0	0	277	111	42
17	339	111	52	142	117	23	0	0	0	223	112	34
18	134	92	20	142	117	23	0	0	0	20	44	3
19	0	8	0	62	115	10	0	0	0	0	0	0
20	0	1	0	0	100	0	0	0	0	0	0	0
21	0	2	0	0	83	0	0	0	0	0	0	0
22	0	2	0	0	66	0	0	0	0	0	0	0
23	0	3	0	0	49	0	0	0	0	0	0	0
24	0	4	0	0	32	0	0	0	0	0	0	0
25	0	5	0	0	15	0	0	0	0	0	0	0
26	1480	6	11	0	1	0	0	0	0	0	0	0
27	2450	6	19	0	0	0	0	0	0	0	0	0
28	2450	6	21	0	0	0	0	0	0	0	0	0
29	2450	7	23	0	0	0	0	0	0	0	0	0
Avg	619	72	51	200	90	33	109	48	17	257	69	40
n	29	29	29	29	29	29	29	29	29	29	29	29
SD	697	53	40	182	45	30	143	57	23	228	55	36
Min	0	1	0	0	0	0	0	0	0	0	0	0
Max	2450	116	109	492	122	79	383	119	61	577	117	90

ED_004549_00015928-00086

Table E2. Daily means of animal characteristics at Site IN3B for March, 2008.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	2450	8	25	0	0	0	0	0	0	0	0	0
2	2450	8	27	0	0	0	0	0	0	0	0	0
3	2450	9	29	0	1	0	0	0	0	0	0	0
4	2450	9	31	1480	5	10	0	0	0	0	0	0
5	2440	10	32	2460	5	18	0	0	0	0	0	0
6	2440	10	34	2460	6	19	0	0	0	0	0	0
7	2440	11	36	2460	6	21	0	0	0	0	0	0
8	2440	11	37	2460	7	23	0	0	0	0	0	0
9	2440	12	39	2460	7	25	0	0	0	0	0	0
10	2440	12	40	2460	8	27	0	0	0	0	0	0
11	2440	12	41	2460	9	29	0	0	0	0	0	0
12	2440	13	43	2460	9	30	0	0	0	0	0	0
13	2440	13	44	2460	9	32	0	0	0	0	0	0
14	2440	14	46	2460	10	33	0	0	0	0	0	0
15	2440	14	47	2460	10	35	0	0	0	0	0	0
16	2440	15	48	2460	11	36	0	0	0	0	0	0
17	2380	15	49	2460	11	38	0	0	0	0	0	0
18	2120	15	45	2460	12	39	0	0	0	0	0	0
19	1840	16	40	2460	12	41	0	0	0	0	0	0
20	1560	16	35	2450	13	42	0	0	0	0	3	0
21	1330	17	31	2450	13	43	0	0	0	659	16	15
22	1300	17	31	2450	13	45	0	0	0	1090	17	25
23	1300	18	32	2450	14	46	0	0	0	1090	18	26
24	1300	18	33	2450	14	48	0	0	0	1090	18	27
25	1300	19	34	2420	15	48	0	0	0	1090	19	28
26	1300	19	34	2240	15	46	0	0	0	1090	19	29
27	1300	20	35	2050	16	44	0	0	0	1090	20	30
28	1300	21	36	1870	16	41	0	0	0	1090	20	30
29	1300	21	37	1680	17	38	0	0	0	1090	21	31
30	1300	22	38	1490	17	35	0	3	0	1090	21	32
31	1290	22	39	1340	18	32	721	16	17	1090	22	32
Avg	1980	15	37	2050	10	31	23	1	1	372	7	10
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	535	4	6	749	5	14	127	3	3	507	9	14
Min	1290	8	25	0	0	0	0	0	0	0	0	0
Max	2450	22	49	2460	18	48	721	16	17	1090	22	32

ED_004549_00015928-00087

Table E2. Daily means of animal characteristics at Site IN3B for April, 2008.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	1230	23	39	1300	18	32	1190	18	29	1090	22	33
2	1170	24	38	1230	19	31	1190	18	30	1090	23	34
3	1110	24	37	1150	19	30	1190	19	31	1090	23	34
4	1060	25	36	1080	20	29	1190	20	32	1090	24	35
5	1050	26	37	1070	20	30	1190	20	33	1090	24	36
6	1050	27	38	1070	21	31	1190	21	34	1080	24	36
7	1050	27	39	1070	21	31	1190	21	34	1080	25	37
8	1050	28	40	1070	22	32	1190	22	35	1080	25	37
9	1050	29	41	1070	23	33	1190	22	36	1080	26	38
10	1050	30	43	1070	23	34	1190	23	37	1080	26	39
11	1050	30	44	1070	24	35	1190	23	37	1080	27	40
12	1050	31	45	1070	25	36	1190	23	38	1080	27	40
13	1050	32	46	1070	25	37	1190	24	39	1080	28	41
14	1050	33	48	1070	26	38	1190	24	40	1080	28	42
15	1050	34	49	1070	27	39	1190	25	40	1080	29	43
16	1050	35	50	1070	28	41	1190	25	41	1080	29	43
17	1050	36	52	1070	29	42	1190	26	42	1080	30	44
18	1050	37	53	1070	29	43	1190	26	43	1080	31	45
19	1050	38	54	1070	30	44	1190	27	43	1080	31	46
20	1050	39	56	1070	31	45	1190	27	44	1080	32	47
21	1050	40	57	1070	32	47	1190	28	45	1080	32	48
22	1050	41	59	1070	33	48	1190	28	46	1080	33	49
23	1050	42	60	1070	34	49	1190	29	46	1080	34	50
24	1050	43	62	1070	35	51	1190	29	47	1080	35	51
25	1050	44	63	1070	36	52	1190	30	48	1080	35	52
26	1050	45	65	1070	36	53	1190	30	49	1080	36	53
27	1050	46	66	1070	37	55	1190	31	50	1080	37	55
28	1050	47	68	1070	38	56	1190	31	51	1080	38	56
29	1050	48	69	1070	39	58	1190	32	52	1080	39	57
30	1050	49	71	1070	40	59	1190	33	53	1080	39	58
Avg	1060	35	51	1090	28	41	1190	25	41	1080	30	44
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	39	8	11	51	7	9	2	4	7	1	5	7
Min	1050	23	36	1070	18	29	1190	18	29	1080	22	33
Max	1230	49	71	1300	40	59	1190	33	53	1090	39	58

ED_004549_00015928-00088

Table E2. Daily means of animal characteristics at Site IN3B for May, 2008.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	1050	51	73	1070	41	61	1190	33	54	1080	40	60
2	1050	52	74	1070	42	62	1190	34	55	1080	41	61
3	1050	53	76	1070	44	64	1190	35	56	1080	42	62
4	1050	54	77	1070	45	65	1190	36	58	1080	43	64
5	1050	55	79	1070	46	67	1190	36	59	1080	44	65
6	1050	56	81	1070	47	68	1190	37	60	1080	45	67
7	1050	58	82	1070	48	70	1190	38	62	1080	46	68
8	1050	59	84	1070	49	72	1190	39	63	1080	47	69
9	1050	60	86	1070	50	73	1180	40	64	1080	48	71
10	1050	61	87	1070	51	75	1180	41	66	1080	49	73
11	1050	62	89	1070	52	76	1180	42	67	1080	50	74
12	1050	63	91	1070	53	78	1180	42	69	1080	51	76
13	1050	65	92	1070	55	80	1180	43	70	1080	52	77
14	1050	66	94	1070	56	81	1180	44	72	1080	54	79
15	1050	67	96	1070	57	83	1180	45	73	1080	55	81
16	1050	68	97	1070	58	85	1180	46	75	1080	56	82
17	1050	69	99	1070	59	86	1180	47	77	1080	57	84
18	1050	70	100	1070	60	88	1180	48	78	1080	58	86
19	1050	71	102	1070	61	90	1180	49	80	1080	59	87
20	1050	73	104	1070	63	91	1180	51	82	1080	60	89
21	1050	74	105	1070	64	93	1180	52	84	1080	62	91
22	1050	75	107	1070	65	94	1180	53	85	1080	63	93
23	1050	76	108	1070	66	96	1180	54	87	1080	64	94
24	1050	77	110	1070	67	98	1180	55	89	1080	65	96
25	1050	78	111	1070	68	99	1180	56	91	1080	66	98
26	1050	79	113	1070	69	101	1180	57	93	1080	67	99
27	1050	80	114	1070	70	102	1180	59	95	1080	69	101
28	1050	81	116	1070	71	104	1180	60	96	1080	70	103
29	1050	82	117	1070	73	106	1180	61	98	1080	71	105
30	1050	83	119	1060	74	107	1180	62	100	1080	72	106
31	1050	84	120	1060	75	109	1180	63	102	1080	73	108
Avg	1050	68	97	1070	58	85	1180	47	76	1080	56	83
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	1	10	14	1	10	15	1	9	15	1	10	15
Min	1050	51	73	1060	41	61	1180	33	54	1080	40	60
Max	1050	84	120	1070	75	109	1190	63	102	1080	73	108

ED_004549_00015928-00089

Table E2. Daily means of animal characteristics at Site IN3B for June, 2008.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}
1	1050	85	122	1060	76	110	1180	64	104	1080	75	110
2	1040	86	123	1060	77	112	1180	66	106	1080	76	111
3	1040	87	124	1060	78	113	1180	67	108	1080	77	113
4	1040	88	126	1060	79	115	1180	68	110	1080	78	115
5	1040	89	127	1060	80	116	1180	69	112	1080	79	116
6	1040	90	128	1060	81	118	1180	70	114	1080	80	118
7	1040	91	129	1060	82	119	1180	72	116	1080	81	119
8	1040	92	131	1060	83	120	1180	73	117	1080	82	121
9	1040	92	132	1060	84	122	1180	74	119	1080	83	123
10	1040	93	133	1060	85	123	1180	75	121	1080	84	124
11	1040	94	134	1060	86	124	1180	76	123	1080	85	126
12	1040	95	135	1060	87	126	1180	78	125	1080	86	127
13	1040	96	136	1060	87	127	1180	79	127	1080	87	128
14	1040	96	137	1060	88	128	1180	80	129	1080	88	130
15	1040	97	138	1060	89	130	1180	81	130	1080	89	131
16	1040	98	139	1060	90	131	1180	82	132	1070	90	132
17	1040	98	140	1060	91	132	1180	83	134	1070	91	134
18	1040	99	141	1060	92	133	1180	84	136	1070	92	135
19	1040	100	142	1060	92	134	1180	85	137	1070	93	136
20	1040	100	143	1060	93	135	1180	86	139	1070	94	138
21	1040	101	144	1060	94	136	1180	87	140	1070	95	139
22	1040	102	144	1060	95	138	1180	88	142	1070	95	140
23	1040	102	145	1060	95	139	1180	89	144	1070	96	141
24	1040	103	146	1060	96	140	1180	90	145	1070	97	142
25	1040	103	147	1060	97	141	1180	91	147	1070	98	143
26	1040	104	148	1060	98	142	1180	92	148	1070	98	144
27	1040	104	149	1060	98	142	1180	93	150	1070	99	145
28	1040	105	149	1060	99	143	1180	94	151	1070	100	146
29	1040	105	150	1060	99	144	1180	95	152	1070	100	147
30	1040	106	151	1060	100	145	1180	96	154	1070	101	148
Avg	1040	97	138	1060	89	129	1180	81	130	1080	89	131
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	2	6	9	0	7	11	1	9	15	2	8	12
Min	1040	85	122	1060	76	110	1180	64	104	1070	75	110
Max	1050	106	151	1060	100	145	1180	96	154	1080	101	148

ED_004549_00015928-00090

Table E2. Daily means of animal characteristics at Site IN3B for July, 2008.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	1040	107	151	1060	101	146	1180	96	155	1070	102	149
2	1040	107	152	1060	101	147	1180	97	156	1070	102	150
3	1040	108	153	1060	102	148	1180	98	157	1070	103	150
4	1040	108	153	1060	102	148	1180	99	159	1070	103	151
5	1040	108	154	1060	103	149	1180	99	160	1070	104	152
6	1040	109	155	1060	103	150	1180	100	161	1070	104	153
7	1040	109	155	1060	104	151	1180	101	162	1070	105	154
8	1040	110	156	1060	104	152	1180	101	163	1070	105	154
9	1040	110	157	1060	105	152	1180	102	164	1070	106	155
10	1040	111	157	1060	105	153	1180	103	165	1070	106	156
11	930	111	141	1060	106	154	1180	103	166	1070	107	156
12	859	111	130	1060	106	154	1180	104	167	1070	107	157
13	859	111	130	1060	107	155	1180	104	168	1070	108	158
14	859	112	131	1060	107	156	1180	105	168	1070	108	159
15	859	112	132	1060	108	156	1180	105	169	1070	109	159
16	859	113	132	1060	108	157	1180	106	170	1070	109	160
17	750	112	115	952	108	141	1180	106	171	962	110	144
18	678	112	103	880	108	129	1180	107	172	890	110	133
19	678	112	104	879	108	130	1180	108	173	889	110	134
20	678	112	104	879	108	130	1180	108	173	888	111	134
21	677	113	105	879	109	131	1180	108	174	888	111	135
22	677	113	105	879	109	131	1180	109	175	888	112	135
23	677	114	105	879	110	132	1180	109	176	888	112	136
24	677	114	106	879	110	132	1180	110	177	888	113	137
25	572	114	89	862	110	130	1070	110	162	785	113	121
26	503	113	78	782	109	117	1000	110	151	717	112	109
27	503	114	78	713	110	107	1000	110	152	716	112	110
28	502	114	78	707	110	106	1000	111	152	715	112	110
29	502	115	79	707	110	107	1000	111	153	715	113	110
30	502	115	79	707	111	107	1000	112	153	715	114	111
31	502	115	79	706	111	107	867	112	133	681	114	106
Avg	797	112	121	945	107	138	1140	105	163	947	109	140
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	205	2	29	135	3	17	81	5	10	143	4	18
Min	502	107	78	706	101	106	867	96	133	681	102	106
Max	1040	115	157	1060	111	157	1180	112	177	1070	114	160

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Table E2. Daily means of animal characteristics at Site IN3B for August, 2008.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	502	116	79	706	112	108	776	111	118	481	114	75
2	502	116	80	706	112	108	775	112	118	420	113	65
3	502	117	80	706	112	108	775	112	119	420	114	65
4	502	117	80	706	113	109	774	113	119	420	114	65
5	400	115	63	706	113	109	774	113	119	420	114	66
6	333	113	52	706	114	110	773	113	120	317	113	49
7	333	114	52	603	114	94	773	114	120	249	107	36
8	333	114	52	536	113	83	773	114	121	249	107	36
9	333	115	52	535	113	83	773	115	121	249	107	36
10	333	115	52	535	114	83	773	115	122	249	107	37
11	219	113	34	415	114	65	664	115	105	244	108	36
12	145	112	22	337	112	52	562	114	87	240	108	36
13	145	113	22	337	113	52	444	113	69	239	109	36
14	145	113	22	337	113	52	433	113	67	239	109	36
15	145	114	23	337	113	52	433	114	67	239	110	36
16	145	114	23	337	114	53	433	114	68	239	110	36
17	145	115	23	337	114	53	433	115	68	239	110	36
18	145	115	23	337	115	53	433	115	68	239	111	36
19	57	95	9	319	116	50	429	116	68	227	112	35
20	0	9	0	308	116	49	415	119	67	217	113	34
21	0	0	0	308	117	49	402	119	66	215	114	34
22	0	0	0	122	112	20	155	114	25	85	109	13
23	0	2	0	0	85	0	0	87	0	0	83	0
24	0	3	0	0	56	0	0	57	0	0	54	0
25	0	4	0	0	26	0	0	26	0	0	25	0
26	1540	6	12	0	2	0	0	2	0	0	2	0
27	2550	6	20	0	0	0	0	0	0	0	0	0
28	2550	6	23	0	0	0	0	0	0	0	0	0
29	2550	7	24	0	0	0	0	0	0	0	0	0
30	2550	8	26	0	0	0	0	0	0	0	0	0
31	2550	8	28	0	0	0	0	0	0	0	0	0
Avg	634	71	32	332	86	51	419	87	65	198	84	30
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	886	53	26	259	46	40	311	46	48	148	45	23
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	2550	117	80	706	117	110	776	119	122	481	114	75

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Table E2. Daily means of animal characteristics at Site IN3B for September, 2008.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	2550	9	30	0	1	0	0	0	0	0	0	0
2	2550	9	32	1350	5	10	0	0	0	0	0	0
3	2550	10	34	2240	6	18	0	0	0	0	0	0
4	2550	10	35	2240	6	20	0	1	0	0	0	0
5	2550	11	37	1580	7	15	655	5	5	0	0	0
6	2550	11	38	1150	8	12	1080	6	9	0	0	0
7	2550	11	40	1150	8	13	1080	6	10	0	0	0
8	2250	12	37	1150	9	14	1080	7	11	0	1	0
9	1140	12	19	1140	9	14	1080	8	11	612	5	5
10	1030	13	18	1140	10	15	1080	8	12	1010	6	8
11	1030	13	19	1130	10	16	1080	9	13	1010	6	9
12	1030	14	19	1130	11	16	1080	9	14	1010	7	10
13	1030	14	20	1120	11	17	1080	10	15	1010	8	11
14	1030	14	20	1120	11	18	1080	10	15	1010	8	12
15	1030	15	21	1120	12	18	1070	11	16	1010	9	12
16	1030	15	21	1110	12	19	1070	11	17	1010	9	13
17	1030	16	22	1110	13	19	1070	12	17	1010	10	14
18	1030	16	23	1110	13	20	1070	12	18	1010	11	14
19	1030	17	23	1110	14	21	1070	13	19	1010	11	15
20	1030	17	24	1100	14	21	1070	13	19	1010	11	16
21	1030	18	25	1100	14	22	1070	14	20	1000	12	16
22	1020	18	25	1100	15	22	1070	14	21	1000	12	17
23	1020	19	26	1100	15	23	1070	14	21	1000	13	18
24	1020	19	27	1100	16	24	1070	15	22	1000	13	18
25	1020	20	27	1100	16	24	1070	15	23	1000	14	19
26	1020	20	28	1100	17	25	1070	16	23	1000	14	19
27	1020	21	29	1100	17	26	1070	16	24	1000	15	20
28	1020	21	30	1100	18	26	1070	17	25	1000	15	21
29	1020	22	31	1100	18	27	1070	17	25	1000	16	21
30	1020	23	31	1100	19	28	1070	18	26	1000	16	22
Avg	1430	15	27	1180	12	19	918	10	15	725	8	11
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	657	4	6	362	4	6	368	5	8	443	6	8
Min	1020	9	18	0	1	0	0	0	0	0	0	0
Max	2550	23	40	2240	19	28	1080	18	26	1010	16	22

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Table E2. Daily means of animal characteristics at Site IN3B for October, 2008.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	1020	23	32	1100	19	29	1070	18	27	1000	17	23
2	1020	24	33	1100	20	29	1070	19	28	1000	17	23
3	1020	24	34	1100	20	30	1070	20	29	1000	18	24
4	1020	25	35	1100	21	31	1070	20	29	1000	18	25
5	1020	26	36	1100	21	32	1070	21	30	1000	19	26
6	1020	27	37	1090	22	33	1070	21	31	1000	19	26
7	1020	27	38	1090	23	34	1070	22	32	1000	20	27
8	1020	28	39	1090	23	35	1070	23	33	1000	21	28
9	1020	29	40	1090	24	36	1070	23	34	1000	21	29
10	1020	30	41	1090	24	37	1070	24	35	999	22	30
11	1020	30	42	1090	25	38	1070	25	36	999	22	31
12	1020	31	43	1090	26	39	1070	25	37	999	23	32
13	1020	32	45	1090	27	40	1070	26	38	999	24	33
14	1020	33	46	1090	27	41	1070	27	39	999	25	33
15	1020	34	47	1090	28	42	1070	28	41	998	25	35
16	1020	35	48	1090	29	43	1070	29	42	998	26	36
17	1020	36	50	1090	30	44	1070	29	43	998	27	37
18	1020	37	51	1090	31	45	1070	30	44	998	28	38
19	1020	38	52	1090	31	47	1070	31	45	997	29	39
20	1020	39	54	1090	32	48	1070	32	47	997	29	40
21	1020	40	55	1090	33	49	1070	33	48	997	30	41
22	1020	41	56	1090	34	50	1070	34	49	997	31	43
23	1020	42	58	1090	35	52	1070	35	51	997	32	44
24	1010	43	59	1090	36	53	1070	36	52	996	33	45
25	1010	44	61	1090	37	55	1070	37	54	996	34	46
26	1010	45	62	1090	38	56	1070	38	55	996	35	48
27	1010	46	63	1080	39	57	1070	39	57	996	36	49
28	1010	47	65	1080	40	59	1070	40	58	996	37	51
29	1010	48	66	1080	41	60	1070	41	60	995	38	52
30	1010	49	68	1080	42	62	1070	42	61	995	39	53
31	1010	50	69	1080	43	63	1060	43	63	995	40	55
Avg	1020	35	49	1090	30	44	1070	29	43	998	27	37
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	3	8	11	4	7	10	2	7	11	2	7	10
Min	1010	23	32	1080	19	29	1060	18	27	995	17	23
Max	1020	50	69	1100	43	63	1070	43	63	1000	40	55

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Table E2. Daily means of animal characteristics at Site IN3B for November, 2008.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	1010	51	71	1080	44	65	1060	44	64	995	41	56
2	1010	52	72	1080	45	66	1060	45	66	994	43	58
3	1010	53	74	1080	46	68	1060	47	68	994	44	59
4	1010	55	75	1080	47	69	1060	48	69	994	45	61
5	1010	56	77	1080	48	71	1060	49	71	994	46	63
6	1010	57	79	1080	49	73	1060	50	73	994	47	64
7	1010	58	80	1080	50	74	1060	51	74	994	48	66
8	1010	59	82	1080	51	76	1060	52	76	994	50	67
9	1010	60	83	1080	53	78	1060	54	78	994	51	69
10	1010	61	85	1080	54	79	1060	55	80	994	52	71
11	1010	63	86	1080	55	81	1060	56	81	994	53	72
12	1010	64	88	1080	56	83	1060	57	83	994	54	74
13	1010	65	89	1080	57	84	1060	58	85	994	56	76
14	1010	66	91	1080	58	86	1060	60	86	993	57	77
15	1010	67	93	1080	59	88	1060	61	88	993	58	79
16	1010	68	94	1080	60	89	1060	62	90	993	59	81
17	1010	69	96	1080	62	91	1060	63	92	993	61	82
18	1010	70	97	1080	63	92	1060	64	93	992	62	84
19	1010	72	99	1080	64	94	1060	66	95	992	63	85
20	1010	73	100	1080	65	96	1060	67	97	991	64	87
21	1010	74	102	1080	66	97	1060	68	99	991	66	89
22	1010	75	103	1080	67	99	1060	69	100	990	67	90
23	1010	76	104	1080	68	100	1060	70	102	990	68	92
24	1010	77	106	1070	70	102	1060	72	104	989	69	93
25	1010	78	107	1070	71	104	1060	73	105	989	70	95
26	1010	79	109	1070	72	105	1060	74	107	988	72	97
27	1010	80	110	1070	73	107	1060	75	109	988	73	98
28	1010	81	111	1070	74	108	1060	76	110	988	74	100
29	1010	82	113	1070	75	110	1060	77	112	988	75	101
30	1010	83	114	1070	76	111	1060	78	113	987	76	103
Avg	1010	67	93	1080	60	88	1060	61	89	992	59	80
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	2	10	13	4	10	14	2	10	15	2	11	14
Min	1010	51	71	1070	44	65	1060	44	64	987	41	56
Max	1010	83	114	1080	76	111	1060	78	113	995	76	103

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Table E2. Daily means of animal characteristics at Site IN3B for December, 2008.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	1010	84	115	1070	77	113	1060	80	115	987	77	104
2	1010	85	117	1070	78	114	1060	81	116	987	79	106
3	1010	86	118	1070	79	116	1060	82	118	986	80	107
4	1000	87	119	1070	80	117	1060	83	119	986	81	109
5	1000	88	120	1070	81	118	1060	84	121	985	82	110
6	1000	89	122	1060	82	120	1050	85	122	985	83	112
7	1000	90	123	1060	83	121	1050	86	124	984	84	113
8	1000	90	124	1060	84	122	1050	87	125	984	85	114
9	1000	91	125	1060	85	124	1050	88	126	984	86	116
10	1000	92	126	1060	86	125	1050	89	128	984	87	117
11	1000	93	127	1060	87	126	1050	90	129	984	88	118
12	1000	94	128	1060	88	127	1050	91	130	983	89	119
13	1000	94	129	1060	89	129	1050	91	132	983	90	121
14	1000	95	130	1060	90	130	1050	92	133	983	91	122
15	1000	96	131	1060	91	131	1050	93	134	983	92	123
16	1000	97	132	1060	91	132	1050	94	135	983	93	124
17	1000	97	133	1060	92	133	1050	95	136	982	93	125
18	1000	98	134	1060	93	134	1050	96	137	982	94	126
19	1000	99	135	1060	94	135	1050	96	138	981	95	127
20	1000	99	136	1060	95	136	1050	97	140	981	96	128
21	1000	100	137	1050	95	137	1050	98	140	980	97	129
22	1000	100	137	1050	96	138	1050	99	142	980	97	130
23	1000	101	138	1050	97	139	1050	99	142	979	98	131
24	1000	102	139	1050	98	140	1050	100	143	978	99	132
25	1000	102	140	1050	98	141	1050	101	144	977	99	133
26	1000	103	140	1050	99	142	1050	101	145	976	100	133
27	1000	103	141	1050	99	142	1040	102	146	975	101	134
28	999	104	142	1050	100	143	1040	103	146	974	101	135
29	999	104	142	1050	101	144	1040	103	147	973	102	135
30	998	105	143	1050	101	145	1040	104	148	973	102	136
31	998	105	143	1050	102	146	1040	104	148	973	103	137
Avg	1000	96	131	1060	91	131	1050	93	134	981	92	123
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	2	6	8	7	7	10	4	7	10	4	8	10
Min	998	84	115	1050	77	113	1040	80	115	973	77	104
Max	1010	105	143	1070	102	146	1060	104	148	987	103	137

ED_004549_00015928-00096

Table E2. Daily means of animal characteristics at Site IN3B for January, 2009.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	997	106	144	1050	102	146	1040	105	149	973	104	138
2	997	106	145	1050	103	147	1040	105	149	972	104	138
3	996	107	145	1050	103	148	1040	106	150	972	105	139
4	996	107	146	1050	104	149	1040	106	151	972	105	140
5	995	108	146	1050	104	149	1040	107	151	972	106	140
6	994	108	147	1050	105	150	1030	107	152	972	106	141
7	994	108	147	1050	105	151	1030	108	153	971	107	142
8	993	109	148	1050	106	151	1030	108	153	971	107	142
9	993	109	148	1050	106	152	1030	109	154	970	108	143
10	992	110	149	1050	107	152	1030	109	155	970	108	143
11	992	110	149	1050	107	153	1030	110	155	969	109	144
12	991	111	150	1040	108	154	1030	110	156	969	109	145
13	991	111	150	1040	108	154	1030	111	156	969	110	145
14	991	112	151	1040	108	155	1030	111	157	969	110	146
15	991	112	152	1040	109	155	1030	112	158	969	111	147
16	979	111	149	1040	109	156	1010	111	154	867	110	130
17	922	111	140	1040	110	156	927	111	140	800	110	120
18	861	111	131	1040	110	157	852	111	129	799	110	120
19	701	110	106	1040	111	157	845	112	129	765	111	116
20	621	109	93	933	110	140	737	111	112	635	110	95
21	621	110	93	861	110	129	665	111	101	619	109	92
22	621	110	93	859	110	129	664	111	101	618	110	93
23	621	111	94	858	111	130	663	112	101	617	110	93
24	620	111	94	857	111	130	662	112	101	616	110	93
25	620	111	94	857	112	131	662	112	102	606	111	92
26	620	112	95	857	112	131	662	113	102	565	111	86
27	620	112	95	857	112	132	662	113	103	520	112	80
28	620	113	96	857	113	132	662	114	103	476	112	73
29	511	111	78	749	112	115	549	113	85	439	111	66
30	440	110	66	678	111	103	458	112	70	433	110	65
31	440	111	67	678	112	104	435	112	67	422	110	63
Avg	817	110	123	960	108	142	859	110	129	786	109	116
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	200	2	29	117	3	15	201	2	29	203	2	29
Min	440	106	66	678	102	103	435	105	67	422	104	63
Max	997	113	152	1050	113	157	1040	114	158	973	112	147

ED_004549_00015928-00097

Table E2. Daily means of animal characteristics at Site IN3B for February, 2009.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	439	111	67	678	112	104	412	113	64	378	110	57
2	439	112	67	678	113	105	390	113	60	332	111	50
3	439	112	67	678	113	105	367	114	57	285	111	43
4	303	111	46	569	112	87	345	114	54	246	108	36
5	214	111	33	498	111	76	327	112	50	242	106	35
6	214	112	33	498	112	76	325	110	49	242	106	35
7	214	112	33	498	112	76	325	110	49	242	107	35
8	214	112	33	498	113	77	325	111	49	242	107	35
9	214	113	33	401	111	61	325	111	49	242	107	36
10	214	113	33	338	110	51	325	112	50	242	108	36
11	214	114	33	338	110	51	325	112	50	242	108	36
12	214	114	33	338	111	51	325	113	50	242	109	36
13	214	115	34	338	111	51	325	113	50	242	109	36
14	214	115	34	338	112	52	325	114	51	242	110	36
15	214	116	34	338	112	52	325	114	51	242	111	37
16	85	114	14	134	110	21	129	112	20	96	108	15
17	0	100	0	0	96	0	0	98	0	0	95	0
18	0	86	0	0	82	0	0	83	0	0	80	0
19	0	71	0	0	67	0	0	68	0	0	66	0
20	0	57	0	0	52	0	0	53	0	0	51	0
21	0	42	0	0	37	0	0	38	0	0	37	0
22	0	28	0	0	22	0	0	23	0	0	22	0
23	0	13	0	0	7	0	0	8	0	0	7	0
24	1840	6	14	0	0	0	0	0	0	0	0	0
25	2320	6	18	0	0	0	0	0	0	0	0	0
26	2320	6	20	0	0	0	0	0	0	0	0	0
27	2320	7	22	0	0	0	0	0	0	0	0	0
28	2320	8	24	0	0	0	0	0	0	0	0	0
Avg	542	80	26	256	77	39	186	77	29	143	75	21
n	28	28	28	28	28	28	28	28	28	28	28	28
SD	798	44	20	249	46	38	167	46	26	131	45	20
Min	0	6	0	0	0	0	0	0	0	0	0	0
Max	2320	116	67	678	113	105	412	114	64	378	111	57

ED_004549_00015928-00098

Table E2. Daily means of animal characteristics at Site IN3B for March, 2009.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	2320	8	26	0	0	0	0	0	0	0	0	0
2	2320	9	27	0	3	0	0	0	0	0	0	0
3	2320	9	29	1710	6	13	0	0	0	0	0	0
4	2320	10	30	2160	6	17	0	0	0	0	0	0
5	2320	10	32	2160	6	19	0	0	0	0	0	0
6	2320	10	33	2160	7	20	0	0	0	0	0	0
7	2320	11	34	2160	7	22	0	0	0	0	0	0
8	2310	11	35	2160	8	23	0	0	0	0	0	0
9	2310	12	37	2160	8	25	0	0	0	0	0	0
10	2310	12	38	2160	9	26	0	0	0	0	0	0
11	2310	12	39	2160	9	28	0	0	0	0	0	0
12	2310	13	40	2160	10	29	0	0	0	0	0	0
13	2310	13	42	2160	10	30	0	0	0	0	0	0
14	2310	14	43	2160	11	32	0	0	0	0	0	0
15	2300	14	44	2160	11	33	0	0	0	0	0	0
16	2280	14	45	2160	12	34	0	0	0	0	0	0
17	2270	15	46	2170	12	35	0	0	0	0	0	0
18	2250	15	47	2200	12	37	0	0	0	0	6	0
19	1570	16	34	2230	13	39	0	0	0	668	15	14
20	1130	16	25	2230	13	40	0	0	0	1110	16	24
21	1130	17	26	2230	14	41	0	0	0	1110	17	25
22	1130	17	26	2230	14	42	0	0	0	1110	17	26
23	1130	17	27	2230	14	44	0	0	0	1110	18	27
24	1130	18	28	2230	15	45	0	0	0	1110	18	27
25	1130	18	28	2230	15	46	0	0	0	1110	19	28
26	1130	19	29	2220	16	47	0	0	0	1100	19	29
27	1130	19	30	2220	16	48	0	0	0	1100	19	29
28	1120	20	31	2220	16	50	0	0	0	1100	20	30
29	1120	20	31	2050	17	47	0	0	0	1100	21	31
30	1120	21	32	1720	17	41	0	0	0	1100	21	32
31	1120	22	33	1390	18	34	0	9	0	1100	22	33
Avg	1830	15	34	1990	11	32	0	0	0	449	8	12
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	570	4	7	552	4	13	0	2	0	534	9	14
Min	1120	8	25	0	0	0	0	0	0	0	0	0
Max	2320	22	47	2230	18	50	0	9	0	1110	22	33

ED_004549_00015928-00099

Table E2. Daily means of animal characteristics at Site IN3B for April, 2009.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	1120	22	34	1120	18	28	889	18	22	1100	22	34
2	1120	23	35	1090	19	28	1120	19	29	1100	23	35
3	1120	23	36	1090	19	29	1120	19	30	1100	24	35
4	1120	24	37	1090	20	29	1120	20	30	1100	24	36
5	1120	25	38	1090	20	30	1120	20	31	1100	25	37
6	1120	25	39	1090	21	31	1120	21	32	1100	25	38
7	1120	26	40	1090	21	32	1120	21	33	1100	26	39
8	1120	27	41	1090	22	33	1120	22	34	1100	27	40
9	1120	27	42	1090	23	34	1120	23	35	1100	28	42
10	1120	28	43	1090	23	34	1120	23	35	1100	28	43
11	1120	29	44	1090	24	35	1120	24	36	1100	29	44
12	1110	30	45	1090	24	36	1120	24	37	1100	30	45
13	1110	31	46	1090	25	37	1120	25	38	1100	31	46
14	1110	31	48	1090	26	38	1120	26	39	1100	32	47
15	1110	32	49	1090	26	39	1120	26	41	1100	32	49
16	1110	33	50	1090	27	40	1120	27	42	1100	33	50
17	1110	34	52	1090	28	41	1120	28	43	1100	34	51
18	1110	35	53	1090	29	43	1120	29	44	1100	35	52
19	1110	36	54	1090	29	44	1120	29	45	1100	36	54
20	1110	37	56	1090	30	45	1120	30	46	1100	37	55
21	1110	37	57	1090	31	46	1120	31	47	1100	38	56
22	1110	38	58	1090	32	47	1120	32	48	1100	39	58
23	1110	39	60	1090	33	48	1120	33	50	1100	40	59
24	1110	40	61	1080	33	50	1120	33	51	1100	41	61
25	1110	41	63	1080	34	51	1120	34	52	1100	41	62
26	1110	42	64	1080	35	52	1120	35	54	1100	42	64
27	1110	43	66	1080	36	53	1120	36	55	1100	43	65
28	1110	44	67	1080	37	55	1120	37	56	1090	44	66
29	1110	45	69	1080	38	56	1120	38	58	1090	45	68
30	1110	46	70	1080	39	57	1120	39	59	1090	46	69
Avg	1110	33	51	1090	27	41	1110	27	42	1100	33	50
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	3	7	11	6	6	9	41	6	10	3	7	11
Min	1110	22	34	1080	18	28	889	18	22	1090	22	34
Max	1120	46	70	1120	39	57	1120	39	59	1100	46	69

ED_004549_00015928-00100

Table E2. Daily means of animal characteristics at Site IN3B for May, 2009.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	1110	47	72	1080	40	59	1120	40	60	1090	48	71
2	1110	48	73	1080	41	60	1120	41	62	1090	49	72
3	1110	49	75	1080	42	62	1120	42	63	1090	50	74
4	1110	50	77	1080	43	63	1120	43	65	1090	51	76
5	1110	52	78	1080	44	65	1120	43	66	1090	52	77
6	1110	53	80	1080	45	66	1120	44	68	1090	53	79
7	1110	54	81	1080	46	68	1120	45	69	1090	54	80
8	1110	55	83	1080	47	69	1120	46	71	1090	55	82
9	1110	56	85	1080	48	71	1120	48	72	1090	56	84
10	1110	57	86	1080	49	72	1120	49	74	1090	57	85
11	1110	58	88	1080	50	74	1120	50	76	1090	58	87
12	1110	59	89	1080	51	75	1120	51	77	1090	59	88
13	1110	60	91	1080	52	77	1120	52	79	1090	60	90
14	1110	61	93	1080	53	78	1120	53	80	1090	62	92
15	1110	62	94	1080	54	80	1120	54	82	1090	63	93
16	1110	63	96	1080	55	81	1120	55	84	1090	64	95
17	1110	65	98	1080	56	83	1110	56	85	1090	65	96
18	1110	66	99	1080	57	84	1110	57	87	1090	66	98
19	1110	67	101	1080	58	86	1110	58	88	1090	67	100
20	1110	68	102	1080	59	87	1110	59	90	1090	68	101
21	1100	69	104	1080	60	89	1110	60	91	1090	69	103
22	1100	70	105	1080	61	91	1110	61	93	1090	70	104
23	1100	71	107	1080	63	92	1110	62	94	1090	71	106
24	1100	72	109	1080	64	94	1110	63	96	1090	72	108
25	1100	73	110	1080	65	95	1110	64	97	1090	73	109
26	1100	74	112	1080	66	97	1110	65	99	1090	74	111
27	1100	75	113	1080	67	98	1110	66	101	1090	76	112
28	1100	76	115	1080	68	100	1110	67	102	1090	77	114
29	1100	77	116	1080	69	101	1110	69	104	1090	78	115
30	1100	78	118	1080	70	103	1110	70	105	1090	79	117
31	1100	79	119	1080	71	104	1110	71	107	1090	80	118
Avg	1110	63	96	1080	55	81	1110	55	83	1090	64	95
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	2	10	14	3	9	14	3	9	14	2	10	14
Min	1100	47	72	1080	40	59	1110	40	60	1090	48	71
Max	1110	79	119	1080	71	104	1120	71	107	1090	80	118

ED_004549_00015928-00101

Table E2. Daily means of animal characteristics at Site IN3B for June, 2009.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	1100	80	121	1080	72	106	1110	72	108	1090	81	119
2	1100	81	122	1070	73	107	1110	73	110	1080	81	121
3	1100	82	123	1070	74	109	1110	74	111	1080	82	122
4	1100	83	125	1070	75	110	1110	75	113	1080	83	123
5	1100	84	126	1070	76	111	1110	76	114	1080	84	125
6	1100	85	127	1070	77	113	1110	77	116	1080	85	126
7	1100	86	129	1070	78	114	1110	78	117	1080	86	127
8	1100	86	130	1070	79	116	1110	78	118	1080	87	128
9	1100	87	131	1070	80	117	1110	79	120	1080	88	130
10	1100	88	132	1070	81	118	1110	80	121	1080	89	131
11	1100	89	134	1070	82	120	1100	81	122	1080	90	132
12	1100	90	135	1070	83	121	1100	82	124	1080	90	134
13	1100	91	136	1070	83	122	1100	83	125	1080	91	135
14	1100	91	137	1070	84	123	1100	84	126	1080	92	136
15	1100	92	138	1070	85	125	1100	85	128	1080	93	137
16	1100	93	139	1070	86	126	1100	86	129	1080	94	138
17	1100	94	140	1070	87	127	1100	86	130	1080	94	139
18	1100	94	142	1070	88	128	1100	87	131	1080	95	140
19	1100	95	143	1070	89	129	1100	88	133	1080	96	141
20	1100	96	144	1070	89	131	1100	89	134	1080	96	142
21	1100	96	145	1070	90	132	1100	90	135	1080	97	143
22	1100	97	146	1070	91	133	1100	90	136	1080	98	144
23	1100	98	147	1070	92	134	1100	91	137	1080	98	145
24	1100	98	147	1070	92	135	1100	92	138	1080	99	146
25	1100	99	148	1070	93	136	1100	92	139	1080	100	147
26	1100	100	149	1070	94	137	1100	93	140	1080	100	147
27	1100	100	150	1070	94	138	1100	94	141	1080	101	148
28	1100	101	151	1070	95	139	1100	94	142	1080	101	149
29	1100	101	152	1070	96	140	1100	95	143	1080	102	150
30	1100	102	152	1070	96	141	1100	96	144	1080	102	151
Avg	1100	92	138	1070	85	125	1100	85	127	1080	93	137
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	2	6	10	2	7	11	2	7	11	2	7	9
Min	1100	80	121	1070	72	106	1100	72	108	1080	81	119
Max	1100	102	152	1080	96	141	1110	96	144	1090	102	151

ED_004549_00015928-00102

Table E2. Daily means of animal characteristics at Site IN3B for July, 2009.

Day	Room 5			Room 6			Room 7			Room 8		
	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2	Inv., pigs	Mass, kg	kg·m^2
1	1100	102	153	1070	97	141	1100	96	145	1080	103	151
2	1100	103	154	1070	98	142	1100	97	145	1080	103	152
3	1100	103	155	1070	98	143	1100	97	146	1080	104	153
4	1100	104	155	1070	99	144	1100	98	147	1080	105	154
5	1100	104	156	1070	99	145	1100	99	148	1080	105	154
6	1100	105	157	1070	100	145	1100	99	148	1080	105	155
7	1100	105	157	1070	100	146	1100	100	149	1070	106	156
8	1100	106	158	1070	101	147	1100	100	150	1070	106	156
9	1100	106	159	1070	101	147	1100	101	150	1070	107	157
10	1100	106	159	1070	102	148	1090	101	151	1070	107	157
11	1100	107	160	1070	102	149	1090	102	152	1070	108	158
12	1100	107	161	1060	103	149	1090	102	152	1050	108	155
13	1100	108	161	1060	103	150	1090	102	153	994	109	148
14	1100	108	162	1060	104	151	1090	103	154	941	109	140
15	986	108	146	1060	104	151	1090	103	154	897	109	134
16	915	108	135	1060	104	152	1090	104	155	892	109	133
17	915	108	135	1060	105	152	1090	104	156	891	109	133
18	915	109	136	1060	105	153	1090	105	156	890	110	134
19	915	109	136	1060	106	154	1090	105	157	890	110	134
20	915	109	137	1060	106	154	1090	106	157	890	110	134
21	915	110	137	1060	107	155	1090	106	158	890	111	135
22	915	110	138	954	107	139	982	106	142	890	111	135
23	914	111	138	883	107	129	910	106	132	889	112	136
24	914	111	139	882	107	129	909	106	132	889	112	136
25	914	111	139	882	107	129	908	107	132	889	112	137
26												
27												
28												
29												
30												
31												
Avg	1020	107	149	1040	103	146	1070	102	149	984	108	145
n	25	25	25	25	25	25	25	25	25	25	25	25
SD	88	3	10	62	3	7	63	3	7	88	3	10
Min	914	102	135	882	97	129	908	96	132	889	103	133
Max	1100	111	162	1070	107	155	1100	107	158	1080	112	158

ED_004549_00015928-00103

Table E3. Building environment.

Table E3. Daily means (SD) of environmental parameters at Site IN3B for July, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	25.5 (0.6)	56.6 (6.6)	-10.5 (3.4)		25.9 (1.4)	54.7 (10.2)	-15.1 (2.6)		25.7 (1.7)	56.9 (9.3)	-16.3 (3.4)		24.3 (1.3)	58.4 (8.6)	-16.3 (3.4)	
2	24.6 (0.3)	52.8 (5.8)	-8.7 (3.4)		25.0 (0.8)	51.1 (9.4)	-13.8 (3.0)		24.6 (1.2)	53.5 (8.5)	-15.8 (3.3)		22.9 (1.0)	55.3 (7.9)	-15.9 (3.7)	
3	25.4 (0.8)	52.9 (7.2)	-10.7 (3.3)		25.8 (1.4)	52.6 (9.1)	-15.4 (3.0)		25.8 (1.7)	54.3 (8.8)	-16.7 (3.3)		24.2 (1.6)	55.4 (9.4)	-16.5 (3.2)	
4	26.2 (1.4)	62.9 (5.2)	-11.0 (1.8)		26.8 (1.7)	62.9 (4.7)	-14.3 (1.5)		27.2 (1.8)	65.2 (4.8)	-14.1 (1.6)		25.8 (1.8)	64.4 (5.2)	-14.1 (1.2)	
5	26.4 (1.3)	65.3 (10.6)	-10.5 (2.1)		27.1 (1.5)	65.3 (10.7)	-12.0 (1.6)		27.7 (1.5)	68.1 (11.1)	-12.6 (1.4)		26.5 (1.9)	67.0 (12.2)	-13.6 (1.4)	
6	25.8 (0.9)	59.6 (9.0)	-12.3 (1.6)		26.7 (1.4)	58.9 (9.8)	-13.1 (2.0)	19.7 (6.9)	27.0 (1.5)	61.2 (9.8)	-14.3 (2.5)	31.8 (9.5)	25.5 (1.8)	62.1 (11.0)	-14.9 (2.3)	
7	25.7 (1.0)	54.5 (10.3)	-11.6 (2.4)		26.5 (1.6)	55.0 (10.5)	-14.0 (2.9)	20.5 (7.0)	26.5 (1.6)	56.6 (10.2)	-14.6 (2.7)	32.8 (10.0)	25.3 (2.0)	56.5 (12.1)	-14.7 (2.9)	
8	26.2 (1.5)	58.0 (6.9)	-9.0 (1.4)		27.3 (1.8)	58.6 (6.2)	-11.5 (1.4)		27.4 (1.7)	60.6 (6.3)	-12.0 (1.3)	37.4 (6.6)	26.0 (1.7)	59.5 (8.0)	-11.6 (1.9)	38.0 (5.5)
9	26.7 (1.6)	64.3 (8.2)	-10.6 (1.6)		27.2 (1.7)	63.8 (8.0)	-12.1 (1.3)		27.7 (1.5)	66.2 (8.1)	-13.0 (1.5)	39.6 (3.4)	26.4 (1.5)	65.3 (9.4)	-12.3 (2.0)	40.1 (1.1)
10	28.3 (1.8)	66.4 (6.0)	-11.4 (1.3)		28.4 (1.8)	65.8 (6.8)	-13.4 (1.8)	24.1 (3.2)	28.5 (1.8)	68.6 (6.9)	-14.2 (1.4)	38.5 (4.9)	28.0 (1.8)	67.6 (7.7)	-13.4 (2.3)	38.4 (4.6)
11	26.0 (0.7)	53.3 (11.5)	-13.4 (2.0)		26.0 (0.7)	53.6 (11.3)	-15.2 (3.0)	22.1 (5.7)	26.1 (1.0)	55.1 (11.9)	-13.6 (3.7)	35.4 (9.0)	26.0 (1.2)	53.6 (12.4)	-15.0 (2.7)	36.4 (7.7)
12	26.5 (1.2)	49.4 (9.5)	-11.6 (3.0)		25.8 (1.3)	51.5 (10.1)	-16.9 (5.0)	22.5 (11.9)	25.6 (1.7)	52.8 (9.6)	-15.9 (5.7)	30.0 (12.1)	25.3 (2.1)	51.9 (11.3)	-16.5 (4.2)	30.3 (10.7)
13	26.3 (1.1)	53.9 (11.3)	-13.7 (2.9)		25.9 (0.9)	55.3 (11.1)	-19.4 (7.3)	31.9 (13.3)	25.9 (1.2)	56.5 (10.3)	-16.6 (4.6)	32.3 (12.8)	25.4 (1.7)	55.8 (12.5)	-17.5 (3.8)	33.2 (11.8)
14	27.4 (1.6)	49.8 (7.6)	-10.3 (2.3)		26.5 (2.0)	52.6 (8.5)	-17.0 (4.9)	35.6 (13.6)	26.4 (2.4)	53.9 (8.3)	-15.8 (5.2)	36.6 (14.3)	25.9 (2.5)	52.3 (9.0)	-15.8 (4.8)	36.4 (13.2)
15	26.3 (1.0)	54.8 (7.8)	-12.9 (2.8)		26.3 (1.2)	55.5 (8.8)	-16.8 (3.6)	34.3 (11.9)	26.3 (1.5)	57.3 (8.5)	-15.6 (3.4)	34.9 (12.0)	25.8 (1.6)	56.5 (9.3)	-16.2 (3.2)	36.1 (11.2)
16	27.0 (1.5)	50.7 (9.4)	-11.4 (2.7)		26.4 (2.2)	52.3 (10.8)	-16.7 (4.4)		26.4 (2.5)	53.8 (10.4)	-16.7 (3.8)	34.4 (13.6)	25.5 (2.7)	53.7 (10.8)	-17.4 (3.4)	34.6 (12.7)
17	26.1 (0.8)	66.1 (5.2)	-12.0 (1.5)		25.9 (0.9)	68.1 (5.9)	-13.5 (2.0)		26.3 (0.8)	69.9 (6.0)	-14.1 (1.8)	37.4 (9.8)	26.2 (1.0)	68.3 (5.4)	-15.1 (1.5)	35.8 (9.0)
18	27.5 (1.8)	69.1 (4.3)	-10.6 (1.1)		27.3 (1.9)	70.8 (4.7)	-13.1 (2.2)		27.5 (2.0)	72.6 (4.7)	-13.2 (1.7)	39.5 (9.3)	27.5 (1.7)	70.5 (5.7)	-13.9 (1.5)	37.7 (8.7)
19	26.4 (1.1)	69.0 (8.0)	-11.3 (2.6)		25.7 (1.3)	71.7 (8.1)	-22.5 (6.7)		26.2 (1.3)	73.5 (8.4)	-13.1 (3.2)	35.7 (11.3)	26.3 (1.3)	71.0 (8.3)	-14.5 (2.5)	36.6 (10.1)
20	25.1 (0.6)	52.5 (5.3)	-9.9 (3.4)	26.8 (15.5)	23.7 (2.2)	54.2 (9.0)	-17.1 (3.5)		24.3 (1.5)	55.6 (7.6)	-15.2 (3.2)	27.3 (15.6)	24.2 (1.7)	54.2 (6.5)	-15.8 (3.6)	26.9 (12.2)
21	25.3 (0.6)	52.8 (5.0)	-10.5 (3.4)	28.1 (16.3)	23.9 (2.3)	53.9 (8.6)	-16.9 (3.4)		24.8 (1.6)	55.3 (7.8)	-16.3 (3.2)	29.0 (15.3)	24.4 (1.7)	54.6 (6.3)	-17.0 (3.1)	29.9 (13.1)
22	25.5 (0.8)	51.9 (6.1)	-9.7 (3.3)	29.3 (16.6)	24.4 (2.8)	52.5 (9.8)	-16.3 (3.5)		25.1 (2.1)	53.7 (8.8)	-15.7 (3.5)	30.5 (15.3)	24.7 (2.0)	53.4 (7.5)	-16.5 (3.5)	31.0 (13.3)
23	26.4 (1.3)	50.3 (8.3)	-11.3 (3.8)	30.7 (16.2)	25.3 (3.0)	50.5 (11.3)	-16.7 (3.4)		25.8 (2.5)	51.3 (10.6)	-17.1 (3.2)	32.7 (14.2)	25.6 (2.4)	51.3 (9.6)	-17.6 (3.0)	31.9 (12.8)
24	26.7 (1.7)	54.8 (6.7)	-13.2 (2.7)	30.6 (16.0)	25.7 (2.8)	56.0 (9.2)	-17.2 (3.7)		26.1 (2.5)	56.8 (8.6)	-17.7 (3.7)	31.7 (14.7)	25.9 (2.6)	56.1 (8.1)	-18.3 (3.8)	32.0 (12.5)
25	26.8 (1.9)	58.7 (8.8)	-15.0 (3.2)	30.3 (13.5)	25.8 (2.2)	60.3 (9.6)	-16.7 (3.8)		26.0 (2.2)	61.0 (9.0)	-18.2 (4.3)	31.6 (12.3)	26.0 (2.2)	60.0 (9.2)	-18.3 (4.0)	31.1 (11.6)
26	27.2 (1.6)	63.6 (5.0)	-14.2 (3.0)	36.7 (12.8)	26.3 (1.9)	65.7 (4.8)	-14.6 (3.4)		26.7 (1.8)	66.3 (4.9)	-16.6 (3.8)	36.8 (12.1)	26.7 (1.8)	64.8 (5.9)	-15.9 (3.6)	36.4 (10.2)
27	26.4 (0.6)	71.3 (2.0)	-12.9 (0.8)	43.2 (7.0)	25.9 (0.5)	73.0 (1.8)	-12.4 (1.6)		26.4 (0.5)	74.8 (1.7)	-14.3 (1.0)	43.9 (6.2)	26.4 (0.6)	72.9 (2.2)	-14.7 (0.9)	43.0 (4.0)
28	26.5 (1.7)	71.7 (3.4)	-12.7 (0.9)	36.9 (9.0)	26.6 (1.9)	70.4 (5.0)	-16.2 (2.2)		27.0 (1.8)	72.3 (4.6)	-15.2 (1.4)	37.1 (9.1)	26.5 (1.6)	72.3 (3.9)	-15.5 (1.7)	35.5 (9.2)
29	26.8 (1.7)	62.2 (7.4)	-14.3 (3.1)	35.5 (12.2)	26.6 (2.2)	61.6 (9.5)	-15.2 (2.8)		27.2 (2.0)	63.1 (8.6)	-16.9 (2.6)	36.6 (10.7)	26.6 (1.9)	63.1 (8.5)	-16.1 (3.2)	35.5 (10.4)
30	27.0 (2.2)	60.7 (7.2)	-15.1 (3.4)	34.7 (12.9)	26.9 (2.7)	59.4 (9.1)	-15.6 (3.4)		27.3 (2.2)	61.2 (8.0)	-16.6 (3.9)	35.8 (12.3)	26.6 (2.3)	61.8 (7.3)	-16.2 (4.5)	34.9 (11.7)
31	27.3 (2.4)	63.4 (5.5)	-15.6 (3.4)	35.8 (12.7)	28.3 (2.6)	61.2 (8.1)	-18.5 (5.5)	36.3 (12.3)	28.0 (2.8)	63.3 (7.4)	-18.0 (4.6)	36.1 (12.1)	27.0 (2.6)	64.1 (6.1)	-17.4 (4.8)	35.2 (11.7)
Avg	26.4	58.8	-11.9	33.2	26.2	59.3	-15.5	27.5	26.4	61.0	-15.4	34.8	25.8	60.4	-15.6	34.9
n	31	31	31	12	31	31	31	9	31	31	31	26	31	31	31	24
SD	0.8	6.7	1.8	4.5	1.1	6.7	2.3	6.5	1	6.9	1.6	3.68	1	6.5	1.6	3.51
Min	24.6	49.4	-15.6	26.8	23.7	50.5	-22.5	19.7	24.3	51.3	-18.2	27.3	22.9	51.3	-18.3	26.9
Max	28.3	71.7	-8.7	43.2	28.4	73	-11.5	36.3	28.5	74.8	-12	43.9	28	72.9	-11.6	43

ED_004549_00015928-00104

Table E3. Daily means (SD) of environmental parameters at Site IN3B for August, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	28.0 (2.3)	65.0 (6.2)	-14.1 (2.0)	38.7 (10.5)	28.7 (2.8)	62.8 (9.9)	-15.7 (3.9)		28.8 (2.7)	64.9 (9.4)	-15.5 (2.2)	39.4 (9.3)	27.8 (2.5)	66.1 (7.4)	-15.7 (2.5)	37.9 (8.6)
2	28.3 (2.5)	64.4 (8.8)	-13.7 (1.1)	39.7 (8.7)	28.0 (2.7)	65.3 (10.2)	-14.3 (3.1)		28.5 (2.4)	67.2 (10.4)	-14.5 (1.7)	41.5 (7.9)	28.2 (2.6)	65.5 (9.8)	-14.9 (2.4)	39.1 (8.0)
3																
4	26.0 (1.2)	62.3 (4.9)	-15.0 (3.1)	34.5 (12.7)	24.9 (1.8)	62.5 (5.8)	-17.3 (3.8)		25.6 (1.5)	63.6 (5.8)	-17.5 (3.7)	34.8 (12.3)	25.8 (1.4)	62.9 (5.0)	-17.8 (3.6)	34.1 (11.6)
5	28.0 (2.1)	69.7 (3.6)	-12.1 (1.2)		27.3 (2.2)	71.2 (4.6)	-14.0 (2.6)		27.5 (2.2)	73.5 (4.6)	-14.4 (1.6)	41.6 (8.0)	27.9 (2.1)	70.7 (4.6)	-14.4 (2.0)	40.7 (6.7)
6	29.2 (1.9)	70.8 (4.2)	-13.1 (1.0)		28.4 (2.1)	72.6 (5.1)	-12.8 (0.8)		28.9 (1.9)	74.5 (5.1)	-13.8 (0.9)	45.8 (1.0)	29.3 (1.9)	71.3 (4.6)	-13.8 (1.7)	43.6 (0.4)
7	29.9 (1.7)	70.4 (5.1)	-11.8 (1.4)	45.8 (0.8)	29.9 (2.6)	68.9 (8.2)	-12.7 (0.9)		30.0 (2.2)	71.1 (9.0)	-13.3 (1.2)	46.0 (0.6)	30.0 (1.7)	69.5 (7.0)	-12.9 (1.7)	43.1 (1.2)
8	30.3 (1.7)	67.3 (6.7)	-12.9 (0.8)	45.5 (0.5)	30.4 (2.2)	66.6 (8.5)	-13.6 (0.7)	45.7 (0.5)	30.3 (2.0)	69.2 (8.7)	-13.3 (0.9)	45.7 (0.5)	30.5 (2.4)	66.7 (8.9)	-12.5 (1.8)	
9	29.4 (1.5)	70.2 (6.0)	-12.8 (0.9)	45.7 (0.5)	29.6 (1.5)	70.1 (6.2)	-12.9 (1.2)	46.3 (0.5)	29.5 (1.7)	72.9 (7.7)	-12.4 (1.6)	46.3 (0.8)	30.1 (1.9)	68.0 (8.0)	-11.3 (1.5)	35.8 (1.9)
10	27.6 (1.9)	68.4 (8.0)	-12.7 (1.0)	42.1 (7.2)	28.4 (2.6)	66.6 (10.7)	-12.8 (2.7)	43.4 (6.0)	28.1 (2.5)	69.9 (12.0)	-13.4 (1.0)	43.3 (6.6)	27.8 (2.4)	68.0 (9.6)	-12.4 (2.1)	35.1 (3.6)
11	27.1 (2.4)	63.2 (7.6)	-14.5 (2.9)	35.8 (12.3)	27.5 (3.2)	62.7 (11.2)	-10.5 (4.6)	37.8 (10.8)	27.5 (3.2)	63.9 (11.3)	-15.8 (3.2)	36.9 (11.8)	26.2 (2.8)	65.5 (9.8)	-15.1 (4.3)	30.6 (7.7)
12	28.1 (2.9)	62.7 (7.1)	-12.9 (1.4)	39.3 (9.4)	28.4 (3.4)	63.0 (9.4)	-11.5 (3.2)	40.7 (7.5)	28.1 (3.2)	65.1 (9.0)	-14.1 (1.5)	40.3 (8.4)	28.1 (3.7)	62.6 (9.9)	-13.0 (3.0)	32.1 (5.2)
13	26.5 (2.0)	55.3 (12.4)	-14.0 (3.2)	35.4 (12.5)	27.0 (2.9)	55.1 (15.4)	-12.2 (5.2)	38.2 (10.8)	26.6 (2.6)	56.9 (14.9)	-15.6 (2.9)	37.7 (11.6)	26.5 (2.3)	55.1 (13.4)	-15.3 (3.8)	34.7 (10.2)
14	25.2 (1.7)	61.0 (5.8)	-14.0 (3.2)	29.4 (15.2)	24.8 (2.2)	64.0 (5.6)	-19.8 (5.2)	31.5 (13.6)	24.6 (2.1)	65.2 (5.7)	-18.6 (3.8)	29.6 (15.5)	25.1 (1.9)	61.5 (5.9)	-18.1 (4.1)	29.8 (12.8)
15	27.1 (2.1)	64.9 (4.1)	-14.0 (2.7)	37.2 (11.6)	27.2 (2.7)	66.1 (6.5)	-16.6 (3.7)	38.6 (9.9)	26.8 (2.7)	67.5 (6.3)	-16.7 (2.8)	37.9 (10.1)	26.9 (2.4)	65.6 (4.9)	-16.8 (2.7)	36.3 (9.4)
16	26.1 (1.3)	73.1 (3.0)	-12.7 (1.8)	38.6 (8.9)	25.7 (1.2)	74.8 (2.7)	-15.9 (3.5)	37.6 (9.8)	25.3 (1.2)	77.3 (3.2)	-15.0 (2.3)	38.0 (9.8)	26.2 (1.4)	72.9 (3.1)	-14.5 (1.8)	36.6 (8.9)
17																
18																
19	25.4 (1.7)	64.0 (7.9)	-14.6 (2.5)	37.8 (11.4)	24.9 (1.8)	64.8 (7.9)	-17.9 (3.8)	37.6 (11.6)	24.7 (1.8)	66.9 (8.5)	-17.3 (2.7)	37.0 (12.5)	25.6 (1.8)	63.3 (7.9)	-16.1 (2.5)	36.4 (10.8)
20	25.3 (0.6)	78.3 (3.0)	-12.4 (2.5)	38.8 (8.9)	24.2 (0.4)	78.2 (1.4)	-7.4 (6.3)		24.1 (0.5)	83.4 (3.6)	-14.4 (1.9)	32.8 (8.1)	24.9 (0.5)	78.9 (3.4)	-13.8 (1.4)	37.8 (8.6)
21	26.9 (1.4)	76.6 (6.2)	-12.5 (1.0)	46.5 (0.6)	25.5 (1.4)	71.4 (2.6)	-2.8 (0.8)	11.4 (0.1)	25.9 (1.8)	82.0 (7.8)	-12.8 (0.9)	46.8 (1.4)	27.0 (1.9)	76.4 (7.7)	-13.2 (0.9)	44.1 (0.3)
22	28.3 (2.4)	70.5 (7.2)	-12.3 (0.9)	46.4 (0.6)	27.2 (2.1)		-2.8 (0.8)		27.8 (2.7)	74.1 (9.4)	-12.7 (1.5)	46.8 (0.8)	29.0 (2.9)	68.6 (9.5)	-12.5 (2.0)	45.1 (1.0)
23	28.3 (2.9)	66.7 (8.2)	-12.2 (1.2)	42.5 (6.9)	26.7 (2.4)		-4.1 (2.4)		28.0 (3.3)	69.1 (10.6)	-14.2 (2.8)	41.4 (10.0)	29.1 (3.3)	64.6 (10.5)	-13.9 (3.2)	42.2 (7.2)
24	26.5 (2.5)	70.0 (6.4)	-13.3 (2.8)	36.6 (10.8)	24.7 (2.2)		-6.9 (2.2)		25.8 (2.8)	73.8 (8.4)	-15.4 (3.7)	36.5 (11.8)	26.8 (2.8)	69.6 (8.2)	-15.0 (4.7)	38.7 (10.0)
25	24.7 (0.8)	74.6 (5.5)	-13.1 (2.7)	32.1 (9.8)	22.7 (1.2)		-10.6 (3.8)		23.7 (1.2)	80.3 (7.7)	-15.7 (2.5)	32.2 (10.4)	24.8 (1.0)	75.7 (6.3)	-16.2 (2.5)	32.8 (9.7)
26	23.4 (1.5)	61.5 (7.9)	-11.6 (3.5)	24.1 (16.2)	21.5 (3.3)				22.2 (2.8)	67.3 (13.1)	-14.0 (4.2)	22.9 (18.7)	23.3 (1.8)	61.7 (8.0)	-15.2 (3.8)	26.6 (15.6)
27	23.1 (2.2)		-6.3 (4.6)		22.2 (3.3)		-6.4 (5.0)		22.8 (3.5)	68.9 (10.9)	-9.3 (4.1)	22.7 (20.4)	23.3 (2.5)	65.1 (7.0)	-7.7 (4.1)	16.8 (9.4)
28	24.9 (3.6)		-1.6 (1.3)		26.9 (4.1)		-5.6 (5.6)		25.6 (4.1)	62.9 (13.5)	-3.2 (2.2)	12.2 (10.1)	25.7 (3.9)	62.1 (11.1)	-1.5 (2.2)	5.4 (1.7)
29	24.3 (1.0)		0.3 (0.3)		29.0 (2.4)		-7.1 (7.1)		26.3 (2.3)	64.0 (7.4)	0.8 (0.6)	2.1 (0.0)	26.1 (2.0)	64.1 (5.3)	0.7 (0.4)	2.1 (0.0)
30	22.5 (0.7)		1.3 (1.2)		27.1 (1.1)		-18.1 (5.9)		24.1 (0.9)		1.3 (0.6)		23.7 (1.0)		1.5 (0.9)	
31	19.7 (1.1)		-0.1 (1.5)		25.7 (2.1)		-8.1 (5.1)		20.3 (0.9)		-1.4 (2.4)		21.1 (1.9)		-2.8 (7.0)	
Avg	26.4	67.4	-11.0	38.7	26.6	67.0	-11.5	37.2	26.3	69.8	-12.6	36.1	26.7	67.0	-12.3	33.5
n	28	23	28	21	28	18	27	11	28	26	28	26	28	26	28	25
SD	2.4	5.4	4.8	5.7	2.2	5.3	4.8	9.1	2.4	6.2	5.2	10.6	2.2	5.2	5.3	10.6
Min	19.7	55.3	-15.0	24.1	21.5	55.1	-19.8	11.4	20.3	56.9	-18.6	2.1	21.1	55.1	-18.1	2.1
Max	30.3	78.3	1.3	46.5	30.4	78.2	-2.8	46.3	30.3	83.4	1.3	46.8	30.5	78.9	1.5	45.1

ED_004549_00015928-00105

Table E3. Daily means (SD) of environmental parameters at Site IN3B for September, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	20.7 (2.5)		0.2 (0.7)		26.4 (2.6)	52.8 (9.3)	-6.7 (5.4)	8.1 (3.1)	20.0 (2.5)		-1.0 (1.2)		21.6 (1.9)		-1.4 (1.4)	
2	21.2 (2.3)		0.3 (0.3)		27.0 (2.8)	52.2 (10.3)	-7.2 (5.8)	8.7 (2.8)	20.4 (2.4)		-1.2 (0.8)		22.4 (2.4)		-0.8 (0.6)	
3	23.1 (3.7)		-3.8 (3.9)		27.5 (3.0)	51.7 (10.3)	-7.2 (6.2)	9.0 (2.6)	22.3 (4.1)				23.9 (3.3)		-1.7 (1.6)	
4	26.1 (5.7)		-6.7 (5.7)		28.0 (3.1)	51.6 (12.0)	-10.0 (8.2)	12.8 (6.1)	23.7 (4.0)		-3.4 (1.7)		24.1 (3.3)		-3.2 (2.0)	
5	29.1 (3.2)	48.3 (11.3)	-13.5 (6.0)	16.6 (15.3)	28.4 (3.4)	51.7 (13.3)	-14.8 (9.0)	10.7 (6.1)	24.2 (3.9)		-2.6 (1.8)		24.7 (3.0)		-2.9 (1.6)	
6	27.2 (1.1)	61.3 (3.9)	-12.9 (5.2)	10.6 (5.6)	27.2 (1.2)	61.6 (4.8)	-27.5 (5.4)	14.5 (10.1)	24.6 (1.7)		-3.5 (4.3)		24.4 (1.0)		-3.8 (4.0)	
7	27.3 (1.8)	63.8 (4.8)	-14.4 (7.2)	12.4 (6.6)	27.7 (1.6)	63.9 (4.3)	-22.5 (10.8)	17.7 (6.0)	25.1 (2.0)	72.2 (5.1)	-5.2 (5.7)	3.1 (5.5)	24.5 (1.7)		-4.3 (5.5)	
8																
9																
10																
11	24.4 (1.3)	56.9 (11.1)	-10.2 (5.1)	7.1 (4.3)	24.9 (1.0)	55.5 (10.0)	-20.0 (8.0)	11.1 (4.6)	20.7 (1.6)	63.8 (14.1)	-3.8 (1.5)	2.0 (0.1)	20.6 (1.4)		-2.6 (1.1)	
12	22.7 (3.0)	55.2 (13.1)	-10.7 (8.3)	7.3 (5.1)	24.1 (1.7)	50.7 (8.9)	-14.9 (10.2)	9.9 (6.4)	18.3 (3.0)	61.9 (13.0)	-4.2 (1.8)	2.1 (0.1)	18.2 (2.2)		-4.2 (1.8)	
13	23.9 (3.1)	51.3 (14.0)	-10.3 (7.0)	9.4 (6.7)	24.8 (2.2)	48.0 (10.1)	-11.6 (6.7)	11.3 (6.4)	19.7 (4.1)	59.3 (16.1)	-3.7 (1.3)	2.1 (0.0)	19.3 (3.0)		-3.5 (1.5)	
14	23.7 (1.6)	50.8 (6.8)	-10.3 (6.8)	6.8 (3.9)	24.5 (1.1)	48.8 (5.6)	-16.5 (8.3)	10.4 (5.0)	19.4 (1.9)	56.6 (10.1)	-3.0 (1.3)	2.1 (0.0)	19.1 (1.7)		-2.5 (1.2)	
15	20.9 (2.1)	54.6 (11.1)	-6.3 (2.4)	4.5 (0.8)	22.7 (1.5)	50.5 (6.7)	-11.3 (8.1)	7.9 (4.9)	15.7 (2.4)	60.1 (11.6)	-3.5 (1.2)	2.1 (0.0)	15.1 (1.4)		-3.4 (1.2)	
16	22.1 (2.8)	48.8 (13.4)	-11.0 (8.8)	7.8 (5.5)	23.7 (1.9)	45.3 (8.4)	-13.0 (8.3)	10.2 (6.0)	17.0 (3.5)	56.3 (16.1)	-2.3 (1.2)	2.2 (0.0)	15.9 (2.6)		-2.9 (1.0)	
17	23.5 (2.6)	48.8 (7.6)	-10.7 (7.4)	8.9 (6.1)	24.4 (2.1)	47.0 (4.7)	-12.9 (6.7)	11.9 (5.9)	19.0 (4.0)	57.8 (10.9)	-1.3 (0.6)	2.2 (0.0)	17.1 (2.5)		-1.8 (0.6)	
18	26.1 (3.1)	51.2 (5.2)	-9.1 (6.0)	12.2 (6.8)	26.6 (3.2)	49.1 (6.3)	-11.6 (8.9)	15.7 (5.6)	22.2 (4.1)	59.1 (5.8)	-0.8 (0.5)	2.1 (0.0)	19.2 (3.6)		-1.3 (0.9)	
19	27.1 (2.5)	57.4 (6.2)	-10.5 (6.2)	13.4 (6.1)	27.4 (2.5)	56.5 (7.5)	-12.8 (9.0)	16.8 (4.5)	23.9 (3.0)	64.2 (6.3)	-0.3 (1.0)	2.1 (0.0)	23.1 (3.4)		-1.7 (2.1)	
20	26.5 (2.4)	59.1 (8.1)	-10.4 (7.0)	10.0 (3.0)	27.2 (2.9)	59.0 (9.1)	-10.9 (8.2)	11.4 (3.5)	24.0 (3.5)	64.8 (12.0)	-2.1 (2.2)	4.5 (3.5)	23.4 (2.9)		-6.5 (3.2)	
21	27.1 (2.8)	51.6 (11.5)	-11.5 (6.8)	14.3 (5.9)	27.0 (2.6)	51.6 (11.9)	-12.2 (6.9)	15.0 (6.9)	25.3 (4.1)	55.4 (16.0)	-10.0 (4.5)	22.1 (18.3)	24.7 (3.9)	54.3 (15.0)	-5.7 (4.4)	9.6 (2.7)
22	25.7 (1.5)	46.2 (9.4)	-13.6 (6.4)	12.8 (5.1)	25.0 (2.1)	45.0 (11.0)	-15.1 (5.2)	14.3 (12.3)	25.2 (1.7)	47.0 (11.9)	-12.4 (3.3)	14.3 (13.3)	22.7 (1.9)	47.5 (10.7)	-9.9 (5.2)	10.4 (1.7)
23	26.0 (2.7)	50.1 (7.7)	-4.6 (3.8)	11.8 (6.6)	25.7 (3.3)	48.2 (8.5)	-10.2 (7.2)	18.6 (18.4)	25.4 (3.3)	51.8 (10.0)	-8.7 (5.5)	20.2 (18.1)	22.4 (4.2)	53.1 (8.9)	-4.3 (3.2)	7.8 (4.2)
24	28.7 (2.7)	52.2 (3.8)	-6.7 (4.1)		27.6 (3.6)	53.6 (5.7)	-14.6 (3.7)	26.1 (17.8)	27.7 (3.2)	56.2 (6.6)	-12.9 (1.9)	27.3 (18.6)	26.1 (3.9)	56.6 (6.7)	-6.9 (6.4)	11.1 (0.4)
25																
26	24.3 (1.0)	70.4 (1.1)	-16.4 (2.6)	9.7 (1.5)	23.2 (0.7)	72.9 (1.9)	-14.5 (4.2)	8.1 (2.5)	23.8 (0.5)	74.4 (4.5)	-12.5 (3.5)	6.1 (1.3)	20.8 (1.2)	77.1 (2.5)	-13.3 (4.0)	7.8 (2.9)
27	23.8 (1.4)	60.8 (10.8)	-16.0 (7.0)	10.4 (5.5)	23.1 (1.7)	61.6 (11.8)	-12.4 (7.5)	8.2 (6.6)	23.9 (1.4)	62.1 (10.7)	-10.7 (5.8)	9.1 (6.5)	19.8 (1.9)	66.8 (13.5)	-9.1 (4.6)	4.3 (3.7)
28																
29	22.8 (3.1)	47.0 (12.3)	-12.5 (8.6)	10.8 (9.3)	23.6 (2.6)	44.9 (10.1)	-11.2 (9.0)	11.3 (11.1)	23.7 (2.7)	49.6 (14.0)	-11.0 (7.6)	14.9 (14.9)	23.5 (3.0)	45.1 (10.6)	-10.8 (7.4)	11.1 (10.5)
30	24.1 (3.0)	45.8 (8.5)	-13.2 (7.6)	16.8 (16.1)	24.2 (2.9)	45.4 (6.7)	-12.8 (8.0)	17.7 (16.9)	24.8 (2.9)	48.3 (9.5)	-12.8 (7.2)	19.5 (17.4)	24.9 (3.0)	44.1 (7.1)	-11.2 (6.4)	17.4 (17.3)
Avg	24.7	53.9	-9.8	10.7	25.7	52.8	-13.4	12.7	22.4	59.0	-5.5	8.4	21.7	55.6	-4.8	9.9
n	25	21	25	20	25	25	25	25	25	19	24	19	25	8	25	8
SD	2.3	6.3	4.3	3.1	1.7	6.6	4.5	4.2	3	7.1	4.4	8.23	3	10.6	3.4	3.54
Min	20.7	45.8	-16.4	4.5	22.7	44.9	-27.5	7.9	15.7	47.0	-12.9	2.0	15.1	44.1	-13.3	4.3
Max	29.1	70.4	0.3	16.8	28.4	72.9	-6.7	26.1	27.7	74.4	-0.3	27.3	26.1	77.1	-0.8	17.4

ED_004549_00015928-00106

Table E3. Daily means (SD) of environmental parameters at Site IN3B for October, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	23.7 (1.2)	52.9 (6.5)	-15.4 (5.7)	9.2 (4.8)	23.8 (1.0)	55.3 (6.1)	-19.1 (7.4)	10.1 (4.5)	24.9 (0.8)	55.3 (6.4)	-16.5 (5.9)	12.0 (4.9)	24.7 (1.1)	51.5 (6.3)	-13.7 (5.6)	8.7 (6.1)
2	24.2 (2.4)	57.3 (10.2)	-14.4 (6.6)	14.4 (12.9)	24.3 (2.6)	57.9 (9.9)	-14.1 (5.5)	12.9 (10.3)	25.0 (2.2)	59.6 (11.4)	-13.9 (6.3)	19.1 (15.0)	24.9 (2.3)	56.6 (10.0)	-12.1 (5.3)	15.7 (14.3)
3	23.7 (1.3)	56.1 (10.9)	-17.2 (6.8)	10.6 (6.7)	24.0 (1.6)	57.3 (10.7)	-17.8 (4.8)	10.8 (4.3)	24.9 (1.5)	57.2 (11.0)	-15.8 (5.6)	14.9 (8.0)	24.7 (1.4)	53.3 (9.2)	-15.2 (5.6)	10.8 (8.2)
4	24.8 (3.0)	57.4 (9.5)	-14.9 (6.5)	20.0 (17.3)	24.9 (3.2)	56.5 (8.5)	-15.0 (6.5)	22.3 (17.2)	25.6 (3.2)	60.6 (11.9)	-12.8 (5.0)	18.7 (13.9)	25.6 (3.0)	54.8 (7.2)	-12.8 (5.1)	20.5 (17.9)
5	26.2 (2.7)	62.6 (7.0)	-19.0 (5.4)	21.2 (15.2)	26.3 (2.7)	63.8 (7.5)	-17.6 (4.8)	25.9 (16.0)	27.3 (2.3)	62.9 (6.5)	-16.7 (4.7)	22.9 (13.0)	26.8 (2.6)	61.9 (6.5)	-17.0 (4.8)	23.0 (17.3)
6	27.1 (2.3)	63.0 (8.4)	-21.8 (4.8)	25.7 (15.0)	27.2 (2.4)	64.1 (8.5)	-20.6 (5.9)	29.0 (14.2)	27.6 (2.2)	64.4 (8.7)	-20.4 (5.3)	30.5 (13.1)	27.7 (2.4)	62.2 (8.0)	-20.2 (4.4)	26.3 (15.5)
7																
8																
9	23.8 (1.4)	51.8 (12.1)	-19.4 (7.0)	12.3 (6.5)	23.4 (1.6)	54.2 (12.7)	-20.6 (6.4)	14.3 (7.0)	24.4 (1.3)	53.7 (12.8)	-17.4 (6.0)	14.8 (7.5)	24.4 (1.6)	51.0 (11.7)	-16.3 (6.1)	11.8 (8.2)
10	19.7 (0.7)	50.9 (4.0)	-8.3 (1.8)	4.5 (0.5)	19.5 (0.6)	49.7 (3.8)	-8.2 (2.2)	4.5 (1.0)	20.6 (0.7)	55.1 (4.2)	-7.3 (3.5)	6.8 (4.0)	20.9 (0.7)	48.0 (3.4)	-4.8 (2.0)	3.7 (0.9)
11	19.7 (0.9)	58.5 (4.8)	-9.7 (2.3)	4.8 (0.5)	19.8 (0.7)	56.9 (3.1)	-9.9 (3.7)	5.0 (1.6)	21.2 (0.9)	58.5 (2.9)	-7.4 (2.8)	6.0 (2.4)	21.0 (1.1)	52.3 (2.9)	-6.5 (3.0)	4.0 (0.7)
12	19.3 (1.1)	54.8 (7.7)	-9.0 (2.2)	4.9 (0.5)	19.5 (0.8)	54.1 (5.9)	-9.1 (3.8)	5.2 (1.9)	20.4 (1.1)	58.5 (6.2)	-8.1 (3.4)	5.8 (2.5)	20.5 (0.9)	50.0 (4.6)	-7.7 (2.9)	4.0 (0.7)
13	19.7 (1.7)	52.5 (7.3)	-10.4 (4.4)	5.8 (2.0)	19.2 (1.6)	53.1 (6.3)	-10.5 (6.2)	5.9 (2.7)	20.1 (1.9)	58.0 (8.7)	-9.5 (5.3)	6.3 (3.2)	21.0 (1.5)	49.2 (6.2)	-8.8 (4.7)	4.9 (2.1)
14	21.4 (1.1)	49.4 (3.7)	-15.6 (7.9)	7.9 (4.2)	21.2 (1.5)	50.4 (3.5)	-16.5 (6.8)	9.8 (4.6)	22.3 (1.5)	53.3 (6.2)	-15.2 (7.0)	10.4 (5.0)	22.4 (1.3)	47.1 (3.4)	-14.6 (7.1)	7.0 (4.5)
15	23.2 (1.8)	47.4 (4.1)	-18.2 (5.8)	13.3 (8.2)	22.9 (2.0)	48.8 (5.0)	-19.2 (6.0)	17.0 (10.6)	23.8 (1.7)	50.1 (5.4)	-17.8 (5.5)	15.6 (9.0)	24.1 (1.8)	46.4 (3.7)	-16.2 (5.3)	13.3 (9.6)
16	22.5 (0.6)	61.1 (5.4)	-20.7 (5.7)	11.6 (3.7)	22.8 (0.8)	62.0 (5.2)	-22.6 (5.5)	13.1 (3.8)	24.1 (0.6)	60.8 (4.7)	-20.4 (5.6)	13.2 (3.9)	23.5 (0.8)	59.4 (5.6)	-18.8 (5.8)	9.8 (4.6)
17	22.6 (1.7)	62.4 (6.1)	-20.5 (9.1)	12.8 (6.9)	22.2 (1.9)	62.9 (6.8)	-19.4 (6.9)	15.0 (8.9)	23.7 (1.7)	64.3 (6.9)	-17.8 (7.2)	15.2 (10.3)	23.6 (1.9)	59.4 (5.3)	-17.7 (7.6)	11.3 (7.7)
18	24.6 (1.5)	64.5 (7.1)	-25.9 (7.6)	21.7 (11.0)	24.9 (1.6)	65.1 (7.2)	-24.0 (6.2)	24.5 (10.8)	25.6 (1.3)	65.3 (6.7)	-23.0 (3.9)	26.0 (11.4)	25.8 (1.4)	62.6 (6.5)	-18.5 (7.4)	18.2 (11.7)
19	21.1 (0.8)	60.3 (3.7)	-12.9 (2.9)	8.2 (2.3)	21.1 (1.0)	60.6 (3.1)	-21.6 (4.5)	10.2 (2.4)	22.5 (0.7)	61.4 (2.4)	-14.0 (3.0)	9.7 (2.0)	22.5 (0.6)	56.2 (3.9)	-12.0 (3.0)	5.8 (1.8)
20	21.6 (1.7)	48.1 (7.7)	-16.8 (7.1)	10.0 (5.5)	21.4 (2.0)	49.1 (7.8)	-19.9 (6.6)	12.0 (6.7)	22.8 (1.6)	50.8 (9.6)	-16.2 (6.7)	12.3 (7.2)	23.2 (1.4)	44.8 (6.0)	-14.5 (6.6)	9.2 (7.0)
21	23.0 (2.1)	44.4 (5.8)	-19.1 (4.9)	15.4 (9.5)	23.1 (2.0)	45.6 (6.2)	-21.0 (5.0)	18.9 (12.0)	24.2 (1.5)	45.8 (6.8)	-18.7 (4.8)	19.9 (13.8)	24.2 (1.8)	42.2 (4.8)	-14.6 (5.0)	15.9 (13.2)
22	21.9 (1.3)	55.0 (7.4)	-19.2 (6.5)	11.4 (4.4)	21.9 (1.4)	56.1 (7.2)	-21.2 (4.9)	12.9 (4.1)	23.5 (1.2)	55.7 (6.8)	-17.6 (5.7)	11.9 (4.8)	23.2 (1.5)	52.0 (6.1)	-16.0 (5.5)	
23	19.4 (0.4)	60.9 (2.1)	-10.6 (3.0)	6.4 (1.3)	19.4 (0.5)	61.1 (3.0)	-12.6 (3.2)	7.2 (2.1)	21.2 (0.7)	64.0 (3.2)	-9.5 (2.6)	6.9 (1.9)	21.2 (0.3)	55.6 (1.8)	-9.8 (2.7)	4.4 (0.5)
24	19.0 (0.5)	57.7 (4.3)	-9.5 (2.4)	6.0 (1.4)	18.8 (0.9)	57.2 (3.9)	-11.5 (2.9)	6.9 (2.1)	20.8 (0.9)	62.2 (5.3)	-8.6 (2.4)	7.2 (2.4)	20.8 (0.5)	53.2 (2.7)	-8.8 (3.3)	4.5 (1.0)
25	18.9 (1.2)	57.1 (2.5)	-9.2 (4.8)	6.0 (1.9)	18.9 (1.1)	56.5 (1.9)	-7.6 (3.8)	7.0 (2.8)	20.7 (1.2)	59.3 (3.4)	-5.7 (3.0)	7.5 (2.8)	20.7 (1.0)	53.3 (2.1)	-11.9 (5.8)	4.5 (0.7)
26	20.5 (1.2)	58.0 (5.9)	-17.8 (8.2)	9.1 (4.4)	20.6 (1.6)	58.5 (6.7)	-17.5 (7.3)	10.7 (5.4)	22.5 (1.6)	61.9 (7.2)	-15.4 (7.4)	10.1 (5.4)	22.3 (1.3)	55.5 (6.6)	-15.7 (7.4)	7.9 (5.5)
27	19.6 (0.8)	61.1 (3.8)	-12.6 (3.8)	6.7 (1.8)	19.3 (0.7)	61.7 (4.4)	-15.7 (4.1)	7.9 (2.3)	21.6 (0.7)	64.1 (3.1)	-10.8 (3.0)	7.5 (2.4)	21.4 (0.7)	55.5 (3.1)	-9.4 (2.2)	4.7 (0.7)
28	17.6 (1.7)	54.2 (9.4)	-11.0 (5.6)	6.3 (2.5)	18.2 (1.1)	50.7 (7.0)	-11.3 (6.6)	6.6 (3.5)	20.2 (1.7)	56.6 (8.6)	-9.6 (5.5)	6.3 (3.2)	19.7 (1.4)	48.7 (6.8)	-9.2 (5.2)	4.8 (2.2)
29	17.6 (1.8)	51.8 (6.5)	-10.6 (4.7)	6.5 (2.4)	18.5 (1.5)	49.3 (4.8)	-12.2 (7.2)	6.7 (3.2)	20.6 (1.7)	55.5 (6.4)	-9.0 (5.1)	5.4 (3.0)	20.3 (1.6)	47.5 (4.7)	-8.4 (4.6)	5.0 (2.3)
30	19.0 (1.9)	49.7 (6.2)	-15.3 (8.8)	9.0 (5.0)	19.5 (1.9)	48.4 (4.3)	-16.4 (9.2)	9.3 (5.4)	21.8 (1.9)	54.0 (8.0)	-13.8 (8.4)	8.3 (4.7)	21.6 (1.5)	46.3 (4.3)	-12.9 (8.2)	7.3 (5.1)
31	20.1 (1.2)	51.5 (3.5)	-17.0 (6.2)	10.1 (4.7)	20.1 (1.5)	52.3 (3.5)	-20.4 (8.6)	10.4 (4.8)	22.9 (1.0)	54.0 (4.1)	-15.0 (7.0)	9.0 (4.6)	22.5 (1.1)	48.6 (3.2)	-13.3 (7.0)	8.4 (5.0)
Avg	21.6	55.6	-15.2	10.7	21.6	55.8	-16.3	12.1	23.0	58.0	-13.9	12.4	22.9	52.6	-13.0	9.8
n	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	28
SD	2.5	5.2	4.5	5.5	2.5	5.3	4.7	6.4	2.1	4.8	4.5	6.38	2.1	5.3	3.9	6.11
Min	17.6	44.4	-25.9	4.5	18.2	45.6	-24.0	4.5	20.1	45.8	-23.0	5.4	19.7	42.2	-20.2	3.7
Max	27.1	64.5	-8.3	25.7	27.2	65.1	-7.6	29	27.6	65.3	-5.7	30.5	27.7	62.6	-4.8	26.3

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Table E3. Daily means (SD) of environmental parameters at Site IN3B for November, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	18.1 (1.4)	48.9 (6.7)	-11.4 (5.1)	6.5 (2.3)	18.2 (1.3)	47.0 (4.9)	-11.6 (5.2)	6.6 (2.6)	20.9 (1.2)	54.0 (6.2)	-8.9 (4.7)	5.2 (2.3)	20.3 (1.1)	46.3 (5.2)	-8.3 (4.5)	5.0 (2.3)
2	17.8 (1.9)	49.7 (8.2)	-12.0 (6.5)	6.7 (2.9)	18.6 (1.6)	47.9 (5.9)	-12.7 (8.0)	7.7 (4.7)	20.5 (1.7)	54.3 (8.5)	-10.3 (7.0)	6.3 (4.7)	20.3 (1.3)	47.1 (7.1)	-10.0 (6.4)	5.4 (2.6)
3	18.1 (1.5)	49.9 (7.0)	-12.6 (6.3)	7.0 (3.0)	18.4 (1.4)	47.8 (5.1)	-13.6 (7.0)	7.9 (4.3)	20.7 (1.7)	54.4 (7.2)	-10.5 (5.5)	5.9 (3.2)	20.3 (1.5)	46.5 (5.1)	-9.8 (4.9)	5.7 (2.8)
4	18.2 (1.0)	46.5 (3.1)	-12.5 (4.3)	7.1 (2.2)	18.3 (1.3)	45.3 (2.3)	-13.8 (4.6)	7.2 (2.2)	21.0 (0.9)	50.7 (3.2)	-9.8 (3.3)	6.0 (2.3)	20.8 (1.0)	44.0 (3.2)	-7.9 (1.7)	5.3 (2.4)
5	18.8 (1.1)	46.6 (3.1)	-13.9 (3.9)	7.5 (2.5)	18.8 (1.3)	46.1 (3.4)	-16.5 (6.2)	8.2 (3.2)	21.5 (0.9)	49.0 (3.4)	-11.2 (4.5)	7.1 (2.4)	21.5 (0.9)	43.3 (3.4)	-8.2 (4.5)	5.7 (2.5)
6	17.5 (0.4)	49.7 (2.0)	-9.8 (2.0)	5.2 (0.8)	17.7 (0.4)	47.5 (2.0)	-9.2 (2.4)	5.3 (0.7)	20.3 (0.4)	53.3 (3.0)	-6.2 (4.1)	4.6 (1.0)	20.4 (0.5)	49.0 (3.6)	-2.6 (4.1)	4.1 (1.0)
7	17.7 (0.9)	49.9 (5.0)	-8.8 (2.7)	5.1 (1.1)	17.9 (0.6)	47.7 (3.9)	-9.5 (3.3)	5.3 (1.4)	19.8 (0.7)	55.0 (4.6)	-7.6 (2.4)	5.1 (1.5)	20.0 (0.8)	47.8 (3.2)	-6.8 (2.0)	3.9 (0.7)
8	17.9 (1.0)	47.4 (3.4)	-11.9 (3.7)	6.4 (1.9)	18.7 (1.1)	46.3 (2.4)	-13.4 (5.1)	6.7 (2.1)	20.8 (1.0)	51.1 (3.3)	-10.3 (3.3)	6.5 (2.1)	20.8 (0.9)	44.5 (2.4)	-8.9 (2.6)	4.3 (0.9)
9	18.0 (1.1)	50.6 (4.2)	-11.7 (4.2)	6.3 (2.0)	18.7 (0.9)	48.9 (3.5)	-11.8 (4.0)	6.5 (2.0)	20.5 (1.0)	55.5 (4.7)	-9.3 (3.5)	6.1 (1.8)	21.1 (0.8)	46.9 (3.0)	-8.0 (2.3)	4.1 (1.0)
10	18.2 (1.4)	51.1 (6.2)	-11.7 (4.8)	6.4 (2.3)	19.0 (1.3)	49.0 (4.2)	-11.8 (4.7)	6.6 (2.5)	20.4 (1.5)	56.7 (5.9)	-10.1 (4.1)	6.5 (2.6)	20.8 (1.0)	48.1 (4.1)	-9.4 (4.2)	4.3 (1.3)
11	18.7 (0.6)	57.0 (3.7)	-12.7 (2.5)	6.5 (1.3)	19.1 (0.7)	56.9 (4.1)	-12.7 (3.8)	6.7 (1.7)	20.5 (0.7)	61.8 (3.2)	-10.7 (2.4)	7.2 (2.1)	21.5 (0.4)	53.1 (4.0)	-9.2 (1.8)	4.5 (0.9)
12	21.7 (1.3)	61.7 (3.3)	-20.8 (4.6)	12.0 (3.9)	22.3 (1.5)	63.1 (4.1)	-26.1 (5.4)		23.7 (0.8)	62.8 (3.7)	-20.1 (5.3)	12.6 (3.9)	23.6 (0.9)	58.7 (4.3)	-18.6 (5.8)	9.8 (4.5)
13	20.5 (1.1)	56.3 (4.2)	-18.5 (6.6)	10.2 (3.6)	21.1 (1.3)	57.2 (4.0)	-19.7 (6.2)	11.0 (4.0)	22.4 (1.2)	59.0 (4.7)	-17.0 (6.0)	10.9 (4.1)	22.2 (0.8)	54.1 (3.0)	-15.5 (5.5)	7.8 (4.2)
14	21.1 (1.2)	54.6 (8.4)	-18.7 (5.0)	9.9 (2.8)	21.6 (1.1)	55.5 (9.5)	-21.9 (6.3)		22.8 (1.2)	56.1 (7.3)	-17.7 (5.4)	10.7 (3.4)	22.8 (0.8)	53.9 (9.7)	-13.8 (4.7)	8.6 (2.6)
15	17.5 (0.7)	53.6 (3.2)	-10.4 (2.2)	5.6 (0.8)	18.4 (0.5)	52.1 (3.4)	-10.1 (2.2)	5.5 (0.5)	19.5 (0.3)	56.5 (3.8)	-10.1 (3.0)	5.4 (0.6)	20.2 (0.8)	50.1 (3.4)	-5.6 (2.5)	4.3 (0.8)
16	17.3 (0.7)	54.9 (3.5)	-9.3 (2.3)	5.4 (1.1)	18.2 (0.6)	53.8 (2.7)	-10.2 (2.8)	5.3 (1.0)	19.1 (0.5)	56.8 (3.0)	-8.6 (2.3)	5.6 (1.6)	19.7 (1.0)	51.0 (2.7)	-7.8 (1.9)	4.1 (1.0)
17	18.0 (0.9)	53.3 (2.0)	-11.9 (3.8)	6.7 (1.8)	18.9 (0.9)	52.6 (2.4)	-12.9 (3.7)	6.9 (2.0)	19.8 (1.0)	56.9 (3.5)	-11.2 (3.2)	7.2 (2.3)	20.7 (0.4)	48.7 (1.8)	-10.4 (3.0)	4.2 (0.8)
18	18.0 (0.6)	58.2 (2.1)	-10.9 (2.0)	6.1 (0.9)	18.7 (0.5)	57.4 (1.8)	-10.2 (2.2)	6.2 (1.1)	19.3 (0.7)	63.5 (3.3)	-9.2 (1.3)	6.8 (1.9)	20.6 (0.3)	53.7 (3.0)	-10.6 (2.0)	4.0 (0.4)
19	20.1 (1.8)	61.0 (3.2)	-17.2 (5.2)	8.9 (2.9)	20.5 (1.8)	61.7 (4.1)	-20.8 (9.5)	10.8 (4.7)	21.6 (1.3)	62.3 (3.2)	-16.7 (7.1)	11.1 (5.3)	22.0 (1.1)	57.3 (5.6)	-14.9 (5.8)	6.9 (2.7)
20	22.9 (0.4)	63.7 (1.7)	-24.3 (4.5)	13.6 (3.6)	23.1 (0.6)	65.4 (1.8)	-30.6 (2.2)	16.5 (2.1)	23.6 (0.4)	64.1 (1.5)	-25.5 (2.8)	17.3 (2.2)	23.8 (0.4)	63.0 (2.1)	-22.8 (2.6)	11.8 (3.2)
21	21.3 (2.1)	64.3 (2.4)	-17.9 (6.0)	10.4 (3.2)	21.7 (1.5)	65.3 (2.4)	-20.5 (7.8)	11.6 (4.3)	22.1 (1.4)	66.8 (3.4)	-17.8 (6.2)	12.0 (4.7)	22.1 (1.5)	62.0 (3.0)		
22	17.5 (0.8)	60.8 (3.0)	-11.5 (2.4)	6.2 (1.2)	18.4 (0.4)	59.9 (3.1)	-10.5 (2.2)	5.7 (0.7)	19.5 (0.4)	63.5 (2.6)	-9.5 (1.3)	5.7 (0.9)	20.1 (0.3)	55.4 (3.6)		
23	17.1 (0.7)	57.4 (2.9)	-9.5 (2.6)	5.5 (1.1)	18.4 (0.4)	55.7 (3.1)	-9.1 (2.1)	5.0 (0.7)	18.6 (0.3)	60.9 (3.0)	-8.4 (1.9)	4.9 (0.8)	19.1 (0.5)	53.7 (2.7)	-6.7 (2.1)	4.1 (0.7)
24	17.1 (0.7)	58.0 (2.2)	-9.3 (2.4)	5.5 (1.2)	18.2 (0.4)	57.8 (2.5)	-10.2 (2.9)	5.1 (0.6)	18.6 (0.6)	62.0 (3.5)	-8.2 (1.9)	5.0 (0.7)	19.2 (0.7)	53.4 (2.3)	-8.0 (1.8)	4.2 (0.7)
25	17.3 (1.1)	59.5 (2.2)	-9.8 (2.2)	5.7 (1.1)	18.1 (0.5)	58.7 (3.0)	-10.2 (1.8)	5.3 (0.8)	19.1 (0.6)	62.3 (3.6)	-8.9 (1.8)	5.2 (0.8)	19.7 (0.5)	53.6 (2.9)	-8.6 (1.8)	4.2 (0.6)
26	18.1 (0.3)	62.2 (3.2)	-10.7 (2.0)	6.2 (1.1)	18.5 (0.4)	62.2 (3.3)	-11.1 (1.4)	5.8 (0.7)	19.8 (0.4)	64.5 (2.5)	-9.9 (1.4)	5.6 (0.3)	19.9 (0.4)	56.3 (3.6)		
27	18.0 (0.7)	57.5 (2.7)	-10.3 (3.1)	6.1 (1.6)	18.6 (0.6)	57.5 (3.3)	-11.2 (3.7)	5.5 (1.4)	19.5 (0.8)	60.5 (3.2)	-8.2 (2.4)	5.3 (0.6)	19.7 (0.5)	52.6 (2.0)	-7.5 (1.8)	4.4 (1.0)
28	18.7 (1.3)	52.9 (4.7)	-13.8 (4.7)	7.6 (2.4)	19.3 (1.3)	53.5 (3.9)	-15.1 (7.6)	7.1 (2.4)	19.8 (1.6)	56.6 (5.5)	-11.3 (5.0)	7.2 (2.6)	20.2 (1.1)	48.3 (4.1)	-9.4 (3.2)	5.3 (1.7)
29	18.2 (1.1)	54.4 (2.8)	-10.1 (2.2)	5.8 (1.0)	18.7 (0.4)	53.7 (3.2)	-8.9 (2.7)	5.0 (0.9)	19.7 (0.7)	57.0 (3.8)	-4.9 (3.4)	5.2 (0.7)	19.7 (0.6)	53.9 (3.4)	-3.7 (3.7)	3.9 (0.8)
30	17.8 (1.1)	54.3 (2.8)	-10.6 (3.4)	6.2 (1.7)	18.5 (0.8)	52.9 (3.1)	-11.6 (3.7)	5.4 (1.4)	19.3 (0.5)	57.0 (3.2)	-7.8 (2.8)	5.5 (1.2)	19.4 (0.8)	50.9 (2.2)	-6.5 (1.8)	4.3 (1.0)
Avg	18.6	54.9	-12.8	7.2	19.2	54.2	-13.9	7.1	20.5	58.2	-11.2	7.2	20.8	51.6	-9.6	5.3
n	30	30	30	30	30	30	30	28	30	30	30	30	30	30	27	27
SD	1.5	5.1	3.8	2.1	1.4	5.9	5.3	2.5	1.3	4.5	4.4	2.89	1.2	4.9	4.2	1.94
Min	17.1	46.5	-24.3	5.1	17.7	45.3	-30.6	5.0	18.6	49.0	-25.5	4.6	19.1	43.3	-22.8	3.9
Max	22.9	64.3	-8.8	13.6	23.1	65.4	-8.9	16.5	23.7	66.8	-4.9	17.3	23.8	63	-2.6	11.8

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Table E3. Daily means (SD) of environmental parameters at Site IN3B for December, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	17.6 (0.4)	55.2 (3.8)	-10.5 (3.3)	5.5 (0.7)	18.4 (0.4)	54.8 (3.6)	-4.5 (4.1)		19.6 (0.4)	58.5 (4.2)	-4.8 (2.3)	5.3 (0.8)	19.1 (0.8)	53.7 (3.9)	-7.0 (2.7)	3.5 (0.8)
2	20.2 (1.5)	59.2 (6.0)	-19.0 (6.7)	9.9 (4.1)	20.8 (1.6)	61.0 (6.6)	-19.1 (11.3)	9.8 (4.4)	21.9 (1.0)	60.7 (5.6)			21.4 (1.2)	57.3 (7.4)	-11.3 (9.2)	7.1 (2.6)
3	18.3 (0.4)	56.4 (2.9)	-9.6 (1.8)	5.5 (0.5)	18.6 (0.5)	57.9 (3.4)	-6.7 (4.6)	5.0 (0.6)	20.3 (0.3)	57.4 (3.8)			19.5 (0.4)	56.9 (4.2)	-1.9 (4.4)	4.0 (0.6)
4	18.2 (0.5)	57.1 (2.7)	-10.5 (2.4)	5.8 (1.1)	18.5 (0.5)	58.5 (3.3)	-10.1 (2.4)	5.5 (1.2)	19.8 (0.7)	60.4 (3.5)	-8.6 (2.5)	5.9 (1.5)	19.3 (0.4)	55.6 (3.5)	-8.9 (2.1)	4.3 (0.8)
5	16.9 (1.0)	59.8 (3.7)	-7.3 (3.1)	5.5 (0.7)	18.5 (0.4)	60.9 (4.4)	-7.5 (2.7)	4.8 (0.6)	20.0 (0.4)	62.4 (2.1)	-7.3 (1.9)	5.5 (0.6)	18.7 (0.7)	58.8 (4.1)	-8.4 (2.7)	4.1 (0.8)
6	16.5 (0.8)	62.5 (3.6)	-8.8 (2.6)	5.2 (1.0)	17.8 (0.5)	64.9 (4.0)	-8.2 (2.4)	4.6 (0.7)	19.3 (0.6)	65.0 (4.3)	-7.0 (2.1)	5.0 (0.9)	18.5 (0.6)	61.2 (4.7)	-6.8 (1.8)	3.9 (0.5)
7	17.6 (0.6)	61.8 (2.5)	-10.9 (1.6)	6.0 (0.9)	18.4 (0.4)	63.6 (3.2)	-11.0 (1.6)	5.5 (0.5)	19.1 (0.4)	64.5 (1.5)	-9.1 (1.3)	5.7 (0.5)	19.8 (0.4)	57.7 (3.7)	-8.9 (1.3)	4.3 (0.6)
8	18.1 (0.4)	60.3 (2.0)	-10.1 (1.9)	6.1 (1.0)	18.7 (0.4)	61.2 (2.4)	-10.0 (1.5)	5.6 (0.5)	19.7 (0.5)	65.2 (3.3)	-9.4 (1.2)	5.7 (0.3)	19.5 (0.3)	57.8 (3.5)	-10.2 (1.6)	4.5 (0.6)
9	18.1 (0.4)	62.5 (4.6)	-9.6 (2.5)	5.9 (0.7)	18.4 (0.4)	64.3 (4.6)	-9.2 (2.2)	5.7 (0.4)	19.9 (0.6)	65.0 (5.5)	-8.9 (2.0)	5.9 (0.7)	19.5 (0.3)	59.7 (4.9)	-11.3 (2.3)	4.2 (0.4)
10	18.4 (0.6)	63.2 (1.8)	-11.2 (2.2)	6.2 (1.2)	18.5 (0.6)	64.5 (3.1)	-11.0 (1.5)	5.9 (0.8)	19.7 (0.3)	65.9 (3.1)	-9.9 (1.3)	5.9 (0.4)	19.7 (0.4)	59.0 (4.1)	-10.2 (1.1)	4.6 (0.7)
11																
12	19.1 (0.5)	61.5 (2.0)	-12.4 (3.2)	6.8 (1.8)	19.4 (0.4)	62.1 (2.8)	-12.0 (2.6)	6.6 (1.6)	19.9 (0.6)	64.7 (2.5)	-10.0 (3.3)	6.9 (2.0)	20.0 (0.3)	58.9 (3.0)	-11.6 (1.9)	5.2 (0.5)
13	19.2 (0.6)	62.3 (3.1)	-10.9 (2.6)	6.5 (1.5)	19.2 (0.4)	63.7 (3.9)	-10.7 (2.4)	6.0 (0.9)	20.1 (0.4)	63.7 (2.8)	-6.7 (4.3)	6.1 (1.0)	20.2 (0.2)	59.0 (4.6)	-8.8 (1.9)	4.9 (0.6)
14	18.4 (0.6)	61.1 (2.2)	-10.3 (3.0)	6.2 (1.4)	18.9 (0.4)	60.2 (2.9)	-10.3 (2.4)	5.8 (1.0)	19.5 (0.7)	62.4 (3.9)	-8.2 (3.3)	6.0 (0.9)	19.8 (0.3)	57.8 (3.6)	-9.0 (2.1)	4.6 (0.7)
15	18.7 (0.5)	62.6 (4.3)	-10.2 (3.6)	5.7 (0.8)	18.9 (0.4)	62.0 (5.0)	-7.5 (1.8)	5.7 (0.6)	20.1 (0.4)	63.7 (5.0)	-5.3 (3.3)	6.1 (0.7)	19.5 (0.5)	60.4 (5.7)	-11.6 (2.2)	4.4 (0.6)
16	17.9 (0.3)	64.2 (3.1)	-7.5 (2.2)	5.4 (0.6)	18.6 (0.6)	65.2 (5.0)	-11.9 (4.8)	4.4 (0.7)	20.0 (0.3)	63.6 (3.4)	-4.2 (6.1)	5.3 (0.8)	19.6 (0.5)	63.1 (6.2)	-4.2 (2.8)	4.0 (0.4)
17	17.4 (0.5)	65.7 (5.9)	-8.5 (1.9)	5.2 (0.6)	17.6 (0.9)	68.8 (5.2)	-10.6 (2.3)	4.9 (0.6)	19.5 (0.4)	65.2 (4.1)	-6.4 (3.0)	5.0 (0.6)	19.2 (0.3)	63.6 (4.9)	-6.3 (1.9)	4.5 (0.6)
18	18.2 (1.0)	62.2 (3.0)	-10.8 (3.3)	6.2 (1.3)	18.2 (0.8)	63.0 (3.6)	-12.0 (3.0)	5.8 (1.1)	19.8 (0.4)	61.8 (2.9)	-9.2 (2.0)	5.8 (1.3)	19.7 (0.6)	59.8 (3.6)	-7.9 (1.6)	5.0 (0.7)
19	18.5 (0.6)	62.4 (3.8)	-10.2 (2.2)	6.1 (1.1)	18.5 (0.4)	62.7 (3.2)	-10.4 (2.6)	5.6 (0.8)	19.5 (0.6)	64.4 (5.5)	-8.2 (2.5)	6.3 (1.5)	19.7 (0.5)	60.9 (6.0)	-8.2 (1.4)	4.7 (0.9)
20	19.1 (1.0)	61.0 (2.7)	-12.9 (3.5)	6.3 (1.4)	19.0 (0.6)	59.4 (3.5)	-7.0 (3.5)	5.9 (1.5)	19.3 (0.7)	63.9 (3.4)	-6.9 (1.9)	6.4 (1.6)	20.3 (0.7)	58.8 (3.9)	-9.8 (2.6)	4.8 (0.9)
21	20.0 (0.3)	61.2 (5.2)	-13.4 (2.9)	6.8 (1.8)	19.4 (0.5)	60.9 (5.5)	-10.4 (3.6)	6.8 (1.7)	20.1 (0.5)	63.6 (5.0)	-9.6 (2.2)	7.0 (1.9)	20.5 (0.4)	58.2 (4.5)	-11.3 (1.7)	5.6 (0.3)
22	21.2 (0.6)	63.7 (2.5)	-18.7 (3.9)	9.4 (2.1)	21.2 (0.9)	65.0 (3.1)	-17.6 (3.2)	9.5 (2.0)	22.1 (0.5)	64.7 (3.1)	-15.6 (2.6)	10.0 (1.7)	21.5 (0.6)	61.6 (4.2)	-15.2 (2.5)	7.4 (2.2)
23	19.8 (1.6)	61.4 (3.3)	-8.3 (12.6)	6.6 (2.8)	18.7 (2.1)	64.8 (4.6)	-19.8 (6.9)	7.0 (3.5)	20.1 (1.9)	60.3 (3.2)	-11.8 (6.0)	3.7 (3.5)	20.6 (1.0)	60.5 (4.1)	-7.9 (7.4)	5.4 (2.3)
24	19.0 (0.3)	60.1 (3.8)	-7.7 (2.5)	6.0 (1.0)	17.8 (0.8)	63.0 (5.0)	-13.2 (5.1)	5.7 (0.7)	19.6 (0.4)	60.8 (3.9)	-9.3 (2.6)	4.6 (1.4)	19.9 (0.3)	59.0 (5.3)	-7.3 (1.9)	5.1 (0.5)
25	19.2 (0.8)	59.0 (3.0)	-11.9 (4.3)	7.1 (2.1)	19.4 (0.9)	59.7 (3.8)	-11.7 (5.1)	6.6 (2.0)	19.9 (0.7)	60.5 (2.4)	-10.4 (3.4)	6.4 (2.4)	20.2 (0.5)	58.3 (3.9)	-9.8 (2.9)	5.4 (1.0)
26	19.6 (1.2)	57.7 (3.0)	-13.2 (4.4)	7.5 (2.1)	19.7 (1.2)	57.7 (3.3)	-13.4 (4.4)	7.5 (2.3)	20.1 (1.3)	61.1 (3.5)	-11.7 (3.7)	7.4 (2.5)	20.4 (0.4)	56.8 (3.8)	-11.5 (3.6)	6.0 (1.8)
27	19.3 (0.4)	64.4 (3.6)	-11.3 (2.6)	6.7 (1.6)	19.1 (0.5)	66.2 (4.8)	-12.3 (2.9)	6.6 (1.6)	20.0 (0.4)	64.9 (3.5)	-10.4 (1.6)	6.3 (1.3)	20.3 (0.3)	59.2 (4.5)	-9.9 (1.3)	5.3 (0.8)
28	19.8 (0.3)	62.9 (3.9)	-11.8 (4.1)	6.8 (1.8)	19.4 (0.3)	64.2 (4.5)	-12.1 (4.8)	6.8 (1.7)	20.2 (0.8)	63.3 (3.9)	-9.4 (4.1)	6.6 (1.7)	20.4 (0.4)	59.0 (4.5)	-10.5 (2.5)	5.6 (0.7)
29	19.0 (0.6)	61.3 (5.1)	-10.5 (2.1)	6.3 (1.2)	18.4 (0.5)	61.7 (4.5)	-10.5 (1.7)	5.9 (0.6)	19.9 (0.7)	60.2 (3.9)	-7.4 (3.5)	5.7 (0.7)	20.1 (0.3)	58.6 (4.5)	-7.6 (2.1)	5.4 (0.5)
30	19.0 (0.6)	61.8 (2.9)	-11.6 (3.0)	6.6 (1.5)	18.7 (0.5)	62.0 (3.0)	-10.4 (2.5)	6.2 (1.3)	19.0 (0.9)	64.6 (3.1)	-9.6 (1.9)	6.3 (1.7)	20.0 (0.3)	58.6 (4.3)	-9.6 (1.7)	5.4 (0.7)
31	19.6 (0.8)	61.8 (3.1)	-12.8 (4.1)	7.4 (2.1)	19.3 (0.9)	62.9 (3.6)	-14.2 (3.8)	7.2 (2.0)	19.9 (1.0)	63.5 (3.0)	-10.6 (5.5)	7.0 (2.1)	20.4 (0.4)	58.4 (3.9)	-10.6 (3.6)	6.0 (1.5)
Avg	18.7	61.2	-11.1	6.4	18.9	62.2	-11.2	6.2	19.9	62.9	-8.8	6.1	19.9	58.9	-9.1	5.0
n	30	30	30	30	30	30	30	29	30	30	28	28	30	30	30	30
SD	1	2.3	2.6	1	0.8	2.8	3.3	1.2	0.6	2.2	2.3	1.08	0.7	2	2.5	0.88
Min	16.5	55.2	-19.0	5.2	17.6	54.8	-19.8	4.4	19.0	57.4	-15.6	3.7	18.5	53.7	-15.2	3.5
Max	21.2	65.7	-7.3	9.9	21.2	68.8	-4.5	9.8	22.1	65.9	-4.2	10	21.5	63.6	-1.9	7.43

ED_004549_00015928-00109

Table E3. Daily means (SD) of environmental parameters at Site IN3B for January, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	19.0 (0.6)	63.2 (5.9)	-6.9 (2.3)	5.5 (0.7)	19.1 (0.5)	66.1 (5.7)	-6.4 (2.7)	5.1 (0.8)	19.5 (1.1)	62.5 (6.9)	6.6 (6.4)	4.4 (1.4)	20.4 (0.4)	63.6 (7.1)	-0.1 (3.6)	4.3 (0.6)
2	17.6 (0.4)	68.1 (5.3)	-4.8 (1.3)	4.8 (0.5)	17.7 (0.5)	70.6 (4.1)	-4.3 (2.1)	4.5 (0.6)	17.4 (0.8)	65.7 (7.3)	1.6 (4.1)	3.6 (0.9)	19.5 (0.4)	67.1 (7.1)	-0.2 (3.3)	4.5 (0.6)
3	17.5 (0.5)	67.8 (3.9)	-7.7 (3.9)		16.4 (0.6)	71.4 (3.1)	-8.3 (4.2)	5.2 (1.1)	17.4 (0.9)	68.6 (4.2)	-7.6 (9.2)	4.9 (1.6)	18.6 (0.4)	66.6 (5.2)	-5.3 (3.5)	5.2 (1.1)
4	18.6 (0.8)	58.1 (4.3)	-13.5 (2.9)	7.0 (1.9)	17.0 (1.5)	59.9 (5.6)	-15.7 (3.8)	7.0 (1.8)	17.6 (1.7)	59.0 (4.5)	-10.4 (2.5)	6.3 (2.1)	19.5 (0.4)	56.0 (4.7)	-7.9 (2.5)	6.1 (0.6)
5	20.5 (0.5)	59.9 (5.9)	-17.5 (2.5)	9.4 (1.8)	19.6 (0.6)	62.5 (7.4)	-20.6 (3.1)	9.7 (1.4)	20.4 (0.6)	60.6 (6.6)	-15.1 (2.3)	9.2 (2.2)	20.5 (0.4)	57.7 (6.5)	-12.5 (2.3)	6.7 (1.8)
6	22.7 (0.9)	65.9 (2.6)	-25.0 (5.6)	14.7 (3.9)	22.6 (1.2)	68.5 (3.1)	-26.9 (4.8)	14.4 (3.3)	22.9 (0.8)	64.8 (2.4)	-23.3 (4.6)	14.4 (3.7)	22.9 (1.0)	65.2 (3.4)	-21.0 (4.3)	11.8 (3.4)
7	24.8 (0.4)	64.3 (1.7)	-28.0 (4.7)	20.1 (3.7)	24.8 (0.3)	65.4 (2.2)	-29.7 (3.5)	19.1 (3.7)	24.4 (0.3)	63.6 (2.1)	-26.8 (3.6)	19.7 (3.8)	24.4 (0.3)	63.8 (2.5)	-24.1 (4.2)	19.9 (4.0)
8	23.2 (0.7)	66.0 (3.0)	-26.3 (5.0)	16.6 (2.9)	23.4 (0.7)	67.3 (4.2)	-29.8 (10.0)	15.6 (3.0)	23.3 (0.6)	64.8 (3.3)	-27.0 (2.1)	17.6 (1.0)	23.4 (0.4)	65.3 (3.7)	-22.1 (7.2)	12.7 (4.0)
9	20.3 (0.6)	60.1 (2.5)	-14.3 (3.4)	8.8 (2.2)	19.4 (0.7)	60.0 (3.6)	-15.6 (4.7)	8.5 (2.3)	20.8 (0.6)	60.2 (3.6)	-13.5 (4.1)	8.2 (2.5)	21.0 (0.9)	58.0 (3.4)	-11.1 (4.2)	6.6 (1.8)
10	20.7 (0.9)	61.2 (3.5)	-16.9 (4.7)	9.4 (2.2)	20.2 (1.1)	62.2 (4.8)	-13.4 (8.8)	9.4 (2.7)	19.9 (0.8)	62.5 (3.9)	-10.1 (3.6)	7.0 (2.0)	21.1 (0.8)	60.2 (4.9)	-13.0 (2.7)	8.0 (2.5)
11	20.0 (0.5)	61.2 (3.8)	-10.5 (3.0)	8.8 (2.4)	19.7 (0.8)	61.5 (4.3)	-16.4 (5.4)	8.4 (2.2)	19.9 (0.6)	58.8 (2.5)	-7.5 (6.3)	5.6 (0.6)	21.3 (0.6)	60.2 (5.1)	-8.8 (2.3)	6.4 (1.6)
12	19.9 (0.9)	58.0 (4.1)	-14.6 (4.6)	8.3 (2.3)	19.5 (1.1)	58.1 (4.0)	-14.7 (4.5)	8.2 (2.5)	18.9 (0.9)	57.4 (3.5)	-12.0 (3.3)	6.1 (1.9)	20.5 (0.5)	56.8 (4.5)	-11.7 (3.3)	7.3 (2.1)
13	19.5 (0.5)	61.6 (6.1)	-12.8 (3.9)	7.9 (2.2)	19.4 (0.5)	60.5 (6.2)	-13.5 (3.7)	7.5 (2.2)	18.9 (0.4)	59.0 (4.3)	-8.1 (4.3)	5.5 (0.6)	20.6 (0.4)	60.5 (6.3)	-8.8 (2.9)	6.5 (1.7)
14	18.8 (0.6)	64.7 (4.8)	-9.3 (1.9)	6.3 (1.3)	18.4 (0.4)	63.4 (5.8)	-9.9 (2.0)	5.9 (0.9)	18.2 (0.4)	60.5 (4.7)	-3.4 (3.1)	4.7 (0.6)	19.7 (0.4)	61.1 (6.0)	-4.9 (1.9)	5.5 (0.6)
15	17.8 (0.5)	67.5 (3.9)	-9.3 (2.6)	6.1 (1.3)	17.6 (0.6)	64.6 (4.3)	-9.5 (2.8)	5.8 (1.1)	17.8 (0.7)	59.8 (3.4)	-6.4 (2.6)	3.9 (0.7)	19.2 (0.4)	62.1 (5.0)	-6.3 (2.4)	5.5 (0.7)
16	18.4 (1.1)	62.6 (4.4)	-12.1 (4.0)	7.0 (2.0)	18.3 (0.8)	61.4 (4.5)	-12.1 (4.9)	7.0 (2.2)	18.2 (0.4)	58.4 (3.6)	-9.0 (2.5)	4.8 (1.2)	19.4 (0.6)	60.4 (4.7)	-8.6 (2.4)	6.0 (1.5)
17																
18	19.3 (0.4)	59.2 (4.3)	-9.5 (3.5)	6.6 (1.7)	17.2 (0.7)	58.1 (5.3)	-11.3 (5.2)	5.7 (1.1)	17.4 (0.6)	59.4 (2.7)	-5.6 (5.0)	4.0 (0.9)	19.3 (0.5)	59.6 (4.2)	-5.3 (3.7)	5.2 (1.2)
19	17.7 (0.6)	68.7 (5.6)	-7.9 (1.8)	5.5 (0.5)	16.5 (0.6)	66.9 (6.0)	-6.0 (2.1)	4.4 (0.6)	16.0 (0.6)	66.1 (3.9)	-3.5 (3.7)	3.0 (0.5)	19.0 (0.4)	66.4 (5.6)	1.9 (2.7)	5.2 (1.4)
20	17.3 (0.4)	70.6 (3.6)	-7.4 (3.9)	5.6 (1.2)	15.7 (0.4)	69.7 (3.9)	-5.3 (2.5)	4.7 (0.7)	15.3 (0.7)	65.6 (2.2)	-2.0 (2.8)	3.6 (0.2)	18.3 (0.4)	69.3 (3.6)	-2.2 (2.3)	3.5 (0.6)
21	18.5 (0.9)	61.8 (6.5)	-11.3 (4.8)	6.7 (1.8)	16.7 (0.7)	59.7 (7.7)	-9.1 (3.4)	5.5 (1.1)	15.9 (0.9)	59.3 (5.1)	-6.6 (1.9)	4.6 (1.0)	18.4 (0.7)	61.5 (7.0)	-6.6 (2.2)	4.1 (1.0)
22	19.1 (1.2)	63.6 (6.8)	-9.3 (3.0)	6.9 (2.0)	17.1 (0.8)	63.7 (6.3)	-11.8 (6.1)	5.5 (0.7)	17.3 (0.9)	60.7 (5.2)	-4.1 (4.7)	4.3 (1.0)	19.6 (0.8)	60.8 (7.1)	-4.3 (3.7)	4.1 (0.8)
23	17.5 (1.1)	67.7 (4.6)	-9.1 (3.1)	6.4 (1.6)	17.0 (1.2)	62.7 (6.7)	-9.5 (2.7)	5.1 (0.8)	15.7 (1.2)	63.2 (2.6)	-7.1 (2.3)	4.1 (1.1)	18.3 (0.7)	64.2 (4.6)	-7.1 (3.6)	5.2 (1.9)
24	16.0 (1.1)	75.8 (7.4)	-7.6 (3.2)	5.5 (1.6)	17.5 (0.7)	62.4 (7.1)	-5.5 (2.3)	3.9 (0.8)	14.6 (0.8)	63.1 (4.5)	-4.7 (3.3)	4.6 (2.2)	15.5 (0.8)	63.7 (5.8)	-2.1 (4.8)	7.9 (0.5)
25	16.2 (1.1)	71.6 (7.9)	-6.7 (3.3)	5.0 (1.3)	16.4 (1.0)	60.1 (4.9)	-5.6 (2.9)	3.8 (0.8)	12.4 (1.5)	62.5 (5.1)	-6.2 (1.6)	3.7 (0.1)	15.3 (0.8)	60.4 (3.8)	-7.0 (1.4)	7.6 (0.1)
26	18.0 (0.7)	62.9 (3.9)	-10.2 (1.9)	6.3 (1.2)	17.7 (0.5)	56.7 (5.3)	-9.5 (2.6)	4.7 (0.6)	14.4 (1.2)	59.7 (2.4)	-7.6 (0.9)	3.5 (0.1)	16.2 (0.7)	59.9 (4.2)	-7.9 (0.9)	7.7 (0.1)
27	18.5 (1.2)	61.7 (5.1)	-10.7 (3.5)	7.0 (2.2)	18.1 (1.1)	55.4 (3.4)	-7.6 (3.1)	4.5 (1.3)	15.2 (1.5)	57.4 (3.4)	-7.7 (2.3)	4.0 (0.9)	16.7 (1.3)	58.8 (3.7)	-8.2 (2.1)	8.0 (0.5)
28	19.5 (0.8)	57.9 (5.7)	-14.0 (3.6)	8.4 (2.1)	17.5 (0.2)	53.1 (3.6)	-8.9 (2.8)	4.9 (0.9)	15.8 (0.8)	56.5 (3.7)	-7.6 (1.2)	3.6 (0.1)	16.9 (0.5)	57.1 (3.7)	-7.4 (1.4)	7.7 (0.2)
29	21.0 (0.9)	60.0 (6.8)	-15.9 (5.3)	10.1 (3.6)	18.4 (1.7)	61.1 (7.6)	-13.5 (7.4)	6.3 (2.5)	16.4 (3.4)	60.4 (7.0)	-1.2 (20.0)	3.8 (1.2)	18.8 (1.7)	59.9 (7.0)	-6.6 (6.4)	7.4 (2.2)
30	18.3 (0.5)	64.7 (3.7)	-6.5 (2.7)	4.9 (1.3)	12.8 (0.7)	61.1 (3.4)	-4.6 (4.5)	4.0 (2.0)	9.8 (4.4)	54.1 (3.8)	4.5 (9.5)	3.1 (0.9)	15.3 (1.4)	59.0 (6.5)	0.3 (3.5)	2.9 (1.1)
31	18.0 (1.3)	62.0 (4.8)	-9.2 (3.5)	4.4 (2.4)	15.3 (1.1)	57.2 (2.6)	2.2 (4.3)	5.0 (2.4)	15.5 (0.7)	57.2 (2.9)	2.1 (4.0)	4.5 (0.7)	15.8 (0.4)	60.6 (2.5)	-8.1 (3.7)	2.0 (0.7)
Avg	19.1	64.0	-12.2	7.9	18.2	62.4	-11.7	7.0	17.6	61.0	-7.6	6.0	19.2	61.5	-7.9	6.7
n	30	30	30	29	30	30	30	30	30	30	30	30	30	30	30	30
SD	1.9	4.3	5.7	3.5	2.4	4.4	7.2	3.6	3.1	3.3	7.7	4.05	2.3	3.3	6.1	3.3
Min	16.0	57.9	-28.0	4.4	12.8	53.1	-29.8	3.8	9.8	54.1	-27.0	3.0	15.3	56.0	-24.1	2.0
Max	24.8	75.8	-4.8	20.1	24.8	71.4	2.2	19.1	24.4	68.6	6.6	19.7	24.4	69.3	1.9	19.9

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Table E3. Daily means (SD) of environmental parameters at Site IN3B for February, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	18.2 (1.2)	60.7 (4.9)	-7.7 (2.1)	4.4 (2.2)	16.5 (0.8)	56.7 (3.2)	-1.4 (6.3)	5.2 (2.2)	15.6 (0.4)	58.2 (2.2)	-1.3 (4.2)	3.9 (0.6)	17.7 (1.1)	61.3 (3.9)	-6.0 (3.0)	2.8 (0.8)
2	18.4 (0.7)	60.7 (2.4)	-9.8 (2.4)	6.2 (1.2)	16.8 (0.9)	56.3 (2.0)	-7.1 (1.9)	4.2 (0.7)	16.4 (0.6)	56.5 (1.1)	-5.8 (1.5)	3.6 (0.1)	18.2 (0.6)	59.1 (2.1)	-5.0 (1.4)	3.1 (0.5)
3	18.2 (0.8)	62.4 (3.6)	-8.7 (3.7)	5.9 (0.9)	17.1 (0.6)	56.8 (2.3)	-5.3 (2.4)	4.2 (0.5)	16.5 (0.3)	57.8 (1.6)	-3.8 (3.2)	3.8 (0.4)	18.1 (0.5)	60.5 (3.1)	-9.4 (7.7)	2.7 (0.6)
4	19.6 (1.1)	65.7 (4.0)			18.3 (1.2)	64.3 (7.5)			18.0 (1.5)	61.7 (3.1)	-10.0 (4.6)	4.2 (0.7)	19.5 (1.1)	63.9 (4.8)	-9.4 (1.9)	5.1 (2.6)
5	19.8 (1.1)	65.3 (3.6)			18.7 (1.0)	66.1 (5.2)			18.3 (1.2)	63.7 (3.3)	-9.0 (13.2)	4.5 (1.5)	19.7 (1.2)	64.3 (3.1)	-11.9 (5.1)	5.1 (2.3)
6	18.3 (0.6)	62.6 (3.8)			17.0 (0.5)	59.5 (3.9)	-10.5 (7.2)	4.9 (0.6)	16.3 (0.7)	58.8 (2.3)	-4.0 (5.1)	3.5 (0.6)	18.1 (0.4)	61.4 (4.4)	-8.4 (5.6)	3.4 (1.3)
7	17.1 (0.6)	61.8 (3.4)	-6.3 (1.3)	5.2 (0.7)	16.1 (0.4)	57.5 (2.4)	-4.4 (1.3)	3.5 (0.5)	14.9 (0.3)	58.5 (2.5)	-2.3 (4.3)	3.6 (0.3)	17.1 (0.4)	61.4 (1.8)	-3.1 (1.9)	2.9 (0.6)
8	17.0 (1.0)	59.0 (3.4)	-8.1 (2.3)	5.4 (0.9)	16.1 (1.0)	56.5 (3.1)	-6.6 (3.4)	3.8 (1.2)	14.8 (0.3)	57.9 (1.6)	-5.0 (1.9)	4.0 (1.2)	17.1 (0.7)	58.3 (2.6)	-4.7 (1.9)	3.2 (1.0)
9	17.5 (0.5)	56.0 (2.3)	-6.4 (1.9)	5.5 (0.5)	16.8 (0.7)	57.1 (1.8)	-5.7 (2.9)	3.2 (0.7)	14.8 (0.6)	56.5 (3.3)	-4.9 (8.3)	3.4 (0.8)	17.5 (0.6)	58.1 (3.1)	-2.6 (3.7)	3.2 (0.5)
10	15.5 (0.6)	61.4 (5.0)	-2.3 (1.5)		11.5 (1.6)	58.9 (2.1)	-4.7 (3.1)	2.3 (0.7)	5.8 (3.7)	50.1 (4.3)	-18.0 (13.2)	1.9 (1.1)	14.5 (1.0)	51.6 (2.7)	5.4 (3.3)	3.0 (0.4)
11	15.3 (0.8)	66.8 (2.0)	-3.0 (1.6)		12.7 (1.1)	61.3 (1.7)	-2.9 (1.2)	3.3 (0.2)	11.7 (2.0)	56.9 (1.1)	-2.1 (2.6)	4.0 (0.3)	14.6 (0.3)	62.1 (2.9)	-1.8 (2.0)	2.3 (0.1)
12	14.3 (0.8)	63.9 (4.3)	-4.2 (2.4)		13.9 (0.5)	60.6 (5.1)	-2.5 (1.8)	3.5 (0.2)	9.6 (3.7)	57.9 (2.8)	0.3 (3.4)	3.3 (1.9)	15.1 (0.6)	63.1 (3.2)	-1.6 (3.4)	2.7 (0.9)
13	15.7 (0.7)	63.5 (2.1)	-4.2 (1.4)	4.2 (0.3)	14.2 (0.7)	61.8 (1.2)	-2.3 (0.6)	3.4 (0.2)	5.4 (0.5)	54.4 (3.3)	-0.9 (1.3)	1.5 (0.1)	16.0 (0.3)	64.0 (2.1)	-1.4 (0.9)	3.4 (0.5)
14	16.3 (0.9)	62.8 (3.5)	-5.8 (2.5)	4.0 (0.5)	14.3 (1.1)	60.1 (2.5)	-4.6 (2.5)	3.6 (0.2)	6.0 (0.9)	59.5 (1.7)	-2.3 (1.3)	1.4 (0.8)	16.3 (0.5)	62.5 (2.4)	-1.5 (1.3)	3.4 (0.8)
15	16.4 (0.6)	59.0 (3.2)	-3.7 (2.1)	3.6 (0.9)	14.4 (1.4)	61.6 (2.7)	-2.5 (2.4)	3.1 (1.3)	6.9 (0.4)	59.2 (3.8)	-2.4 (1.5)	1.3 (0.1)	15.8 (0.7)	66.2 (5.5)	-1.5 (1.4)	3.2 (1.2)
16	15.9 (1.1)	60.4 (4.8)	-2.7 (1.5)	3.0 (0.6)	13.2 (1.1)	62.2 (3.4)	-1.4 (1.0)	2.6 (0.1)	6.8 (0.8)	57.9 (2.6)	-1.1 (0.7)	1.4 (0.0)	15.2 (0.9)	67.5 (2.8)	-1.4 (0.8)	2.7 (0.5)
17	17.4 (1.0)	62.7 (2.2)	-4.2 (4.9)	3.8 (1.4)	14.8 (0.8)	66.9 (3.8)	-6.4 (6.9)	2.4 (0.5)	9.3 (1.7)	72.1 (3.9)	-1.2 (5.6)	1.6 (0.4)	16.6 (0.8)	66.8 (2.6)	-1.8 (2.8)	4.2 (2.4)
18	11.7 (3.5)	63.5 (1.2)	0.8 (1.5)	1.9 (0.6)	13.5 (0.5)	58.9 (2.6)	-1.3 (2.9)	2.3 (0.3)	6.7 (0.9)	56.2 (7.2)	5.5 (7.1)	1.5 (0.5)	11.8 (3.2)	61.3 (4.4)	3.4 (2.8)	1.3 (1.3)
19	6.6 (0.4)	59.8 (1.2)	0.9 (1.2)	1.4 (0.8)	7.7 (2.5)	56.3 (2.1)	-1.9 (4.4)	2.7 (2.1)	3.9 (1.9)	51.6 (4.0)	4.7 (6.2)	1.6 (0.8)	7.0 (0.3)	60.5 (4.7)	2.5 (2.5)	0.1 (0.7)
20	7.0 (0.4)	61.8 (1.1)	0.1 (1.3)	1.3 (0.1)	7.0 (0.3)	59.5 (1.4)	0.1 (1.1)	1.2 (0.1)	6.7 (0.4)	66.0 (2.9)	-0.5 (0.7)	1.4 (0.1)	7.2 (0.3)	73.7 (1.0)	0.1 (0.9)	0.0 (0.0)
21	6.3 (0.8)		-2.1 (2.3)		5.9 (0.4)		2.0 (3.9)		6.4 (0.8)	64.1 (3.4)	1.7 (1.6)	1.5 (0.1)	5.9 (0.3)	67.7 (5.8)	-2.3 (2.4)	0.0 (0.0)
22																
23	7.4 (0.3)		-0.5 (0.2)		6.6 (0.4)		-0.4 (0.3)		7.2 (0.5)	68.9 (2.7)	-0.2 (0.2)	1.4 (0.0)	7.6 (0.3)	75.9 (0.4)	-0.1 (0.2)	0.0 (0.0)
24	7.1 (0.6)		-0.5 (0.3)		6.7 (0.7)		-0.7 (0.7)		7.2 (0.6)	70.6 (1.2)	-0.2 (0.5)	1.4 (0.0)	7.4 (0.6)	76.4 (0.2)	-0.2 (0.3)	0.0 (0.0)
25	8.3 (1.2)		-0.8 (1.5)		8.2 (1.4)		-1.1 (1.8)		7.8 (0.2)	73.4 (1.1)	0.2 (0.8)	1.5 (0.7)	7.9 (0.5)	76.8 (0.2)	0.0 (0.7)	0.0 (0.4)
26	17.3 (3.1)		-0.4 (1.7)		10.1 (2.9)		-0.2 (2.3)		7.2 (0.5)	71.9 (5.5)	-1.4 (2.0)	1.3 (0.3)	7.8 (0.2)	76.2 (0.8)	0.3 (1.9)	0.0 (0.0)
27	19.5 (0.5)		-0.9 (0.4)		5.9 (0.2)		0.2 (1.3)		6.3 (0.3)	57.9 (5.2)	0.5 (3.1)	1.4 (0.2)	7.3 (0.3)	75.2 (1.2)	1.4 (1.4)	0.0 (0.0)
28	20.1 (1.2)		-1.2 (0.6)		6.0 (0.5)		-0.6 (2.0)		6.9 (0.6)	65.1 (1.5)	-0.1 (0.7)	1.4 (0.0)	6.9 (0.5)	73.5 (1.7)	-0.4 (0.5)	0.0 (0.3)
29	20.7 (0.5)	58.4 (2.2)	-0.9 (1.6)	2.6 (0.3)	7.0 (0.3)		-0.4 (2.4)		7.8 (0.4)	68.2 (2.3)	4.2 (5.3)	1.6 (0.3)	7.7 (0.3)	74.4 (1.4)	1.4 (1.3)	0.0 (0.0)
Avg	15.1	61.8	-3.3	3.9	12.4	59.9	-2.8	3.3	10.0	61.1	-2.1	2.4	13.3	65.8	-2.1	2.1
n	28	21	25	15	28	20	26	18	28	28	28	28	28	28	28	28
SD	4.6	2.5	3.1	1.5	4.3	3.1	2.8	0.9	4.5	6.2	4.6	1.15	4.7	6.7	3.9	1.69
Min	6.3	56.0	-9.8	1.3	5.9	56.3	-10.5	1.2	3.9	50.1	-18.0	1.3	5.9	51.6	-11.9	0.0
Max	20.7	66.8	0.9	6.2	18.7	66.9	2	5.2	18.3	73.4	5.5	4.49	19.7	76.8	5.4	5.14

ED_004549_00015928-00111

Table E3. Daily means (SD) of environmental parameters at Site IN3B for March, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	21.2 (0.4)	60.1 (3.7)	-1.0 (0.7)	2.5 (0.1)	7.6 (0.7)		0.2 (1.9)		7.7 (0.4)	65.2 (2.4)	2.0 (3.7)	1.5 (0.2)	7.9 (0.4)	73.3 (1.9)	0.4 (1.4)	0.0 (0.0)
2	21.3 (0.8)	58.5 (2.7)	-1.7 (0.9)	3.0 (0.3)	10.0 (1.7)		-0.6 (3.4)		9.9 (2.0)	71.0 (2.6)	0.5 (0.9)	1.9 (0.4)	9.4 (1.6)	74.3 (3.3)	0.1 (0.8)	0.0 (0.0)
3	21.9 (0.5)	58.7 (3.8)	-2.4 (1.9)	2.7 (0.2)	11.7 (0.5)		-1.3 (2.5)		10.6 (1.6)	74.7 (1.3)	0.0 (1.2)	1.9 (0.4)	11.2 (1.0)	77.1 (1.2)	0.3 (1.1)	0.0 (0.0)
4	20.8 (0.5)	56.6 (2.4)	4.3 (5.2)	3.0 (1.0)	11.8 (1.9)		4.0 (3.0)		7.4 (0.3)	73.2 (2.2)	-0.4 (1.1)	1.4 (0.1)	7.2 (0.5)	73.7 (3.0)	-5.7 (5.3)	0.0 (0.6)
5	21.3 (0.6)	58.9 (2.1)	-1.2 (0.4)	2.5 (0.1)	21.7 (1.1)	55.1 (4.6)	-1.0 (1.1)	1.8 (0.6)	7.7 (0.3)	68.0 (2.2)	0.4 (0.8)	1.4 (0.0)	7.8 (0.3)	76.3 (0.6)	0.1 (0.4)	0.0 (0.0)
6	21.6 (0.6)	60.8 (3.1)	-0.9 (0.5)	2.5 (0.1)	22.1 (0.4)	51.4 (2.4)	-0.8 (0.7)	2.5 (0.1)	7.7 (0.2)	66.3 (2.6)	1.5 (1.6)	1.5 (0.1)	7.9 (0.3)	77.3 (0.3)	0.1 (0.6)	0.0 (0.0)
7	20.9 (0.6)	57.2 (2.1)	2.1 (3.8)	3.2 (1.0)	21.4 (0.4)	52.0 (1.4)	1.8 (2.6)	2.7 (0.3)	7.5 (0.2)	65.3 (2.3)	-0.4 (0.5)	1.4 (0.0)	7.2 (0.3)	71.1 (4.9)	-5.1 (4.6)	0.0 (0.3)
8	20.4 (0.5)	53.6 (3.1)	-1.7 (2.4)	2.6 (0.4)	20.8 (0.3)	52.5 (2.0)	-0.6 (1.8)	2.4 (0.2)	7.1 (0.2)	61.4 (2.4)	1.2 (2.8)	1.5 (0.2)	7.4 (0.5)	70.9 (1.8)	-1.5 (2.2)	0.0 (0.0)
9	20.9 (0.8)	52.4 (2.3)	-3.7 (1.1)	2.6 (0.2)	21.5 (0.9)	50.7 (3.9)	-2.0 (1.3)	2.7 (0.4)	7.6 (0.6)	62.5 (2.5)	0.2 (0.5)	1.5 (0.1)	7.8 (0.7)	70.5 (4.3)	-0.4 (0.6)	0.0 (0.0)
10	21.5 (0.5)	54.3 (2.7)	-3.6 (1.2)	2.7 (0.3)	22.4 (0.3)	49.1 (2.5)	-1.5 (0.9)	3.0 (0.3)	8.0 (0.2)	66.4 (2.0)	0.9 (1.4)	1.5 (0.1)	8.4 (0.5)	73.6 (3.2)	-0.2 (0.6)	0.0 (0.0)
11	20.8 (0.8)	54.5 (2.0)	-3.0 (1.0)	2.7 (0.2)	22.0 (0.4)	49.9 (2.6)	-3.7 (3.0)	3.1 (0.5)	7.9 (0.4)	64.9 (2.7)	1.1 (1.3)	1.5 (0.1)	8.2 (0.5)	71.6 (4.9)	0.0 (0.4)	0.0 (0.0)
12	20.9 (0.9)	54.0 (5.5)	-5.2 (2.6)	4.0 (1.6)	22.2 (1.0)	45.4 (3.6)	-2.5 (3.8)	4.6 (1.0)	9.1 (1.4)	64.4 (4.5)	-0.2 (0.7)	1.7 (0.4)	9.0 (1.1)	70.0 (6.3)	-1.3 (1.2)	0.0 (0.3)
13																
14																
15																
16	19.7 (1.1)	63.8 (4.1)	-4.3 (1.7)	4.8 (0.7)	22.1 (0.7)	44.1 (2.8)	-3.5 (2.4)	4.5 (0.9)	7.3 (0.8)	66.1 (0.6)	-0.4 (0.4)		7.3 (0.4)		-1.5 (1.0)	
17	19.7 (0.5)	66.9 (3.2)	-5.5 (1.6)	4.3 (0.5)	21.7 (0.4)	46.8 (2.8)	3.4 (4.2)	6.0 (2.4)	7.1 (0.2)	65.8 (1.0)	-0.6 (0.9)		7.9 (1.5)		-2.5 (2.0)	
18	20.3 (1.3)	67.8 (2.9)	-7.9 (2.3)	5.4 (0.5)	21.6 (0.9)	53.2 (4.6)	-8.0 (5.3)	6.7 (3.1)	9.6 (1.5)		-0.4 (0.7)		10.1 (1.7)		-3.4 (4.2)	
19	19.5 (1.0)	67.5 (2.8)	-4.5 (1.6)	4.7 (0.6)	20.0 (0.5)		-4.9 (1.4)		7.5 (0.9)		-0.8 (0.7)		7.7 (0.9)		-1.4 (0.6)	
20	19.4 (1.9)	61.5 (6.7)	-6.1 (2.5)	5.1 (0.9)	19.7 (1.0)		-4.9 (3.5)		6.8 (1.3)		0.6 (1.4)		8.0 (1.4)		-1.5 (1.3)	
21	19.9 (0.6)	59.3 (3.2)	-5.6 (2.1)	4.4 (0.5)	18.8 (1.1)		0.8 (4.9)		7.6 (1.6)		-1.2 (1.0)		14.0 (3.5)		-3.4 (2.2)	
22	19.1 (0.4)	57.5 (1.2)	-3.4 (1.9)	4.6 (0.3)	17.9 (0.7)		-2.0 (1.6)		6.3 (0.3)		-0.4 (0.5)		16.6 (0.3)		-2.7 (1.6)	
23	18.7 (1.0)	57.4 (0.9)	-4.9 (0.5)	4.4 (0.1)	17.8 (0.9)		-3.2 (1.0)		5.7 (0.4)		0.4 (1.3)		16.9 (0.7)		-1.2 (0.7)	
24	18.9 (0.9)	57.1 (2.0)	-4.9 (0.6)	4.5 (0.1)	17.6 (1.0)		-3.5 (1.5)		5.5 (0.4)		-0.2 (0.6)		17.0 (0.8)		-1.7 (0.8)	
25	18.9 (0.6)	54.9 (1.6)	-7.1 (3.3)	4.6 (0.2)	18.8 (1.4)		-8.8 (7.6)		7.2 (1.8)		2.6 (3.2)		18.2 (1.0)		-0.5 (2.2)	
26	20.3 (1.1)	55.3 (4.2)	-6.0 (1.6)	4.8 (0.6)	20.3 (1.1)	50.9 (4.1)	-5.5 (1.6)	5.1 (0.6)	8.2 (1.6)		0.6 (1.3)		19.4 (0.7)	50.6 (2.9)	-1.9 (1.2)	
27	19.3 (0.5)	63.3 (3.7)	-4.4 (2.7)	4.3 (0.4)	20.0 (0.6)	55.5 (4.5)	-1.7 (2.8)	5.2 (0.8)	7.3 (0.4)		-1.2 (1.1)		18.6 (0.4)	57.4 (4.1)	-5.0 (2.5)	
28	18.6 (1.0)	60.6 (3.2)	-2.7 (2.7)	4.9 (0.4)	19.2 (0.9)	54.8 (4.5)	-3.5 (2.9)	5.1 (0.6)	6.9 (0.9)		-0.7 (0.7)		18.1 (0.4)	55.8 (2.4)	-3.2 (1.4)	
29	18.6 (0.8)	61.1 (1.5)	-7.0 (3.0)	3.8 (0.5)	18.5 (1.5)	58.1 (4.2)	-0.6 (3.5)	5.9 (2.4)	6.4 (0.9)		-1.3 (1.2)		18.1 (0.4)	53.7 (1.9)	-5.3 (2.7)	2.6 (1.2)
30	19.6 (0.9)	63.1 (3.6)	-8.0 (1.7)	4.6 (0.8)	19.7 (1.3)	56.6 (2.0)	-4.1 (5.2)	5.9 (0.8)	9.1 (1.9)		-0.8 (0.8)		18.8 (0.8)	54.2 (4.3)	-5.0 (2.0)	3.4 (0.6)
31	21.8 (0.6)	69.8 (0.7)	-12.3 (2.9)	6.9 (1.8)	21.5 (0.4)	61.5 (1.5)	-9.1 (2.0)	5.9 (1.0)	16.5 (3.0)		-0.1 (1.9)		21.3 (0.7)	60.3 (0.8)	-3.2 (1.6)	5.7 (0.6)
Avg	20.2	59.5	-4.0	3.9	18.9	52.2	-2.4	4.3	8.0	66.8	0.1	1.6	12.0	67.3	-2.0	0.8
n	28	28	28	28	28	17	28	17	28	14	28	12	28	18	28	15
SD	1	4.6	3.2	1.1	3.9	4.4	3.1	1.5	2	3.7	0.9	0.17	4.9	8.9	1.9	1.67
Min	18.6	52.4	-12.3	2.5	7.6	44.1	-9.1	1.8	5.5	61.4	-1.3	1.4	7.2	50.6	-5.7	0.0
Max	21.9	69.8	4.3	6.9	22.4	61.5	4	6.7	16.5	74.7	2.6	1.91	21.3	77.3	0.4	5.7

ED_004549_00015928-00112

Table E3. Daily means (SD) of environmental parameters at Site IN3B for April, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	20.5 (0.9)	64.9 (2.9)	-6.7 (3.0)	4.8 (0.7)	19.2 (1.1)	56.3 (2.9)	-5.1 (4.4)	3.7 (0.9)	18.3 (0.5)				19.4 (1.1)	55.5 (2.5)	-1.9 (3.2)	4.2 (0.9)
2	19.6 (1.0)	58.7 (3.4)	-7.0 (1.8)	4.7 (0.5)	18.5 (1.1)	50.4 (4.7)	-3.6 (1.6)	4.3 (0.5)	17.9 (0.5)		-3.4 (1.3)		18.5 (0.7)	51.1 (2.3)	-3.7 (2.0)	3.7 (0.2)
3	19.8 (1.2)	60.2 (1.5)	-7.4 (1.9)	4.7 (0.5)	19.0 (1.1)	50.3 (1.9)	-3.0 (1.8)	4.4 (0.6)	17.8 (0.6)		-3.3 (1.5)		18.6 (0.8)	52.7 (1.8)	-3.7 (2.2)	3.9 (0.4)
4	19.1 (1.3)	62.5 (3.1)	-9.9 (3.5)	4.5 (0.6)	19.0 (0.6)	54.4 (1.1)	-5.0 (0.9)	3.9 (0.1)	17.9 (0.4)		-5.1 (0.9)		18.6 (0.5)	58.0 (1.9)	-5.4 (0.9)	3.7 (0.4)
5	19.9 (2.2)	58.0 (7.7)	-10.2 (5.6)	6.2 (2.5)	19.8 (2.0)	48.0 (6.7)	-8.3 (5.0)	5.2 (2.2)	19.1 (2.0)	51.9 (7.2)	-7.4 (3.9)	5.0 (2.4)	19.6 (1.8)	50.2 (5.2)	-8.0 (4.4)	6.1 (3.0)
6	20.9 (1.7)	52.8 (5.8)	-12.2 (7.6)	7.2 (3.9)	20.5 (2.1)	44.4 (5.8)	-10.7 (8.5)	6.9 (4.7)	20.4 (2.1)	47.2 (6.5)	-9.5 (6.3)	5.6 (2.8)	20.5 (1.7)	46.1 (4.6)	-10.5 (7.0)	7.7 (5.1)
7	21.9 (1.7)	52.9 (7.4)	-12.1 (5.9)	8.8 (5.4)	21.3 (1.2)	44.5 (5.1)	-13.8 (9.6)	6.9 (4.2)	20.5 (1.6)	49.0 (7.8)	-10.8 (6.4)	5.4 (2.8)	21.5 (1.5)	45.7 (6.1)	-11.2 (7.2)	9.9 (5.8)
8	21.6 (1.7)	57.9 (3.5)	-13.0 (6.9)	7.7 (3.6)	21.6 (1.5)	49.1 (4.3)	-9.7 (8.7)	5.8 (2.2)	20.1 (2.0)	53.0 (6.3)	-9.0 (6.5)	5.9 (2.7)	21.2 (1.5)	49.6 (2.7)	-10.6 (5.8)	9.0 (5.1)
9	20.8 (1.0)	60.5 (2.5)	-8.7 (3.4)	5.9 (1.6)	20.6 (1.0)	53.1 (3.4)	-7.0 (4.6)	5.1 (1.7)	18.7 (1.0)	54.3 (4.7)	-6.3 (4.2)	3.9 (0.8)	21.1 (1.0)	49.5 (4.5)	-5.1 (3.7)	6.2 (1.8)
10	20.3 (0.6)	64.7 (3.3)	-10.4 (3.6)	4.7 (1.0)	19.9 (0.6)	57.1 (4.5)	-1.0 (2.8)	4.8 (0.6)	18.9 (0.6)	56.9 (3.6)	2.0 (2.8)	2.7 (1.3)	19.9 (0.7)	55.6 (4.8)	-6.8 (2.9)	4.0 (2.0)
11	22.5 (1.7)	61.5 (7.9)	-14.2 (8.0)	10.3 (5.2)	22.1 (1.5)	57.7 (8.6)	-17.4 (9.2)	9.0 (4.8)	20.9 (1.8)	58.1 (11.3)	-10.6 (9.3)	6.5 (5.5)	22.4 (1.1)	54.8 (9.7)	-9.3 (6.6)	13.1 (6.3)
12	19.3 (0.4)	59.2 (4.6)	-3.5 (1.7)	4.5 (0.2)	19.2 (0.7)	55.8 (5.1)	-10.0 (3.8)	3.8 (0.3)	18.2 (0.6)	50.9 (7.0)	-4.6 (3.4)	3.4 (0.5)	20.4 (0.6)	50.2 (4.7)	-2.9 (1.3)	5.1 (0.9)
13	18.9 (0.5)	60.9 (1.3)	-5.5 (1.2)	4.6 (0.4)	18.2 (0.5)	55.7 (1.4)	-5.2 (0.9)	4.2 (2.7)	17.7 (0.3)	56.6 (2.1)	-5.0 (2.0)	3.7 (0.1)	19.5 (0.3)	52.5 (2.0)	-4.5 (1.8)	4.3 (0.7)
14	19.3 (1.2)	53.7 (5.3)	-7.8 (3.5)	5.5 (1.8)	18.9 (1.1)	47.6 (7.0)	-7.2 (3.6)	4.6 (0.9)	18.3 (1.3)	48.0 (7.0)	-7.5 (3.7)	4.2 (0.8)	19.7 (1.2)	45.7 (5.0)	-7.5 (3.8)	5.3 (2.2)
15	19.9 (2.2)	49.6 (9.3)	-11.4 (6.7)	7.4 (4.1)	19.5 (1.8)	44.7 (7.8)	-10.9 (7.7)	5.0 (1.2)	19.1 (1.6)	44.1 (8.3)	-8.7 (5.7)	5.5 (2.6)	20.8 (1.3)	42.1 (6.5)	-8.4 (5.7)	7.6 (4.5)
16	21.9 (2.1)	43.9 (5.2)	-16.5 (9.1)	11.0 (6.3)	21.3 (1.8)	40.4 (4.9)	-14.6 (10.8)	5.5 (1.2)	20.5 (2.2)	40.5 (7.5)	-11.3 (8.6)	8.2 (5.3)	22.0 (1.2)	38.1 (5.6)	-8.9 (7.8)	12.8 (6.7)
17	23.4 (2.3)	47.3 (3.3)	-17.0 (5.9)	14.5 (8.2)	22.4 (2.1)	43.3 (3.6)	-17.5 (7.2)	6.4 (4.3)	22.1 (2.4)	43.0 (4.4)	-14.6 (6.4)	13.1 (8.8)	23.3 (1.5)	41.0 (3.8)	-12.5 (6.9)	15.8 (8.8)
18	24.2 (2.1)	49.6 (6.7)	-18.5 (5.1)	16.1 (7.6)	23.5 (1.8)	46.6 (7.6)	-18.4 (6.2)	8.0 (4.6)	22.9 (2.4)	46.4 (10.2)	-16.3 (5.2)	14.7 (9.7)	23.7 (1.5)	42.9 (7.0)	-13.5 (5.4)	18.2 (10.6)
19	22.4 (0.9)	59.3 (3.9)	-16.8 (4.1)	10.8 (3.3)	21.8 (0.6)	56.7 (4.1)	-16.8 (5.6)	9.5 (3.5)	21.2 (1.0)	58.5 (6.3)	-13.7 (3.9)	8.2 (2.8)	22.4 (0.6)	53.5 (4.1)	-13.6 (3.8)	11.3 (3.9)
20	23.1 (1.2)	58.6 (2.2)	-19.1 (7.3)	11.7 (4.9)	21.9 (1.3)	56.1 (3.0)	-18.2 (7.1)	7.1 (2.2)	21.2 (1.8)	58.6 (5.1)	-16.9 (6.6)	9.1 (4.7)	22.9 (1.1)	52.5 (3.5)	-17.4 (7.0)	12.3 (5.7)
21	23.8 (1.8)	56.3 (8.3)	-19.8 (5.3)	15.1 (7.2)	23.0 (2.0)	51.7 (11.0)	-17.6 (5.5)	8.1 (4.0)	22.9 (2.5)	52.6 (13.6)	-16.5 (5.1)	14.6 (9.2)	23.4 (1.4)	50.1 (8.9)	-16.6 (5.2)	16.1 (8.1)
22	24.5 (2.0)	52.2 (7.1)	-19.9 (5.2)	18.6 (10.1)	23.5 (2.0)	47.5 (8.3)	-18.5 (5.9)	11.9 (7.3)	23.7 (2.3)	47.7 (10.1)	-17.3 (5.5)	16.8 (11.1)	24.0 (1.8)	45.7 (7.9)	-17.3 (5.2)	21.4 (11.9)
23	25.0 (1.6)	54.1 (5.5)	-20.9 (6.8)	23.8 (13.3)	24.3 (2.1)	48.4 (8.0)	-18.4 (4.9)	21.5 (14.2)	24.6 (2.1)	48.2 (7.5)	-16.5 (4.3)	23.0 (15.4)	24.7 (1.7)	48.0 (5.4)	-17.7 (5.7)	25.8 (13.6)
24	24.9 (1.2)	46.6 (7.5)	-22.9 (5.2)	18.9 (7.8)	23.8 (1.6)	41.2 (8.5)	-16.1 (6.7)		23.8 (1.8)	40.5 (9.9)	-15.9 (5.2)	21.2 (12.0)	24.3 (1.2)	40.6 (8.2)	-17.8 (4.5)	21.6 (10.2)
25	26.3 (1.9)	55.4 (5.9)	-21.5 (3.9)	29.0 (11.2)	25.3 (1.9)	51.9 (5.9)	-21.9 (5.6)	27.2 (11.8)	25.4 (1.7)	51.6 (6.8)	-18.1 (4.4)	28.3 (14.5)	25.6 (1.9)	49.8 (6.3)	-13.5 (5.3)	32.3 (12.7)
26	22.1 (1.1)	53.6 (6.2)	-14.2 (5.3)	11.2 (4.8)	20.8 (1.2)	49.1 (6.2)	-17.5 (7.7)	10.0 (4.5)	21.1 (1.2)	48.7 (6.8)	-11.4 (7.8)	9.4 (4.7)	21.6 (0.8)	46.5 (5.3)	-10.6 (6.3)	12.5 (4.8)
27	21.3 (1.6)	49.0 (7.8)	-17.4 (8.3)	10.5 (4.8)	20.0 (1.4)	43.3 (6.3)	-16.4 (8.3)	5.7 (0.6)	19.8 (1.8)	45.2 (9.5)	-15.0 (7.4)	8.0 (4.6)	21.5 (1.4)	41.1 (6.1)	-15.2 (7.8)	10.4 (5.4)
28	20.9 (1.1)	57.8 (5.1)	-13.0 (5.3)	8.0 (3.5)	19.2 (0.9)	51.7 (4.3)	-12.4 (5.3)	6.9 (2.6)	18.7 (1.0)	56.2 (6.5)	-10.8 (4.5)	5.8 (1.8)	20.8 (1.0)	48.1 (5.5)	-9.3 (5.6)	8.0 (3.8)
29	20.2 (1.4)	55.5 (5.4)	-13.2 (5.8)	7.9 (3.2)	19.0 (0.9)	48.2 (4.1)	-12.3 (5.4)		18.4 (1.5)	50.4 (6.7)	-11.5 (5.1)	5.9 (2.6)	20.5 (1.2)	45.1 (3.2)	-11.3 (5.1)	8.0 (3.6)
30	21.2 (2.3)	51.1 (6.3)	-18.1 (8.7)	11.0 (5.4)	20.2 (2.3)	44.6 (5.8)	-16.2 (9.1)	5.9 (3.0)	20.2 (2.4)	44.1 (5.5)	-14.5 (7.3)	8.9 (6.4)	20.9 (1.5)	42.1 (3.2)	-14.1 (6.1)	9.9 (4.9)
Avg	21.7	55.6	-13.6	10.3	20.9	49.7	-12.4	7.6	20.3	50.1	-10.7	9.5	21.5	48.1	-10.3	11.0
n	30	30	30	30	30	30	30	28	30	26	29	26	30	30	30	30
SD	2	5.3	5.2	6	1.9	5	5.6	5.1	2.2	5.3	5.1	6.47	1.9	5	4.7	6.99
Min	18.9	43.9	-22.9	4.5	18.2	40.4	-21.9	3.7	17.7	40.5	-18.1	2.7	18.5	38.1	-17.8	3.7
Max	26.3	64.9	-3.5	29	25.3	57.7	-1	27.2	25.4	58.6	2	28.3	25.6	58	-1.9	32.3

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Table E3. Daily means (SD) of environmental parameters at Site IN3B for May, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	24.1 (1.7)		-21.9 (5.1)		23.0 (2.2)	49.5 (3.1)	-22.8 (6.2)	10.0 (6.5)	22.7 (2.2)	50.7 (3.8)	-20.0 (6.3)	16.2 (7.8)	23.7 (1.7)	46.9 (3.5)	-17.2 (6.2)	18.9 (9.8)
2	25.1 (0.7)		-24.6 (3.6)		24.7 (0.7)	56.8 (4.5)	-26.9 (3.3)	17.8 (5.6)	24.4 (0.7)	59.0 (5.3)	-23.2 (2.9)	19.7 (4.8)	24.5 (0.8)	56.4 (5.2)	-18.0 (4.5)	23.0 (7.0)
3	22.8 (1.2)		-15.7 (5.5)		21.4 (1.2)	55.6 (4.5)	-21.5 (8.0)	11.5 (4.0)	21.5 (1.2)	54.8 (4.6)	-15.2 (7.4)	10.2 (3.7)	22.2 (0.9)	52.0 (4.9)	-13.3 (6.1)	13.7 (4.7)
4	22.8 (2.0)		-18.9 (7.2)		21.1 (2.1)	45.0 (8.6)	-19.7 (7.6)	6.5 (2.9)	20.9 (2.5)	45.7 (11.6)	-17.2 (7.6)	11.9 (7.1)	22.3 (1.6)	40.9 (7.8)	-16.9 (7.9)	14.2 (7.4)
5	23.5 (1.9)		-19.4 (5.3)		22.7 (2.0)	41.7 (6.2)	-21.5 (5.9)	11.3 (6.7)	22.4 (2.1)	41.5 (7.3)	-18.5 (5.5)	15.1 (8.6)	23.2 (1.5)	39.1 (6.3)	-18.0 (5.1)	18.0 (11.9)
6	25.3 (1.8)		-19.3 (4.3)		24.4 (2.2)	42.1 (9.0)	-19.8 (5.1)	17.7 (14.4)	24.4 (2.2)	40.6 (8.6)	-17.7 (4.5)	26.6 (15.4)	25.0 (2.4)	39.4 (8.9)	-17.0 (3.9)	28.0 (14.5)
7	24.7 (0.5)		-26.1 (2.2)		24.0 (0.5)	57.4 (6.6)	-29.9 (2.5)	17.5 (2.0)	23.5 (0.6)	60.5 (7.2)	-25.2 (2.1)	17.5 (1.9)	24.1 (0.4)	56.3 (5.9)	-23.4 (3.5)	18.7 (2.6)
8	22.1 (1.0)		-17.2 (3.6)		20.8 (0.9)	63.9 (1.8)	-15.0 (5.5)	10.6 (2.6)	21.1 (1.2)	67.0 (4.2)	-14.0 (3.8)	9.6 (1.9)	21.7 (0.7)	60.6 (2.6)	-19.1 (3.2)	10.6 (2.6)
9	21.7 (0.8)		-19.3 (5.3)		20.6 (1.0)	56.5 (1.9)	-18.8 (5.5)	11.1 (3.9)	21.2 (1.2)	59.3 (4.0)	-16.3 (4.0)	9.8 (2.3)	21.8 (0.7)	53.9 (2.1)	-17.4 (4.3)	10.6 (4.0)
10	22.9 (1.6)		-20.9 (7.8)		21.7 (2.1)	50.2 (6.2)	-18.4 (6.9)	14.4 (7.6)	21.7 (2.5)	52.7 (7.8)	-17.2 (6.4)	13.7 (7.7)	22.6 (1.5)	48.2 (4.1)	-18.7 (7.0)	14.4 (7.4)
11	22.1 (0.9)		-20.2 (4.3)		20.8 (0.8)	60.7 (3.7)	-19.6 (4.8)	10.7 (2.5)	21.6 (1.0)	61.2 (3.5)	-12.6 (5.1)	10.3 (3.0)	21.6 (0.6)	58.2 (3.9)	-15.4 (3.7)	11.4 (3.2)
12	22.0 (1.6)		-20.7 (7.5)		21.0 (1.6)	50.9 (5.5)	-19.9 (7.6)	12.0 (5.9)	21.5 (1.9)	52.6 (6.9)	-17.4 (7.0)	12.4 (5.8)	22.3 (1.3)	46.8 (4.4)	-17.7 (7.0)	12.3 (6.5)
13	23.2 (1.8)		-20.9 (5.4)		22.5 (2.2)	49.9 (6.6)	-20.5 (6.4)	16.4 (8.0)	22.8 (1.9)	51.2 (7.9)	-18.9 (5.1)	17.7 (8.9)	23.1 (1.4)	47.8 (5.0)	-18.2 (5.1)	16.7 (8.5)
14	22.9 (0.6)	62.7 (4.7)	-22.6 (5.0)	13.6 (3.8)	21.6 (0.8)	63.0 (3.5)	-24.6 (5.7)	13.9 (3.6)	22.6 (0.9)	65.0 (3.9)	-19.9 (4.5)	11.9 (3.9)	22.7 (0.5)	61.5 (3.7)	-20.1 (4.5)	13.1 (3.8)
15	21.8 (0.9)	60.6 (2.1)	-18.2 (5.6)	10.5 (3.3)	20.2 (1.0)	60.5 (1.9)	-14.5 (4.2)	10.1 (3.7)	20.8 (1.1)	63.2 (3.6)	-12.8 (3.7)	10.4 (2.7)	21.6 (0.7)	57.2 (4.0)	-17.4 (5.2)	9.7 (4.2)
16	23.0 (1.7)	49.8 (8.2)	-21.9 (5.3)	15.7 (6.4)	21.5 (2.0)	50.2 (8.4)	-23.2 (6.1)	15.6 (6.6)	22.3 (1.9)	51.0 (9.2)	-19.3 (5.1)	15.4 (6.5)	22.9 (1.2)	46.7 (6.7)	-19.5 (5.1)	15.6 (8.0)
17	24.3 (1.1)	45.5 (8.1)	-21.1 (4.5)	21.6 (11.4)	23.0 (1.5)	46.0 (8.0)	-24.0 (5.6)	21.4 (11.8)	23.6 (1.3)	47.3 (8.4)	-19.8 (5.2)	18.3 (7.6)	24.0 (1.2)	45.0 (8.0)	-19.3 (4.7)	22.5 (13.3)
18	22.6 (1.2)	49.0 (4.7)	-22.4 (6.4)	13.5 (4.0)	21.0 (1.4)	50.5 (5.5)	-22.8 (6.5)	13.2 (4.3)	21.9 (1.5)	51.3 (6.9)	-18.9 (5.2)	12.7 (5.0)	22.5 (1.2)	47.5 (5.4)	-19.7 (5.1)	13.7 (5.2)
19	22.3 (1.4)	50.7 (6.9)	-20.8 (6.9)	12.5 (4.7)	20.8 (1.6)	52.0 (6.8)	-20.4 (7.3)	11.9 (4.9)	21.1 (1.3)	54.2 (8.4)	-18.1 (6.3)	11.9 (4.8)	21.8 (1.2)	49.6 (7.0)	-18.3 (6.2)	12.7 (5.6)
20	21.9 (0.7)	49.9 (3.4)	-22.4 (6.1)	12.9 (3.5)	20.6 (1.1)	50.6 (3.4)	-22.5 (5.6)	12.5 (3.8)	21.2 (1.0)	52.5 (4.5)	-19.6 (5.0)	11.6 (3.7)	21.8 (0.6)	49.3 (3.6)	-20.0 (5.0)	12.4 (4.3)
21	22.6 (1.5)	46.3 (6.7)	-22.1 (6.3)	14.3 (5.4)	21.0 (1.7)	47.0 (7.8)	-21.6 (9.3)	13.0 (8.6)	21.9 (1.5)	48.5 (8.1)	-18.9 (5.7)	13.5 (6.4)	22.5 (1.2)	45.3 (7.4)	-19.0 (5.4)	14.7 (6.5)
22	23.0 (1.7)	44.2 (7.8)	-19.8 (6.7)	16.8 (7.8)	22.3 (2.5)	46.9 (6.0)	-13.1 (6.0)		22.5 (1.7)	46.5 (8.8)	-17.4 (4.9)	17.0 (8.2)	23.0 (1.6)	42.3 (7.1)	-17.8 (5.7)	16.8 (9.9)
23	22.1 (0.4)	57.0 (5.6)	-21.1 (4.6)	12.3 (3.2)	21.7 (1.1)	57.1 (5.1)	-19.0 (3.2)	10.6 (1.4)	21.7 (0.8)	60.4 (4.8)	-18.8 (3.5)	11.7 (3.1)	21.8 (0.5)	57.3 (4.9)	-19.5 (3.6)	12.1 (3.2)
24	23.2 (1.7)	50.2 (7.3)	-22.2 (5.4)	17.3 (6.9)	22.4 (2.1)	49.3 (9.2)	-19.7 (4.0)	13.7 (7.2)	23.0 (1.8)	52.1 (10.1)	-18.0 (3.8)	17.9 (9.2)	23.0 (1.3)	49.5 (7.4)	-20.8 (4.6)	17.4 (7.5)
25	24.5 (2.3)	46.1 (6.8)	-19.3 (3.7)	26.9 (13.9)	23.7 (2.7)	46.9 (7.1)	-18.6 (4.9)	14.6 (9.7)	24.2 (2.3)	48.2 (7.7)	-18.4 (3.5)	26.9 (14.6)	24.4 (2.2)	45.6 (6.4)	-17.5 (3.7)	27.6 (14.8)
26	26.6 (1.3)	56.8 (5.7)	-20.0 (4.2)	34.1 (10.8)	25.5 (1.3)	58.4 (5.0)	-19.2 (4.7)		25.9 (0.9)	61.3 (5.6)	-18.3 (4.7)	34.2 (12.1)	26.4 (1.3)	57.7 (5.9)	-18.3 (4.0)	34.6 (10.8)
27	23.8 (1.4)	58.5 (6.6)	-23.7 (5.1)	18.4 (5.8)	23.3 (1.4)	58.1 (6.7)	-24.0 (4.9)	18.8 (6.9)	23.5 (1.3)	60.7 (7.8)	-21.0 (4.4)	17.9 (6.9)	23.6 (1.2)	57.2 (7.0)	-22.0 (3.8)	18.1 (6.5)
28	22.8 (1.3)	44.2 (8.9)	-21.8 (5.3)	15.9 (6.4)	21.7 (2.3)	43.8 (10.9)	-18.1 (5.2)	16.3 (9.0)	21.9 (1.9)	47.2 (11.7)	-15.4 (6.9)	14.9 (8.7)	22.2 (1.3)	43.7 (9.2)	-21.0 (5.4)	16.3 (7.7)
29	23.8 (1.9)	38.9 (11.0)	-20.2 (5.3)	24.3 (14.2)	22.3 (2.5)	39.5 (12.1)	-19.4 (5.8)	20.1 (14.0)	23.3 (1.9)	40.7 (12.4)	-18.2 (5.6)	24.5 (15.2)	23.3 (2.1)	38.3 (10.4)	-18.6 (5.7)	24.5 (15.0)
30	26.8 (2.7)	49.6 (9.9)	-21.5 (5.4)	30.7 (11.8)	26.1 (2.6)	50.6 (9.3)	-21.2 (6.4)	28.5 (12.3)	26.0 (2.8)	53.9 (10.6)	-20.1 (6.3)	32.3 (13.6)	26.5 (2.9)	51.0 (10.5)	-18.9 (6.8)	32.6 (13.1)
31	26.5 (1.2)	58.4 (8.1)	-17.5 (2.6)	35.8 (10.1)	26.0 (1.0)	59.3 (7.5)	-17.7 (4.6)	35.8 (10.0)	25.9 (1.0)	62.5 (7.9)	-15.4 (5.7)	36.1 (12.1)	26.7 (1.2)	58.6 (8.7)	-16.2 (3.6)	
Avg	23.5	51.0	-20.8	19.3	22.4	51.9	-20.6	15.1	22.7	53.7	-18.1	17.1	23.2	50.0	-18.5	17.5
n	31	18	31	18	31	31	31	29	31	31	31	31	31	31	31	30
SD	1.4	6.4	2.1	7.6	1.6	6.4	3.4	5.8	1.5	7.1	2.6	7.19	1.4	6.6	1.9	6.38
Min	21.7	38.9	-26.1	10.5	20.2	39.5	-29.9	6.5	20.8	40.6	-25.2	9.6	21.6	38.3	-23.4	9.7
Max	26.8	62.7	-15.7	35.8	26.1	63.9	-13.1	35.8	26	67	-12.6	36.1	26.7	61.5	-13.3	34.6

ED_004549_00015928-00114

Table E3. Daily means (SD) of environmental parameters at Site IN3B for June, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	26.2 (1.6)	51.1 (9.0)	-21.6 (6.0)	30.9 (12.6)	25.9 (1.7)	50.5 (8.2)	-21.4 (6.1)	31.9 (12.8)	25.8 (1.6)	53.9 (9.1)	-20.1 (6.3)	31.7 (13.1)	26.0 (1.8)	50.7 (8.2)	-20.9 (5.7)	31.7 (12.8)
2	27.1 (2.3)	50.0 (8.0)	-19.3 (5.9)	35.7 (13.3)	26.6 (2.3)	49.7 (6.7)	-19.3 (6.4)	36.4 (13.3)	26.6 (2.3)	52.5 (7.4)	-18.8 (5.9)	36.1 (13.6)	26.9 (2.7)	49.6 (7.5)	-19.3 (5.8)	36.1 (12.4)
3	26.3 (0.8)	63.8 (4.6)	-16.6 (1.2)	34.2 (8.7)	26.2 (0.7)	64.3 (4.2)	-17.2 (2.4)	35.7 (9.2)	26.2 (0.7)	68.2 (4.6)	-16.9 (2.4)	35.0 (9.2)	26.4 (0.8)	65.0 (4.8)	-16.9 (1.9)	34.8 (8.8)
4	27.1 (1.8)	65.3 (6.1)	-17.7 (4.4)	35.5 (11.2)	26.4 (1.6)	65.8 (4.9)	-17.6 (4.7)		26.6 (1.7)	69.2 (6.0)	-17.3 (4.1)	36.7 (11.0)	27.0 (1.9)	65.0 (6.7)	-17.5 (3.9)	35.8 (10.6)
5	29.4 (2.0)	62.2 (6.6)	-15.2 (1.0)	44.5 (0.7)	28.8 (2.0)	63.4 (5.8)	-14.3 (1.6)		28.8 (2.0)	66.7 (6.6)	-14.2 (2.0)	45.8 (1.0)	29.5 (2.0)	62.2 (6.7)	-13.3 (1.8)	44.8 (0.5)
6	28.9 (2.2)	60.2 (6.1)	-15.7 (1.3)	42.7 (4.6)	28.3 (2.3)	61.6 (5.3)	-14.3 (2.1)		28.3 (2.1)	65.0 (6.2)	-15.4 (2.1)	43.5 (5.7)	29.1 (2.2)	60.9 (6.7)	-13.1 (2.2)	
7	26.9 (1.3)	70.5 (2.4)	-16.2 (1.6)	35.5 (8.7)	26.4 (1.5)	70.5 (2.8)	-16.3 (3.4)		26.8 (1.3)	74.4 (3.4)	-17.6 (2.1)	36.5 (8.9)	27.3 (1.4)	71.9 (2.8)	-15.8 (1.9)	
8	30.3 (2.4)	61.1 (8.7)	-15.2 (0.9)	44.8 (0.7)	29.6 (2.2)	62.8 (7.6)	-14.0 (1.6)		29.4 (2.2)	65.6 (8.5)	-13.6 (2.0)	46.1 (0.9)	30.5 (2.1)	60.9 (8.7)	-13.2 (2.1)	
9	28.7 (2.0)	60.9 (5.5)	-15.7 (2.0)	42.9 (6.4)	28.1 (1.7)	62.7 (4.5)	-14.5 (2.4)		28.0 (1.6)	66.7 (5.6)	-14.2 (2.7)	44.5 (6.0)	28.7 (1.9)	61.4 (6.4)	-15.1 (2.0)	43.0 (5.9)
10	26.3 (1.5)	55.7 (10.8)	-19.8 (5.1)	33.7 (12.2)	25.9 (1.5)	56.5 (9.9)	-19.6 (5.7)	34.3 (12.0)	25.9 (1.4)	60.0 (10.6)	-18.1 (6.0)	33.7 (12.4)	26.2 (1.6)	55.2 (10.9)	-19.1 (4.7)	34.2 (11.7)
11	27.4 (2.2)	49.0 (10.5)	-17.3 (4.0)	37.3 (10.4)	27.3 (2.5)	48.6 (10.6)	-16.7 (4.4)	39.5 (10.0)	27.5 (2.4)	51.2 (11.5)	-17.8 (3.6)	37.0 (10.4)	27.4 (2.3)	48.9 (10.5)	-17.4 (4.2)	37.1 (10.3)
12	28.8 (3.0)	52.3 (4.3)	-15.4 (1.8)	39.4 (7.9)	28.7 (3.2)	52.5 (4.1)	-14.1 (3.2)	41.5 (8.5)	28.8 (3.0)	55.6 (5.0)	-16.6 (2.3)	39.4 (8.2)	28.8 (3.0)	53.4 (4.4)	-15.0 (3.4)	38.9 (8.4)
13	26.5 (1.2)	68.3 (3.5)	-16.3 (1.3)	38.5 (8.6)	26.4 (1.1)	68.4 (3.5)	-15.6 (3.2)	40.7 (8.9)	26.3 (0.9)	72.8 (3.3)	-16.9 (2.1)	38.3 (8.9)	26.7 (1.1)	69.3 (3.5)	-16.2 (2.1)	38.0 (8.6)
14	27.1 (1.9)	50.8 (15.4)	-19.7 (3.2)	35.6 (10.2)	26.5 (1.9)	51.5 (14.8)	-18.4 (3.9)	37.4 (10.2)	26.5 (1.7)	54.2 (15.3)	-17.9 (3.9)	35.6 (11.2)	26.9 (1.9)	50.4 (15.1)	-18.9 (3.4)	35.7 (10.5)
15	26.9 (2.2)	51.7 (8.4)	-19.2 (3.1)	32.9 (11.2)	26.6 (2.3)	52.0 (8.2)	-18.6 (4.9)	34.6 (10.7)	26.3 (2.2)	56.6 (10.2)	-18.3 (5.5)	33.0 (12.0)	26.8 (2.2)	52.1 (8.7)	-18.3 (4.9)	33.6 (11.3)
16	25.9 (1.2)	53.3 (10.1)	-19.4 (4.5)	29.2 (13.4)	25.1 (1.3)	53.6 (9.0)	-21.2 (6.2)	31.1 (12.8)	24.7 (1.2)	59.2 (10.6)	-18.9 (6.7)	29.9 (14.7)	25.5 (1.5)	52.8 (9.7)	-20.1 (5.7)	30.6 (12.8)
17	24.8 (0.6)	45.4 (8.7)	-16.3 (3.0)	25.7 (14.1)	23.6 (1.3)	47.0 (9.6)	-21.0 (5.7)	28.2 (13.5)	23.8 (1.1)	50.2 (10.2)	-18.1 (4.8)	25.0 (14.0)	24.1 (1.3)	46.3 (9.9)	-19.2 (4.0)	28.7 (13.4)
18	25.2 (1.0)	44.4 (6.9)	-14.6 (3.9)	27.9 (15.4)	24.4 (1.6)	45.0 (7.6)	-21.0 (5.8)	28.8 (13.3)	24.7 (1.4)	47.8 (7.9)	-18.4 (5.0)	28.1 (15.2)	24.5 (1.8)	45.4 (7.8)	-19.2 (4.6)	30.0 (13.6)
19	25.7 (1.6)	46.0 (8.7)	-15.2 (3.1)	30.2 (15.3)	25.2 (2.7)	45.6 (10.2)	-19.9 (5.4)	30.8 (14.1)	25.6 (1.9)	48.3 (9.7)	-17.6 (3.8)	30.5 (15.0)	25.3 (2.0)	46.4 (9.2)	-18.1 (3.8)	31.1 (14.3)
20	26.9 (2.3)	42.2 (9.7)	-16.9 (4.0)	35.3 (12.7)	26.8 (2.3)	41.5 (9.0)	-19.5 (5.7)	34.0 (13.2)	26.7 (2.2)	44.2 (9.1)	-18.7 (5.4)	35.5 (12.6)	26.8 (2.4)	41.9 (9.3)	-19.5 (5.0)	35.2 (12.2)
21	26.3 (1.1)	53.5 (6.0)	-15.0 (2.4)	36.2 (10.6)	26.1 (1.1)	54.1 (5.8)	-17.6 (3.8)	36.9 (10.3)	26.0 (1.0)	57.6 (6.0)	-16.2 (4.5)	36.5 (11.2)	26.3 (1.2)	54.0 (6.7)	-17.2 (3.1)	36.0 (10.3)
22	26.0 (1.6)	49.0 (8.3)	-17.4 (4.5)	29.3 (12.4)	25.5 (1.3)	49.1 (7.2)	-21.0 (6.1)	31.0 (12.2)	25.5 (1.2)	52.4 (7.6)	-20.1 (5.9)	30.3 (12.5)	25.8 (1.7)	48.7 (8.5)	-20.5 (5.4)	29.7 (11.9)
23	25.4 (1.0)	49.8 (7.3)	-17.8 (4.1)	29.9 (14.0)	25.1 (1.1)	49.8 (6.9)	-22.0 (6.3)	29.5 (12.9)	25.1 (1.1)	53.4 (7.6)	-20.2 (6.5)	30.6 (13.2)	25.1 (1.4)	49.7 (7.7)	-21.0 (5.7)	30.9 (13.1)
24	26.4 (1.7)	47.4 (10.2)	-18.0 (5.6)	31.3 (14.9)	25.6 (2.1)	48.1 (10.1)	-20.2 (5.3)	32.0 (13.7)	25.5 (1.9)	51.8 (10.5)	-18.7 (4.2)	32.7 (14.1)	25.7 (2.3)	48.2 (10.8)	-19.3 (3.5)	32.3 (13.6)
25	27.4 (2.0)	59.0 (4.9)	-15.4 (3.8)	37.2 (9.3)	27.3 (1.8)	58.9 (4.5)	-16.5 (2.9)	36.1 (11.8)	27.1 (1.7)	63.4 (5.2)	-15.9 (3.7)	38.5 (9.6)	27.3 (1.9)	59.7 (5.2)	-16.4 (2.5)	37.7 (9.0)
26	27.0 (1.7)	67.2 (5.9)	-15.6 (2.1)	43.4 (4.0)	26.8 (1.4)	67.1 (4.9)	-15.9 (1.9)	42.5 (7.1)	26.7 (1.4)	72.1 (5.7)	-15.2 (2.1)	42.2 (7.5)	27.3 (1.5)	67.1 (6.1)	-16.1 (1.8)	
27	26.9 (2.1)	67.7 (6.3)	-14.8 (1.3)	42.3 (3.6)	27.3 (1.5)	66.8 (4.3)	-16.8 (2.8)	36.2 (9.4)	27.1 (1.5)	71.4 (5.0)	-16.7 (2.3)	36.7 (9.1)	28.0 (1.7)	66.6 (5.8)	-16.4 (2.1)	
28																
29																
30	25.2 (1.1)	48.3 (8.2)	-9.8 (5.8)	26.6 (14.1)	25.0 (1.3)	49.3 (9.5)	-21.9 (5.2)	29.8 (12.8)	25.1 (1.3)	52.8 (10.4)	-18.7 (5.9)	30.1 (13.0)	25.1 (1.4)	49.0 (9.4)	-19.4 (4.6)	29.8 (13.1)
Avg	26.9	55.2	-16.7	35.3	26.5	55.6	-18.1	34.5	26.5	59.2	-17.4	35.7	26.8	55.5	-17.6	34.6
n	28	28	28	28	28	28	28	22	28	28	28	28	28	28	28	23
SD	1.3	8	2.3	5.5	1.3	8.1	2.6	4.1	1.3	8.5	1.7	5.27	1.5	8.1	2.3	4.1
Min	24.8	42.2	-21.6	25.7	23.6	41.5	-22.0	28.2	23.8	44.2	-20.2	25.0	24.1	41.9	-21.0	28.7
Max	30.3	70.5	-9.8	44.8	29.6	70.5	-14	42.5	29.4	74.4	-13.6	46.1	30.5	71.9	-13.1	44.8

ED_004549_00015928-00115

Table E3. Daily means (SD) of environmental parameters at Site IN3B for July, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	26.3 (2.3)	42.7 (8.5)	-12.2 (5.2)	31.2 (14.8)	25.8 (2.4)	44.7 (8.9)	-18.3 (4.3)	27.6 (15.9)	25.8 (2.3)	47.8 (9.5)	-17.1 (3.6)	32.6 (14.4)	26.1 (2.6)	44.3 (10.1)	-17.4 (2.7)	31.7 (14.7)
2	28.3 (2.5)	51.8 (5.3)	-12.6 (4.7)	37.2 (10.9)	27.9 (2.5)	53.4 (4.3)	-16.8 (3.6)	38.5 (9.4)	27.7 (2.4)	57.3 (5.0)	-15.6 (4.1)	39.2 (10.8)	28.3 (2.7)	52.6 (5.3)	-14.2 (4.3)	38.8 (9.9)
3	25.6 (0.8)	62.2 (8.4)	-9.6 (4.8)	32.9 (10.6)	25.8 (0.8)	60.8 (9.4)	-18.2 (3.1)	34.9 (9.9)	25.7 (0.7)	65.6 (9.7)	-16.6 (3.0)	34.8 (10.4)	25.8 (0.8)	61.8 (8.8)	-16.5 (2.8)	34.6 (10.3)
4	25.1 (0.6)	57.6 (4.4)	-6.8 (5.4)	26.4 (12.7)	25.5 (0.9)	56.3 (6.8)	-20.3 (5.1)	31.8 (12.2)	25.4 (0.7)	60.7 (6.9)	-18.5 (4.9)	31.6 (12.6)	25.2 (0.6)	57.8 (5.2)	-19.1 (4.2)	30.2 (12.0)
5	25.7 (1.1)	57.3 (4.9)	-9.1 (5.8)	29.9 (13.4)	26.2 (1.5)	55.4 (7.4)	-20.2 (4.8)	33.0 (12.0)	26.1 (1.4)	60.0 (7.4)	-18.3 (4.7)	32.7 (12.4)	25.7 (1.2)	57.4 (5.8)	-18.8 (4.0)	32.2 (12.3)
6	27.4 (2.3)	57.5 (6.3)	-11.1 (5.8)	33.7 (13.3)	27.6 (2.4)	57.4 (7.0)	-18.7 (5.1)	36.8 (12.0)	27.5 (2.5)	61.3 (7.7)	-18.0 (4.5)	36.0 (12.1)	27.4 (2.5)	57.8 (6.9)	-18.4 (4.1)	35.2 (11.8)
7	26.9 (1.4)	66.9 (4.7)	-12.2 (4.1)	38.2 (8.3)	26.9 (1.4)	66.5 (4.8)	-16.2 (2.7)	39.1 (9.0)	26.9 (1.4)	70.6 (5.5)	-16.2 (1.9)	38.5 (8.7)	27.2 (1.4)	67.1 (5.3)	-15.6 (2.0)	39.7 (8.0)
8	28.5 (1.9)	69.5 (6.2)	-15.6 (1.5)	44.5 (2.3)	27.9 (1.8)	70.5 (5.3)	-14.3 (1.0)	45.8 (0.6)	28.0 (1.8)	74.5 (6.1)	-13.5 (2.1)	45.4 (4.1)	28.6 (1.9)	69.6 (7.0)	-14.5 (1.2)	44.5 (2.6)
9	27.3 (1.3)	60.8 (12.8)	-12.8 (4.9)	37.3 (8.9)	26.8 (1.3)	61.8 (13.0)	-16.1 (2.7)	40.7 (8.8)	27.0 (1.1)	64.3 (13.0)	-15.1 (2.7)	38.9 (9.5)	27.3 (1.4)	60.5 (13.5)	-16.3 (1.8)	37.2 (9.3)
10	27.7 (2.4)	54.7 (8.6)	-12.1 (5.2)	36.2 (12.3)	27.5 (2.1)	56.3 (8.2)	-18.1 (4.9)	37.5 (11.8)	27.4 (2.1)	59.3 (9.1)	-17.2 (4.4)	37.3 (11.8)	27.9 (2.5)	54.6 (9.5)	-17.3 (4.2)	36.5 (11.6)
11	28.2 (2.4)	61.6 (6.0)	-12.6 (4.8)	37.8 (10.5)	28.0 (2.4)	62.9 (4.8)	-16.3 (3.2)	39.9 (8.8)	27.9 (2.3)	66.5 (5.5)	-15.8 (3.0)	39.1 (9.4)	28.3 (2.6)	62.3 (6.6)	-15.5 (4.1)	38.3 (9.5)
12	27.9 (1.8)	71.4 (6.1)	-13.7 (4.3)	41.9 (8.2)	27.9 (1.6)	73.5 (4.6)	-7.5 (7.2)	47.1 (8.0)	27.9 (1.6)	75.4 (6.1)	-13.4 (2.5)	44.9 (5.0)	28.4 (1.8)	70.5 (7.4)	-14.4 (1.8)	42.3 (6.3)
13	26.2 (1.5)	54.8 (10.5)	-10.8 (5.5)	33.5 (12.1)	25.3 (1.7)	60.7 (11.8)	1.1 (1.5)	44.8 (10.6)	26.1 (1.0)	58.9 (10.2)	-13.0 (4.9)	36.7 (12.4)	26.7 (1.4)	53.5 (10.5)	-15.5 (3.2)	34.7 (11.3)
14	26.7 (2.1)	52.1 (8.6)	-10.6 (6.4)	31.6 (13.3)	26.1 (2.4)	55.1 (9.8)	-9.7 (7.8)	37.6 (9.7)	26.6 (1.6)	57.3 (8.9)	-16.1 (4.1)	35.0 (12.2)	27.0 (2.0)	52.7 (9.7)	-17.4 (2.8)	33.7 (11.8)
15	28.5 (2.9)	55.3 (8.7)	-12.8 (5.0)		28.4 (2.6)	56.4 (8.2)	-16.7 (3.8)	38.9 (10.0)	28.3 (2.6)	59.6 (8.9)	-16.3 (3.6)	38.9 (10.2)	28.9 (2.8)	55.3 (9.6)	-16.7 (3.4)	37.9 (10.6)
16	29.0 (2.5)	61.7 (8.2)	-13.9 (3.3)		28.8 (2.4)	63.0 (7.7)	-14.8 (1.6)	44.9 (3.9)	28.8 (2.3)	66.2 (8.1)	-14.8 (1.7)	43.7 (6.0)	29.5 (2.4)	61.4 (8.7)	-15.2 (1.8)	41.1 (7.2)
17	28.5 (2.4)	61.4 (10.0)	-14.1 (3.4)		28.4 (2.4)	61.9 (9.6)	-15.5 (0.8)	45.3 (2.2)	28.6 (2.4)	65.0 (10.2)	-14.6 (1.4)	44.3 (5.0)	29.2 (2.4)	60.5 (10.4)	-15.3 (1.5)	40.1 (7.8)
18	28.3 (2.7)	58.6 (10.1)	-12.8 (4.5)		27.9 (2.7)	60.0 (10.0)	-15.7 (0.8)	43.9 (7.4)	28.5 (2.2)	62.2 (9.0)	-14.9 (2.3)	41.0 (8.1)	28.9 (2.6)	58.1 (10.1)	-15.3 (2.5)	39.3 (8.3)
19	27.6 (1.6)	66.9 (3.3)	-14.9 (2.7)		27.8 (1.4)	66.9 (3.1)	-15.5 (0.6)	45.4 (0.3)	28.0 (1.4)	71.1 (3.8)	-14.7 (0.8)	45.6 (0.5)	28.6 (1.6)	65.9 (4.1)	-15.2 (0.9)	42.9 (5.3)
20	27.5 (1.6)	70.4 (6.2)	-15.5 (2.6)		27.6 (1.4)	70.5 (5.2)	-15.2 (1.0)	45.5 (0.6)	27.9 (1.4)	74.8 (6.3)	-13.4 (2.1)	46.3 (1.8)	28.5 (1.6)	69.1 (7.2)	-15.6 (0.8)	44.4 (2.5)
21	27.1 (1.8)	69.0 (9.0)	-13.7 (3.9)		27.0 (1.8)	69.0 (9.5)	-15.7 (1.0)	45.4 (0.6)	27.6 (1.6)	72.2 (10.0)	-14.7 (2.0)	42.5 (7.0)	28.0 (1.7)	67.6 (9.6)	-15.9 (1.5)	39.1 (8.1)
22	25.9 (1.6)	61.9 (6.1)	-10.1 (5.6)	31.1 (12.5)	25.4 (2.2)	64.2 (8.5)	-14.7 (2.2)	42.6 (3.9)	26.5 (1.4)	65.4 (7.5)	-16.7 (2.9)	34.9 (10.7)	26.7 (1.6)	60.9 (6.9)	-17.5 (2.6)	33.4 (11.1)
23	25.3 (1.5)	54.3 (7.4)	-9.4 (6.0)	27.3 (15.2)	24.3 (3.1)	55.9 (11.2)	-15.0 (5.9)	30.8 (12.9)	26.0 (1.6)	58.0 (10.3)	-18.2 (4.4)	32.4 (12.9)	25.8 (1.8)	54.2 (9.0)	-18.7 (4.2)	31.3 (13.0)
24	25.5 (1.8)	50.1 (9.9)	-12.0 (5.1)	27.8 (15.7)	25.1 (1.8)	51.5 (10.2)	-19.3 (8.0)	30.3 (13.7)	25.8 (1.4)	55.5 (11.5)	-19.0 (5.4)	32.3 (13.4)	26.0 (2.2)	50.6 (11.7)	-19.5 (4.3)	30.1 (14.2)
25	26.4 (2.5)	58.3 (8.9)	-15.3 (7.3)	30.4 (14.6)	26.1 (2.3)	59.4 (7.0)	-19.6 (5.3)	34.5 (12.8)	26.8 (1.9)	64.2 (8.2)	-18.5 (4.9)	35.0 (12.6)	26.6 (2.5)	59.8 (8.1)	-18.5 (4.5)	32.8 (13.2)
26	27.2 (2.5)	64.1 (9.7)	-12.0 (5.2)	35.0 (10.6)	27.1 (1.9)	64.1 (8.6)	-17.0 (3.4)	37.0 (9.9)	27.5 (1.9)	67.7 (9.2)	-15.6 (3.9)	37.8 (10.0)	27.8 (2.4)	62.5 (10.0)	-17.2 (2.3)	35.9 (9.9)
27	25.8 (2.2)	55.7 (10.2)	-9.5 (6.5)	29.0 (14.7)	25.4 (1.9)	56.2 (9.6)	-20.5 (5.0)	32.6 (12.8)	26.3 (1.8)	59.8 (11.5)	-18.8 (4.3)	33.7 (12.3)	26.4 (2.2)	55.0 (11.5)	-19.2 (3.6)	30.5 (13.4)
28	26.3 (2.1)	64.4 (5.7)	-10.8 (6.0)	32.9 (12.6)	26.3 (1.8)	63.7 (4.7)	-18.7 (4.0)	35.3 (11.3)	26.9 (1.8)	68.0 (5.9)	-17.5 (3.5)	36.8 (10.3)	27.0 (2.0)	62.9 (6.0)	-18.1 (3.0)	33.5 (11.4)
29	27.6 (2.8)	63.4 (7.6)	-11.5 (6.0)	34.2 (13.7)	27.6 (2.7)	62.5 (8.0)	-18.3 (5.2)	36.4 (11.9)	28.3 (2.7)	66.7 (9.8)	-24.1 (263.0)	37.2 (11.1)	28.2 (2.8)	62.1 (8.2)	-17.8 (4.1)	35.5 (11.8)
30	26.5 (1.6)	68.2 (6.9)	-11.6 (4.1)	36.8 (9.5)	26.5 (1.1)	67.1 (5.1)	-16.5 (2.9)	37.6 (9.4)	27.0 (1.1)	71.1 (6.1)	-15.0 (3.3)	38.7 (9.8)	27.2 (1.4)	66.2 (6.8)	-15.6 (2.7)	36.5 (9.3)
31																
Avg	27.0	60.2	-12.1	33.8	26.8	60.9	-15.9	38.7	27.2	64.2	-16.4	38.1	27.4	59.8	-16.7	36.5
n	30	30	30	23	30	30	30	30	30	30	30	30	30	30	30	30
SD	1.1	6.6	2	4.5	1.2	6.2	4.2	5.4	1	6.3	2.2	4.33	1.2	6.1	1.6	4.1
Min	25.1	42.7	-15.6	26.4	24.3	44.7	-20.5	27.6	25.4	47.8	-24.1	31.6	25.2	44.3	-19.5	30.1
Max	29	71.4	-6.8	44.5	28.8	73.5	1.1	47.1	28.8	75.4	-13	46.3	29.5	70.5	-14.2	44.5

ED_004549_00015928-00116

Table E3. Daily means (SD) of environmental parameters at Site IN3B for August, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1																
2																
3																
4																
5																
6																
7	24.5 (1.7)	57.4 (7.5)	-8.3 (7.0)	24.8 (15.1)	24.0 (1.8)	59.5 (8.9)	-20.0 (9.4)	15.8 (11.6)	24.5 (1.8)	62.0 (9.5)	-18.6 (5.1)		25.2 (2.1)	57.3 (9.2)	-19.3 (4.2)	29.4 (13.4)
8	23.1 (1.6)	56.7 (6.0)	-6.1 (6.3)	21.3 (15.2)	23.1 (2.2)	57.1 (8.4)	-20.8 (5.1)	25.4 (15.5)	23.5 (1.9)	60.3 (8.6)	-17.1 (4.0)		24.0 (1.9)	57.0 (7.9)	-16.5 (3.6)	25.4 (15.4)
9	23.2 (1.8)	59.9 (4.2)	-6.4 (6.4)	21.8 (14.6)	23.2 (2.0)	61.3 (5.2)	-19.3 (5.0)	25.8 (14.8)	23.9 (1.7)	64.0 (5.6)	-17.1 (4.3)	28.2 (14.4)	24.3 (1.9)	59.8 (6.1)	-17.8 (3.2)	26.3 (14.3)
10	22.5 (0.9)	56.7 (5.2)	-4.1 (4.4)	13.9 (6.9)	22.9 (1.3)	55.7 (7.5)	-13.9 (6.0)	19.9 (13.7)	23.2 (1.5)	59.0 (9.1)	-17.6 (3.0)	25.1 (11.5)	23.7 (1.4)	55.3 (8.8)	-17.3 (2.7)	20.9 (11.1)
11	22.2 (1.3)	59.4 (4.8)	-6.4 (4.3)	16.5 (11.8)	23.0 (1.9)	57.2 (6.7)	-7.4 (5.9)	20.0 (15.0)	23.5 (2.0)	60.0 (7.3)	-14.7 (2.2)	26.6 (14.5)	22.9 (1.7)	58.6 (6.2)	-13.4 (3.2)	20.3 (13.3)
12	22.2 (2.0)	60.9 (7.2)	-6.2 (7.2)	21.3 (17.1)	23.2 (2.0)	57.6 (7.6)	-4.8 (6.2)	22.3 (16.2)	23.7 (1.9)	61.2 (9.2)	-15.6 (3.1)	29.0 (13.5)	22.7 (2.4)	59.7 (8.2)	-14.8 (3.9)	22.0 (17.3)
13	22.9 (1.7)	62.4 (7.7)	-6.7 (6.7)	23.2 (16.8)	23.9 (1.5)	58.2 (6.4)	-4.3 (5.2)	22.7 (15.1)	23.9 (1.7)	63.6 (8.8)	-15.5 (3.1)	29.4 (14.0)	23.5 (2.0)	61.2 (8.3)	-14.9 (3.2)	23.1 (16.9)
14	22.3 (1.1)	69.1 (3.2)	-3.4 (3.1)	16.3 (8.6)	23.3 (1.0)	64.2 (3.3)	-2.5 (4.0)	18.5 (12.3)	23.8 (1.3)	68.8 (5.1)	-17.3 (2.3)	27.8 (11.6)	23.3 (1.3)	66.7 (5.0)	-17.3 (2.5)	20.5 (13.2)
15	21.8 (1.8)	60.8 (7.4)	-6.5 (7.1)	18.8 (15.6)	22.3 (2.4)	57.4 (7.6)	-4.0 (5.2)	22.8 (16.1)	23.3 (1.9)	60.8 (8.9)	-13.8 (3.7)	27.3 (14.8)	22.6 (2.1)	59.1 (7.7)	-13.3 (3.8)	20.2 (17.2)
16	24.5 (4.6)	54.0 (12.2)	-28.7 (15.7)	19.3 (12.3)	22.5 (2.4)	57.3 (5.8)	-2.9 (4.6)	20.3 (14.8)	23.6 (1.9)	59.7 (8.6)	-15.6 (4.5)	29.0 (15.5)	23.1 (2.6)	58.5 (8.6)	-16.0 (5.1)	21.7 (18.0)
17	23.7 (2.8)	56.3 (10.0)	-19.3 (9.7)	23.7 (17.0)	23.3 (2.2)	55.3 (6.6)	-4.0 (5.4)	22.9 (16.0)	23.8 (2.2)		-15.6 (4.0)		23.5 (2.9)	57.1 (10.2)	-16.2 (4.2)	23.2 (18.1)
18	24.1 (2.9)	59.7 (8.2)	-18.1 (4.6)	27.3 (16.6)	24.7 (2.2)	57.7 (5.3)	-5.9 (5.8)	26.9 (15.7)	24.6 (2.5)	60.5 (9.7)	-16.3 (3.7)	32.3 (14.2)	24.6 (2.9)	58.5 (7.8)	-16.9 (3.6)	25.9 (17.6)
19	23.9 (2.5)		-7.0 (8.4)		25.4 (2.5)	58.2 (7.8)	-7.3 (6.0)	28.2 (15.7)	25.2 (2.7)	64.5 (9.5)	-16.6 (2.8)	30.7 (12.8)	24.7 (2.7)	62.0 (8.2)	-16.5 (3.3)	27.1 (17.2)
20	23.2 (2.0)		1.2 (0.9)		24.7 (2.5)	58.5 (4.0)	-6.1 (5.8)	25.7 (15.3)	24.4 (2.2)		-15.3 (3.2)		24.1 (2.3)	62.8 (4.7)	-16.0 (3.4)	25.0 (17.2)
21	23.5 (2.5)		0.2 (1.0)		25.2 (2.4)	59.3 (6.5)	-7.4 (5.8)	30.3 (15.7)	24.9 (2.6)		-15.3 (2.2)		24.8 (2.7)	61.6 (6.6)	-15.6 (2.1)	28.5 (17.0)
22	24.9 (1.0)		-2.1 (3.1)		25.1 (0.8)	71.6 (2.1)	-1.8 (3.0)	13.9 (10.2)	25.1 (0.9)		-8.4 (6.5)		25.4 (1.1)	71.2 (3.0)	-6.9 (7.5)	13.9 (9.9)
23	24.1 (0.6)		-0.6 (1.2)		26.3 (2.2)	67.8 (2.1)	0.2 (0.5)	6.3 (0.1)	26.4 (2.5)	71.2 (0.7)	-1.0 (3.0)	6.3 (0.1)	27.0 (2.7)	67.4 (0.8)	-1.5 (3.0)	6.2 (0.1)
24	23.3 (2.0)		-4.1 (3.8)		25.1 (1.5)	64.3 (2.2)	0.3 (0.6)	6.3 (0.1)	25.1 (1.9)	69.0 (0.8)	-0.4 (3.0)	6.3 (0.3)	25.6 (2.1)	65.4 (0.9)	-1.2 (2.9)	6.2 (0.3)
25	20.1 (2.0)		-4.8 (1.5)		21.9 (2.4)	61.5 (1.5)	0.0 (0.7)	5.3 (1.2)	21.3 (2.5)	67.2 (0.6)	-3.2 (2.6)	3.9 (0.9)	21.4 (2.3)	63.8 (0.6)	-4.8 (2.4)	5.8 (0.4)
26	21.1 (3.1)		-6.8 (7.9)		20.9 (2.5)		-0.1 (0.8)		20.5 (2.4)		-2.4 (2.1)		20.6 (2.1)		-4.7 (2.2)	
27	28.0 (3.9)	54.0 (9.1)	-9.5 (4.7)	7.0 (3.1)	22.5 (2.8)		0.1 (0.4)		22.0 (2.5)		-2.3 (2.0)		22.3 (2.7)		-3.2 (2.5)	
28	28.4 (2.6)	58.0 (7.5)	-11.3 (3.9)	8.2 (2.6)	22.8 (2.0)		0.2 (0.5)		21.6 (1.7)		-1.1 (0.9)		23.1 (2.3)		-2.2 (2.0)	
29	28.8 (2.5)	56.6 (8.0)	-11.0 (4.3)	9.1 (2.4)	22.8 (1.2)		0.5 (0.5)		22.5 (0.7)		-0.4 (1.5)		24.6 (1.7)		-1.6 (2.2)	
30	26.9 (3.2)	52.4 (12.3)	-6.4 (4.7)	6.7 (3.1)	20.2 (2.4)		0.2 (0.5)		21.3 (2.6)		-2.2 (2.3)		22.1 (2.1)		-2.9 (1.6)	
31	27.3 (3.2)	50.5 (11.6)	-6.4 (4.7)	7.0 (3.1)	22.4 (3.7)		0.4 (0.5)		21.8 (2.4)		-1.0 (1.6)		22.5 (2.9)		-1.5 (1.5)	
Avg	24.0	57.9	-7.6	16.8	23.4	60.0	-5.2	20.0	23.5	63.5	-10.6	23.2	23.7	61.2	-10.9	20.6
n	25	17	25	17	25	19	25	19	25	15	25	13	25	19	25	19
SD	2.2	4.2	6.3	6.8	1.4	4.1	6.5	7.2	1.4	3.8	7	9.87	1.4	4.1	6.6	7.18
Min	20.1	50.5	-28.7	6.7	20.2	55.3	-20.8	5.3	20.5	59.0	-18.6	3.9	20.6	55.3	-19.3	5.8
Max	28.8	69.1	1.2	27.3	26.3	71.6	0.5	30.3	26.4	71.2	-0.4	32.3	27	71.2	-1.2	29.4

ED_004549_00015928-00117

Table E3. Daily means (SD) of environmental parameters at Site IN3B for September, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	27.6 (3.1)	48.3 (10.6)	-5.7 (4.1)	7.1 (3.1)	23.1 (3.6)		-0.9 (1.6)		22.1 (2.7)		-2.8 (2.6)		23.0 (2.4)		-2.8 (2.3)	
2	28.4 (3.8)	55.2 (9.7)	-7.2 (4.6)	7.9 (3.2)	25.6 (5.2)		-6.7 (6.7)		24.3 (4.3)		-5.6 (4.8)		22.9 (4.0)		-4.4 (3.8)	
3	28.6 (2.7)	59.4 (9.0)	-7.7 (3.5)	8.4 (2.5)	27.8 (1.8)		-8.3 (4.2)		25.1 (2.4)		-2.3 (1.9)		25.2 (2.9)		-2.1 (2.0)	
4	26.6 (1.1)	66.1 (3.0)	-10.8 (3.7)	7.3 (2.2)	26.7 (0.9)		-13.1 (3.3)		22.7 (0.8)	78.4 (3.7)	-4.5 (3.1)	3.7 (0.2)	23.0 (0.8)	75.7 (3.8)	-4.3 (3.0)	3.8 (0.2)
5	23.2 (2.3)	73.8 (11.1)	-4.9 (3.8)		25.9 (0.6)		-12.4 (3.9)		22.9 (1.6)	73.2 (7.9)	-5.5 (1.8)	3.8 (0.6)	23.5 (1.8)	71.6 (7.0)	-5.1 (1.6)	4.0 (0.6)
6	20.7 (1.4)		-3.2 (3.6)		25.7 (1.7)		-12.3 (5.8)		24.8 (2.1)	58.4 (10.0)	-9.5 (7.9)	6.9 (5.3)	25.6 (1.8)	55.4 (8.5)	-9.6 (8.5)	4.4 (0.9)
7	20.6 (2.0)		-7.1 (3.1)		25.6 (1.4)		-12.8 (5.3)		24.6 (1.5)	58.0 (9.5)	-8.4 (6.0)	5.3 (3.2)	25.3 (1.4)	56.3 (7.2)	-8.5 (6.3)	4.4 (0.9)
8	20.8 (2.6)		-7.2 (3.8)		25.8 (1.8)		-12.8 (5.2)		24.9 (1.7)	59.6 (6.0)	-8.1 (5.8)	5.8 (3.7)	25.1 (1.4)	59.3 (5.2)	-8.0 (6.1)	4.6 (1.0)
9	21.7 (2.1)		-7.6 (4.6)		24.5 (1.1)		-8.9 (4.4)		24.2 (1.4)	55.8 (9.5)	-6.3 (4.8)	5.0 (3.0)	24.5 (1.2)	55.1 (8.0)	-6.2 (4.8)	4.4 (0.9)
10	24.2 (2.1)		-9.5 (7.4)		24.0 (2.3)	52.9 (11.5)	-8.8 (7.6)	5.9 (3.0)	24.3 (2.2)	51.3 (9.6)	-9.2 (8.2)	7.0 (5.4)	24.4 (1.7)	49.5 (7.8)	-9.8 (8.5)	4.4 (0.9)
11	25.6 (2.3)		-13.2 (7.9)		25.3 (2.4)	60.9 (6.6)	-12.0 (8.6)		25.2 (2.5)	60.6 (6.8)	-12.2 (9.6)	8.1 (6.7)	25.8 (2.4)	57.0 (7.0)	-13.7 (11.5)	4.8 (1.0)
12	26.0 (0.6)	71.6 (4.7)	-15.9 (1.7)		26.4 (0.3)	75.2 (2.2)	-14.5 (3.8)	7.8 (2.2)	26.3 (0.3)	74.2 (1.4)	-11.3 (2.5)	5.2 (0.5)	26.4 (0.3)	71.9 (3.1)	-11.7 (2.9)	5.7 (0.1)
13	28.9 (2.4)	66.1 (9.4)	-19.3 (2.9)	9.8 (0.2)	28.3 (1.5)		-19.6 (5.3)		28.4 (1.4)	67.4 (7.8)	-18.0 (6.2)	17.6 (14.3)	28.7 (2.0)	65.3 (8.2)	-22.4 (9.6)	5.4 (0.3)
14	26.5 (1.4)	69.1 (2.6)	-14.1 (5.0)	8.1 (2.3)	26.5 (1.3)		-14.7 (5.7)		26.2 (1.6)	73.5 (4.0)	-11.7 (7.1)	7.2 (3.0)	26.4 (1.0)	69.8 (3.5)	-11.1 (7.7)	5.1 (0.7)
15	24.9 (0.9)	60.7 (5.7)	-10.0 (5.4)	6.1 (2.3)	24.5 (0.7)		-9.3 (5.3)		23.8 (1.1)	69.1 (7.1)	-7.2 (5.1)	4.5 (1.7)	24.9 (0.8)	59.8 (2.7)	-7.5 (5.8)	4.5 (0.9)
16	24.5 (1.6)	57.5 (9.7)	-10.8 (7.1)	6.2 (3.0)	24.8 (1.0)		-10.6 (7.3)		24.6 (1.5)	58.3 (9.1)	-10.0 (7.8)	6.3 (4.7)	24.8 (1.5)	55.2 (7.1)	-10.2 (8.1)	4.5 (0.9)
17	24.5 (2.8)	58.5 (9.8)	-13.0 (11.6)	6.8 (4.8)	25.3 (2.0)		-16.3 (14.2)		25.4 (2.1)	56.2 (7.9)	-13.2 (11.8)	8.9 (7.2)	25.3 (2.4)	53.0 (7.3)	-14.7 (14.4)	4.6 (0.8)
18	25.8 (1.8)	56.0 (9.9)	-11.8 (10.5)	6.9 (5.5)	25.9 (1.8)		-17.4 (15.7)		25.1 (1.9)	57.6 (10.4)	-10.3 (8.7)	9.7 (8.6)	24.2 (1.7)	54.4 (6.6)	-10.6 (8.0)	4.4 (0.9)
19	26.0 (2.3)	53.8 (9.7)	-15.0 (14.3)	8.0 (6.6)	26.1 (2.2)		-19.7 (18.4)		25.1 (2.2)	55.1 (10.1)	-14.1 (12.8)	9.6 (7.9)	24.9 (2.5)	50.5 (7.9)	-16.2 (15.5)	4.5 (0.8)
20	26.2 (2.1)	59.3 (8.9)	-15.6 (13.8)	8.0 (6.2)	26.4 (2.3)	56.3 (9.2)	-22.3 (17.8)	14.4 (10.5)	25.6 (2.2)	60.3 (9.6)	-15.4 (12.7)	10.2 (7.7)	25.2 (2.5)	55.9 (7.4)	-17.1 (15.2)	4.5 (0.8)
21	26.4 (1.9)	61.1 (9.9)	-10.3 (13.0)	7.7 (6.1)	26.6 (2.3)	56.4 (10.9)	-17.9 (16.1)	14.8 (11.2)	26.1 (1.8)	59.7 (10.5)	-12.3 (10.3)	11.9 (9.5)	25.4 (2.1)	57.0 (8.6)	-12.7 (13.1)	4.6 (0.8)
22	26.3 (1.5)	56.0 (9.1)	-9.7 (10.0)	10.9 (9.6)	26.4 (1.9)	54.4 (10.8)	-10.8 (8.5)	17.0 (13.5)	26.4 (2.0)	57.8 (12.7)	-9.4 (8.3)	15.9 (13.7)	25.1 (2.0)	55.2 (9.3)	-7.7 (8.8)	4.8 (0.8)
23	26.3 (2.1)	53.5 (10.1)	-12.8 (8.2)	12.2 (9.5)	26.3 (2.3)	51.9 (10.4)	-13.1 (6.0)	18.6 (15.8)	26.4 (2.2)	54.7 (11.9)	-9.9 (7.1)	17.1 (15.6)	25.3 (2.5)	51.8 (9.0)	-9.5 (9.9)	4.7 (0.8)
24	26.5 (2.3)	50.4 (11.4)	-12.2 (7.7)	13.1 (12.2)	25.8 (2.2)	49.4 (11.9)	-11.8 (6.4)	17.3 (16.2)	26.4 (2.3)	52.2 (13.0)	-10.3 (7.1)	17.6 (15.8)	25.6 (2.5)	47.7 (9.0)	-9.3 (7.8)	4.6 (1.0)
25	26.4 (2.2)	49.4 (13.4)	-12.4 (9.0)	10.2 (8.9)	25.3 (2.3)	45.9 (12.1)	-11.2 (7.7)	15.4 (15.8)	26.1 (2.2)	47.3 (12.5)	-11.0 (7.1)	16.5 (15.6)	25.8 (2.2)	43.2 (8.9)	-11.4 (7.6)	4.5 (0.9)
26	25.7 (2.1)	49.8 (15.5)	-11.5 (9.5)	7.6 (5.7)	24.6 (2.0)	45.3 (14.2)	-11.5 (9.0)	10.2 (8.7)	25.3 (2.0)	47.6 (14.7)	-10.5 (7.8)	11.1 (9.0)	25.3 (1.7)	43.1 (10.0)	-11.6 (9.0)	4.3 (1.0)
27	26.0 (2.2)	54.0 (14.1)	-12.1 (9.5)	8.6 (6.8)	24.9 (2.2)	48.9 (12.4)	-12.3 (9.2)	10.7 (9.0)	25.7 (2.0)	51.6 (12.6)	-11.2 (8.2)	11.7 (9.3)	25.5 (2.0)	48.1 (9.0)	-11.3 (8.5)	4.4 (0.9)
28	26.0 (2.4)	56.6 (12.1)	-13.4 (10.1)	9.1 (6.9)	24.8 (2.1)	52.8 (10.3)	-13.7 (9.9)	11.1 (8.7)	25.4 (2.2)	56.4 (12.0)	-12.4 (9.0)	11.7 (8.9)	25.6 (2.1)	50.6 (7.2)	-12.3 (9.3)	4.5 (0.8)
29	25.8 (1.6)	62.3 (7.3)	-11.9 (7.9)	7.2 (4.3)	24.4 (1.4)	59.8 (5.2)	-13.8 (9.3)	8.6 (5.3)	25.6 (1.3)	60.1 (6.1)	-11.7 (8.0)	9.8 (5.7)	25.1 (1.6)	55.6 (4.5)	-10.9 (7.6)	4.4 (0.9)
30	24.5 (0.7)	62.0 (7.8)	-6.7 (2.6)	4.4 (0.8)	22.9 (0.4)	56.8 (8.6)	-7.0 (2.9)	4.6 (0.9)	24.2 (0.6)	59.2 (6.5)	-5.8 (2.4)	5.8 (2.1)	23.9 (0.6)	52.6 (6.8)	-5.2 (1.8)	3.9 (0.4)
Avg	25.4	58.8	-10.8	8.2	25.5	54.8	-12.5	12.0	25.1	59.8	-9.7	9.4	25.0	56.3	-9.9	4.5
n	30	24	30	22	30	14	30	13	30	27	30	27	30	27	30	27
SD	2.1	6.8	3.6	2	1.2	7.3	4.3	4.4	1.2	7.9	3.5	4.33	1.1	8.2	4.3	0.39
Min	20.6	48.3	-19.3	4.4	22.9	45.3	-22.3	4.6	22.1	47.3	-18.0	3.7	22.9	43.1	-22.4	3.8
Max	28.9	73.8	-3.2	13.1	28.3	75.2	-0.9	18.6	28.4	78.4	-2.3	17.6	28.7	75.7	-2.1	5.65

ED_004549_00015928-00118

Table E3. Daily means (SD) of environmental parameters at Site IN3B for October, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	23.6 (0.9)	60.3 (5.5)	-6.3 (3.1)	4.4 (0.9)	22.1 (0.5)	54.7 (4.9)	-5.8 (3.3)	4.0 (0.9)	23.4 (0.7)	56.7 (4.6)	-4.6 (2.6)	4.8 (1.8)	23.6 (1.0)	49.8 (3.5)	-4.4 (2.5)	4.3 (0.7)
2	23.9 (0.7)	52.8 (9.4)	-7.8 (4.7)	5.6 (2.4)	22.1 (1.0)	48.6 (10.2)	-6.9 (4.2)	4.3 (1.5)	23.7 (0.7)	50.1 (8.4)	-6.0 (3.3)	4.4 (0.9)	22.8 (0.9)	46.5 (6.5)	-5.4 (2.9)	4.5 (1.0)
3	23.9 (1.0)	54.6 (6.2)	-9.1 (5.4)	6.1 (2.6)	23.0 (0.9)	50.2 (4.3)	-8.8 (6.1)	5.8 (3.1)	24.3 (0.8)	51.8 (4.5)	-8.4 (5.6)	6.2 (3.5)	22.8 (0.9)	47.5 (3.4)	-8.6 (5.8)	4.4 (0.9)
4	23.1 (1.5)	51.9 (12.0)	-9.4 (7.2)	6.4 (3.8)	22.7 (1.2)	46.0 (9.7)	-8.5 (7.5)	5.8 (3.9)	23.7 (1.2)	48.9 (8.6)	-7.9 (5.9)	5.5 (2.7)	22.2 (1.3)	44.2 (7.4)	-8.2 (6.0)	4.4 (0.9)
5	23.6 (2.3)	47.6 (13.6)	-12.9 (10.6)	8.5 (6.1)	23.1 (2.2)	43.6 (10.6)	-11.8 (10.5)	8.1 (6.6)	24.2 (2.1)	45.8 (10.8)	-11.3 (9.7)	8.5 (6.7)	23.0 (1.9)	42.1 (8.3)	-11.9 (9.8)	4.5 (0.9)
6	24.6 (1.7)	45.2 (6.6)	-14.4 (9.5)	9.1 (6.4)	24.3 (1.7)	42.2 (5.5)	-12.6 (8.7)	9.7 (7.6)	25.5 (1.7)	44.0 (5.9)	-11.8 (8.1)		23.6 (1.9)	42.0 (3.6)	-13.8 (8.5)	
7	24.1 (1.1)	56.7 (9.5)	-13.3 (6.8)	7.7 (3.5)	24.4 (1.0)	53.7 (8.7)	-13.3 (7.7)	8.4 (4.2)	25.6 (0.9)	55.1 (8.6)	-12.2 (6.9)		23.7 (1.0)	51.8 (8.3)	-12.7 (6.6)	
8	23.4 (0.8)	66.8 (4.2)	-11.3 (4.3)	6.6 (2.3)	23.9 (0.5)	63.5 (3.8)	-13.1 (5.0)	7.4 (2.4)	25.0 (0.7)	64.0 (3.0)	-10.0 (3.8)		23.3 (0.7)	59.3 (3.4)	-9.3 (3.4)	
9	23.2 (1.8)	54.9 (11.6)	-13.2 (10.6)	8.1 (5.7)	24.0 (1.4)	51.4 (9.8)	-13.5 (10.3)	7.7 (5.4)	24.6 (1.5)	54.7 (9.8)	-11.8 (9.6)	7.9 (5.8)	23.2 (1.6)	48.2 (6.9)	-11.9 (9.7)	
10	23.3 (2.5)	47.0 (11.8)	-12.9 (9.2)	10.1 (8.2)	24.5 (1.8)	43.1 (9.8)	-12.4 (8.8)	10.6 (8.9)	24.7 (2.2)	47.7 (11.7)	-11.6 (8.2)	10.1 (8.7)	23.3 (2.1)	42.3 (7.4)	-12.3 (8.4)	
11	25.3 (2.5)	52.1 (5.4)	-14.7 (6.8)	17.8 (16.0)	25.7 (2.2)	49.9 (5.4)	-14.4 (6.8)	17.5 (17.2)	26.4 (2.0)	51.3 (5.1)	-13.8 (6.3)	17.5 (16.1)	25.2 (2.6)	50.1 (5.4)	-14.1 (6.3)	
12	26.1 (2.3)	47.2 (7.6)	-16.0 (5.6)	19.5 (15.9)	26.3 (2.3)	45.1 (7.5)	-15.6 (6.2)	15.1 (14.3)	27.1 (2.0)	46.8 (8.4)	-15.4 (5.3)	18.9 (16.0)	25.8 (2.7)	46.3 (6.9)	-15.4 (5.4)	
13	26.2 (1.8)	50.5 (5.5)	-18.7 (6.7)	19.3 (13.6)	26.3 (1.6)	49.9 (5.0)	-19.5 (7.0)	18.9 (14.1)	27.1 (1.1)	49.7 (5.1)	-17.8 (6.2)	16.4 (11.5)	25.8 (1.9)	49.5 (5.4)	-17.3 (6.2)	
14	25.2 (1.0)	60.3 (4.9)	-19.5 (6.6)	10.9 (3.7)	25.2 (0.8)	59.5 (5.0)	-21.6 (6.8)		25.9 (0.9)	59.4 (4.5)	-18.4 (5.6)	10.0 (3.0)	24.5 (0.9)	59.8 (4.5)	-18.6 (5.8)	
15	25.0 (1.5)	65.1 (5.4)	-18.5 (6.3)	13.4 (8.1)	25.3 (1.2)	63.9 (5.1)	-20.4 (6.5)	16.3 (10.9)	26.1 (1.3)	63.9 (5.1)	-17.0 (6.3)	11.5 (7.2)	24.8 (1.8)	62.9 (5.9)	-16.5 (6.0)	
16	22.8 (0.7)	56.3 (6.3)	-11.5 (4.0)	6.9 (2.2)	22.6 (0.6)	54.7 (5.7)	-12.1 (3.7)	7.1 (2.1)	23.6 (0.5)	56.3 (6.0)	-9.8 (3.4)	5.9 (1.4)	22.5 (0.5)	51.6 (4.4)	-10.0 (3.6)	
17	22.0 (1.1)	54.8 (8.9)	-10.5 (5.0)	6.4 (2.3)	22.6 (0.8)	50.3 (5.9)	-11.4 (5.4)	5.9 (1.5)	23.6 (0.6)	53.5 (6.8)	-9.2 (4.2)	5.8 (1.9)	22.1 (0.6)	47.8 (4.7)	-9.5 (4.8)	
18	21.4 (1.1)	56.9 (8.5)	-10.0 (5.2)	6.1 (2.4)	22.7 (0.6)	52.0 (6.1)	-11.1 (5.7)	6.0 (2.3)	23.6 (0.6)	55.0 (6.0)	-9.0 (4.5)	6.1 (2.1)	21.6 (0.7)	49.1 (4.8)	-9.0 (4.8)	
19	21.6 (1.5)	51.2 (9.1)	-10.3 (6.7)	6.5 (3.4)	22.5 (1.0)	46.5 (6.0)	-11.2 (7.7)	6.4 (3.8)	23.5 (0.8)	52.2 (7.9)	-9.1 (5.9)	5.9 (2.5)	21.6 (1.1)	45.8 (4.8)	-9.1 (5.9)	
20	22.7 (1.8)	51.9 (6.3)	-13.0 (8.0)	8.3 (4.9)	23.1 (1.2)	48.1 (3.9)	-15.2 (9.4)		23.8 (1.1)	52.1 (5.6)	-11.8 (7.5)	6.8 (3.0)	22.3 (1.5)	48.1 (3.8)	-12.1 (7.9)	
21	22.0 (0.8)	52.6 (7.3)	-9.3 (5.1)	6.1 (2.6)	22.1 (0.6)	47.9 (4.1)	-10.2 (5.1)		23.1 (0.8)	53.5 (5.4)	-7.8 (4.4)	5.7 (2.3)	20.8 (0.9)	47.4 (4.6)	-7.9 (4.4)	
22	21.2 (0.8)	51.2 (9.6)	-8.1 (4.0)	4.8 (1.3)	21.8 (0.8)	45.5 (5.9)	-7.9 (4.4)		21.5 (1.1)	53.1 (7.3)	-5.6 (2.8)	5.5 (2.3)	20.8 (0.7)	44.3 (6.4)	-8.3 (4.2)	
23	22.0 (1.4)	46.9 (5.9)	-12.8 (6.8)	7.0 (3.2)	22.5 (0.9)	42.8 (3.9)	-12.6 (8.3)		22.2 (1.8)	49.3 (6.5)	-10.2 (6.8)	7.5 (4.2)	21.9 (1.0)	41.5 (3.9)	-12.3 (6.4)	
24	21.5 (0.8)	61.7 (7.7)	-10.7 (2.2)	6.3 (1.3)	22.3 (0.6)	55.4 (6.4)	-12.4 (3.3)		21.8 (0.6)	66.9 (8.5)	-9.8 (1.9)	6.3 (1.2)	21.9 (0.5)	51.2 (6.3)	-9.2 (1.6)	
25	21.0 (0.3)	60.8 (2.5)	-8.3 (1.3)	5.3 (0.4)	21.1 (0.4)	55.5 (2.4)	-11.5 (2.3)		21.3 (0.4)	65.5 (2.2)	-6.7 (1.4)	5.6 (0.2)	21.2 (0.4)	51.3 (2.2)	-6.6 (1.3)	
26	21.5 (0.9)	53.3 (5.5)	-10.2 (3.5)	6.4 (2.3)	21.8 (0.7)	48.4 (5.3)	-13.0 (4.7)		22.4 (0.9)	54.0 (7.2)	-4.9 (5.7)	5.8 (2.5)	21.3 (0.7)	48.6 (3.3)	-4.4 (4.7)	
27	20.4 (0.3)	57.1 (2.8)	-7.9 (2.1)	4.8 (0.6)	20.8 (0.6)	49.2 (2.2)	-7.6 (2.2)		21.2 (0.5)	56.5 (3.5)	-3.6 (4.8)	4.5 (0.9)	20.6 (0.4)	52.1 (3.5)	-2.2 (2.6)	
28	20.6 (0.5)	57.1 (3.6)	-7.9 (2.8)	4.8 (1.0)	20.0 (0.5)	48.4 (3.6)	-8.0 (2.7)		21.5 (0.6)	56.9 (4.0)	-4.7 (2.9)	4.7 (0.9)	20.3 (0.5)	47.8 (3.2)	-3.6 (1.5)	
29	21.1 (0.7)	52.9 (7.4)	-8.9 (4.6)	5.4 (2.1)	20.4 (0.7)	45.6 (4.0)	-9.3 (5.2)		21.7 (0.8)	51.3 (7.0)	-5.7 (4.6)	4.9 (1.2)	20.4 (0.7)	44.9 (3.5)	-5.4 (3.7)	
30	21.5 (1.6)	52.8 (10.2)	-10.8 (6.1)	6.7 (3.0)	21.6 (1.2)	45.6 (7.0)	-12.5 (8.4)		21.9 (1.5)	53.3 (8.4)	-9.7 (5.8)	6.0 (2.5)	20.8 (1.1)	45.0 (4.6)	-9.0 (5.2)	
31	23.7 (1.7)	48.7 (3.3)	-17.3 (7.3)	11.4 (6.2)	23.2 (1.5)	44.6 (3.3)	-19.6 (7.3)		23.8 (1.9)	50.7 (4.0)	-15.7 (7.2)	10.5 (5.9)	22.8 (1.3)	44.8 (3.6)	-14.8 (7.1)	
Avg	23.0	54.2	-11.8	8.3	23.0	49.9	-12.4	9.2	23.8	53.9	-10.0	7.8	22.6	48.5	-10.1	4.4
n	31	31	31	31	31	31	31	18	31	31	31	28	31	31	31	5
SD	1.6	5.2	3.4	4	1.6	5.5	3.9	4.5	1.7	5.5	3.9	3.88	1.5	5	4.1	0.09
Min	20.4	45.2	-19.5	4.4	20.0	42.2	-21.6	4.0	21.2	44.0	-18.4	4.4	20.3	41.5	-18.6	4.3
Max	26.2	66.8	-6.3	19.5	26.3	63.9	-5.8	18.9	27.1	66.9	-3.6	18.9	25.8	62.9	-2.2	4.52

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Table E3. Daily means (SD) of environmental parameters at Site IN3B for November, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	24.2 (1.3)	53.5 (3.7)	-18.3 (7.8)	11.4 (5.8)	23.5 (1.2)	50.7 (3.7)	-20.4 (6.4)		24.3 (1.5)	57.0 (5.8)	-16.3 (7.0)	10.1 (5.8)	22.9 (1.5)	50.3 (3.4)	-16.6 (7.0)	
2	24.2 (1.1)	51.8 (4.3)	-18.8 (6.2)	11.6 (5.6)	23.3 (1.6)	48.9 (5.0)	-21.1 (6.5)		24.7 (1.3)	54.1 (6.8)	-17.1 (6.6)	11.0 (5.5)	23.6 (1.3)	48.7 (3.6)	-16.8 (5.7)	
3	24.6 (1.0)	47.4 (5.1)	-19.7 (4.6)	13.9 (6.4)	24.4 (1.0)	44.4 (5.5)	-22.3 (4.6)		25.0 (1.2)	48.1 (5.9)	-18.1 (5.0)	11.3 (6.7)	24.4 (1.0)	46.0 (5.3)	-17.9 (4.6)	
4	23.8 (1.6)	48.3 (6.5)	-17.3 (7.1)	12.1 (7.0)	23.3 (1.7)	45.3 (6.6)	-19.1 (7.1)		24.0 (1.8)	50.7 (7.8)	-15.8 (6.9)	10.3 (6.3)	23.6 (1.5)	44.8 (5.2)	-15.4 (6.8)	
5	23.8 (1.6)	48.7 (5.8)	-17.5 (6.7)	12.8 (7.1)	23.8 (1.6)	45.6 (5.7)	-19.4 (6.6)		24.0 (1.8)	50.9 (7.3)	-16.2 (6.5)	10.7 (7.1)	23.9 (1.5)	45.9 (4.3)	-15.1 (5.6)	
6	24.0 (1.4)	54.3 (6.2)	-18.7 (6.0)	12.1 (5.5)	23.3 (1.6)	51.2 (6.6)	-22.1 (6.7)		24.3 (1.3)	55.4 (5.9)	-17.2 (5.9)	12.3 (6.8)	24.0 (1.2)	51.2 (6.3)	-14.1 (6.2)	
7	22.8 (1.1)	56.3 (5.1)	-13.6 (4.6)	8.5 (2.8)	21.9 (1.1)	52.6 (5.6)	-18.5 (7.0)	9.7 (3.9)	22.6 (1.3)	58.2 (5.7)	-12.5 (5.0)	7.8 (2.2)	22.8 (0.9)	51.1 (5.8)	-12.4 (4.4)	7.4 (2.6)
8	20.7 (0.3)	58.7 (5.6)	-7.6 (1.5)	5.6 (0.4)	20.0 (0.3)	52.2 (4.8)	-10.8 (3.4)	5.8 (0.7)	20.5 (0.6)	59.6 (5.3)	-5.4 (4.3)	5.6 (0.5)	21.6 (0.5)	50.1 (4.8)	-5.8 (2.0)	4.2 (0.5)
9	20.2 (0.4)	63.5 (5.5)	-7.2 (0.9)	5.2 (0.4)	19.7 (0.3)	55.9 (5.6)	-8.2 (1.8)	5.4 (0.5)	20.5 (0.9)	65.5 (6.4)	-2.7 (3.1)	4.3 (0.6)	21.8 (0.6)	54.6 (3.8)	-3.9 (2.0)	4.1 (0.4)
10	19.7 (0.7)	61.2 (4.6)	-7.7 (2.7)	5.1 (1.1)	19.3 (0.5)	52.3 (3.1)	-8.3 (3.0)	5.1 (1.2)	19.9 (0.6)	59.7 (2.8)	-5.5 (3.0)	4.2 (0.9)	21.2 (0.6)	51.9 (2.7)	-5.2 (2.5)	4.4 (0.9)
11	19.1 (0.5)	66.8 (3.2)	-8.4 (2.3)	5.2 (0.8)	19.5 (0.5)	55.7 (3.3)	-7.2 (2.4)	5.4 (1.1)	19.7 (0.6)	63.0 (5.4)	-4.7 (1.3)	4.2 (0.8)	21.4 (0.8)	54.1 (3.6)	-5.7 (1.6)	4.8 (1.2)
12	20.7 (0.9)	65.2 (3.8)	-12.8 (3.6)	7.4 (2.1)	20.9 (0.5)	58.0 (5.4)	-13.9 (4.8)	8.1 (2.2)	20.6 (0.7)	63.6 (3.1)	-8.7 (3.3)	6.9 (2.3)	22.5 (0.4)	57.3 (6.0)	-9.0 (2.7)	6.8 (1.9)
13	22.1 (0.5)	64.6 (1.6)	-15.7 (3.3)	9.1 (1.9)	21.9 (0.5)	59.7 (1.3)	-20.4 (3.7)	10.0 (2.1)	21.1 (0.5)	62.2 (2.5)	-11.4 (2.0)	8.4 (1.3)	22.8 (0.5)	59.6 (2.4)	-11.1 (2.4)	8.2 (2.3)
14	22.1 (0.4)	66.2 (4.5)	-16.6 (2.6)	9.6 (1.5)	22.1 (0.5)	61.3 (4.2)	-19.8 (2.9)	9.8 (1.4)	21.8 (0.4)	63.3 (4.3)	-11.5 (1.7)	8.9 (1.1)	22.7 (0.4)	60.5 (5.2)	-11.9 (2.4)	8.0 (2.3)
15	20.5 (0.5)	65.7 (3.5)	-9.6 (2.0)	6.1 (1.1)	20.3 (0.4)	56.1 (2.9)	-10.7 (3.1)	6.3 (1.5)	18.6 (1.5)	62.6 (4.8)	-6.2 (2.3)	5.9 (2.4)	22.2 (0.6)	54.4 (3.3)	-5.3 (3.2)	5.7 (0.4)
16	20.0 (0.4)	62.9 (3.9)	-7.4 (1.2)	5.7 (0.3)	19.5 (0.4)	55.3 (3.0)	-8.8 (2.8)	5.4 (0.3)	17.9 (0.6)	59.0 (4.8)	-2.6 (4.2)	4.1 (0.6)	21.8 (0.4)	54.4 (1.9)	-3.8 (2.0)	5.4 (0.3)
17	20.3 (0.4)	63.4 (3.8)	-8.1 (1.4)	5.4 (0.6)	19.5 (0.3)	54.3 (2.6)	-8.2 (1.5)	5.1 (0.6)	17.3 (1.2)	64.7 (3.2)	-5.0 (2.1)	4.0 (0.5)	21.1 (0.4)	52.6 (3.0)	-2.3 (2.4)	5.1 (0.9)
18	19.9 (0.8)	65.2 (4.4)	-7.5 (2.2)	5.1 (0.8)	19.4 (0.4)	53.2 (2.5)	-8.3 (2.5)	5.1 (1.0)	18.6 (0.8)	64.6 (4.4)	-5.3 (1.6)	4.5 (1.9)	20.6 (0.4)	52.1 (2.3)	-4.6 (1.9)	4.2 (0.8)
19	20.0 (0.9)	63.1 (4.0)	-9.2 (2.6)	5.6 (1.1)	19.4 (0.7)	52.1 (2.4)	-12.3 (5.5)	6.0 (1.5)	19.0 (1.2)	62.1 (4.7)	-7.4 (2.6)	5.3 (1.7)	20.6 (0.7)	49.9 (2.2)	-6.6 (2.2)	4.1 (0.6)
20	20.0 (0.6)	60.8 (4.6)	-8.3 (1.7)	5.5 (0.7)	19.3 (0.4)	50.7 (2.7)	-9.3 (1.9)	5.6 (0.8)	20.1 (0.5)	60.7 (3.6)	-8.1 (1.9)	5.2 (0.6)	21.0 (0.5)	50.1 (3.4)	-4.8 (2.0)	4.1 (0.6)
21	19.5 (0.3)	63.6 (3.7)	-7.3 (2.2)	4.9 (0.7)	18.8 (0.5)	51.7 (2.5)	-7.6 (2.1)	4.8 (0.7)	19.7 (0.6)	60.8 (2.0)	-5.8 (2.0)	4.8 (0.8)	20.1 (0.5)	51.9 (2.6)	-3.9 (1.7)	3.7 (0.3)
22	19.0 (0.4)	66.1 (2.6)	-7.4 (2.4)	4.9 (0.8)	18.9 (0.5)	55.2 (1.7)	-7.9 (2.4)	4.9 (0.7)	20.1 (0.6)	62.6 (2.0)	-6.1 (1.6)	5.0 (0.8)	19.7 (0.6)	52.4 (2.0)	-5.8 (1.4)	3.5 (0.2)
23	19.0 (0.9)	59.9 (5.5)	-9.5 (3.8)	5.7 (1.6)	19.2 (0.9)	50.9 (3.6)	-10.9 (5.3)	5.9 (2.0)	20.4 (0.6)	59.2 (4.0)	-8.0 (3.0)	5.9 (1.7)	20.3 (0.7)	49.4 (2.8)	-7.4 (2.6)	4.1 (0.9)
24	19.2 (0.9)	63.0 (4.5)	-10.4 (2.4)	6.1 (1.3)	19.8 (0.5)	56.0 (5.7)	-11.7 (2.8)	6.2 (1.3)	21.0 (0.4)	62.2 (4.8)	-7.2 (3.0)	6.2 (1.1)	21.0 (0.4)	53.9 (5.7)	-6.3 (2.6)	
25			-9.8 (2.8)				-10.8 (2.9)				-7.4 (2.8)				-4.6 (2.7)	
26	18.2 (1.2)	58.5 (6.4)	-7.6 (3.4)	5.6 (1.2)	19.2 (0.9)	54.2 (3.1)	-11.3 (4.0)	6.1 (2.0)	20.6 (0.7)	60.1 (3.1)	-8.3 (2.9)	5.6 (0.3)	20.5 (0.5)	51.4 (2.7)	-8.1 (2.6)	
27																
28			-20.7 (3.6)				-23.7 (4.0)				-3.3 (1.5)				4.6 (1.9)	
29			-20.5 (3.6)				-19.0 (3.7)				-3.6 (2.2)				4.5 (1.8)	
30	19.3 (0.4)	62.0 (6.7)	-10.4 (1.4)	5.8 (0.5)	19.7 (0.3)	57.5 (6.6)	-10.7 (2.6)	5.8 (0.6)	21.1 (0.8)	63.0 (6.7)	-7.3 (1.5)	5.9 (0.2)	19.9 (0.4)	53.7 (5.8)	-9.7 (1.5)	
Avg	21.0	60.0	-12.2	7.5	20.8	53.1	-13.9	6.3	21.1	59.7	-8.8	6.9	21.8	52.0	-7.8	5.2
n	26	26	29	26	26	26	29	20	26	26	29	26	26	26	29	17
SD	2	5.8	4.8	2.9	1.8	4.1	5.5	1.6	2.2	4.5	4.7	2.58	1.3	3.7	5.6	1.48
Min	18.2	47.4	-20.7	4.9	18.8	44.4	-23.7	4.8	17.3	48.1	-18.1	4.0	19.7	44.8	-17.9	3.5
Max	24.6	66.8	-7.2	13.9	24.4	61.3	-7.2	10	25	65.5	-2.6	12.3	24.4	60.5	4.6	8.16

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Table E3. Daily means (SD) of environmental parameters at Site IN3B for December, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1			-17.1 (8.7)				-14.9 (7.9)				-2.1 (3.4)				0.4 (3.3)	
2	18.8 (0.4)	61.3 (3.5)	-8.6 (2.0)	5.5 (0.5)	19.3 (0.4)	58.7 (2.9)	-10.2 (3.5)	5.2 (0.7)	19.9 (0.6)	63.7 (4.3)	-6.6 (2.1)		19.5 (0.5)	54.5 (3.5)	-6.0 (1.5)	
3	19.4 (0.6)	61.9 (4.8)	-11.4 (2.2)	6.3 (1.3)	19.9 (0.4)	58.4 (4.4)	-11.9 (2.7)	6.1 (1.3)	20.7 (0.6)	62.6 (4.0)	-8.6 (2.5)		20.6 (0.3)	53.5 (4.6)	-7.5 (2.2)	
4	19.2 (0.4)	63.0 (4.6)	-8.9 (1.8)	5.3 (0.5)	19.2 (0.4)	60.5 (4.1)	-8.8 (2.4)	4.8 (0.6)	20.3 (0.5)	65.5 (5.2)	-4.9 (3.5)		20.2 (0.4)	55.9 (4.4)	-2.5 (2.2)	
5	19.0 (0.5)	66.3 (4.3)	-6.6 (1.2)		18.5 (0.4)	65.8 (4.4)	-7.0 (3.1)		19.4 (0.5)	69.4 (4.7)	-3.6 (2.8)		19.5 (0.3)	59.1 (4.9)	-4.0 (1.6)	
6	18.7 (0.8)	65.2 (4.2)	-9.2 (2.1)		19.1 (0.4)	62.4 (3.5)	-10.8 (3.8)		20.3 (0.6)	64.8 (2.9)	-6.3 (3.3)		20.2 (0.4)	57.5 (5.0)	-3.0 (4.5)	
7	18.4 (0.5)	67.0 (3.2)	-7.3 (2.1)	5.1 (0.7)	18.2 (0.5)	63.0 (3.5)	-7.1 (2.8)	4.9 (0.7)	19.0 (1.2)	68.7 (5.7)	-6.1 (2.0)	4.8 (0.8)	19.5 (0.4)	57.0 (4.5)	-5.2 (3.1)	3.9 (0.6)
8	19.2 (0.8)	60.2 (4.7)	-9.9 (2.4)	6.2 (1.2)	19.1 (0.6)	57.6 (4.4)	-10.2 (3.0)	6.2 (1.6)	19.7 (1.3)	63.8 (5.4)	-8.0 (1.7)	6.1 (1.4)	19.9 (0.4)	52.5 (5.2)	-8.4 (1.7)	4.8 (1.0)
9	20.6 (0.5)	62.5 (6.4)	-15.4 (3.4)	8.6 (2.2)	21.1 (0.8)	59.7 (6.9)	-18.1 (5.0)	8.9 (2.4)	21.7 (0.6)	62.7 (6.8)	-12.6 (3.0)	7.2 (2.1)	21.2 (0.3)	56.1 (8.1)	-12.5 (3.1)	7.3 (2.1)
10	18.6 (0.5)	64.0 (3.2)	-7.3 (2.5)	6.3 (1.2)	19.7 (0.4)	59.7 (2.9)	-9.5 (2.5)	6.2 (1.4)	20.5 (0.6)	65.8 (3.7)	-8.1 (1.4)	5.5 (0.6)	19.9 (0.4)	55.0 (3.6)	-9.0 (1.4)	5.2 (0.8)
11	18.0 (0.8)	67.7 (3.2)	-8.1 (2.5)	5.7 (1.1)	19.2 (0.5)	63.1 (3.7)	-8.4 (2.6)	5.5 (1.2)	19.4 (0.4)	68.5 (3.6)	-7.2 (1.8)	4.8 (0.7)	19.5 (0.3)	56.9 (4.6)	-7.9 (1.8)	4.8 (0.9)
12	18.3 (0.8)	68.3 (4.1)	-7.2 (1.7)	5.3 (0.6)	18.9 (0.4)	65.0 (5.2)	-6.5 (1.8)	4.9 (0.5)	19.6 (0.4)	69.2 (4.4)	-4.7 (2.7)	4.6 (0.5)	19.6 (0.5)	57.6 (5.3)	-4.2 (1.8)	4.1 (0.7)
13	18.6 (0.9)	63.4 (4.8)	-10.4 (3.3)	6.3 (1.3)	19.2 (0.9)	61.1 (4.6)	-9.6 (3.8)	6.1 (1.6)	19.9 (1.0)	63.6 (4.4)	-7.0 (2.2)	5.8 (2.3)	19.5 (0.8)	54.4 (4.5)	-5.5 (1.5)	4.8 (1.1)
14	20.6 (1.0)	61.0 (5.0)	-16.2 (3.5)	8.8 (2.0)	20.9 (0.9)	58.3 (5.6)	-16.9 (4.7)	8.9 (2.3)	22.0 (0.8)	61.1 (5.0)	-12.1 (3.3)	12.2 (8.2)	20.9 (0.9)	54.1 (6.4)	-9.5 (3.4)	7.1 (2.2)
15	19.7 (1.6)	67.3 (6.1)	-8.6 (4.9)	6.1 (2.3)	19.1 (1.6)	65.2 (6.9)	-9.9 (7.7)	6.0 (3.2)	21.1 (1.6)	68.0 (6.2)	-2.8 (6.9)		20.6 (1.2)	61.4 (5.3)	-2.3 (5.4)	5.1 (2.2)
16	18.6 (0.5)	68.6 (4.1)	-7.4 (2.7)	5.1 (0.7)	18.5 (0.5)	67.3 (4.0)	-6.1 (2.3)	5.3 (0.6)	19.0 (0.7)	71.6 (4.5)	-4.4 (1.9)		18.8 (0.7)	60.8 (5.4)	-8.7 (3.2)	3.9 (0.5)
17	19.3 (0.6)	69.5 (5.1)	-8.1 (1.4)	5.4 (0.4)	18.6 (0.8)	66.9 (6.2)	-8.0 (1.6)	5.3 (0.5)	20.4 (0.8)	68.2 (4.3)	-5.4 (2.1)		19.4 (0.4)	59.0 (5.7)	-6.8 (1.5)	4.0 (0.4)
18	18.7 (0.5)	69.4 (4.4)	-8.1 (1.8)	5.5 (0.6)	18.9 (0.7)	65.8 (3.4)	-8.5 (2.0)	5.7 (0.7)	19.1 (0.6)	71.7 (3.2)	-6.8 (1.5)		19.2 (0.4)	58.6 (4.4)	-8.1 (1.5)	3.9 (0.7)
19	19.5 (0.7)	67.0 (3.2)	-10.9 (3.1)	6.6 (1.8)	20.0 (0.5)	62.6 (3.6)	-10.7 (6.0)	6.9 (1.7)	20.6 (0.6)	66.4 (2.8)	-7.6 (4.4)	6.5 (2.7)	19.8 (0.6)	58.2 (4.5)	-9.7 (2.9)	4.5 (0.9)
20	19.4 (0.4)	66.0 (5.0)	-9.7 (2.3)	5.6 (0.4)	19.4 (0.3)	63.1 (4.4)	-6.9 (2.7)	6.1 (0.6)	20.3 (0.5)	65.9 (3.2)	-5.1 (2.5)	6.1 (1.7)	19.3 (0.5)	56.8 (4.4)	-10.4 (1.8)	3.9 (0.5)
21	18.5 (1.0)	68.7 (3.9)	-2.1 (2.5)	3.4 (0.8)	17.8 (1.0)	66.4 (5.3)	-3.7 (3.4)		17.4 (1.6)	60.7 (3.9)	15.4 (8.8)		17.9 (0.9)	57.2 (2.9)	3.0 (3.4)	3.5 (0.4)
22	17.5 (0.5)	67.9 (2.6)	-3.5 (2.3)	4.5 (0.8)	17.1 (0.7)	67.8 (4.6)	-4.9 (3.3)		17.9 (0.6)	66.4 (5.3)	-0.9 (5.7)		18.1 (0.3)	60.9 (3.5)	-3.1 (2.5)	3.5 (0.4)
23	18.2 (0.8)	63.5 (3.1)	-9.4 (3.2)	5.8 (0.7)	18.9 (0.9)	63.6 (3.7)	-9.5 (2.8)		19.1 (0.8)	64.7 (2.2)	-6.3 (2.0)		18.4 (0.7)	56.3 (3.4)	-4.1 (1.2)	4.6 (1.0)
24	19.3 (0.5)	63.0 (3.3)	-9.5 (4.3)	6.8 (2.2)	19.7 (0.9)	61.2 (3.6)	-12.8 (6.5)		20.6 (0.7)	63.2 (3.3)	-4.3 (9.4)		19.9 (0.8)	56.8 (3.2)	-4.2 (6.0)	5.3 (1.1)
25	18.4 (0.5)	63.0 (2.5)	-7.6 (2.5)	5.3 (0.7)	18.4 (0.5)	60.9 (3.4)	-7.5 (2.8)		19.3 (0.4)	65.6 (4.0)	-4.6 (3.5)		18.5 (0.7)	55.9 (3.6)	-4.6 (3.0)	4.0 (0.5)
26	19.7 (1.2)	63.8 (5.9)	-13.3 (4.3)	7.9 (2.4)	20.0 (1.3)	61.3 (6.3)	-14.7 (6.0)	8.2 (3.0)	20.1 (1.2)	67.7 (7.7)	-10.1 (4.4)		20.2 (1.2)	56.4 (7.2)	-9.5 (3.6)	6.8 (2.6)
27	23.6 (0.7)	68.5 (1.2)	-24.6 (4.7)	15.3 (4.2)	23.8 (0.8)	65.6 (1.2)	-30.6 (5.8)	18.1 (4.2)	24.5 (0.4)	66.3 (1.2)	-22.5 (4.3)		23.9 (0.5)	63.6 (1.4)	-21.2 (4.3)	14.7 (4.3)
28	19.9 (0.9)	60.1 (3.3)	-7.2 (5.2)	6.8 (2.4)	20.1 (1.2)	58.6 (3.1)	-16.9 (6.5)	7.3 (2.8)	20.2 (1.4)	61.8 (4.0)	-9.6 (5.8)		20.9 (1.0)	54.9 (3.7)	-7.7 (3.4)	5.5 (1.9)
29	20.2 (0.8)	58.2 (2.3)	-10.6 (2.5)	7.4 (2.2)	20.2 (0.7)	56.3 (2.4)	-15.7 (6.4)	7.5 (2.3)	20.3 (1.1)	61.7 (3.8)	-7.7 (4.8)	7.5 (8.1)	20.9 (0.5)	51.8 (4.1)	-8.3 (3.3)	6.0 (2.0)
30	20.2 (0.7)	58.8 (2.8)	-12.0 (4.1)	7.5 (2.2)	20.3 (0.8)	56.2 (2.7)	-14.0 (5.6)	7.9 (2.7)	21.5 (0.7)	60.8 (4.0)	-8.0 (6.5)	11.3 (8.3)	20.3 (0.7)	52.4 (3.3)	-7.9 (6.0)	5.8 (1.9)
31	19.1 (0.6)	61.5 (4.9)	-6.8 (1.8)	5.7 (0.6)	19.0 (0.5)	59.4 (5.1)	-6.7 (3.3)	5.8 (0.8)	19.8 (0.9)	66.5 (5.3)	-7.3 (3.6)		19.7 (0.7)	54.9 (4.3)	-4.5 (2.7)	4.7 (0.8)
Avg	19.2	64.5	-9.8	6.4	19.4	62.0	-10.9	6.9	20.1	65.6	-6.3	6.9	19.9	56.7	-6.5	5.3
n	30	30	31	28	30	30	31	23	30	30	31	12	30	30	31	25
SD	1.1	3.3	4.2	2.1	1.2	3.3	5.1	2.7	1.3	3	5.5	2.35	1.1	2.7	4.2	2.19
Min	17.5	58.2	-24.6	3.4	17.1	56.2	-30.6	4.8	17.4	60.7	-22.5	4.6	17.9	51.8	-21.2	3.5
Max	23.6	69.5	-2.1	15.3	23.8	67.8	-3.7	18.1	24.5	71.7	15.4	12.2	23.9	63.6	3	14.7

ED_004549_00015928-00121

Table E3. Daily means (SD) of environmental parameters at Site IN3B for January, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	19.0 (0.7)	60.8 (4.0)	-9.4 (2.5)	6.1 (1.0)	19.1 (0.6)	59.1 (4.3)	-10.4 (3.4)	6.1 (1.4)	19.8 (0.9)	63.4 (5.7)	-6.9 (2.0)		18.7 (0.8)	52.1 (4.0)	-6.6 (1.7)	5.0 (0.9)
2	19.5 (0.8)	59.6 (4.5)	-9.4 (2.8)	6.6 (1.6)	19.5 (0.4)	57.8 (3.9)	-11.7 (3.2)	6.6 (1.7)	20.4 (0.8)	60.8 (4.7)	-7.5 (2.1)	6.9 (4.4)	19.7 (0.5)	51.1 (4.0)	-7.7 (1.3)	5.0 (0.7)
3	19.1 (1.2)	61.9 (3.9)	-12.7 (4.9)	6.7 (2.0)	19.5 (0.8)	58.3 (3.7)	-5.9 (4.3)	7.3 (2.0)	20.8 (0.8)	62.2 (4.4)	-4.3 (2.0)	9.5 (7.6)	19.9 (0.7)	54.4 (3.5)	-10.6 (4.0)	4.6 (1.0)
4	20.3 (0.4)	64.7 (3.9)	-12.6 (3.7)	7.7 (2.2)	20.0 (0.8)	62.1 (4.7)	-12.8 (5.3)	8.1 (2.2)	21.4 (0.9)	64.9 (5.4)	-8.3 (3.9)		20.3 (0.5)	56.4 (4.4)	-7.5 (4.3)	5.6 (1.0)
5	18.7 (0.9)	63.2 (3.6)	-8.5 (2.9)	6.0 (1.3)	18.4 (0.5)	61.2 (3.9)	-9.2 (3.3)	6.2 (1.5)	19.6 (0.5)	66.5 (4.2)	-7.6 (2.1)		19.0 (0.4)	54.4 (4.1)	-7.1 (2.4)	
6	18.6 (0.9)	66.1 (3.9)	-10.0 (2.8)	6.1 (1.3)	19.4 (0.7)	62.5 (4.6)	-8.6 (2.8)	6.3 (1.3)	20.6 (0.5)	64.5 (3.9)	-6.8 (1.9)		19.0 (0.4)	54.4 (4.9)	-9.7 (2.3)	
7	19.6 (0.4)	64.0 (3.6)	-8.1 (1.7)	6.2 (1.3)	19.4 (0.6)	62.8 (4.5)	-10.0 (3.8)	6.4 (1.6)	20.5 (0.4)	63.6 (4.2)	-5.0 (5.6)	7.2 (4.9)	19.3 (0.4)	56.9 (4.8)	-6.3 (3.0)	
8	18.8 (0.5)	65.9 (4.9)	-6.8 (1.6)	5.3 (0.6)	18.6 (0.5)	65.6 (5.9)	-7.5 (2.3)	5.4 (0.7)	20.1 (0.4)	65.7 (5.5)	-3.5 (3.5)		19.1 (0.7)	59.9 (3.6)	-3.7 (3.7)	4.1 (0.7)
9	18.5 (0.9)	65.5 (3.7)	-10.0 (3.7)	6.3 (1.8)	19.5 (0.9)	62.8 (3.6)	-10.5 (4.1)	6.9 (2.1)	20.9 (0.4)	63.9 (4.2)	-7.4 (2.6)		18.4 (0.8)	54.6 (3.7)	-8.7 (2.7)	4.8 (1.1)
10	19.3 (0.5)	65.6 (6.0)	-8.5 (2.5)	6.2 (1.1)	20.1 (0.5)	63.8 (5.7)	-9.6 (4.1)	6.5 (2.3)	21.1 (0.5)	65.3 (5.0)	-6.6 (2.9)	6.8 (3.7)	18.9 (0.5)	55.9 (5.0)	-10.0 (2.1)	5.1 (0.8)
11	19.3 (0.4)	66.9 (4.4)	-8.6 (1.4)	6.0 (0.8)	19.6 (0.4)	64.4 (4.5)	-10.8 (4.0)	5.0 (2.4)	19.9 (0.6)	68.0 (4.7)	-8.1 (1.9)	6.2 (3.2)	18.5 (0.6)	55.6 (4.7)	-8.0 (1.6)	5.4 (0.6)
12	18.9 (0.5)	66.8 (4.1)	-9.8 (2.3)	6.3 (1.2)	19.9 (0.7)	63.5 (4.7)	-11.9 (4.2)	6.3 (2.3)	20.5 (0.5)	65.3 (4.3)	-8.6 (2.1)	7.1 (4.8)	18.9 (0.4)	55.3 (4.3)	-8.3 (2.0)	5.6 (0.8)
13	19.2 (0.8)	67.1 (6.0)	-7.6 (2.2)	5.7 (0.8)	19.7 (0.9)	65.1 (6.5)	-9.1 (4.8)	4.3 (2.3)	20.3 (1.1)	66.8 (6.1)	-3.5 (5.3)	5.6 (1.5)	19.0 (0.7)	59.3 (5.1)	-1.8 (4.6)	5.2 (1.5)
14	17.7 (0.7)	73.1 (3.7)	-6.8 (2.6)	5.2 (0.8)	18.8 (0.3)	69.8 (3.1)	-7.2 (4.3)	4.5 (1.5)	19.0 (0.5)	70.5 (3.6)	-5.8 (3.5)		18.3 (0.5)	60.5 (3.9)	-5.7 (3.3)	4.7 (0.7)
15	16.8 (1.0)	78.5 (5.8)	-3.6 (1.4)	4.6 (0.6)	17.5 (0.7)	71.9 (6.2)	-2.9 (1.6)	3.5 (0.4)	18.3 (1.0)	71.8 (5.3)	1.1 (2.2)		18.5 (0.7)	67.1 (6.2)	-0.3 (1.7)	3.8 (0.5)
16	15.6 (1.3)		-3.3 (1.3)		16.9 (0.6)	76.9 (2.9)	-5.0 (3.0)	3.1 (1.2)	15.5 (1.5)	80.0 (4.1)	-2.6 (1.2)		16.4 (0.6)	68.7 (3.5)	-2.8 (0.9)	3.4 (0.3)
17	17.3 (1.3)	68.9 (4.7)	-7.1 (3.7)	5.1 (0.7)	18.9 (1.0)	67.4 (3.9)	-12.6 (7.7)	4.9 (2.7)	16.2 (1.6)	69.5 (6.5)	-4.7 (3.6)	5.2 (1.7)	17.1 (1.0)	58.0 (3.0)	-4.4 (3.0)	3.7 (0.4)
18	18.1 (0.6)	62.7 (3.9)	-6.3 (1.5)	4.9 (0.4)	19.0 (0.7)	65.4 (5.3)	-8.3 (4.3)	5.2 (2.0)	17.3 (1.5)	65.3 (6.5)	-3.8 (3.5)	5.3 (2.0)	17.8 (0.4)	56.3 (3.2)	-3.6 (2.2)	3.7 (0.4)
19	17.2 (0.7)	68.1 (4.7)	-4.3 (1.7)	4.0 (0.9)	18.6 (0.8)	69.3 (2.7)	-6.3 (4.0)	4.8 (1.6)	15.3 (0.8)	69.7 (3.6)	-3.7 (1.9)	4.0 (0.7)	17.6 (0.5)	57.7 (2.4)	-4.0 (1.7)	4.4 (0.6)
20	16.1 (1.3)	70.3 (4.8)	-3.7 (1.8)	3.8 (0.7)	18.4 (0.6)	69.9 (5.6)	-5.1 (3.1)	4.6 (1.5)	13.9 (0.8)	70.2 (4.5)	-3.5 (1.4)		17.3 (0.8)	60.1 (3.8)	-3.0 (1.0)	4.1 (0.6)
21	16.8 (0.6)		-5.2 (2.8)		18.8 (0.7)	61.0 (6.5)	-10.3 (5.5)	5.5 (2.1)	15.3 (1.1)	65.1 (2.4)	-3.6 (1.8)		17.5 (1.0)	58.5 (2.9)	-3.7 (1.6)	3.7 (0.4)
22	17.8 (1.3)		-7.2 (2.5)		19.7 (0.7)	51.6 (3.2)	-11.4 (4.7)	6.1 (2.4)	17.5 (0.7)	60.6 (2.5)	-6.1 (2.4)		18.4 (0.6)	54.4 (2.2)	-6.3 (2.3)	4.1 (0.7)
23	18.2 (1.0)		-7.9 (2.2)		19.4 (0.6)	51.0 (3.5)	-11.6 (4.4)	5.8 (2.3)	18.5 (0.5)	61.6 (2.2)	-8.0 (2.9)		18.5 (0.6)	54.9 (3.1)	-3.8 (3.7)	4.8 (0.9)
24	16.4 (0.8)		-4.3 (1.9)		17.6 (0.5)	61.9 (5.0)	-5.2 (2.2)	4.0 (0.8)	17.6 (0.4)	66.1 (3.4)	-4.8 (1.7)		17.2 (0.7)	57.6 (3.9)	-2.7 (1.6)	3.8 (0.4)
25	16.1 (1.0)		-3.7 (1.5)		17.3 (0.7)	69.6 (4.5)	-4.9 (3.0)	4.2 (1.1)	17.2 (0.5)	70.4 (2.7)	-2.8 (1.3)		16.5 (0.9)	61.1 (3.4)	-2.7 (1.1)	3.5 (0.1)
26	16.5 (0.6)		-4.6 (1.7)		17.3 (0.9)	69.0 (2.9)	-6.5 (3.9)	4.8 (1.5)	17.7 (0.4)	66.2 (2.5)	-4.6 (1.4)		16.7 (0.5)	57.9 (3.5)	-4.6 (1.4)	3.5 (0.2)
27	16.2 (0.7)		-3.9 (1.6)		18.0 (0.6)	68.2 (4.0)	-5.2 (3.1)	4.5 (1.4)	18.0 (0.3)	67.1 (3.9)	-4.1 (1.1)		16.1 (0.7)	57.6 (4.1)	-6.2 (1.5)	3.3 (0.3)
28	16.1 (0.9)		-4.6 (1.5)		18.0 (0.9)	69.0 (3.9)	-6.0 (3.1)	4.4 (1.5)	18.0 (0.7)	67.0 (2.8)	-3.5 (1.9)		16.7 (1.2)	58.8 (4.4)	-3.7 (1.0)	3.5 (0.2)
29	16.1 (0.8)		-3.5 (1.5)		18.9 (0.9)	67.1 (4.1)	-10.2 (3.7)	4.2 (1.3)	16.8 (1.2)	63.0 (2.6)	-0.6 (2.5)		16.8 (0.9)	60.6 (3.7)	-1.5 (1.6)	4.0 (0.9)
30	15.9 (0.8)	54.6 (2.7)	-1.9 (0.8)	3.2 (0.1)	18.6 (0.4)	64.4 (5.0)	-3.4 (1.3)	3.6 (0.5)	14.9 (0.8)	64.8 (3.2)	1.2 (3.4)	3.6 (0.2)	15.5 (0.6)	58.6 (2.8)	-1.1 (1.1)	3.6 (0.1)
31	15.1 (0.6)	54.8 (2.4)	-6.2 (3.6)	3.4 (0.2)	18.5 (1.2)	66.7 (4.0)	-10.0 (6.7)	4.1 (1.5)	15.7 (1.6)	64.0 (2.8)	-2.7 (1.2)	3.8 (0.5)	15.5 (0.8)	56.8 (2.5)	-1.8 (0.9)	3.8 (0.2)
Avg	17.7	65.2	-6.8	5.5	18.8	64.5	-8.4	5.3	18.3	66.3	-4.7	5.9	18.0	57.6	-5.1	4.3
n	31	21	31	21	31	31	31	31	31	31	31	12	31	31	31	28
SD	1.4	5.3	2.8	1.1	0.9	5.4	2.8	1.2	2.1	3.8	2.5	1.62	1.3	3.6	2.8	0.71
Min	15.1	54.6	-12.7	3.2	16.9	51.0	-12.8	3.1	13.9	60.6	-8.6	3.6	15.5	51.1	-10.6	3.3
Max	20.3	78.5	-1.9	7.7	20.1	76.9	-2.9	8.1	21.4	80	1.2	9.46	20.3	68.7	-0.3	5.58

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Table E3. Daily means (SD) of environmental parameters at Site IN3B for February, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	17.8 (0.9)	47.7 (2.7)	-5.3 (2.0)	4.3 (0.8)	20.0 (0.4)	58.5 (2.8)	-10.8 (5.3)	5.6 (2.2)	17.5 (0.4)	60.0 (2.0)	-4.1 (2.4)	4.8 (0.6)	16.9 (0.6)	51.3 (1.9)	-4.7 (1.4)	3.6 (0.2)
2	17.1 (0.8)	47.8 (2.7)	-3.4 (1.1)	3.8 (0.5)	19.6 (0.6)	63.1 (3.3)	-6.0 (2.8)	4.6 (1.4)	16.8 (0.7)	61.8 (2.4)	-1.8 (2.4)	4.0 (0.6)	16.2 (0.8)	53.1 (2.8)	-2.4 (1.3)	3.7 (0.2)
3	15.6 (0.8)	48.8 (3.0)	-2.0 (0.9)	3.4 (0.2)	19.5 (0.4)	64.1 (4.6)	-3.9 (1.9)	3.6 (0.7)	15.4 (0.5)	63.9 (3.2)	-4.0 (3.4)	3.1 (0.7)	15.6 (0.6)	57.7 (4.1)	0.2 (2.9)	4.0 (0.6)
4	14.2 (0.4)	50.5 (3.1)	-1.8 (0.4)	3.2 (0.1)	18.1 (0.9)	67.7 (5.2)	-2.1 (1.0)	2.9 (0.6)	14.9 (0.7)	67.0 (2.7)	-1.3 (2.2)	3.6 (0.5)	15.2 (0.5)	58.4 (3.4)	-0.2 (1.1)	3.8 (0.3)
5	12.7 (0.4)	51.5 (2.2)	-3.4 (1.8)	3.6 (0.4)	16.3 (0.5)	71.4 (2.1)	-3.2 (2.1)	3.2 (0.9)	12.8 (0.9)	68.1 (4.6)	-2.5 (0.9)	4.1 (1.3)	14.0 (0.3)	55.8 (1.9)	-1.9 (0.8)	3.8 (0.1)
6																
7	16.4 (1.3)	54.7 (1.7)	-9.9 (3.0)	5.4 (2.2)	19.2 (1.1)	65.2 (2.1)	-21.8 (5.7)	10.2 (3.3)	18.0 (1.0)	64.0 (2.6)	-6.1 (3.8)	9.8 (7.8)	17.0 (1.3)	59.4 (0.8)	-6.7 (3.8)	4.7 (0.9)
8	15.2 (0.6)	50.9 (2.5)	-4.2 (1.5)	3.8 (0.5)	17.9 (0.8)	63.4 (2.4)	-8.7 (4.6)	6.4 (2.3)	15.8 (1.1)	65.9 (1.9)	-4.6 (2.2)	4.6 (1.1)	15.8 (0.7)	57.5 (2.0)	-4.2 (2.1)	3.7 (0.2)
9	15.0 (1.2)	54.3 (2.5)	-5.6 (2.7)	3.8 (0.7)	18.3 (1.2)	64.2 (1.6)	-9.8 (6.3)	7.6 (3.4)	16.2 (1.8)	65.5 (1.9)	-4.2 (3.1)	5.3 (2.1)	16.1 (1.1)	58.6 (1.6)	-4.8 (2.4)	3.9 (0.6)
10	17.6 (1.2)	56.9 (1.3)	-11.5 (4.4)	6.3 (2.4)	20.2 (0.6)	66.0 (1.5)	-12.9 (4.7)	8.1 (2.2)	19.2 (0.8)	66.5 (1.4)	-10.3 (4.1)	8.7 (2.8)	17.9 (0.8)	62.7 (2.5)	-8.9 (4.1)	6.5 (2.6)
11	16.8 (1.1)	58.3 (4.9)	-9.9 (5.4)	5.5 (2.0)	19.0 (1.9)	68.4 (3.9)	-9.3 (5.1)	6.2 (3.3)	18.5 (1.5)	68.0 (5.2)	-5.1 (12.8)	8.3 (3.7)	17.5 (1.3)	62.9 (3.4)	-4.5 (11.1)	6.5 (6.7)
12	15.0 (0.6)	48.2 (2.3)	-1.9 (1.7)	3.5 (0.3)	15.9 (1.3)	62.3 (2.1)	-1.7 (2.6)	2.4 (0.6)	16.0 (1.0)	62.4 (3.2)	5.1 (7.8)	3.8 (0.8)	15.3 (0.5)	58.2 (2.0)	0.4 (2.1)	3.9 (0.3)
13	15.1 (0.8)	46.8 (4.6)	-3.7 (2.1)	4.1 (0.8)	16.5 (0.9)	59.5 (4.9)	-1.8 (1.4)	3.3 (0.8)	15.2 (0.8)	63.5 (2.5)	-2.6 (2.0)	4.1 (0.8)	15.0 (0.5)	56.6 (2.3)	-2.8 (1.7)	3.8 (0.1)
14	14.4 (0.4)	50.3 (1.3)	-2.3 (0.5)	3.6 (0.1)	15.7 (0.4)	62.7 (1.5)	-1.4 (0.7)	3.0 (0.3)	14.7 (0.5)	65.2 (1.4)	-2.5 (0.4)	3.6 (0.1)	14.6 (0.4)	58.0 (2.4)	-2.3 (0.5)	3.8 (0.1)
15	13.9 (0.8)	46.2 (3.0)	-2.7 (0.8)	3.7 (0.2)	15.2 (0.7)	62.2 (3.4)	-1.3 (0.8)	2.8 (0.6)	15.1 (0.2)	63.6 (1.8)	-2.5 (0.5)	3.6 (0.1)	14.1 (0.5)	56.8 (1.7)	-2.4 (0.6)	3.8 (0.1)
16	13.1 (0.9)	50.8 (4.4)	-2.5 (0.7)	3.5 (0.3)	11.0 (2.7)	67.4 (2.8)	-1.0 (0.5)	2.2 (0.5)	14.0 (0.9)	59.3 (4.7)	-2.1 (0.8)	3.6 (0.3)	14.0 (0.7)	54.8 (3.5)	-2.1 (0.7)	3.7 (0.4)
17	7.2 (0.6)	42.2 (8.8)	-2.1 (1.5)	1.5 (0.2)	7.4 (0.5)	74.7 (2.6)	-0.2 (1.0)	0.0 (0.0)	7.4 (0.6)	65.6 (2.6)	0.0 (0.6)	1.5 (0.3)	8.4 (0.6)	65.0 (3.0)	1.7 (1.6)	2.2 (0.2)
18	7.6 (0.7)		-1.7 (1.1)		7.8 (1.1)		-1.6 (2.1)		7.3 (0.9)		2.3 (4.0)		8.2 (0.7)		2.9 (3.4)	
19	4.9 (0.4)		0.2 (1.2)		0.9 (1.3)		-1.5 (1.8)		3.6 (0.6)		-1.3 (5.3)		5.6 (0.4)		4.9 (3.0)	
20	6.1 (1.4)		-0.2 (0.4)		1.2 (1.0)		-0.4 (0.7)		4.0 (0.6)		1.1 (1.7)		5.6 (0.7)		0.7 (1.1)	
21	6.5 (1.5)		0.3 (2.2)		2.5 (0.8)		-2.0 (3.2)		4.7 (0.5)		1.2 (5.9)		4.0 (1.1)		1.8 (1.4)	
22	6.1 (0.5)		0.2 (0.6)		0.4 (0.7)		-0.6 (1.4)		3.7 (0.4)		4.4 (4.1)		3.0 (1.5)		3.3 (2.0)	
23	6.3 (0.4)		-0.3 (0.5)		4.5 (1.5)		-0.3 (0.5)		4.8 (0.9)		0.0 (0.8)		6.8 (2.2)		-0.4 (0.6)	
24	16.8 (4.5)		-1.0 (1.1)		7.4 (1.3)		0.0 (0.8)		6.0 (2.0)		0.1 (0.6)		6.8 (0.9)		-0.4 (1.1)	
25	22.2 (1.0)	60.4 (3.4)	-2.1 (1.5)	2.1 (0.9)	10.2 (1.3)		-1.5 (1.6)		7.9 (1.7)		-0.5 (0.7)		8.5 (2.6)	75.5 (8.4)	-0.6 (1.1)	3.8 (0.8)
26	23.2 (0.2)	64.8 (1.7)	-3.5 (2.8)	3.1 (0.6)	11.6 (0.5)		-0.6 (1.5)		9.4 (0.7)		-0.5 (0.9)		10.8 (1.7)		-1.1 (1.8)	
27	22.1 (1.1)	63.5 (3.8)	-0.2 (2.0)	2.8 (0.3)	9.0 (1.8)		-0.8 (3.0)		7.5 (1.9)		-0.1 (3.6)		8.4 (2.2)		0.0 (1.7)	
28	17.6 (2.2)	65.1 (2.1)	0.2 (3.3)	2.4 (0.9)	6.9 (0.3)		3.3 (2.3)		6.1 (0.2)		1.7 (2.3)		4.6 (0.3)		-2.7 (3.0)	
Avg	13.9	53.0	-3.0	3.7	12.3	65.0	-3.8	4.5	11.6	64.4	-1.5	4.8	11.7	59.0	-1.4	4.1
n	27	20	27	20	27	16	27	16	27	16	27	16	27	17	27	17
SD	5.1	6.4	3.1	1.1	6.5	4	5.2	2.6	5.3	2.5	3.2	2.16	4.8	5.3	3	0.99
Min	4.9	42.2	-11.5	1.5	0.4	58.5	-21.8	0.0	3.6	59.3	-10.3	1.5	3.0	51.3	-8.9	2.2
Max	23.2	65.1	0.3	6.3	20.2	74.7	3.3	10.2	19.2	68.1	5.1	9.81	17.9	75.5	4.9	6.46

ED_004549_00015928-00123

Table E3. Daily means (SD) of environmental parameters at Site IN3B for March, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	20.6 (0.8)	68.0 (1.8)	1.2 (2.1)	3.0 (0.5)	6.3 (0.2)		0.6 (1.2)		5.9 (0.3)		0.0 (0.6)		4.7 (0.3)		-0.2 (0.9)	
2	21.0 (0.8)	68.3 (2.0)	1.3 (1.3)	2.8 (0.2)	6.1 (0.5)		0.9 (1.3)		4.9 (0.4)		0.0 (0.7)		4.1 (0.3)		-0.8 (1.0)	
3	21.3 (0.3)	67.8 (4.0)	-1.0 (1.2)	3.1 (0.6)	13.1 (3.4)		0.0 (0.8)		5.2 (0.9)		0.2 (0.5)		4.4 (0.7)		-0.5 (0.6)	
4	21.7 (0.4)	58.6 (5.7)	-2.2 (1.8)	3.7 (0.6)	19.0 (1.1)		-0.4 (1.1)		7.1 (0.9)	64.5 (11.3)	-0.1 (0.4)	0.0 (0.0)	6.1 (1.2)		0.4 (0.9)	
5	22.9 (1.2)	51.8 (2.5)	-8.3 (5.0)	5.2 (1.6)	21.4 (1.4)		-5.5 (5.1)		10.8 (3.2)	67.7 (4.1)	-0.7 (1.2)	0.0 (0.0)	10.1 (3.0)	59.4 (4.5)	2.6 (1.4)	2.1 (0.4)
6	24.3 (0.6)	55.2 (2.2)	-8.9 (2.9)	6.7 (2.1)	23.9 (1.1)		-6.9 (2.5)		15.2 (1.7)	75.4 (1.7)	-1.1 (1.5)	0.0 (0.0)	14.9 (1.5)	70.0 (1.9)	-0.5 (2.2)	2.2 (0.1)
7	24.5 (0.8)	55.6 (1.6)	-9.0 (3.0)	7.6 (2.2)	24.5 (1.0)	51.9 (3.6)	-7.8 (5.4)		16.4 (1.9)	74.2 (5.8)	-1.1 (1.1)	0.0 (0.0)	16.2 (1.7)	68.0 (6.6)	-1.4 (1.2)	2.1 (0.1)
8	23.1 (0.9)	58.1 (3.1)	-5.1 (5.9)	5.2 (2.0)	23.4 (1.1)	53.1 (3.7)	-5.2 (8.2)		14.2 (1.7)	75.2 (6.2)	1.5 (8.2)	0.1 (0.1)	14.2 (1.2)	69.9 (6.5)	-0.4 (3.1)	2.1 (0.1)
9	22.1 (0.5)	57.3 (1.8)	-3.5 (2.3)	4.2 (0.8)	22.0 (0.8)	52.8 (2.6)	-0.5 (1.6)	3.7 (1.1)	9.6 (0.9)	72.4 (3.4)	-0.4 (2.4)	0.0 (0.0)	10.3 (0.8)	67.6 (2.3)	-0.3 (3.7)	2.2 (0.2)
10	23.4 (1.0)	58.9 (3.5)	-9.6 (4.4)	7.1 (2.5)	23.6 (1.0)	55.6 (3.8)	-5.2 (5.2)	4.8 (1.1)	13.7 (3.0)	80.8 (3.5)	-0.9 (2.9)	0.0 (0.2)	13.5 (2.7)	77.9 (4.3)	-0.8 (2.4)	2.2 (0.1)
11	21.0 (0.6)	54.8 (3.1)	-2.0 (1.7)	3.5 (0.7)	20.2 (0.9)	52.1 (2.7)	0.2 (2.4)	2.2 (0.5)	7.3 (1.8)	67.3 (4.2)	4.4 (5.5)	0.1 (0.1)	8.9 (1.9)	69.5 (3.8)	4.7 (3.3)	2.2 (0.4)
12	20.7 (0.3)	57.2 (2.1)	-0.8 (1.2)	4.1 (0.5)	20.7 (0.4)	55.7 (3.1)	0.6 (1.2)	3.1 (0.5)	6.3 (0.4)	72.1 (1.6)	0.1 (0.8)	0.3 (0.2)	5.6 (0.3)	69.0 (2.9)	-0.3 (1.1)	0.9 (0.5)
13	20.9 (0.5)	56.2 (3.8)	-2.0 (2.1)	4.3 (0.7)	21.3 (0.5)	52.1 (5.9)	0.0 (2.2)	3.2 (0.5)	7.1 (0.7)	69.8 (7.2)	0.5 (1.1)	0.7 (0.5)	6.0 (0.6)	67.1 (4.9)	-1.4 (1.4)	0.4 (0.1)
14	21.5 (0.8)	52.6 (5.3)	-4.3 (3.1)	5.0 (1.1)	21.6 (0.8)	47.7 (6.7)	-1.7 (3.0)	3.7 (0.7)	8.5 (1.7)	63.6 (10.6)	-0.7 (1.5)	1.1 (0.8)	7.5 (1.7)	61.4 (11.6)	-2.3 (2.2)	1.1 (0.8)
15	21.8 (0.9)	50.6 (4.2)	-7.5 (5.6)	6.4 (2.4)	22.0 (1.1)	45.7 (5.5)	-4.0 (4.7)	5.0 (2.1)	10.3 (2.9)	60.8 (10.1)	-1.2 (1.5)	1.5 (0.9)	9.5 (2.7)	57.7 (10.7)	-4.1 (3.1)	1.4 (0.8)
16	22.3 (1.5)	49.7 (4.1)	-9.8 (7.3)	6.9 (4.0)	22.8 (1.4)	45.1 (2.7)	-7.2 (6.5)	5.6 (2.0)	12.2 (3.3)	60.2 (4.6)	-3.7 (2.6)	1.6 (0.7)	11.8 (2.9)	56.6 (4.8)	-4.3 (1.9)	2.1 (0.2)
17	22.9 (1.8)	51.6 (6.8)	-10.2 (7.4)	6.0 (5.2)	23.3 (1.4)	46.0 (4.2)	-13.5 (9.4)	7.8 (4.8)	14.7 (3.8)	61.6 (9.8)	-4.3 (1.8)	2.1 (0.1)	14.6 (3.6)	56.4 (9.9)	-4.0 (2.0)	2.1 (0.1)
18	23.0 (1.0)	52.9 (2.4)	-8.1 (6.5)	3.3 (3.5)	22.6 (0.8)	46.2 (1.9)	-10.3 (5.4)	5.9 (3.1)	14.3 (1.6)	59.5 (5.1)	-4.2 (1.9)	2.2 (0.0)	15.0 (1.8)	52.3 (5.7)	-4.0 (1.7)	2.0 (0.3)
19	20.7 (0.7)	49.4 (8.2)	-2.9 (2.6)	1.6 (2.0)	21.2 (0.7)	42.1 (6.2)	-5.8 (4.6)	4.9 (1.6)	10.7 (1.7)	50.3 (9.8)	-3.5 (2.3)	1.7 (0.7)	17.8 (3.6)	43.8 (8.6)	-2.6 (2.7)	3.2 (4.5)
20	18.9 (0.7)	52.5 (2.8)	-2.7 (1.2)	1.3 (0.1)	20.6 (1.0)	46.5 (4.4)	-3.1 (2.8)	4.1 (0.7)	8.1 (1.3)	52.8 (6.3)	-2.3 (1.3)	1.0 (0.8)	19.4 (0.5)	45.3 (3.4)	-2.5 (1.5)	3.9 (0.2)
21																
22																
23																
24	21.4 (1.9)	44.1 (3.2)	-10.0 (5.2)		22.8 (1.7)	39.0 (4.0)	-12.0 (10.1)		15.0 (3.7)	40.0 (4.6)	-2.8 (2.6)	2.2 (0.1)	21.6 (1.5)	38.7 (2.9)	-3.8 (2.3)	4.3 (1.0)
25	22.2 (1.1)	51.8 (5.7)	-6.0 (2.7)		22.3 (0.8)	49.6 (4.8)	-14.1 (5.4)	7.6 (2.5)	14.8 (1.4)	55.6 (9.1)	-4.5 (2.4)	2.1 (0.1)	21.3 (0.8)	48.1 (4.8)	-3.8 (1.6)	4.1 (0.5)
26	20.8 (1.4)	49.3 (5.9)	-5.4 (2.6)		21.2 (0.8)	45.6 (4.2)	-11.2 (6.7)	7.2 (4.6)	11.7 (2.0)	52.0 (7.5)	-5.3 (1.9)	2.1 (0.1)	20.5 (0.8)	44.9 (3.8)	-4.4 (2.0)	4.0 (0.4)
27	20.5 (1.6)	51.1 (5.0)	-5.0 (3.5)		21.3 (1.2)	46.7 (4.5)	-11.9 (7.9)	9.6 (5.3)	11.9 (2.8)	53.1 (8.5)	-5.4 (2.4)	1.7 (0.6)	20.5 (1.1)	46.2 (4.1)	-4.8 (2.8)	4.2 (0.6)
28	18.1 (0.5)	59.2 (2.1)	-7.5 (6.4)	1.6 (1.7)	20.6 (0.8)	50.4 (3.6)	-0.2 (4.9)	7.1 (2.6)	10.1 (1.8)	58.8 (5.7)	2.1 (4.2)	1.7 (0.9)	19.2 (0.3)	51.7 (2.5)	-8.4 (5.3)	2.2 (1.7)
29	18.2 (0.4)	60.1 (1.3)	-4.0 (1.3)	2.8 (0.5)	19.8 (0.3)	59.6 (2.6)	-3.5 (2.8)	3.5 (0.9)	7.7 (1.4)	64.6 (3.0)	-2.0 (3.6)	2.2 (0.1)	19.5 (0.3)	52.0 (1.6)	1.2 (4.2)	0.0 (0.0)
30	19.5 (1.7)	53.4 (6.9)	-5.1 (3.0)	2.8 (0.8)	20.0 (0.9)	53.2 (6.4)	-5.6 (5.5)	5.7 (2.8)	8.3 (3.3)	54.6 (9.5)	-4.1 (2.0)	2.1 (0.2)	19.7 (0.8)	48.7 (3.1)	-3.8 (1.9)	1.7 (1.9)
31	20.0 (0.8)	54.8 (3.6)	-6.8 (2.9)	2.9 (0.7)	20.5 (0.6)	55.2 (4.0)	-5.1 (4.1)	6.1 (1.4)	10.9 (1.0)	58.5 (6.0)	-2.1 (2.0)	2.2 (0.1)	20.1 (0.4)	51.1 (2.9)	-2.5 (1.4)	4.0 (0.4)
Avg	21.4	55.4	-5.2	4.2	20.3	49.6	-4.9	5.3	10.5	62.6	-1.5	1.2	13.5	57.2	-1.9	2.4
n	28	28	28	24	28	22	28	19	28	25	28	25	28	24	28	24
SD	1.6	5.7	3.3	1.8	4.4	4.9	4.6	1.9	3.4	9.4	2.3	0.9	5.9	10.4	2.6	1.18
Min	18.1	44.1	-10.2	1.3	6.1	39.0	-14.1	2.2	4.9	40.0	-5.4	0.0	4.1	38.7	-8.4	0.0
Max	24.5	68.3	1.3	7.6	24.5	59.6	0.9	9.6	16.4	80.8	4.4	2.21	21.6	77.9	4.7	4.29

ED_004549_00015928-00124

Table E3. Daily means (SD) of environmental parameters at Site IN3B for April, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	20.3 (1.3)	50.7 (5.3)	-4.3 (1.8)	3.8 (1.0)	19.9 (0.5)	50.2 (6.2)	-7.3 (4.6)		15.4 (4.8)	47.7 (8.5)	-4.3 (3.0)	3.0 (0.7)	20.3 (1.0)	44.7 (5.0)	-3.6 (1.5)	4.2 (0.7)
2	21.7 (1.2)	48.7 (4.8)	-11.6 (8.7)	6.9 (4.0)	21.6 (1.1)	47.5 (5.3)	-5.8 (8.5)		20.6 (1.6)	44.8 (7.1)	-6.2 (5.4)	5.0 (2.5)	21.4 (1.3)	45.7 (4.9)	-8.5 (6.1)	5.4 (2.4)
3	19.6 (0.7)	56.8 (2.3)	-4.0 (1.6)	4.2 (0.5)	20.2 (0.5)	57.6 (2.3)	-1.2 (2.7)		18.7 (0.4)	52.3 (2.5)	-4.4 (2.7)	3.2 (0.6)	20.3 (0.6)	54.6 (1.7)	-1.1 (2.7)	4.2 (0.6)
4	19.5 (1.6)	52.1 (5.4)	-7.2 (5.6)	5.4 (2.4)	19.8 (1.3)	51.5 (6.5)	-4.4 (4.4)		18.9 (1.1)	45.6 (3.9)	-5.5 (3.6)	3.8 (0.7)	20.5 (1.2)	47.6 (5.1)	-5.8 (3.8)	5.1 (2.1)
5	19.8 (0.3)	58.9 (4.5)	-6.6 (3.3)	4.1 (0.8)	20.3 (0.2)	58.2 (4.8)	1.0 (3.8)		18.9 (0.3)	54.0 (5.0)	-0.7 (2.7)	3.8 (0.4)	19.8 (0.5)	55.6 (3.6)	-4.8 (2.6)	3.0 (1.4)
6	19.1 (0.8)	56.4 (1.9)	-3.8 (1.8)	4.0 (0.5)	19.4 (0.4)	58.4 (1.9)	-2.3 (2.0)		18.0 (0.3)	52.5 (1.9)	-3.6 (1.2)	3.6 (0.1)	19.5 (0.8)	56.6 (1.6)	-2.8 (1.4)	0.0 (0.0)
7	18.8 (1.0)	52.6 (2.1)	-3.8 (1.6)	3.9 (0.4)	19.0 (0.4)	57.0 (1.5)	-1.3 (1.6)		17.7 (0.4)	47.9 (1.8)	-2.6 (4.3)		19.6 (0.6)	53.3 (2.6)	1.8 (3.7)	
8	19.8 (1.3)	49.4 (4.1)	-6.5 (4.3)	5.2 (2.0)	19.6 (0.7)	50.7 (5.4)	-4.7 (2.7)	3.4 (1.3)	18.3 (0.5)	44.2 (3.8)	-4.5 (2.2)	3.5 (0.2)	20.6 (1.4)	46.6 (4.8)	-4.2 (2.2)	4.8 (1.5)
9	20.7 (1.5)	46.8 (6.2)	-10.8 (8.1)	7.4 (4.5)	20.5 (1.0)	47.7 (6.0)	-8.2 (6.7)		19.0 (1.0)	42.3 (6.7)	-7.9 (5.3)	4.1 (0.9)	21.2 (1.5)	43.4 (6.9)	-8.1 (5.6)	6.3 (2.7)
10	20.1 (0.4)	55.8 (4.2)	-5.5 (2.1)	4.7 (0.5)	20.2 (0.3)	56.5 (3.9)	-0.8 (2.1)		17.9 (0.4)	55.4 (4.1)	-3.1 (2.4)	3.6 (0.2)	20.2 (0.3)	53.3 (4.4)	-6.8 (2.4)	4.1 (0.5)
11	19.6 (1.0)	50.3 (5.9)	-7.2 (5.1)	5.7 (2.3)	20.1 (0.8)	49.9 (6.3)	-5.4 (5.0)	4.3 (2.4)	18.9 (1.3)	45.5 (6.2)	-6.2 (4.0)	4.1 (1.0)	19.9 (1.1)	47.2 (6.4)	-6.1 (4.4)	5.0 (1.9)
12	19.9 (1.3)	50.3 (4.3)	-11.0 (6.8)	5.0 (2.6)	20.1 (1.1)	50.2 (5.6)	-3.6 (4.6)	4.9 (2.9)	19.2 (1.3)	44.6 (4.6)	-2.5 (3.4)	4.5 (1.1)	20.5 (1.3)	45.8 (4.7)	-8.7 (5.1)	4.4 (1.3)
13	19.3 (0.5)	57.7 (4.1)	-10.1 (3.1)	2.1 (1.8)	19.7 (0.5)	56.7 (5.3)	1.3 (2.9)	3.4 (0.8)	18.4 (0.4)	53.0 (5.7)	2.1 (3.0)	4.2 (0.4)	19.3 (0.7)	54.0 (4.4)	-8.2 (2.6)	1.8 (1.6)
14	20.2 (0.5)	57.2 (2.1)	-7.2 (1.4)	5.1 (0.5)	19.3 (0.2)	60.3 (2.2)	-4.8 (1.7)	3.8 (0.6)	18.0 (0.4)	57.1 (1.5)	-5.9 (1.1)	3.5 (0.1)	20.4 (0.4)	54.9 (1.2)	-5.6 (1.1)	4.9 (0.6)
15	20.5 (0.9)	54.5 (1.6)	-7.9 (1.9)	5.3 (0.7)	19.7 (0.5)	56.4 (1.4)	-6.6 (2.4)	4.6 (1.3)	18.4 (1.1)	52.9 (1.0)	-7.0 (2.0)	3.9 (0.7)	20.8 (0.6)	52.3 (2.2)	-6.9 (2.2)	5.4 (0.9)
16	21.2 (1.2)	49.9 (4.6)	-14.9 (10.6)	8.3 (5.0)	21.0 (1.5)	52.0 (4.4)	-4.7 (4.6)	6.5 (3.4)	20.0 (2.3)	47.4 (6.1)	-8.8 (5.7)	6.7 (5.0)	21.2 (1.1)		-11.8 (7.9)	
17	22.1 (2.7)	45.4 (8.9)	-17.9 (14.3)	11.4 (7.9)	21.4 (1.9)	45.7 (7.9)	-8.6 (8.4)	7.8 (5.0)	21.0 (3.4)	42.1 (10.3)	-13.4 (11.5)	7.1 (5.6)	22.2 (1.9)		-14.5 (13.6)	
18	23.6 (2.6)	48.5 (6.1)	-18.0 (9.5)	13.2 (7.5)	22.3 (2.1)	48.4 (5.1)	-11.1 (8.6)	10.1 (5.6)	22.6 (2.5)	45.7 (8.0)	-13.9 (9.4)	11.3 (6.9)	22.7 (2.1)		-13.7 (10.2)	
19	22.6 (0.6)	62.1 (2.9)	-14.8 (4.7)	9.0 (2.4)	22.5 (0.6)	60.6 (2.9)	-4.8 (3.2)	7.2 (1.8)	22.3 (0.9)	62.7 (5.3)	-7.1 (3.3)	8.0 (2.3)	22.5 (0.7)		-7.7 (2.4)	
20	21.5 (0.5)	58.0 (3.3)	-9.0 (3.4)	6.5 (1.7)	20.6 (0.6)	56.4 (2.3)	-3.3 (2.3)	5.4 (0.6)	20.5 (0.8)	58.2 (5.7)	-4.5 (4.4)	4.9 (0.8)	20.3 (0.9)		-1.9 (2.6)	
21	20.9 (0.7)	56.5 (1.7)	-6.7 (1.4)	5.4 (0.4)	19.8 (0.3)	56.1 (1.7)	-2.1 (2.4)	4.4 (0.6)	20.2 (0.5)	54.1 (2.3)	-1.2 (4.5)	4.1 (0.6)	18.7 (0.4)		-0.9 (2.6)	
22	21.4 (1.4)	50.7 (4.6)	-11.4 (7.3)	8.0 (4.2)	20.3 (1.3)	50.4 (4.6)	-4.6 (3.9)	5.9 (2.1)	20.7 (1.3)	47.7 (4.6)	-5.4 (4.7)	6.0 (2.5)	19.4 (1.8)		-4.1 (2.5)	
23	21.8 (1.8)	50.4 (5.9)	-17.9 (10.3)	10.5 (5.0)	21.3 (2.1)	49.1 (4.1)	-5.9 (4.9)	7.4 (2.9)	22.1 (1.9)	46.0 (5.2)	-8.6 (5.8)		20.9 (2.0)		-9.0 (5.9)	
24	25.7 (2.2)	47.8 (6.3)	-21.3 (4.3)	24.2 (12.7)	25.5 (1.8)	47.8 (5.0)	-22.6 (10.5)	18.8 (9.3)	25.5 (2.1)	42.7 (7.0)	-19.3 (6.5)		25.6 (1.9)		-22.4 (9.9)	
25	26.7 (2.0)	49.3 (3.0)	-14.6 (9.2)	27.4 (12.2)	26.5 (1.9)	50.3 (2.9)	-25.3 (6.6)	20.9 (7.5)	26.5 (1.6)	45.1 (3.3)	-19.4 (3.5)	21.4 (8.7)	26.8 (1.6)		-21.9 (6.4)	
26	27.5 (1.3)	48.1 (3.9)	-8.1 (7.3)	26.5 (14.5)	26.7 (2.0)	50.3 (4.1)	-22.8 (9.3)	21.2 (8.3)	26.8 (1.6)	44.4 (5.2)	-19.4 (5.0)	25.2 (13.2)	26.0 (2.1)		-22.6 (8.8)	
27	26.9 (1.0)	51.0 (6.4)	-9.8 (8.9)	21.4 (12.7)	26.1 (1.4)	53.7 (6.5)	-20.6 (10.1)	17.5 (7.6)	26.2 (1.0)	48.0 (7.6)	-18.6 (5.2)	20.0 (11.3)	25.6 (2.1)		-20.7 (8.7)	
28	23.8 (1.2)	61.2 (2.7)	-6.7 (3.7)	8.0 (3.2)	22.9 (1.1)	64.6 (2.0)	-7.2 (5.1)	9.3 (2.1)	23.4 (1.1)	60.6 (2.0)	-8.6 (6.1)	10.5 (2.2)	23.7 (0.6)	59.0 (3.7)	-10.3 (2.5)	
29	23.1 (1.4)	61.0 (2.6)	-4.0 (2.6)	6.0 (2.4)	21.3 (0.9)	62.8 (1.8)	-4.0 (2.7)	8.0 (2.4)	22.2 (1.3)	61.0 (2.3)	-4.2 (3.2)	9.4 (2.5)	23.2 (0.5)	55.2 (3.5)	-8.2 (3.1)	
30	24.8 (1.0)	65.1 (2.1)	-12.3 (5.1)	12.1 (4.1)	23.5 (1.0)	66.3 (1.9)	-13.3 (7.1)	11.6 (3.6)	24.1 (1.0)	62.6 (2.2)	-15.4 (6.2)	14.4 (4.8)	24.7 (0.7)	61.7 (3.3)	-14.0 (5.0)	
Avg	21.8	53.4	-9.8	9.0	21.4	54.1	-7.2	8.9	20.7	50.3	-7.7	7.5	21.6	51.8	-8.8	4.2
n	30	30	30	30	30	30	30	21	30	30	30	27	30	18	30	14
SD	2.4	5	4.7	6.8	2.2	5.4	6.9	5.7	2.9	6.3	5.8	5.92	2.2	5.2	6.4	1.57
Min	18.8	45.4	-21.3	2.1	19.0	45.7	-25.3	3.4	15.4	42.1	-19.4	3.0	18.7	43.4	-22.6	0.0
Max	27.5	65.1	-3.8	27.4	26.7	66.3	1.3	21.2	26.8	62.7	2.1	25.2	26.8	61.7	1.8	6.27

ED_004549_00015928-00125

Table E3. Daily means (SD) of environmental parameters at Site IN3B for May, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	24.1 (1.1)	61.7 (3.5)	-8.7 (3.1)	9.3 (2.2)	22.6 (0.9)	61.7 (5.0)	-9.0 (3.5)	9.2 (2.1)	23.7 (1.2)	58.7 (3.7)	-10.8 (4.3)	10.3 (3.4)	24.1 (0.7)	57.1 (5.2)	-9.8 (4.1)	
2	23.2 (1.6)	54.2 (6.3)	-8.5 (5.0)	8.8 (3.3)	22.1 (1.2)	51.8 (4.1)	-7.9 (4.3)	8.2 (2.3)	23.4 (1.5)	50.3 (9.2)	-11.7 (7.0)		23.2 (1.2)	45.4 (5.8)	-10.8 (6.5)	
3	24.0 (1.3)	49.6 (9.3)	-12.5 (8.5)	10.9 (4.8)	22.7 (1.1)	47.2 (8.2)	-11.7 (8.0)	10.6 (4.7)	24.4 (1.7)	44.0 (12.2)	-17.4 (12.8)	15.5 (11.2)	23.9 (1.5)	41.1 (9.5)	-15.7 (10.9)	
4	24.1 (1.1)	49.9 (5.7)	-11.5 (7.4)	10.9 (4.6)	23.3 (1.4)	47.2 (6.8)	-11.9 (8.2)	12.9 (7.0)	23.8 (1.7)	44.5 (9.2)	-12.5 (7.0)	13.9 (7.4)	24.2 (1.3)	43.0 (5.9)	-13.7 (8.0)	
5	24.1 (1.7)	50.0 (5.2)	-14.4 (9.6)	12.2 (5.2)	23.3 (1.7)	48.3 (5.9)	-14.7 (10.9)	13.8 (7.0)	24.5 (2.3)	44.3 (8.9)	-19.1 (13.8)	17.9 (11.0)	24.6 (1.3)	43.2 (5.7)	-18.5 (12.4)	
6	23.6 (0.5)	59.1 (5.5)	-8.7 (2.7)	9.4 (2.1)	22.9 (0.5)	58.8 (5.7)	-7.7 (2.6)	9.7 (2.0)	24.6 (0.8)	54.7 (4.6)	-10.8 (3.2)		23.7 (0.4)	54.4 (5.8)	-10.6 (2.9)	
7	25.0 (1.5)	58.9 (5.8)	-17.9 (12.7)	16.5 (10.2)	23.8 (1.7)	60.2 (4.8)	-17.1 (11.1)	14.9 (8.6)	25.2 (2.0)	54.5 (7.4)	-20.1 (11.3)	17.3 (9.0)	24.6 (1.7)	55.2 (6.1)	-20.0 (11.6)	
8	25.4 (0.8)	62.4 (2.7)	-15.6 (4.4)	14.9 (4.1)	24.0 (0.8)	64.1 (1.9)	-15.0 (4.1)	14.8 (4.1)	25.3 (0.7)	59.7 (1.9)	-17.6 (3.2)	15.9 (4.9)	24.6 (1.3)	60.7 (2.7)	-12.6 (7.2)	
9	24.5 (0.5)	57.5 (3.1)	-9.5 (3.8)	10.1 (1.6)	23.6 (0.6)	57.7 (3.9)	-10.3 (4.3)	9.9 (2.0)	24.4 (0.8)	52.1 (5.0)	-12.7 (9.4)	11.9 (3.8)	23.0 (0.8)	54.4 (5.5)	-13.4 (8.6)	
10	24.3 (1.2)	52.7 (6.1)	-11.5 (6.4)	10.6 (4.3)	22.8 (1.1)	52.9 (5.3)	-11.4 (6.1)	9.9 (3.8)	23.6 (1.7)	46.5 (11.1)	-17.2 (8.4)	12.1 (5.9)	23.0 (1.6)	47.4 (8.6)	-19.0 (10.1)	
11	23.2 (1.2)	50.1 (5.2)	-8.5 (4.8)	10.3 (4.1)	22.5 (1.2)	47.8 (6.1)	-10.7 (6.0)	11.0 (5.2)	22.5 (1.3)	44.8 (8.0)	-12.0 (5.1)	10.9 (6.8)	22.6 (1.4)	44.5 (7.9)	-12.4 (8.8)	
12	22.9 (2.1)	47.0 (8.4)	-12.3 (10.1)	12.3 (6.0)	22.8 (1.8)	45.5 (8.9)	-12.9 (8.6)	14.0 (8.1)	23.2 (1.8)	41.5 (12.3)	-14.1 (6.5)	13.0 (8.5)	22.4 (1.5)	41.1 (8.2)	-13.0 (8.5)	
13	23.6 (1.1)	60.4 (7.5)	-21.4 (5.6)	13.1 (3.2)	23.3 (1.1)	62.2 (7.6)	-23.2 (6.2)	14.2 (4.0)	23.7 (1.1)	59.4 (6.7)	-20.8 (5.9)	11.3 (4.7)	23.2 (1.2)	59.6 (8.1)	-19.3 (4.3)	
14	25.0 (0.9)	55.0 (7.6)	-22.4 (4.8)	18.0 (5.6)	24.3 (0.9)	57.2 (8.1)	-25.5 (4.8)	18.6 (5.2)	25.4 (1.0)	51.7 (9.6)	-21.6 (4.7)	15.8 (6.8)	24.6 (0.8)	53.3 (9.3)	-21.5 (4.2)	
15	25.2 (1.5)	59.2 (4.6)	-18.1 (5.7)	18.4 (8.5)	24.2 (1.9)	61.1 (5.4)	-17.3 (4.9)	19.6 (9.3)	24.7 (2.2)	56.9 (7.8)	-17.9 (4.4)	17.9 (11.5)	24.2 (1.9)	58.3 (5.1)	-18.8 (4.3)	
16	24.5 (0.9)	60.1 (6.5)	-22.0 (6.2)	15.5 (4.8)	24.1 (1.4)	61.4 (5.4)	-12.8 (4.1)	12.1 (3.9)	24.3 (1.2)	53.8 (7.6)	-20.4 (6.1)	12.2 (5.3)	23.8 (1.0)	57.9 (7.8)	-18.7 (4.6)	
17	22.8 (1.5)	46.5 (7.4)	-15.5 (8.8)	10.7 (5.1)	21.7 (1.7)	48.2 (9.5)	-18.5 (8.6)	11.7 (6.1)	21.7 (1.8)	41.8 (10.4)	-15.2 (8.1)	8.7 (6.9)	22.2 (1.4)	43.4 (9.5)	-15.6 (8.0)	
18	22.3 (1.7)		-12.9 (8.0)		22.0 (2.4)	46.4 (9.7)	-18.5 (7.5)	14.5 (7.7)	22.5 (2.5)	40.3 (12.8)	-16.0 (7.0)	11.8 (9.2)	22.4 (1.7)	41.1 (9.9)	-16.1 (7.1)	
19	24.2 (1.5)		-14.4 (6.4)		23.3 (2.0)	45.7 (5.7)	-17.9 (7.5)	17.1 (8.3)	24.1 (2.2)	37.7 (6.0)	-17.7 (4.8)	20.1 (14.9)	24.1 (1.9)	39.8 (6.9)	-16.7 (4.8)	
20	25.8 (2.5)		-16.4 (5.0)		25.4 (2.7)	43.1 (7.7)	-17.4 (6.2)		25.8 (2.7)	36.5 (8.0)	-18.2 (4.4)	26.8 (16.1)	26.0 (2.3)	37.5 (7.8)	-16.7 (5.1)	
21	27.0 (2.4)	39.8 (4.7)	-15.5 (4.4)	33.6 (15.3)	26.0 (2.6)	48.3 (4.2)	-16.0 (6.1)		26.6 (2.1)	42.3 (4.4)	-17.1 (4.4)	30.8 (15.9)	26.9 (2.6)	43.0 (4.9)	-17.6 (4.1)	34.5 (12.4)
22	26.9 (1.8)	45.1 (7.8)	-20.5 (9.2)	34.1 (11.7)	27.0 (2.1)	50.1 (7.7)	-18.6 (5.9)		27.5 (2.3)	46.1 (8.8)	-19.1 (5.0)		27.4 (1.9)	48.2 (7.5)	-19.5 (5.1)	32.8 (11.1)
23	26.4 (3.1)	44.1 (7.2)	-21.7 (9.1)	33.2 (11.1)	26.2 (2.8)	50.9 (6.5)	-18.8 (6.0)		26.9 (2.8)	46.3 (7.1)	-19.3 (5.2)		26.9 (2.7)	47.6 (7.2)	-20.1 (5.6)	31.3 (12.2)
24	27.2 (2.3)	49.9 (9.1)	-17.0 (7.1)	34.1 (13.7)	26.8 (2.9)	54.5 (8.4)	-17.8 (6.9)		27.4 (2.6)	50.7 (9.0)	-18.0 (5.7)	33.0 (14.1)	27.2 (2.5)	52.5 (8.5)	-18.2 (6.3)	34.5 (12.8)
25	24.7 (0.5)	44.4 (7.0)	-27.5 (6.1)	19.8 (4.5)	24.2 (0.8)	49.5 (6.4)	-19.2 (4.5)	21.0 (4.5)	24.8 (0.8)	45.1 (6.9)	-18.6 (4.2)	20.8 (4.3)	24.8 (0.5)	46.6 (7.5)	-28.0 (4.4)	21.0 (4.3)
26																
27	27.3 (1.7)	59.4 (5.9)	-15.3 (3.3)	35.8 (10.0)	26.9 (1.3)	64.5 (4.5)	-15.7 (5.2)	35.8 (10.8)	27.4 (1.3)	60.5 (5.3)	-17.1 (3.6)	33.6 (10.3)	27.5 (1.5)	61.8 (6.0)	-16.1 (2.8)	35.2 (9.2)
28	24.8 (0.6)	57.2 (4.2)	-25.3 (4.2)	17.3 (4.1)	23.6 (0.9)	62.1 (3.6)	-25.9 (4.5)	18.0 (4.1)	24.6 (0.7)	59.2 (3.8)	-24.6 (3.4)	16.9 (4.2)	24.3 (0.9)	58.9 (4.9)	-24.2 (3.2)	19.9 (3.9)
29	25.4 (1.7)	48.2 (8.3)	-17.4 (4.9)	25.7 (15.4)	23.8 (2.0)	55.4 (7.9)	-18.1 (6.3)	25.5 (15.4)	24.9 (1.6)	50.2 (8.7)	-17.4 (5.4)	24.4 (15.5)	24.9 (2.2)	50.5 (8.5)	-18.2 (4.4)	27.1 (13.9)
30	25.3 (1.6)	44.4 (12.9)	-18.1 (5.8)	26.6 (15.2)	24.1 (1.8)	51.3 (11.6)	-17.8 (7.1)	26.5 (15.7)	24.7 (2.1)	45.9 (12.9)	-19.2 (5.4)	25.0 (15.2)	25.0 (1.9)	46.7 (12.8)	-19.3 (5.2)	27.8 (13.6)
31	24.8 (0.9)	41.2 (8.9)	-20.2 (5.6)	23.3 (12.1)	23.6 (1.4)	47.7 (8.6)	-20.9 (5.8)	25.1 (13.5)	24.6 (1.4)	42.0 (9.8)	-20.4 (4.8)	23.1 (13.2)	24.4 (1.3)	43.8 (9.1)	-20.6 (4.7)	25.9 (11.4)
Avg	24.7	52.2	-16.0	18.3	23.9	53.4	-16.0	15.9	24.7	48.7	-17.2	18.1	24.5	49.3	-17.2	29.0
n	30	27	30	27	30	30	30	25	30	30	30	26	30	30	30	10
SD	1.3	6.7	5	8.9	1.4	6.4	4.6	6.5	1.4	6.9	3.3	7.02	1.5	7	4	5.28
Min	22.3	39.8	-27.5	8.8	21.7	43.1	-25.9	8.2	21.7	36.5	-24.6	8.7	22.2	37.5	-28.0	19.9
Max	27.3	62.4	-8.5	35.8	27	64.5	-7.7	35.8	27.5	60.5	-10.8	33.6	27.5	61.8	-9.8	35.2

ED_004549_00015928-00126

Table E3. Daily means (SD) of environmental parameters at Site IN3B for June, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	26.0 (2.6)	50.0 (9.3)	-18.8 (9.4)	29.7 (22.7)	24.7 (2.6)	57.0 (8.3)	-18.0 (9.9)	30.4 (19.2)	26.3 (2.4)	50.5 (8.5)	-19.9 (6.0)	26.9 (13.4)	26.3 (2.6)	51.8 (8.7)	-19.4 (5.6)	28.9 (11.6)
2	24.8 (1.7)	61.8 (4.7)	-22.8 (9.2)	23.6 (10.7)	24.6 (1.5)	65.5 (3.3)	-17.0 (6.1)	25.3 (12.6)	26.0 (0.8)	61.6 (2.8)	-21.0 (5.1)	26.1 (11.5)	25.6 (0.8)	63.6 (2.4)	-20.7 (4.7)	26.1 (10.2)
3	22.3 (0.6)	57.4 (2.7)	-3.5 (2.0)	9.3 (2.3)	22.0 (0.5)	63.1 (2.5)	-20.0 (4.2)	15.7 (3.6)	22.7 (1.9)	61.3 (2.1)	-17.9 (4.0)	12.7 (4.1)	23.6 (0.7)	61.3 (3.2)	-20.1 (3.9)	15.6 (4.1)
4	22.7 (1.6)	48.7 (5.6)	-9.7 (10.4)	15.4 (10.9)	22.8 (1.9)	55.5 (6.2)	-15.7 (7.3)	17.6 (8.8)	22.3 (2.4)	51.7 (9.0)	-16.5 (4.9)	18.4 (9.6)	24.1 (0.9)	52.3 (6.3)	-16.4 (4.7)	17.1 (7.7)
5	24.5 (1.7)	40.5 (9.6)	-14.6 (9.9)	21.8 (12.7)	24.4 (1.8)	50.0 (8.8)	-16.8 (6.9)	19.8 (12.4)	23.9 (2.0)	43.4 (9.2)	-17.8 (5.5)	24.4 (13.5)	24.7 (1.5)	44.8 (10.1)	-17.3 (5.9)	25.3 (14.8)
6	26.4 (1.9)	41.0 (5.2)	-17.6 (8.9)	26.9 (12.6)	26.0 (1.6)	50.1 (3.5)	-17.5 (5.3)	27.9 (15.8)	25.9 (1.9)	43.7 (4.1)	-18.6 (4.1)	31.2 (12.8)	26.3 (1.6)	45.1 (4.1)	-17.8 (3.4)	31.0 (14.0)
7	26.8 (1.6)	48.6 (4.8)	-19.8 (7.2)	29.3 (11.0)	26.7 (1.3)	55.9 (2.9)	-18.5 (5.8)	30.6 (12.2)	26.6 (1.5)	50.7 (3.4)	-19.2 (4.5)	32.0 (12.0)	26.8 (1.3)	52.0 (4.0)	-18.2 (4.1)	32.9 (12.1)
8	27.2 (1.3)	54.8 (4.9)	-15.9 (9.6)	24.1 (14.7)	27.7 (1.1)	63.2 (7.3)	-12.1 (9.0)	33.5 (11.4)	27.4 (1.0)	56.7 (5.1)	-16.0 (3.3)	37.5 (9.5)	27.5 (1.1)	58.3 (5.2)	-14.7 (2.3)	37.9 (9.1)
9	26.3 (1.0)	55.0 (5.5)	-10.2 (8.6)	23.0 (18.4)	26.9 (1.1)	62.4 (11.5)	-11.4 (9.9)		26.9 (0.9)	57.8 (7.3)	-17.1 (3.4)	32.9 (10.8)	25.8 (0.9)	60.6 (7.5)	-16.7 (3.4)	32.7 (11.2)
10	25.0 (1.4)	61.1 (3.5)	-14.7 (4.8)	27.4 (13.0)	25.9 (1.7)	61.6 (2.8)	-19.0 (5.9)	27.5 (13.2)	26.5 (1.3)	58.8 (3.7)	-19.2 (4.8)	30.1 (12.2)	24.5 (1.7)	63.8 (3.5)	-19.2 (5.3)	29.1 (12.9)
11	25.6 (0.4)	64.7 (2.4)	-14.5 (3.5)	24.0 (7.4)	26.3 (0.7)	65.2 (2.3)	-17.7 (4.5)	21.5 (6.0)	26.2 (0.4)	63.7 (2.3)	-19.0 (3.2)	27.4 (8.6)	25.6 (0.4)	66.4 (2.1)	-18.2 (3.2)	25.9 (8.9)
12	25.4 (0.7)	55.7 (6.4)	-14.8 (4.1)	25.5 (10.9)	25.9 (1.0)	56.5 (6.2)	-20.2 (5.6)	26.4 (12.6)	26.2 (0.9)	52.9 (6.7)	-18.8 (4.7)	29.4 (12.4)	26.0 (0.8)	55.0 (5.8)	-17.0 (5.3)	26.1 (14.1)
13	25.4 (0.8)	56.1 (6.3)	-14.8 (4.6)	29.8 (13.1)	26.2 (1.0)	56.0 (4.9)	-19.9 (6.0)	28.0 (13.8)	26.3 (1.3)	51.6 (6.6)	-20.1 (5.3)	31.5 (12.8)	26.0 (1.0)	55.6 (5.0)	-19.4 (5.3)	31.6 (13.0)
14	26.3 (1.4)	55.2 (5.2)	-14.2 (4.6)	31.5 (12.8)	27.2 (1.7)	55.5 (4.4)	-19.0 (6.1)	31.1 (13.9)	27.2 (1.8)	52.0 (4.9)	-18.9 (5.3)	32.9 (12.6)	26.7 (1.6)	55.6 (4.0)	-17.9 (5.9)	33.5 (13.0)
15	26.3 (0.9)	51.0 (7.7)	-13.5 (5.4)	32.5 (13.9)	27.0 (1.5)	51.5 (7.1)	-18.6 (6.8)	32.0 (13.9)	26.9 (1.5)	48.7 (7.3)	-17.7 (5.9)	33.7 (13.0)	26.6 (1.1)	51.9 (6.4)	-17.2 (6.2)	34.3 (13.8)
16																
17																
18																
19																
20																
21																
22	28.3 (1.6)	67.1 (4.7)	-11.0 (5.6)		29.2 (1.8)	65.6 (5.4)	-14.7 (4.0)		29.0 (2.4)	62.0 (6.4)	-14.6 (2.0)		28.4 (1.8)	68.8 (6.6)	-13.7 (2.0)	
23																
24	29.5 (2.9)	59.7 (9.5)	-10.7 (4.2)	38.5 (7.3)	29.6 (2.5)	62.4 (7.3)	-14.4 (4.4)		29.9 (2.6)	57.1 (8.4)	-17.7 (4.1)	40.0 (8.0)	29.9 (2.8)	60.7 (10.0)	-20.7 (7.0)	41.3 (5.2)
25	29.6 (2.9)	61.7 (8.0)	-9.8 (7.5)	43.5 (5.1)	30.2 (2.9)	62.3 (6.9)	-12.3 (6.0)	42.6 (8.4)	30.6 (3.1)	58.3 (8.2)	-15.6 (6.2)		30.8 (3.1)	60.0 (9.0)	-19.6 (9.0)	
26	29.2 (2.2)	57.1 (13.0)	-10.7 (3.1)	40.6 (7.6)	29.9 (2.1)	57.5 (11.7)	-14.0 (3.3)	40.4 (9.8)	30.3 (2.3)	54.3 (12.6)	-15.1 (2.3)		29.8 (2.2)	57.3 (12.2)	-15.9 (7.0)	
27	27.8 (2.1)	49.8 (8.7)	-8.8 (4.7)	35.0 (12.9)	28.7 (2.3)	51.3 (8.8)	-15.0 (3.8)	36.7 (12.8)	28.9 (2.6)	48.3 (9.2)	-14.7 (1.1)		28.1 (2.6)	51.1 (9.5)	-10.5 (4.1)	
28	27.8 (1.3)	46.7 (13.6)	-12.0 (4.1)	40.6 (8.0)	28.1 (1.0)	48.5 (12.0)	-12.9 (3.3)	39.4 (11.4)	28.4 (1.1)	46.1 (12.7)	-11.6 (2.7)		28.2 (1.4)	47.9 (14.0)	-10.6 (2.5)	
29	26.7 (1.4)	44.4 (7.4)	-6.9 (5.6)	30.7 (13.4)	25.9 (1.3)	48.0 (6.8)	-14.9 (5.6)	30.1 (13.4)	26.7 (1.4)	44.9 (6.9)	-11.8 (4.4)		26.5 (1.6)	46.1 (7.5)	-7.0 (3.1)	
30	24.9 (0.6)	50.9 (3.9)	-2.6 (2.4)	17.8 (6.4)	24.1 (0.8)	54.6 (5.0)	-17.6 (3.0)	18.6 (6.0)	25.6 (0.7)	49.9 (4.3)	-13.5 (2.0)		25.0 (0.6)	51.7 (4.2)	-5.5 (3.3)	25.2 (10.6)
Avg	26.3	53.9	-12.7	28.2	26.5	57.4	-16.4	28.8	26.8	53.3	-17.1	29.2	26.6	55.7	-16.2	29.1
n	23	23	23	22	23	23	23	20	23	23	23	16	23	23	23	17
SD	1.9	7	4.7	8.3	2.1	5.6	2.6	7.4	2.1	6	2.5	6.52	1.8	6.6	4.1	6.38
Min	22.3	40.5	-22.8	9.3	22.0	48.0	-20.2	15.7	22.3	43.4	-21.0	12.7	23.6	44.8	-20.7	15.6
Max	29.6	67.1	-2.6	43.5	30.2	65.6	-11.4	42.6	30.6	63.7	-11.6	40	30.8	68.8	-5.5	41.3

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Table E3. Daily means (SD) of environmental parameters at Site IN3B for July, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	24.4 (0.4)	53.8 (3.1)	-1.5 (1.5)	13.8 (4.5)	23.9 (0.7)	58.2 (4.0)	-17.8 (3.4)	15.8 (4.5)	25.0 (0.3)	53.4 (3.2)	-14.2 (2.1)		24.6 (0.4)	54.0 (4.0)	-3.2 (1.4)	17.5 (5.0)
2	25.2 (1.2)	53.4 (5.0)	-12.4 (10.2)	18.3 (6.6)	25.0 (1.1)	55.0 (5.0)	-21.3 (4.8)	18.7 (6.1)	25.6 (1.0)	52.3 (4.2)	-20.2 (5.2)	24.8 (5.8)	25.2 (0.9)	53.0 (4.5)	-17.3 (12.6)	27.0 (12.2)
3	26.5 (0.8)	53.2 (7.7)	-18.7 (5.6)	30.2 (13.1)	26.1 (0.8)	54.8 (4.8)	-18.2 (7.9)	33.6 (14.3)	27.0 (0.9)	52.2 (5.8)	-19.0 (7.4)		26.7 (1.4)	53.1 (8.3)	-20.7 (9.8)	
4	25.1 (0.5)	62.3 (3.2)	-19.3 (2.9)	19.0 (4.1)	24.9 (0.6)	61.7 (3.3)	-18.6 (3.7)	21.6 (4.2)	24.9 (1.0)	59.3 (3.5)	-23.0 (6.1)		25.3 (0.6)	61.6 (3.4)	-8.2 (4.4)	
5	26.2 (1.1)	59.0 (7.7)	-16.4 (4.9)	29.1 (12.8)	26.4 (1.8)	58.1 (7.0)	-14.3 (3.0)	32.8 (13.0)	25.8 (2.4)	53.8 (7.5)	-20.1 (6.8)		26.1 (1.2)	58.1 (7.2)	-12.7 (4.6)	
6	25.9 (1.8)	56.2 (11.3)	-15.9 (3.5)	31.0 (12.8)	27.1 (1.7)	52.6 (10.3)	-15.6 (5.0)	36.2 (12.6)	26.8 (2.0)		-14.6 (3.0)		26.9 (2.2)	51.4 (12.3)	-11.1 (5.2)	
7	24.7 (1.3)	58.2 (13.4)	-16.0 (4.7)		26.9 (1.7)	50.7 (10.0)	-14.7 (3.6)	36.2 (12.3)	27.5 (1.7)	48.1 (9.2)	-17.0 (4.2)	35.8 (11.6)	27.0 (1.7)	48.9 (10.8)	-16.8 (4.4)	36.5 (11.7)
8	26.0 (0.3)	49.7 (5.6)	-18.5 (5.3)	22.0 (6.9)	25.4 (0.6)	51.0 (5.0)	-18.8 (4.6)	31.2 (10.9)	26.3 (0.5)	48.3 (4.6)	-18.5 (3.6)	31.0 (10.3)	25.0 (0.6)	50.6 (5.0)	-17.2 (4.2)	30.3 (10.7)
9	26.1 (0.6)	60.0 (3.6)	-17.8 (6.3)	22.9 (8.5)	25.9 (1.2)	60.7 (3.3)	-17.2 (5.1)	29.4 (12.2)	26.6 (1.3)	56.3 (3.4)	-19.1 (3.5)	29.7 (10.7)	25.7 (1.1)	60.2 (3.0)	-17.6 (3.3)	30.0 (11.0)
10	28.2 (2.1)	60.7 (4.6)	-13.4 (6.5)	29.9 (9.0)	27.8 (2.2)	64.0 (3.3)	-13.0 (2.3)	37.5 (13.1)	28.5 (2.0)	58.7 (2.8)	-17.3 (4.2)	37.6 (11.5)	28.4 (2.2)	61.7 (4.8)	-17.0 (4.0)	37.6 (11.9)
11	27.7 (0.8)	67.6 (2.3)	-9.6 (2.3)	35.2 (3.6)	27.6 (0.8)	71.3 (2.1)	-10.9 (2.3)	46.7 (5.5)	27.3 (0.9)	59.0 (3.6)	-14.5 (2.3)	44.9 (5.9)	28.3 (0.9)	69.5 (3.8)	-15.6 (1.0)	44.5 (4.1)
12	26.8 (1.2)	51.2 (12.5)	-16.2 (6.6)	26.3 (9.4)	26.3 (1.4)	53.4 (10.7)	-15.4 (4.3)	34.1 (13.1)	26.1 (2.1)	43.1 (8.6)	-20.1 (3.7)	33.8 (11.6)	27.6 (1.5)	50.9 (12.2)	-18.9 (4.0)	34.5 (11.8)
13	26.9 (1.5)	48.7 (9.4)	-15.5 (6.5)	24.3 (11.5)	26.1 (2.0)	50.9 (7.7)	-19.0 (7.1)	33.0 (14.1)	26.8 (2.3)	42.8 (5.1)	-21.3 (4.9)	32.1 (12.8)	27.3 (1.9)	48.3 (9.5)	-20.8 (4.2)	32.3 (13.0)
14	26.1 (1.4)	48.4 (7.1)	-12.9 (5.2)	24.2 (12.3)	26.0 (2.3)	50.1 (7.6)	-16.3 (5.6)	32.7 (15.0)	26.6 (2.4)		-19.6 (3.5)		26.5 (2.0)	48.7 (7.8)	-18.1 (3.2)	31.1 (14.7)
15	27.4 (1.6)	60.1 (5.3)	-13.5 (6.2)	28.8 (9.2)	27.2 (1.8)	63.9 (6.2)	-14.3 (5.8)	38.7 (12.2)	27.4 (1.7)	63.2 (6.2)	-17.4 (4.6)	38.5 (10.6)	27.4 (1.8)	60.9 (6.1)	-17.3 (2.3)	37.5 (9.9)
16	27.3 (1.4)	53.7 (10.1)	-13.9 (5.4)	29.0 (7.8)	26.9 (1.5)	58.0 (8.7)	-13.1 (4.6)	41.3 (10.3)	27.2 (1.5)	57.8 (9.2)	-16.7 (4.9)	37.4 (11.5)	27.5 (1.8)	54.2 (10.4)	-18.0 (3.7)	39.9 (8.7)
17	25.8 (0.7)	52.5 (8.5)	-19.2 (4.5)	20.4 (7.2)	25.0 (0.5)	56.3 (7.1)	-18.4 (5.3)	28.5 (9.8)	26.0 (0.6)	55.4 (7.5)	-20.4 (4.1)	26.0 (7.7)	24.9 (1.5)	52.4 (8.6)	-19.8 (3.7)	30.1 (10.4)
18	24.8 (0.4)	54.3 (4.0)	-18.7 (3.6)	15.1 (6.4)	24.5 (0.7)	57.2 (3.2)	-22.3 (3.4)	23.1 (5.6)	25.4 (0.6)	56.7 (3.7)	-22.2 (2.5)	22.4 (5.1)	23.1 (1.7)	54.9 (4.4)	-22.1 (1.7)	23.7 (7.2)
19	24.9 (0.4)	57.7 (3.6)	-18.0 (3.9)	16.0 (7.0)	24.7 (0.6)	60.7 (3.1)	-20.0 (5.1)	23.9 (7.7)	25.8 (0.5)	59.8 (3.5)	-22.3 (2.5)	23.8 (6.8)	24.4 (1.1)	59.4 (5.2)	-21.8 (2.0)	24.9 (8.5)
20	25.8 (1.5)	52.7 (7.6)	-14.3 (5.5)	21.8 (11.7)	26.0 (1.8)	55.2 (7.6)	-13.0 (5.6)	30.3 (15.6)	26.4 (1.7)	55.0 (8.5)	-19.2 (2.9)	30.8 (12.1)	25.9 (2.3)	53.4 (9.9)	-19.2 (2.7)	29.5 (14.4)
21	26.8 (1.4)	54.4 (7.1)	-14.6 (5.8)	24.1 (11.8)	26.8 (1.7)	56.7 (7.3)	-16.9 (5.5)	35.0 (12.9)	27.5 (1.5)	55.9 (8.0)	-18.9 (4.3)	33.3 (12.8)	26.7 (2.3)	55.3 (9.2)	-19.1 (2.9)	33.9 (11.8)
22	25.8 (0.4)	64.2 (1.6)	-22.8 (2.6)	17.5 (3.2)	25.4 (0.5)	65.7 (2.1)	-16.7 (3.2)	23.5 (4.3)	26.5 (0.9)	63.8 (1.7)	-20.3 (4.7)		25.4 (0.5)	64.3 (1.7)	-22.2 (2.7)	28.3 (5.5)
23	26.6 (1.2)	60.6 (6.7)	-18.6 (6.5)	23.1 (8.6)	25.8 (1.1)	63.1 (5.1)	-15.6 (4.4)	31.4 (12.8)	26.4 (1.1)	61.2 (5.5)	-18.8 (5.0)	29.5 (11.0)	26.5 (1.5)	60.0 (8.1)	-19.3 (9.3)	31.8 (9.1)
24	27.5 (2.3)	53.7 (7.9)	-11.4 (3.9)	25.7 (11.2)	26.5 (2.4)	57.9 (7.0)	-14.4 (5.1)	34.6 (12.1)	26.3 (2.4)	56.6 (6.7)	-14.9 (1.9)	32.4 (11.3)	27.3 (1.9)	53.5 (7.0)	-7.6 (4.0)	31.4 (14.4)
25																
26																
27																
28																
29																
30																
31																
Avg	26.2	56.1	-15.4	23.8	26.0	57.8	-16.5	31.2	26.5	55.1	-18.7	32.0	26.2	55.8	-16.7	31.6
n	24	24	24	23	24	24	24	24	24	22	24	17	24	24	24	20
SD	1	4.9	4.1	5.5	1	5.2	2.8	7.1	0.8	5.5	2.4	5.69	1.3	5.3	4.8	5.9
Min	24.4	48.4	-22.8	13.8	23.9	50.1	-22.3	15.8	24.9	42.8	-23.0	22.4	23.1	48.3	-22.2	17.5
Max	28.2	67.6	-1.5	35.2	27.8	71.3	-10.9	46.7	28.5	63.8	-14.2	44.9	28.4	69.5	-3.2	44.5

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Table E4. Particulate matter concentrations.

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for July, 2007.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1															
2															
3															
4						24.8 (9.6)									
5						15.3 (7.8)									
6						16.1 (7.4)									
7						16.9 (8.9)									
8						19.9 (8.7)									
9						23.1 (8.7)									
10						15.7 (8.1)									
11						5.7 (5.4)									
12															
13	16.5 (6.7)														
14	23.0 (8.0)	331.0 (240.0)	204.0 (120.0)	206.0 (135.0)	244.0 (178.0)										
15	14.9 (6.9)	257.0 (165.0)	166.0 (80.2)	189.0 (100.0)	195.0 (104.0)										
16	19.8 (13.1)	327.0 (262.0)	202.0 (113.0)	225.0 (158.0)	232.0 (192.0)										
17	15.1 (9.9)	140.0 (105.0)	118.0 (59.1)	122.0 (77.2)	125.0 (75.5)										
18	18.6 (11.6)	108.0 (55.4)	84.8 (33.7)	91.0 (41.5)	88.4 (39.9)										
19	12.5 (11.0)	105.0 (154.0)	83.5 (38.8)	79.6 (65.1)	88.3 (69.8)										
20	11.0 (6.9)	337.0 (235.0)	175.0 (94.5)	241.0 (172.0)	299.0 (190.0)										
21	13.5 (9.6)	258.0 (208.0)	140.0 (75.9)	192.0 (133.0)	225.0 (171.0)										
22	13.3 (7.3)	259.0 (199.0)	153.0 (84.1)	214.0 (166.0)	240.0 (161.0)										
23	16.9 (9.3)	245.0 (208.0)	140.0 (73.6)	186.0 (136.0)	244.0 (164.0)										
24	31.7 (11.3)	232.0 (175.0)	130.0 (65.5)	191.0 (133.0)	244.0 (154.0)										
25	33.7 (17.0)	212.0 (174.0)	126.0 (72.0)	169.0 (113.0)	228.0 (175.0)										
26	50.5 (20.8)	157.0 (124.0)	105.0 (39.2)	149.0 (69.7)	174.0 (112.0)										
27	36.1 (25.6)	75.6 (59.8)	58.7 (24.7)	77.7 (47.8)	70.5 (47.3)										
28	29.5 (17.9)	85.9 (72.5)	73.6 (37.1)	89.1 (68.3)	86.6 (62.2)										
29	22.5 (9.1)	104.0 (120.0)	85.4 (49.6)	115.0 (97.3)	102.0 (106.0)										
30	22.2 (7.2)	131.0 (139.0)	113.0 (69.5)	163.0 (90.4)	135.0 (130.0)										
31	26.4 (7.7)	142.0 (102.0)	124.0 (62.1)	146.0 (75.6)	149.0 (106.0)										
Avg	22.5	195.0	127.0	158.0	176.0	17.2									
n	19	18	18	18	18	8	0	0	0	0	0	0	0	0	0
SD	9.9	86.1	40.8	50.5	69.4	5.5									
Min	11.0	75.6	58.7	77.7	70.5	5.7									
Max	50.5	337	204	241	299	24.8									

ED_004549_00015928-00129

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for August, 2007.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1	32.3 (9.7)	142.0 (60.7)	157.0 (56.8)	120.0 (48.3)	125.0 (56.5)										
2	44.8 (16.6)	149.0 (56.1)	148.0 (72.0)	105.0 (51.9)	133.0 (57.5)										
3															
4	20.9 (7.9)	211.0 (97.9)	167.0 (98.1)	133.0 (87.2)	178.0 (88.8)										
5	34.1 (8.6)	113.0 (38.2)	93.5 (35.5)	70.2 (28.4)	94.1 (25.9)										
6	30.8 (11.9)	98.6 (41.2)	68.9 (41.6)	54.0 (32.1)	84.0 (34.5)										
7	28.8 (6.3)														
8	22.1 (8.0)														
9	21.9 (12.4)			47.8 (21.4)											
10	15.7 (6.4)	89.4 (40.4)	68.0 (27.9)	45.7 (19.2)	89.4 (40.0)										
11	23.0 (9.3)	157.0 (90.3)	109.0 (55.2)	79.5 (47.1)	174.0 (79.2)										
12	32.6 (9.5)	144.0 (73.7)	106.0 (46.8)	70.1 (30.6)											
13	15.7 (8.3)	223.0 (109.0)	112.0 (56.1)	82.9 (44.0)	148.0 (123.0)										
14	21.9 (12.8)	251.0 (181.0)	140.0 (86.6)	126.0 (80.7)	190.0 (141.0)										
15	28.0 (12.4)	152.0 (89.2)	89.9 (36.2)	81.8 (35.6)	111.0 (66.0)										
16	28.8 (15.9)	102.0 (90.1)	62.5 (40.9)	58.1 (33.1)	92.5 (69.1)										
17															
18															
19	20.8 (14.8)	95.8 (64.7)	74.5 (60.7)	61.7 (52.8)	76.4 (72.7)										
20	19.7 (14.9)	59.3 (41.2)	36.7 (28.0)	38.1 (25.7)	40.5 (32.9)										
21	26.5 (11.0)	46.4 (31.1)	32.2 (21.3)	30.6 (20.6)	30.1 (27.2)										
22	25.2 (7.1)	58.6 (72.6)		35.5 (22.4)											
23	22.2 (12.9)														
24	18.7 (21.9)	80.9 (55.0)		35.3 (29.8)	54.4 (41.9)										
25	12.8 (9.5)	64.9 (44.9)		21.1 (20.7)	40.0 (36.8)										
26	11.6 (8.3)	124.0 (81.9)		28.9 (23.8)	97.7 (72.3)										
27	20.2 (9.6)														
28	32.3 (9.4)														
29	48.6 (43.0)														
30															
31															
Avg	25.4	124.0	97.7	66.3	103.0										
n	26	19	15	20	17	0	0	0	0	0	0	0	0	0	0
SD	8.6	56.1	40.5	32.8	47.7										
Min	11.6	46.4	32.2	21.1	30.1										
Max	48.6	251	167	133	190										

ED_004549_00015928-00130

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for September, 2007.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1	11.6 (7.1)														
2	18.8 (9.0)														
3	26.9 (17.6)														
4	36.1 (16.0)														
5	45.1 (9.7)														
6	47.8 (13.3)		108.0 (59.2)												
7	35.4 (11.1)		93.5 (53.4)												
8															
9															
10															
11	15.7 (10.3)	131.0 (98.1)	115.0 (79.7)	-19.1 (33.0)											
12	13.5 (10.5)	159.0 (117.0)	206.0 (106.0)	4.1 (23.2)											
13	20.5 (9.9)		180.0 (124.0)	13.5 (59.7)											
14	27.4 (14.9)		180.0 (107.0)	19.5 (27.6)											
15	8.6 (7.5)		279.0 (137.0)	6.5 (20.4)											
16	13.2 (8.3)		247.0 (125.0)	10.0 (26.4)											
17	29.8 (12.5)		206.0 (99.9)	19.8 (15.0)											
18	40.3 (9.6)		187.0 (118.0)	38.0 (15.0)											
19			163.0 (134.0)	38.3 (21.3)											
20		245.0 (140.0)	160.0 (102.0)	22.0 (20.4)											
21	55.8 (17.3)		95.5 (105.0)	119.0 (93.7)											
22	30.0 (19.6)		85.3 (94.3)	137.0 (76.4)	31.2 (52.0)										
23	24.8 (11.2)		103.0 (72.4)	188.0 (126.0)	19.6 (26.1)										
24	41.1 (13.7)		89.0 (69.7)	105.0 (73.1)	34.8 (31.3)										
25															
26	16.2 (11.5)		93.5 (91.5)	124.0 (99.9)	12.3 (12.8)										
27	20.7 (9.9)	272.0 (95.4)	117.0 (94.2)	209.0 (107.0)	13.1 (10.7)										
28															
29	30.4 (17.7)	188.0 (116.0)	193.0 (140.0)	225.0 (135.0)	69.4 (45.7)										
30	35.4 (11.8)	164.0 (91.9)	162.0 (110.0)	193.0 (93.6)	62.1 (42.5)										
Avg	28.0	193.0	153.0	80.8	34.6										
n	23	6	20	18	7	0	0	0	0	0	0	0	0	0	0
SD	12.4	49.5	55.3	79.6	21.3										
Min	8.6	131.0	85.3	-19.1	12.3										
Max	55.8	272	279	225	69.4										

ED_004549_00015928-00131

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for October, 2007.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1	31.1 (15.4)	171.0 (86.5)	165.0 (131.0)	227.0 (128.0)	61.9 (32.2)										
2	37.4 (25.8)														
3	23.2 (9.9)											830.0 (320.0)	871.0 (268.0)	477.0 (197.0)	205.0 (113.0)
4	34.7 (14.8)											695.0 (450.0)	750.0 (526.0)	327.0 (169.0)	192.0 (118.0)
5	26.6 (9.1)											429.0 (348.0)	374.0 (244.0)	266.0 (177.0)	107.0 (86.8)
6	24.4 (9.4)											291.0 (201.0)	273.0 (171.0)	202.0 (122.0)	99.2 (64.2)
7															
8															
9	16.7 (9.1)											759.0 (424.0)	640.0 (309.0)	483.0 (231.0)	279.0 (181.0)
10	13.0 (8.5)														
11	9.5 (10.5)	200.0 (175.0)	125.0 (79.4)	160.0 (88.2)	72.1 (61.5)										
12	14.9 (10.6)	172.0 (184.0)	143.0 (92.4)	155.0 (134.0)	80.0 (62.4)										
13	23.5 (10.7)	165.0 (194.0)	164.0 (114.0)	183.0 (125.0)	92.7 (92.8)										
14	32.2 (7.5)	94.7 (139.0)	114.0 (65.9)	129.0 (88.6)	65.2 (45.2)										
15	33.6 (12.7)	90.5 (109.0)	95.0 (72.7)	88.1 (82.0)	62.2 (64.6)										
16	25.2 (10.3)	79.0 (132.0)	98.9 (81.6)	104.0 (52.9)	104.0 (342.0)										
17	26.7 (11.5)	90.8 (134.0)	77.0 (81.9)	85.7 (137.0)	58.3 (69.8)										
18	23.3 (13.2)														
19	9.6 (5.0)		70.5 (100.0)	120.0 (106.0)	49.6 (59.5)										
20	18.4 (17.0)	171.0 (74.0)	86.3 (87.5)	112.0 (109.0)	54.6 (84.6)										
21	19.1 (11.2)	131.0 (51.0)	70.7 (68.2)	86.0 (81.0)	48.3 (57.2)										
22	24.1 (13.2)	191.0 (120.0)	138.0 (118.0)	167.0 (136.0)	111.0 (88.3)										
23	6.3 (6.2)		133.0 (108.0)	166.0 (129.0)	101.0 (71.8)										
24		169.0 (77.0)	150.0 (97.6)	179.0 (140.0)	112.0 (73.6)										
25		200.0 (75.3)	150.0 (92.8)	197.0 (145.0)	115.0 (71.9)						11.0 (8.1)				
26		118.0 (70.6)	115.0 (120.0)	139.0 (169.0)	96.0 (83.3)						21.1 (11.5)				
27		148.0 (83.0)	120.0 (106.0)	166.0 (187.0)	111.0 (87.5)						21.7 (10.7)				
28		204.0 (94.2)	190.0 (116.0)	216.0 (175.0)	135.0 (92.0)						25.9 (20.8)				
29		185.0 (85.7)	191.0 (152.0)	204.0 (137.0)	109.0 (95.7)						25.6 (12.5)				
30		182.0 (99.1)	174.0 (121.0)	196.0 (172.0)	65.3 (93.4)						29.6 (11.1)				
31		170.0 (93.3)	164.0 (150.0)	181.0 (237.0)	69.8 (100.0)						39.6 (12.1)				
Avg	22.6	154.0	130.0	155.0	84.5						24.9	601.0	582.0	351.0	177.0
n	21	19	21	21	21	0	0	0	0	0	7	5	5	5	5
SD	8.5	40	36.8	42.4	25.2						8.1	206	226	112	67.1
Min	6.3	79.0	70.5	85.7	48.3						11.0	291.0	273.0	202.0	99.2
Max	37.4	204	191	227	135						39.6	830	871	483	279

ED_004549_00015928-00132

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for November, 2007.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1		242.0 (111.0)	217.0 (133.0)	255.0 (241.0)	93.6 (96.2)										
2	23.8 (8.3)	223.0 (104.0)	214.0 (139.0)	242.0 (179.0)	77.3 (87.9)										
3	34.0 (14.4)	233.0 (120.0)	203.0 (151.0)	234.0 (208.0)	85.8 (93.4)										
4	29.7 (19.2)	233.0 (137.0)	205.0 (179.0)	223.0 (309.0)	95.1 (118.0)										
5	28.1 (13.9)	227.0 (138.0)	191.0 (180.0)	211.0 (273.0)	93.7 (112.0)										
6	19.2 (9.3)	347.0 (223.0)	317.0 (229.0)	356.0 (384.0)	114.0 (96.4)										
7	23.0 (13.6)	365.0 (179.0)	341.0 (172.0)	318.0 (305.0)	120.0 (61.9)										
8	36.6 (11.8)	319.0 (209.0)		275.0 (302.0)	119.0 (61.9)										
9	47.4 (9.2)	346.0 (184.0)		275.0 (334.0)	127.0 (60.3)										
10	36.6 (12.4)	308.0 (218.0)		260.0 (323.0)	134.0 (61.1)										
11	35.9 (11.6)	273.0 (211.0)		218.0 (407.0)	116.0 (96.6)										
12	30.5 (10.5)	180.0 (157.0)		165.0 (237.0)	60.3 (35.8)										
13	34.4 (14.5)	241.0 (204.0)		183.0 (249.0)	79.1 (43.3)										
14	26.3 (9.5)	236.0 (199.0)		179.0 (282.0)	73.5 (47.6)										
15	19.7 (8.8)	427.0 (292.0)		303.0 (307.0)	116.0 (69.9)										
16	25.3 (10.6)	373.0 (221.0)		256.0 (331.0)	120.0 (63.1)										
17	30.7 (12.3)	327.0 (290.0)		242.0 (364.0)	114.0 (71.5)										
18	24.6 (10.1)	287.0 (263.0)		231.0 (397.0)	101.0 (68.7)										
19	36.2 (13.1)	250.0 (259.0)	244.0 (108.0)	204.0 (351.0)	88.8 (68.9)										
20	28.6 (9.0)	194.0 (245.0)	171.0 (91.7)	153.0 (141.0)	51.6 (51.7)										
21	17.8 (12.9)	297.0 (173.0)	267.0 (140.0)	247.0 (149.0)	78.1 (66.3)										
22	10.5 (9.0)	454.0 (230.0)	433.0 (220.0)	290.0 (139.0)	107.0 (72.5)										
23	13.3 (8.0)	499.0 (203.0)	428.0 (177.0)	360.0 (156.0)	135.0 (78.3)										
24	24.8 (8.0)	470.0 (194.0)	457.0 (167.0)	352.0 (142.0)	131.0 (79.6)										
25	31.1 (8.9)	410.0 (175.0)	454.0 (173.0)	325.0 (140.0)	118.0 (81.7)										
26	24.3 (10.2)	337.0 (176.0)	343.0 (160.0)	269.0 (122.0)	96.9 (99.0)										
27	22.6 (10.7)	406.0 (210.0)	390.0 (153.0)	340.0 (182.0)											
28	18.8 (12.1)	351.0 (185.0)	326.0 (134.0)	290.0 (201.0)											
29	21.3 (10.3)	482.0 (249.0)	421.0 (187.0)	355.0 (197.0)											
30	19.7 (9.2)	545.0 (364.0)	475.0 (260.0)	320.0 (228.0)											
Avg	26.7	329.0	321.0	264.0	102.0										
n	29	30	19	30	26	0	0	0	0	0	0	0	0	0	0
SD	7.9	96.2	102	58.2	22.3										
Min	10.5	180.0	171.0	153.0	51.6										
Max	47.4	545	475	360	135										

ED_004549_00015928-00133

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for December, 2007.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1	14.9 (7.4)	575.0 (254.0)	528.0 (229.0)	374.0 (183.0)											
2	24.7 (11.2)	305.0 (146.0)	313.0 (152.0)	254.0 (177.0)											
3	12.3 (6.1)	514.0 (276.0)	555.0 (270.0)	384.0 (227.0)											
4	20.3 (8.2)	445.0 (233.0)	489.0 (204.0)	403.0 (593.0)											
5	26.3 (24.5)	577.0 (332.0)	639.0 (289.0)	439.0 (220.0)											
6	42.6 (27.6)	594.0 (352.0)	621.0 (244.0)	506.0 (311.0)											
7	27.1 (9.5)	460.0 (259.0)	459.0 (188.0)	323.0 (183.0)											
8	34.2 (13.4)	407.0 (286.0)	378.0 (152.0)	348.0 (223.0)											
9	19.5 (7.5)	377.0 (305.0)	336.0 (137.0)	320.0 (224.0)											
10	36.8 (12.6)	377.0 (319.0)	312.0 (132.0)	264.0 (192.0)											
11															
12											23.0 (12.5)	1420.0 (622.0)	1510.0 (672.0)	1320.0 (691.0)	
13											29.4 (10.8)	1550.0 (813.0)	1590.0 (824.0)	1170.0 (611.0)	
14											34.3 (15.5)	1680.0 (656.0)	1720.0 (853.0)	1250.0 (770.0)	
15											85.1 (144.0)	2070.0 (1040.0)	1850.0 (926.0)	1590.0 (910.0)	
16											37.3 (58.9)	2580.0 (1140.0)	2080.0 (979.0)	3100.0 (1800.0)	
17											33.3 (10.5)	2200.0 (895.0)	1930.0 (1010.0)	2440.0 (1910.0)	
18											27.9 (10.2)	2060.0 (1300.0)	1860.0 (887.0)	1380.0 (943.0)	
19															
20	49.4 (20.8)	327.0 (303.0)	476.0 (163.0)	380.0 (167.0)											
21	35.3 (10.8)	278.0 (299.0)	409.0 (174.0)	305.0 (184.0)											
22	28.7 (11.0)	276.0 (291.0)	304.0 (110.0)	293.0 (174.0)											
23	21.6 (9.3)	392.0 (481.0)	510.0 (259.0)	385.0 (236.0)											
24	24.1 (7.9)	442.0 (385.0)	488.0 (163.0)	472.0 (313.0)											
25	29.2 (14.3)	432.0 (453.0)	440.0 (141.0)	301.0 (166.0)											
26	37.3 (10.7)	399.0 (451.0)	407.0 (152.0)	279.0 (226.0)											
27	34.7 (14.3)	383.0 (369.0)	412.0 (172.0)	269.0 (258.0)											
28	26.5 (11.3)	316.0 (114.0)	445.0 (196.0)	328.0 (221.0)	104.0 (107.0)										
29	22.8 (7.6)	391.0 (156.0)	539.0 (251.0)	353.0 (256.0)	111.0 (139.0)										
30	32.5 (11.8)	326.0 (134.0)	477.0 (183.0)	316.0 (233.0)	129.0 (136.0)										
31	30.2 (9.3)	362.0 (223.0)	434.0 (221.0)	309.0 (255.0)	134.0 (119.0)										
Avg	28.7	407.0	453.0	346.0	119.0						38.6	1940.0	1790.0	1750.0	
n	22	22	22	22	4	0	0	0	0	0	7	7	7	7	0
SD	8.6	90.4	90.6	65.4	12						19.5	377	183	682	
Min	12.3	276.0	304.0	254.0	104.0						23.0	1420.0	1510.0	1170.0	
Max	49.4	594	639	506	134						85.1	2580	2080	3100	

ED_004549_00015928-00134

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for January, 2008.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1	35.9 (9.8)	436.0 (172.0)		417.0 (272.0)	132.0 (123.0)										
2	22.5 (7.9)	519.0 (253.0)		495.0 (254.0)	133.0 (135.0)										
3	28.3 (7.4)	500.0 (334.0)		472.0 (541.0)											
4	26.7 (9.1)	404.0 (225.0)	267.0 (159.0)	380.0 (463.0)											
5	21.5 (8.3)	324.0 (184.0)	192.0 (125.0)	387.0 (351.0)											
6	18.6 (8.0)	215.0 (122.0)	116.0 (84.1)	223.0 (163.0)											
7	16.5 (6.2)	153.0 (111.0)	84.1 (90.3)	165.0 (165.0)											
8	13.6 (10.0)	211.0 (273.0)		237.0 (426.0)											
9	26.2 (11.4)	416.0 (238.0)	382.0 (177.0)	425.0 (364.0)	128.0 (60.1)										
10															
11						18.4 (8.5)	10.5 (159.0)	19.0 (25.6)	10.9 (178.0)	13.6 (15.3)					
12						20.7 (8.6)	11.8 (193.0)	22.9 (28.6)	25.6 (131.0)	10.7 (13.2)					
13						25.1 (9.9)	28.8 (240.0)	31.2 (29.0)	35.8 (138.0)						
14						12.0 (6.1)	21.2 (121.0)	32.8 (33.5)	28.0 (133.0)	27.5 (34.4)					
15						12.7 (7.1)	21.7 (133.0)	43.1 (25.5)	28.3 (112.0)	34.8 (24.9)					
16						13.7 (7.4)	26.3 (225.0)	46.3 (34.6)	35.2 (157.0)	40.6 (87.0)					
17															
18						7.4 (5.3)	30.5 (140.0)	50.9 (28.9)	36.5 (116.0)	21.3 (31.7)					
19						9.8 (8.4)	43.2 (104.0)	62.8 (30.3)	64.7 (106.0)	29.5 (31.6)					
20						4.5 (5.2)	42.5 (139.0)	76.8 (40.4)	48.5 (84.8)	28.9 (26.5)					
21						9.6 (6.0)	33.9 (210.0)	60.5 (41.6)	45.5 (127.0)	19.7 (26.6)					
22						11.8 (8.1)	46.7 (160.0)	63.6 (57.8)	57.9 (240.0)	25.3 (25.4)					
23						11.8 (7.7)	43.7 (163.0)	60.3 (52.1)	69.0 (194.0)	26.4 (33.4)					
24															
25	32.7 (14.2)	582.0 (186.0)	804.0 (310.0)	431.0 (115.0)	248.0 (97.3)										
26	35.7 (11.1)	488.0 (181.0)	636.0 (307.0)	387.0 (148.0)	183.0 (117.0)										
27	39.1 (9.0)	524.0 (250.0)	611.0 (405.0)	367.0 (168.0)	196.0 (181.0)										
28	29.5 (12.0)		330.0 (173.0)	236.0 (106.0)	110.0 (59.8)										
29	21.3 (11.9)		239.0 (132.0)	207.0 (86.8)	100.0 (85.4)										
30	21.1 (13.8)														
31	22.0 (19.0)														
Avg	25.7	398.0	366.0	345.0	154.0	13.1	30.1	47.5	40.5	25.3					
n	16	12	10	14	8	12	12	12	12	11	0	0	0	0	0
SD	7.2	135	229	105	47.3	5.5	11.8	17.3	16.5	8.3					
Min	13.6	153.0	84.1	165.0	100.0	4.5	10.5	19.0	10.9	10.7					
Max	39.1	582	804	495	248	25.1	46.7	76.8	69	40.6					

ED_004549_00015928-00135

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for February, 2008.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1															
2															
3															
4															
5															
6				327.0 (211.0)	496.0 (306.0)										
7			557.0 (170.0)	271.0 (207.0)	591.0 (327.0)										
8			523.0 (209.0)	181.0 (104.0)	475.0 (270.0)										
9			469.0 (140.0)	180.0 (96.1)	438.0 (269.0)										
10			566.0 (203.0)	268.0 (180.0)	496.0 (362.0)										
11			647.0 (199.0)	283.0 (104.0)	714.0 (398.0)										
12			634.0 (246.0)	96.2 (143.0)	560.0 (250.0)										
13			586.0 (210.0)	13.7 (57.8)	562.0 (194.0)										
14			717.0 (280.0)	22.8 (75.6)	601.0 (300.0)										
15			377.0 (368.0)	16.3 (87.5)	444.0 (265.0)										
16	26.2 (7.7)		250.0 (76.8)	32.5 (82.5)	331.0 (205.0)										
17	22.2 (13.3)		154.0 (48.2)	-24.0 (67.7)	232.0 (88.7)										
18	11.3 (8.0)		202.0 (61.5)	0.9 (59.1)	57.4 (203.0)										
19	9.6 (7.3)														
20	14.0 (9.2)														
21	17.2 (11.0)														
22															
23					81.1 (68.8)										
24					113.0 (60.3)										
25	29.7 (8.4)				48.4 (40.7)										
26	11.3 (8.3)				37.8 (10.7)										
27	7.2 (5.8)				66.0 (17.2)										
28	19.3 (7.5)				104.0 (54.4)										
29	20.7 (8.7)				38.2 (15.6)										
Avg	17.2		474.0	128.0	324.0										
n	11	0	12	13	20	0	0	0	0	0	0	0	0	0	0
SD	6.9		178	123	230										
Min	7.2		154.0	-24.0	37.8										
Max	29.7		717	327	714										

ED_004549_00015928-00136

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for March, 2008.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1	10.0 (7.1)				27.4 (15.5)										
2	17.2 (11.8)				9.0 (23.5)										
3	18.3 (8.3)				13.1 (4.9)										
4	9.4 (8.8)				27.5 (18.4)										
5	16.3 (12.2)		291.0 (210.0)		44.2 (14.7)										
6	25.3 (8.9)		326.0 (225.0)		54.9 (34.8)										
7	15.8 (12.7)		446.0 (244.0)		34.9 (26.7)										
8	7.7 (7.6)	844.0 (563.0)	870.0 (430.0)		40.3 (13.0)										
9	24.9 (11.0)	855.0 (539.0)	1050.0 (504.0)		38.1 (20.3)										
10	36.2 (11.3)	899.0 (696.0)	1050.0 (627.0)		41.8 (10.9)										
11	34.2 (12.1)	647.0 (498.0)	377.0 (259.0)		49.5 (31.3)										
12	34.4 (10.3)	739.0 (532.0)	352.0 (268.0)		45.2 (33.1)										
13															
14															
15															
16	7.7 (7.0)	930.0 (667.0)	699.0 (487.0)												
17	14.3 (10.8)	765.0 (564.0)	723.0 (495.0)												
18	17.9 (8.1)	527.0 (461.0)													
19	10.1 (7.3)	1050.0 (653.0)													
20	12.8 (10.0)	972.0 (521.0)													
21	13.2 (10.4)	467.0 (404.0)													
22	11.5 (7.8)	316.0 (307.0)													
23	10.7 (9.6)	347.0 (269.0)													
24	13.0 (9.6)	363.0 (294.0)													
25	19.1 (6.4)	320.0 (315.0)													
26	17.0 (8.1)	473.0 (225.0)	1230.0 (749.0)												
27	20.6 (8.1)	539.0 (236.0)	988.0 (593.0)												
28	13.0 (17.8)	556.0 (256.0)	1080.0 (728.0)												
29	6.9 (7.7)	548.0 (273.0)	1050.0 (558.0)												
30	20.3 (11.9)	429.0 (227.0)	1020.0 (459.0)												
31	31.7 (9.1)	212.0 (126.0)	461.0 (202.0)												
Avg	17.5	610.0	751.0		35.5										
n	28	21	16	0	12	0	0	0	0	0	0	0	0	0	0
SD	8.3	241	318		13.4										
Min	6.9	212.0	291.0		9.0										
Max	36.2	1050	1230		54.9										

ED_004549_00015928-00137

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for April, 2008.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1	8.5 (7.4)	420.0 (331.0)	574.0 (346.0)												
2	8.4 (7.4)	460.0 (249.0)	653.0 (262.0)												
3	16.7 (10.5)	400.0 (283.0)	549.0 (231.0)												
4	19.7 (7.6)	222.0 (297.0)	397.0 (233.0)												
5	28.3 (8.4)	254.0 (173.0)	269.0 (139.0)	412.0 (215.0)											
6	28.0 (8.4)	208.0 (134.0)	234.0 (128.0)	385.0 (134.0)											
7	28.6 (12.7)	187.0 (145.0)	210.0 (145.0)	330.0 (158.0)											
8	29.4 (11.4)	267.0 (160.0)	304.0 (195.0)	206.0 (135.0)											
9	13.9 (8.1)	418.0 (278.0)	416.0 (282.0)	440.0 (277.0)											
10	25.2 (8.1)	434.0 (261.0)	501.0 (352.0)	374.0 (199.0)											
11	20.5 (17.4)	210.0 (239.0)	221.0 (179.0)	204.0 (201.0)											
12	12.4 (6.3)	546.0 (306.0)	506.0 (326.0)	380.0 (286.0)											
13	11.3 (8.3)	556.0 (288.0)	497.0 (340.0)	414.0 (271.0)											
14	10.3 (8.4)	461.0 (269.0)	361.0 (232.0)	355.0 (222.0)											
15	15.7 (10.1)	388.0 (255.0)	333.0 (196.0)	381.0 (268.0)											
16	24.7 (12.0)	288.0 (197.0)	354.0 (237.0)	324.0 (264.0)											
17		241.0 (161.0)	258.0 (94.7)	224.0 (180.0)											
18		218.0 (352.0)	239.0 (96.5)	195.0 (172.0)											
19	21.4 (10.5)	230.0 (204.0)	243.0 (145.0)	259.0 (232.0)											
20	35.4 (16.2)	217.0 (171.0)	232.0 (113.0)	235.0 (193.0)											
21	39.5 (15.4)	187.0 (216.0)	191.0 (82.1)	172.0 (176.0)											
22	42.0 (10.2)	184.0 (269.0)	201.0 (85.3)	190.0 (201.0)											
23															
24											41.1 (27.6)	748.0 (368.0)	757.0 (315.0)	905.0 (508.0)	673.0 (398.0)
25											44.0 (10.1)		530.0 (267.0)	541.0 (327.0)	303.0 (183.0)
26											30.7 (20.7)		1640.0 (894.0)	1700.0 (939.0)	1210.0 (576.0)
27											27.5 (9.9)		1610.0 (660.0)	1280.0 (783.0)	1240.0 (500.0)
28											24.5 (13.2)		1810.0 (993.0)	1660.0 (1210.0)	1490.0 (946.0)
29											22.6 (12.6)		1790.0 (696.0)	1730.0 (923.0)	1450.0 (762.0)
30											41.6 (19.7)		1660.0 (748.0)	1670.0 (854.0)	1320.0 (705.0)
Avg	22.0	318.0	352.0	304.0							33.1		1400.0	1360.0	1100.0
n	20	22	22	18	0	0	0	0	0	0	7	1	7	7	7
SD	9.8	121	136	89.4							8.2		487	435	410
Min	8.4	184.0	191.0	172.0							22.6		530.0	541.0	303.0
Max	42	556	653	440							44		1810	1730	1490

ED_004549_00015928-00138

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for May, 2008.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1											48.9 (10.0)		1020.0 (626.0)	870.0 (487.0)	806.0 (601.0)
2											28.5 (16.9)		754.0 (471.0)	738.0 (316.0)	499.0 (433.0)
3											23.7 (18.8)		1220.0 (826.0)	1370.0 (868.0)	886.0 (640.0)
4											30.5 (13.0)		1320.0 (756.0)	1110.0 (512.0)	830.0 (513.0)
5											47.2 (19.9)		1030.0 (590.0)	851.0 (569.0)	1020.0 (782.0)
6											68.2 (54.9)		640.0 (371.0)	713.0 (603.0)	417.0 (574.0)
7															
8	14.4 (11.5)		262.0 (189.0)	231.0 (262.0)	199.0 (368.0)										
9	20.2 (8.5)		276.0 (176.0)	269.0 (276.0)											
10	18.9 (8.5)		275.0 (151.0)	206.0 (295.0)											
11			249.0 (159.0)	211.0 (233.0)											
12	9.8 (7.7)		287.0 (170.0)	226.0 (258.0)											
13	27.1 (21.2)		240.0 (253.0)												
14	46.1 (28.0)	149.0 (76.3)	180.0 (110.0)	198.0 (221.0)											
15	13.8 (8.2)	190.0 (116.0)	202.0 (155.0)												
16	20.6 (12.3)	173.0 (106.0)	204.0 (158.0)		210.0 (80.4)										
17	26.2 (8.4)	163.0 (132.0)	173.0 (189.0)		167.0 (67.7)										
18	11.5 (8.0)	200.0 (164.0)	213.0 (173.0)		226.0 (108.0)										
19	15.4 (11.0)	272.0 (208.0)	309.0 (416.0)		272.0 (202.0)										
20	18.8 (9.8)	286.0 (171.0)	297.0 (233.0)	263.0 (390.0)	273.0 (161.0)										
21	17.4 (6.1)	234.0 (151.0)		194.0 (279.0)	242.0 (148.0)										
22	14.8 (9.3)	218.0 (144.0)	264.0 (333.0)	222.0 (283.0)	203.0 (127.0)										
23	12.6 (7.9)	225.0 (133.0)	256.0 (277.0)	234.0 (253.0)	219.0 (121.0)										
24	17.9 (9.9)	203.0 (152.0)	180.0 (228.0)	154.0 (254.0)	183.0 (93.7)										
25	27.7 (9.8)	159.0 (139.0)	159.0 (152.0)	137.0 (219.0)	140.0 (101.0)										
26	21.8 (8.7)	111.0 (96.1)	120.0 (141.0)	132.0 (254.0)	88.5 (61.1)										
27	14.7 (9.8)	229.0 (212.0)	223.0 (257.0)	208.0 (347.0)	223.0 (189.0)										
28	14.8 (8.0)	312.0 (194.0)	271.0 (258.0)	249.0 (491.0)	316.0 (152.0)										
29	16.3 (13.2)	189.0 (231.0)	231.0 (339.0)	152.0 (407.0)	211.0 (158.0)										
30	38.3 (21.3)	198.0 (242.0)	204.0 (266.0)	204.0 (278.0)	165.0 (162.0)										
31	14.5 (9.8)	84.0 (132.0)	86.8 (178.0)	60.7 (131.0)	83.6 (85.9)										
Avg	19.7	200.0	224.0	197.0	201.0						41.2		997.0	942.0	742.0
n	23	18	23	18	17	0	0	0	0	0	6	0	6	6	6
SD	8.4	55.9	55.4	51.1	59.3						15.3		239	231	213
Min	9.8	84.0	86.8	60.7	83.6						23.7		640.0	713.0	417.0
Max	46.1	312	309	269	316						68.2		1320	1370	1020

ED_004549_00015928-00139

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for June, 2008.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1	17.5 (8.9)	142.0 (176.0)	157.0 (204.0)	131.0 (160.0)	140.0 (110.0)										
2	30.0 (19.2)	139.0 (194.0)	142.0 (120.0)	115.0 (293.0)	136.0 (131.0)										
3	22.6 (14.5)	142.0 (140.0)	117.0 (48.9)	107.0 (175.0)	117.0 (87.3)										
4	13.7 (8.6)		98.7 (53.5)	94.0 (178.0)	74.2 (114.0)										
5	34.1 (37.9)		82.9 (30.5)	18.0 (90.6)	56.1 (62.3)										
6	22.6 (12.1)		99.7 (74.9)	60.7 (92.2)	65.5 (92.2)										
7	12.0 (11.1)		82.5 (31.9)	57.5 (19.0)	61.6 (70.8)										
8	23.0 (6.7)		78.1 (28.4)	56.4 (16.9)	46.8 (58.3)										
9	51.1 (95.6)		113.0 (136.0)	89.0 (117.0)	84.2 (192.0)										
10	10.5 (8.0)		149.0 (66.0)	133.0 (62.3)	116.0 (116.0)										
11	19.4 (8.5)	145.0 (69.8)	147.0 (77.4)	126.0 (55.4)	123.0 (149.0)										
12	30.4 (10.0)	134.0 (64.0)	142.0 (71.1)	109.0 (46.9)	134.0 (99.1)										
13	22.2 (15.2)	120.0 (74.0)	119.0 (75.6)	93.7 (56.6)	110.0 (114.0)										
14	16.8 (7.6)	144.0 (66.0)	167.0 (98.7)	152.0 (100.0)	133.0 (157.0)										
15	23.2 (15.2)	172.0 (97.9)	206.0 (114.0)	216.0 (103.0)	181.0 (168.0)										
16	16.6 (7.8)	247.0 (125.0)		407.0 (653.0)	248.0 (221.0)										
17	14.1 (8.1)	330.0 (176.0)		382.0 (254.0)	312.0 (233.0)										
18	19.8 (10.9)	313.0 (190.0)		250.0 (108.0)	293.0 (228.0)										
19	22.3 (16.0)	258.0 (171.0)		191.0 (114.0)	265.0 (270.0)										
20	34.2 (22.9)	199.0 (145.0)	260.0 (154.0)	144.0 (87.5)	200.0 (210.0)										
21	30.2 (29.3)	160.0 (112.0)	207.0 (117.0)	122.0 (100.0)	169.0 (206.0)										
22	19.6 (10.9)	175.0 (135.0)	277.0 (159.0)	152.0 (118.0)	261.0 (465.0)										
23	17.3 (10.4)	142.0 (99.0)	240.0 (145.0)	164.0 (106.0)	139.0 (172.0)										
24	21.2 (10.4)	135.0 (129.0)	194.0 (143.0)	156.0 (116.0)	123.0 (213.0)										
25	28.2 (13.9)	108.0 (78.6)	142.0 (171.0)	114.0 (89.9)	128.0 (286.0)										
26	26.4 (14.4)	89.0 (75.8)	117.0 (95.5)	98.5 (80.9)	92.2 (167.0)										
27	22.3 (14.8)	89.4 (57.4)	137.0 (94.1)	92.6 (65.2)	90.2 (118.0)										
28															
29															
30															
Avg	23.0	169.0	151.0	142.0	144.0										
n	27	20	23	27	27	0	0	0	0	0	0	0	0	0	0
SD	8.3	66.1	54.9	86.3	72.8										
Min	10.5	89.0	78.1	18.0	46.8										
Max	51.1	330	277	407	312										

ED_004549_00015928-00140

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for July, 2008.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1											32.5 (14.1)	720.0 (615.0)	680.0 (512.0)	548.0 (456.0)	609.0 (567.0)
2											63.7 (46.2)	529.0 (429.0)	534.0 (327.0)	355.0 (276.0)	412.0 (352.0)
3											25.7 (11.1)	521.0 (323.0)	478.0 (254.0)	357.0 (277.0)	390.0 (315.0)
4											29.4 (12.8)	892.0 (544.0)	711.0 (417.0)	544.0 (337.0)	603.0 (414.0)
5											24.8 (7.3)	825.0 (600.0)	686.0 (408.0)	490.0 (372.0)	593.0 (447.0)
6											42.1 (11.0)	617.0 (581.0)	566.0 (455.0)	411.0 (351.0)	476.0 (484.0)
7															
8	30.5 (15.3)	115.0 (50.2)	113.0 (248.0)	90.2 (32.3)	89.2 (29.7)										
9	18.2 (9.0)	197.0 (81.8)	178.0 (183.0)	153.0 (88.6)	122.0 (55.7)										
10	27.8 (10.0)	275.0 (188.0)	214.0 (179.0)	189.0 (90.5)	150.0 (71.1)										
11	49.7 (61.2)	215.0 (181.0)	155.0 (162.0)	140.0 (85.5)	124.0 (81.4)										
12	9.1 (13.5)	89.9 (61.6)	84.9 (94.8)	48.7 (36.7)	76.4 (245.0)										
13	11.0 (9.9)	226.0 (127.0)	111.0 (57.7)	133.0 (88.6)	156.0 (88.4)										
14	16.5 (8.4)	240.0 (160.0)	174.0 (71.7)	129.0 (97.5)	152.0 (104.0)										
15	29.2 (17.1)	127.0 (72.8)	187.0 (90.2)	101.0 (67.8)	114.0 (69.7)										
16	71.7 (36.3)	122.0 (52.0)	170.0 (81.3)	105.0 (57.7)	108.0 (49.3)										
17	72.8 (27.7)	111.0 (45.7)	143.0 (81.2)	118.0 (67.0)	112.0 (65.7)										
18	83.8 (47.3)	142.0 (69.0)	160.0 (101.0)	174.0 (94.6)	139.0 (104.0)										
19	50.4 (17.0)	82.7 (30.9)	90.6 (40.1)	109.0 (55.0)	82.9 (49.4)										
20	22.6 (13.3)	50.4 (29.5)	58.7 (39.2)	66.9 (48.9)	45.1 (37.9)										
21	19.9 (12.4)	64.6 (38.8)	70.1 (52.0)	104.0 (81.3)											
22	11.4 (10.0)	154.0 (119.0)	86.3 (62.2)	161.0 (118.0)											
23	12.0 (8.5)	218.0 (175.0)	125.0 (82.4)	197.0 (145.0)											
24	23.6 (17.4)	227.0 (172.0)	178.0 (104.0)	215.0 (146.0)											
25	34.1 (20.9)	179.0 (139.0)	155.0 (109.0)	191.0 (113.0)	61.4 (99.7)										
26	30.8 (10.3)	65.9 (42.9)	74.9 (37.4)	93.1 (43.5)	36.6 (38.7)										
27	31.6 (13.8)	134.0 (85.6)	141.0 (76.7)	166.0 (94.1)	101.0 (73.0)										
28	33.0 (10.7)	92.2 (61.0)	98.5 (56.8)	108.0 (59.2)	80.7 (61.0)										
29	28.4 (17.5)	82.1 (65.8)	97.5 (71.8)	103.0 (70.7)	67.3 (60.1)										
30	44.1 (68.9)	89.6 (83.1)	130.0 (196.0)	93.0 (46.2)	68.0 (57.0)										
31															
Avg	33.1	143.0	130.0	130.0	99.2						36.4	684.0	609.0	451.0	514.0
n	23	23	23	23	19	0	0	0	0	0	6	6	6	6	6
SD	20.1	64.2	42.1	43	34.9						13.5	141	87.5	80.8	91.6
Min	9.1	50.4	58.7	48.7	36.6						24.8	521.0	478.0	355.0	390.0
Max	83.8	275	214	215	156						63.7	892	711	548	609

ED_004549_00015928-00141

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for August, 2008.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1															
2															
3															
4															
5															
6															
7	12.9 (8.7)	115.0 (103.0)	94.5 (106.0)	109.0 (76.7)	111.0 (192.0)										
8	7.3 (7.0)	120.0 (119.0)	85.2 (77.2)	118.0 (92.9)	149.0 (434.0)										
9	13.1 (9.5)	122.0 (96.6)	86.6 (64.1)	111.0 (83.2)	179.0 (376.0)										
10	5.3 (5.6)	142.0 (93.6)	113.0 (88.2)	113.0 (81.7)	99.7 (171.0)										
11	9.2 (10.0)	90.4 (106.0)		111.0 (94.8)	354.0 (769.0)										
12	12.8 (9.9)	46.2 (57.6)		81.4 (91.4)	328.0 (609.0)										
13	23.1 (11.4)			88.6 (75.2)	207.0 (327.0)										
14	20.4 (14.1)			65.9 (50.3)	160.0 (277.0)										
15				91.9 (80.0)	90.7 (218.0)										
16		58.3 (33.7)	140.0 (102.0)	92.4 (81.1)	40.7 (71.1)										
17		59.4 (38.1)	126.0 (85.0)		24.0 (29.7)										
18		61.9 (40.3)	122.0 (93.4)	92.3 (82.5)	40.4 (112.0)										
19			111.0 (108.0)	95.9 (102.0)	26.3 (84.9)										
20			92.2 (64.6)		16.2 (47.7)										
21			111.0 (67.1)		67.5 (203.0)										
22															
23	39.6 (14.4)														
24															
25															
26															
27	28.6 (22.2)														
28	49.9 (29.4)														
29	35.8 (21.7)														
30	21.4 (24.1)														
31	20.2 (16.0)														
Avg	21.4	90.7	108.0	97.5	126.0										
n	14	9	10	12	15	0	0	0	0	0	0	0	0	0	0
SD	12.6	33.2	17.2	14.6	102										
Min	5.3	46.2	85.2	65.9	16.2										
Max	49.9	142	140	118	354										

ED_004549_00015928-00142

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for September, 2008.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1	22.1 (14.7)														
2	43.5 (31.7)														
3	30.1 (30.3)														
4	28.0 (20.5)														
5	10.1 (10.0)														
6	12.3 (10.2)														
7	11.0 (10.3)														
8	12.0 (10.8)														
9	9.3 (10.7)				3.2 (9.4)										
10	12.8 (13.3)		601.0 (277.0)		1.2 (4.7)										
11	25.7 (16.2)				2.4 (23.7)										
12	12.8 (7.3)		99.4 (56.6)		89.6 (91.6)										
13	27.8 (13.7)	117.0 (69.1)			173.0 (160.0)										
14	10.9 (12.1)	162.0 (99.1)			258.0 (127.0)										
15	14.0 (7.9)	453.0 (577.0)			463.0 (216.0)										
16	13.1 (13.9)	516.0 (299.0)			409.0 (131.0)										
17	18.8 (14.0)	205.0 (215.0)		190.0 (242.0)	333.0 (225.0)										
18	20.1 (34.4)	113.0 (51.2)		175.0 (261.0)	315.0 (314.0)										
19	19.4 (16.0)	168.0 (84.4)			292.0 (153.0)										
20		203.0 (173.0)	272.0 (92.2)		293.0 (119.0)										
21		247.0 (146.0)	250.0 (108.0)		317.0 (190.0)										
22															
23						19.2 (15.2)	17.4 (70.2)	11.7 (51.0)		13.2 (23.9)					
24						24.7 (13.3)	28.5 (53.5)	24.6 (65.7)		21.6 (30.8)					
25						17.2 (12.2)	20.8 (65.7)	13.0 (46.8)		14.7 (29.9)					
26						11.9 (9.1)	13.6 (42.9)	11.6 (66.9)		13.4 (38.0)					
27						7.0 (8.8)	13.2 (7.3)	9.6 (39.2)	-30.9 (46.5)	9.2 (31.9)					
28						14.4 (9.9)	21.4 (7.7)	19.5 (35.1)	-19.9 (44.2)	17.1 (33.0)					
29						11.6 (12.8)	21.4 (6.3)	16.5 (37.8)	-1.0 (46.5)	13.6 (27.9)					
30						8.6 (9.8)	21.0 (7.3)	11.6 (41.3)	8.1 (46.9)	11.3 (27.7)					
Avg	18.6	243.0	306.0	182.0	227.0	14.3	19.7	14.8	-10.9	14.3					
n	19	9	4	2	13	8	8	8	4	8	0	0	0	0	0
SD	8.8	136	183	7.6	152	5.5	4.6	4.8	15.3	3.5					
Min	9.3	113.0	99.4	175.0	1.2	7.0	13.2	9.6	-30.9	9.2					
Max	43.5	516	601	190	463	24.7	28.5	24.6	8.1	21.6					

ED_004549_00015928-00143

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for October, 2008.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1						2.4 (10.8)	15.3 (7.3)	43.7 (308.0)	-5.0 (36.8)	5.7 (35.2)					
2						4.7 (8.1)	14.3 (6.5)	7.3 (48.3)	-10.0 (31.4)	1.8 (20.9)					
3						4.7 (10.3)	18.1 (9.5)	12.3 (37.5)	-4.0 (32.6)	4.9 (18.6)					
4						5.7 (9.7)	18.6 (9.6)	12.3 (54.4)	11.0 (44.4)	8.1 (23.5)					
5						10.6 (14.5)	14.4 (9.9)	16.5 (51.5)	17.1 (44.2)	12.5 (29.6)					
6						11.5 (10.8)	17.6 (6.0)	19.5 (32.5)	14.8 (16.1)	14.8 (19.8)					
7						11.1 (11.3)	16.0 (8.7)	26.4 (30.7)	14.0 (5.7)	18.1 (19.6)					
8															
9	28.5 (62.3)	109.0 (43.5)	186.0 (77.5)	165.0 (88.0)	141.0 (54.7)										
10	24.2 (25.7)	100.0 (38.8)	186.0 (93.9)	151.0 (69.9)	126.0 (49.7)										
11	23.0 (23.5)	71.2 (29.4)	138.0 (66.2)	103.0 (40.0)	98.5 (52.5)										
12	19.1 (15.3)	62.8 (28.8)	110.0 (70.0)	101.0 (46.7)	87.2 (50.0)										
13	23.0 (15.5)	74.6 (44.6)	141.0 (180.0)	128.0 (130.0)	120.0 (70.3)										
14	15.6 (10.4)	86.9 (52.6)	129.0 (149.0)	153.0 (109.0)	131.0 (68.1)										
15	16.0 (16.4)	59.1 (35.7)	102.0 (40.0)	87.5 (58.2)	90.3 (35.7)										
16	13.3 (9.5)	122.0 (75.9)	209.0 (139.0)	185.0 (121.0)	197.0 (99.3)										
17	17.6 (15.1)				214.0 (118.0)										
18	16.8 (15.5)				199.0 (113.0)		9.2 (23.4)	10.6 (12.5)	3.4 (50.3)						
19	16.7 (7.4)				208.0 (108.0)		8.3 (17.8)	9.4 (11.4)	4.7 (33.3)						
20	23.1 (19.7)				201.0 (105.0)		11.8 (16.5)	12.4 (12.7)	7.1 (32.2)						
21					289.0 (210.0)										
22					257.0 (143.0)						15.5 (8.2)	1070.0 (531.0)	1520.0 (860.0)	1190.0 (713.0)	
23					223.0 (127.0)						42.8 (75.7)	939.0 (479.0)	1290.0 (921.0)	1060.0 (567.0)	
24					181.0 (127.0)						15.1 (10.1)	801.0 (486.0)	765.0 (502.0)	757.0 (587.0)	
25					222.0 (155.0)						17.0 (6.5)	1150.0 (779.0)	1180.0 (712.0)	902.0 (525.0)	
26					244.0 (170.0)						36.2 (39.3)	1160.0 (643.0)	1060.0 (615.0)	1270.0 (857.0)	
27					266.0 (209.0)						14.2 (8.3)	1300.0 (707.0)	1630.0 (929.0)	1370.0 (691.0)	
28					324.0 (304.0)										
29	21.1 (8.9)	359.0 (175.0)	311.0 (357.0)	231.0 (322.0)	227.0 (213.0)										
30	23.3 (13.8)	197.0 (93.9)	217.0 (104.0)	306.0 (427.0)	229.0 (129.0)										
31		80.9 (43.7)		140.0 (417.0)											
Avg	20.1	120.0	173.0	159.0	194.0	7.2	14.4	17.0	5.3	9.4	23.5	1070.0	1240.0	1090.0	
n	14	11	10	11	22	7	10	10	10	7	6	6	6	6	0
SD	4.1	84	59.8	60.8	64.2	3.5	3.4	10.3	8.8	5.4	11.5	163	288	212	
Min	13.3	59.1	102.0	87.5	87.2	2.4	8.3	7.3	-10.0	1.8	14.2	801.0	765.0	757.0	
Max	28.5	359	311	306	324	11.5	18.6	43.7	17.1	18.1	42.8	1300	1630	1370	

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for November, 2008.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1		76.9 (27.4)	196.0 (320.0)	434.0 (629.0)		25.6 (12.0)				8.9 (71.9)					
2		54.8 (24.8)	163.0 (276.0)	150.0 (389.0)		17.3 (9.0)				5.9 (74.0)					
3			205.0 (283.0)	291.0 (361.0)											
4			212.0 (286.0)	282.0 (373.0)							49.6 (19.1)				837.0 (516.0)
5			217.0 (296.0)	217.0 (194.0)							41.2 (10.2)				867.0 (738.0)
6			170.0 (238.0)	195.0 (268.0)							32.0 (13.4)				
7		17.6 (56.1)	225.0 (250.0)	203.0 (172.0)							20.4 (9.7)				
8		68.1 (73.5)	274.0 (257.0)	220.0 (134.0)							13.6 (8.0)				
9		109.0 (76.8)	280.0 (250.0)	280.0 (158.0)							10.8 (6.7)				
10			344.0 (292.0)	230.0 (151.0)											
11			281.0 (241.0)	277.0 (165.0)											1350.0 (573.0)
12			215.0 (262.0)	44.0 (350.0)											1100.0 (890.0)
13			200.0 (223.0)	115.0 (389.0)							17.9 (11.1)				596.0 (535.0)
14			203.0 (276.0)	194.0 (412.0)											
15			360.0 (335.0)	287.0 (382.0)	200.0 (206.0)										
16		222.0 (254.0)	489.0 (356.0)	332.0 (323.0)	185.0 (207.0)										
17			584.0 (439.0)	301.0 (267.0)	217.0 (186.0)										
18			656.0 (346.0)	313.0 (198.0)	249.0 (174.0)										
19				314.0 (283.0)	213.0 (189.0)										
20				214.0 (223.0)	176.0 (285.0)										
21	11.1 (7.3)	292.0 (357.0)	563.0 (242.0)	290.0 (258.0)	325.0 (249.0)										
22	22.4 (11.8)	279.0 (328.0)	480.0 (216.0)	257.0 (202.0)	312.0 (302.0)										
23	26.5 (10.5)	244.0 (391.0)	313.0 (235.0)	235.0 (215.0)	286.0 (276.0)										
24	20.0 (23.4)	201.0 (436.0)	54.7 (83.2)	212.0 (222.0)	263.0 (451.0)										
25															
26	20.5 (8.2)	242.0 (362.0)	78.3 (71.6)	241.0 (279.0)	301.0 (396.0)										
27															
28															
29															
30		289.0 (463.0)		241.0 (271.0)	279.0 (223.0)										
Avg	20.1	175.0	294.0	245.0	250.0	21.4				7.4	26.5				950.0
n	5	12	23	26	12	2	0	0	0	2	7	0	0	0	5
SD	5	97.6	156	74	49	4.1				1.5	13.6				257
Min	11.1	17.6	54.7	44.0	176.0	17.3				5.9	10.8				596.0
Max	26.5	292	656	434	325	25.6				8.9	49.6				1350

ED_004549_00015928-00145

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for December, 2008.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1															
2		412.0 (277.0)	80.0 (59.9)		501.0 (363.0)										
3			159.0 (257.0)		555.0 (462.0)										
4	14.9 (6.4)		347.0 (506.0)	482.0 (633.0)	513.0 (306.0)										
5			349.0 (304.0)	468.0 (555.0)	507.0 (266.0)										
6	19.3 (10.2)		310.0 (330.0)	384.0 (552.0)	415.0 (295.0)										
7			387.0 (442.0)	368.0 (391.0)											
8	25.8 (8.7)	386.0 (247.0)													
9	10.7 (7.5)	249.0 (204.0)			271.0 (205.0)									1130.0 (579.0)	
10	13.2 (7.1)	410.0 (248.0)			309.0 (245.0)									1840.0 (806.0)	
11	19.7 (7.8)	459.0 (449.0)													1250.0 (1200.0)
12		458.0 (328.0)						-21.2 (162.0)	-30.7 (120.0)						2760.0 (1630.0)
13	20.3 (7.9)	449.0 (329.0)						-28.2 (130.0)	-35.2 (126.0)						2000.0 (1060.0)
14	11.4 (6.4)	365.0 (247.0)						-27.5 (99.5)	-34.2 (248.0)						1420.0 (1000.0)
15															
16			362.0 (176.0)	395.0 (204.0)						-76.2 (246.0)		2020.0 (812.0)			
17			375.0 (199.0)	372.0 (252.0)						-45.8 (272.0)		1970.0 (1000.0)			
18			263.0 (265.0)	396.0 (298.0)											
19	25.9 (18.5)	450.0 (141.0)	270.0 (241.0)	326.0 (430.0)	399.0 (208.0)						25.9 (18.5)				
20			342.0 (224.0)	483.0 (265.0)	389.0 (169.0)										
21			395.0 (194.0)	546.0 (378.0)	396.0 (171.0)										
22					465.0 (210.0)										
23					410.0 (194.0)										
24		469.0 (176.0)	345.0 (143.0)		298.0 (163.0)										
25		623.0 (239.0)	496.0 (207.0)		445.0 (251.0)										
26		390.0 (182.0)	304.0 (150.0)		316.0 (221.0)										
27		158.0 (74.9)	150.0 (58.3)	202.0 (242.0)	115.0 (136.0)										
28		435.0 (231.0)	386.0 (202.0)	390.0 (274.0)	413.0 (284.0)										
29		448.0 (197.0)	394.0 (223.0)	354.0 (290.0)	408.0 (279.0)										
30		488.0 (268.0)	395.0 (192.0)	393.0 (298.0)	409.0 (265.0)										
31		562.0 (252.0)	504.0 (272.0)	437.0 (272.0)	504.0 (303.0)										
Avg	17.9	424.0	331.0	400.0	402.0			-25.6	-33.4	-61.0		2000.0		1490.0	1860.0
n	9	17	20	15	20	0	0	3	3	2	1	2	0	2	4
SD	5.4	102	104	77.4	99.9			3.1	1.9	15.2		25.3		351	591
Min	10.7	158.0	80.0	202.0	115.0			-28.2	-35.2	-76.2		1970.0		1130.0	1250.0
Max	25.9	623	504	546	555			-21.2	-30.7	-45.8		2020		1840	2760

ED_004549_00015928-00146

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for January, 2009.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1		569.0 (252.0)	471.0 (248.0)	527.0 (790.0)	480.0 (352.0)										
2		517.0 (262.0)	452.0 (230.0)	473.0 (397.0)	397.0 (279.0)										
3		492.0 (275.0)	444.0 (278.0)	452.0 (354.0)	425.0 (340.0)										
4		382.0 (197.0)	334.0 (195.0)	369.0 (286.0)	332.0 (260.0)										
5		559.0 (269.0)	800.0 (777.0)	434.0 (299.0)	599.0 (371.0)										
6		506.0 (178.0)	492.0 (160.0)	415.0 (312.0)	463.0 (244.0)										
7		525.0 (270.0)	447.0 (210.0)	627.0 (478.0)	500.0 (387.0)										
8		585.0 (231.0)	466.0 (164.0)	768.0 (362.0)	555.0 (283.0)						32.3 (6.1)				
9		642.0 (301.0)	655.0 (402.0)	989.0 (768.0)	649.0 (404.0)						36.8 (16.1)				
10		600.0 (261.0)	772.0 (332.0)	798.0 (378.0)	781.0 (492.0)						23.4 (7.7)				
11		685.0 (341.0)	791.0 (355.0)	751.0 (406.0)	875.0 (565.0)						33.1 (8.0)				
12		633.0 (291.0)	754.0 (315.0)	725.0 (336.0)	838.0 (541.0)						37.3 (6.7)				
13		627.0 (291.0)	640.0 (277.0)	587.0 (270.0)	771.0 (525.0)						26.9 (12.0)				
14		652.0 (313.0)	458.0 (224.0)	609.0 (324.0)	1150.0 (628.0)						30.2 (16.0)				
15		593.0 (663.0)	413.0 (343.0)	563.0 (447.0)	601.0 (536.0)										
16			544.0 (343.0)	753.0 (433.0)	807.0 (494.0)										
17	23.1 (11.0)	750.0 (365.0)	755.0 (394.0)	684.0 (271.0)	797.0 (339.0)										
18	25.1 (9.5)	891.0 (499.0)	568.0 (452.0)	865.0 (398.0)	841.0 (428.0)										
19	33.4 (9.6)	620.0 (471.0)	598.0 (367.0)	897.0 (456.0)											
20	31.7 (10.7)	578.0 (250.0)	313.0 (400.0)	1120.0 (537.0)											
21			667.0 (324.0)	953.0 (413.0)	830.0 (305.0)										
22	45.2 (12.1)		713.0 (255.0)	641.0 (226.0)	733.0 (253.0)										
23	49.5 (13.9)		813.0 (524.0)		756.0 (344.0)										
24			718.0 (252.0)		1200.0 (362.0)										
25			787.0 (241.0)	956.0 (390.0)	1120.0 (451.0)										
26			752.0 (291.0)	954.0 (286.0)	1040.0 (448.0)										
27			715.0 (296.0)	901.0 (295.0)	805.0 (429.0)										
28			780.0 (345.0)	890.0 (383.0)	691.0 (409.0)										
29				782.0 (408.0)	630.0 (308.0)										
30		718.0 (214.0)	845.0 (410.0)	761.0 (252.0)	422.0 (283.0)										
31		592.0 (261.0)	785.0 (565.0)	833.0 (367.0)	496.0 (235.0)										
Avg	34.7	606.0	625.0	727.0	710.0						31.4				
n	6	21	30	29	29	0	0	0	0	0	7	0	0	0	0
SD	9.7	102	157	193	227						4.7				
Min	23.1	382.0	313.0	369.0	332.0						23.4				
Max	49.5	891	845	1120	1200						37.3				

ED_004549_00015928-00147

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for February, 2009.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1	17.8 (9.7)	493.0 (249.0)	782.0 (837.0)	632.0 (391.0)	411.0 (197.0)										
2		687.0 (326.0)	772.0 (451.0)	859.0 (320.0)	626.0 (210.0)										
3		834.0 (360.0)	832.0 (381.0)	959.0 (375.0)	677.0 (237.0)										
4															
5							82.7 (31.1)	48.0 (42.9)	66.9 (28.4)	113.0 (57.9)					
6															
7						9.0 (6.8)	10.6 (9.8)	20.5 (5.4)	31.5 (310.0)	20.5 (9.3)					
8						25.1 (11.7)	44.0 (14.3)	44.4 (12.7)	47.3 (129.0)	53.0 (19.4)					
9						31.4 (10.1)	43.6 (24.3)	43.4 (24.5)	54.1 (41.7)	60.4 (27.2)					
10						6.7 (7.1)	7.9 (7.6)	18.2 (11.8)	10.5 (129.0)	22.5 (19.1)					
11							3.6 (15.1)	17.1 (12.2)	14.2 (157.0)	20.9 (57.3)					
12															
13		331.0 (150.0)		857.0 (289.0)	1010.0 (392.0)						16.0 (9.8)				
14		245.0 (149.0)		1010.0 (393.0)	928.0 (405.0)						20.7 (7.3)				
15		348.0 (109.0)	726.0 (270.0)	1150.0 (405.0)	1040.0 (470.0)						23.6 (7.6)				
16		106.0 (246.0)	243.0 (449.0)	519.0 (816.0)	498.0 (639.0)						12.1 (7.7)				
17		-53.5 (17.3)	-5.6 (7.5)	-53.5 (45.0)	-46.4 (19.9)						13.7 (5.8)				
18															
19	5.6 (7.3)														
20	9.6 (7.9)														
21	16.4 (8.3)														
22	11.9 (7.1)														
23	12.9 (7.5)														
24	18.7 (7.7)														
25	23.1 (12.9)	359.0 (196.0)													
26	39.5 (10.4)	286.0 (145.0)													
27	9.7 (10.0)	445.0 (271.0)													
28	9.0 (7.6)	727.0 (458.0)													
Avg	15.8	401.0	558.0	742.0	643.0	18.0	32.1	31.9	37.4	48.5	17.2				
n	11	12	6	8	8	4	6	6	6	6	5	0	0	0	0
SD	8.9	246	321	355	341	10.5	28	13.5	20.6	33.2	4.3				
Min	5.6	-53.5	-5.6	-53.5	-46.4	6.7	3.6	17.1	10.5	20.5	12.1				
Max	39.5	834	832	1150	1040	31.4	82.7	48	66.9	113	23.6				

ED_004549_00015928-00148

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for March, 2009.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1	5.7 (5.8)	563.0 (377.0)													
2	4.5 (5.8)	561.0 (228.0)													
3	11.0 (7.5)	653.0 (316.0)													
4	24.8 (8.2)	604.0 (430.0)													
5	22.6 (7.5)	238.0 (201.0)													
6	22.2 (8.2)	203.0 (145.0)													
7	27.1 (11.4)	411.0 (181.0)	486.0 (226.0)	16.5 (9.6)	15.6 (7.4)										
8	9.1 (10.2)	569.0 (293.0)	491.0 (269.0)	5.9 (6.2)	8.0 (9.2)										
9				6.8 (12.0)	8.1 (6.1)										
10				11.1 (5.6)	10.5 (6.3)	9.8 (7.6)	15.5 (11.3)								
11				18.7 (71.8)	19.7 (10.1)										
12				57.5 (132.0)							12.6 (9.2)				
13											9.9 (9.0)				
14											12.4 (12.2)				
15											7.3 (11.3)				
16											24.6 (16.1)				
17					17.1 (9.5)						35.3 (6.9)				
18					28.9 (71.0)						28.8 (15.2)				
19					469.0 (410.0)						18.4 (9.4)	2020.0 (1080.0)			
20					561.0 (202.0)						11.7 (7.3)	2120.0 (838.0)			
21															
22															
23															
24	22.8 (10.5)				366.0 (403.0)		-33.7 (50.8)	24.2 (15.3)							
25	15.7 (7.3)				359.0 (567.0)		-27.0 (39.1)	12.6 (16.0)							
26	15.8 (7.0)				393.0 (558.0)		-24.3 (46.2)	18.1 (10.5)							
27	22.6 (14.1)														
28	13.7 (7.4)	207.0 (95.2)	941.0 (465.0)												
29	7.2 (6.0)	233.0 (135.0)	906.0 (516.0)												
30	10.6 (7.6)	197.0 (123.0)	854.0 (501.0)												
31	13.5 (7.7)	212.0 (146.0)	704.0 (490.0)												
Avg	15.6	388.0	730.0	19.4	188.0		-17.4	18.3			17.9	2070.0			
n	16	12	6	6	12	1	4	3	0	0	9	2	0	0	0
SD	7.1	181	186	17.7	210		19.3	4.7			9.1	48.8			
Min	4.5	197.0	486.0	5.9	8.0		-33.7	12.6			7.3	2020.0			
Max	27.1	653	941	57.5	561		15.5	24.2			35.3	2120			

ED_004549_00015928-00149

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for April, 2009.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1	9.6 (7.6)	204.0 (132.0)	456.0 (329.0)												
2	13.1 (9.9)	151.0 (98.0)	266.0 (153.0)	214.0 (103.0)											
3	12.2 (6.4)	238.0 (170.0)	286.0 (204.0)	236.0 (143.0)											
4	9.4 (7.4)	229.0 (105.0)	393.0 (193.0)	232.0 (115.0)	142.0 (64.9)										
5	9.2 (7.4)	212.0 (150.0)	502.0 (294.0)	246.0 (139.0)	111.0 (67.0)										
6	6.0 (8.7)	238.0 (172.0)	649.0 (418.0)	301.0 (194.0)	241.0 (184.0)										
7		214.0 (145.0)	658.0 (334.0)	326.0 (220.0)	217.0 (149.0)										
8		282.0 (177.0)	747.0 (334.0)	322.0 (218.0)	276.0 (163.0)						19.9 (9.5)				
9		245.0 (143.0)	589.0 (255.0)	261.0 (149.0)	278.0 (149.0)						28.8 (8.4)				
10		301.0 (212.0)	630.0 (356.0)	343.0 (234.0)	289.0 (176.0)										
11	12.5 (6.8)	332.0 (218.0)	571.0 (245.0)	294.0 (173.0)	254.0 (170.0)										
12	7.9 (7.9)	278.0 (192.0)	521.0 (225.0)	317.0 (202.0)	167.0 (100.0)										
13	10.4 (5.8)	199.0 (149.0)	477.0 (299.0)	343.0 (251.0)	140.0 (104.0)										
14	17.0 (8.5)	194.0 (161.0)	408.0 (261.0)	343.0 (264.0)	141.0 (103.0)										
15	12.4 (7.3)	181.0 (163.0)	391.0 (280.0)	270.0 (195.0)	143.0 (126.0)										
16	5.2 (13.4)	128.0 (136.0)	508.0 (416.0)	258.0 (218.0)											
17	12.4 (10.9)	126.0 (164.0)	324.0 (208.0)	195.0 (188.0)											
18	25.8 (10.1)	141.0 (133.0)	319.0 (210.0)	225.0 (182.0)											
19	16.6 (11.0)	134.0 (152.0)	276.0 (204.0)	221.0 (215.0)											
20	6.9 (9.5)	166.0 (178.0)	406.0 (350.0)	282.0 (266.0)											
21	5.2 (6.4)	215.0 (204.0)	350.0 (270.0)	305.0 (351.0)											
22	11.2 (8.0)	174.0 (231.0)	346.0 (283.0)	238.0 (254.0)											
23	9.7 (8.9)	154.0 (162.0)	290.0 (208.0)	207.0 (173.0)											
24	23.4 (10.2)	79.2 (123.0)	145.0 (167.0)	102.0 (156.0)											
25	24.3 (11.7)	104.0 (136.0)	141.0 (141.0)	97.5 (107.0)											
26	27.0 (10.2)	95.5 (142.0)	138.0 (158.0)	82.9 (129.0)											
27	24.0 (25.1)	148.0 (170.0)	211.0 (202.0)	149.0 (159.0)											
28	11.3 (7.1)	133.0 (204.0)	209.0 (189.0)	131.0 (130.0)											
29		179.0 (125.0)	276.0 (165.0)	133.0 (304.0)											
30		108.0 (38.7)	134.0 (57.5)	111.0 (521.0)											
Avg	13.4	186.0	387.0	234.0	200.0						24.3				
n	24	30	30	29	12	0	0	0	0	0	2	0	0	0	0
SD	6.6	62.4	168	79.2	62.7						4.4				
Min	5.2	79.2	134.0	82.9	111.0						19.9				
Max	27	332	747	343	289						28.8				

ED_004549_00015928-00150

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for May, 2009.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1		177.0 (116.0)	201.0 (146.0)	142.0 (431.0)											
2		207.0 (117.0)	258.0 (187.0)	137.0 (269.0)											
3		175.0 (81.0)	224.0 (132.0)	171.0 (293.0)											
4		198.0 (95.5)	199.0 (125.0)	157.0 (223.0)											
5		198.0 (114.0)	209.0 (110.0)	137.0 (214.0)											
6		191.0 (108.0)	204.0 (108.0)	165.0 (239.0)											
7		121.0 (77.6)	151.0 (82.7)	91.2 (164.0)											
8		121.0 (71.7)	161.0 (91.0)	123.0 (68.6)											
9		221.0 (148.0)	213.0 (164.0)	170.0 (100.0)											
10		211.0 (121.0)	218.0 (166.0)	170.0 (90.0)											
11		243.0 (169.0)	219.0 (162.0)	116.0 (87.1)											
12		256.0 (182.0)	243.0 (189.0)	150.0 (95.4)											
13		165.0 (105.0)	187.0 (85.1)	106.0 (52.5)											
14		132.0 (122.0)	155.0 (110.0)	114.0 (99.8)											
15		138.0 (114.0)	143.0 (105.0)	108.0 (78.9)											
16		123.0 (137.0)	178.0 (178.0)	97.0 (76.5)	122.0 (64.1)										
17		216.0 (157.0)	258.0 (184.0)	127.0 (134.0)	202.0 (103.0)										
18			206.0 (134.0)	90.3 (74.1)	190.0 (109.0)										
19			175.0 (133.0)	119.0 (74.3)	153.0 (71.4)										
20			132.0 (86.1)	109.0 (99.1)	116.0 (68.3)										
21		120.0 (87.1)	121.0 (73.5)	119.0 (59.1)	110.0 (52.6)										
22		113.0 (132.0)	120.0 (123.0)	127.0 (113.0)											
23	38.4 (25.9)	127.0 (150.0)	130.0 (126.0)	97.0 (98.6)											
24	35.3 (17.5)	96.9 (110.0)	107.0 (84.4)	82.3 (70.0)											
25	19.7 (15.2)	162.0 (147.0)	211.0 (186.0)	129.0 (124.0)	184.0 (136.0)										
26															
27	23.9 (23.6)	74.1 (105.0)	75.7 (115.0)	59.7 (89.1)											
28	6.3 (8.5)	160.0 (167.0)	181.0 (110.0)	159.0 (146.0)											
29	18.5 (17.7)	147.0 (174.0)	144.0 (56.2)	95.3 (130.0)	113.0 (98.8)										
30	15.2 (25.0)	152.0 (228.0)	151.0 (75.3)	120.0 (195.0)	130.0 (141.0)										
31	15.1 (15.7)	155.0 (210.0)	192.0 (73.2)	113.0 (157.0)	126.0 (138.0)										
Avg	21.6	163.0	179.0	123.0	145.0										
n	8	27	30	30	10	0	0	0	0	0	0	0	0	0	0
SD	10	44.8	44.5	27.9	33.4										
Min	6.3	74.1	75.7	59.7	110.0										
Max	38.4	256	258	171	202										

ED_004549_00015928-00151

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for June, 2009.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1															
2											24.8 (17.8)	407.0 (249.0)		405.0 (248.0)	593.0 (289.0)
3											9.3 (12.1)	1090.0 (675.0)		968.0 (549.0)	871.0 (467.0)
4															
5	20.4 (13.7)	180.0 (86.5)	242.0 (84.5)	152.0 (50.9)	178.0 (73.1)										
6	27.7 (23.4)	138.0 (61.9)	183.0 (69.8)	122.0 (47.6)	149.0 (74.4)										
7	29.3 (18.3)	128.0 (64.5)	157.0 (66.9)	120.0 (43.6)											
8	25.8 (19.9)	147.0 (105.0)	118.0 (56.8)	81.5 (32.0)											
9				104.0 (47.5)											
10	11.6 (20.4)			91.0 (45.5)											
11				78.2 (43.5)											
12		101.0 (63.7)	179.0 (99.4)	118.0 (54.7)											
13		106.0 (63.1)	119.0 (63.9)	107.0 (55.7)											
14		94.7 (47.1)	103.0 (50.3)	89.3 (43.5)											
15		104.0 (65.2)	113.0 (62.1)	112.0 (59.0)											
16															
17															
18															
19															
20															
21															
22		39.7 (44.3)		41.9 (43.1)	50.0 (61.3)										
23															
24		59.4 (70.0)	73.6 (76.1)	63.5 (64.5)											
25		44.2 (81.6)	76.1 (42.4)	49.5 (35.8)											
26		55.6 (40.6)	95.4 (54.3)	68.6 (41.4)	73.4 (33.3)										
27		100.0 (84.2)	143.0 (106.0)	99.9 (71.6)	120.0 (93.7)										
28		85.7 (64.5)	139.0 (83.6)	69.9 (47.9)	90.0 (51.3)										
29		174.0 (98.4)	264.0 (170.0)	162.0 (132.0)	205.0 (110.0)										
30		328.0 (138.0)	343.0 (238.0)	177.0 (86.1)	159.0 (98.2)										
Avg	22.9	118.0	157.0	100.0	128.0						17.1	748.0		686.0	732.0
n	5	16	15	19	8	0	0	0	0	0	2	2	0	2	2
SD	6.4	67.9	73.1	35.6	50.5						7.7	341		281	139
Min	11.6	39.7	73.6	41.9	50.0						9.3	407.0		405.0	593.0
Max	29.3	328	343	177	205						24.8	1090		968	871

ED_004549_00015928-00152

Table E4. Daily means (SD) of particulate matter concentrations at Site IN3B for July, 2009.

Day	PM_{10}, mg·dsm^{-3}					$PM_{2.5}$, mg·dsm^{-3}					TSP, mg·dsm^{-3}				
	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8	Inlet	Room 5	Room 6	Room 7	Room 8
1					170.0 (91.5)										
2							4.3 (42.8)	-0.1 (36.4)	0.4 (35.8)						
3							8.2 (26.1)	94.9 (252.0)	5.3 (29.8)						
4							11.1 (25.8)	129.0 (115.0)	5.6 (29.3)						
5							12.0 (31.6)	134.0 (153.0)	10.4 (26.3)						
6							14.9 (48.1)								
7							10.4 (63.6)								
8							12.0 (31.7)	6.7 (8.7)	6.7 (12.5)						
9							15.2 (20.8)	14.9 (8.3)	12.4 (9.3)						
10							33.8 (32.3)	29.7 (9.4)	25.9 (26.8)						
11							18.9 (21.2)		19.5 (93.2)						
12							3.0 (46.3)		2.5 (84.6)						
13									7.2 (51.5)						
14								6.2 (19.4)							
15							8.3 (17.7)	12.4 (21.1)	12.0 (10.7)						
16							4.6 (12.4)	3.1 (15.4)	6.0 (7.8)						
17							7.4 (13.3)	3.2 (26.3)	5.4 (8.8)	9.0 (10.4)					
18							13.8 (19.4)	7.8 (22.0)	10.9 (9.0)	19.4 (14.5)					
19							10.7 (23.5)	8.7 (27.3)	7.6 (8.0)	13.5 (14.1)					
20															
21												501.0 (203.0)	750.0 (598.0)	737.0 (418.0)	606.0 (341.0)
22												528.0 (245.0)	756.0 (499.0)	753.0 (514.0)	514.0 (241.0)
23												531.0 (338.0)	565.0 (528.0)	438.0 (293.0)	506.0 (292.0)
24															
25															
26															
27															
28															
29															
30															
31															
Avg							11.8	34.7	9.2	14.0		520.0	691.0	643.0	542.0
n	0	0	0	0	1	0	16	13	15	3	0	3	3	3	3
SD							7	47.7	6.3	4.3		13.5	88.6	145	45.6
Min							3.0	-0.1	0.4	9.0		501.0	565.0	438.0	506.0
Max							33.8	134	25.9	19.4		531	756	753	606

ED_004549_00015928-00153

Table E5. PM10 emissions.

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for July, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14	624 (324)	853 (443)	586 (305)	2780 (1450)	449 (200)	614 (273)	427 (189)	1990 (884)	456 (231)	623 (315)	424 (214)	2050 (1030)	523 (265)	714 (362)	501 (254)	2450 (1250)
15	563 (269)	769 (368)	530 (253)	2500 (1200)	410 (221)	560 (302)	390 (210)	1810 (976)	483 (283)	659 (386)	450 (263)	2160 (1260)	493 (212)	674 (290)	473 (204)	2310 (992)
16	493 (346)	673 (472)	464 (325)	2180 (1530)					473 (249)	646 (340)	441 (232)	2110 (1110)	485 (327)	663 (447)	466 (314)	2260 (1520)
17	336 (200)	459 (273)	317 (188)	1480 (883)					310 (169)	424 (231)	290 (158)	1380 (749)	300 (154)	410 (210)	289 (148)	1390 (714)
18	291 (196)	397 (267)	275 (185)	1280 (862)					233 (145)	318 (198)	223 (138)	1060 (654)	209 (125)	286 (171)	202 (120)	968 (578)
19	216 (268)	296 (367)	205 (254)	951 (1180)					175 (185)	239 (253)	193 (200)	919 (952)	205 (187)	280 (256)	198 (180)	945 (863)
20	543 (300)	741 (410)	514 (284)	2380 (1310)					383 (208)	523 (284)	426 (231)	2040 (1100)	599 (322)	818 (440)	578 (310)	2750 (1480)
21	412 (305)	563 (417)	390 (289)	1800 (1330)					333 (225)	454 (307)	371 (251)	1770 (1190)	454 (305)	620 (417)	438 (294)	2080 (1400)
22	435 (311)	595 (425)	413 (295)	1900 (1360)					378 (221)	517 (302)	423 (248)	2000 (1170)	511 (305)	698 (417)	494 (295)	2330 (1390)
23	442 (471)	604 (644)	425 (456)	1950 (2080)					369 (291)	504 (398)	413 (326)	1950 (1540)	535 (371)	730 (506)	517 (358)	2430 (1680)
24	398 (381)	544 (520)	405 (390)	1850 (1780)					319 (234)	436 (319)	358 (262)	1680 (1230)	510 (361)	697 (494)	493 (350)	2310 (1630)
25	398 (442)	544 (604)	432 (483)	1960 (2190)					310 (263)	424 (359)	349 (295)	1630 (1380)	465 (454)	636 (620)	450 (439)	2100 (2040)
26	285 (411)	389 (562)	325 (471)	1470 (2130)					266 (196)	363 (268)	299 (221)	1400 (1030)	343 (356)	468 (487)	367 (394)	1710 (1840)
27	137 (197)	188 (268)	158 (226)	713 (1020)					155 (166)	211 (226)	174 (187)	811 (869)	126 (154)	172 (210)	148 (181)	691 (841)
28	168 (245)	230 (335)	194 (283)	872 (1270)					176 (196)	241 (268)	199 (222)	923 (1030)	158 (194)	216 (265)	187 (228)	867 (1060)
29	212 (409)	290 (559)	245 (473)	1100 (2120)					259 (296)	354 (404)	293 (335)	1350 (1550)	218 (336)	298 (459)	257 (397)	1190 (1830)
30	288 (490)	393 (670)	338 (579)	1510 (2590)					345 (208)	471 (284)	390 (235)	1800 (1080)	280 (396)	382 (541)	331 (468)	1520 (2160)
31	307 (284)	419 (388)	384 (355)	1710 (1580)	265 (179)	362 (245)	333 (229)	1470 (1010)	299 (91)	408 (124)	339 (103)	1560 (474)	301 (257)	412 (351)	357 (304)	1640 (1400)
Avg	364	497	367	1690	375	512	383	1760	318	434	336	1590	373	510	375	1770
n	18	18	18	18	3	3	3	3	18	18	18	18	18	18	18	18
SD	135	184	117	558	79.1	108	38.6	216	95.1	130	88.7	428	146	200	130	626
Min	137	188	158	713	265	362	333	1470	155	211	174	811	126	172	148	691
Max	624	853	586	2780	449	614	427	1990	483	659	450	2160	599	818	578	2750

ED_004549_00015928-00154

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for August, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	318 (109)	435 (149)	425 (142)	1880 (631)					251 (93)	344 (127)	286 (106)	1310 (485)	266 (110)	363 (150)	315 (130)	1440 (598)
2	330 (125)	451 (171)	471 (179)	2100 (791)					192 (157)	263 (214)	219 (178)	998 (812)	267 (126)	365 (172)	317 (149)	1450 (680)
3																
4	500 (221)	683 (301)	723 (319)	3230 (1430)					262 (139)	358 (190)	299 (158)	1350 (717)	401 (183)	548 (250)	477 (218)	2160 (985)
5	259 (94)	353 (129)	375 (137)	1670 (609)					114 (71)	156 (97)	131 (81)	589 (365)	195 (76)	266 (104)	232 (91)	1050 (411)
6	272 (169)	371 (230)	400 (249)	1780 (1110)					94 (139)	128 (190)	107 (159)	482 (715)	206 (132)	281 (181)	248 (159)	1110 (715)
7																
8																
9									93 (82)	127 (112)	129 (113)	578 (507)				
10	249 (104)	340 (142)	483 (202)	2160 (906)	185 (103)	252 (141)	360 (201)	1600 (891)	103 (68)	141 (93)	147 (97)	667 (440)	216 (119)	296 (163)	324 (179)	1470 (810)
11	340 (200)	464 (273)	662 (390)	2950 (1740)	227 (129)	310 (176)	444 (252)	1960 (1110)	135 (110)	184 (150)	192 (157)	868 (707)	355 (145)	485 (197)	533 (217)	2410 (980)
12	324 (162)	443 (221)	635 (317)	2820 (1410)	229 (117)	313 (160)	448 (229)	1980 (1010)	115 (83)	157 (113)	165 (119)	741 (534)				
13	570 (295)	778 (403)	1150 (603)	5080 (2660)	285 (158)	390 (216)	573 (321)	2510 (1410)	186 (103)	254 (141)	267 (148)	1190 (662)	353 (373)	482 (509)	540 (574)	2420 (2570)
14	392 (214)	536 (292)	877 (475)	3860 (2090)	253 (206)	346 (282)	564 (462)	2460 (2010)	177 (101)	241 (138)	254 (145)	1130 (646)	307 (212)	420 (290)	508 (349)	2270 (1560)
15	328 (151)	448 (207)	840 (382)	3690 (1680)	188 (110)	257 (150)	482 (287)	2090 (1240)	155 (88)	211 (121)	233 (132)	1030 (585)	219 (146)	299 (199)	399 (263)	1770 (1170)
16	210 (224)	287 (306)	610 (644)	2710 (2820)	88 (114)	121 (156)	254 (324)	1110 (1410)	74 (97)	101 (133)	134 (176)	597 (783)	165 (168)	226 (230)	330 (335)	1480 (1480)
17																
18																
19	208 (165)	285 (225)	629 (498)	2810 (2230)	125 (138)	171 (189)	377 (416)	1650 (1820)	85 (108)	116 (148)	218 (283)	980 (1270)	127 (174)	173 (238)	260 (357)	1170 (1610)
20	138 (123)	189 (168)	698 (797)	3240 (3770)	43 (62)	58 (85)	129 (199)	564 (871)	47 (71)	64 (97)	134 (204)	605 (922)	58 (104)	79 (142)	120 (219)	538 (983)
21	80 (115)	109 (156)	587 (846)	2760 (3980)	6 (18)	8 (24)	0 (0)	0 (0)	17 (74)	23 (101)	49 (219)	225 (1010)	14 (94)	18 (128)	45 (305)	208 (1420)
22	134 (290)	183 (397)	996 (2170)	4670 (10200)					42 (94)	57 (128)	124 (281)	573 (1290)				
23																
24	172 (173)	235 (236)	1300 (1310)	6060 (6110)					50 (99)	69 (135)	152 (298)	693 (1360)	105 (126)	144 (172)	347 (416)	1590 (1910)
25	133 (136)	181 (186)	1020 (1050)	4710 (4830)					22 (70)	30 (96)	66 (214)	299 (972)	64 (106)	88 (145)	212 (351)	967 (1600)
26	183 (175)	250 (240)	1420 (1360)	6530 (6270)					29 (87)	40 (119)	89 (266)	404 (1200)	134 (143)	183 (195)	445 (474)	2020 (2150)
27																
28																
29																
30																
31																
Avg	270	369	752	3410	163	223	363	1590	112	153	170	766	203	277	333	1500
n	19	19	19	19	10	10	10	10	20	20	20	20	17	17	17	17
SD	124	169	296	1380	88.8	121	176	773	70.9	96.8	70.9	319	109	149	137	614
Min	80	109	375	1670	6	8	0	0	17	23	49	225	14	18	45	208
Max	570	778	1420	6530	285	390	573	2510	262	358	299	1350	401	548	540	2420

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Table E5. Daily means (SD) of PM10 emissions at Site IN3B for September, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6					61 (98)	83 (134)	28 (45)	1340 (2140)								
7					79 (74)	108 (101)	36 (34)	1660 (1550)								
8																
9																
10																
11	64 (52)	87 (72)	28 (23)	1480 (1210)	95 (98)	130 (134)	44 (45)	1720 (1760)	-6 (6)	-8 (8)	0 (0)	0 (0)				
12	79 (70)	108 (95)	35 (31)	1760 (1530)	167 (158)	228 (216)	77 (73)	2920 (2760)	-2 (5)	-2 (7)	0 (0)	0 (0)				
13					120 (131)	163 (180)	55 (61)	2040 (2230)	-1 (11)	-2 (15)	0 (0)	0 (0)				
14					128 (124)	175 (169)	59 (57)	2110 (2040)	-1 (5)	-2 (7)	0 (0)	0 (0)				
15					185 (159)	252 (217)	85 (73)	2960 (2530)	0 (4)	-1 (5)	0 (0)	0 (0)				
16					195 (180)	266 (246)	90 (83)	3030 (2780)	-1 (5)	-1 (7)	0 (0)	0 (0)				
17					176 (152)	241 (208)	81 (70)	2660 (2290)	-2 (3)	-3 (4)	0 (0)	0 (0)				
18					198 (184)	271 (251)	95 (86)	3020 (2740)	0 (3)	-1 (4)	0 (0)	0 (0)				
19																
20																
21					21 (124)	29 (169)	19 (118)	558 (3460)	74 (100)	101 (137)	79 (193)	2270 (5570)				
22					19 (158)	25 (216)	18 (153)	508 (4340)	104 (118)	141 (162)	92 (106)	2580 (2940)	0 (44)	0 (61)	0 (0)	0 (0)
23					52 (81)	71 (110)	50 (78)	1380 (2150)	126 (79)	173 (108)	113 (70)	3060 (1900)	-5 (14)	-6 (20)	0 (0)	0 (0)
24					67 (123)	92 (168)	65 (119)	1750 (3210)	105 (119)	143 (163)	94 (107)	2480 (2820)	-5 (29)	-7 (40)	0 (0)	0 (0)
25																
26					49 (65)	67 (89)	47 (63)	1210 (1610)	57 (53)	78 (72)	51 (47)	1270 (1170)	-3 (11)	-4 (16)	0 (0)	0 (0)
27	232 (157)	317 (215)	166 (116)	5080 (3540)	54 (134)	74 (183)	52 (129)	1300 (3200)	154 (166)	210 (227)	137 (148)	3330 (3580)	-4 (10)	-5 (14)	0 (0)	0 (0)
28																
29	82 (44)	112 (60)	75 (41)	2170 (1170)	83 (137)	114 (187)	80 (132)	1890 (3100)	143 (109)	196 (149)	128 (98)	2940 (2230)	8 (33)	11 (45)	7 (29)	178 (708)
30	97 (63)	133 (86)	89 (58)	2510 (1610)	98 (138)	134 (189)	95 (133)	2170 (3050)	183 (148)	250 (202)	164 (132)	3650 (2940)	-2 (54)	-3 (74)	-2 (48)	-42 (1140)
Avg	111	151	79	2600	103	140	60	1900	58	80	54	1350	-1	-2	1	19
n	5	5	5	5	18	18	18	18	16	16	16	16	7	7	7	7
SD	61.5	84	49.5	1290	57.9	79.1	24.5	771	66.1	90.3	58.6	1430	4.3	5.8	2.8	66.5
Min	64	87	28	1480	19	25	18	508	-6	-8	0	0	-5	-7	-2	-42
Max	232	317	166	5080	198	271	95	3030	183	250	164	3650	8	11	7	178

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Table E5. Daily means (SD) of PM10 emissions at Site IN3B for October, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	109 (99)	149 (135)	100 (91)	2750 (2500)	133 (153)	182 (209)	128 (148)	2870 (3300)	217 (176)	297 (240)	194 (157)	4220 (3400)	20 (30)	27 (40)	18 (27)	412 (605)
2																
3																
4																
5																
6																
7																
8																
9																
10																
11	79 (74)	108 (101)	73 (68)	1520 (1430)	55 (54)	75 (74)	53 (52)	898 (884)	88 (80)	120 (110)	79 (72)	1290 (1170)	22 (22)	30 (30)	20 (20)	343 (345)
12	67 (80)	91 (109)	62 (73)	1260 (1490)	64 (72)	87 (99)	62 (70)	1020 (1150)	93 (126)	127 (172)	83 (113)	1320 (1790)	22 (21)	31 (29)	20 (19)	341 (318)
13	73 (111)	100 (152)	68 (103)	1340 (2030)	76 (86)	104 (117)	74 (83)	1190 (1330)	101 (125)	138 (171)	91 (112)	1400 (1730)	29 (38)	39 (52)	26 (34)	425 (569)
14	52 (112)	70 (154)	48 (104)	916 (2000)	81 (90)	110 (123)	78 (87)	1220 (1360)	105 (125)	143 (171)	94 (112)	1410 (1690)	25 (42)	34 (57)	22 (38)	355 (601)
15	73 (131)	99 (178)	67 (121)	1260 (2260)	86 (111)	118 (152)	84 (108)	1270 (1640)	83 (142)	114 (194)	75 (127)	1100 (1860)	31 (102)	42 (139)	28 (92)	435 (1430)
16	45 (138)	62 (189)	42 (128)	770 (2340)	82 (87)	112 (119)	79 (85)	1180 (1260)	92 (81)	126 (110)	83 (73)	1180 (1030)	56 (301)	77 (412)	51 (272)	776 (4140)
17	71 (177)	97 (242)	66 (164)	1170 (2900)	62 (128)	85 (175)	60 (124)	867 (1790)	76 (168)	104 (229)	68 (151)	947 (2090)	24 (97)	32 (132)	21 (87)	315 (1290)
18																
19					55 (82)	76 (112)	54 (79)	735 (1090)	98 (93)	133 (126)	88 (83)	1150 (1090)	17 (29)	23 (39)	15 (26)	213 (365)
20	140 (100)	192 (137)	130 (93)	2120 (1510)	78 (116)	107 (159)	76 (112)	1010 (1500)	105 (149)	144 (204)	95 (134)	1210 (1710)	23 (134)	31 (183)	21 (121)	284 (1660)
21	139 (90)	190 (124)	129 (84)	2050 (1330)	68 (146)	93 (199)	66 (141)	860 (1840)	85 (180)	116 (247)	76 (162)	950 (2020)	15 (126)	21 (172)	14 (113)	186 (1520)
22	183 (172)	250 (235)	169 (159)	2620 (2460)	147 (174)	200 (237)	142 (168)	1810 (2130)	164 (180)	223 (246)	147 (162)	1790 (1970)				
23					89 (95)	122 (130)	87 (92)	1070 (1140)	111 (121)	152 (165)	100 (109)	1190 (1290)	36 (31)	49 (42)	33 (28)	416 (350)
24																
25																
26																
27																
28																
29																
30																
31																
Avg	94	128	87	1620	83	113	80	1230	109	149	98	1470	27	36	24	375
n	11	11	11	11	13	13	13	13	13	13	13	13	12	12	12	12
SD	41.4	56.5	38.3	639	26.7	36.5	25.9	538	37.5	51.2	33.5	821	10.5	14.4	9.5	143
Min	45	62	42	770	55	75	53	735	76	104	68	947	15	21	14	186
Max	183	250	169	2750	147	200	142	2870	217	297	194	4220	56	77	51	776

ED_004549_00015928-00157

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for November, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2	127 (108)	173 (147)	118 (100)	1380 (1170)	138 (174)	188 (237)	134 (168)	1310 (1650)	147 (205)	200 (279)	132 (185)	1240 (1720)	25 (54)	34 (74)	22 (49)	225 (492)
3	132 (122)	181 (166)	123 (113)	1410 (1290)	127 (171)	173 (234)	123 (166)	1180 (1590)	137 (228)	187 (311)	123 (206)	1130 (1880)	26 (59)	35 (81)	23 (54)	227 (529)
4	142 (134)	194 (183)	132 (124)	1480 (1390)	132 (187)	180 (256)	128 (181)	1200 (1700)	134 (236)	183 (323)	121 (213)	1080 (1910)	38 (79)	53 (108)	35 (71)	335 (687)
5	149 (138)	204 (188)	138 (128)	1510 (1400)	132 (174)	180 (237)	128 (169)	1170 (1550)	137 (214)	188 (292)	124 (193)	1090 (1690)	38 (66)	51 (90)	34 (59)	321 (560)
6	156 (147)	214 (201)	145 (137)	1550 (1460)	142 (125)	194 (171)	137 (121)	1240 (1090)	147 (198)	200 (270)	133 (179)	1140 (1540)	32 (35)	44 (48)	29 (32)	269 (295)
7	159 (121)	217 (165)	148 (112)	1550 (1170)	157 (121)	214 (166)	152 (118)	1340 (1040)	151 (211)	207 (288)	137 (191)	1150 (1610)	35 (29)	48 (39)	32 (26)	286 (236)
8	180 (189)	246 (258)	167 (175)	1710 (1790)					171 (248)	234 (339)	155 (225)	1280 (1850)	34 (31)	46 (42)	30 (28)	271 (246)
9	180 (157)	246 (215)	167 (146)	1670 (1460)					146 (243)	200 (332)	133 (220)	1070 (1780)	31 (28)	42 (38)	28 (25)	242 (217)
10	169 (178)	231 (244)	157 (166)	1540 (1620)					153 (251)	209 (342)	138 (227)	1100 (1800)	39 (31)	53 (43)	35 (28)	301 (243)
11	147 (154)	200 (211)	136 (144)	1310 (1370)					157 (339)	214 (463)	142 (307)	1110 (2390)	31 (42)	42 (58)	28 (38)	233 (322)
12	178 (192)	243 (262)	165 (179)	1550 (1680)					174 (279)	238 (381)	158 (253)	1210 (1940)	27 (38)	37 (52)	25 (35)	202 (284)
13	200 (217)	273 (297)	186 (202)	1700 (1850)					164 (246)	223 (336)	148 (223)	1110 (1680)	33 (41)	45 (56)	30 (37)	240 (301)
14	192 (210)	262 (286)	178 (195)	1600 (1750)					168 (275)	230 (376)	152 (250)	1130 (1840)	36 (44)	49 (61)	33 (40)	258 (318)
15	208 (177)	285 (242)	194 (165)	1710 (1450)					137 (153)	187 (209)	124 (139)	902 (1010)	38 (33)	52 (45)	35 (30)	269 (230)
16	171 (135)	233 (184)	159 (125)	1380 (1080)					125 (228)	171 (311)	114 (207)	812 (1480)	36 (38)	49 (51)	33 (34)	251 (260)
17	205 (250)	280 (341)	191 (233)	1620 (1970)					170 (316)	232 (431)	154 (286)	1080 (2010)	34 (36)	47 (50)	31 (33)	233 (247)
18	145 (169)	198 (231)	135 (157)	1130 (1310)					155 (304)	212 (415)	140 (276)	972 (1910)	28 (27)	38 (37)	25 (25)	185 (183)
19	173 (219)	237 (299)	161 (204)	1320 (1670)	187 (127)	255 (174)	182 (124)	1290 (875)	180 (323)	245 (442)	163 (293)	1110 (2000)	29 (42)	39 (58)	26 (38)	190 (277)
20	212 (363)	289 (496)	197 (338)	1580 (2710)	207 (132)	283 (180)	201 (128)	1400 (889)	197 (203)	269 (277)	179 (184)	1200 (1230)	28 (69)	39 (94)	26 (62)	183 (444)
21	244 (164)	334 (224)	228 (153)	1790 (1200)	221 (115)	301 (157)	214 (111)	1470 (764)	223 (136)	305 (186)	203 (124)	1340 (817)				
22	249 (167)	341 (229)	233 (156)	1800 (1210)	211 (117)	288 (160)	205 (114)	1390 (770)	147 (113)	201 (155)	134 (103)	870 (670)				
23	246 (153)	336 (209)	230 (143)	1750 (1080)	184 (96)	252 (131)	179 (93)	1190 (618)	159 (110)	217 (150)	144 (100)	927 (639)	46 (37)	62 (51)	41 (34)	282 (230)
24	226 (141)	309 (193)	211 (132)	1580 (985)	197 (92)	269 (125)	191 (89)	1260 (584)	150 (82)	204 (112)	136 (75)	860 (471)	41 (36)	56 (49)	37 (32)	248 (219)
25	196 (124)	267 (170)	183 (116)	1340 (853)	201 (99)	275 (136)	195 (97)	1270 (625)	140 (87)	192 (119)	128 (79)	796 (493)	32 (34)	44 (46)	29 (31)	194 (202)
26	177 (131)	241 (178)	165 (122)	1190 (880)	165 (93)	225 (127)	160 (91)	1020 (578)	122 (66)	166 (90)	111 (60)	681 (367)				
27	216 (158)	295 (216)	202 (148)	1440 (1050)	184 (108)	251 (148)	179 (105)	1130 (662)	152 (106)	208 (145)	138 (97)	840 (586)				
28	233 (170)	319 (232)	218 (159)	1530 (1110)	194 (118)	265 (162)	188 (115)	1170 (713)	195 (178)	266 (243)	177 (162)	1060 (972)				
29	240 (160)	327 (218)	224 (149)	1540 (1030)	178 (99)	244 (135)	173 (96)	1060 (587)	158 (128)	215 (174)	144 (116)	851 (688)				
30	304 (298)	415 (407)	284 (278)	1930 (1890)	225 (175)	308 (239)	219 (170)	1330 (1030)	153 (146)	209 (200)	139 (133)	814 (778)				
Avg	192	262	178	1540	177	241	172	1250	157	214	142	1030	33	46	30	248
n	29	29	29	29	18	18	18	18	29	29	29	29	22	22	22	22
SD	41.1	56.1	38.6	182	31.3	42.8	30.6	114	21.6	29.6	19.7	163	5.2	7.1	4.7	41.5
Min	127	173	118	1130	127	173	123	1020	122	166	111	681	25	34	22	183
Max	304	415	284	1930	225	308	219	1470	223	305	203	1340	46	62	41	335

ED_004549_00015928-00158

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for December, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	268 (135)	366 (184)	250 (126)	1680 (843)					169 (103)	231 (140)	154 (94)	891 (541)				
2	260 (200)	355 (273)	243 (187)	1610 (1240)	267 (218)	365 (298)	260 (212)	1540 (1260)								
3	244 (146)	333 (199)	228 (136)	1480 (888)	244 (141)	333 (193)	237 (137)	1380 (801)								
4	218 (158)	298 (215)	204 (147)	1310 (947)	230 (156)	314 (213)	224 (151)	1290 (873)	241 (555)	329 (758)	220 (506)	1230 (2830)				
5	270 (181)	369 (247)	252 (169)	1600 (1070)	265 (148)	361 (202)	257 (144)	1470 (822)	202 (116)	276 (159)	184 (106)	1020 (587)				
6	264 (219)	360 (299)	247 (205)	1540 (1280)	243 (129)	332 (177)	236 (126)	1330 (709)	213 (195)	291 (266)	194 (178)	1070 (975)				
7	233 (162)	318 (221)	218 (152)	1350 (935)	213 (107)	291 (147)	207 (105)	1160 (583)	151 (112)	206 (153)	138 (103)	750 (557)				
8	204 (177)	278 (241)	191 (165)	1160 (1010)	175 (88)	239 (120)	170 (85)	940 (472)	160 (115)	218 (158)	146 (105)	786 (566)				
9	188 (183)	257 (250)	176 (172)	1060 (1030)	161 (82)	220 (112)	157 (80)	860 (434)	162 (174)	222 (237)	148 (159)	792 (845)				
10	200 (254)	273 (347)	187 (238)	1120 (1420)	145 (78)	199 (106)	142 (76)	768 (409)	121 (124)	165 (169)	110 (113)	583 (598)				
11																
12																
13																
14																
15																
16																
17																
18																
19																
20	163 (192)	222 (262)	153 (180)	824 (970)	230 (132)	314 (180)	224 (128)	1120 (641)	199 (156)	272 (213)	183 (143)	897 (702)				
21	155 (207)	212 (283)	146 (195)	778 (1040)	230 (143)	314 (195)	224 (139)	1110 (691)	186 (177)	254 (242)	171 (162)	833 (791)				
22	212 (256)	290 (350)	199 (241)	1060 (1270)	235 (113)	321 (154)	229 (110)	1130 (541)	244 (184)	333 (251)	223 (169)	1080 (818)				
23	195 (286)	267 (391)	184 (269)	966 (1410)	278 (127)	380 (173)	271 (123)	1330 (605)	89 (88)	121 (120)	81 (80)	392 (388)				
24	229 (250)	313 (342)	216 (235)	1130 (1230)	238 (100)	325 (137)	232 (98)	1130 (475)	200 (191)	274 (261)	184 (175)	882 (841)				
25	276 (402)	377 (550)	259 (379)	1340 (1960)	247 (139)	338 (189)	241 (135)	1170 (653)	165 (137)	225 (187)	151 (126)	721 (600)				
26	258 (356)	352 (486)	243 (335)	1250 (1720)	253 (154)	346 (210)	247 (150)	1190 (721)	182 (210)	248 (287)	167 (193)	792 (915)				
27	215 (244)	294 (334)	202 (230)	1030 (1170)	225 (137)	307 (187)	219 (133)	1050 (637)	141 (200)	193 (273)	129 (184)	611 (867)				
28	179 (106)	245 (145)	169 (100)	857 (507)	262 (172)	358 (235)	256 (168)	1210 (796)	191 (184)	261 (251)	176 (169)	825 (793)	39 (56)	53 (76)	35 (51)	170 (246)
29	210 (118)	286 (161)	197 (111)	994 (559)	270 (141)	369 (193)	263 (138)	1250 (652)	171 (168)	234 (229)	158 (154)	737 (721)	43 (65)	58 (89)	39 (59)	187 (285)
30	177 (116)	242 (158)	167 (109)	834 (546)	249 (137)	341 (187)	243 (133)	1140 (627)	177 (208)	242 (285)	163 (192)	756 (891)	49 (93)	67 (127)	44 (84)	212 (404)
31	234 (230)	320 (314)	220 (216)	1100 (1080)	272 (194)	372 (264)	266 (189)	1240 (884)	197 (229)	269 (313)	181 (210)	840 (975)	53 (70)	73 (95)	48 (63)	231 (301)
Avg	220	301	207	1190	235	321	229	1180	178	243	163	824	46	63	41	200
n	22	22	22	22	21	21	21	21	20	20	20	20	4	4	4	4
SD	35.2	48.1	32.8	267	35	47.8	34.2	181	36	49.2	32.9	182	5.6	7.7	5.1	23.3
Min	155	212	146	778	145	199	142	768	89	121	81	392	39	53	35	170
Max	276	377	259	1680	278	380	271	1540	244	333	223	1230	53	73	48	231

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for January, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	196 (100)	268 (136)	185 (94)	914 (464)					154 (130)	210 (178)	141 (120)	653 (553)	37 (49)	50 (67)	33 (44)	158 (210)
2	216 (133)	295 (182)	204 (125)	1000 (616)					146 (94)	200 (129)	134 (87)	617 (398)	43 (56)	59 (76)	39 (50)	185 (238)
3									229 (445)	313 (609)	211 (410)	965 (1870)				
4	253 (215)	346 (294)	239 (203)	1160 (986)	157 (126)	214 (172)	153 (123)	704 (564)	251 (409)	343 (558)	233 (379)	1060 (1720)				
5	261 (168)	356 (230)	246 (159)	1190 (769)	149 (114)	203 (155)	145 (111)	663 (507)	323 (342)	442 (468)	307 (325)	1390 (1470)				
6	250 (183)	341 (250)	236 (173)	1140 (830)	125 (124)	170 (169)	122 (121)	555 (549)	262 (227)	358 (310)	256 (222)	1150 (1000)				
7	249 (225)	340 (307)	235 (212)	1130 (1020)	124 (167)	170 (229)	122 (164)	552 (742)	269 (337)	367 (460)	269 (339)	1210 (1520)				
8	295 (460)	403 (629)	279 (435)	1330 (2070)					350 (731)	479 (998)	361 (755)	1620 (3380)				
9	324 (228)	443 (312)	306 (216)	1450 (1020)	277 (174)	378 (238)	270 (170)	1220 (766)	352 (382)	481 (522)	374 (406)	1670 (1810)	58 (36)	80 (49)	53 (32)	243 (148)
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25	241 (143)	329 (195)	277 (164)	1250 (741)	253 (137)	346 (188)	407 (223)	1740 (955)	128 (36)	175 (49)	235 (65)	1010 (279)	139 (63)	190 (86)	197 (89)	869 (394)
26	256 (138)	350 (189)	295 (159)	1330 (716)	250 (155)	341 (212)	431 (267)	1830 (1140)	108 (46)	148 (63)	220 (94)	943 (402)	97 (78)	132 (106)	146 (117)	641 (513)
27	311 (223)	425 (305)	359 (257)	1610 (1150)	237 (271)	324 (371)	441 (513)	1870 (2170)	113 (72)	155 (98)	259 (167)	1110 (713)	111 (140)	151 (191)	180 (231)	784 (1010)
28					124 (75)	170 (102)	248 (150)	1060 (647)	64 (32)	87 (43)	163 (81)	704 (351)	53 (37)	72 (51)	91 (64)	401 (284)
29					116 (82)	158 (112)	232 (165)	998 (708)	103 (236)	140 (322)	267 (612)	1160 (2670)	56 (58)	76 (80)	97 (101)	429 (448)
30																
31																
Avg	259	354	260	1230	181	248	257	1120	204	278	245	1090	74	101	104	464
n	11	11	11	11	10	10	10	10	14	14	14	14	8	8	8	8
SD	36.5	49.9	47.1	188	61.5	84	121	502	95.2	130	69.3	309	34.5	47.1	59.5	256
Min	196	268	185	914	116	158	122	552	64	87	134	617	37	50	33	158
Max	324	443	359	1610	277	378	441	1870	352	481	374	1670	139	190	197	869

ED_004549_00015928-00160

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for February, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6									98 (75)	134 (102)	380 (284)	1600 (1190)	160 (174)	218 (238)	356 (393)	1540 (1690)
7																
8																
9					122 (43)	167 (58)	386 (134)	1620 (563)	48 (31)	65 (43)	239 (156)	1030 (672)	114 (78)	155 (106)	275 (188)	1210 (824)
10					105 (60)	144 (82)	331 (189)	1380 (788)	42 (40)	57 (55)	209 (203)	892 (868)	116 (85)	159 (116)	272 (199)	1190 (866)
11					178 (57)	244 (77)	562 (179)	2340 (743)	90 (35)	123 (48)	455 (175)	1940 (746)	136 (78)	186 (106)	309 (176)	1340 (766)
12					181 (75)	248 (103)	591 (244)	2440 (1010)	36 (53)	49 (73)	328 (1880)	1390 (7980)	127 (76)	173 (103)	281 (167)	1210 (719)
13					164 (61)	223 (84)	646 (237)	2660 (976)	-1 (7)	-2 (10)	0 (0)	0 (0)	160 (77)	218 (105)	354 (171)	1520 (731)
14					213 (90)	291 (123)	1100 (485)	4500 (1990)	0 (12)	1 (16)	0 (0)	0 (0)	170 (134)	232 (183)	412 (330)	1780 (1430)
15					95 (114)	130 (156)	623 (741)	2580 (3020)	-1 (10)	-2 (14)	0 (0)	0 (0)	119 (164)	162 (224)	405 (538)	1820 (2410)
16					50 (18)	68 (24)	351 (122)	1510 (527)	1 (10)	1 (14)	0 (0)	0 (0)	69 (43)	94 (59)	248 (155)	1110 (695)
17					27 (10)	37 (13)	190 (69)	816 (296)	-7 (10)	-9 (13)	0 (0)	0 (0)	74 (49)	101 (67)	352 (241)	1570 (1080)
18					37 (14)	51 (19)	261 (97)	1110 (414)	-2 (8)	-3 (11)	0 (0)	0 (0)	19 (42)	25 (58)	154 (3340)	690 (15000)
19																
20																
21																
22																
23																
24																
25													0 (1)	0 (1)	0 (0)	0 (0)
26													0 (0)	0 (0)	0 (0)	0 (0)
27													0 (0)	0 (0)	0 (0)	0 (0)
28													0 (0)	0 (0)	0 (0)	0 (0)
29													0 (0)	0 (0)	0 (0)	0 (0)
Avg					117	160	504	2100	28	38	146	623	79	108	214	936
n	0	0	0	0	10	10	10	10	11	11	11	11	16	16	16	16
SD					62.3	85.1	249	1010	36.6	50	171	728	64.3	87.8	156	683
Min					27	37	190	816	-7	-9	0	0	0	0	0	0
Max					213	291	1100	4500	98	134	455	1940	170	232	412	1820

ED_004549_00015928-00161

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for March, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1													0 (0)	0 (0)	0 (0)	0 (0)
2													0 (0)	0 (0)	0 (0)	0 (0)
3													0 (0)	0 (0)	0 (0)	0 (0)
4													0 (1)	0 (1)	0 (0)	0 (0)
5					45 (44)	61 (60)	18 (18)	1730 (1690)					0 (0)	0 (0)	0 (0)	0 (0)
6					63 (47)	85 (64)	25 (19)	2220 (1670)					0 (0)	0 (0)	0 (0)	0 (0)
7					99 (61)	135 (84)	40 (25)	3150 (1950)					0 (1)	0 (1)	0 (0)	0 (0)
8	174 (112)	238 (153)	71 (46)	3220 (2040)	174 (84)	237 (115)	71 (34)	5070 (2440)					0 (0)	0 (0)	0 (0)	0 (0)
9	188 (128)	256 (175)	77 (53)	3320 (2250)	244 (139)	333 (191)	99 (57)	6600 (3730)					0 (0)	0 (0)	0 (0)	0 (0)
10	206 (173)	281 (236)	84 (71)	3520 (2940)	269 (177)	367 (242)	109 (72)	6770 (4400)					0 (0)	0 (0)	0 (0)	0 (0)
11	145 (125)	198 (171)	59 (51)	2390 (2050)	93 (75)	126 (103)	38 (31)	2190 (1780)					0 (0)	0 (0)	0 (0)	0 (0)
12	287 (302)	392 (413)	118 (124)	4550 (4780)	125 (113)	171 (155)	51 (46)	2800 (2520)					0 (0)	0 (0)	0 (0)	0 (0)
13																
14																
15																
16	409 (347)	559 (474)	168 (142)	5750 (4860)	283 (238)	387 (325)	115 (97)	5290 (4420)								
17	291 (258)	397 (352)	122 (109)	4080 (3630)	359 (280)	491 (383)	146 (114)	6490 (5040)								
18	239 (236)	327 (322)	113 (112)	3680 (3630)												
19	429 (306)	586 (418)	237 (174)	7440 (5430)												
20	436 (281)	596 (384)	284 (189)	8650 (5740)												
21	172 (153)	235 (210)	130 (116)	3850 (3450)												
22	119 (121)	162 (165)	91 (93)	2630 (2680)												
23	128 (103)	175 (140)	98 (79)	2760 (2210)												
24	133 (112)	182 (153)	102 (86)	2790 (2340)												
25	119 (125)	163 (171)	92 (97)	2430 (2560)												
26	197 (116)	269 (158)	151 (89)	3900 (2290)	545 (392)	744 (535)	246 (180)	8120 (5900)								
27	188 (85)	257 (115)	145 (65)	3640 (1630)	437 (303)	597 (414)	214 (152)	6880 (4840)								
28	228 (111)	312 (152)	176 (86)	4290 (2080)	472 (348)	644 (476)	256 (193)	7980 (5980)								
29	173 (85)	236 (116)	133 (65)	3160 (1550)	560 (479)	765 (654)	337 (293)	10200 (8840)								
30	164 (100)	224 (137)	126 (77)	2910 (1770)	502 (258)	686 (353)	340 (181)	10000 (5270)								
31	121 (111)	165 (152)	94 (87)	2110 (1940)	227 (146)	310 (200)	169 (109)	4860 (3140)								
Avg	216	296	127	3860	281	384	142	5650					0	0	0	0
n	21	21	21	21	16	16	16	16	0	0	0	0	12	12	12	12
SD	97.7	133	53	1600	172	236	104	2620					0	0	0	0
Min	119	162	59	2110	45	61	18	1730					0	0	0	0
Max	436	596	284	8650	560	765	340	10200					0	0	0	0

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Table E5. Daily means (SD) of PM10 emissions at Site IN3B for April, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	159 (127)	217 (173)	130 (104)	2820 (2250)	167 (92)	228 (126)	128 (72)	3560 (1970)								
2	188 (121)	257 (165)	161 (104)	3410 (2190)	247 (126)	337 (173)	202 (105)	5450 (2820)								
3	159 (136)	217 (186)	144 (124)	2960 (2540)	205 (102)	280 (140)	179 (91)	4700 (2370)								
4	84 (147)	115 (201)	79 (139)	1590 (2800)	127 (78)	173 (106)	117 (72)	2990 (1850)								
5	115 (103)	157 (141)	109 (98)	2120 (1900)	111 (86)	152 (117)	104 (80)	2560 (1960)	192 (202)	262 (276)	161 (169)	3990 (4190)				
6	105 (97)	144 (132)	100 (92)	1880 (1720)	125 (133)	171 (182)	116 (124)	2790 (2970)	186 (155)	255 (212)	156 (130)	3780 (3130)				
7	97 (141)	133 (193)	92 (134)	1700 (2460)	112 (167)	153 (228)	105 (155)	2440 (3610)	164 (174)	224 (238)	138 (146)	3250 (3440)				
8	167 (153)	228 (208)	159 (145)	2820 (2570)	142 (129)	193 (177)	132 (121)	2990 (2730)	79 (56)	108 (77)	66 (47)	1530 (1090)				
9	201 (154)	275 (211)	191 (147)	3310 (2540)	173 (135)	236 (184)	161 (125)	3550 (2760)	143 (103)	196 (141)	120 (87)	2720 (1950)				
10	166 (115)	226 (157)	157 (109)	2660 (1840)	194 (147)	265 (201)	180 (137)	3870 (2940)	73 (44)	100 (60)	62 (37)	1370 (821)				
11	148 (229)	202 (312)	141 (217)	2300 (3560)	150 (175)	205 (239)	140 (163)	2910 (3380)	125 (164)	171 (224)	105 (138)	2280 (2990)				
12	207 (123)	282 (168)	196 (117)	3130 (1850)	167 (119)	229 (163)	156 (111)	3160 (2240)	108 (86)	147 (117)	90 (72)	1920 (1530)				
13	221 (133)	301 (181)	210 (126)	3250 (1950)	173 (136)	237 (186)	162 (127)	3170 (2490)	129 (85)	176 (116)	108 (71)	2270 (1490)				
14	221 (160)	302 (219)	210 (152)	3170 (2290)	144 (116)	196 (158)	134 (108)	2560 (2050)	134 (111)	183 (152)	113 (93)	2310 (1910)				
15	221 (206)	302 (281)	210 (196)	3090 (2870)	134 (94)	183 (128)	125 (88)	2320 (1620)	215 (265)	294 (362)	181 (223)	3640 (4480)				
16	259 (324)	354 (443)	246 (308)	3520 (4400)	159 (134)	217 (184)	148 (126)	2670 (2250)	243 (303)	332 (414)	204 (255)	4030 (5030)				
17																
18																
19	197 (216)	269 (295)	187 (206)	2480 (2710)	205 (194)	280 (265)	192 (181)	3180 (2990)	200 (218)	273 (298)	168 (183)	3160 (3440)				
20	184 (210)	252 (287)	175 (200)	2250 (2570)	112 (58)	153 (79)	105 (54)	1680 (868)	190 (254)	259 (347)	159 (214)	2940 (3930)				
21	173 (327)	237 (447)	165 (311)	2070 (3890)	116 (123)	159 (168)	109 (115)	1700 (1800)	161 (315)	220 (431)	136 (265)	2450 (4800)				
22	182 (590)	248 (806)	173 (562)	2120 (6850)	179 (186)	245 (254)	168 (174)	2560 (2640)	201 (379)	274 (517)	169 (319)	3000 (5660)				
23																
24																
25																
26																
27																
28																
29																
30																
Avg	173	236	162	2630	157	215	143	3040	159	217	134	2790				
n	20	20	20	20	20	20	20	20	16	16	16	16	0	0	0	0
SD	44.7	61	43.1	583	36	49.2	29.9	873	47.3	64.6	39.7	804				
Min	84	115	79	1590	111	152	104	1680	73	100	62	1370				
Max	259	354	246	3520	247	337	202	5450	243	332	204	4030				

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Table E5. Daily means (SD) of PM10 emissions at Site IN3B for May, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8					224 (178)	306 (243)	209 (166)	2140 (1690)	196 (245)	268 (335)	166 (207)	2130 (2660)	163 (319)	223 (435)	151 (295)	1600 (3130)
9					285 (246)	390 (336)	267 (230)	2670 (2290)	234 (288)	320 (394)	198 (243)	2490 (3060)				
10					345 (329)	471 (449)	323 (308)	3150 (3000)	254 (514)	347 (703)	214 (434)	2630 (5330)				
11																
12					330 (330)	450 (450)	308 (308)	2880 (2880)	284 (404)	388 (552)	240 (341)	2820 (4010)				
13					338 (476)	462 (651)	317 (446)	2900 (4080)								
14	129 (117)	176 (161)	123 (112)	938 (853)	174 (166)	238 (226)	163 (155)	1460 (1390)	178 (278)	243 (380)	151 (235)	1700 (2640)				
15	171 (150)	234 (206)	164 (144)	1220 (1070)	177 (178)	242 (243)	165 (166)	1460 (1460)								
16	232 (229)	316 (313)	221 (219)	1630 (1610)	276 (317)	377 (433)	258 (296)	2220 (2550)					273 (196)	373 (267)	253 (181)	2260 (1610)
17	257 (334)	352 (456)	246 (319)	1780 (2300)	268 (438)	366 (598)	251 (410)	2120 (3460)					278 (209)	380 (286)	258 (194)	2260 (1690)
18	234 (244)	319 (333)	223 (233)	1590 (1650)	260 (276)	355 (377)	243 (258)	2010 (2140)					279 (218)	381 (297)	258 (202)	2220 (1730)
19	314 (325)	429 (444)	300 (311)	2100 (2170)	353 (628)	483 (858)	331 (588)	2690 (4790)					328 (364)	448 (498)	304 (337)	2560 (2850)
20	326 (263)	446 (359)	312 (251)	2150 (1730)	344 (349)	471 (477)	323 (327)	2580 (2610)	297 (456)	405 (623)	250 (385)	2470 (3810)	315 (271)	430 (370)	291 (251)	2410 (2070)
21	277 (238)	378 (325)	265 (228)	1800 (1540)					272 (315)	371 (430)	230 (266)	2220 (2570)	321 (313)	438 (427)	297 (290)	2410 (2350)
22	314 (309)	429 (422)	300 (296)	2010 (1970)					298 (497)	408 (679)	252 (420)	2390 (3970)	289 (276)	394 (377)	267 (256)	2130 (2030)
23	239 (177)	326 (242)	228 (169)	1510 (1110)	224 (288)	305 (394)	209 (270)	1590 (2050)	251 (338)	343 (462)	212 (285)	1970 (2640)	235 (188)	321 (257)	218 (175)	1700 (1360)
24	295 (306)	403 (418)	282 (292)	1830 (1900)	193 (407)	263 (556)	181 (381)	1340 (2830)	238 (339)	326 (463)	201 (286)	1820 (2590)	275 (226)	376 (309)	255 (210)	1960 (1600)
25	285 (346)	390 (473)	273 (331)	1750 (2120)	166 (283)	226 (386)	155 (265)	1140 (1940)	282 (616)	386 (841)	239 (520)	2120 (4600)	247 (232)	337 (317)	229 (215)	1720 (1620)
26	240 (290)	328 (396)	230 (277)	1450 (1750)	267 (482)	365 (658)	251 (452)	1810 (3260)	294 (691)	401 (944)	248 (584)	2160 (5090)	186 (168)	254 (229)	172 (155)	1280 (1150)
27	356 (361)	486 (493)	340 (345)	2120 (2150)	346 (426)	472 (582)	324 (400)	2300 (2840)	307 (579)	419 (790)	259 (489)	2210 (4170)	325 (319)	444 (435)	302 (296)	2190 (2150)
28	424 (378)	579 (517)	405 (362)	2500 (2220)	352 (469)	481 (640)	330 (440)	2310 (3070)	254 (625)	346 (854)	214 (528)	1790 (4420)	454 (356)	620 (486)	421 (330)	3010 (2350)
29	272 (540)	372 (738)	260 (517)	1580 (3140)	407 (691)	556 (944)	382 (649)	2630 (4460)	228 (842)	311 (1150)	193 (712)	1580 (5830)	336 (371)	459 (507)	312 (344)	2190 (2410)
30	383 (639)	524 (873)	367 (612)	2210 (3670)	416 (774)	569 (1060)	391 (727)	2650 (4930)	411 (796)	561 (1090)	347 (673)	2800 (5410)	297 (428)	406 (585)	276 (397)	1910 (2750)
31	200 (465)	274 (636)	192 (445)	1140 (2640)	206 (672)	282 (918)	194 (632)	1300 (4230)	111 (485)	152 (662)	94 (410)	741 (3230)	217 (328)	296 (448)	201 (304)	1370 (2070)
Avg	275	376	263	1740	283	387	266	2160	258	353	218	2120	283	387	263	2070
n	18	18	18	18	21	21	21	21	17	17	17	17	17	17	17	17
SD	70.9	96.9	67.9	394	75.1	103	70.5	584	61.9	84.6	52.3	495	64.4	87.9	59.7	428
Min	129	176	123	938	166	226	155	1140	111	152	94	741	163	223	151	1280
Max	424	579	405	2500	416	569	391	3150	411	561	347	2820	454	620	421	3010

ED_004549_00015928-00164

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for June, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	321 (563)	439 (769)	307 (539)	1800 (3160)	372 (658)	508 (899)	350 (619)	2300 (4070)	286 (458)	391 (625)	242 (387)	1870 (2990)	317 (357)	432 (488)	294 (331)	1970 (2220)
2	304 (695)	416 (950)	291 (665)	1690 (3860)	325 (373)	444 (509)	306 (351)	1990 (2280)	235 (1060)	321 (1450)	199 (897)	1510 (6820)	291 (463)	398 (633)	270 (430)	1780 (2830)
3	322 (392)	440 (536)	308 (375)	1770 (2150)	273 (123)	373 (169)	257 (116)	1650 (745)	244 (589)	334 (804)	207 (498)	1550 (3720)	259 (251)	354 (343)	241 (233)	1570 (1520)
4					261 (166)	357 (226)	246 (156)	1550 (985)	254 (587)	347 (803)	215 (497)	1580 (3650)	174 (343)	237 (468)	161 (318)	1030 (2040)
5					191 (183)	261 (250)	179 (172)	1120 (1080)	-66 (396)	-91 (541)	-56 (335)	-403 (2420)	83 (287)	113 (392)	77 (266)	487 (1680)
6					293 (266)	400 (363)	275 (250)	1700 (1540)	126 (340)	172 (464)	107 (287)	753 (2040)	166 (371)	226 (507)	154 (344)	958 (2150)
7					219 (84)	299 (115)	206 (79)	1260 (482)	135 (61)	185 (83)	115 (51)	800 (357)	146 (217)	200 (296)	136 (201)	836 (1240)
8					216 (116)	296 (158)	204 (109)	1230 (655)	133 (76)	181 (103)	112 (64)	771 (439)	92 (230)	126 (314)	86 (213)	519 (1300)
9					230 (664)	314 (907)	217 (625)	1290 (3730)	140 (625)	191 (854)	118 (530)	794 (3590)	118 (816)	161 (1120)	110 (758)	654 (4550)
10					394 (212)	538 (289)	370 (199)	2180 (1170)	335 (171)	458 (234)	284 (145)	1890 (962)	285 (350)	389 (478)	264 (325)	1560 (1920)
11	381 (237)	521 (324)	365 (227)	1940 (1210)	416 (268)	568 (366)	391 (252)	2280 (1470)	326 (201)	445 (274)	276 (170)	1810 (1110)	305 (502)	417 (686)	284 (467)	1660 (2730)
12	318 (167)	435 (228)	305 (160)	1610 (846)	375 (204)	512 (279)	353 (192)	2040 (1110)	252 (151)	344 (206)	213 (128)	1380 (827)	326 (305)	445 (417)	302 (284)	1750 (1640)
13	284 (196)	388 (268)	272 (188)	1420 (983)	310 (243)	424 (332)	292 (229)	1670 (1310)	208 (177)	283 (241)	176 (150)	1120 (949)	252 (362)	345 (495)	234 (337)	1340 (1930)
14	383 (231)	523 (316)	367 (222)	1910 (1150)	482 (378)	658 (517)	453 (356)	2560 (2010)	421 (392)	575 (536)	356 (333)	2230 (2080)	333 (530)	456 (724)	310 (493)	1750 (2790)
15	383 (245)	523 (335)	367 (235)	1890 (1210)	511 (319)	698 (436)	481 (300)	2700 (1680)	515 (287)	704 (392)	437 (243)	2700 (1500)	413 (469)	564 (641)	384 (437)	2150 (2440)
16	549 (389)	751 (531)	527 (373)	2700 (1910)					1200 (2750)	1640 (3750)	1020 (2330)	6220 (14200)	630 (702)	861 (959)	586 (653)	3250 (3610)
17	592 (307)	808 (419)	568 (294)	2890 (1490)					788 (584)	1080 (798)	668 (495)	4020 (2980)	664 (484)	908 (662)	618 (451)	3390 (2470)
18	542 (360)	740 (491)	520 (345)	2620 (1740)					513 (346)	701 (473)	435 (293)	2590 (1740)	614 (567)	839 (774)	571 (528)	3100 (2860)
19	479 (417)	654 (569)	460 (400)	2300 (2000)					391 (330)	535 (451)	332 (280)	1950 (1640)	508 (708)	694 (967)	473 (659)	2550 (3540)
20	404 (371)	552 (507)	388 (356)	1930 (1770)	641 (526)	875 (718)	603 (495)	3230 (2650)	306 (325)	418 (444)	260 (276)	1510 (1590)	411 (652)	562 (891)	383 (607)	2040 (3240)
21	357 (343)	488 (468)	343 (329)	1700 (1630)	538 (389)	735 (531)	506 (366)	2690 (1940)	268 (359)	366 (490)	228 (304)	1300 (1740)	382 (663)	521 (906)	355 (618)	1880 (3270)
22	324 (338)	443 (462)	311 (325)	1530 (1600)	628 (463)	858 (632)	591 (435)	3120 (2290)	310 (357)	424 (487)	263 (303)	1490 (1710)	525 (1100)	717 (1500)	489 (1020)	2570 (5380)
23	260 (255)	356 (348)	250 (245)	1220 (1200)	498 (371)	680 (507)	468 (349)	2460 (1830)	361 (313)	493 (428)	307 (266)	1720 (1490)	261 (503)	357 (687)	243 (469)	1270 (2440)
24	213 (307)	291 (419)	204 (295)	994 (1430)	424 (376)	579 (514)	399 (354)	2070 (1840)	339 (354)	463 (483)	288 (300)	1590 (1660)	220 (648)	301 (885)	205 (604)	1060 (3110)
25	243 (261)	332 (356)	234 (250)	1130 (1210)	347 (464)	474 (634)	326 (437)	1690 (2260)	276 (313)	377 (428)	235 (266)	1290 (1460)	264 (667)	360 (911)	246 (621)	1260 (3180)
26	243 (294)	332 (402)	234 (283)	1120 (1360)	351 (373)	480 (510)	330 (351)	1690 (1800)	272 (328)	372 (448)	231 (279)	1260 (1510)	238 (550)	325 (751)	222 (513)	1130 (2610)
27	241 (201)	330 (275)	232 (193)	1110 (925)	344 (286)	470 (391)	323 (269)	1650 (1370)	208 (217)	284 (296)	176 (184)	950 (990)	195 (408)	267 (557)	182 (380)	921 (1920)
28																
29																
30																
Avg	357	488	343	1770	376	513	353	2010	325	444	276	1710	314	429	292	1650
n	20	20	20	20	23	23	23	23	27	27	27	27	27	27	27	27
SD	107	146	102	529	124	170	117	580	231	315	196	1180	158	216	147	785
Min	213	291	204	994	191	261	179	1120	-66	-91	-56	-403	83	113	77	487
Max	592	808	568	2890	641	875	603	3230	1200	1640	1020	6220	664	908	618	3390

ED_004549_00015928-00165

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for July, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8	324 (203)	442 (277)	312 (195)	1420 (886)	326 (971)	446 (1330)	307 (914)	1470 (4380)	233 (132)	319 (180)	198 (112)	978 (553)	226 (117)	308 (160)	211 (110)	999 (519)
9	564 (284)	770 (388)	543 (273)	2460 (1230)	577 (699)	788 (956)	543 (658)	2590 (3140)	456 (342)	622 (468)	387 (291)	1900 (1420)	348 (210)	475 (287)	325 (196)	1530 (923)
10	603 (340)	823 (464)	580 (327)	2610 (1470)	530 (552)	725 (753)	499 (519)	2370 (2460)	465 (235)	636 (322)	395 (200)	1930 (974)	339 (172)	463 (234)	316 (160)	1480 (752)
11	420 (492)	573 (672)	425 (491)	1910 (2210)	337 (571)	460 (780)	317 (537)	1500 (2540)	275 (343)	375 (468)	233 (291)	1130 (1410)	203 (322)	277 (440)	190 (301)	887 (1410)
12	260 (147)	355 (201)	302 (171)	1370 (774)	267 (178)	364 (243)	251 (168)	1180 (790)	146 (135)	200 (185)	124 (115)	599 (555)	215 (772)	294 (1050)	201 (721)	934 (3360)
13	522 (226)	713 (309)	607 (264)	2730 (1190)	375 (218)	512 (298)	353 (205)	1650 (962)	343 (243)	469 (332)	292 (207)	1400 (989)	390 (225)	533 (308)	364 (210)	1690 (975)
14	432 (254)	590 (347)	502 (295)	2250 (1320)	511 (286)	699 (391)	481 (269)	2240 (1250)	285 (246)	389 (336)	242 (209)	1160 (998)	328 (244)	449 (333)	307 (228)	1420 (1050)
15					487 (267)	665 (365)	458 (251)	2130 (1170)	205 (195)	279 (267)	174 (166)	825 (787)	224 (179)	307 (245)	210 (167)	963 (768)
16					374 (265)	511 (362)	352 (249)	1630 (1150)	114 (196)	156 (267)	97 (166)	458 (785)	113 (179)	155 (244)	106 (167)	484 (763)
17					269 (308)	367 (421)	277 (318)	1280 (1460)	162 (222)	221 (303)	138 (189)	647 (886)	122 (252)	167 (345)	120 (253)	546 (1150)
18					281 (300)	384 (410)	319 (341)	1480 (1580)	309 (307)	422 (419)	263 (261)	1230 (1220)	176 (370)	240 (505)	197 (416)	898 (1890)
19					157 (150)	215 (205)	179 (170)	828 (790)	230 (208)	314 (284)	195 (177)	909 (823)	109 (165)	149 (226)	123 (186)	558 (844)
20					142 (161)	195 (220)	162 (183)	747 (846)	177 (199)	242 (272)	151 (169)	699 (785)	82 (135)	111 (185)	92 (152)	415 (688)
21					188 (199)	257 (272)	214 (226)	984 (1040)	295 (310)	403 (424)	251 (264)	1160 (1220)				
22	273 (205)	374 (280)	404 (303)	1780 (1340)	267 (227)	364 (310)	303 (258)	1390 (1180)	399 (308)	545 (421)	340 (262)	1560 (1200)				
23	294 (235)	402 (321)	434 (347)	1910 (1530)	323 (258)	441 (353)	368 (294)	1680 (1340)	430 (349)	587 (476)	366 (297)	1670 (1360)				
24	256 (238)	350 (325)	378 (351)	1660 (1540)	328 (229)	447 (313)	373 (260)	1690 (1180)	414 (322)	566 (439)	353 (274)	1600 (1240)				
25	216 (215)	294 (294)	360 (379)	1580 (1670)	275 (256)	376 (349)	317 (295)	1440 (1340)	377 (262)	515 (358)	346 (239)	1570 (1080)	-4 (296)	-6 (405)	-26 (393)	-117 (1750)
26	78 (113)	107 (154)	156 (224)	686 (990)	115 (89)	157 (121)	147 (113)	671 (519)	185 (142)	253 (193)	184 (141)	838 (640)	-3 (118)	-4 (162)	-4 (165)	-17 (738)
27	157 (121)	215 (166)	313 (241)	1380 (1060)	241 (130)	329 (178)	337 (183)	1540 (835)	322 (208)	440 (284)	321 (207)	1450 (937)	107 (141)	146 (193)	149 (197)	664 (882)
28	109 (109)	148 (149)	216 (216)	947 (949)	151 (122)	206 (167)	214 (173)	972 (786)	203 (146)	278 (200)	203 (145)	913 (656)	87 (139)	119 (190)	121 (195)	540 (866)
29	92 (131)	126 (178)	184 (260)	803 (1130)	160 (158)	218 (216)	226 (224)	1030 (1020)	191 (157)	261 (215)	190 (157)	854 (703)	66 (136)	90 (186)	92 (191)	409 (845)
30	134 (172)	184 (235)	268 (343)	1160 (1490)	268 (767)	366 (1050)	380 (1090)	1720 (4910)	144 (250)	197 (342)	143 (249)	641 (1110)	58 (204)	80 (279)	82 (285)	360 (1260)
31																
Avg	296	404	374	1670	302	413	321	1490	277	378	243	1140	168	229	167	771
n	16	16	16	16	23	23	23	23	23	23	23	23	19	19	19	19
SD	164	224	133	605	126	172	104	497	106	145	88.9	421	116	158	104	490
Min	78	107	156	686	115	157	147	671	114	156	97	458	-4	-6	-26	-117
Max	603	823	607	2730	577	788	543	2590	465	636	395	1930	390	533	364	1690

ED_004549_00015928-00166

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for August, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7	108 (150)	148 (206)	325 (452)	1430 (1990)	126 (188)	172 (257)	188 (271)	824 (1190)					329 (759)	450 (1040)	1320 (3040)	6200 (14300)
8	99 (127)	136 (174)	298 (383)	1310 (1680)	97 (105)	133 (143)	181 (196)	802 (866)					413 (1670)	564 (2280)	1660 (6710)	7770 (31400)
9	111 (124)	152 (169)	335 (372)	1460 (1620)	104 (104)	142 (142)	194 (194)	858 (858)	171 (144)	233 (197)	221 (186)	962 (812)	577 (1490)	789 (2030)	2320 (5970)	10800 (27900)
10	143 (107)	196 (146)	430 (320)	1870 (1390)	122 (97)	166 (133)	228 (182)	1000 (800)	196 (150)	267 (205)	253 (194)	1100 (841)	226 (481)	308 (656)	906 (1930)	4220 (8990)
11	58 (134)	79 (183)	180 (626)	781 (2770)					151 (172)	207 (235)	222 (270)	962 (1170)	877 (1930)	1200 (2630)	3650 (8030)	16900 (37300)
12	14 (144)	20 (197)	99 (995)	441 (4430)					97 (189)	133 (258)	172 (330)	754 (1450)	1120 (2380)	1530 (3250)	4670 (9910)	21500 (45700)
13									117 (178)	159 (244)	261 (408)	1150 (1810)	616 (1140)	842 (1560)	2570 (4760)	11800 (21900)
14									84 (116)	114 (158)	193 (268)	851 (1180)	415 (763)	567 (1040)	1740 (3190)	7950 (14600)
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
Avg	89	122	278	1220	112	153	198	871	136	186	220	963	572	781	2350	10900
n	6	6	6	6	4	4	4	4	6	6	6	6	8	8	8	8
SD	41.8	57	108	471	12	16.4	17.9	77.4	40.1	54.8	31.2	135	279	381	1180	5430
Min	14	20	99	441	97	133	181	802	84	114	172	754	226	308	906	4220
Max	143	196	430	1870	126	172	228	1000	196	267	261	1150	1120	1530	4670	21500

ED_004549_00015928-00167

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for September, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9													-3 (6)	-4 (8)	-3 (5)	-256 (464)
10					296 (211)	404 (288)	260 (186)	13400 (9480)					-5 (6)	-7 (9)	-5 (6)	-424 (538)
11													-10 (13)	-14 (17)	-10 (12)	-764 (941)
12					61 (48)	84 (66)	54 (43)	2570 (2030)					37 (45)	51 (62)	37 (45)	2510 (3100)
13	76 (59)	103 (81)	74 (57)	2640 (2060)									67 (75)	92 (102)	67 (74)	4240 (4610)
14	93 (50)	127 (68)	91 (48)	3150 (1680)									108 (63)	147 (86)	107 (62)	6340 (3650)
15	222 (485)	303 (662)	216 (472)	7270 (15900)									179 (110)	245 (151)	177 (109)	9890 (6040)
16	276 (198)	377 (271)	269 (193)	8810 (6300)									156 (63)	212 (86)	154 (63)	8140 (3290)
17	83 (104)	113 (142)	80 (101)	2580 (3250)					128 (260)	174 (356)	119 (242)	5040 (10200)	118 (89)	161 (121)	117 (88)	5890 (4440)
18	50 (68)	68 (93)	49 (67)	1510 (2070)					141 (330)	192 (451)	131 (308)	5330 (12500)	107 (105)	147 (143)	107 (104)	5110 (5020)
19	77 (88)	105 (121)	75 (86)	2250 (2590)									98 (55)	134 (75)	98 (55)	4460 (2510)
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
Avg	125	171	122	4030	179	244	157	7980	134	183	125	5180	78	106	77	4100
n	7	7	7	7	2	2	2	2	2	2	2	2	11	11	11	11
SD	80.6	110	78.5	2610	117	160	103	5400	6.5	8.9	6.1	145	62.5	85.4	62	3370
Min	50	68	49	1510	61	84	54	2570	128	174	119	5040	-10	-14	-10	-764
Max	276	377	269	8810	296	404	260	13400	141	192	131	5330	179	245	177	9890

ED_004549_00015928-00168

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for October, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9	51 (79)	70 (108)	50 (78)	872 (1340)	113 (136)	155 (186)	104 (124)	2180 (2610)	129 (183)	176 (250)	121 (171)	2590 (3670)				
10	67 (75)	91 (103)	66 (74)	1100 (1240)	163 (189)	223 (258)	149 (173)	3050 (3520)	118 (141)	161 (193)	110 (132)	2300 (2750)				
11	60 (77)	82 (105)	59 (75)	963 (1240)	144 (154)	197 (211)	132 (141)	2620 (2800)	100 (101)	137 (138)	94 (94)	1900 (1910)				
12	67 (79)	92 (108)	66 (77)	1060 (1240)	99 (120)	135 (164)	90 (110)	1750 (2110)	116 (124)	158 (169)	108 (116)	2130 (2270)				
13	69 (89)	94 (122)	68 (87)	1050 (1360)	189 (452)	259 (618)	173 (414)	3250 (7750)	159 (234)	217 (319)	148 (219)	2840 (4190)				
14	75 (71)	102 (97)	73 (69)	1110 (1050)					137 (145)	188 (198)	128 (136)	2390 (2510)				
15	48 (45)	65 (61)	47 (44)	693 (646)	131 (112)	179 (154)	120 (103)	2130 (1830)	79 (85)	109 (116)	74 (79)	1340 (1420)				
16	72 (67)	98 (92)	71 (66)	1010 (949)	138 (131)	189 (179)	127 (120)	2190 (2070)	97 (99)	133 (135)	91 (92)	1600 (1620)				
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29	174 (145)	238 (199)	172 (144)	1790 (1490)					100 (162)	137 (222)	94 (152)	1150 (1850)				
30	105 (89)	144 (121)	104 (88)	1060 (893)					170 (260)	233 (355)	160 (244)	1900 (2890)				
31																
Avg	79	108	78	1070	140	191	128	2450	121	165	113	2010				
n	10	10	10	10	7	7	7	7	10	10	10	10	0	0	0	0
SD	35.1	47.9	34.7	268	28	38.2	25.6	503	27.2	37.2	25.5	516				
Min	48	65	47	693	99	135	90	1750	79	109	74	1150				
Max	174	238	172	1790	189	259	173	3250	170	233	160	2840				

ED_004549_00015928-00169

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for November, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18					300 (204)	410 (279)	278 (190)	2210 (1510)	139 (145)	189 (198)	130 (137)	1010 (1060)	92 (80)	126 (109)	93 (81)	749 (649)
19									159 (243)	218 (332)	150 (229)	1150 (1750)	73 (81)	99 (110)	73 (81)	581 (643)
20																
21	123 (166)	168 (227)	122 (165)	825 (1120)	240 (140)	329 (191)	223 (130)	1690 (980)	123 (126)	168 (172)	116 (119)	850 (870)	101 (81)	138 (111)	102 (82)	776 (626)
22	114 (148)	155 (203)	113 (147)	753 (983)	202 (122)	277 (166)	188 (113)	1400 (839)	105 (94)	144 (128)	99 (88)	717 (638)	87 (94)	119 (128)	88 (95)	659 (710)
23	112 (199)	152 (272)	111 (198)	730 (1300)	168 (194)	229 (264)	156 (180)	1140 (1310)	124 (173)	169 (236)	117 (163)	829 (1160)	99 (114)	135 (156)	100 (115)	733 (847)
24	107 (259)	146 (354)	106 (257)	688 (1670)	19 (45)	26 (61)	18 (42)	128 (301)	112 (164)	153 (224)	106 (155)	739 (1080)				
25																
26	107 (175)	146 (239)	106 (174)	672 (1100)	36 (35)	49 (48)	34 (33)	234 (228)	111 (135)	152 (185)	105 (128)	711 (863)				
27																
28																
29																
30	138 (232)	189 (317)	137 (230)	826 (1390)					115 (139)	157 (189)	109 (131)	692 (835)				
Avg	117	159	116	749	161	220	150	1130	123	169	116	837	90	123	91	700
n	6	6	6	6	6	6	6	6	8	8	8	8	5	5	5	5
SD	11	15	10.9	60.1	103	140	95.1	749	16.6	22.7	15.6	153	10	13.7	10.2	71
Min	107	146	106	672	19	26	18	128	105	144	99	692	73	99	73	581
Max	138	189	137	826	300	410	278	2210	159	218	150	1150	101	138	102	776

ED_004549_00015928-00170

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for December, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2	185 (141)	253 (192)	184 (140)	1080 (823)	28 (31)	38 (43)	26 (29)	166 (186)								
3					71 (135)	96 (184)	66 (126)	416 (794)								
4					144 (230)	196 (314)	135 (215)	838 (1340)								
5																
6																
7																
8	202 (165)	276 (225)	201 (164)	1110 (908)	688 (801)	940 (1090)	648 (755)	3840 (4470)	538 (672)	735 (918)	510 (637)	2930 (3660)				
9	184 (175)	251 (239)	183 (174)	1000 (955)	812 (849)	1110 (1160)	765 (800)	4490 (4690)	759 (538)	1040 (735)	720 (511)	4100 (2910)	188 (169)	257 (231)	191 (172)	1110 (998)
10	228 (169)	312 (231)	227 (169)	1240 (915)									141 (146)	193 (199)	144 (148)	826 (851)
11	240 (367)	327 (501)	239 (366)	1290 (1970)						379 (746)	263 (518)	1470 (2890)				
12																
13	248 (212)	339 (290)	248 (211)	1310 (1120)	-24 (70)	-33 (95)	-23 (66)	-129 (370)	-22 (97)	-30 (132)	-21 (92)	-115 (501)				
14	275 (209)	376 (285)	274 (208)	1440 (1090)	-30 (85)	-41 (115)	-28 (80)	-156 (444)	12 (337)	16 (461)	11 (320)	59 (1730)				
15																
16																
17																
18																
19	273 (138)	373 (189)	273 (138)	1380 (698)	179 (184)	244 (252)	169 (175)	901 (930)					172 (98)	235 (134)	176 (100)	924 (527)
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
Avg	229	313	229	1230	233	319	220	1300	322	427	297	1690	167	229	170	954
n	8	8	8	8	8	8	8	8	4	5	5	5	3	3	3	3
SD	34.1	46.6	34.1	143	308	420	290	1700	336	412	286	1630	19.4	26.5	19.8	118
Min	184	251	183	1000	-30	-41	-28	-156	-22	-30	-21	-115	141	193	144	826
Max	275	376	274	1440	812	1110	765	4490	759	1040	720	4100	188	257	191	1110

ED_004549_00015928-00171

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for January, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17	338 (214)	461 (293)	367 (234)	1660 (1060)	369 (370)	504 (506)	354 (355)	1610 (1620)	325 (407)	444 (556)	353 (443)	1590 (2000)	247 (119)	338 (162)	309 (148)	1410 (677)
18	371 (238)	507 (326)	433 (279)	1940 (1260)	278 (335)	380 (458)	267 (322)	1210 (1460)	418 (535)	572 (730)	493 (633)	2220 (2840)	263 (163)	359 (222)	329 (203)	1490 (924)
19	220 (271)	301 (370)	309 (334)	1400 (1500)	266 (270)	363 (368)	255 (259)	1150 (1170)	318 (240)	435 (327)	377 (284)	1690 (1270)				
20																
21																
22					422 (284)	577 (388)	491 (330)	2230 (1500)					259 (126)	354 (172)	420 (204)	1920 (930)
23					380 (257)	519 (351)	443 (299)	2000 (1350)					303 (162)	415 (222)	492 (263)	2240 (1200)
24																
25																
26																
27																
28																
29																
30																
31																
Avg	310	423	370	1670	343	469	362	1640	354	483	407	1830	268	367	388	1760
n	3	3	3	3	5	5	5	5	3	3	3	3	4	4	4	4
SD	64.8	88.5	50.5	221	60.8	83.1	93.5	423	45.7	62.4	61.2	275	21.1	28.8	73.3	333
Min	220	301	309	1400	266	363	255	1150	318	435	353	1590	247	338	309	1410
Max	371	507	433	1940	422	577	491	2230	418	572	493	2220	303	415	492	2240

ED_004549_00015928-00172

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for February, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	187 (104)	256 (143)	426 (238)	1920 (1070)	415 (472)	567 (644)	613 (696)	2730 (3100)	245 (206)	335 (281)	594 (504)	2630 (2230)	124 (63)	170 (86)	326 (168)	1470 (761)
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25	47 (30)	65 (41)	20 (13)	1770 (1120)												
26	63 (37)	86 (51)	27 (16)	2110 (1250)												
27	101 (62)	137 (85)	43 (27)	3120 (1930)												
28	131 (98)	179 (134)	57 (42)	3760 (2790)												
Avg	106	145	115	2540												
n	5	5	5	5	1	1	1	1	1	1	1	1	1	1	1	1
SD	50.2	68.6	156	771												
Min	47	65	20	1770												
Max	187	256	426	3760												

ED_004549_00015928-00173

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for March, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	149 (120)	204 (164)	64 (52)	4010 (3240)												
2	130 (55)	178 (75)	56 (24)	3280 (1380)												
3	175 (104)	238 (142)	75 (45)	4150 (2460)												
4	193 (168)	264 (229)	83 (72)	4390 (3800)												
5	97 (100)	132 (136)	42 (43)	2110 (2160)												
6	104 (102)	142 (139)	45 (44)	2150 (2110)												
7	273 (185)	373 (252)	118 (80)	5440 (3660)					0 (0)	0 (0)	0 (0)	0 (0)	-2 (2)	-3 (2)	0 (0)	0 (0)
8	248 (176)	339 (240)	107 (76)	4790 (3390)					0 (0)	0 (0)	0 (0)	0 (0)	0 (2)	0 (3)	0 (0)	0 (0)
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24													122 (154)	166 (210)	110 (139)	3050 (3840)
25													122 (199)	166 (273)	110 (181)	2960 (4860)
26													132 (195)	180 (267)	119 (177)	3140 (4640)
27																
28	28 (31)	39 (43)	25 (28)	636 (704)	619 (491)	846 (671)	279 (221)	8510 (6720)								
29	51 (28)	70 (39)	45 (25)	1110 (613)	249 (135)	340 (185)	122 (68)	3620 (2010)								
30	50 (53)	68 (72)	44 (47)	1050 (1120)	490 (526)	669 (718)	289 (314)	8360 (9070)								
31	54 (48)	73 (65)	48 (43)	1110 (985)	397 (385)	543 (525)	289 (285)	8150 (8040)								
Avg	129	177	63	2850	439	600	245	7160	0	0	0	0	75	102	68	1830
n	12	12	12	12	4	4	4	4	2	2	2	2	5	5	5	5
SD	77.1	105	26.9	1620	135	185	71.1	2050	0	0	0	0	62	84.7	55.6	1500
Min	28	39	25	636	249	340	122	3620	0	0	0	0	-2	-3	0	0
Max	273	373	118	5440	619	846	289	8510	0	0	0	0	132	180	119	3140

ED_004549_00015928-00174

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for April, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	69 (62)	94 (85)	61 (56)	1380 (1250)												
2	92 (95)	125 (130)	82 (85)	1800 (1860)					99 (94)	136 (129)	89 (84)	2350 (2220)				
3	83 (69)	113 (94)	74 (62)	1580 (1310)					61 (41)	83 (56)	54 (36)	1400 (939)				
4	116 (109)	159 (148)	104 (97)	2170 (2020)					78 (56)	106 (77)	69 (50)	1740 (1250)	67 (65)	91 (89)	61 (59)	1250 (1220)
5	75 (65)	102 (89)	67 (58)	1350 (1180)					79 (50)	108 (68)	71 (44)	1740 (1090)	27 (22)	37 (30)	25 (20)	501 (403)
6	85 (75)	115 (102)	76 (67)	1490 (1320)					89 (58)	122 (79)	80 (51)	1910 (1230)	0 (0)	0 (0)	0 (0)	0 (0)
7																
8																
9																
10																
11	182 (200)	248 (273)	163 (179)	2810 (3080)	241 (253)	330 (345)	222 (232)	4670 (4880)	109 (90)	149 (122)	97 (80)	2040 (1670)	113 (107)	154 (146)	102 (97)	1760 (1670)
12	146 (167)	199 (229)	131 (150)	2190 (2520)	256 (247)	350 (337)	235 (227)	4820 (4640)	133 (117)	181 (159)	119 (104)	2420 (2120)	65 (50)	89 (69)	59 (46)	988 (765)
13	26 (33)	36 (45)	24 (30)	387 (488)	143 (119)	195 (163)	131 (110)	2620 (2180)	122 (96)	166 (131)	109 (85)	2170 (1700)	15 (21)	21 (29)	14 (19)	226 (312)
14	81 (79)	110 (108)	73 (71)	1160 (1140)	137 (110)	187 (150)	126 (101)	2460 (1960)	96 (77)	131 (105)	86 (69)	1660 (1330)	56 (51)	76 (70)	51 (46)	807 (733)
15	80 (82)	109 (112)	72 (74)	1110 (1150)	167 (161)	228 (221)	153 (149)	2900 (2810)	91 (81)	124 (111)	81 (72)	1530 (1360)	65 (77)	89 (106)	59 (70)	919 (1090)
16	88 (148)	120 (202)	79 (133)	1190 (2010)	359 (445)	490 (608)	330 (410)	6080 (7540)	188 (249)	256 (340)	168 (223)	3080 (4090)				
17	117 (243)	160 (333)	105 (219)	1560 (3220)	248 (273)	339 (373)	228 (251)	4090 (4490)	188 (312)	257 (426)	168 (279)	3010 (4990)				
18	136 (224)	186 (306)	122 (201)	1760 (2890)	304 (332)	415 (453)	279 (305)	4870 (5310)	227 (299)	311 (409)	203 (268)	3540 (4660)				
19	100 (134)	136 (183)	90 (120)	1260 (1680)	177 (177)	242 (242)	163 (163)	2770 (2770)	167 (191)	228 (261)	149 (171)	2540 (2900)				
20	99 (135)	135 (184)	89 (121)	1220 (1660)	192 (201)	263 (275)	177 (185)	2930 (3070)	121 (135)	166 (184)	108 (120)	1800 (1990)				
21	100 (101)	136 (138)	90 (91)	1200 (1210)	135 (104)	184 (143)	124 (96)	2010 (1550)	106 (138)	144 (188)	95 (123)	1530 (1990)				
22	112 (262)	153 (358)	101 (235)	1310 (3060)	193 (228)	263 (312)	177 (210)	2790 (3310)	147 (223)	200 (305)	131 (199)	2070 (3130)				
23	128 (193)	175 (264)	115 (174)	1460 (2200)	200 (203)	273 (278)	184 (187)	2830 (2870)	205 (252)	280 (345)	184 (226)	2810 (3450)				
24	78 (302)	107 (412)	70 (271)	876 (3360)	180 (316)	245 (432)	166 (292)	2480 (4360)	100 (309)	136 (422)	89 (276)	1330 (4130)				
25	122 (301)	166 (412)	109 (271)	1330 (3280)	175 (238)	239 (325)	161 (219)	2360 (3200)	121 (303)	166 (414)	109 (271)	1590 (3960)				
26	74 (338)	101 (462)	66 (304)	788 (3600)	178 (294)	244 (402)	164 (271)	2340 (3860)	76 (341)	104 (466)	68 (305)	970 (4350)				
27	171 (374)	234 (511)	154 (337)	1780 (3890)	258 (375)	352 (512)	238 (346)	3300 (4790)	190 (298)	259 (408)	170 (267)	2360 (3700)				
28	102 (155)	140 (212)	92 (139)	1040 (1580)	172 (168)	234 (229)	158 (155)	2140 (2100)	119 (137)	162 (186)	107 (122)	1440 (1650)				
29																
30																
Avg	102	140	92	1420	206	282	190	3250	127	173	113	2050	51	70	46	807
n	24	24	24	24	18	18	18	18	23	23	23	23	8	8	8	8
SD	33.4	45.6	30	491	58.4	79.8	53.7	1120	45.4	62.1	40.7	627	33.4	45.7	30.4	529
Min	26	36	24	387	135	184	124	2010	61	83	54	970	0	0	0	0
Max	182	248	163	2810	359	490	330	6080	227	311	203	3540	113	154	102	1760

ED_004549_00015928-00175

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for May, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23	211 (476)	288 (650)	191 (431)	1340 (3030)					113 (323)	155 (441)	102 (291)	820 (2330)				
24	136 (296)	186 (404)	124 (268)	857 (1860)					107 (219)	146 (299)	97 (198)	763 (1560)				
25	242 (250)	331 (342)	219 (227)	1500 (1550)	346 (339)	472 (464)	321 (315)	2480 (2430)	196 (220)	267 (300)	176 (198)	1370 (1540)	303 (264)	414 (361)	278 (243)	1900 (1650)
26																
27	139 (372)	189 (508)	126 (337)	837 (2240)	146 (414)	200 (565)	136 (384)	1020 (2870)	95 (309)	129 (422)	85 (278)	642 (2090)				
28	232 (281)	317 (384)	210 (255)	1380 (1670)	276 (202)	377 (275)	256 (187)	1890 (1380)	232 (247)	317 (337)	209 (223)	1550 (1640)				
29	219 (453)	299 (619)	198 (411)	1280 (2660)	255 (195)	348 (266)	237 (181)	1720 (1310)	129 (293)	176 (401)	116 (265)	848 (1930)	184 (251)	251 (343)	169 (231)	1090 (1490)
30	253 (592)	345 (808)	229 (536)	1460 (3420)	294 (253)	402 (346)	273 (235)	1950 (1680)	213 (440)	291 (601)	192 (397)	1380 (2850)	231 (353)	316 (482)	213 (325)	1350 (2060)
31	255 (578)	349 (789)	232 (524)	1460 (3310)	407 (330)	556 (451)	378 (307)	2660 (2150)	207 (335)	282 (458)	186 (303)	1320 (2140)	235 (393)	321 (537)	216 (362)	1360 (2270)
Avg	211	288	191	1270	287	393	267	1950	161	220	146	1090	238	325	219	1420
n	8	8	8	8	6	6	6	6	8	8	8	8	4	4	4	4
SD	44.7	61.1	40.5	251	80.5	110	74.8	535	51.9	71	46.9	329	42.5	58	39	294
Min	136	186	124	837	146	200	136	1020	95	129	85	642	184	251	169	1090
Max	255	349	232	1500	407	556	378	2660	232	317	209	1550	303	414	278	1900

ED_004549_00015928-00176

Table E5. Daily means (SD) of PM10 emissions at Site IN3B for June, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5	241 (108)	329 (147)	219 (98)	1300 (582)	425 (360)	580 (492)	396 (336)	2600 (2200)	270 (165)	369 (225)	244 (149)	1610 (983)	324 (218)	443 (298)	300 (202)	1780 (1200)
6	206 (137)	282 (187)	187 (124)	1110 (733)	329 (211)	449 (288)	306 (197)	1990 (1270)	230 (153)	314 (210)	208 (139)	1360 (904)	235 (176)	321 (241)	218 (163)	1280 (956)
7	215 (126)	293 (172)	195 (114)	1140 (668)	307 (150)	419 (205)	286 (140)	1830 (898)	245 (149)	335 (203)	222 (135)	1430 (865)				
8	294 (186)	401 (254)	267 (169)	1540 (976)	232 (135)	317 (185)	216 (126)	1370 (799)	167 (108)	228 (148)	151 (98)	962 (624)				
9																
10									169 (99)	231 (135)	153 (89)	953 (556)				
11										195 (390)	129 (258)	794 (1590)				
12		-879 (399)	-586 (266)	-3260 (1480)		-693 (479)	-473 (328)	-2860 (1980)		-999 (519)	-662 (344)	-4030 (2090)				
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
Avg	239	85	56	366	323	215	146	986	216	96	63	439	280	382	259	1530
n	4	5	5	5	4	5	5	5	5	7	7	7	2	2	2	2
SD	34	484	322	1820	68.9	461	315	1960	41.4	451	299	1850	44.5	60.8	41.1	250
Min	206	-879	-586	-3260	232	-693	-473	-2860	167	-999	-662	-4030	235	321	218	1280
Max	294	401	267	1540	425	580	396	2600	270	369	244	1610	324	443	300	1780

ED_004549_00015928-00177

Table E6. PM 2.5 emissions.

Table E6. Daily means (SD) of PM2.5 emissions at Site IN3B for January, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11	7.0 (157.0)	9.6 (214.0)	6.6 (148.0)	31 (697)	2.8 (23.3)	3.8 (31.8)	2.7 (22.8)	12 (102)	-0.4 (102.0)	-0.6 (140.0)	-0.5 (113.0)	-2 (503)	-3.3 (10.7)	-4.5 (14.6)	-3.0 (9.7)	-14 (44)
12	8.4 (169.0)	11.4 (231.0)	7.9 (160.0)	37 (749)	2.5 (24.4)	3.4 (33.4)	2.4 (23.9)	11 (106)	6.6 (84.0)	9.0 (115.0)	7.3 (95.2)	33 (424)	-6.7 (10.6)	-9.1 (14.4)	-6.2 (9.9)	-28 (45)
13	37.3 (205.0)	51.0 (280.0)	35.3 (194.0)	165 (904)	7.3 (22.9)	9.9 (31.3)	7.1 (22.4)	31 (99)	7.1 (67.1)	9.7 (91.7)	8.3 (78.4)	37 (348)				
14	14.2 (95.7)	19.4 (131.0)	13.4 (90.6)	62 (421)	12.2 (24.3)	16.7 (33.2)	11.9 (23.8)	53 (105)	8.2 (58.7)	11.3 (80.2)	10.0 (71.3)	44 (315)	7.6 (17.8)	10.4 (24.3)	7.5 (17.5)	34 (79)
15	12.7 (93.2)	17.3 (127.0)	12.0 (88.3)	56 (408)	16.6 (19.3)	22.7 (26.4)	16.5 (19.3)	72 (85)	6.6 (41.0)	9.1 (56.0)	8.3 (51.3)	37 (226)	11.6 (17.0)	15.8 (23.2)	11.7 (17.2)	52 (77)
16	26.0 (193.0)	35.5 (264.0)	24.6 (183.0)	114 (843)	24.8 (34.8)	33.9 (47.6)	26.7 (37.7)	117 (165)	9.3 (78.9)	12.6 (108.0)	12.0 (103.0)	52 (451)	18.5 (72.9)	25.3 (99.6)	19.2 (75.6)	86 (338)
17																
18	23.1 (119.0)	31.5 (162.0)	21.9 (112.0)	100 (514)	23.1 (21.4)	31.5 (29.2)	27.0 (25.0)	118 (109)	10.8 (44.2)	14.8 (60.4)	14.7 (60.2)	65 (265)	7.0 (17.4)	9.6 (23.7)	7.6 (18.7)	34 (84)
19	17.2 (52.4)	23.5 (71.6)	16.3 (49.7)	74 (226)	20.4 (13.7)	27.9 (18.7)	23.9 (16.0)	104 (70)	13.8 (28.0)	18.9 (38.3)	19.6 (39.6)	86 (173)	6.3 (10.7)	8.5 (14.6)	7.0 (11.9)	31 (53)
20	25.4 (100.0)	34.7 (137.0)	24.1 (95.2)	109 (432)	30.7 (20.4)	41.9 (27.9)	35.9 (23.9)	156 (104)	13.6 (27.4)	18.6 (37.4)	20.0 (40.5)	87 (177)	7.6 (9.5)	10.4 (13.0)	8.7 (10.9)	39 (49)
21	29.7 (162.0)	40.6 (222.0)	28.5 (156.0)	129 (704)	25.1 (25.4)	34.3 (34.7)	29.4 (29.7)	127 (129)	14.1 (54.5)	19.2 (74.4)	21.6 (84.7)	94 (368)	4.3 (14.3)	5.8 (19.5)	5.1 (17.1)	22 (76)
22	35.0 (125.0)	47.8 (170.0)	35.3 (126.0)	159 (568)	25.8 (30.2)	35.2 (41.3)	30.8 (36.5)	133 (157)	19.2 (103.0)	26.2 (141.0)	30.9 (165.0)	134 (715)	5.2 (11.3)	7.1 (15.4)	6.4 (13.8)	28 (61)
23	32.7 (135.0)	44.7 (185.0)	35.4 (148.0)	159 (664)	23.0 (30.2)	31.4 (41.3)	30.6 (40.9)	131 (176)	22.2 (77.8)	30.3 (106.0)	38.1 (134.0)	164 (578)	6.0 (19.5)	8.2 (26.6)	7.7 (25.1)	34 (110)
24																
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30																
31																
Avg	22.4	30.6	21.8	100	17.8	24.4	20.4	89	10.9	14.9	15.8	69	5.8	8.0	6.5	29
n	12	12	12	12	12	12	12	12	12	12	12	12	11	11	11	11
SD	9.9	13.6	10.1	45.6	9.1	12.5	11.3	48.7	5.9	8.0	10.4	44.5	6.3	8.7	6.4	28.7
Min	7.0	9.6	6.6	31	2.5	3.4	2.4	11	-0.4	-0.6	-0.5	-2	-6.7	-9.1	-6.2	-28
Max	37.3	51.0	35.4	165	30.7	41.9	35.9	156	22.2	30.3	38.1	164	18.5	25.3	19.2	86

ED_004549_00015928-00178

Table E6. Daily means (SD) of PM2.5 emissions at Site IN3B for September, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1}m^{-2}$	$g \cdot d^{-1}hd^{-1}$	$g \cdot d^{-1}AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1}m^{-2}$	$g \cdot d^{-1}hd^{-1}$	$g \cdot d^{-1}AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1}m^{-2}$	$g \cdot d^{-1}hd^{-1}$	$g \cdot d^{-1}AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1}m^{-2}$	$g \cdot d^{-1}hd^{-1}$	$g \cdot d^{-1}AU^{-1}$
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23	-15.2 (80.4)	-20.8 (110.0)	-14.9 (78.5)	-402 (2120)	-36.9 (136.0)	-50.4 (186.0)	-33.6 (124.0)	-1100 (4050)	-39.3 (257.0)	-53.7 (351.0)	-36.7 (239.0)	-1270 (8260)	-3.1 (13.2)	-4.2 (18.1)	-3.1 (13.2)	-121 (512)
24	-12.0 (163.0)	-16.4 (223.0)	-11.7 (159.0)	-311 (4180)	-9.6 (224.0)	-13.1 (306.0)	-8.8 (204.0)	-283 (6480)	-102.0 (233.0)	-140.0 (318.0)	-95.3 (217.0)	-3200 (7260)	0.1 (22.8)	0.2 (31.1)	0.1 (22.7)	4 (853)
25	-10.1 (61.4)	-13.8 (83.9)	-9.9 (60.0)	-252 (1530)	-33.3 (120.0)	-45.4 (164.0)	-30.3 (109.0)	-938 (3370)	-180.0 (218.0)	-246.0 (298.0)	-168.0 (204.0)	-5450 (6600)	-2.2 (13.5)	-3.0 (18.5)	-2.2 (13.5)	-78 (491)
26	-3.1 (22.1)	-4.3 (30.2)	-3.0 (21.6)	-76 (538)	-9.3 (85.0)	-12.7 (116.0)	-8.5 (77.4)	-256 (2340)	-102.0 (122.0)	-139.0 (167.0)	-95.0 (114.0)	-2990 (3590)	0.0 (14.6)	0.0 (19.9)	0.0 (14.5)	-1 (513)
27	0.1 (11.6)	0.1 (15.8)	0.1 (11.3)	1 (274)	-16.8 (65.2)	-22.9 (89.1)	-15.3 (59.4)	-448 (1740)	-43.1 (79.3)	-58.9 (108.0)	-40.2 (73.9)	-1230 (2250)	-0.4 (13.0)	-0.6 (17.8)	-0.4 (13.0)	-15 (444)
28	0.9 (14.4)	1.2 (19.7)	0.9 (14.1)	20 (331)	-5.7 (52.6)	-7.8 (71.9)	-5.2 (48.0)	-150 (1370)	-45.3 (78.9)	-61.9 (108.0)	-42.2 (73.5)	-1250 (2170)	-0.2 (13.9)	-0.3 (18.9)	-0.2 (13.8)	-6 (460)
29	3.0 (11.7)	4.1 (16.0)	2.9 (11.4)	67 (262)	-2.2 (48.7)	-3.0 (66.5)	-2.0 (44.4)	-55 (1230)	-14.4 (67.1)	-19.7 (91.6)	-13.5 (62.5)	-387 (1800)	0.1 (12.5)	0.1 (17.1)	0.1 (12.5)	2 (402)
30	4.4 (4.9)	6.0 (6.7)	4.3 (4.8)	95 (106)	-0.1 (19.7)	-0.1 (27.0)	-0.1 (18.0)	-2 (486)	0.5 (30.6)	0.7 (41.8)	0.5 (28.5)	15 (797)	0.6 (10.1)	0.8 (13.8)	0.6 (10.1)	18 (313)
Avg	-4.0	-5.5	-3.9	-107	-14.2	-19.4	-12.9	-404	-65.7	-89.8	-61.3	-1970	-0.6	-0.9	-0.6	-25
n	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
SD	7.0	9.5	6.8	177	13.0	17.7	11.8	380	55.2	75.4	51.4	1680	1.2	1.6	1.2	45.4
Min	-15.2	-20.8	-14.9	-402	-36.9	-50.4	-33.6	-1100	-180.0	-246.0	-168.0	-5450	-3.1	-4.2	-3.1	-121
Max	4.4	6.0	4.3	95	-0.1	-0.1	-0.1	-2	0.5	0.7	0.5	15	0.6	0.8	0.6	18

ED_004549_00015928-00179

Table E6. Daily means (SD) of PM2.5 emissions at Site IN3B for October, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	4.6 (5.7)	6.3 (7.7)	4.5 (5.5)	98 (120)	14.3 (114.0)	19.5 (156.0)	13.0 (104.0)	340 (2720)	-1.5 (25.4)	-2.0 (34.7)	-1.4 (23.7)	-37 (643)	0.7 (13.4)	1.0 (18.4)	0.7 (13.4)	23 (406)
2	4.0 (7.0)	5.5 (9.6)	3.9 (6.9)	82 (144)	2.0 (31.1)	2.7 (42.5)	1.8 (28.4)	46 (724)	-6.0 (14.0)	-8.2 (19.1)	-5.6 (13.1)	-148 (345)	-1.9 (11.0)	-2.6 (15.0)	-1.9 (11.0)	-57 (321)
3	5.7 (7.7)	7.7 (10.5)	5.5 (7.5)	113 (154)	2.4 (27.6)	3.2 (37.7)	2.2 (25.2)	54 (626)	-4.4 (30.6)	-6.0 (41.8)	-4.1 (28.5)	-105 (731)	-0.5 (9.5)	-0.7 (13.0)	-0.5 (9.5)	-15 (270)
4	5.0 (10.1)	6.9 (13.9)	4.9 (9.9)	98 (197)	2.5 (41.8)	3.4 (57.1)	2.3 (38.2)	54 (921)	3.6 (35.7)	5.0 (48.7)	3.4 (33.3)	83 (830)	-0.1 (10.8)	-0.1 (14.8)	-0.1 (10.8)	-2 (297)
5	-1.7 (16.2)	-2.4 (22.2)	-1.7 (15.9)	-34 (308)	2.6 (57.9)	3.6 (79.0)	2.4 (52.8)	55 (1240)	-2.1 (57.3)	-2.8 (78.3)	-1.9 (53.5)	-48 (1290)	-0.7 (14.5)	-0.9 (19.8)	-0.7 (14.5)	-18 (388)
6	0.8 (10.4)	1.1 (14.2)	0.8 (10.2)	15 (192)	1.0 (45.4)	1.4 (62.1)	0.9 (41.5)	22 (945)	2.5 (10.1)	3.4 (13.7)	2.3 (9.4)	55 (221)				
7	1.7 (9.8)	2.3 (13.4)	1.6 (9.6)	30 (177)	15.2 (29.6)	20.7 (40.4)	13.9 (27.0)	308 (599)	0.7 (10.0)	0.9 (13.7)	0.6 (9.3)	14 (212)				
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31																
Avg	2.9	3.9	2.8	58	5.7	7.8	5.2	125	-1.0	-1.4	-1.0	-27	-0.5	-0.7	-0.5	-14
n	7	7	7	7	7	7	7	7	7	7	7	7	5	5	5	5
SD	2.5	3.4	2.5	50.6	5.7	7.8	5.2	126	3.3	4.4	3.0	77.3	0.9	1.2	0.9	25.7
Min	-1.7	-2.4	-1.7	-34	1.0	1.4	0.9	22	-6.0	-8.2	-5.6	-148	-1.9	-2.6	-1.9	-57
Max	5.7	7.7	5.5	113	15.2	20.7	13.9	340	3.6	5.0	3.4	83	0.7	1.0	0.7	23

ED_004549_00015928-00180

Table E7. TSP emissions.

Table E7. Daily means (SD) of TSP emissions at Site IN3B for December, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
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12	871 (549)	1190 (750)	816 (514)	4750 (2990)	887 (530)	1210 (724)	864 (516)	4600 (2740)	842 (616)	1150 (841)	770 (563)	4000 (2930)				
13	890 (589)	1220 (804)	835 (552)	4810 (3180)	836 (473)	1140 (647)	814 (461)	4300 (2430)	625 (398)	854 (543)	572 (364)	2950 (1870)				
14	925 (503)	1260 (687)	867 (472)	4950 (2690)	877 (519)	1200 (709)	855 (506)	4470 (2640)	668 (599)	913 (819)	611 (548)	3130 (2800)				
15	992 (581)	1350 (793)	930 (545)	5250 (3070)	899 (513)	1230 (701)	876 (500)	4550 (2590)	825 (584)	1130 (798)	755 (535)	3840 (2710)				
16	1180 (620)	1610 (847)	1100 (582)	6170 (3250)	803 (438)	1100 (598)	783 (427)	4030 (2190)	1410 (961)	1920 (1310)	1290 (880)	6490 (4430)				
17	1000 (535)	1370 (731)	940 (502)	5210 (2780)	831 (524)	1140 (716)	810 (511)	4140 (2610)	1030 (859)	1400 (1170)	940 (787)	4710 (3940)				
18	1160 (959)	1590 (1310)	1090 (900)	5990 (4940)	976 (616)	1330 (841)	951 (600)	4820 (3040)	746 (716)	1020 (978)	684 (655)	3400 (3260)				
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31																
Avg	1000	1370	940	5300	873	1190	850	4410	877	1200	803	4070				
n	7	7	7	7	7	7	7	7	7	7	7	7	0	0	0	0
SD	114	156	108	521	52.8	72.1	51.5	256	248	339	227	1130				
Min	871	1190	816	4750	803	1100	783	4030	625	854	572	2950				
Max	1180	1610	1100	6170	976	1330	951	4820	1410	1920	1290	6490				

ED_004549_00015928-00181

Table E7. Daily means (SD) of TSP emissions at Site IN3B for April, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
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24	1140 (745)	1550 (1020)	1080 (709)	12600 (8240)					1460 (926)	2000 (1260)	1230 (779)	21200 (13400)	1090 (756)	1490 (1030)	1010 (698)	14600 (10100)
25					1160 (965)	1590 (1320)	1090 (902)	15300 (12600)	987 (587)	1350 (802)	831 (494)	14000 (8320)	578 (307)	790 (420)	534 (284)	7560 (4020)
26					1450 (1200)	1980 (1640)	1360 (1120)	18600 (15300)	1460 (1260)	1990 (1730)	1230 (1060)	20300 (17600)	1290 (821)	1760 (1120)	1190 (758)	16500 (10500)
27					772 (329)	1050 (450)	722 (308)	9640 (4110)	991 (1040)	1350 (1420)	835 (878)	13600 (14200)	1200 (989)	1650 (1350)	1110 (913)	15100 (12300)
28					1030 (631)	1410 (862)	963 (590)	12500 (7660)	877 (813)	1200 (1110)	739 (685)	11800 (10900)	1050 (863)	1430 (1180)	968 (798)	12800 (10600)
29									980 (918)	1340 (1250)	825 (773)	12800 (12000)	1030 (858)	1400 (1170)	950 (792)	12300 (10300)
30					835 (636)	1140 (869)	782 (595)	9670 (7350)	1350 (1310)	1840 (1780)	1130 (1100)	17300 (16800)	1150 (986)	1570 (1350)	1060 (911)	13500 (11500)
Avg					1050	1430	982	13100	1160	1580	975	15900	1060	1440	976	13200
n	1	1	1	1	5	5	5	5	7	7	7	7	7	7	7	7
SD					244	333	228	3430	235	321	198	3480	213	291	197	2650
Min					772	1050	722	9640	877	1200	739	11800	578	790	534	7560
Max					1450	1980	1360	18600	1460	2000	1230	21200	1290	1760	1190	16500

ED_004549_00015928-00182

Table E7. Daily means (SD) of TSP emissions at Site IN3B for May, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1					1040 (1250)	1420 (1710)	972 (1170)	11700 (14100)	1220 (970)	1670 (1320)	1030 (817)	15400 (12200)	1220 (1250)	1660 (1710)	1120 (1160)	13900 (14400)
2					1160 (975)	1590 (1330)	1090 (912)	12800 (10700)	1210 (653)	1660 (892)	1020 (551)	15000 (8050)	879 (812)	1200 (1110)	812 (751)	9860 (9120)
3					1220 (977)	1670 (1340)	1140 (914)	13100 (10500)	1190 (826)	1620 (1130)	1000 (697)	14400 (9990)	1010 (844)	1380 (1150)	935 (781)	11100 (9250)
4					759 (760)	1040 (1040)	710 (711)	7970 (7950)	1310 (1230)	1790 (1680)	1100 (1040)	15500 (14500)	985 (965)	1350 (1320)	911 (893)	10600 (10300)
5					1100 (1040)	1500 (1430)	1030 (977)	11300 (10700)	1160 (1090)	1590 (1490)	981 (918)	13500 (12600)	1280 (1300)	1750 (1780)	1180 (1200)	13400 (13600)
6					827 (681)	1130 (931)	774 (637)	8260 (6780)	1280 (1380)	1750 (1890)	1080 (1170)	14500 (15600)	534 (1210)	730 (1650)	494 (1120)	5480 (12400)
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Avg					1020	1390	952	10900	1230	1680	1040	14700	984	1340	910	10700
n	0	0	0	0	6	6	6	6	6	6	6	6	6	6	6	6
SD					169	232	159	2040	50	68.4	42.3	688	243	332	225	2770
Min					759	1040	710	7970	1160	1590	981	13500	534	730	494	5480
Max					1220	1670	1140	13100	1310	1790	1100	15500	1280	1750	1180	13900

ED_004549_00015928-00183

Table E7. Daily means (SD) of TSP emissions at Site IN3B for July, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	1270 (726)	1740 (992)	1220 (698)	5740 (3280)	1420 (1060)	1940 (1450)	1340 (998)	6650 (4960)	1120 (785)	1530 (1070)	949 (666)	4930 (3460)	1180 (1030)	1610 (1410)	1100 (960)	5400 (4730)
2	1160 (755)	1590 (1030)	1120 (726)	5230 (3400)	1380 (707)	1890 (965)	1300 (665)	6430 (3290)	814 (594)	1110 (811)	691 (504)	3560 (2600)	956 (766)	1310 (1050)	892 (714)	4370 (3500)
3	1270 (764)	1740 (1040)	1220 (735)	5680 (3410)	1300 (827)	1770 (1130)	1220 (778)	6000 (3820)	921 (778)	1260 (1060)	782 (660)	3990 (3370)	984 (910)	1340 (1240)	918 (849)	4460 (4130)
4	1610 (892)	2200 (1220)	1550 (859)	7170 (3980)	1640 (980)	2240 (1340)	1540 (922)	7530 (4510)	1200 (739)	1640 (1010)	1020 (627)	5170 (3180)	1270 (883)	1730 (1210)	1180 (824)	5730 (3990)
5	1670 (1240)	2280 (1690)	1610 (1190)	7420 (5500)	1700 (1070)	2320 (1460)	1600 (1000)	7780 (4880)	1180 (1120)	1610 (1530)	1000 (951)	5030 (4780)	1310 (1020)	1790 (1390)	1220 (952)	5890 (4580)
6	1160 (948)	1580 (1300)	1110 (912)	5110 (4190)	1320 (869)	1800 (1190)	1240 (818)	6000 (3960)	932 (854)	1270 (1170)	791 (725)	3960 (3630)	999 (1150)	1360 (1570)	932 (1070)	4460 (5140)
7																
8																
9																
10																
11																
12																
13																
14																
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16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
Avg	1360	1850	1310	6060	1460	1990	1370	6730	1030	1400	872	4440	1120	1520	1040	5050
n	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
SD	206	282	199	905	155	211	145	696	146	199	124	624	142	194	133	637
Min	1160	1580	1110	5110	1300	1770	1220	6000	814	1110	691	3560	956	1310	892	4370
Max	1670	2280	1610	7420	1700	2320	1600	7780	1200	1640	1020	5170	1310	1790	1220	5890

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Table E7. Daily means (SD) of TSP emissions at Site IN3B for October, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22	473 (324)	647 (443)	466 (320)	5740 (3930)					661 (716)	903 (978)	619 (670)	9130 (9870)				
23	566 (441)	773 (602)	558 (434)	6700 (5200)					796 (856)	1090 (1170)	746 (802)	10700 (11500)				
24	444 (354)	607 (483)	438 (348)	5140 (4080)					436 (430)	596 (587)	409 (403)	5710 (5620)				
25	534 (384)	730 (525)	527 (379)	6030 (4340)					445 (271)	607 (370)	417 (254)	5670 (3460)				
26	651 (484)	890 (662)	642 (478)	7180 (5330)					697 (781)	953 (1070)	654 (733)	8650 (9670)				
27	558 (370)	762 (506)	550 (365)	6010 (3980)					564 (377)	770 (516)	529 (354)	6810 (4550)				
28																
29																
30																
31																
Avg	538	735	530	6130					600	819	562	7780				
n	6	6	6	6	0	0	0	0	6	6	6	6	0	0	0	0
SD	67.1	91.7	66.3	658					131	180	123	1860				
Min	444	607	438	5140					436	596	409	5670				
Max	651	890	642	7180					796	1090	746	10700				

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Table E7. Daily means (SD) of TSP emissions at Site IN3B for November, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13													479 (485)	655 (663)	483 (488)	4330 (4380)
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
Avg																
n	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
SD																
Min																
Max																

ED_004549_00015928-00186

Table E7. Daily means (SD) of TSP emissions at Site IN3B for March, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19	251 (221)	343 (301)	158 (96)	5050 (3080)												
20	225 (88)	307 (120)	198 (78)	6150 (2390)												
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
Avg	238	325	178	5600												
n	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0
SD	13.3	18.2	20.2	549												
Min	225	307	158	5050												
Max	251	343	198	6150												

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Table E7. Daily means (SD) of TSP emissions at Site IN3B for June, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{-2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2	743 (594)	1020 (811)	674 (539)	4160 (3320)					778 (656)	1060 (897)	703 (593)	4840 (4080)	1270 (794)	1740 (1080)	1170 (732)	7190 (4490)
3	827 (574)	1130 (784)	751 (521)	4580 (3180)					1100 (853)	1510 (1170)	998 (771)	6780 (5230)	1170 (676)	1600 (923)	1080 (624)	6570 (3780)
4																
5																
6																
7																
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25																
26																
27																
28																
29																
30																
Avg	785	1070	713	4370					941	1290	850	5810	1220	1670	1130	6880
n	2	2	2	2	0	0	0	0	2	2	2	2	2	2	2	2
SD	41.9	57.3	38.1	212					163	223	147	967	48.9	66.8	44.7	310
Min	743	1020	674	4160					778	1060	703	4840	1170	1600	1080	6570
Max	827	1130	751	4580					1100	1510	998	6780	1270	1740	1170	7190

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Table E8. Non-methane hydrocarbon concentrations.

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for July, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25	-0.05 (0.00)	-0.08 (0.00)	-0.04 (0.01)	-0.07 (0.03)	-0.05 (0.00)	-0.08 (0.00)	-0.04 (0.00)	-0.08 (0.00)	-0.05 (0.00)	-0.08 (0.00)
26			0.04 (0.10)	0.08 (0.18)						
27										
28										
29										
30	-0.05 (0.00)	-0.08 (0.00)	-0.01 (0.02)	-0.02 (0.04)	-0.02 (0.02)	-0.03 (0.03)	-0.03 (0.01)	-0.06 (0.01)		
31	-0.05 (0.00)	-0.08 (0.00)	0.00 (0.02)	0.00 (0.03)	-0.02 (0.02)	-0.03 (0.03)	-0.02 (0.02)	-0.04 (0.04)	-0.02 (0.02)	-0.04 (0.03)
Avg	-0.05	-0.08	0.00	0.00	-0.03	-0.05	-0.03	-0.06	-0.03	-0.06
n	3	3	4	4	3	3	3	3	2	2
SD	0.00	0.00	0.03	0.06	0.01	0.03	0.01	0.02	0.01	0.02
Min	-0.05	-0.08	-0.04	-0.07	-0.05	-0.08	-0.04	-0.08	-0.05	-0.08
Max	-0.05	-0.08	0.04	0.08	-0.02	-0.03	-0.02	-0.04	-0.02	-0.04

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Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for August, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	-0.05 (0.00)	-0.08 (0.00)	-0.01 (0.02)	-0.01 (0.03)	-0.03 (0.01)	-0.05 (0.02)	-0.03 (0.01)	-0.06 (0.02)	-0.02 (0.01)	-0.04 (0.03)
2	-0.05 (0.00)	-0.08 (0.00)	0.02 (0.03)	0.03 (0.05)	-0.02 (0.02)	-0.03 (0.04)	0.00 (0.05)	0.01 (0.10)	0.00 (0.02)	-0.01 (0.05)
3	-0.05 (0.00)									
4	-0.05 (0.00)	-0.08 (0.00)	0.01 (0.03)	0.01 (0.06)	-0.03 (0.01)	-0.05 (0.02)	-0.04 (0.01)	-0.07 (0.02)	-0.01 (0.02)	-0.01 (0.04)
5	-0.05 (0.00)	-0.08 (0.00)	0.02 (0.03)	0.03 (0.06)	-0.02 (0.02)	-0.03 (0.03)	-0.03 (0.01)	-0.05 (0.02)	0.01 (0.02)	0.01 (0.04)
6	-0.05 (0.00)	-0.09 (0.00)	0.02 (0.03)	0.04 (0.06)	-0.01 (0.02)	-0.02 (0.04)	0.00 (0.02)	0.00 (0.03)	-0.01 (0.02)	-0.02 (0.04)
7	-0.05 (0.00)	-0.09 (0.00)	0.04 (0.05)	0.09 (0.09)	-0.01 (0.02)	-0.02 (0.03)	-0.02 (0.02)	-0.03 (0.03)		
8	-0.05 (0.00)	-0.09 (0.00)	0.04 (0.02)	0.07 (0.04)	-0.03 (0.01)	-0.06 (0.02)	0.02 (0.09)	0.03 (0.16)	0.01 (0.03)	0.01 (0.06)
9	-0.05 (0.00)	-0.09 (0.00)	-0.01 (0.03)	-0.01 (0.05)	0.02 (0.14)	0.04 (0.26)	-0.04 (0.01)	-0.08 (0.01)	-0.03 (0.02)	-0.05 (0.03)
10	-0.05 (0.00)	-0.08 (0.00)	-0.04 (0.00)	-0.08 (0.01)	-0.05 (0.00)	-0.08 (0.00)	-0.05 (0.00)	-0.09 (0.00)	-0.05 (0.00)	-0.09 (0.00)
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28	-0.05 (0.00)	-0.08 (0.00)			0.01 (0.04)		0.00 (0.03)	0.00 (0.06)	0.02 (0.08)	0.04 (0.16)
29	-0.05 (0.00)	-0.08 (0.00)			0.02 (0.04)		0.07 (0.12)	0.14 (0.22)	0.15 (0.12)	0.28 (0.21)
30	-0.04 (0.00)				0.12 (0.10)		0.09 (0.07)		0.19 (0.11)	
31	-0.05 (0.00)				0.27 (0.17)		0.09 (0.10)		0.19 (0.10)	
Avg	-0.05	-0.08	0.01	0.02	0.02	-0.04	0.01	-0.02	0.04	0.01
n	14	11	9	9	13	9	13	11	12	10
SD	0.00	0.00	0.02	0.05	0.08	0.03	0.05	0.06	0.08	0.09
Min	-0.05	-0.09	-0.04	-0.08	-0.05	-0.08	-0.05	-0.09	-0.05	-0.09
Max	-0.04	-0.08	0.04	0.09	0.27	0.04	0.09	0.14	0.19	0.28

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Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for September, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	-0.04 (0.02)	-0.07 (0.04)			0.31 (0.24)	0.58 (0.44)			0.26 (0.16)	
2	-0.05 (0.00)	-0.08 (0.00)			0.24 (0.15)	0.45 (0.27)			0.20 (0.12)	
3	-0.05 (0.00)	-0.08 (0.00)			0.19 (0.10)	0.36 (0.18)			0.12 (0.15)	
4	-0.05 (0.00)	-0.08 (0.00)			0.14 (0.07)	0.26 (0.12)				
5	-0.05 (0.00)	-0.08 (0.00)	0.04 (0.09)	0.08 (0.16)	0.12 (0.07)	0.22 (0.13)				
6	-0.05 (0.00)	-0.08 (0.00)	0.18 (0.11)	0.34 (0.21)	0.07 (0.02)	0.13 (0.04)				
7	-0.05 (0.00)	-0.08 (0.00)	0.30 (0.17)	0.57 (0.31)	0.06 (0.03)	0.11 (0.05)	-0.03 (0.03)	-0.05 (0.06)		
8										
9										
10										
11	-0.05 (0.00)	-0.08 (0.00)	0.27 (0.13)	0.51 (0.25)	0.22 (0.12)	0.42 (0.21)	-0.01 (0.03)	-0.02 (0.05)		
12	-0.05 (0.00)	-0.08 (0.00)	0.34 (0.23)	0.62 (0.43)	0.36 (0.25)	0.66 (0.46)	-0.01 (0.03)	-0.02 (0.05)		
13	-0.05 (0.00)	-0.08 (0.00)								
14	-0.05 (0.00)	-0.08 (0.00)								
15	-0.05 (0.00)	-0.08 (0.00)	0.43 (0.17)	0.79 (0.31)	0.45 (0.23)	0.83 (0.43)	-0.01 (0.02)	-0.02 (0.04)		
16	-0.04 (0.00)	-0.08 (0.00)	0.39 (0.18)	0.72 (0.33)	0.36 (0.21)	0.67 (0.40)	0.02 (0.07)	0.03 (0.13)		
17	-0.05 (0.00)	-0.08 (0.00)	0.28 (0.21)	0.52 (0.38)	0.27 (0.17)	0.50 (0.30)	-0.02 (0.02)	-0.04 (0.04)		
18	-0.05 (0.00)	-0.08 (0.00)	0.30 (0.08)	0.55 (0.14)	0.11 (0.06)	0.21 (0.11)				
19	-0.05 (0.00)	-0.08 (0.00)	0.24 (0.04)	0.45 (0.08)	0.16 (0.05)	0.30 (0.09)	-0.03 (0.03)	-0.05 (0.06)		
20	-0.05 (0.00)	-0.08 (0.00)	0.37 (0.17)	0.68 (0.32)	0.18 (0.05)	0.34 (0.09)	-0.03 (0.02)	-0.06 (0.03)		
21	-0.05 (0.00)	-0.08 (0.00)	0.25 (0.08)	0.47 (0.15)	0.10 (0.09)	0.18 (0.17)	-0.04 (0.01)	-0.08 (0.01)		
22	-0.05 (0.00)	-0.08 (0.00)	0.10 (0.07)	0.18 (0.13)	0.08 (0.12)	0.14 (0.22)	-0.04 (0.01)	-0.07 (0.02)	-0.04 (0.01)	-0.07 (0.02)
23	-0.05 (0.00)	-0.08 (0.00)	0.17 (0.11)	0.31 (0.20)	0.24 (0.32)	0.45 (0.59)	0.01 (0.06)	0.01 (0.12)	-0.02 (0.03)	-0.03 (0.06)
24	-0.05 (0.00)	-0.08 (0.00)			0.01 (0.04)	0.01 (0.07)	-0.04 (0.01)	-0.07 (0.01)	-0.04 (0.00)	-0.08 (0.01)
25	-0.05 (0.00)									
26	-0.05 (0.00)	-0.08 (0.00)	0.14 (0.04)	0.25 (0.07)	0.08 (0.03)	0.14 (0.06)	-0.02 (0.02)	-0.03 (0.04)		
27	-0.05 (0.00)	-0.08 (0.00)	0.15 (0.04)	0.29 (0.07)	0.03 (0.05)	0.06 (0.09)	-0.01 (0.02)	-0.01 (0.03)	-0.03 (0.01)	-0.06 (0.02)
28	-0.05 (0.00)									
29	-0.05 (0.00)	-0.08 (0.00)	0.25 (0.23)	0.47 (0.42)	0.13 (0.19)	0.25 (0.35)	0.03 (0.07)	0.06 (0.13)	0.00 (0.03)	0.00 (0.06)
30	-0.05 (0.00)	-0.08 (0.00)	0.18 (0.20)	0.33 (0.37)	0.06 (0.11)	0.11 (0.20)	0.01 (0.06)	0.01 (0.11)	-0.01 (0.04)	-0.01 (0.08)
Avg	-0.05	-0.08	0.24	0.45	0.17	0.32	-0.01	-0.03	0.05	-0.04
n	27	25	18	18	23	23	16	16	9	6
SD	0.00	0.00	0.10	0.19	0.12	0.21	0.02	0.04	0.11	0.03
Min	-0.05	-0.08	0.04	0.08	0.01	0.01	-0.04	-0.08	-0.04	-0.08
Max	-0.04	-0.07	0.43	0.79	0.45	0.83	0.03	0.06	0.26	0.00

ED_004549_00015928-00191

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for October, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	-0.05 (0.00)	-0.08 (0.00)	0.02 (0.04)	0.04 (0.06)	-0.01 (0.03)	-0.02 (0.05)	-0.02 (0.02)	-0.03 (0.04)	-0.04 (0.01)	-0.07 (0.02)
2	-0.05 (0.00)	-0.08 (0.00)	0.08 (0.11)	0.15 (0.20)	0.00 (0.02)	0.00 (0.04)	0.01 (0.02)	0.02 (0.04)	-0.02 (0.03)	-0.03 (0.06)
3	-0.05 (0.00)	-0.08 (0.00)	0.03 (0.05)	0.06 (0.09)	0.01 (0.03)	0.01 (0.05)	0.02 (0.03)	0.03 (0.06)	-0.02 (0.03)	-0.04 (0.05)
4	-0.05 (0.00)	-0.08 (0.00)	0.08 (0.09)	0.14 (0.16)	0.01 (0.04)	0.01 (0.07)	0.06 (0.04)	0.11 (0.07)	0.01 (0.04)	0.01 (0.08)
5	-0.05 (0.00)	-0.08 (0.00)	0.04 (0.02)	0.08 (0.04)	0.01 (0.02)	0.02 (0.03)	0.06 (0.04)	0.11 (0.07)	-0.02 (0.02)	-0.04 (0.03)
6	-0.05 (0.00)	-0.08 (0.00)	0.02 (0.02)	0.03 (0.03)	0.00 (0.02)	0.00 (0.03)	0.01 (0.02)	0.02 (0.05)	-0.03 (0.01)	-0.05 (0.02)
7	-0.05 (0.00)									
8	-0.05 (0.00)									
9	-0.05 (0.00)	-0.08 (0.00)	0.02 (0.03)	0.04 (0.06)	0.01 (0.03)	0.01 (0.06)	0.03 (0.03)	0.06 (0.05)	-0.02 (0.03)	-0.04 (0.05)
10	-0.05 (0.00)	-0.08 (0.00)			0.18 (0.13)	0.34 (0.23)	0.16 (0.14)	0.30 (0.25)	0.16 (0.17)	0.29 (0.32)
11	-0.05 (0.00)	-0.08 (0.00)	0.15 (0.04)	0.28 (0.06)	0.13 (0.06)	0.24 (0.10)	0.13 (0.02)	0.24 (0.04)	0.06 (0.03)	0.12 (0.06)
12	-0.05 (0.00)	-0.08 (0.00)	0.14 (0.03)	0.25 (0.06)	0.15 (0.05)	0.28 (0.10)	0.17 (0.04)	0.32 (0.07)	0.07 (0.03)	0.13 (0.05)
13	-0.05 (0.00)	-0.08 (0.00)	0.13 (0.05)	0.24 (0.08)	0.15 (0.07)	0.28 (0.14)	0.15 (0.08)	0.27 (0.14)	0.08 (0.04)	0.14 (0.08)
14	-0.05 (0.00)	-0.08 (0.00)	0.09 (0.05)	0.16 (0.08)	0.06 (0.04)	0.11 (0.07)	0.09 (0.06)	0.17 (0.11)	0.02 (0.03)	0.04 (0.05)
15	-0.05 (0.00)	-0.08 (0.00)	0.04 (0.04)	0.07 (0.07)	0.01 (0.04)	0.02 (0.07)	0.17 (0.14)	0.31 (0.27)	0.00 (0.02)	-0.01 (0.04)
16	-0.05 (0.00)	-0.08 (0.00)	0.00 (0.02)	0.01 (0.04)	0.03 (0.03)	0.05 (0.06)	0.09 (0.03)	0.16 (0.06)	0.00 (0.02)	0.01 (0.03)
17	-0.04 (0.01)	-0.08 (0.02)	0.05 (0.04)	0.08 (0.08)	0.08 (0.08)	0.14 (0.14)	0.05 (0.03)	0.09 (0.06)	0.03 (0.01)	0.05 (0.02)
18	-0.03 (0.01)	-0.06 (0.03)	0.05 (0.07)	0.10 (0.14)	0.06 (0.04)	0.11 (0.07)	0.04 (0.02)	0.08 (0.05)	0.01 (0.02)	0.02 (0.03)
19	-0.01 (0.00)	-0.03 (0.00)	0.02 (0.01)	0.03 (0.02)	0.02 (0.01)	0.04 (0.01)	0.04 (0.02)	0.08 (0.04)	0.06 (0.03)	0.11 (0.06)
20	-0.01 (0.00)	-0.03 (0.00)	0.05 (0.03)	0.09 (0.06)	0.06 (0.04)	0.10 (0.07)	0.04 (0.01)	0.07 (0.02)	0.02 (0.02)	0.04 (0.04)
21	-0.01 (0.00)	-0.03 (0.00)	0.03 (0.02)	0.05 (0.03)	0.06 (0.03)	0.12 (0.05)	0.04 (0.02)	0.07 (0.03)	0.02 (0.02)	0.03 (0.04)
22	-0.01 (0.00)	-0.03 (0.00)							0.05 (0.04)	0.09 (0.07)
23	-0.01 (0.00)	-0.03 (0.00)	0.04 (0.03)	0.07 (0.06)	0.04 (0.01)	0.07 (0.02)	0.05 (0.03)	0.09 (0.06)	0.07 (0.04)	0.13 (0.07)
24	-0.01 (0.00)	-0.03 (0.00)	0.06 (0.03)	0.10 (0.05)	0.10 (0.04)	0.19 (0.07)	0.15 (0.05)	0.29 (0.09)	0.13 (0.04)	0.23 (0.07)
25	-0.01 (0.00)	-0.03 (0.00)	0.09 (0.02)	0.16 (0.04)	0.16 (0.06)	0.30 (0.10)	0.12 (0.08)	0.22 (0.14)	0.14 (0.04)	0.26 (0.07)
26	-0.01 (0.00)	-0.03 (0.00)	0.05 (0.04)	0.09 (0.07)	0.17 (0.07)	0.32 (0.13)	0.10 (0.02)	0.18 (0.04)	0.10 (0.04)	0.19 (0.07)
27	-0.01 (0.00)	-0.03 (0.00)	0.08 (0.05)	0.14 (0.10)	0.09 (0.03)	0.17 (0.05)	0.10 (0.05)	0.18 (0.10)	0.13 (0.04)	0.24 (0.07)
28	-0.01 (0.00)	-0.03 (0.00)	0.09 (0.05)	0.17 (0.09)	0.19 (0.04)	0.35 (0.07)	0.19 (0.04)	0.36 (0.08)	0.15 (0.05)	0.27 (0.08)
29	-0.01 (0.00)	-0.03 (0.00)	0.07 (0.04)	0.12 (0.07)	0.16 (0.11)	0.31 (0.21)	0.19 (0.05)	0.35 (0.09)		
30	-0.01 (0.00)	-0.03 (0.00)	0.16 (0.13)	0.30 (0.25)	0.07 (0.02)	0.13 (0.03)	0.12 (0.04)	0.22 (0.07)	0.12 (0.06)	0.22 (0.12)
31	-0.01 (0.00)	-0.03 (0.00)	0.07 (0.05)	0.13 (0.09)	0.05 (0.01)	0.08 (0.02)	0.12 (0.04)	0.23 (0.07)	0.11 (0.03)	0.21 (0.05)
Avg	-0.03	-0.06	0.06	0.12	0.07	0.14	0.09	0.16	0.05	0.09
n	31	29	27	27	28	28	28	28	28	28
SD	0.02	0.03	0.04	0.08	0.06	0.12	0.06	0.11	0.06	0.11
Min	-0.05	-0.08	0.00	0.01	-0.01	-0.02	-0.02	-0.03	-0.04	-0.07
Max	-0.01	-0.03	0.16	0.30	0.19	0.35	0.19	0.36	0.16	0.29

ED_004549_00015928-00192

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for November, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	-0.01 (0.00)	-0.03 (0.00)	0.05 (0.03)	0.09 (0.05)	0.07 (0.03)	0.13 (0.06)	0.17 (0.06)	0.32 (0.10)	0.18 (0.05)	0.34 (0.09)
2	-0.01 (0.00)	-0.03 (0.00)	0.10 (0.04)	0.18 (0.07)	0.10 (0.04)	0.19 (0.07)	0.19 (0.07)	0.36 (0.13)	0.21 (0.07)	0.38 (0.12)
3	-0.01 (0.00)	-0.03 (0.00)	0.07 (0.03)	0.13 (0.06)	0.07 (0.02)	0.13 (0.04)	0.22 (0.04)	0.41 (0.07)	0.18 (0.06)	0.33 (0.11)
4	-0.01 (0.00)	-0.03 (0.00)	0.06 (0.06)	0.11 (0.11)	0.08 (0.04)	0.15 (0.07)	0.17 (0.06)	0.32 (0.11)	0.16 (0.04)	0.30 (0.06)
5	-0.01 (0.00)	-0.03 (0.00)	0.03 (0.03)	0.06 (0.06)	0.07 (0.05)	0.13 (0.09)	0.17 (0.06)	0.31 (0.12)	0.17 (0.05)	0.32 (0.10)
6	-0.01 (0.00)	-0.03 (0.00)	0.14 (0.05)	0.25 (0.10)	0.13 (0.08)	0.24 (0.15)	0.23 (0.08)	0.43 (0.14)	0.30 (0.08)	0.55 (0.14)
7	-0.01 (0.00)	-0.03 (0.00)	0.19 (0.04)	0.34 (0.08)	0.13 (0.05)	0.24 (0.08)	0.29 (0.14)	0.53 (0.26)	0.27 (0.04)	0.49 (0.06)
8	-0.01 (0.00)	-0.03 (0.00)	0.14 (0.03)	0.26 (0.05)	0.21 (0.10)	0.39 (0.18)	0.26 (0.10)	0.48 (0.18)	0.21 (0.04)	0.39 (0.07)
9	-0.01 (0.00)	-0.03 (0.00)								
10	-0.03 (0.01)	-0.05 (0.03)	0.22 (0.10)	0.41 (0.18)	0.11 (0.05)	0.19 (0.09)	0.23 (0.12)	0.42 (0.23)	0.25 (0.03)	0.47 (0.06)
11	-0.05 (0.00)	-0.08 (0.00)	0.32 (0.18)	0.60 (0.33)	0.13 (0.09)	0.24 (0.17)	0.27 (0.10)	0.50 (0.18)	0.26 (0.06)	0.49 (0.11)
12	-0.05 (0.00)	-0.08 (0.00)	0.18 (0.09)	0.34 (0.16)	0.27 (0.11)	0.50 (0.20)	0.34 (0.07)	0.63 (0.13)	0.20 (0.05)	0.37 (0.09)
13	-0.04 (0.00)	-0.07 (0.01)	0.21 (0.11)	0.38 (0.21)	0.29 (0.12)	0.54 (0.22)	0.20 (0.10)	0.38 (0.19)	0.21 (0.05)	0.39 (0.09)
14	-0.04 (0.00)	-0.06 (0.00)	0.21 (0.11)	0.39 (0.20)	0.22 (0.07)	0.41 (0.13)	0.20 (0.09)	0.38 (0.16)	0.17 (0.07)	0.31 (0.14)
15	-0.04 (0.00)	-0.06 (0.00)								
16	-0.03 (0.01)	-0.06 (0.02)	0.20 (0.10)	0.37 (0.19)			0.20 (0.08)	0.37 (0.15)	0.33 (0.20)	0.59 (0.35)
17	-0.01 (0.00)	-0.03 (0.00)	0.13 (0.08)	0.23 (0.16)	0.18 (0.08)	0.33 (0.15)	0.16 (0.09)	0.30 (0.16)	0.22 (0.08)	0.41 (0.14)
18	-0.01 (0.00)	-0.03 (0.00)	0.14 (0.07)	0.27 (0.14)	0.18 (0.07)	0.32 (0.13)	0.12 (0.08)	0.22 (0.15)	0.22 (0.07)	0.41 (0.13)
19	-0.01 (0.00)	-0.03 (0.00)	0.16 (0.08)	0.29 (0.16)	0.18 (0.07)	0.33 (0.12)				
20	0.01 (0.04)	0.01 (0.07)	0.25 (0.08)	0.46 (0.15)	0.19 (0.05)	0.35 (0.09)	0.16 (0.03)	0.30 (0.05)	0.14 (0.04)	0.27 (0.08)
21	-0.01 (0.00)	-0.03 (0.00)	0.17 (0.04)	0.31 (0.08)	0.16 (0.03)	0.29 (0.05)	0.13 (0.02)	0.23 (0.04)	0.11 (0.03)	0.21 (0.06)
22	-0.01 (0.00)	-0.03 (0.00)	0.12 (0.04)	0.22 (0.07)	0.16 (0.06)	0.30 (0.11)	0.12 (0.06)	0.22 (0.11)	0.20 (0.08)	0.37 (0.14)
23	-0.01 (0.00)	-0.03 (0.00)	0.16 (0.06)	0.30 (0.10)	0.19 (0.07)	0.34 (0.12)	0.12 (0.07)	0.22 (0.13)	0.26 (0.03)	0.48 (0.05)
24	-0.01 (0.00)	-0.03 (0.00)	0.19 (0.09)	0.35 (0.17)	0.21 (0.06)	0.38 (0.11)	0.20 (0.08)	0.36 (0.14)	0.28 (0.05)	0.51 (0.08)
25	-0.01 (0.00)	-0.03 (0.00)	0.12 (0.05)	0.22 (0.09)	0.20 (0.02)	0.37 (0.04)	0.23 (0.09)	0.42 (0.16)	0.24 (0.05)	0.45 (0.10)
26	-0.01 (0.00)	-0.03 (0.00)	0.11 (0.05)	0.21 (0.09)	0.19 (0.03)	0.35 (0.06)	0.31 (0.15)	0.57 (0.27)	0.21 (0.08)	0.38 (0.15)
27	-0.01 (0.00)	-0.03 (0.00)	0.16 (0.05)	0.29 (0.10)	0.25 (0.08)	0.45 (0.14)	0.31 (0.09)	0.58 (0.16)	0.23 (0.07)	0.43 (0.12)
28	-0.01 (0.00)	-0.03 (0.00)	0.12 (0.06)	0.23 (0.11)	0.31 (0.14)	0.57 (0.25)	0.46 (0.19)	0.84 (0.36)	0.27 (0.07)	0.50 (0.14)
29	-0.01 (0.00)	-0.03 (0.00)	0.12 (0.06)	0.22 (0.11)	0.23 (0.05)	0.41 (0.08)	0.26 (0.08)	0.48 (0.16)	0.28 (0.04)	0.51 (0.07)
30	-0.01 (0.00)	-0.03 (0.00)	0.17 (0.08)	0.31 (0.15)	0.29 (0.11)	0.53 (0.19)	0.24 (0.05)	0.45 (0.10)	0.30 (0.10)	0.56 (0.19)
Avg	-0.02	-0.03	0.15	0.28	0.18	0.33	0.22	0.41	0.22	0.41
n	30	30	28	28	27	27	27	27	27	27
SD	0.01	0.02	0.06	0.11	0.07	0.13	0.08	0.14	0.05	0.09
Min	-0.05	-0.08	0.03	0.06	0.07	0.13	0.12	0.22	0.11	0.21
Max	0.01	0.01	0.32	0.60	0.31	0.57	0.46	0.84	0.33	0.59

ED_004549_00015928-00193

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for December, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	-0.01 (0.00)	-0.03 (0.00)	0.21 (0.12)	0.40 (0.22)	0.28 (0.10)	0.51 (0.19)	0.31 (0.07)	0.58 (0.13)	0.26 (0.08)	0.48 (0.14)
2	-0.01 (0.00)	-0.03 (0.00)	0.16 (0.07)	0.30 (0.13)	0.17 (0.07)	0.31 (0.13)	0.36 (0.11)	0.66 (0.20)	0.31 (0.11)	0.58 (0.21)
3	-0.01 (0.00)	-0.03 (0.00)	0.20 (0.05)	0.37 (0.09)	0.21 (0.14)	0.39 (0.26)	0.27 (0.06)	0.50 (0.11)	0.25 (0.09)	0.46 (0.17)
4	-0.01 (0.00)	-0.03 (0.00)	0.24 (0.10)	0.45 (0.18)			0.35 (0.14)	0.64 (0.26)	0.39 (0.10)	0.72 (0.19)
5	-0.01 (0.00)	-0.03 (0.00)	0.16 (0.07)	0.29 (0.13)	0.24 (0.06)	0.45 (0.10)	0.32 (0.07)	0.59 (0.14)	0.29 (0.06)	0.53 (0.12)
6	-0.01 (0.00)	-0.03 (0.00)	0.24 (0.06)	0.45 (0.11)	0.30 (0.15)	0.55 (0.27)	0.27 (0.11)	0.50 (0.20)	0.39 (0.08)	0.72 (0.14)
7	-0.01 (0.00)	-0.03 (0.00)	0.33 (0.09)	0.61 (0.16)	0.36 (0.08)	0.66 (0.15)	0.49 (0.08)	0.91 (0.15)	0.44 (0.15)	0.81 (0.28)
8	-0.01 (0.00)	-0.03 (0.00)	0.28 (0.08)	0.52 (0.15)	0.30 (0.05)	0.56 (0.10)	0.49 (0.09)	0.91 (0.16)	0.38 (0.12)	0.71 (0.23)
9	-0.01 (0.00)	-0.03 (0.00)	0.23 (0.07)	0.42 (0.13)	0.31 (0.07)	0.57 (0.13)	0.38 (0.12)	0.70 (0.22)	0.34 (0.12)	0.63 (0.23)
10	-0.01 (0.00)	-0.03 (0.00)	0.27 (0.10)	0.51 (0.18)	0.34 (0.07)	0.63 (0.13)	0.50 (0.07)	0.92 (0.12)	0.40 (0.13)	0.74 (0.24)
11	-0.01 (0.00)									
12	-0.01 (0.00)	-0.03 (0.00)	0.33 (0.06)	0.61 (0.11)	0.41 (0.11)	0.76 (0.20)	0.50 (0.09)	0.92 (0.17)	0.39 (0.12)	0.72 (0.21)
13	-0.01 (0.00)	-0.03 (0.00)	0.34 (0.06)	0.63 (0.11)	0.31 (0.08)	0.58 (0.14)	0.47 (0.04)	0.86 (0.07)	0.33 (0.10)	0.61 (0.18)
14	-0.01 (0.00)	-0.03 (0.00)	0.32 (0.08)	0.60 (0.14)	0.38 (0.08)	0.71 (0.15)	0.46 (0.11)	0.84 (0.20)	0.44 (0.06)	0.82 (0.11)
15	-0.01 (0.00)	-0.03 (0.00)	0.29 (0.05)	0.54 (0.09)	0.27 (0.08)	0.49 (0.15)	0.47 (0.12)	0.87 (0.23)	0.33 (0.12)	0.60 (0.21)
16	-0.01 (0.00)	-0.03 (0.00)	0.39 (0.15)	0.73 (0.28)	0.23 (0.07)	0.42 (0.13)	0.37 (0.11)	0.69 (0.20)	0.35 (0.10)	0.64 (0.19)
17	-0.01 (0.00)	-0.03 (0.00)	0.39 (0.18)	0.72 (0.32)	0.31 (0.10)	0.58 (0.19)	0.31 (0.12)	0.58 (0.23)		
18	-0.01 (0.00)	-0.03 (0.00)	0.48 (0.08)	0.89 (0.15)	0.56 (0.19)	1.04 (0.36)	0.71 (0.13)	1.31 (0.23)	0.49 (0.14)	0.90 (0.25)
19	-0.01 (0.00)	-0.03 (0.00)			0.29 (0.10)	0.54 (0.18)	0.47 (0.22)	0.87 (0.40)	0.41 (0.18)	0.76 (0.33)
20	-0.01 (0.00)	-0.03 (0.00)					0.46 (0.09)	0.84 (0.16)	0.48 (0.09)	0.89 (0.17)
21	-0.01 (0.00)	-0.03 (0.00)	0.40 (0.09)	0.75 (0.16)	0.31 (0.11)	0.57 (0.20)	0.49 (0.13)	0.90 (0.24)	0.40 (0.09)	0.75 (0.17)
22	-0.01 (0.00)	-0.03 (0.00)	0.39 (0.05)	0.72 (0.10)	0.31 (0.06)	0.57 (0.11)	0.50 (0.11)	0.92 (0.21)	0.44 (0.04)	0.81 (0.08)
23	-0.01 (0.00)	-0.03 (0.00)	0.22 (0.06)	0.41 (0.12)	0.17 (0.08)	0.31 (0.15)	0.30 (0.08)	0.55 (0.16)	0.25 (0.11)	0.46 (0.20)
24	-0.01 (0.00)	-0.03 (0.00)	0.36 (0.12)	0.66 (0.21)	0.27 (0.09)	0.49 (0.17)	0.35 (0.07)	0.64 (0.13)	0.33 (0.09)	0.61 (0.16)
25	-0.01 (0.00)	-0.03 (0.00)	0.39 (0.25)	0.71 (0.45)	0.35 (0.14)	0.64 (0.25)	0.47 (0.20)	0.88 (0.37)	0.49 (0.14)	0.91 (0.25)
26	-0.01 (0.00)	-0.03 (0.00)	0.36 (0.10)	0.66 (0.19)	0.33 (0.11)	0.61 (0.20)	0.39 (0.19)	0.73 (0.35)	0.50 (0.20)	0.92 (0.37)
27	-0.01 (0.00)	-0.03 (0.00)								
28	-0.01 (0.00)	-0.03 (0.00)	0.41 (0.09)	0.76 (0.16)	0.28 (0.07)	0.52 (0.13)	0.41 (0.11)	0.75 (0.21)	0.38 (0.14)	0.71 (0.25)
29	-0.01 (0.00)	-0.03 (0.00)	0.35 (0.07)	0.64 (0.13)	0.30 (0.11)	0.54 (0.20)	0.33 (0.09)	0.61 (0.17)	0.42 (0.09)	0.77 (0.17)
30	-0.01 (0.00)	-0.03 (0.00)	0.28 (0.10)	0.51 (0.19)	0.29 (0.09)	0.53 (0.16)	0.40 (0.14)	0.74 (0.26)	0.34 (0.12)	0.63 (0.22)
31	-0.01 (0.00)	-0.03 (0.00)	0.28 (0.14)	0.53 (0.26)	0.27 (0.08)	0.50 (0.16)	0.37 (0.13)	0.69 (0.24)	0.45 (0.18)	0.84 (0.33)
Avg	-0.01	-0.03	0.31	0.57	0.30	0.56	0.41	0.76	0.38	0.70
n	31	30	27	27	27	27	29	29	28	28
SD	0.00	0.00	0.08	0.15	0.08	0.14	0.09	0.17	0.07	0.13
Min	-0.01	-0.03	0.16	0.29	0.17	0.31	0.27	0.50	0.25	0.46
Max	-0.01	-0.03	0.48	0.89	0.56	1.04	0.71	1.31	0.50	0.92

ED_004549_00015928-00194

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for January, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1			0.25 (0.09)	0.47 (0.17)	0.21 (0.11)	0.38 (0.20)	0.32 (0.07)	0.58 (0.14)	0.42 (0.13)	0.78 (0.23)
2	-0.01 (0.00)	-0.03 (0.00)	0.48 (0.35)	0.89 (0.65)	0.36 (0.13)	0.66 (0.24)	0.36 (0.12)	0.67 (0.23)	0.51 (0.09)	0.95 (0.16)
3	-0.01 (0.00)	-0.03 (0.00)	0.61 (0.27)	1.13 (0.49)	0.54 (0.26)	0.99 (0.47)				
4	-0.01 (0.00)	-0.03 (0.00)	0.71 (0.20)	1.30 (0.38)	0.64 (0.24)	1.17 (0.44)	0.75 (0.18)	1.38 (0.33)	0.94 (0.16)	1.73 (0.29)
5	-0.01 (0.00)	-0.03 (0.00)	0.42 (0.11)	0.78 (0.21)	0.25 (0.14)	0.46 (0.27)	0.49 (0.10)	0.91 (0.19)	0.55 (0.15)	1.02 (0.27)
6	-0.01 (0.00)	-0.03 (0.00)	0.36 (0.06)	0.67 (0.10)	0.35 (0.06)	0.66 (0.11)	0.37 (0.06)	0.69 (0.12)	0.42 (0.13)	0.78 (0.24)
7	-0.01 (0.00)	-0.03 (0.00)	0.30 (0.08)	0.56 (0.15)	0.27 (0.03)	0.50 (0.06)	0.25 (0.05)	0.47 (0.10)	0.42 (0.11)	0.79 (0.21)
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Avg	-0.01	-0.03	0.45	0.83	0.37	0.69	0.42	0.78	0.54	1.01
n	6	6	7	7	7	7	6	6	6	6
SD	0.00	0.00	0.15	0.28	0.15	0.27	0.16	0.30	0.18	0.34
Min	-0.01	-0.03	0.25	0.47	0.21	0.38	0.25	0.47	0.42	0.78
Max	-0.01	-0.03	0.71	1.30	0.64	1.17	0.75	1.38	0.94	1.73

ED_004549_00015928-00195

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for February, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19	-0.01 (0.00)	-0.03 (0.00)								
20	-0.01 (0.00)	-0.03 (0.00)								
21										
22										
23										
24										
25										
26	-0.01 (0.01)	-0.02 (0.01)	0.46 (0.23)				0.06 (0.05)	0.11 (0.10)	0.05 (0.02)	0.09 (0.03)
27	-0.01 (0.00)	-0.03 (0.00)	0.51 (0.06)				0.03 (0.05)	0.05 (0.10)	0.06 (0.02)	0.10 (0.05)
28	-0.01 (0.00)	-0.03 (0.00)	0.55 (0.14)				0.15 (0.03)	0.27 (0.06)	0.03 (0.01)	0.05 (0.02)
29	-0.01 (0.00)	-0.03 (0.00)	0.33 (0.07)	0.61 (0.14)			0.07 (0.06)	0.13 (0.11)	0.02 (0.01)	0.03 (0.02)
Avg	-0.01	-0.03	0.46				0.08	0.14	0.04	0.07
n	6	6	4	1	0	0	4	4	4	4
SD	0.00	0.00	0.08				0.04	0.08	0.02	0.03
Min	-0.01	-0.03	0.33				0.03	0.05	0.02	0.03
Max	-0.01	-0.02	0.55				0.15	0.27	0.06	0.10

ED_004549_00015928-00196

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for March, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	-0.01 (0.00)	-0.03 (0.00)	0.50 (0.10)	0.94 (0.18)			0.08 (0.11)	0.15 (0.19)	0.03 (0.01)	0.05 (0.02)
2	-0.01 (0.00)	-0.03 (0.00)	0.48 (0.05)	0.89 (0.09)			0.13 (0.06)	0.24 (0.12)	0.00 (0.01)	0.01 (0.02)
3	-0.01 (0.00)	-0.03 (0.00)	0.52 (0.13)	0.97 (0.24)			0.12 (0.11)	0.22 (0.20)	0.04 (0.04)	0.08 (0.07)
4	-0.01 (0.00)	-0.03 (0.00)	0.53 (0.04)	0.98 (0.08)			0.13 (0.05)	0.25 (0.10)	0.01 (0.03)	0.02 (0.06)
5	-0.02 (0.00)	-0.03 (0.00)	0.59 (0.07)	1.09 (0.14)	0.36 (0.06)	0.67 (0.12)	0.12 (0.02)	0.21 (0.04)	0.05 (0.02)	0.09 (0.04)
6	-0.02 (0.00)	-0.04 (0.00)	0.63 (0.03)	1.17 (0.05)	0.41 (0.09)	0.77 (0.17)	0.09 (0.04)	0.16 (0.06)	0.04 (0.02)	0.07 (0.03)
7	-0.02 (0.00)	-0.04 (0.00)	0.57 (0.08)	1.05 (0.15)	0.36 (0.15)	0.67 (0.29)			0.02 (0.03)	0.04 (0.05)
8	-0.02 (0.00)	-0.04 (0.00)	0.49 (0.06)	0.92 (0.10)	0.43 (0.02)	0.80 (0.04)	0.04 (0.04)	0.07 (0.08)	0.02 (0.02)	0.04 (0.03)
9	-0.02 (0.00)	-0.04 (0.00)	0.47 (0.04)	0.86 (0.07)	0.45 (0.03)	0.84 (0.05)	0.07 (0.02)	0.12 (0.04)	0.00 (0.02)	-0.01 (0.03)
10	-0.02 (0.00)	-0.04 (0.00)	0.52 (0.02)	0.96 (0.04)	0.47 (0.02)	0.86 (0.04)	0.02 (0.03)	0.04 (0.06)	-0.01 (0.01)	-0.02 (0.01)
11	-0.02 (0.00)	-0.04 (0.00)	0.51 (0.05)	0.95 (0.10)	0.42 (0.04)	0.77 (0.08)	-0.01 (0.01)	-0.02 (0.01)	-0.01 (0.01)	-0.02 (0.01)
12	-0.02 (0.00)	-0.04 (0.00)	0.51 (0.10)	0.94 (0.18)	0.40 (0.42)	0.74 (0.78)				
13	-0.02 (0.00)									
14	-0.02 (0.00)									
15	-0.02 (0.00)									
16	-0.02 (0.00)	-0.04 (0.00)	0.52 (0.05)	0.96 (0.08)	0.35 (0.03)	0.64 (0.05)	-0.02 (0.00)			
17	-0.02 (0.00)	-0.04 (0.00)	0.51 (0.06)	0.95 (0.11)	0.46 (0.26)	0.82 (0.44)	-0.02 (0.00)			
18	-0.02 (0.00)	-0.04 (0.00)	0.48 (0.19)	0.89 (0.35)	0.32 (0.11)	0.59 (0.22)				
19	-0.02 (0.00)	-0.04 (0.00)	0.47 (0.07)	0.87 (0.13)	0.39 (0.05)					
20	-0.02 (0.00)	-0.04 (0.00)	0.59 (0.32)	1.09 (0.59)	0.43 (0.05)					
21	-0.02 (0.00)	-0.04 (0.00)	0.47 (0.04)	0.87 (0.07)	0.41 (0.05)				0.05 (0.07)	
22	-0.02 (0.00)	-0.04 (0.00)	0.39 (0.02)	0.73 (0.04)	0.43 (0.05)				0.10 (0.03)	
23	-0.02 (0.00)	-0.04 (0.00)	0.39 (0.06)	0.72 (0.11)	0.46 (0.06)				0.16 (0.08)	
24	-0.02 (0.00)	-0.04 (0.00)	0.42 (0.10)	0.78 (0.18)	0.43 (0.14)				0.27 (0.10)	
25	-0.02 (0.00)	-0.04 (0.00)	0.42 (0.20)	0.77 (0.37)	0.66 (0.41)				0.26 (0.02)	
26	-0.02 (0.00)	-0.04 (0.00)	0.40 (0.06)	0.73 (0.12)	0.51 (0.10)	0.94 (0.19)			0.32 (0.05)	0.60 (0.10)
27	-0.02 (0.00)	-0.04 (0.00)	0.36 (0.04)	0.67 (0.08)	0.37 (0.03)	0.69 (0.05)			0.32 (0.06)	0.60 (0.10)
28	-0.02 (0.00)	-0.04 (0.00)	0.46 (0.11)	0.85 (0.20)	0.47 (0.18)	0.87 (0.34)			0.47 (0.19)	0.87 (0.36)
29	-0.02 (0.00)	-0.04 (0.00)	0.44 (0.06)	0.82 (0.12)	0.49 (0.11)	0.91 (0.20)			0.51 (0.04)	0.94 (0.07)
30	-0.02 (0.00)	-0.04 (0.00)	0.39 (0.05)	0.72 (0.08)	0.45 (0.03)	0.83 (0.06)			0.44 (0.06)	0.81 (0.11)
31	-0.02 (0.00)	-0.04 (0.00)	0.40 (0.05)	0.74 (0.09)	0.50 (0.09)	0.92 (0.17)			0.46 (0.06)	0.85 (0.11)
Avg	-0.02	-0.03	0.48	0.89	0.43	0.78	0.06	0.15	0.16	0.29
n	31	28	28	28	24	17	12	10	22	17
SD	0.00	0.00	0.07	0.12	0.07	0.10	0.06	0.09	0.18	0.37
Min	-0.02	-0.04	0.36	0.67	0.32	0.59	-0.02	-0.02	-0.01	-0.02
Max	-0.01	-0.03	0.63	1.17	0.66	0.94	0.13	0.25	0.51	0.94

ED_004549_00015928-00197

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for April, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	-0.02 (0.00)	-0.04 (0.00)	0.37 (0.04)	0.68 (0.08)	0.38 (0.05)	0.71 (0.09)			0.42 (0.06)	0.77 (0.10)
2	-0.02 (0.00)	-0.04 (0.00)	0.45 (0.05)	0.83 (0.10)	0.45 (0.08)	0.83 (0.15)				
3	-0.02 (0.00)	-0.04 (0.00)	0.42 (0.05)	0.78 (0.09)	0.36 (0.06)	0.66 (0.11)	0.11 (0.07)		0.43 (0.04)	0.79 (0.08)
4	-0.02 (0.00)	-0.04 (0.00)	0.36 (0.13)	0.66 (0.24)	0.25 (0.09)	0.46 (0.17)	0.13 (0.05)		0.33 (0.09)	0.61 (0.16)
5	-0.02 (0.00)	-0.04 (0.00)	0.33 (0.12)	0.60 (0.23)	0.38 (0.15)	0.70 (0.28)	0.14 (0.04)	0.26 (0.08)	0.34 (0.07)	0.62 (0.13)
6	-0.02 (0.00)	-0.04 (0.00)	0.28 (0.08)	0.52 (0.16)	0.27 (0.09)	0.49 (0.17)	0.10 (0.04)	0.18 (0.08)	0.19 (0.07)	0.35 (0.14)
7	-0.02 (0.00)	-0.04 (0.00)	0.24 (0.10)	0.44 (0.18)	0.26 (0.08)	0.49 (0.14)	0.08 (0.03)	0.15 (0.06)	0.16 (0.06)	0.30 (0.12)
8	-0.02 (0.00)	-0.04 (0.00)	0.26 (0.06)	0.48 (0.12)	0.25 (0.05)	0.46 (0.10)				
9	-0.02 (0.00)	-0.04 (0.00)	0.24 (0.08)	0.44 (0.15)	0.32 (0.17)	0.60 (0.31)	0.08 (0.04)	0.15 (0.07)	0.23 (0.07)	0.43 (0.13)
10	-0.02 (0.00)	-0.04 (0.00)	0.23 (0.05)	0.42 (0.10)			0.18 (0.08)	0.33 (0.16)	0.27 (0.06)	0.50 (0.11)
11	-0.01 (0.01)	-0.02 (0.01)			0.24 (0.11)	0.44 (0.21)	0.35 (0.33)	0.65 (0.62)	0.24 (0.04)	0.45 (0.08)
12	0.00 (0.00)	0.00 (0.00)	0.21 (0.05)	0.39 (0.09)	0.21 (0.03)	0.39 (0.06)	0.15 (0.10)	0.28 (0.18)	0.33 (0.10)	0.61 (0.18)
13	0.00 (0.00)	0.00 (0.00)	0.26 (0.04)	0.48 (0.07)	0.26 (0.04)	0.48 (0.07)	0.24 (0.05)	0.44 (0.09)	0.35 (0.05)	0.65 (0.09)
14	0.00 (0.00)	0.00 (0.00)	0.32 (0.08)	0.59 (0.14)	0.36 (0.12)	0.66 (0.22)	0.28 (0.08)	0.52 (0.15)	0.33 (0.08)	0.61 (0.15)
15	0.00 (0.00)	0.00 (0.00)	0.24 (0.08)	0.44 (0.14)	0.19 (0.03)	0.36 (0.05)	0.18 (0.07)	0.34 (0.12)	0.26 (0.09)	0.47 (0.16)
16	0.00 (0.00)	0.00 (0.00)	0.18 (0.08)	0.34 (0.15)	0.17 (0.05)	0.31 (0.10)	0.19 (0.06)	0.34 (0.11)	0.16 (0.08)	0.30 (0.15)
17	0.00 (0.00)	0.00 (0.00)	0.17 (0.04)	0.31 (0.07)	0.15 (0.04)	0.27 (0.07)	0.13 (0.05)	0.23 (0.09)	0.11 (0.06)	0.20 (0.11)
18	0.00 (0.00)	0.00 (0.00)	0.14 (0.04)	0.25 (0.06)	0.12 (0.07)	0.23 (0.14)	0.11 (0.04)	0.20 (0.08)	0.10 (0.04)	0.18 (0.07)
19	0.00 (0.00)	-0.01 (0.01)	0.18 (0.05)	0.34 (0.09)	0.16 (0.08)	0.30 (0.15)	0.17 (0.07)	0.31 (0.12)	0.16 (0.04)	0.29 (0.07)
20	0.00 (0.00)	0.00 (0.01)	0.21 (0.05)	0.40 (0.10)	0.29 (0.23)	0.54 (0.42)	0.17 (0.04)	0.31 (0.08)	0.14 (0.03)	0.26 (0.06)
21	0.00 (0.00)	0.00 (0.01)	0.16 (0.07)	0.29 (0.13)	0.18 (0.08)	0.33 (0.14)	0.13 (0.06)	0.24 (0.11)	0.14 (0.06)	0.25 (0.11)
22	0.00 (0.00)	-0.01 (0.01)	0.16 (0.07)	0.29 (0.13)	0.13 (0.04)	0.24 (0.08)	0.13 (0.04)	0.23 (0.08)	0.06 (0.03)	0.11 (0.06)
23	0.00 (0.00)	0.00 (0.00)	0.16 (0.09)	0.30 (0.17)	0.14 (0.11)	0.25 (0.19)	0.09 (0.04)	0.17 (0.07)	0.06 (0.04)	0.12 (0.08)
24	0.00 (0.00)	0.00 (0.00)	0.12 (0.04)	0.21 (0.07)	0.09 (0.02)	0.16 (0.04)	0.06 (0.02)	0.10 (0.04)	0.05 (0.02)	0.10 (0.03)
25	0.00 (0.00)	0.00 (0.00)	0.08 (0.05)	0.15 (0.09)	0.08 (0.06)	0.15 (0.10)			0.04 (0.03)	0.08 (0.05)
26	0.00 (0.00)	0.00 (0.00)	0.19 (0.08)	0.36 (0.14)	0.17 (0.07)	0.32 (0.14)	0.15 (0.05)	0.28 (0.09)	0.19 (0.07)	0.34 (0.13)
27	0.00 (0.00)	0.00 (0.00)	0.21 (0.07)	0.39 (0.13)	0.19 (0.04)	0.35 (0.07)	0.15 (0.04)	0.28 (0.07)	0.16 (0.05)	0.30 (0.10)
28	0.00 (0.00)	0.00 (0.00)	0.32 (0.07)	0.59 (0.13)	0.25 (0.06)	0.46 (0.12)	0.21 (0.08)	0.39 (0.14)	0.28 (0.12)	0.52 (0.21)
29	0.00 (0.00)	0.00 (0.00)	0.31 (0.05)	0.58 (0.10)	0.34 (0.08)	0.63 (0.14)	0.26 (0.09)	0.47 (0.17)	0.29 (0.04)	0.54 (0.08)
30	0.00 (0.00)	0.00 (0.00)	0.30 (0.14)	0.56 (0.25)	0.35 (0.11)	0.65 (0.20)	0.26 (0.13)	0.47 (0.23)		
Avg	-0.01	-0.01	0.24	0.45	0.24	0.45	0.16	0.31	0.22	0.40
n	30	30	29	29	29	29	26	24	27	27
SD	0.01	0.02	0.09	0.16	0.10	0.18	0.07	0.13	0.11	0.21
Min	-0.02	-0.04	0.08	0.15	0.08	0.15	0.06	0.10	0.04	0.08
Max	0.00	0.00	0.45	0.83	0.45	0.83	0.35	0.65	0.43	0.79

ED_004549_00015928-00198

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for May, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.00 (0.00)	0.00 (0.00)	0.24 (0.05)		0.25 (0.06)	0.47 (0.11)	0.21 (0.05)	0.39 (0.09)	0.15 (0.04)	0.28 (0.06)
2	0.00 (0.00)	0.00 (0.00)	0.19 (0.05)		0.21 (0.06)	0.39 (0.12)	0.17 (0.03)	0.32 (0.06)	0.12 (0.05)	0.22 (0.10)
3	0.00 (0.00)	0.00 (0.00)	0.26 (0.05)		0.24 (0.07)	0.45 (0.13)	0.24 (0.03)	0.44 (0.06)	0.18 (0.07)	0.34 (0.12)
4	0.00 (0.00)	0.00 (0.00)	0.21 (0.08)		0.28 (0.13)	0.52 (0.23)	0.18 (0.06)	0.33 (0.10)	0.14 (0.08)	0.27 (0.14)
5	0.00 (0.00)	0.00 (0.00)	0.15 (0.05)		0.17 (0.04)	0.31 (0.08)	0.11 (0.05)	0.19 (0.08)	0.10 (0.05)	0.18 (0.09)
6	0.00 (0.00)	0.00 (0.00)	0.15 (0.05)		0.12 (0.06)	0.23 (0.11)	0.13 (0.01)	0.23 (0.02)	0.07 (0.04)	0.12 (0.07)
7	0.00 (0.00)	0.00 (0.00)	0.21 (0.09)		0.17 (0.08)	0.31 (0.14)	0.15 (0.07)	0.28 (0.14)	0.16 (0.10)	0.29 (0.18)
8	0.00 (0.00)	0.00 (0.00)	0.32 (0.05)		0.20 (0.04)	0.38 (0.08)	0.23 (0.06)	0.42 (0.10)	0.24 (0.08)	0.44 (0.15)
9			0.30 (0.08)		0.27 (0.10)	0.50 (0.18)	0.30 (0.07)	0.56 (0.12)	0.30 (0.05)	0.56 (0.09)
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Avg	0.00	0.00	0.22		0.21	0.39	0.19	0.35	0.16	0.30
n	8	8	9	0	9	9	9	9	9	9
SD	0.00	0.00	0.06		0.05	0.09	0.06	0.11	0.07	0.13
Min	0.00	0.00	0.15		0.12	0.23	0.11	0.19	0.07	0.12
Max	0.00	0.00	0.32		0.28	0.52	0.30	0.56	0.30	0.56

ED_004549_00015928-00199

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for August, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16	-0.03 (0.00)	-0.05 (0.00)	0.03 (0.05)	0.05 (0.09)	0.17 (0.09)	0.31 (0.17)	0.24 (0.15)	0.49 (0.30)	0.08 (0.08)	0.15 (0.16)
17	-0.03 (0.00)	-0.05 (0.01)	0.02 (0.06)	0.04 (0.11)	0.18 (0.08)	0.33 (0.15)	0.20 (0.10)		0.07 (0.06)	0.14 (0.12)
18	-0.03 (0.01)	-0.05 (0.01)	0.02 (0.06)	0.04 (0.11)	0.22 (0.12)	0.41 (0.22)	0.15 (0.06)	0.30 (0.10)	0.07 (0.06)	0.12 (0.11)
19										
20										
21										
22										
23										
24										
25										
26										
27	-0.01 (0.01)	-0.02 (0.01)	0.05 (0.03)	0.10 (0.05)						
28	0.00 (0.01)	0.00 (0.02)	0.10 (0.04)	0.19 (0.07)						
29	0.00 (0.01)	-0.01 (0.02)	0.10 (0.04)	0.19 (0.07)						
30	0.00 (0.01)	0.00 (0.02)	0.13 (0.05)	0.24 (0.09)						
31	0.01 (0.01)	0.01 (0.02)	0.14 (0.05)	0.25 (0.10)						
Avg	-0.01	-0.02	0.07	0.14	0.19	0.35	0.20	0.39	0.07	0.14
n	8	8	8	8	3	3	3	2	3	3
SD	0.01	0.03	0.05	0.08	0.02	0.05	0.04	0.10	0.01	0.01
Min	-0.03	-0.05	0.02	0.04	0.17	0.31	0.15	0.30	0.07	0.12
Max	0.01	0.01	0.14	0.25	0.22	0.41	0.24	0.49	0.08	0.15

ED_004549_00015928-00200

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for September, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.01 (0.01)	0.01 (0.02)	0.14 (0.06)	0.25 (0.10)						
2	0.01 (0.01)	0.03 (0.03)	0.14 (0.05)	0.26 (0.08)						
3	0.01 (0.02)	0.01 (0.03)	0.11 (0.02)	0.20 (0.03)						
4	0.00 (0.01)	0.00 (0.02)	0.09 (0.01)	0.18 (0.02)	0.18 (0.06)					
5	0.00 (0.01)	0.00 (0.02)			0.16 (0.05)					
6	-0.01 (0.01)	-0.01 (0.01)			0.16 (0.07)					
7	0.00 (0.01)	-0.01 (0.02)			0.15 (0.06)					
8	-0.01 (0.01)	-0.01 (0.01)			0.13 (0.05)					
9	0.02 (0.04)	0.04 (0.08)	0.17 (0.14)				0.16 (0.12)	0.30 (0.23)	0.13 (0.03)	0.25 (0.06)
10	0.01 (0.02)	0.01 (0.03)	0.37 (0.13)		0.16 (0.06)	0.28 (0.11)	0.17 (0.05)	0.31 (0.10)	0.15 (0.05)	0.27 (0.09)
11	0.06 (0.05)	0.11 (0.09)	0.34 (0.18)		0.17 (0.04)		0.16 (0.06)	0.29 (0.11)	0.29 (0.30)	0.54 (0.57)
12	0.00 (0.01)	0.00 (0.02)	0.17 (0.03)		0.12 (0.02)	0.22 (0.03)	0.09 (0.01)	0.17 (0.02)	0.09 (0.01)	0.17 (0.02)
13	0.01 (0.01)	0.01 (0.03)	0.14 (0.03)	0.26 (0.05)	0.13 (0.04)		0.08 (0.01)	0.14 (0.02)	0.09 (0.04)	0.16 (0.07)
14	0.00 (0.02)	0.01 (0.03)	0.20 (0.05)	0.37 (0.09)	0.12 (0.04)		0.10 (0.04)	0.18 (0.08)	0.10 (0.05)	0.19 (0.09)
15	0.01 (0.01)	0.01 (0.02)	0.31 (0.15)	0.57 (0.28)	0.21 (0.07)		0.14 (0.03)	0.26 (0.05)	0.13 (0.03)	0.24 (0.06)
16	0.01 (0.01)	0.02 (0.02)	0.21 (0.09)	0.38 (0.18)	0.20 (0.05)		0.15 (0.05)	0.27 (0.10)	0.14 (0.04)	0.27 (0.08)
17	0.02 (0.02)	0.05 (0.03)	0.14 (0.07)	0.26 (0.13)	0.19 (0.09)		0.16 (0.07)	0.29 (0.13)	0.14 (0.07)	0.26 (0.13)
18	0.01 (0.01)	0.02 (0.02)	0.15 (0.06)	0.27 (0.11)	0.16 (0.07)		0.18 (0.08)	0.34 (0.14)	0.13 (0.06)	0.23 (0.10)
19	0.01 (0.01)	0.02 (0.02)	0.13 (0.06)	0.24 (0.12)	0.17 (0.07)		0.15 (0.07)	0.28 (0.13)	0.13 (0.07)	0.25 (0.13)
20	0.01 (0.01)	0.02 (0.02)	0.12 (0.06)	0.22 (0.10)	0.16 (0.07)	0.29 (0.14)	0.13 (0.07)	0.23 (0.12)	0.12 (0.07)	0.22 (0.12)
21	0.01 (0.01)	0.01 (0.02)	0.12 (0.04)	0.22 (0.07)	0.15 (0.06)	0.28 (0.10)	0.11 (0.06)	0.21 (0.10)	0.11 (0.05)	0.20 (0.09)
22	-0.01 (0.01)	-0.01 (0.02)	0.11 (0.04)	0.20 (0.08)			0.12 (0.06)	0.21 (0.10)	0.12 (0.05)	0.22 (0.09)
23	-0.02 (0.01)	-0.03 (0.01)	0.09 (0.04)	0.17 (0.07)	0.11 (0.04)	0.20 (0.07)	0.10 (0.05)	0.19 (0.10)	0.12 (0.05)	0.22 (0.09)
24	-0.02 (0.00)	-0.03 (0.01)	0.10 (0.05)	0.18 (0.10)	0.11 (0.05)	0.21 (0.09)	0.09 (0.05)	0.17 (0.09)	0.10 (0.04)	0.18 (0.07)
25	-0.01 (0.02)	-0.01 (0.03)	0.11 (0.06)	0.21 (0.11)	0.12 (0.07)	0.23 (0.13)	0.09 (0.06)	0.17 (0.10)	0.11 (0.05)	0.20 (0.10)
26	-0.01 (0.01)	-0.01 (0.02)	0.14 (0.06)	0.25 (0.10)	0.15 (0.07)	0.27 (0.13)	0.13 (0.05)	0.23 (0.09)	0.12 (0.06)	0.22 (0.11)
27	-0.01 (0.01)	-0.01 (0.03)	0.13 (0.07)	0.23 (0.12)	0.14 (0.06)	0.25 (0.11)	0.13 (0.06)	0.24 (0.11)	0.12 (0.06)	0.21 (0.11)
28	-0.01 (0.01)	-0.02 (0.02)	0.12 (0.07)	0.22 (0.13)	0.15 (0.07)	0.27 (0.14)	0.13 (0.08)	0.23 (0.15)	0.12 (0.08)	0.23 (0.15)
29										
30										
Avg	0.00	0.01	0.16	0.26	0.15	0.25	0.13	0.24	0.13	0.24
n	28	28	24	20	23	10	20	20	20	20
SD	0.01	0.03	0.07	0.09	0.03	0.03	0.03	0.05	0.04	0.08
Min	-0.02	-0.03	0.09	0.17	0.11	0.20	0.08	0.14	0.09	0.16
Max	0.06	0.11	0.37	0.57	0.21	0.29	0.18	0.34	0.29	0.54

ED_004549_00015928-00201

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for October, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2	0.00 (0.01)	0.00 (0.02)	0.15 (0.04)	0.28 (0.08)	0.19 (0.03)	0.35 (0.05)	0.18 (0.04)	0.34 (0.08)	0.15 (0.05)	0.28 (0.09)
3	-0.01 (0.01)	-0.02 (0.01)	0.14 (0.03)	0.27 (0.06)	0.17 (0.04)	0.31 (0.07)	0.17 (0.04)	0.32 (0.08)	0.13 (0.05)	0.24 (0.08)
4	-0.01 (0.00)	-0.01 (0.01)	0.16 (0.06)	0.29 (0.11)	0.18 (0.06)	0.33 (0.11)	0.17 (0.05)	0.31 (0.10)	0.14 (0.06)	0.26 (0.10)
5	-0.01 (0.00)	-0.02 (0.01)	0.12 (0.07)	0.22 (0.14)	0.15 (0.08)	0.27 (0.15)	0.14 (0.07)	0.25 (0.13)	0.13 (0.07)	0.24 (0.12)
6	-0.01 (0.00)	-0.03 (0.00)	0.10 (0.05)	0.18 (0.09)						
7	-0.01 (0.00)	-0.02 (0.00)	0.09 (0.03)	0.16 (0.05)	0.10 (0.03)	0.19 (0.05)	0.11 (0.02)	0.20 (0.04)	0.09 (0.02)	0.16 (0.04)
8	-0.02 (0.01)	-0.03 (0.01)	0.10 (0.02)	0.19 (0.04)	0.11 (0.04)	0.21 (0.07)	0.12 (0.03)	0.23 (0.05)	0.11 (0.03)	0.20 (0.06)
9	-0.02 (0.01)	-0.03 (0.01)	0.09 (0.06)	0.17 (0.11)	0.11 (0.05)	0.21 (0.10)	0.13 (0.06)	0.25 (0.11)	0.12 (0.06)	0.22 (0.11)
10	-0.02 (0.01)	-0.03 (0.02)	0.08 (0.06)	0.14 (0.11)	0.09 (0.06)	0.17 (0.12)	0.11 (0.06)	0.19 (0.11)	0.10 (0.06)	0.19 (0.10)
11	-0.01 (0.01)	-0.03 (0.02)	0.06 (0.04)	0.12 (0.07)	0.07 (0.04)	0.13 (0.08)	0.08 (0.04)	0.16 (0.07)	0.07 (0.03)	0.13 (0.06)
12	-0.02 (0.00)	-0.04 (0.00)	0.03 (0.03)	0.06 (0.06)	0.04 (0.03)	0.07 (0.05)	0.05 (0.04)	0.09 (0.07)	0.06 (0.03)	0.10 (0.05)
13	-0.02 (0.00)	-0.04 (0.01)	0.11 (0.19)	0.21 (0.34)	0.10 (0.15)	0.19 (0.27)	0.06 (0.02)	0.11 (0.04)	0.06 (0.01)	0.10 (0.03)
14	-0.01 (0.00)	-0.02 (0.00)	0.05 (0.02)	0.10 (0.04)	0.05 (0.02)	0.09 (0.04)	0.09 (0.02)	0.16 (0.04)	0.08 (0.03)	0.15 (0.05)
15	-0.01 (0.01)	-0.02 (0.01)	0.06 (0.03)	0.11 (0.05)	0.06 (0.02)	0.11 (0.04)	0.10 (0.03)	0.19 (0.05)	0.09 (0.02)	0.17 (0.03)
16	-0.01 (0.00)	-0.02 (0.00)	0.10 (0.02)	0.19 (0.03)	0.09 (0.01)	0.17 (0.03)	0.16 (0.03)	0.29 (0.05)	0.11 (0.02)	0.20 (0.03)
17	0.06 (0.05)	0.11 (0.10)					0.18 (0.04)	0.33 (0.07)	0.13 (0.02)	0.25 (0.03)
18	-0.01 (0.00)	-0.02 (0.01)	0.13 (0.02)	0.24 (0.05)	0.10 (0.02)	0.19 (0.04)	0.19 (0.03)	0.35 (0.06)	0.14 (0.05)	0.25 (0.08)
19	-0.01 (0.00)	-0.02 (0.01)	0.13 (0.05)	0.24 (0.09)	0.11 (0.04)	0.21 (0.06)	0.20 (0.05)	0.38 (0.10)	0.16 (0.05)	0.29 (0.09)
20	-0.01 (0.00)	-0.02 (0.00)	0.12 (0.03)	0.23 (0.06)	0.10 (0.03)	0.18 (0.06)	0.18 (0.06)	0.33 (0.11)	0.12 (0.04)	0.22 (0.07)
21	-0.01 (0.02)	-0.03 (0.04)	0.12 (0.05)	0.23 (0.10)			0.26 (0.06)	0.48 (0.11)		
22	-0.02 (0.00)	-0.04 (0.00)	0.18 (0.04)	0.34 (0.07)	0.15 (0.03)	0.27 (0.06)	0.25 (0.03)	0.46 (0.06)	0.16 (0.05)	0.30 (0.09)
23			0.12 (0.07)	0.22 (0.14)			0.21 (0.09)	0.39 (0.17)		
24										
25										
26										
27										
28										
29	-0.01 (0.00)	-0.02 (0.01)	0.19 (0.04)	0.35 (0.07)	0.17 (0.02)	0.31 (0.03)	0.25 (0.03)	0.47 (0.06)	0.20 (0.04)	0.36 (0.06)
30	-0.01 (0.00)	-0.02 (0.00)	0.17 (0.05)	0.32 (0.10)	0.15 (0.05)	0.27 (0.09)	0.23 (0.06)	0.43 (0.10)	0.19 (0.05)	0.34 (0.10)
31	-0.01 (0.00)	-0.02 (0.00)	0.10 (0.03)	0.19 (0.05)	0.09 (0.03)	0.16 (0.05)	0.17 (0.04)	0.31 (0.07)	0.13 (0.02)	0.23 (0.04)
Avg	-0.01	-0.02	0.11	0.21	0.11	0.21	0.16	0.29	0.12	0.22
n	24	24	24	24	21	21	24	24	22	22
SD	0.02	0.03	0.04	0.07	0.04	0.08	0.06	0.11	0.04	0.07
Min	-0.02	-0.04	0.03	0.06	0.04	0.07	0.05	0.09	0.06	0.10
Max	0.06	0.11	0.19	0.35	0.19	0.35	0.26	0.48	0.20	0.36

ED_004549_00015928-00202

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for November, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	-0.02 (0.00)	-0.03 (0.00)	0.10 (0.03)	0.19 (0.05)	0.08 (0.02)	0.15 (0.04)	0.14 (0.02)	0.25 (0.03)	0.12 (0.01)	0.21 (0.02)
2	-0.02 (0.00)	-0.04 (0.00)	0.09 (0.02)	0.17 (0.03)	0.07 (0.02)	0.13 (0.04)	0.13 (0.03)	0.24 (0.06)	0.09 (0.03)	0.17 (0.05)
3	-0.02 (0.00)	-0.04 (0.01)	0.08 (0.03)	0.15 (0.05)	0.07 (0.02)	0.13 (0.03)	0.09 (0.03)	0.17 (0.06)	0.07 (0.03)	0.13 (0.05)
4	-0.02 (0.00)	-0.04 (0.00)	0.08 (0.04)	0.15 (0.08)			0.15 (0.04)	0.27 (0.07)		
5	-0.02 (0.00)	-0.04 (0.00)								
6	-0.02 (0.00)	-0.03 (0.01)	0.12 (0.01)	0.22 (0.02)	0.09 (0.02)	0.18 (0.04)	0.14 (0.03)	0.26 (0.05)		
7	-0.02 (0.00)	-0.03 (0.01)	0.15 (0.02)	0.28 (0.03)	0.11 (0.02)	0.21 (0.05)	0.19 (0.03)	0.35 (0.05)	0.13 (0.03)	0.24 (0.05)
8	-0.02 (0.01)	-0.03 (0.01)	0.21 (0.04)	0.39 (0.07)	0.16 (0.03)	0.29 (0.05)	0.23 (0.02)	0.42 (0.04)	0.20 (0.04)	0.36 (0.07)
9	-0.01 (0.01)	-0.03 (0.01)	0.25 (0.06)	0.46 (0.11)	0.20 (0.04)	0.37 (0.07)	0.28 (0.05)	0.51 (0.09)	0.27 (0.04)	0.50 (0.07)
10	-0.01 (0.01)	-0.03 (0.01)	0.27 (0.04)	0.50 (0.07)	0.24 (0.03)	0.44 (0.05)	0.32 (0.04)	0.59 (0.08)	0.32 (0.02)	0.60 (0.03)
11	-0.02 (0.00)	-0.03 (0.01)	0.25 (0.03)	0.46 (0.06)	0.24 (0.03)	0.44 (0.05)	0.25 (0.09)	0.46 (0.17)	0.30 (0.02)	0.55 (0.03)
12	-0.02 (0.00)	-0.04 (0.01)	0.22 (0.04)	0.40 (0.06)	0.17 (0.01)	0.32 (0.03)	0.21 (0.04)	0.39 (0.06)	0.23 (0.02)	0.42 (0.03)
13	-0.02 (0.00)	-0.04 (0.01)	0.18 (0.02)	0.33 (0.03)	0.14 (0.01)	0.25 (0.02)	0.16 (0.02)	0.29 (0.03)	0.18 (0.01)	0.33 (0.02)
14	-0.02 (0.00)		0.17 (0.05)							
15	-0.02 (0.00)		0.21 (0.05)	0.38 (0.10)	0.15 (0.02)	0.28 (0.03)	0.17 (0.03)	0.32 (0.06)	0.19 (0.03)	0.35 (0.05)
16	-0.02 (0.01)		0.26 (0.04)	0.48 (0.07)	0.18 (0.02)	0.32 (0.04)	0.22 (0.04)	0.40 (0.07)	0.22 (0.02)	0.40 (0.03)
17	-0.01 (0.00)		0.30 (0.09)	0.56 (0.17)	0.18 (0.01)	0.34 (0.02)	0.20 (0.08)	0.37 (0.15)	0.23 (0.03)	0.42 (0.06)
18	-0.01 (0.11)		0.26 (0.09)	0.48 (0.17)	0.19 (0.02)	0.36 (0.03)	0.26 (0.09)	0.49 (0.16)		
19	-0.02 (0.00)		0.20 (0.01)	0.36 (0.02)	0.21 (0.03)	0.39 (0.05)	0.26 (0.03)	0.48 (0.06)	0.22 (0.02)	0.41 (0.04)
20	-0.02 (0.00)		0.29 (0.19)	0.54 (0.35)	0.18 (0.03)	0.33 (0.06)	0.29 (0.11)	0.53 (0.20)	0.27 (0.08)	0.49 (0.15)
21	-0.02 (0.00)	-0.04 (0.00)	0.24 (0.03)	0.45 (0.06)	0.21 (0.02)	0.39 (0.04)	0.29 (0.02)	0.54 (0.04)	0.32 (0.02)	0.58 (0.04)
22	-0.02 (0.01)	-0.03 (0.01)	0.28 (0.04)	0.51 (0.07)	0.24 (0.02)	0.44 (0.04)	0.32 (0.02)	0.58 (0.04)	0.32 (0.02)	0.60 (0.04)
23	-0.01 (0.01)	-0.03 (0.02)	0.28 (0.09)	0.52 (0.16)	0.28 (0.07)	0.52 (0.12)	0.37 (0.07)	0.69 (0.14)	0.30 (0.04)	0.55 (0.08)
24	-0.02 (0.01)	-0.03 (0.01)	0.22 (0.05)	0.41 (0.10)	0.21 (0.04)	0.40 (0.07)	0.32 (0.08)	0.59 (0.14)	0.27 (0.06)	0.49 (0.10)
25	-0.01 (0.00)		0.24 (0.03)		0.22 (0.03)		0.30 (0.04)		0.29 (0.03)	
26	-0.01 (0.00)	-0.02 (0.01)	0.22 (0.03)	0.41 (0.06)	0.23 (0.04)	0.42 (0.08)	0.32 (0.04)	0.59 (0.08)	0.24 (0.04)	0.44 (0.06)
27										
28										
29										
30	-0.01 (0.01)		0.22 (0.03)	0.41 (0.06)	0.22 (0.02)	0.41 (0.05)	0.27 (0.06)	0.50 (0.11)	0.28 (0.03)	0.51 (0.05)
Avg	-0.02	-0.03	0.21	0.38	0.18	0.33	0.23	0.43	0.23	0.42
n	27	18	26	24	24	23	25	24	22	21
SD	0.00	0.01	0.07	0.13	0.06	0.11	0.07	0.14	0.07	0.14
Min	-0.02	-0.04	0.08	0.15	0.07	0.13	0.09	0.17	0.07	0.13
Max	-0.01	-0.02	0.30	0.56	0.28	0.52	0.37	0.69	0.32	0.60

ED_004549_00015928-00203

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for December, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	-0.01 (0.00)									
2	-0.01 (0.00)		0.26 (0.02)	0.48 (0.03)	0.25 (0.02)	0.46 (0.03)	0.31 (0.03)	0.58 (0.06)	0.32 (0.05)	0.58 (0.09)
3	0.02 (0.05)		0.26 (0.04)	0.48 (0.07)	0.37 (0.14)	0.69 (0.25)	0.44 (0.11)	0.80 (0.21)	0.31 (0.03)	0.58 (0.06)
4	-0.01 (0.00)	-0.02 (0.01)	0.28 (0.04)	0.51 (0.07)	0.26 (0.02)	0.47 (0.03)	0.31 (0.04)	0.57 (0.07)	0.30 (0.03)	0.56 (0.06)
5	0.03 (0.02)	0.06 (0.03)	0.34 (0.04)	0.62 (0.08)	0.30 (0.01)	0.56 (0.02)	0.34 (0.01)	0.63 (0.02)	0.37 (0.02)	0.68 (0.03)
6	0.02 (0.01)	0.04 (0.01)	0.30 (0.03)	0.55 (0.06)	0.31 (0.05)	0.58 (0.09)	0.37 (0.08)	0.69 (0.15)	0.34 (0.04)	0.64 (0.07)
7	0.01 (0.01)	0.03 (0.02)	0.29 (0.02)	0.54 (0.04)	0.30 (0.02)	0.56 (0.04)	0.35 (0.06)	0.64 (0.11)	0.37 (0.03)	0.68 (0.05)
8	0.01 (0.00)	0.01 (0.01)	0.42 (0.11)	0.77 (0.21)	0.51 (0.09)	0.94 (0.17)	0.40 (0.12)	0.74 (0.22)	0.41 (0.06)	0.76 (0.12)
9	0.02 (0.07)	0.03 (0.13)	0.30 (0.15)	0.55 (0.28)	0.45 (0.19)	0.84 (0.35)	0.30 (0.07)	0.55 (0.13)		
10	0.01 (0.00)	0.01 (0.00)								
11	0.01 (0.01)	0.03 (0.01)	0.25 (0.03)	0.47 (0.05)	0.29 (0.02)	0.53 (0.04)				
12	0.05 (0.03)	0.08 (0.05)	0.29 (0.03)	0.54 (0.06)	0.35 (0.04)	0.65 (0.08)	0.37 (0.04)	0.69 (0.08)	0.34 (0.04)	0.62 (0.07)
13	0.07 (0.01)	0.13 (0.01)	0.43 (0.19)	0.79 (0.35)	0.47 (0.11)	0.86 (0.20)	0.49 (0.10)	0.91 (0.19)	0.41 (0.05)	0.75 (0.09)
14	0.07 (0.00)	0.12 (0.00)	0.32 (0.10)	0.59 (0.18)	0.44 (0.10)	0.82 (0.18)	0.44 (0.09)	0.81 (0.17)	0.31 (0.03)	0.57 (0.05)
15	0.05 (0.02)	0.09 (0.03)	0.33 (0.09)	0.61 (0.17)	0.42 (0.07)	0.77 (0.13)	0.40 (0.08)	0.73 (0.15)		
16	0.02 (0.01)	0.03 (0.01)	0.29 (0.02)	0.54 (0.04)	0.36 (0.02)	0.67 (0.03)	0.36 (0.03)	0.66 (0.06)	0.34 (0.02)	0.63 (0.03)
17	0.01 (0.01)	0.02 (0.01)	0.28 (0.02)	0.51 (0.04)	0.32 (0.01)	0.59 (0.02)	0.43 (0.09)	0.79 (0.17)	0.37 (0.03)	0.68 (0.05)
18	0.15 (0.23)	0.27 (0.42)	0.32 (0.08)	0.59 (0.14)	0.33 (0.04)	0.60 (0.08)	0.43 (0.11)	0.79 (0.20)	0.40 (0.07)	0.73 (0.13)
19	0.02 (0.02)	0.03 (0.03)	0.32 (0.05)	0.58 (0.09)	0.44 (0.14)	0.82 (0.26)	0.40 (0.08)	0.73 (0.14)	0.36 (0.04)	0.67 (0.08)
20	0.01 (0.01)	0.01 (0.01)	0.36 (0.14)	0.67 (0.26)	0.34 (0.04)	0.63 (0.07)	0.36 (0.03)	0.67 (0.06)	0.32 (0.03)	0.59 (0.05)
21	0.02 (0.01)	0.04 (0.03)	0.31 (0.01)	0.57 (0.03)	0.48 (0.13)	0.88 (0.23)	0.33 (0.02)	0.61 (0.04)	0.34 (0.02)	0.63 (0.04)
22	0.07 (0.05)	0.14 (0.08)	0.34 (0.05)	0.62 (0.10)	0.44 (0.06)	0.81 (0.12)	0.38 (0.02)	0.70 (0.04)	0.38 (0.06)	0.70 (0.11)
23	0.01 (0.01)	0.02 (0.02)	0.24 (0.01)	0.44 (0.03)	0.35 (0.05)	0.66 (0.09)	0.37 (0.07)	0.69 (0.13)	0.31 (0.05)	0.56 (0.09)
24	0.00 (0.00)	0.00 (0.00)	0.26 (0.04)	0.47 (0.07)	0.33 (0.04)	0.61 (0.08)	0.33 (0.09)	0.62 (0.17)	0.31 (0.04)	0.58 (0.08)
25	0.00 (0.00)	0.01 (0.01)	0.24 (0.02)	0.44 (0.04)	0.31 (0.02)	0.58 (0.04)	0.34 (0.02)	0.62 (0.04)	0.31 (0.02)	0.56 (0.04)
26	0.01 (0.01)	0.01 (0.01)	0.21 (0.03)	0.39 (0.06)	0.34 (0.04)	0.62 (0.07)	0.28 (0.03)	0.52 (0.05)	0.24 (0.01)	0.45 (0.02)
27	0.00 (0.00)	0.00 (0.01)	0.13 (0.02)	0.25 (0.04)	0.28 (0.09)	0.51 (0.16)	0.19 (0.04)	0.35 (0.08)	0.16 (0.03)	0.29 (0.06)
28	0.00 (0.00)	0.00 (0.00)	0.17 (0.02)	0.31 (0.04)	0.23 (0.01)	0.42 (0.02)	0.21 (0.02)	0.39 (0.03)	0.21 (0.02)	0.38 (0.04)
29	0.00 (0.00)	0.00 (0.00)	0.20 (0.04)	0.36 (0.08)	0.30 (0.13)	0.55 (0.25)	0.25 (0.07)	0.46 (0.13)	0.23 (0.03)	0.43 (0.06)
30	0.00 (0.00)	0.00 (0.01)	0.17 (0.01)	0.32 (0.02)	0.23 (0.02)	0.42 (0.03)	0.24 (0.02)	0.45 (0.05)	0.20 (0.02)	0.37 (0.03)
31	0.00 (0.00)	0.00 (0.00)	0.19 (0.03)	0.36 (0.05)	0.23 (0.03)	0.43 (0.05)	0.26 (0.05)	0.48 (0.09)	0.23 (0.03)	0.43 (0.05)
Avg	0.02	0.04	0.28	0.51	0.35	0.64	0.35	0.64	0.31	0.58
n	31	28	29	29	29	29	28	28	26	26
SD	0.03	0.06	0.07	0.12	0.08	0.15	0.07	0.13	0.07	0.12
Min	-0.01	-0.02	0.13	0.25	0.23	0.42	0.19	0.35	0.16	0.29
Max	0.15	0.27	0.43	0.79	0.51	0.94	0.49	0.91	0.41	0.76

ED_004549_00015928-00204

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for January, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1			0.23 (0.02)	0.42 (0.04)	0.31 (0.03)	0.58 (0.06)	0.32 (0.07)	0.59 (0.12)	0.26 (0.02)	0.48 (0.04)
2	0.00 (0.00)	0.01 (0.01)	0.20 (0.02)	0.37 (0.03)	0.26 (0.02)	0.47 (0.04)	0.26 (0.03)	0.49 (0.05)	0.23 (0.02)	0.42 (0.04)
3	0.00 (0.00)	0.01 (0.01)	0.23 (0.02)	0.42 (0.04)	0.28 (0.03)	0.51 (0.05)	0.32 (0.04)	0.58 (0.07)	0.26 (0.03)	0.49 (0.06)
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16	0.06 (0.03)	0.10 (0.06)	0.31 (0.02)		0.35 (0.03)	0.64 (0.05)	0.32 (0.08)	0.58 (0.16)	0.42 (0.03)	0.77 (0.05)
17	0.02 (0.02)	0.03 (0.03)	0.27 (0.05)	0.51 (0.09)	0.38 (0.17)	0.70 (0.31)	0.40 (0.10)	0.73 (0.19)	0.39 (0.06)	0.72 (0.11)
18	0.01 (0.01)	0.01 (0.01)	0.25 (0.02)	0.46 (0.03)	0.28 (0.02)	0.52 (0.04)	0.35 (0.06)	0.64 (0.10)	0.34 (0.03)	0.63 (0.05)
19	0.01 (0.01)	0.02 (0.01)	0.25 (0.09)	0.45 (0.17)	0.29 (0.03)	0.53 (0.05)	0.31 (0.03)	0.57 (0.06)	0.37 (0.02)	0.69 (0.04)
20	0.02 (0.01)	0.04 (0.02)	0.23 (0.03)	0.43 (0.06)			0.43 (0.26)	0.80 (0.47)		
21	0.01 (0.01)	0.02 (0.02)	0.26 (0.03)		0.33 (0.09)	0.61 (0.16)	0.32 (0.04)	0.59 (0.07)	0.40 (0.05)	0.73 (0.09)
22	0.00 (0.00)	0.00 (0.01)	0.24 (0.04)		0.26 (0.03)	0.48 (0.05)	0.24 (0.04)	0.44 (0.07)	0.35 (0.03)	0.64 (0.06)
23	0.00 (0.00)	0.01 (0.01)	0.23 (0.08)		0.25 (0.03)	0.46 (0.06)	0.21 (0.04)	0.40 (0.07)	0.33 (0.10)	0.61 (0.18)
24	0.00 (0.00)	0.00 (0.01)	0.21 (0.02)		0.26 (0.02)	0.48 (0.04)	0.28 (0.03)	0.51 (0.05)	0.34 (0.03)	0.63 (0.06)
25	0.00 (0.01)	0.01 (0.01)	0.24 (0.02)		0.26 (0.01)	0.48 (0.03)	0.31 (0.01)	0.57 (0.02)	0.36 (0.02)	0.67 (0.03)
26	0.00 (0.00)	0.00 (0.00)	0.23 (0.02)		0.24 (0.01)	0.45 (0.02)	0.31 (0.01)	0.57 (0.02)	0.36 (0.01)	0.66 (0.03)
27	0.00 (0.00)	0.00 (0.01)	0.27 (0.03)		0.29 (0.04)	0.53 (0.08)	0.32 (0.01)	0.60 (0.03)	0.34 (0.01)	0.63 (0.02)
28	0.01 (0.01)	0.01 (0.01)	0.22 (0.02)		0.51 (0.44)	0.94 (0.82)	0.32 (0.02)	0.60 (0.04)	0.37 (0.03)	0.68 (0.06)
29	0.01 (0.01)	0.01 (0.01)					0.30 (0.04)	0.56 (0.06)	0.38 (0.07)	0.71 (0.13)
30	0.00 (0.00)	0.00 (0.01)	0.26 (0.03)	0.48 (0.06)	0.30 (0.02)	0.56 (0.03)	0.31 (0.03)	0.57 (0.06)	0.35 (0.02)	0.64 (0.04)
31	0.00 (0.00)	0.00 (0.00)	0.22 (0.03)	0.41 (0.05)	0.29 (0.02)	0.53 (0.03)	0.30 (0.02)	0.56 (0.04)	0.30 (0.03)	0.56 (0.05)
Avg	0.01	0.02	0.24	0.44	0.30	0.56	0.31	0.58	0.34	0.63
n	18	18	18	9	17	17	19	19	18	18
SD	0.01	0.02	0.03	0.04	0.06	0.12	0.05	0.09	0.05	0.09
Min	0.00	0.00	0.20	0.37	0.24	0.45	0.21	0.40	0.23	0.42
Max	0.06	0.10	0.31	0.51	0.51	0.94	0.43	0.80	0.42	0.77

ED_004549_00015928-00205

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for February, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.00 (0.00)	0.00 (0.00)	0.21 (0.02)	0.38 (0.04)	0.36 (0.09)	0.66 (0.17)	0.27 (0.01)	0.49 (0.02)	0.25 (0.02)	0.47 (0.03)
2	0.00 (0.00)	0.00 (0.00)	0.22 (0.02)	0.41 (0.05)	0.28 (0.02)	0.51 (0.04)	0.27 (0.02)	0.49 (0.04)	0.27 (0.02)	0.50 (0.04)
3	0.00 (0.00)	0.00 (0.00)	0.23 (0.04)	0.43 (0.07)	0.30 (0.04)	0.55 (0.07)	0.25 (0.02)	0.47 (0.04)	0.31 (0.03)	0.56 (0.06)
4	0.00 (0.00)	0.00 (0.00)	0.27 (0.11)	0.50 (0.21)						
5	0.00 (0.00)	0.00 (0.00)	0.18 (0.02)	0.33 (0.04)	0.30 (0.04)	0.55 (0.08)	0.24 (0.04)	0.45 (0.08)	0.26 (0.03)	0.48 (0.05)
6	0.00 (0.00)									
7	0.00 (0.00)	0.00 (0.00)	0.09 (0.02)	0.17 (0.04)	0.18 (0.02)	0.33 (0.03)	0.15 (0.02)	0.28 (0.04)	0.15 (0.02)	0.28 (0.04)
8	0.00 (0.00)	0.00 (0.00)	0.12 (0.02)	0.22 (0.03)	0.22 (0.03)	0.40 (0.05)	0.18 (0.02)	0.33 (0.04)	0.18 (0.02)	0.33 (0.04)
9	0.00 (0.00)	0.00 (0.00)	0.11 (0.03)	0.21 (0.06)	0.20 (0.03)	0.38 (0.05)	0.18 (0.03)	0.33 (0.05)	0.18 (0.03)	0.33 (0.06)
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21	0.00 (0.00)	0.00 (0.00)								
22	0.00 (0.00)	0.00 (0.00)								
23	0.00 (0.00)	0.00 (0.00)								
24	0.03 (0.09)	0.05 (0.17)								
25	0.00 (0.00)	0.00 (0.00)	0.36 (0.23)	0.67 (0.43)					0.11 (0.04)	0.21 (0.08)
26	0.01 (0.01)	0.01 (0.01)	0.26 (0.04)	0.49 (0.08)					0.18 (0.08)	
27	0.00 (0.00)	0.00 (0.01)	0.33 (0.08)	0.62 (0.15)					0.19 (0.07)	
28	0.00 (0.00)	0.00 (0.00)	0.25 (0.10)	0.46 (0.18)					0.11 (0.04)	
Avg	0.00	0.00	0.22	0.41	0.26	0.48	0.22	0.41	0.20	0.40
n	17	16	12	12	7	7	7	7	11	8
SD	0.01	0.01	0.08	0.15	0.06	0.11	0.05	0.08	0.06	0.12
Min	0.00	0.00	0.09	0.17	0.18	0.33	0.15	0.28	0.11	0.21
Max	0.03	0.05	0.36	0.67	0.36	0.66	0.27	0.49	0.31	0.56

ED_004549_00015928-00206

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for March, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.00 (0.00)	0.00 (0.00)	0.39 (0.05)	0.73 (0.09)	0.32 (0.08)		0.20 (0.03)		0.13 (0.03)	
2	0.00 (0.00)	0.00 (0.00)	0.38 (0.01)	0.70 (0.02)	0.25 (0.07)		0.16 (0.03)		0.10 (0.02)	
3										
4										
5										
6										
7	0.00 (0.00)	0.00 (0.00)	0.14 (0.03)	0.27 (0.05)	0.15 (0.05)	0.29 (0.09)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)
8	0.00 (0.00)	0.00 (0.00)	0.16 (0.02)	0.30 (0.03)	0.23 (0.03)	0.43 (0.06)	0.02 (0.02)	0.04 (0.03)	0.05 (0.02)	0.08 (0.05)
9	0.39 (0.38)	0.71 (0.69)	0.33 (0.15)	0.61 (0.28)	0.39 (0.17)	0.72 (0.32)	0.03 (0.02)	0.05 (0.04)	0.17 (0.23)	0.31 (0.42)
10	0.00 (0.00)	0.00 (0.00)	0.23 (0.07)	0.42 (0.12)	0.22 (0.08)	0.40 (0.14)	0.02 (0.02)	0.03 (0.03)	0.02 (0.02)	0.04 (0.04)
11	0.02 (0.04)	0.04 (0.07)	0.59 (0.75)	1.05 (1.31)	0.61 (0.71)	1.11 (1.29)	0.01 (0.01)	0.02 (0.02)	0.08 (0.02)	0.14 (0.03)
12	0.00 (0.00)	0.00 (0.00)	0.37 (0.01)	0.68 (0.02)	0.53 (0.05)	0.99 (0.09)	0.14 (0.03)	0.25 (0.05)	0.11 (0.02)	0.20 (0.03)
13	0.00 (0.00)	0.00 (0.00)	0.37 (0.04)	0.69 (0.08)	0.48 (0.07)	0.89 (0.13)	0.12 (0.04)	0.22 (0.07)	0.07 (0.04)	0.13 (0.07)
14	0.00 (0.01)	0.01 (0.01)	0.37 (0.03)	0.68 (0.06)	0.41 (0.11)	0.76 (0.20)	0.08 (0.06)	0.15 (0.12)	0.06 (0.06)	0.12 (0.10)
15	0.00 (0.00)	0.00 (0.00)	0.29 (0.03)	0.53 (0.06)	0.34 (0.11)	0.63 (0.20)	0.05 (0.06)	0.10 (0.11)	0.04 (0.05)	0.08 (0.09)
16	0.00 (0.01)	0.01 (0.01)	0.22 (0.04)	0.41 (0.07)	0.27 (0.08)	0.51 (0.15)	0.01 (0.01)	0.01 (0.01)	0.00 (0.01)	0.01 (0.01)
17	0.00 (0.00)	0.00 (0.00)	0.19 (0.06)	0.35 (0.11)	0.20 (0.07)	0.37 (0.13)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.01)
18	0.00 (0.00)	0.00 (0.00)	0.23 (0.06)	0.42 (0.10)	0.21 (0.04)	0.38 (0.07)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.01)
19	0.00 (0.00)	0.00 (0.00)	0.25 (0.06)	0.45 (0.12)	0.26 (0.07)	0.48 (0.13)	0.01 (0.01)	0.02 (0.03)	0.05 (0.04)	0.09 (0.07)
20	0.00 (0.00)	0.00 (0.00)	0.21 (0.02)	0.40 (0.04)	0.32 (0.04)	0.59 (0.07)	0.00 (0.00)	0.01 (0.01)	0.09 (0.01)	0.16 (0.03)
21										
22										
23										
24	0.00 (0.00)	0.00 (0.00)	0.18 (0.08)	0.34 (0.14)	0.17 (0.05)	0.32 (0.10)				
25										
26										
27										
28	0.00 (0.00)	0.00 (0.00)	0.20 (0.02)	0.36 (0.04)	0.28 (0.02)	0.52 (0.04)	0.03 (0.02)	0.05 (0.04)	0.18 (0.02)	0.33 (0.04)
29	0.00 (0.00)	0.00 (0.00)	0.21 (0.02)	0.38 (0.03)	0.35 (0.05)	0.65 (0.10)	0.00 (0.00)	0.01 (0.01)	0.19 (0.01)	0.34 (0.02)
30	0.00 (0.00)	0.00 (0.00)	0.23 (0.05)		0.40 (0.17)	0.72 (0.32)	0.01 (0.01)	0.01 (0.02)		
31	0.00 (0.00)	0.00 (0.00)	0.24 (0.04)	0.44 (0.07)	0.26 (0.02)	0.49 (0.03)	0.00 (0.00)	0.00 (0.00)	0.20 (0.01)	0.37 (0.02)
Avg	0.02	0.04	0.27	0.51	0.32	0.59	0.04	0.05	0.08	0.14
n	21	21	21	20	21	19	20	18	19	17
SD	0.08	0.15	0.10	0.19	0.12	0.22	0.06	0.07	0.06	0.12
Min	0.00	0.00	0.14	0.27	0.15	0.29	0.00	0.00	0.00	0.00
Max	0.39	0.71	0.59	1.05	0.61	1.11	0.20	0.25	0.20	0.37

ED_004549_00015928-00207

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for April, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.00 (0.00)	0.00 (0.00)	0.25 (0.03)	0.46 (0.06)	0.32 (0.04)	0.59 (0.08)	0.07 (0.05)	0.13 (0.10)	0.20 (0.05)	0.36 (0.09)
2	0.00 (0.00)	0.00 (0.00)	0.21 (0.06)	0.39 (0.11)	0.25 (0.08)	0.47 (0.14)	0.07 (0.05)	0.13 (0.09)	0.21 (0.09)	0.38 (0.17)
3	0.00 (0.00)	0.00 (0.00)	0.27 (0.04)	0.50 (0.08)	0.35 (0.03)	0.65 (0.05)	0.13 (0.02)	0.24 (0.03)	0.31 (0.03)	0.57 (0.05)
4	0.00 (0.00)	0.00 (0.00)	0.21 (0.04)	0.38 (0.08)	0.27 (0.05)	0.50 (0.10)	0.11 (0.05)	0.20 (0.08)	0.23 (0.08)	0.42 (0.14)
5	0.00 (0.00)	0.00 (0.00)	0.26 (0.02)	0.48 (0.04)	0.30 (0.01)	0.56 (0.02)	0.16 (0.01)	0.30 (0.02)	0.27 (0.02)	0.51 (0.03)
6	0.00 (0.00)	0.00 (0.00)	0.26 (0.04)	0.48 (0.06)	0.32 (0.02)	0.59 (0.04)	0.17 (0.02)	0.32 (0.04)	0.29 (0.02)	0.54 (0.04)
7	0.00 (0.00)	0.00 (0.00)	0.43 (0.35)	0.80 (0.66)	1.40 (2.41)	2.26 (4.05)	0.41 (0.40)	0.73 (0.74)		
8	0.00 (0.00)	0.00 (0.00)	0.24 (0.07)	0.45 (0.14)			0.17 (0.04)	0.31 (0.08)	0.23 (0.04)	0.43 (0.07)
9	0.00 (0.00)	0.00 (0.00)	0.16 (0.07)	0.30 (0.12)	0.21 (0.05)	0.39 (0.08)	0.12 (0.06)	0.22 (0.11)	0.18 (0.07)	0.34 (0.12)
10	0.00 (0.00)	0.00 (0.00)	0.19 (0.03)	0.35 (0.05)	0.25 (0.06)	0.45 (0.10)	0.17 (0.03)	0.32 (0.05)	0.23 (0.02)	0.43 (0.03)
11	0.00 (0.00)	0.00 (0.00)	0.20 (0.04)	0.37 (0.08)	0.27 (0.04)	0.50 (0.07)	0.17 (0.05)	0.31 (0.08)	0.23 (0.05)	0.43 (0.08)
12	0.00 (0.00)	0.00 (0.00)	0.19 (0.03)	0.36 (0.05)	0.24 (0.06)	0.45 (0.11)	0.17 (0.05)	0.32 (0.09)	0.24 (0.03)	0.45 (0.06)
13	0.00 (0.00)	0.00 (0.00)	0.24 (0.04)	0.44 (0.08)	0.28 (0.02)	0.51 (0.04)	0.22 (0.03)	0.41 (0.06)	0.28 (0.05)	0.53 (0.09)
14	0.00 (0.00)	0.00 (0.00)	0.22 (0.02)	0.42 (0.03)	0.25 (0.02)	0.46 (0.03)	0.17 (0.03)	0.31 (0.05)	0.28 (0.02)	0.53 (0.04)
15	0.00 (0.00)	0.00 (0.00)	0.22 (0.03)	0.41 (0.05)	0.22 (0.01)	0.41 (0.02)	0.15 (0.02)	0.27 (0.03)	0.24 (0.03)	0.45 (0.06)
16	0.00 (0.00)	0.00 (0.00)	0.15 (0.07)	0.28 (0.12)	0.17 (0.03)	0.32 (0.06)	0.10 (0.04)	0.18 (0.07)	0.30 (0.27)	
17	0.00 (0.00)	0.00 (0.00)	0.11 (0.06)	0.20 (0.11)	0.14 (0.05)	0.26 (0.09)	0.09 (0.05)	0.16 (0.10)	0.16 (0.08)	
18	0.00 (0.00)	0.00 (0.00)	0.12 (0.05)	0.23 (0.09)	0.12 (0.05)	0.23 (0.09)	0.11 (0.06)	0.19 (0.12)	0.16 (0.06)	
19	0.00 (0.00)	0.00 (0.00)	0.16 (0.03)	0.29 (0.06)	0.15 (0.01)	0.27 (0.02)	0.13 (0.02)	0.25 (0.04)	0.20 (0.03)	
20	0.00 (0.00)	0.00 (0.00)	0.19 (0.02)	0.35 (0.04)	0.18 (0.04)	0.33 (0.07)	0.17 (0.02)	0.31 (0.04)	0.22 (0.03)	
21	0.00 (0.01)	0.01 (0.02)	0.22 (0.05)	0.41 (0.09)			0.21 (0.03)	0.39 (0.05)	0.23 (0.08)	
22	0.00 (0.00)	0.00 (0.00)	0.17 (0.04)	0.32 (0.07)	0.19 (0.03)	0.35 (0.05)	0.18 (0.03)	0.33 (0.05)	0.19 (0.03)	
23	0.00 (0.00)	0.00 (0.00)	0.13 (0.06)	0.24 (0.11)	0.16 (0.03)	0.29 (0.06)	0.14 (0.06)	0.26 (0.11)	0.16 (0.04)	
24	0.00 (0.00)	0.00 (0.00)	0.10 (0.03)	0.19 (0.05)	0.10 (0.04)	0.19 (0.07)	0.06 (0.03)	0.12 (0.05)	0.09 (0.03)	
25	0.00 (0.00)	0.00 (0.00)	0.07 (0.02)	0.13 (0.03)	0.08 (0.02)	0.14 (0.03)	0.04 (0.01)	0.08 (0.02)	0.06 (0.02)	
26	0.00 (0.00)	0.00 (0.00)	0.06 (0.04)	0.12 (0.07)	0.07 (0.02)	0.12 (0.03)	0.04 (0.01)	0.08 (0.03)	0.04 (0.01)	
27	0.00 (0.00)	0.00 (0.00)	0.08 (0.03)	0.16 (0.06)	0.07 (0.02)	0.13 (0.03)	0.04 (0.01)	0.07 (0.03)	0.06 (0.02)	
28	0.00 (0.00)	0.00 (0.00)	0.11 (0.03)	0.20 (0.06)	0.08 (0.02)	0.16 (0.03)	0.09 (0.02)	0.16 (0.05)	0.13 (0.03)	0.24 (0.05)
29	0.00 (0.00)	0.00 (0.00)	0.36 (0.34)	0.66 (0.64)	0.32 (0.54)	0.59 (1.00)	0.12 (0.02)	0.23 (0.03)	0.17 (0.01)	0.32 (0.02)
30	0.00 (0.00)	0.00 (0.00)	0.25 (0.21)	0.46 (0.38)	0.09 (0.02)	0.16 (0.04)	0.09 (0.04)	0.16 (0.07)	0.16 (0.05)	0.30 (0.09)
Avg	0.00	0.00	0.19	0.36	0.24	0.44	0.14	0.25	0.20	0.43
n	30	30	30	30	28	28	30	30	29	17
SD	0.00	0.00	0.08	0.15	0.24	0.38	0.07	0.13	0.07	0.09
Min	0.00	0.00	0.06	0.12	0.07	0.12	0.04	0.07	0.04	0.24
Max	0.00	0.01	0.43	0.80	1.40	2.26	0.41	0.73	0.31	0.57

ED_004549_00015928-00208

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for May, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.00 (0.00)	0.00 (0.00)	0.13 (0.04)	0.25 (0.07)	0.10 (0.03)	0.18 (0.05)	0.13 (0.02)	0.24 (0.04)	0.14 (0.02)	0.26 (0.04)
2					0.12 (0.01)	0.21 (0.02)	0.09 (0.05)	0.17 (0.09)		
3										
4										
5										
6										
7										
8	0.00 (0.00)	0.00 (0.00)	0.10 (0.03)	0.19 (0.05)						
9	0.00 (0.00)	0.00 (0.00)	0.15 (0.02)	0.28 (0.03)	0.13 (0.02)	0.24 (0.03)	0.08 (0.02)	0.14 (0.04)	0.10 (0.03)	0.18 (0.05)
10	0.00 (0.00)	0.00 (0.00)	0.14 (0.04)	0.26 (0.06)	0.12 (0.02)	0.22 (0.04)	0.05 (0.03)	0.09 (0.06)	0.09 (0.04)	0.17 (0.07)
11	0.00 (0.00)	0.00 (0.00)	0.14 (0.02)	0.25 (0.04)	0.12 (0.03)	0.21 (0.05)	0.05 (0.02)	0.09 (0.04)	0.11 (0.03)	0.21 (0.06)
12	0.00 (0.00)	0.01 (0.00)	0.12 (0.04)							
13	0.01 (0.00)	0.01 (0.00)	0.15 (0.04)	0.28 (0.08)	0.13 (0.02)	0.24 (0.03)	0.09 (0.03)	0.16 (0.05)	0.10 (0.02)	0.19 (0.04)
14	0.01 (0.00)	0.01 (0.00)	0.10 (0.02)	0.18 (0.03)	0.09 (0.02)	0.16 (0.03)	0.05 (0.02)	0.10 (0.03)	0.08 (0.02)	0.14 (0.04)
15	0.00 (0.00)	0.00 (0.01)	0.10 (0.04)				0.04 (0.04)	0.07 (0.07)		
16	0.00 (0.00)	0.00 (0.00)	0.12 (0.05)	0.23 (0.09)	0.17 (0.03)	0.31 (0.06)	0.03 (0.01)	0.06 (0.02)	0.10 (0.03)	0.18 (0.06)
17	0.00 (0.00)	-0.01 (0.00)	0.16 (0.05)	0.29 (0.10)	0.15 (0.06)	0.27 (0.10)	0.04 (0.03)	0.07 (0.05)	0.13 (0.06)	0.24 (0.11)
18	0.00 (0.00)	0.00 (0.00)	0.18 (0.04)		0.20 (0.10)	0.37 (0.18)	0.06 (0.03)	0.10 (0.06)	0.21 (0.29)	0.39 (0.53)
19	0.00 (0.00)	0.00 (0.00)	0.14 (0.06)		0.11 (0.04)	0.21 (0.08)	0.07 (0.02)	0.12 (0.04)	0.11 (0.04)	0.20 (0.07)
20	0.00 (0.00)	0.00 (0.00)			0.09 (0.06)	0.16 (0.11)				
21	0.00 (0.00)	0.00 (0.00)								
22	0.00 (0.00)	0.00 (0.00)			0.12 (0.10)	0.23 (0.19)				
23	0.00 (0.00)	0.00 (0.00)	0.08 (0.03)	0.14 (0.05)	0.05 (0.06)	0.09 (0.11)	0.07 (0.02)	0.14 (0.03)	0.09 (0.02)	0.16 (0.03)
24	0.00 (0.00)	0.00 (0.00)	0.11 (0.03)	0.21 (0.05)	0.06 (0.01)	0.12 (0.03)	0.08 (0.02)	0.14 (0.03)	0.10 (0.03)	0.19 (0.05)
25	0.00 (0.00)	0.00 (0.01)	0.12 (0.02)	0.21 (0.04)	0.07 (0.04)	0.13 (0.07)	0.05 (0.02)	0.10 (0.04)	0.10 (0.03)	0.19 (0.06)
26	0.07 (0.05)									
27	0.00 (0.00)	0.00 (0.00)	0.07 (0.01)	0.13 (0.02)	0.05 (0.01)	0.09 (0.02)	0.08 (0.02)	0.14 (0.03)	0.07 (0.02)	0.13 (0.03)
28	0.00 (0.00)	0.00 (0.00)	0.10 (0.04)	0.19 (0.08)	0.07 (0.03)	0.12 (0.05)	0.07 (0.02)	0.12 (0.04)	0.08 (0.04)	0.16 (0.08)
29	0.00 (0.00)	0.00 (0.00)	0.07 (0.04)	0.14 (0.06)	0.08 (0.03)	0.14 (0.05)	0.08 (0.04)	0.14 (0.07)	0.05 (0.03)	0.09 (0.05)
30	0.00 (0.00)	0.00 (0.00)	0.08 (0.04)	0.15 (0.07)	0.09 (0.04)	0.16 (0.08)	0.07 (0.02)	0.12 (0.04)	0.07 (0.03)	0.12 (0.06)
31	0.00 (0.00)	0.00 (0.00)	0.06 (0.03)	0.11 (0.06)	0.07 (0.02)	0.12 (0.05)	0.06 (0.03)	0.12 (0.05)	0.05 (0.03)	0.10 (0.05)
Avg	0.00	0.00	0.11	0.20	0.10	0.19	0.07	0.12	0.10	0.18
n	25	24	21	17	21	21	20	20	18	18
SD	0.01	0.00	0.03	0.06	0.04	0.07	0.02	0.04	0.04	0.07
Min	0.00	-0.01	0.06	0.11	0.05	0.09	0.03	0.06	0.05	0.09
Max	0.07	0.01	0.18	0.29	0.20	0.37	0.13	0.24	0.21	0.39

ED_004549_00015928-00209

Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for June, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.00 (0.00)	0.00 (0.00)	0.06 (0.02)	0.12 (0.04)	0.04 (0.03)	0.08 (0.05)	0.07 (0.02)	0.13 (0.04)	0.07 (0.01)	0.14 (0.03)
2	0.00 (0.00)	0.00 (0.00)	0.03 (0.01)	0.05 (0.02)	0.06 (0.01)	0.11 (0.02)	0.08 (0.02)	0.15 (0.04)	0.08 (0.02)	0.15 (0.03)
3	0.00 (0.00)	0.00 (0.00)	0.06 (0.03)	0.12 (0.06)	0.09 (0.03)	0.16 (0.06)	0.07 (0.03)	0.13 (0.05)	0.12 (0.03)	0.22 (0.05)
4	0.00 (0.00)	0.00 (0.00)	0.10 (0.07)	0.19 (0.13)	0.10 (0.04)	0.19 (0.08)	0.06 (0.01)	0.11 (0.02)	0.11 (0.04)	0.20 (0.08)
5	0.00 (0.00)	0.00 (0.00)	0.09 (0.03)	0.16 (0.06)	0.13 (0.07)	0.24 (0.12)	0.05 (0.02)	0.09 (0.04)	0.08 (0.04)	0.15 (0.08)
6	0.00 (0.00)	0.00 (0.00)	0.06 (0.04)	0.12 (0.07)	0.10 (0.04)	0.19 (0.08)	0.07 (0.01)	0.13 (0.02)	0.07 (0.03)	0.12 (0.05)
7	0.00 (0.00)	0.00 (0.00)	0.07 (0.04)	0.12 (0.07)	0.10 (0.02)	0.19 (0.04)	0.07 (0.02)	0.13 (0.04)	0.08 (0.02)	0.15 (0.04)
8	0.01 (0.01)	0.01 (0.02)								
9	0.00 (0.00)	0.00 (0.01)								
10	0.00 (0.00)	0.00 (0.00)	0.04 (0.01)	0.07 (0.02)	0.08 (0.02)	0.15 (0.03)	0.08 (0.01)	0.15 (0.02)	0.04 (0.02)	0.08 (0.03)
11	0.00 (0.00)	0.00 (0.00)	0.06 (0.02)	0.12 (0.04)	0.12 (0.03)	0.22 (0.06)	0.11 (0.02)	0.20 (0.04)	0.05 (0.02)	0.10 (0.03)
12	0.00 (0.00)	0.00 (0.00)	0.08 (0.03)	0.15 (0.06)	0.09 (0.02)	0.17 (0.04)	0.09 (0.02)	0.18 (0.05)	0.07 (0.02)	0.13 (0.04)
13	0.00 (0.00)	0.00 (0.00)	0.07 (0.05)	0.14 (0.09)	0.11 (0.03)	0.20 (0.06)	0.09 (0.01)	0.17 (0.03)	0.10 (0.03)	0.18 (0.05)
14	0.00 (0.00)	0.00 (0.00)	0.09 (0.03)	0.16 (0.05)	0.12 (0.02)	0.22 (0.04)	0.10 (0.02)	0.19 (0.05)	0.12 (0.02)	0.22 (0.03)
15	0.00 (0.00)	0.00 (0.00)	0.08 (0.04)	0.15 (0.07)	0.11 (0.02)	0.21 (0.04)	0.10 (0.02)	0.19 (0.04)	0.11 (0.03)	0.21 (0.06)
16										
17										
18										
19										
20										
21										
22	0.00 (0.00)	0.00 (0.00)	0.05 (0.02)	0.09 (0.03)	0.09 (0.04)	0.17 (0.07)	0.10 (0.05)	0.17 (0.08)		
23	0.00 (0.00)		0.04 (0.02)							
24	0.00 (0.00)	0.00 (0.00)	0.05 (0.01)	0.09 (0.01)	0.10 (0.02)	0.18 (0.04)	0.09 (0.03)	0.17 (0.05)	0.08 (0.01)	0.15 (0.02)
25	0.00 (0.00)	0.00 (0.00)	0.05 (0.01)	0.10 (0.03)	0.08 (0.04)	0.14 (0.07)	0.09 (0.02)	0.17 (0.04)	0.10 (0.03)	0.20 (0.06)
26	0.00 (0.00)	0.00 (0.00)	0.06 (0.02)	0.11 (0.03)	0.10 (0.04)	0.18 (0.07)	0.10 (0.02)	0.19 (0.05)	0.09 (0.02)	0.17 (0.03)
27	0.00 (0.00)	0.00 (0.00)	0.06 (0.03)	0.12 (0.06)	0.10 (0.04)	0.18 (0.08)	0.11 (0.02)	0.20 (0.03)	0.06 (0.03)	0.11 (0.05)
28	0.00 (0.00)	0.00 (0.00)	0.05 (0.02)	0.08 (0.03)	0.05 (0.03)	0.09 (0.06)	0.08 (0.02)	0.14 (0.03)	0.05 (0.02)	0.08 (0.03)
29	0.00 (0.00)	0.00 (0.00)	0.05 (0.04)	0.10 (0.07)	0.04 (0.03)	0.08 (0.05)	0.09 (0.04)	0.17 (0.07)	0.06 (0.02)	0.11 (0.04)
30	0.00 (0.00)	0.00 (0.00)	0.08 (0.03)	0.14 (0.05)	0.03 (0.02)	0.06 (0.03)	0.11 (0.02)	0.20 (0.04)	0.08 (0.02)	0.14 (0.04)
Avg	0.00	0.00	0.06	0.12	0.09	0.16	0.09	0.16	0.08	0.15
n	24	23	22	21	21	21	21	21	20	20
SD	0.00	0.00	0.02	0.03	0.03	0.05	0.02	0.03	0.02	0.04
Min	0.00	0.00	0.03	0.05	0.03	0.06	0.05	0.09	0.04	0.08
Max	0.01	0.01	0.10	0.19	0.13	0.24	0.11	0.20	0.12	0.22

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Table E8. Daily means (SD) of NMHC concentrations at Site IN3B for July, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.00 (0.00)	0.00 (0.00)	0.56 (1.19)	0.95 (2.16)	0.05 (0.02)	0.10 (0.04)	0.11 (0.02)	0.20 (0.04)		
2										
3										
4										
5										
6										
7	0.00 (0.01)	0.01 (0.01)	0.08 (0.02)	0.15 (0.04)	0.08 (0.02)	0.14 (0.04)	0.08 (0.01)	0.15 (0.02)	0.06 (0.02)	0.10 (0.04)
8	0.00 (0.00)	0.00 (0.00)	0.09 (0.04)	0.16 (0.07)	0.09 (0.02)	0.16 (0.04)	0.09 (0.02)	0.16 (0.04)	0.05 (0.02)	0.09 (0.03)
9	0.00 (0.00)	0.00 (0.00)	0.09 (0.04)	0.16 (0.08)	0.14 (0.10)	0.27 (0.19)	0.11 (0.03)	0.20 (0.05)	0.06 (0.01)	0.12 (0.02)
10	0.00 (0.00)	0.00 (0.00)	0.06 (0.02)	0.11 (0.04)	0.09 (0.01)	0.17 (0.02)	0.14 (0.02)	0.26 (0.04)	0.12 (0.01)	0.21 (0.03)
11	0.00 (0.00)	0.00 (0.00)	0.04 (0.01)	0.07 (0.02)	0.07 (0.01)	0.14 (0.02)	0.11 (0.02)	0.20 (0.03)	0.10 (0.01)	0.18 (0.02)
12	0.00 (0.00)	0.00 (0.00)	0.05 (0.03)	0.10 (0.06)	0.08 (0.04)	0.15 (0.08)	0.09 (0.02)	0.17 (0.03)	0.11 (0.02)	0.21 (0.04)
13	0.00 (0.00)	0.00 (0.00)	0.06 (0.04)	0.12 (0.08)	0.07 (0.02)	0.13 (0.04)	0.12 (0.07)	0.23 (0.12)	0.12 (0.03)	0.23 (0.06)
14	0.00 (0.00)	0.00 (0.00)	0.20 (0.23)	0.36 (0.43)	0.10 (0.04)	0.18 (0.08)	0.11 (0.03)		0.13 (0.03)	0.25 (0.05)
15	0.00 (0.00)	0.00 (0.00)	0.05 (0.03)	0.10 (0.05)	0.08 (0.02)	0.15 (0.04)	0.11 (0.03)	0.20 (0.06)	0.12 (0.02)	0.22 (0.04)
16	0.00 (0.00)	0.00 (0.00)	0.05 (0.02)	0.09 (0.03)	0.08 (0.03)	0.15 (0.05)				
17	0.00 (0.00)	0.00 (0.00)	0.06 (0.03)	0.11 (0.05)	0.10 (0.03)	0.19 (0.06)	0.10 (0.02)	0.18 (0.04)	0.06 (0.03)	0.12 (0.06)
18	0.00 (0.00)	0.00 (0.00)	0.05 (0.03)	0.10 (0.06)	0.12 (0.03)	0.22 (0.05)	0.11 (0.03)	0.21 (0.05)	0.04 (0.03)	0.07 (0.05)
19	0.00 (0.00)	0.00 (0.00)	0.05 (0.03)	0.10 (0.05)	0.12 (0.02)	0.21 (0.04)	0.15 (0.03)	0.27 (0.06)	0.06 (0.02)	0.11 (0.03)
20	0.00 (0.00)	0.00 (0.00)	0.06 (0.04)	0.11 (0.07)	0.12 (0.06)	0.22 (0.11)	0.13 (0.02)	0.23 (0.04)	0.05 (0.03)	0.10 (0.06)
21	0.00 (0.00)	0.00 (0.00)	0.08 (0.03)	0.15 (0.06)	0.13 (0.02)	0.23 (0.04)	0.18 (0.08)	0.33 (0.16)	0.08 (0.01)	0.15 (0.02)
22	0.00 (0.00)	0.00 (0.00)	0.11 (0.02)	0.20 (0.03)	0.13 (0.03)	0.25 (0.05)	0.15 (0.05)	0.27 (0.09)		
23	0.00 (0.00)	0.00 (0.00)			0.10 (0.02)	0.18 (0.04)				
24										
25										
26										
27										
28										
29										
30										
31										
Avg	0.00	0.00	0.10	0.19	0.10	0.18	0.12	0.22	0.08	0.15
n	18	18	17	17	18	18	16	15	14	14
SD	0.00	0.00	0.12	0.20	0.02	0.05	0.03	0.05	0.03	0.06
Min	0.00	0.00	0.04	0.07	0.05	0.10	0.08	0.15	0.04	0.07
Max	0.00	0.01	0.56	0.95	0.14	0.27	0.18	0.33	0.13	0.25

ED_004549_00015928-00211

Table E9. Non-methane hydrocarbon emissions.

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for July, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25	0.01 (0.02)	11 (26)	9 (21)	41 (95)					0.02 (0.04)	33 (56)	27 (46)	127 (215)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
26																
27																
28																
29																
30	0.07 (0.05)	99 (63)	85 (53)	378 (237)					0.09 (0.13)	116 (183)	97 (152)	444 (699)				
31	0.13 (0.13)	177 (179)	160 (162)	714 (719)	0.12 (0.13)	164 (179)	151 (166)	665 (732)	0.06 (0.09)	87 (118)	72 (98)	332 (450)	0.05 (0.06)	69 (77)	60 (66)	274 (305)
Avg	0.07	96	85	377					0.06	79	65	301	0.03	34	30	137
n	3	3	3	3	1	1	1	1	3	3	3	3	2	2	2	2
SD	0.05	67.7	61.8	275					0.03	34.6	28.8	132	0.03	34.4	29.8	137
Min	0.01	11	9	41					0.02	33	27	127	0.00	0	0	0
Max	0.13	177	160	714					0.09	116	97	444	0.05	69	60	274

ED_004549_00015928-00212

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for August, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1	0.05 (0.02)	64 (25)	63 (24)	277 (107)					0.09 (0.14)	124 (187)	103 (156)	472 (711)	0.04 (0.03)	54 (38)	47 (33)	216 (149)
2									0.44 (0.71)	597 (974)	497 (811)	2270 (3700)	0.09 (0.11)	117 (150)	102 (131)	463 (595)
3																
4	0.18 (0.23)	248 (309)	262 (327)	1170 (1460)					0.01 (0.01)	14 (13)	12 (11)	55 (49)	0.14 (0.21)	187 (288)	163 (250)	736 (1130)
5	0.09 (0.04)	117 (48)	125 (51)	555 (224)					0.02 (0.01)	29 (19)	25 (16)	111 (70)	0.08 (0.07)	112 (100)	97 (87)	438 (393)
6	0.18 (0.15)	241 (203)	262 (220)	1160 (977)					0.14 (0.18)	186 (251)	156 (210)	700 (944)	0.13 (0.16)	180 (215)	161 (195)	723 (873)
7	0.14 (0.06)	191 (84)	224 (98)	990 (431)					0.05 (0.05)	65 (62)	54 (52)	243 (231)				
8	0.10 (0.02)	132 (31)	170 (39)	746 (171)	0.04 (0.05)	57 (67)	81 (96)	362 (427)	0.20 (0.28)	270 (387)	243 (349)	1080 (1560)	0.06 (0.03)	81 (46)	83 (47)	370 (210)
9	0.07 (0.06)	101 (82)	140 (112)	618 (493)	0.08 (0.13)	112 (171)	159 (244)	708 (1090)	0.01 (0.01)	9 (12)	9 (12)	39 (54)	0.03 (0.04)	41 (49)	44 (54)	198 (243)
10	0.00 (0.01)	5 (6)	7 (9)	32 (40)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28					0.07 (0.06)	91 (84)	35 (130)	2930 (11000)	0.04 (0.02)	52 (33)	0 (0)	0 (0)	0.04 (0.04)	59 (59)	0 (0)	0 (0)
29					0.11 (0.08)	151 (106)	51 (36)	4180 (2940)	0.04 (0.06)	56 (77)	0 (0)	0 (0)	0.07 (0.03)	94 (45)	0 (0)	0 (0)
30					0.44 (0.69)	607 (944)	205 (319)	15200 (23400)	0.02 (0.03)	33 (38)	0 (0)	0 (0)	0.11 (0.02)	146 (23)	0 (0)	0 (0)
31					0.34 (0.10)	468 (134)	158 (45)	10700 (3050)	0.05 (0.04)	74 (56)	0 (0)	0 (0)	0.06 (0.06)	80 (76)	0 (0)	0 (0)
Avg	0.10	137	157	694	0.16	212	99	4870	0.09	116	85	382	0.07	96	58	262
n	8	8	8	8	7	7	7	7	13	13	13	13	12	12	12	12
SD	0.06	79.5	86.2	383	0.16	213	70.7	5430	0.12	157	139	632	0.04	53.4	59.7	269
Min	0.00	5	7	32	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0
Max	0.18	248	262	1170	0.44	607	205	15200	0.44	597	497	2270	0.14	187	163	736

ED_004549_00015928-00213

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for September, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1					0.38 (0.14)	523 (190)	177 (64)	11200 (4200)					0.00 (0.00)	0 (0)	0 (0)	0 (0)
2					0.37 (0.09)	506 (128)	171 (43)	10100 (2590)					0.00 (0.00)	0 (0)	0 (0)	0 (0)
3					0.35 (0.09)	475 (119)	161 (40)	8950 (2190)					0.00 (0.01)	4 (9)	0 (0)	0 (0)
4					0.28 (0.10)	378 (131)	128 (44)	6760 (2380)								
5	0.10 (0.06)	134 (83)	43 (27)	3530 (2130)	0.24 (0.19)	331 (254)	112 (86)	5630 (4350)								
6	0.37 (0.16)	500 (218)	162 (71)	12100 (5050)	0.25 (0.16)	339 (213)	115 (72)	5450 (3390)								
7	0.57 (0.14)	777 (196)	252 (64)	17400 (4500)	0.27 (0.10)	364 (140)	123 (47)	5610 (2140)	0.00 (0.00)	2 (3)	0 (0)	0 (0)				
8																
9																
10																
11	0.33 (0.09)	455 (120)	148 (39)	7810 (2050)	0.45 (0.16)	615 (212)	208 (72)	8160 (2800)	0.02 (0.01)	20 (15)	0 (0)	0 (0)				
12	0.34 (0.14)	463 (192)	150 (62)	7580 (3190)	0.47 (0.09)	643 (122)	218 (41)	8280 (1600)	0.02 (0.01)	25 (20)	0 (0)	0 (0)				
13																
14																
15	0.39 (0.11)	527 (144)	171 (47)	7630 (2090)	0.48 (0.11)	655 (150)	222 (51)	7720 (1780)	0.02 (0.01)	27 (12)	0 (0)	0 (0)				
16	0.43 (0.12)	583 (163)	189 (53)	8110 (2260)	0.48 (0.16)	650 (218)	220 (74)	7420 (2490)	0.02 (0.01)	22 (18)	0 (0)	0 (0)				
17	0.38 (0.16)	516 (214)	168 (70)	6910 (2880)	0.47 (0.10)	648 (140)	219 (47)	7190 (1560)	0.01 (0.01)	11 (11)	0 (0)	0 (0)				
18	0.53 (0.28)	725 (376)	236 (122)	9380 (4800)	0.28 (0.11)	387 (150)	135 (53)	4310 (1680)								
19	0.66 (0.34)	899 (470)	292 (153)	11300 (5830)	0.47 (0.18)	636 (249)	273 (120)	8420 (3670)	0.00 (0.01)	6 (10)	0 (0)	0 (0)				
20	0.71 (0.39)	965 (532)	314 (173)	11700 (6380)	0.42 (0.15)	578 (202)	314 (123)	9460 (3660)	0.00 (0.00)	4 (6)	0 (0)	0 (0)				
21	0.55 (0.24)	744 (329)	242 (107)	8800 (3880)	0.33 (0.09)	453 (121)	309 (81)	9080 (2380)								
22	0.28 (0.22)	379 (306)	123 (99)	4350 (3480)	0.14 (0.11)	192 (144)	135 (102)	3860 (2900)	0.01 (0.01)	6 (11)	4 (7)	117 (193)	0.01 (0.01)	11 (17)	0 (0)	0 (0)
23	0.33 (0.09)	450 (119)	146 (39)	4990 (1320)	0.22 (0.09)	298 (127)	210 (90)	5860 (2520)	0.04 (0.05)	54 (64)	35 (42)	960 (1150)	0.02 (0.02)	23 (23)	0 (0)	0 (0)
24									0.01 (0.01)	11 (7)	7 (4)	198 (118)				
25																
26	0.38 (0.09)	513 (125)	202 (47)	6390 (1500)	0.20 (0.13)	274 (183)	194 (129)	4970 (3300)	0.03 (0.03)	45 (34)	30 (22)	737 (553)				
27	0.30 (0.12)	413 (161)	216 (89)	6580 (2710)	0.08 (0.04)	106 (54)	75 (38)	1870 (946)	0.05 (0.02)	62 (25)	41 (16)	985 (391)	0.01 (0.00)	6 (4)	0 (0)	0 (0)
28																
29	0.24 (0.16)	328 (215)	220 (145)	6410 (4230)	0.11 (0.09)	145 (118)	102 (83)	2420 (1980)	0.07 (0.05)	92 (63)	60 (41)	1390 (955)	0.03 (0.02)	42 (28)	27 (19)	658 (448)
30	0.19 (0.13)	258 (179)	173 (120)	4900 (3430)	0.10 (0.08)	138 (113)	97 (80)	2250 (1850)	0.04 (0.05)	60 (64)	40 (42)	889 (948)	0.02 (0.02)	31 (33)	20 (22)	480 (515)
Avg	0.39	535	192	8100	0.31	424	178	6590	0.02	30	14	352	0.01	15	6	142
n	18	18	18	18	22	22	22	22	15	15	15	15	8	8	8	8
SD	0.15	211	62	3260	0.13	179	65.6	2540	0.02	25.9	19.8	473	0.01	14.4	10.5	250
Min	0.10	134	43	3530	0.08	106	75	1870	0.00	2	0	0	0.00	0	0	0
Max	0.71	965	314	17400	0.48	655	314	11200	0.07	92	60	1390	0.03	42	27	658

ED_004549_00015928-00214

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for October, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1	0.09 (0.04)	126 (54)	85 (36)	2330 (984)	0.07 (0.05)	90 (72)	64 (51)	1420 (1140)	0.06 (0.06)	82 (77)	54 (51)	1160 (1090)	0.01 (0.02)	15 (20)	10 (13)	218 (305)
2	0.15 (0.06)	198 (81)	133 (54)	3580 (1470)	0.09 (0.06)	117 (77)	83 (54)	1800 (1170)	0.08 (0.07)	114 (97)	75 (64)	1580 (1350)	0.03 (0.02)	34 (33)	23 (22)	504 (489)
3	0.09 (0.04)	122 (58)	82 (39)	2140 (999)	0.11 (0.06)	145 (79)	102 (56)	2160 (1180)	0.09 (0.04)	121 (50)	79 (33)	1620 (665)	0.02 (0.02)	31 (30)	20 (20)	438 (428)
4	0.14 (0.09)	188 (120)	127 (81)	3220 (2050)	0.10 (0.11)	141 (146)	100 (103)	2050 (2140)	0.22 (0.15)	303 (205)	199 (135)	3950 (2660)	0.12 (0.15)	166 (204)	109 (134)	2290 (2810)
5	0.17 (0.10)	236 (133)	159 (89)	3910 (2200)	0.20 (0.13)	271 (179)	192 (127)	3840 (2530)	0.20 (0.10)	276 (143)	181 (94)	3520 (1820)	0.03 (0.04)	44 (54)	29 (35)	591 (728)
6	0.10 (0.04)	136 (51)	92 (34)	2210 (816)	0.16 (0.11)	212 (145)	150 (103)	2910 (1990)	0.08 (0.02)	102 (33)	67 (21)	1260 (398)	0.03 (0.02)	44 (33)	29 (22)	580 (426)
7																
8																
9	0.10 (0.03)	130 (43)	88 (29)	1940 (639)	0.13 (0.11)	178 (145)	126 (103)	2260 (1850)	0.11 (0.04)	145 (49)	95 (32)	1650 (563)	0.03 (0.02)	45 (29)	30 (19)	546 (349)
10					0.18 (0.11)	243 (155)	172 (110)	3000 (1910)	0.14 (0.07)	192 (91)	126 (60)	2120 (997)	0.13 (0.13)	172 (171)	114 (112)	2030 (2010)
11	0.18 (0.02)	240 (33)	162 (22)	3390 (469)	0.15 (0.04)	209 (51)	148 (36)	2530 (624)	0.17 (0.03)	232 (37)	152 (25)	2490 (393)	0.07 (0.02)	91 (30)	60 (20)	1050 (340)
12	0.17 (0.02)	238 (30)	161 (20)	3280 (420)	0.18 (0.03)	248 (40)	175 (28)	2900 (453)	0.22 (0.08)	296 (110)	194 (73)	3090 (1140)	0.08 (0.02)	102 (21)	68 (14)	1140 (240)
13	0.17 (0.05)	236 (66)	159 (44)	3170 (891)	0.18 (0.05)	242 (69)	171 (49)	2770 (798)	0.18 (0.11)	250 (148)	164 (97)	2540 (1500)	0.09 (0.02)	128 (31)	85 (20)	1400 (335)
14	0.18 (0.11)	240 (145)	162 (98)	3130 (1880)	0.17 (0.08)	228 (110)	161 (78)	2530 (1220)	0.18 (0.10)	247 (133)	162 (87)	2440 (1300)	0.06 (0.03)	84 (39)	55 (26)	885 (416)
15	0.11 (0.06)	156 (75)	105 (50)	1980 (946)												
16	0.09 (0.06)	117 (83)	79 (56)	1440 (1020)	0.15 (0.09)	210 (116)	149 (82)	2210 (1210)	0.25 (0.09)	339 (126)	223 (83)	3180 (1180)	0.07 (0.04)	100 (53)	66 (35)	1010 (528)
17	0.18 (0.14)	243 (186)	165 (126)	2920 (2220)	0.27 (0.23)	362 (309)	257 (219)	3710 (3160)	0.16 (0.09)	212 (120)	140 (79)	1930 (1070)	0.12 (0.09)	164 (128)	108 (85)	1610 (1250)
18	0.19 (0.15)	256 (211)	173 (143)	2990 (2470)	0.21 (0.15)	290 (202)	205 (143)	2900 (2010)	0.17 (0.09)	229 (126)	151 (83)	2040 (1120)	0.09 (0.03)	117 (42)	77 (28)	1120 (400)
19	0.04 (0.02)	56 (25)	38 (17)	633 (279)	0.06 (0.02)	83 (26)	59 (18)	807 (256)	0.09 (0.03)	117 (47)	77 (31)	1010 (404)	0.06 (0.03)	79 (35)	52 (23)	736 (328)
20	0.09 (0.07)	123 (92)	83 (63)	1360 (1020)	0.10 (0.05)	134 (71)	95 (50)	1270 (671)	0.07 (0.03)	100 (43)	66 (28)	847 (360)	0.03 (0.01)	38 (16)	25 (11)	344 (148)
21	0.06 (0.03)	78 (34)	53 (23)	844 (370)	0.15 (0.07)	203 (100)	144 (71)	1880 (916)	0.07 (0.02)	101 (31)	67 (20)	834 (250)	0.04 (0.03)	57 (46)	38 (30)	505 (405)
22																
23	0.06 (0.03)	79 (44)	53 (30)	806 (456)	0.06 (0.03)	81 (35)	58 (25)	714 (306)	0.07 (0.04)	92 (55)	60 (36)	717 (425)	0.05 (0.02)	71 (29)	47 (19)	597 (244)
24	0.07 (0.03)	97 (37)	66 (25)	966 (366)	0.13 (0.05)	179 (73)	127 (52)	1540 (622)	0.21 (0.11)	286 (145)	189 (96)	2180 (1100)	0.09 (0.04)	123 (55)	81 (36)	1010 (447)
25	0.11 (0.05)	148 (66)	100 (45)	1440 (638)	0.20 (0.08)	279 (114)	198 (81)	2330 (941)	0.18 (0.14)	240 (187)	159 (123)	1790 (1390)	0.12 (0.03)	164 (47)	108 (31)	1310 (377)
26	0.11 (0.10)	152 (140)	103 (95)	1440 (1320)	0.28 (0.16)	379 (216)	269 (153)	3100 (1760)	0.15 (0.05)	207 (64)	136 (42)	1500 (459)	0.12 (0.06)	165 (78)	109 (52)	1290 (610)
27	0.11 (0.08)	147 (107)	100 (72)	1360 (983)	0.13 (0.04)	176 (54)	125 (39)	1400 (430)	0.14 (0.08)	190 (113)	125 (75)	1350 (800)	0.11 (0.05)	147 (61)	97 (40)	1120 (466)
28	0.12 (0.08)	169 (115)	115 (78)	1520 (1040)	0.21 (0.06)	279 (81)	198 (57)	2180 (624)	0.21 (0.08)	289 (108)	191 (71)	2010 (743)	0.12 (0.03)	162 (36)	107 (24)	1210 (269)
29	0.08 (0.06)	110 (85)	75 (58)	966 (742)	0.18 (0.12)	241 (161)	171 (114)	1840 (1230)								
30	0.26 (0.24)	348 (332)	236 (225)	2980 (2840)	0.13 (0.08)	175 (103)	124 (73)	1300 (768)	0.18 (0.13)	244 (180)	161 (119)	1610 (1190)	0.15 (0.08)	200 (103)	132 (68)	1420 (733)
31	0.15 (0.13)	208 (173)	141 (117)	1740 (1440)	0.11 (0.07)	155 (97)	110 (69)	1130 (699)	0.20 (0.13)	274 (178)	181 (117)	1770 (1150)	0.15 (0.07)	209 (95)	138 (63)	1450 (659)
Avg	0.12	169	115	2140	0.15	206	146	2170	0.15	203	134	1930	0.08	106	70	1020
n	27	27	27	27	27	27	27	27	26	26	26	26	26	26	26	26
SD	0.05	67.4	45.6	964	0.06	75.5	53.5	804	0.06	77.1	50.7	815	0.04	56.7	37.4	502
Min	0.04	56	38	633	0.06	81	58	714	0.06	82	54	717	0.01	15	10	218
Max	0.26	348	236	3910	0.28	379	269	3840	0.25	339	223	3950	0.15	209	138	2290

ED_004549_00015928-00215

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for November, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1	0.07 (0.03)	95 (42)	64 (29)	776 (345)	0.11 (0.06)	145 (82)	103 (58)	1030 (579)	0.16 (0.09)	220 (120)	145 (80)	1390 (758)	0.16 (0.06)	212 (76)	140 (50)	1450 (516)
2	0.13 (0.06)	179 (86)	122 (59)	1430 (688)	0.13 (0.04)	180 (57)	128 (41)	1250 (398)	0.27 (0.28)	371 (380)	245 (251)	2300 (2350)	0.19 (0.03)	252 (44)	166 (29)	1680 (296)
3	0.11 (0.07)	144 (92)	98 (62)	1120 (715)	0.09 (0.03)	121 (43)	86 (31)	825 (294)	0.25 (0.15)	335 (204)	221 (135)	2030 (1230)	0.17 (0.05)	237 (65)	156 (43)	1550 (423)
4	0.10 (0.09)	135 (122)	92 (83)	1030 (932)	0.11 (0.06)	146 (75)	104 (54)	974 (501)	0.18 (0.08)	250 (111)	165 (73)	1480 (657)	0.15 (0.04)	205 (59)	135 (39)	1310 (378)
5	0.06 (0.04)	84 (60)	57 (40)	624 (442)	0.11 (0.08)	154 (104)	109 (74)	1000 (676)	0.23 (0.13)	314 (175)	208 (116)	1830 (1020)	0.18 (0.08)	240 (106)	158 (70)	1500 (661)
6	0.14 (0.04)	187 (61)	127 (41)	1360 (441)	0.14 (0.07)	184 (98)	131 (69)	1180 (624)	0.18 (0.07)	241 (95)	160 (63)	1370 (541)				
7	0.17 (0.05)	229 (70)	155 (48)	1630 (499)	0.14 (0.04)	194 (55)	138 (39)	1220 (341)	0.28 (0.20)	387 (275)	256 (182)	2160 (1530)	0.19 (0.03)	262 (36)	173 (24)	1570 (216)
8	0.19 (0.05)	255 (71)	173 (48)	1770 (485)	0.29 (0.16)	399 (220)	284 (156)	2450 (1350)	0.31 (0.17)	422 (231)	279 (153)	2310 (1260)	0.16 (0.06)	217 (83)	143 (55)	1280 (485)
9																
10					0.12 (0.04)	162 (56)	115 (40)	957 (331)	0.32 (0.22)	442 (294)	293 (195)	2320 (1550)	0.21 (0.07)	282 (90)	186 (59)	1600 (507)
11	0.42 (0.22)	568 (297)	387 (202)	3710 (1950)	0.18 (0.12)	245 (167)	174 (119)	1420 (961)	0.37 (0.13)	499 (170)	331 (113)	2580 (880)	0.21 (0.09)	288 (127)	190 (84)	1590 (697)
12	0.32 (0.20)	443 (272)	301 (185)	2820 (1730)	0.52 (0.31)	716 (416)	509 (296)	4070 (2360)	0.70 (0.25)	950 (347)	630 (230)	4830 (1760)	0.39 (0.23)	539 (317)	356 (209)	2930 (1720)
13	0.38 (0.20)	520 (279)	354 (190)	3250 (1730)	0.46 (0.26)	623 (354)	443 (251)	3480 (1970)	0.44 (0.29)	605 (399)	402 (265)	3020 (1990)	0.32 (0.21)	434 (284)	287 (188)	2320 (1510)
14	0.33 (0.16)	450 (216)	307 (147)	2760 (1320)	0.35 (0.13)	480 (178)	341 (127)	2640 (983)	0.38 (0.20)	514 (272)	341 (181)	2530 (1340)	0.26 (0.16)	354 (221)	234 (146)	1860 (1160)
15																
16									0.21 (0.07)	281 (100)	186 (67)	1340 (479)				
17	0.17 (0.13)	232 (179)	158 (122)	1340 (1030)	0.22 (0.16)	294 (213)	209 (151)	1530 (1110)	0.22 (0.12)	293 (169)	195 (112)	1370 (786)	0.16 (0.09)	217 (117)	143 (77)	1080 (582)
18	0.17 (0.09)	235 (122)	160 (83)	1330 (695)	0.18 (0.10)	249 (140)	177 (100)	1280 (717)	0.15 (0.10)	208 (135)	138 (90)	957 (621)	0.13 (0.05)	176 (62)	117 (41)	864 (302)
19	0.22 (0.18)	304 (239)	207 (163)	1690 (1320)												
20	0.45 (0.20)	611 (270)	417 (184)	3340 (1470)	0.29 (0.19)	397 (263)	282 (187)	1970 (1300)	0.37 (0.14)	507 (194)	337 (129)	2260 (857)	0.28 (0.17)	378 (227)	250 (150)	1790 (1080)
21	0.25 (0.07)	343 (93)	234 (63)	1850 (504)	0.26 (0.08)	350 (103)	249 (73)	1710 (505)	0.24 (0.09)	329 (116)	219 (77)	1450 (514)				
22	0.15 (0.05)	201 (69)	137 (47)	1060 (363)	0.16 (0.06)	213 (78)	152 (56)	1030 (377)	0.14 (0.07)	187 (93)	124 (62)	808 (400)				
23	0.20 (0.07)	271 (98)	185 (67)	1410 (509)	0.16 (0.07)	223 (88)	159 (63)	1060 (418)	0.11 (0.06)	153 (88)	102 (58)	653 (374)	0.18 (0.03)	244 (41)	162 (27)	1110 (188)
24	0.20 (0.13)	274 (181)	187 (124)	1400 (926)	0.20 (0.07)	270 (94)	192 (67)	1260 (438)	0.19 (0.08)	260 (111)	173 (74)	1090 (466)	0.19 (0.07)	265 (92)	175 (61)	1180 (410)
25	0.14 (0.06)	184 (78)	126 (53)	928 (391)	0.18 (0.03)	251 (41)	179 (29)	1160 (191)	0.24 (0.09)	323 (128)	215 (86)	1340 (532)	0.15 (0.05)	206 (62)	136 (41)	909 (276)
26	0.10 (0.06)	141 (87)	96 (59)	693 (425)	0.19 (0.04)	257 (59)	183 (42)	1170 (269)	0.28 (0.09)	381 (127)	254 (84)	1560 (516)				
27	0.21 (0.11)	280 (152)	191 (104)	1360 (733)	0.24 (0.12)	333 (163)	237 (116)	1490 (730)	0.29 (0.08)	398 (115)	265 (76)	1610 (462)	0.18 (0.07)	243 (98)	161 (65)	1040 (419)
28	0.21 (0.10)	286 (137)	195 (94)	1370 (660)	0.37 (0.20)	504 (278)	358 (198)	2220 (1220)	0.58 (0.33)	788 (453)	525 (302)	3150 (1810)	0.25 (0.12)	346 (161)	229 (107)	1460 (680)
29	0.13 (0.08)	180 (105)	123 (72)	849 (495)	0.20 (0.06)	278 (78)	198 (55)	1210 (343)	0.25 (0.10)	335 (136)	223 (91)	1320 (538)	0.15 (0.03)	210 (42)	139 (28)	876 (176)
30	0.22 (0.12)	303 (167)	207 (114)	1410 (775)	0.27 (0.15)	370 (204)	263 (145)	1590 (879)	0.25 (0.06)	347 (79)	231 (53)	1360 (308)	0.21 (0.10)	291 (135)	192 (89)	1200 (556)
Avg	0.20	274	187	1630	0.22	298	212	1580	0.28	383	254	1870	0.20	277	183	1460
n	26	26	26	26	26	26	26	26	27	27	27	27	22	22	22	22
SD	0.10	138	93.9	830	0.11	147	105	783	0.13	175	116	859	0.06	84.5	55.8	474
Min	0.06	84	57	624	0.09	121	86	825	0.11	153	102	653	0.13	176	117	864
Max	0.45	611	417	3710	0.52	716	509	4070	0.70	950	630	4830	0.39	539	356	2930

ED_004549_00015928-00216

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for December, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1	0.25 (0.15)	340 (202)	233 (138)	1560 (923)					0.31 (0.09)	416 (117)	278 (78)	1610 (447)	0.15 (0.07)	207 (101)	137 (67)	840 (410)
2	0.32 (0.20)	432 (278)	295 (191)	1950 (1260)	0.27 (0.15)	364 (210)	259 (150)	1530 (885)					0.35 (0.12)	474 (164)	314 (108)	1900 (660)
3	0.25 (0.06)	342 (86)	234 (59)	1530 (385)	0.19 (0.14)	254 (186)	181 (133)	1050 (774)					0.14 (0.06)	185 (86)	122 (57)	732 (342)
4	0.24 (0.09)	327 (123)	224 (84)	1440 (548)												
5	0.18 (0.07)	240 (91)	164 (62)	1040 (392)	0.17 (0.07)	234 (99)	167 (71)	953 (404)	0.32 (0.09)	432 (117)	288 (78)	1600 (435)	0.17 (0.05)	230 (68)	152 (45)	890 (262)
6	0.26 (0.08)	351 (108)	240 (74)	1510 (465)	0.22 (0.13)	302 (183)	215 (130)	1210 (731)	0.23 (0.11)	315 (149)	210 (100)	1160 (546)	0.23 (0.07)	318 (95)	211 (63)	1220 (365)
7	0.30 (0.11)	416 (149)	285 (102)	1760 (631)	0.31 (0.07)	423 (97)	302 (69)	1690 (385)	0.50 (0.08)	677 (113)	452 (75)	2460 (407)	0.28 (0.12)	387 (159)	256 (105)	1470 (605)
8	0.30 (0.11)	406 (155)	279 (106)	1700 (647)	0.30 (0.06)	403 (81)	287 (57)	1590 (314)	0.51 (0.11)	693 (146)	463 (97)	2500 (529)	0.27 (0.11)	364 (144)	241 (95)	1370 (545)
9	0.25 (0.09)	344 (123)	236 (84)	1420 (510)	0.29 (0.08)	401 (114)	286 (81)	1560 (440)	0.39 (0.15)	538 (210)	359 (140)	1920 (751)	0.22 (0.11)	294 (144)	194 (96)	1090 (538)
10	0.28 (0.14)	388 (190)	266 (130)	1590 (776)	0.35 (0.09)	480 (116)	342 (83)	1860 (449)	0.51 (0.07)	697 (101)	466 (68)	2470 (359)	0.27 (0.11)	374 (146)	247 (97)	1380 (540)
11																
12	0.39 (0.11)	530 (144)	364 (99)	2120 (575)	0.47 (0.19)	648 (264)	462 (188)	2460 (1000)	0.58 (0.09)	793 (115)	531 (77)	2760 (405)	0.32 (0.13)	440 (181)	291 (120)	1590 (658)
13	0.39 (0.10)	529 (139)	363 (96)	2100 (553)	0.32 (0.10)	434 (132)	309 (94)	1630 (494)	0.50 (0.09)	679 (125)	455 (84)	2350 (437)	0.25 (0.09)	338 (124)	224 (82)	1210 (443)
14	0.37 (0.12)	504 (157)	346 (108)	1970 (613)	0.38 (0.13)	521 (181)	372 (129)	1940 (675)	0.47 (0.14)	646 (195)	433 (130)	2210 (665)	0.31 (0.07)	429 (90)	284 (59)	1520 (319)
15	0.28 (0.07)	383 (97)	263 (67)	1480 (375)	0.23 (0.09)	315 (118)	225 (84)	1170 (438)	0.47 (0.15)	641 (198)	429 (133)	2180 (678)	0.21 (0.11)	281 (150)	186 (99)	989 (530)
16	0.34 (0.13)	465 (177)	319 (121)	1790 (676)	0.14 (0.08)	196 (115)	140 (82)	722 (423)	0.31 (0.15)	424 (208)	284 (140)	1440 (708)	0.21 (0.10)	285 (143)	189 (94)	997 (500)
17	0.36 (0.16)	496 (221)	340 (152)	1890 (840)	0.22 (0.09)	304 (118)	217 (84)	1110 (430)	0.23 (0.10)	308 (141)	206 (95)	1030 (476)				
18	0.52 (0.15)	706 (206)	486 (142)	2660 (779)	0.58 (0.19)	798 (255)	570 (182)	2890 (923)	0.75 (0.23)	1030 (311)	690 (208)	3430 (1030)	0.39 (0.14)	526 (196)	348 (130)	1810 (671)
19									0.58 (0.32)	786 (435)	527 (292)	2610 (1450)	0.35 (0.23)	475 (315)	315 (208)	1620 (1080)
20									0.51 (0.12)	697 (168)	468 (113)	2300 (549)	0.35 (0.13)	475 (183)	314 (121)	1610 (617)
21	0.47 (0.11)	643 (144)	442 (99)	2360 (530)	0.38 (0.15)	518 (200)	370 (142)	1840 (705)	0.59 (0.14)	807 (195)	542 (131)	2640 (642)	0.37 (0.13)	506 (179)	335 (119)	1700 (605)
22	0.59 (0.14)	800 (197)	551 (135)	2920 (715)	0.47 (0.12)	641 (162)	458 (116)	2260 (567)	0.77 (0.25)	1060 (342)	708 (230)	3440 (1120)	0.54 (0.14)	736 (190)	488 (126)	2460 (633)
23	0.27 (0.14)	363 (196)	250 (135)	1320 (714)	0.19 (0.17)	256 (228)	183 (163)	896 (800)	0.20 (0.25)	276 (335)	185 (225)	894 (1090)	0.22 (0.22)	295 (295)	196 (196)	981 (984)
24	0.35 (0.11)	484 (148)	333 (102)	1740 (528)	0.26 (0.11)	349 (144)	249 (103)	1210 (498)	0.24 (0.12)	331 (161)	222 (108)	1070 (519)	0.24 (0.11)	325 (146)	216 (97)	1070 (479)
25	0.58 (0.56)	796 (764)	548 (526)	2840 (2720)	0.42 (0.25)	568 (335)	406 (239)	1960 (1160)	0.54 (0.38)	742 (516)	499 (347)	2380 (1650)	0.48 (0.19)	651 (256)	431 (170)	2130 (838)
26	0.45 (0.20)	612 (277)	421 (191)	2170 (979)	0.44 (0.24)	596 (322)	426 (230)	2050 (1110)	0.52 (0.36)	712 (496)	478 (333)	2270 (1580)	0.55 (0.39)	757 (528)	502 (350)	2470 (1720)
27																
28	0.47 (0.17)	636 (228)	438 (157)	2220 (797)	0.33 (0.11)	450 (146)	321 (104)	1530 (494)	0.46 (0.12)	630 (166)	423 (112)	1990 (525)	0.33 (0.16)	448 (218)	297 (144)	1440 (702)
29	0.41 (0.09)	559 (119)	386 (82)	1940 (413)	0.29 (0.10)	396 (141)	283 (101)	1340 (475)	0.32 (0.09)	434 (126)	292 (85)	1370 (398)	0.39 (0.14)	531 (196)	352 (130)	1700 (631)
30	0.34 (0.19)	464 (263)	320 (181)	1600 (906)	0.29 (0.11)	401 (155)	286 (110)	1350 (518)	0.50 (0.34)	677 (462)	455 (311)	2120 (1450)	0.26 (0.13)	361 (182)	239 (121)	1150 (581)
31	0.34 (0.23)	467 (314)	322 (217)	1600 (1080)	0.33 (0.13)	448 (172)	320 (123)	1500 (575)	0.50 (0.34)	689 (463)	464 (311)	2150 (1440)	0.48 (0.28)	649 (383)	430 (254)	2060 (1210)
Avg	0.35	482	331	1860	0.31	428	305	1570	0.45	620	416	2090	0.31	420	278	1460
n	27	27	27	27	25	25	25	25	26	26	26	26	27	27	27	27
SD	0.10	140	97	448	0.10	143	102	500	0.15	201	135	658	0.11	149	99.1	461
Min	0.18	240	164	1040	0.14	196	140	722	0.20	276	185	894	0.14	185	122	732
Max	0.59	800	551	2920	0.58	798	570	2890	0.77	1060	708	3440	0.55	757	502	2470

ED_004549_00015928-00217

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for January, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1																
2	0.39 (0.26)	532 (360)	367 (248)	1810 (1220)	0.25 (0.06)	346 (88)	247 (63)	1140 (290)	0.16 (0.08)	224 (105)	151 (71)	693 (324)	0.31 (0.08)	416 (107)	276 (71)	1310 (338)
3					0.46 (0.28)	633 (378)	452 (270)	2090 (1240)								
4	0.92 (0.53)	1260 (724)	868 (500)	4220 (2430)	0.75 (0.27)	1020 (364)	730 (260)	3360 (1200)	0.82 (0.25)	1110 (343)	754 (232)	3430 (1060)	1.00 (0.21)	1370 (289)	906 (192)	4250 (902)
5	0.63 (0.19)	860 (257)	595 (178)	2880 (858)	0.38 (0.23)	525 (320)	375 (229)	1720 (1050)	0.76 (0.14)	1030 (195)	717 (139)	3250 (629)	0.62 (0.24)	850 (328)	564 (217)	2630 (1020)
6	0.85 (0.35)	1160 (475)	801 (328)	3850 (1580)	0.77 (0.32)	1060 (430)	755 (307)	3440 (1400)	0.75 (0.30)	1030 (405)	733 (294)	3310 (1330)	0.81 (0.38)	1110 (521)	733 (346)	3410 (1600)
7	0.86 (0.39)	1170 (537)	809 (371)	3870 (1780)	0.82 (0.29)	1120 (395)	801 (282)	3630 (1280)	0.75 (0.23)	1030 (307)	755 (226)	3390 (1020)	1.14 (0.39)	1560 (537)	1030 (356)	4780 (1650)
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
Avg	0.73	995	688	3330	0.57	784	560	2560	0.65	885	622	2820	0.78	1060	702	3280
n	5	5	5	5	6	6	6	6	5	5	5	5	5	5	5	5
SD	0.20	268	185	883	0.22	296	212	958	0.24	332	236	1060	0.29	400	265	1230
Min	0.39	532	367	1810	0.25	346	247	1140	0.16	224	151	693	0.31	416	276	1310
Max	0.92	1260	868	4220	0.82	1120	801	3630	0.82	1110	755	3430	1.14	1560	1030	4780

ED_004549_00015928-00218

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for February, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19													0.00 (0.00)	0 (0)	0 (0)	0 (0)
20													0.00 (0.00)	0 (0)	0 (0)	0 (0)
21													0.00 (0.00)	0 (0)	0 (0)	0 (0)
22																
23													0.00 (0.00)	0 (0)	0 (0)	0 (0)
24													0.00 (0.00)	0 (0)	0 (0)	0 (0)
25													0.00 (0.00)	0 (0)	0 (0)	0 (0)
26	0.17 (0.09)	235 (116)	64 (252)	5650 (22500)					0.02 (0.01)	22 (14)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
27	0.19 (0.02)	258 (31)	77 (9)	6610 (671)					0.01 (0.01)	12 (17)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
28	0.20 (0.03)	278 (38)	83 (11)	6550 (1060)					0.03 (0.01)	40 (16)	0 (0)	0 (0)	0.00 (0.00)	0 (2)	0 (0)	0 (0)
29	0.16 (0.03)	219 (43)	65 (13)	4690 (900)					0.02 (0.01)	23 (17)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
Avg	0.18	247	72	5870					0.02	24	0	0	0.00	0	0	0
n	4	4	4	4	0	0	0	0	4	4	4	4	10	10	10	10
SD	0.02	22.5	8.14	784					0.01	10.3	0	0	0.00	0.036	0	0
Min	0.16	219	64	4690					0.01	12	0	0	0.00	0	0	0
Max	0.20	278	83	6610					0.03	40	0	0	0.00	0	0	0

ED_004549_00015928-00219

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for March, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1	0.21 (0.04)	283 (58)	85 (17)	5580 (1070)					0.02 (0.02)	31 (32)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
2	0.26 (0.04)	360 (50)	108 (15)	6600 (824)					0.04 (0.03)	59 (34)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
3	0.25 (0.04)	335 (51)	100 (15)	5780 (845)					0.04 (0.03)	57 (39)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
4	0.27 (0.10)	368 (130)	110 (39)	6000 (2070)					0.03 (0.01)	47 (14)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
5	0.24 (0.05)	332 (67)	100 (20)	5140 (964)	0.12 (0.07)	159 (90)	47 (27)	4490 (2460)	0.03 (0.01)	38 (10)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
6	0.26 (0.01)	356 (18)	107 (6)	5240 (267)	0.17 (0.04)	236 (50)	70 (15)	6060 (1190)	0.02 (0.01)	33 (13)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
7	0.29 (0.11)	398 (153)	119 (46)	5610 (2170)	0.19 (0.02)	263 (28)	78 (8)	6160 (640)					0.00 (0.00)	0 (0)	0 (0)	0 (0)
8	0.21 (0.03)	280 (37)	84 (11)	3790 (515)	0.18 (0.01)	247 (19)	74 (6)	5290 (442)	0.01 (0.01)	19 (20)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
9	0.21 (0.04)	285 (48)	85 (15)	3690 (603)	0.24 (0.06)	325 (77)	97 (23)	6440 (1420)	0.02 (0.01)	29 (8)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
10	0.25 (0.06)	344 (81)	103 (24)	4310 (1000)	0.25 (0.02)	335 (33)	100 (10)	6190 (612)	0.01 (0.01)	15 (14)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
11	0.25 (0.05)	335 (71)	100 (21)	4050 (847)	0.24 (0.04)	323 (48)	96 (14)	5620 (793)	0.00 (0.00)	0 (1)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
12	0.34 (0.17)	466 (229)	140 (69)	5420 (2640)									0.00 (0.00)	0 (0)	0 (0)	0 (0)
13																
14																
15																
16	0.42 (0.09)	575 (127)	173 (38)	5930 (1290)	0.27 (0.05)	374 (65)	111 (19)	5130 (865)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
17	0.36 (0.05)	488 (71)	150 (20)	5010 (674)	0.49 (0.50)	671 (680)	200 (203)	8870 (8980)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
18	0.45 (0.18)	620 (239)	216 (86)	7000 (2770)	0.38 (0.18)	525 (247)	156 (74)	6690 (3120)								
19	0.37 (0.07)	511 (90)	203 (32)	6390 (1020)	0.31 (0.04)	425 (49)	127 (15)	5220 (570)								
20	0.55 (0.37)	751 (503)	358 (246)	10900 (7480)	0.37 (0.09)	507 (121)	151 (36)	6020 (1420)								
21	0.35 (0.06)	477 (85)	264 (51)	7830 (1490)	0.38 (0.15)	523 (208)	156 (62)	6030 (2390)								
22	0.30 (0.02)	409 (31)	230 (18)	6640 (504)	0.29 (0.03)	392 (35)	117 (10)	4370 (362)								
23	0.29 (0.05)	398 (62)	224 (35)	6290 (948)	0.31 (0.06)	426 (76)	127 (23)	4620 (802)								
24	0.31 (0.07)	427 (100)	241 (56)	6550 (1490)	0.31 (0.11)	425 (146)	127 (44)	4440 (1500)								
25	0.29 (0.03)	389 (46)	219 (26)	5810 (668)	0.52 (0.34)	706 (460)	214 (140)	7310 (4750)								
26	0.34 (0.11)	469 (155)	264 (87)	6820 (2230)	0.46 (0.15)	630 (198)	206 (67)	6830 (2190)								
27	0.24 (0.03)	334 (41)	188 (23)	4730 (559)	0.31 (0.05)	427 (67)	152 (26)	4900 (813)								
28	0.39 (0.10)	526 (136)	297 (77)	7230 (1830)	0.41 (0.22)	564 (297)	223 (122)	6980 (3770)								
29	0.28 (0.04)	383 (50)	216 (28)	5130 (681)	0.44 (0.21)	602 (292)	265 (132)	8030 (3970)					0.24 (0.11)	327 (150)	220 (101)	5290 (2440)
30	0.32 (0.09)	433 (117)	244 (66)	5620 (1490)	0.44 (0.08)	604 (103)	297 (53)	8760 (1530)					0.26 (0.06)	355 (85)	239 (57)	5590 (1310)
31	0.50 (0.13)	680 (174)	387 (100)	8690 (2220)	0.58 (0.15)	797 (210)	437 (117)	12500 (3340)					0.46 (0.10)	632 (131)	426 (89)	9790 (2000)
Avg	0.31	429	183	5990	0.33	456	158	6390	0.02	27	0	0	0.06	77	52	1220
n	28	28	28	28	23	23	23	23	12	12	12	12	17	17	17	17
SD	0.09	116	83.1	1480	0.12	162	86.3	1810	0.02	20.1	0	0	0.13	177	119	2770
Min	0.21	280	84	3690	0.12	159	47	4370	0.00	0	0	0	0.00	0	0	0
Max	0.55	751	387	10900	0.58	797	437	12500	0.04	59	0	0	0.46	632	426	9790

ED_004549_00015928-00220

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for April, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1	0.30 (0.04)	410 (60)	244 (34)	5310 (761)	0.27 (0.14)	371 (189)	208 (104)	5800 (2950)					0.30 (0.06)	406 (84)	274 (57)	6150 (1300)
2	0.35 (0.06)	475 (84)	296 (52)	6290 (1110)	0.36 (0.09)	484 (126)	289 (75)	7810 (2040)								
3	0.34 (0.08)	463 (108)	307 (75)	6300 (1500)	0.27 (0.07)	363 (94)	232 (63)	6090 (1620)	0.08 (0.05)	108 (63)	66 (39)	1740 (1000)	0.26 (0.04)	356 (55)	240 (37)	5190 (788)
4					0.17 (0.06)	228 (81)	154 (55)	3930 (1390)	0.09 (0.03)	125 (38)	77 (24)	1960 (599)	0.21 (0.05)	285 (74)	192 (50)	4080 (1060)
5	0.39 (0.27)	535 (366)	371 (254)	7220 (4940)	0.37 (0.22)	500 (306)	341 (208)	8440 (5140)	0.14 (0.07)	185 (101)	113 (62)	2820 (1520)	0.34 (0.18)	469 (244)	316 (164)	6590 (3420)
6	0.34 (0.17)	465 (227)	323 (158)	6090 (2970)	0.32 (0.18)	433 (249)	295 (170)	7100 (4070)	0.09 (0.02)	128 (32)	79 (19)	1910 (475)	0.19 (0.06)	256 (84)	172 (57)	3530 (1160)
7	0.35 (0.19)	471 (265)	327 (184)	6020 (3380)	0.29 (0.14)	401 (197)	273 (134)	6380 (3120)	0.09 (0.03)	120 (44)	74 (27)	1750 (642)	0.25 (0.15)	337 (198)	228 (133)	4580 (2690)
8	0.37 (0.20)	510 (278)	354 (193)	6310 (3410)	0.23 (0.09)	310 (126)	211 (86)	4800 (1920)								
9	0.25 (0.10)	348 (135)	242 (94)	4190 (1610)	0.32 (0.21)	431 (289)	294 (197)	6470 (4310)	0.07 (0.03)	92 (41)	56 (25)	1280 (564)	0.25 (0.11)	344 (146)	232 (99)	4510 (1910)
10	0.19 (0.06)	252 (82)	175 (57)	2960 (946)					0.10 (0.02)	129 (32)	80 (20)	1760 (437)	0.19 (0.10)	254 (137)	171 (93)	3260 (1750)
11					0.35 (0.36)	479 (487)	327 (332)	6810 (6900)					0.45 (0.22)	611 (297)	412 (201)	7730 (3760)
12	0.15 (0.03)	205 (38)	143 (27)	2280 (407)	0.13 (0.02)	181 (21)	124 (14)	2500 (279)	0.08 (0.06)	107 (80)	66 (49)	1400 (1040)	0.27 (0.11)	368 (146)	249 (98)	4570 (1800)
13	0.20 (0.04)	268 (54)	187 (37)	2890 (565)	0.18 (0.09)	246 (122)	168 (83)	3310 (1640)	0.14 (0.03)	192 (37)	118 (23)	2470 (475)	0.24 (0.06)	326 (84)	220 (57)	3980 (1010)
14	0.31 (0.14)	420 (194)	292 (135)	4410 (2030)	0.33 (0.18)	448 (241)	306 (165)	5850 (3130)	0.23 (0.13)	309 (183)	190 (112)	3910 (2300)	0.28 (0.13)	388 (181)	262 (122)	4650 (2160)
15	0.28 (0.16)	388 (216)	270 (150)	3960 (2210)	0.19 (0.07)	252 (92)	173 (63)	3200 (1160)	0.18 (0.08)	242 (111)	149 (68)	3000 (1360)				
16	0.28 (0.15)	379 (199)	264 (139)	3780 (1990)	0.16 (0.05)	224 (73)	153 (50)	2770 (905)	0.22 (0.13)	302 (175)	186 (108)	3680 (2120)	0.24 (0.10)	330 (138)	223 (93)	3810 (1600)
17	0.34 (0.17)	462 (229)	322 (159)	4480 (2210)	0.15 (0.09)	198 (125)	135 (85)	2370 (1490)	0.17 (0.07)	225 (97)	139 (60)	2710 (1170)	0.19 (0.11)	259 (149)	175 (101)	2930 (1690)
18	0.24 (0.15)	331 (210)	230 (146)	3130 (1970)					0.16 (0.10)	215 (139)	132 (86)	2530 (1640)	0.25 (0.24)	345 (330)	233 (223)	3820 (3650)
19	0.31 (0.13)	419 (176)	292 (123)	3850 (1610)	0.26 (0.19)	357 (263)	244 (180)	4040 (2970)	0.24 (0.15)	330 (207)	203 (128)	3810 (2390)	0.31 (0.13)	423 (179)	286 (121)	4590 (1930)
20	0.40 (0.19)	543 (258)	378 (180)	4870 (2300)	0.34 (0.25)	464 (342)	317 (234)	5100 (3730)	0.25 (0.14)	341 (193)	210 (119)	3880 (2170)	0.28 (0.18)	384 (240)	260 (162)	4080 (2550)
21	0.38 (0.25)	520 (340)	362 (237)	4540 (2970)	0.23 (0.09)	309 (126)	211 (86)	3320 (1350)	0.21 (0.18)	288 (249)	177 (153)	3220 (2780)	0.33 (0.23)	445 (310)	300 (210)	4640 (3240)
22	0.31 (0.21)	428 (286)	298 (199)	3660 (2440)	0.22 (0.13)	303 (176)	207 (121)	3160 (1840)	0.22 (0.14)	298 (190)	184 (117)	3270 (2090)	0.13 (0.07)	181 (91)	123 (62)	1850 (936)
23	0.54 (0.57)	732 (779)	510 (543)	6100 (6490)	0.20 (0.13)	270 (179)	185 (122)	2760 (1830)	0.18 (0.11)	251 (145)	155 (89)	2710 (1570)				
24	0.36 (0.18)	497 (244)	346 (170)	4030 (1970)					0.08 (0.03)	113 (34)	70 (21)	1190 (362)	0.13 (0.08)	175 (113)	118 (76)	1710 (1110)
25																
26	0.34 (0.18)	460 (242)	321 (169)	3560 (1870)	0.29 (0.21)	394 (289)	270 (198)	3690 (2700)	0.22 (0.13)	305 (177)	188 (109)	3110 (1810)	0.41 (0.17)	555 (230)	375 (156)	5200 (2150)
27	0.28 (0.09)	385 (124)	268 (87)	2910 (938)	0.19 (0.04)	255 (47)	175 (32)	2340 (428)	0.19 (0.09)	258 (120)	159 (74)	2580 (1200)	0.27 (0.15)	375 (204)	253 (138)	3430 (1870)
28	0.41 (0.19)	566 (258)	395 (180)	4180 (1910)	0.27 (0.11)	374 (145)	256 (99)	3330 (1290)	0.20 (0.08)	277 (115)	171 (71)	2720 (1120)	0.36 (0.23)	498 (316)	337 (214)	4460 (2830)
29	0.43 (0.18)	585 (252)	408 (176)	4220 (1810)					0.28 (0.19)	380 (255)	234 (157)	3650 (2440)	0.38 (0.21)	525 (284)	355 (192)	4610 (2490)
30	0.52 (0.25)	706 (347)	493 (242)	4980 (2440)	0.36 (0.19)	496 (263)	339 (180)	4200 (2220)	0.36 (0.30)	494 (404)	305 (249)	4650 (3810)				
Avg	0.33	453	312	4540	0.26	351	236	4620	0.17	233	143	2710	0.27	371	250	4330
n	27	27	27	27	25	25	25	25	25	25	25	25	24	24	24	24
SD	0.09	118	83.5	1260	0.07	98.8	65.8	1790	0.07	101	62.1	908	0.08	108	72.8	1300
Min	0.15	205	143	2280	0.13	181	124	2340	0.07	92	56	1190	0.13	175	118	1710
Max	0.54	732	510	7220	0.37	500	341	8440	0.36	494	305	4650	0.45	611	412	7730

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Table E9. Daily means (SD) of NMHC emissions at Site IN3B for May, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1	0.64 (0.29)	872 (396)	608 (276)	6010 (2730)	0.42 (0.33)	570 (443)	390 (304)	4700 (3640)	0.50 (0.27)	682 (366)	421 (226)	6290 (3370)	0.38 (0.19)	520 (255)	352 (172)	4360 (2140)
2	0.58 (0.23)	796 (318)	555 (222)	5370 (2140)	0.61 (0.30)	835 (404)	572 (277)	6720 (3240)	0.55 (0.28)	749 (385)	462 (238)	6770 (3470)	0.43 (0.26)	586 (353)	396 (239)	4800 (2890)
3	0.48 (0.18)	660 (248)	461 (173)	4360 (1640)	0.43 (0.23)	593 (309)	406 (212)	4670 (2430)	0.40 (0.15)	543 (200)	335 (123)	4820 (1780)	0.40 (0.17)	546 (228)	370 (154)	4390 (1820)
4	0.44 (0.20)	596 (276)	416 (192)	3850 (1780)	0.30 (0.15)	413 (201)	282 (137)	3170 (1530)	0.29 (0.15)	395 (205)	244 (127)	3420 (1770)	0.34 (0.21)	470 (289)	318 (196)	3700 (2270)
5	0.36 (0.23)	486 (318)	340 (222)	3080 (2010)	0.31 (0.17)	418 (231)	286 (158)	3130 (1720)					0.15 (0.10)	198 (130)	134 (88)	1530 (1010)
6	0.35 (0.16)	476 (216)	332 (151)	2950 (1350)	0.21 (0.10)	287 (133)	197 (91)	2110 (975)	0.28 (0.16)	380 (223)	235 (138)	3160 (1860)	0.16 (0.11)	218 (153)	148 (104)	1650 (1160)
7	0.60 (0.30)	824 (403)	575 (281)	5000 (2440)	0.52 (0.27)	707 (363)	484 (248)	5050 (2580)	0.39 (0.22)	536 (301)	331 (186)	4350 (2430)	0.57 (0.32)	773 (433)	524 (293)	5680 (3180)
8	0.52 (0.09)	715 (117)	499 (82)	4260 (688)	0.34 (0.09)	467 (117)	320 (80)	3270 (818)	0.35 (0.10)	483 (141)	298 (87)	3840 (1110)	0.43 (0.12)	589 (169)	399 (115)	4240 (1220)
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
Avg	0.50	678	473	4360	0.39	536	367	4100	0.39	538	332	4670	0.36	488	330	3790
n	8	8	8	8	8	8	8	8	7	7	7	7	8	8	8	8
SD	0.10	141	98.2	1000	0.12	165	113	1370	0.09	127	78.6	1290	0.13	181	123	1380
Min	0.35	476	332	2950	0.21	287	197	2110	0.28	380	235	3160	0.15	198	134	1530
Max	0.64	872	608	6010	0.61	835	572	6720	0.55	749	462	6770	0.57	773	524	5680

ED_004549_00015928-00222

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for August, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16	0.11 (0.07)	152 (94)	769 (475)	3360 (2080)	0.94 (0.78)	1290 (1070)	2800 (2330)	12300 (10200)	1.45 (0.73)	1980 (1000)	3340 (1690)	14600 (7390)	0.23 (0.15)	315 (201)	964 (616)	4380 (2800)
17	0.09 (0.10)	126 (142)	634 (717)	2760 (3120)	1.05 (0.80)	1430 (1090)	3100 (2360)	13600 (10300)	1.35 (0.78)	1850 (1060)	3130 (1790)	13600 (7790)	0.26 (0.16)	355 (219)	1090 (670)	4920 (3030)
18	0.10 (0.14)	138 (184)	695 (930)	3010 (4030)	1.50 (0.99)	2050 (1350)	4460 (2920)	19400 (12700)	1.25 (0.75)	1710 (1020)	2890 (1720)	12500 (7460)	0.27 (0.21)	370 (287)	1130 (880)	5110 (3960)
19																
20																
21																
22																
23	0.00 (0.00)	0 (0)	0 (0)	0 (0)												
24																
25																
26																
27	0.07 (0.04)	98 (58)	28 (17)	2380 (1370)												
28	0.13 (0.05)	177 (66)	51 (19)	3940 (1460)												
29	0.14 (0.03)	194 (45)	56 (13)	3990 (920)												
30	0.13 (0.04)	175 (58)	50 (17)	3310 (1100)												
31	0.13 (0.02)	174 (23)	50 (7)	3060 (395)									0.00 (0.00)	0 (0)	0 (0)	0 (0)
Avg	0.10	137	259	2870	1.16	1590	3450	15100	1.35	1850	3120	13600	0.19	260	796	3600
n	9	9	9	9	3	3	3	3	3	3	3	3	4	4	4	4
SD	0.04	56.1	313	1120	0.24	333	724	3110	0.08	110	186	863	0.11	151	464	2100
Min	0.00	0	0	0	0.94	1290	2800	12300	1.25	1710	2890	12500	0.00	0	0	0
Max	0.14	194	769	3990	1.50	2050	4460	19400	1.45	1980	3340	14600	0.27	370	1130	5110

ED_004549_00015928-00223

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for September, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1	0.13 (0.02)	177 (30)	51 (9)	2940 (510)									0.00 (0.00)	0 (0)	0 (0)	0 (0)
2	0.15 (0.05)	208 (61)	60 (18)	3260 (944)												
3	0.14 (0.04)	192 (48)	55 (14)	2850 (697)												
4	0.12 (0.03)	159 (37)	46 (11)	2240 (524)	0.16 (0.06)	214 (86)	70 (28)	5480 (2360)								
5	0.06 (0.05)	83 (64)	24 (18)	1140 (880)	0.13 (0.05)	177 (66)	88 (42)	6240 (2810)								
6					0.13 (0.06)	180 (84)	115 (54)	7580 (3580)								
7					0.13 (0.06)	177 (85)	113 (54)	6930 (3370)								
8					0.12 (0.05)	160 (66)	102 (42)	5920 (2480)								
9	0.11 (0.10)	155 (141)	107 (103)	4290 (4100)									0.08 (0.02)	111 (31)	53 (47)	4620 (4100)
10	0.29 (0.05)	393 (69)	280 (49)	11000 (1940)	0.12 (0.02)	162 (31)	104 (20)	5390 (1060)	0.14 (0.04)	195 (55)	132 (38)	7960 (2210)	0.10 (0.03)	132 (37)	95 (27)	8090 (2240)
11	0.23 (0.14)	319 (188)	227 (133)	8660 (5120)	0.09 (0.06)	120 (75)	78 (48)	3830 (2380)	0.08 (0.06)	107 (77)	72 (52)	4110 (2990)	0.22 (0.31)	304 (418)	220 (302)	16900 (23100)
12	0.24 (0.04)	328 (51)	234 (36)	8630 (1380)	0.15 (0.03)	210 (40)	136 (26)	6450 (1220)	0.08 (0.01)	110 (18)	75 (12)	4010 (695)	0.09 (0.02)	116 (25)	84 (18)	5860 (1360)
13	0.18 (0.02)	250 (30)	178 (22)	6380 (816)	0.20 (0.08)	274 (107)	178 (69)	8110 (3140)	0.19 (0.16)	260 (218)	177 (148)	8860 (7410)	0.08 (0.04)	106 (56)	77 (41)	4910 (2510)
14	0.24 (0.04)	324 (52)	231 (37)	8030 (1270)	0.15 (0.03)	208 (35)	136 (23)	5930 (985)	0.10 (0.02)	140 (33)	96 (22)	4620 (1090)	0.07 (0.03)	101 (38)	73 (28)	4340 (1580)
15	0.30 (0.17)	407 (227)	290 (162)	9760 (5450)	0.19 (0.07)	263 (100)	172 (66)	7260 (2780)	0.10 (0.02)	140 (22)	95 (15)	4380 (691)	0.09 (0.02)	124 (28)	90 (20)	5030 (1090)
16	0.18 (0.07)	242 (91)	173 (65)	5680 (2150)	0.19 (0.04)	254 (55)	167 (36)	6760 (1450)	0.12 (0.04)	159 (49)	108 (33)	4760 (1430)	0.10 (0.03)	139 (38)	101 (28)	5330 (1420)
17	0.09 (0.03)	125 (41)	89 (29)	2850 (951)	0.20 (0.05)	267 (66)	176 (44)	6890 (1690)	0.14 (0.05)	187 (68)	128 (46)	5410 (1930)	0.09 (0.04)	117 (52)	85 (38)	4290 (1930)
18	0.11 (0.04)	154 (47)	110 (34)	3420 (1050)	0.20 (0.06)	268 (80)	177 (53)	6730 (2020)	0.20 (0.13)	274 (179)	187 (122)	7620 (4980)	0.08 (0.03)	113 (45)	82 (32)	3920 (1560)
19	0.10 (0.04)	141 (51)	100 (36)	3030 (1100)	0.24 (0.08)	321 (110)	212 (73)	7830 (2680)	0.14 (0.03)	185 (45)	126 (31)	4980 (1210)	0.09 (0.04)	122 (56)	89 (41)	4050 (1880)
20	0.11 (0.04)	145 (52)	103 (37)	3030 (1080)	0.26 (0.07)	350 (96)	232 (64)	8330 (2270)	0.12 (0.04)	166 (51)	113 (35)	4300 (1310)	0.08 (0.04)	112 (51)	82 (37)	3580 (1640)
21	0.11 (0.03)	154 (40)	110 (29)	3140 (814)	0.26 (0.08)	355 (108)	236 (72)	8210 (2490)	0.14 (0.04)	196 (58)	134 (40)	4930 (1440)	0.08 (0.03)	109 (44)	79 (32)	3340 (1350)
22	0.18 (0.19)	249 (256)	178 (183)	4940 (5060)					0.18 (0.03)	245 (41)	167 (28)	5990 (1020)	0.10 (0.03)	132 (46)	96 (34)	3890 (1370)
23	0.14 (0.04)	197 (60)	141 (43)	3810 (1160)	0.27 (0.13)	364 (174)	242 (116)	7950 (3790)	0.21 (0.08)	289 (114)	197 (78)	6820 (2680)	0.10 (0.03)	139 (41)	101 (30)	3950 (1170)
24	0.14 (0.04)	185 (50)	132 (36)	3480 (950)	0.20 (0.06)	274 (88)	183 (59)	5830 (1860)	0.20 (0.06)	269 (77)	184 (53)	6180 (1760)	0.09 (0.02)	123 (31)	90 (23)	3380 (886)
25	0.13 (0.03)	171 (43)	122 (31)	3120 (788)	0.17 (0.05)	231 (63)	154 (42)	4760 (1300)	0.14 (0.05)	187 (70)	128 (48)	4160 (1530)	0.09 (0.02)	117 (31)	85 (23)	3100 (839)
26	0.14 (0.04)	188 (50)	134 (36)	3340 (891)	0.17 (0.03)	226 (45)	151 (30)	4560 (905)	0.18 (0.06)	245 (87)	167 (59)	5270 (1850)	0.09 (0.03)	116 (44)	84 (32)	2990 (1140)
27	0.13 (0.03)	171 (40)	122 (29)	2950 (693)	0.17 (0.04)	233 (60)	155 (40)	4550 (1160)	0.18 (0.05)	245 (70)	167 (48)	5110 (1450)	0.09 (0.03)	116 (43)	85 (31)	2890 (1070)
28	0.13 (0.04)	181 (47)	129 (34)	3050 (804)	0.19 (0.06)	265 (78)	177 (52)	5050 (1480)	0.15 (0.03)	202 (36)	138 (24)	4080 (731)	0.10 (0.04)	129 (56)	94 (41)	3140 (1380)
29																
30																
Avg	0.16	212	137	4600	0.18	241	154	6370	0.15	200	136	5450	0.09	123	88	4650
n	25	25	25	25	23	23	23	23	19	19	19	19	21	21	21	21
SD	0.06	81.6	70.3	2560	0.05	63.8	48.4	1280	0.04	54	36.9	1400	0.04	49	36.2	3110
Min	0.06	83	24	1140	0.09	120	70	3830	0.08	107	72	4010	0.00	0	0	0
Max	0.30	407	290	11000	0.27	364	242	8330	0.21	289	197	8860	0.22	304	220	16900

ED_004549_00015928-00224

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for October, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1																
2	0.13 (0.02)	171 (26)	122 (19)	2570 (388)	0.15 (0.03)	198 (39)	132 (26)	3380 (659)	0.14 (0.02)	185 (27)	126 (18)	3340 (478)	0.11 (0.02)	153 (31)	111 (23)	3270 (678)
3	0.15 (0.03)	199 (34)	143 (24)	2920 (490)	0.17 (0.05)	225 (71)	150 (48)	3740 (1180)	0.18 (0.05)	244 (70)	167 (47)	4280 (1210)	0.10 (0.02)	135 (30)	99 (22)	2810 (644)
4	0.14 (0.02)	193 (31)	138 (22)	2760 (437)	0.15 (0.03)	200 (37)	133 (25)	3220 (599)	0.14 (0.02)	191 (27)	130 (18)	3260 (456)	0.11 (0.03)	145 (42)	106 (31)	2910 (856)
5	0.12 (0.03)	165 (39)	118 (28)	2300 (549)	0.14 (0.03)	186 (46)	125 (31)	2940 (716)	0.14 (0.03)	189 (36)	129 (24)	3130 (586)	0.10 (0.04)	134 (49)	98 (36)	2630 (982)
6	0.13 (0.03)	170 (45)	122 (32)	2310 (610)												
7	0.12 (0.03)	170 (35)	122 (25)	2240 (457)	0.14 (0.03)	196 (41)	131 (28)	2920 (613)	0.15 (0.04)	202 (60)	138 (41)	3160 (935)				
8	0.12 (0.04)	170 (48)	122 (34)	2180 (611)	0.15 (0.07)	205 (90)	137 (60)	2960 (1290)	0.16 (0.05)	212 (64)	145 (44)	3220 (963)				
9	0.11 (0.03)	150 (41)	108 (30)	1880 (515)	0.14 (0.04)	187 (52)	125 (35)	2640 (726)	0.16 (0.07)	216 (92)	147 (63)	3180 (1360)				
10	0.10 (0.03)	131 (40)	94 (29)	1590 (492)	0.11 (0.02)	156 (25)	105 (17)	2140 (341)	0.13 (0.03)	180 (34)	123 (23)	2580 (486)				
11	0.13 (0.06)	182 (77)	131 (56)	2160 (911)	0.15 (0.07)	202 (91)	135 (61)	2690 (1210)	0.16 (0.08)	214 (113)	146 (77)	2970 (1560)				
12	0.10 (0.04)	143 (49)	102 (35)	1640 (562)	0.11 (0.04)	146 (60)	98 (40)	1900 (770)	0.13 (0.04)	172 (55)	117 (38)	2320 (747)				
13	0.60 (1.32)	823 (1810)	592 (1300)	9230 (20300)	0.16 (0.06)	217 (78)	145 (52)	2730 (969)	0.16 (0.06)	216 (83)	148 (57)	2830 (1080)				
14	0.13 (0.05)	174 (70)	125 (50)	1900 (761)					0.17 (0.05)	229 (63)	157 (43)	2930 (795)				
15	0.12 (0.06)	165 (75)	118 (54)	1750 (802)	0.14 (0.06)	191 (84)	128 (56)	2280 (999)	0.21 (0.12)	293 (165)	200 (113)	3610 (2040)				
16	0.12 (0.02)	164 (22)	118 (16)	1700 (233)	0.13 (0.03)	172 (46)	115 (31)	2000 (536)	0.17 (0.04)	236 (55)	162 (38)	2840 (662)				
17																
18	0.14 (0.04)	197 (53)	142 (38)	1940 (513)	0.12 (0.03)	161 (40)	108 (27)	1770 (435)	0.20 (0.03)	269 (43)	184 (29)	3050 (483)				
19	0.14 (0.04)	188 (47)	136 (34)	1800 (453)	0.12 (0.04)	168 (48)	113 (32)	1810 (515)	0.19 (0.03)	263 (45)	180 (31)	2890 (484)				
20	0.17 (0.06)	230 (75)	166 (54)	2140 (698)					0.19 (0.03)	259 (44)	178 (30)	2770 (474)				
21																
22	0.16 (0.03)	222 (41)	160 (29)	1970 (363)					0.25 (0.08)	339 (114)	233 (78)	3440 (1140)				
23																
24																
25																
26																
27																
28																
29	0.17 (0.03)	226 (40)	164 (29)	1710 (295)					0.23 (0.04)	315 (56)	217 (39)	2640 (476)				
30	0.19 (0.06)	255 (77)	184 (56)	1880 (570)					0.23 (0.05)	320 (69)	220 (48)	2610 (562)				
31	0.20 (0.08)	279 (104)	202 (75)	2010 (749)					0.30 (0.13)	405 (183)	279 (126)	3230 (1460)				
Avg	0.16	217	156	2390	0.14	187	125	2610	0.18	245	168	3060	0.10	142	103	2900
n	22	22	22	22	15	15	15	15	21	21	21	21	4	4	4	4
SD	0.10	137	98.5	1530	0.02	21.9	14.5	587	0.04	59.3	41	410	0.01	7.58	5.5	232
Min	0.10	131	94	1590	0.11	146	98	1770	0.13	172	117	2320	0.10	134	98	2630
Max	0.60	823	592	9230	0.17	225	150	3740	0.30	405	279	4280	0.11	153	111	3270

ED_004549_00015928-00225

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for November, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1	0.21 (0.07)	282 (91)	204 (66)	1990 (638)					0.24 (0.09)	332 (120)	228 (82)	2580 (922)				
2	0.21 (0.09)	286 (123)	206 (89)	1970 (849)					0.24 (0.05)	329 (68)	226 (47)	2500 (508)				
3	0.21 (0.09)	282 (122)	204 (88)	1910 (820)					0.18 (0.07)	249 (93)	171 (64)	1850 (688)				
4																
5																
6	0.22 (0.05)	295 (73)	213 (53)	1880 (463)					0.31 (0.12)	428 (160)	295 (110)	2950 (1100)				
7	0.23 (0.07)	312 (91)	226 (66)	1950 (571)	0.21 (0.07)	281 (96)	190 (65)	1890 (643)	0.27 (0.08)	369 (105)	254 (72)	2480 (705)	0.18 (0.05)	245 (64)	180 (47)	1870 (488)
8	0.20 (0.03)	272 (39)	197 (28)	1670 (234)	0.18 (0.03)	241 (39)	163 (26)	1590 (250)	0.24 (0.02)	322 (28)	222 (19)	2120 (179)	0.15 (0.03)	199 (40)	146 (30)	1480 (294)
9	0.21 (0.03)	288 (41)	208 (30)	1730 (244)	0.19 (0.02)	262 (30)	178 (20)	1690 (186)	0.21 (0.03)	291 (45)	200 (31)	1870 (279)	0.19 (0.03)	258 (36)	190 (27)	1870 (256)
10	0.24 (0.09)	331 (118)	240 (85)	1950 (694)	0.22 (0.06)	297 (75)	201 (51)	1870 (469)	0.24 (0.04)	333 (51)	229 (35)	2090 (314)	0.24 (0.05)	330 (72)	243 (53)	2340 (511)
11	0.23 (0.03)	316 (45)	229 (32)	1830 (253)	0.21 (0.02)	281 (29)	190 (20)	1740 (172)	0.25 (0.04)	337 (54)	232 (37)	2070 (322)	0.24 (0.06)	331 (79)	244 (59)	2290 (541)
12	0.28 (0.07)	384 (96)	279 (70)	2190 (547)	0.25 (0.06)	345 (77)	234 (52)	2090 (465)	0.28 (0.05)	385 (63)	265 (43)	2320 (378)	0.28 (0.09)	380 (118)	280 (87)	2570 (799)
13	0.29 (0.07)	402 (93)	291 (68)	2250 (522)	0.25 (0.06)	337 (81)	229 (55)	2010 (478)	0.25 (0.04)	347 (56)	239 (38)	2050 (326)	0.27 (0.08)	371 (109)	274 (80)	2460 (717)
14																
15	0.23 (0.05)	320 (64)	232 (47)	1730 (341)	0.18 (0.03)	250 (43)	170 (29)	1430 (246)	0.21 (0.05)	284 (67)	195 (46)	1610 (381)	0.19 (0.03)	257 (38)	189 (28)	1630 (236)
16	0.24 (0.04)	331 (60)	240 (44)	1760 (322)	0.18 (0.02)	243 (26)	165 (18)	1360 (145)	0.19 (0.05)	258 (64)	178 (44)	1430 (351)	0.19 (0.02)	256 (22)	189 (16)	1590 (130)
17	0.28 (0.09)	375 (127)	272 (92)	1970 (662)	0.17 (0.01)	228 (19)	155 (13)	1260 (102)	0.18 (0.05)	243 (68)	167 (47)	1330 (371)	0.19 (0.03)	255 (35)	188 (25)	1550 (208)
18	0.22 (0.11)	294 (145)	213 (105)	1510 (749)	0.18 (0.04)	244 (49)	165 (33)	1320 (260)								
19	0.18 (0.04)	252 (58)	183 (42)	1280 (293)	0.23 (0.06)	320 (87)	217 (59)	1700 (459)	0.26 (0.08)	361 (110)	249 (76)	1900 (576)	0.16 (0.02)	222 (33)	164 (24)	1300 (195)
20	0.30 (0.24)	411 (332)	299 (241)	2050 (1650)	0.19 (0.03)	257 (39)	174 (27)	1340 (204)	0.25 (0.04)	338 (51)	233 (35)	1750 (262)	0.19 (0.06)	253 (85)	187 (63)	1450 (483)
21	0.21 (0.05)	281 (70)	204 (51)	1380 (345)	0.19 (0.03)	257 (39)	175 (27)	1320 (197)	0.24 (0.04)	322 (59)	222 (41)	1630 (295)	0.20 (0.02)	277 (32)	204 (24)	1560 (177)
22	0.22 (0.04)	305 (48)	221 (35)	1480 (232)	0.21 (0.04)	287 (49)	195 (33)	1450 (242)	0.27 (0.05)	362 (63)	250 (44)	1810 (310)	0.19 (0.02)	266 (31)	196 (23)	1470 (167)
23	0.28 (0.14)	383 (195)	278 (142)	1840 (933)	0.30 (0.14)	412 (192)	280 (130)	2050 (950)	0.41 (0.18)	554 (252)	382 (174)	2710 (1230)	0.21 (0.07)	291 (91)	215 (67)	1590 (494)
24	0.24 (0.06)	322 (82)	234 (59)	1520 (383)	0.24 (0.05)	334 (66)	227 (45)	1640 (320)	0.34 (0.10)	466 (140)	322 (97)	2250 (673)				
25																
26	0.22 (0.10)	298 (133)	217 (96)	1370 (610)	0.25 (0.10)	347 (135)	237 (92)	1650 (638)	0.33 (0.05)	449 (73)	311 (50)	2100 (338)				
27																
28																
29																
30	0.21 (0.02)	291 (32)	212 (23)	1280 (138)	0.22 (0.03)	302 (35)	207 (24)	1360 (157)	0.26 (0.03)	355 (39)	246 (27)	1570 (170)				
Avg	0.23	318	231	1760	0.21	291	197	1620	0.26	351	242	2040	0.20	279	206	1800
n	23	23	23	23	19	19	19	19	22	22	22	22	15	15	15	15
SD	0.03	43.2	31.4	275	0.03	46.9	32.1	263	0.05	71.9	49.8	415	0.04	50.3	37	399
Min	0.18	252	183	1280	0.17	228	155	1260	0.18	243	167	1330	0.15	199	146	1300
Max	0.30	411	299	2250	0.30	412	280	2090	0.41	554	382	2950	0.28	380	280	2570

ED_004549_00015928-00226

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for December, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1																
2	0.23 (0.02)	318 (26)	231 (19)	1360 (106)	0.22 (0.03)	305 (41)	209 (28)	1340 (177)								
3	0.25 (0.08)	343 (107)	250 (78)	1450 (454)	0.36 (0.14)	491 (196)	337 (134)	2130 (847)								
4	0.24 (0.04)	321 (50)	234 (36)	1350 (212)	0.21 (0.02)	291 (32)	199 (22)	1240 (139)								
5																
6																
7	0.24 (0.03)	322 (35)	235 (25)	1310 (140)	0.23 (0.03)	319 (42)	220 (29)	1320 (170)	0.27 (0.08)	363 (109)	252 (76)	1470 (439)	0.22 (0.04)	305 (54)	227 (40)	1350 (242)
8	0.44 (0.16)	596 (224)	435 (164)	2410 (901)					0.47 (0.13)	636 (177)	441 (123)	2540 (706)	0.36 (0.10)	486 (139)	362 (103)	2120 (603)
9									0.33 (0.10)	447 (136)	311 (94)	1770 (539)				
10																
11	0.25 (0.04)	341 (51)	249 (37)	1340 (200)	0.25 (0.04)	345 (55)	238 (38)	1370 (220)								
12	0.23 (0.06)	311 (87)	227 (63)	1210 (341)	0.25 (0.03)	336 (38)	232 (26)	1320 (152)	0.25 (0.05)	337 (66)	234 (46)	1290 (257)	0.20 (0.03)	276 (39)	206 (29)	1160 (164)
13	0.33 (0.16)	450 (224)	328 (163)	1740 (860)	0.41 (0.20)	558 (273)	385 (189)	2170 (1060)	0.43 (0.19)	581 (266)	404 (185)	2210 (1000)	0.28 (0.10)	383 (134)	285 (100)	1580 (550)
14	0.34 (0.10)	463 (131)	338 (96)	1770 (502)	0.52 (0.10)	711 (131)	491 (90)	2740 (506)	0.66 (0.33)	896 (452)	623 (314)	3370 (1700)	0.28 (0.08)	388 (110)	289 (82)	1590 (448)
15	0.27 (0.10)	363 (130)	265 (95)	1380 (496)	0.34 (0.13)	457 (183)	316 (126)	1740 (702)	0.34 (0.28)	461 (385)	320 (268)	1720 (1440)				
16	0.22 (0.03)	306 (45)	224 (33)	1160 (170)	0.29 (0.03)	390 (46)	270 (32)	1480 (171)	0.26 (0.04)	351 (57)	244 (40)	1300 (209)	0.20 (0.03)	276 (39)	205 (29)	1110 (157)
17	0.23 (0.02)	314 (26)	230 (19)	1180 (98)	0.27 (0.03)	365 (35)	253 (24)	1370 (131)					0.24 (0.03)	322 (44)	240 (33)	1280 (176)
18	0.16 (0.23)	217 (318)	158 (232)	808 (1190)	0.20 (0.24)	268 (322)	186 (223)	998 (1200)					0.15 (0.14)	204 (187)	152 (139)	807 (741)
19	0.33 (0.07)	443 (91)	324 (66)	1640 (338)	0.52 (0.22)	713 (295)	494 (205)	2630 (1100)	0.40 (0.21)	549 (280)	382 (195)	1980 (1010)	0.26 (0.03)	349 (41)	261 (31)	1370 (161)
20	0.28 (0.09)	388 (118)	283 (86)	1430 (436)	0.36 (0.06)	496 (78)	344 (54)	1820 (290)	0.35 (0.10)	478 (132)	333 (92)	1710 (474)	0.20 (0.05)	271 (65)	202 (49)	1060 (256)
21	0.15 (0.03)	210 (43)	153 (31)	768 (157)									0.18 (0.03)	243 (35)	181 (26)	938 (137)
22	0.19 (0.05)	261 (73)	191 (53)	950 (263)									0.17 (0.03)	231 (37)	173 (28)	888 (142)
23	0.21 (0.03)	282 (35)	206 (26)	1020 (127)									0.22 (0.03)	297 (39)	222 (29)	1130 (148)
24	0.28 (0.08)	384 (104)	281 (76)	1380 (376)									0.28 (0.07)	379 (96)	283 (71)	1440 (364)
25	0.20 (0.03)	276 (37)	202 (27)	988 (131)									0.20 (0.03)	268 (35)	201 (26)	1010 (133)
26	0.26 (0.06)	351 (86)	257 (63)	1250 (304)	0.43 (0.13)	587 (179)	409 (125)	2070 (629)					0.27 (0.09)	362 (119)	272 (89)	1360 (444)
27	0.29 (0.08)	402 (114)	295 (84)	1430 (406)	0.60 (0.15)	826 (210)	576 (146)	2900 (738)					0.36 (0.10)	485 (130)	364 (98)	1810 (486)
28	0.18 (0.06)	250 (79)	183 (58)	883 (280)	0.27 (0.07)	367 (96)	256 (67)	1280 (336)					0.17 (0.05)	237 (61)	178 (46)	880 (228)
29	0.23 (0.15)	318 (201)	233 (148)	1120 (708)	0.40 (0.28)	548 (379)	383 (265)	1900 (1320)	0.46 (0.74)	625 (1010)	439 (708)	2120 (3430)	0.23 (0.10)	310 (130)	233 (98)	1140 (478)
30	0.21 (0.07)	289 (88)	212 (65)	1010 (308)	0.29 (0.10)	397 (133)	277 (93)	1370 (457)	0.44 (0.33)	598 (449)	420 (315)	2030 (1520)	0.19 (0.07)	254 (91)	191 (69)	933 (334)
31	0.18 (0.03)	243 (37)	178 (27)	847 (128)	0.23 (0.03)	309 (36)	216 (25)	1060 (122)					0.18 (0.03)	244 (39)	184 (29)	891 (142)
Avg	0.25	337	246	1280	0.33	454	315	1710	0.39	527	367	1960	0.23	313	234	1230
n	26	26	26	26	20	20	20	20	12	12	12	12	21	21	21	21
SD	0.06	83.7	61	350	0.11	155	108	551	0.11	151	105	555	0.06	76.4	56.9	332
Min	0.15	210	153	768	0.20	268	186	998	0.25	337	234	1290	0.15	204	152	807
Max	0.44	596	435	2410	0.60	826	576	2900	0.66	896	623	3370	0.36	486	364	2120

ED_004549_00015928-00227

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for January, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1																
2	0.22 (0.05)	300 (71)	221 (52)	1040 (247)	0.28 (0.07)	381 (88)	267 (62)	1300 (300)	0.30 (0.14)	406 (194)	287 (137)	1360 (650)	0.19 (0.04)	257 (48)	194 (36)	930 (174)
3	0.25 (0.07)	339 (97)	249 (71)	1170 (333)	0.33 (0.08)	454 (113)	317 (79)	1530 (383)	0.47 (0.36)	641 (491)	453 (347)	2130 (1630)	0.19 (0.05)	261 (74)	197 (56)	940 (265)
4																
5																
6													0.00 (0.00)	0 (0)	0 (0)	0 (0)
7																
8																
9																
10																
11																
12																
13																
14																
15																
16	0.18 (0.03)	239 (42)	179 (32)	803 (141)	0.14 (0.05)	187 (74)	131 (52)	601 (237)					0.19 (0.03)	261 (38)	222 (37)	1010 (170)
17	0.20 (0.04)	272 (55)	216 (46)	976 (208)	0.47 (0.65)	636 (882)	447 (620)	2040 (2820)	0.34 (0.14)	460 (192)	369 (163)	1660 (734)	0.23 (0.06)	317 (80)	290 (74)	1320 (335)
18	0.19 (0.03)	258 (33)	219 (26)	984 (117)	0.25 (0.09)	339 (126)	238 (88)	1080 (401)	0.31 (0.12)	427 (162)	366 (136)	1650 (613)	0.21 (0.03)	286 (35)	262 (32)	1190 (145)
19	0.14 (0.09)	191 (123)	197 (106)	895 (474)	0.24 (0.13)	322 (174)	226 (123)	1020 (554)	0.20 (0.03)	268 (42)	232 (37)	1040 (165)	0.26 (0.04)	358 (49)	343 (51)	1550 (228)
20	0.13 (0.04)	181 (50)	213 (59)	973 (271)												
21	0.16 (0.03)	218 (38)	257 (45)	1170 (205)	0.34 (0.24)	463 (330)	394 (280)	1790 (1270)					0.23 (0.04)	317 (47)	375 (56)	1720 (255)
22	0.18 (0.04)	240 (53)	282 (63)	1280 (286)	0.25 (0.07)	338 (95)	288 (81)	1310 (367)					0.23 (0.05)	318 (63)	377 (75)	1720 (341)
23	0.19 (0.07)	266 (100)	313 (117)	1420 (530)	0.24 (0.08)	322 (111)	275 (95)	1240 (427)					0.23 (0.07)	308 (95)	366 (112)	1660 (511)
24	0.15 (0.03)	205 (35)	242 (41)	1090 (184)	0.17 (0.03)	231 (39)	198 (33)	889 (150)					0.20 (0.02)	269 (32)	320 (38)	1450 (170)
25	0.15 (0.02)	208 (33)	245 (39)	1100 (175)	0.17 (0.04)	231 (53)	197 (46)	884 (204)					0.20 (0.01)	269 (13)	325 (19)	1470 (84)
26	0.17 (0.03)	230 (43)	272 (51)	1220 (225)	0.19 (0.06)	258 (78)	220 (67)	984 (297)					0.20 (0.01)	273 (19)	354 (28)	1590 (124)
27	0.17 (0.02)	235 (22)	277 (26)	1230 (117)	0.20 (0.06)	278 (77)	237 (66)	1060 (293)					0.18 (0.02)	247 (28)	348 (36)	1550 (163)
28	0.16 (0.03)	212 (34)	250 (40)	1110 (178)	0.27 (0.20)	365 (269)	312 (230)	1380 (1020)					0.20 (0.02)	272 (30)	419 (46)	1870 (206)
29													0.23 (0.06)	317 (80)	530 (138)	2400 (647)
30	0.13 (0.02)	174 (27)	289 (45)	1310 (204)	0.17 (0.03)	225 (35)	243 (38)	1090 (169)	0.18 (0.02)	242 (30)	387 (51)	1730 (225)	0.20 (0.02)	275 (22)	465 (36)	2120 (166)
31	0.12 (0.01)	166 (15)	276 (24)	1250 (110)	0.18 (0.07)	249 (89)	269 (96)	1200 (430)	0.19 (0.03)	259 (45)	436 (78)	1940 (345)	0.19 (0.01)	253 (19)	439 (28)	1990 (127)
Avg	0.17	231	247	1120	0.24	330	266	1210	0.28	386	361	1640	0.20	270	324	1470
n	17	17	17	17	16	16	16	16	7	7	7	7	18	18	18	18
SD	0.03	44.5	34.9	156	0.08	111	74.1	344	0.10	133	72.7	335	0.05	71.6	117	525
Min	0.12	166	179	803	0.14	187	131	601	0.18	242	232	1040	0.00	0	0	0
Max	0.25	339	313	1420	0.47	636	447	2040	0.47	641	453	2130	0.26	358	530	2400

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Table E9. Daily means (SD) of NMHC emissions at Site IN3B for February, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1	0.15 (0.04)	206 (57)	344 (95)	1550 (426)	0.25 (0.09)	347 (122)	374 (132)	1670 (586)	0.22 (0.04)	293 (50)	521 (91)	2310 (402)	0.16 (0.01)	217 (19)	420 (40)	1900 (178)
2	0.14 (0.03)	185 (35)	308 (58)	1380 (258)	0.21 (0.09)	293 (121)	316 (131)	1400 (578)	0.17 (0.04)	236 (48)	443 (90)	1960 (398)	0.16 (0.02)	223 (21)	494 (60)	2220 (266)
3	0.13 (0.02)	175 (31)	291 (52)	1300 (230)	0.17 (0.05)	230 (66)	248 (72)	1100 (317)	0.13 (0.03)	180 (41)	358 (81)	1570 (355)	0.20 (0.04)	274 (59)	710 (174)	3180 (776)
4	0.14 (0.06)	190 (78)	535 (334)	2410 (1510)												
5	0.11 (0.01)	144 (13)	492 (45)	2210 (201)	0.15 (0.02)	201 (33)	296 (49)	1330 (219)	0.17 (0.04)	236 (48)	530 (109)	2380 (497)	0.16 (0.01)	214 (16)	647 (49)	3060 (235)
6																
7	0.09 (0.03)	121 (37)	413 (126)	1840 (560)	0.25 (0.05)	337 (69)	495 (101)	2210 (451)	0.23 (0.15)	319 (211)	718 (474)	3250 (2150)	0.11 (0.02)	154 (26)	467 (77)	2190 (362)
8	0.08 (0.01)	109 (14)	374 (49)	1660 (218)	0.22 (0.06)	300 (83)	441 (122)	1960 (542)	0.14 (0.02)	185 (28)	416 (64)	1880 (288)	0.10 (0.01)	142 (18)	431 (54)	2010 (254)
9	0.08 (0.02)	102 (25)	349 (85)	1540 (375)	0.24 (0.09)	323 (121)	628 (304)	2850 (1410)	0.14 (0.04)	190 (51)	428 (115)	1920 (517)	0.10 (0.02)	137 (22)	414 (66)	1930 (308)
10																
11																
12																
13																
14																
15																
16																
17					0.00 (0.00)	0 (0)	0 (0)	0 (0)								
18																
19																
20					0.00 (0.00)	0 (0)	0 (0)	0 (0)								
21													0.00 (0.00)	0 (0)	0 (0)	0 (0)
22	0.00 (0.00)	0 (0)	0 (0)	0 (0)									0.00 (0.00)	0 (0)	0 (0)	0 (0)
23	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)								
24					0.00 (0.00)	1 (5)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)				
25	0.13 (0.13)	179 (175)	57 (55)	4880 (4800)	0.00 (0.00)	0 (0)	0 (0)	0 (0)					0.07 (0.02)	100 (26)	0 (0)	0 (0)
26	0.13 (0.02)	176 (24)	56 (7)	4340 (568)	0.00 (0.00)	0 (0)	0 (0)	0 (0)					0.15 (0.07)	198 (88)	0 (0)	0 (0)
27	0.15 (0.05)	205 (65)	65 (21)	4640 (1400)									0.08 (0.02)	109 (25)	0 (0)	0 (0)
28	0.10 (0.06)	139 (82)	44 (26)	2930 (1750)	0.00 (0.00)	0 (1)	0 (0)	0 (0)					0.03 (0.01)	41 (15)	0 (0)	0 (0)
Avg	0.10	138	238	2190	0.11	145	200	894	0.15	205	427	1910	0.10	139	276	1270
n	14	14	14	14	14	14	14	14	8	8	8	8	13	13	13	13
SD	0.05	65	185	1480	0.11	149	218	978	0.07	90.8	191	862	0.06	83.9	268	1230
Min	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0
Max	0.15	206	535	4880	0.25	347	628	2850	0.23	319	718	3250	0.20	274	710	3180

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Table E9. Daily means (SD) of NMHC emissions at Site IN3B for March, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1	0.19 (0.05)	258 (62)	82 (20)	5060 (1200)					0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.04 (0.00)	49 (6)	0 (0)	0 (0)
2	0.16 (0.02)	224 (22)	71 (7)	4140 (420)					0.00 (0.00)	1 (0)	0 (0)	0 (0)	0.03 (0.01)	37 (7)	0 (0)	0 (0)
3																
4																
5																
6																
7	0.17 (0.02)	233 (28)	74 (9)	3420 (417)					0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.01 (0.01)	8 (11)	0 (0)	0 (0)
8	0.14 (0.04)	186 (58)	59 (18)	2630 (822)					0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.02 (0.01)	28 (13)	0 (0)	0 (0)
9	-0.03 (0.20)	-41 (278)	-13 (88)	-576 (3790)	0.12 (0.20)	159 (267)	54 (90)	3130 (5330)	0.00 (0.00)	-1 (2)	0 (0)	0 (0)	-0.07 (0.16)	-92 (217)	0 (0)	0 (0)
10	0.22 (0.06)	306 (79)	97 (25)	4030 (1040)	0.17 (0.04)	225 (58)	77 (20)	4290 (1160)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.01 (0.01)	12 (13)	0 (0)	0 (0)
11	0.30 (0.41)	414 (556)	131 (176)	5290 (7130)	0.24 (0.39)	334 (537)	113 (182)	6030 (9730)	0.00 (0.00)	0 (1)	0 (0)	0 (0)	0.02 (0.01)	29 (18)	0 (0)	0 (0)
12	0.24 (0.03)	321 (38)	102 (12)	3970 (459)	0.27 (0.04)	365 (49)	124 (17)	6280 (795)	0.01 (0.01)	10 (8)	0 (0)	0 (0)	0.02 (0.01)	23 (14)	0 (0)	0 (0)
13	0.26 (0.06)	350 (77)	111 (25)	4200 (905)	0.25 (0.04)	340 (52)	115 (18)	5600 (852)	0.01 (0.01)	18 (8)	0 (0)	0 (0)	0.01 (0.00)	7 (4)	0 (0)	0 (0)
14	0.28 (0.06)	385 (85)	122 (27)	4480 (984)	0.24 (0.05)	330 (73)	112 (25)	5240 (1170)	0.01 (0.01)	8 (9)	0 (0)	0 (0)	0.01 (0.01)	10 (10)	0 (0)	0 (0)
15	0.29 (0.07)	389 (93)	124 (30)	4420 (1050)	0.25 (0.04)	345 (54)	117 (18)	5280 (839)	0.01 (0.01)	7 (8)	0 (0)	0 (0)	0.01 (0.01)	9 (8)	0 (0)	0 (0)
16	0.22 (0.10)	303 (130)	97 (42)	3380 (1450)	0.24 (0.04)	322 (60)	109 (21)	4760 (919)	0.00 (0.00)	-1 (2)	0 (0)	0 (0)	0.00 (0.01)	4 (7)	0 (0)	0 (0)
17	0.12 (0.06)	165 (81)	53 (26)	1800 (886)	0.22 (0.06)	295 (82)	100 (28)	4180 (1160)	0.00 (0.00)	1 (1)	0 (0)	0 (0)	0.00 (0.00)	2 (4)	0 (0)	0 (0)
18	0.10 (0.09)	135 (123)	44 (40)	1440 (1320)	0.20 (0.07)	267 (98)	89 (32)	3590 (1290)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0 (1)	0 (0)	0 (0)
19	0.06 (0.09)	81 (116)	37 (38)	1180 (1220)	0.21 (0.05)	281 (65)	92 (21)	3630 (842)	0.00 (0.01)	4 (9)	0 (0)	0 (0)	0.02 (0.02)	24 (27)	17 (51)	533 (1610)
20	0.04 (0.00)	55 (5)	36 (3)	1110 (105)	0.22 (0.04)	298 (48)	98 (16)	3740 (597)	0.00 (0.00)	1 (1)	0 (0)	0 (0)	0.05 (0.01)	70 (15)	46 (10)	1430 (305)
21																
22																
23																
24																
25																
26																
27																
28	0.05 (0.05)	73 (72)	47 (47)	1190 (1190)	0.32 (0.10)	439 (132)	145 (44)	4420 (1320)	0.02 (0.02)	22 (22)	0 (0)	0 (0)	0.07 (0.05)	89 (72)	59 (48)	1490 (1210)
29	0.08 (0.01)	115 (18)	75 (11)	1830 (284)	0.20 (0.05)	273 (63)	98 (23)	2900 (690)	0.00 (0.00)	1 (3)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
30					0.37 (0.30)	506 (414)	217 (179)	6270 (5160)	0.00 (0.01)	3 (6)	0 (0)	0 (0)				
31	0.12 (0.05)	159 (67)	104 (44)	2400 (1010)	0.27 (0.07)	369 (91)	195 (51)	5500 (1440)	0.00 (0.00)	1 (2)	0 (0)	0 (0)	0.13 (0.02)	178 (25)	118 (17)	2720 (379)
Avg	0.16	216	76	2920	0.24	322	116	4680	0.00	4	0	0	0.02	26	13	325
n	19	19	19	19	16	16	16	16	20	20	20	20	19	19	19	19
SD	0.09	125	36.1	1580	0.06	77.9	39.5	1070	0.00	6.11	0	0	0.04	50	29.8	724
Min	-0.03	-41	-13	-576	0.12	159	54	2900	0.00	-1	0	0	-0.07	-92	0	0
Max	0.30	414	131	5290	0.37	506	217	6280	0.02	22	0	0	0.13	178	118	2720

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Table E9. Daily means (SD) of NMHC emissions at Site IN3B for April, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1	0.16 (0.06)	213 (81)	139 (53)	3140 (1180)					0.04 (0.03)	53 (39)	44 (77)	1200 (2120)	0.13 (0.03)	177 (36)	118 (24)	2640 (515)
2	0.21 (0.06)	283 (75)	185 (49)	4060 (1080)					0.04 (0.03)	60 (38)	39 (25)	1040 (663)	0.15 (0.03)	207 (45)	138 (30)	3010 (655)
3	0.20 (0.05)	270 (61)	177 (40)	3770 (859)					0.07 (0.02)	97 (24)	63 (16)	1640 (409)	0.21 (0.03)	282 (40)	187 (27)	3980 (553)
4	0.17 (0.05)	232 (63)	152 (41)	3160 (850)					0.07 (0.03)	96 (33)	63 (22)	1590 (553)	0.17 (0.03)	227 (45)	151 (30)	3120 (639)
5	0.17 (0.04)	227 (53)	149 (34)	3020 (688)					0.10 (0.01)	141 (17)	92 (11)	2270 (274)	0.13 (0.06)	172 (83)	114 (55)	2310 (1110)
6	0.16 (0.04)	224 (48)	147 (32)	2900 (616)					0.11 (0.01)	143 (16)	94 (10)	2250 (239)	0.00 (0.00)	0 (0)	0 (0)	0 (0)
7	0.27 (0.26)	364 (353)	239 (232)	4580 (4440)												
8	0.19 (0.07)	262 (94)	172 (62)	3210 (1150)					0.10 (0.03)	137 (34)	89 (22)	2040 (510)				
9	0.17 (0.05)	229 (62)	150 (41)	2740 (744)					0.08 (0.03)	111 (38)	72 (25)	1610 (568)	0.16 (0.03)	221 (39)	147 (26)	2660 (471)
10	0.15 (0.02)	200 (32)	131 (21)	2320 (365)					0.11 (0.01)	156 (18)	102 (12)	2200 (253)	0.16 (0.02)	213 (26)	142 (17)	2500 (294)
11	0.19 (0.06)	253 (86)	166 (57)	2860 (973)	0.18 (0.08)	248 (111)	167 (75)	3510 (1570)	0.11 (0.01)	153 (19)	100 (12)	2100 (262)	0.18 (0.05)	246 (70)	163 (47)	2810 (801)
12	0.16 (0.08)	219 (108)	143 (71)	2410 (1200)	0.17 (0.05)	237 (71)	159 (48)	3270 (971)	0.13 (0.02)	173 (26)	113 (17)	2320 (346)	0.17 (0.05)	228 (62)	152 (41)	2540 (693)
13	0.08 (0.08)	113 (102)	74 (67)	1210 (1090)	0.16 (0.04)	217 (56)	146 (37)	2910 (740)	0.16 (0.02)	213 (33)	139 (21)	2780 (418)	0.09 (0.08)	118 (114)	79 (76)	1270 (1220)
14	0.18 (0.02)	250 (29)	164 (19)	2620 (308)	0.16 (0.02)	222 (33)	150 (22)	2920 (441)	0.10 (0.02)	137 (25)	90 (16)	1740 (315)	0.22 (0.03)	305 (37)	203 (24)	3220 (384)
15	0.20 (0.05)	266 (63)	175 (41)	2710 (633)	0.18 (0.05)	242 (70)	163 (47)	3080 (883)	0.10 (0.02)	140 (30)	92 (19)	1730 (364)	0.21 (0.03)	286 (45)	190 (30)	2940 (467)
16	0.16 (0.06)	216 (75)	142 (50)	2150 (754)	0.17 (0.08)	227 (114)	153 (77)	2810 (1410)	0.09 (0.02)	117 (33)	76 (22)	1400 (396)				
17	0.13 (0.05)	183 (68)	120 (44)	1780 (657)	0.14 (0.04)	196 (52)	132 (35)	2370 (629)	0.08 (0.03)	106 (46)	69 (30)	1240 (533)				
18	0.19 (0.04)	256 (53)	168 (35)	2420 (494)	0.15 (0.03)	205 (44)	138 (30)	2420 (515)	0.12 (0.05)	162 (69)	106 (45)	1850 (787)				
19	0.23 (0.07)	309 (98)	203 (65)	2850 (902)	0.17 (0.05)	235 (64)	158 (43)	2700 (727)	0.17 (0.05)	238 (65)	156 (43)	2650 (718)				
20	0.21 (0.06)	279 (80)	184 (52)	2520 (713)	0.15 (0.05)	210 (67)	141 (45)	2340 (737)	0.14 (0.03)	192 (39)	126 (26)	2090 (419)				
21	0.20 (0.05)	270 (71)	178 (47)	2370 (621)					0.14 (0.02)	189 (33)	124 (22)	2000 (343)				
22	0.21 (0.07)	283 (98)	186 (64)	2430 (837)	0.18 (0.07)	245 (100)	166 (68)	2610 (1060)	0.17 (0.04)	235 (57)	154 (37)	2430 (578)				
23	0.17 (0.04)	236 (48)	155 (31)	1970 (397)	0.18 (0.05)	244 (74)	165 (50)	2530 (760)	0.17 (0.03)	236 (42)	155 (28)	2370 (415)				
24	0.31 (0.19)	429 (252)	282 (166)	3500 (2060)	0.39 (0.32)	526 (430)	355 (290)	5320 (4330)	0.12 (0.06)	163 (80)	107 (53)	1600 (795)				
25	0.18 (0.05)	242 (72)	159 (47)	1930 (568)	0.29 (0.19)	401 (257)	271 (174)	3940 (2520)	0.13 (0.06)	177 (79)	116 (52)	1700 (757)				
26	0.14 (0.13)	193 (172)	127 (113)	1510 (1350)	0.28 (0.14)	384 (197)	259 (133)	3690 (1890)	0.10 (0.06)	134 (75)	88 (49)	1250 (697)				
27	0.20 (0.07)	277 (96)	183 (63)	2110 (729)	0.23 (0.12)	313 (160)	211 (108)	2930 (1490)	0.11 (0.05)	148 (68)	97 (45)	1350 (619)				
28	0.14 (0.06)	190 (85)	125 (56)	1420 (636)	0.12 (0.03)	170 (43)	115 (29)	1550 (395)	0.16 (0.05)	212 (64)	139 (42)	1880 (567)				
29	0.27 (0.53)	365 (721)	241 (475)	2660 (5240)	0.42 (0.74)	576 (1010)	389 (681)	5130 (8990)	0.19 (0.05)	265 (68)	174 (45)	2300 (582)				
30	0.43 (0.32)	590 (440)	389 (290)	4210 (3160)	0.15 (0.06)	207 (74)	140 (50)	1800 (650)	0.19 (0.08)	265 (111)	174 (73)	2250 (938)				
Avg	0.19	264	174	2680	0.20	279	188	3040	0.12	160	105	1890	0.15	206	137	2540
n	30	30	30	30	19	19	19	19	29	29	29	29	13	13	13	13
SD	0.06	84.6	55.8	790	0.08	110	74.2	940	0.04	54.8	35.4	448	0.06	76.9	51.1	939
Min	0.08	113	74	1210	0.12	170	115	1550	0.04	53	39	1040	0.00	0	0	0
Max	0.43	590	389	4580	0.42	576	389	5320	0.19	265	174	2780	0.22	305	203	3980

ED_004549_00015928-00231

Table E9. Daily means (SD) of NMHC emissions at Site IN3B for May, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1	0.21 (0.07)	288 (88)	190 (58)	2010 (615)	0.15 (0.04)	200 (50)	135 (34)	1700 (424)	0.23 (0.08)	307 (109)	202 (71)	2550 (913)				
2																
3																
4																
5																
6																
7																
8																
9	0.26 (0.06)	350 (78)	232 (51)	2080 (460)	0.23 (0.06)	311 (87)	210 (58)	2210 (610)	0.15 (0.05)	200 (67)	131 (44)	1380 (463)				
10	0.25 (0.08)	339 (108)	224 (71)	1970 (623)	0.19 (0.05)	253 (66)	171 (45)	1750 (455)	0.07 (0.04)	94 (58)	61 (38)	633 (396)				
11	0.26 (0.11)	357 (152)	236 (101)	2040 (863)	0.21 (0.08)	283 (108)	191 (73)	1920 (731)	0.09 (0.05)	123 (63)	81 (41)	811 (412)				
12																
13	0.32 (0.10)	435 (135)	288 (89)	2390 (738)	0.27 (0.05)	374 (72)	253 (49)	2440 (463)	0.14 (0.07)	194 (95)	127 (63)	1230 (603)				
14	0.27 (0.08)	375 (107)	248 (71)	2020 (577)	0.26 (0.09)	358 (121)	242 (82)	2290 (774)	0.10 (0.05)	132 (65)	87 (42)	823 (403)				
15																
16	0.31 (0.09)	428 (115)	283 (76)	2230 (600)	0.43 (0.26)	582 (361)	394 (244)	3590 (2220)	0.06 (0.04)	88 (52)	58 (34)	525 (311)				
17	0.26 (0.07)	359 (92)	238 (61)	1840 (473)	0.25 (0.07)	343 (95)	232 (65)	2070 (577)	0.04 (0.02)	57 (21)	38 (14)	337 (120)				
18	0.31 (0.10)	421 (141)	279 (94)	2120 (709)	0.38 (0.31)	524 (420)	355 (284)	3100 (2480)	0.07 (0.03)	97 (35)	64 (23)	561 (201)				
19	0.29 (0.11)	398 (149)	263 (99)	1980 (745)	0.31 (0.11)	419 (153)	284 (104)	2440 (895)	0.15 (0.07)	204 (96)	134 (63)	1160 (546)				
20																
21																
22																
23	0.25 (0.11)	339 (156)	225 (104)	1580 (730)					0.29 (0.17)	394 (237)	260 (156)	2090 (1250)	0.37 (0.12)	498 (162)	335 (109)	2350 (762)
24	0.28 (0.11)	381 (154)	253 (102)	1760 (715)					0.29 (0.15)	389 (204)	257 (135)	2030 (1060)	0.44 (0.20)	604 (277)	406 (186)	2810 (1280)
25									0.16 (0.14)	219 (189)	144 (125)	1120 (967)	0.34 (0.15)	465 (206)	313 (138)	2130 (942)
26																
27	0.22 (0.10)	294 (131)	195 (87)	1300 (577)	0.32 (0.15)	443 (205)	301 (139)	2250 (1040)	0.28 (0.11)	378 (156)	250 (103)	1880 (778)	0.30 (0.11)	409 (153)	276 (103)	1830 (682)
28	0.35 (0.21)	478 (280)	317 (186)	2080 (1220)	0.22 (0.08)	295 (110)	200 (75)	1480 (547)	0.13 (0.03)	180 (34)	119 (22)	880 (165)	0.25 (0.11)	344 (150)	231 (101)	1510 (663)
29	0.20 (0.12)	274 (159)	182 (105)	1180 (684)	0.28 (0.12)	385 (166)	262 (113)	1900 (818)	0.14 (0.06)	191 (84)	126 (56)	922 (409)	0.17 (0.10)	228 (137)	154 (92)	991 (595)
30	0.21 (0.12)	292 (168)	194 (111)	1240 (713)	0.26 (0.16)	354 (216)	241 (147)	1720 (1050)	0.14 (0.06)	189 (85)	125 (56)	900 (404)	0.19 (0.13)	258 (172)	174 (116)	1110 (738)
31	0.15 (0.09)	206 (126)	136 (84)	863 (533)	0.21 (0.11)	292 (145)	199 (98)	1400 (695)	0.11 (0.07)	153 (101)	101 (67)	719 (474)	0.15 (0.12)	201 (161)	135 (109)	853 (685)
Avg	0.26	354	234	1810	0.26	361	245	2150	0.15	199	131	1140	0.28	376	253	1700
n	17	17	17	17	15	15	15	15	18	18	18	18	8	8	8	8
SD	0.05	66.7	44.1	412	0.07	97.3	66.1	568	0.07	101	67	599	0.10	134	90	657
Min	0.15	206	136	863	0.15	200	135	1400	0.04	57	38	337	0.15	201	135	853
Max	0.35	478	317	2390	0.43	582	394	3590	0.29	394	260	2550	0.44	604	406	2810

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Table E9. Daily means (SD) of NMHC emissions at Site IN3B for June, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1	0.26 (0.24)	361 (327)	240 (217)	1500 (1360)					0.33 (0.41)	451 (561)	298 (371)	2080 (2590)	0.24 (0.08)	333 (105)	224 (71)	1390 (438)
2	0.08 (0.05)	111 (72)	74 (48)	455 (294)	0.19 (0.09)	258 (122)	175 (83)	1200 (568)	0.17 (0.06)	234 (79)	155 (52)	1070 (359)	0.28 (0.11)	384 (149)	259 (100)	1590 (615)
3	0.09 (0.04)	127 (58)	84 (38)	514 (233)	0.22 (0.10)	305 (136)	208 (93)	1400 (625)	0.12 (0.06)	163 (75)	108 (50)	736 (339)	0.32 (0.10)	436 (132)	294 (89)	1790 (542)
4	0.26 (0.34)	348 (464)	231 (308)	1400 (1860)	0.27 (0.09)	363 (118)	248 (81)	1650 (538)	0.10 (0.04)	140 (58)	93 (38)	622 (257)	0.26 (0.10)	348 (139)	235 (94)	1410 (566)
5	0.33 (0.34)	444 (463)	295 (308)	1760 (1830)	0.26 (0.10)	352 (141)	240 (96)	1580 (633)	0.12 (0.07)	161 (94)	107 (62)	707 (414)	0.23 (0.11)	319 (154)	215 (104)	1280 (617)
6	0.18 (0.12)	241 (168)	160 (112)	947 (659)	0.38 (0.18)	523 (243)	357 (165)	2320 (1070)	0.15 (0.08)	199 (103)	131 (68)	858 (445)	0.16 (0.10)	217 (135)	147 (91)	862 (536)
7	0.21 (0.16)	287 (224)	191 (149)	1110 (871)	0.54 (0.20)	742 (271)	506 (185)	3240 (1180)	0.19 (0.10)	262 (129)	173 (85)	1120 (547)	0.23 (0.13)	312 (175)	211 (119)	1230 (691)
8	0.11 (0.12)	155 (169)	103 (112)	598 (651)	0.43 (0.44)	590 (597)	403 (407)	2550 (2580)								
9	0.05 (0.08)	74 (104)	49 (69)	281 (396)	0.27 (0.25)	373 (341)	255 (233)	1590 (1450)								
10	0.14 (0.19)	189 (257)	126 (171)	712 (967)	0.47 (0.29)	640 (390)	437 (266)	2700 (1640)	0.25 (0.07)	336 (93)	222 (62)	1380 (385)	0.22 (0.13)	304 (177)	206 (120)	1160 (677)
11	0.17 (0.13)	235 (174)	156 (116)	878 (649)	0.39 (0.18)	536 (248)	366 (169)	2240 (1030)	0.32 (0.12)	432 (163)	286 (108)	1760 (663)	0.16 (0.08)	223 (112)	151 (76)	844 (425)
12	0.24 (0.14)	325 (188)	217 (126)	1210 (697)	0.43 (0.24)	593 (329)	405 (225)	2450 (1360)	0.26 (0.11)	356 (149)	236 (99)	1440 (603)	0.16 (0.06)	217 (76)	147 (52)	812 (285)
13	0.31 (0.15)	420 (211)	280 (140)	1540 (775)	0.50 (0.23)	687 (309)	469 (211)	2810 (1260)	0.26 (0.12)	361 (166)	239 (110)	1440 (663)	0.32 (0.13)	432 (173)	293 (117)	1610 (642)
14	0.33 (0.17)	445 (227)	297 (151)	1620 (829)	0.66 (0.27)	904 (370)	618 (253)	3660 (1490)	0.49 (0.39)	673 (528)	446 (350)	2660 (2090)	0.40 (0.11)	544 (152)	368 (103)	2000 (558)
15	0.28 (0.16)	381 (218)	254 (145)	1380 (788)	0.61 (0.24)	832 (330)	569 (225)	3340 (1320)	0.43 (0.32)	591 (442)	392 (293)	2310 (1720)	0.38 (0.12)	523 (159)	354 (108)	1910 (582)
16																
17																
18																
19																
20																
21																
22																
23																
24	0.16 (0.08)	217 (107)	145 (72)	736 (365)					0.36 (0.18)	489 (240)	325 (159)	1770 (866)	0.17 (0.08)	228 (110)	155 (75)	780 (375)
25	0.16 (0.12)	216 (158)	144 (106)	727 (533)	0.70 (0.15)	960 (209)	657 (143)	3530 (768)								
26	0.13 (0.10)	174 (136)	116 (91)	582 (456)	0.67 (0.27)	908 (370)	622 (253)	3320 (1360)								
27	0.18 (0.20)	243 (270)	162 (180)	810 (902)	0.54 (0.22)	740 (305)	507 (209)	2680 (1110)								
28	0.15 (0.14)	203 (189)	135 (126)	672 (626)	0.34 (0.25)	464 (344)	318 (236)	1670 (1240)								
29	0.18 (0.20)	251 (272)	168 (181)	829 (897)	0.20 (0.14)	267 (189)	183 (129)	955 (678)								
30	0.29 (0.19)	393 (254)	262 (170)	1290 (835)	0.16 (0.11)	224 (149)	153 (102)	796 (529)					0.30 (0.20)	411 (270)	279 (184)	1360 (897)
Avg	0.19	265	177	980	0.41	563	385	2280	0.25	346	229	1430	0.26	349	236	1330
n	22	22	22	22	20	20	20	20	14	14	14	14	15	15	15	15
SD	0.08	108	71.7	413	0.17	229	157	865	0.12	160	106	607	0.08	103	69.4	384
Min	0.05	74	49	281	0.16	224	153	796	0.10	140	93	622	0.16	217	147	780
Max	0.33	445	297	1760	0.70	960	657	3660	0.49	673	446	2660	0.40	544	368	2000

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Table E9. Daily means (SD) of NMHC emissions at Site IN3B for July, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{-2}$	$mg \cdot d^{-1} hd^{-1}$	$mg \cdot d^{-1} AU^{-1}$
1	0.92 (1.58)	1250 (2160)	836 (1440)	4090 (7050)	0.17 (0.08)	238 (108)	163 (74)	840 (380)								
2																
3																
4																
5																
6																
7	0.26 (0.24)	359 (329)	240 (220)	1140 (1050)	0.42 (0.16)	568 (220)	390 (151)	1940 (750)	0.16 (0.11)	215 (148)	144 (99)	722 (498)	0.09 (0.07)	127 (92)	87 (63)	409 (297)
8	0.21 (0.12)	284 (157)	190 (105)	898 (497)	0.46 (0.16)	621 (215)	426 (147)	2120 (732)	0.23 (0.14)	318 (195)	213 (130)	1060 (650)	0.15 (0.11)	198 (143)	135 (97)	634 (458)
9	0.24 (0.12)	333 (158)	223 (105)	1050 (498)	0.68 (0.35)	930 (471)	639 (323)	3150 (1600)	0.26 (0.12)	349 (159)	233 (106)	1160 (529)	0.14 (0.07)	189 (100)	129 (68)	602 (320)
10	0.16 (0.12)	219 (161)	146 (108)	687 (507)	0.47 (0.19)	648 (261)	445 (179)	2190 (878)	0.51 (0.18)	699 (248)	467 (166)	2310 (819)	0.40 (0.11)	539 (145)	367 (99)	1710 (461)
11	0.06 (0.04)	80 (53)	54 (35)	251 (164)	0.54 (0.16)	734 (211)	505 (145)	2470 (711)	0.35 (0.10)	471 (133)	315 (89)	1550 (436)	0.21 (0.07)	281 (89)	192 (61)	890 (283)
12	0.16 (0.13)	214 (173)	143 (115)	666 (538)	0.27 (0.22)	370 (295)	255 (203)	1240 (989)	0.36 (0.13)	487 (183)	326 (123)	1600 (601)	0.30 (0.11)	413 (150)	289 (104)	1330 (480)
13	0.17 (0.14)	227 (197)	151 (132)	702 (610)	0.34 (0.19)	459 (253)	315 (174)	1530 (842)	0.42 (0.22)	570 (299)	382 (200)	1860 (977)	0.34 (0.16)	465 (213)	341 (153)	1570 (705)
14	0.57 (0.70)	779 (954)	521 (638)	2410 (2940)	0.40 (0.17)	549 (234)	378 (161)	1820 (778)	0.42 (0.20)	572 (277)	383 (185)	1860 (899)	0.33 (0.19)	449 (260)	348 (200)	1590 (916)
15	0.19 (0.18)	252 (241)	176 (163)	812 (752)	0.42 (0.16)	571 (219)	392 (151)	1890 (725)	0.36 (0.17)	493 (238)	330 (160)	1600 (772)	0.29 (0.17)	392 (235)	319 (191)	1460 (872)
16	0.14 (0.13)	188 (173)	150 (138)	696 (641)	0.49 (0.27)	671 (365)	462 (251)	2210 (1200)								
17	0.21 (0.11)	281 (143)	225 (114)	1040 (528)	0.44 (0.13)	599 (183)	412 (126)	1960 (602)	0.35 (0.18)	477 (241)	320 (162)	1530 (775)	0.08 (0.05)	113 (64)	93 (52)	424 (240)
18	0.12 (0.07)	162 (92)	130 (74)	598 (340)	0.57 (0.17)	778 (234)	535 (161)	2540 (763)	0.29 (0.11)	395 (152)	265 (102)	1260 (488)	0.09 (0.11)	121 (151)	99 (125)	452 (567)
19	0.16 (0.10)	224 (139)	179 (111)	821 (509)	0.50 (0.19)	679 (254)	468 (175)	2210 (825)	0.41 (0.16)	560 (212)	376 (142)	1790 (677)	0.07 (0.02)	91 (25)	75 (20)	339 (92)
20	0.15 (0.15)	203 (209)	163 (167)	744 (764)	0.40 (0.17)	547 (228)	377 (157)	1770 (736)					0.08 (0.02)	113 (23)	93 (19)	421 (85)
21	0.20 (0.11)	268 (146)	214 (117)	977 (533)	0.53 (0.11)	727 (147)	501 (101)	2350 (473)	0.48 (0.28)	655 (387)	440 (260)	2070 (1220)	0.11 (0.03)	150 (46)	124 (38)	557 (170)
22	0.29 (0.10)	398 (136)	319 (109)	1450 (495)	0.48 (0.16)	654 (221)	497 (154)	2330 (722)								
23																
24																
25																
26																
27																
28																
29																
30																
31																
Avg	0.25	337	239	1120	0.45	608	421	2030	0.35	482	323	1570	0.19	260	192	885
n	17	17	17	17	17	17	17	17	13	13	13	13	14	14	14	14
SD	0.20	271	178	866	0.11	154	107	511	0.10	131	87.8	417	0.11	153	110	505
Min	0.06	80	54	251	0.17	238	163	840	0.16	215	144	722	0.07	91	75	339
Max	0.92	1250	836	4090	0.68	930	639	3150	0.51	699	467	2310	0.40	539	367	1710

ED_004549_00015928-00234

Table E10. Hydrogen sulfide concentrations.

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for July, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13	27 (23)	39 (33)	272 (191)	394 (273)			128 (92)	185 (132)	255 (170)	368 (244)
14	21 (9)	31 (14)	564 (261)	810 (374)	409 (37)	587 (53)	274 (69)	393 (98)	432 (36)	620 (51)
15	22 (21)	31 (29)	528 (154)	757 (221)	467 (56)	670 (80)	259 (26)	372 (37)	527 (113)	756 (163)
16	39 (16)	56 (23)	742 (196)	1060 (282)	397 (106)	570 (151)	342 (108)	491 (154)	465 (62)	668 (89)
17	22 (3)	31 (4)			240 (138)	345 (198)	245 (28)	352 (41)	623 (91)	896 (131)
18	28 (2)	40 (3)								
19	15 (8)	21 (11)	893 (203)	1280 (289)	400 (101)	575 (146)	172 (71)	247 (102)	933 (154)	1340 (220)
20	12 (6)	18 (8)	1340 (317)	1920 (457)	470 (83)	674 (119)	250 (58)	358 (84)	760 (91)	1090 (131)
21	25 (17)	36 (25)	1390 (297)	2000 (428)	451 (46)	646 (67)	242 (58)	348 (83)	800 (84)	1150 (121)
22	29 (23)	41 (33)	1460 (367)	2090 (528)	462 (39)	662 (56)	204 (37)	293 (53)	862 (85)	1240 (122)
23	18 (13)	26 (19)	970 (726)	1390 (1050)	379 (144)	541 (206)	144 (53)	206 (76)	471 (245)	670 (352)
24	31 (28)	45 (40)	360 (147)	517 (212)	271 (83)	389 (119)	113 (30)	162 (43)	235 (94)	337 (134)
25	29 (32)	41 (46)	280 (125)	402 (180)	255 (86)	366 (124)	85 (23)	122 (33)	241 (97)	346 (140)
26			212 (81)	305 (117)					242 (97)	349 (140)
27										
28										
29										
30	8 (5)	12 (8)	249 (96)	362 (139)	300 (124)	438 (179)	113 (24)	163 (34)		
31	15 (13)	22 (18)	249 (95)	358 (137)	213 (33)	307 (48)	120 (25)	174 (36)	253 (86)	365 (123)
Avg	23	33	679	974	363	521	192	276	507	728
n	15	15	14	14	13	13	14	14	14	14
SD	8	11	442	633	91	129	75	107	242	348
Min	8	12	212	305	213	307	85	122	235	337
Max	39	56	1460	2090	470	674	342	491	933	1340

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Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for August, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	16 (9)	23 (13)	215 (43)	309 (62)	242 (97)	348 (140)	125 (19)	180 (28)	234 (52)	338 (74)
2	28 (14)	40 (20)	234 (47)	337 (67)	230 (16)	332 (23)	153 (21)	221 (30)	225 (86)	324 (124)
3	28 (7)									
4	9 (8)	13 (11)	248 (73)	357 (105)	213 (60)	305 (87)	108 (12)	156 (18)	263 (92)	377 (132)
5	15 (5)	22 (8)	239 (44)	345 (63)	210 (18)	304 (25)	105 (9)	152 (13)	240 (38)	347 (54)
6	13 (7)	18 (11)	243 (40)	352 (57)	190 (34)	275 (49)	112 (16)	162 (23)	242 (25)	350 (36)
7	23 (3)	33 (4)	230 (29)	338 (41)	187 (26)	273 (39)	104 (11)	150 (16)		
8	12 (5)	18 (7)	227 (38)	329 (55)	167 (24)	241 (34)	110 (10)	159 (15)	207 (29)	299 (42)
9	12 (4)	17 (6)	250 (40)	362 (57)	158 (9)	229 (13)	97 (14)	141 (20)	228 (27)	330 (38)
10	13 (17)	19 (24)	237 (59)	342 (85)	173 (31)	250 (45)	103 (16)	149 (23)	222 (33)	320 (48)
11	30 (21)	43 (31)	250 (75)	360 (108)	159 (30)	229 (43)	98 (13)	141 (18)	309 (112)	445 (161)
12	28 (24)	40 (34)	234 (72)	337 (103)	164 (37)	236 (53)	105 (13)	152 (19)	269 (65)	388 (93)
13	2 (4)	3 (5)	226 (62)	324 (89)	152 (32)	218 (46)	87 (17)	124 (24)	248 (63)	356 (91)
14	21 (11)	31 (16)	315 (141)	452 (202)	170 (72)	245 (103)	86 (22)	123 (32)	266 (80)	382 (115)
15	7 (6)	10 (9)	192 (32)	276 (46)	130 (12)	188 (18)	77 (16)	111 (22)	250 (57)	361 (82)
16	10 (6)	14 (9)	187 (45)	269 (65)	142 (28)	204 (40)	80 (10)	115 (14)	204 (85)	294 (122)
17	26 (5)									
18	10 (5)									
19										
20										
21										
22										
23	8 (3)	11 (4)	118 (14)	170 (21)			57 (12)	83 (18)	129 (12)	187 (17)
24	10 (6)	14 (9)	128 (30)	184 (42)			61 (20)	89 (29)	139 (27)	200 (38)
25	8 (9)	12 (13)	138 (43)	199 (62)			51 (17)	73 (24)	130 (32)	187 (46)
26	15 (15)	21 (21)	215 (109)	308 (156)			66 (35)	94 (50)	273 (169)	391 (242)
27	10 (6)	14 (9)					84 (45)	121 (64)	283 (150)	406 (215)
28	25 (26)	37 (37)			136 (91)		85 (35)	121 (51)	309 (332)	445 (478)
29	25 (22)	36 (32)			189 (90)		159 (146)	228 (210)	556 (436)	801 (627)
30	16 (9)				201 (65)		220 (120)		712 (207)	
31	16 (16)				417 (198)		291 (189)		650 (168)	
Avg	16	22	217	313	191	258	109	138	287	358
n	27	22	19	19	19	15	24	22	23	21
SD	8	11	46	67	61	45	52	39	147	122
Min	2	3	118	170	130	188	51	73	129	187
Max	30	43	315	452	417	348	291	228	712	801

ED_004549_00015928-00236

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for September, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	7 (14)	10 (20)			415 (291)	595 (418)			580 (272)	
2	9 (7)	13 (10)			356 (245)	510 (352)			503 (214)	
3	20 (37)	29 (53)			311 (228)	446 (326)			316 (269)	
4	8 (4)	12 (6)			220 (146)	318 (210)				
5	8 (6)	12 (9)	94 (43)	134 (62)	239 (164)	343 (236)				
6	6 (4)	9 (6)	117 (55)	168 (80)	131 (37)	188 (53)				
7	14 (3)	21 (4)	151 (78)	218 (112)	161 (76)	231 (109)	19 (14)	27 (20)		
8	17 (3)									
9	14 (1)									
10	7 (4)									
11	4 (9)	6 (13)	561 (341)	805 (488)	410 (179)	588 (256)	41 (21)	59 (30)		
12	18 (15)	25 (21)	600 (418)	857 (597)	521 (335)	746 (479)	66 (35)	95 (51)		
13	33 (13)	47 (19)	621 (350)	889 (500)	421 (253)	603 (362)	73 (30)	105 (43)		
14	16 (17)	23 (24)	558 (330)	799 (472)	397 (182)	568 (260)	50 (32)	71 (46)		
15	8 (6)	12 (8)	716 (353)	1020 (504)	619 (319)	885 (456)	76 (30)	108 (42)		
16	23 (8)	33 (11)	600 (394)	857 (562)	469 (281)	671 (402)	57 (34)	82 (49)		
17	25 (10)	35 (14)	505 (378)	721 (540)	364 (236)	521 (337)	39 (28)	56 (39)		
18	23 (9)	32 (13)	462 (303)	661 (433)	212 (106)	305 (152)				
19	13 (5)	18 (7)	279 (167)	400 (240)	170 (65)	244 (93)	21 (15)	29 (22)		
20	6 (4)	8 (6)	290 (188)	417 (270)	185 (108)	266 (154)	13 (9)	18 (12)		
21	27 (16)	39 (23)	310 (169)	445 (243)	192 (69)	275 (99)	56 (64)	80 (92)		
22	11 (8)	16 (12)	224 (105)	320 (151)	180 (121)	257 (172)	62 (81)	89 (115)	37 (24)	53 (34)
23	4 (5)	6 (7)	260 (196)	373 (280)	325 (304)	466 (435)	132 (97)	189 (139)	63 (52)	90 (74)
24	16 (2)	23 (3)			81 (18)	117 (25)	47 (61)	68 (87)	50 (20)	72 (29)
25	9 (2)									
26	3 (2)	5 (3)								
27	4 (3)	5 (4)								
28	6 (4)									
29	14 (5)	19 (7)	445 (325)	636 (465)	185 (147)	265 (211)	95 (68)	135 (97)	80 (64)	114 (91)
30										
Avg	13	19	400	572	298	428	57	81	233	82
n	29	24	17	17	22	22	15	15	7	4
SD	8	12	191	272	138	197	30	43	215	23
Min	3	5	94	134	81	117	13	18	37	53
Max	33	47	716	1020	619	885	132	189	580	114

ED_004549_00015928-00237

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for October, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1										
2										
3	12 (9)	17 (12)	142 (94)	204 (134)	86 (37)	123 (52)	64 (36)	92 (52)	38 (22)	54 (32)
4	17 (9)	25 (13)	198 (162)	284 (231)	89 (47)	127 (67)	79 (58)	114 (83)	48 (26)	69 (37)
5	7 (4)	10 (5)	96 (46)	138 (65)	79 (34)	114 (49)	48 (12)	68 (17)	27 (8)	38 (11)
6	5 (1)	7 (2)	73 (20)	105 (29)	59 (12)	85 (17)	62 (32)	89 (47)	32 (6)	46 (8)
7	8 (3)									
8	4 (2)									
9	8 (3)	11 (4)	196 (105)	280 (151)	149 (77)	214 (111)	120 (55)	172 (79)	46 (21)	66 (30)
10	10 (4)	14 (6)			371 (136)	531 (194)	350 (85)	500 (122)	220 (47)	314 (67)
11	7 (1)	10 (2)	421 (95)	601 (136)	347 (100)	496 (143)	279 (105)	399 (150)	163 (78)	233 (111)
12	10 (5)	14 (7)	393 (80)	561 (114)	351 (94)	501 (135)	277 (101)	395 (145)	168 (86)	241 (123)
13	8 (1)	11 (1)	332 (134)	475 (191)	333 (157)	475 (224)	295 (182)	421 (259)	183 (126)	261 (180)
14	12 (6)	18 (9)	217 (107)	311 (152)	183 (83)	261 (119)	124 (47)	177 (67)	83 (44)	119 (63)
15	11 (3)	16 (4)	131 (76)	189 (109)	145 (79)	207 (112)	157 (57)	222 (81)	77 (22)	110 (31)
16	9 (2)	13 (3)	153 (52)	219 (75)	155 (61)	223 (87)	78 (28)	112 (40)	73 (27)	105 (39)
17	14 (5)	21 (8)	166 (93)	238 (133)	144 (90)	206 (128)	118 (56)	169 (80)	122 (54)	175 (77)
18	10 (2)	14 (3)	94 (36)	135 (52)	79 (14)	114 (20)	76 (18)	110 (26)	83 (19)	119 (27)
19	23 (3)	33 (4)	238 (58)	341 (82)	252 (46)	360 (65)	217 (65)	311 (93)	140 (44)	201 (63)
20	17 (5)	25 (7)	231 (118)	330 (169)	209 (109)	299 (155)	183 (71)	262 (101)	138 (92)	198 (131)
21	13 (2)	18 (3)	176 (110)	251 (158)	158 (81)	226 (116)	138 (33)	197 (47)	116 (36)	165 (52)
22	10 (2)	14 (3)							211 (135)	303 (193)
23	12 (3)	17 (4)	259 (46)	371 (65)	248 (34)	355 (48)	184 (53)	263 (75)	246 (58)	353 (83)
24	10 (3)	14 (5)	286 (67)	409 (96)	212 (64)	305 (91)	226 (148)	326 (212)	232 (83)	332 (118)
25	3 (2)	4 (3)	283 (98)	405 (140)	240 (109)	343 (155)	100 (21)	143 (30)	223 (167)	319 (238)
26	10 (4)	14 (6)	174 (61)	248 (88)	160 (78)	229 (111)	138 (100)	198 (142)	161 (100)	230 (143)
27										
28										
29										
30	8 (2)	11 (3)	260 (131)	370 (187)	301 (165)	430 (236)	183 (115)	261 (164)	387 (265)	552 (378)
31	13 (2)	19 (3)	263 (99)	376 (141)	227 (88)	324 (126)	177 (103)	254 (148)	301 (175)	430 (250)
Avg	10	15	217	311	199	285	160	228	147	210
n	26	24	22	22	23	23	23	23	24	24
SD	4	6	90	127	93	132	81	116	90	129
Min	3	4	73	105	59	85	48	68	27	38
Max	23	33	421	601	371	531	350	500	387	552

ED_004549_00015928-00238

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for November, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	16 (6)	23 (9)	372 (118)	530 (168)	381 (145)	543 (206)	333 (149)	475 (212)	638 (286)	911 (408)
2	17 (7)	24 (9)	368 (155)	524 (220)	396 (192)	565 (274)	330 (197)	471 (280)	634 (373)	906 (532)
3	12 (6)	16 (9)	359 (129)	512 (184)	320 (129)	457 (183)	289 (164)	412 (233)	550 (305)	784 (435)
4	15 (10)	22 (14)	333 (62)	475 (88)	288 (81)	411 (115)	266 (133)	380 (190)	482 (239)	687 (341)
5	16 (8)	22 (11)	298 (94)	424 (134)	292 (94)	416 (133)	221 (135)	316 (192)	485 (218)	692 (311)
6	22 (8)	31 (11)	569 (84)	812 (119)	428 (145)	610 (207)	418 (128)	597 (184)	896 (331)	1280 (473)
7	17 (8)	24 (11)	540 (156)	772 (221)	430 (80)	613 (114)	389 (129)	555 (184)	706 (208)	1010 (297)
8	26 (6)	37 (9)	432 (159)	617 (226)	286 (105)	409 (150)	246 (111)	351 (158)	425 (203)	608 (290)
9	18 (5)	25 (7)								
10	17 (8)	24 (12)	777 (229)	1110 (326)	549 (182)	783 (260)	326 (122)	465 (174)	648 (342)	925 (488)
11	20 (5)	29 (7)	608 (131)	868 (187)	399 (70)	569 (99)	260 (67)	371 (95)	455 (115)	650 (165)
12	13 (6)	19 (9)	337 (115)	483 (165)	234 (82)	335 (117)	97 (52)	139 (75)	207 (90)	297 (129)
13	23 (6)	33 (9)	326 (136)	467 (195)	276 (115)	395 (164)	141 (77)	202 (110)	243 (172)	347 (246)
14	17 (6)	24 (9)	331 (134)	473 (191)	248 (86)	354 (122)	113 (70)	162 (100)	319 (114)	456 (163)
15	15 (6)	24 (9)								
16	38 (6)	54 (9)	620 (178)	896 (250)			280 (94)	401 (134)	634 (120)	906 (173)
17	28 (15)	39 (22)	391 (77)	557 (109)	382 (74)	544 (105)	188 (55)	268 (78)	345 (129)	493 (183)
18	19 (9)	27 (13)	371 (29)	529 (41)	369 (39)	527 (56)	187 (25)	267 (36)	392 (68)	560 (98)
19	21 (5)	30 (7)	226 (88)	328 (123)	274 (92)	392 (130)	131 (58)	189 (82)		
20	17 (4)	25 (5)	151 (19)	217 (27)	185 (33)	266 (47)	72 (26)	103 (37)	192 (55)	276 (79)
21	19 (3)	26 (3)	288 (114)	413 (163)	335 (109)	480 (156)	132 (47)	190 (67)	281 (79)	402 (112)
22	19 (5)	27 (7)	390 (30)	556 (42)	435 (95)	620 (136)	189 (43)	269 (61)	526 (42)	751 (59)
23	17 (3)	25 (5)	371 (99)	529 (140)	512 (114)	730 (163)	208 (48)	296 (68)	504 (107)	719 (153)
24	20 (5)	28 (7)	362 (87)	516 (124)	455 (116)	649 (165)	178 (45)	254 (64)	457 (101)	653 (143)
25	19 (10)	27 (15)	335 (80)	477 (114)	423 (111)	603 (158)	171 (55)	243 (78)	445 (74)	636 (106)
26	20 (10)	28 (14)	265 (19)	378 (26)	341 (40)	486 (57)	138 (15)	197 (21)	359 (29)	513 (41)
27	28 (8)	39 (11)	316 (60)	450 (85)	424 (105)	605 (150)	160 (39)	228 (56)	361 (98)	516 (140)
28	22 (5)	31 (6)	261 (94)	372 (134)	348 (108)	496 (154)	139 (51)	199 (72)	342 (144)	488 (206)
29	16 (6)	23 (9)	268 (59)	382 (84)	435 (91)	621 (130)	206 (36)	294 (51)	622 (201)	890 (287)
30	24 (7)	34 (9)	242 (118)	346 (168)	292 (93)	417 (132)	195 (57)	278 (82)	396 (118)	566 (168)
Avg	20	28	375	536	361	515	214	306	465	664
n	30	30	28	28	27	27	28	28	27	27
SD	5	7	133	191	85	121	87	124	162	232
Min	12	16	151	217	185	266	72	103	192	276
Max	38	54	777	1110	549	783	418	597	896	1280

ED_004549_00015928-00239

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for December, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	15 (6)	21 (8)	343 (86)	488 (123)	254 (67)	362 (96)	193 (17)	276 (25)	518 (67)	740 (96)
2	17 (3)	24 (5)	153 (54)	218 (76)	191 (73)	273 (104)	119 (45)	170 (64)	277 (197)	396 (282)
3	18 (7)	25 (10)	323 (54)	461 (77)	224 (45)	319 (65)	186 (19)	266 (27)	627 (159)	896 (228)
4	11 (4)	16 (5)	345 (116)	492 (166)			174 (44)	249 (63)	418 (100)	597 (143)
5	20 (11)	29 (16)	317 (58)	452 (82)	235 (27)	335 (39)	198 (41)	282 (59)	416 (123)	595 (176)
6	23 (18)	33 (25)	330 (124)	471 (176)	236 (40)	337 (57)	173 (42)	247 (59)	490 (122)	700 (173)
7	18 (6)	26 (8)	221 (39)	315 (56)	145 (20)	207 (29)	119 (20)	170 (28)	423 (76)	605 (109)
8	14 (14)	20 (20)	224 (33)	320 (48)	142 (20)	202 (28)	103 (17)	147 (25)	317 (47)	454 (67)
9	12 (7)	17 (10)	252 (44)	359 (63)	134 (13)	191 (19)	116 (18)	166 (26)	300 (49)	429 (71)
10	18 (7)	26 (10)	177 (19)	252 (27)	108 (11)	153 (15)	86 (16)	122 (23)	318 (36)	454 (52)
11	10 (7)									
12	10 (11)	15 (15)	224 (32)	320 (45)	82 (12)	117 (17)	75 (38)	107 (54)	237 (49)	339 (70)
13	20 (10)	29 (14)	198 (20)	283 (28)	92 (9)	132 (13)	71 (13)	101 (19)	316 (29)	452 (41)
14	39 (13)	56 (18)	235 (32)	335 (45)	100 (23)	142 (32)	82 (24)	117 (35)	324 (71)	463 (102)
15	7 (6)	10 (8)	261 (23)	372 (33)	110 (10)	156 (14)	124 (10)	177 (15)	224 (48)	320 (69)
16	22 (3)	32 (5)	242 (58)	346 (82)	111 (17)	159 (25)	122 (25)	175 (36)	384 (122)	549 (175)
17	19 (6)	27 (9)	269 (35)	384 (49)	84 (12)	119 (17)	90 (25)	129 (36)		
18	12 (7)	18 (10)	203 (27)	289 (38)	67 (11)	95 (15)	72 (18)	102 (26)	260 (62)	372 (88)
19	18 (6)	25 (9)			67 (26)	95 (38)	73 (20)	104 (29)	266 (70)	381 (101)
20	26 (5)	37 (7)					92 (45)	131 (65)	226 (78)	323 (112)
21	14 (8)	20 (11)	177 (28)	253 (41)	55 (14)	79 (20)	72 (26)	103 (37)	186 (60)	266 (86)
22	28 (8)	41 (12)	181 (52)	259 (74)	58 (10)	84 (14)	61 (19)	88 (27)	123 (31)	176 (45)
23	26 (5)	37 (7)	215 (62)	307 (89)	51 (14)	72 (20)	143 (51)	204 (73)	250 (74)	358 (105)
24	22 (4)	31 (6)	177 (26)	253 (37)	50 (5)	71 (8)	90 (33)	129 (47)	282 (33)	404 (46)
25	6 (4)	8 (6)	138 (30)	198 (42)	66 (15)	94 (21)	75 (20)	107 (28)	212 (69)	303 (98)
26	13 (3)	18 (4)	88 (29)	125 (41)	60 (17)	86 (24)	84 (24)	120 (34)	210 (74)	300 (105)
27	4 (1)	6 (1)								
28	7 (4)	10 (6)	75 (24)	107 (35)	48 (13)	69 (19)	64 (19)	91 (27)	196 (57)	280 (82)
29	7 (2)	10 (2)	74 (23)	105 (32)	39 (9)	56 (13)	94 (48)	134 (68)	229 (27)	328 (39)
30	3 (2)	4 (3)	71 (15)	102 (21)	37 (8)	53 (12)	63 (16)	90 (24)	241 (39)	345 (55)
31	7 (3)	10 (4)	66 (16)	94 (22)	38 (18)	55 (26)	69 (20)	99 (29)	197 (88)	281 (126)
Avg	16	23	207	295	107	152	106	152	302	432
n	31	30	27	27	27	27	29	29	28	28
SD	8	11	84	119	66	94	41	59	112	160
Min	3	4	66	94	37	53	61	88	123	176
Max	39	56	345	492	254	362	198	282	627	896

ED_004549_00015928-00240

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for January, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1			82 (19)	117 (28)	73 (16)	105 (23)	113 (44)	162 (63)	362 (93)	519 (134)
2	3 (2)	4 (2)	76 (17)	109 (25)	76 (16)	109 (23)	96 (33)	137 (47)	305 (44)	437 (63)
3	3 (3)	5 (4)	60 (16)	86 (23)	39 (16)	57 (22)	81 (28)	117 (39)		
4	1 (2)	2 (2)	75 (33)	106 (47)	40 (18)	57 (25)	61 (19)	87 (27)	157 (42)	225 (60)
5	4 (3)	6 (4)	62 (20)	89 (28)	36 (11)	52 (16)	65 (16)	94 (23)	103 (63)	148 (90)
6	1 (1)	1 (1)	38 (13)	54 (19)	23 (11)	33 (16)	47 (13)	67 (18)	97 (51)	139 (72)
7	2 (1)	3 (2)	25 (10)	36 (14)	16 (8)	23 (12)	16 (4)	23 (6)	55 (20)	79 (29)
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Avg	2	3	60	85	43	62	68	98	180	258
n	6	6	7	7	7	7	7	7	6	6
SD	1	2	20	28	22	31	30	43	114	163
Min	1	1	25	36	16	23	16	23	55	79
Max	4	6	82	117	76	109	113	162	362	519

ED_004549_00015928-00241

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for February, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19	-4 (0)	-6 (0)								
20	-4 (0)	-5 (0)								
21										
22										
23										
24										
25										
26	-3 (1)	-5 (1)	23 (10)				9 (6)	12 (9)	15 (12)	21 (17)
27	-3 (1)	-4 (1)	43 (5)				9 (5)	12 (7)	50 (8)	72 (12)
28	-2 (1)	-3 (1)	51 (5)				18 (2)	26 (2)	72 (7)	103 (10)
29	-3 (1)	-4 (1)	39 (5)	56 (7)			18 (4)	26 (5)	55 (14)	78 (20)
Avg	-3	-4	39				14	19	48	69
n	6	6	4	1	0	0	4	4	4	4
SD	1	1	10				5	7	21	30
Min	-4	-6	23				9	12	15	21
Max	-2	-3	51				18	26	72	103

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Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for March, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	-3 (0)	-4 (1)	70 (15)	101 (21)			25 (7)	35 (10)	68 (13)	97 (18)
2	-1 (2)	-1 (3)	43 (13)	62 (19)			29 (10)	41 (14)	43 (21)	61 (30)
3	-1 (1)	-1 (2)	70 (29)	101 (42)			37 (8)	53 (11)	60 (21)	85 (29)
4	-3 (0)	-4 (0)	124 (30)	178 (43)			49 (6)	70 (8)	53 (13)	75 (19)
5	-2 (1)	-3 (1)	118 (22)	169 (31)	85 (41)	122 (58)	54 (4)	77 (6)	88 (8)	125 (12)
6	1 (1)	1 (2)	155 (24)	223 (34)	226 (41)	324 (59)	58 (11)	83 (16)	107 (12)	152 (16)
7	-2 (0)	-3 (1)	192 (33)	276 (48)	361 (76)	517 (109)			112 (24)	159 (35)
8	2 (3)	2 (4)	147 (15)	211 (21)	482 (38)	691 (54)	93 (20)	132 (28)	165 (24)	235 (35)
9	7 (1)	9 (2)	124 (21)	175 (29)	489 (130)	695 (189)	105 (6)	150 (8)	167 (20)	238 (29)
10	3 (3)	4 (4)	111 (21)	159 (30)	627 (159)	900 (229)	89 (17)	127 (24)	196 (14)	280 (20)
11	10 (2)	15 (3)	159 (18)	227 (26)	1030 (194)	1470 (280)	106 (10)	151 (15)	220 (28)	313 (40)
12	3 (3)	4 (4)	167 (36)	239 (51)						
13	6 (3)									
14	3 (7)									
15	4 (3)									
16	1 (1)	1 (1)	169 (40)	242 (58)	1430 (546)	2050 (782)	127 (33)			
17	6 (6)	9 (9)	286 (111)	409 (161)	1630 (462)	2360 (656)	409 (736)			
18	13 (7)	18 (10)	181 (129)	258 (185)	1080 (765)	1600 (1220)				
19	4 (3)	5 (5)	141 (19)	202 (27)	1330 (177)					
20	12 (10)	17 (15)	144 (44)	206 (62)	1270 (509)					
21	4 (1)	6 (1)	147 (58)	211 (83)	1230 (242)				61 (28)	
22	11 (3)	16 (4)	136 (20)	195 (29)	1250 (146)				197 (38)	
23	10 (4)	14 (5)	114 (18)	163 (25)	1090 (231)				236 (88)	
24	10 (3)	14 (4)	114 (23)	162 (33)	820 (183)				241 (76)	
25	8 (1)	12 (1)	99 (15)	141 (21)	620 (173)				209 (89)	
26	11 (2)	15 (3)	70 (20)	100 (29)	491 (129)	702 (185)			182 (106)	261 (152)
27	7 (3)	9 (4)	103 (29)	148 (41)	495 (65)	709 (94)			246 (64)	352 (92)
28	15 (3)	21 (4)	82 (16)	118 (22)	417 (88)	597 (126)			277 (90)	396 (128)
29	4 (3)	6 (4)	106 (21)	151 (31)	466 (169)	667 (242)			414 (68)	592 (98)
30	9 (3)	13 (4)	138 (96)	197 (137)	441 (348)	631 (497)			457 (310)	653 (442)
31	6 (1)	9 (1)	45 (10)	64 (15)	133 (30)	191 (43)			121 (65)	173 (93)
Avg	5	7	127	182	760	889	98	92	178	250
n	31	28	28	28	23	16	12	10	22	17
SD	5	7	49	70	441	623	99	42	107	167
Min	-3	-4	43	62	85	122	25	35	43	61
Max	15	21	286	409	1630	2360	409	151	457	653

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Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for April, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	10 (4)	15 (5)	84 (21)	120 (30)	137 (55)	196 (79)			679 (204)	971 (291)
2	11 (6)	15 (8)	133 (33)	190 (47)	135 (65)	193 (92)			917 (132)	1310 (188)
3	8 (3)	11 (4)	128 (33)	183 (47)	119 (37)	169 (53)	69 (16)		999 (318)	1430 (455)
4										
5										
6										
7										
8										
9	32 (31)	47 (45)	68 (25)	97 (35)	50 (11)	72 (16)	121 (62)	173 (88)	933 (376)	1330 (537)
10	12 (19)	17 (28)	104 (56)	149 (80)			240 (140)	343 (200)	1210 (391)	1730 (558)
11	4 (1)	6 (1)			35 (19)	50 (27)	83 (94)	119 (134)	711 (218)	1020 (312)
12	7 (2)	10 (3)	91 (15)	130 (21)	55 (10)	78 (15)	279 (84)	399 (120)	1240 (266)	1780 (379)
13	40 (12)	57 (17)	97 (13)	138 (18)	56 (6)	81 (9)	384 (67)	549 (95)	1300 (175)	1860 (250)
14	20 (11)	28 (16)	97 (37)	138 (52)	52 (14)	74 (20)	322 (168)	460 (240)	833 (406)	1190 (580)
15	4 (3)	6 (4)	62 (44)	90 (63)	38 (18)	55 (26)	248 (203)	353 (290)	753 (446)	1080 (637)
16	2 (0)	3 (1)	36 (19)	52 (26)	31 (14)	44 (19)	236 (176)	336 (251)	334 (159)	476 (227)
17	2 (1)	3 (2)	32 (8)	45 (12)	28 (6)	39 (9)	125 (61)	178 (87)	174 (47)	249 (67)
18	3 (1)	4 (1)	28 (11)	40 (16)	29 (19)	42 (27)	120 (41)	171 (59)	228 (70)	326 (100)
19	2 (2)	3 (3)	31 (11)	45 (16)	39 (13)	56 (18)	121 (59)	173 (84)	185 (30)	265 (43)
20	2 (2)	2 (2)	36 (14)	52 (19)	38 (14)	54 (19)	142 (68)	203 (97)	195 (55)	280 (78)
21	0 (1)	0 (2)	30 (13)	43 (18)	32 (13)	45 (18)	194 (73)	278 (105)	247 (53)	353 (76)
22	0 (1)	1 (2)	31 (14)	45 (20)	38 (18)	54 (26)	278 (104)	397 (148)	219 (38)	313 (55)
23	2 (2)	3 (2)	26 (11)	37 (16)	35 (8)	51 (12)	174 (57)	248 (81)	208 (56)	297 (80)
24	-1 (1)	-1 (1)	25 (6)	36 (9)	29 (9)	41 (13)	197 (67)	281 (96)	241 (57)	344 (81)
25	1 (1)	1 (2)	25 (5)	36 (8)	23 (9)	33 (13)	191 (76)	273 (109)	188 (77)	270 (111)
26	0 (1)	0 (2)	41 (17)	59 (25)	56 (18)	80 (25)	339 (162)	485 (231)	200 (30)	285 (43)
27	12 (7)	18 (10)	60 (25)	85 (35)	71 (21)	101 (30)	378 (190)	539 (271)	233 (61)	332 (87)
28	8 (3)	11 (5)	70 (19)	99 (28)	72 (13)	102 (19)	447 (114)	639 (163)	260 (71)	372 (101)
29	9 (6)	13 (8)	83 (19)	119 (28)	73 (20)	104 (29)	464 (199)	662 (284)	273 (93)	390 (132)
30	4 (2)	6 (3)	65 (39)	93 (56)	48 (28)	69 (40)	276 (251)	395 (358)		
Avg	8	11	62	88	55	78	236	348	532	760
n	25	25	24	24	24	24	23	22	24	24
SD	10	14	33	47	32	46	111	153	387	554
Min	-1	-1	25	36	23	33	69	119	174	249
Max	40	57	133	190	137	196	464	662	1300	1860

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Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for May, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	0 (2)	1 (2)	26 (9)		20 (8)	29 (11)	100 (55)	143 (79)	145 (44)	207 (63)
2	0 (1)	0 (1)	26 (8)		19 (7)	28 (10)	91 (39)	131 (56)	164 (44)	235 (64)
3	2 (1)	3 (2)	55 (25)		55 (22)	79 (31)	186 (89)	266 (127)	134 (24)	192 (35)
4	4 (3)	6 (4)	52 (18)		53 (21)	75 (30)	219 (129)	312 (184)	127 (38)	181 (54)
5	5 (1)	8 (2)	49 (16)		53 (26)	76 (38)	209 (153)	298 (218)	177 (64)	253 (92)
6	0 (1)	0 (1)	36 (8)		38 (11)	54 (16)	127 (25)	182 (36)	125 (26)	178 (37)
7	2 (2)	3 (3)	39 (12)		30 (7)	44 (10)	76 (24)	108 (34)	93 (23)	133 (32)
8	7 (5)	10 (7)	95 (30)		103 (29)	147 (41)	247 (24)	353 (34)	225 (20)	322 (29)
9	14 (6)	20 (8)	92 (23)		83 (23)	119 (33)	211 (43)	301 (61)	200 (48)	286 (69)
10	2 (3)	3 (4)	66 (40)		72 (38)	102 (55)	120 (59)	172 (84)	143 (54)	204 (77)
11	2 (1)	3 (2)	79 (29)		96 (28)	137 (41)	127 (20)	181 (29)	135 (31)	194 (44)
12	3 (3)	4 (5)	66 (39)				116 (62)	165 (89)	127 (38)	181 (54)
13	4 (2)	6 (3)	58 (23)		65 (28)	93 (40)	85 (44)	121 (62)	85 (28)	121 (40)
14	4 (2)	6 (3)	60 (16)	86 (23)	69 (14)	99 (20)	75 (20)	108 (29)	105 (24)	150 (35)
15	1 (4)	2 (5)	96 (27)	137 (39)	86 (22)	123 (31)	84 (22)	120 (31)	119 (48)	170 (69)
16	1 (2)	2 (3)	70 (31)	101 (44)	60 (25)	85 (36)	49 (22)	70 (32)	68 (15)	97 (22)
17	2 (3)	3 (4)	47 (9)	67 (12)	50 (9)	72 (13)	33 (6)	48 (8)	66 (28)	94 (41)
18	-1 (1)	-2 (1)	65 (32)	93 (46)	76 (23)	109 (32)	44 (14)	63 (20)	79 (18)	113 (26)
19	-1 (1)	-2 (1)	62 (35)	89 (50)	73 (30)	104 (43)	51 (22)	73 (31)	92 (34)	131 (49)
20	-2 (1)	-3 (1)	77 (26)	110 (38)	67 (24)	95 (34)	54 (14)	77 (21)	80 (20)	115 (29)
21	-2 (1)	-3 (2)	50 (23)	72 (33)	90 (34)	129 (50)	44 (17)	64 (24)	92 (43)	135 (62)
22	-2 (1)	-3 (1)	65 (24)	93 (35)	78 (15)	111 (21)	40 (16)	57 (23)	54 (22)	76 (31)
23	-2 (1)	-3 (1)	64 (9)	92 (13)	67 (21)	96 (31)	58 (15)	83 (22)	79 (19)	113 (26)
24	-2 (2)	-3 (2)	54 (17)	77 (24)	47 (17)	68 (25)	34 (17)	49 (25)	55 (25)	79 (35)
25	1 (2)	2 (3)	42 (13)	60 (19)	56 (19)	80 (27)	28 (9)	40 (13)	46 (26)	66 (37)
26	1 (2)	1 (3)	35 (9)	50 (12)	40 (15)	57 (21)	17 (5)	24 (7)	29 (9)	41 (13)
27	-2 (1)	-3 (1)	62 (19)	89 (27)	48 (34)	68 (48)	33 (11)	47 (15)	54 (23)	78 (33)
28	-4 (1)	-5 (1)	67 (27)	95 (39)	62 (25)	88 (35)	36 (11)	52 (15)	58 (42)	83 (61)
29	1 (3)	1 (5)	51 (16)	73 (23)			34 (15)	49 (21)	35 (25)	49 (36)
30	-2 (1)	-2 (1)	29 (9)	42 (13)	21 (9)	30 (12)	21 (14)	30 (20)	41 (20)	59 (28)
31	-3 (1)	-4 (1)	35 (17)	50 (24)	19 (6)	27 (9)	14 (7)	20 (10)	21 (10)	30 (14)
Avg	1	2	57	82	58	84	86	123	98	141
n	31	31	31	18	29	29	31	31	31	31
SD	3	5	19	23	23	33	65	93	50	72
Min	-4	-5	26	42	19	27	14	20	21	30
Max	14	20	96	137	103	147	247	353	225	322

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Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for June, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	-3 (1)	-5 (1)	32 (11)	46 (16)	26 (7)	38 (10)	17 (5)	24 (7)	32 (29)	46 (42)
2	-3 (2)	-4 (2)	44 (31)	63 (44)	33 (14)	47 (20)	20 (7)	28 (10)	38 (28)	55 (40)
3	-3 (1)	-4 (1)	25 (10)	36 (14)	23 (10)	33 (14)	17 (6)	24 (9)	23 (11)	33 (16)
4	-2 (1)	-3 (2)	32 (9)	46 (13)	21 (8)	30 (11)	16 (8)	24 (12)	33 (22)	48 (32)
5	-3 (1)	-4 (1)	34 (12)	49 (18)	25 (9)	37 (13)	20 (11)	29 (16)	23 (7)	34 (10)
6	-2 (2)	-3 (2)	27 (8)	39 (12)	32 (30)	46 (44)	16 (8)	23 (12)	21 (7)	30 (10)
7	-2 (1)	-3 (1)	47 (18)	68 (26)	26 (9)	38 (13)	17 (5)	24 (8)	21 (6)	31 (9)
8	-3 (1)	-4 (1)	27 (12)	39 (17)	22 (9)	32 (13)	19 (7)	27 (10)	20 (7)	29 (10)
9	-3 (1)	-5 (1)	22 (11)	32 (16)	23 (11)	34 (15)	26 (18)	38 (27)	16 (9)	23 (13)
10	-3 (1)	-4 (2)	30 (13)	43 (19)	23 (13)	33 (19)	17 (14)	24 (20)	22 (16)	31 (23)
11	-3 (2)	-4 (2)	34 (16)	49 (22)	14 (9)	20 (13)	9 (6)	13 (9)	16 (13)	23 (18)
12	-2 (1)	-4 (1)	16 (9)	23 (13)	10 (6)	14 (9)	8 (7)	12 (10)	14 (4)	20 (6)
13	-4 (1)	-5 (1)	33 (21)	47 (31)	15 (8)	21 (12)	9 (4)	13 (6)	14 (7)	20 (10)
14	-3 (1)	-4 (1)	30 (6)	43 (9)	21 (16)	31 (23)	11 (7)	15 (11)	16 (6)	23 (9)
15	-3 (1)	-4 (2)	32 (18)	45 (26)	19 (21)	27 (30)	16 (7)	23 (10)	21 (8)	31 (12)
16										
17										
18										
19										
20	0 (4)	0 (6)	54 (26)	77 (37)	28 (14)	40 (20)	20 (8)	28 (11)	41 (37)	59 (53)
21	-2 (2)	-2 (3)	33 (15)	48 (21)	28 (21)	41 (30)	30 (10)	42 (14)	35 (12)	51 (17)
22	-3 (1)	-4 (1)	38 (18)	55 (26)	28 (16)	40 (23)	32 (15)	46 (21)	62 (40)	88 (57)
23	-2 (1)	-4 (2)								
24	-2 (0)	-3 (0)								
25	-3 (1)	-4 (1)								
26	-4 (1)	-5 (2)	37 (19)	54 (27)	36 (16)	51 (23)	29 (11)	42 (16)	37 (11)	53 (16)
27	-3 (1)	-4 (1)	26 (12)	37 (17)	38 (24)	54 (35)	27 (8)	39 (12)	117 (72)	169 (103)
28	-2 (1)									
29	-3 (1)									
30	-2 (1)	-3 (1)	89 (42)	128 (60)	30 (13)	43 (18)			330 (96)	472 (137)
Avg	-3	-4	35	51	25	36	19	27	45	65
n	26	24	21	21	21	21	20	20	21	21
SD	1	1	15	21	7	10	7	10	67	97
Min	-4	-5	16	23	10	14	8	12	14	20
Max	0	0	89	128	38	54	32	46	330	472

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Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for July, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	-1 (2)	-2 (2)	57 (38)	81 (55)	29 (16)	42 (23)	42 (20)	60 (29)	576 (121)	824 (173)
2	-1 (1)	-1 (1)	35 (11)	51 (16)	36 (20)	52 (29)	30 (13)	43 (19)	488 (82)	701 (118)
3										
4										
5										
6										
7										
8	4 (2)	6 (4)	165 (36)	238 (51)	37 (11)	54 (16)	33 (17)	47 (24)	727 (88)	1050 (125)
9	6 (4)	8 (6)	259 (88)	373 (126)	41 (21)	59 (30)	41 (28)	60 (41)	763 (126)	1100 (181)
10	10 (10)	14 (14)	307 (79)	442 (113)	33 (15)	47 (21)	48 (21)	69 (30)	832 (122)	1200 (175)
11	9 (10)	13 (14)	281 (79)	405 (114)	32 (10)	45 (14)	42 (27)	60 (39)		
12	12 (5)	17 (7)	337 (89)	486 (129)	32 (14)	46 (20)	41 (13)	59 (19)	905 (98)	1310 (140)
13	9 (3)	13 (5)	445 (116)	639 (166)	33 (18)	47 (26)	61 (27)	87 (39)	882 (144)	1270 (209)
14	14 (12)	20 (18)	424 (63)	609 (90)	25 (8)	36 (11)	49 (23)	70 (33)	929 (124)	1330 (178)
15	17 (6)	24 (8)	483 (61)	695 (87)	31 (13)	45 (19)	65 (32)	94 (45)	1030 (170)	1490 (244)
16	17 (6)	24 (8)	567 (53)	817 (77)	32 (14)	46 (19)	48 (19)	68 (28)	945 (98)	1360 (141)
17	17 (9)	24 (12)	566 (39)	815 (56)	47 (16)	68 (24)	42 (7)	61 (10)	914 (270)	1320 (389)
18	32 (11)	47 (16)			76 (15)	109 (22)	55 (25)	80 (36)		
19	17 (9)	24 (12)	506 (50)	730 (72)	89 (22)	128 (32)	45 (11)	64 (16)	844 (51)	1220 (72)
20	8 (2)	11 (3)	547 (61)	789 (88)	129 (23)	186 (33)	80 (25)	116 (36)	768 (55)	1110 (80)
21	27 (23)	39 (33)	662 (61)	954 (87)	231 (73)	333 (105)	142 (39)	205 (56)	855 (99)	1230 (143)
22	43 (25)	61 (35)	759 (102)	1090 (147)	427 (98)	613 (140)	233 (38)	335 (55)	916 (202)	1320 (290)
23	15 (11)	22 (16)	706 (76)	1010 (110)	469 (78)	672 (112)	297 (68)	427 (97)	1100 (410)	1580 (590)
24	42 (16)	61 (23)	769 (312)	1100 (448)	455 (158)	651 (226)	437 (131)	626 (188)	1120 (538)	1600 (772)
25	50 (25)	72 (35)	883 (205)	1270 (294)	465 (135)	668 (194)	466 (192)	670 (276)	1050 (535)	1510 (766)
26	22 (17)	32 (24)	892 (95)	1280 (138)	533 (67)	767 (97)	690 (50)	993 (72)	806 (172)	1160 (246)
27	72 (29)	103 (42)	857 (146)	1230 (210)	465 (47)	667 (68)	637 (133)	915 (191)	986 (476)	1420 (684)
28	90 (47)	130 (68)	1040 (255)	1500 (367)			645 (127)	929 (184)	795 (122)	1140 (175)
29	67 (41)	96 (58)	906 (167)	1310 (240)	510 (103)	734 (149)	744 (140)	1070 (203)	836 (330)	1200 (474)
30	120 (78)	173 (112)	857 (92)	1230 (133)	665 (143)	957 (206)			723 (92)	1040 (133)
31										
Avg	29	41	555	798	205	295	209	300	860	1240
n	25	25	24	24	24	24	24	24	23	23
SD	30	43	279	401	216	310	243	349	149	213
Min	-1	-2	35	51	25	36	30	43	488	701
Max	120	173	1040	1500	665	957	744	1070	1120	1600

ED_004549_00015928-00247

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for August, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7	24 (12)	34 (17)	1260 (604)	1810 (868)	512 (183)	734 (262)	683 (105)	979 (151)	771 (353)	1110 (506)
8	75 (67)	108 (96)	1250 (632)	1790 (907)	805 (497)	1150 (712)	681 (70)	976 (101)	900 (465)	1290 (667)
9	65 (60)	93 (85)	1230 (621)	1760 (890)	820 (341)	1180 (488)	746 (138)	1070 (197)	841 (434)	1210 (621)
10	43 (14)	61 (20)	1280 (633)	1840 (909)	880 (361)	1260 (518)	677 (106)	971 (151)	1060 (488)	1520 (700)
11	58 (54)	83 (77)			1070 (547)	1530 (784)	648 (143)	929 (204)		
12	82 (48)	117 (69)	1410 (1000)	2020 (1440)	893 (485)	1280 (696)	825 (278)	1180 (398)	885 (486)	1270 (696)
13	85 (55)	121 (79)	1090 (780)	1560 (1120)	931 (518)	1340 (745)	632 (161)	908 (232)	694 (323)	996 (464)
14	55 (37)	79 (53)	671 (230)	964 (330)	1720 (599)	2470 (860)	576 (157)	827 (225)	595 (301)	854 (431)
15			808 (537)	1160 (769)	512 (288)	734 (412)	867 (524)	1240 (751)	524 (302)	750 (433)
16										
17										
18										
19										
20	9 (8)	12 (11)			242 (135)	347 (193)	447 (190)		337 (180)	483 (259)
21	30 (19)	43 (27)			182 (115)	261 (164)	440 (276)		256 (131)	367 (187)
22	40 (30)	58 (43)								
23	49 (69)	70 (101)								
24	30 (25)									
25	28 (23)									
26	22 (19)									
27	50 (42)	71 (60)	658 (494)	945 (709)						
28	87 (44)	125 (63)	607 (335)	873 (480)						
29	53 (51)	76 (74)	799 (734)	1150 (1050)						
30	70 (60)	101 (87)	1340 (1090)	1930 (1570)						
31	48 (42)	69 (60)	1490 (1140)	2130 (1630)						
Avg	50	78	1070	1530	779	1120	657	1010	687	985
n	20	17	13	13	11	11	11	9	10	10
SD	22	30	302	433	405	581	128	126	245	351
Min	9	12	607	873	182	261	440	827	256	367
Max	87	125	1490	2130	1720	2470	867	1240	1060	1520

ED_004549_00015928-00248

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for September, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	50 (52)	71 (75)	1360 (1050)	1950 (1500)						
2	53 (62)	76 (88)	1180 (1080)	1700 (1540)						
3	53 (52)	77 (74)	777 (421)	1120 (605)						
4	35 (23)	51 (33)	767 (321)	1100 (460)	450 (170)					
5	41 (36)	59 (51)			710 (311)					
6	45 (36)	64 (51)			834 (596)					
7	65 (37)	93 (53)			770 (516)					
8	64 (42)	91 (59)			604 (436)					
9	41 (11)	58 (16)	1160 (652)				695 (466)	995 (667)	1210 (603)	1730 (865)
10	28 (6)	40 (8)	828 (771)		1070 (817)	1270 (1110)	662 (556)	948 (796)	1130 (837)	1620 (1200)
11										
12										
13										
14										
15										
16	23 (6)	32 (9)	779 (493)	1120 (706)	1100 (603)		842 (628)	1210 (901)	935 (494)	1340 (707)
17	64 (23)	92 (33)	796 (670)	1140 (960)	1040 (772)		926 (691)	1330 (990)	784 (600)	1120 (859)
18	21 (14)	30 (20)	994 (658)	1430 (943)	842 (593)		862 (587)	1230 (840)	633 (431)	906 (618)
19	28 (11)	40 (16)	922 (742)	1330 (1060)	841 (595)		892 (709)	1280 (1020)	730 (474)	1040 (682)
20	27 (13)	39 (18)	893 (683)	1280 (979)	754 (605)	1080 (867)	778 (606)	1120 (867)	614 (429)	879 (615)
21	51 (17)	72 (24)	817 (554)	1170 (795)	774 (483)	1110 (693)	785 (522)	1130 (748)	567 (386)	814 (554)
22	20 (17)	29 (25)	705 (507)	1020 (733)			912 (580)	1310 (839)	745 (502)	1070 (727)
23					440 (293)	630 (420)	830 (683)	1190 (978)	713 (534)	1020 (767)
24										
25										
26										
27										
28										
29										
30										
Avg	42	60	922	1310	787	1020	818	1170	806	1150
n	17	17	13	11	13	4	10	10	10	10
SD	15	22	190	273	201	238	84	121	206	296
Min	20	29	705	1020	440	630	662	948	567	814
Max	65	93	1360	1950	1100	1270	926	1330	1210	1730

ED_004549_00015928-00249

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for October, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1										
2	68 (18)	97 (26)	894 (499)	1280 (716)	981 (343)	1400 (491)	1330 (735)	1910 (1050)	1050 (517)	1510 (739)
3	35 (28)	50 (39)	744 (343)	1070 (490)	847 (344)	1210 (491)	1150 (685)	1650 (979)	856 (485)	1220 (694)
4	18 (9)	26 (13)	920 (521)	1320 (744)	983 (565)	1400 (809)	1170 (746)	1670 (1070)	1040 (558)	1490 (798)
5	20 (10)	28 (14)	876 (606)	1250 (865)	857 (707)	1220 (1010)	944 (690)	1350 (986)	852 (569)	1220 (813)
6	10 (6)	15 (9)	599 (417)	916 (598)	575 (406)	858 (600)				
7	30 (6)	43 (9)	572 (290)	820 (415)	481 (255)	688 (364)	637 (465)	911 (664)	587 (223)	841 (319)
8	66 (14)	95 (20)	785 (374)	1130 (535)	632 (276)	906 (394)	806 (525)	1160 (752)	722 (326)	1040 (466)
9	40 (16)	57 (23)	860 (641)	1230 (917)	716 (407)	1020 (583)	1040 (745)	1490 (1070)	878 (531)	1260 (760)
10	33 (14)	47 (19)	784 (604)	1120 (863)	621 (455)	888 (650)	798 (644)	1140 (919)	773 (548)	1100 (784)
11	37 (23)	53 (33)	484 (395)	693 (565)	375 (232)	536 (331)	526 (351)	753 (502)	431 (309)	616 (441)
12	33 (21)	48 (30)	326 (277)	466 (397)	276 (159)	394 (227)	437 (302)	626 (432)	371 (191)	530 (273)
13	40 (7)	57 (10)	254 (177)	363 (254)	244 (116)	349 (166)	375 (261)	537 (374)	316 (172)	452 (245)
14	33 (15)	47 (22)	329 (203)	473 (291)	325 (128)	466 (182)	491 (286)	704 (409)	389 (128)	558 (183)
15	35 (12)	50 (17)	393 (245)	564 (350)	353 (181)	507 (258)	447 (293)	641 (419)	393 (177)	564 (253)
16	33 (12)	47 (17)	875 (286)	1250 (408)	539 (86)	770 (122)	1010 (462)	1450 (662)	694 (203)	994 (291)
17	31 (15)	44 (21)								
18	41 (42)	59 (59)	981 (446)	1400 (636)	673 (266)	961 (380)	1110 (688)	1580 (983)	694 (298)	992 (427)
19	37 (14)	53 (20)	1060 (637)	1510 (909)	732 (337)	1050 (481)	1250 (790)	1790 (1130)	754 (424)	1080 (606)
20	30 (14)	42 (20)	828 (506)	1180 (723)	625 (300)	893 (427)	1100 (799)	1570 (1140)	597 (297)	853 (424)
21	21 (13)	30 (18)	1050 (672)	1500 (962)			1850 (600)	2640 (858)		
22	3 (3)	4 (4)	1110 (517)	1580 (739)	722 (307)	1030 (439)	1120 (564)	1600 (805)	714 (353)	1020 (504)
23	15 (6)	22 (9)	775 (565)	1110 (808)	562 (332)	802 (475)	854 (614)	1220 (874)	592 (338)	846 (483)
24										
25										
26										
27										
28										
29										
30										
31										
Avg	32	46	738	1060	606	868	922	1320	669	957
n	22	22	21	21	20	20	20	20	19	19
SD	15	21	251	357	213	304	360	514	214	305
Min	3	4	254	363	244	349	375	537	316	452
Max	68	97	1110	1580	983	1400	1850	2640	1050	1510

ED_004549_00015928-00250

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for November, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1			660 (323)	944 (462)	472 (197)	675 (282)	552 (320)	789 (457)	585 (302)	836 (431)
2										
3										
4	54 (26)	76 (37)	645 (443)	921 (633)			743 (458)	1060 (653)		
5	89 (11)	127 (16)								
6	41 (16)	59 (22)	608 (233)	873 (333)	469 (197)	672 (281)	607 (259)	870 (369)		
7	56 (23)	79 (33)	976 (295)	1400 (421)	827 (275)	1180 (392)	1180 (449)	1680 (639)	926 (323)	1320 (461)
8	84 (9)	119 (13)	1230 (195)	1760 (279)	1090 (119)	1560 (171)	1650 (223)	2350 (319)	1370 (309)	1960 (443)
9	72 (24)	101 (35)	1490 (194)	2130 (277)	1170 (166)	1670 (236)	2290 (358)	3280 (512)	1830 (372)	2610 (532)
10	39 (8)	56 (12)	1590 (448)	2280 (642)	1240 (251)	1770 (361)	2010 (870)	2880 (1250)	2040 (506)	2910 (722)
11	54 (12)	76 (18)	1560 (495)	2220 (706)	1200 (453)	1710 (647)	1000 (968)	1430 (1380)	1480 (511)	2110 (729)
12	58 (12)	83 (18)	847 (276)	1210 (393)	598 (78)	855 (111)	217 (84)	311 (120)	806 (189)	1150 (270)
13	57 (10)	81 (14)	633 (115)	907 (165)	597 (95)	855 (135)	235 (66)	337 (94)	612 (178)	877 (255)
14	49 (12)		664 (160)							
15	27 (11)		1250 (218)	1780 (311)	830 (156)	1190 (222)	195 (68)	279 (97)	865 (167)	1240 (239)
16	43 (13)		1370 (163)	1950 (233)	1090 (147)	1560 (209)	150 (27)	214 (38)	938 (223)	1340 (319)
17	35 (11)		1520 (218)	2180 (312)	1060 (85)	1510 (121)	114 (49)	163 (70)	965 (212)	1380 (302)
18	28 (12)		1220 (640)	1740 (915)	1160 (175)	1660 (250)	378 (103)	539 (147)		
19	77 (11)		981 (249)	1400 (355)	819 (227)	1170 (324)	471 (213)	671 (303)	993 (253)	1420 (361)
20	72 (21)		1090 (193)	1560 (275)	929 (132)	1330 (188)	1110 (305)	1580 (437)	1290 (217)	1850 (311)
21	55 (16)	78 (23)	1500 (379)	2140 (542)	1040 (169)	1490 (241)	1460 (338)	2090 (483)	1630 (346)	2320 (493)
22	56 (11)	80 (16)	1630 (575)	2330 (822)	1050 (223)	1500 (318)	1540 (352)	2190 (502)	1420 (433)	2030 (618)
23	81 (18)	114 (26)	1330 (563)	1890 (804)	864 (255)	1230 (364)	1360 (477)	1950 (681)	1240 (419)	1760 (598)
24	50 (11)	71 (15)	1170 (208)	1680 (295)	798 (61)	1140 (87)	1340 (300)	1920 (428)	1320 (229)	1880 (328)
25	42 (9)		1360 (314)		845 (125)		1700 (572)		1430 (286)	
26	76 (19)	108 (27)	1210 (382)	1720 (544)	802 (209)	1140 (298)	1320 (477)	1890 (681)	1210 (342)	1730 (487)
27	27 (10)									
28	4 (3)		0 (2)		-1 (2)		1 (1)		2 (3)	
29	9 (11)		56 (187)		20 (73)		13 (57)		7 (14)	
30	47 (39)		1410 (183)	2010 (261)	837 (105)	1200 (146)	1530 (299)	2190 (414)	1390 (258)	1990 (356)
Avg	51	87	1080	1680	825	1290	927	1390	1110	1720
n	27	15	26	22	24	21	25	22	22	19
SD	21	21	439	465	325	323	665	900	498	541
Min	4	56	0	873	-1	672	1	163	2	836
Max	89	127	1630	2330	1240	1770	2290	3280	2040	2910

ED_004549_00015928-00251

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for December, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	32 (33)		865 (850)		575 (534)		897 (1070)			
2	95 (16)		1740 (229)	2490 (326)	1000 (177)	1430 (253)	2080 (472)	2970 (674)	1910 (458)	2730 (654)
3	73 (15)		1350 (209)	1930 (298)	763 (109)	1090 (156)	1530 (283)	2180 (403)	1480 (163)	2110 (231)
4	38 (6)	54 (8)	1910 (267)	2740 (383)	1270 (145)	1820 (208)	2580 (429)	3700 (613)	2100 (400)	3000 (571)
5	66 (28)	93 (39)	2260 (202)	3240 (288)	1460 (120)	2080 (171)	3000 (306)	4290 (436)	2470 (294)	3540 (420)
6	89 (45)	126 (64)	1710 (267)	2440 (378)	1280 (243)	1830 (346)	2330 (417)	3340 (596)	2200 (519)	3150 (744)
7	61 (20)	86 (28)	1940 (432)	2770 (618)	1490 (304)	2130 (434)	2530 (526)	3620 (756)	2150 (524)	3070 (748)
8	96 (10)	136 (14)	1370 (222)	1950 (317)	938 (229)	1340 (327)	1650 (263)	2360 (372)	1610 (194)	2300 (276)
9	62 (18)	88 (25)	755 (314)	1080 (446)	864 (166)	1240 (238)	1310 (569)	1870 (810)		
10	27 (4)	39 (6)								
11	47 (22)	67 (31)	1360 (347)	1930 (493)	1380 (284)	1970 (406)				
12	47 (10)	67 (15)	1290 (199)	1850 (283)	1730 (258)	2480 (368)	3090 (294)	4420 (420)	2380 (244)	3400 (346)
13	65 (7)	92 (11)	789 (333)	1130 (475)	1390 (397)	1990 (567)	2340 (726)	3340 (1040)	1900 (479)	2710 (683)
14	50 (5)	71 (7)	480 (88)	686 (126)	1000 (106)	1440 (151)	1490 (249)	2130 (354)	1220 (277)	1740 (394)
15	33 (8)	47 (11)	804 (224)	1150 (321)	2060 (488)	2950 (697)	2770 (1170)	3970 (1670)		
16	61 (17)	87 (24)	950 (124)	1360 (179)	2050 (229)	2930 (326)	2960 (413)	4230 (591)	2380 (414)	3400 (589)
17	50 (16)	71 (22)	673 (54)	962 (76)	1820 (75)	2600 (106)	2690 (215)	3840 (308)	2260 (110)	3240 (157)
18	42 (31)	59 (43)	604 (136)	862 (194)	1580 (285)	2260 (407)	2260 (514)	3230 (731)	1860 (151)	2660 (215)
19	58 (26)	82 (36)	439 (68)	627 (96)	1450 (189)	2070 (270)	1890 (276)	2700 (391)	1920 (260)	2750 (372)
20	43 (26)	61 (37)	438 (69)	626 (99)	1710 (109)	2440 (155)	2270 (124)	3250 (177)	1970 (231)	2820 (333)
21	29 (17)	42 (24)	388 (55)	556 (79)	3170 (308)	4540 (442)	3060 (228)	4380 (327)	2350 (378)	3360 (541)
22	58 (18)	82 (26)	442 (140)	632 (201)	2720 (356)	3890 (508)	3680 (581)	5270 (835)	2950 (775)	4220 (1110)
23	23 (6)	33 (9)	289 (28)	414 (41)	1810 (392)	2590 (559)	2260 (523)	3230 (748)	1890 (456)	2700 (651)
24	33 (12)	47 (18)	199 (37)	284 (53)	1760 (658)	2520 (939)	2020 (974)	2890 (1390)	1950 (774)	2790 (1110)
25	38 (13)	53 (19)	233 (41)	333 (59)	2320 (424)	3320 (606)	2800 (901)	4000 (1290)	2590 (915)	3700 (1310)
26	18 (5)	26 (7)	156 (51)	223 (72)	1420 (398)	2030 (566)	1420 (792)	2020 (1130)	1450 (534)	2080 (761)
27	17 (4)	24 (6)	92 (40)	132 (58)	670 (279)	962 (400)	638 (389)	917 (559)	825 (372)	1180 (534)
28	27 (3)	39 (4)	150 (20)	214 (28)	1890 (425)	2700 (607)	1890 (467)	2700 (667)	1950 (344)	2790 (492)
29	21 (3)	30 (4)	135 (42)	193 (60)	1510 (222)	2150 (315)	1790 (415)	2550 (590)	1710 (307)	2450 (440)
30	14 (6)	20 (9)	123 (36)	176 (51)	1610 (282)	2300 (401)	1790 (583)	2560 (832)	1370 (403)	1960 (575)
31	59 (21)	84 (30)	133 (47)	191 (68)	2030 (336)	2900 (480)	2530 (435)	3610 (619)	1850 (169)	2640 (240)
Avg	48	65	802	1140	1560	2270	2190	3200	1950	2790
n	31	28	30	29	30	29	29	28	26	26
SD	22	29	630	917	569	784	686	934	448	641
Min	14	20	92	132	575	962	638	917	825	1180
Max	96	136	2260	3240	3170	4540	3680	5270	2950	4220

ED_004549_00015928-00252

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for January, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1			130 (40)	186 (58)	1750 (432)	2490 (617)	2100 (490)	3000 (697)	1750 (404)	2510 (577)
2	39 (10)	55 (15)	160 (37)	229 (53)	1610 (202)	2310 (288)	1870 (308)	2670 (439)	1550 (241)	2210 (344)
3	11 (8)	16 (12)	146 (54)	209 (77)	1660 (317)	2370 (452)	2160 (645)	3090 (918)	1920 (211)	2750 (302)
4	31 (19)	44 (26)	139 (32)	198 (47)	1490 (372)	2130 (531)	1820 (550)	2600 (784)	1610 (536)	2300 (767)
5	43 (23)	61 (33)	149 (42)	214 (61)	2090 (462)	2980 (661)	2550 (278)	3640 (397)		
6	16 (12)	23 (17)	151 (37)	216 (53)	1740 (321)	2490 (456)	2090 (579)	2990 (825)	1760 (376)	2510 (535)
7	33 (8)	47 (11)	146 (48)	209 (69)	1940 (448)	2770 (642)	2470 (796)	3540 (1150)	1940 (653)	2780 (938)
8	26 (2)	37 (3)	173 (40)	247 (57)	2380 (419)	3400 (597)	2890 (533)	4130 (763)	2920 (799)	4180 (1140)
9	14 (4)	20 (6)	137 (50)	195 (71)	1800 (469)	2580 (668)	1970 (698)	2820 (997)	2160 (494)	3080 (706)
10	49 (23)	69 (32)	146 (23)	208 (32)	2100 (356)	3000 (508)	2080 (252)	2980 (358)	2070 (188)	2960 (267)
11	26 (18)	36 (26)	113 (22)	162 (31)	2170 (350)	3100 (497)	2090 (304)	2980 (432)	2430 (267)	3470 (379)
12	32 (31)	45 (45)	111 (28)	159 (40)	2030 (312)	2900 (442)	2050 (447)	2930 (637)	2220 (372)	3170 (529)
13	22 (9)	31 (13)								
14	36 (20)	51 (28)	149 (32)	213 (46)	2530 (439)	3620 (626)	2460 (452)	3520 (647)	3450 (587)	4930 (838)
15	31 (9)	43 (13)	188 (76)	268 (109)	3110 (553)	4450 (794)				
16	23 (9)	32 (13)	218 (75)		2960 (283)	4230 (403)	2690 (967)	3840 (1380)	3830 (413)	5470 (588)
17	22 (5)	31 (7)	240 (79)	343 (112)	2430 (430)	3470 (611)	2520 (650)	3600 (926)	2510 (1070)	3580 (1520)
18	48 (11)	68 (16)	247 (64)	353 (91)	2960 (298)	4230 (425)	2640 (412)	3770 (588)	3030 (743)	4330 (1060)
19	42 (10)	59 (15)	98 (62)	140 (88)	2620 (308)	3750 (437)	2510 (496)	3580 (707)	3220 (553)	4600 (788)
20	43 (13)	61 (18)	122 (66)	174 (95)			2780 (727)	3960 (1040)		
21	35 (15)	49 (21)	143 (45)		2560 (552)	3650 (787)	2460 (677)	3510 (966)	4030 (687)	5760 (980)
22	26 (6)	36 (8)	133 (36)		2280 (605)	3260 (863)	1700 (611)	2420 (872)	3280 (909)	4690 (1300)
23	28 (21)	40 (30)	101 (35)		2320 (413)	3310 (590)	1430 (481)	2040 (686)	3030 (446)	4340 (638)
24	65 (30)	93 (42)	99 (41)		2950 (618)	4210 (883)	2080 (335)	2970 (479)	4000 (564)	5720 (804)
25	43 (6)	61 (9)	110 (49)		2690 (470)	3850 (671)	2220 (373)	3180 (532)	4390 (380)	6280 (539)
26	66 (45)	94 (64)	136 (30)		2460 (165)	3510 (234)	1810 (387)	2580 (552)	4020 (494)	5750 (704)
27	78 (34)	110 (49)	182 (43)		2530 (285)	3610 (405)	1860 (167)	2660 (239)	3690 (414)	5270 (589)
28	74 (34)	106 (49)	170 (36)		2660 (374)	3800 (530)	1580 (167)	2260 (237)	4010 (209)	5740 (297)
29	16 (5)	23 (7)			2520 (819)	3610 (1170)	1530 (265)	2190 (380)	3690 (563)	5280 (802)
30	25 (5)	35 (7)	50 (7)	71 (11)	3630 (516)	5200 (736)	1480 (153)	2110 (219)	3890 (173)	5550 (246)
31	12 (4)	16 (5)	99 (48)	142 (68)	3060 (944)	4370 (1350)	1210 (340)	1730 (484)	3160 (742)	4520 (1060)
Avg	35	50	144	207	2380	3400	2110	3010	2950	4210
n	30	30	29	20	29	29	29	29	27	27
SD	17	25	42	63	507	726	430	614	881	1260
Min	11	16	50	71	1490	2130	1210	1730	1550	2210
Max	78	110	247	353	3630	5200	2890	4130	4390	6280

ED_004549_00015928-00253

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for February, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	34 (23)	48 (32)	144 (93)	205 (132)	2310 (235)	3300 (336)	1010 (234)	1450 (335)	1950 (635)	2790 (906)
2	29 (14)	41 (20)	91 (57)	130 (82)	2600 (416)	3720 (590)	1020 (116)	1460 (166)	2950 (701)	4210 (1000)
3	58 (30)	82 (43)	41 (11)	58 (16)	2830 (365)	4050 (520)	777 (232)	1110 (332)	3370 (352)	4820 (500)
4	60 (28)	84 (40)	51 (27)	73 (39)	3320 (468)	4750 (667)				
5	7 (1)	9 (2)	41 (8)	58 (12)	2780 (856)	3970 (1220)	912 (409)	1300 (584)	3010 (340)	4300 (486)
6	7 (1)									
7	10 (4)	15 (6)	49 (14)	70 (20)	1500 (700)	2140 (999)	254 (102)	363 (145)	1830 (677)	2620 (968)
8	39 (21)	56 (29)	35 (9)	49 (13)	2280 (438)	3260 (623)	396 (36)	565 (51)	2560 (510)	3660 (728)
9	6 (5)	9 (7)	20 (5)	29 (7)	1810 (736)	2590 (1050)	361 (81)	516 (115)	2710 (600)	3870 (857)
10	5 (2)	7 (3)	33 (4)	47 (6)	1520 (364)	2180 (520)	172 (81)	246 (116)	1340 (537)	1920 (767)
11	4 (3)	6 (4)	43 (38)	61 (54)	1200 (149)	1720 (214)	237 (66)	340 (95)	1210 (177)	1740 (255)
12	15 (11)	22 (16)	67 (42)	96 (59)	2650 (663)	3800 (948)	291 (108)	419 (154)	2100 (895)	3020 (1270)
13	32 (23)	45 (32)	104 (56)	148 (80)	2480 (871)	3540 (1250)	306 (34)	437 (48)	2370 (500)	3390 (714)
14	52 (18)	74 (25)	55 (6)	78 (8)	2500 (382)	3570 (545)	256 (57)	366 (82)	2540 (132)	3620 (189)
15	27 (10)	38 (14)	63 (9)	90 (13)	2810 (766)	4020 (1100)	242 (64)	346 (91)	2400 (257)	3430 (366)
16	4 (5)	5 (6)	92 (35)	131 (49)	3260 (367)	4660 (525)	286 (46)	407 (66)	2460 (230)	3510 (331)
17	0 (2)	-1 (3)	97 (32)	137 (45)	3600 (511)	5120 (728)	386 (56)	549 (79)	2890 (188)	4110 (268)
18	1 (2)	2 (3)			2580 (652)		186 (75)		1900 (459)	
19	6 (8)	9 (11)	20 (13)		1380 (286)		68 (46)		1640 (339)	
20	18 (23)	25 (32)								
21	11 (29)	16 (42)								
22	18 (25)	26 (35)								
23	25 (32)	35 (45)								
24	8 (14)	11 (20)								
25	18 (10)	26 (14)	231 (62)	333 (89)					1460 (594)	2080 (846)
26	17 (6)	24 (8)	149 (40)	214 (57)					1210 (297)	
27	45 (18)	64 (25)	230 (68)	331 (98)					1400 (509)	
28	47 (12)	67 (17)	352 (76)	505 (108)					1600 (273)	
Avg	21	31	96	142	2410	3520	422	658	2140	3320
n	28	27	21	20	18	16	17	15	21	16
SD	18	25	83	119	671	940	297	420	636	869
Min	0	-1	20	29	1200	1720	68	246	1210	1740
Max	60	84	352	505	3600	5120	1020	1460	3370	4820

ED_004549_00015928-00254

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for March, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	39 (7)	56 (10)	241 (50)	346 (72)	3170 (408)		274 (38)		1720 (145)	
2	23 (12)	33 (18)	336 (90)	484 (130)	2810 (728)		227 (45)		1430 (103)	
3	32 (14)	45 (21)	296 (20)	426 (29)	2140 (486)		153 (26)		1240 (92)	
4	37 (5)	52 (7)	296 (60)	424 (86)	1920 (469)		156 (30)	222 (43)	975 (303)	
5	31 (3)	44 (4)	247 (125)	354 (179)	1090 (713)		122 (52)	174 (74)	710 (337)	1010 (479)
6	40 (9)	58 (13)	207 (41)	297 (59)	501 (357)		59 (14)	84 (20)	295 (224)	421 (319)
7	38 (7)	55 (10)	246 (47)	353 (68)	466 (336)	668 (482)	61 (51)	88 (73)	168 (106)	241 (152)
8	20 (6)	29 (9)	312 (112)	449 (160)	1440 (642)	2070 (919)	193 (122)	276 (174)	622 (305)	888 (435)
9	14 (8)	20 (11)	407 (80)	584 (115)	2290 (944)	3280 (1350)	141 (49)	201 (70)	979 (272)	1390 (388)
10	23 (6)	33 (9)	267 (85)	383 (122)	1030 (799)	1480 (1140)	117 (66)	167 (94)	525 (372)	749 (530)
11	14 (3)	19 (4)	491 (86)	704 (124)	3020 (402)	4330 (576)	148 (28)	211 (39)	1160 (149)	1650 (212)
12	11 (7)	16 (10)	597 (33)	856 (48)	3050 (703)	4360 (1010)	223 (70)	318 (100)	1160 (112)	1660 (159)
13	5 (2)	8 (3)	415 (117)	595 (168)	2520 (1120)	3620 (1610)	281 (58)	400 (83)	956 (227)	1360 (323)
14	3 (6)	5 (9)	270 (124)	388 (177)	1710 (1000)	2450 (1440)	183 (117)	261 (167)	680 (422)	968 (600)
15	0 (3)	0 (4)	185 (81)	266 (116)	1170 (821)	1670 (1170)	135 (125)	192 (178)	523 (417)	744 (593)
16	4 (2)	6 (3)	150 (51)	214 (73)	741 (410)	1060 (586)	68 (51)	97 (73)	288 (207)	410 (295)
17	10 (6)	14 (9)	131 (53)	187 (75)	539 (344)	771 (492)	52 (51)	74 (73)	232 (206)	331 (293)
18	5 (6)	8 (8)	153 (53)	220 (76)	606 (225)	866 (321)	46 (44)	66 (63)	255 (162)	364 (231)
19	21 (7)	30 (10)	149 (95)	213 (136)	832 (350)	1190 (500)	175 (147)	249 (210)	492 (381)	702 (543)
20	10 (10)	14 (15)	81 (20)	115 (28)	981 (399)	1400 (570)	165 (73)	234 (103)	574 (203)	819 (290)
21										
22										
23										
24	-1 (2)	-1 (3)	27 (14)	38 (20)	375 (183)	535 (261)	50 (47)	71 (67)	537 (634)	766 (906)
25	27 (17)	38 (25)	53 (15)	76 (22)	401 (137)	574 (195)	50 (38)	71 (54)	511 (442)	731 (633)
26	30 (14)	43 (20)	38 (9)	55 (13)	518 (195)	740 (279)	94 (63)	134 (89)	851 (478)	1220 (683)
27	57 (28)	82 (40)			516 (265)	737 (379)	96 (70)	137 (100)	879 (557)	1260 (795)
28	23 (30)	32 (42)	309 (192)	443 (276)	822 (194)	1180 (277)	310 (109)	442 (155)	1150 (360)	1640 (514)
29	6 (3)	8 (4)	60 (23)	85 (33)	1210 (89)	1730 (129)	124 (14)	177 (20)	1300 (320)	1860 (457)
30	5 (4)	7 (5)	43 (13)	63 (19)	964 (349)	1410 (494)	73 (38)	108 (53)		
31	2 (1)	3 (2)	48 (8)	69 (11)	769 (168)	1100 (240)	74 (24)	105 (34)	1140 (323)	1630 (461)
Avg	19	27	224	322	1340	1690	137	182	791	992
n	28	28	27	27	28	22	28	25	27	23
SD	15	21	145	207	890	1160	74	100	400	481
Min	-1	-1	27	38	375	535	46	66	168	241
Max	57	82	597	856	3170	4360	310	442	1720	1860

ED_004549_00015928-00255

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for April, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	5 (2)	7 (3)	90 (17)	129 (24)	1060 (193)	1520 (276)	173 (127)	247 (181)	1120 (570)	1600 (815)
2	8 (9)	12 (12)	81 (45)	116 (64)	1050 (402)	1500 (575)	109 (98)	156 (140)	1120 (749)	1600 (1070)
3	30 (13)	43 (18)	133 (27)	191 (39)	1560 (178)	2230 (256)	176 (83)	252 (119)	1920 (306)	2750 (437)
4	30 (14)	42 (19)	104 (35)	149 (50)	1270 (400)	1820 (571)	226 (154)	323 (220)	1410 (825)	2010 (1180)
5	5 (6)	8 (9)	131 (33)	187 (47)	1500 (189)	2140 (269)	302 (139)	432 (199)	1930 (371)	2770 (529)
6	53 (12)	76 (18)	134 (21)	192 (30)	1560 (225)	2230 (322)	304 (107)	434 (153)	2020 (253)	2890 (361)
7	17 (12)		109 (21)	155 (30)	1350 (502)	1940 (727)	285 (157)	415 (223)		
8										
9										
10	25 (12)	35 (17)			1320 (310)	1890 (443)	349 (181)	499 (258)		
11	45 (26)	64 (37)	167 (53)	239 (75)	1170 (404)	1670 (578)	450 (303)	643 (433)	1390 (717)	1980 (1030)
12	6 (5)	9 (8)	133 (43)	190 (62)	1180 (462)	1680 (661)	489 (347)	697 (495)	1330 (656)	1900 (938)
13	0 (2)	0 (2)	163 (36)	234 (52)	1430 (188)	2050 (268)	825 (118)	1180 (168)	1640 (171)	2340 (246)
14	18 (7)	25 (9)	197 (36)	283 (51)	1020 (54)	1460 (78)	375 (174)	535 (248)	1350 (259)	1930 (370)
15	14 (8)	20 (12)	156 (27)	224 (39)	907 (128)	1300 (183)	328 (228)	469 (325)	1210 (414)	1730 (592)
16	5 (4)	7 (5)	106 (57)	156 (79)	768 (335)	1100 (478)	311 (230)	444 (329)	980 (555)	
17	3 (4)	4 (6)	107 (51)	153 (72)	719 (384)	1030 (549)	401 (310)	572 (442)	851 (599)	
18	14 (9)	20 (12)	100 (66)	142 (95)	561 (340)	803 (485)	370 (299)	528 (427)	563 (384)	
19	16 (10)	22 (15)	118 (16)	170 (23)	579 (82)	831 (116)	318 (135)	455 (193)	534 (225)	
20	19 (8)	27 (11)	164 (31)	235 (44)	804 (118)	1150 (169)	686 (204)	981 (292)	988 (156)	
21	13 (5)	18 (8)	214 (45)	306 (65)			1060 (275)	1510 (393)	1250 (206)	
22	13 (7)	18 (10)	158 (62)	226 (88)	792 (300)	1130 (430)	811 (456)	1160 (653)	860 (437)	
23	8 (2)	12 (2)	129 (71)	184 (101)	679 (403)	970 (575)	656 (558)	937 (798)	615 (446)	
24	13 (4)	18 (5)	69 (38)	99 (54)	332 (125)	476 (179)	212 (73)	304 (104)	295 (109)	
25	18 (4)	26 (5)	53 (23)	76 (33)	293 (61)	421 (87)	196 (20)	280 (29)	254 (119)	
26	14 (2)	21 (4)	36 (7)	51 (9)	291 (63)	418 (91)	200 (35)	286 (50)	239 (104)	
27	11 (2)	15 (2)	51 (24)	74 (34)	329 (84)	472 (121)	238 (59)	341 (85)	363 (139)	
28	18 (9)	26 (13)	60 (8)	86 (12)	491 (149)	704 (214)	342 (90)	490 (128)	632 (121)	907 (173)
29	1 (1)	2 (2)	74 (15)	107 (21)	658 (171)	942 (244)	512 (211)	732 (301)	628 (216)	901 (310)
30	11 (6)	16 (10)	57 (11)	82 (15)	375 (107)	538 (153)	287 (106)	412 (151)	601 (216)	863 (310)
Avg	15	22	115	164	890	1270	392	561	1000	1870
n	28	27	27	27	27	27	28	28	26	14
SD	12	17	45	65	406	581	222	317	516	651
Min	0	0	36	51	291	418	109	156	239	863
Max	53	76	214	306	1560	2230	1060	1510	2020	2890

ED_004549_00015928-00256

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for May, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	16 (5)	23 (7)	72 (12)	103 (16)	443 (122)	635 (174)	633 (339)	907 (484)	716 (100)	1030 (142)
2	12 (3)	17 (5)	72 (12)	103 (17)	524 (190)	750 (271)	779 (455)	1110 (650)	648 (182)	926 (260)
3	18 (9)	25 (13)	78 (24)	112 (35)	385 (198)	551 (283)	657 (564)	939 (806)	518 (219)	740 (314)
4	27 (20)	39 (29)	90 (27)	128 (39)	397 (195)	568 (279)	634 (373)	906 (533)	555 (176)	793 (252)
5	16 (7)	22 (10)	102 (19)	146 (28)	388 (200)	555 (286)	634 (528)	906 (754)	529 (247)	757 (353)
6	9 (5)	12 (7)	104 (15)	150 (21)	453 (90)	650 (129)	491 (153)	703 (219)	719 (130)	1030 (187)
7	20 (6)	29 (9)	99 (38)	142 (55)					529 (176)	761 (251)
8	19 (7)	26 (11)	145 (48)	209 (70)						
9	22 (8)	32 (12)	99 (23)	142 (33)	501 (86)	718 (124)	471 (165)	675 (236)	727 (242)	1040 (346)
10	24 (10)	34 (15)	87 (13)	124 (18)	513 (216)	735 (309)	460 (202)	657 (289)	744 (415)	1060 (595)
11	9 (6)	13 (8)	167 (90)	239 (129)	427 (180)	610 (257)	559 (313)	797 (447)	613 (258)	876 (370)
12	9 (8)	13 (12)	174 (58)							
13	15 (5)	22 (7)	174 (29)	250 (42)	371 (161)	531 (229)	216 (42)	310 (61)	430 (130)	616 (185)
14	22 (11)	32 (16)	276 (121)	396 (173)	257 (124)	369 (177)	261 (87)	374 (125)	484 (227)	693 (325)
15	18 (7)	27 (10)	291 (167)	420 (240)			275 (132)	394 (188)		
16	20 (4)	29 (6)	484 (99)	695 (141)	524 (206)	753 (295)	353 (181)	505 (257)	488 (218)	700 (311)
17	22 (7)	31 (11)	618 (267)	883 (381)	615 (369)	878 (528)	430 (311)	613 (443)	650 (358)	928 (512)
18	29 (10)	42 (14)	677 (340)		565 (335)	807 (480)	470 (371)	672 (529)	557 (366)	798 (523)
19	24 (7)	34 (9)	416 (255)		365 (249)	521 (356)	364 (184)	520 (262)	520 (277)	743 (395)
20	34 (8)	48 (11)	324 (157)		298 (218)	426 (312)	313 (109)	447 (156)	460 (203)	658 (290)
21	29 (16)	42 (22)	316 (167)	451 (238)	264 (168)	379 (241)	306 (70)	437 (99)	428 (194)	613 (278)
22	48 (7)	69 (11)								
23	26 (8)	37 (12)								
24	31 (20)	44 (29)	524 (338)	752 (485)	213 (93)	306 (134)	272 (55)	390 (78)	541 (242)	777 (348)
25										
26										
27										
28										
29	33 (11)	47 (15)	842 (438)	1210 (627)	423 (237)	607 (340)	774 (368)	1110 (527)	796 (335)	1140 (480)
30	46 (34)	66 (49)	729 (382)	1040 (548)	439 (310)	630 (443)	546 (225)	781 (322)	733 (348)	1050 (499)
31	28 (17)	40 (24)	693 (293)	992 (420)	407 (222)	582 (318)	540 (168)	771 (241)	716 (284)	1020 (408)
Avg	23	33	306	414	418	598	474	678	595	853
n	27	27	25	21	21	21	22	22	22	22
SD	10	14	241	353	101	145	163	233	111	159
Min	9	12	72	103	213	306	216	310	428	613
Max	48	69	842	1210	615	878	779	1110	796	1140

ED_004549_00015928-00257

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for June, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	46 (34)	66 (48)	694 (340)	994 (485)	336 (112)	481 (159)	491 (95)	705 (138)	722 (216)	1040 (308)
2	19 (23)	27 (33)	663 (195)	952 (280)	358 (118)	515 (170)	441 (83)	635 (119)	753 (234)	1080 (336)
3	13 (13)	18 (18)	1040 (240)	1500 (346)	613 (190)	879 (272)	736 (242)	1050 (346)	1030 (151)	1470 (216)
4	25 (16)	36 (23)	796 (188)	1140 (269)	616 (347)	887 (497)	773 (423)	1110 (605)	913 (340)	1310 (487)
5										
6										
7										
8										
9	61 (36)	2060 (2260)	800 (378)	1150 (551)	1410 (1370)		712 (318)	1020 (463)	893 (427)	1290 (615)
10	17 (11)	24 (16)	648 (273)	930 (391)	435 (128)	625 (183)	527 (93)	757 (133)	814 (286)	1170 (410)
11	24 (18)	35 (25)	749 (218)	1080 (313)	415 (57)	597 (82)	638 (93)	918 (133)	874 (257)	1260 (370)
12	28 (16)	40 (23)	796 (354)	1140 (508)	446 (162)	640 (233)	495 (145)	710 (208)	696 (270)	1000 (388)
13	40 (25)	57 (35)	741 (375)	1060 (538)	460 (244)	661 (351)	463 (104)	665 (150)	728 (236)	1050 (339)
14	29 (19)	42 (27)	788 (432)	1130 (618)	433 (110)	621 (158)	467 (49)	671 (70)	791 (365)	1140 (523)
15	7 (10)	10 (14)	656 (395)	941 (566)	405 (161)	581 (231)	412 (53)	591 (76)	678 (277)	972 (398)
16										
17										
18										
19										
20										
21										
22	29 (23)	42 (34)	436 (108)	639 (155)	398 (93)	580 (135)	716 (115)	1020 (158)		
23	27 (12)		399 (155)							
24	34 (9)	49 (14)	410 (90)	593 (130)	365 (78)	528 (112)	598 (97)	864 (140)	608 (65)	877 (94)
25	28 (10)	40 (14)	462 (85)	667 (122)	375 (165)	542 (239)	646 (36)	932 (52)	581 (38)	839 (55)
26	35 (15)	51 (21)	492 (95)	708 (136)	351 (82)	506 (118)	657 (73)	947 (105)	554 (39)	798 (55)
27	38 (22)	54 (31)	571 (267)	820 (384)	347 (136)	499 (196)	654 (145)	939 (209)	541 (101)	777 (145)
28	18 (9)	25 (12)	456 (155)	654 (222)	283 (66)	406 (95)	517 (76)	742 (110)	399 (67)	573 (95)
29	27 (18)	39 (27)	549 (282)	797 (407)	382 (152)	550 (220)	493 (153)	710 (222)	413 (58)	593 (83)
30	15 (4)	21 (5)	787 (218)	1130 (314)	410 (93)	588 (133)	648 (72)	929 (103)	498 (83)	714 (118)
Avg	28	144	647	949	465	594	583	838	694	997
n	20	19	20	19	19	18	19	19	18	18
SD	12	453	167	229	236	119	109	156	171	246
Min	7	10	399	593	283	406	412	591	399	573
Max	61	2060	1040	1500	1410	887	773	1110	1030	1470

ED_004549_00015928-00258

Table E10. Daily means (SD) of hydrogen sulfide concentrations at Site IN3B for July, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	17 (5)	25 (7)	893 (119)	1290 (173)	517 (113)	746 (161)	590 (124)	852 (176)		
2	15 (5)	21 (7)	776 (181)	1110 (261)	396 (152)	569 (219)	554 (89)	794 (128)	507 (125)	728 (180)
3	17 (10)	25 (15)	604 (272)	867 (392)	280 (91)	402 (131)	476 (104)	684 (149)	407 (75)	584 (108)
4	40 (5)	58 (8)	673 (283)	968 (405)	313 (45)	449 (65)	436 (107)	627 (153)	513 (207)	738 (297)
5	22 (20)	31 (29)	664 (266)	954 (383)	292 (45)	419 (65)	400 (68)	575 (98)	549 (172)	788 (247)
6	41 (12)	59 (18)	712 (314)	1040 (452)	350 (77)		456 (53)			
7	22 (16)	32 (22)	736 (350)	1060 (504)	313 (63)	449 (91)	414 (65)	594 (93)	500 (144)	717 (208)
8	29 (23)	41 (33)	917 (312)	1310 (448)	340 (64)	487 (93)	370 (56)	530 (81)	436 (76)	625 (109)
9	30 (15)	43 (21)	886 (363)	1270 (521)	387 (70)	555 (100)	381 (42)	547 (61)	461 (81)	662 (115)
10	46 (19)	66 (28)	700 (344)	1010 (493)	326 (45)	470 (64)	450 (63)	647 (90)	524 (62)	754 (89)
11	28 (7)	41 (11)	558 (75)	805 (107)	337 (90)	485 (129)	458 (44)	658 (63)	544 (71)	785 (101)
12	55 (38)	78 (55)	820 (374)	1180 (538)	399 (95)	572 (137)	452 (57)	647 (82)	614 (121)	881 (174)
13	34 (25)	49 (35)	826 (411)	1190 (591)	395 (114)	566 (163)	452 (71)	647 (101)	700 (189)	1000 (272)
14	51 (19)	73 (27)	676 (362)	970 (519)	470 (275)	673 (395)	482 (85)		754 (228)	1080 (327)
15	50 (46)	72 (66)	732 (226)	1050 (324)	320 (55)	461 (78)	465 (45)	669 (64)	599 (71)	862 (101)
16	32 (21)	46 (31)	610 (287)	880 (417)	363 (100)	522 (146)				
17	13 (5)	18 (8)	835 (241)	1200 (347)	404 (65)	579 (93)	582 (36)	834 (53)	496 (117)	711 (170)
18	32 (10)	45 (14)	979 (227)	1410 (325)	496 (50)	712 (71)	600 (111)	861 (160)	517 (76)	739 (109)
19	29 (13)	42 (18)	941 (311)	1350 (447)	501 (91)	718 (131)	697 (75)	1000 (108)	624 (70)	894 (101)
20	79 (67)	114 (95)	837 (345)	1210 (496)	562 (224)	812 (321)	707 (177)	1010 (254)	539 (284)	782 (403)
21	36 (22)	52 (31)	713 (316)	1020 (453)	505 (108)	725 (154)	626 (101)	898 (144)	592 (123)	849 (176)
22	25 (16)	39 (23)	778 (180)	1120 (266)	575 (87)	826 (129)	750 (184)	1080 (270)		
23	30 (9)	43 (13)			522 (216)	760 (312)				
24										
25										
26										
27										
28										
29										
30										
31										
Avg	34	48	767	1100	407	589	514	745	549	788
n	23	23	22	22	23	22	21	19	18	18
SD	15	22	113	161	90	131	109	163	85	122
Min	13	18	558	805	280	402	370	530	407	584
Max	79	114	979	1410	575	826	750	1080	754	1080

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Table E11. Hydrogen sulfide emissions.

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for July, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14	923 (277)	1260 (378)	867 (260)	4.12 (1.24)	625 (102)	854 (139)	593 (97)	2.77 (0.45)	420 (131)	574 (179)	391 (122)	1.89 (0.59)	857 (181)	1170 (247)	822 (173)	4.02 (0.85)
15	966 (252)	1320 (344)	908 (237)	4.29 (1.12)	678 (86)	926 (117)	644 (82)	2.99 (0.38)	436 (91)	596 (124)	406 (85)	1.95 (0.41)	916 (200)	1250 (274)	879 (192)	4.28 (0.94)
16									455 (156)	621 (214)	424 (146)	2.03 (0.70)	1090 (322)	1490 (440)	1040 (309)	5.07 (1.50)
17									370 (102)	506 (139)	346 (95)	1.64 (0.45)	896 (620)	1220 (847)	861 (596)	4.15 (2.87)
18																
19	1530 (338)	2090 (462)	1450 (320)	6.73 (1.48)					323 (78)	441 (106)	354 (90)	1.68 (0.44)	1250 (235)	1710 (320)	1210 (226)	5.77 (1.08)
20	1850 (401)	2530 (547)	1750 (379)	8.13 (1.76)					439 (96)	599 (131)	489 (107)	2.33 (0.51)	1460 (436)	1990 (596)	1410 (420)	6.70 (2.01)
21	2000 (403)	2730 (551)	1900 (382)	8.74 (1.76)					368 (146)	503 (199)	411 (163)	1.95 (0.78)	1400 (300)	1910 (410)	1350 (289)	6.40 (1.38)
22	2010 (484)	2740 (661)	1910 (459)	8.76 (2.11)					312 (98)	427 (134)	349 (110)	1.65 (0.52)	1500 (387)	2050 (528)	1450 (373)	6.83 (1.77)
23	1550 (941)	2120 (1280)	1480 (887)	6.78 (4.07)					295 (175)	403 (239)	330 (196)	1.56 (0.93)	1090 (740)	1490 (1010)	1060 (716)	4.97 (3.37)
24	656 (229)	896 (312)	664 (227)	3.03 (1.04)					146 (103)	200 (141)	164 (116)	0.77 (0.55)	625 (326)	853 (446)	604 (316)	2.83 (1.48)
25	708 (332)	967 (453)	765 (363)	3.47 (1.65)					132 (63)	181 (86)	149 (70)	0.70 (0.33)	492 (184)	672 (252)	476 (178)	2.22 (0.83)
26																
27																
28																
29																
30	718 (358)	981 (490)	839 (412)	3.75 (1.84)					246 (60)	335 (82)	278 (68)	1.28 (0.32)				
31	705 (380)	963 (518)	874 (458)	3.89 (2.04)	703 (227)	961 (310)	882 (298)	3.89 (1.31)	250 (62)	341 (85)	283 (71)	1.30 (0.32)	593 (129)	810 (176)	702 (152)	3.22 (0.70)
Avg	1240	1690	1220	5.61	669	913	707	3.22	322	441	336	1.60	1010	1380	988	4.71
n	11	11	11	11	3	3	3	3	13	13	13	13	12	12	12	12
SD	530	724	461	2.14	33	45	126	0.49	103	140	95	0.46	329	449	306	1.46
Min	656	896	664	3.03	625	854	593	2.77	132	181	149	0.70	492	672	476	2.22
Max	2010	2740	1910	8.76	703	961	882	3.89	455	621	489	2.33	1500	2050	1450	6.83

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Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for August, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	545 (161)	744 (220)	729 (210)	3.23 (0.93)					248 (86)	339 (117)	282 (98)	1.29 (0.45)	520 (194)	710 (265)	616 (230)	2.82 (1.05)
2									213 (91)	291 (124)	242 (103)	1.10 (0.47)	427 (139)	584 (190)	507 (165)	2.31 (0.75)
3																
4	767 (310)	1050 (423)	1110 (447)	4.95 (2.00)					216 (57)	294 (77)	246 (65)	1.11 (0.29)	498 (193)	680 (264)	592 (230)	2.68 (1.04)
5	722 (169)	986 (230)	1050 (245)	4.66 (1.09)					186 (41)	255 (56)	213 (47)	0.96 (0.21)	535 (121)	730 (165)	637 (144)	2.87 (0.65)
6	646 (143)	882 (196)	957 (223)	4.24 (0.99)					295 (168)	404 (230)	338 (193)	1.52 (0.86)	664 (166)	907 (227)	801 (203)	3.60 (0.91)
7	658 (112)	899 (153)	1060 (192)	4.67 (0.85)					115 (24)	158 (33)	132 (28)	0.59 (0.13)				
8	617 (99)	844 (135)	1090 (163)	4.78 (0.72)	717 (104)	980 (142)	1390 (202)	6.23 (0.91)	214 (38)	292 (51)	255 (46)	1.14 (0.20)	348 (110)	475 (150)	480 (144)	2.14 (0.64)
9	707 (128)	965 (174)	1350 (237)	5.98 (1.01)	701 (81)	957 (110)	1360 (157)	6.08 (0.70)	163 (34)	222 (46)	225 (45)	1.01 (0.20)	336 (74)	459 (102)	498 (111)	2.24 (0.50)
10	610 (182)	833 (248)	1180 (353)	5.30 (1.58)	720 (265)	984 (362)	1400 (517)	6.23 (2.30)	164 (87)	224 (119)	234 (124)	1.06 (0.56)	356 (72)	487 (99)	534 (108)	2.42 (0.49)
11	795 (226)	1090 (308)	1550 (439)	6.92 (1.96)	478 (156)	652 (213)	933 (305)	4.12 (1.35)	105 (85)	144 (116)	150 (122)	0.68 (0.55)	553 (127)	755 (173)	830 (191)	3.75 (0.86)
12	561 (201)	766 (274)	1100 (393)	4.88 (1.74)	579 (97)	790 (132)	1130 (189)	4.99 (0.83)	111 (82)	152 (112)	159 (118)	0.71 (0.53)	396 (119)	541 (163)	596 (180)	2.68 (0.81)
13	747 (234)	1020 (320)	1510 (483)	6.66 (2.14)	530 (207)	725 (283)	1060 (407)	4.65 (1.79)	181 (48)	247 (65)	259 (69)	1.16 (0.31)	451 (92)	616 (126)	691 (138)	3.09 (0.62)
14	855 (308)	1170 (421)	1920 (675)	8.44 (2.98)	471 (180)	643 (246)	1040 (370)	4.55 (1.62)	86 (46)	117 (63)	124 (66)	0.55 (0.30)	453 (210)	619 (286)	752 (342)	3.36 (1.53)
15	618 (163)	845 (223)	1590 (415)	6.98 (1.82)	350 (95)	478 (129)	904 (264)	3.93 (1.15)	127 (32)	173 (43)	192 (45)	0.85 (0.20)	439 (102)	600 (139)	811 (204)	3.60 (0.90)
16	518 (124)	707 (169)	1510 (360)	6.74 (1.61)	441 (152)	602 (207)	1290 (447)	5.66 (1.95)	140 (23)	191 (32)	264 (46)	1.19 (0.21)	404 (67)	552 (92)	813 (135)	3.66 (0.62)
17																
18																
19																
20																
21																
22																
23	373 (94)	509 (128)	2800 (706)	13.10 (3.30)					121 (39)	166 (53)	364 (117)	1.67 (0.54)	311 (56)	424 (76)	1020 (184)	4.69 (0.85)
24	401 (117)	548 (159)	3040 (881)	14.20 (4.11)					163 (106)	222 (145)	492 (320)	2.25 (1.46)	283 (42)	387 (57)	933 (137)	4.27 (0.63)
25	321 (57)	439 (78)	2460 (441)	11.40 (2.03)					115 (39)	156 (53)	348 (118)	1.58 (0.54)	273 (79)	373 (108)	904 (263)	4.12 (1.19)
26	368 (101)	503 (138)	2850 (781)	13.10 (3.60)					130 (191)	178 (261)	397 (584)	1.80 (2.64)	466 (134)	636 (183)	1550 (445)	7.02 (2.02)
27									88 (53)	120 (73)	114 (536)	0.52 (2.42)	396 (211)	541 (288)	1100 (4770)	5.00 (21.60)
28					86 (61)	118 (83)	26 (66)	2.18 (5.59)	52 (37)	71 (51)	0 (0)	0.00 (0.00)	154 (149)	210 (203)	0 (0)	0.00 (0.00)
29					206 (116)	282 (158)	95 (54)	7.82 (4.45)	34 (45)	46 (62)	0 (0)	0.00 (0.00)	153 (113)	209 (154)	0 (0)	0.00 (0.00)
30					294 (55)	401 (76)	136 (26)	10.10 (1.88)	34 (28)	46 (38)	0 (0)	0.00 (0.00)	200 (44)	273 (61)	0 (0)	0.00 (0.00)
31					339 (92)	463 (126)	157 (43)	10.60 (2.96)	66 (44)	90 (60)	0 (0)	0.00 (0.00)	245 (363)	335 (496)	0 (0)	0.00 (0.00)
Avg	602	822	1600	7.24	455	621	841	5.94	140	192	210	0.95	385	526	638	2.88
n	18	18	18	18	13	13	13	13	24	24	24	24	23	23	23	23
SD	153	208	696	3.31	190	260	516	2.31	66	90	128	0.58	128	174	373	1.69
Min	321	439	729	3.23	86	118	26	2.18	34	46	0	0.00	153	209	0	0.00
Max	855	1170	3040	14.20	720	984	1400	10.60	295	404	492	2.25	664	907	1550	7.02

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for September, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1					324 (132)	442 (180)	150 (61)	9.44 (3.94)					0 (0)	0 (0)	0 (0)	0.00 (0.00)
2					307 (167)	419 (228)	142 (77)	8.41 (4.62)					0 (0)	0 (0)	0 (0)	0.00 (0.00)
3					275 (156)	376 (213)	127 (72)	7.11 (4.05)					7 (16)	10 (21)	0 (0)	0.00 (0.00)
4					234 (128)	319 (175)	108 (59)	5.72 (3.16)								
5	131 (52)	179 (71)	58 (23)	4.74 (1.84)	273 (252)	372 (344)	126 (116)	6.38 (5.90)								
6	132 (38)	180 (52)	58 (17)	4.37 (1.25)	199 (128)	272 (175)	92 (59)	4.36 (2.76)								
7	171 (58)	234 (79)	76 (26)	5.23 (1.79)	284 (146)	388 (199)	131 (67)	6.02 (3.15)	-1 (3)	-2 (5)	0 (0)	0.00 (0.00)				
8																
9																
10																
11	399 (153)	546 (208)	177 (68)	9.38 (3.60)	532 (175)	727 (239)	246 (81)	9.67 (3.21)	7 (5)	10 (6)	0 (0)	0.00 (0.00)				
12	384 (178)	525 (242)	170 (79)	8.60 (4.02)	426 (124)	583 (169)	197 (57)	7.51 (2.20)	11 (7)	16 (10)	0 (0)	0.00 (0.00)				
13					361 (133)	493 (181)	167 (61)	6.16 (2.29)								
14	397 (125)	542 (171)	176 (56)	8.13 (2.57)	438 (121)	598 (165)	202 (56)	7.25 (2.00)	8 (6)	11 (8)	0 (0)	0.00 (0.00)				
15	419 (179)	572 (244)	186 (79)	8.28 (3.55)	473 (107)	646 (146)	219 (49)	7.62 (1.75)	17 (6)	23 (8)	0 (0)	0.00 (0.00)				
16	399 (154)	546 (211)	177 (69)	7.61 (2.97)	400 (98)	546 (133)	185 (45)	6.23 (1.55)	6 (8)	8 (10)	0 (0)	0.00 (0.00)				
17	369 (153)	504 (208)	164 (68)	6.77 (2.84)	394 (117)	539 (160)	182 (54)	5.98 (1.79)	2 (6)	3 (8)	0 (0)	0.00 (0.00)				
18	456 (142)	623 (194)	203 (63)	8.09 (2.53)	315 (100)	431 (137)	150 (48)	4.81 (1.53)								
19	416 (185)	569 (252)	185 (82)	7.13 (3.15)	292 (147)	399 (200)	168 (88)	5.19 (2.70)	1 (3)	2 (4)	0 (0)	0.00 (0.00)				
20	388 (266)	531 (364)	173 (118)	6.46 (4.42)	246 (137)	335 (187)	177 (94)	5.34 (2.85)	1 (3)	2 (4)	0 (0)	0.00 (0.00)				
21	428 (195)	585 (266)	190 (87)	6.92 (3.14)	237 (90)	324 (123)	219 (78)	6.44 (2.31)	96 (228)	131 (311)	90 (202)	2.57 (5.77)				
22	322 (124)	439 (169)	143 (55)	5.06 (1.97)	185 (61)	252 (83)	178 (59)	5.07 (1.67)	107 (199)	146 (272)	95 (178)	2.65 (4.94)	29 (21)	40 (29)	0 (0)	0.00 (0.00)
23	240 (103)	328 (140)	107 (46)	3.65 (1.58)	217 (70)	297 (95)	210 (67)	5.84 (1.89)	207 (240)	282 (328)	184 (214)	5.00 (5.79)	29 (20)	40 (27)	0 (0)	0.00 (0.00)
24									65 (130)	89 (177)	58 (116)	1.53 (3.04)				
25																
26																
27																
28																
29	285 (144)	390 (196)	262 (132)	7.61 (3.87)	94 (35)	128 (47)	91 (34)	2.14 (0.80)	45 (39)	61 (53)	40 (35)	0.92 (0.80)	36 (35)	49 (48)	32 (32)	0.78 (0.77)
30																
Avg	334	456	157	6.75	310	423	165	6.32	41	56	33	0.90	17	23	5	0.13
n	16	16	16	16	21	21	21	21	14	14	14	14	6	6	6	6
SD	105	144	54	1.63	104	142	42	1.66	58	79	54	1.47	15	20	12	0.29
Min	131	179	58	3.65	94	128	91	2.14	-1	-2	0	0.00	0	0	0	0.00
Max	456	623	262	9.38	532	727	246	9.67	207	282	184	5.00	36	49	32	0.78

ED_004549_00015928-00262

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for October, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3	133 (47)	182 (64)	123 (43)	3.19 (1.09)	97 (35)	132 (47)	93 (34)	1.97 (0.71)	75 (27)	102 (37)	67 (25)	1.37 (0.49)	25 (19)	34 (25)	22 (17)	0.48 (0.36)
4	187 (53)	255 (72)	172 (48)	4.36 (1.25)	134 (48)	184 (66)	130 (47)	2.67 (0.95)	66 (42)	90 (58)	59 (38)	1.18 (0.76)	46 (31)	63 (42)	41 (28)	0.87 (0.58)
5	177 (51)	242 (69)	163 (47)	4.02 (1.15)	176 (52)	241 (72)	170 (51)	3.41 (1.01)	78 (28)	107 (38)	70 (25)	1.36 (0.47)	51 (44)	70 (60)	46 (39)	0.94 (0.80)
6	164 (39)	224 (54)	151 (36)	3.63 (0.86)	174 (60)	238 (82)	168 (58)	3.27 (1.11)	141 (83)	193 (114)	126 (75)	2.37 (1.39)	66 (33)	90 (45)	59 (30)	1.18 (0.58)
7																
8																
9	249 (58)	340 (80)	229 (54)	5.07 (1.21)	240 (58)	328 (79)	232 (56)	4.18 (1.02)	148 (67)	202 (92)	132 (60)	2.29 (1.04)	43 (29)	58 (40)	38 (26)	0.71 (0.49)
10					236 (67)	323 (92)	229 (65)	4.00 (1.14)	244 (75)	334 (103)	219 (67)	3.69 (1.12)	107 (28)	147 (38)	97 (25)	1.73 (0.44)
11	283 (38)	386 (51)	261 (35)	5.46 (0.75)	233 (31)	318 (42)	225 (30)	3.83 (0.52)	195 (37)	267 (50)	175 (33)	2.87 (0.55)	85 (36)	117 (49)	77 (32)	1.34 (0.57)
12	272 (29)	372 (39)	251 (27)	5.12 (0.56)	234 (35)	320 (47)	227 (33)	3.75 (0.55)	184 (47)	251 (65)	165 (42)	2.62 (0.67)	89 (42)	121 (58)	80 (38)	1.36 (0.65)
13	233 (60)	319 (82)	215 (56)	4.28 (1.13)	225 (42)	308 (57)	218 (40)	3.51 (0.66)	184 (58)	252 (79)	165 (52)	2.56 (0.82)	97 (59)	133 (81)	88 (53)	1.45 (0.89)
14	186 (45)	254 (61)	171 (41)	3.32 (0.81)	202 (52)	276 (72)	196 (51)	3.07 (0.79)	126 (40)	172 (55)	113 (36)	1.70 (0.54)	54 (20)	74 (27)	49 (18)	0.78 (0.29)
15	164 (34)	225 (46)	152 (31)	2.86 (0.60)					173 (83)	236 (114)	155 (75)	2.27 (1.10)				
16	228 (76)	312 (103)	211 (70)	3.86 (1.28)	312 (75)	426 (102)	302 (72)	4.49 (1.07)	114 (42)	155 (58)	102 (38)	1.46 (0.54)	94 (62)	128 (85)	85 (56)	1.29 (0.85)
17	204 (48)	278 (65)	188 (44)	3.35 (0.77)	216 (53)	296 (72)	210 (51)	3.04 (0.75)	119 (33)	163 (45)	107 (30)	1.49 (0.42)	118 (40)	162 (54)	107 (36)	1.58 (0.53)
18	205 (79)	280 (108)	189 (73)	3.28 (1.27)	275 (96)	376 (131)	266 (93)	3.75 (1.29)	156 (69)	213 (95)	140 (62)	1.89 (0.83)	146 (76)	199 (103)	132 (68)	1.90 (0.97)
19	234 (67)	319 (92)	216 (62)	3.64 (1.06)	339 (97)	463 (132)	328 (94)	4.52 (1.31)	283 (104)	386 (143)	254 (94)	3.34 (1.23)	103 (67)	141 (91)	93 (60)	1.31 (0.86)
20	239 (50)	326 (68)	221 (46)	3.62 (0.76)	247 (67)	338 (91)	239 (65)	3.21 (0.87)	200 (57)	273 (78)	180 (52)	2.30 (0.66)	98 (50)	134 (68)	88 (45)	1.22 (0.63)
21	231 (66)	316 (90)	214 (61)	3.41 (0.99)	308 (82)	421 (111)	298 (79)	3.90 (1.04)	209 (54)	286 (74)	188 (48)	2.35 (0.61)	131 (47)	179 (64)	118 (42)	1.58 (0.57)
22																
23	216 (25)	296 (34)	200 (23)	3.03 (0.36)	235 (51)	321 (69)	228 (49)	2.83 (0.62)	162 (33)	222 (45)	146 (30)	1.74 (0.36)	149 (34)	203 (46)	134 (30)	1.71 (0.39)
24	213 (40)	291 (55)	197 (37)	2.91 (0.56)	189 (41)	258 (55)	183 (39)	2.22 (0.48)	191 (107)	261 (146)	172 (96)	2.00 (1.13)	135 (42)	185 (58)	122 (38)	1.52 (0.47)
25	202 (55)	275 (76)	187 (51)	2.68 (0.75)	195 (36)	266 (49)	189 (35)	2.24 (0.42)	102 (31)	139 (43)	92 (28)	1.03 (0.32)	128 (83)	175 (113)	116 (74)	1.41 (0.91)
26	183 (49)	250 (67)	169 (46)	2.37 (0.63)	184 (60)	251 (82)	178 (58)	2.05 (0.67)	135 (74)	184 (101)	121 (67)	1.34 (0.74)	118 (60)	161 (82)	107 (54)	1.26 (0.64)
27																
28																
29																
30	239 (51)	326 (70)	221 (47)	2.80 (0.61)	279 (66)	382 (90)	271 (64)	2.85 (0.68)	163 (70)	223 (95)	147 (63)	1.48 (0.64)	251 (98)	342 (134)	226 (89)	2.44 (0.97)
31	314 (75)	429 (102)	291 (70)	3.59 (0.84)	308 (104)	420 (142)	298 (101)	3.06 (1.02)	187 (98)	255 (134)	169 (89)	1.66 (0.88)	246 (90)	336 (123)	222 (81)	2.35 (0.86)
Avg	216	295	200	3.63	229	313	222	3.26	158	216	142	2.02	108	148	98	1.38
n	22	22	22	22	22	22	22	22	23	23	23	23	22	22	22	22
SD	41	56	38	0.80	58	80	56	0.74	52	71	47	0.68	56	76	50	0.47
Min	133	182	123	2.37	97	132	93	1.97	66	90	59	1.03	25	34	22	0.48
Max	314	429	291	5.46	339	463	328	4.52	283	386	254	3.69	251	342	226	2.44

ED_004549_00015928-00263

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for November, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	286 (38)	391 (51)	265 (35)	3.20 (0.42)	308 (53)	421 (72)	299 (51)	3.00 (0.52)	230 (61)	315 (84)	208 (55)	1.99 (0.53)	381 (99)	521 (135)	344 (89)	3.55 (0.92)
2	269 (60)	368 (82)	250 (56)	2.94 (0.66)	313 (55)	428 (75)	303 (54)	2.98 (0.53)	209 (67)	285 (92)	188 (61)	1.77 (0.57)	348 (151)	475 (207)	314 (137)	3.17 (1.39)
3	290 (51)	396 (69)	269 (47)	3.09 (0.54)	298 (57)	407 (78)	289 (55)	2.77 (0.53)	228 (102)	312 (140)	206 (92)	1.89 (0.85)	338 (114)	461 (156)	304 (103)	3.01 (1.02)
4	295 (50)	403 (68)	274 (46)	3.07 (0.51)	268 (54)	366 (74)	260 (52)	2.44 (0.49)	211 (77)	288 (105)	190 (69)	1.71 (0.62)	311 (103)	425 (141)	280 (93)	2.71 (0.91)
5	281 (61)	383 (83)	260 (57)	2.85 (0.61)	309 (118)	422 (162)	300 (115)	2.76 (1.05)	169 (77)	231 (105)	153 (70)	1.34 (0.61)	353 (118)	482 (162)	318 (107)	3.01 (1.00)
6	348 (36)	475 (49)	323 (33)	3.46 (0.37)	296 (85)	404 (116)	287 (82)	2.59 (0.75)	197 (40)	268 (55)	178 (37)	1.53 (0.31)				
7	334 (64)	456 (88)	310 (60)	3.25 (0.63)	309 (43)	423 (59)	300 (42)	2.65 (0.38)	226 (66)	309 (90)	205 (59)	1.73 (0.50)	380 (79)	519 (108)	343 (71)	3.11 (0.65)
8	351 (92)	479 (125)	326 (85)	3.34 (0.88)	234 (61)	320 (84)	227 (59)	1.97 (0.52)	175 (59)	239 (81)	158 (54)	1.31 (0.45)	238 (87)	325 (119)	215 (79)	1.92 (0.71)
9																
10					390 (69)	533 (94)	379 (67)	3.16 (0.57)	236 (55)	323 (75)	214 (49)	1.70 (0.40)	348 (164)	476 (225)	314 (148)	2.70 (1.28)
11	529 (76)	723 (103)	492 (70)	4.72 (0.68)	346 (60)	473 (82)	336 (58)	2.75 (0.48)	220 (94)	300 (128)	199 (85)	1.56 (0.67)	287 (73)	393 (100)	259 (66)	2.18 (0.55)
12	467 (116)	638 (159)	434 (108)	4.08 (1.03)	489 (188)	668 (257)	475 (183)	3.81 (1.46)	143 (65)	196 (88)	130 (58)	1.00 (0.45)	273 (136)	374 (186)	247 (123)	2.03 (1.01)
13	398 (82)	544 (112)	370 (76)	3.40 (0.70)	370 (96)	505 (131)	359 (93)	2.82 (0.73)	149 (65)	204 (89)	135 (59)	1.02 (0.45)	216 (122)	295 (167)	195 (110)	1.58 (0.90)
14	448 (144)	612 (197)	417 (134)	3.75 (1.20)	489 (272)	668 (372)	475 (264)	3.67 (2.04)	155 (87)	212 (119)	141 (79)	1.04 (0.58)	364 (128)	497 (175)	328 (115)	2.61 (0.92)
15																
16									168 (40)	230 (54)	153 (36)	1.09 (0.26)	324 (73)	443 (99)	293 (66)	2.25 (0.51)
17	323 (74)	441 (102)	301 (69)	2.56 (0.59)	332 (57)	453 (78)	322 (55)	2.36 (0.41)	158 (60)	216 (82)	143 (55)	1.01 (0.38)	192 (59)	262 (81)	173 (54)	1.31 (0.41)
18	285 (35)	389 (48)	265 (33)	2.21 (0.27)	318 (42)	435 (58)	309 (41)	2.23 (0.30)	161 (65)	221 (89)	146 (59)	1.01 (0.41)	223 (47)	304 (64)	201 (42)	1.49 (0.31)
19	239 (54)	327 (74)	223 (50)	1.82 (0.41)					148 (48)	202 (65)	134 (43)	0.91 (0.29)				
20	346 (127)	472 (173)	322 (118)	2.58 (0.94)	690 (165)	943 (226)	670 (161)	4.68 (1.11)	161 (75)	220 (103)	146 (68)	0.98 (0.46)	318 (70)	435 (96)	287 (63)	2.06 (0.46)
21	397 (148)	542 (202)	370 (138)	2.92 (1.09)	530 (178)	725 (244)	515 (173)	3.55 (1.21)	184 (59)	251 (80)	167 (53)	1.10 (0.35)				
22	317 (42)	433 (57)	295 (39)	2.29 (0.31)	348 (50)	476 (68)	338 (48)	2.29 (0.32)	127 (26)	174 (35)	116 (24)	0.75 (0.15)				
23	270 (51)	369 (70)	252 (48)	1.91 (0.36)	362 (49)	494 (67)	351 (47)	2.34 (0.31)	129 (26)	177 (35)	118 (23)	0.76 (0.15)	283 (37)	386 (51)	255 (34)	1.75 (0.23)
24	252 (56)	344 (77)	235 (53)	1.76 (0.40)	324 (59)	443 (80)	315 (57)	2.07 (0.37)	104 (20)	142 (27)	95 (18)	0.60 (0.11)	260 (45)	355 (62)	235 (41)	1.58 (0.28)
25	258 (46)	352 (62)	240 (43)	1.77 (0.32)	316 (49)	432 (67)	307 (47)	1.99 (0.31)	105 (28)	143 (38)	95 (26)	0.60 (0.16)	257 (28)	351 (38)	232 (25)	1.54 (0.17)
26	222 (21)	304 (29)	207 (20)	1.50 (0.15)	284 (34)	389 (46)	276 (33)	1.77 (0.21)	92 (14)	125 (19)	83 (12)	0.51 (0.08)				
27	255 (45)	348 (62)	238 (42)	1.69 (0.30)	311 (68)	425 (93)	302 (66)	1.90 (0.42)	98 (25)	134 (34)	89 (23)	0.54 (0.14)	205 (54)	280 (74)	185 (49)	1.20 (0.32)
28	240 (63)	328 (86)	225 (59)	1.58 (0.42)	288 (62)	394 (84)	280 (60)	1.74 (0.37)	103 (32)	140 (44)	93 (29)	0.56 (0.18)	220 (62)	300 (84)	198 (56)	1.27 (0.36)
29	213 (46)	290 (62)	199 (43)	1.37 (0.30)	308 (50)	421 (68)	299 (49)	1.84 (0.30)	123 (33)	168 (45)	112 (30)	0.66 (0.18)	272 (50)	371 (68)	246 (45)	1.55 (0.29)
30	183 (80)	250 (109)	171 (75)	1.16 (0.50)	200 (60)	274 (82)	195 (59)	1.18 (0.36)	121 (41)	166 (56)	110 (37)	0.65 (0.22)	205 (39)	279 (54)	185 (36)	1.15 (0.22)
Avg	311	425	290	2.63	347	475	337	2.59	162	221	147	1.12	287	392	259	2.12
n	26	26	26	26	26	26	26	26	28	28	28	28	23	23	23	23
SD	81	111	75	0.89	100	136	97	0.75	44	60	40	0.45	60	81	54	0.71
Min	183	250	171	1.16	200	274	195	1.18	92	125	83	0.51	192	262	173	1.15
Max	529	723	492	4.72	690	943	670	4.68	236	323	214	1.99	381	521	344	3.55

ED_004549_00015928-00264

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for December, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	263 (41)	359 (56)	246 (39)	1.65 (0.26)					121 (15)	165 (21)	110 (14)	0.64 (0.08)	239 (57)	326 (78)	215 (52)	1.32 (0.32)
2	171 (49)	234 (68)	160 (46)	1.06 (0.31)	240 (114)	328 (155)	233 (111)	1.38 (0.65)					196 (79)	268 (108)	177 (72)	1.07 (0.43)
3	249 (44)	340 (60)	233 (41)	1.52 (0.26)	151 (30)	207 (41)	147 (29)	0.86 (0.17)					273 (55)	372 (75)	246 (50)	1.48 (0.30)
4	258 (68)	352 (92)	241 (63)	1.55 (0.41)												
5	233 (21)	318 (28)	218 (19)	1.38 (0.12)	155 (21)	212 (28)	151 (20)	0.86 (0.12)	126 (24)	172 (33)	115 (22)	0.64 (0.12)	237 (61)	324 (83)	214 (55)	1.26 (0.32)
6	234 (61)	319 (83)	219 (57)	1.37 (0.36)	132 (18)	181 (24)	129 (17)	0.73 (0.10)	97 (20)	132 (27)	88 (18)	0.49 (0.10)	265 (62)	362 (85)	239 (56)	1.39 (0.33)
7	181 (26)	247 (36)	169 (25)	1.05 (0.16)	103 (13)	140 (18)	100 (13)	0.56 (0.07)	79 (14)	107 (20)	72 (13)	0.39 (0.07)	262 (52)	359 (71)	237 (47)	1.36 (0.27)
8	181 (34)	247 (46)	170 (32)	1.03 (0.19)	107 (21)	146 (28)	104 (20)	0.57 (0.11)	69 (21)	94 (28)	63 (19)	0.34 (0.10)	208 (40)	283 (55)	188 (36)	1.06 (0.21)
9	208 (42)	284 (58)	195 (40)	1.18 (0.24)	104 (9)	142 (12)	101 (8)	0.56 (0.05)	83 (16)	113 (23)	75 (15)	0.40 (0.08)	186 (44)	255 (59)	169 (39)	0.95 (0.22)
10	148 (20)	202 (27)	139 (19)	0.83 (0.11)	79 (12)	108 (16)	77 (12)	0.42 (0.06)	54 (16)	74 (22)	50 (15)	0.26 (0.08)	205 (39)	280 (53)	185 (35)	1.03 (0.19)
11																
12	199 (38)	272 (52)	187 (36)	1.09 (0.21)	65 (18)	89 (24)	64 (17)	0.34 (0.09)	73 (71)	100 (97)	67 (65)	0.35 (0.34)	172 (36)	236 (49)	156 (33)	0.85 (0.18)
13	161 (17)	220 (23)	151 (16)	0.87 (0.09)	63 (13)	86 (18)	61 (13)	0.32 (0.07)	43 (7)	58 (10)	39 (6)	0.20 (0.03)	212 (25)	290 (34)	192 (23)	1.04 (0.12)
14	173 (21)	236 (28)	162 (19)	0.93 (0.11)	54 (22)	74 (29)	53 (21)	0.28 (0.11)	38 (24)	51 (33)	34 (22)	0.18 (0.11)	196 (37)	268 (51)	177 (34)	0.95 (0.18)
15	197 (35)	269 (48)	185 (33)	1.04 (0.19)	86 (10)	118 (13)	84 (10)	0.44 (0.05)	99 (14)	136 (19)	91 (13)	0.46 (0.07)	140 (43)	191 (58)	127 (39)	0.67 (0.21)
16	171 (31)	234 (42)	161 (29)	0.90 (0.16)	53 (13)	72 (18)	51 (13)	0.26 (0.07)	72 (24)	98 (33)	66 (22)	0.33 (0.11)	196 (59)	268 (80)	177 (53)	0.93 (0.28)
17	176 (29)	241 (40)	165 (27)	0.92 (0.15)	42 (6)	58 (8)	41 (6)	0.21 (0.03)	47 (19)	65 (26)	43 (17)	0.22 (0.09)				
18	168 (24)	229 (33)	158 (22)	0.87 (0.12)	45 (12)	62 (17)	44 (12)	0.22 (0.06)	47 (17)	64 (24)	43 (16)	0.21 (0.08)	185 (40)	253 (54)	167 (36)	0.87 (0.19)
19									45 (20)	62 (27)	41 (18)	0.20 (0.09)	149 (23)	204 (32)	135 (21)	0.70 (0.11)
20									57 (36)	78 (49)	53 (33)	0.26 (0.16)	138 (60)	189 (82)	125 (55)	0.64 (0.28)
21	148 (40)	203 (55)	139 (38)	0.74 (0.20)	39 (18)	53 (25)	38 (18)	0.19 (0.09)	54 (35)	73 (48)	49 (32)	0.24 (0.16)	144 (40)	197 (55)	131 (36)	0.66 (0.19)
22	176 (71)	241 (96)	166 (66)	0.88 (0.35)	38 (11)	52 (16)	37 (11)	0.18 (0.05)	48 (36)	65 (50)	44 (33)	0.21 (0.16)	101 (52)	138 (71)	91 (47)	0.46 (0.24)
23	149 (41)	204 (56)	140 (39)	0.74 (0.20)	24 (13)	33 (17)	23 (12)	0.11 (0.06)	37 (36)	51 (49)	34 (33)	0.16 (0.16)	159 (46)	217 (63)	144 (42)	0.72 (0.21)
24	122 (24)	167 (32)	115 (22)	0.60 (0.12)	25 (5)	34 (7)	24 (5)	0.12 (0.02)	40 (22)	55 (30)	37 (20)	0.18 (0.10)	195 (23)	267 (31)	177 (21)	0.88 (0.10)
25	122 (28)	167 (39)	115 (27)	0.60 (0.14)	57 (27)	78 (36)	56 (26)	0.27 (0.13)	61 (25)	83 (35)	56 (23)	0.27 (0.11)	159 (38)	218 (52)	144 (35)	0.71 (0.17)
26	75 (23)	103 (31)	71 (22)	0.36 (0.11)	54 (29)	74 (40)	53 (28)	0.25 (0.14)	76 (45)	104 (61)	70 (41)	0.33 (0.20)	167 (52)	228 (70)	151 (47)	0.74 (0.23)
27																
28	61 (25)	83 (35)	57 (24)	0.29 (0.12)	39 (14)	53 (20)	38 (14)	0.18 (0.07)	54 (31)	74 (42)	49 (28)	0.23 (0.13)	158 (50)	216 (68)	143 (45)	0.70 (0.22)
29	58 (20)	79 (27)	54 (18)	0.27 (0.09)	27 (8)	36 (10)	26 (7)	0.12 (0.04)	69 (44)	95 (59)	64 (40)	0.30 (0.19)	179 (27)	244 (37)	162 (24)	0.78 (0.12)
30	61 (14)	84 (20)	58 (14)	0.29 (0.07)	30 (7)	41 (10)	29 (7)	0.14 (0.03)	51 (21)	70 (29)	47 (19)	0.22 (0.09)	192 (32)	262 (44)	174 (29)	0.84 (0.14)
31	58 (21)	79 (29)	55 (20)	0.27 (0.10)	32 (20)	44 (28)	31 (20)	0.15 (0.09)	63 (34)	86 (47)	58 (31)	0.27 (0.15)	160 (71)	218 (98)	144 (65)	0.69 (0.31)
Avg	163	223	153	0.90	74	101	72	0.39	65	89	60	0.31	188	257	170	0.92
n	27	27	27	27	25	25	25	25	26	26	26	26	27	27	27	27
SD	60	82	56	0.39	51	69	49	0.30	24	32	21	0.13	41	56	37	0.26
Min	58	79	54	0.27	24	33	23	0.11	37	51	34	0.16	101	138	91	0.46
Max	263	359	246	1.65	240	328	233	1.38	126	172	115	0.64	273	372	246	1.48

ED_004549_00015928-00265

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for January, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2	44 (11)	60 (15)	41 (10)	0.20 (0.05)	39 (11)	53 (16)	38 (11)	0.18 (0.05)	41 (20)	56 (28)	38 (19)	0.17 (0.09)	150 (23)	205 (31)	136 (21)	0.64 (0.10)
3					26 (10)	36 (14)	25 (10)	0.12 (0.04)								
4	65 (40)	89 (54)	62 (37)	0.30 (0.18)	38 (21)	52 (29)	37 (21)	0.17 (0.09)	56 (39)	77 (53)	52 (36)	0.24 (0.16)	134 (38)	183 (52)	121 (35)	0.57 (0.16)
5	65 (21)	89 (29)	61 (20)	0.30 (0.10)	37 (12)	51 (17)	36 (12)	0.17 (0.05)	77 (28)	105 (39)	73 (27)	0.33 (0.12)	83 (78)	114 (107)	76 (71)	0.35 (0.33)
6	74 (31)	101 (42)	70 (29)	0.34 (0.14)	54 (36)	74 (49)	53 (35)	0.24 (0.16)	81 (43)	110 (59)	79 (42)	0.36 (0.19)	151 (67)	206 (91)	137 (60)	0.64 (0.28)
7	62 (24)	84 (32)	58 (22)	0.28 (0.11)	48 (33)	65 (45)	47 (32)	0.21 (0.15)	28 (9)	39 (13)	28 (10)	0.13 (0.04)	144 (37)	196 (50)	130 (33)	0.60 (0.15)
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
Avg	62	85	59	0.28	40	55	39	0.18	57	77	54	0.25	132	181	120	0.56
n	5	5	5	5	6	6	6	6	5	5	5	5	5	5	5	5
SD	10	14	9	0.04	9	12	9	0.04	20	28	20	0.09	25	35	23	0.11
Min	44	60	41	0.20	26	36	25	0.12	28	39	28	0.13	83	114	76	0.35
Max	74	101	70	0.34	54	74	53	0.24	81	110	79	0.36	151	206	137	0.64

ED_004549_00015928-00266

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for February, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19													0 (0)	0 (0)	0 (0)	0.00 (0.00)
20													0 (0)	0 (0)	0 (0)	0.00 (0.00)
21													0 (0)	0 (0)	0 (0)	0.00 (0.00)
22																
23													0 (0)	0 (0)	0 (0)	0.00 (0.00)
24													0 (0)	0 (0)	0 (0)	0.00 (0.00)
25													0 (0)	0 (0)	0 (0)	0.00 (0.00)
26	8 (4)	11 (5)	3 (4)	0.24 (0.36)					2 (1)	2 (1)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
27	15 (2)	21 (2)	6 (1)	0.54 (0.05)					2 (1)	3 (2)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
28	18 (2)	25 (3)	7 (1)	0.59 (0.08)					4 (1)	5 (1)	0 (0)	0.00 (0.00)	0 (2)	0 (3)	0 (0)	0.00 (0.00)
29	16 (2)	22 (3)	6 (1)	0.46 (0.07)					5 (1)	7 (1)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
Avg	14	20	6	0.46					3	4	0	0.00	0	0	0	0.00
n	4	4	4	4	0	0	0	0	4	4	4	4	10	10	10	10
SD	4	5	2	0.13					1	2	0	0.00	0	0	0	0.00
Min	8	11	3	0.24					2	2	0	0.00	0	0	0	0.00
Max	18	25	7	0.59					5	7	0	0.00	0	0	0	0.00

ED_004549_00015928-00267

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for March, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	27 (7)	37 (10)	11 (3)	0.72 (0.19)					6 (1)	8 (1)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
2	21 (5)	28 (7)	8 (2)	0.52 (0.14)					6 (2)	8 (3)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
3	30 (10)	41 (14)	12 (4)	0.71 (0.23)					9 (1)	12 (2)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
4	56 (30)	76 (41)	23 (12)	1.24 (0.64)					11 (2)	15 (2)	0 (0)	0.00 (0.00)	0 (2)	0 (3)	0 (0)	0.00 (0.00)
5	45 (7)	61 (10)	18 (3)	0.94 (0.15)	21 (16)	28 (22)	8 (6)	0.79 (0.59)	12 (1)	17 (1)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
6	57 (10)	78 (14)	23 (4)	1.14 (0.19)	67 (14)	92 (20)	27 (6)	2.36 (0.45)	13 (2)	18 (2)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
7	85 (36)	116 (49)	35 (15)	1.63 (0.69)	112 (21)	153 (28)	46 (8)	3.57 (0.57)					0 (3)	0 (4)	0 (0)	0.00 (0.00)
8	55 (13)	75 (18)	23 (5)	1.02 (0.26)	137 (16)	187 (22)	56 (7)	4.01 (0.46)	20 (4)	28 (5)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
9	46 (6)	63 (8)	19 (2)	0.82 (0.11)	161 (28)	220 (38)	66 (11)	4.38 (0.77)	21 (2)	29 (3)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
10	43 (6)	59 (8)	18 (2)	0.74 (0.10)	222 (34)	304 (47)	91 (14)	5.61 (0.82)	19 (2)	26 (3)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
11	61 (11)	84 (15)	25 (4)	1.01 (0.17)	401 (61)	548 (84)	163 (25)	9.52 (1.35)	22 (4)	30 (6)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
12	85 (12)	116 (17)	35 (5)	1.35 (0.19)									0 (5)	0 (7)	0 (0)	0.00 (0.00)
13																
14																
15																
16	108 (14)	147 (20)	44 (6)	1.52 (0.21)	812 (211)	1110 (288)	331 (86)	15.30 (4.02)	29 (7)	39 (9)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
17	167 (84)	228 (115)	71 (37)	2.35 (1.21)	1400 (634)	1910 (866)	570 (258)	25.30 (11.20)	73 (128)	100 (174)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
18	129 (98)	177 (134)	60 (43)	1.95 (1.43)	822 (423)	1120 (579)	335 (172)	14.40 (7.54)								
19	85 (16)	116 (22)	46 (10)	1.46 (0.30)	852 (66)	1160 (90)	347 (27)	14.30 (1.12)								
20	87 (19)	118 (26)	56 (12)	1.70 (0.37)	778 (262)	1060 (358)	317 (107)	12.60 (4.23)								
21	77 (26)	106 (36)	58 (19)	1.73 (0.58)	1010 (537)	1380 (734)	412 (219)	15.90 (8.49)								
22	73 (13)	100 (18)	56 (10)	1.62 (0.30)	720 (90)	983 (123)	293 (37)	11.00 (1.41)								
23	60 (10)	81 (14)	46 (8)	1.29 (0.22)	626 (125)	856 (170)	255 (51)	9.29 (1.92)								
24	60 (13)	82 (17)	46 (10)	1.26 (0.27)	480 (93)	655 (128)	196 (38)	6.87 (1.37)								
25	57 (12)	78 (16)	44 (9)	1.17 (0.24)	419 (120)	573 (164)	173 (48)	5.92 (1.66)								
26	37 (9)	50 (12)	28 (7)	0.73 (0.18)	339 (57)	463 (78)	151 (24)	5.02 (0.81)								
27	52 (15)	72 (21)	40 (12)	1.01 (0.29)	361 (79)	493 (108)	177 (42)	5.67 (1.32)								
28	44 (10)	60 (14)	34 (8)	0.82 (0.19)	288 (47)	393 (64)	154 (24)	4.82 (0.76)								
29	48 (8)	65 (11)	37 (6)	0.87 (0.14)	376 (167)	513 (228)	226 (106)	6.84 (3.17)					136 (66)	186 (90)	126 (60)	3.02 (1.46)
30	75 (40)	102 (54)	58 (31)	1.33 (0.72)	365 (285)	499 (389)	240 (178)	7.10 (5.34)					184 (117)	252 (160)	170 (108)	3.99 (2.55)
31	38 (14)	52 (19)	30 (11)	0.66 (0.24)	119 (30)	162 (40)	89 (22)	2.54 (0.63)					86 (49)	118 (66)	80 (45)	1.83 (1.02)
Avg	65	88	36	1.19	473	647	205	8.40	20	28	0	0.00	24	33	22	0.52
n	28	28	28	28	23	23	23	23	12	12	12	12	17	17	17	17
SD	31	42	17	0.43	343	468	136	5.62	17	24	0	0.00	54	74	50	1.18
Min	21	28	8	0.52	21	28	8	0.79	6	8	0	0.00	0	0	0	0.00
Max	167	228	71	2.35	1400	1910	570	25.30	73	100	0	0.00	184	252	170	3.99

ED_004549_00015928-00268

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for April, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	50 (7)	68 (10)	41 (7)	0.88 (0.14)	66 (22)	90 (30)	51 (17)	1.41 (0.48)					328 (61)	448 (83)	303 (56)	6.79 (1.23)
2	79 (34)	108 (46)	67 (29)	1.43 (0.62)	77 (43)	105 (59)	63 (35)	1.70 (0.95)								
3	78 (18)	106 (25)	70 (17)	1.45 (0.34)	70 (18)	95 (25)	61 (15)	1.59 (0.41)	29 (7)	39 (10)	24 (6)	0.63 (0.16)	500 (150)	684 (205)	461 (138)	9.96 (2.97)
4																
5																
6																
7																
8																
9	31 (21)	43 (28)	30 (20)	0.52 (0.34)	17 (15)	23 (20)	16 (14)	0.35 (0.30)	45 (31)	61 (43)	38 (26)	0.85 (0.59)	660 (211)	902 (288)	609 (195)	11.80 (3.78)
10	49 (19)	67 (27)	47 (18)	0.79 (0.31)					116 (94)	158 (128)	97 (79)	2.16 (1.75)	593 (292)	811 (399)	547 (269)	10.40 (5.15)
11					36 (12)	49 (16)	33 (11)	0.69 (0.24)	39 (36)	53 (49)	33 (30)	0.70 (0.64)	947 (341)	1290 (466)	874 (314)	16.40 (5.94)
12	51 (8)	70 (12)	49 (8)	0.78 (0.13)	29 (7)	39 (10)	27 (7)	0.54 (0.13)	115 (42)	157 (58)	96 (36)	2.05 (0.75)	745 (123)	1020 (169)	687 (114)	12.70 (2.14)
13	40 (9)	55 (13)	38 (9)	0.60 (0.14)	13 (8)	18 (11)	12 (8)	0.24 (0.15)	178 (35)	243 (48)	149 (30)	3.13 (0.63)	711 (61)	972 (83)	656 (56)	11.90 (1.05)
14	53 (26)	72 (35)	50 (24)	0.76 (0.37)	21 (13)	29 (18)	20 (12)	0.38 (0.23)	161 (84)	219 (114)	135 (70)	2.78 (1.45)	484 (150)	662 (205)	447 (138)	7.94 (2.48)
15	44 (22)	60 (29)	42 (20)	0.62 (0.30)	23 (11)	32 (15)	22 (10)	0.40 (0.19)	158 (89)	216 (122)	133 (75)	2.69 (1.52)	446 (167)	610 (228)	412 (154)	7.18 (2.71)
16	41 (12)	56 (16)	39 (11)	0.56 (0.16)	20 (10)	27 (13)	18 (9)	0.33 (0.17)	158 (68)	216 (93)	133 (57)	2.64 (1.15)	385 (103)	526 (140)	356 (95)	6.07 (1.62)
17	42 (11)	57 (14)	40 (10)	0.55 (0.14)	20 (14)	27 (19)	19 (13)	0.33 (0.23)	146 (76)	199 (103)	122 (63)	2.39 (1.23)	280 (131)	383 (179)	259 (121)	4.32 (2.01)
18	36 (11)	50 (15)	35 (10)	0.47 (0.14)					162 (91)	222 (124)	136 (76)	2.61 (1.45)	367 (143)	501 (195)	338 (132)	5.55 (2.16)
19	43 (15)	58 (21)	41 (15)	0.54 (0.19)	50 (27)	68 (36)	46 (25)	0.77 (0.41)	118 (52)	161 (71)	99 (44)	1.87 (0.82)	297 (103)	405 (140)	274 (95)	4.40 (1.52)
20	50 (14)	69 (19)	48 (13)	0.62 (0.17)	34 (21)	47 (29)	32 (20)	0.52 (0.32)	138 (46)	188 (63)	116 (39)	2.14 (0.72)	289 (101)	395 (138)	267 (94)	4.20 (1.46)
21	46 (11)	63 (15)	44 (11)	0.55 (0.13)	34 (18)	46 (25)	32 (17)	0.50 (0.27)	257 (117)	351 (160)	216 (98)	3.92 (1.77)	373 (110)	510 (151)	345 (102)	5.32 (1.57)
22	49 (13)	67 (17)	47 (12)	0.57 (0.15)	52 (27)	70 (37)	48 (26)	0.74 (0.39)	361 (133)	494 (182)	304 (112)	5.42 (1.99)	366 (99)	500 (135)	338 (91)	5.10 (1.36)
23	58 (23)	79 (31)	55 (22)	0.66 (0.26)	83 (34)	113 (47)	78 (32)	1.15 (0.47)	383 (234)	524 (319)	323 (197)	5.64 (3.43)				
24	55 (16)	75 (21)	52 (15)	0.61 (0.17)					371 (186)	506 (254)	312 (157)	5.36 (2.69)	450 (106)	615 (145)	416 (98)	6.01 (1.40)
25																
26	59 (20)	80 (27)	56 (19)	0.62 (0.21)	81 (34)	111 (46)	76 (31)	1.04 (0.43)	353 (92)	482 (125)	297 (77)	4.92 (1.29)	355 (172)	485 (234)	328 (158)	4.54 (2.20)
27	53 (19)	72 (25)	50 (18)	0.55 (0.19)	45 (28)	62 (38)	42 (26)	0.57 (0.36)	314 (83)	429 (114)	264 (70)	4.30 (1.15)	325 (151)	444 (207)	300 (140)	4.07 (1.89)
28	64 (23)	87 (32)	61 (22)	0.64 (0.24)	60 (15)	81 (20)	56 (14)	0.72 (0.18)	326 (56)	445 (77)	274 (47)	4.37 (0.74)	278 (120)	380 (164)	257 (111)	3.41 (1.48)
29	77 (23)	105 (31)	74 (22)	0.76 (0.23)					325 (79)	444 (108)	274 (67)	4.27 (1.04)	263 (48)	359 (65)	243 (44)	3.16 (0.58)
30	72 (22)	98 (30)	69 (21)	0.69 (0.21)	32 (24)	43 (32)	30 (22)	0.37 (0.28)	194 (103)	265 (140)	163 (87)	2.50 (1.34)				
Avg	53	72	50	0.70	43	59	39	0.72	202	276	170	3.06	450	614	415	7.20
n	23	23	23	23	20	20	20	20	22	22	22	22	21	21	21	21
SD	13	18	12	0.25	22	30	20	0.43	112	152	94	1.48	180	245	166	3.54
Min	31	43	30	0.47	13	18	12	0.24	29	39	24	0.63	263	359	243	3.16
Max	79	108	74	1.45	83	113	78	1.70	383	524	323	5.64	947	1290	874	16.40

ED_004549_00015928-00269

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for May, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^2$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^2$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^2$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^2$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	55 (21)	76 (28)	53 (20)	0.52 (0.19)	27 (20)	37 (28)	25 (19)	0.30 (0.23)	197 (124)	269 (169)	166 (104)	2.49 (1.56)	242 (101)	330 (139)	224 (94)	2.77 (1.16)
2	65 (18)	89 (25)	62 (17)	0.60 (0.17)	61 (34)	84 (46)	57 (31)	0.67 (0.37)	242 (121)	330 (165)	204 (102)	2.99 (1.49)	383 (131)	523 (178)	354 (121)	4.29 (1.45)
3	92 (34)	125 (47)	88 (33)	0.83 (0.31)	105 (55)	144 (75)	99 (52)	1.13 (0.59)	255 (80)	348 (109)	215 (67)	3.08 (0.96)	293 (155)	401 (212)	271 (144)	3.22 (1.71)
4	74 (19)	101 (26)	71 (18)	0.65 (0.16)	39 (30)	54 (41)	37 (28)	0.41 (0.31)	248 (100)	339 (136)	209 (84)	2.94 (1.18)	166 (73)	227 (99)	154 (67)	1.78 (0.78)
5	76 (35)	104 (47)	73 (33)	0.66 (0.30)	70 (32)	95 (44)	65 (30)	0.71 (0.33)	234 (85)	319 (116)	197 (71)	2.72 (1.00)	241 (77)	329 (105)	223 (71)	2.53 (0.81)
6	96 (34)	131 (47)	91 (33)	0.81 (0.29)	92 (67)	125 (92)	86 (63)	0.92 (0.67)	315 (125)	430 (171)	265 (106)	3.58 (1.42)	264 (76)	361 (103)	245 (70)	2.72 (0.78)
7	132 (34)	180 (47)	126 (33)	1.09 (0.28)	104 (26)	142 (36)	97 (25)	1.01 (0.25)	188 (36)	257 (49)	159 (30)	2.09 (0.40)	244 (80)	333 (109)	226 (74)	2.46 (0.81)
8	136 (52)	185 (71)	129 (50)	1.10 (0.42)	149 (42)	204 (58)	140 (40)	1.43 (0.40)	340 (102)	464 (139)	287 (86)	3.70 (1.11)	308 (85)	421 (116)	285 (78)	3.03 (0.85)
9	117 (34)	159 (46)	111 (32)	0.93 (0.27)	125 (65)	170 (89)	116 (61)	1.16 (0.60)	279 (95)	381 (130)	235 (80)	2.96 (1.00)	304 (176)	415 (241)	281 (163)	2.92 (1.69)
10	97 (29)	132 (40)	92 (28)	0.76 (0.23)	123 (38)	168 (52)	115 (36)	1.12 (0.35)	156 (42)	213 (57)	132 (35)	1.62 (0.43)	203 (44)	277 (60)	188 (41)	1.91 (0.42)
11	112 (46)	153 (63)	107 (44)	0.86 (0.35)	162 (70)	222 (95)	152 (65)	1.45 (0.62)	211 (82)	289 (112)	179 (69)	2.15 (0.84)	238 (74)	326 (101)	221 (69)	2.20 (0.68)
12									163 (44)	222 (61)	137 (38)	1.62 (0.44)	147 (46)	201 (63)	137 (43)	1.33 (0.42)
13	94 (31)	129 (42)	90 (29)	0.70 (0.23)	114 (41)	156 (55)	107 (38)	0.98 (0.35)	130 (57)	178 (78)	110 (48)	1.27 (0.56)	146 (53)	200 (73)	135 (49)	1.29 (0.47)
14	114 (49)	156 (67)	109 (47)	0.83 (0.35)	177 (84)	242 (115)	166 (79)	1.49 (0.71)	114 (39)	155 (54)	96 (33)	1.08 (0.37)	196 (73)	268 (100)	181 (68)	1.69 (0.63)
15	132 (45)	180 (61)	126 (43)	0.94 (0.32)	122 (47)	166 (64)	114 (44)	1.00 (0.38)	121 (40)	165 (54)	102 (33)	1.13 (0.37)	148 (62)	202 (85)	137 (57)	1.25 (0.52)
16	130 (46)	178 (63)	124 (44)	0.92 (0.32)	113 (37)	154 (50)	106 (34)	0.91 (0.30)	93 (34)	127 (46)	79 (28)	0.85 (0.31)	108 (45)	148 (62)	100 (42)	0.90 (0.37)
17	114 (38)	156 (52)	109 (36)	0.79 (0.26)	119 (49)	162 (67)	111 (46)	0.94 (0.39)	67 (22)	91 (29)	56 (18)	0.59 (0.19)	125 (48)	171 (65)	116 (44)	1.02 (0.39)
18	132 (66)	180 (90)	126 (63)	0.90 (0.45)	158 (85)	216 (116)	148 (80)	1.23 (0.66)	79 (29)	108 (39)	67 (24)	0.69 (0.25)	151 (62)	206 (84)	140 (57)	1.20 (0.49)
19					111 (54)	152 (74)	104 (51)	0.85 (0.41)	79 (30)	109 (41)	67 (25)	0.68 (0.26)	143 (68)	195 (94)	132 (63)	1.12 (0.53)
20	143 (49)	195 (67)	137 (47)	0.94 (0.33)	134 (63)	183 (86)	126 (59)	1.01 (0.47)	89 (38)	121 (52)	75 (32)	0.74 (0.32)	127 (41)	174 (56)	118 (38)	0.97 (0.31)
21	88 (29)	120 (40)	84 (28)	0.57 (0.19)	169 (177)	231 (241)	158 (165)	1.25 (1.30)	80 (32)	109 (44)	68 (27)	0.65 (0.26)	135 (61)	185 (84)	125 (57)	1.02 (0.47)
22	130 (58)	177 (80)	124 (56)	0.83 (0.37)					79 (26)	108 (35)	67 (22)	0.63 (0.21)	83 (47)	113 (64)	77 (43)	0.61 (0.35)
23	124 (51)	169 (69)	118 (48)	0.78 (0.32)	101 (29)	138 (40)	95 (27)	0.72 (0.21)	111 (50)	151 (68)	93 (42)	0.87 (0.39)	133 (37)	182 (51)	124 (35)	0.97 (0.27)
24	124 (57)	169 (78)	118 (54)	0.77 (0.35)	85 (48)	116 (65)	80 (45)	0.60 (0.33)	65 (24)	89 (32)	55 (20)	0.50 (0.18)	97 (33)	133 (45)	90 (31)	0.69 (0.24)
25	93 (33)	127 (45)	89 (32)	0.57 (0.20)	101 (59)	138 (81)	95 (56)	0.69 (0.41)	50 (20)	68 (27)	42 (17)	0.38 (0.15)	78 (41)	106 (57)	72 (38)	0.54 (0.29)
26	100 (36)	136 (49)	96 (34)	0.60 (0.22)	113 (41)	155 (56)	106 (38)	0.77 (0.28)	36 (21)	50 (28)	31 (17)	0.27 (0.15)	51 (21)	70 (29)	47 (20)	0.35 (0.15)
27	138 (54)	188 (73)	132 (51)	0.82 (0.32)	120 (69)	165 (94)	113 (65)	0.80 (0.46)	86 (29)	118 (39)	73 (24)	0.62 (0.21)	121 (57)	166 (78)	113 (53)	0.82 (0.38)
28	119 (31)	162 (42)	113 (29)	0.70 (0.18)	109 (41)	150 (56)	103 (38)	0.72 (0.27)	77 (45)	105 (61)	65 (38)	0.55 (0.32)	94 (48)	128 (65)	87 (44)	0.62 (0.32)
29																
30	82 (32)	112 (44)	78 (31)	0.47 (0.19)	64 (41)	87 (57)	60 (39)	0.41 (0.26)	72 (63)	98 (87)	61 (54)	0.49 (0.43)	112 (59)	153 (81)	104 (55)	0.72 (0.38)
31	91 (41)	125 (56)	87 (39)	0.52 (0.23)	67 (31)	92 (42)	63 (29)	0.42 (0.19)	41 (16)	56 (22)	35 (14)	0.27 (0.11)	73 (36)	100 (49)	68 (33)	0.46 (0.22)
Avg	107	146	102	0.77	108	148	102	0.90	143	196	121	1.47	172	235	159	1.58
n	28	28	28	28	28	28	28	28	30	30	30	30	30	30	30	30
SD	24	32	23	0.16	36	50	34	0.31	85	116	72	1.08	81	111	75	0.99
Min	55	76	53	0.47	27	37	25	0.30	36	50	31	0.27	51	70	47	0.35
Max	143	195	137	1.10	177	242	166	1.49	340	464	287	3.70	383	523	354	4.29

ED_004549_00015928-00270

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for June, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	80 (29)	109 (40)	77 (28)	0.45 (0.17)	93 (45)	127 (62)	88 (43)	0.58 (0.28)	57 (18)	77 (25)	48 (16)	0.37 (0.12)	90 (61)	122 (84)	83 (57)	0.56 (0.38)
2	94 (50)	129 (68)	90 (48)	0.53 (0.28)	97 (44)	133 (59)	91 (41)	0.59 (0.27)	62 (30)	85 (41)	53 (25)	0.40 (0.19)	142 (138)	194 (189)	131 (128)	0.87 (0.85)
3	65 (27)	89 (36)	62 (25)	0.36 (0.15)	79 (34)	108 (46)	74 (32)	0.48 (0.20)	45 (14)	62 (19)	38 (12)	0.29 (0.09)	53 (21)	72 (29)	49 (20)	0.32 (0.13)
4	100 (42)	136 (57)	95 (40)	0.54 (0.23)	85 (38)	116 (51)	80 (35)	0.51 (0.22)	49 (22)	66 (30)	41 (19)	0.30 (0.14)	91 (44)	125 (60)	85 (41)	0.54 (0.26)
5	99 (38)	136 (52)	95 (36)	0.54 (0.20)	106 (30)	145 (41)	100 (28)	0.62 (0.18)	52 (19)	70 (26)	44 (16)	0.32 (0.12)	87 (25)	118 (34)	81 (23)	0.51 (0.15)
6	84 (41)	114 (56)	80 (39)	0.45 (0.22)	97 (66)	133 (90)	92 (62)	0.57 (0.38)	42 (18)	57 (24)	35 (15)	0.25 (0.11)	58 (20)	79 (27)	54 (18)	0.34 (0.11)
7	100 (45)	137 (61)	96 (43)	0.53 (0.23)	78 (32)	107 (43)	74 (30)	0.45 (0.18)	49 (15)	67 (20)	42 (12)	0.29 (0.09)	60 (26)	82 (36)	55 (24)	0.34 (0.15)
8	80 (35)	110 (48)	77 (34)	0.42 (0.19)	92 (31)	125 (42)	86 (29)	0.52 (0.17)	62 (17)	84 (23)	52 (14)	0.36 (0.10)	74 (48)	101 (65)	69 (44)	0.42 (0.27)
9	75 (36)	103 (50)	72 (35)	0.39 (0.19)	80 (34)	110 (47)	76 (32)	0.45 (0.19)	62 (30)	84 (41)	52 (26)	0.35 (0.17)	62 (33)	84 (45)	57 (31)	0.34 (0.18)
10	88 (54)	120 (73)	84 (51)	0.45 (0.28)	74 (40)	100 (55)	69 (38)	0.41 (0.22)	49 (28)	67 (38)	41 (24)	0.28 (0.16)	75 (46)	103 (63)	70 (43)	0.42 (0.26)
11	66 (28)	90 (38)	63 (26)	0.34 (0.14)	34 (16)	47 (22)	32 (15)	0.19 (0.09)	27 (13)	37 (18)	23 (11)	0.15 (0.07)	63 (44)	85 (60)	58 (41)	0.34 (0.24)
12	46 (30)	62 (41)	44 (29)	0.23 (0.15)	39 (18)	53 (25)	37 (17)	0.21 (0.10)	24 (15)	33 (20)	21 (13)	0.13 (0.08)	38 (13)	52 (17)	36 (12)	0.21 (0.07)
13	86 (46)	117 (63)	82 (45)	0.43 (0.23)	56 (20)	76 (27)	52 (19)	0.30 (0.11)	30 (15)	42 (20)	26 (13)	0.16 (0.08)	39 (15)	53 (21)	36 (14)	0.21 (0.08)
14	85 (29)	116 (40)	81 (28)	0.42 (0.15)	86 (64)	118 (87)	81 (60)	0.46 (0.34)	33 (18)	45 (24)	28 (15)	0.18 (0.10)	49 (22)	66 (30)	45 (20)	0.26 (0.12)
15	94 (76)	128 (104)	90 (73)	0.46 (0.38)	52 (33)	71 (45)	49 (31)	0.28 (0.17)	45 (19)	62 (27)	38 (17)	0.24 (0.10)	56 (24)	77 (33)	53 (22)	0.29 (0.13)
16																
17																
18																
19																
20	151 (109)	206 (149)	145 (105)	0.72 (0.52)					48 (31)	66 (42)	41 (26)	0.24 (0.15)	89 (47)	121 (64)	83 (44)	0.44 (0.23)
21	82 (34)	112 (46)	79 (33)	0.39 (0.16)	87 (87)	119 (119)	82 (82)	0.44 (0.43)	70 (27)	96 (36)	60 (23)	0.34 (0.13)	80 (30)	109 (42)	74 (28)	0.39 (0.15)
22	138 (65)	188 (89)	132 (63)	0.65 (0.31)	92 (66)	125 (90)	86 (62)	0.46 (0.33)	92 (50)	126 (68)	78 (42)	0.44 (0.24)	153 (92)	208 (126)	142 (86)	0.75 (0.45)
23																
24																
25																
26	98 (53)	133 (73)	94 (51)	0.45 (0.25)	129 (58)	177 (79)	122 (55)	0.63 (0.28)	88 (45)	120 (61)	75 (38)	0.41 (0.21)	168 (88)	229 (121)	156 (82)	0.79 (0.42)
27	70 (39)	96 (54)	68 (38)	0.32 (0.18)	99 (64)	135 (87)	93 (60)	0.47 (0.31)	72 (33)	98 (45)	61 (28)	0.33 (0.15)	265 (145)	362 (198)	247 (135)	1.25 (0.68)
28																
29																
30	203 (139)	278 (190)	195 (134)	0.92 (0.63)	82 (42)	111 (57)	77 (39)	0.38 (0.20)					753 (226)	1030 (309)	702 (211)	3.48 (1.04)
Avg	94	129	91	0.48	82	112	77	0.45	53	72	45	0.29	121	165	113	0.62
n	21	21	21	21	20	20	20	20	20	20	20	20	21	21	21	21
SD	33	45	32	0.15	22	30	21	0.12	18	24	15	0.09	150	206	140	0.68
Min	46	62	44	0.23	34	47	32	0.19	24	33	21	0.13	38	52	36	0.21
Max	203	278	195	0.92	129	177	122	0.63	92	126	78	0.44	753	1030	702	3.48

ED_004549_00015928-00271

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for July, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	119 (64)	162 (87)	114 (61)	0.54 (0.29)	72 (49)	99 (67)	68 (46)	0.34 (0.23)	92 (39)	126 (54)	78 (33)	0.41 (0.17)	922 (125)	1260 (170)	860 (116)	4.24 (0.57)
2	105 (52)	143 (71)	101 (50)	0.47 (0.24)	71 (36)	97 (50)	67 (34)	0.33 (0.17)	65 (22)	88 (30)	55 (19)	0.28 (0.10)	907 (181)	1240 (248)	846 (169)	4.14 (0.82)
3																
4																
5																
6																
7																
8	282 (84)	385 (115)	271 (81)	1.23 (0.37)	117 (74)	160 (101)	110 (70)	0.53 (0.33)	45 (49)	61 (67)	38 (41)	0.19 (0.21)	1460 (332)	1990 (453)	1360 (310)	6.45 (1.46)
9	461 (161)	630 (220)	444 (155)	2.01 (0.70)	83 (58)	114 (80)	78 (55)	0.37 (0.26)	78 (73)	107 (100)	67 (62)	0.33 (0.31)	1600 (290)	2190 (396)	1490 (271)	7.05 (1.28)
10	558 (175)	763 (240)	537 (169)	2.42 (0.76)	63 (40)	87 (54)	60 (38)	0.28 (0.18)	70 (32)	95 (44)	59 (27)	0.29 (0.13)	1670 (309)	2280 (422)	1560 (288)	7.33 (1.35)
11	500 (123)	683 (167)	535 (133)	2.41 (0.60)	48 (44)	66 (60)	46 (41)	0.22 (0.20)	53 (85)	73 (116)	45 (72)	0.22 (0.35)				
12	652 (427)	891 (584)	760 (497)	3.43 (2.25)	21 (59)	29 (81)	20 (56)	0.09 (0.26)	44 (48)	60 (66)	37 (41)	0.18 (0.20)	1700 (292)	2330 (398)	1590 (272)	7.41 (1.26)
13	886 (482)	1210 (658)	1030 (561)	4.64 (2.52)	31 (35)	42 (47)	29 (33)	0.14 (0.15)	74 (45)	101 (62)	63 (38)	0.30 (0.18)	1590 (276)	2170 (377)	1480 (258)	6.87 (1.20)
14	709 (154)	969 (211)	826 (179)	3.70 (0.81)	22 (56)	30 (77)	21 (53)	0.10 (0.25)	46 (62)	63 (85)	39 (53)	0.19 (0.25)	1980 (489)	2700 (668)	1850 (456)	8.52 (2.11)
15					36 (64)	49 (87)	33 (60)	0.16 (0.28)	64 (88)	87 (120)	54 (75)	0.26 (0.35)	2340 (688)	3200 (940)	2190 (643)	10.00 (2.95)
16					38 (29)	51 (40)	35 (28)	0.16 (0.13)	28 (47)	38 (64)	23 (40)	0.11 (0.19)	1920 (253)	2620 (346)	1790 (236)	8.19 (1.07)
17					83 (97)	114 (133)	93 (110)	0.43 (0.51)	32 (70)	43 (96)	27 (60)	0.13 (0.28)	1880 (234)	2570 (319)	1980 (322)	9.00 (1.46)
18					96 (71)	131 (97)	109 (81)	0.51 (0.38)	-1 (91)	-1 (124)	-1 (77)	0.00 (0.36)				
19					197 (78)	269 (107)	224 (89)	1.04 (0.41)	17 (45)	23 (61)	14 (38)	0.07 (0.18)	1690 (218)	2310 (298)	1900 (245)	8.62 (1.11)
20					294 (58)	402 (79)	335 (66)	1.54 (0.30)	132 (55)	180 (75)	112 (47)	0.52 (0.22)	1720 (269)	2350 (368)	1930 (303)	8.74 (1.36)
21					419 (119)	572 (163)	476 (135)	2.19 (0.62)	175 (127)	240 (173)	149 (108)	0.69 (0.50)	1610 (260)	2210 (355)	1820 (293)	8.19 (1.31)
22	1400 (350)	1910 (479)	2070 (517)	9.13 (2.28)	636 (221)	869 (302)	724 (252)	3.31 (1.15)	272 (154)	372 (210)	232 (131)	1.06 (0.60)	1600 (349)	2190 (477)	1810 (393)	8.10 (1.76)
23	1290 (365)	1770 (499)	1910 (539)	8.39 (2.37)	757 (143)	1030 (195)	861 (162)	3.92 (0.74)	504 (151)	688 (206)	429 (128)	1.96 (0.59)	2510 (698)	3430 (953)	2830 (786)	12.60 (3.51)
24	1430 (428)	1950 (584)	2110 (632)	9.21 (2.76)	827 (342)	1130 (467)	941 (389)	4.27 (1.76)	604 (230)	825 (314)	514 (195)	2.34 (0.89)	2670 (1360)	3650 (1860)	3010 (1530)	13.40 (6.82)
25	1490 (554)	2040 (757)	2600 (884)	11.50 (3.89)	858 (325)	1170 (444)	1000 (400)	4.55 (1.83)	637 (274)	870 (374)	607 (289)	2.75 (1.31)	2260 (901)	3090 (1230)	2810 (866)	12.50 (3.83)
26	1870 (357)	2560 (488)	3720 (710)	16.40 (3.14)	1000 (192)	1370 (263)	1280 (249)	5.85 (1.14)	1060 (132)	1440 (180)	1050 (131)	4.79 (0.60)	1540 (287)	2110 (393)	2150 (402)	9.63 (1.80)
27	1430 (325)	1960 (443)	2850 (646)	12.50 (2.83)	903 (292)	1230 (399)	1270 (415)	5.79 (1.90)	777 (193)	1060 (263)	774 (192)	3.50 (0.87)	1720 (874)	2350 (1190)	2400 (1220)	10.70 (5.46)
28									684 (209)	934 (285)	681 (208)	3.07 (0.94)	1330 (546)	1810 (746)	1850 (764)	8.24 (3.40)
29	1980 (774)	2700 (1060)	3940 (1540)	17.20 (6.71)	1090 (475)	1490 (649)	1550 (672)	7.01 (3.04)	926 (280)	1260 (382)	922 (279)	4.14 (1.25)	1770 (580)	2420 (793)	2480 (812)	11.00 (3.60)
30	1790 (700)	2440 (956)	3560 (1390)	15.50 (6.07)									1060 (235)	1450 (321)	1490 (329)	6.55 (1.45)
31																
Avg	997	1360	1610	7.10	338	461	410	1.87	270	368	253	1.16	1720	2340	1890	8.58
n	17	17	17	17	23	23	23	23	24	24	24	24	23	23	23	23
SD	606	828	1290	5.64	370	505	483	2.20	322	440	318	1.43	437	596	547	2.32
Min	105	143	101	0.47	21	29	20	0.09	-1	-1	-1	0.00	907	1240	846	4.14
Max	1980	2700	3940	17.20	1090	1490	1550	7.01	1060	1440	1050	4.79	2670	3650	3010	13.40

ED_004549_00015928-00272

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for August, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7	2260 (917)	3090 (1250)	6790 (2750)	29.90 (12.10)	919 (658)	1260 (900)	1470 (1000)	6.48 (4.41)					1590 (674)	2170 (921)	6360 (2700)	29.70 (12.50)
8	2010 (877)	2740 (1200)	6030 (2630)	26.40 (11.50)	1400 (514)	1910 (702)	2600 (959)	11.50 (4.23)					1510 (565)	2060 (771)	6060 (2270)	28.40 (10.60)
9	1720 (576)	2350 (787)	5170 (1730)	22.50 (7.55)	1630 (503)	2230 (687)	3050 (939)	13.50 (4.15)	1170 (300)	1600 (409)	1510 (388)	6.58 (1.69)	1490 (460)	2030 (628)	5970 (1850)	27.90 (8.65)
10	1660 (852)	2270 (1160)	4990 (2560)	21.70 (11.10)	1310 (387)	1790 (528)	2450 (723)	10.80 (3.18)	1240 (276)	1700 (377)	1610 (357)	6.96 (1.55)	1720 (708)	2350 (968)	6900 (2850)	32.20 (13.30)
11					1370 (473)	1880 (646)	3410 (1200)	15.00 (5.30)								
12	1560 (507)	2140 (693)	10800 (3500)	48.00 (15.60)	1310 (492)	1790 (672)	3890 (1460)	17.30 (6.49)	1730 (658)	2360 (899)	3050 (1050)	13.40 (4.57)	932 (179)	1270 (245)	3890 (749)	18.00 (3.44)
13	1440 (408)	1970 (558)	9940 (2820)	44.10 (12.50)	1580 (709)	2160 (968)	4690 (2100)	20.80 (9.33)	1460 (489)	2000 (668)	3280 (1020)	14.50 (4.52)	954 (257)	1300 (351)	3980 (1070)	18.30 (4.92)
14	1080 (410)	1470 (561)	7430 (2830)	32.80 (12.50)	5480 (5640)	7490 (7700)	16300 (16700)	71.90 (73.90)	1320 (338)	1800 (462)	3050 (781)	13.40 (3.44)	868 (299)	1190 (409)	3630 (1250)	16.60 (5.75)
15																
16																
17																
18																
19																
20					646 (293)	882 (400)	2100 (951)	9.02 (4.09)	1340 (504)	1840 (689)	3230 (1190)	13.60 (5.07)	582 (149)	795 (203)	2680 (686)	11.80 (3.02)
21					382 (233)	522 (318)	1240 (757)	5.31 (3.24)	1290 (885)	1760 (1210)	3200 (2170)	13.40 (9.10)	358 (81)	489 (110)	1670 (372)	7.31 (1.64)
22																
23	0 (0)	0 (0)	0 (0)	0.00 (0.00)												
24																
25																
26																
27	421 (347)	576 (474)	165 (136)	14.10 (11.40)												
28	433 (216)	591 (295)	170 (85)	13.20 (6.75)												
29	668 (397)	913 (543)	262 (156)	18.60 (10.70)												
30	780 (510)	1070 (697)	306 (200)	20.30 (13.50)												
31	889 (558)	1210 (762)	349 (219)	21.50 (13.50)									0 (0)	0 (0)	0 (0)	0.00 (0.00)
Avg	1150	1570	4030	24.10	1600	2190	4120	18.20	1370	1870	2700	11.70	1000	1370	4110	19.00
n	13	13	13	13	10	10	10	10	7	7	7	7	10	10	10	10
SD	658	899	3860	12.20	1350	1840	4170	18.50	171	234	729	3.14	545	744	2130	10.10
Min	0	0	0	0.00	382	522	1240	5.31	1170	1600	1510	6.58	0	0	0	0.00
Max	2260	3090	10800	48.00	5480	7490	16300	71.90	1730	2360	3280	14.50	1720	2350	6900	32.20

ED_004549_00015928-00273

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for September, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	832 (487)	1140 (666)	327 (191)	18.90 (11.30)									0 (0)	0 (0)	0 (0)	0.00 (0.00)
2	764 (528)	1040 (722)	300 (207)	16.40 (11.50)												
3	732 (373)	1000 (510)	287 (146)	14.90 (7.52)												
4	673 (208)	919 (284)	264 (81)	13.00 (4.13)	271 (111)	370 (151)	121 (50)	9.40 (3.86)								
5	658 (599)	899 (818)	258 (235)	12.30 (11.10)	540 (322)	738 (440)	374 (284)	26.30 (19.30)								
6					625 (474)	854 (648)	544 (413)	36.20 (27.70)								
7					631 (484)	862 (662)	549 (422)	33.90 (26.20)								
8					448 (344)	612 (470)	391 (300)	22.70 (17.60)								
9	665 (343)	908 (469)	581 (308)	23.50 (12.40)									614 (301)	839 (412)	304 (376)	26.70 (33.00)
10	426 (381)	582 (520)	413 (369)	16.30 (14.70)	546 (366)	746 (500)	479 (321)	25.10 (17.00)	363 (249)	496 (340)	336 (231)	20.60 (14.30)	584 (397)	798 (543)	576 (392)	49.50 (33.90)
11																
12																
13																
14																
15																
16	480 (232)	656 (317)	468 (226)	15.30 (7.41)	758 (300)	1040 (409)	681 (269)	27.60 (11.00)	440 (278)	601 (379)	410 (258)	18.10 (11.40)	556 (283)	759 (387)	551 (281)	29.10 (14.70)
17	392 (330)	536 (451)	382 (322)	12.20 (10.40)	725 (340)	991 (465)	653 (306)	25.70 (12.10)	489 (320)	668 (438)	455 (298)	19.40 (12.80)	426 (321)	582 (439)	423 (319)	21.30 (16.20)
18	548 (294)	748 (402)	534 (287)	16.60 (8.91)	757 (341)	1030 (466)	683 (307)	26.00 (11.70)	626 (363)	855 (496)	583 (338)	23.80 (13.80)	363 (238)	496 (326)	361 (237)	17.30 (11.40)
19	482 (350)	658 (478)	469 (341)	14.20 (10.40)	789 (308)	1080 (421)	714 (279)	26.40 (10.40)	546 (336)	745 (459)	508 (313)	20.10 (12.50)	403 (246)	550 (336)	401 (244)	18.30 (11.20)
20	511 (315)	698 (430)	498 (307)	14.70 (9.09)	751 (369)	1030 (504)	680 (334)	24.40 (12.10)	526 (271)	719 (370)	490 (252)	18.70 (9.67)	350 (230)	477 (315)	348 (229)	15.30 (10.10)
21	488 (278)	667 (379)	476 (271)	13.60 (7.79)	828 (337)	1130 (460)	752 (305)	26.20 (10.70)	648 (350)	885 (478)	604 (326)	22.20 (11.90)	323 (233)	441 (318)	321 (232)	13.50 (9.67)
22	528 (223)	722 (305)	515 (218)	14.40 (6.10)					949 (332)	1300 (453)	885 (309)	31.70 (11.20)	440 (256)	602 (350)	439 (255)	17.80 (10.40)
23																
24																
25																
26																
27																
28																
29																
30																
Avg	584	798	412	15.50	639	873	552	25.80	573	783	534	21.80	406	554	372	20.90
n	14	14	14	14	12	12	12	12	8	8	8	8	10	10	10	10
SD	130	178	105	2.85	157	215	177	6.18	166	227	156	4.12	166	227	151	12.10
Min	392	536	258	12.20	271	370	121	9.40	363	496	336	18.10	0	0	0	0.00
Max	832	1140	581	23.50	828	1130	752	36.20	949	1300	885	31.70	614	839	576	49.50

ED_004549_00015928-00274

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for October, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2	480 (206)	656 (281)	470 (202)	9.91 (4.29)	547 (117)	747 (160)	499 (107)	12.80 (2.76)	697 (358)	952 (490)	650 (334)	17.20 (8.90)	557 (249)	761 (340)	556 (248)	16.30 (7.37)
3	491 (151)	670 (207)	480 (148)	9.85 (3.05)	583 (120)	796 (164)	532 (110)	13.20 (2.71)	732 (298)	1000 (407)	682 (278)	17.50 (7.16)	472 (236)	645 (323)	471 (236)	13.40 (6.80)
4	551 (222)	752 (303)	539 (218)	10.80 (4.34)	557 (241)	762 (330)	509 (220)	12.30 (5.34)	644 (333)	879 (455)	600 (310)	15.00 (7.81)	587 (276)	802 (378)	587 (276)	16.20 (7.63)
5	552 (273)	754 (373)	541 (268)	10.50 (5.20)	490 (287)	670 (392)	448 (262)	10.60 (6.25)	588 (301)	803 (411)	548 (281)	13.30 (6.88)	474 (262)	647 (358)	473 (261)	12.70 (7.09)
6	511 (202)	698 (276)	501 (198)	9.47 (3.79)												
7	476 (205)	650 (279)	467 (201)	8.59 (3.72)	416 (155)	568 (212)	380 (142)	8.47 (3.20)	523 (330)	714 (451)	488 (308)	11.20 (7.14)				
8	553 (138)	755 (188)	542 (135)	9.67 (2.37)	525 (167)	718 (228)	480 (153)	10.40 (3.22)	596 (285)	814 (389)	556 (266)	12.30 (5.84)				
9	510 (268)	697 (366)	500 (263)	8.70 (4.58)	500 (206)	683 (282)	457 (188)	9.62 (3.99)	627 (353)	857 (483)	586 (330)	12.70 (7.16)				
10	505 (264)	689 (360)	495 (259)	8.38 (4.41)	433 (175)	591 (240)	396 (160)	8.12 (3.33)	511 (281)	698 (384)	477 (262)	10.00 (5.57)				
11	417 (172)	570 (235)	410 (169)	6.76 (2.83)	471 (178)	643 (243)	430 (163)	8.57 (3.22)	502 (171)	686 (233)	469 (160)	9.56 (3.31)				
12	354 (167)	484 (227)	348 (163)	5.58 (2.66)	340 (161)	464 (220)	311 (148)	6.02 (2.86)	574 (158)	784 (216)	536 (148)	10.60 (2.98)				
13	277 (121)	379 (165)	272 (118)	4.25 (1.87)	400 (161)	547 (220)	366 (147)	6.88 (2.74)	373 (181)	510 (248)	349 (169)	6.71 (3.30)				
14	390 (127)	533 (173)	384 (124)	5.81 (1.86)					601 (226)	820 (309)	561 (212)	10.50 (3.90)				
15	447 (162)	610 (222)	439 (159)	6.49 (2.36)	489 (210)	669 (287)	448 (193)	7.96 (3.39)	431 (210)	589 (287)	403 (196)	7.28 (3.56)				
16	686 (164)	937 (225)	675 (162)	9.73 (2.35)	503 (91)	687 (124)	461 (83)	8.00 (1.44)	766 (346)	1050 (472)	716 (323)	12.60 (5.73)				
17																
18	670 (204)	915 (279)	659 (201)	8.99 (2.71)	499 (192)	681 (263)	458 (177)	7.50 (2.89)	749 (436)	1020 (595)	701 (408)	11.60 (6.74)				
19	687 (271)	939 (370)	676 (267)	9.00 (3.58)	518 (195)	707 (266)	476 (179)	7.62 (2.88)	760 (412)	1040 (563)	711 (386)	11.40 (6.17)				
20	633 (195)	865 (266)	623 (192)	8.08 (2.50)					775 (463)	1060 (632)	725 (433)	11.40 (6.81)				
21																
22	636 (170)	869 (232)	626 (167)	7.73 (2.10)					713 (248)	973 (339)	668 (232)	9.86 (3.42)				
23	521 (263)	711 (360)	513 (259)	6.18 (3.15)					622 (303)	849 (414)	582 (284)	8.40 (4.14)				
24																
25																
26																
27																
28																
29																
30																
31																
Avg	517	707	508	8.22	485	662	443	9.20	620	847	579	11.50	523	714	522	14.70
n	20	20	20	20	15	15	15	15	19	19	19	19	4	4	4	4
SD	107	147	106	1.77	62	85	57	2.13	114	155	106	2.81	51	70	51	1.61
Min	277	379	272	4.25	340	464	311	6.02	373	510	349	6.71	472	645	471	12.70
Max	687	939	676	10.80	583	796	532	13.20	775	1060	725	17.50	587	802	587	16.30

ED_004549_00015928-00275

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for November, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4	704 (335)	962 (457)	696 (331)	6.39 (3.04)												
5																
6	774 (182)	1060 (248)	766 (180)	6.73 (1.58)					858 (193)	1170 (264)	806 (182)	8.06 (1.80)				
7	955 (227)	1310 (310)	945 (225)	8.16 (1.95)	1060 (349)	1440 (477)	977 (323)	9.72 (3.21)	1140 (317)	1560 (433)	1070 (298)	10.50 (2.90)	855 (179)	1170 (245)	860 (180)	8.90 (1.88)
8	852 (96)	1160 (131)	843 (95)	7.13 (0.80)	846 (89)	1160 (122)	782 (82)	7.61 (0.77)	1220 (109)	1660 (150)	1140 (103)	10.90 (0.98)	718 (79)	982 (108)	723 (80)	7.29 (0.79)
9	934 (78)	1280 (106)	925 (77)	7.67 (0.62)	854 (93)	1170 (127)	789 (86)	7.52 (0.83)	1340 (170)	1840 (232)	1260 (160)	11.80 (1.49)	950 (142)	1300 (194)	956 (143)	9.42 (1.38)
10	1010 (176)	1380 (240)	1000 (174)	8.15 (1.42)	837 (136)	1140 (186)	774 (126)	7.22 (1.18)	1120 (378)	1520 (517)	1050 (356)	9.60 (3.29)	1130 (136)	1540 (186)	1140 (137)	10.90 (1.32)
11	1010 (184)	1380 (251)	998 (182)	7.98 (1.49)	802 (187)	1100 (256)	742 (173)	6.79 (1.62)	626 (501)	855 (684)	588 (471)	5.29 (4.25)	837 (205)	1140 (280)	843 (206)	7.93 (1.98)
12	713 (197)	975 (268)	707 (195)	5.56 (1.54)	604 (182)	825 (249)	559 (169)	5.00 (1.50)	174 (97)	237 (133)	163 (91)	1.43 (0.79)	630 (202)	860 (276)	634 (204)	5.82 (1.87)
13	726 (220)	992 (301)	720 (218)	5.55 (1.68)	729 (180)	995 (246)	674 (166)	5.92 (1.45)	215 (75)	293 (102)	202 (70)	1.73 (0.61)	659 (156)	900 (214)	663 (157)	5.96 (1.41)
14																
15	981 (157)	1340 (214)	972 (155)	7.24 (1.15)	673 (131)	920 (180)	623 (122)	5.25 (1.02)	138 (70)	188 (96)	130 (66)	1.07 (0.55)	587 (109)	801 (149)	591 (110)	5.09 (0.95)
16	949 (99)	1300 (135)	941 (98)	6.90 (0.73)	779 (109)	1060 (149)	722 (101)	5.97 (0.86)	73 (17)	99 (24)	68 (16)	0.55 (0.14)	483 (99)	660 (135)	487 (100)	4.10 (0.84)
17	1000 (107)	1370 (146)	993 (106)	7.17 (0.75)	701 (49)	957 (67)	649 (45)	5.28 (0.36)	79 (41)	108 (56)	75 (39)	0.59 (0.30)	550 (106)	751 (145)	554 (107)	4.57 (0.87)
18	727 (353)	993 (482)	720 (350)	5.12 (2.50)	769 (66)	1050 (90)	713 (61)	5.68 (0.49)								
19	576 (150)	786 (204)	571 (148)	3.99 (1.04)	592 (126)	809 (171)	549 (116)	4.30 (0.92)	327 (170)	446 (232)	308 (160)	2.34 (1.20)	524 (112)	716 (154)	528 (113)	4.19 (0.92)
20	618 (97)	844 (132)	613 (96)	4.22 (0.66)	661 (66)	903 (90)	614 (61)	4.72 (0.47)	715 (147)	976 (201)	673 (139)	5.04 (1.02)	660 (128)	902 (175)	666 (129)	5.18 (0.98)
21	831 (117)	1140 (160)	825 (116)	5.59 (0.77)	659 (45)	900 (61)	612 (41)	4.63 (0.32)	856 (128)	1170 (175)	807 (121)	5.94 (0.89)	820 (153)	1120 (208)	828 (154)	6.32 (1.18)
22	891 (194)	1220 (265)	884 (192)	5.91 (1.30)	668 (73)	913 (100)	621 (68)	4.62 (0.51)	939 (149)	1280 (203)	885 (140)	6.40 (1.01)	673 (188)	919 (257)	680 (190)	5.09 (1.44)
23	820 (216)	1120 (295)	814 (214)	5.37 (1.43)	602 (91)	822 (124)	560 (85)	4.09 (0.63)	911 (220)	1250 (301)	860 (208)	6.11 (1.49)	643 (121)	878 (166)	650 (122)	4.78 (0.92)
24	877 (153)	1200 (209)	871 (152)	5.66 (0.98)	647 (85)	884 (116)	602 (79)	4.33 (0.57)	973 (314)	1330 (429)	918 (297)	6.41 (2.05)				
25																
26	836 (247)	1140 (337)	831 (245)	5.26 (1.56)	587 (125)	802 (171)	546 (117)	3.81 (0.82)	871 (349)	1190 (477)	822 (330)	5.58 (2.24)				
27																
28																
29																
30	1040 (105)	1420 (144)	1040 (105)	6.24 (0.63)	637 (66)	871 (90)	595 (61)	3.91 (0.41)	1120 (235)	1530 (321)	1060 (222)	6.75 (1.42)				
Avg	849	1160	841	6.29	721	985	669	5.60	721	984	679	5.59	715	976	720	6.37
n	21	21	21	21	19	19	19	19	19	19	19	19	15	15	15	15
SD	132	180	131	1.19	117	160	107	1.52	412	563	388	3.48	169	230	169	2.01
Min	576	786	571	3.99	587	802	546	3.81	73	99	68	0.55	483	660	487	4.10
Max	1040	1420	1040	8.16	1060	1440	977	9.72	1340	1840	1260	11.80	1130	1540	1140	10.90

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for December, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2	1160 (111)	1580 (152)	1150 (111)	6.77 (0.65)	653 (90)	892 (123)	610 (84)	3.90 (0.54)								
3	1030 (136)	1410 (185)	1020 (135)	5.96 (0.79)	579 (95)	792 (130)	542 (89)	3.42 (0.56)								
4	1220 (85)	1670 (116)	1220 (85)	7.01 (0.48)	839 (93)	1150 (127)	787 (88)	4.90 (0.54)								
5																
6																
7	1230 (157)	1680 (215)	1220 (157)	6.84 (0.89)	945 (114)	1290 (156)	889 (107)	5.34 (0.66)	1480 (235)	2030 (321)	1410 (223)	8.19 (1.31)	1110 (262)	1520 (358)	1130 (266)	6.73 (1.61)
8	1020 (137)	1400 (187)	1020 (136)	5.65 (0.76)	696 (136)	950 (186)	655 (128)	3.89 (0.77)	1200 (245)	1640 (335)	1140 (232)	6.57 (1.34)	1050 (124)	1440 (170)	1070 (126)	6.29 (0.73)
9									1190 (423)	1630 (578)	1130 (402)	6.45 (2.27)				
10																
11	1040 (231)	1420 (316)	1030 (231)	5.57 (1.25)	969 (127)	1320 (173)	914 (119)	5.25 (0.69)								
12	889 (113)	1210 (154)	886 (113)	4.73 (0.61)	1160 (110)	1580 (150)	1090 (103)	6.19 (0.58)	1840 (225)	2510 (308)	1750 (214)	9.64 (1.17)	1300 (150)	1780 (205)	1320 (152)	7.45 (0.86)
13	583 (202)	797 (275)	581 (201)	3.08 (1.07)	1060 (191)	1450 (260)	1000 (180)	5.64 (1.02)	1640 (439)	2240 (599)	1560 (416)	8.53 (2.29)	1200 (124)	1630 (170)	1220 (126)	6.77 (0.70)
14	465 (124)	635 (169)	464 (124)	2.44 (0.65)	1060 (190)	1440 (260)	997 (180)	5.56 (1.00)	2200 (1450)	3000 (1980)	2090 (1380)	11.30 (7.44)	1130 (232)	1540 (317)	1150 (236)	6.33 (1.30)
15	551 (89)	753 (121)	550 (88)	2.87 (0.46)	1420 (191)	1940 (261)	1340 (180)	7.41 (1.00)	2100 (933)	2860 (1270)	1990 (886)	10.70 (4.78)				
16	572 (75)	782 (102)	571 (75)	2.96 (0.39)	1390 (123)	1900 (168)	1320 (116)	7.20 (0.63)	1790 (222)	2450 (304)	1700 (211)	9.06 (1.12)	1280 (259)	1750 (354)	1300 (264)	7.03 (1.43)
17	459 (41)	627 (57)	458 (41)	2.35 (0.21)	1330 (93)	1810 (127)	1250 (88)	6.80 (0.48)					1290 (128)	1760 (175)	1310 (131)	7.03 (0.71)
18	434 (79)	593 (108)	433 (79)	2.21 (0.40)	1210 (149)	1650 (204)	1150 (141)	6.16 (0.76)					1010 (138)	1380 (189)	1030 (141)	5.47 (0.74)
19	330 (67)	451 (91)	330 (67)	1.67 (0.34)	1280 (263)	1750 (359)	1210 (249)	6.46 (1.32)	1530 (404)	2090 (552)	1460 (384)	7.56 (1.99)	1140 (171)	1560 (234)	1160 (175)	6.13 (0.92)
20	302 (50)	413 (69)	302 (50)	1.52 (0.25)	1460 (96)	1990 (131)	1380 (91)	7.30 (0.48)	1740 (426)	2380 (583)	1650 (406)	8.51 (2.09)	1010 (129)	1380 (176)	1030 (131)	5.38 (0.69)
21	160 (30)	219 (41)	160 (30)	0.80 (0.15)									930 (206)	1270 (281)	948 (210)	4.91 (1.08)
22	233 (66)	318 (89)	233 (65)	1.16 (0.33)									1340 (219)	1830 (299)	1370 (223)	7.02 (1.16)
23	226 (41)	309 (56)	226 (41)	1.12 (0.20)									1210 (248)	1650 (339)	1230 (254)	6.29 (1.30)
24	146 (45)	200 (61)	146 (45)	0.72 (0.22)									1170 (221)	1590 (303)	1190 (227)	6.04 (1.14)
25	150 (30)	205 (41)	150 (30)	0.73 (0.15)									1340 (333)	1830 (454)	1370 (340)	6.91 (1.72)
26	134 (42)	183 (57)	134 (42)	0.65 (0.20)	1390 (251)	1900 (343)	1330 (239)	6.72 (1.21)					1220 (206)	1670 (281)	1250 (211)	6.26 (1.06)
27	116 (42)	159 (58)	116 (42)	0.56 (0.21)	1990 (609)	2710 (833)	1890 (581)	9.52 (2.92)					1680 (606)	2290 (828)	1720 (622)	8.55 (3.08)
28	114 (46)	156 (62)	115 (46)	0.55 (0.22)	1710 (435)	2330 (594)	1630 (415)	8.14 (2.08)					1250 (233)	1710 (318)	1280 (239)	6.34 (1.18)
29	100 (38)	136 (52)	100 (38)	0.48 (0.18)	1470 (394)	2010 (538)	1400 (376)	6.98 (1.87)	1660 (1530)	2260 (2090)	1590 (1470)	7.70 (7.12)	1250 (280)	1700 (382)	1280 (288)	6.29 (1.41)
30	106 (42)	145 (58)	106 (42)	0.51 (0.20)	1660 (336)	2260 (458)	1580 (321)	7.82 (1.58)	2420 (1540)	3310 (2100)	2320 (1480)	11.20 (7.11)	1000 (256)	1370 (350)	1030 (263)	5.03 (1.29)
31	59 (39)	81 (53)	59 (39)	0.28 (0.18)	1580 (186)	2160 (255)	1510 (178)	7.43 (0.87)					1190 (173)	1630 (237)	1220 (178)	5.94 (0.87)
Avg	493	674	492	2.66	1230	1680	1170	6.29	1730	2370	1650	8.78	1200	1630	1220	6.39
n	26	26	26	26	21	21	21	21	12	12	12	12	21	21	21	21
SD	393	537	391	2.26	360	492	347	1.48	357	487	343	1.58	157	215	162	0.81
Min	59	81	59	0.28	579	792	542	3.42	1190	1630	1130	6.45	930	1270	948	4.91
Max	1230	1680	1220	7.01	1990	2710	1890	9.52	2420	3310	2320	11.30	1680	2290	1720	8.55

ED_004549_00015928-00277

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for January, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2	110 (38)	150 (51)	111 (38)	0.52 (0.18)	1420 (310)	1940 (423)	1360 (296)	6.61 (1.43)	1570 (531)	2150 (725)	1510 (511)	7.19 (2.42)	1090 (121)	1480 (165)	1120 (124)	5.36 (0.59)
3	121 (44)	166 (60)	122 (44)	0.57 (0.21)	1560 (215)	2130 (294)	1490 (205)	7.19 (1.00)	2300 (1480)	3140 (2020)	2220 (1420)	10.50 (6.71)	1100 (179)	1500 (244)	1130 (184)	5.38 (0.88)
4	107 (41)	146 (56)	107 (41)	0.50 (0.19)	1530 (386)	2090 (527)	1460 (368)	7.03 (1.77)					1120 (290)	1530 (397)	1150 (299)	5.48 (1.41)
5	88 (37)	120 (50)	88 (37)	0.41 (0.17)												
6	117 (32)	160 (44)	117 (32)	0.54 (0.15)	1500 (277)	2050 (378)	1430 (264)	6.84 (1.27)								
7					1580 (344)	2150 (471)	1510 (329)	7.15 (1.55)	2370 (2090)	3240 (2850)	2300 (2020)	10.60 (9.33)				
8	109 (30)	148 (40)	109 (30)	0.50 (0.14)	1760 (216)	2400 (296)	1680 (207)	7.93 (0.98)					1540 (325)	2110 (444)	1590 (335)	7.41 (1.57)
9	100 (41)	137 (56)	101 (42)	0.46 (0.19)	1630 (362)	2230 (494)	1560 (346)	7.34 (1.63)					1380 (289)	1890 (395)	1430 (298)	6.63 (1.39)
10	79 (28)	109 (38)	80 (28)	0.37 (0.13)	1790 (624)	2440 (852)	1710 (597)	8.00 (2.79)	1720 (763)	2360 (1040)	1670 (738)	7.63 (3.37)	1480 (204)	2020 (279)	1520 (211)	7.03 (0.97)
11	69 (29)	95 (39)	70 (29)	0.32 (0.13)	1370 (666)	1870 (910)	1310 (637)	6.11 (2.98)	1630 (610)	2230 (834)	1580 (591)	7.19 (2.69)	1840 (250)	2510 (342)	1890 (258)	8.71 (1.19)
12	68 (45)	93 (61)	69 (45)	0.31 (0.20)	1670 (453)	2280 (619)	1600 (434)	7.43 (2.01)	1710 (699)	2340 (955)	1660 (677)	7.51 (3.06)	1740 (244)	2380 (333)	1800 (251)	8.24 (1.16)
13																
14	80 (27)	109 (37)	81 (27)	0.36 (0.12)	1710 (283)	2340 (386)	1640 (271)	7.55 (1.25)					2240 (305)	3050 (417)	2310 (315)	10.50 (1.43)
15					1510 (348)	2060 (476)	1440 (334)	6.63 (1.54)								
16	114 (52)	156 (72)	117 (54)	0.53 (0.25)	1190 (558)	1620 (763)	1140 (536)	5.21 (2.45)					1760 (227)	2410 (310)	2040 (300)	9.30 (1.40)
17	156 (63)	213 (86)	170 (68)	0.77 (0.31)	1340 (702)	1830 (959)	1290 (674)	5.85 (3.07)	1620 (349)	2220 (477)	1760 (386)	7.95 (1.74)	1280 (494)	1750 (675)	1600 (617)	7.30 (2.83)
18	132 (47)	180 (64)	153 (54)	0.69 (0.24)	2060 (625)	2810 (854)	1980 (600)	8.97 (2.72)	1790 (629)	2440 (859)	2090 (739)	9.42 (3.32)	1550 (355)	2120 (484)	1940 (444)	8.83 (2.01)
19	31 (41)	42 (56)	40 (49)	0.18 (0.22)	1800 (392)	2460 (536)	1730 (377)	7.82 (1.70)	1380 (214)	1880 (292)	1630 (253)	7.30 (1.14)	1950 (247)	2660 (337)	2550 (329)	11.50 (1.49)
20	42 (40)	58 (54)	68 (64)	0.31 (0.29)												
21	70 (40)	96 (55)	113 (65)	0.51 (0.29)	1860 (405)	2540 (553)	2160 (471)	9.84 (2.14)					1870 (229)	2550 (313)	3010 (369)	13.80 (1.70)
22	73 (21)	100 (29)	117 (34)	0.53 (0.15)	1750 (402)	2390 (549)	2040 (468)	9.24 (2.12)					1590 (324)	2170 (442)	2570 (523)	11.70 (2.40)
23	54 (33)	73 (45)	86 (53)	0.39 (0.24)	1820 (503)	2490 (687)	2120 (585)	9.59 (2.65)					1650 (384)	2250 (524)	2670 (623)	12.20 (2.82)
24	28 (40)	39 (55)	46 (65)	0.21 (0.29)	1730 (274)	2360 (374)	2020 (319)	9.08 (1.44)					1860 (183)	2550 (251)	3030 (298)	13.70 (1.35)
25	41 (35)	56 (48)	66 (57)	0.30 (0.25)	1750 (298)	2390 (407)	2040 (348)	9.14 (1.56)					1900 (150)	2590 (206)	3130 (256)	14.10 (1.15)
26	50 (34)	69 (46)	81 (55)	0.36 (0.24)	1710 (359)	2330 (490)	1990 (419)	8.89 (1.87)					1810 (170)	2470 (233)	3200 (280)	14.40 (1.26)
27	72 (37)	99 (51)	117 (60)	0.52 (0.27)	1610 (373)	2200 (510)	1880 (436)	8.36 (1.94)					1630 (227)	2230 (310)	3130 (402)	14.00 (1.80)
28	65 (22)	89 (31)	105 (36)	0.47 (0.16)	1720 (364)	2350 (497)	2010 (425)	8.91 (1.89)					1700 (186)	2320 (254)	3580 (439)	15.90 (1.95)
29													1630 (191)	2230 (262)	3710 (413)	16.80 (1.80)
30	8 (5)	12 (6)	19 (10)	0.09 (0.05)	1620 (193)	2210 (263)	2390 (284)	10.70 (1.28)	641 (72)	876 (98)	1400 (150)	6.26 (0.67)	1750 (102)	2390 (140)	4040 (238)	18.40 (1.08)
31	42 (27)	58 (37)	96 (61)	0.43 (0.28)	1550 (305)	2110 (416)	2280 (449)	10.20 (2.01)	611 (134)	835 (183)	1400 (292)	6.24 (1.30)	1590 (278)	2170 (379)	3750 (592)	17.00 (2.71)
Avg	78	107	94	0.43	1640	2230	1740	7.99	1580	2160	1750	7.98	1630	2220	2410	11.00
n	26	26	26	26	26	26	26	26	11	11	11	11	24	24	24	24
SD	35	48	33	0.15	181	247	331	1.38	530	725	300	1.46	277	378	890	3.94
Min	8	12	19	0.09	1190	1620	1140	5.21	611	835	1400	6.24	1090	1480	1120	5.36
Max	156	213	170	0.77	2060	2810	2390	10.70	2370	3240	2300	10.60	2240	3050	4040	18.40

ED_004549_00015928-00278

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for February, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	71 (67)	98 (92)	162 (153)	0.73 (0.69)	1830 (692)	2500 (946)	2700 (1020)	12.00 (4.54)	661 (90)	903 (122)	1600 (229)	7.11 (1.01)	1000 (316)	1370 (432)	2650 (858)	12.00 (3.88)
2	33 (40)	46 (55)	76 (92)	0.34 (0.41)	1620 (363)	2210 (496)	2390 (535)	10.60 (2.37)	652 (88)	891 (120)	1670 (216)	7.38 (0.96)	1520 (365)	2080 (499)	4590 (1120)	20.70 (5.05)
3	-9 (12)	-12 (16)	-20 (27)	-0.09 (0.12)	1270 (356)	1730 (487)	1870 (526)	8.24 (2.33)	373 (166)	509 (227)	1010 (437)	4.44 (1.93)	1660 (140)	2270 (192)	5830 (469)	26.20 (2.10)
4	-3 (19)	-4 (26)	-19 (72)	-0.09 (0.32)												
5	15 (2)	20 (3)	69 (11)	0.31 (0.05)	1190 (104)	1630 (143)	2390 (210)	10.80 (0.94)	526 (204)	718 (278)	1610 (615)	7.16 (2.64)	1440 (124)	1960 (170)	5930 (513)	28.00 (2.43)
6																
7	29 (19)	40 (26)	135 (89)	0.60 (0.39)	1540 (359)	2100 (491)	3080 (721)	13.80 (3.22)	294 (215)	402 (293)	905 (660)	4.10 (2.99)	894 (217)	1220 (296)	3690 (895)	17.30 (4.20)
8	-1 (9)	-2 (13)	-5 (44)	-0.02 (0.19)	1700 (211)	2320 (288)	3410 (424)	15.10 (1.89)	218 (36)	298 (49)	672 (111)	3.03 (0.50)	1130 (222)	1540 (303)	4650 (917)	21.70 (4.29)
9	8 (3)	10 (5)	35 (16)	0.16 (0.07)	1490 (385)	2040 (525)	3770 (1030)	17.10 (4.77)	211 (47)	288 (65)	649 (145)	2.92 (0.65)	1140 (227)	1550 (310)	4700 (936)	21.90 (4.38)
10	21 (10)	28 (13)	96 (45)	0.42 (0.20)					188 (76)	256 (104)	577 (234)	2.58 (1.05)	851 (188)	1160 (257)	3520 (777)	16.30 (3.61)
11	32 (39)	43 (54)	147 (183)	0.65 (0.81)	1210 (720)	1650 (983)	3580 (2130)	16.30 (9.68)	264 (149)	361 (204)	812 (460)	3.62 (2.05)	799 (717)	1090 (979)	3300 (2960)	15.20 (13.60)
12	22 (17)	31 (24)	105 (82)	0.46 (0.36)	700 (186)	957 (254)	2070 (550)	9.37 (2.48)	103 (31)	140 (43)	315 (96)	1.40 (0.42)	1000 (385)	1370 (526)	4150 (1590)	19.00 (7.28)
13	47 (56)	65 (77)	220 (264)	0.96 (1.15)	890 (130)	1220 (178)	2630 (385)	11.90 (1.74)	130 (29)	177 (39)	399 (88)	1.76 (0.39)	1130 (207)	1550 (283)	4680 (856)	21.40 (3.91)
14	1 (8)	1 (11)	3 (37)	0.01 (0.16)	875 (84)	1200 (114)	2590 (247)	11.60 (1.12)	95 (23)	129 (32)	292 (72)	1.28 (0.32)	1200 (79)	1640 (108)	4970 (327)	22.60 (1.51)
15	16 (6)	21 (8)	73 (28)	0.32 (0.12)	847 (83)	1160 (113)	2510 (245)	11.20 (1.09)	97 (31)	133 (42)	300 (95)	1.31 (0.41)	1140 (129)	1560 (176)	4730 (531)	21.40 (2.41)
16	36 (16)	49 (22)	114 (499)	0.49 (2.14)	819 (195)	1120 (266)	1470 (5160)	6.54 (23.00)	128 (21)	175 (29)	282 (815)	1.23 (3.55)	1130 (135)	1540 (184)	3010 (10700)	13.60 (48.40)
17	14 (7)	20 (9)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	56 (18)	76 (24)	0 (0)	0.00 (0.00)	847 (56)	1160 (77)	0 (0)	0.00 (0.00)
18					0 (1)	0 (1)	0 (0)	0.00 (0.00)	34 (16)	46 (22)	0 (0)	0.00 (0.00)	521 (164)	712 (224)	0 (0)	0.00 (0.00)
19	2 (2)	3 (2)	0 (0)	0.00 (0.00)	2 (2)	2 (2)	0 (0)	0.00 (0.00)	9 (11)	12 (15)	0 (0)	0.00 (0.00)	396 (121)	541 (165)	0 (0)	0.00 (0.00)
20	2 (4)	3 (5)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)					198 (206)	271 (281)	0 (0)	0.00 (0.00)
21													0 (0)	0 (0)	0 (0)	0.00 (0.00)
22	0 (0)	0 (0)	0 (0)	0.00 (0.00)									0 (0)	0 (0)	0 (0)	0.00 (0.00)
23	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)								
24					8 (37)	11 (51)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)				
25	49 (20)	67 (27)	21 (8)	1.80 (0.68)	0 (0)	0 (0)	0 (0)	0.00 (0.00)					668 (150)	912 (205)	0 (0)	0.00 (0.00)
26	57 (21)	78 (29)	25 (9)	1.91 (0.67)	0 (0)	0 (0)	0 (0)	0.00 (0.00)					748 (125)	1020 (171)	0 (0)	0.00 (0.00)
27	68 (24)	94 (33)	30 (10)	2.11 (0.72)									468 (104)	639 (142)	0 (0)	0.00 (0.00)
28	83 (32)	114 (44)	36 (14)	2.40 (0.93)	0 (0)	0 (1)	0 (0)	0.00 (0.00)					320 (92)	437 (125)	0 (0)	0.00 (0.00)
Avg	25	34	54	0.56	726	992	1570	7.02	224	306	616	2.74	842	1150	2520	11.60
n	24	24	24	24	22	22	22	22	18	18	18	18	24	24	24	24
SD	26	35	64	0.73	666	909	1390	6.26	200	274	544	2.42	442	603	2250	10.30
Min	-9	-12	-20	-0.09	0	0	0	0.00	0	0	0	0.00	0	0	0	0.00
Max	83	114	220	2.40	1830	2500	3770	17.10	661	903	1670	7.38	1660	2270	5930	28.00

ED_004549_00015928-00279

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for March, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	76 (16)	104 (22)	33 (7)	2.03 (0.41)					0 (0)	0 (0)	0 (0)	0.00 (0.00)	357 (51)	488 (69)	0 (0)	0.00 (0.00)
2	104 (27)	142 (38)	45 (12)	2.64 (0.73)					0 (0)	0 (0)	0 (0)	0.00 (0.00)	298 (25)	407 (34)	0 (0)	0.00 (0.00)
3	107 (18)	147 (25)	46 (8)	2.56 (0.42)					0 (0)	0 (0)	0 (0)	0.00 (0.00)	237 (28)	324 (38)	0 (0)	0.00 (0.00)
4	131 (21)	178 (29)	56 (9)	2.96 (0.45)					0 (0)	0 (0)	0 (0)	0.00 (0.00)	219 (32)	299 (43)	0 (0)	0.00 (0.00)
5	139 (61)	190 (84)	60 (27)	3.04 (1.37)					0 (0)	0 (0)	0 (0)	0.00 (0.00)	100 (102)	137 (140)	0 (0)	0.00 (0.00)
6	161 (56)	220 (76)	70 (24)	3.34 (1.14)					0 (0)	0 (0)	0 (0)	0.00 (0.00)	35 (42)	48 (57)	0 (0)	0.00 (0.00)
7	206 (24)	281 (33)	89 (10)	4.11 (0.49)					0 (1)	0 (1)	0 (0)	0.00 (0.00)	42 (57)	57 (78)	0 (0)	0.00 (0.00)
8	185 (52)	252 (71)	80 (22)	3.57 (1.03)					1 (2)	1 (3)	0 (0)	0.00 (0.00)	203 (110)	278 (150)	0 (0)	0.00 (0.00)
9	228 (35)	311 (48)	98 (15)	4.24 (0.65)	858 (250)		398 (116)	23.50 (6.98)	0 (1)	1 (1)	0 (0)	0.00 (0.00)	309 (53)	422 (72)	0 (0)	0.00 (0.00)
10	216 (63)	295 (86)	93 (27)	3.89 (1.13)	503 (359)	687 (490)	233 (166)	13.10 (9.51)	1 (9)	1 (12)	0 (0)	0.00 (0.00)	129 (138)	176 (188)	0 (0)	0.00 (0.00)
11	237 (59)	324 (80)	103 (26)	4.13 (1.00)	818 (223)	1120 (305)	379 (103)	20.10 (5.39)	1 (1)	2 (1)	0 (0)	0.00 (0.00)	296 (53)	404 (73)	0 (0)	0.00 (0.00)
12	320 (41)	437 (56)	138 (18)	5.40 (0.67)	1040 (130)	1420 (178)	480 (60)	24.40 (3.05)	11 (10)	16 (13)	0 (0)	0.00 (0.00)	140 (79)	192 (107)	0 (0)	0.00 (0.00)
13	215 (40)	293 (54)	93 (17)	3.53 (0.67)	876 (316)	1200 (432)	406 (147)	19.80 (7.25)	28 (18)	39 (25)	0 (0)	0.00 (0.00)	53 (14)	72 (19)	0 (0)	0.00 (0.00)
14	164 (55)	224 (75)	71 (24)	2.61 (0.89)	697 (361)	952 (494)	323 (168)	15.10 (7.92)	20 (6)	28 (8)	0 (0)	0.00 (0.00)	72 (47)	98 (65)	0 (0)	0.00 (0.00)
15	143 (33)	196 (44)	62 (14)	2.23 (0.51)	598 (282)	817 (385)	277 (131)	12.50 (6.00)	18 (13)	24 (18)	0 (0)	0.00 (0.00)	69 (55)	94 (75)	0 (0)	0.00 (0.00)
16	115 (35)	158 (48)	51 (15)	1.76 (0.54)	479 (182)	655 (248)	222 (84)	9.69 (3.73)	15 (15)	20 (20)	0 (0)	0.00 (0.00)	134 (61)	183 (83)	0 (0)	0.00 (0.00)
17	71 (36)	97 (49)	31 (16)	1.06 (0.54)	407 (152)	556 (207)	188 (71)	7.91 (3.03)	20 (27)	27 (37)	0 (0)	0.00 (0.00)	71 (94)	96 (128)	0 (0)	0.00 (0.00)
18	56 (30)	76 (41)	25 (13)	0.82 (0.43)	422 (144)	576 (197)	191 (65)	7.76 (2.60)	17 (19)	23 (27)	0 (0)	0.00 (0.00)	84 (54)	115 (73)	0 (0)	0.00 (0.00)
19	27 (28)	37 (39)	15 (12)	0.47 (0.37)	503 (196)	687 (268)	226 (88)	8.88 (3.48)	39 (43)	54 (59)	0 (0)	0.00 (0.00)	129 (168)	176 (229)	118 (351)	3.72 (11.20)
20	10 (2)	14 (3)	9 (2)	0.28 (0.06)	510 (189)	697 (258)	229 (85)	8.74 (3.27)	21 (10)	29 (13)	0 (0)	0.00 (0.00)	291 (113)	398 (155)	263 (102)	8.15 (3.17)
21																
22																
23																
24									19 (18)	25 (25)	0 (0)	0.00 (0.00)	233 (301)	318 (411)	210 (272)	5.87 (7.61)
25					374 (108)	511 (147)	168 (48)	5.57 (1.63)	9 (11)	12 (15)	0 (0)	0.00 (0.00)	271 (228)	370 (311)	245 (206)	6.59 (5.49)
26					367 (126)	501 (172)	165 (57)	5.31 (1.81)	29 (25)	40 (34)	0 (0)	0.00 (0.00)	395 (215)	540 (294)	357 (195)	9.42 (5.15)
27					401 (123)	548 (168)	181 (55)	5.68 (1.75)	12 (24)	16 (33)	0 (0)	0.00 (0.00)	410 (277)	560 (378)	371 (251)	9.55 (6.41)
28	20 (36)	27 (49)	18 (32)	0.44 (0.80)	687 (204)	939 (278)	310 (92)	9.46 (2.75)	99 (79)	135 (108)	0 (0)	0.00 (0.00)	338 (306)	462 (419)	306 (277)	7.70 (7.01)
29	19 (7)	26 (10)	17 (6)	0.41 (0.16)	603 (151)	824 (207)	294 (73)	8.74 (2.17)	54 (6)	73 (8)	0 (0)	0.00 (0.00)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
30	13 (3)	18 (4)	12 (2)	0.27 (0.06)	655 (143)	894 (195)	379 (82)	11.00 (2.36)	36 (17)	50 (24)	0 (0)	0.00 (0.00)				
31	19 (7)	26 (10)	17 (6)	0.39 (0.14)	584 (125)	797 (170)	419 (85)	11.80 (2.40)	26 (10)	35 (14)	0 (0)	0.00 (0.00)	576 (142)	788 (194)	523 (129)	12.00 (3.01)
Avg	124	170	55	2.34	599	798	288	12.10	17	23	0	0.00	203	278	89	2.34
n	24	24	24	24	19	18	19	19	28	28	28	28	27	27	27	27
SD	84	115	34	1.50	186	246	96	5.75	21	29	0	0.00	139	190	150	3.83
Min	10	14	9	0.27	367	501	165	5.31	0	0	0	0.00	0	0	0	0.00
Max	320	437	138	5.40	1040	1420	480	24.40	99	135	0	0.00	576	788	523	12.00

ED_004549_00015928-00280

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for April, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	48 (21)	66 (28)	43 (19)	0.96 (0.41)					71 (50)	97 (68)	154 (676)	4.22 (18.60)	562 (258)	768 (352)	509 (234)	11.40 (5.25)
2	53 (23)	73 (32)	47 (21)	1.04 (0.46)					55 (49)	75 (67)	49 (43)	1.31 (1.16)	572 (297)	782 (406)	519 (269)	11.40 (5.94)
3	67 (22)	92 (30)	60 (19)	1.28 (0.42)					70 (50)	95 (68)	62 (44)	1.61 (1.14)	975 (154)	1330 (210)	884 (139)	18.80 (2.92)
4	49 (25)	67 (34)	44 (22)	0.92 (0.46)					100 (80)	137 (109)	89 (71)	2.27 (1.81)	715 (358)	976 (490)	649 (325)	13.40 (6.77)
5	75 (25)	102 (33)	67 (22)	1.36 (0.44)					163 (74)	222 (101)	145 (66)	3.59 (1.65)	680 (391)	929 (533)	617 (354)	12.50 (7.16)
6	53 (19)	72 (26)	47 (17)	0.93 (0.34)					128 (53)	175 (72)	114 (47)	2.75 (1.14)	0 (0)	0 (0)	0 (0)	0.00 (0.00)
7																
8																
9																
10																
11	91 (38)	124 (52)	81 (34)	1.40 (0.59)	562 (68)	768 (92)	517 (62)	10.90 (1.31)	208 (155)	284 (212)	185 (138)	3.90 (2.92)	739 (319)	1010 (436)	671 (290)	11.50 (5.00)
12	81 (42)	110 (57)	72 (37)	1.22 (0.62)	636 (88)	869 (120)	585 (81)	12.00 (1.63)	269 (175)	367 (239)	240 (156)	4.92 (3.20)	662 (301)	904 (411)	601 (273)	10.10 (4.63)
13	44 (43)	60 (58)	39 (38)	0.64 (0.62)	673 (144)	919 (197)	618 (132)	12.40 (2.67)	503 (93)	687 (126)	449 (83)	8.97 (1.68)	353 (323)	483 (441)	321 (293)	5.20 (4.73)
14	141 (36)	193 (49)	127 (33)	2.02 (0.53)	576 (76)	787 (104)	530 (70)	10.30 (1.37)	197 (99)	270 (135)	176 (88)	3.42 (1.70)	810 (76)	1110 (103)	736 (69)	11.70 (1.10)
15	111 (18)	151 (24)	99 (16)	1.55 (0.25)	592 (94)	809 (129)	544 (87)	10.30 (1.60)	176 (117)	241 (160)	157 (104)	2.98 (1.99)	775 (174)	1060 (238)	705 (158)	10.90 (2.50)
16	93 (25)	127 (34)	83 (22)	1.26 (0.33)	511 (122)	699 (167)	470 (112)	8.68 (2.09)	194 (105)	265 (144)	174 (94)	3.20 (1.76)				
17	105 (33)	144 (45)	95 (29)	1.40 (0.44)	508 (92)	694 (125)	467 (84)	8.39 (1.53)	274 (147)	374 (200)	245 (131)	4.40 (2.37)				
18	91 (40)	125 (54)	82 (36)	1.18 (0.52)	489 (134)	668 (182)	450 (123)	7.86 (2.15)	285 (120)	389 (164)	255 (107)	4.46 (1.91)				
19	117 (28)	160 (38)	106 (25)	1.48 (0.34)	506 (117)	691 (160)	466 (108)	7.93 (1.83)	291 (101)	398 (138)	260 (90)	4.43 (1.52)				
20	129 (27)	176 (37)	116 (24)	1.58 (0.33)	517 (56)	706 (77)	476 (52)	7.90 (0.85)	422 (106)	576 (145)	377 (95)	6.27 (1.57)				
21	148 (30)	202 (41)	133 (27)	1.78 (0.37)					554 (160)	757 (219)	496 (144)	8.02 (2.31)				
22	131 (22)	179 (30)	118 (20)	1.53 (0.26)	506 (112)	692 (153)	466 (103)	7.36 (1.64)	513 (192)	701 (263)	459 (172)	7.25 (2.72)				
23	124 (26)	169 (36)	111 (24)	1.41 (0.30)	514 (133)	702 (182)	473 (123)	7.28 (1.92)	524 (195)	716 (266)	469 (174)	7.22 (2.72)				
24	116 (31)	159 (42)	105 (28)	1.30 (0.35)	748 (340)	1020 (465)	690 (314)	10.30 (4.67)	409 (186)	558 (253)	366 (166)	5.48 (2.49)				
25	94 (36)	128 (50)	84 (33)	1.03 (0.40)	839 (421)	1150 (575)	774 (388)	11.30 (5.62)	535 (248)	731 (339)	479 (222)	7.00 (3.23)				
26	65 (21)	89 (28)	59 (19)	0.69 (0.22)	913 (381)	1250 (520)	842 (351)	12.00 (4.98)	457 (201)	625 (274)	409 (180)	5.83 (2.55)				
27	119 (119)	163 (162)	107 (107)	1.24 (1.24)	811 (357)	1110 (488)	748 (330)	10.40 (4.56)	526 (216)	718 (296)	471 (194)	6.54 (2.68)				
28	40 (20)	54 (27)	36 (18)	0.40 (0.20)	550 (126)	751 (172)	507 (116)	6.86 (1.58)	553 (166)	755 (227)	495 (148)	6.72 (2.01)				
29	47 (21)	64 (29)	42 (19)	0.47 (0.21)	614 (159)	839 (217)	566 (147)	7.48 (1.94)	669 (150)	915 (205)	600 (134)	7.94 (1.76)				
30	69 (19)	94 (26)	62 (17)	0.67 (0.18)	530 (201)	724 (275)	489 (185)	6.31 (2.40)	505 (212)	690 (290)	452 (190)	5.86 (2.48)				
Avg	88	121	79	1.18	610	834	562	9.26	333	455	301	5.02	622	850	565	10.60
n	26	26	26	26	19	19	19	19	26	26	26	26	11	11	11	11
SD	33	45	30	0.39	125	171	116	1.89	183	251	160	2.04	248	339	225	4.51
Min	40	54	36	0.40	489	668	450	6.31	55	75	49	1.31	0	0	0	0.00
Max	148	202	133	2.02	913	1250	842	12.40	669	915	600	8.97	975	1330	884	18.80

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for May, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	64 (12)	87 (17)	57 (11)	0.61 (0.12)	534 (111)	729 (152)	492 (103)	6.20 (1.30)	935 (348)	1280 (475)	838 (312)	10.60 (3.93)				
2	61 (16)	83 (22)	55 (15)	0.56 (0.15)	532 (109)	727 (149)	491 (101)	6.04 (1.26)	824 (235)	1130 (320)	738 (210)	9.11 (2.61)				
3	65 (23)	89 (32)	59 (21)	0.59 (0.21)	420 (114)	574 (156)	388 (105)	4.66 (1.28)	704 (391)	962 (534)	631 (350)	7.62 (4.26)				
4	53 (18)	73 (25)	48 (17)	0.47 (0.16)	540 (164)	738 (224)	498 (151)	5.85 (1.76)	765 (282)	1040 (386)	685 (253)	8.07 (3.00)				
5	96 (16)	131 (22)	87 (14)	0.84 (0.14)	597 (150)	816 (205)	551 (138)	6.32 (1.58)	803 (361)	1100 (493)	719 (323)	8.29 (3.75)				
6	105 (20)	143 (28)	95 (18)	0.90 (0.17)	600 (148)	820 (202)	553 (136)	6.20 (1.53)	898 (284)	1230 (389)	805 (255)	9.07 (2.88)				
7																
8																
9	91 (31)	124 (42)	82 (28)	0.73 (0.25)	682 (205)	932 (280)	630 (189)	6.61 (2.00)	706 (281)	965 (384)	633 (252)	6.66 (2.67)				
10	77 (26)	105 (36)	69 (24)	0.61 (0.21)	584 (172)	798 (235)	539 (159)	5.53 (1.63)	678 (202)	926 (276)	607 (181)	6.26 (1.85)				
11	150 (107)	205 (145)	135 (96)	1.17 (0.83)	554 (214)	757 (292)	511 (197)	5.15 (1.99)	709 (347)	968 (474)	635 (311)	6.41 (3.14)				
12																
13	270 (72)	369 (99)	244 (65)	2.03 (0.54)	602 (178)	822 (244)	556 (165)	5.37 (1.61)	266 (88)	363 (121)	238 (79)	2.31 (0.76)				
14	455 (119)	622 (162)	412 (108)	3.36 (0.87)	692 (187)	945 (255)	639 (172)	6.05 (1.64)	420 (129)	574 (176)	376 (115)	3.58 (1.10)				
15																
16	761 (169)	1040 (231)	688 (153)	5.43 (1.21)	804 (257)	1100 (351)	744 (238)	6.76 (2.15)	557 (251)	760 (343)	499 (225)	4.55 (2.06)				
17	667 (137)	912 (187)	603 (124)	4.68 (0.97)	756 (219)	1030 (299)	700 (203)	6.25 (1.83)	305 (150)	416 (204)	273 (134)	2.45 (1.19)				
18	749 (184)	1020 (251)	677 (166)	5.16 (1.27)	777 (194)	1060 (265)	719 (180)	6.30 (1.58)	374 (183)	511 (250)	336 (164)	2.96 (1.45)				
19	623 (222)	851 (303)	563 (201)	4.23 (1.52)	750 (244)	1020 (333)	695 (226)	5.98 (1.96)	560 (231)	765 (315)	503 (207)	4.34 (1.78)				
20	752 (203)	1030 (277)	681 (183)	5.02 (1.36)					655 (329)	895 (449)	589 (296)	4.99 (2.49)				
21	688 (230)	939 (314)	622 (208)	4.53 (1.53)					766 (290)	1050 (397)	690 (261)	5.74 (2.16)	1190 (461)	1620 (629)	1090 (423)	7.88 (3.04)
22																
23																
24	1030 (592)	1410 (809)	935 (536)	6.51 (3.75)					797 (283)	1090 (387)	719 (255)	5.68 (2.00)	1500 (652)	2050 (891)	1380 (600)	9.55 (4.12)
25																
26																
27																
28																
29	1450 (605)	1990 (827)	1320 (549)	8.56 (3.57)	1130 (271)	1540 (371)	1050 (252)	7.60 (1.84)	1420 (493)	1940 (673)	1280 (445)	9.34 (3.25)	2070 (629)	2830 (859)	1900 (578)	12.30 (3.73)
30	1510 (611)	2060 (835)	1370 (554)	8.77 (3.55)	1180 (629)	1610 (859)	1090 (584)	7.83 (4.19)	1140 (423)	1560 (578)	1030 (382)	7.42 (2.74)	1740 (866)	2380 (1180)	1600 (796)	10.20 (5.11)
31	1320 (521)	1810 (712)	1200 (473)	7.58 (3.01)	1210 (417)	1650 (570)	1120 (388)	7.91 (2.75)	1050 (429)	1440 (586)	951 (387)	6.74 (2.74)	1560 (526)	2130 (718)	1430 (483)	9.01 (3.07)
Avg	526	719	476	3.44	719	982	665	6.26	730	998	656	6.29	1610	2200	1480	9.79
n	21	21	21	21	18	18	18	18	21	21	21	21	5	5	5	5
SD	476	651	432	2.78	224	307	210	0.84	270	368	244	2.31	291	397	268	1.46
Min	53	73	48	0.47	420	574	388	4.66	266	363	238	2.31	1190	1620	1090	7.88
Max	1510	2060	1370	8.77	1210	1650	1120	7.91	1420	1940	1280	10.60	2070	2830	1900	12.30

Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for June, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	1910 (1140)	2600 (1560)	1730 (1040)	10.80 (6.48)	1340 (956)	1830 (1310)	1250 (889)	8.64 (6.15)	1160 (611)	1590 (834)	1050 (551)	7.33 (3.84)	1980 (583)	2700 (797)	1820 (537)	11.30 (3.32)
2	1630 (383)	2220 (523)	1470 (347)	9.11 (2.16)	1130 (433)	1540 (592)	1050 (403)	7.20 (2.76)	1070 (309)	1470 (422)	969 (279)	6.68 (1.92)	1830 (413)	2500 (564)	1690 (381)	10.30 (2.33)
3	1470 (595)	2000 (813)	1330 (540)	8.12 (3.31)	1270 (319)	1740 (436)	1190 (297)	8.01 (1.99)	1130 (339)	1550 (463)	1020 (306)	6.96 (2.08)	2140 (623)	2930 (851)	1980 (575)	12.00 (3.50)
4	1260 (711)	1720 (971)	1140 (645)	6.89 (3.89)	1190 (412)	1630 (563)	1110 (384)	7.40 (2.56)	1400 (704)	1910 (962)	1260 (636)	8.49 (4.27)	1690 (480)	2310 (655)	1560 (443)	9.37 (2.66)
5																
6																
7																
8																
9	833 (714)	1140 (976)	757 (649)	4.33 (3.71)	1210 (1140)	1660 (1560)	1130 (1060)	7.08 (6.66)	1780 (735)	2430 (1000)	1610 (665)	10.10 (4.22)	2510 (719)	3430 (983)	2330 (665)	13.20 (3.79)
10	1420 (429)	1950 (587)	1300 (390)	7.34 (2.22)	2060 (957)	2810 (1310)	1920 (893)	11.90 (5.51)	1470 (341)	2000 (465)	1330 (308)	8.26 (1.91)	3090 (1590)	4220 (2170)	2860 (1470)	16.10 (8.30)
11	1990 (910)	2720 (1240)	1810 (828)	10.20 (4.66)	1240 (507)	1690 (692)	1150 (473)	7.06 (2.89)	1480 (394)	2020 (538)	1340 (357)	8.24 (2.22)	1940 (694)	2640 (949)	1790 (642)	10.00 (3.60)
12	1480 (518)	2020 (708)	1340 (472)	7.48 (2.62)	1500 (457)	2050 (625)	1400 (427)	8.47 (2.59)	1220 (456)	1670 (623)	1110 (413)	6.75 (2.52)	1490 (327)	2030 (446)	1380 (302)	7.62 (1.68)
13	1840 (922)	2510 (1260)	1670 (840)	9.24 (4.64)	1390 (415)	1900 (567)	1300 (387)	7.78 (2.32)	1150 (417)	1570 (570)	1040 (378)	6.27 (2.28)	1920 (618)	2620 (844)	1770 (571)	9.73 (3.15)
14	1920 (1010)	2630 (1380)	1750 (917)	9.58 (5.04)	1820 (621)	2480 (849)	1700 (580)	10.10 (3.42)	1260 (367)	1730 (501)	1150 (332)	6.83 (1.97)	2050 (516)	2800 (705)	1890 (477)	10.30 (2.61)
15	1560 (765)	2130 (1050)	1420 (697)	7.72 (3.80)	1620 (675)	2220 (922)	1520 (630)	8.90 (3.70)	1130 (272)	1550 (372)	1030 (247)	6.05 (1.45)	2110 (791)	2890 (1080)	1960 (732)	10.60 (3.96)
16																
17																
18																
19																
20																
21																
22																
23																
24	1040 (256)	1430 (350)	952 (233)	4.84 (1.19)					2200 (602)	3010 (822)	2000 (547)	10.90 (2.96)	1340 (310)	1830 (423)	1240 (287)	6.26 (1.45)
25	866 (235)	1180 (321)	788 (214)	3.99 (1.08)	2710 (931)	3700 (1270)	2540 (871)	13.60 (4.70)								
26	950 (431)	1300 (589)	865 (392)	4.35 (1.97)	1620 (422)	2220 (576)	1520 (394)	8.10 (2.12)								
27	1180 (756)	1620 (1030)	1080 (688)	5.39 (3.45)	1620 (631)	2210 (862)	1520 (590)	8.03 (3.11)								
28	915 (604)	1250 (825)	834 (550)	4.14 (2.72)	1410 (571)	1920 (780)	1320 (534)	6.93 (2.82)								
29	1020 (529)	1400 (722)	930 (482)	4.60 (2.39)	1280 (494)	1750 (675)	1200 (462)	6.26 (2.42)								
30	1410 (631)	1930 (862)	1290 (575)	6.34 (2.83)	1340 (495)	1830 (677)	1250 (464)	6.52 (2.41)					1270 (625)	1740 (854)	1180 (581)	5.76 (2.84)
Avg	1370	1870	1250	6.91	1520	2070	1410	8.35	1370	1870	1240	7.74	1950	2660	1800	10.20
n	18	18	18	18	17	17	17	17	12	12	12	12	13	13	13	13
SD	375	512	340	2.21	382	521	357	1.87	317	433	289	1.46	467	637	431	2.66
Min	833	1140	757	3.99	1130	1540	1050	6.26	1070	1470	969	6.05	1270	1740	1180	5.76
Max	1990	2720	1810	10.80	2710	3700	2540	13.60	2200	3010	2000	10.90	3090	4220	2860	16.10

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Table E11. Daily means (SD) of hydrogen sulfide emissions at Site IN3B for July, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} m^{2}$	$mg \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	1980 (884)	2710 (1210)	1810 (805)	8.85 (3.94)	1460 (566)	1990 (774)	1370 (530)	7.04 (2.73)								
2	1350 (761)	1840 (1040)	1230 (694)	5.97 (3.38)	1140 (375)	1550 (512)	1060 (351)	5.46 (1.80)	1580 (353)	2160 (482)	1440 (321)	7.42 (1.66)	1060 (434)	1450 (592)	988 (403)	4.77 (1.95)
3	1320 (626)	1800 (855)	1200 (571)	5.82 (2.77)	1120 (278)	1530 (379)	1050 (260)	5.34 (1.32)								
4	1700 (642)	2320 (877)	1550 (585)	7.45 (2.82)	990 (397)	1350 (543)	927 (372)	4.70 (1.89)								
5	1640 (725)	2240 (991)	1500 (662)	7.20 (3.18)	1280 (712)	1750 (972)	1200 (667)	6.05 (3.36)								
6																
7	1390 (653)	1900 (892)	1270 (596)	6.03 (2.84)	1450 (496)	1990 (678)	1360 (465)	6.80 (2.32)	1170 (339)	1600 (463)	1070 (309)	5.38 (1.55)	1390 (456)	1900 (623)	1290 (424)	6.10 (2.00)
8	1620 (713)	2220 (973)	1480 (650)	7.01 (3.08)	1480 (344)	2030 (471)	1390 (323)	6.90 (1.60)	810 (188)	1110 (256)	739 (171)	3.69 (0.86)	1150 (346)	1560 (472)	1070 (322)	5.01 (1.51)
9	1660 (682)	2260 (932)	1510 (623)	7.13 (2.94)	1650 (688)	2250 (940)	1540 (646)	7.63 (3.19)	801 (148)	1090 (202)	732 (135)	3.64 (0.67)	1040 (250)	1420 (342)	967 (233)	4.52 (1.09)
10	1290 (757)	1760 (1030)	1180 (691)	5.54 (3.25)	1260 (542)	1720 (740)	1180 (509)	5.79 (2.49)	1370 (457)	1870 (624)	1250 (418)	6.20 (2.06)	1320 (230)	1800 (314)	1230 (214)	5.73 (1.00)
11	1060 (151)	1450 (206)	970 (138)	4.53 (0.65)	2210 (768)	3020 (1050)	2080 (721)	10.20 (3.53)	1550 (298)	2120 (407)	1420 (273)	6.99 (1.34)	1190 (273)	1630 (372)	1110 (254)	5.15 (1.18)
12	1410 (873)	1920 (1190)	1290 (797)	5.98 (3.71)	1400 (794)	1910 (1080)	1310 (745)	6.39 (3.64)	1260 (326)	1720 (446)	1150 (298)	5.63 (1.47)	1100 (255)	1510 (348)	1050 (244)	4.86 (1.13)
13	1460 (823)	1990 (1120)	1330 (752)	6.18 (3.49)	1530 (421)	2090 (575)	1440 (396)	6.97 (1.92)	1290 (360)	1770 (492)	1180 (329)	5.77 (1.61)	1730 (642)	2360 (878)	1730 (625)	7.96 (2.88)
14	955 (389)	1310 (532)	873 (355)	4.03 (1.64)	1600 (442)	2190 (604)	1510 (415)	7.27 (2.01)	1160 (213)	1590 (291)	1070 (195)	5.18 (0.94)	1620 (840)	2220 (1150)	1720 (878)	7.87 (4.03)
15	1510 (781)	2060 (1070)	1480 (657)	6.85 (3.03)	1520 (461)	2070 (630)	1420 (433)	6.84 (2.08)	1650 (610)	2250 (833)	1510 (558)	7.28 (2.69)	1220 (370)	1670 (506)	1360 (412)	6.22 (1.87)
16	1230 (597)	1680 (816)	1340 (653)	6.23 (3.03)	1700 (487)	2330 (665)	1600 (458)	7.66 (2.19)								
17	1570 (485)	2150 (663)	1720 (531)	7.92 (2.45)	1540 (479)	2100 (654)	1450 (450)	6.89 (2.15)	1640 (583)	2240 (797)	1500 (534)	7.21 (2.56)	890 (201)	1220 (275)	998 (226)	4.56 (1.03)
18	1250 (373)	1710 (510)	1370 (408)	6.31 (1.88)	2000 (583)	2730 (796)	1880 (548)	8.93 (2.60)	1190 (210)	1630 (287)	1090 (192)	5.21 (0.92)	1000 (401)	1370 (548)	1130 (451)	5.13 (2.05)
19	1430 (650)	1960 (888)	1570 (710)	7.19 (3.26)	1560 (467)	2130 (638)	1470 (439)	6.94 (2.08)	1570 (494)	2150 (674)	1440 (452)	6.86 (2.15)	896 (151)	1220 (206)	1010 (170)	4.57 (0.77)
20	1070 (614)	1470 (838)	1170 (671)	5.36 (3.07)	1570 (678)	2150 (926)	1480 (637)	6.96 (3.00)					689 (363)	942 (496)	775 (408)	3.51 (1.85)
21	1230 (588)	1680 (803)	1340 (642)	6.12 (2.93)	1890 (473)	2580 (647)	1770 (445)	8.32 (2.08)	1720 (440)	2340 (602)	1570 (404)	7.42 (1.90)	927 (144)	1270 (197)	1040 (162)	4.70 (0.73)
22	1420 (348)	1940 (476)	1550 (381)	7.04 (1.74)	1630 (599)	2220 (818)	1680 (524)	7.86 (2.45)								
23																
24																
25																
26																
27																
28																
29																
30																
31																
Avg	1410	1920	1370	6.42	1520	2080	1440	7.00	1340	1830	1230	5.99	1150	1570	1160	5.38
n	21	21	21	21	21	21	21	21	14	14	14	14	15	15	15	15
SD	236	322	221	1.07	281	384	270	1.20	286	391	262	1.24	269	368	259	1.19
Min	955	1310	873	4.03	990	1350	927	4.70	801	1090	732	3.64	689	942	775	3.51
Max	1980	2710	1810	8.85	2210	3020	2080	10.20	1720	2340	1570	7.42	1730	2360	1730	7.96

ED_004549_00015928-00284

Table E12. Ammonia concentrations.

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for July, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13	0.5 (0.4)	0.4 (0.3)	6.8 (3.5)	4.9 (2.5)			5.1 (3.3)	3.7 (2.4)	7.6 (4.3)	5.5 (3.1)
14	0.5 (0.2)	0.4 (0.1)	11.9 (2.1)	8.5 (1.5)	15.2 (2.3)	10.9 (1.7)	11.1 (1.2)	7.9 (0.8)	12.4 (1.2)	8.9 (0.9)
15	0.5 (0.3)	0.3 (0.2)	10.7 (1.6)	7.7 (1.1)	15.5 (2.0)	11.1 (1.4)	11.2 (1.0)	8.0 (0.7)	12.9 (2.3)	9.3 (1.6)
16	0.7 (0.2)	0.5 (0.1)	13.3 (1.6)	9.6 (1.2)	13.9 (3.9)	9.9 (2.8)	13.5 (1.9)	9.7 (1.3)	13.0 (3.0)	9.3 (2.2)
17	0.5 (0.1)	0.4 (0.1)					16.2 (4.2)	11.6 (3.0)	18.8 (2.8)	13.5 (2.0)
18	0.8 (0.2)	0.5 (0.1)								
19	0.6 (0.2)	0.5 (0.1)	14.2 (1.1)	10.2 (0.8)	13.7 (2.8)	9.9 (2.0)	12.3 (4.3)	8.9 (3.1)	21.1 (2.1)	15.2 (1.5)
20	0.4 (0.2)	0.3 (0.1)	18.2 (1.5)	13.0 (1.1)	15.8 (3.9)	11.3 (2.8)	15.3 (3.1)	10.9 (2.2)	15.9 (2.5)	11.4 (1.8)
21	0.4 (0.2)	0.3 (0.2)	21.8 (1.9)	15.6 (1.4)	15.6 (2.6)	11.2 (1.9)	15.4 (4.2)	11.1 (3.0)	17.4 (2.5)	12.5 (1.8)
22	0.5 (0.3)	0.4 (0.2)	23.6 (2.6)	16.9 (1.8)	16.6 (2.7)	11.9 (1.9)	15.4 (2.2)	11.1 (1.6)	18.2 (3.0)	13.1 (2.1)
23	0.5 (0.2)	0.4 (0.2)	15.3 (8.3)	10.9 (6.0)	13.8 (6.6)	9.9 (4.7)	11.3 (4.1)	8.1 (2.9)	12.3 (4.3)	8.7 (3.1)
24	0.5 (0.3)	0.3 (0.2)	8.0 (2.3)	5.8 (1.6)	9.7 (3.6)	6.9 (2.5)	7.4 (0.8)	5.3 (0.5)	6.4 (1.2)	4.6 (0.9)
25	0.5 (0.4)	0.4 (0.3)	7.2 (2.1)	5.1 (1.5)	7.6 (2.4)	5.5 (1.7)	6.0 (0.8)	4.3 (0.5)	6.4 (1.2)	4.6 (0.9)
26			9.8 (2.1)	7.1 (1.5)						
27										
28										
29										
30	0.3 (0.1)	0.2 (0.1)	5.0 (0.8)	3.6 (0.6)	6.0 (1.8)	4.3 (1.3)	6.0 (1.1)	4.3 (0.8)		
31	0.5 (0.1)	0.4 (0.1)	5.3 (1.0)	3.8 (0.7)	5.1 (0.7)	3.7 (0.5)	5.5 (1.0)	4.0 (0.8)	7.0 (0.8)	5.0 (0.5)
Avg	0.5	0.4	12.2	8.8	12.4	8.9	10.8	7.8	13.0	9.3
n	15	15	14	14	12	12	14	14	13	13
SD	0.1	0.1	5.7	4.1	4	2.8	4	2.8	4.9	3.5
Min	0.3	0.2	5.0	3.6	5.1	3.7	5.1	3.7	6.4	4.6
Max	0.8	0.5	23.6	16.9	16.6	11.9	16.2	11.6	21.1	15.2

ED_004549_00015928-00285

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for August, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.5 (0.1)	0.4 (0.1)	4.8 (0.5)	3.5 (0.4)	4.9 (0.5)	3.5 (0.3)	6.2 (0.5)	4.5 (0.4)	6.8 (0.4)	4.9 (0.3)
2	0.5 (0.1)	0.4 (0.1)	4.4 (0.6)	3.2 (0.4)	4.8 (0.4)	3.4 (0.3)	6.7 (0.5)	4.9 (0.3)	7.0 (0.7)	5.0 (0.5)
3	0.4 (0.1)									
4	0.3 (0.2)	0.2 (0.1)	4.7 (0.7)	3.3 (0.5)	3.8 (0.7)	2.7 (0.5)	4.8 (0.7)	3.5 (0.5)	7.1 (1.7)	5.1 (1.2)
5	0.5 (0.2)	0.4 (0.1)	5.3 (0.6)	3.8 (0.4)	4.6 (0.7)	3.4 (0.5)	6.0 (0.7)	4.3 (0.5)	7.5 (0.3)	5.4 (0.2)
6	0.7 (0.2)	0.5 (0.1)	5.1 (0.4)	3.7 (0.3)	4.0 (0.4)	2.9 (0.3)	6.8 (0.9)	4.9 (0.7)	7.3 (0.5)	5.3 (0.4)
7	1.0 (0.2)	0.7 (0.2)	5.1 (0.4)	3.7 (0.3)	4.7 (0.6)	3.3 (0.4)	6.3 (0.6)	4.5 (0.4)		
8	0.7 (0.1)	0.5 (0.1)	5.4 (0.5)	3.9 (0.4)	4.2 (0.4)	3.0 (0.3)	6.7 (0.4)	4.8 (0.3)	7.3 (0.5)	5.3 (0.3)
9	0.7 (0.1)	0.5 (0.1)	5.4 (0.7)	3.9 (0.5)	4.2 (0.6)	3.1 (0.5)	5.5 (0.5)	4.0 (0.4)	7.7 (1.0)	5.6 (0.7)
10	0.5 (0.1)	0.4 (0.1)	4.7 (0.4)	3.4 (0.3)	4.4 (0.7)	3.1 (0.5)	5.1 (0.6)	3.7 (0.4)	6.7 (0.6)	4.9 (0.4)
11	0.5 (0.2)	0.4 (0.1)	4.8 (0.9)	3.5 (0.6)	4.2 (0.6)	3.0 (0.4)	4.7 (0.4)	3.4 (0.3)	7.6 (2.1)	5.5 (1.5)
12	0.6 (0.1)	0.4 (0.1)	4.8 (0.5)	3.5 (0.4)	4.6 (0.7)	3.3 (0.5)	5.0 (0.5)	3.6 (0.4)	7.2 (0.9)	5.2 (0.7)
13	0.1 (0.2)	0.1 (0.1)	4.4 (1.1)	3.1 (0.8)	3.6 (0.6)	2.6 (0.4)	3.9 (0.6)	2.8 (0.4)	6.2 (1.3)	4.4 (0.9)
14	0.4 (0.1)	0.3 (0.1)	6.5 (2.5)	4.7 (1.8)	4.2 (1.3)	3.0 (0.9)	5.0 (1.1)	3.6 (0.8)	9.1 (3.2)	6.5 (2.3)
15	0.5 (0.1)	0.4 (0.1)	4.9 (0.6)	3.5 (0.4)	3.7 (0.4)	2.6 (0.3)	4.4 (0.5)	3.1 (0.4)	7.5 (0.9)	5.4 (0.7)
16	0.5 (0.1)	0.4 (0.0)	5.2 (0.6)	3.8 (0.5)	3.6 (0.5)	2.6 (0.4)	4.4 (0.4)	3.2 (0.3)	5.9 (1.7)	4.3 (1.2)
17	0.3 (0.2)									
18	-0.1 (0.1)									
19	-0.1 (0.1)	0.0 (0.1)	3.9 (0.6)	2.8 (0.5)						
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Avg	0.5	0.4	5.0	3.6	4.2	3.0	5.4	3.9	7.2	5.2
n	19	16	16	16	15	15	15	15	14	14
SD	0.3	0.2	0.6	0.4	0.4	0.3	0.9	0.7	0.7	0.5
Min	-0.1	0.0	3.9	2.8	3.6	2.6	3.9	2.8	5.9	4.3
Max	1	0.7	6.5	4.7	4.9	3.5	6.8	4.9	9.1	6.5

ED_004549_00015928-00286

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for September, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11	0.2 (0.2)	0.2 (0.1)	8.5 (4.1)	6.1 (2.9)	8.4 (2.4)	6.0 (1.7)	16.1 (8.0)	11.5 (5.7)		
12	0.3 (0.3)	0.2 (0.2)	10.4 (5.7)	7.5 (4.1)	11.7 (5.4)	8.4 (3.9)	17.1 (9.4)	12.2 (6.7)		
13	0.6 (0.2)	0.5 (0.1)	12.1 (5.9)	8.6 (4.2)	10.7 (5.0)	7.7 (3.6)	16.9 (9.1)	12.1 (6.5)		
14	0.4 (0.4)	0.3 (0.3)	11.0 (5.5)	7.9 (3.9)	9.6 (3.1)	6.8 (2.2)	13.0 (8.5)	9.3 (6.1)		
15	0.1 (0.2)	0.1 (0.2)	14.7 (5.3)	10.5 (3.8)	15.2 (6.7)	10.9 (4.8)	20.2 (7.9)	14.4 (5.6)		
16	0.3 (0.2)	0.2 (0.2)	13.1 (7.1)	9.3 (5.1)	13.5 (6.8)	9.6 (4.8)	15.8 (10.0)	11.2 (7.1)		
17	0.4 (0.3)	0.3 (0.2)	11.4 (6.9)	8.2 (4.9)	11.5 (6.0)	8.3 (4.3)	13.6 (11.6)	9.7 (8.3)		
18	0.4 (0.2)	0.3 (0.1)	10.0 (4.2)	7.1 (3.0)	7.1 (2.4)	5.1 (1.7)				
19	0.4 (0.2)	0.3 (0.1)	7.1 (2.2)	5.1 (1.6)	7.8 (2.3)	5.6 (1.7)	11.4 (14.5)	8.2 (10.4)		
20	0.5 (0.2)	0.3 (0.1)	7.9 (1.9)	5.7 (1.4)	8.1 (3.4)	5.8 (2.5)	14.0 (15.4)	10.0 (11.0)		
21	0.5 (0.3)	0.3 (0.2)	7.7 (2.6)	5.5 (1.9)	7.4 (3.0)	5.3 (2.2)	6.0 (3.7)	4.3 (2.6)		
22	0.2 (0.3)	0.2 (0.2)	5.8 (2.2)	4.1 (1.6)	7.2 (4.7)	5.2 (3.4)	3.1 (2.5)	2.2 (1.8)	4.4 (2.7)	3.2 (1.9)
23	0.2 (0.1)	0.1 (0.1)	8.3 (5.4)	6.0 (3.9)	15.6 (13.6)	11.2 (9.7)	10.3 (7.8)	7.4 (5.5)	10.2 (8.8)	7.3 (6.3)
24	0.4 (0.1)	0.3 (0.0)			5.8 (1.3)	4.2 (0.9)	3.5 (2.2)	2.5 (1.6)	4.2 (1.7)	3.0 (1.2)
25	0.4 (0.0)									
26	0.5 (0.2)	0.3 (0.2)	8.0 (3.9)	5.8 (2.8)	11.6 (2.7)	8.3 (1.9)	3.3 (2.0)	2.4 (1.4)		
27	0.3 (0.2)	0.2 (0.2)	11.5 (4.7)	8.2 (3.4)	9.5 (4.4)	6.8 (3.2)	8.3 (4.0)	5.9 (2.8)	7.5 (3.7)	5.3 (2.7)
28	0.0 (0.1)									
29	0.3 (0.3)	0.2 (0.2)	17.8 (12.5)	12.7 (8.9)	14.4 (12.0)	10.3 (8.6)	11.7 (9.2)	8.4 (6.6)	8.8 (7.2)	6.3 (5.1)
30	0.4 (0.3)	0.3 (0.2)	14.4 (11.7)	10.3 (8.4)	9.8 (6.9)	7.0 (5.0)	9.3 (7.6)	6.6 (5.4)	6.1 (4.7)	4.4 (3.3)
Avg	0.3	0.2	10.6	7.6	10.3	7.4	11.4	8.1	6.9	4.9
n	20	18	17	17	18	18	17	17	6	6
SD	0.1	0.1	3.1	2.2	2.9	2.1	5.1	3.6	2.2	1.6
Min	0.0	0.1	5.8	4.1	5.8	4.2	3.1	2.2	4.2	3.0
Max	0.6	0.5	17.8	12.7	15.6	11.2	20.2	14.4	10.2	7.3

ED_004549_00015928-00287

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for October, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.3 (0.2)	0.2 (0.1)	6.2 (2.7)	4.5 (2.0)	5.3 (1.6)	3.8 (1.1)	3.0 (1.1)	2.2 (0.8)	1.4 (0.8)	1.0 (0.5)
2	0.2 (0.1)	0.2 (0.1)	10.2 (7.8)	7.3 (5.6)	6.4 (3.2)	4.6 (2.3)	6.3 (3.4)	4.5 (2.5)	4.0 (2.3)	2.8 (1.6)
3	0.4 (0.3)	0.3 (0.2)	7.0 (3.5)	5.0 (2.5)	7.0 (2.6)	5.0 (1.8)	4.6 (2.0)	3.3 (1.4)	3.0 (1.7)	2.1 (1.2)
4	0.5 (0.2)	0.4 (0.2)	9.8 (6.7)	7.0 (4.8)	6.5 (3.3)	4.7 (2.4)	6.7 (4.1)	4.8 (2.9)	4.2 (2.0)	3.0 (1.4)
5	0.3 (0.1)	0.2 (0.1)	5.2 (1.3)	3.7 (1.0)	5.9 (2.4)	4.2 (1.7)	4.2 (0.7)	3.0 (0.5)	2.5 (1.0)	1.8 (0.7)
6	0.3 (0.1)	0.2 (0.1)	3.7 (0.7)	2.6 (0.5)	4.3 (1.1)	3.1 (0.8)	4.3 (0.6)	3.1 (0.5)	2.4 (0.5)	1.7 (0.4)
7	0.3 (0.0)									
8	0.4 (0.1)									
9	0.1 (0.1)	0.1 (0.1)	5.8 (2.8)	4.2 (2.0)	6.6 (3.1)	4.7 (2.2)	6.8 (2.9)	4.9 (2.1)	2.9 (1.3)	2.1 (0.9)
10	0.1 (0.1)	0.0 (0.1)			14.8 (6.0)	10.6 (4.3)	16.3 (3.2)	11.6 (2.3)	11.8 (2.4)	8.5 (1.7)
11	0.1 (0.1)	0.1 (0.1)	16.1 (3.5)	11.5 (2.5)	16.4 (4.6)	11.7 (3.3)	14.4 (4.6)	10.3 (3.3)	10.2 (4.2)	7.3 (3.0)
12	0.1 (0.2)	0.1 (0.1)	16.3 (3.2)	11.6 (2.3)	16.9 (4.4)	12.1 (3.1)	16.0 (4.0)	11.4 (2.8)	10.0 (4.1)	7.1 (3.0)
13	0.1 (0.1)	0.0 (0.1)	15.3 (5.9)	10.9 (4.2)	16.2 (7.2)	11.6 (5.2)	16.7 (7.4)	11.9 (5.3)	10.7 (6.7)	7.6 (4.8)
14	0.2 (0.2)	0.1 (0.1)	9.8 (4.5)	7.0 (3.2)	8.5 (3.2)	6.1 (2.3)	9.3 (1.6)	6.7 (1.1)	4.5 (2.1)	3.2 (1.5)
15										
16										
17										
18										
19										
20										
21										
22										
23			6.7 (1.2)	4.8 (0.8)						
24			9.2 (1.9)	6.6 (1.4)						
25			12.8 (3.4)	9.1 (2.5)						
26										
27										
28										
29			11.6 (3.3)	8.3 (2.4)						
30	0.0 (0.1)	0.0 (0.1)	12.0 (4.1)	8.6 (2.9)	11.6 (5.2)	8.3 (3.7)	10.7 (5.1)	7.7 (3.7)	10.8 (6.3)	7.7 (4.5)
31	0.2 (0.1)	0.1 (0.1)	10.5 (3.3)	7.5 (2.4)	9.7 (2.1)	6.9 (1.5)	9.4 (3.8)	6.7 (2.7)	7.6 (3.4)	5.4 (2.4)
Avg	0.2	0.1	9.9	7.1	9.7	7.0	9.2	6.6	6.1	4.4
n	16	14	17	17	14	14	14	14	14	14
SD	0.1	0.1	3.7	2.7	4.4	3.1	4.7	3.4	3.7	2.6
Min	0.0	0.0	3.7	2.6	4.3	3.1	3.0	2.2	1.4	1.0
Max	0.5	0.4	16.3	11.6	16.9	12.1	16.7	11.9	11.8	8.5

ED_004549_00015928-00288

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for November, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.1 (0.2)	0.1 (0.2)	13.7 (3.4)	9.7 (2.4)	14.6 (3.9)	10.4 (2.7)	16.5 (5.5)	11.8 (3.9)	14.3 (5.1)	10.2 (3.6)
2	0.3 (0.2)	0.2 (0.2)	14.1 (4.7)	10.1 (3.4)	16.6 (6.4)	11.8 (4.6)	15.5 (7.2)	11.1 (5.1)	15.2 (7.7)	10.9 (5.5)
3	0.0 (0.2)	0.0 (0.1)	13.2 (3.7)	9.4 (2.6)	13.6 (3.8)	9.7 (2.7)	14.3 (5.7)	10.2 (4.0)	13.4 (5.8)	9.5 (4.1)
4	0.2 (0.3)	0.1 (0.2)	11.9 (1.5)	8.5 (1.1)	13.1 (2.7)	9.3 (1.9)	12.9 (3.8)	9.2 (2.7)	11.5 (4.3)	8.2 (3.1)
5	0.1 (0.2)	0.1 (0.1)	10.9 (2.6)	7.8 (1.9)	11.7 (2.3)	8.3 (1.7)	11.2 (5.3)	8.0 (3.7)	11.0 (3.8)	7.8 (2.7)
6	0.3 (0.2)	0.2 (0.1)	20.4 (1.8)	14.6 (1.3)	18.1 (2.2)	12.9 (1.6)	22.3 (5.0)	15.9 (3.6)	21.1 (6.3)	15.0 (4.5)
7	0.4 (0.1)	0.3 (0.0)								
8	0.5 (0.1)	0.4 (0.1)								
9	0.4 (0.1)	0.3 (0.1)								
10	0.4 (0.1)	0.3 (0.1)	19.9 (4.8)	14.2 (3.4)	16.1 (3.9)	11.5 (2.8)	16.2 (5.2)	11.6 (3.7)	13.7 (5.2)	9.8 (3.7)
11	0.5 (0.1)	0.4 (0.1)	18.6 (6.0)	13.3 (4.3)	12.6 (1.2)	9.0 (0.8)	14.8 (2.4)	10.6 (1.7)	12.1 (1.0)	8.7 (0.7)
12	0.4 (0.2)	0.3 (0.1)	10.8 (1.9)	7.7 (1.3)	9.7 (1.1)	7.0 (0.8)	8.4 (2.2)	6.0 (1.6)	7.2 (2.1)	5.1 (1.5)
13										
14										
15										
16										
17	0.3 (0.3)	0.2 (0.2)	16.0 (1.9)	11.4 (1.3)	15.4 (2.2)	11.0 (1.5)	16.3 (3.9)	11.6 (2.8)	12.6 (3.0)	9.0 (2.1)
18	0.1 (0.2)	0.0 (0.2)	16.0 (1.0)	11.4 (0.7)	15.5 (1.0)	11.1 (0.7)	16.7 (1.9)	11.9 (1.4)	14.0 (1.4)	10.0 (1.0)
19	0.6 (0.1)	0.4 (0.1)	11.1 (2.9)	8.0 (2.0)	12.3 (2.7)	8.8 (1.9)				
20	0.6 (0.1)	0.4 (0.1)	10.7 (1.1)	7.7 (0.8)	8.8 (0.6)	6.3 (0.4)	7.4 (1.1)	5.3 (0.8)	7.5 (0.9)	5.4 (0.6)
21	0.4 (0.1)	0.3 (0.1)	14.2 (4.1)	10.1 (2.9)	13.0 (3.7)	9.3 (2.7)	13.7 (5.2)	9.8 (3.7)	10.8 (3.1)	7.8 (2.2)
22	0.4 (0.3)	0.3 (0.2)	19.6 (1.3)	14.0 (0.9)	18.0 (3.2)	12.8 (2.3)	21.5 (3.3)	15.3 (2.4)	20.9 (1.4)	15.0 (1.0)
23	0.3 (0.1)	0.2 (0.1)	19.3 (3.4)	13.8 (2.4)	22.9 (3.5)	16.3 (2.5)	23.8 (3.9)	17.0 (2.8)	22.1 (2.8)	15.8 (2.0)
24	0.5 (0.1)	0.4 (0.1)	20.3 (3.0)	14.5 (2.1)	21.8 (3.7)	15.5 (2.6)	22.7 (3.8)	16.2 (2.7)	21.6 (2.9)	15.4 (2.1)
25	0.6 (0.2)	0.4 (0.2)	18.7 (3.0)	13.4 (2.2)	20.2 (3.2)	14.4 (2.3)	22.9 (4.7)	16.3 (3.3)	21.3 (2.0)	15.2 (1.4)
26	0.5 (0.3)	0.3 (0.2)	16.0 (1.0)	11.4 (0.7)	17.5 (1.1)	12.5 (0.8)	20.4 (1.9)	14.6 (1.3)	18.8 (1.0)	13.5 (0.7)
27	0.7 (0.2)	0.5 (0.2)	19.8 (2.5)	14.1 (1.8)	20.9 (3.0)	14.9 (2.2)	23.2 (2.6)	16.5 (1.9)	17.9 (3.5)	12.8 (2.5)
28	0.6 (0.2)	0.4 (0.2)	17.3 (4.9)	12.4 (3.5)	18.5 (3.7)	13.2 (2.6)	20.1 (6.5)	14.3 (4.6)	16.7 (5.2)	11.9 (3.7)
29	0.4 (0.2)	0.2 (0.1)	20.6 (2.9)	14.7 (2.1)	22.9 (2.9)	16.3 (2.1)	26.5 (3.1)	18.9 (2.2)	27.4 (6.0)	19.6 (4.3)
30	0.6 (0.3)	0.4 (0.2)	20.1 (5.4)	14.3 (3.9)	19.6 (3.2)	14.0 (2.3)	24.7 (4.1)	17.6 (2.9)	21.4 (3.1)	15.3 (2.2)
Avg	0.4	0.3	16.2	11.6	16.2	11.6	17.8	12.7	16.0	11.4
n	26	26	23	23	23	23	22	22	22	22
SD	0.2	0.1	3.5	2.5	4	2.8	5.2	3.7	5.2	3.7
Min	0.0	0.0	10.7	7.7	8.8	6.3	7.4	5.3	7.2	5.1
Max	0.7	0.5	20.6	14.7	22.9	16.3	26.5	18.9	27.4	19.6

ED_004549_00015928-00289

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for December, 2007.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.1 (0.2)	0.1 (0.2)	26.5 (4.5)	18.9 (3.2)	18.1 (3.0)	12.9 (2.2)	25.4 (2.4)	18.1 (1.7)	27.2 (3.1)	19.4 (2.2)
2	0.3 (0.2)	0.2 (0.1)	14.4 (4.8)	10.3 (3.4)	14.5 (3.6)	10.4 (2.6)	16.0 (5.2)	11.4 (3.7)	16.6 (6.6)	11.9 (4.7)
3	0.2 (0.2)	0.1 (0.2)	28.4 (2.2)	20.3 (1.5)	20.1 (2.5)	14.3 (1.8)	26.3 (2.0)	18.8 (1.5)	30.5 (4.5)	21.8 (3.2)
4	-0.2 (0.2)	-0.1 (0.1)	28.9 (5.5)	20.6 (3.9)			23.5 (4.1)	16.8 (3.0)	23.6 (3.0)	16.9 (2.1)
5	0.2 (0.3)	0.1 (0.2)	26.6 (4.1)	19.0 (2.9)	25.4 (3.4)	18.1 (2.4)	25.9 (2.7)	18.5 (1.9)	23.9 (4.9)	17.1 (3.5)
6	0.6 (0.5)	0.4 (0.4)	30.4 (6.0)	21.7 (4.3)	29.2 (3.1)	20.8 (2.2)	29.1 (4.1)	20.8 (2.9)	28.6 (3.7)	20.4 (2.6)
7	0.2 (0.3)	0.2 (0.2)	21.0 (1.6)	14.9 (1.2)	19.5 (1.6)	13.9 (1.2)	21.6 (2.1)	15.4 (1.5)	23.7 (1.4)	16.9 (1.0)
8	-0.1 (0.2)	-0.1 (0.1)	21.6 (1.3)	15.4 (1.0)	18.5 (1.8)	13.2 (1.3)	22.3 (2.2)	15.9 (1.6)	21.0 (1.4)	15.0 (1.0)
9	0.0 (0.2)	0.0 (0.2)	26.3 (1.6)	18.8 (1.1)	19.2 (1.1)	13.7 (0.8)	24.6 (1.3)	17.6 (1.0)	19.4 (1.4)	13.9 (1.0)
10	-0.1 (0.1)	-0.1 (0.1)	24.1 (3.3)	17.2 (2.4)	18.8 (1.0)	13.4 (0.7)	22.5 (1.4)	16.1 (1.0)	19.6 (1.2)	14.0 (0.8)
11	-0.1 (0.1)									
12	-0.1 (0.2)	-0.1 (0.1)	21.6 (3.4)	15.4 (2.5)	18.9 (2.0)	13.5 (1.4)	20.9 (1.4)	14.9 (1.0)	18.9 (1.5)	13.5 (1.1)
13	0.1 (0.3)	0.1 (0.2)	21.3 (2.3)	15.2 (1.6)	20.7 (1.8)	14.8 (1.3)	21.9 (4.0)	15.7 (2.8)	22.6 (2.2)	16.1 (1.6)
14	0.7 (0.3)	0.5 (0.2)	23.2 (1.7)	16.5 (1.2)	22.3 (1.0)	15.9 (0.7)	21.6 (2.2)	15.4 (1.6)	22.1 (2.3)	15.8 (1.6)
15	-0.2 (0.2)	-0.2 (0.1)	25.2 (1.5)	17.9 (1.0)	22.8 (1.5)	16.2 (1.0)	25.6 (2.6)	18.3 (1.9)	21.4 (2.3)	15.2 (1.7)
16	0.3 (0.1)	0.2 (0.1)	28.2 (5.3)	20.1 (3.8)	28.8 (3.5)	20.5 (2.5)	29.9 (4.7)	21.3 (3.4)	30.7 (8.0)	22.0 (5.7)
17	0.5 (0.3)	0.4 (0.2)	30.0 (4.0)	21.4 (2.9)	29.0 (2.7)	20.7 (2.0)	33.0 (3.9)	23.6 (2.8)		
18	0.4 (0.3)	0.3 (0.2)	21.3 (1.6)	15.2 (1.2)	22.8 (3.3)	16.2 (2.4)	25.4 (3.7)	18.1 (2.6)	24.3 (2.6)	17.3 (1.8)
19	0.4 (0.2)	0.3 (0.2)			17.5 (6.5)	12.3 (4.6)	23.5 (2.4)	16.8 (1.7)	25.3 (3.3)	18.1 (2.4)
20	0.5 (0.2)	0.4 (0.2)					25.1 (4.5)	17.9 (3.2)	26.5 (4.5)	18.9 (3.2)
21	0.1 (0.3)	0.1 (0.2)	20.2 (2.3)	14.4 (1.6)	18.5 (1.5)	13.2 (1.1)	19.8 (1.5)	14.1 (1.1)	23.4 (3.4)	16.7 (2.4)
22	0.4 (0.1)	0.3 (0.1)	15.1 (2.3)	10.8 (1.6)	17.1 (1.6)	12.2 (1.2)	19.1 (2.4)	13.7 (1.7)	15.6 (1.6)	11.2 (1.1)
23	0.3 (0.1)	0.2 (0.1)	22.2 (6.7)	15.9 (4.8)	20.7 (4.9)	14.8 (3.5)	23.5 (5.0)	16.8 (3.6)	24.8 (5.4)	17.8 (3.8)
24	0.6 (0.1)	0.4 (0.1)	27.5 (1.1)	19.6 (0.8)	22.2 (0.8)	15.8 (0.6)	31.4 (2.4)	22.5 (1.7)	27.2 (1.7)	19.4 (1.2)
25	0.2 (0.1)	0.1 (0.1)	26.3 (5.0)	18.7 (3.6)	21.6 (1.9)	15.4 (1.3)	25.7 (4.6)	18.4 (3.3)	24.6 (4.9)	17.6 (3.5)
26	0.2 (0.2)	0.1 (0.2)	22.1 (3.7)	15.8 (2.6)	18.5 (1.1)	13.2 (0.8)	22.4 (2.8)	16.0 (2.0)	21.1 (4.2)	15.0 (3.0)
27	-0.2 (0.1)	-0.1 (0.1)								
28	0.1 (0.4)	0.1 (0.3)	23.0 (2.9)	16.4 (2.0)	20.5 (1.1)	14.6 (0.8)	24.7 (2.9)	17.7 (2.1)	22.4 (1.8)	16.0 (1.3)
29	0.4 (0.3)	0.2 (0.2)	25.4 (2.4)	18.1 (1.7)	21.2 (1.2)	15.1 (0.9)	25.6 (1.8)	18.3 (1.3)	25.4 (1.1)	18.2 (0.8)
30	0.2 (0.1)	0.1 (0.1)	24.6 (3.2)	17.5 (2.3)	21.1 (1.1)	15.1 (0.8)	23.6 (1.8)	16.8 (1.2)	26.2 (1.7)	18.7 (1.2)
31	0.6 (0.3)	0.4 (0.2)	22.2 (3.4)	15.8 (2.4)	19.2 (2.2)	13.7 (1.6)	24.0 (2.2)	17.2 (1.6)	22.4 (2.9)	16.0 (2.0)
Avg	0.2	0.2	24.0	17.1	21.0	15.0	24.3	17.3	23.5	16.8
n	31	30	27	27	27	27	29	29	28	28
SD	0.3	0.2	3.9	2.8	3.5	2.5	3.5	2.5	3.6	2.6
Min	-0.2	-0.2	14.4	10.3	14.5	10.4	16.0	11.4	15.6	11.2
Max	0.7	0.5	30.4	21.7	29.2	20.8	33	23.6	30.7	22

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Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for January, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1									31.1 (5.6)	22.3 (4.0)
2	0.3 (0.2)	0.2 (0.1)								
3	0.8 (0.1)	0.5 (0.1)								
4	1.2 (0.2)	0.8 (0.2)								
5	1.0 (0.2)	0.7 (0.1)								
6	0.7 (0.2)	0.5 (0.1)								
7	0.8 (0.1)	0.5 (0.1)								
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Avg	0.8	0.6								
n	6	6	0	0	0	0	0	0	1	1
SD	0.3	0.2								
Min	0.3	0.2								
Max	1.2	0.8								

ED_004549_00015928-00291

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for February, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19	-0.1 (0.1)	-0.1 (0.1)								
20	-0.1 (0.0)	-0.1 (0.0)								
21										
22										
23										
24										
25										
26	0.1 (0.1)	0.0 (0.1)	23.6 (3.3)				21.3 (3.8)	15.2 (2.7)	29.1 (1.8)	20.7 (1.3)
27	0.0 (0.1)	0.0 (0.1)	31.8 (1.7)				14.3 (4.0)	10.2 (2.9)	33.0 (1.6)	23.5 (1.1)
28	0.3 (0.2)	0.2 (0.2)	31.7 (2.8)				24.4 (1.5)	17.4 (1.0)	32.9 (0.8)	23.4 (0.6)
29	0.2 (0.3)	0.2 (0.2)	24.7 (3.2)	17.7 (2.3)			21.9 (4.6)	15.6 (3.3)	27.2 (4.4)	19.3 (3.1)
Avg	0.1	0.0	27.9				20.5	14.6	30.5	21.7
n	6	6	4	1	0	0	4	4	4	4
SD	0.2	0.1	3.8				3.7	2.7	2.5	1.8
Min	-0.1	-0.1	23.6				14.3	10.2	27.2	19.3
Max	0.3	0.2	31.8				24.4	17.4	33	23.5

ED_004549_00015928-00292

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for March, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.0 (0.1)	0.0 (0.1)	27.2 (3.1)	19.5 (2.2)			20.1 (4.6)	14.3 (3.3)	30.7 (5.9)	21.9 (4.2)
2	0.5 (0.3)	0.3 (0.2)	22.7 (6.1)	16.3 (4.4)			22.4 (5.6)	15.9 (4.0)	22.8 (8.8)	16.2 (6.3)
3	0.4 (0.2)	0.3 (0.2)	23.0 (4.8)	16.5 (3.5)			22.1 (4.5)	15.7 (3.2)	30.3 (9.7)	21.6 (6.9)
4	0.1 (0.1)	0.1 (0.1)	29.4 (3.9)	21.1 (2.8)			21.4 (3.4)	15.2 (2.4)	23.2 (6.2)	16.5 (4.4)
5	0.0 (0.1)	0.0 (0.1)	33.7 (3.0)	24.2 (2.1)	22.2 (5.3)	15.9 (3.8)	22.4 (0.9)	16.0 (0.6)	35.7 (1.8)	25.4 (1.3)
6	0.1 (0.1)	0.1 (0.1)	39.8 (1.3)	28.5 (0.9)	21.1 (2.9)	15.1 (2.1)	20.6 (3.1)	14.7 (2.2)	39.9 (2.6)	28.4 (1.9)
7	-0.1 (0.1)	-0.1 (0.1)	41.4 (3.9)	29.7 (2.8)	23.3 (2.3)	16.7 (1.7)			33.1 (5.4)	23.6 (3.9)
8	0.2 (0.3)	0.1 (0.2)	39.3 (1.4)	28.2 (1.0)	26.9 (1.5)	19.3 (1.1)	21.7 (1.6)	15.5 (1.1)	38.8 (4.9)	27.6 (3.5)
9	1.3 (0.2)	0.9 (0.1)	36.8 (3.4)	26.2 (2.4)	25.8 (5.8)	18.3 (4.2)	23.7 (2.2)	16.9 (1.6)	36.9 (3.7)	26.2 (2.7)
10	0.4 (0.5)	0.3 (0.4)	35.3 (4.6)	25.3 (3.3)	23.4 (4.3)	16.8 (3.1)	22.0 (3.7)	15.6 (2.6)	39.1 (2.1)	27.8 (1.5)
11	0.8 (0.4)	0.6 (0.3)	33.2 (5.1)	23.8 (3.7)	25.0 (6.2)	17.9 (4.5)	23.4 (2.8)	16.7 (2.0)	36.2 (6.0)	25.8 (4.3)
12	0.1 (0.2)	0.1 (0.1)	31.0 (6.3)	22.3 (4.5)						
13	0.5 (0.2)									
14	-0.1 (0.1)									
15	-0.2 (0.1)									
16	-0.3 (0.1)	-0.2 (0.1)	26.0 (5.6)	18.6 (4.0)	24.6 (7.3)	17.6 (5.2)	21.7 (5.8)			
17	-0.1 (0.1)	-0.1 (0.1)	27.0 (3.3)	19.3 (2.4)	23.3 (5.6)	16.8 (3.9)	20.1 (5.5)			
18	0.4 (0.5)	0.3 (0.3)	20.0 (3.5)	14.3 (2.5)	14.3 (6.2)	10.3 (4.9)				
19	-0.3 (0.1)	-0.2 (0.1)	25.9 (3.0)	18.5 (2.2)	19.9 (2.3)					
20	-0.1 (0.3)	-0.1 (0.2)	22.8 (3.3)	16.3 (2.4)	19.4 (6.2)					
21	-0.2 (0.1)	-0.2 (0.1)	26.3 (3.8)	18.8 (2.7)	24.1 (4.2)				5.5 (1.7)	
22	-0.1 (0.1)	-0.1 (0.1)	27.2 (1.4)	19.5 (1.0)	28.4 (1.3)				10.4 (2.0)	
23	-0.1 (0.0)	-0.1 (0.0)	25.8 (2.8)	18.4 (2.0)	29.6 (2.6)				14.8 (3.5)	
24	0.2 (0.3)	0.1 (0.2)	25.9 (3.2)	18.5 (2.3)	28.8 (4.6)				16.8 (2.8)	
25	0.4 (0.1)	0.3 (0.1)	22.2 (3.3)	15.8 (2.3)	25.3 (4.8)				14.7 (4.6)	
26	0.1 (0.2)	0.1 (0.1)	21.6 (5.4)	15.5 (3.9)	23.4 (4.2)	16.7 (3.0)			12.9 (4.9)	9.3 (3.5)
27	-0.1 (0.1)	-0.1 (0.1)	25.9 (1.8)	18.5 (1.3)	25.4 (1.1)	18.2 (0.8)			15.5 (1.8)	11.1 (1.3)
28	0.2 (0.2)	0.1 (0.1)	21.1 (3.8)	15.0 (2.7)	24.6 (3.2)	17.6 (2.3)			16.7 (3.4)	11.9 (2.5)
29	-0.2 (0.1)	-0.1 (0.1)	26.4 (3.3)	18.9 (2.4)	22.5 (1.6)	16.1 (1.1)			18.7 (2.3)	13.4 (1.6)
30	0.1 (0.3)	0.1 (0.2)	22.7 (6.0)	16.3 (4.3)	18.7 (3.0)	13.4 (2.1)			14.3 (6.2)	10.2 (4.4)
31	0.3 (0.1)	0.2 (0.0)	14.3 (1.1)	10.3 (0.8)	14.2 (1.0)	10.2 (0.7)			5.7 (1.2)	4.1 (0.8)
Avg	0.1	0.1	27.6	19.8	23.2	16.1	21.8	15.6	23.3	18.9
n	31	28	28	28	23	16	12	10	22	17
SD	0.3	0.2	6.4	4.6	3.9	2.6	1.1	0.8	11.2	7.5
Min	-0.3	-0.2	14.3	10.3	14.2	10.2	20.1	14.3	5.5	4.1
Max	1.3	0.9	41.4	29.7	29.6	19.3	23.7	16.9	39.9	28.4

ED_004549_00015928-00293

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for April, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.0 (0.2)	0.0 (0.1)	21.1 (3.3)	15.1 (2.3)	20.0 (3.6)	14.3 (2.6)			13.9 (3.6)	10.0 (2.5)
2	-0.1 (0.2)	-0.1 (0.1)	23.7 (2.4)	16.9 (1.7)	17.0 (3.7)	12.1 (2.6)				
3	-0.1 (0.1)	-0.1 (0.1)	23.0 (2.8)	16.4 (2.0)	16.9 (3.1)	12.0 (2.2)	8.6 (2.2)		15.5 (4.3)	11.1 (3.1)
4	0.2 (0.1)	0.1 (0.1)	17.8 (6.0)	12.7 (4.3)	17.2 (2.1)	12.3 (1.5)	10.6 (2.3)		16.8 (2.0)	12.0 (1.4)
5	-0.1 (0.2)	-0.1 (0.1)	16.6 (6.4)	11.9 (4.6)	14.6 (5.8)	10.4 (4.2)	9.8 (5.7)	7.0 (4.1)	13.5 (5.3)	9.7 (3.8)
6	0.0 (0.2)	0.0 (0.1)	13.0 (6.4)	9.3 (4.5)	12.2 (5.1)	8.7 (3.7)	8.0 (5.6)	5.7 (4.0)	11.3 (5.7)	8.1 (4.1)
7	0.3 (0.4)	0.2 (0.3)	10.6 (4.7)	7.6 (3.3)	12.1 (4.9)	8.6 (3.5)	5.8 (3.7)	4.1 (2.6)	9.4 (3.7)	6.7 (2.7)
8	-0.1 (0.1)	0.0 (0.1)	12.1 (5.8)	8.6 (4.1)	12.4 (6.3)	8.9 (4.5)				
9	0.1 (0.3)	0.1 (0.2)	13.4 (3.0)	9.5 (2.1)	16.0 (4.7)	11.4 (3.4)	9.5 (3.6)	6.8 (2.6)	12.9 (3.8)	9.2 (2.7)
10	-0.1 (0.3)	-0.1 (0.2)	19.8 (4.1)	14.2 (2.9)			13.0 (3.9)	9.3 (2.7)	17.4 (2.5)	12.4 (1.8)
11	0.2 (0.1)	0.1 (0.1)			11.4 (5.6)	8.2 (4.0)	7.0 (3.1)	5.0 (2.2)	12.0 (3.9)	8.6 (2.8)
12	0.2 (0.1)	0.1 (0.1)	18.6 (1.3)	13.3 (0.9)	21.0 (2.3)	15.0 (1.6)	13.0 (3.4)	9.3 (2.5)	18.2 (2.5)	13.0 (1.8)
13	0.2 (0.2)	0.2 (0.1)	20.6 (1.0)	14.7 (0.7)	21.3 (2.5)	15.2 (1.8)	16.5 (3.0)	11.8 (2.1)	19.9 (2.3)	14.2 (1.6)
14	-0.1 (0.1)	-0.1 (0.1)	17.2 (5.4)	12.3 (3.9)	16.4 (5.5)	11.7 (3.9)	12.8 (5.5)	9.1 (3.9)	15.8 (6.3)	11.3 (4.5)
15	-0.1 (0.1)	-0.1 (0.1)	13.5 (7.3)	9.7 (5.2)	12.1 (6.1)	8.6 (4.4)	12.1 (6.0)	8.6 (4.3)	16.0 (8.0)	11.4 (5.7)
16	0.1 (0.1)	0.1 (0.1)	9.3 (5.8)	6.7 (4.1)	9.7 (4.5)	6.9 (3.2)	8.5 (5.8)	6.1 (4.2)	9.1 (3.0)	6.5 (2.2)
17	0.2 (0.1)	0.1 (0.1)	7.7 (3.5)	5.5 (2.5)	8.5 (1.7)	6.1 (1.2)	4.3 (1.9)	3.1 (1.3)	5.9 (1.1)	4.2 (0.8)
18	0.2 (0.1)	0.1 (0.1)	6.6 (2.9)	4.7 (2.1)	7.0 (4.0)	5.0 (2.8)	3.6 (1.4)	2.6 (1.0)	6.9 (2.5)	4.9 (1.8)
19	0.2 (0.1)	0.1 (0.1)	6.9 (1.8)	5.0 (1.3)	8.3 (1.5)	6.0 (1.1)	3.8 (0.7)	2.7 (0.5)	6.8 (1.0)	4.9 (0.7)
20	0.0 (0.1)	0.0 (0.1)	7.3 (3.1)	5.2 (2.2)	8.5 (1.3)	6.1 (0.9)	4.2 (1.2)	3.0 (0.9)	7.0 (2.1)	5.0 (1.5)
21	0.2 (0.2)	0.1 (0.1)	6.1 (2.0)	4.4 (1.4)	7.4 (2.1)	5.3 (1.5)	4.0 (1.3)	2.9 (0.9)	7.4 (1.8)	5.3 (1.3)
22	0.1 (0.2)	0.1 (0.2)	6.3 (2.3)	4.5 (1.7)	6.8 (2.6)	4.9 (1.9)	4.8 (1.9)	3.4 (1.4)	6.5 (2.0)	4.6 (1.4)
23	0.1 (0.2)	0.1 (0.1)	5.5 (1.5)	4.0 (1.1)	6.8 (1.6)	4.8 (1.1)	3.2 (0.7)	2.3 (0.5)	5.7 (1.5)	4.1 (1.0)
24	-0.1 (0.2)	-0.1 (0.1)	4.9 (0.9)	3.5 (0.7)	5.9 (1.8)	4.2 (1.3)	3.3 (0.7)	2.4 (0.5)	6.7 (1.4)	4.8 (1.0)
25	0.2 (0.1)	0.1 (0.1)	4.8 (0.9)	3.4 (0.6)	5.0 (0.7)	3.6 (0.5)			5.8 (2.5)	4.2 (1.8)
26	0.0 (0.2)	0.0 (0.1)	8.0 (2.8)	5.7 (2.0)	9.2 (2.2)	6.6 (1.5)	6.8 (2.5)	4.9 (1.8)	7.4 (1.1)	5.3 (0.8)
27	-0.2 (0.1)	-0.1 (0.1)	9.2 (4.6)	6.6 (3.3)	10.1 (3.2)	7.2 (2.3)	8.1 (4.1)	5.7 (2.9)	9.8 (3.7)	7.0 (2.7)
28	-0.1 (0.1)	-0.1 (0.1)	12.2 (2.8)	8.7 (2.0)	12.5 (2.0)	8.9 (1.4)	10.3 (3.1)	7.3 (2.2)	12.0 (3.2)	8.5 (2.3)
29	-0.1 (0.1)	-0.1 (0.1)	12.1 (3.8)	8.7 (2.7)	14.2 (2.6)	10.1 (1.9)	12.2 (4.5)	8.7 (3.2)	13.5 (4.0)	9.6 (2.9)
30	0.1 (0.1)	0.1 (0.0)	10.8 (6.2)	7.8 (4.4)	11.8 (4.6)	8.4 (3.3)	9.7 (6.6)	7.0 (4.7)		
Avg	0.0	0.0	12.4	8.9	12.2	8.7	8.2	5.8	11.2	8.0
n	30	30	29	29	29	29	26	24	27	27
SD	0.1	0.1	5.7	4.1	4.5	3.2	3.6	2.7	4.3	3.1
Min	-0.2	-0.1	4.8	3.4	5.0	3.6	3.2	2.3	5.7	4.1
Max	0.3	0.2	23.7	16.9	21.3	15.2	16.5	11.8	19.9	14.2

ED_004549_00015928-00294

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for May, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.1 (0.1)	0.1 (0.0)	5.9 (2.0)		6.2 (2.2)	4.5 (1.6)	4.6 (1.4)	3.3 (1.0)	6.1 (2.9)	4.4 (2.1)
2	0.1 (0.1)	0.1 (0.0)	4.8 (1.1)		4.3 (0.7)	3.1 (0.5)	3.0 (0.7)	2.2 (0.5)	5.7 (0.9)	4.1 (0.6)
3	0.0 (0.1)	0.0 (0.1)	8.0 (2.4)		7.4 (1.8)	5.3 (1.3)	4.7 (1.3)	3.4 (0.9)	5.8 (1.3)	4.1 (0.9)
4	0.2 (0.2)	0.1 (0.1)	8.2 (4.7)		8.1 (2.2)	5.8 (1.6)	5.7 (2.4)	4.1 (1.7)	5.5 (1.8)	3.9 (1.3)
5	0.1 (0.1)	0.1 (0.0)	6.6 (3.1)		6.2 (4.0)	4.4 (2.9)	5.4 (3.1)	3.9 (2.2)	6.8 (2.8)	4.8 (2.0)
6	0.0 (0.1)	0.0 (0.1)	4.9 (1.2)		4.7 (1.5)	3.4 (1.1)	3.8 (0.7)	2.7 (0.5)	4.8 (1.7)	3.4 (1.2)
7	0.2 (0.1)	0.2 (0.1)	5.7 (1.3)		4.0 (0.6)	2.9 (0.4)	2.8 (0.6)	2.0 (0.5)	4.9 (0.6)	3.5 (0.4)
8	-0.1 (0.2)	-0.1 (0.1)	10.5 (1.3)		9.5 (1.7)	6.8 (1.2)	8.1 (1.2)	5.8 (0.9)	9.2 (0.9)	6.6 (0.7)
9	0.0 (0.1)	0.0 (0.1)	10.2 (2.7)		9.0 (1.6)	6.4 (1.2)	9.2 (1.7)	6.6 (1.2)	9.3 (1.2)	6.6 (0.9)
10	-0.1 (0.1)	-0.1 (0.1)	8.6 (4.8)		8.1 (3.7)	5.8 (2.6)	7.1 (2.3)	5.1 (1.6)	8.1 (3.2)	5.8 (2.3)
11	0.0 (0.1)	0.0 (0.1)	10.5 (1.9)		10.0 (1.6)	7.1 (1.2)	8.3 (0.9)	6.0 (0.6)	8.9 (1.3)	6.4 (0.9)
12	-0.2 (0.2)	-0.1 (0.1)	9.0 (4.6)				9.8 (3.9)	7.0 (2.8)	9.4 (3.6)	6.7 (2.6)
13	0.2 (0.1)	0.1 (0.1)	7.6 (3.4)		8.5 (3.9)	6.0 (2.8)	7.9 (3.7)	5.6 (2.6)	8.0 (2.4)	5.7 (1.7)
14	0.3 (0.1)	0.2 (0.1)	8.8 (1.3)	6.3 (0.9)	7.6 (1.3)	5.5 (0.9)	9.6 (2.3)	6.9 (1.7)	10.6 (1.1)	7.6 (0.8)
15	0.0 (0.2)	0.0 (0.2)	11.7 (2.0)	8.4 (1.4)	10.9 (2.1)	7.8 (1.5)	10.9 (2.7)	7.8 (1.9)	11.7 (1.6)	8.3 (1.1)
16	0.0 (0.2)	0.0 (0.2)	9.0 (3.8)	6.4 (2.8)	8.6 (3.0)	6.2 (2.2)	8.1 (3.6)	5.8 (2.6)	8.0 (1.9)	5.7 (1.4)
17	0.1 (0.3)	0.1 (0.2)	6.2 (1.4)	4.5 (1.0)	6.1 (1.8)	4.3 (1.3)	5.8 (2.1)	4.1 (1.5)	7.2 (2.2)	5.2 (1.6)
18	-0.1 (0.2)	0.0 (0.1)	7.7 (2.3)	5.5 (1.7)	8.6 (1.6)	6.2 (1.2)	7.8 (2.5)	5.6 (1.8)	9.6 (2.2)	6.9 (1.6)
19	0.0 (0.2)	0.0 (0.1)	8.4 (4.3)	6.0 (3.1)	10.2 (2.8)	7.3 (2.0)	8.8 (4.0)	6.3 (2.8)	11.4 (2.9)	8.1 (2.1)
20	-0.1 (0.1)	-0.1 (0.1)	9.1 (2.6)	6.5 (1.9)	9.3 (1.9)	6.6 (1.3)	9.0 (1.4)	6.4 (1.0)	10.6 (1.3)	7.6 (0.9)
21	-0.1 (0.2)	-0.1 (0.1)	7.6 (2.8)	5.5 (2.0)	8.5 (3.0)	6.2 (2.2)	7.9 (2.7)	5.7 (1.9)	9.6 (3.2)	7.0 (2.3)
22	-0.1 (0.1)	-0.1 (0.1)	8.7 (3.2)	6.2 (2.3)	10.0 (2.3)	7.1 (1.6)	8.6 (3.4)	6.1 (2.4)	9.0 (3.6)	6.4 (2.6)
23	-0.1 (0.1)	-0.1 (0.1)	9.9 (1.5)	7.1 (1.1)	10.1 (0.9)	7.2 (0.6)	10.7 (1.8)	7.7 (1.3)	13.2 (1.1)	9.5 (0.8)
24	-0.2 (0.1)	-0.1 (0.1)	9.4 (3.3)	6.7 (2.4)	7.8 (2.2)	5.6 (1.6)	9.1 (3.2)	6.5 (2.3)	10.3 (3.4)	7.4 (2.5)
25	0.1 (0.1)	0.1 (0.1)	7.9 (3.5)	5.7 (2.5)	7.3 (2.7)	5.2 (1.9)	7.6 (2.5)	5.5 (1.8)	9.0 (2.7)	6.4 (2.0)
26	0.2 (0.1)	0.2 (0.1)	6.0 (0.6)	4.3 (0.4)	6.0 (0.9)	4.3 (0.6)	6.0 (0.7)	4.3 (0.5)	6.8 (0.5)	4.9 (0.4)
27	0.2 (0.2)	0.2 (0.2)	9.3 (1.8)	6.7 (1.3)	7.7 (1.4)	5.5 (1.0)	8.0 (3.4)	5.7 (2.4)	11.0 (2.9)	7.9 (2.0)
28	-0.3 (0.1)	-0.2 (0.1)	9.4 (4.0)	6.7 (2.8)	8.5 (2.4)	6.1 (1.7)	10.6 (3.0)	7.6 (2.2)	12.0 (4.5)	8.6 (3.2)
29	0.0 (0.2)	0.0 (0.2)	7.8 (2.8)	5.6 (2.0)			8.2 (2.6)	5.8 (1.9)	9.6 (4.9)	6.8 (3.5)
30	0.2 (0.1)	0.2 (0.1)	6.5 (1.2)	4.7 (0.9)	5.8 (0.8)	4.1 (0.5)	5.9 (1.2)	4.3 (0.8)	8.7 (1.3)	6.2 (0.9)
31	0.0 (0.1)	0.0 (0.1)	6.6 (0.9)	4.7 (0.6)	5.5 (0.3)	3.9 (0.2)	6.2 (0.6)	4.4 (0.4)	6.7 (1.1)	4.8 (0.8)
Avg	0.0	0.0	8.1	6.0	7.7	5.5	7.4	5.3	8.6	6.2
n	31	31	31	18	29	29	31	31	31	31
SD	0.1	0.1	1.7	1	1.8	1.3	2.1	1.5	2.2	1.6
Min	-0.3	-0.2	4.8	4.3	4.0	2.9	2.8	2.0	4.8	3.4
Max	0.3	0.2	11.7	8.4	10.9	7.8	10.9	7.8	13.2	9.5

ED_004549_00015928-00295

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for June, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.0 (0.1)	0.0 (0.1)	7.7 (1.8)	5.5 (1.3)	5.9 (0.5)	4.2 (0.3)	6.4 (0.5)	4.6 (0.4)	7.2 (2.2)	5.2 (1.6)
2	0.2 (0.1)	0.1 (0.1)	8.1 (2.0)	5.8 (1.4)	6.4 (0.8)	4.6 (0.6)	6.8 (0.8)	4.9 (0.6)	8.4 (2.5)	6.0 (1.8)
3	0.1 (0.1)	0.1 (0.1)	6.7 (0.8)	4.8 (0.6)	5.9 (0.9)	4.3 (0.6)	6.7 (0.6)	4.8 (0.4)	6.5 (0.5)	4.7 (0.3)
4	0.4 (0.1)	0.3 (0.1)	7.3 (0.6)	5.3 (0.4)	6.6 (0.5)	4.8 (0.4)	7.1 (0.7)	5.1 (0.5)	7.8 (0.5)	5.6 (0.3)
5	0.4 (0.1)	0.3 (0.1)	6.7 (0.7)	4.9 (0.5)	7.0 (0.8)	5.0 (0.6)	7.9 (0.7)	5.7 (0.5)	8.1 (0.9)	5.9 (0.6)
6	0.3 (0.1)	0.2 (0.1)	6.3 (0.6)	4.5 (0.5)	6.1 (0.8)	4.4 (0.6)	7.3 (0.7)	5.3 (0.5)	7.4 (1.1)	5.3 (0.8)
7	0.3 (0.1)	0.2 (0.1)	6.5 (0.5)	4.7 (0.4)	6.6 (0.8)	4.7 (0.6)	7.5 (1.1)	5.4 (0.8)	7.2 (0.9)	5.2 (0.7)
8	0.6 (0.2)	0.4 (0.1)	7.1 (1.0)	5.1 (0.7)	7.2 (0.7)	5.2 (0.5)	8.6 (1.0)	6.2 (0.7)	7.3 (0.8)	5.3 (0.6)
9	0.3 (0.2)	0.2 (0.1)	6.2 (0.9)	4.5 (0.7)	6.4 (0.6)	4.6 (0.4)	7.0 (0.6)	5.0 (0.4)	6.1 (0.6)	4.4 (0.4)
10	0.1 (0.2)	0.1 (0.1)	6.7 (1.6)	4.8 (1.2)	6.6 (0.6)	4.7 (0.4)	6.9 (0.4)	4.9 (0.3)	6.5 (1.6)	4.7 (1.2)
11	0.0 (0.1)	0.0 (0.1)	6.1 (0.6)	4.3 (0.4)	5.9 (0.6)	4.2 (0.4)	6.9 (0.5)	5.0 (0.4)	5.9 (0.7)	4.3 (0.5)
12	0.3 (0.1)	0.2 (0.0)	6.3 (0.5)	4.5 (0.4)	6.6 (1.2)	4.7 (0.9)	7.5 (1.3)	5.4 (0.9)	6.2 (0.5)	4.5 (0.4)
13	0.2 (0.1)	0.2 (0.1)	5.6 (0.7)	4.0 (0.5)	6.2 (0.5)	4.5 (0.4)	6.6 (0.7)	4.7 (0.5)	6.2 (0.6)	4.5 (0.5)
14	0.0 (0.1)	0.0 (0.1)	5.9 (0.9)	4.2 (0.7)	6.3 (0.7)	4.5 (0.5)	6.9 (0.7)	4.9 (0.5)	6.1 (0.8)	4.4 (0.6)
15	0.1 (0.1)	0.1 (0.1)	6.2 (0.7)	4.5 (0.5)	5.6 (0.6)	4.0 (0.4)	6.7 (0.8)	4.8 (0.6)	6.1 (0.7)	4.4 (0.5)
16										
17										
18										
19										
20	-0.1 (0.1)	-0.1 (0.1)	6.4 (1.2)	4.6 (0.8)	5.7 (1.1)	4.0 (0.7)	6.0 (0.9)	4.3 (0.6)	6.7 (1.3)	4.8 (0.9)
21	-0.1 (0.1)	-0.1 (0.1)	6.0 (0.7)	4.3 (0.5)	5.7 (0.6)	4.1 (0.4)	6.1 (0.5)	4.4 (0.4)	6.0 (0.8)	4.3 (0.5)
22	-0.3 (0.1)	-0.2 (0.1)	6.8 (0.9)	4.9 (0.6)	5.4 (0.5)	3.9 (0.4)	5.9 (0.9)	4.2 (0.7)	6.9 (1.7)	4.9 (1.2)
23	-0.2 (0.1)	-0.2 (0.1)								
24	-0.2 (0.1)	-0.1 (0.1)								
25	0.1 (0.2)	0.0 (0.1)								
26	-0.1 (0.1)	-0.1 (0.1)	6.1 (0.7)	4.4 (0.5)	6.8 (0.7)	4.9 (0.5)	6.5 (0.9)	4.7 (0.7)	5.8 (0.7)	4.2 (0.5)
27	-0.1 (0.1)	-0.1 (0.0)	6.6 (1.4)	4.8 (1.0)	6.9 (0.8)	5.0 (0.6)	7.3 (0.8)	5.2 (0.6)	6.7 (0.7)	4.8 (0.5)
28	-0.2 (0.1)									
29	-0.3 (0.0)									
30	-0.3 (0.1)	-0.2 (0.0)	7.5 (2.1)	5.4 (1.5)	5.7 (0.7)	4.1 (0.5)			6.7 (2.2)	4.8 (1.6)
Avg	0.1	0.1	6.6	4.7	6.3	4.5	6.9	5.0	6.8	4.9
n	26	24	21	21	21	21	20	20	21	21
SD	0.2	0.2	0.6	0.4	0.5	0.4	0.6	0.5	0.7	0.5
Min	-0.3	-0.2	5.6	4.0	5.4	3.9	5.9	4.2	5.8	4.2
Max	0.6	0.4	8.1	5.8	7.2	5.2	8.6	6.2	8.4	6

ED_004549_00015928-00296

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for July, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	-0.2 (0.1)	-0.1 (0.1)	7.6 (1.8)	5.4 (1.3)	6.8 (0.6)	4.9 (0.5)	8.2 (1.7)	5.9 (1.2)	7.4 (2.5)	5.3 (1.8)
2	-0.1 (0.1)	-0.1 (0.1)	7.0 (0.6)	5.0 (0.4)	6.6 (1.0)	4.7 (0.7)	7.0 (0.9)	5.0 (0.7)	6.6 (0.6)	4.7 (0.4)
3	-0.3 (0.2)	-0.2 (0.1)	6.6 (0.6)	4.7 (0.4)	6.0 (0.7)	4.3 (0.5)	6.5 (1.2)	4.7 (0.9)	6.1 (1.1)	4.4 (0.8)
4	-0.4 (0.1)	-0.3 (0.1)	6.9 (1.2)	5.0 (0.8)	5.9 (0.7)	4.3 (0.5)	6.2 (0.9)	4.5 (0.6)	6.3 (1.3)	4.5 (0.9)
5	-0.4 (0.1)	-0.3 (0.1)	7.0 (1.0)	5.0 (0.7)	6.4 (0.6)	4.6 (0.4)	6.6 (0.8)	4.7 (0.6)	6.5 (1.1)	4.7 (0.8)
6	-0.1 (0.2)	-0.1 (0.1)	7.4 (1.0)	5.3 (0.7)	7.1 (1.1)	5.1 (0.8)	7.7 (1.5)	5.6 (1.1)	7.4 (1.5)	5.4 (1.0)
7	0.0 (0.1)	0.0 (0.1)	7.5 (0.9)	5.4 (0.7)	6.6 (1.2)	4.8 (0.9)	7.0 (1.3)	5.1 (1.0)	7.4 (0.5)	5.3 (0.4)
8	0.0 (0.1)	0.0 (0.1)	6.9 (1.0)	5.0 (0.7)	7.9 (0.8)	5.7 (0.6)	7.4 (1.0)	5.3 (0.7)	7.5 (0.8)	5.4 (0.5)
9	-0.2 (0.1)	-0.1 (0.1)	7.7 (0.6)	5.5 (0.4)	6.7 (0.9)	4.8 (0.6)	7.3 (0.8)	5.2 (0.6)	6.9 (0.7)	4.9 (0.5)
10	-0.1 (0.1)	-0.1 (0.1)	7.2 (1.1)	5.2 (0.8)	7.0 (0.9)	5.1 (0.6)	7.6 (0.9)	5.4 (0.7)	7.6 (0.6)	5.4 (0.5)
11	-0.2 (0.1)	-0.1 (0.1)	6.4 (1.0)	4.6 (0.7)	7.0 (1.2)	5.0 (0.9)	7.4 (1.0)	5.4 (0.8)		
12	0.0 (0.1)	0.0 (0.1)	6.2 (1.5)	4.5 (1.1)	7.1 (1.3)	5.1 (1.0)	8.4 (1.0)	6.1 (0.7)	7.7 (0.8)	5.6 (0.6)
13	-0.3 (0.1)	-0.2 (0.1)	6.1 (1.0)	4.4 (0.7)	5.4 (1.3)	3.9 (0.9)	8.2 (0.8)	5.9 (0.6)	7.1 (0.9)	5.1 (0.7)
14	-0.2 (0.1)	-0.1 (0.1)	6.6 (1.2)	4.7 (0.9)	6.1 (1.3)	4.4 (0.9)	7.9 (0.7)	5.7 (0.5)	7.3 (1.1)	5.2 (0.8)
15	-0.1 (0.1)	0.0 (0.1)	6.8 (0.7)	4.9 (0.5)	7.5 (1.1)	5.4 (0.8)	8.2 (0.8)	5.9 (0.6)	8.0 (0.9)	5.7 (0.7)
16	0.1 (0.1)	0.1 (0.1)	6.6 (0.6)	4.8 (0.5)	8.2 (1.0)	5.9 (0.7)	8.4 (0.7)	6.0 (0.5)	8.1 (0.5)	5.9 (0.4)
17	0.0 (0.1)	0.0 (0.1)	6.0 (0.9)	4.3 (0.7)	7.4 (0.5)	5.3 (0.4)	8.2 (0.9)	5.9 (0.6)	7.2 (1.2)	5.2 (0.8)
18	-0.1 (0.1)	-0.1 (0.1)			7.1 (1.3)	5.1 (0.9)	9.6 (1.1)	6.9 (0.8)		
19	-0.1 (0.1)	-0.1 (0.0)	5.8 (0.6)	4.2 (0.4)	6.9 (0.6)	5.0 (0.5)	8.0 (0.6)	5.8 (0.5)	6.8 (0.3)	4.9 (0.2)
20	-0.3 (0.1)	-0.2 (0.1)	5.5 (0.6)	4.0 (0.4)	6.5 (0.6)	4.7 (0.5)	8.0 (0.5)	5.7 (0.3)	6.6 (0.5)	4.7 (0.4)
21	-0.3 (0.1)	-0.2 (0.1)	5.6 (0.6)	4.0 (0.5)	6.5 (0.8)	4.7 (0.6)	7.7 (0.5)	5.6 (0.4)	7.3 (0.6)	5.2 (0.5)
22	-0.3 (0.1)	-0.2 (0.1)	5.7 (0.6)	4.1 (0.4)	6.5 (0.7)	4.6 (0.5)	7.7 (1.0)	5.5 (0.7)	7.0 (0.7)	5.0 (0.5)
23	-0.4 (0.1)	-0.3 (0.1)	6.4 (1.6)	4.6 (1.2)	6.4 (1.1)	4.6 (0.8)	7.0 (0.9)	5.0 (0.6)	7.5 (1.7)	5.4 (1.2)
24	-0.3 (0.1)	-0.2 (0.1)	6.3 (2.3)	4.5 (1.7)	6.3 (1.1)	4.5 (0.8)	7.2 (1.2)	5.2 (0.9)	8.2 (2.3)	5.9 (1.6)
25	-0.1 (0.1)	-0.1 (0.1)	6.9 (1.8)	4.9 (1.3)	7.0 (1.4)	5.0 (1.0)	8.1 (1.3)	5.8 (1.0)	8.1 (1.8)	5.8 (1.3)
26	-0.4 (0.1)	-0.3 (0.1)	5.8 (0.9)	4.1 (0.7)	6.3 (1.1)	4.6 (0.8)	7.7 (0.7)	5.5 (0.5)	7.0 (0.9)	5.0 (0.7)
27	0.0 (0.2)	0.0 (0.1)	5.7 (1.2)	4.1 (0.8)	5.2 (1.1)	3.7 (0.8)	7.3 (0.7)	5.2 (0.5)	7.3 (2.0)	5.3 (1.4)
28	-0.1 (0.2)	-0.1 (0.1)	6.7 (1.9)	4.8 (1.4)			8.5 (1.6)	6.1 (1.2)	6.4 (0.6)	4.6 (0.4)
29	0.0 (0.2)	0.0 (0.1)	6.4 (0.7)	4.6 (0.5)	5.7 (1.8)	4.1 (1.3)	8.4 (1.5)	6.1 (1.1)	7.6 (1.4)	5.5 (1.0)
30	-0.2 (0.1)	-0.1 (0.0)	6.0 (1.0)	4.3 (0.7)	5.1 (1.1)	3.7 (0.8)			6.4 (0.7)	4.6 (0.5)
31										
Avg	-0.2	-0.1	6.5	4.7	6.6	4.8	7.7	5.5	7.2	5.2
n	30	30	29	29	29	29	29	29	28	28
SD	0.1	0.1	0.6	0.4	0.7	0.5	0.7	0.5	0.6	0.4
Min	-0.4	-0.3	5.5	4.0	5.1	3.7	6.2	4.5	6.1	4.4
Max	0.1	0.1	7.7	5.5	8.2	5.9	9.6	6.9	8.2	5.9

ED_004549_00015928-00297

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for August, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7	-0.4 (0.1)	-0.3 (0.1)	7.1 (2.9)	5.1 (2.1)	2.7 (0.6)	1.9 (0.5)	5.1 (1.1)	3.7 (0.8)	5.7 (0.8)	4.1 (0.6)
8	-0.2 (0.3)	-0.1 (0.2)	8.5 (3.5)	6.1 (2.5)	5.0 (2.0)	3.6 (1.5)	6.4 (1.5)	4.6 (1.1)	6.3 (1.6)	4.5 (1.1)
9	-0.2 (0.2)	-0.1 (0.2)	8.2 (3.8)	5.9 (2.7)	5.2 (1.0)	3.7 (0.7)	6.5 (1.0)	4.7 (0.7)	6.5 (1.2)	4.7 (0.9)
10	-0.3 (0.1)	-0.2 (0.1)	8.5 (3.4)	6.1 (2.4)	6.2 (1.6)	4.4 (1.1)	5.7 (0.7)	4.1 (0.5)	7.2 (1.6)	5.2 (1.1)
11	-0.2 (0.2)	-0.2 (0.2)			7.5 (2.5)	5.3 (1.8)	6.4 (1.2)	4.6 (0.9)		
12	-0.2 (0.2)	-0.1 (0.1)	8.9 (6.0)	6.3 (4.3)	7.2 (3.1)	5.2 (2.2)	6.6 (2.0)	4.7 (1.5)	5.4 (1.2)	3.9 (0.9)
13	-0.2 (0.2)	-0.1 (0.1)	6.7 (4.0)	4.8 (2.8)	6.8 (2.1)	4.9 (1.5)	5.7 (1.5)	4.1 (1.1)	5.1 (1.3)	3.7 (0.9)
14	-0.3 (0.2)	-0.2 (0.1)	4.7 (0.8)	3.4 (0.5)	10.5 (4.0)	7.5 (2.9)	4.9 (0.8)	3.5 (0.6)	5.0 (1.5)	3.6 (1.1)
15	-0.4 (0.1)	-0.3 (0.1)	5.3 (2.8)	3.8 (2.0)	13.0 (5.5)	9.3 (4.0)	6.8 (3.0)	4.9 (2.1)	4.3 (1.5)	3.1 (1.0)
16	-0.4 (0.1)	-0.3 (0.1)	4.6 (3.6)	3.3 (2.6)	9.1 (4.0)	6.5 (2.9)	7.0 (4.1)	5.3 (3.1)	3.9 (1.7)	2.8 (1.2)
17	-0.4 (0.1)	-0.2 (0.1)	3.7 (2.3)	2.6 (1.7)	6.7 (3.3)	4.8 (2.4)	6.0 (2.7)		3.3 (1.2)	2.3 (0.8)
18	-0.4 (0.1)	-0.3 (0.1)	3.2 (1.8)	2.3 (1.3)	4.4 (1.2)	3.1 (0.9)	5.0 (1.9)	3.9 (1.3)	3.0 (0.6)	2.1 (0.4)
19	-0.2 (0.1)	-0.2 (0.1)			4.3 (2.4)	3.1 (1.7)	4.6 (1.7)	3.5 (1.2)	3.5 (1.0)	2.5 (0.7)
20	-0.5 (0.1)	-0.3 (0.1)			4.3 (1.4)	3.1 (1.0)	4.2 (1.5)		4.1 (1.2)	2.9 (0.8)
21	-0.4 (0.1)	-0.3 (0.1)			3.3 (1.4)	2.3 (1.0)	3.8 (1.9)		3.3 (1.0)	2.4 (0.7)
22	-0.5 (0.3)	-0.4 (0.2)								
23	-0.8 (0.2)	-0.6 (0.1)								
24	-0.8 (0.2)									
25	-0.8 (0.2)									
26	-0.6 (0.2)									
27	-0.1 (0.2)	0.0 (0.2)	6.0 (3.8)	4.3 (2.8)						
28	0.1 (0.2)	0.1 (0.1)	4.8 (1.7)	3.5 (1.2)						
29	0.0 (0.2)	0.0 (0.2)	4.7 (2.2)	3.4 (1.6)						
30	-0.1 (0.3)	0.0 (0.2)	7.8 (4.5)	5.6 (3.3)						
31	-0.1 (0.1)	-0.1 (0.1)	8.6 (4.1)	6.2 (3.0)						
Avg	-0.3	-0.2	6.3	4.5	6.4	4.6	5.6	4.3	4.8	3.4
n	25	22	16	16	15	15	15	12	14	14
SD	0.2	0.1	1.9	1.3	2.7	1.9	1	0.6	1.3	0.9
Min	-0.8	-0.6	3.2	2.3	2.7	1.9	3.8	3.5	3.0	2.1
Max	0.1	0.1	8.9	6.3	13	9.3	7	5.3	7.2	5.2

ED_004549_00015928-00298

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for September, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	-0.2 (0.1)	-0.1 (0.1)	9.5 (5.5)	6.8 (4.0)						
2	0.0 (0.2)	0.0 (0.1)	8.4 (4.9)	6.0 (3.5)						
3	0.0 (0.3)	0.0 (0.2)	5.7 (1.6)	4.1 (1.1)						
4	-0.4 (0.1)	-0.3 (0.1)	5.2 (1.1)	3.7 (0.8)	1.9 (0.3)					
5										
6										
7										
8										
9										
10										
11										
12	0.3 (0.1)	0.2 (0.1)	4.3 (1.0)		6.4 (1.0)	4.6 (0.7)	3.6 (1.0)	2.6 (0.7)	4.4 (0.8)	3.2 (0.6)
13	0.4 (0.1)	0.3 (0.1)	3.6 (1.6)	2.6 (1.2)	7.0 (1.5)		5.0 (1.3)	3.6 (0.9)	4.1 (0.9)	3.0 (0.6)
14	0.2 (0.1)	0.1 (0.1)	4.3 (2.7)	3.1 (1.9)	7.7 (3.5)		8.5 (7.1)	6.1 (5.1)	7.0 (4.4)	5.1 (3.1)
15	0.0 (0.3)	0.0 (0.2)	8.3 (3.0)	5.9 (2.2)	13.0 (4.0)		13.3 (7.7)	9.5 (5.5)	9.5 (4.2)	6.8 (3.0)
16	-0.3 (0.1)	-0.2 (0.1)	9.0 (4.6)	6.4 (3.3)	13.6 (5.3)		12.3 (7.4)	8.8 (5.3)	9.3 (4.3)	6.6 (3.1)
17	0.1 (0.3)	0.1 (0.2)	10.1 (7.1)	7.3 (5.1)	13.2 (8.0)		11.7 (8.3)	8.4 (5.9)	8.5 (5.7)	6.1 (4.1)
18	-0.4 (0.1)	-0.3 (0.1)	13.5 (8.0)	9.7 (5.7)	11.8 (6.8)		10.5 (5.5)	7.5 (4.0)	7.8 (4.8)	5.6 (3.4)
19	-0.3 (0.2)	-0.2 (0.1)	12.4 (9.1)	8.9 (6.5)	12.4 (7.3)		10.4 (7.6)	7.5 (5.5)	10.0 (6.3)	7.2 (4.5)
20	-0.2 (0.2)	-0.2 (0.1)	12.0 (8.6)	8.6 (6.2)	11.7 (7.5)	8.4 (5.3)	8.6 (6.2)	6.2 (4.4)	8.8 (5.9)	6.3 (4.2)
21	0.0 (0.2)	0.0 (0.2)	12.7 (7.5)	9.1 (5.4)	12.5 (6.0)	8.9 (4.3)	8.5 (4.5)	6.1 (3.2)	9.2 (5.5)	6.6 (3.9)
22	-0.2 (0.3)	-0.2 (0.2)	10.5 (7.3)	7.6 (5.3)			9.5 (5.3)	6.8 (3.8)	12.4 (8.2)	8.9 (5.9)
23	-0.3 (0.2)	-0.2 (0.1)	9.6 (5.6)	6.9 (4.0)	8.4 (3.6)	6.0 (2.5)	7.8 (5.1)	5.6 (3.7)	11.2 (7.7)	8.0 (5.6)
24	0.0 (0.3)	0.0 (0.2)	9.7 (6.1)	6.9 (4.4)	9.4 (4.5)	6.8 (3.2)	7.2 (4.6)	5.2 (3.3)	8.8 (6.9)	6.3 (5.0)
25	-0.2 (0.3)	-0.1 (0.2)	12.0 (7.5)	8.6 (5.4)	12.3 (7.4)	8.8 (5.3)	6.7 (4.1)	4.8 (2.9)	8.4 (5.3)	6.0 (3.8)
26	-0.3 (0.2)	-0.2 (0.1)	14.0 (8.7)	10.0 (6.2)	14.0 (8.2)	10.0 (5.9)	8.9 (5.1)	6.3 (3.7)	9.2 (6.1)	6.6 (4.4)
27	-0.3 (0.2)	-0.2 (0.1)	14.3 (9.4)	10.2 (6.7)	13.7 (7.3)	9.8 (5.3)	8.8 (4.7)	6.3 (3.4)	9.3 (6.3)	6.6 (4.5)
28	-0.3 (0.2)	-0.2 (0.1)	13.5 (9.7)	9.7 (7.0)	12.9 (8.2)	9.2 (5.9)	8.6 (6.0)	6.1 (4.3)	10.0 (8.2)	7.2 (5.8)
29	-0.2 (0.1)	-0.1 (0.1)	13.7 (7.7)	9.9 (5.5)	10.8 (5.9)	7.8 (4.2)	7.8 (4.0)	5.6 (2.9)	7.9 (4.6)	5.7 (3.3)
30	-0.1 (0.3)	-0.1 (0.2)	19.8 (5.2)	14.2 (3.7)	14.4 (2.7)	10.3 (1.9)	13.5 (3.5)	9.6 (2.5)	12.4 (5.0)	8.9 (3.6)
Avg	-0.1	-0.1	10.3	7.6	10.9	8.2	9.0	6.5	8.8	6.3
n	23	23	23	22	19	11	19	19	19	19
SD	0.2	0.1	3.9	2.7	3.2	1.7	2.5	1.8	2.1	1.5
Min	-0.4	-0.3	3.6	2.6	1.9	4.6	3.6	2.6	4.1	3.0
Max	0.4	0.3	19.8	14.2	14.4	10.3	13.5	9.6	12.4	8.9

ED_004549_00015928-00299

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for October, 2008.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1			19.7 (6.8)	14.1 (4.9)	14.5 (4.2)	10.4 (3.0)	15.2 (7.5)	10.9 (5.4)	15.7 (6.4)	11.2 (4.6)
2										
3										
4										
5										
6										
7										
8										
9	-0.2 (0.2)	-0.2 (0.1)	13.6 (9.4)	9.7 (6.7)	9.7 (4.6)	6.9 (3.3)	11.3 (7.1)	8.1 (5.1)	10.8 (5.8)	7.7 (4.1)
10	-0.3 (0.1)	-0.2 (0.1)	12.0 (9.1)	8.6 (6.5)	8.8 (5.5)	6.3 (3.9)	8.4 (6.0)	6.0 (4.3)	9.7 (6.4)	6.9 (4.6)
11	-0.3 (0.2)	-0.2 (0.1)	7.5 (5.8)	5.4 (4.2)	6.2 (2.9)	4.4 (2.1)	5.3 (3.1)	3.8 (2.2)	6.2 (3.3)	4.4 (2.4)
12	-0.3 (0.2)	-0.2 (0.2)	4.9 (3.9)	3.5 (2.8)	4.5 (1.8)	3.2 (1.3)	4.0 (2.2)	2.9 (1.5)	5.0 (2.1)	3.6 (1.5)
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Avg	-0.3	-0.2	11.5	8.3	8.7	6.2	8.8	6.3	9.5	6.8
n	4	4	5	5	5	5	5	5	5	5
SD	0	0	5.1	3.7	3.4	2.4	4.1	2.9	3.8	2.7
Min	-0.3	-0.2	4.9	3.5	4.5	3.2	4.0	2.9	5.0	3.6
Max	-0.2	-0.2	19.7	14.1	14.5	10.4	15.2	10.9	15.7	11.2

ED_004549_00015928-00300

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for January, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4										
5										
6	0.2 (0.3)	0.1 (0.2)	32.7 (2.0)	23.3 (1.4)	23.4 (2.2)	16.7 (1.6)	26.8 (3.3)	19.2 (2.3)	24.9 (2.5)	17.8 (1.8)
7	0.6 (0.2)	0.4 (0.2)	31.1 (8.5)	22.2 (6.1)	22.8 (3.5)	16.3 (2.5)	28.4 (7.4)	20.3 (5.4)	27.4 (9.7)	19.6 (7.0)
8	0.4 (0.3)	0.3 (0.2)	42.8 (3.0)	30.6 (2.1)	26.0 (2.0)	18.6 (1.4)	33.0 (3.2)	23.6 (2.3)	38.9 (9.5)	27.8 (6.8)
9	0.7 (0.4)	0.5 (0.3)	34.5 (6.8)	24.6 (4.8)	23.5 (2.9)	16.8 (2.0)	26.3 (5.8)	18.8 (4.2)	26.0 (3.9)	18.6 (2.8)
10	-0.1 (0.2)	-0.1 (0.1)	35.9 (3.7)	25.6 (2.7)	23.9 (2.8)	17.1 (2.0)	24.4 (1.1)	17.4 (0.8)	24.9 (2.0)	17.8 (1.4)
11	0.4 (0.3)	0.3 (0.2)	34.8 (2.2)	24.9 (1.6)	24.1 (2.4)	17.2 (1.7)	24.9 (1.1)	17.8 (0.8)	25.0 (2.0)	17.8 (1.4)
12	0.5 (0.2)	0.4 (0.2)	31.2 (2.9)	22.2 (2.1)	22.0 (1.3)	15.7 (0.9)	24.9 (2.6)	17.8 (1.8)	22.7 (2.0)	16.2 (1.5)
13	0.2 (0.3)	0.1 (0.2)					26.1 (6.3)	18.6 (4.5)		
14	0.5 (0.5)	0.3 (0.4)	40.2 (7.4)	28.7 (5.3)	24.9 (3.1)	17.8 (2.2)	30.6 (3.8)	21.9 (2.7)	32.8 (3.9)	23.5 (2.8)
15	0.0 (0.3)	0.0 (0.2)	37.5 (11.3)	26.8 (8.0)	30.3 (3.2)	21.7 (2.3)				
16	1.9 (0.6)	1.4 (0.4)	48.4 (5.2)		31.0 (2.2)	22.1 (1.6)	34.0 (6.4)	24.3 (4.5)	35.6 (2.4)	25.5 (1.7)
17	0.9 (0.5)	0.7 (0.4)	43.4 (6.8)	31.0 (4.8)	27.0 (2.6)	19.3 (1.8)	29.3 (4.1)	20.9 (2.9)	25.5 (5.9)	18.2 (4.2)
18	0.0 (0.1)	0.0 (0.1)	42.9 (3.2)	30.7 (2.3)	27.4 (2.0)	19.6 (1.4)	29.4 (2.1)	21.0 (1.5)	27.0 (4.3)	19.3 (3.0)
19	0.3 (0.3)	0.2 (0.2)	41.1 (9.4)	29.4 (6.7)	26.8 (2.1)	19.1 (1.5)	30.8 (3.7)	21.9 (2.6)	32.3 (3.7)	23.0 (2.7)
20	0.5 (0.4)	0.3 (0.3)	42.4 (9.0)	30.2 (6.4)			31.9 (4.1)	22.8 (2.9)		
21	1.9 (0.3)	1.3 (0.2)	42.3 (7.1)		26.4 (2.9)	18.8 (2.1)	27.6 (3.1)	19.7 (2.2)	35.7 (3.9)	25.5 (2.8)
22	1.6 (0.5)	1.1 (0.4)	34.7 (5.5)		22.6 (4.0)	16.1 (2.8)	20.8 (5.6)	14.8 (4.0)	28.8 (5.3)	20.6 (3.8)
23	0.9 (0.8)	0.6 (0.6)	29.6 (3.2)		23.0 (2.2)	16.4 (1.6)	21.6 (6.6)	15.4 (4.7)	27.9 (3.7)	19.9 (2.6)
24	0.0 (0.1)	0.0 (0.1)	39.2 (3.4)		32.6 (2.9)	23.2 (2.1)	34.3 (3.6)	24.5 (2.6)	34.3 (3.3)	24.5 (2.3)
25	0.2 (0.3)	0.1 (0.2)	44.4 (2.4)		31.2 (3.0)	22.3 (2.1)	39.2 (2.8)	28.0 (2.0)	38.9 (2.0)	27.8 (1.4)
26	-0.1 (0.2)	-0.1 (0.2)	39.4 (2.6)		25.3 (0.6)	18.1 (0.4)	33.6 (4.3)	24.0 (3.1)	35.7 (2.4)	25.5 (1.7)
27	-0.1 (0.2)	0.0 (0.1)	42.2 (2.1)		24.9 (1.2)	17.7 (0.8)	35.4 (1.4)	25.3 (1.0)	32.9 (1.4)	23.5 (1.0)
28	0.5 (0.4)	0.4 (0.3)	40.0 (1.8)		25.6 (0.9)	18.2 (0.7)	35.6 (2.1)	25.5 (1.5)	36.9 (2.5)	26.4 (1.8)
29	1.2 (0.1)	0.9 (0.1)			25.9 (6.0)	18.5 (4.3)	37.8 (3.7)	27.1 (2.6)	37.1 (2.4)	26.5 (1.7)
30	0.5 (0.4)	0.3 (0.3)	54.4 (2.1)	38.8 (1.5)	32.5 (2.1)	23.3 (1.5)	39.6 (3.6)	28.3 (2.6)	37.2 (1.4)	26.5 (1.0)
31	0.9 (0.3)	0.6 (0.2)	45.1 (5.3)	32.2 (3.8)	31.7 (5.1)	22.6 (3.7)	36.2 (1.8)	25.9 (1.3)	32.5 (5.4)	23.2 (3.8)
Avg	0.6	0.4	39.6	28.1	26.5	18.9	30.5	21.8	31.4	22.4
n	26	26	24	15	24	24	25	25	23	23
SD	0.6	0.4	5.8	4.3	3.3	2.4	5.2	3.7	5.1	3.6
Min	-0.1	-0.1	29.6	22.2	22.0	15.7	20.8	14.8	22.7	16.2
Max	1.9	1.4	54.4	38.8	32.6	23.3	39.6	28.3	38.9	27.8

ED_004549_00015928-00301

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for February, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.5 (0.4)	0.3 (0.3)	38.4 (5.8)	27.4 (4.2)	25.4 (0.8)	18.2 (0.6)	28.6 (4.7)	20.4 (3.4)	22.2 (4.0)	15.9 (2.8)
2										
3										
4										
5										
6										
7			22.8 (5.7)	16.3 (4.1)	20.4 (6.8)	14.5 (4.8)	23.0 (4.7)	16.5 (3.4)	21.7 (6.1)	15.5 (4.3)
8	0.4 (0.3)	0.3 (0.2)	30.1 (3.7)	21.4 (2.6)	28.1 (4.3)	20.1 (3.1)	32.0 (4.8)	22.8 (3.4)	27.7 (4.2)	19.8 (3.0)
9										
10										
11										
12										
13	0.2 (0.1)	0.1 (0.1)	30.1 (5.3)	21.4 (3.7)	29.7 (7.1)	21.2 (5.1)	35.5 (6.0)	25.4 (4.3)	27.9 (5.1)	19.9 (3.7)
14	0.3 (0.1)	0.2 (0.1)	33.7 (0.6)	24.0 (0.4)	31.2 (2.9)	22.3 (2.1)	37.9 (1.3)	27.0 (0.9)	29.8 (1.1)	21.3 (0.8)
15	0.0 (0.1)	0.0 (0.1)	33.4 (1.3)	23.8 (0.9)	36.5 (7.4)	26.1 (5.3)	36.2 (1.6)	25.8 (1.2)	28.9 (1.8)	20.6 (1.3)
16	0.1 (0.2)	0.1 (0.1)	34.7 (6.6)	24.7 (4.7)	40.8 (4.0)	29.1 (2.9)	34.2 (4.3)	24.4 (3.1)	29.8 (2.7)	21.3 (1.9)
17	0.4 (0.1)	0.3 (0.1)	32.7 (2.2)	23.2 (1.6)	41.7 (3.6)	29.7 (2.6)	34.5 (1.9)	24.5 (1.4)	33.2 (1.8)	23.6 (1.3)
18	0.3 (0.2)	0.2 (0.1)			34.8 (7.2)		23.3 (7.3)			
19	0.4 (0.5)	0.3 (0.3)	24.4 (1.0)		14.7 (1.9)		18.1 (2.8)		24.5 (3.3)	
20	-0.3 (0.2)	-0.2 (0.2)								
21	-0.7 (0.1)	-0.5 (0.1)								
22	-0.5 (0.2)	-0.4 (0.2)								
23	-0.6 (0.2)	-0.4 (0.1)								
24	-0.1 (0.3)	-0.1 (0.2)								
25	0.9 (0.3)	0.6 (0.2)	34.0 (12.4)	24.4 (8.9)					19.3 (7.3)	13.7 (5.2)
26	1.1 (0.5)	0.8 (0.4)	26.1 (1.2)	18.7 (0.9)					18.0 (4.2)	
27	0.5 (0.2)	0.3 (0.1)	34.2 (7.3)	24.6 (5.3)					22.6 (6.7)	
28	0.0 (0.2)	0.0 (0.1)	36.8 (9.4)	26.4 (6.8)					21.5 (3.7)	
Avg	0.2	0.1	31.6	23.0	30.3	22.6	30.3	23.4	25.2	19.1
n	18	18	13	12	10	8	10	8	13	9
SD	0.5	0.3	4.6	3	8.2	5	6.4	3.2	4.5	3.1
Min	-0.7	-0.5	22.8	16.3	14.7	14.5	18.1	16.5	18.0	13.7
Max	1.1	0.8	38.4	27.4	41.7	29.7	37.9	27	33.2	23.6

ED_004549_00015928-00302

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for March, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.2 (0.1)	0.1 (0.1)	47.3 (6.0)	34.0 (4.3)	29.0 (2.5)		32.9 (2.0)		25.9 (2.0)	
2	0.0 (0.1)	0.0 (0.1)	58.0 (3.6)	41.7 (2.5)	27.2 (3.6)		31.3 (2.4)		24.0 (1.1)	
3	0.7 (0.6)	0.5 (0.4)	51.2 (8.8)	36.8 (6.4)	29.5 (3.8)		25.1 (0.9)		23.7 (1.0)	
4	1.5 (0.3)	1.1 (0.2)	39.6 (9.5)	28.4 (6.8)	28.8 (6.7)		21.9 (6.0)	15.6 (4.3)	21.1 (5.2)	
5	1.0 (0.2)	0.7 (0.1)	21.6 (12.9)	15.5 (9.3)	15.5 (8.4)		16.4 (7.7)	11.7 (5.5)	14.7 (5.6)	10.5 (4.0)
6	0.6 (0.2)	0.4 (0.1)	10.0 (2.8)	7.2 (2.0)	6.8 (2.7)		5.2 (1.7)	3.7 (1.2)	7.2 (5.1)	5.1 (3.6)
7	0.3 (0.1)	0.2 (0.1)	10.5 (3.6)	7.5 (2.6)	5.3 (2.2)	3.8 (1.5)	2.6 (0.6)	1.9 (0.5)	4.3 (2.2)	3.0 (1.6)
8	-0.2 (0.1)	-0.1 (0.1)	17.4 (6.0)	12.5 (4.3)	9.0 (2.7)	6.5 (1.9)	10.7 (4.8)	7.7 (3.5)	11.9 (4.7)	8.5 (3.4)
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Avg	0.5	0.4	31.9	22.9	18.9	5.1	18.2	8.1	16.6	6.8
n	8	8	8	8	8	2	8	5	8	4
SD	0.5	0.4	18.1	13	10.1	1.3	10.7	5	7.7	2.9
Min	-0.2	-0.1	10.0	7.2	5.3	3.8	2.6	1.9	4.3	3.0
Max	1.5	1.1	58	41.7	29.5	6.5	32.9	15.6	25.9	10.5

ED_004549_00015928-00303

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for April, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30	0.4 (0.3)	0.2 (0.2)	11.7 (2.9)	8.4 (2.1)	9.0 (2.6)	6.5 (1.8)	6.0 (1.5)	4.3 (1.1)	8.9 (2.3)	6.4 (1.7)
Avg										
n	1	1	1	1	1	1	1	1	1	1
SD										
Min										
Max										

ED_004549_00015928-00304

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for May, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	-0.2 (0.2)	-0.1 (0.1)	12.3 (2.4)	8.8 (1.7)	9.0 (2.2)	6.5 (1.6)	8.8 (3.4)	6.3 (2.4)	8.8 (1.0)	6.3 (0.7)
2	-0.2 (0.1)	-0.1 (0.1)	13.3 (3.9)	9.5 (2.8)	10.4 (2.9)	7.5 (2.1)	10.0 (5.2)	7.1 (3.7)	8.0 (1.5)	5.8 (1.1)
3	-0.2 (0.3)	-0.1 (0.2)	10.8 (4.0)	7.7 (2.8)	8.1 (3.9)	5.8 (2.8)	7.8 (5.4)	5.6 (3.9)	6.7 (2.6)	4.8 (1.8)
4	0.1 (0.4)	0.1 (0.3)	11.6 (2.7)	8.3 (2.0)	8.0 (3.3)	5.7 (2.3)	8.0 (3.7)	5.7 (2.6)	6.8 (1.9)	4.9 (1.4)
5	-0.2 (0.2)	-0.1 (0.2)	10.8 (3.6)	7.7 (2.5)	7.7 (3.4)	5.5 (2.5)	7.4 (4.8)	5.3 (3.5)	6.5 (2.4)	4.7 (1.7)
6	-0.2 (0.2)	-0.1 (0.1)	12.6 (1.9)	9.1 (1.3)	9.3 (0.9)	6.6 (0.6)	7.7 (1.3)	5.5 (0.9)	8.8 (1.0)	6.3 (0.7)
7	0.2 (0.2)	0.1 (0.1)	9.5 (3.8)	6.8 (2.7)					6.9 (2.4)	5.0 (1.8)
8	0.0 (0.1)	0.0 (0.1)	10.1 (1.2)	7.2 (0.8)						
9	-0.1 (0.3)	-0.1 (0.2)	11.8 (1.8)	8.5 (1.3)	9.6 (1.2)	6.9 (0.9)	6.0 (1.4)	4.3 (1.0)	9.3 (2.7)	6.6 (1.9)
10	-0.2 (0.1)	-0.1 (0.1)	11.8 (3.0)	8.5 (2.1)	9.4 (3.2)	6.7 (2.3)	5.4 (2.2)	3.9 (1.6)	9.2 (4.4)	6.6 (3.2)
11	-0.5 (0.2)	-0.3 (0.1)	14.0 (4.1)	10.0 (2.9)	8.9 (2.8)	6.4 (2.0)	6.9 (2.2)	4.9 (1.6)	9.2 (2.9)	6.6 (2.1)
12										
13										
14										
15										
16	-0.1 (0.2)	-0.1 (0.1)	9.9 (1.8)	7.1 (1.3)	9.5 (1.9)	6.8 (1.3)	4.9 (1.4)	3.5 (1.0)	6.9 (1.7)	4.9 (1.2)
17	-0.1 (0.2)	-0.1 (0.1)	10.9 (4.8)	7.8 (3.5)	10.8 (5.2)	7.7 (3.7)	5.4 (3.1)	3.8 (2.2)	8.5 (3.8)	6.1 (2.7)
18	0.0 (0.2)	0.0 (0.1)	12.3 (5.4)		10.2 (5.1)	7.3 (3.7)	6.8 (4.1)	4.8 (2.9)	7.6 (3.9)	5.4 (2.8)
19	-0.1 (0.1)	-0.1 (0.1)	7.2 (4.1)		7.5 (3.5)	5.4 (2.5)	5.6 (1.9)	4.0 (1.4)	7.0 (3.2)	5.0 (2.3)
20	-0.1 (0.1)	0.0 (0.1)	5.3 (2.6)		6.0 (3.1)	4.3 (2.2)	4.8 (1.2)	3.4 (0.8)	6.0 (2.2)	4.3 (1.6)
21	0.0 (0.1)	0.0 (0.1)	5.3 (2.5)	3.8 (1.8)	5.5 (1.8)	4.0 (1.3)	4.7 (0.6)	3.3 (0.4)	5.9 (1.9)	4.2 (1.4)
22	0.2 (0.1)	0.2 (0.1)	5.2 (1.3)	3.8 (0.9)	5.2 (0.7)	3.7 (0.5)				
23	0.2 (0.1)	0.1 (0.0)	5.4 (1.3)	3.8 (1.0)	5.9 (1.4)	4.3 (1.0)	4.8 (0.8)	3.4 (0.6)	6.3 (1.2)	4.5 (0.9)
24	0.3 (0.2)	0.2 (0.1)	7.4 (3.4)	5.3 (2.4)	5.6 (0.8)	4.0 (0.6)	4.9 (0.7)	3.5 (0.5)	7.0 (2.2)	5.1 (1.6)
25	0.0 (0.1)	0.0 (0.1)	8.1 (1.9)	5.8 (1.4)	5.7 (0.6)	4.1 (0.4)	3.8 (0.7)	2.7 (0.5)	7.5 (1.2)	5.3 (0.9)
26	0.5 (0.2)									
27	0.4 (0.1)	0.3 (0.1)	5.4 (0.7)	3.9 (0.5)	5.7 (0.6)	4.1 (0.4)	5.7 (0.8)	4.1 (0.6)	7.0 (0.6)	5.1 (0.4)
28	0.0 (0.1)	0.0 (0.1)	9.9 (2.5)	7.1 (1.8)	6.7 (2.1)	4.8 (1.5)	6.7 (1.8)	4.8 (1.3)	8.2 (1.7)	5.9 (1.2)
29	0.0 (0.1)	0.0 (0.1)	7.0 (3.1)	5.0 (2.2)	8.6 (2.7)	6.1 (2.0)	8.3 (2.2)	5.9 (1.6)	7.4 (2.5)	5.3 (1.8)
30	0.2 (0.2)	0.1 (0.1)	6.2 (2.7)	4.5 (2.0)	8.5 (4.0)	6.1 (2.9)	6.7 (1.4)	4.8 (1.0)	6.9 (2.1)	5.0 (1.5)
31	-0.1 (0.2)	-0.1 (0.2)	6.1 (2.4)	4.4 (1.7)	7.6 (2.2)	5.4 (1.6)	6.4 (1.3)	4.6 (0.9)	7.0 (2.2)	5.0 (1.6)
Avg	0.0	0.0	9.2	6.7	7.9	5.7	6.4	4.6	7.5	5.4
n	27	26	26	23	24	24	23	23	24	24
SD	0.2	0.1	2.8	2	1.7	1.2	1.5	1.1	1	0.7
Min	-0.5	-0.3	5.2	3.8	5.2	3.7	3.8	2.7	5.9	4.2
Max	0.5	0.3	14	10	10.8	7.7	10	7.1	9.3	6.6

ED_004549_00015928-00305

Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for June, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.2 (0.2)	0.1 (0.1)	6.1 (1.9)	4.4 (1.3)	7.0 (0.5)	5.0 (0.4)	6.7 (1.1)	4.8 (0.8)	7.8 (1.1)	5.6 (0.8)
2	0.1 (0.1)	0.1 (0.1)	6.7 (1.2)	4.8 (0.9)	8.1 (1.5)	5.8 (1.1)	7.2 (1.4)	5.2 (1.0)	7.7 (1.2)	5.5 (0.8)
3	-0.2 (0.1)	-0.2 (0.1)	10.1 (1.4)	7.2 (1.0)	10.2 (2.5)	7.3 (1.8)	8.4 (1.6)	6.0 (1.1)	10.0 (1.1)	7.2 (0.8)
4	-0.1 (0.2)	-0.1 (0.1)	8.3 (2.2)	6.0 (1.5)	10.8 (3.6)	7.8 (2.6)	9.6 (2.7)	6.9 (2.0)	8.9 (2.2)	6.4 (1.6)
5	0.2 (0.2)	0.1 (0.1)	6.5 (1.7)	4.7 (1.3)	9.9 (4.5)	7.1 (3.2)	7.3 (1.9)	5.2 (1.3)	7.3 (2.6)	5.2 (1.8)
6	0.0 (0.1)	0.0 (0.1)	5.9 (1.6)	4.2 (1.1)	7.7 (2.4)	5.5 (1.7)	6.2 (0.5)	4.4 (0.4)	7.1 (1.6)	5.1 (1.1)
7	0.1 (0.2)	0.1 (0.2)	5.9 (1.7)	4.2 (1.2)	6.0 (0.7)	4.3 (0.5)	6.0 (1.2)	4.3 (0.9)	7.0 (0.8)	5.0 (0.6)
8	0.5 (0.7)	0.3 (0.5)	6.3 (2.4)	4.5 (1.8)	11.6 (12.2)	4.2 (1.0)	7.0 (1.0)	5.0 (0.7)	7.3 (1.4)	5.3 (1.0)
9	0.3 (0.5)	0.2 (0.3)	8.5 (3.9)	6.1 (2.9)	29.2 (28.8)		9.5 (3.6)	6.8 (2.6)	8.8 (3.5)	6.3 (2.5)
10	0.1 (0.4)	0.1 (0.3)	6.6 (1.9)	4.7 (1.4)	6.5 (0.9)	4.7 (0.6)	6.2 (1.0)	4.4 (0.7)	7.3 (1.5)	5.3 (1.0)
11	0.3 (0.4)	0.2 (0.3)	6.8 (1.4)	4.9 (1.0)	6.5 (0.9)	4.7 (0.6)	7.9 (0.6)	5.7 (0.5)	7.8 (2.1)	5.6 (1.5)
12	0.1 (0.4)	0.1 (0.3)	6.8 (1.9)	4.8 (1.4)	6.1 (1.5)	4.3 (1.1)	6.5 (1.7)	4.7 (1.2)	5.9 (1.2)	4.3 (0.8)
13	0.2 (0.3)	0.1 (0.2)	6.4 (3.0)	4.6 (2.1)	6.7 (2.1)	4.8 (1.5)	6.0 (1.3)	4.3 (1.0)	7.0 (1.2)	5.0 (0.9)
14	0.1 (0.2)	0.1 (0.1)	6.2 (2.6)	4.4 (1.8)	6.2 (0.7)	4.5 (0.5)	6.3 (1.0)	4.5 (0.7)	7.8 (1.8)	5.6 (1.3)
15	0.0 (0.2)	0.0 (0.1)	5.0 (2.2)	3.6 (1.6)	5.9 (1.0)	4.2 (0.7)	6.0 (1.0)	4.3 (0.7)	6.6 (1.9)	4.8 (1.3)
16										
17										
18										
19										
20										
21										
22	0.5 (0.1)	0.3 (0.1)	4.9 (0.7)	3.6 (0.5)	7.5 (0.8)	5.4 (0.5)	-81.8 (171.0)	-58.6 (124.0)		
23	0.2 (0.1)		4.3 (0.8)							
24	0.5 (0.1)	0.3 (0.1)	4.3 (0.4)	3.1 (0.3)	6.3 (0.5)	4.6 (0.3)	6.4 (1.2)	4.6 (0.9)	7.3 (0.8)	5.3 (0.6)
25	0.5 (0.1)	0.4 (0.1)	4.4 (0.6)	3.2 (0.4)	6.0 (1.0)	4.3 (0.7)	6.4 (1.1)	4.6 (0.8)	7.2 (1.0)	5.2 (0.7)
26	0.4 (0.2)	0.3 (0.1)	4.4 (0.7)	3.2 (0.5)	5.7 (0.5)	4.1 (0.4)	6.9 (1.2)	5.0 (0.8)	7.3 (0.7)	5.2 (0.5)
27	0.2 (0.1)	0.1 (0.1)	5.2 (1.8)	3.7 (1.3)	6.3 (0.8)	4.5 (0.6)	7.1 (0.5)	5.1 (0.4)	6.1 (0.4)	4.4 (0.3)
28	0.1 (0.2)	0.1 (0.1)	4.4 (1.3)	3.1 (0.9)	5.3 (1.3)	3.8 (0.9)	5.7 (0.7)	4.1 (0.5)	5.1 (0.7)	3.6 (0.5)
29	0.1 (0.2)	0.1 (0.1)	4.7 (1.9)	3.4 (1.4)	6.0 (1.5)	4.3 (1.1)	5.7 (1.3)	4.1 (0.9)	5.6 (0.7)	4.0 (0.5)
30										
Avg	0.2	0.1	6.0	4.4	8.3	5.0	2.9	2.1	7.3	5.2
n	23	22	23	22	22	21	22	22	21	21
SD	0.2	0.1	1.5	1	4.9	1.1	18.5	13.2	1.1	0.8
Min	-0.2	-0.2	4.3	3.1	5.3	3.8	-81.8	-58.6	5.1	3.6
Max	0.5	0.4	10.1	7.2	29.2	7.8	9.6	6.9	10	7.2

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Table E12. Daily means (SD) of ammonia concentrations at Site IN3B for July, 2009.

Day	Inlet		Room 5		Room 6		Room 7		Room 8	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1										
2										
3										
4										
5										
6										
7										
8										
9										
10	0.5 (0.1)	0.3 (0.1)	6.2 (2.2)	4.5 (1.6)	6.7 (0.3)	4.8 (0.2)	9.8 (0.4)	7.1 (0.3)	9.1 (0.7)	6.5 (0.5)
11	0.4 (0.1)	0.3 (0.1)	4.6 (0.5)	3.3 (0.4)	6.4 (0.5)	4.6 (0.4)	8.7 (0.7)	6.3 (0.5)	8.5 (0.4)	6.1 (0.3)
12	0.3 (0.2)	0.2 (0.1)	6.5 (2.2)	4.6 (1.6)	6.4 (0.9)	4.6 (0.7)	8.2 (0.9)	5.8 (0.6)	8.5 (1.1)	6.1 (0.8)
13	0.7 (0.1)	0.5 (0.1)	7.6 (2.3)	5.4 (1.7)	7.0 (0.8)	5.0 (0.5)	9.5 (1.2)	6.8 (0.9)	9.8 (1.9)	7.0 (1.4)
14	0.7 (0.1)	0.5 (0.1)	7.5 (3.3)	5.4 (2.3)	8.8 (2.3)	6.3 (1.7)	9.5 (0.7)		9.8 (1.5)	7.0 (1.1)
15	0.7 (0.1)	0.5 (0.1)	6.8 (1.9)	4.9 (1.3)	8.1 (0.5)	5.8 (0.4)	10.1 (1.1)	7.3 (0.8)	9.1 (1.1)	6.5 (0.8)
16	0.6 (0.1)	0.4 (0.1)	6.3 (2.0)	4.6 (1.4)	7.6 (0.6)	5.5 (0.5)				
17	0.5 (0.1)	0.3 (0.1)	8.2 (2.0)	5.8 (1.4)	7.6 (0.8)	5.4 (0.6)	9.6 (0.7)	6.8 (0.5)	6.9 (1.4)	4.9 (1.0)
18	0.6 (0.1)	0.4 (0.1)	9.5 (2.5)	6.8 (1.8)	8.6 (0.6)	6.2 (0.5)	10.8 (1.8)	7.8 (1.3)	7.8 (2.0)	5.6 (1.5)
19	0.7 (0.1)	0.5 (0.0)	8.5 (2.1)	6.1 (1.5)	8.6 (0.9)	6.1 (0.6)	11.9 (1.0)	8.5 (0.7)	9.5 (1.2)	6.8 (0.8)
20			8.1 (2.8)	5.8 (2.0)	8.7 (1.5)	6.2 (1.1)			8.2 (3.8)	6.0 (2.7)
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Avg	0.6	0.4	7.3	5.2	7.7	5.5	9.8	7.0	8.7	6.3
n	10	10	11	11	11	11	9	8	10	10
SD	0.1	0.1	1.3	0.9	0.9	0.6	1	0.8	0.9	0.6
Min	0.3	0.2	4.6	3.3	6.4	4.6	8.2	5.8	6.9	4.9
Max	0.7	0.5	9.5	6.8	8.8	6.3	11.9	8.5	9.8	7

ED_004549_00015928-00307

Table E13. Ammonia emissions.

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for July, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14	10.8 (2.4)	14.8 (3.2)	10.2 (2.2)	48.4 (10.5)	15.4 (2.1)	21.0 (2.9)	14.6 (2.0)	68.1 (9.5)	10.1 (1.3)	13.8 (1.8)	9.4 (1.2)	45.4 (5.9)	12.7 (1.6)	17.4 (2.1)	12.2 (1.5)	59.6 (7.3)
15	10.2 (1.7)	13.9 (2.4)	9.6 (1.6)	45.3 (7.7)	14.6 (1.7)	19.9 (2.3)	13.9 (1.6)	64.4 (7.5)	10.9 (2.4)	14.9 (3.2)	10.1 (2.2)	48.6 (10.5)	12.0 (2.9)	16.4 (3.9)	11.5 (2.8)	56.1 (13.4)
16									11.7 (3.4)	15.9 (4.6)	10.9 (3.1)	51.9 (14.9)	22.3 (18.0)	30.4 (24.6)	21.4 (17.3)	104.0 (83.7)
17									23.4 (24.5)	32.0 (33.4)	21.9 (22.9)	104.0 (108.0)	25.5 (25.7)	34.9 (35.2)	24.5 (24.7)	118.0 (119.0)
18																
19	13.0 (1.1)	17.8 (1.5)	12.3 (1.1)	57.1 (5.0)					11.8 (1.4)	16.1 (2.0)	12.9 (1.7)	61.4 (8.1)	14.6 (1.5)	20.0 (2.0)	14.1 (1.4)	67.5 (6.7)
20	14.0 (3.1)	19.2 (4.2)	13.3 (2.9)	61.5 (13.4)					12.9 (2.2)	17.7 (3.0)	14.4 (2.5)	68.8 (11.9)	14.9 (3.1)	20.3 (4.3)	14.4 (3.0)	68.4 (14.4)
21	16.6 (3.6)	22.7 (4.9)	15.8 (3.4)	72.7 (15.5)					12.8 (2.4)	17.4 (3.3)	14.2 (2.7)	67.7 (12.9)	15.9 (2.9)	21.7 (4.0)	15.3 (2.8)	72.6 (13.5)
22	17.3 (3.5)	23.7 (4.8)	16.5 (3.3)	75.6 (15.4)					12.9 (2.2)	17.6 (3.0)	14.4 (2.4)	68.2 (11.4)	15.4 (2.6)	21.0 (3.6)	14.9 (2.5)	70.2 (12.0)
23	12.5 (5.2)	17.1 (7.1)	12.0 (4.9)	54.9 (22.4)					10.1 (3.6)	13.9 (4.9)	11.4 (4.0)	53.6 (18.8)	12.6 (7.2)	17.1 (9.8)	12.1 (6.9)	57.1 (32.6)
24	7.9 (2.1)	10.8 (2.9)	8.1 (2.1)	36.7 (9.7)					7.1 (1.5)	9.7 (2.1)	8.0 (1.7)	37.5 (7.9)	7.9 (2.5)	10.8 (3.4)	7.6 (2.4)	35.7 (11.3)
25	9.0 (3.2)	12.3 (4.4)	9.8 (3.5)	44.4 (16.0)					6.1 (1.4)	8.3 (1.9)	6.8 (1.6)	32.0 (7.3)	7.0 (2.2)	9.5 (3.0)	6.7 (2.1)	31.3 (9.8)
26																
27																
28																
29																
30	7.1 (1.4)	9.8 (2.0)	8.4 (1.6)	37.3 (7.2)					10.7 (7.8)	14.6 (10.7)	12.1 (8.9)	55.7 (40.8)				
31	7.7 (2.2)	10.5 (3.0)	9.5 (2.6)	42.4 (11.8)	8.7 (3.0)	11.8 (4.1)	10.9 (3.8)	48.0 (16.9)	6.9 (1.9)	9.4 (2.7)	7.8 (2.2)	35.8 (10.1)	7.9 (2.4)	10.8 (3.3)	9.4 (2.8)	43.1 (13.0)
Avg	11.5	15.7	11.4	52.4	12.9	17.6	13.1	60.2	11.3	15.5	11.9	56.2	14.1	19.2	13.7	65.3
n	11	11	11	11	3	3	3	3	13	13	13	13	12	12	12	12
SD	3.37	4.6	2.71	12.7	2.99	4.09	1.61	8.74	4.13	5.64	3.79	18.1	5.32	7.27	4.96	24.3
Min	7.1	9.8	8.1	36.7	8.7	11.8	10.9	48.0	6.1	8.3	6.8	32.0	7.0	9.5	6.7	31.3
Max	17.3	23.7	16.5	75.6	15.4	21	14.6	68.1	23.4	32	21.9	104	25.5	34.9	24.5	118

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Table E13. Daily means (SD) of ammonia emissions at Site IN3B for August, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	6.7 (2.2)	9.2 (3.0)	9.0 (2.9)	40.0 (12.8)					7.9 (2.3)	10.7 (3.2)	8.9 (2.7)	40.9 (12.1)	7.6 (2.1)	10.3 (2.9)	9.0 (2.5)	41.0 (11.5)
2									8.0 (2.7)	10.9 (3.6)	9.1 (3.0)	41.3 (13.8)	7.2 (2.2)	9.8 (3.1)	8.5 (2.7)	38.9 (12.1)
3																
4	7.3 (2.3)	10.0 (3.2)	10.6 (3.4)	47.1 (15.0)					5.9 (2.1)	8.0 (2.9)	6.7 (2.4)	30.2 (10.9)	7.3 (2.6)	10.0 (3.6)	8.7 (3.1)	39.2 (14.2)
5	8.4 (2.3)	11.5 (3.2)	12.2 (3.4)	54.3 (15.0)					7.4 (2.3)	10.2 (3.1)	8.5 (2.6)	38.3 (11.7)	9.4 (2.4)	12.9 (3.2)	11.2 (2.8)	50.6 (12.7)
6	7.1 (1.5)	9.7 (2.1)	10.5 (2.3)	46.6 (10.3)					11.9 (8.5)	16.3 (11.6)	13.7 (9.7)	61.4 (43.5)	10.0 (2.3)	13.7 (3.2)	12.1 (2.9)	54.3 (12.8)
7	7.2 (1.1)	9.8 (1.5)	11.5 (1.9)	50.7 (8.5)					7.1 (1.5)	9.7 (2.0)	8.1 (1.7)	36.3 (7.4)				
8	7.7 (0.8)	10.5 (1.1)	13.6 (1.7)	59.6 (7.3)	7.1 (1.0)	9.7 (1.4)	13.8 (2.0)	61.7 (8.8)	8.8 (1.0)	12.1 (1.4)	10.5 (1.4)	46.9 (6.0)	6.5 (0.8)	8.9 (1.2)	9.0 (1.1)	40.2 (4.9)
9	8.3 (1.5)	11.3 (2.0)	15.8 (2.8)	70.2 (12.3)	8.5 (2.3)	11.6 (3.2)	16.5 (4.5)	73.5 (20.0)	6.9 (1.1)	9.5 (1.5)	9.6 (1.7)	43.3 (7.6)	6.9 (2.1)	9.4 (2.8)	10.2 (3.1)	45.7 (13.7)
10	6.7 (1.0)	9.1 (1.4)	12.9 (2.0)	57.9 (8.9)	8.0 (2.0)	10.9 (2.7)	15.6 (3.9)	69.3 (17.2)	6.0 (1.3)	8.2 (1.8)	8.5 (1.9)	38.6 (8.6)	6.2 (0.7)	8.4 (1.0)	9.3 (1.1)	41.9 (4.9)
11	8.6 (2.3)	11.7 (3.1)	16.7 (4.4)	74.7 (19.6)	5.9 (1.7)	8.1 (2.3)	11.5 (3.3)	51.0 (14.3)	5.3 (1.9)	7.2 (2.6)	7.6 (2.7)	34.2 (12.1)	7.4 (1.3)	10.2 (1.7)	11.2 (1.9)	50.4 (8.6)
12	6.7 (1.4)	9.2 (2.0)	13.2 (2.8)	58.6 (12.6)	6.9 (0.8)	9.4 (1.1)	13.5 (1.6)	59.4 (6.9)	5.6 (1.8)	7.7 (2.4)	8.1 (2.6)	36.3 (11.4)	6.1 (0.9)	8.3 (1.2)	9.2 (1.4)	41.2 (6.1)
13	8.6 (2.7)	11.7 (3.7)	17.3 (5.6)	76.4 (24.5)	5.8 (1.7)	7.9 (2.3)	11.5 (3.2)	50.5 (14.2)	5.1 (1.4)	7.0 (1.9)	7.3 (2.0)	32.7 (8.9)	6.5 (0.9)	8.9 (1.3)	10.0 (1.4)	44.9 (6.3)
14	10.0 (3.5)	13.6 (4.8)	22.3 (7.9)	98.5 (34.6)	6.0 (1.5)	8.2 (2.0)	13.4 (3.2)	58.6 (14.1)	4.8 (1.8)	6.6 (2.4)	7.0 (2.6)	31.0 (11.4)	8.3 (3.8)	11.4 (5.2)	13.9 (6.3)	61.9 (28.2)
15	8.0 (2.7)	10.9 (3.7)	20.5 (6.8)	89.8 (29.8)	4.7 (1.3)	6.4 (1.8)	12.0 (3.5)	52.2 (15.2)	5.2 (1.6)	7.1 (2.1)	7.9 (2.5)	35.2 (10.9)	6.8 (1.0)	9.3 (1.4)	12.6 (2.0)	55.9 (8.9)
16	7.0 (0.9)	9.5 (1.2)	20.3 (2.6)	90.7 (11.6)	5.4 (2.0)	7.4 (2.7)	15.8 (5.9)	69.6 (26.0)	5.4 (1.6)	7.3 (2.2)	10.2 (3.4)	46.0 (15.6)	6.2 (1.1)	8.5 (1.5)	12.6 (2.3)	56.5 (10.4)
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
Avg	7.7	10.5	14.7	65.4	6.5	8.8	13.7	60.6	6.8	9.2	8.8	39.5	7.3	10.0	10.5	47.3
n	14	14	14	14	9	9	9	9	15	15	15	15	14	14	14	14
SD	0.92	1.26	4.01	17.7	1.18	1.61	1.77	8.13	1.82	2.49	1.69	7.62	1.15	1.57	1.66	7.27
Min	6.7	9.1	9.0	40.0	4.7	6.4	11.5	50.5	4.8	6.6	6.7	30.2	6.1	8.3	8.5	38.9
Max	9.95	13.6	22.3	98.5	8.48	11.6	16.5	73.5	11.9	16.3	13.7	61.4	10	13.7	13.9	61.9

ED_004549_00015928-00309

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for September, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1													0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
2													0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
3																
4																
5																
6																
7																
8																
9																
10																
11	3.2 (0.7)	4.3 (1.0)	1.4 (0.3)	74.6 (17.8)	5.7 (1.6)	7.8 (2.2)	2.6 (0.7)	104.0 (29.0)	2.4 (1.5)	3.2 (2.0)	0.0 (0.0)	0.0 (0.0)				
12	3.6 (0.9)	4.9 (1.2)	1.6 (0.4)	80.2 (20.2)	5.8 (1.6)	7.9 (2.2)	2.7 (0.8)	102.0 (28.6)	2.8 (1.8)	3.8 (2.4)	0.0 (0.0)	0.0 (0.0)				
13					5.7 (1.1)	7.8 (1.5)	2.6 (0.5)	97.6 (18.5)								
14	4.0 (1.1)	5.5 (1.5)	1.8 (0.5)	82.3 (22.1)	6.1 (2.1)	8.3 (2.8)	2.8 (1.0)	101.0 (34.0)								
15	4.5 (1.1)	6.2 (1.5)	2.0 (0.5)	88.9 (22.0)	6.4 (1.6)	8.7 (2.2)	3.0 (0.7)	103.0 (25.3)	3.7 (1.4)	5.1 (1.9)	0.0 (0.0)	0.0 (0.0)				
16	4.7 (1.1)	6.4 (1.5)	2.1 (0.5)	89.5 (21.3)	6.8 (1.5)	9.3 (2.0)	3.1 (0.7)	106.0 (22.8)	2.4 (1.8)	3.2 (2.5)	0.0 (0.0)	0.0 (0.0)				
17	4.5 (1.0)	6.1 (1.4)	2.0 (0.5)	81.6 (19.1)	7.2 (1.2)	9.9 (1.6)	3.4 (0.6)	110.0 (17.8)	1.9 (1.9)	2.6 (2.5)	0.0 (0.0)	0.0 (0.0)				
18	5.3 (1.1)	7.2 (1.6)	2.3 (0.5)	93.2 (20.0)	6.6 (2.5)	9.0 (3.5)	3.2 (1.4)	102.0 (42.1)								
19	5.0 (1.3)	6.8 (1.8)	2.2 (0.6)	84.9 (22.3)	7.6 (3.1)	10.4 (4.3)	4.4 (1.8)	136.0 (56.5)	1.0 (1.4)	1.3 (1.9)	0.0 (0.0)	0.0 (0.0)				
20	4.7 (1.4)	6.4 (2.0)	2.1 (0.6)	78.2 (23.7)	5.5 (2.3)	7.5 (3.1)	4.0 (1.6)	121.0 (47.7)	1.7 (1.8)	2.3 (2.5)	0.0 (0.0)	0.0 (0.0)				
21	5.1 (1.1)	7.0 (1.6)	2.3 (0.5)	82.4 (18.4)	5.7 (1.8)	7.7 (2.5)	5.2 (1.5)	154.0 (45.9)								
22	4.3 (1.2)	5.8 (1.6)	1.9 (0.5)	67.0 (18.5)	4.2 (1.5)	5.7 (2.1)	4.0 (1.5)	114.0 (42.2)	2.0 (1.9)	2.8 (2.6)	1.8 (1.7)	50.8 (48.0)	2.3 (1.0)	3.2 (1.4)	0.0 (0.0)	0.0 (0.0)
23	4.2 (1.2)	5.8 (1.7)	1.9 (0.5)	64.1 (18.7)	6.1 (1.7)	8.3 (2.4)	5.9 (1.7)	163.0 (45.7)	4.9 (1.5)	6.6 (2.0)	4.3 (1.3)	118.0 (36.3)	2.7 (1.4)	3.6 (1.9)	0.0 (0.0)	0.0 (0.0)
24									3.7 (3.7)	5.1 (5.0)	3.3 (3.3)	87.4 (86.7)				
25																
26					6.8 (2.8)	9.3 (3.8)	6.5 (2.7)	168.0 (69.6)	1.2 (0.7)	1.7 (1.0)	1.1 (0.6)	27.8 (15.6)				
27	6.6 (1.7)	9.0 (2.3)	4.6 (1.2)	142.0 (37.3)	3.9 (0.8)	5.3 (1.1)	3.8 (0.8)	93.5 (19.2)	3.6 (1.1)	4.9 (1.6)	3.2 (1.0)	78.5 (24.9)	1.5 (0.4)	2.0 (0.5)	0.0 (0.0)	0.0 (0.0)
28																
29	6.2 (2.3)	8.5 (3.2)	5.7 (2.1)	166.0 (62.6)	4.3 (1.3)	5.8 (1.8)	4.1 (1.3)	97.6 (30.4)	4.1 (1.7)	5.6 (2.4)	3.7 (1.5)	84.5 (36.0)	2.9 (1.5)	3.9 (2.1)	2.6 (1.4)	62.2 (32.9)
30	5.8 (2.1)	7.9 (2.9)	5.3 (1.9)	150.0 (55.1)	5.3 (1.6)	7.3 (2.2)	5.2 (1.6)	118.0 (35.4)	4.3 (1.3)	5.8 (1.8)	3.8 (1.2)	85.5 (27.1)	2.7 (1.3)	3.7 (1.8)	2.4 (1.2)	56.7 (27.1)
Avg	4.8	6.5	2.6	94.9	5.9	8.0	3.9	117.0	2.8	3.9	1.5	38.0	1.7	2.4	0.7	17.0
n	15	15	15	15	17	17	17	17	14	14	14	14	7	7	7	7
SD	0.9	1.22	1.34	30	1.01	1.38	1.15	23.1	1.17	1.6	1.7	42.5	1.16	1.59	1.13	26.9
Min	3.2	4.3	1.4	64.1	3.9	5.3	2.6	93.5	1.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Max	6.58	8.99	5.71	166	7.62	10.4	6.54	168	4.86	6.64	4.33	118	2.86	3.91	2.58	62.2

ED_004549_00015928-00310

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for October, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	3.3 (0.9)	4.5 (1.2)	3.1 (0.8)	83.8 (21.7)	3.6 (1.8)	4.9 (2.4)	3.4 (1.7)	76.8 (38.4)	2.1 (0.5)	2.8 (0.7)	1.8 (0.4)	40.1 (9.5)	0.5 (0.3)	0.7 (0.4)	0.5 (0.3)	11.2 (5.7)
2	4.8 (1.8)	6.6 (2.5)	4.4 (1.7)	118.0 (44.4)	3.8 (1.3)	5.2 (1.8)	3.7 (1.3)	79.5 (27.1)	3.8 (1.0)	5.2 (1.4)	3.4 (0.9)	71.8 (19.3)	2.2 (1.3)	3.0 (1.8)	2.0 (1.2)	43.3 (26.3)
3	3.6 (1.1)	4.9 (1.6)	3.3 (1.0)	85.0 (26.8)	4.4 (1.7)	6.0 (2.3)	4.3 (1.6)	90.0 (34.0)	3.0 (0.9)	4.1 (1.2)	2.7 (0.8)	55.1 (15.3)	1.4 (1.1)	1.9 (1.5)	1.3 (1.0)	26.8 (21.4)
4	5.1 (1.4)	7.0 (1.9)	4.7 (1.3)	120.0 (32.0)	5.8 (1.9)	7.9 (2.6)	5.6 (1.8)	115.0 (36.9)	4.9 (2.9)	6.7 (3.9)	4.4 (2.6)	87.3 (51.1)	2.7 (1.7)	3.7 (2.3)	2.5 (1.5)	51.7 (31.6)
5	4.4 (1.9)	6.0 (2.6)	4.0 (1.7)	98.9 (42.3)	6.8 (2.0)	9.3 (2.7)	6.6 (1.9)	132.0 (37.9)	3.5 (0.9)	4.8 (1.2)	3.2 (0.8)	61.4 (15.2)	2.4 (2.0)	3.3 (2.8)	2.2 (1.8)	44.5 (37.5)
6	3.8 (1.6)	5.2 (2.2)	3.5 (1.5)	84.3 (35.8)	6.5 (1.8)	8.9 (2.5)	6.3 (1.8)	123.0 (34.0)	4.7 (1.6)	6.4 (2.2)	4.2 (1.5)	78.8 (27.4)	2.5 (1.5)	3.4 (2.0)	2.3 (1.3)	45.1 (26.4)
7																
8																
9	3.8 (0.8)	5.2 (1.0)	3.5 (0.7)	77.9 (15.7)	5.7 (1.7)	7.8 (2.3)	5.6 (1.7)	100.0 (30.0)	4.3 (1.5)	5.8 (2.0)	3.8 (1.3)	66.2 (22.9)	1.6 (0.7)	2.2 (0.9)	1.4 (0.6)	26.5 (11.2)
10					4.9 (1.6)	6.6 (2.2)	4.7 (1.6)	82.1 (27.7)	5.7 (1.5)	7.7 (2.0)	5.1 (1.3)	85.3 (21.6)	3.0 (0.7)	4.0 (1.0)	2.7 (0.7)	47.5 (11.6)
11	5.5 (0.7)	7.5 (1.0)	5.1 (0.7)	107.0 (14.2)	5.6 (0.7)	7.7 (1.0)	5.5 (0.7)	92.7 (12.3)	5.2 (0.7)	7.1 (1.0)	4.7 (0.7)	76.1 (11.0)	2.8 (0.9)	3.8 (1.2)	2.5 (0.8)	43.2 (14.3)
12	5.8 (0.6)	7.9 (0.8)	5.3 (0.6)	109.0 (11.7)	5.8 (0.8)	8.0 (1.1)	5.6 (0.8)	93.2 (12.7)	5.6 (1.0)	7.7 (1.4)	5.1 (0.9)	80.5 (14.1)	2.7 (0.9)	3.7 (1.3)	2.5 (0.8)	41.7 (14.3)
13	5.5 (1.3)	7.5 (1.8)	5.1 (1.2)	101.0 (24.9)	5.6 (0.8)	7.7 (1.1)	5.5 (0.8)	87.9 (12.9)	5.7 (0.8)	7.8 (1.0)	5.1 (0.7)	79.5 (10.9)	3.0 (1.4)	4.1 (2.0)	2.7 (1.3)	44.4 (21.5)
14	4.4 (1.0)	5.9 (1.3)	4.0 (0.9)	77.7 (17.5)	5.0 (0.8)	6.9 (1.1)	4.9 (0.8)	76.0 (12.5)	4.9 (0.7)	6.7 (1.0)	4.4 (0.7)	66.5 (9.9)	1.7 (0.4)	2.3 (0.6)	1.5 (0.4)	24.1 (6.5)
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30	5.9 (1.1)	8.0 (1.5)	5.5 (1.0)	69.0 (12.7)	5.9 (1.0)	8.0 (1.4)	5.7 (1.0)	59.8 (10.5)	5.1 (0.9)	7.0 (1.3)	4.6 (0.8)	46.1 (8.4)	3.8 (0.9)	5.2 (1.3)	3.4 (0.8)	37.2 (9.2)
31	6.4 (1.3)	8.7 (1.8)	5.9 (1.2)	72.9 (14.5)	6.5 (2.2)	8.9 (3.0)	6.3 (2.1)	65.1 (21.5)	5.4 (1.9)	7.4 (2.7)	4.9 (1.8)	47.8 (17.3)	3.4 (0.7)	4.6 (0.9)	3.0 (0.6)	31.9 (6.3)
Avg	4.8	6.5	4.4	92.6	5.4	7.4	5.3	90.9	4.6	6.2	4.1	67.3	2.4	3.3	2.2	37.1
n	13	13	13	13	14	14	14	14	14	14	14	14	14	14	14	14
SD	0.96	1.31	0.89	16.5	0.95	1.3	0.92	20	1.06	1.45	0.95	14.7	0.83	1.13	0.75	11
Min	3.3	4.5	3.1	69.0	3.6	4.9	3.4	59.8	2.1	2.8	1.8	40.1	0.5	0.7	0.5	11.2
Max	6.38	8.71	5.91	120	6.81	9.3	6.58	132	5.72	7.82	5.13	87.3	3.81	5.21	3.44	51.7

ED_004549_00015928-00311

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for November, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	5.6 (0.7)	7.6 (0.9)	5.2 (0.6)	62.4 (7.2)	6.3 (1.2)	8.6 (1.7)	6.1 (1.2)	60.9 (11.8)	6.0 (1.0)	8.3 (1.3)	5.5 (0.9)	52.2 (8.3)	4.4 (0.8)	6.0 (1.1)	4.0 (0.7)	40.9 (7.2)
2	5.6 (0.9)	7.6 (1.2)	5.2 (0.8)	60.6 (9.9)	7.1 (1.4)	9.7 (2.0)	6.9 (1.4)	67.8 (13.8)	5.5 (1.3)	7.5 (1.7)	4.9 (1.1)	46.3 (10.7)	4.4 (1.3)	6.0 (1.8)	3.9 (1.2)	39.9 (12.0)
3	5.7 (1.1)	7.8 (1.5)	5.3 (1.0)	60.9 (11.3)	6.8 (1.8)	9.3 (2.5)	6.6 (1.7)	63.2 (16.7)	5.8 (1.5)	7.9 (2.1)	5.2 (1.4)	48.1 (12.5)	4.4 (0.7)	6.0 (1.0)	3.9 (0.6)	38.9 (6.4)
4	5.5 (1.0)	7.5 (1.4)	5.1 (0.9)	57.0 (10.3)	6.3 (1.1)	8.6 (1.5)	6.1 (1.0)	57.2 (9.7)	5.3 (1.2)	7.3 (1.6)	4.8 (1.1)	43.2 (9.4)	3.8 (1.0)	5.2 (1.3)	3.5 (0.9)	33.4 (8.6)
5	5.3 (1.2)	7.3 (1.7)	4.9 (1.2)	54.0 (12.5)	6.3 (2.4)	8.7 (3.2)	6.2 (2.3)	56.6 (20.9)	4.7 (1.5)	6.5 (2.0)	4.3 (1.3)	37.5 (11.6)	4.0 (1.1)	5.5 (1.6)	3.6 (1.0)	34.1 (9.7)
6	6.5 (0.4)	8.9 (0.6)	6.0 (0.4)	64.4 (4.2)	6.3 (0.5)	8.6 (0.6)	6.1 (0.4)	55.0 (4.2)	5.9 (0.9)	8.0 (1.2)	5.3 (0.8)	45.8 (6.5)				
7																
8																
9																
10					5.8 (0.6)	7.9 (0.9)	5.6 (0.6)	46.8 (5.3)	6.3 (1.0)	8.7 (1.3)	5.7 (0.9)	45.6 (7.0)	3.7 (1.1)	5.0 (1.5)	3.3 (1.0)	28.4 (8.6)
11	8.0 (1.7)	10.9 (2.3)	7.4 (1.6)	71.2 (15.0)	5.4 (0.7)	7.4 (0.9)	5.3 (0.6)	43.1 (5.2)	6.0 (1.6)	8.2 (2.3)	5.4 (1.5)	42.4 (11.7)	3.7 (0.8)	5.0 (1.0)	3.3 (0.7)	27.9 (5.6)
12	7.2 (1.3)	9.8 (1.8)	6.7 (1.2)	62.6 (11.1)	8.5 (3.0)	11.5 (4.1)	8.2 (2.9)	65.7 (23.2)	6.2 (1.5)	8.5 (2.0)	5.6 (1.3)	43.2 (10.2)	4.5 (1.9)	6.2 (2.6)	4.1 (1.7)	33.7 (14.2)
13																
14																
15																
16																
17	7.0 (1.6)	9.6 (2.2)	6.6 (1.5)	55.6 (12.7)	6.9 (1.0)	9.4 (1.4)	6.7 (1.0)	49.1 (7.0)	7.5 (1.9)	10.2 (2.6)	6.8 (1.7)	47.7 (12.0)	3.6 (0.6)	4.9 (0.8)	3.3 (0.5)	24.6 (4.1)
18	6.5 (0.8)	8.9 (1.0)	6.1 (0.7)	50.5 (5.8)	6.9 (0.7)	9.4 (1.0)	6.7 (0.7)	48.2 (4.9)	7.7 (2.3)	10.6 (3.1)	7.0 (2.0)	48.5 (14.0)	4.0 (0.6)	5.4 (0.8)	3.6 (0.6)	26.6 (4.1)
19	6.1 (1.2)	8.3 (1.7)	5.6 (1.1)	46.1 (9.3)												
20	9.3 (2.8)	12.7 (3.8)	8.7 (2.6)	69.7 (20.9)	12.9 (2.3)	17.6 (3.2)	12.5 (2.3)	87.4 (15.8)	8.2 (1.8)	11.2 (2.5)	7.4 (1.7)	49.8 (11.1)	6.4 (2.6)	8.7 (3.6)	5.7 (2.4)	41.2 (17.1)
21	9.6 (2.6)	13.2 (3.6)	9.0 (2.5)	70.8 (19.4)	10.1 (3.1)	13.8 (4.2)	9.8 (3.0)	67.4 (20.8)	9.9 (2.4)	13.5 (3.2)	9.0 (2.2)	59.2 (14.1)				
22	8.1 (1.1)	11.1 (1.5)	7.6 (1.0)	58.5 (8.0)	7.1 (0.7)	9.7 (1.0)	6.9 (0.7)	46.9 (4.5)	8.1 (1.1)	11.1 (1.5)	7.4 (1.0)	48.1 (6.3)				
23	7.2 (0.7)	9.8 (0.9)	6.7 (0.6)	50.7 (4.8)	8.0 (0.7)	11.0 (0.9)	7.8 (0.7)	52.0 (4.2)	7.8 (0.8)	10.7 (1.1)	7.1 (0.7)	45.7 (4.6)	6.2 (0.6)	8.5 (0.9)	5.6 (0.6)	38.3 (3.8)
24	7.3 (1.1)	9.9 (1.6)	6.8 (1.1)	50.7 (8.0)	7.7 (0.7)	10.5 (0.9)	7.4 (0.7)	48.8 (4.3)	7.4 (0.6)	10.1 (0.9)	6.7 (0.6)	42.6 (3.5)	6.1 (0.8)	8.4 (1.1)	5.5 (0.7)	37.3 (5.1)
25	7.3 (0.8)	10.0 (1.1)	6.8 (0.8)	50.1 (5.9)	7.5 (0.4)	10.2 (0.5)	7.2 (0.4)	46.9 (2.6)	7.8 (1.0)	10.6 (1.3)	7.1 (0.9)	44.2 (5.5)	6.1 (0.6)	8.3 (0.8)	5.5 (0.5)	36.6 (3.5)
26	6.8 (0.7)	9.3 (0.9)	6.3 (0.6)	45.8 (4.4)	7.3 (0.5)	10.0 (0.7)	7.1 (0.5)	45.2 (3.1)	7.6 (0.7)	10.4 (0.9)	6.9 (0.6)	42.8 (3.6)				
27	8.5 (1.4)	11.7 (1.9)	8.0 (1.3)	56.7 (9.0)	7.7 (1.1)	10.5 (1.5)	7.5 (1.1)	47.1 (6.9)	8.3 (0.9)	11.3 (1.2)	7.5 (0.8)	45.9 (4.9)	5.3 (1.1)	7.2 (1.4)	4.8 (1.0)	30.7 (6.1)
28	8.6 (1.8)	11.7 (2.4)	8.0 (1.7)	56.3 (11.7)	7.9 (1.1)	10.8 (1.5)	7.7 (1.1)	47.6 (6.8)	8.4 (1.9)	11.5 (2.6)	7.7 (1.7)	46.0 (10.2)	5.6 (1.2)	7.6 (1.7)	5.0 (1.1)	32.0 (7.1)
29	8.5 (1.2)	11.6 (1.6)	7.9 (1.1)	54.8 (7.4)	8.0 (0.8)	10.9 (1.1)	7.8 (0.8)	47.7 (4.9)	8.7 (1.5)	11.9 (2.0)	7.9 (1.3)	46.9 (7.8)	6.6 (1.2)	9.0 (1.7)	6.0 (1.1)	37.6 (6.9)
30	8.3 (1.5)	11.3 (2.1)	7.7 (1.4)	52.5 (9.7)	6.8 (1.2)	9.3 (1.6)	6.6 (1.2)	40.2 (7.2)	8.6 (1.3)	11.8 (1.8)	7.9 (1.2)	46.0 (7.0)	5.7 (0.5)	7.8 (0.7)	5.2 (0.5)	32.2 (3.0)
Avg	7.2	9.8	6.7	57.3	7.4	10.1	7.2	54.1	7.2	9.8	6.5	46.3	4.9	6.7	4.4	34.1
n	22	22	22	22	22	22	22	22	22	22	22	22	18	18	18	18
SD	1.26	1.72	1.19	7.21	1.54	2.11	1.5	10.7	1.31	1.79	1.21	4.1	1.03	1.41	0.93	4.93
Min	5.3	7.3	4.9	45.8	5.4	7.4	5.3	40.2	4.7	6.5	4.3	37.5	3.6	4.9	3.3	24.6
Max	9.63	13.2	8.98	71.2	12.9	17.6	12.5	87.4	9.86	13.5	8.95	59.2	6.6	9.02	5.96	41.2

ED_004549_00015928-00312

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for December, 2007.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	10.2 (1.0)	13.9 (1.3)	9.5 (0.9)	63.6 (6.1)					8.6 (0.9)	11.7 (1.2)	7.8 (0.8)	45.1 (4.5)	6.2 (1.3)	8.5 (1.8)	5.6 (1.2)	34.4 (7.3)
2	8.7 (2.0)	11.9 (2.7)	8.2 (1.9)	53.8 (12.4)	9.5 (4.7)	13.0 (6.4)	9.3 (4.6)	54.8 (26.9)					6.7 (1.3)	9.1 (1.8)	6.0 (1.2)	36.6 (7.0)
3	10.9 (0.9)	14.8 (1.2)	10.2 (0.9)	66.2 (5.4)	6.8 (0.7)	9.3 (0.9)	6.6 (0.7)	38.6 (3.8)					7.2 (1.3)	9.8 (1.8)	6.5 (1.2)	38.9 (7.2)
4	10.9 (1.4)	14.9 (2.0)	10.2 (1.3)	65.5 (8.7)												
5	9.8 (0.8)	13.3 (1.1)	9.1 (0.8)	58.0 (4.7)	8.6 (0.8)	11.7 (1.0)	8.3 (0.7)	47.6 (4.1)	9.1 (0.6)	12.5 (0.8)	8.3 (0.5)	46.2 (3.0)	6.7 (1.2)	9.1 (1.7)	6.0 (1.1)	35.2 (6.5)
6	10.2 (1.1)	13.9 (1.5)	9.5 (1.0)	59.7 (6.4)	8.8 (1.0)	12.0 (1.3)	8.6 (0.9)	48.4 (5.2)	9.4 (1.5)	12.9 (2.1)	8.6 (1.4)	47.2 (7.6)	7.4 (1.2)	10.1 (1.6)	6.7 (1.1)	38.9 (6.3)
7	8.4 (0.8)	11.5 (1.1)	7.9 (0.7)	48.8 (4.4)	7.5 (0.6)	10.2 (0.8)	7.3 (0.6)	40.7 (3.1)	8.2 (1.0)	11.3 (1.3)	7.5 (0.9)	40.9 (4.7)	7.1 (1.0)	9.7 (1.3)	6.4 (0.9)	36.8 (5.1)
8	8.9 (0.9)	12.2 (1.2)	8.4 (0.8)	51.1 (5.0)	7.5 (0.7)	10.3 (0.9)	7.3 (0.6)	40.5 (3.4)	8.7 (0.9)	11.8 (1.2)	7.9 (0.8)	42.6 (4.2)	6.8 (1.0)	9.3 (1.3)	6.1 (0.9)	34.8 (5.0)
9	11.0 (1.3)	15.0 (1.7)	10.3 (1.2)	62.0 (7.0)	7.9 (0.5)	10.8 (0.6)	7.7 (0.5)	42.2 (2.4)	9.7 (1.0)	13.2 (1.4)	8.8 (0.9)	47.2 (5.0)	5.8 (0.7)	8.0 (1.0)	5.3 (0.7)	29.7 (3.6)
10	10.8 (1.7)	14.7 (2.3)	10.1 (1.6)	60.2 (9.4)	8.1 (0.7)	11.0 (0.9)	7.8 (0.7)	42.5 (3.5)	9.2 (0.9)	12.5 (1.2)	8.4 (0.8)	44.3 (4.2)	6.4 (1.0)	8.7 (1.4)	5.8 (0.9)	32.0 (5.2)
11																
12	9.7 (2.0)	13.3 (2.8)	9.1 (1.9)	53.2 (11.0)	8.6 (1.2)	11.7 (1.6)	8.3 (1.1)	44.3 (6.0)	10.2 (3.1)	13.9 (4.2)	9.3 (2.8)	48.5 (14.6)	7.0 (0.7)	9.6 (1.0)	6.3 (0.7)	34.6 (3.7)
13	9.1 (1.2)	12.5 (1.6)	8.6 (1.1)	49.3 (6.4)	8.8 (0.9)	12.1 (1.2)	8.6 (0.9)	45.4 (4.5)	9.0 (1.5)	12.2 (2.1)	8.2 (1.4)	42.2 (7.2)	7.7 (0.8)	10.5 (1.1)	7.0 (0.7)	37.7 (3.8)
14	9.4 (1.3)	12.8 (1.8)	8.8 (1.2)	50.3 (6.9)	8.8 (0.9)	12.0 (1.2)	8.6 (0.8)	44.8 (4.3)	8.3 (0.8)	11.4 (1.1)	7.6 (0.8)	39.1 (3.8)	7.0 (0.7)	9.5 (1.0)	6.3 (0.7)	33.7 (3.5)
15	9.4 (1.7)	12.9 (2.3)	8.8 (1.6)	49.9 (8.8)	9.3 (0.8)	12.7 (1.1)	9.1 (0.8)	47.1 (3.9)	10.5 (1.1)	14.4 (1.5)	9.6 (1.0)	49.0 (4.9)	6.6 (1.2)	9.0 (1.7)	6.0 (1.1)	31.8 (5.9)
16	9.9 (1.0)	13.6 (1.3)	9.3 (0.9)	52.1 (4.9)	8.3 (1.7)	11.3 (2.3)	8.1 (1.7)	41.6 (8.6)	9.8 (1.2)	13.3 (1.7)	8.9 (1.1)	45.0 (5.6)	7.7 (1.6)	10.6 (2.2)	7.0 (1.5)	36.9 (7.7)
17	9.8 (1.7)	13.4 (2.3)	9.2 (1.6)	51.1 (8.8)	9.2 (0.9)	12.5 (1.2)	8.9 (0.9)	45.6 (4.4)	10.3 (1.5)	14.1 (2.0)	9.5 (1.4)	47.4 (6.9)				
18	8.7 (1.1)	11.9 (1.5)	8.2 (1.1)	45.0 (5.7)	9.1 (0.7)	12.4 (0.9)	8.9 (0.7)	45.0 (3.4)	9.6 (1.0)	13.2 (1.4)	8.8 (0.9)	43.9 (4.6)	8.3 (0.8)	11.3 (1.1)	7.5 (0.8)	38.8 (3.9)
19									9.9 (1.8)	13.5 (2.5)	9.1 (1.7)	44.8 (8.2)	7.6 (1.1)	10.4 (1.5)	6.9 (1.0)	35.4 (5.1)
20									10.1 (1.3)	13.7 (1.8)	9.2 (1.2)	45.3 (6.0)	8.4 (2.2)	11.5 (2.9)	7.6 (1.9)	39.0 (9.9)
21	8.8 (1.6)	12.1 (2.2)	8.3 (1.5)	44.4 (8.2)	8.6 (1.3)	11.8 (1.7)	8.4 (1.2)	41.6 (6.0)	9.0 (2.1)	12.3 (2.8)	8.3 (1.9)	40.3 (9.2)	9.1 (1.1)	12.4 (1.6)	8.2 (1.0)	41.8 (5.2)
22	9.0 (1.8)	12.3 (2.5)	8.5 (1.7)	44.8 (9.1)	10.5 (2.2)	14.3 (3.1)	10.2 (2.2)	50.3 (10.7)	12.2 (2.5)	16.7 (3.5)	11.2 (2.3)	54.4 (11.3)	7.7 (2.6)	10.5 (3.6)	7.0 (2.4)	35.1 (12.0)
23	8.1 (1.8)	11.1 (2.4)	7.6 (1.7)	40.1 (8.8)	9.8 (2.5)	13.4 (3.4)	9.5 (2.4)	46.7 (12.0)	4.3 (3.5)	5.9 (4.7)	4.0 (3.2)	19.2 (15.3)	7.9 (1.8)	10.7 (2.4)	7.1 (1.6)	35.6 (8.1)
24	10.3 (1.6)	14.1 (2.2)	9.7 (1.5)	50.6 (7.7)	8.8 (0.5)	12.0 (0.7)	8.6 (0.5)	41.8 (2.5)	8.9 (2.8)	12.1 (3.9)	8.1 (2.6)	39.0 (12.4)	8.9 (0.8)	12.2 (1.0)	8.1 (0.7)	40.2 (3.4)
25	12.0 (1.5)	16.4 (2.0)	11.3 (1.4)	58.6 (7.3)	9.7 (1.7)	13.2 (2.3)	9.4 (1.6)	45.6 (7.9)	10.4 (1.9)	14.2 (2.6)	9.5 (1.7)	45.5 (8.2)	8.7 (1.3)	11.9 (1.8)	7.9 (1.2)	38.9 (5.8)
26	10.6 (1.3)	14.5 (1.7)	10.0 (1.2)	51.4 (6.0)	9.5 (2.8)	13.0 (3.8)	9.3 (2.7)	44.7 (13.1)	10.8 (2.2)	14.7 (3.0)	9.9 (2.0)	46.9 (9.6)	8.3 (1.6)	11.3 (2.2)	7.5 (1.5)	36.9 (7.3)
27																
28	10.0 (1.7)	13.7 (2.4)	9.4 (1.6)	47.7 (8.3)	9.5 (1.4)	13.0 (1.9)	9.3 (1.4)	44.3 (6.5)	10.9 (3.0)	14.9 (4.2)	10.0 (2.8)	47.0 (13.1)	8.7 (0.9)	11.9 (1.3)	7.9 (0.9)	38.2 (4.1)
29	10.8 (1.5)	14.7 (2.1)	10.1 (1.4)	51.0 (7.2)	8.9 (0.6)	12.1 (0.8)	8.7 (0.6)	41.0 (2.8)	9.6 (0.9)	13.1 (1.3)	8.8 (0.9)	41.1 (4.0)	9.1 (0.8)	12.4 (1.1)	8.2 (0.7)	39.8 (3.6)
30	10.7 (2.0)	14.6 (2.8)	10.1 (1.9)	50.6 (9.5)	9.1 (1.0)	12.4 (1.4)	8.9 (1.0)	41.8 (4.7)	10.0 (1.6)	13.7 (2.2)	9.2 (1.5)	42.8 (6.9)	9.6 (0.8)	13.2 (1.0)	8.7 (0.7)	41.9 (3.3)
31	10.5 (1.7)	14.3 (2.4)	9.9 (1.6)	49.0 (8.1)	9.2 (1.6)	12.6 (2.2)	9.0 (1.6)	42.2 (7.3)	11.5 (3.0)	15.7 (4.0)	10.6 (2.7)	48.9 (12.5)	8.9 (1.5)	12.1 (2.1)	8.0 (1.4)	38.5 (6.6)
Avg	9.9	13.5	9.3	52.9	8.8	12.0	8.6	44.4	9.5	13.0	8.7	44.0	7.7	10.5	7.0	36.7
n	27	27	27	27	25	25	25	25	26	26	26	26	27	27	27	27
SD	0.92	1.26	0.87	6.57	0.8	1.1	0.79	3.48	1.4	1.92	1.29	6.02	1	1.37	0.91	2.93
Min	8.1	11.1	7.6	40.1	6.8	9.3	6.6	38.6	4.3	5.9	4.0	19.2	5.8	8.0	5.3	29.7
Max	12	16.4	11.3	66.2	10.5	14.3	10.2	54.8	12.2	16.7	11.2	54.4	9.63	13.2	8.72	41.9

ED_004549_00015928-00313

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for February, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19													0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
20													0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
21													0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
22																
23													0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
24													0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
25													0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
26	3.7 (0.9)	5.0 (1.2)	1.3 (2.9)	114.0 (260.0)					1.9 (0.6)	2.5 (0.9)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
27	5.4 (0.3)	7.3 (0.4)	2.2 (0.1)	188.0 (11.0)					1.2 (0.4)	1.6 (0.6)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
28	5.5 (0.4)	7.4 (0.6)	2.2 (0.2)	175.0 (16.4)					2.2 (0.2)	3.1 (0.3)	0.0 (0.0)	0.0 (0.0)	0.0 (0.5)	0.0 (0.7)	0.0 (0.0)	0.0 (0.0)
29	4.6 (1.0)	6.3 (1.3)	1.9 (0.4)	136.0 (31.4)					2.2 (0.3)	3.0 (0.5)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Avg	4.8	6.5	1.9	153.0					1.9	2.6	0.0	0.0	0.0	0.0	0.0	0.0
n	4	4	4	4	0	0	0	0	4	4	4	4	10	10	10	10
SD	0.72	0.98	0.38	29.9					0.44	0.6	0	0	0.01	0.01	0	0
Min	3.7	5.0	1.3	114.0					1.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0
Max	5.45	7.44	2.22	188					2.24	3.06	0	0	0.02	0.03	0	0

ED_004549_00015928-00314

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for March, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	4.9 (0.8)	6.7 (1.0)	2.0 (0.3)	132.0 (18.3)					2.0 (0.3)	2.8 (0.5)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
2	5.2 (1.2)	7.1 (1.6)	2.1 (0.5)	131.0 (31.4)					2.3 (0.6)	3.2 (0.9)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
3	4.9 (0.7)	6.7 (1.0)	2.0 (0.3)	115.0 (15.8)					2.6 (0.3)	3.6 (0.4)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
4	6.2 (1.8)	8.5 (2.4)	2.5 (0.7)	138.0 (39.8)					2.1 (0.4)	2.9 (0.5)	0.0 (0.0)	0.0 (0.0)	0.0 (0.6)	0.0 (0.8)	0.0 (0.0)	0.0 (0.0)
5	6.3 (0.6)	8.6 (0.8)	2.6 (0.2)	134.0 (10.2)	2.3 (0.7)	3.1 (0.9)	0.9 (0.3)	87.3 (24.1)	2.3 (0.1)	3.1 (0.1)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
6	7.2 (0.3)	9.8 (0.4)	3.0 (0.1)	145.0 (7.1)	3.1 (0.6)	4.3 (0.8)	1.3 (0.3)	111.0 (23.4)	2.2 (0.2)	3.0 (0.3)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
7	8.9 (3.0)	12.2 (4.1)	3.7 (1.2)	171.0 (57.5)	3.6 (0.3)	5.0 (0.4)	1.5 (0.1)	117.0 (9.7)					0.0 (0.4)	0.0 (0.6)	0.0 (0.0)	0.0 (0.0)
8	7.5 (0.9)	10.2 (1.2)	3.1 (0.4)	138.0 (17.2)	3.9 (0.5)	5.3 (0.6)	1.6 (0.2)	113.0 (14.8)	2.3 (0.3)	3.2 (0.4)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
9	7.1 (0.5)	9.7 (0.6)	2.9 (0.2)	125.0 (8.7)	4.1 (0.6)	5.6 (0.8)	1.7 (0.2)	112.0 (16.7)	2.2 (0.2)	3.1 (0.2)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
10	7.1 (0.3)	9.7 (0.4)	2.9 (0.1)	121.0 (5.2)	4.1 (0.5)	5.7 (0.7)	1.7 (0.2)	105.0 (13.1)	2.3 (0.2)	3.1 (0.3)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
11	6.7 (0.5)	9.1 (0.7)	2.7 (0.2)	111.0 (9.3)	4.7 (0.5)	6.5 (0.7)	1.9 (0.2)	112.0 (12.8)	2.4 (0.3)	3.2 (0.4)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
12													0.0 (0.4)	0.0 (0.5)	0.0 (0.0)	0.0 (0.0)
13																
14																
15																
16	8.4 (0.9)	11.4 (1.2)	3.4 (0.4)	118.0 (12.7)	7.3 (1.1)	10.0 (1.5)	3.0 (0.4)	138.0 (21.2)	2.4 (0.2)	3.3 (0.3)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
17	7.4 (0.9)	10.1 (1.2)	3.1 (0.3)	104.0 (11.4)	9.8 (3.2)	13.4 (4.4)	4.0 (1.3)	177.0 (58.4)	1.7 (0.6)	2.3 (0.8)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
18	7.6 (1.3)	10.3 (1.7)	3.6 (0.6)	116.0 (18.5)	5.7 (2.0)	7.8 (2.8)	2.3 (0.8)	99.2 (35.7)								
19	8.2 (1.1)	11.2 (1.5)	4.4 (0.5)	140.0 (16.9)	6.6 (0.6)	9.0 (0.8)	2.7 (0.2)	110.0 (10.0)								
20	7.7 (0.7)	10.5 (1.0)	4.9 (0.6)	151.0 (16.9)	6.2 (1.2)	8.5 (1.6)	2.5 (0.5)	101.0 (19.3)								
21	7.2 (1.1)	9.9 (1.4)	5.5 (0.8)	162.0 (23.7)	9.7 (4.4)	13.3 (6.0)	4.0 (1.8)	153.0 (69.0)								
22	8.0 (0.6)	10.9 (0.9)	6.2 (0.5)	177.0 (14.1)	8.2 (0.5)	11.1 (0.7)	3.3 (0.2)	125.0 (8.2)								
23	7.5 (0.8)	10.2 (1.1)	5.8 (0.6)	162.0 (18.4)	8.4 (0.6)	11.5 (0.8)	3.4 (0.2)	124.0 (8.6)								
24	7.4 (1.0)	10.1 (1.4)	5.7 (0.8)	155.0 (21.5)	8.2 (1.1)	11.2 (1.5)	3.3 (0.5)	117.0 (16.3)								
25	6.7 (1.1)	9.1 (1.5)	5.1 (0.8)	136.0 (23.0)	8.3 (1.7)	11.3 (2.3)	3.4 (0.6)	117.0 (22.5)								
26	6.6 (0.8)	9.1 (1.1)	5.1 (0.6)	132.0 (16.4)	8.2 (0.7)	11.2 (0.9)	3.6 (0.3)	121.0 (9.3)								
27	6.6 (0.8)	9.0 (1.1)	5.1 (0.6)	128.0 (15.4)	8.8 (1.3)	12.0 (1.8)	4.3 (0.7)	138.0 (22.5)								
28	6.3 (1.4)	8.7 (1.9)	4.9 (1.1)	119.0 (25.5)	8.4 (0.6)	11.4 (0.8)	4.5 (0.3)	140.0 (8.6)								
29	6.2 (1.8)	8.4 (2.5)	4.8 (1.4)	113.0 (33.5)	8.9 (3.1)	12.1 (4.2)	5.3 (1.9)	161.0 (56.9)					3.2 (1.6)	4.4 (2.2)	2.9 (1.5)	70.6 (36.1)
30	6.8 (0.7)	9.3 (0.9)	5.2 (0.5)	121.0 (12.4)	7.6 (1.4)	10.3 (1.9)	5.1 (0.8)	149.0 (25.1)					3.0 (1.1)	4.0 (1.5)	2.7 (1.0)	63.9 (23.8)
31	6.7 (0.9)	9.2 (1.3)	5.2 (0.8)	118.0 (16.5)	6.3 (0.8)	8.6 (1.0)	4.7 (0.5)	136.0 (15.7)					2.1 (0.2)	2.8 (0.3)	1.9 (0.2)	43.7 (4.9)
Avg	6.9	9.5	4.0	134.0	6.6	9.1	3.0	125.0	2.2	3.1	0.0	0.0	0.5	0.7	0.5	10.5
n	27	27	27	27	23	23	23	23	12	12	12	12	17	17	17	17
SD	0.95	1.29	1.29	18.8	2.21	3.01	1.26	21.1	0.21	0.29	0	0	1.06	1.45	0.98	23.2
Min	4.9	6.7	2.0	104.0	2.3	3.1	0.9	87.3	1.7	2.3	0.0	0.0	0.0	0.0	0.0	0.0
Max	8.91	12.2	6.15	177	9.79	13.4	5.31	177	2.63	3.59	0	0	3.19	4.36	2.94	70.6

ED_004549_00015928-00315

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for April, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	7.0 (0.4)	9.6 (0.5)	5.7 (0.4)	124.0 (7.3)	5.5 (0.7)	7.5 (1.0)	4.2 (0.6)	118.0 (16.2)					3.5 (0.5)	4.8 (0.7)	3.2 (0.5)	72.2 (10.2)
2	7.1 (0.5)	9.8 (0.7)	6.1 (0.5)	129.0 (9.4)	5.3 (0.9)	7.2 (1.3)	4.3 (0.7)	117.0 (20.2)								
3	7.2 (0.6)	9.9 (0.9)	6.5 (0.6)	134.0 (11.6)	5.3 (0.6)	7.2 (0.8)	4.6 (0.5)	120.0 (13.6)	2.1 (0.5)	2.9 (0.7)	1.8 (0.5)	47.2 (12.1)	4.4 (0.3)	6.0 (0.4)	4.1 (0.3)	87.4 (6.4)
4					5.1 (0.6)	6.9 (0.9)	4.7 (0.6)	120.0 (14.5)	2.7 (0.8)	3.6 (1.1)	2.2 (0.7)	56.7 (17.0)	4.3 (0.5)	5.9 (0.7)	4.0 (0.4)	84.1 (9.4)
5	6.1 (1.4)	8.3 (1.9)	5.8 (1.3)	113.0 (25.8)	4.8 (0.8)	6.6 (1.1)	4.5 (0.8)	111.0 (19.4)	2.7 (1.1)	3.6 (1.5)	2.2 (0.9)	55.7 (23.7)	4.7 (1.2)	6.4 (1.7)	4.3 (1.1)	89.8 (23.7)
6	5.2 (1.2)	7.0 (1.7)	4.9 (1.2)	92.4 (22.2)	5.1 (1.7)	7.0 (2.3)	4.8 (1.6)	115.0 (37.1)	2.3 (1.2)	3.2 (1.7)	2.0 (1.0)	47.3 (25.1)	4.2 (0.8)	5.7 (1.1)	3.8 (0.7)	78.3 (15.0)
7	4.9 (0.8)	6.7 (1.1)	4.6 (0.7)	85.2 (13.9)	5.0 (1.4)	6.9 (1.9)	4.7 (1.3)	109.0 (30.7)	1.6 (0.8)	2.2 (1.1)	1.4 (0.7)	31.9 (16.3)	4.4 (0.9)	6.1 (1.3)	4.1 (0.9)	82.2 (17.2)
8	5.4 (0.8)	7.4 (1.1)	5.1 (0.8)	91.5 (14.2)	4.3 (1.8)	5.9 (2.4)	4.0 (1.7)	90.9 (38.1)								
9	5.3 (0.9)	7.2 (1.2)	5.0 (0.8)	86.7 (14.6)	5.7 (0.9)	7.7 (1.2)	5.3 (0.8)	116.0 (18.1)	2.4 (0.8)	3.2 (1.0)	2.0 (0.6)	45.0 (14.4)	4.9 (1.0)	6.6 (1.3)	4.5 (0.9)	86.8 (17.1)
10	5.6 (1.4)	7.7 (2.0)	5.4 (1.4)	90.4 (22.9)					3.0 (1.6)	4.1 (2.2)	2.5 (1.4)	56.4 (30.7)	4.4 (2.0)	6.0 (2.8)	4.1 (1.9)	77.2 (35.6)
11					6.5 (2.1)	8.9 (2.9)	6.1 (2.0)	126.0 (41.7)					8.3 (4.0)	11.3 (5.5)	7.6 (3.7)	143.0 (69.5)
12	5.5 (0.4)	7.4 (0.6)	5.2 (0.4)	82.6 (6.0)	6.2 (0.8)	8.4 (1.1)	5.8 (0.8)	116.0 (14.8)	2.7 (0.9)	3.6 (1.2)	2.2 (0.8)	47.7 (16.0)	5.7 (0.9)	7.7 (1.3)	5.2 (0.9)	96.1 (15.7)
13	6.5 (0.5)	8.9 (0.7)	6.2 (0.5)	95.8 (7.5)	6.5 (1.3)	8.9 (1.7)	6.1 (1.2)	120.0 (23.9)	4.1 (0.8)	5.6 (1.1)	3.5 (0.7)	72.3 (13.7)	5.6 (0.4)	7.7 (0.6)	5.2 (0.4)	93.9 (7.1)
14	6.1 (1.0)	8.3 (1.4)	5.8 (1.0)	87.5 (15.2)	5.4 (1.1)	7.4 (1.5)	5.0 (1.1)	96.2 (20.3)	3.5 (1.1)	4.8 (1.5)	2.9 (0.9)	60.4 (19.4)	5.0 (1.0)	6.8 (1.4)	4.6 (1.0)	81.5 (17.3)
15	5.3 (1.6)	7.2 (2.1)	5.0 (1.5)	74.0 (21.9)	4.0 (1.5)	5.4 (2.1)	3.7 (1.4)	69.1 (26.4)	3.2 (1.3)	4.4 (1.7)	2.7 (1.1)	54.5 (21.6)				
16	5.2 (1.2)	7.1 (1.7)	4.9 (1.2)	70.8 (16.8)	3.3 (1.5)	4.5 (2.1)	3.1 (1.4)	55.9 (26.1)	3.0 (1.0)	4.1 (1.4)	2.5 (0.9)	50.1 (17.0)	5.9 (2.0)	8.1 (2.7)	5.5 (1.9)	93.3 (31.4)
17	5.2 (1.0)	7.1 (1.4)	5.0 (1.0)	69.3 (13.6)	3.5 (2.3)	4.7 (3.1)	3.2 (2.1)	56.9 (37.3)	2.5 (1.0)	3.4 (1.4)	2.1 (0.9)	40.8 (17.0)	4.3 (1.5)	5.9 (2.1)	4.0 (1.4)	66.6 (23.0)
18	4.7 (1.4)	6.4 (1.9)	4.5 (1.3)	60.8 (17.8)					2.4 (1.3)	3.3 (1.7)	2.1 (1.1)	39.3 (20.1)	6.7 (4.0)	9.1 (5.5)	6.2 (3.7)	101.0 (61.1)
19	5.2 (1.4)	7.1 (1.9)	5.0 (1.3)	65.5 (17.7)	5.4 (2.4)	7.4 (3.3)	5.1 (2.2)	84.1 (36.9)	1.9 (0.6)	2.5 (0.8)	1.6 (0.5)	29.3 (9.0)	5.4 (2.0)	7.4 (2.8)	5.0 (1.9)	80.3 (30.1)
20	5.3 (1.2)	7.2 (1.7)	5.1 (1.2)	65.0 (15.1)	3.9 (1.4)	5.3 (2.0)	3.7 (1.3)	58.9 (21.6)	2.1 (0.7)	2.9 (1.0)	1.8 (0.6)	33.2 (11.2)	5.5 (1.9)	7.6 (2.6)	5.1 (1.8)	80.4 (27.7)
21	5.1 (1.3)	7.0 (1.8)	4.9 (1.2)	61.2 (15.6)	3.9 (1.6)	5.3 (2.2)	3.6 (1.5)	57.1 (24.0)	2.6 (1.2)	3.6 (1.7)	2.2 (1.0)	39.8 (18.8)	6.0 (1.8)	8.3 (2.4)	5.6 (1.6)	86.1 (25.1)
22	5.4 (1.6)	7.4 (2.2)	5.2 (1.5)	63.3 (19.0)	4.5 (2.1)	6.2 (2.9)	4.2 (2.0)	64.6 (30.8)	3.2 (1.6)	4.4 (2.1)	2.7 (1.3)	47.8 (23.2)	6.0 (1.9)	8.1 (2.6)	5.5 (1.8)	82.9 (26.7)
23	7.3 (3.4)	10.0 (4.7)	7.0 (3.3)	83.2 (39.2)	7.4 (2.5)	10.1 (3.4)	6.9 (2.3)	102.0 (34.6)	3.2 (1.3)	4.4 (1.8)	2.7 (1.1)	47.1 (19.6)				
24	5.5 (1.2)	7.5 (1.6)	5.2 (1.1)	60.7 (12.8)					3.3 (1.1)	4.5 (1.5)	2.8 (0.9)	47.3 (15.8)	7.1 (1.8)	9.7 (2.4)	6.5 (1.6)	94.4 (23.4)
25																
26	5.7 (1.8)	7.8 (2.4)	5.5 (1.7)	60.7 (18.5)	6.8 (3.2)	9.2 (4.4)	6.3 (3.0)	86.7 (40.9)	3.6 (0.9)	5.0 (1.3)	3.1 (0.8)	50.7 (12.7)	6.2 (2.7)	8.5 (3.6)	5.7 (2.5)	79.4 (34.0)
27	5.7 (1.3)	7.8 (1.7)	5.4 (1.2)	58.7 (13.0)	3.9 (1.8)	5.3 (2.5)	3.7 (1.7)	48.8 (23.1)	3.5 (0.8)	4.8 (1.1)	2.9 (0.7)	47.8 (11.6)	6.6 (2.2)	9.0 (3.0)	6.1 (2.0)	82.8 (27.4)
28	6.3 (1.9)	8.6 (2.6)	6.0 (1.8)	63.2 (19.1)	5.8 (1.6)	7.9 (2.2)	5.4 (1.5)	70.3 (19.4)	3.8 (0.7)	5.2 (1.0)	3.2 (0.6)	51.2 (9.6)	6.0 (1.9)	8.2 (2.6)	5.5 (1.7)	73.5 (22.9)
29	6.1 (1.2)	8.3 (1.7)	5.8 (1.2)	60.0 (12.0)					4.4 (0.7)	6.0 (1.0)	3.7 (0.6)	57.9 (9.3)	6.8 (1.9)	9.3 (2.5)	6.3 (1.7)	81.4 (22.3)
30	6.8 (1.3)	9.2 (1.8)	6.4 (1.2)	65.2 (12.6)	4.1 (2.2)	5.5 (3.0)	3.8 (2.0)	47.1 (25.2)	3.8 (1.6)	5.2 (2.1)	3.2 (1.3)	49.5 (20.2)				
Avg	5.8	7.9	5.4	81.3	5.1	6.9	4.7	91.1	2.9	4.0	2.5	48.3	5.5	7.5	5.1	86.5
n	27	27	27	27	25	25	25	25	25	25	25	25	24	24	24	24
SD	0.74	1.01	0.61	21.8	1.06	1.44	0.99	26.7	0.7	0.96	0.59	9.27	1.11	1.52	1.03	14.2
Min	4.7	6.4	4.5	58.7	3.3	4.5	3.1	47.1	1.6	2.2	1.4	29.3	3.5	4.8	3.2	66.6
Max	7.31	9.99	6.96	134	7.36	10.1	6.88	126	4.4	6.01	3.71	72.3	8.27	11.3	7.63	143

ED_004549_00015928-00316

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for May, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	6.3 (1.7)	8.6 (2.3)	6.0 (1.6)	59.5 (16.0)	3.7 (2.2)	5.0 (3.0)	3.5 (2.1)	41.7 (24.7)	3.8 (1.8)	5.2 (2.4)	3.2 (1.5)	48.4 (22.2)	5.1 (1.6)	6.9 (2.2)	4.7 (1.5)	58.0 (18.4)
2	6.7 (1.6)	9.2 (2.2)	6.4 (1.6)	61.8 (14.9)	5.7 (2.3)	7.8 (3.2)	5.4 (2.2)	63.1 (25.2)	3.7 (1.4)	5.0 (2.0)	3.1 (1.2)	45.6 (17.6)	6.8 (1.8)	9.3 (2.5)	6.3 (1.7)	76.4 (19.9)
3	7.2 (2.1)	9.8 (2.9)	6.8 (2.0)	64.6 (19.3)	6.4 (2.4)	8.7 (3.3)	6.0 (2.3)	68.4 (26.2)	3.2 (1.0)	4.4 (1.3)	2.7 (0.8)	38.9 (11.9)	5.9 (2.3)	8.1 (3.1)	5.5 (2.1)	65.2 (25.0)
4	5.9 (1.3)	8.0 (1.7)	5.6 (1.2)	51.8 (11.1)	3.2 (1.5)	4.4 (2.0)	3.0 (1.4)	33.8 (15.8)	3.3 (0.8)	4.5 (1.1)	2.8 (0.7)	38.6 (9.5)	3.9 (1.5)	5.3 (2.0)	3.6 (1.4)	41.8 (16.1)
5	5.8 (1.9)	7.9 (2.7)	5.5 (1.9)	49.8 (16.7)	4.3 (1.9)	5.9 (2.5)	4.0 (1.7)	43.9 (19.1)					4.8 (1.6)	6.5 (2.2)	4.4 (1.5)	50.2 (16.9)
6	6.9 (1.6)	9.4 (2.2)	6.6 (1.5)	58.4 (13.5)	4.7 (2.5)	6.4 (3.3)	4.4 (2.3)	46.6 (24.4)	4.1 (1.1)	5.6 (1.5)	3.5 (0.9)	46.7 (12.4)	5.8 (1.6)	7.9 (2.2)	5.4 (1.5)	59.7 (16.8)
7	8.6 (1.3)	11.8 (1.7)	8.2 (1.2)	71.6 (10.4)	6.3 (1.2)	8.5 (1.6)	5.9 (1.1)	61.1 (11.1)	3.5 (0.6)	4.7 (0.8)	2.9 (0.5)	38.3 (6.8)	6.6 (1.3)	9.0 (1.7)	6.1 (1.2)	66.3 (13.0)
8	8.0 (1.7)	10.9 (2.3)	7.6 (1.6)	64.8 (13.4)	7.3 (1.4)	10.0 (1.9)	6.9 (1.3)	70.2 (13.6)	5.5 (1.6)	7.6 (2.2)	4.7 (1.4)	60.3 (17.8)	6.7 (1.6)	9.1 (2.2)	6.2 (1.5)	65.7 (15.8)
9	7.4 (1.8)	10.2 (2.4)	7.1 (1.7)	59.3 (14.2)	7.0 (3.0)	9.6 (4.1)	6.6 (2.8)	65.8 (27.8)	6.0 (1.8)	8.2 (2.5)	5.1 (1.6)	63.9 (19.2)	7.2 (3.6)	9.9 (4.9)	6.7 (3.3)	69.7 (34.3)
10	6.6 (1.5)	9.0 (2.1)	6.3 (1.4)	51.4 (11.8)	6.6 (2.5)	9.0 (3.4)	6.2 (2.3)	60.3 (23.0)	4.9 (1.4)	6.6 (2.0)	4.1 (1.2)	50.5 (15.0)	6.5 (1.6)	8.8 (2.3)	6.0 (1.5)	60.8 (15.5)
11	7.8 (2.0)	10.6 (2.7)	7.4 (1.9)	59.7 (15.0)	8.3 (2.5)	11.4 (3.4)	7.8 (2.3)	74.4 (22.1)	6.6 (2.5)	9.1 (3.4)	5.6 (2.1)	67.6 (25.5)	8.0 (2.5)	10.9 (3.4)	7.4 (2.3)	73.8 (22.9)
12									6.5 (1.7)	8.9 (2.3)	5.5 (1.4)	64.6 (16.3)	5.6 (1.5)	7.6 (2.1)	5.2 (1.4)	50.3 (13.8)
13	6.7 (2.1)	9.1 (2.9)	6.4 (2.0)	49.3 (15.7)	7.4 (2.0)	10.1 (2.7)	6.9 (1.9)	63.5 (17.2)	6.5 (2.2)	8.8 (3.0)	5.5 (1.9)	62.9 (21.9)	6.7 (2.2)	9.2 (3.0)	6.2 (2.0)	59.1 (19.1)
14	8.2 (2.5)	11.3 (3.4)	7.9 (2.4)	60.0 (17.9)	9.3 (3.6)	12.7 (4.9)	8.7 (3.3)	78.3 (29.8)	7.4 (1.9)	10.1 (2.6)	6.3 (1.6)	70.7 (18.0)	10.4 (3.5)	14.2 (4.7)	9.6 (3.2)	89.6 (29.7)
15	8.4 (2.5)	11.5 (3.4)	8.1 (2.4)	60.3 (17.5)	7.6 (2.7)	10.4 (3.7)	7.1 (2.6)	62.8 (22.4)	7.7 (2.1)	10.5 (2.9)	6.5 (1.8)	71.4 (19.9)	7.5 (3.4)	10.3 (4.6)	7.0 (3.1)	63.9 (28.6)
16	8.3 (2.1)	11.4 (2.8)	8.0 (2.0)	58.5 (14.7)	7.8 (2.0)	10.7 (2.8)	7.3 (1.9)	63.3 (16.4)	7.0 (2.5)	9.6 (3.4)	5.9 (2.1)	63.9 (23.2)	7.3 (3.1)	10.0 (4.3)	6.8 (2.9)	60.6 (25.9)
17	7.5 (2.3)	10.3 (3.1)	7.2 (2.2)	51.9 (15.8)	7.5 (2.4)	10.2 (3.3)	7.0 (2.3)	59.1 (19.3)	5.6 (1.4)	7.7 (1.9)	4.8 (1.2)	50.3 (12.7)	8.2 (2.3)	11.2 (3.2)	7.6 (2.2)	66.8 (19.1)
18	7.4 (1.8)	10.1 (2.4)	7.1 (1.7)	50.2 (12.1)	8.8 (2.5)	12.0 (3.4)	8.2 (2.3)	68.4 (19.4)	6.6 (2.3)	9.0 (3.2)	5.6 (2.0)	57.5 (20.3)	8.9 (2.6)	12.1 (3.6)	8.2 (2.4)	70.9 (21.0)
19					7.7 (2.0)	10.5 (2.8)	7.2 (1.9)	58.8 (15.4)	6.3 (1.9)	8.6 (2.7)	5.3 (1.6)	54.1 (16.7)	9.1 (4.0)	12.4 (5.5)	8.4 (3.7)	71.1 (31.1)
20	8.2 (1.5)	11.2 (2.1)	7.9 (1.4)	54.3 (10.0)	9.1 (3.7)	12.4 (5.0)	8.5 (3.4)	68.0 (27.4)	6.7 (2.2)	9.2 (3.0)	5.7 (1.8)	56.1 (18.2)	9.8 (3.8)	13.4 (5.2)	9.1 (3.5)	75.0 (28.9)
21	7.3 (2.2)	9.9 (3.0)	6.9 (2.1)	47.2 (14.2)	7.5 (4.8)	10.3 (6.6)	7.1 (4.5)	55.5 (35.5)	6.0 (1.7)	8.2 (2.4)	5.1 (1.5)	49.3 (14.3)	8.4 (2.3)	11.4 (3.2)	7.7 (2.2)	62.9 (17.5)
22	7.8 (2.7)	10.7 (3.7)	7.5 (2.6)	50.2 (17.3)					7.6 (2.4)	10.4 (3.3)	6.4 (2.1)	61.1 (19.7)	7.8 (3.5)	10.7 (4.8)	7.3 (3.3)	57.8 (26.1)
23	8.8 (2.0)	12.0 (2.7)	8.4 (1.9)	55.5 (12.5)	7.8 (1.4)	10.7 (1.9)	7.3 (1.3)	55.5 (10.0)	8.9 (2.1)	12.2 (2.8)	7.5 (1.8)	69.8 (16.1)	11.3 (3.9)	15.4 (5.3)	10.5 (3.6)	81.9 (28.2)
24	9.8 (2.0)	13.3 (2.8)	9.3 (1.9)	60.7 (12.7)	6.7 (3.0)	9.2 (4.0)	6.3 (2.8)	47.1 (20.7)	8.0 (2.3)	10.9 (3.2)	6.7 (2.0)	61.2 (18.1)	9.0 (2.0)	12.2 (2.8)	8.3 (1.9)	63.7 (14.5)
25	9.2 (1.6)	12.6 (2.1)	8.8 (1.5)	56.4 (9.7)	6.8 (3.6)	9.2 (4.9)	6.3 (3.4)	46.6 (24.7)	7.8 (1.6)	10.6 (2.2)	6.6 (1.3)	58.4 (12.1)	8.3 (2.7)	11.4 (3.7)	7.7 (2.5)	58.2 (18.9)
26	9.3 (2.1)	12.7 (2.8)	8.9 (2.0)	56.3 (12.5)	9.9 (2.7)	13.5 (3.7)	9.3 (2.5)	67.1 (18.3)	7.3 (1.6)	10.0 (2.2)	6.2 (1.3)	53.8 (11.7)	7.6 (1.4)	10.4 (1.9)	7.1 (1.3)	52.3 (9.4)
27	9.9 (2.6)	13.5 (3.6)	9.4 (2.5)	58.9 (15.8)	9.9 (3.2)	13.5 (4.3)	9.3 (3.0)	66.1 (21.2)	7.8 (2.1)	10.7 (2.9)	6.6 (1.8)	56.2 (14.9)	11.0 (3.2)	15.1 (4.4)	10.2 (3.0)	74.5 (21.7)
28	8.6 (2.1)	11.8 (2.9)	8.3 (2.0)	50.9 (12.6)	8.4 (3.3)	11.5 (4.5)	7.9 (3.1)	55.4 (21.7)	10.0 (6.4)	13.6 (8.7)	8.4 (5.4)	70.7 (45.0)	10.6 (3.6)	14.5 (4.9)	9.8 (3.3)	70.4 (24.0)
29																
30	9.3 (2.5)	12.7 (3.4)	8.9 (2.4)	53.6 (14.2)	9.3 (3.8)	12.6 (5.1)	8.7 (3.5)	59.0 (23.9)	7.1 (2.2)	9.7 (3.0)	6.0 (1.9)	48.1 (14.8)	12.8 (3.3)	17.6 (4.6)	11.9 (3.1)	82.6 (21.6)
31	10.1 (2.3)	13.9 (3.2)	9.7 (2.2)	57.7 (13.3)	8.7 (2.8)	11.9 (3.8)	8.2 (2.6)	54.8 (17.3)	7.8 (1.9)	10.6 (2.7)	6.6 (1.6)	51.8 (12.9)	8.7 (1.5)	11.9 (2.0)	8.1 (1.4)	55.0 (9.5)
Avg	7.9	10.8	7.6	56.6	7.3	9.9	6.8	59.2	6.3	8.6	5.3	56.2	7.9	10.8	7.3	65.1
n	28	28	28	28	28	28	28	28	29	29	29	29	30	30	30	30
SD	1.18	1.62	1.14	5.52	1.73	2.36	1.62	10.2	1.71	2.34	1.45	9.59	2.03	2.78	1.89	10.3
Min	5.8	7.9	5.5	47.2	3.2	4.4	3.0	33.8	3.2	4.4	2.7	38.3	3.9	5.3	3.6	41.8
Max	10.1	13.9	9.7	71.6	9.91	13.5	9.3	78.3	9.98	13.6	8.43	71.4	12.8	17.6	11.9	89.6

ED_004549_00015928-00317

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for June, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	9.4 (1.4)	12.9 (1.9)	9.0 (1.3)	52.9 (7.8)	9.4 (2.1)	12.9 (2.9)	8.8 (2.0)	58.4 (12.9)	7.5 (1.4)	10.3 (2.0)	6.4 (1.2)	49.2 (9.3)	10.0 (2.4)	13.7 (3.3)	9.3 (2.2)	62.3 (15.0)
2	10.3 (1.9)	14.1 (2.7)	9.9 (1.9)	57.4 (10.8)	10.1 (1.7)	13.8 (2.3)	9.5 (1.6)	61.6 (10.1)	9.3 (2.6)	12.7 (3.6)	7.9 (2.2)	59.9 (16.7)	11.7 (4.5)	15.9 (6.1)	10.8 (4.2)	71.6 (27.8)
3	9.0 (2.0)	12.3 (2.7)	8.6 (1.9)	49.3 (10.8)	9.2 (2.8)	12.6 (3.8)	8.7 (2.6)	55.7 (16.5)	8.0 (1.7)	10.9 (2.3)	6.8 (1.4)	50.5 (10.7)	7.7 (1.3)	10.5 (1.8)	7.1 (1.2)	46.2 (7.8)
4	10.9 (2.0)	14.9 (2.7)	10.5 (1.9)	59.5 (10.8)	11.3 (3.2)	15.5 (4.4)	10.7 (3.0)	67.5 (19.0)	8.2 (1.4)	11.2 (1.9)	7.0 (1.2)	51.1 (8.4)	8.9 (1.3)	12.1 (1.7)	8.2 (1.2)	52.7 (7.5)
5	10.4 (1.1)	14.2 (1.5)	9.9 (1.0)	55.8 (5.7)	13.7 (2.2)	18.7 (2.9)	12.9 (2.0)	80.4 (12.5)	9.6 (1.2)	13.1 (1.7)	8.1 (1.0)	58.5 (7.2)	10.1 (1.3)	13.8 (1.8)	9.4 (1.2)	59.4 (7.6)
6	9.3 (1.3)	12.6 (1.8)	8.9 (1.2)	49.3 (6.9)	12.0 (1.7)	16.4 (2.3)	11.3 (1.6)	69.9 (9.8)	8.9 (1.3)	12.1 (1.7)	7.5 (1.1)	53.2 (7.6)	9.0 (1.7)	12.3 (2.3)	8.4 (1.6)	52.3 (9.7)
7	8.8 (2.4)	12.0 (3.2)	8.4 (2.3)	46.3 (12.4)	11.1 (2.7)	15.1 (3.8)	10.4 (2.6)	63.6 (15.6)	9.2 (2.0)	12.5 (2.8)	7.8 (1.7)	54.1 (11.8)	8.3 (1.5)	11.3 (2.0)	7.7 (1.4)	47.3 (8.3)
8	10.6 (1.6)	14.5 (2.2)	10.1 (1.6)	55.4 (8.5)	14.1 (2.5)	19.3 (3.4)	13.3 (2.3)	80.2 (13.9)	10.9 (1.8)	14.9 (2.4)	9.2 (1.5)	63.3 (10.1)	8.9 (0.9)	12.2 (1.3)	8.3 (0.9)	50.2 (5.2)
9	10.1 (5.6)	13.9 (7.7)	9.7 (5.4)	52.6 (29.1)	11.4 (2.2)	15.6 (3.0)	10.7 (2.1)	63.9 (12.4)	9.3 (2.3)	12.7 (3.1)	7.9 (1.9)	53.4 (13.0)	8.1 (1.0)	11.1 (1.4)	7.5 (0.9)	45.1 (5.6)
10	8.8 (2.1)	12.0 (2.8)	8.4 (2.0)	45.0 (10.6)	11.0 (2.9)	15.1 (4.0)	10.4 (2.8)	61.2 (16.2)	8.1 (1.2)	11.0 (1.6)	6.8 (1.0)	45.4 (6.8)	8.7 (3.2)	11.9 (4.4)	8.1 (3.0)	48.0 (17.8)
11	9.2 (2.5)	12.6 (3.5)	8.9 (2.4)	47.1 (13.0)	9.5 (2.4)	12.9 (3.3)	8.9 (2.3)	51.9 (13.1)	7.7 (1.7)	10.5 (2.3)	6.5 (1.4)	42.7 (9.2)	8.0 (1.4)	10.9 (1.9)	7.4 (1.3)	43.5 (7.5)
12	9.0 (1.9)	12.3 (2.6)	8.7 (1.8)	45.6 (9.5)	11.8 (4.6)	16.2 (6.3)	11.1 (4.3)	64.3 (24.9)	8.5 (1.9)	11.6 (2.7)	7.2 (1.7)	46.4 (10.5)	7.9 (1.6)	10.8 (2.2)	7.3 (1.5)	42.5 (8.4)
13	7.7 (1.8)	10.5 (2.4)	7.3 (1.7)	38.4 (8.8)	10.6 (2.7)	14.4 (3.6)	9.9 (2.5)	56.8 (14.4)	7.7 (1.4)	10.5 (1.9)	6.5 (1.2)	41.5 (7.5)	7.2 (1.3)	9.9 (1.8)	6.7 (1.2)	38.5 (7.0)
14	8.5 (2.0)	11.6 (2.7)	8.1 (1.9)	42.3 (9.9)	9.9 (2.7)	13.6 (3.7)	9.3 (2.6)	52.8 (14.5)	8.1 (1.8)	11.1 (2.4)	6.9 (1.5)	43.0 (9.4)	7.4 (1.5)	10.1 (2.0)	6.9 (1.3)	39.0 (7.6)
15	8.6 (1.4)	11.7 (1.9)	8.2 (1.4)	42.4 (7.0)	8.2 (2.0)	11.2 (2.7)	7.7 (1.8)	43.3 (10.3)	7.3 (1.7)	10.0 (2.3)	6.2 (1.4)	38.2 (8.7)	7.0 (1.3)	9.5 (1.7)	6.5 (1.2)	36.2 (6.6)
16																
17																
18																
19																
20	10.3 (2.5)	14.1 (3.4)	9.9 (2.4)	49.4 (11.8)					8.8 (2.0)	12.0 (2.7)	7.5 (1.7)	43.1 (9.6)	9.2 (1.0)	12.6 (1.4)	8.6 (0.9)	45.6 (4.9)
21	9.0 (2.0)	12.3 (2.8)	8.6 (2.0)	42.8 (9.7)	8.7 (2.7)	11.9 (3.6)	8.2 (2.5)	43.4 (13.3)	7.6 (1.6)	10.4 (2.2)	6.5 (1.4)	37.0 (7.9)	7.6 (1.6)	10.4 (2.2)	7.1 (1.5)	37.6 (7.9)
22	10.0 (2.2)	13.6 (3.1)	9.6 (2.1)	47.1 (10.6)	9.0 (2.9)	12.3 (4.0)	8.4 (2.8)	44.5 (14.6)	7.9 (2.5)	10.7 (3.4)	6.7 (2.1)	37.7 (12.1)	8.8 (2.3)	12.0 (3.2)	8.2 (2.2)	43.1 (11.4)
23																
24																
25																
26	8.4 (1.7)	11.5 (2.3)	8.1 (1.6)	38.9 (7.9)	12.2 (2.8)	16.6 (3.8)	11.5 (2.7)	58.8 (13.6)	8.9 (1.6)	12.2 (2.1)	7.6 (1.3)	41.2 (7.2)	8.1 (1.5)	11.1 (2.1)	7.6 (1.4)	38.5 (7.2)
27	8.9 (2.7)	12.1 (3.7)	8.5 (2.6)	40.7 (12.3)	10.6 (3.5)	14.5 (4.8)	10.0 (3.3)	50.7 (16.9)	9.3 (2.3)	12.6 (3.1)	7.9 (1.9)	42.3 (10.3)	8.3 (2.2)	11.4 (3.0)	7.8 (2.0)	39.2 (10.2)
28																
29																
30	8.4 (4.1)	11.5 (5.5)	8.1 (3.9)	38.2 (18.4)	8.6 (2.0)	11.7 (2.8)	8.1 (1.9)	40.4 (9.6)					8.5 (1.9)	11.6 (2.6)	8.0 (1.8)	39.4 (8.8)
Avg	9.3	12.7	8.9	47.5	10.6	14.5	10.0	58.5	8.5	11.7	7.2	47.6	8.5	11.7	7.9	46.6
n	21	21	21	21	20	20	20	20	20	20	20	20	21	21	21	21
SD	0.85	1.17	0.81	6.23	1.6	2.18	1.5	10.9	0.87	1.19	0.74	7.49	1.06	1.45	0.98	8.86
Min	7.7	10.5	7.3	38.2	8.2	11.2	7.7	40.4	7.3	10.0	6.2	37.0	7.0	9.5	6.5	36.2
Max	10.9	14.9	10.5	59.5	14.1	19.3	13.3	80.4	10.9	14.9	9.21	63.3	11.7	15.9	10.8	71.6

ED_004549_00015928-00318

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for July, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	9.1 (1.4)	12.5 (1.9)	8.8 (1.3)	41.2 (6.3)	9.3 (4.0)	12.7 (5.5)	8.7 (3.8)	43.4 (18.8)	9.4 (2.2)	12.8 (3.0)	7.9 (1.9)	41.2 (9.7)	8.0 (1.3)	10.9 (1.8)	7.4 (1.2)	36.6 (6.1)
2	9.3 (1.9)	12.8 (2.6)	9.0 (1.8)	42.0 (8.6)	11.2 (3.8)	15.2 (5.1)	10.5 (3.5)	51.9 (17.5)	9.2 (1.9)	12.6 (2.6)	7.8 (1.6)	40.4 (8.4)	8.4 (1.2)	11.4 (1.7)	7.8 (1.2)	38.1 (5.6)
3	7.9 (1.6)	10.7 (2.2)	7.6 (1.6)	35.1 (7.2)	8.6 (2.2)	11.8 (3.0)	8.1 (2.1)	39.9 (10.2)	8.3 (2.1)	11.3 (2.8)	7.0 (1.7)	36.0 (8.9)	7.3 (1.8)	10.0 (2.5)	6.9 (1.7)	33.3 (8.2)
4	8.5 (2.4)	11.6 (3.3)	8.1 (2.3)	37.7 (10.6)	8.9 (2.6)	12.1 (3.5)	8.4 (2.4)	40.9 (11.8)	8.3 (1.9)	11.4 (2.6)	7.1 (1.6)	35.9 (8.1)	8.1 (1.7)	11.1 (2.3)	7.6 (1.5)	36.7 (7.5)
5	9.2 (2.2)	12.5 (3.0)	8.8 (2.1)	40.6 (9.6)	9.5 (2.4)	13.0 (3.2)	8.9 (2.2)	43.5 (10.8)	8.7 (2.2)	11.9 (3.0)	7.4 (1.9)	37.4 (9.4)	8.7 (1.7)	11.9 (2.3)	8.1 (1.6)	39.1 (7.6)
6	10.1 (3.5)	13.8 (4.8)	9.7 (3.4)	44.5 (15.4)	11.5 (3.2)	15.6 (4.4)	10.8 (3.0)	52.2 (14.5)	10.4 (3.2)	14.2 (4.3)	8.8 (2.7)	44.0 (13.3)	9.0 (2.1)	12.3 (2.8)	8.4 (1.9)	40.2 (9.2)
7	9.4 (2.4)	12.8 (3.3)	9.0 (2.3)	41.2 (10.5)	11.0 (4.2)	15.0 (5.7)	10.3 (3.9)	49.7 (18.9)	8.5 (2.5)	11.7 (3.4)	7.2 (2.1)	36.0 (10.4)	8.2 (1.8)	11.2 (2.4)	7.6 (1.7)	36.4 (7.9)
8	9.5 (2.1)	13.0 (2.8)	9.1 (2.0)	41.5 (9.1)	14.3 (1.6)	19.5 (2.1)	13.4 (1.5)	64.3 (7.1)	9.4 (1.8)	12.9 (2.4)	8.0 (1.5)	39.5 (7.4)	9.5 (1.2)	13.0 (1.6)	8.9 (1.1)	42.0 (5.1)
9	13.6 (7.7)	18.6 (10.5)	13.1 (7.4)	59.3 (33.6)	11.1 (2.7)	15.1 (3.7)	10.4 (2.5)	49.7 (12.1)	9.6 (2.6)	13.1 (3.6)	8.2 (2.2)	39.9 (10.9)	9.3 (2.0)	12.7 (2.8)	8.7 (1.9)	40.8 (8.9)
10	10.0 (2.8)	13.7 (3.9)	9.7 (2.7)	43.6 (12.3)	11.1 (3.2)	15.1 (4.3)	10.4 (3.0)	49.4 (14.1)	9.3 (1.8)	12.6 (2.5)	7.9 (1.5)	38.3 (7.5)	9.3 (1.8)	12.7 (2.5)	8.7 (1.7)	40.6 (7.9)
11	8.9 (2.3)	12.1 (3.2)	9.5 (2.4)	42.7 (10.7)	11.2 (4.6)	15.3 (6.3)	10.6 (4.3)	49.8 (20.4)	10.4 (3.0)	14.2 (4.0)	8.8 (2.5)	42.8 (12.1)				
12	9.1 (5.5)	12.5 (7.5)	10.6 (6.4)	48.1 (28.8)	10.3 (3.0)	14.0 (4.2)	9.7 (2.9)	45.6 (13.5)	10.9 (2.1)	14.8 (2.9)	9.2 (1.8)	44.4 (8.7)	9.1 (1.2)	12.4 (1.6)	8.5 (1.1)	39.6 (5.0)
13	9.9 (5.4)	13.6 (7.4)	11.6 (6.3)	52.0 (28.5)	6.4 (2.3)	8.7 (3.2)	6.0 (2.2)	28.2 (10.3)	9.5 (1.9)	12.9 (2.6)	8.0 (1.6)	38.5 (7.7)	7.9 (1.6)	10.8 (2.2)	7.4 (1.5)	34.2 (7.1)
14	8.8 (2.5)	12.0 (3.4)	10.2 (2.9)	45.7 (12.9)	8.6 (3.4)	11.7 (4.7)	8.1 (3.2)	37.7 (15.1)	9.6 (2.1)	13.2 (2.9)	8.2 (1.8)	39.0 (8.6)	9.1 (2.5)	12.5 (3.4)	8.5 (2.3)	39.3 (10.8)
15					11.2 (3.9)	15.4 (5.3)	10.6 (3.7)	49.1 (17.0)	9.3 (1.9)	12.7 (2.5)	7.9 (1.6)	37.5 (7.4)	9.6 (1.5)	13.2 (2.0)	9.0 (1.4)	41.3 (6.4)
16					14.0 (3.2)	19.1 (4.4)	13.2 (3.0)	60.9 (13.9)	9.4 (1.7)	12.9 (2.3)	8.0 (1.4)	37.8 (6.6)	8.8 (1.5)	12.0 (2.1)	8.2 (1.4)	37.6 (6.5)
17					12.9 (1.8)	17.7 (2.5)	13.7 (2.1)	63.1 (9.7)	10.0 (1.9)	13.6 (2.5)	8.5 (1.6)	39.9 (7.4)	8.2 (1.4)	11.2 (2.0)	8.6 (1.5)	39.1 (6.8)
18					11.5 (3.0)	15.7 (4.2)	13.1 (3.5)	60.7 (16.1)	17.3 (12.0)	23.6 (16.5)	14.7 (10.3)	68.7 (47.9)				
19					11.8 (1.5)	16.1 (2.0)	13.4 (1.7)	62.0 (7.8)	9.3 (0.9)	12.7 (1.3)	7.9 (0.8)	36.8 (3.7)	8.1 (1.0)	11.0 (1.3)	9.1 (1.1)	41.1 (4.9)
20					11.7 (1.8)	16.0 (2.4)	13.3 (2.0)	61.5 (9.2)	9.8 (0.8)	13.4 (1.0)	8.3 (0.6)	38.6 (2.9)	8.6 (1.3)	11.8 (1.8)	9.7 (1.5)	43.8 (6.8)
21					10.7 (1.5)	14.6 (2.0)	12.2 (1.7)	56.0 (7.6)	9.4 (1.4)	12.9 (1.9)	8.0 (1.2)	36.9 (5.6)	7.9 (1.5)	10.8 (2.0)	8.9 (1.7)	39.9 (7.4)
22	8.0 (2.1)	10.9 (2.9)	11.8 (3.2)	52.1 (13.9)	9.8 (1.9)	13.4 (2.5)	11.2 (2.1)	51.2 (9.6)	8.0 (1.9)	11.0 (2.6)	6.9 (1.6)	31.4 (7.5)	7.6 (1.3)	10.3 (1.8)	8.5 (1.5)	38.1 (6.7)
23	8.5 (3.5)	11.6 (4.8)	12.6 (5.2)	55.3 (22.8)	7.5 (2.6)	10.2 (3.5)	8.5 (3.0)	38.7 (13.4)	8.6 (2.9)	11.8 (4.0)	7.3 (2.5)	33.5 (11.3)	9.1 (1.6)	12.4 (2.2)	10.2 (1.8)	45.7 (8.1)
24	7.1 (1.3)	9.7 (1.8)	10.4 (1.9)	45.7 (8.3)	9.5 (3.4)	13.0 (4.6)	10.8 (3.9)	49.2 (17.5)	8.3 (2.3)	11.4 (3.2)	7.1 (2.0)	32.2 (9.0)	10.6 (6.0)	14.5 (8.2)	11.9 (6.8)	53.0 (30.1)
25	8.4 (3.2)	11.4 (4.4)	14.8 (6.1)	65.3 (26.9)	11.2 (3.3)	15.3 (4.5)	13.0 (4.0)	59.1 (18.0)	9.5 (2.3)	13.0 (3.1)	9.0 (2.5)	40.9 (11.5)	9.5 (2.7)	13.0 (3.7)	12.1 (3.2)	53.8 (14.0)
26	8.5 (2.4)	11.6 (3.2)	16.8 (4.7)	74.2 (20.7)	9.1 (3.1)	12.4 (4.2)	11.7 (4.0)	53.3 (18.2)	8.8 (1.9)	12.1 (2.5)	8.8 (1.8)	40.0 (8.4)	8.0 (2.1)	11.0 (2.9)	11.2 (3.0)	50.1 (13.3)
27	7.1 (3.7)	9.7 (5.0)	14.1 (7.3)	61.8 (31.9)	8.8 (3.5)	12.0 (4.8)	12.4 (5.1)	56.5 (23.1)	7.4 (1.7)	10.1 (2.3)	7.4 (1.7)	33.3 (7.7)	7.7 (2.2)	10.4 (2.9)	10.7 (3.0)	47.7 (13.5)
28									8.2 (2.9)	11.1 (4.0)	8.1 (2.9)	36.6 (13.1)	6.9 (2.4)	9.5 (3.3)	9.7 (3.4)	43.1 (15.0)
29	9.4 (3.9)	12.8 (5.3)	18.7 (7.7)	81.6 (33.8)	9.0 (3.6)	12.3 (5.0)	12.8 (5.2)	57.8 (23.3)	9.0 (2.4)	12.3 (3.3)	9.0 (2.4)	40.2 (10.9)	8.8 (2.1)	12.0 (2.9)	12.3 (2.9)	54.6 (13.0)
30	8.9 (2.5)	12.2 (3.4)	17.8 (5.0)	77.5 (21.6)									7.1 (1.5)	9.7 (2.1)	10.0 (2.1)	43.9 (9.3)
31																
Avg	9.1	12.4	11.4	51.3	10.4	14.2	10.9	50.9	9.4	12.9	8.2	39.2	8.5	11.6	9.1	41.8
n	22	22	22	22	28	28	28	28	29	29	29	29	28	28	28	28
SD	1.28	1.75	3.13	13	1.76	2.41	2	8.78	1.66	2.27	1.38	6.38	0.84	1.14	1.44	5.52
Min	7.1	9.7	7.6	35.1	6.4	8.7	6.0	28.2	7.4	10.1	6.9	31.4	6.9	9.5	6.9	33.3
Max	13.6	18.6	18.7	81.6	14.3	19.5	13.7	64.3	17.3	23.6	14.7	68.7	10.6	14.5	12.3	54.6

ED_004549_00015928-00319

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for August, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7	7.3 (2.2)	10.0 (3.0)	22.0 (6.6)	97.0 (29.0)	2.9 (1.9)	4.0 (2.6)	4.7 (3.1)	20.6 (13.6)					6.7 (1.6)	9.1 (2.2)	26.7 (6.3)	125.0 (29.7)
8	7.9 (3.7)	10.9 (5.1)	23.9 (11.1)	105.0 (48.8)	5.3 (1.7)	7.3 (2.3)	9.9 (3.2)	44.0 (14.0)					6.4 (2.0)	8.7 (2.7)	25.6 (7.9)	120.0 (36.9)
9	6.7 (1.9)	9.1 (2.6)	20.0 (5.8)	87.2 (25.2)	6.3 (1.9)	8.6 (2.6)	11.7 (3.5)	51.6 (15.5)	7.1 (1.9)	9.7 (2.6)	9.2 (2.4)	39.9 (10.7)	6.4 (1.2)	8.8 (1.7)	25.8 (5.0)	121.0 (23.2)
10	6.1 (2.0)	8.3 (2.8)	18.2 (6.1)	78.9 (26.4)	5.4 (1.4)	7.3 (2.0)	10.0 (2.7)	44.1 (11.8)	6.5 (1.5)	8.9 (2.0)	8.4 (1.9)	36.4 (8.4)	6.5 (1.8)	8.9 (2.5)	26.3 (7.4)	122.0 (34.3)
11					5.8 (2.1)	7.9 (2.8)	15.0 (6.7)	65.8 (29.4)								
12	6.1 (1.9)	8.3 (2.5)	42.1 (12.8)	187.0 (57.2)	6.5 (2.6)	8.8 (3.5)	19.2 (7.7)	85.5 (34.2)	8.9 (3.1)	12.1 (4.2)	15.6 (4.9)	68.7 (21.4)	4.4 (2.5)	6.0 (3.5)	18.3 (10.6)	84.5 (48.9)
13	5.8 (1.9)	8.0 (2.6)	40.2 (13.2)	178.0 (58.4)	7.1 (2.4)	9.7 (3.3)	21.1 (7.2)	93.5 (31.7)	8.4 (2.7)	11.4 (3.7)	18.8 (5.9)	83.1 (26.1)	4.9 (2.8)	6.8 (3.8)	20.6 (11.5)	94.9 (52.8)
14	4.6 (1.6)	6.3 (2.2)	31.6 (11.2)	140.0 (49.4)	10.3 (3.5)	14.1 (4.8)	30.6 (10.3)	135.0 (45.5)	6.6 (1.5)	9.0 (2.0)	15.3 (3.4)	67.3 (15.1)	4.7 (2.0)	6.4 (2.7)	19.7 (8.2)	90.2 (37.7)
15	4.2 (1.5)	5.7 (2.1)	28.9 (10.5)	127.0 (46.3)	11.9 (5.2)	16.3 (7.1)	35.3 (15.4)	156.0 (67.7)	8.6 (2.6)	11.7 (3.6)	19.8 (6.1)	87.0 (26.7)	4.2 (2.7)	5.7 (3.7)	17.4 (11.2)	79.3 (51.2)
16	3.7 (0.9)	5.0 (1.2)	25.4 (6.2)	111.0 (27.3)	8.2 (2.3)	11.2 (3.2)	24.3 (6.9)	107.0 (30.4)	8.4 (2.9)	11.5 (3.9)	19.5 (6.7)	85.2 (29.2)	3.6 (1.9)	4.9 (2.6)	14.9 (8.0)	67.6 (36.4)
17	3.5 (1.5)	4.8 (2.0)	24.4 (10.1)	106.0 (44.1)	6.8 (1.7)	9.3 (2.3)	20.1 (5.0)	87.8 (21.8)	8.3 (2.8)	11.4 (3.8)	19.2 (6.4)	83.6 (27.7)	3.3 (1.9)	4.4 (2.6)	13.6 (8.0)	61.5 (36.1)
18	4.1 (2.1)	5.6 (2.9)	28.1 (14.7)	122.0 (63.7)	6.6 (1.8)	9.0 (2.4)	19.5 (5.2)	84.9 (22.7)	7.3 (2.3)	9.9 (3.1)	16.8 (5.2)	72.8 (22.6)	3.5 (1.9)	4.7 (2.6)	14.5 (8.1)	65.4 (36.4)
19					5.5 (2.2)	7.5 (2.9)	17.0 (6.6)	73.5 (28.7)	7.1 (2.9)	9.7 (3.9)	16.5 (6.5)	71.1 (28.3)	4.3 (2.2)	5.9 (3.0)	19.3 (10.2)	86.5 (45.7)
20					6.4 (1.9)	8.8 (2.6)	20.8 (6.2)	89.5 (26.5)	6.9 (2.2)	9.4 (2.9)	16.6 (5.1)	69.8 (21.5)	4.8 (2.2)	6.5 (3.0)	22.0 (10.1)	96.9 (44.5)
21					5.3 (1.3)	7.2 (1.8)	17.2 (4.3)	73.5 (18.3)	6.6 (3.0)	9.1 (4.1)	16.4 (7.4)	68.9 (31.1)	4.3 (2.0)	5.8 (2.8)	19.8 (9.5)	86.9 (41.6)
22																
23	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)												
24																
25																
26																
27	2.1 (0.8)	2.8 (1.1)	0.8 (0.3)	70.1 (28.1)												
28	2.1 (0.5)	2.9 (0.7)	0.8 (0.2)	64.9 (16.0)												
29	2.3 (0.5)	3.1 (0.6)	0.9 (0.2)	64.7 (13.4)												
30	2.7 (0.8)	3.7 (1.1)	1.1 (0.3)	70.9 (22.3)												
31	3.1 (0.6)	4.3 (0.8)	1.2 (0.2)	75.3 (14.7)									0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Avg	4.3	5.8	18.2	99.1	6.7	9.1	18.4	80.8	7.6	10.3	16.0	69.5	4.5	6.2	19.0	86.8
n	17	17	17	17	15	15	15	15	12	12	12	12	15	15	15	15
SD	2.08	2.85	14.1	43.4	2.09	2.85	7.65	33.8	0.85	1.16	3.55	15.6	1.64	2.24	6.56	30.8
Min	0.0	0.0	0.0	0.0	2.9	4.0	4.7	20.6	6.5	8.9	8.4	36.4	0.0	0.0	0.0	0.0
Max	7.94	10.9	42.1	187	11.9	16.3	35.3	156	8.89	12.1	19.8	87	6.67	9.11	26.7	125

ED_004549_00015928-00320

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for September, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	3.5 (1.1)	4.8 (1.5)	1.4 (0.4)	79.8 (25.1)									0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
2	3.3 (0.8)	4.5 (1.1)	1.3 (0.3)	71.1 (17.4)												
3	3.0 (0.7)	4.1 (1.0)	1.2 (0.3)	60.8 (14.8)												
4	2.6 (0.5)	3.6 (0.7)	1.0 (0.2)	51.2 (10.6)	0.8 (0.2)	1.1 (0.2)	0.4 (0.1)	27.8 (6.6)								
5																
6																
7																
8																
9																
10																
11																
12	2.3 (0.6)	3.2 (0.9)	2.2 (0.6)	82.7 (22.3)	3.1 (0.5)	4.2 (0.7)	2.8 (0.4)	130.0 (19.6)	1.2 (0.3)	1.6 (0.4)	1.1 (0.3)	58.8 (14.5)	1.5 (0.4)	2.0 (0.6)	1.4 (0.4)	100.0 (27.6)
13	1.8 (0.9)	2.4 (1.3)	1.7 (0.9)	62.0 (32.7)	3.7 (0.7)	5.1 (1.0)	3.3 (0.6)	151.0 (29.2)	3.4 (2.1)	4.6 (2.9)	3.1 (1.9)	158.0 (96.8)	1.4 (0.5)	1.9 (0.6)	1.4 (0.5)	88.6 (31.0)
14	1.8 (0.8)	2.5 (1.1)	1.8 (0.8)	60.9 (26.3)	3.6 (0.8)	4.9 (1.1)	3.2 (0.7)	139.0 (30.0)	3.2 (1.6)	4.4 (2.2)	3.0 (1.5)	145.0 (69.1)	1.8 (1.2)	2.4 (1.6)	1.8 (1.1)	104.0 (65.3)
15	3.1 (0.6)	4.3 (0.8)	3.0 (0.6)	102.0 (19.2)	4.9 (0.8)	6.6 (1.1)	4.4 (0.7)	184.0 (29.5)	3.9 (1.9)	5.3 (2.6)	3.6 (1.8)	168.0 (83.7)	2.8 (1.0)	3.9 (1.4)	2.8 (1.0)	156.0 (56.1)
16	3.1 (0.8)	4.2 (1.2)	3.0 (0.8)	98.7 (26.9)	5.1 (0.9)	7.0 (1.3)	4.6 (0.8)	186.0 (34.7)	3.7 (1.2)	5.1 (1.7)	3.5 (1.2)	153.0 (51.5)	2.9 (1.1)	3.9 (1.5)	2.9 (1.1)	151.0 (57.6)
17	2.9 (1.6)	3.9 (2.1)	2.8 (1.5)	88.8 (49.0)	5.4 (1.0)	7.4 (1.4)	4.9 (0.9)	192.0 (36.8)	3.7 (1.4)	5.0 (1.9)	3.4 (1.3)	146.0 (56.9)	2.5 (1.5)	3.4 (2.0)	2.5 (1.5)	126.0 (74.2)
18	4.2 (1.5)	5.7 (2.0)	4.1 (1.5)	127.0 (45.5)	6.2 (1.5)	8.5 (2.1)	5.6 (1.4)	214.0 (53.4)	4.5 (2.8)	6.2 (3.8)	4.2 (2.6)	171.0 (105.0)	2.4 (1.3)	3.3 (1.7)	2.4 (1.3)	115.0 (60.8)
19	3.8 (1.8)	5.1 (2.4)	3.7 (1.7)	111.0 (53.0)	6.5 (1.3)	8.8 (1.7)	5.8 (1.2)	216.0 (43.4)	3.6 (1.5)	5.0 (2.0)	3.4 (1.4)	134.0 (55.9)	2.9 (1.6)	4.0 (2.1)	2.9 (1.6)	134.0 (71.7)
20	3.9 (1.7)	5.4 (2.3)	3.8 (1.6)	113.0 (48.2)	6.8 (1.6)	9.3 (2.1)	6.2 (1.4)	222.0 (52.3)	3.4 (1.0)	4.6 (1.4)	3.1 (1.0)	120.0 (37.8)	2.7 (1.5)	3.7 (2.1)	2.7 (1.5)	118.0 (66.9)
21	4.4 (1.4)	6.1 (1.9)	4.3 (1.3)	124.0 (38.2)	7.6 (1.9)	10.3 (2.5)	6.9 (1.7)	239.0 (59.8)	4.1 (0.9)	5.5 (1.3)	3.8 (0.9)	139.0 (31.9)	2.9 (1.5)	3.9 (2.0)	2.8 (1.5)	120.0 (62.1)
22	4.1 (1.4)	5.6 (2.0)	4.0 (1.4)	112.0 (39.2)					5.6 (1.6)	7.7 (2.2)	5.3 (1.5)	188.0 (54.9)	3.9 (2.1)	5.3 (2.9)	3.9 (2.1)	156.0 (85.7)
23	4.4 (0.9)	6.0 (1.3)	4.3 (0.9)	115.0 (24.9)	6.6 (2.4)	9.0 (3.3)	6.0 (2.2)	197.0 (72.8)	4.5 (1.5)	6.1 (2.1)	4.2 (1.4)	145.0 (50.3)	3.5 (2.0)	4.8 (2.7)	3.5 (2.0)	138.0 (78.3)
24	4.1 (1.3)	5.6 (1.8)	4.0 (1.3)	105.0 (34.8)	6.0 (1.5)	8.3 (2.0)	5.5 (1.3)	175.0 (42.3)	4.2 (1.1)	5.8 (1.5)	3.9 (1.0)	133.0 (35.0)	2.6 (1.8)	3.5 (2.4)	2.6 (1.8)	97.6 (67.8)
25	4.2 (1.2)	5.8 (1.6)	4.1 (1.1)	105.0 (29.1)	6.0 (1.5)	8.2 (2.0)	5.4 (1.3)	168.0 (41.9)	3.6 (0.7)	5.0 (0.9)	3.4 (0.6)	110.0 (20.9)	2.6 (1.3)	3.5 (1.7)	2.6 (1.3)	93.6 (46.5)
26	4.5 (1.6)	6.2 (2.2)	4.4 (1.5)	110.0 (38.8)	5.3 (1.2)	7.3 (1.7)	4.8 (1.1)	146.0 (34.8)	3.7 (0.7)	5.1 (1.0)	3.5 (0.7)	109.0 (22.4)	2.6 (1.6)	3.5 (2.2)	2.6 (1.6)	91.3 (55.9)
27	4.9 (1.6)	6.6 (2.2)	4.7 (1.6)	115.0 (38.0)	5.6 (0.9)	7.7 (1.2)	5.1 (0.8)	151.0 (23.2)	4.1 (0.9)	5.6 (1.3)	3.8 (0.9)	117.0 (26.6)	2.7 (1.5)	3.7 (2.1)	2.7 (1.5)	92.0 (52.6)
28	4.9 (1.8)	6.7 (2.5)	4.8 (1.8)	113.0 (42.5)	5.5 (1.2)	7.5 (1.7)	5.0 (1.1)	143.0 (32.7)	3.7 (0.9)	5.0 (1.2)	3.4 (0.8)	102.0 (25.2)	2.9 (1.9)	4.0 (2.6)	2.9 (1.9)	96.7 (64.6)
29	5.0 (1.6)	6.9 (2.2)	4.9 (1.5)	113.0 (35.6)	4.8 (1.5)	6.5 (2.0)	4.4 (1.4)	121.0 (38.2)	3.8 (1.0)	5.2 (1.3)	3.6 (0.9)	103.0 (26.1)	2.4 (1.2)	3.2 (1.6)	2.4 (1.2)	75.5 (37.4)
30	6.0 (0.8)	8.2 (1.1)	5.9 (0.8)	131.0 (18.1)	5.0 (0.7)	6.9 (1.0)	4.6 (0.7)	124.0 (18.6)	5.1 (1.0)	6.9 (1.4)	4.7 (1.0)	132.0 (27.0)	3.5 (1.2)	4.7 (1.6)	3.5 (1.2)	108.0 (36.8)
Avg	3.7	5.1	3.3	97.8	5.2	7.1	4.7	165.0	3.9	5.3	3.6	133.0	2.5	3.4	2.5	108.0
n	23	23	23	23	19	19	19	19	19	19	19	19	20	20	20	20
SD	1.04	1.42	1.37	22.9	1.51	2.06	1.44	47	0.85	1.17	0.8	29.2	0.83	1.14	0.83	33.8
Min	1.8	2.4	1.0	51.2	0.8	1.1	0.4	27.8	1.2	1.6	1.1	58.8	0.0	0.0	0.0	0.0
Max	6.01	8.21	5.88	131	7.56	10.3	6.86	239	5.64	7.7	5.26	188	3.86	5.28	3.85	156

ED_004549_00015928-00321

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for October, 2008.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9	4.7 (1.5)	6.4 (2.1)	4.6 (1.5)	79.7 (26.6)	3.9 (1.3)	5.3 (1.7)	3.6 (1.2)	75.0 (24.7)	4.0 (1.4)	5.5 (1.8)	3.8 (1.3)	80.9 (27.7)				
10	4.5 (1.6)	6.1 (2.1)	4.4 (1.5)	74.1 (26.3)	3.7 (0.9)	5.1 (1.2)	3.4 (0.8)	69.8 (16.5)	3.2 (1.0)	4.4 (1.4)	3.0 (1.0)	63.5 (20.4)				
11	4.2 (1.2)	5.8 (1.6)	4.2 (1.2)	68.5 (19.7)	4.7 (2.0)	6.4 (2.8)	4.3 (1.9)	85.8 (37.0)	3.3 (1.1)	4.5 (1.5)	3.1 (1.0)	62.5 (21.0)				
12	3.7 (1.1)	5.0 (1.6)	3.6 (1.1)	57.6 (18.2)	3.5 (1.8)	4.8 (2.4)	3.2 (1.6)	61.9 (31.4)	3.1 (1.1)	4.2 (1.6)	2.9 (1.1)	57.1 (20.9)				
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
Avg	4.3	5.8	4.2	70.0	4.0	5.4	3.6	73.1	3.4	4.7	3.2	66.0				
n	4	4	4	4	4	4	4	4	4	4	4	4	0	0	0	0
SD	0.38	0.52	0.37	8.16	0.46	0.63	0.42	8.66	0.36	0.49	0.33	8.96				
Min	3.7	5.0	3.6	57.6	3.5	4.8	3.2	61.9	3.1	4.2	2.9	57.1				
Max	4.67	6.38	4.58	79.7	4.71	6.43	4.31	85.8	4.01	5.48	3.75	80.9				

ED_004549_00015928-00322

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for January, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6	13.4 (2.2)	18.3 (3.1)	13.4 (2.3)	62.2 (10.4)	10.0 (1.4)	13.7 (1.9)	9.6 (1.4)	45.7 (6.5)								
7					9.1 (1.6)	12.4 (2.2)	8.7 (1.5)	41.1 (7.3)	13.5 (11.2)	18.5 (15.2)	13.1 (10.8)	60.6 (49.9)				
8	14.4 (1.1)	19.6 (1.5)	14.5 (1.1)	66.5 (5.1)	9.6 (0.7)	13.1 (0.9)	9.1 (0.7)	43.2 (3.1)					9.7 (2.4)	13.2 (3.2)	10.0 (2.4)	46.5 (11.4)
9	13.5 (1.7)	18.4 (2.3)	13.6 (1.7)	62.1 (7.9)	9.6 (1.9)	13.1 (2.6)	9.2 (1.8)	43.1 (8.4)					8.1 (1.1)	11.0 (1.6)	8.3 (1.2)	38.6 (5.4)
10	14.2 (1.7)	19.4 (2.3)	14.3 (1.7)	65.4 (7.6)	9.8 (3.2)	13.4 (4.4)	9.4 (3.1)	44.0 (14.3)	10.6 (4.6)	14.5 (6.3)	10.3 (4.5)	46.9 (20.5)	8.5 (1.1)	11.5 (1.5)	8.7 (1.2)	40.3 (5.3)
11	13.6 (1.5)	18.6 (2.1)	13.8 (1.5)	62.5 (6.9)	7.5 (3.4)	10.2 (4.6)	7.2 (3.2)	33.4 (15.0)	10.1 (3.9)	13.8 (5.3)	9.8 (3.7)	44.5 (17.0)	9.2 (1.0)	12.5 (1.4)	9.5 (1.0)	43.6 (4.8)
12	12.9 (1.6)	17.6 (2.2)	13.0 (1.6)	58.8 (7.2)	8.7 (2.4)	11.9 (3.3)	8.3 (2.3)	38.7 (10.8)	10.3 (3.9)	14.1 (5.4)	10.0 (3.8)	45.3 (17.2)	8.7 (0.9)	11.9 (1.2)	9.0 (0.9)	41.2 (4.2)
13																
14	14.1 (1.2)	19.2 (1.7)	14.2 (1.3)	63.7 (5.6)	7.8 (1.5)	10.7 (2.0)	7.5 (1.4)	34.5 (6.5)					10.4 (1.2)	14.2 (1.7)	10.7 (1.3)	48.8 (5.7)
15					7.0 (0.7)	9.5 (1.0)	6.7 (0.7)	30.7 (3.2)								
16	14.5 (1.8)	19.7 (2.4)	14.8 (1.8)	66.4 (8.3)	5.6 (2.1)	7.6 (2.9)	5.4 (2.0)	24.5 (9.2)					7.6 (0.9)	10.3 (1.2)	8.8 (1.3)	40.1 (6.2)
17	14.1 (2.0)	19.2 (2.7)	15.2 (1.9)	68.7 (8.8)	7.8 (4.8)	10.6 (6.6)	7.4 (4.6)	33.9 (21.0)	9.5 (1.6)	13.0 (2.1)	10.3 (1.8)	46.6 (8.1)	6.3 (1.3)	8.6 (1.7)	7.8 (1.6)	35.7 (7.2)
18	14.2 (1.5)	19.4 (2.0)	16.5 (1.9)	74.2 (8.6)	9.2 (2.6)	12.6 (3.6)	8.8 (2.5)	40.1 (11.5)	10.2 (3.4)	13.9 (4.6)	12.0 (4.0)	53.9 (18.0)	6.9 (1.5)	9.5 (2.0)	8.7 (1.8)	39.3 (8.2)
19	11.4 (3.7)	15.5 (5.1)	16.0 (3.5)	72.4 (15.2)	8.7 (1.8)	11.8 (2.4)	8.3 (1.7)	37.6 (7.7)	8.4 (1.2)	11.5 (1.6)	10.0 (1.4)	44.5 (6.3)	9.8 (1.2)	13.3 (1.6)	12.8 (1.7)	57.9 (7.6)
20	11.3 (3.1)	15.5 (4.3)	18.2 (5.1)	83.3 (23.1)												
21	11.5 (1.0)	15.8 (1.4)	18.6 (1.6)	84.7 (7.3)	8.8 (2.2)	12.0 (3.0)	10.2 (2.5)	46.5 (11.5)					8.0 (0.7)	11.0 (1.0)	13.0 (1.2)	59.4 (5.5)
22	11.5 (0.8)	15.8 (1.1)	18.6 (1.3)	84.4 (5.7)	8.0 (1.8)	10.9 (2.4)	9.3 (2.0)	42.1 (9.2)					7.0 (0.7)	9.5 (0.9)	11.3 (1.1)	51.6 (5.1)
23	10.8 (0.8)	14.8 (1.1)	17.5 (1.4)	78.9 (6.1)	8.6 (2.3)	11.8 (3.2)	10.0 (2.7)	45.3 (12.1)					7.8 (2.2)	10.7 (3.0)	12.7 (3.6)	57.7 (16.4)
24	11.8 (1.2)	16.1 (1.7)	19.0 (2.0)	85.8 (9.0)	9.3 (1.0)	12.7 (1.3)	10.8 (1.1)	48.7 (5.1)					8.2 (0.8)	11.1 (1.1)	13.2 (1.3)	60.0 (5.9)
25	12.1 (0.9)	16.5 (1.2)	19.4 (1.4)	87.2 (6.2)	9.3 (1.3)	12.8 (1.7)	10.9 (1.5)	48.8 (6.7)					8.6 (0.6)	11.8 (0.8)	14.2 (1.1)	64.1 (4.8)
26	12.1 (1.0)	16.5 (1.4)	19.4 (1.7)	86.9 (7.5)	8.4 (1.8)	11.4 (2.5)	9.8 (2.1)	43.6 (9.5)					8.3 (0.5)	11.3 (0.7)	14.6 (0.8)	65.7 (3.6)
27	12.9 (0.9)	17.6 (1.3)	20.8 (1.5)	92.7 (6.7)	7.7 (1.7)	10.5 (2.3)	9.0 (2.0)	39.9 (8.9)					7.4 (0.7)	10.1 (0.9)	14.2 (1.2)	63.6 (5.4)
28	12.3 (1.4)	16.8 (1.9)	19.9 (2.2)	88.1 (9.9)	7.8 (1.8)	10.6 (2.4)	9.1 (2.1)	40.2 (9.2)					8.1 (0.7)	11.0 (1.0)	16.9 (1.8)	75.4 (7.8)
29													8.2 (1.4)	11.2 (2.0)	18.7 (3.3)	84.5 (15.3)
30	10.9 (0.7)	14.9 (0.9)	24.8 (1.5)	112.0 (6.7)	7.3 (0.7)	9.9 (1.0)	10.7 (1.1)	48.1 (4.8)	8.6 (1.3)	11.8 (1.7)	18.9 (2.9)	84.5 (12.9)	8.4 (0.6)	11.5 (0.8)	19.4 (1.3)	88.6 (5.8)
31	9.8 (0.8)	13.4 (1.1)	22.3 (1.8)	101.0 (8.2)	8.3 (1.6)	11.3 (2.2)	12.2 (2.4)	54.3 (10.7)	8.8 (0.9)	12.0 (1.3)	20.2 (2.2)	90.0 (9.8)	8.0 (0.9)	10.9 (1.3)	18.9 (1.8)	86.1 (8.4)
Avg	12.6	17.2	17.2	77.6	8.4	11.5	9.0	41.2	10.0	13.7	12.7	57.4	8.2	11.3	12.5	56.6
n	22	22	22	22	23	23	23	23	9	9	9	9	21	21	21	21
SD	1.34	1.83	3.13	13.9	1.03	1.41	1.5	6.58	1.46	1.99	3.81	16.7	0.96	1.31	3.61	16.1
Min	9.8	13.4	13.0	58.8	5.6	7.6	5.4	24.5	8.4	11.5	9.8	44.5	6.3	8.6	7.8	35.7
Max	14.5	19.7	24.8	112	10	13.7	12.2	54.3	13.5	18.5	20.2	90	10.4	14.2	19.4	88.6

ED_004549_00015928-00323

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for February, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	10.7 (1.2)	14.6 (1.6)	24.3 (2.6)	110.0 (11.8)	9.3 (3.2)	12.7 (4.4)	13.7 (4.8)	60.9 (21.2)	8.4 (0.9)	11.5 (1.2)	20.4 (2.3)	90.4 (10.0)	5.6 (0.8)	7.6 (1.2)	14.7 (2.2)	66.4 (10.1)
2																
3																
4																
5																
6																
7																
8	8.0 (0.4)	11.0 (0.5)	37.5 (1.9)	167.0 (8.2)	10.5 (1.3)	14.3 (1.8)	21.1 (2.6)	93.7 (11.7)	9.3 (0.9)	12.7 (1.2)	28.5 (2.6)	129.0 (11.9)	6.2 (0.9)	8.5 (1.2)	25.8 (3.7)	120.0 (17.2)
9																
10																
11																
12																
13	8.1 (0.5)	11.0 (0.7)	37.8 (2.5)	164.0 (11.0)	5.7 (0.8)	7.7 (1.0)	16.7 (2.3)	75.2 (10.1)	8.5 (0.7)	11.6 (1.0)	26.2 (2.3)	116.0 (10.1)	6.6 (1.0)	9.0 (1.3)	27.1 (4.0)	124.0 (18.3)
14	8.3 (0.3)	11.4 (0.4)	38.9 (1.3)	168.0 (5.4)	5.5 (0.3)	7.5 (0.4)	16.2 (0.8)	72.7 (3.5)	8.5 (0.4)	11.6 (0.5)	26.1 (1.2)	114.0 (5.1)	7.2 (0.3)	9.9 (0.4)	29.9 (1.1)	136.0 (4.9)
15	8.3 (0.5)	11.3 (0.7)	38.7 (2.5)	167.0 (10.8)	5.8 (0.6)	7.9 (0.8)	17.0 (1.8)	75.9 (7.8)	8.2 (0.3)	11.2 (0.5)	25.2 (1.0)	110.0 (4.3)	7.0 (0.3)	9.6 (0.4)	29.0 (1.3)	131.0 (6.0)
16	7.0 (1.1)	9.5 (1.5)	18.5 (18.6)	79.5 (79.8)	5.2 (1.3)	7.1 (1.8)	10.0 (35.2)	44.4 (156.0)	8.0 (1.1)	10.9 (1.5)	17.5 (58.2)	76.4 (254.0)	6.9 (0.9)	9.4 (1.2)	18.3 (65.4)	82.4 (295.0)
17	3.4 (0.5)	4.6 (0.7)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	3.6 (0.7)	4.9 (0.9)	0.0 (0.0)	0.0 (0.0)	4.8 (0.4)	6.5 (0.6)	0.0 (0.0)	0.0 (0.0)
18					0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	2.5 (0.8)	3.5 (1.1)	0.0 (0.0)	0.0 (0.0)				
19	1.9 (0.1)	2.6 (0.1)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.4 (0.6)	1.9 (0.9)	0.0 (0.0)	0.0 (0.0)	2.9 (0.8)	3.9 (1.1)	0.0 (0.0)	0.0 (0.0)
20	0.6 (0.9)	0.8 (1.3)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)					1.3 (1.3)	1.8 (1.8)	0.0 (0.0)	0.0 (0.0)
21													0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
22	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)									0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
23	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)								
24					0.1 (0.5)	0.2 (0.7)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)				
25	3.9 (1.0)	5.4 (1.3)	1.7 (0.4)	147.0 (34.7)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)					4.1 (1.0)	5.6 (1.3)	0.0 (0.0)	0.0 (0.0)
26	5.4 (1.1)	7.4 (1.5)	2.3 (0.5)	181.0 (33.4)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)					5.2 (0.8)	7.2 (1.1)	0.0 (0.0)	0.0 (0.0)
27	6.1 (1.7)	8.4 (2.3)	2.7 (0.7)	190.0 (47.3)									3.9 (1.2)	5.4 (1.6)	0.0 (0.0)	0.0 (0.0)
28	5.4 (3.0)	7.4 (4.1)	2.3 (1.3)	155.0 (86.8)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)					2.2 (0.6)	3.1 (0.8)	0.0 (0.0)	0.0 (0.0)
Avg	5.1	7.0	13.6	102.0	2.8	3.8	6.3	28.2	5.8	8.0	14.4	63.6	4.3	5.8	9.7	44.0
n	15	15	15	15	15	15	15	15	10	10	10	10	15	15	15	15
SD	3.28	4.47	16.3	76.6	3.66	5	8.03	35.8	3.36	4.59	12.1	53.6	2.4	3.28	12.3	56.4
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	10.7	14.6	38.9	190	10.5	14.3	21.1	93.7	9.28	12.7	28.5	129	7.24	9.9	29.9	136

ED_004549_00015928-00324

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for March, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	8.9 (1.3)	12.2 (1.8)	3.9 (0.6)	240.0 (37.4)					0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	2.7 (0.4)	3.7 (0.5)	0.0 (0.0)	0.0 (0.0)
2	9.7 (0.9)	13.3 (1.2)	4.2 (0.4)	245.0 (22.4)					0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	2.5 (0.2)	3.5 (0.3)	0.0 (0.0)	0.0 (0.0)
3	9.9 (1.6)	13.5 (2.1)	4.3 (0.7)	236.0 (39.3)					0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	2.2 (0.2)	3.0 (0.2)	0.0 (0.0)	0.0 (0.0)
4	9.1 (1.4)	12.5 (1.9)	4.0 (0.6)	208.0 (33.8)					0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	2.3 (0.2)	3.2 (0.3)	0.0 (0.0)	0.0 (0.0)
5	6.4 (2.9)	8.8 (4.0)	2.8 (1.3)	140.0 (65.3)					0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.4 (0.8)	1.8 (1.1)	0.0 (0.0)	0.0 (0.0)
6	4.1 (0.7)	5.6 (1.0)	1.8 (0.3)	84.4 (15.2)					0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.7 (0.5)	1.0 (0.6)	0.0 (0.0)	0.0 (0.0)
7	5.0 (0.8)	6.8 (1.1)	2.2 (0.3)	100.0 (16.4)					0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.7 (0.5)	0.9 (0.7)	0.0 (0.0)	0.0 (0.0)
8	5.6 (1.8)	7.7 (2.4)	2.4 (0.8)	109.0 (34.7)					0.0 (0.0)	0.0 (0.1)	0.0 (0.0)	0.0 (0.0)	2.1 (0.9)	2.9 (1.2)	0.0 (0.0)	0.0 (0.0)
9																
10																
11																
12																
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17																
18																
19																
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21																
22																
23																
24																
25																
26																
27																
28																
29													0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
30																
31																
Avg	7.4	10.0	3.2	170.0					0.0	0.0	0.0	0.0	1.6	2.2	0.0	0.0
n	8	8	8	8	0	0	0	0	8	8	8	8	9	9	9	9
SD	2.18	2.98	0.94	64.5					0.01	0.01	0	0	0.92	1.25	0	0
Min	4.1	5.6	1.8	84.4					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	9.9	13.5	4.27	245					0.03	0.04	0	0	2.72	3.71	0	0

ED_004549_00015928-00325

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for April, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6													0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
7																
8																
9																
10																
11																
12																
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28																
29																
30	9.0 (2.4)	12.3 (3.3)	8.1 (2.1)	87.2 (23.2)	6.1 (2.0)	8.3 (2.7)	5.6 (1.8)	72.6 (23.7)	4.9 (1.5)	6.7 (2.1)	4.4 (1.4)	57.2 (17.7)				
Avg																
n	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
SD																
Min																
Max																

ED_004549_00015928-00326

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for May, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	7.7 (1.9)	10.5 (2.6)	6.9 (1.7)	73.2 (18.5)	5.6 (1.2)	7.6 (1.7)	5.1 (1.2)	64.5 (14.5)	6.3 (2.1)	8.7 (2.8)	5.7 (1.8)	71.6 (23.2)				
2	7.4 (2.9)	10.1 (4.0)	6.7 (2.6)	68.8 (27.2)	5.5 (1.1)	7.6 (1.5)	5.1 (1.0)	62.7 (12.7)	6.1 (1.4)	8.3 (1.9)	5.4 (1.3)	67.1 (15.8)				
3	6.8 (1.9)	9.3 (2.7)	6.2 (1.8)	62.3 (17.7)	4.9 (1.1)	6.7 (1.5)	4.5 (1.0)	54.5 (12.4)	5.1 (1.7)	7.0 (2.3)	4.6 (1.5)	55.6 (18.6)				
4	6.4 (1.8)	8.7 (2.5)	5.8 (1.6)	57.1 (15.9)	5.7 (1.7)	7.8 (2.3)	5.3 (1.5)	61.9 (17.8)	5.3 (1.8)	7.3 (2.4)	4.8 (1.6)	56.1 (18.6)				
5	7.5 (1.8)	10.3 (2.4)	6.8 (1.6)	66.0 (15.5)	6.0 (1.4)	8.1 (1.9)	5.5 (1.3)	63.0 (14.8)	5.6 (1.4)	7.6 (1.9)	5.0 (1.3)	57.3 (14.8)				
6	8.0 (2.5)	11.0 (3.4)	7.2 (2.2)	68.8 (21.1)	6.3 (1.6)	8.5 (2.2)	5.8 (1.5)	64.6 (16.5)	6.9 (2.0)	9.4 (2.7)	6.2 (1.8)	69.5 (20.3)				
7																
8																
9	8.4 (1.8)	11.4 (2.5)	7.5 (1.7)	67.5 (14.9)	6.7 (1.7)	9.1 (2.3)	6.1 (1.6)	64.5 (16.6)	5.0 (1.7)	6.8 (2.3)	4.5 (1.5)	47.0 (15.8)				
10	7.7 (2.2)	10.5 (3.0)	6.9 (2.0)	61.0 (17.1)	5.7 (1.4)	7.8 (1.9)	5.3 (1.3)	54.2 (13.1)	4.1 (1.0)	5.5 (1.3)	3.6 (0.9)	37.4 (9.1)				
11	9.6 (3.5)	13.2 (4.7)	8.7 (3.1)	75.0 (26.8)	6.3 (2.1)	8.6 (2.9)	5.8 (2.0)	58.7 (19.7)	5.3 (3.2)	7.2 (4.4)	4.8 (2.9)	47.9 (28.8)				
12																
13																
14																
15																
16	9.0 (2.4)	12.3 (3.2)	8.1 (2.1)	64.1 (17.0)	7.9 (2.7)	10.8 (3.7)	7.3 (2.5)	66.5 (22.6)	4.3 (1.9)	5.8 (2.6)	3.8 (1.7)	35.0 (15.7)				
17	6.4 (1.4)	8.8 (1.9)	5.8 (1.3)	45.1 (9.9)	7.2 (1.8)	9.9 (2.4)	6.7 (1.6)	59.6 (14.6)	2.3 (0.8)	3.2 (1.1)	2.1 (0.7)	18.5 (6.5)				
18	7.5 (1.5)	10.2 (2.0)	6.7 (1.3)	51.4 (10.0)	7.4 (1.5)	10.1 (2.0)	6.9 (1.4)	60.0 (12.0)	4.0 (2.7)	5.5 (3.6)	3.6 (2.4)	31.9 (21.0)				
19	6.3 (1.5)	8.6 (2.0)	5.7 (1.4)	42.9 (10.2)	8.0 (2.9)	10.9 (4.0)	7.4 (2.7)	63.7 (23.1)	4.8 (2.2)	6.5 (3.0)	4.3 (2.0)	37.0 (17.0)				
20	6.9 (1.6)	9.4 (2.2)	6.2 (1.5)	46.1 (10.9)					5.9 (2.9)	8.1 (4.0)	5.3 (2.6)	44.9 (22.3)				
21	6.8 (1.7)	9.3 (2.4)	6.1 (1.6)	44.6 (11.5)					6.6 (2.9)	9.0 (3.9)	6.0 (2.6)	49.5 (21.5)	8.6 (1.9)	11.7 (2.6)	7.9 (1.8)	57.0 (12.5)
22	8.7 (3.0)	11.8 (4.0)	7.8 (2.7)	56.0 (19.1)												
23	8.0 (2.1)	10.9 (2.8)	7.2 (1.9)	50.8 (13.2)					7.4 (3.7)	10.1 (5.0)	6.7 (3.3)	53.6 (26.7)	9.3 (2.2)	12.7 (3.0)	8.6 (2.0)	59.9 (14.1)
24	7.8 (2.4)	10.7 (3.3)	7.1 (2.2)	49.3 (15.5)					7.4 (3.0)	10.0 (4.2)	6.6 (2.7)	52.3 (21.6)	10.2 (2.7)	13.9 (3.7)	9.4 (2.5)	64.7 (17.1)
25	9.2 (1.8)	12.6 (2.5)	8.3 (1.7)	57.0 (11.4)	7.9 (1.9)	10.8 (2.6)	7.3 (1.8)	56.7 (13.6)	5.3 (1.8)	7.2 (2.5)	4.8 (1.6)	37.1 (12.7)	8.9 (2.2)	12.2 (3.0)	8.2 (2.0)	55.7 (13.8)
26																
27	7.9 (1.5)	10.8 (2.0)	7.2 (1.3)	47.7 (8.8)	11.5 (2.4)	15.7 (3.2)	10.7 (2.2)	80.0 (16.6)	9.4 (1.6)	12.8 (2.2)	8.5 (1.4)	63.8 (10.6)	11.9 (2.4)	16.2 (3.2)	10.9 (2.2)	72.3 (14.5)
28	9.9 (2.4)	13.6 (3.3)	9.0 (2.2)	59.1 (14.4)	8.5 (2.8)	11.6 (3.9)	7.9 (2.6)	58.1 (19.3)	6.3 (1.3)	8.6 (1.8)	5.7 (1.2)	42.2 (8.5)	10.0 (2.2)	13.6 (3.1)	9.2 (2.1)	59.9 (13.5)
29	6.9 (2.0)	9.5 (2.7)	6.3 (1.8)	40.8 (11.8)	11.2 (3.2)	15.3 (4.3)	10.4 (3.0)	75.3 (21.4)	7.9 (3.1)	10.7 (4.2)	7.1 (2.8)	51.8 (20.3)	9.8 (2.3)	13.4 (3.1)	9.0 (2.1)	58.0 (13.6)
30	6.8 (2.1)	9.3 (2.9)	6.2 (1.9)	39.7 (12.1)	11.0 (4.7)	15.0 (6.4)	10.2 (4.3)	73.1 (31.0)	7.0 (3.1)	9.6 (4.2)	6.4 (2.8)	45.7 (20.1)	8.0 (3.1)	10.9 (4.2)	7.4 (2.9)	47.0 (18.3)
31	6.8 (1.7)	9.3 (2.3)	6.2 (1.5)	39.2 (9.7)	11.3 (4.0)	15.4 (5.5)	10.5 (3.8)	74.0 (26.4)	6.8 (3.4)	9.3 (4.6)	6.1 (3.0)	43.5 (21.4)	8.3 (2.8)	11.3 (3.8)	7.7 (2.6)	48.1 (16.3)
Avg	7.7	10.5	7.0	55.6	7.6	10.4	7.0	64.0	5.9	8.0	5.3	48.5	9.4	12.9	8.7	58.1
n	24	24	24	24	19	19	19	19	23	23	23	23	9	9	9	9
SD	1	1.36	0.9	10.8	2.11	2.88	1.97	6.96	1.48	2.03	1.34	12.6	1.12	1.53	1.03	7.33
Min	6.3	8.6	5.7	39.2	4.9	6.7	4.5	54.2	2.3	3.2	2.1	18.5	8.0	10.9	7.4	47.0
Max	9.93	13.6	9	75	11.5	15.7	10.7	80	9.4	12.8	8.48	71.6	11.9	16.2	10.9	72.3

ED_004549_00015928-00327

Table E13. Daily means (SD) of ammonia emissions at Site IN3B for June, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1	9.5 (5.3)	12.9 (7.2)	8.6 (4.8)	53.6 (29.9)	11.5 (7.6)	15.7 (10.4)	10.7 (7.1)	74.3 (48.9)	8.2 (3.9)	11.3 (5.3)	7.4 (3.5)	51.9 (24.2)	10.8 (3.0)	14.8 (4.1)	10.0 (2.8)	61.8 (16.9)
2	8.6 (2.1)	11.8 (2.9)	7.8 (1.9)	48.4 (11.8)	10.8 (3.5)	14.7 (4.7)	10.0 (3.2)	68.5 (22.0)	8.5 (2.9)	11.7 (4.0)	7.7 (2.6)	53.1 (18.0)	9.9 (2.2)	13.5 (3.1)	9.1 (2.1)	56.0 (12.6)
3	6.9 (2.4)	9.4 (3.3)	6.2 (2.2)	38.0 (13.3)	10.1 (2.4)	13.8 (3.2)	9.4 (2.2)	63.7 (14.7)	6.5 (1.6)	8.9 (2.2)	5.9 (1.5)	39.8 (10.0)	10.8 (2.8)	14.8 (3.8)	10.0 (2.6)	60.5 (15.8)
4	7.0 (3.9)	9.5 (5.3)	6.3 (3.5)	38.0 (21.1)	11.0 (3.9)	15.1 (5.4)	10.3 (3.7)	68.4 (24.4)	7.6 (2.5)	10.3 (3.4)	6.8 (2.3)	45.9 (15.2)	8.5 (2.6)	11.6 (3.5)	7.8 (2.4)	47.0 (14.3)
5	6.1 (1.8)	8.4 (2.5)	5.6 (1.6)	33.2 (9.8)	9.3 (3.3)	12.7 (4.5)	8.7 (3.1)	57.1 (20.4)	7.3 (2.4)	10.0 (3.2)	6.6 (2.1)	43.6 (14.1)	7.3 (2.2)	10.0 (3.0)	6.7 (2.0)	39.9 (12.0)
6	7.5 (2.9)	10.3 (3.9)	6.8 (2.6)	40.3 (15.4)	11.5 (5.6)	15.6 (7.6)	10.7 (5.2)	69.3 (33.8)	7.3 (2.0)	10.0 (2.7)	6.6 (1.8)	43.2 (11.5)	8.4 (2.2)	11.5 (3.0)	7.8 (2.1)	45.5 (12.1)
7	7.1 (2.7)	9.7 (3.7)	6.5 (2.4)	37.7 (14.3)	11.9 (3.2)	16.3 (4.4)	11.1 (3.0)	71.2 (19.2)	7.5 (2.2)	10.2 (2.9)	6.7 (1.9)	43.5 (12.5)	8.5 (1.8)	11.6 (2.4)	7.9 (1.6)	45.7 (9.6)
8	5.2 (4.4)	7.1 (6.1)	4.7 (4.0)	27.4 (23.3)	9.9 (10.0)	13.5 (13.7)	9.2 (9.4)	58.4 (59.1)	8.8 (2.0)	12.0 (2.8)	8.0 (1.8)	50.8 (11.8)	8.6 (1.7)	11.8 (2.3)	8.0 (1.6)	45.9 (8.8)
9	5.2 (4.8)	7.1 (6.6)	4.8 (4.4)	27.2 (25.1)	10.4 (10.2)	14.2 (13.9)	9.7 (9.5)	60.8 (59.3)	11.4 (3.7)	15.6 (5.0)	10.3 (3.3)	65.2 (21.2)	12.0 (2.5)	16.4 (3.4)	11.1 (2.3)	63.1 (13.3)
10	7.1 (1.8)	9.6 (2.4)	6.4 (1.6)	36.3 (9.2)	13.1 (6.2)	17.9 (8.4)	12.2 (5.7)	75.7 (35.5)	9.3 (3.2)	12.7 (4.3)	8.4 (2.9)	52.6 (17.8)	13.6 (5.8)	18.6 (7.9)	12.6 (5.3)	71.2 (30.1)
11	9.1 (4.0)	12.4 (5.5)	8.3 (3.6)	46.5 (20.5)	8.8 (3.5)	12.1 (4.7)	8.3 (3.2)	50.4 (19.7)	9.2 (1.8)	12.5 (2.5)	8.3 (1.6)	51.0 (10.0)	8.3 (2.7)	11.4 (3.8)	7.7 (2.5)	43.0 (14.2)
12	6.5 (1.5)	8.9 (2.0)	5.9 (1.3)	32.9 (7.4)	9.9 (2.9)	13.6 (4.0)	9.3 (2.7)	56.1 (16.5)	8.5 (2.4)	11.6 (3.3)	7.7 (2.2)	46.8 (13.2)	7.1 (1.9)	9.7 (2.6)	6.5 (1.8)	36.1 (9.9)
13	8.5 (2.4)	11.6 (3.2)	7.7 (2.2)	42.7 (12.0)	10.4 (3.8)	14.2 (5.2)	9.7 (3.5)	58.3 (21.1)	8.2 (3.5)	11.2 (4.7)	7.4 (3.1)	44.8 (18.9)	9.2 (1.8)	12.6 (2.4)	8.5 (1.6)	46.8 (9.0)
14	8.4 (3.1)	11.5 (4.2)	7.7 (2.8)	41.9 (15.3)	11.5 (3.5)	15.7 (4.7)	10.8 (3.2)	63.8 (19.2)	9.2 (3.4)	12.5 (4.6)	8.3 (3.1)	49.6 (18.2)	10.6 (2.3)	14.5 (3.1)	9.8 (2.1)	53.3 (11.4)
15	7.0 (1.6)	9.6 (2.2)	6.4 (1.5)	34.6 (8.0)	11.1 (4.9)	15.2 (6.7)	10.4 (4.6)	60.9 (26.7)	8.8 (3.1)	12.0 (4.2)	8.0 (2.8)	47.1 (16.6)	9.7 (3.2)	13.3 (4.3)	9.0 (2.9)	48.4 (15.8)
16																
17																
18																
19																
20																
21																
22																
23																
24	6.0 (0.6)	8.2 (0.9)	5.5 (0.6)	27.7 (2.9)					10.7 (3.1)	14.7 (4.2)	9.7 (2.8)	53.1 (15.3)	8.5 (2.2)	11.7 (3.0)	7.9 (2.0)	40.0 (10.2)
25	5.9 (1.6)	8.1 (2.2)	5.4 (1.5)	27.3 (7.4)	14.7 (2.4)	20.0 (3.3)	13.7 (2.2)	73.8 (12.0)								
26	5.0 (1.8)	6.8 (2.5)	4.5 (1.6)	22.8 (8.2)	11.6 (2.7)	15.9 (3.6)	10.9 (2.5)	58.1 (13.4)								
27	6.4 (3.0)	8.7 (4.1)	5.8 (2.7)	29.1 (13.7)	13.6 (4.2)	18.5 (5.7)	12.7 (3.9)	67.2 (20.5)								
28	5.0 (3.0)	6.9 (4.1)	4.6 (2.7)	22.7 (13.5)	11.8 (4.2)	16.1 (5.7)	11.0 (3.9)	58.0 (20.5)								
29					11.4 (3.6)	15.6 (4.9)	10.7 (3.4)	55.9 (17.6)								
30																
Avg	6.9	9.4	6.3	35.4	11.2	15.3	10.5	63.5	8.6	11.7	7.8	48.9	9.5	13.0	8.8	50.3
n	20	20	20	20	20	20	20	20	16	16	16	16	16	16	16	16
SD	1.33	1.82	1.21	8.34	1.37	1.87	1.29	6.99	1.23	1.68	1.12	5.8	1.68	2.3	1.55	9.48
Min	5.0	6.8	4.5	22.7	8.8	12.1	8.3	50.4	6.5	8.9	5.9	39.8	7.1	9.7	6.5	36.1
Max	9.47	12.9	8.58	53.6	14.7	20	13.7	75.7	11.4	15.6	10.3	65.2	13.6	18.6	12.6	71.2

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Table E13. Daily means (SD) of ammonia emissions at Site IN3B for July, 2009.

Day	Room 5				Room 6				Room 7				Room 8			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} m^{2}$	$g \cdot d^{-1} hd^{-1}$	$g \cdot d^{-1} AU^{-1}$
1																
2																
3																
4																
5																
6																
7																
8																
9																
10	6.5 (2.4)	8.9 (3.3)	5.9 (2.2)	27.9 (10.3)	12.8 (3.9)	17.5 (5.3)	12.1 (3.6)	59.2 (17.7)	14.3 (3.8)	19.6 (5.2)	13.1 (3.5)	64.7 (17.1)	11.4 (1.9)	15.5 (2.6)	10.6 (1.8)	49.2 (8.2)
11	5.3 (0.6)	7.3 (0.8)	4.9 (0.5)	22.7 (2.4)	14.9 (2.1)	20.4 (2.9)	14.0 (2.0)	68.6 (9.6)	14.3 (2.1)	19.6 (2.8)	13.1 (1.9)	64.5 (9.3)	10.0 (0.9)	13.6 (1.3)	9.3 (0.9)	43.0 (4.1)
12	6.3 (2.4)	8.6 (3.2)	5.7 (2.2)	26.6 (10.0)	11.3 (4.6)	15.4 (6.3)	10.6 (4.4)	51.7 (21.2)	12.4 (3.5)	16.9 (4.8)	11.3 (3.2)	55.5 (15.6)	9.3 (2.1)	12.6 (2.8)	8.8 (2.0)	40.8 (9.0)
13	5.6 (2.9)	7.7 (3.9)	5.1 (2.6)	23.8 (12.1)	11.7 (4.7)	15.9 (6.5)	11.0 (4.5)	53.2 (21.6)	12.6 (4.1)	17.2 (5.6)	11.5 (3.8)	56.3 (18.4)	11.7 (3.9)	16.0 (5.3)	11.7 (3.8)	53.9 (17.6)
14	6.2 (2.4)	8.5 (3.3)	5.7 (2.2)	26.3 (10.1)	14.6 (4.9)	19.9 (6.6)	13.7 (4.6)	66.0 (22.0)	12.3 (3.4)	16.8 (4.7)	11.2 (3.1)	54.6 (15.1)	11.5 (5.6)	15.7 (7.6)	12.2 (5.9)	55.7 (26.8)
15	7.6 (2.8)	10.4 (3.8)	7.6 (2.3)	35.0 (10.4)	15.7 (3.3)	21.4 (4.5)	14.8 (3.1)	70.9 (14.7)	16.3 (4.6)	22.2 (6.2)	14.9 (4.2)	72.0 (20.2)	10.0 (2.4)	13.7 (3.3)	11.2 (2.7)	51.0 (12.3)
16	6.6 (2.3)	9.0 (3.2)	7.2 (2.6)	33.4 (11.9)	16.1 (3.5)	22.0 (4.8)	15.2 (3.3)	72.6 (15.8)								
17	7.8 (2.0)	10.7 (2.8)	8.5 (2.2)	39.4 (10.3)	12.5 (3.6)	17.1 (4.9)	11.7 (3.3)	55.9 (16.0)	11.6 (3.4)	15.9 (4.6)	10.7 (3.1)	51.1 (14.7)	6.4 (1.2)	8.7 (1.6)	7.1 (1.3)	32.6 (6.0)
18	6.7 (1.9)	9.2 (2.5)	7.3 (2.0)	33.7 (9.4)	14.3 (4.4)	19.5 (6.0)	13.4 (4.1)	63.8 (19.4)	10.7 (2.3)	14.6 (3.1)	9.8 (2.1)	46.9 (10.0)	8.1 (4.3)	11.0 (5.8)	9.1 (4.8)	41.4 (21.8)
19	7.0 (3.1)	9.5 (4.2)	7.6 (3.3)	35.0 (15.3)	12.1 (3.5)	16.5 (4.8)	11.4 (3.3)	53.7 (15.6)	12.2 (3.1)	16.7 (4.2)	11.2 (2.8)	53.3 (13.5)	7.4 (1.8)	10.1 (2.4)	8.3 (2.0)	37.9 (9.1)
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
Avg	6.6	9.0	6.6	30.4	13.6	18.6	12.8	61.6	13.0	17.7	11.9	57.7	9.5	13.0	9.8	45.1
n	10	10	10	10	10	10	10	10	9	9	9	9	9	9	9	9
SD	0.74	1.01	1.17	5.31	1.65	2.25	1.55	7.41	1.6	2.18	1.45	7.43	1.79	2.44	1.59	7.35
Min	5.3	7.3	4.9	22.7	11.3	15.4	10.6	51.7	10.7	14.6	9.8	46.9	6.4	8.7	7.1	32.6
Max	7.8	10.7	8.53	39.4	16.1	22	15.2	72.6	16.3	22.2	14.9	72	11.7	16	12.2	55.7

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Table E14. Completeness of airflow and emission data.

Table E14. Airflow and emission data completeness (%) at Site IN3B for July, 2007.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	2.8	2.8	2.8	2.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	99.2	99.2	99.2	99.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	92.6	98.1	98.1	98.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	76.7	76.7	76.7	76.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	98.4	98.4	98.4	98.4	16.2	13.4	12	19	17.4	13.5	12.2	20.5	27.4	28.2	29.6	29.6	0	0	0	0	0	0	0	0
14	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
15	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
16	100	40.6	100	100	59.9	38.5	78.7	78.7	60.1	40.6	78.8	78.8	88.3	40.6	100	100	0	0	0	0	0	0	0	0
17	100	0	100	100	59.2	0	100	78.7	59.4	0	100	78.8	100	0	100	100	0	0	0	0	0	0	0	0
18	100	0	100	100	59.2	0	60.6	69	59.4	0	60.8	69.1	100	0	100	100	0	0	0	0	0	0	0	0
19	100	0	100	100	100	0	80.1	100	100	0	80.2	100	99.8	0	99.8	99.8	0	0	0	0	0	0	0	0
20	100	0	100	100	100	0	100	100	100	0	100	100	100	0	100	100	0	0	0	0	0	0	0	0
21	100	0	100	100	100	0	100	100	100	0	100	100	100	0	100	100	0	0	0	0	0	0	0	0
22	100	0	100	100	100	0	100	100	100	0	100	100	100	0	100	100	0	0	0	0	0	0	0	0
23	98.4	0	98.4	98.4	98.4	0	98.4	98.4	98.4	0	98.4	98.4	98.4	0	98.4	98.4	0	0	0	0	0	0	0	0
24	100	0	100	100	100	0	100	100	100	0	100	100	100	0	100	100	0	0	0	0	0	0	0	0
25	100	0	100	100	100	0	100	100	100	0	100	100	100	0	100	100	0	0	0	0	0	0	0	0
26	100	0	100	100	48.1	0	48.1	48.1	48.1	0	48.1	48.1	100	0	100	100	0	0	0	0	0	0	0	0
27	100	0	100	100	0	0	0	0	0	0	0	0	100	0	100	100	0	0	0	0	0	0	0	0
28	100	0	100	100	0	0	0	0	0	0	0	0	100	0	100	100	0	0	0	0	0	0	0	0
29	100	0	100	100	26.3	0	26.3	26.3	26.3	0	26.3	26.3	100	0	100	100	0	0	0	0	0	0	0	0
30	95.6	20.8	95.6	95.6	95.6	20.8	95.6	56.9	95.6	20.8	95.6	57.8	95.6	20.8	76.5	89.2	0	0	0	0	0	0	0	0
31	99.9	99.9	99.9	99.9	99.9	99.9	99.9	77.9	99.9	99.9	99.9	78.1	92.8	89.8	99	88.4	0	0	0	0	0	0	0	0
Avg	82.7	36.7	82.9	82.9	44	12	45.1	43.6	44	12.1	45.2	43.7	58.1	12.2	58.2	58.2	0	0	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	36.3	45.9	36.3	36.3	45	29.8	45.8	44.2	45	29.9	45.8	44.2	47.9	29.1	48	47.9	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0

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Table E14. Airflow and emission data completeness (%) at Site IN3B for August, 2007.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	31.3	100	100	100	31.3	100	100	100	31.3	100	100	100	31.3	82.4	100	0	0	0	0	0	0	0	0
2	97.8	0	100	100	74.4	0	75.9	75.9	74.6	0	76	77.4	91.2	0	96.8	83.4	0	0	0	0	0	0	0	0
3	73.3	0	73.3	73.3	67.5	0	57.1	56.4	67.6	0	57.2	56.5	73.3	0	73.3	73.3	0	0	0	0	0	0	0	0
4	100	0	100	100	100	0	100	100	100	0	100	100	100	0	100	100	0	0	0	0	0	0	0	0
5	100	0	100	100	100	0	100	100	100	0	100	100	94.6	0	97.8	83.2	0	0	0	0	0	0	0	0
6	99.9	0	99.9	99.9	99.9	0	99.9	77.9	99.9	0	99.9	78.1	83.1	0	84.2	79.7	0	0	0	0	0	0	0	0
7	90.6	52.6	90.6	90.6	90.6	52.6	90.6	71.4	90.6	52.6	90.6	71.5	60.7	20.2	59.7	56.2	0	0	0	0	0	0	0	0
8	100	100	100	100	100	100	100	100	100	100	100	100	64.1	64.4	65.2	59.6	0	0	0	0	0	0	0	0
9	100	100	100	100	75.9	100	75.9	75.9	76	100	76	76	67	74.1	76.2	58	0	0	0	0	0	0	0	0
10	100	100	100	100	100	100	100	100	100	100	100	100	100	86.6	87.1	87.5	0	0	0	0	0	0	0	0
11	100	100	100	100	100	100	100	100	100	100	100	100	100	93.7	93.3	100	0	0	0	0	0	0	0	0
12	100	100	100	100	100	100	100	100	100	100	100	100	94.2	82.8	87	74.1	0	0	0	0	0	0	0	0
13	100	100	100	100	90.5	100	100	100	90.6	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
14	100	100	100	100	100	78	77.3	95.5	100	78.1	77.4	95.5	97.2	98.6	97	96.9	0	0	0	0	0	0	0	0
15	99.3	99.4	99.4	99.4	99.3	99.4	99.4	99.4	99.3	99.4	99.4	99.4	99.3	92.6	93.5	96.3	0	0	0	0	0	0	0	0
16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
17	48.8	48.8	48.8	48.8	43.5	46.3	38.6	40.7	43.5	46.3	48.8	40.7	48.8	48.8	48.8	48.8	0	0	0	0	0	0	0	0
18	37.9	37.9	37.9	37.9	36.1	33.3	30.6	27.8	22.6	19.8	17	14.2	30.8	37.9	37.9	37.9	0	0	0	0	0	0	0	0
19	77.6	77.8	77.8	77.8	72.8	73	61.9	61.9	0	0	0	0	77.6	77.8	77.8	77.8	0	0	0	0	0	0	0	0
20	87.9	87.9	87.1	87.9	45.7	36.5	38.5	41.3	0	0	0	0	87.9	87.9	87.1	87.9	0	0	0	0	0	0	0	0
21	100	100	100	100	0	0	0	0	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0
22	99.4	99.4	99.4	99.4	0	0	0	0	19.9	0	19.9	19.9	97.6	55.7	98.8	71.9	0	0	0	0	0	0	0	0
23	99.7	99.7	99.7	99.7	0	0	0	0	99.7	0	99.7	99.7	71.3	0	72.8	63.3	0	0	0	0	0	0	0	0
24	93.7	93.5	94.1	93.4	0	0	0	0	93.7	0	94.1	93.4	80.8	0	83.1	76	0	0	0	0	0	0	0	0
25	100	80.2	100	100	0	0	0	0	100	0	100	100	100	0	100	100	0	0	0	0	0	0	0	0
26	100	55.3	100	100	0	0	0	0	100	0	100	100	100	0	100	100	0	0	0	0	0	0	0	0
27	100	100	100	100	0	0	0	0	34.7	46.3	100	100	38.5	0	38.5	38.5	0	0	0	0	0	0	0	0
28	100	100	100	99.9	0	0	0	0	0	100	100	99.9	0	0	0	0	0	0	0	0	0	0	0	0
29	100	100	100	100	0	0	0	0	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
30	100	79.7	100	100	0	0	0	0	0	79.7	100	100	0	0	0	0	0	0	0	0	0	0	0	0
31	94.4	100	100	99.9	0	0	0	33.7	0	100	100	99.9	0	0	0	0	0	0	0	0	0	0	0	0
Avg	93.6	72.4	93.8	93.8	54.7	37.1	53.1	53.5	64.9	46.9	79.2	78.1	72.8	40.4	72.2	69.4	0	0	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	14.7	37.4	14.8	14.8	43.9	42.9	43.7	42.2	41.8	44.9	34.2	34.5	33.7	41.2	32.7	32.3	0	0	0	0	0	0	0	0
Min	37.9	0	37.9	37.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0

ED_004549_00015928-00331

Table E14. Airflow and emission data completeness (%) at Site IN3B for September, 2007.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	100	100	100	0	0	0	99.3	0	100	31.9	100	0	0	0	0	0	0	0	0	0	0	0	0
2	100	100	83.3	100	0	0	0	100	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0
3	100	100	57.5	100	0	0	0	41.8	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0
4	100	100	100	100	0	0	0	0	33.8	100	0	53.4	7.2	18.1	0	0	0	0	0	0	0	0	0	0
5	80.1	100	100	100	0	0	0	0	80.1	100	0	0	0	61.8	0	0	0	0	0	0	0	0	0	0
6	99.1	99.1	83.3	99.1	0	0	0	0	99.1	99.1	41.6	0	15.3	99.1	0	0	0	0	0	0	0	0	0	0
7	100	100	100	100	0	0	0	0	100	100	100	0	55.8	89.3	0	0	0	0	0	0	0	0	0	0
8	57.2	57.2	57.2	57.2	0	0	0	0	54.6	57.2	49.7	0	55.4	57.2	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	58.2	58.2	58.2	58.2	27.6	24.9	23.5	0	48.5	43.8	50.4	0	58.2	58.2	40.2	0	0	0	0	0	0	0	0	0
11	100	100	100	100	100	100	100	0	100	100	100	0	100	100	98.5	0	0	0	0	0	0	0	0	0
12	100	100	100	100	100	100	100	0	100	100	100	0	99.4	100	100	0	0	0	0	0	0	0	0	0
13	100	100	100	100	66.9	100	74.5	0	73.7	100	74.7	0	45	99.5	99.5	0	0	0	0	0	0	0	0	0
14	99.6	99.6	99.6	99.6	99.6	99.6	74.1	0	99.6	99.6	99.6	0	2.5	99.6	99.6	0	0	0	0	0	0	0	0	0
15	100	100	100	100	100	100	100	0	100	100	100	0	21	100	100	0	0	0	0	0	0	0	0	0
16	100	100	100	100	100	100	100	0	100	100	100	0	8.2	100	100	0	0	0	0	0	0	0	0	0
17	100	100	100	100	100	100	100	0	100	100	100	0	0	100	100	0	0	0	0	0	0	0	0	0
18	99.6	99.6	99.6	94.5	77.6	78.3	67.2	0	77.8	78.4	67.8	0	0	95.3	99.6	0	0	0	0	0	0	0	0	0
19	100	100	100	100	100	100	100	0	100	100	100	0	8.1	67.5	67.5	0	0	0	0	0	0	0	0	0
20	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	99.9	99.9	99.9	0	20.2	32	33.1	0	0	0	0	0	0	0	0	0
21	100	100	100	100	78	78.7	66.2	24.8	78.1	78.8	75.8	25.1	0	92.2	87.2	39.5	0	0	0	0	0	0	0	0
22	100	100	100	100	100	100	100	100	100	100	100	100	30.3	100	100	100	0	0	0	0	0	0	0	0
23	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0
24	99.5	99.5	99.5	99.5	59.4	73.3	75.4	50.1	59.6	73.5	75.6	50.3	0	85.6	89.2	95.9	0	0	0	0	0	0	0	0
25	39.9	39.9	39.9	39.9	28.7	37.7	34.9	32.2	28.8	37.8	35.1	32.3	39.9	39.9	39.9	39.9	0	0	0	0	0	0	0	0
26	86.3	86.3	86.3	86.3	57.6	77.9	78.6	68.1	50	41.7	54.2	47.2	36.5	86.3	86.3	86.3	0	0	0	0	0	0	0	0
27	100	100	100	100	100	100	100	99.2	62.6	60.5	58.4	55.6	100	100	100	100	0	0	0	0	0	0	0	0
28	74.9	74.9	74.9	74.9	60.1	53.5	54.9	64.4	65.4	53.6	55	64.7	73.8	74.9	74.9	74.9	0	0	0	0	0	0	0	0
29	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
30	100	100	100	100	100	100	100	100	28.3	19.9	22.7	25.5	100	100	100	100	0	0	0	0	0	0	0	0
Avg	89.8	90.5	88	90.3	58.5	60.8	58.3	32.7	68	81.5	63.1	31.8	32.6	71.9	60.5	27.9	0	0	0	0	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	22.6	22.6	23.1	22.5	43.1	43.9	42.7	41.8	35.3	28.1	37	39.5	36.6	35.8	43.6	41.7	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0

ED_004549_00015928-00332

Table E14. Airflow and emission data completeness (%) at Site IN3B for October, 2007.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	100	100	100	100	100	100	100	0	0	0	0	84.9	100	100	100	0	0	0	0	0	0	0	0
2	100	100	100	100	100	100	100	100	39.7	39.7	39.7	39.7	67.4	67.4	67.4	67.4	0	0	0	0	0	0	0	0
3	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
4	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0	0	0	0	0	0
5	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
6	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
7	54.9	54.9	54.9	54.9	51.3	53.3	46.4	48.5	51.3	53.3	46.4	48.5	0	0	0	0	0	0	0	0	0	0	0	0
8	61	61	61	61	25.4	33.8	54.4	51.6	25.7	34	54.5	51.7	0	0	0	0	0	0	0	0	0	0	0	0
9	100	100	100	100	100	76.6	75.9	77.3	100	76.7	76	77.4	0	0	0	0	0	0	0	0	0	0	0	0
10	99.4	99.4	99.4	99.4	69.2	99.4	81.2	99.4	69.3	99.4	81.3	99.4	42.2	42.2	42.2	42.2	0	0	0	0	0	0	0	0
11	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
12	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
13	100	100	100	100	100	100	100	100	100	100	100	100	99.5	100	100	100	0	0	0	0	0	0	0	0
14	100	100	100	100	100	100	100	100	100	100	100	100	99.7	100	100	100	0	0	0	0	0	0	0	0
15	98.2	98.2	98.2	98.2	44.2	36.8	36.6	39.4	77.6	66.7	75.5	74.8	98.2	98.2	98.2	98.2	0	0	0	0	0	0	0	0
16	100	100	100	100	0	0	0	0	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
17	100	100	100	100	0	0	0	0	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
18	99.1	99.9	99.9	84.9	0	0	0	0	99.1	99.9	99.9	84.9	55.3	60.3	71.9	58.1	0	0	0	0	0	0	0	0
19	98.4	99.9	99.9	99.9	0	0	0	0	98.4	99.9	99.9	99.9	73	99.9	99.9	99.9	0	0	0	0	0	0	0	0
20	100	100	100	100	0	0	0	0	100	100	100	100	98.8	100	100	100	0	0	0	0	0	0	0	0
21	100	100	100	100	0	0	0	0	100	100	100	100	91.9	100	100	100	0	0	0	0	0	0	0	0
22	96.3	96.3	96.3	58.1	0	0	0	0	66.2	55.1	66.2	51.4	87.6	91.4	92.2	58.1	0	0	0	0	0	0	0	0
23	100	100	100	100	0	0	0	0	100	100	91.4	78.8	73.3	100	100	100	0	0	0	0	0	0	0	0
24	98	98	98	98	0	0	0	0	98	98	98	77.4	58.3	59.1	59.1	59.1	0	0	0	0	0	0	0	0
25	100	100	100	100	0	0	0	0.1	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
26	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
27	100	100	100	100	0	0	0	0	44.9	44.9	44.9	44.9	0	0	0	0	0	0	0	0	0	0	0	0
28	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	95.4	95.4	95.4	95.4	33.5	34.9	34.9	16.2	33.7	35	35	16.3	0	0	0	0	0	0	0	0	0	0	0	0
30	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
31	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
Avg	96.8	96.9	96.9	95.2	49.1	49.5	49.3	49.4	80.8	80.7	80.9	78.9	46.1	49	49.4	47.8	0	0	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	10.3	10.3	10.3	12.5	46.2	46.3	45.6	46.5	31.2	30.9	29.7	30.9	44	46.5	46.7	45.9	0	0	0	0	0	0	0	0
Min	54.9	54.9	54.9	54.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0

ED_004549_00015928-00333

Table E14. Airflow and emission data completeness (%) at Site IN3B for November, 2007.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	100	100	100	100	100	100	100	100	100	100	100	60.3	60.3	60.3	60.3	0	0	0	0	0	0	0	0
2	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
3	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
4	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
5	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
6	100	100	100	100	77.3	77.3	100	67.6	77.4	100	100	67.7	97.5	97.5	97.5	97.5	0	0	0	0	0	0	0	0
7	99.7	99.7	99.7	99.7	46.5	38.2	41	43.8	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	0	0	0	0	0	0	0	0
8	99.2	99.2	99.2	99.2	42.5	39.7	38.3	46	92.4	95.1	97.2	89.6	99.2	43.7	99.2	99.2	0	0	0	0	0	0	0	0
9	100	100	100	100	65.5	47.3	46.9	52.3	24.2	11.9	18.2	15.6	100	0	100	100	0	0	0	0	0	0	0	0
10	100	100	100	100	66.7	76.8	96.7	100	66.7	77.2	100	100	100	0	100	100	0	0	0	0	0	0	0	0
11	89.7	100	100	100	85.3	78.7	80.1	100	85.3	78.8	100	100	89.7	0	100	100	0	0	0	0	0	0	0	0
12	98.1	100	100	100	76.1	100	100	100	76.3	100	100	100	98.1	0	100	100	0	0	0	0	0	0	0	0
13	100	100	100	100	20.2	20.2	20.2	20.2	100	77.4	100	100	97.2	0	97.2	97.2	0	0	0	0	0	0	0	0
14	100	100	100	100	0	0	0	0	100	100	100	100	100	0	100	100	0	0	0	0	0	0	0	0
15	76.3	76.3	76.3	76.3	0	0	0	0	68.7	68.7	68.7	57.6	76.3	0	76.3	76.3	0	0	0	0	0	0	0	0
16	97.2	97.2	97.2	97.2	14.7	11.9	17.2	17.2	74	63.8	76.9	96.6	97.2	0	97.2	97.2	0	0	0	0	0	0	0	0
17	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100	0	0	0	0	0	0	0	0
18	100	100	100	100	100	100	100	100	100	100	100	100	100	55.6	100	100	0	0	0	0	0	0	0	0
19	97.4	97.4	97.4	97.4	79.4	69	68.3	69	79.5	69.1	76	69.1	97.4	97.4	97.4	97.4	0	0	0	0	0	0	0	0
20	100	100	100	100	100	100	100	100	100	100	100	100	93.3	93.3	98.2	98.2	0	0	0	0	0	0	0	0
21	100	100	100	71.5	100	100	100	71.5	100	100	100	71.5	100	100	100	71.5	0	0	0	0	0	0	0	0
22	100	100	100	54.4	100	100	100	54.4	100	100	100	54.4	100	100	100	54.4	0	0	0	0	0	0	0	0
23	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0	0
24	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
25	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
26	100	100	100	64.2	100	100	100	64.2	100	100	100	64.2	100	100	100	64.2	0	0	0	0	0	0	0	0
27	100	100	100	100	100	78	78	100	100	78.1	78.1	100	100	100	100	36.8	0	0	0	0	0	0	0	0
28	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
29	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
30	99.4	99.4	99.4	99.4	78.8	99.4	78.8	78.8	79	99.4	79	79	94.8	94.8	94.8	0	0	0	0	0	0	0	0	0
Avg	98.6	99	99	95.3	78.4	77.9	78.8	76.2	90.8	90.6	93.1	88.8	96.7	64.7	97.3	81.7	0	0	0	0	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	4.6	4.3	4.3	11.7	31.8	33	32.8	32.2	16.5	18.6	16.6	19.9	8.2	44.5	8.1	31.8	0	0	0	0	0	0	0	0
Min	76.3	76.3	76.3	54.4	0	0	0	0	24.2	11.9	18.2	15.6	60.3	0	60.3	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0

ED_004549_00015928-00334

Table E14. Airflow and emission data completeness (%) at Site IN3B for December, 2007.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	72.3	100	100	100	72.3	100	100	100	72.3	100	100	100	72.3	100	0	0	0	0	0	0	0	0	0
2	100	100	73.2	100	100	100	73.2	100	100	100	73.2	100	100	100	73.2	0	0	0	0	0	0	0	0	0
3	100	100	72.7	100	100	100	72.7	100	100	100	72.7	100	100	100	72.7	0	0	0	0	0	0	0	0	0
4	100	100	100	100	96	68.9	73.6	70.3	96	69	73.6	70.4	94	92.3	94.3	0	0	0	0	0	0	0	0	0
5	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
6	99.9	99.9	99.9	99.9	77.2	99.9	99.9	99.9	78	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0	0	0
7	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
8	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
9	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
10	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
11	65.5	65.5	65.5	65.5	58.5	60.6	32.4	44.9	58.5	60.6	32.7	45.2	53.5	55.6	55.6	0	0	0	0	0	4.9	5	5	0
12	100	100	100	100	96.5	93.7	90.9	99.2	96.6	93.8	91	99.4	0	0	0	0	0	0	0	0	100	100	100	0
13	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	100	100	100	0
14	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	100	100	100	0
15	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	100	100	100	0
16	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	89.9	89.9	89.9	0
17	100	100	100	100	99.7	76.6	75.7	65.5	99.7	76.7	75.7	65.6	0	0	0	0	0	0	0	0	81.4	83.4	100	0
18	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	100	100	100	0
19	98.5	98.5	98.5	98.5	48.5	51.4	79.4	75.8	51.7	51.9	79.5	75.9	35.8	38	38	0	0	0	0	0	54.2	54.2	54.2	0
20	100	81.5	100	100	65	49.1	78.7	100	65	49.1	78.8	100	100	81.5	100	0	0	0	0	0	0	0	0	0
21	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0	0	0
22	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
23	100	91.3	100	100	100	91.3	100	100	100	91.3	100	100	100	91.3	100	0	0	0	0	0	0	0	0	0
24	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
25	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
26	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
27	99.7	99.7	99.7	99.7	69.3	69.8	71.3	58.9	69.4	70.1	71.5	59	95.1	94	95.1	42.6	0	0	0	0	0	0	0	0
28	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
29	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
30	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
31	99.8	99.8	99.8	99.8	96.7	89.4	92.2	95	96.7	89.4	92.2	95	99.8	99.8	99.8	99.8	0	0	0	0	0	0	0	0
Avg	98.8	97	97.1	98.8	93.8	91.1	91.6	93.9	93.9	91.1	91.6	93.9	73.5	71.8	71.9	14.3	0	0	0	0	23.6	23.6	24.2	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	6.1	8.3	8.8	6.1	13.8	15.5	15	14.2	13.4	15.4	15	14.1	41.9	41.1	41.3	33.8	0	0	0	0	40.3	40.4	41.3	0
Min	65.5	65.5	65.5	65.5	48.5	49.1	32.4	44.9	51.7	49.1	32.7	45.2	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	100	100	100	0

ED_004549_00015928-00335

Table E14. Airflow and emission data completeness (%) at Site IN3B for January, 2008.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	100	100	100	0	0	0	58.3	67.9	67.9	67.9	67.9	100	0.1	100	100	0	0	0	0	0	0	0	0
2	100	100	100	100	0	0	0	0	100	100	100	100	100	0	100	100	0	0	0	0	0	0	0	0
3	68.8	95.8	95.5	97.1	0	0	0	1	68.8	95.8	65.2	66	68.8	17	95.5	59.1	0	0	0	0	0	0	0	0
4	100	100	100	100	0	0	0	0	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
5	100	100	100	100	0	0	0	0	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
6	100	100	100	100	0	0	0	0	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
7	100	100	100	100	0	0	0	0	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
8	99.5	99.5	87.8	99.5	0	0	0	0	2.6	2.6	2.6	2.6	99.4	44.2	87.7	28.1	0	0	0	0	0	0	0	0
9	100	100	89.4	100	0	0	0	0	0	0	0	0	100	100	89.4	100	0	0	0	0	0	0	0	0
10	99	100	100	100	0	0	0	0	0	0	0	0	54.9	54.9	54.9	54.9	43.9	35.1	44.2	44.7	0	0	0	0
11	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	100	0	0	0	0
12	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	100	0	0	0	0
13	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	73.5	0	0	0	0
14	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	98.3	0	0	0	0
15	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	100	0	0	0	0
16	85.2	85.2	85.2	85.2	0	0	0	0	0	0	0	0	0	0	0	0	85.2	85.2	85.2	85.2	0	0	0	0
17	59.2	59.2	59.2	59.2	0	0	0	0	0	0	0	0	0	0	0	0	59.2	59.2	59.2	59.2	0	0	0	0
18	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	94.6	94.6	94.6	94.6	0	0	0	0
19	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	100	0	0	0	0
20	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	100	0	0	0	0
21	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	100	0	0	0	0
22	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	100	0	0	0	0
23	100	99.6	99.6	99.7	0	0	0	0	0	0	0	0	0	0	0	0	99.3	99.1	99	99.3	0	0	0	0
24	100	100	100	100	0	0	0	0	0	0	0	0	36.7	35.6	32.1	31.8	45.7	47.1	49.4	48	0	0	0	0
25	77.2	99	99	99	0	0	0	0	0	0	0	0	77.2	99	99	99	0	0	0	0	0	0	0	0
26	100	100	100	100	0	0	0	0	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0
27	100	100	100	100	0	0	0	0	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0
28	100	100	100	100	0	0	0	0	0	0	0	0	52.3	100	100	100	0	0	0	0	0	0	0	0
29	94.5	99.2	87.4	95.6	0	0.2	0.8	0	0	0.2	0.8	0	0	99.2	100	95.6	0	0	0	0	0	0	0	0
30	99.7	99.7	99.7	99.7	0	0.3	1.1	0	0	0.3	1.1	0	0	29.7	29.7	29.7	0	0	0	0	0	0	0	0
31	100	100	100	100	17.4	0	0	1	17.4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Avg	96.2	98	96.9	97.9	0.6	0	0.1	1.9	21.2	21.5	20.6	20.6	41.6	38.1	48	32.2	42.8	42.6	43	42	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	9.8	7.6	8.1	7.6	3.1	0.1	0.2	10.3	38.4	39.9	38.4	38.5	45.5	44.8	46.9	42.5	46.4	46.4	46.4	45.5	0	0	0	0
Min	59.2	59.2	59.2	59.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	17.4	0.3	1.1	58.3	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0

ED_004549_00015928-00336

Table E14. Airflow and emission data completeness (%) at Site IN3B for February, 2008.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	100	100	100	9.9	0	0	0.1	9.9	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
2	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	100	94.4	100	100	0.8	0	0	0.3	0.8	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0
4	43.7	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	57.8	95.1	100	0	0	1.2	0.5	0	0	1.2	0.5	0	0	30.6	30.6	0	0	0	0	0	0	0	0
6	60.8	100	100	100	0	0	0.1	0.8	0	0	0.1	0.8	0	20.8	95.1	90.9	0	0	0	0	0	0	0	0
7	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	98.5	98.5	98.5	98.5	0	0	0	0	0	0	0	0	0	58.4	52.2	58.4	0	0	0	0	0	0	0	0
9	100	100	100	100	0	0	0.4	0	0	0	0.4	0	0	100	100	100	0	0	0	0	0	0	0	0
10	40.9	100	100	100	0	0.4	6	0	0	0.4	6	0	0	100	100	100	0	0	0	0	0	0	0	0
11	0	96	96	96	0	0	0	0	0	0	0	0	0	96	96	96	0	0	0	0	0	0	0	0
12	53.7	99.3	98.1	99	0.1	0	0	0	0.1	0	0	0	0	99.3	98.1	96.2	0	0	0	0	0	0	0	0
13	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0	0	0	99.9	99.9	99.9	0	0	0	0	0	0	0	0
14	94.9	99.7	99.7	99.7	0	0	0	0	0	0	0	0	0	94	97.8	94	0	0	0	0	0	0	0	0
15	97.2	99.7	99.7	99.7	0	0.2	0.2	0	0	0.3	0.3	0	0	95.1	99.7	99.7	0	0	0	0	0	0	0	0
16	100	100	100	100	0	0	0	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0	0	0
17	100	100	100	100	0	0	0.9	0	0	0	0.9	0	0	100	100	100	0	0	0	0	0	0	0	0
18	100	100	100	100	0	0	2.4	41.4	0	0	2.4	41.4	0	100	100	100	0	0	0	0	0	0	0	0
19	98.9	98.9	98.9	98.9	0	0.2	0.5	95.1	0	0.3	0.5	95.1	0	37.2	40.6	40.6	0	0	0	0	0	0	0	0
20	99.9	99.9	99.9	99.9	0	0	0	99.9	0	0	0	99.9	0	0	0	0	0	0	0	0	0	0	0	0
21	99.4	99.4	99.4	99.4	0.6	0	0	99.4	0.6	0	0	99.4	0	0	0	44	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	100	100	100	100	0	0	0	100	0	0	0	100	0	0	0	51.7	0	0	0	0	0	0	0	0
24	100	100	100	100	0	0	0	100	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0
25	99.1	99.1	99.1	99.1	14.2	0	14.2	98.7	14.2	0	14.2	98.7	0	0	0	79.7	0	0	0	0	0	0	0	0
26	100	100	100	100	100	0	100	100	100	0	100	100	0	0	0	100	0	0	0	0	0	0	0	0
27	100	100	100	100	100	0	100	100	100	0	100	100	0	0	0	100	0	0	0	0	0	0	0	0
28	99.7	99.7	99.7	99.7	99.7	0	99.7	99.7	99.7	0	99.7	99.7	0	0	0	76	0	0	0	0	0	0	0	0
29	100	100	100	100	100	0	100	100	100	0	100	100	0	0	0	100	0	0	0	0	0	0	0	0
Avg	82.3	91.1	96	96.2	14.7	0	14.7	35.7	14.7	0	14.7	35.7	0	38	41.7	60.6	0	0	0	0	0	0	0	0
n	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
SD	32.8	26	18.2	18.2	34.2	0.1	34.2	46.7	34.2	0.1	34.2	46.7	0	45.6	46.3	42.2	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	0.4	100	100	100	0.4	100	100	0	100	100	100	0	0	0	0	0	0	0	0

ED_004549_00015928-00337

Table E14. Airflow and emission data completeness (%) at Site IN3B for March, 2008.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	100	100	100	100	0	100	100	100	0	100	100	0	0	0	100	0	0	0	0	0	0	0	0
2	100	100	100	100	100	0	100	100	100	0	100	100	0	0	0	100	0	0	0	0	0	0	0	0
3	100	100	100	100	100	0	100	100	100	0	100	100	0	0	0	100	0	0	0	0	0	0	0	0
4	99.9	100	100	100	79.4	45.6	80.1	100	79.5	45.7	80.2	100	0	3.1	0	100	0	0	0	0	0	0	0	0
5	99.9	99.9	99.9	99.9	86.3	77.2	99.9	99.9	86.4	99.9	99.9	99.9	0	99.9	0	99.9	0	0	0	0	0	0	0	0
6	100	100	100	100	100	100	100	100	100	100	100	100	0	100	0	100	0	0	0	0	0	0	0	0
7	99.7	99.7	99.7	99.7	99.7	76.3	65.6	99.7	99.7	76.5	65.9	99.7	47.3	99.7	0	99.7	0	0	0	0	0	0	0	0
8	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	0	0	0	0	0	0	0	0
9	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	0	95.8	0	0	0	0	0	0	0	0
10	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	0	0	0	0	0	0	0	0
11	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	0	0	0	0	0	0	0	0
12	97.7	99.7	99.7	99.7	68.3	54.4	55.1	99.7	94.4	54.6	55.8	99.7	92.4	95.1	0	86.9	0	0	0	0	0	0	0	0
13	36.7	36.7	36.7	36.7	34.1	36.2	23	36.7	34.1	36.7	23	36.7	36.7	36.7	0	36.7	0	0	0	0	0	0	0	0
14	54.6	54.6	54.6	54.6	35.3	11.7	19.4	51.9	35.8	12.2	19.8	51.9	52.8	54.6	0	0	0	0	0	0	0	0	0	0
15	58.8	58.8	58.8	58.8	52.7	57.5	56.2	58.8	52.8	57.6	56.3	58.8	58.8	58.8	0	0	0	0	0	0	0	0	0	0
16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0
17	97.7	97.7	97.7	97.7	97.7	77.1	84.9	97.6	97.7	77.2	84.9	97.6	97.7	97.7	0	0	0	0	0	0	0	0	0	0
18	100	100	100	0.1	100	100	0	0.1	100	100	0	0.1	95.8	72.7	0	0	0	0	0	0	0	0	0	0
19	100	100	100	0	100	100	0	0	100	100	0	0	97.9	0	0	0	0	0	0	0	0	0	0	0
20	100	100	100	0	100	100	0	0	100	100	0	0	100	0	0	0	0	0	0	0	0	0	0	0
21	100	100	100	0	100	100	0	0	100	100	0	0	100	0	0	0	0	0	0	0	0	0	0	0
22	100	100	100	0	100	100	0	0	100	100	0	0	100	0	0	0	0	0	0	0	0	0	0	0
23	100	100	100	0	100	100	0	0	100	100	0	0	100	0	0	0	0	0	0	0	0	0	0	0
24	100	100	100	0	100	95.3	0	0	100	95.3	0	0	100	0	0	0	0	0	0	0	0	0	0	0
25	97.1	97.2	93.6	0	97.1	97.2	0	0	97.1	97.2	0	0	84.9	40.3	0	0	0	0	0	0	0	0	0	0
26	99.9	99.9	99.9	0	99.9	99.9	0	0	99.9	99.9	0	0	99.9	99.9	0	0	0	0	0	0	0	0	0	0
27	100	100	100	0	100	100	0	0	100	100	0	0	100	100	0	0	0	0	0	0	0	0	0	0
28	99.6	99.6	99.6	34	99.6	99.6	0	34	99.6	99.6	0	34	91.7	99.6	0	0	0	0	0	0	0	0	0	0
29	100	100	100	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0
30	100	100	100	100	100	100	0	100	100	100	0	100	99.8	100	0	0	0	0	0	0	0	0	0	0
31	100	100	100	100	100	100	0	100	100	100	0	100	99.9	100	0	0	0	0	0	0	0	0	0	0
Avg	94.8	94.8	94.7	60.5	91.8	78.2	44.5	60.5	92.7	79	44.6	60.5	72.6	59.8	0	39.3	0	0	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	15	15	15	45.4	18.3	33.9	45	45.4	17.7	34.1	45	45.4	39.3	44.5	0	47.5	0	0	0	0	0	0	0	0
Min	36.7	36.7	36.7	0	34.1	0	0	0	34.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	0	0	0	0	0	0	0	0

ED_004549_00015928-00338

Table E14. Airflow and emission data completeness (%) at Site IN3B for April, 2008.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	100	38.3	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0
2	99.9	99.9	99.9	99.9	76.5	99.9	36.6	69.5	76.6	99.9	36.6	70.3	99.9	99.9	0	0	0	0	0	0	0	0	0	0
3	100	100	100	100	100	100	100	77.3	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0
4	100	100	100	100	55.5	100	77.3	76.6	35.3	56.9	52	54.1	100	100	50.8	0	0	0	0	0	0	0	0	0
5	100	100	100	100	100	100	100	100	0	0	0	0	100	100	100	0	0	0	0	0	0	0	0	0
6	100	100	100	100	100	100	100	100	0	0	0	0	100	100	100	0	0	0	0	0	0	0	0	0
7	100	100	100	100	100	100	100	100	0	0	0	0	100	100	100	0	0	0	0	0	0	0	0	0
8	99.3	99.4	99.5	99.7	75.9	75.9	64.8	64.8	40.7	37.9	24	21.3	97.6	96.5	96.5	0	0	0	0	0	0	0	0	0
9	99.7	99.9	99.9	99.9	99.7	99.9	99.9	99.9	99.7	99.9	99.9	99.9	99.7	99.9	99.9	0	0	0	0	0	0	0	0	0
10	99.9	99.9	99.9	99.9	99.9	65.4	79.2	77.2	99.9	65.6	79.2	77.4	99.9	99.9	99.9	0	0	0	0	0	0	0	0	0
11	100	100	100	100	54.4	78	64.8	77.8	54.5	78.1	78.1	78	97.7	100	100	0	0	0	0	0	0	0	0	0
12	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
13	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
14	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
15	100	99.8	100	99.8	100	99.8	76.6	66.2	100	99.8	76.7	75.8	95.1	99.8	96.2	0	0	0	0	0	0	0	0	0
16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
17	100	100	100	100	100	100	100	100	100	100	100	100	4.8	4.8	4.8	0	0	0	0	0	0	0	0	0
18	100	99.8	100	100	78	66.2	100	100	78.1	66.3	100	100	57.8	57.6	57.8	0	0	0	0	0	0	0	0	0
19	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
20	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
21	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
22	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
23	98.1	94.2	98.5	98.5	98.1	82.8	98.5	66.2	98.1	82.8	98.5	66.3	47	47.6	49.5	7.2	0	0	0	0	43	41.7	43.4	43.4
24	100	66	100	100	100	66	100	100	100	66	100	100	0	0	0	0	0	0	0	0	100	66	100	100
25	99.7	80.4	99.4	99.7	73.5	72.8	72.8	74.2	73.6	73.6	72.9	74.3	0	0	0	0	0	0	0	0	63.1	79	99.4	99.7
26	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	100	100	100
27	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	99.4	99.1	100
28	100	100	100	98.8	100	100	100	98.8	100	100	100	98.8	0	0	0	0	0	0	0	0	0	100	99.1	98.1
29	100	66.5	100	100	100	66.5	100	100	100	66.5	100	100	0	0	0	0	0	0	0	0	0	66	99	99.9
30	95.1	99.2	98.8	85.7	95.1	99.2	98.8	72.5	95.1	99.2	98.8	72.6	0	0	0	0	0	0	0	0	0	99.2	98.8	85.7
Avg	99.7	96.8	97.8	99.4	93.5	92.4	89	90.7	81.7	79.8	77.2	79.6	70	70.2	58.5	0.2	0	0	0	0	6.9	21.7	24.6	24.2
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	0.9	8.9	11.1	2.6	13.1	12.9	22.4	13.4	32.4	31.3	35.9	32.1	43.5	43.6	46.3	1.3	0	0	0	0	21.9	37.5	41.9	41.3
Min	95.1	66	38.3	85.7	54.4	65.4	0	64.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	7.2	0	0	0	0	100	100	100	100

ED_004549_00015928-00339

Table E14. Airflow and emission data completeness (%) at Site IN3B for May, 2008.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	98.8	100	100
2	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	98.5	100	100
3	100	100	99.7	100	100	100	99.7	100	100	100	99.7	100	0	0	0	0	0	0	0	0	0	100	99.7	100
4	100	100	99.9	100	100	100	99.9	100	100	100	99.9	100	0	0	0	0	0	0	0	0	0	99.3	99.9	100
5	100	100	99.5	100	75.9	90.3	66.7	75.9	76	90.3	76.2	76	0	0	0	0	0	0	0	0	17.4	91.1	97.6	97.3
6	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	97.5	100	100
7	99.9	99.9	99.8	99.9	99.9	99.9	99.8	99.9	99.9	99.9	99.8	99.9	0	43.3	43.3	30.3	0	0	0	0	0	54.7	38.6	54.7
8	99.9	99.9	99.9	99.6	99.9	99.9	99.9	99.6	99.9	99.9	99.9	99.6	0	99.9	75.8	92.4	0	0	0	0	0	0	0	0
9	100	100	100	100	100	100	100	100	100	100	100	100	0	100	76.6	43.3	0	0	0	0	0	0	0	0
10	100	100	99.9	100	100	100	99.9	100	100	100	99.9	100	0	100	99.9	41.4	0	0	0	0	0	0	0	0
11	100	100	100	100	100	100	100	100	100	100	100	100	0	53.2	53.2	1.6	0	0	0	0	0	0	0	0
12	100	100	100	100	65.5	64.8	79.4	75.9	65.6	64.9	76	76	0	99.2	86.9	0	0	0	0	0	0	0	0	0
13	100	100	100	100	100	100	100	100	100	100	100	100	57.3	100	69.8	0	0	0	0	0	0	0	0	0
14	100	100	100	100	100	100	100	100	100	100	100	100	100	100	89.2	0	0	0	0	0	0	0	0	0
15	100	100	98.7	100	100	100	98.7	100	100	100	98.7	100	100	100	56.3	58.5	0	0	0	0	0	0	0	0
16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	45.3	100	0	0	0	0	0	0	0	0
17	99.9	100	100	100	99.9	100	100	100	99.9	100	100	100	97.6	96.7	45.8	100	0	0	0	0	0	0	0	0
18	100	100	99.9	100	100	100	99.9	100	100	100	99.9	100	100	100	58.9	100	0	0	0	0	0	0	0	0
19	100	99.9	100	100	66.9	79.3	76.6	100	67	89.8	76.7	100	100	99.9	68.8	100	0	0	0	0	0	0	0	0
20	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
21	96	96	96	96	96	96	96	96	96	96	96	96	91.7	64	96	96	0	0	0	0	0	0	0	0
22	99.5	70.1	99.4	99.7	99.5	70.1	99.4	99.7	99.5	70.1	99.4	99.7	92.3	70.1	99.4	99.7	0	0	0	0	0	0	0	0
23	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
24	100	100	99.9	100	100	100	99.9	100	100	100	99.9	100	100	100	99.9	100	0	0	0	0	0	0	0	0
25	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
26	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
27	100	100	100	100	75.9	100	75.2	75.9	76	100	75.3	76	93.4	88.6	91.7	96.7	0	0	0	0	0	0	0	0
28	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0	0
29	100	100	100	99.9	68.4	66.9	68.4	68	68.5	67	68.5	68.3	87.2	98.5	89	88	0	0	0	0	0	0	0	0
30	99.9	99.7	99.7	99.4	99.9	99.7	99.7	99.4	99.9	99.7	99.7	99.4	95.4	95.1	95.3	94.9	0	0	0	0	0	0	0	0
31	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
Avg	99.8	98.9	99.7	99.8	95.1	95.7	95.4	96.5	95.1	96.1	95.7	96.5	58.5	74.5	65.8	59.4	0	0	0	0	0.6	20.6	20.5	21
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	0.7	5.3	0.7	0.7	10.9	10.2	10	8.8	10.9	9.7	9.4	8.7	47.1	39.2	36.9	44.8	0	0	0	0	3.1	38.9	39.3	39.7
Min	96	70.1	96	96	65.5	64.8	66.7	68	65.6	64.9	68.5	68.3	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	17.4	100	100	100

ED_004549_00015928-00340

Table E14. Airflow and emission data completeness (%) at Site IN3B for June, 2008.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	100	99.7	100	100	100	99.7	100	100	100	99.7	100	100	96.8	99.7	100	0	0	0	0	0	0	0	0
2	100	100	100	100	78	76.6	100	100	78.1	76.7	100	100	98.1	94.9	95.2	98.2	0	0	0	0	0	0	0	0
3	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
4	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	2.4	99.9	99.9	99.4	0	0	0	0	0	0	0	0
5	100	100	99.9	100	100	100	99.9	100	100	100	99.9	100	0	100	99.9	98.6	0	0	0	0	0	0	0	0
6	100	100	99.9	100	100	100	99.9	100	100	100	99.9	100	0	100	99.9	99.9	0	0	0	0	0	0	0	0
7	100	100	99.7	100	100	100	99.7	100	100	100	99.7	100	0	100	99.7	100	0	0	0	0	0	0	0	0
8	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100	99.9	0	0	0	0	0	0	0	0
9	100	99.9	100	100	78	76.5	77.3	100	78.1	76.6	77.4	100	0	99.9	100	100	0	0	0	0	0	0	0	0
10	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	59.1	99.7	99.7	99.7	0	0	0	0	0	0	0	0
11	100	100	99.9	100	100	100	99.9	100	100	100	99.9	100	100	100	99.9	99.9	0	0	0	0	0	0	0	0
12	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
13	100	100	100	100	100	100	100	100	100	100	100	100	99.7	100	100	100	0	0	0	0	0	0	0	0
14	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	99.8	0	0	0	0	0	0	0	0
15	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
16	100	100	100	100	32.4	32.4	26.8	32.4	32.4	32.4	26.8	32.4	98.2	54	100	82.8	0	0	0	0	0	0	0	0
17	100	100	100	100	0	0	0	0	0	0	0	0	100	0	100	96.9	0	0	0	0	0	0	0	0
18	99.7	91	99.7	99.7	0	0	0	0	0	0	0	0	99.7	0	99.7	98.1	0	0	0	0	0	0	0	0
19	100	89.6	100	100	0	0	0	0	0	0	0	0	100	53.3	100	85.4	0	0	0	0	0	0	0	0
20	100	80.3	100	100	79.2	59.6	79.2	79.2	79.2	59.6	79.2	79.2	100	80.3	100	100	0	0	0	0	0	0	0	0
21	100	100	100	100	100	100	100	100	100	100	100	100	100	95.4	100	87.2	0	0	0	0	0	0	0	0
22	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	78.5	0	0	0	0	0	0	0	0
23	100	91	100	100	41.7	67.9	70.7	73.5	41.9	67.9	70.7	73.5	100	88.4	100	100	0	0	0	0	0	0	0	0
24	100	89.2	100	100	0	0	0	0	0	0	0	0	100	89.2	100	100	0	0	0	0	0	0	0	0
25	98.5	99	98.5	98.6	57.2	53.5	51.3	59.9	57.4	40.8	51.4	60.1	89.5	89.3	89.1	98.2	0	0	0	0	0	0	0	0
26	99.8	100	100	99.7	99.8	100	100	99.7	99.8	100	100	99.7	97.1	97.1	97.1	99.7	0	0	0	0	0	0	0	0
27	100	100	100	100	79.4	100	100	100	79.6	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
28	46.6	46.6	46.6	46.6	45.3	38.4	39.8	42.6	45.3	38.4	39.8	42.6	46.6	46.6	46.6	46.6	0	0	0	0	0	0	0	0
29	58	58	58	58	54.9	52.1	50	47.2	55	52.2	50.1	47.4	58	58	58	58	0	0	0	0	0	0	0	0
30	100	100	99.9	100	77.3	75.9	66.9	100	77.4	76.1	67	99.7	38.5	38.5	38.4	38.5	0	0	0	0	56.5	56.5	56.5	55.3
Avg	96.7	94.8	96.7	96.7	74.1	74.4	75.3	77.8	74.1	74	75.4	77.8	72.9	82.7	94.1	92.2	0	0	0	0	1.9	1.9	1.9	1.8
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	12	12.4	12	12	35.1	35.4	35.8	35.9	35.1	35.7	35.8	35.9	39.9	28.6	15.8	16	0	0	0	0	10.1	10.1	10.1	9.9
Min	46.6	46.6	46.6	46.6	0	0	0	0	0	0	0	0	0	0	38.4	38.5	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	56.5	56.5	56.5	55.3

ED_004549_00015928-00341

Table E14. Airflow and emission data completeness (%) at Site IN3B for July, 2008.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	100	100	100	100
2	100	100	100	100	100	100	100	100	89.1	82.2	83.5	86.3	0	0	0	0	0	0	0	0	100	100	100	100
3	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	100
4	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	100
5	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	100
6	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	100
7	99.9	100	99.6	99.7	77.8	100	99.6	99.7	42.5	41.1	45.6	45.6	45.4	47.8	47.8	47.8	0	0	0	0	46.9	47	46.6	46.7
8	100	100	100	100	100	100	100	100	100	100	100	100	99.9	100	100	99.8	0	0	0	0	0	0	0	0
9	99.9	99.9	99.7	99.9	99.9	99.9	99.7	99.9	99.9	99.9	99.7	99.9	99.9	99.9	99.7	99.9	0	0	0	0	0	0	0	0
10	100	99.9	100	100	100	99.9	100	100	100	99.9	100	100	100	99.9	100	100	0	0	0	0	0	0	0	0
11	100	99.9	100	99.9	75.9	75.9	100	64.8	76	76	100	64.9	98.4	99.9	100	99.9	0	0	0	0	0	0	0	0
12	100	100	100	100	100	100	100	100	100	100	100	100	97.8	97.8	97.8	97.7	0	0	0	0	0	0	0	0
13	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
14	100	100	100	100	100	100	100	100	100	100	100	100	84.1	100	100	100	0	0	0	0	0	0	0	0
15	40.3	100	100	100	40.3	100	100	100	40.3	100	100	100	40.3	100	100	100	0	0	0	0	0	0	0	0
16	0	100	99.9	100	0	100	99.9	100	0	100	99.9	100	0	100	99.9	100	0	0	0	0	0	0	0	0
17	0	100	99.9	100	0	100	99.9	100	0	100	99.9	100	0	100	99.9	100	0	0	0	0	0	0	0	0
18	0	98	96.5	98	0	78.4	96.5	54.1	0	78.5	96.5	66.8	0	98	96.5	98	0	0	0	0	0	0	0	0
19	0	99.9	100	100	0	99.9	100	100	0	99.9	100	100	0	99.9	100	100	0	0	0	0	0	0	0	0
20	0	100	100	100	0	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0
21	43.9	99.8	99.7	99.8	43.9	99.8	99.7	99.8	43.9	99.8	99.7	99.8	43.9	87.1	86.5	19	0	0	0	0	0	0	0	0
22	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
23	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0	0	0
24	100	100	100	100	90.5	100	100	100	90.6	100	100	100	88.7	88.7	88.7	31.2	0	0	0	0	0	0	0	0
25	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
26	100	100	99.9	100	100	100	99.9	100	100	100	99.9	100	100	100	99.9	100	0	0	0	0	0	0	0	0
27	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
28	100	100	100	100	65.5	64.8	78.7	78	65.6	64.9	78.8	78.1	100	100	100	100	0	0	0	0	0	0	0	0
29	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0	0
30	99.8	99.8	99.4	99.8	94.9	71.5	65.6	92.1	94.9	71.6	65.7	92.1	99.8	99.8	99.4	99.8	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg	76.9	96.7	96.6	96.7	73.8	93.2	94.8	93.2	59.4	77.9	79.6	78.5	54.8	74.8	74.7	64.3	0	0	0	0	20.9	20.9	20.9	20.9
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	40.2	17.7	17.6	17.7	39.3	19.4	18.7	20	44.4	36.7	36.8	36.7	46.4	41.5	41.4	45.6	0	0	0	0	39.6	39.6	39.6	39.6
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	100	100	100	100

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Table E14. Airflow and emission data completeness (%) at Site IN3B for August, 2008.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	32.2	32.2	0	32.2	17.2	17.2	0	17.2	17.2	17.2	0	17.2	32.2	32.2	0	32.2	0	0	0	0	0	0	0	0
7	100	100	0	100	100	100	0	100	100	100	0	100	100	100	0	100	0	0	0	0	0	0	0	0
8	99.1	99	41.5	99.2	99.1	99	41.5	99.2	99.1	99	41.5	99.2	99.1	99	41.5	99.2	0	0	0	0	0	0	0	0
9	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
10	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
11	100	100	100	100	66.9	100	67.6	66.9	67	100	67.7	67	99.8	52.1	99.9	99.9	0	0	0	0	0	0	0	0
12	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	96	0	0	0	0	0	0	0	0
13	100	100	100	100	100	100	100	100	100	100	100	100	4.4	0	100	95.8	0	0	0	0	0	0	0	0
14	100	100	100	100	100	100	100	100	100	100	100	100	0	0	100	100	0	0	0	0	0	0	0	0
15	100	100	100	100	100	75.9	100	100	72.4	52.9	72.4	72.4	13.7	21.2	64.3	64.3	0	0	0	0	0	0	0	0
16	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	100	100	100	100	40.4	78	100	100	3.4	39.4	39.4	39.4	0	0	0	0	0	0	0	0	0	0	0	0
20	100	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
21	100	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
22	100	100	100	99.9	19	37.8	40.4	43.2	19	38	40.4	43.2	0	0	0	0	0	0	0	0	0	0	0	0
23	100	100	100	100	92	0	0	0	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	100	100	100	100	26.3	0	0	0	26.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	100	100	100	100	51.5	0	0	0	51.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	100	100	100	99.9	100	0	16.3	0	100	0	16.3	0	0	0	0	0	0	0	0	0	0	0	0	0
28	100	100	100	100	100	0	9	0	100	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0
29	100	100	100	100	100	66.2	10.8	0	100	66.2	10.8	0	0	0	0	0	0	0	0	0	0	0	0	0
30	100	100	100	100	100	29.8	2.7	47.9	100	29.8	2.7	47.9	0	0	0	0	0	0	0	0	0	0	0	0
31	100	100	100	100	100	0	34.3	100	100	0	34.3	100	0	0	0	0	0	0	0	0	0	0	0	0
Avg	81.7	81.6	75.5	81.6	61.7	51.7	45.9	54	49.9	40.1	33.4	41.5	20.9	16.3	22.8	28.6	0	0	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	37.7	37.7	42.1	37.7	44.1	46	45.5	46.9	45.7	44.5	40.9	44.8	39.1	34	40.1	43.2	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0

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Table E14. Airflow and emission data completeness (%) at Site IN3B for September, 2008.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	100	100	100	100	0	27.1	100	100	0	27.1	100	0	0	0	0	0	0	0	0	0	0	0	0
2	100	100	100	100	100	0	0	31.9	100	0	0	31.9	0	0	0	0	0	0	0	0	0	0	0	0
3	100	100	100	100	100	9.1	0	0	100	9.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	100	100	100	100	100	100	0	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	100	100	100	100	52.2	18.2	0	0	97.9	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	100	100	99.9	100	50	0	0	0	50	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	100	100	100	100	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	99.8	99.8	99.8	99.8	0	0	0	0	24.7	99.8	31.1	38.8	0	0	0	33.8	0	0	0	0	0	0	0	0
9	100	100	100	100	0	0	0	0	100	64.9	72.3	76.7	0	0	0	100	0	0	0	0	0	0	0	0
10	100	100	100	100	0	0	0	0	87.4	87.4	81.8	84.6	0	85.1	0	100	0	0	0	0	0	0	0	0
11	100	100	100	100	7.6	7.6	7.6	7.6	0	0	0	0	0	74.6	0	96	0	0	0	0	0	0	0	0
12	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	0	0	0	0	74	99.1	0	98.2	0	0	0	0	0	0	0	0
13	100	100	99.7	100	100	100	99.7	100	0	0	0	0	100	51.5	0	99.3	0	0	0	0	0	0	0	0
14	100	100	100	100	100	100	100	100	0	0	0	0	100	55.6	0	100	0	0	0	0	0	0	0	0
15	99	99	99	99	99	99	99	99	60.6	56.1	53.3	49.7	92.1	7.4	0	98.1	0	0	0	0	0	0	0	0
16	100	100	100	100	100	100	100	100	100	100	100	100	97.6	0	44.4	100	0	0	0	0	0	0	0	0
17	100	100	100	100	100	100	100	100	100	100	100	100	99.9	0	100	100	0	0	0	0	0	0	0	0
18	100	100	100	100	100	100	100	100	100	100	100	100	98.8	0	100	87.3	0	0	0	0	0	0	0	0
19	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	76.6	59.2	63.6	81	0	0	0	0	0	0	0	0
20	100	100	100	100	100	100	100	100	100	100	100	100	30.2	32.5	0	32.5	0	0	0	0	0	0	0	0
21	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
22	98.1	98.2	98.2	97.7	86.2	70.5	98.2	97.7	86.3	70.6	98.2	97.7	26.5	26.5	26.5	19.6	33.3	33.3	33.3	33.3	0	0	0	0
23	100	100	100	100	100	100	100	100	59.5	59.5	59.5	59.5	0	0	0	0	100	100	100	100	0	0	0	0
24	99.7	100	100	100	99.7	100	100	100	0	0	0	0.3	0	0	0	0	98.7	99.8	99.8	99.8	0	0	0	0
25	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	87.3	100	100	100	0	0	0	0
26	100	100	100	100	100	100	100	100	23.3	22.6	22.6	35.6	0	0	0	0	96	100	100	98.2	0	0	0	0
27	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	98.8	100	100	100	0	0	0	0
28	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	100	100	100	100	0	0	0	0
29	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	100	100	100	100	0	0	0	0
30	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	100	100	100	100	0	0	0	0
Avg	99.8	99.8	99.8	99.8	79.8	66.8	64.3	67.8	53	49	34.8	39.1	26.5	16.4	11.2	38.2	27.1	27.8	27.8	27.7	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	0.4	0.4	0.4	0.5	37.1	45.2	46.8	45.5	45.2	45.4	42.3	43.3	40.7	29.2	27.7	45.2	43	43.9	43.9	43.8	0	0	0	0
Min	98.1	98.2	98.2	97.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	99.1	100	100	100	100	100	100	0	0	0	0

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Table E14. Airflow and emission data completeness (%) at Site IN3B for October, 2008.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	99.3	100	100	100	73.5	74.2	74.2	74.2	27.1	27.1	27.1	27.1	0	0	0	0	96.2	99	97.1	98.8	0	0	0	0
2	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	99.8	100	100	100	0	0	0	0
3	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	87.9	99.9	99.9	99.8	0	0	0	0
4	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	87.1	100	98.2	100	0	0	0	0
5	100	100	100	100	0	0	0	0	100	79.8	100	100	0	0	0	0	95	100	100	100	0	0	0	0
6	89.8	89.8	89.8	42	0	0	0	0	89.8	68.2	70.6	31.9	0	0	0	0	87	89.4	77.4	42	0	0	0	0
7	100	100	100	0	0	0	0	0	100	100	100	0	0	0	0	0	89.4	100	100	0	0	0	0	0
8	100	100	100	0	46.3	42.9	51.9	0	76.7	76.3	100	0	21.5	34.2	34.2	0	51.2	64.2	64.2	0	0	0	0	0
9	99.9	99.9	99.9	0	99.9	99.9	99.9	0	99.9	99.9	99.9	0	90.4	99.9	99.9	0	0	0	0	0	0	0	0	0
10	100	100	100	0	100	100	100	0	100	100	100	0	94.2	100	100	0	0	0	0	0	0	0	0	0
11	100	100	100	0	100	100	100	0	100	100	100	0	98.7	100	100	0	0	0	0	0	0	0	0	0
12	100	100	100	0	100	100	76.6	0	100	100	76.7	0	99.7	100	100	0	0	0	0	0	0	0	0	0
13	99.4	79.7	99.2	0	6.3	6.3	6.3	0	99.4	79.7	99.2	0	97.4	77.8	99.2	0	0	0	0	0	0	0	0	0
14	100	73.8	100	0	0	0	0	0	100	73.8	100	0	97.5	72.6	100	0	0	0	0	0	0	0	0	0
15	100	85.6	100	0	0	0	0	0	100	85.6	100	0	99.7	85.6	100	0	0	0	0	0	0	0	0	0
16	100	100	100	0	0	0	0	0	76.7	100	100	0	99.1	100	100	0	0	0	0	0	0	0	0	0
17	100	100	100	0	0	0	0	0	54.5	65.6	65.6	0	36	36.5	36.5	0	0	0	0	0	0	0	0	0
18	100	100	100	0	0	0	0	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0
19	100	80	100	0	0	0	0	0	100	80	100	0	0	0	0	0	0	0	0	0	0	0	0	0
20	99.9	0	99.9	0	0	0	0	0	99.9	0	99.9	0	0	0	0	0	0	0	0	0	0	0	0	0
21	99.9	0	99.9	0	0	0	0	0	56.8	0	73.8	0	0	0	0	0	0	0	0	0	58.3	0	58.7	0
22	100	0	100	0	0	0	0	0	100	0	100	0	0	0	0	0	0	0	0	0	100	0	100	0
23	100	0	100	0	0	0	0	0	94	0	91.9	0	0	0	0	0	0	0	0	0	100	0	100	0
24	99.7	0	99.7	0	0	0	0	0	9.5	0	9.5	0	0	0	0	0	0	0	0	0	99.7	0	99.7	0
25	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	100	0
26	100	0	100	0	0	0	1.1	0	0	0	1.1	0	0	0	0	0	0	0	0	0	100	0	97.9	0
27	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97.3	0	100	0
28	100	0	100	0	0	0	0	0	0	0	0	0	40.6	0	36.4	0	0	0	0	0	44.4	0	49.7	0
29	100	0	100	0	0	0	0	0	0	0	0	0	100	0	100	0	0	0	0	0	0	0	0	0
30	100	0	100	0	0	0	0	0	0	0	0	0	100	0	100	0	0	0	0	0	0	0	0	0
31	100	0	100	0	0	0	0	0	38.5	0	38.5	0	44.5	0	44.5	0	0	0	0	0	0	0	0	0
Avg	99.6	58.3	99.6	17.5	17	16.9	16.5	2.4	68.5	52.8	69.5	14.8	36.1	26	37.1	0	22.4	24.3	23.8	17.4	22.6	0	22.8	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	1.8	46.8	1.8	36.9	35.3	35.3	33.9	13.1	40.8	44.4	40.8	33.6	44.2	40.2	45.1	0	38.6	41.6	40.8	36.8	39.8	0	39.9	0
Min	89.8	0	89.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	74.2	100	100	100	100	100	100	100	0	99.8	100	100	100	100	0	100	0

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Table E14. Airflow and emission data completeness (%) at Site IN3B for November, 2008.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	0	99.9	0	0	0	0	0	69	0	69	0	0	0	0	0	0	0	0	0	0	0	0	0
2	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	99.9	0	99.9	0	0	0	0	0	19.8	0	19.8	0	0	0	0	0	0	0	0	0	0	0	0	0
4	100	0	100	0	0	0	0	0	80.3	0	72.7	0	0	0	0	0	0	0	0	0	0	0	0	0
5	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	99.6	64.5	99	19	0	0	0	0	89.9	64.5	94.2	19	0	0	0	0	0	0	0	0	0	0	0	0
7	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
8	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
9	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
10	98.5	99	98.5	99	0	0	0	0	98.5	99	98.5	99	0	0	0	0	0	0	0	0	0	0	0	0
11	100	100	100	100	0	0	0	0	100	77.4	78.1	100	0	0	0	0	0	0	0	0	0	0	0	0
12	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
13	99.9	99.9	99.9	99.9	0	0	0	0	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0	0	0	0	0	92.8
14	99	99	99	99	0	0	0	0	73.4	61.9	61.3	72.2	0	0	0	0	0	0	0	0	0	0	0	39.2
15	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
16	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
17	100	100	100	100	0	0	0	0	100	76.7	77.4	100	0	42.9	51.7	51.7	0	0	0	0	0	0	0	0
18	100	100	100	100	0	0	0	0	99.4	76.4	71.2	65.6	0	100	100	100	0	0	0	0	0	0	0	0
19	100	100	100	100	0	0	0	0	100	100	100	100	0	62.6	100	100	0	0	0	0	0	0	0	0
20	100	100	100	100	0	0	0	0	76.9	76.9	99.7	76.9	33.3	47	72.7	72.5	0	0	0	0	0	0	0	0
21	100	100	100	100	0	0	0	0	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
22	100	100	100	100	0	0	0	0	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
23	100	100	100	100	0	0	0	0	100	100	100	100	100	98.6	100	100	0	0	0	0	0	0	0	0
24	99.7	99.4	99.1	67.8	0	0	0	0	99.3	99.3	99	67.8	97.8	93.8	97.2	66.2	0	0	0	0	0	0	0	0
25	0.1	0.1	0.1	0.1	0	0	0	0.1	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
26	99.9	99.9	99.6	0	0.2	0.2	0	0	96.4	99	88.4	0	99.1	99.3	99.3	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	99.9	99.9	99.9	0	0	0	0	0	99.5	99.6	99.7	0	95.3	71.4	95.6	0	0	0	0	0	0	0	0	0
Avg	86.5	68.7	86.5	59.5	0	0	0	0	73.4	64.4	71	56.7	20.9	27.2	30.6	23	0	0	0	0	0	0	0	4.4
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	33.9	45.4	33.9	47.7	0	0	0	0	40	43.5	39.3	46.1	39.4	40.5	44.1	39.3	0	0	0	0	0	0	0	17.9
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	0.2	0.2	0	0.1	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	92.8

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Table E14. Airflow and emission data completeness (%) at Site IN3B for December, 2008.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	38.9	40.8	41.3	9.2	0.1	0	0	0	38.5	40.6	40.6	0	38.2	39.7	31.4	8.9	0	0	0	0	0	0	0	0
2	93.2	93.3	8.6	0	0	0	0	0	93.2	93.3	8.6	0	93.2	93.3	8.6	0	0	0	0	0	0	0	0	0
3	99.9	99.9	57.9	0	0	0	0	0	99.9	99.9	57.9	0	62.2	80.3	48.2	0	0	0	0	0	0	0	0	0
4	98.2	98.2	68.2	0	0	0	0	0	98.2	98.2	68.2	0	0	98.2	68.2	0	0	0	0	0	0	0	0	0
5	48	47.9	0	0	0	0	0	0	48	47.9	0	0	0	24.3	0	0	0	0	0	0	0	0	0	0
6	39.6	39.6	39.3	39.6	0	0	0	0	39.6	39.6	39.3	39.6	0	39.6	39.3	37.2	0	0	0	0	0	0	0	0
7	100	100	100	100	0	0	0	0	100	100	100	100	57.4	72.2	72.2	0	0	0	0	0	0	0	0	0
8	100	100	100	100	0	0	0	0	76.3	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
9	99.7	99.7	99.7	99.7	0	0	0	0	72.2	73.3	78.2	56.6	99.7	99.7	99.7	75.1	0	0	0	0	0	0	0	0
10	100	100	100	100	0	0	0	0	0	0	0	0	100	0	0	100	0	0	0	0	0	0	0	0
11	99.4	99.3	99.4	99.5	0	0	0	0	99	96.2	70.8	68.1	99.4	0	44	48	0	0	0	0	0	0	0	0
12	100	100	99.4	100	0	0	0	0	100	100	99.4	100	73.5	0	0	0	0	0	0	0	0	0	0	0
13	100	100	99.8	100	0	0	0	0	100	100	99.8	100	94.9	94.9	94.9	0	0	0	0	0	0	0	0	0
14	100	100	100	100	0	0	0	0	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
15	99.7	99.7	99	99.7	0	0	0.1	0	99.7	99.7	79.2	68.1	27.4	27.4	27.4	0	0	0	0	0	0	0	0	0
16	100	100	99.9	100	0	0	0	0	100	100	99.9	100	0	2.5	2.5	0	0	0	0	0	0	0	0	0
17	100	75.3	42.8	100	0	0	0	0	100	75.3	42.8	100	0	47	37	0	0	0	0	0	0	0	0	0
18	99.6	97.3	74.7	99.7	0	0	0	0	99.6	97.3	74.7	99.7	26.6	24.3	21.6	21	0	0	0	0	0	0	0	0
19	100	100	95.5	100	0	0	0	0.1	100	100	95.5	100	75.1	75.1	70.6	75.1	0	0	0	0	0	0	0	0
20	100	100	100	100	0	0	0	0	100	100	100	100	1.7	8.7	8.7	8.7	0	0	0	0	0	0	0	0
21	100	6.3	6.3	100	0	0	0	0	100	6.3	6.3	100	0	0	0	0	0	0	0	0	0	0	0	0
22	99.4	0	0	99.4	0	0	0	0	99.4	0	0	99.4	0	0	0	0	0	0	0	0	0	0	0	0
23	100	8.3	0	100	0	0	0	0	100	8.3	0	100	0	0	0	0	0	0	0	0	0	0	0	0
24	100	73.1	0	100	0	0	0	0	100	73.1	0	100	0	0	0	0	0	0	0	0	0	0	0	0
25	100	48.2	0	100	0	0	0	0	100	48.2	0	100	0	0	0	0	0	0	0	0	0	0	0	0
26	100	90.6	0	100	0	0	0	0	100	90.6	0	100	0	0	0	0	0	0	0	0	0	0	0	0
27	100	98.1	0	100	0	0	0	0	100	98.1	0	100	0	0	0	0	0	0	0	0	0	0	0	0
28	100	100	71	100	0	0	0	0	100	100	71	100	0	0	0	0	0	0	0	0	0	0	0	0
29	100	100	100	100	0	0	0	0	76	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
30	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
31	100	100	34.2	100	0	0	0	0	92.4	92.4	34.2	89.6	0	0	0	0	0	0	0	0	0	0	0	0
Avg	94.1	81.2	59.3	82.2	0	0	0	0	88.1	76.7	53.8	74.9	33.8	33.1	28.2	12.1	0	0	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	17.1	31.2	42	36.8	0	0	0	0	24	33.7	40.8	39.4	41.4	39.3	35.3	26.1	0	0	0	0	0	0	0	0
Min	38.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	0.1	0	0.1	0.1	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0

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Table E14. Airflow and emission data completeness (%) at Site IN3B for January, 2009.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	100	53.3	100	0	0	0	0	73.5	73.5	53.3	73.5	0	0	0	0	0	0	0	0	0	0	0	0
2	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
3	100	100	77.6	100	0	0	0	0	100	100	77.6	100	0	0	0	0	0	0	0	0	0	0	0	0
4	100	100	52.2	100	0	0	0	0	100	100	52.2	100	0	0	0	0	0	0	0	0	0	0	0	0
5	98.1	98.1	66	56.5	20.9	19.2	17.6	0	76	65.1	42.8	38.9	0	0	0	0	0	0	0	0	0	0	0	0
6	100	100	34.9	0	100	100	34.9	0	100	100	34.9	0	0	0	0	0	0	0	0	0	0	0	0	0
7	99.4	99.4	76.3	52.4	51.6	75.9	76.3	29	66.5	76	76.3	29.1	0	0	0	0	0	0	0	0	0	0	0	0
8	100	100	31	100	100	100	31	100	100	100	31	100	0	0	0	0	0	0	0	0	0	0	0	0
9	100	100	55.5	100	77.5	75.9	32.8	100	77.6	76.8	32.9	100	0	0	0	0	0	0	0	0	0	0	0	0
10	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
11	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
12	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
13	100	100	100	100	65.5	66.1	66.2	64.8	54.5	55.2	65.6	54.5	0	0	0	0	0	0	0	0	0	0	0	0
14	100	100	69.9	100	79.4	78.3	69.9	100	79.5	78.6	69.9	100	0	0	0	0	0	0	0	0	0	0	0	0
15	99.2	99.2	0	99.2	68.5	99.2	0	50.6	70.1	99.2	0	62.4	29.7	29.4	0	29.2	0	0	0	0	0	0	0	0
16	100	100	0	100	100	100	0	100	100	100	0	100	3.6	15.6	0	15.6	0	0	0	0	0	0	0	0
17	100	100	91.9	100	100	100	91.9	100	100	100	91.9	100	97.2	97.2	91.9	97.2	0	0	0	0	0	0	0	0
18	100	100	100	100	100	100	100	100	100	100	100	100	100	97.2	100	100	0	0	0	0	0	0	0	0
19	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	24.9	0	0	0	0	0	0	0	0
20	99.7	99.7	39.7	99.7	99.7	57.5	37	67.2	99.7	62.8	37	67.4	72.5	72.5	34.9	34	0	0	0	0	0	0	0	0
21	100	100	0	100	100	100	0	100	100	100	0	100	12	33.8	0	33.8	0	0	0	0	0	0	0	0
22	100	100	0	100	100	100	0	100	100	100	0	100	0	79.4	0	79.4	0	0	0	0	0	0	0	0
23	100	100	0	100	100	100	0	100	100	100	0	100	0	78.4	0	78.4	0	0	0	0	0	0	0	0
24	100	100	0	100	100	100	0	100	100	100	0	100	0	25.1	0	25.1	0	0	0	0	0	0	0	0
25	100	79.6	0	100	100	79.6	0	100	100	79.6	0	100	0	0	0	0	0	0	0	0	0	0	0	0
26	100	100	0	100	100	100	0	100	100	100	0	100	0	3.5	0	3.5	0	0	0	0	0	0	0	0
27	100	100	0	100	100	100	0	100	100	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0
28	100	100	0	100	100	100	0	100	100	100	0	100	0	20.8	0	20.8	0	0	0	0	0	0	0	0
29	100	100	47.2	98.9	53.2	65.5	47.2	98.9	53.5	65.6	47.2	98.9	42.8	0	41.3	41.7	0	0	0	0	0	0	0	0
30	100	100	100	100	100	100	100	100	100	100	100	100	71	46.7	71	71	0	0	0	0	0	0	0	0
31	100	100	100	100	100	100	100	100	100	100	100	100	23.3	23.3	23.3	23.3	0	0	0	0	0	0	0	0
Avg	99.9	99.2	51.5	93.8	77.9	78	38.9	74.5	92	91.4	48.8	87.9	17.8	23.3	14.9	21.9	0	0	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	0.4	3.6	41	20.4	35.4	34.9	41.7	40	14.4	14.1	40.1	25.1	32.8	34	31.1	30.8	0	0	0	0	0	0	0	0
Min	98.1	79.6	0	0	0	0	0	0	53.5	55.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0

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Table E14. Airflow and emission data completeness (%) at Site IN3B for February, 2009.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	100	100	100	96.3	96.3	96.3	96.3	100	100	100	100	75.2	75.2	75.2	75.2	0	0	0	0	0	0	0	0
2	99.9	99.9	99.9	99.9	0	0	0	0	99.9	99.9	99.9	99.9	25.8	25.8	25.8	25.8	0	0	0	0	0	0	0	0
3	99.6	99.6	99.6	99.6	0	0	0	0	99.6	99.6	99.6	99.6	0	0	0	0	0	0	0	0	0	0	0	0
4	100	99.8	100	100	0	0	0	0	100	68.2	72.2	67.7	0	0	0.2	2.4	0	0	0	0	0	0	0	0
5	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
6	70.6	70.6	70.6	70.6	0	0	0	0	40.6	49.4	46.7	38.3	0	0	0	0	0	0	0	0	0	0	0	0
7	100	100	100	100	67.2	67.2	67.2	67.2	99.5	96.7	94.7	91.9	0	0	0	0	0	0	0	0	0	0	0	0
8	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
9	100	100	99.9	100	59.9	60.8	54.3	57.1	100	100	78.7	78.8	0	0	0	0	0	0	0	0	0	0	0	0
10	100	100	100	100	0	0	0	0	81.9	66.3	80.4	76	0	0	0	0	0	0	0	0	0	0	0	0
11	99.9	99.9	99.9	99.9	0	1.8	3.1	0	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0	0	0	0	0	0
12	86.7	86.7	86.7	98.5	0	0	0	0	86.7	86.7	86.7	79.9	0	0	0	0	0	0	0	0	0	0	0	0
13	100	100	100	100	86.3	86.3	86.3	86.3	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
14	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
15	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
16	100	100	93.7	97.7	77.3	100	86.3	97.7	100	100	86.5	97.7	0	0	0	0	0	0	0	0	0	0	0	0
17	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
18	97.9	97.9	97.9	97.9	72.4	80.5	97.9	73.8	72.5	97.9	97.9	97.9	0	0	0	0	0	0	0	0	0	0	0	0
19	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
20	99.7	99.7	99.7	99.7	99.6	98.5	45.6	99.7	99.6	98.5	63.1	99.7	0	0	0	0	0	0	0	0	0	0	0	0
21	100	100	100	100	71	68.1	4	97.2	71	68.1	4	97.2	0	0	0	0	0	0	0	0	0	0	0	0
22	100	100	100	100	96.9	36.3	0.1	95.6	96.9	36.3	0.1	95.6	0	0	0	0	0	0	0	0	0	0	0	0
23	99.4	99.4	99.4	99.4	98	98.1	23.8	33.8	98	98.1	23.8	33.8	0	0	0	0	0	0	0	0	0	0	0	0
24	100	100	100	100	54.2	96.7	78.4	32.5	54.2	96.7	78.4	32.6	33	0	0	0	0	0	0	0	0	0	0	0
25	100	100	100	100	100	99	45.3	100	100	99	45.3	100	100	0	0	0	0	0	0	0	0	0	0	0
26	100	100	100	100	100	85.3	23	100	100	85.3	23	100	99.8	0	0	0	0	0	0	0	0	0	0	0
27	99.9	99.2	99.2	98.9	99.9	13.5	1.7	98.9	99.9	13.5	1.7	98.9	96.9	0	0	0	0	0	0	0	0	0	0	0
28	100	100	100	100	100	90.9	30.6	100	100	90.9	30.8	100	100	0	0	0	0	0	0	0	0	0	0	0
Avg	98.3	98.3	98.1	98.6	63.5	60	44.4	62	92.9	87.5	71.9	88.8	19	3.6	3.6	3.7	0	0	0	0	0	0	0	0
n	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
SD	5.9	5.9	5.9	5.4	42.2	42.6	41.5	43.2	15	21.9	34.3	20.5	36.2	14.6	14.6	14.6	0	0	0	0	0	0	0	0
Min	70.6	70.6	70.6	70.6	0	0	0	0	40.6	13.5	0.1	32.6	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	75.2	75.2	75.2	0	0	0	0	0	0	0	0

ED_004549_00015928-00349

Table E14. Airflow and emission data completeness (%) at Site IN3B for March, 2009.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	0	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0
2	100	0	100	100	100	0	100	100	100	0	100	100	99.8	0	0	0	0	0	0	0	0	0	0	0
3	95.5	0	95.5	99.2	95.5	0	95.5	77.9	95.5	0	95.5	78.1	79.9	0	0	0	0	0	0	0	0	0	0	0
4	100	0	100	100	100	0	100	100	100	0	100	100	99.8	0	0	0	0	0	0	0	0	0	0	0
5	100	0	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0
6	99.9	0	99	99.3	99.9	0	78.4	99.3	99.9	0	99	99.3	95.4	0	36.8	25.2	0	0	0	0	0	0	0	0
7	100	0	100	100	77	0	100	100	100	0	100	100	100	0	100	100	0	0	0	0	0	0	0	0
8	100	50	100	100	99.6	50	100	100	100	50	100	100	92.6	50	100	100	0	0	0	0	0	0	0	0
9	99	99.3	99.2	99.1	40.6	32.6	38.4	40.6	99	76.7	78.5	99.1	51.5	51.8	51.7	51.6	0	0	0	0	0	0	0	0
10	100	100	100	100	0	0.3	6.9	0	86.4	100	77	77.4	0	0	0	0	0	0	0	0	0	0	0	0
11	99	98.4	98.4	98.7	0	0.8	3.3	0	99	98.4	98.4	98.7	0	0	0	0	0	0	0	0	45.5	0	0	0
12	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	30	0	0	0
13	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
14	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
15	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
16	100	100	100	100	0	0	0	0.6	100	100	100	80.1	0	0	0	0	0	0	0	0	0	0	0	0
17	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
18	99.7	99.4	99.2	99.2	0	0	0	0	99.7	99.4	99.2	77.4	0	0	0	0	0	0	0	0	32.9	0	0	0
19	100	100	100	100	0	0	0	20.8	100	100	100	100	0	0	0	0	0	0	0	0	96.7	0	0	0
20	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	100	0	0	0
21	34.4	34.4	34.4	34.4	0	0	0	0	6.5	6.5	6.5	6.5	0	0	0	0	0	0	0	0	34.4	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	63.2	63.2	0	0	0	1.5	0	0	15.9	16.5	0	0	0	34.2	0	0	0	0	0	0	0	0
24	0	45.4	100	100	0	0	0	0	0	45.4	78.8	76.7	0	0	0	100	0	0	0	0	0	0	0	0
25	0	100	100	100	0	0	0	0	0	100	100	100	0	0	0	100	0	0	0	0	0	0	0	0
26	0	100	100	100	0	0	0	0	0	100	100	100	0	0	0	100	0	0	0	0	0	0	0	0
27	33.3	91.5	99.4	99.5	0	0	0	0	24	91.5	99.4	99.5	33.3	55.4	0	67.1	0	0	0	0	0	0	0	0
28	100	100	99.9	97.4	43	0	0	33.3	100	100	99.9	97.4	100	100	0	0	0	0	0	0	0	0	0	0
29	100	100	100	100	0	0.1	0	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0
30	93	93	76.2	76.2	0	0	0	42.5	93	93	76.2	66.8	93	93	0	0	0	0	0	0	0	0	0	0
31	100	100	100	100	0	0	0	0	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0
Avg	79.2	64.9	92.4	92.5	27.6	2.7	26.5	32.8	77.5	63.3	87.9	86.2	40.2	17.7	9.3	21.9	0	0	0	0	11	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	38.2	44.6	21.6	21.6	42.1	10.4	42.1	43.1	39.8	45.1	27.4	27.5	46.3	34.6	26.2	37.7	0	0	0	0	25.9	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	50	100	100	100	100	100	100	100	100	100	100	0	0	0	0	100	0	0	0

ED_004549_00015928-00350

Table E14. Airflow and emission data completeness (%) at Site IN3B for April, 2009.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	55.2	100	100	0	0	0	0	100	55.2	100	100	100	55.2	67.3	0	0	0	0	0	0	0	0	0
2	100	0	100	100	0	0	0	0	100	0	100	100	99.9	0	100	0	0	0	0	0	0	0	0	0
3	99.4	0	99.3	99.4	0	0	0	0	99.4	0	99.3	99.4	98.3	0	94.2	36.7	0	0	0	0	0	0	0	0
4	100	0	100	100	0	0	0	0	100	0	100	100	100	0	100	100	0	0	0	0	0	0	0	0
5	100	0	99.4	99	0.8	0	0	11.7	100	0	99.4	99	100	0	99.4	99	0	0	0	0	0	0	0	0
6	100	0	100	100	0	0	0	100	100	0	100	100	100	0	100	100	0	0	0	0	0	0	0	0
7	94.2	52.3	73.5	73.7	0	0	0.1	36.7	70.4	28.5	44.2	49.9	36.9	0	36.7	36.7	0	0	0	0	0	0	0	0
8	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	100	50.6	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	100	53.9	100	100	0	0	0	0	51.5	53.9	54.6	53.9	60.8	53.9	60.8	60.8	0	0	0	0	0	0	0	0
11	100	100	100	100	0	0	0	0	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
12	100	100	100	100	6.4	0	0	2.8	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
13	100	100	100	100	28.1	0	0	29.3	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
14	100	100	100	100	0	0	0	0	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
15	100	100	100	100	0	0	0	0	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
16	99.4	99.4	99.2	52	0	0	0	0	99.4	78.8	99.2	52	92.8	96.9	96.7	49.5	0	0	0	0	0	0	0	0
17	100	100	100	0	0	0	0	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0
18	100	100	100	0	0	0	0	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0
19	100	100	100	0	0	0	0	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0
20	100	100	100	0	0	0	0	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0
21	98.6	98.8	98.8	0	0	0	0	0	98.6	65.6	98.8	0	94.2	94.4	94.4	0	0	0	0	0	0	0	0	0
22	100	100	100	0	0	0	0	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0
23	100	100	100	0	0	0	0	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0
24	100	100	100	0	0	0	0	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0
25	100	100	100	0	0	0	0	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0
26	100	100	100	0	0	0	0	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0
27	97.1	97.1	99.1	0	0	0	0	0	97.1	97.1	99.1	0	89.2	89.2	92.5	0	0	0	0	0	0	0	0	0
28	100	100	100	0	0	0	0	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0
29	99.4	99.4	98	0	45.7	42.6	40.8	0	99.4	99.4	98	0	32.6	32.6	32.6	0	0	0	0	0	0	0	0	0
30	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg	99.6	76.9	98.9	50.8	6	4.8	4.7	6	90.5	69.3	89.8	41.8	83.5	64.1	82.5	32.8	0	0	0	0	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	1.2	37.8	4.7	48.4	19.9	19.3	19.2	19.4	26.2	41.9	27.1	46.7	32.7	44.8	32.7	43.4	0	0	0	0	0	0	0	0
Min	94.2	0	73.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0

ED_004549_00015928-00351

Table E14. Airflow and emission data completeness (%) at Site IN3B for May, 2009.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0
2	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0
3	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0
4	100	100	100	0	75.9	100	100	0	76	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0
5	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0
6	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0
7	99.4	99.4	99.4	0	67.2	48.8	49.7	0	67.3	49	50	0	0	0	0	0	0	0	0	0	0	0	0	0
8	77.8	77.8	77.8	0	66.3	68.4	71.2	0	66.3	68.4	71.2	0	0	0	0	0	0	0	0	0	0	0	0	0
9	100	100	100	0	99.2	96.4	93.6	0	99.3	96.5	93.8	0	0	0	0	0	0	0	0	0	0	0	0	0
10	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0
11	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0
12	96.9	96.9	96.2	0	30.9	23.3	25.3	0	70.5	66	56.6	0	0	0	0	0	0	0	0	0	0	0	0	0
13	100	100	100	0	0	0	0	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14	100	100	100	0	0	0	0	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0
15	97.9	98	98	0	10.3	10.3	10.3	0	67.9	67.3	71.4	0	0	0	0	0	0	0	0	0	0	0	0	0
16	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0
17	100	100	100	0	100	100	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0
18	99.5	99.5	99.5	0	77.2	78.7	99.5	0	77.4	78.8	99.5	0	0	0	0	0	0	0	0	0	0	0	0	0
19	100	83.7	100	0	100	83.7	100	0	100	83.7	100	0	0	0	0	0	0	0	0	0	0	0	0	0
20	99.6	56.8	99.2	53.6	96.5	56.8	99.2	50.1	96.5	56.8	99.2	50.2	0	0	0	0	0	0	0	0	0	0	0	0
21	100	47.4	96.2	100	100	47.4	96.2	100	100	47.4	96.2	100	0	0	0	0	0	0	0	0	0	0	0	0
22	99.8	59.4	99.8	99.8	99.8	45.5	70.4	70.4	69.9	32	35.1	37.9	53.5	15	53.5	15.3	0	0	0	0	0	0	0	0
23	100	56.4	100	100	100	56.4	100	100	46.2	17.4	40.6	37.8	100	56.4	100	50.6	0	0	0	0	0	0	0	0
24	100	43.5	100	100	100	43.5	100	100	91.3	34.7	91.3	91.3	100	43.5	100	49.4	0	0	0	0	0	0	0	0
25	100	100	100	100	94.2	95.6	98.3	100	0	0	0	0	100	100	100	93.1	0	0	0	0	0	0	0	0
26	64.7	64.7	64.7	64.7	59.4	57.1	52.8	46.9	0	0	0	0	63.1	63.6	63.4	13.7	0	0	0	0	0	0	0	0
27	100	100	100	100	100	100	100	100	0	0	0	0	100	100	100	0	0	0	0	0	0	0	0	0
28	100	100	100	100	78.2	76.9	76.1	76.1	19.2	19.2	19.2	19.2	100	97.2	100	59.5	0	0	0	0	0	0	0	0
29	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
30	100	100	100	100	100	100	100	100	100	100	100	100	100	100	98.5	100	0	0	0	0	0	0	0	0
31	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
Avg	97.9	89.8	97.8	36.1	82.4	73.8	82	33.7	79	71.5	78.2	20.5	29.6	25	29.5	18.8	0	0	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	7.2	18.1	7.2	46.4	30.4	32.2	31.5	44.1	32.1	35.1	33.9	36.4	43.9	39.9	43.8	34.4	0	0	0	0	0	0	0	0
Min	64.7	43.5	64.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0

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Table E14. Airflow and emission data completeness (%) at Site IN3B for June, 2009.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	100	100	100	100	100	100	100	100	100	100	100	100	53.3	53.3	52.8	52.7	0	0	0	0	39.3	28.8	30	23.2
2	98.7	93.3	97.3	98.5	98.7	93.3	97.3	98.5	98.7	93.3	97.3	98.5	0	0	0	0	0	0	0	0	98.7	45.8	97.3	95.9
3	99.7	100	100	100	99.7	100	100	100	99.7	100	100	100	0	0	0	0	0	0	0	0	99.7	60.2	100	100
4	99.1	99.1	99.1	99.1	99.1	99.1	78	77.3	99.1	99.1	99.1	77.4	38.1	38.3	37.7	37.4	0	0	0	0	58.2	56.7	58.1	58.1
5	100	100	100	100	100	100	100	100	55.1	55.1	55.1	55.1	100	100	100	100	0	0	0	0	0	0	0	0
6	100	100	100	100	100	100	100	100	0	0	0	0	100	100	100	75.1	0	0	0	0	0	0	0	0
7	100	100	100	100	100	100	100	100	0	0	0	0	100	100	97.7	64.2	0	0	0	0	0	0	0	0
8	99.2	99.2	98.8	99.2	99.2	99.2	98.8	99.2	48.5	48.5	48.5	48.5	75.6	75.6	75.2	40.8	0	0	0	0	0	0	0	0
9	97.4	97.4	97.4	97.4	97.4	91.7	79.2	78.5	97.4	91.7	77.9	77.2	5.3	0	61.3	0	0	0	0	0	0	0	0	0
10	100	100	100	100	100	100	100	100	100	100	100	100	0	0	100	0	0	0	0	0	0	0	0	0
11	100	100	100	100	100	100	100	100	100	100	100	100	0	0	9.6	0	0	0	0	0	0	0	0	0
12	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
13	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0	0	0	0	0	0
14	100	100	99.4	100	100	100	99.4	100	100	100	99.4	100	0	0	0	0	0	0	0	0	0	0	0	0
15	100	100	99.3	100	90.3	93.1	95.1	98.6	90.3	93.1	95.1	98.6	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	53.9	32.8	54	54	53.9	32.8	47.6	44.8	53.9	32.8	47.7	44.9	0	0	0	0	0	0	0	0	0	0	0	0
24	98.7	61.4	97.9	98.7	98.7	61.4	97.9	98.7	98.7	61.4	97.9	98.7	0	0	0	0	0	0	0	0	0	0	0	0
25	98.6	98.6	49.9	49.9	98.6	78.1	49.9	49.9	98.6	78.3	49.9	49.9	0	0	0	0	0	0	0	0	0	0	0	0
26	100	100	0	0	100	100	0	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	100	100	0	0	100	100	0	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	100	100	0	0	100	100	0	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	97.3	97.3	6.6	56.9	66	89	0	48.7	97.3	97.3	6.6	56.9	0	0	0	0	0	0	0	0	0	0	0	0
30	99.9	99.9	41	99.9	0	0	0	0	99.9	99.9	41	99.9	0	0	0	0	0	0	0	0	0	0	0	0
Avg	74.7	72.6	58	61.8	70	67.9	54.8	56.5	64.6	61.7	47.2	50.2	15.7	15.6	21.1	12.3	0	0	0	0	9.9	6.4	9.5	9.2
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	42	42.3	46.2	45.7	43.4	43.2	46.5	45.6	44.4	43.7	44.3	44.2	33	33	36.4	26.5	0	0	0	0	26.9	16.9	26.5	26.2
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	99.7	60.2	100	100

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Table E14. Airflow and emission data completeness (%) at Site IN3B for July, 2009.

Day	Airflow				Ammonia				Hydrogen sulfide				PM_{10}				$PM_{2.5}$				TSP			
	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8	R5	R6	R7	R8
1	97.1	97.1	73.4	97.1	0	0	0	0	97.1	97.1	66.4	68.5	0	0	0	0	0	0	0	0	0	0	0	0
2	100	100	75.5	100	0	0	0	0	100	100	75.5	100	0	0	0	0	0	0	0	0	0	0	0	0
3	100	100	0	34.4	0	0	0	0	100	100	0	34.4	0	0	0	0	0	0	0	0	0	0	0	0
4	99.9	99.9	0	0	0	0	0	0	99.9	99.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	99.9	99.9	0	0	0	0	0	0	99.9	99.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	96.7	96.7	65.4	61.5	0	0	0	0	72.4	72.4	26	18.7	0	0	0	0	0	0	0	0	0	0	0	0
7	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
8	100	100	100	100	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
9	100	100	100	100	29	17.3	29	29	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
10	99.9	91.7	99.9	99.9	99.9	79.4	99.9	99.9	99.9	91.7	99.9	99.9	0	0	0	0	0	0	0	0	0	0	0	0
11	100	99.9	100	100	100	99.9	100	100	100	99.9	100	100	0	0	0	0	0	0	0	0	0	0	0	0
12	100	100	99.9	100	100	100	99.9	100	100	100	99.9	100	0	0	0	0	0	0	0	0	0	0	0	0
13	99.9	99.9	99.8	99.9	99.9	99.9	99.8	99.9	99.9	99.9	99.8	99.9	0	0	0	0	0	0	0	0	0	0	0	0
14	100	99.7	96.6	99.8	100	99.7	96.6	99.8	100	99.7	96.6	99.8	0	0	0	0	0	0	0	0	0	0	0	0
15	100	100	92.7	100	100	100	92.7	100	100	100	92.7	100	0	0	0	0	0	0	0	0	0	0	0	0
16	97.5	97.5	88.6	97.5	97.5	97.5	62.2	65	97.5	97.5	62.4	65.1	0	0	0	0	0	0	0	0	0	0	0	0
17	100	100	99.6	100	100	100	99.6	100	100	100	99.6	100	0	0	0	0	0	0	0	0	0	0	0	0
18	99.2	99.2	96	99.2	99.2	99.2	96	99.2	99.2	99.2	96	99.2	0	0	0	0	0	0	0	0	0	0	0	0
19	100	100	99.5	100	100	100	99.5	100	100	100	99.5	100	0	0	0	0	0	0	0	0	0	0	0	0
20	97.3	97.2	95.5	97.3	62.9	62.8	40.2	41.6	97.3	97.2	74.8	76.1	0	0	0	0	0	0	0	0	0	0	0	0
21	100	100	77.5	100	0	0	0	0	100	100	77.5	100	0	0	0	0	0	0	0	0	0	0	0	0
22	91.8	91.8	69.4	91.8	0	0	0	0	91.8	91.8	53.6	55.9	0	0	0	0	0	0	0	0	0	0	0	0
23	96.9	95.2	90.8	96.9	1.9	0.6	5.1	5.1	56.9	40.6	40.8	40.1	0	0	0	0	0	0	0	0	0	0	0	0
24	97.8	97.6	95.1	97.6	31.6	31.6	31.6	29.5	31.6	31.6	31.6	29.5	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg	76.6	76.2	61.8	66.9	36.2	35.1	33.9	34.5	72.4	71.6	54.6	57.7	0	0	0	0	0	0	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	41.4	41.2	43.6	44.7	45.6	44.9	43.4	44.2	41.6	41.8	42.6	43.5	0	0	0	0	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0

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EMISSIONS DATA FROM THREE SWINE FINISHING BARNS IN NORTH CAROLINA

Final Report for Site NC3B

of the

National Air Emissions Monitoring Study

Submitted to

John Thorne, Executive Director
Agricultural Air Research Council
C/O Crowell and Moring, LLP
1001 Pennsylvania Avenue, NW
Washington, DC 20004

and

Bill Schrock, Environmental Engineer
U.S. EPA Office of Air Quality Planning and Standards
Mail Code E143-03, 4930 Page Road
Durham, NC 27703

by

Albert J. Heber, Professor and NAEMS Science Advisor
Agricultural and Biological Engineering, Purdue University
225 S. University St., West Lafayette, IN 47907
Phone: 765-494-1214 Email: [HYPERLINK "mailto:heber@purdue.edu" \h]

July 23, 2010

Contributors

Wayne P. Robarge, Jihoon Kang
Soil Physical Chemistry
North Carolina State University
100 Derieux St., Raleigh, NC 27695-7619

Bill W. Bogan, Jiqin Ni, Juan Carlos Ramirez, Claude Diehl, Changhe Xiao
Agricultural and Biological Engineering, Purdue University
225 S. University St., West Lafayette, IN 47907

Kaiying Wang
Agricultural Engineering,
Zheizhang University
Hangzhou, 310030 P.R. China

Erin L. Cortus
Agricultural and Biosystems Engineering,
South Dakota State University
Box 2120, Brookings, SD 57007

Acknowledgments

This project was supported by the National Pork Board and the Agricultural Air Research Council.

Citation

Bogan, B.W., K.Wang, W.P. Robarge, J. Kang, and A.J. Heber. 2010. National Air Emissions Monitoring Study: Emissions Data from Three Swine Finishing Barns in North Carolina - Site NC3B. Final Report. Purdue University, West Lafayette, IN, July 2.

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1. INTRODUCTION AND OBJECTIVES

1.1. Overview of NAEMS

The primary goals of the National Air Emissions Monitoring Study (NAEMS) were to:
1) quantify aerial pollutant emissions from dairy, pork, egg, and broiler production facilities,
2) provide reliable data for developing and validating emissions models for livestock and poultry production and for comparison with government regulatory thresholds, and 3) promote a national consensus on methods and procedures for measuring emissions from livestock operations. Emissions measurements were conducted at a total of 15 different barn monitoring sites and ten open source sites in the continental US.

The NAEMS was managed by Purdue University (Purdue), in its role as Independent Monitoring Contractor for the Agricultural Air Research Council. Purdue selected equipment and methods in consultation with the U.S. EPA, and subcontracted with other universities to operate the monitoring sites. North Carolina State University (NCSU) installed, maintained and calibrated equipment, collected samples, and conducted all other on-site activities at this site. Purdue provided rapid feedback (generally within 2-4 business days) to catch aberrations in the data, and later conducted final processing of the data. Both NCSU and Purdue participated in reviews of the analyzed data.

The overall objective of this report is to present the quality-assured measurements of ammonia (NH_3), hydrogen sulfide (H_2S), particulate matter (PM) and volatile organic compounds (VOC) from a swine finishing facility in North Carolina. The specific objectives of the report are to:

1. Describe the farm, and the monitored buildings,
2. Describe the monitoring methods and quality assurance, and
3. Present tabulated daily averages of emissions.

2. CONFINED ANIMAL FEEDING OPERATION

2.1. Farm

The farm consisted of nine 800-hd finishing barns (Figure 1) and a lagoon, and was constructed in 1996. The farm was located in a relatively flat area comprised of fields and wooded land. There was a group of 3 or 4 other swine operations, averaging 8-10 barns and one lagoon each, centered in a cluster about 1.1 km southwest of the farm.

The farm had a capacity of 7,200 head, which was divided among nine 50 m x 12.5 m barns that were oriented west-southwest to east-northeast (following a creek line) and separated by a distance of 12 m (Figure 1).

2.2. Monitored Buildings

Emission monitoring was conducted at barns 1, 2 and 3. Barns 1-3 were oriented west-southwest to east-northeast. The distance between the barns was 12 m. Each finisher barn was 50 m long x 12.5 m wide with sidewall heights of 3.4 m. Pens were separated by solid metal panel gating. Well water was dispensed to the pigs by cup waterers.

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The finishing barns were all tunnel-ventilated, with each barn controlled individually. All of the ventilation fans and fan controllers were manufactured by Aerotech Ventilation Systems (Mason, MI). There were five single-speed ventilation fans in the east-northeast wall of each barn, including two 91-cm Aerotech Advantage fans (Model AT36Z1CP), and three 122-cm Advantage fans (Model AT481Z1CP). Each barn was ventilated in five ventilation stages, with each stage controlling a single fan. The numbering scheme shown in Figure 2 and 3 reflects the stage numbers. The first two stages controlled the two 91-cm fans, while the three 122-cm fans were controlled by stages 3 through 5. The producer operated the stage-one fan with a timer to decrease the ventilation rate in cold weather when the barn was newly stocked with young pigs. The on/off cycle in this case was temperature-dependent, with timer control in 10-min intervals.

Each finishing barn had curtain sidewalls that were raised during normal operation. The sidewall curtains had a safety switch that automatically lowered the sidewall curtains in case of power failure. Air entered the barn through eave baffles above the sidewall curtains during most of the year. With warmer temperatures, tunnel ventilation was activated by opening a 12-m long curtain at the WSW end of the barn, the opposite end of the tunnel fans. At the start of the project, the sidewall baffles (16 per side, 32 per barn) were adjusted according to season. They were closed in summer during tunnel ventilation, and open in cooler weather to facilitate crossflow ventilation. In mid-2009, the eave baffles were exchanged with independent units that respond only to the negative pressure in the barn and operate during all seasons of the year.

The finishing barns had concrete slatted floors with metal panels. The manure was stored in a 0.9-m pit located underneath each barn. The barn pits were emptied weekly, transferring the manure into an anaerobic lagoon that was located at the northeast side of the barns. The pit was recharged (0.1 to 0.5 m deep) with lagoon water.

2.3. Significant Events and Modifications

Tropical Storm Hanna passed through the area on 9/4/08, and knocked out power to the site for four days, during which no data was collected.

The site was exposed to smoke from a large wildfire June 1-15, 2008 which influenced inlet PM measurements.

The farm was shut down and evacuated in mid-January of 2008 to eliminate a dysentery outbreak. Hogs were loaded back into all three barns in early March.

Barns were empty May 7-25, 2009, during which the producer analyzed sludge depths in the barn, and replaced manually adjusted ventilation baffles with passively-controlled plastic baffles.

The overhead connection to a feed bin in barn 2 was broken by hogs on or about 7/5/08, resulting in about 5,000 kg of feed being dumped onto the floor. Farm staff removed feed above the floor and feed in the pit was removed using a high pressure water hose. A substantial amount of fresh water flowed into the pit with the pit plug pulled to facilitate drainage and removal of feed.

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The ventilation scheme remained the same throughout the study. Site personnel alerted farm personnel when the monitoring system indicated that fans malfunctioned.

Barn 1 was completely empty on 1/12/08-3/2/08, 7/24/08-8/3/08, 12/23/08-12/28/08, 5/7/09-5/23/09, and 10/7/09-10/18/09. Barn 2 was empty on 1/18/08-3/2/08, 7/29/08-8/3/08, 12/22/08-12/28/08, 5/14/09-5/30/09, and 10/15/09-10/18/09. Finally, the empty periods for Barn 3 were 1/18/08-3/9/08, 8/7/08-8/10/08, 12/22/08-12/30/08, 5/19/09-6/3/09, and 10/15/09-10/25/09. The longer empty periods in early 2008 were due to the dysentery outbreak and its subsequent cleanup.

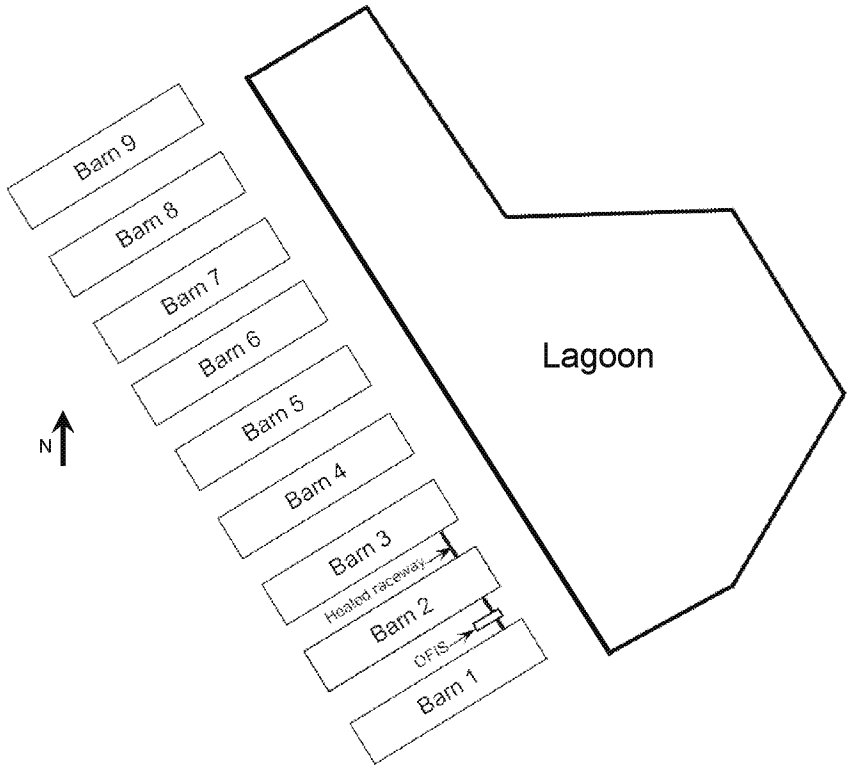

Figure 1. Facility layout. Monitored buildings were barns 1, 2 and 3.

3. MONITORING AND SAMPLING METHODS

3.1. General Approach

Aerial emissions monitoring was conducted in finishing barns 1, 2 and 3. Equipment installation and preliminary testing began on 8/24/07, and was completed on 12/27/07. The site setup and equipment installation followed an approved site monitoring plan, a quality assurance project plan, and instrument or method-specific standard operating procedures.

The monitoring period began on 12/4/07 and concluded on 1/13/10. Target pollutants were NH_3, H_2S, PM (PM_{10}, TSP, and $PM_{2.5}$) and VOC. Appendix A lists the target pollutants, and all measured supporting variables and metadata. The monitoring schemes for the three buildings are shown in Figures 2 and 3. Table 1 lists the major instruments used in the test, including the models, manufacturers and serial numbers.

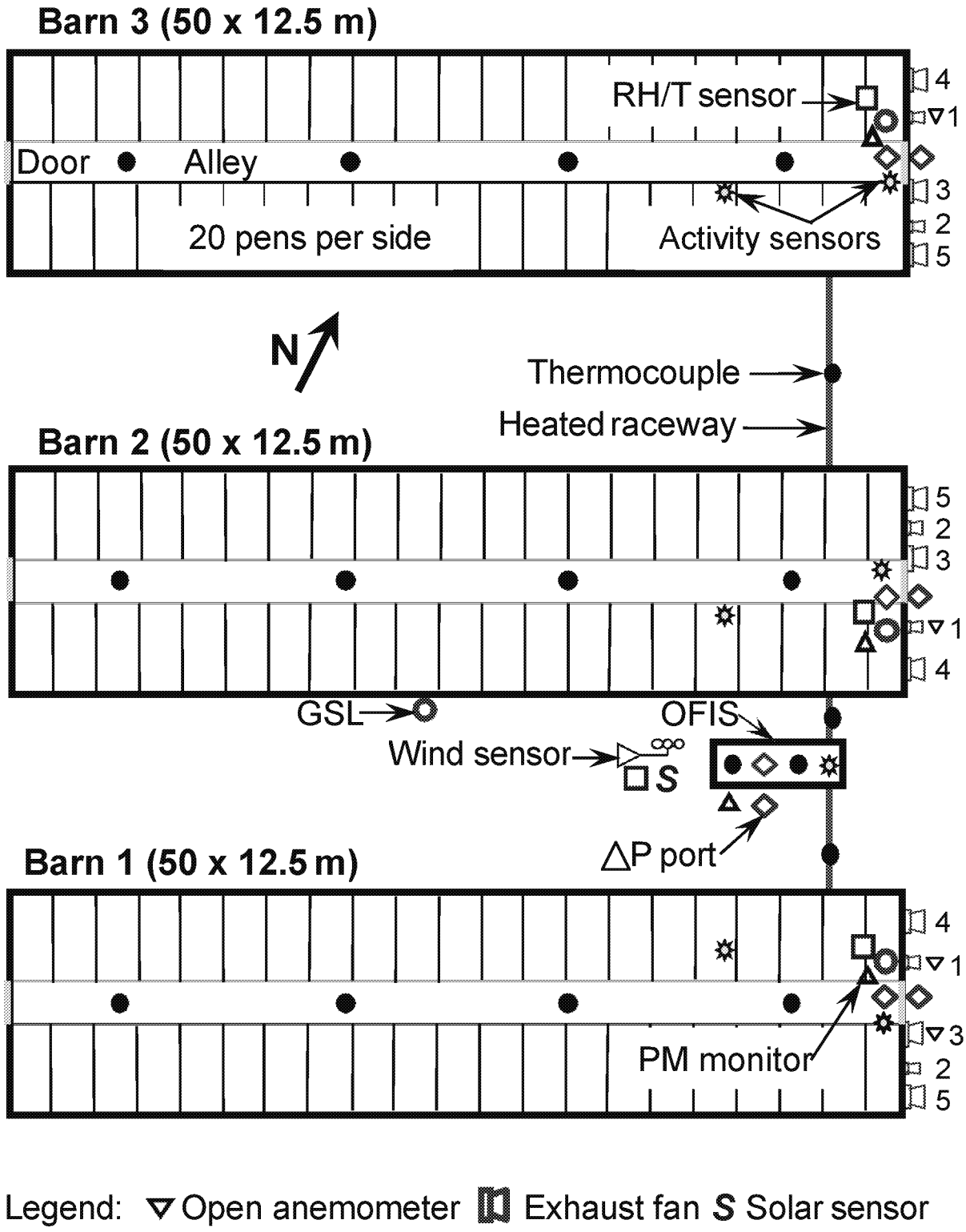

Figure 2. Overhead view of sampling and measurement locations.

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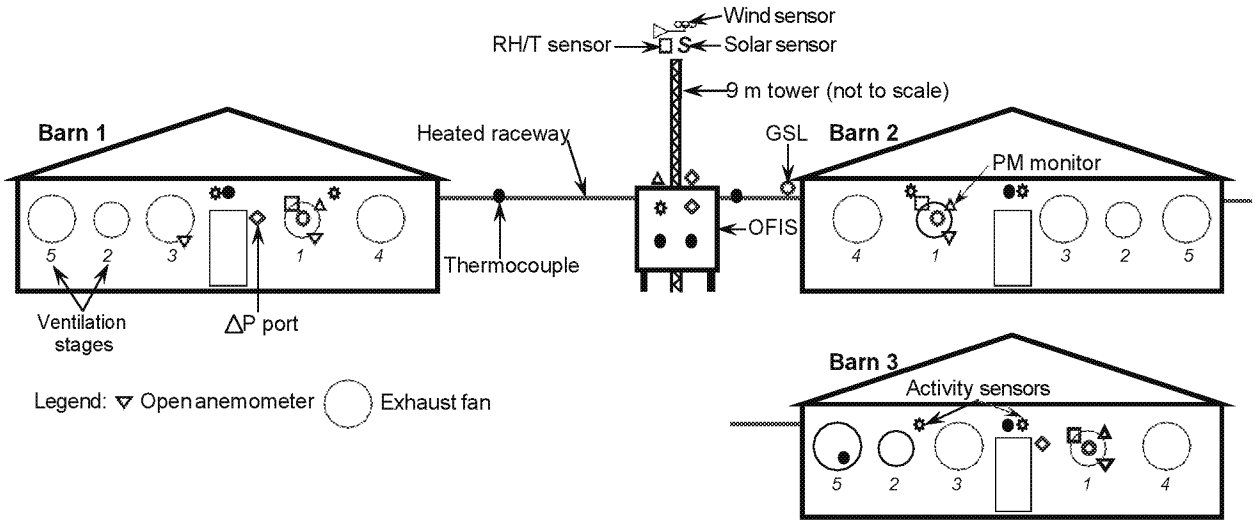

Figure 3. End view of sensor and air sampling locations.

Table 1. Major instrumentation.

Analyzer/Instrument	Serial number
INNOVA 1412 Multi-gas analyzer	710-207
TEI 450i H2S analyzer	709220682
Environics 4040 dilutor	3914
TEOM 1	264580612
TEOM 2	264690612
TEOM 3	265080701
TEI FH 62C14 (Beta Gauge)	E-1293

3.2. Instrument Shelter

The on-farm instrument shelter (OFIS) was located between barns 1 and 2, toward the east end of the barns and offset towards barn 2. Heated raceways were used to connect the OFIS with the monitored barns, to avoid condensation in sampling lines during cold weather. One 12-m raceway connected barn 3 to barn 2, and a short raceway (approximately 2.5 m) connected barn 2 to the OFIS. On the opposite side of the OFIS, a raceway of approximately 7 m connected the OFIS with barn 1. The tubing in the conduits was insulated and heated for additional protection against condensation, along with the full lengths of all sampling lines inside all three barns. The raceway temperatures were monitored continuously.

The OFIS was supplied with 240 VAC electric power on 8/24/07 by the farm. The analyzers, computer, GSS, TEOM vacuum pumps, and data acquisition system in the OFIS obtained electrical power from the farm. A copper ground rod was installed at the location of the OFIS and connected to the OFIS ground.

The HVAC system of the OFIS maintained inside temperatures within the operating range of the analyzers, and created a positive pressure with a filtered outside air intake to minimize entry of

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unfiltered outside air. The temperature and differential static pressure in the OFIS were monitored with a thermocouple near the instrument rack and a pressure sensor, respectively. One set of gas analyzers (Table 1) in the OFIS measured gas concentrations as the gas sampling system (GSS) sequenced through all the gas sampling locations (GSLs). A personal computer collected all site monitoring data using a data acquisition and control program AirDAC.

3.3. Data Acquisition and Control System

The data acquisition and control system consisted of a personal computer, custom software (AirDAC) written in a commercial programming language (LabVIEW, National Instruments, Austin, TX), distributed I/O hardware (National Instruments FieldPoint modules), and Universal Serial Bus (USB) devices by National Instrument (NI) and Measurement Computing (MC, Norton, MA). The NI FieldPoint (FP) modules and MC USB devices (Table 2) were selected and configured to acquire data for all the on-line measurement variables (Appendix A).

Table 2. Data acquisition hardware configuration for NC3B.

Manufacturer and model	I/O type	# units	# channels	Notes
NI FP-AI-112	Analog input	4	16	Single-ended, 16-bit
NI FP-TC-120	Thermocouple	3	8	
NI FP-DO-401	Digital output	2	16	2 A at 10-30 VDC
MC USB 4303 counter	Count input	4	10	
MC USB DIO 96H	Digital input	1	96	

The 16-channel NI FP-DO-401 digital output module was used to control: 1) sequential switching of multiple gas sampling lines, 2) the raceway heating system, and 3) gas sampling system cooling fan. Serial communication (RS232) was used to acquire data from the multi-gas monitor and calibration variables (calibration time, gas concentration, etc.) from the gas dilutor. Voltage or current analog signals from various analyzers and sensors were connected to FP-AI-112 modules. Type T thermocouples were connected to FP-TC-120 modules. Digital signals from fan stage relays were connected to the MC USB DIO96H device. Voltage pulses from proximity sensors used to measure fan rotational speed were detected by the MC USB 4303 counters.

AirDAC averaged the signals (after conversion to engineering units) over 15-s and 60-s intervals and recorded the means into two separate computer files. All real-time data were displayed in tabular and graphic forms for on-site or remote (pcAnywhere, Symantec, Mountain View, CA) viewing (Ni et al., 2009; Ni and Heber, 2010). Measurement alarms, data collection notifications, data files, graphs and statistics of the daily data sets, and modified configuration and fieldnote files were automatically emailed to several recipients after midnight.

3.4. Monitoring and Recording Farm and Building Operation

3.4.1. Animal Husbandry and Building Systems

Two infrared motion sensors (activity sensors) were mounted to ceilings of each of the finishing rooms to monitor movements of pigs and workers. An activity sensor was used to monitor researcher presence in the OFIS.

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Data on animal inventory and mortalities were recorded manually on a daily basis by the producer, and provided to site personnel. Animal inventory was determined by comparing on-farm inventory records and sales reports. The sales reports usually contained information such as the date, packing plant name, number of pigs delivered to the plant, and total weight of each truck load. Average nursery pig weights were also provided by the farm.

If the number sold at the end of a growth cycle, plus documented mortalities during the rotation, differed from the initial count by more than 2, and the difference couldn't be reconciled using interim counts by NCSU, the initial incoming count was changed to match the outgoing plus mortalities. This was done on the assumption that outgoing (sold) counts would be more accurate than those at stocking. Since mortalities were only recorded weekly, interpolation was used to spread the mortalities for a given week across the entire week. Stocking was assumed to begin at 6 AM and end at noon, with interpolation across that 6-h interval. Run-outs were assumed to start at 6 AM and end at 8 PM, with interpolation across that 14-h interval.

Each room was divided into subgroups of pigs according to truck loads, because each load had a specific date and average weight. A growth curve was applied to estimate the weight gain per week, for each pig subgroup, following the "standard" growth rate given in the MWPS-8, Swine Housing and Equipment Handbook (MWPS 1983). For each subgroup, the curve was fitted to the beginning and final weights to estimate the daily weight gain (in percentage with respect to the final weight and age). The average pig weights were estimated based on daily gains of each subgroup, while the total inventory and total weight were the summation of each subgroup within the room. Weekly mortality records were also included in this calculation. The calculated average pig weight within the room was used to estimate unknown weights, because mortalities were not weighed when removed from the rooms.

3.4.2. Thermal Environment

Weather data was collected using a solar radiation shielded capacitance-type relative humidity and temperature probe (RH/T) (Model RHT-WM, Novus Automation, Porto Alegre, Brazil), a pyranometer (Model LI-200SL, LI-COR, Lincoln, NE) and a cup anemometer (Wind Sentry, RM Young, Traverse City, MI), which were mounted on a 9-m tilt tower located just WSW of the OFIS.

The RH/T sensors did not operate properly until 4/5/08. Therefore, relative humidity and temperature data from the "Weather Underground" website ([HYPERLINK "http://www.wunderground.com/)" \h]for a weather station that was about 45 km north of the site were used for this period. The validity of this substitution was tested by comparing the weather station data for April 5-30, 2008 with the site ambient data. The agreement between the two data sets was excellent (data not shown), which proved that the substitution was valid.

For the room environment conditions, RH/T probes were located at the PREF in each room. Type T thermocouples (TCs) were placed in the center of each barn, spaced evenly along the long axis, to measure inside temperature.

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Thermocouples were also located in the heated raceways and in the OFIS near the instrument racks. Two TCs were located in the OFIS to measure the temperature of the OFIS and the temperature-controlled TEOM tubing bundle. One TC monitored the temperature conditions in the inlet PM monitor enclosure.

3.4.3. Building Airflow

Fan operation was monitored in two ways. The first consisted of mounting magnetic Hall-effect sensors (hereafter referred to as speed sensors) on every fan in barns 1-3. Magnets used with the Hall-effect sensors were mounted on the fan pulleys of the 122-cm fans, and directly on a fan blade for the 91-cm fans to detect the rotational speed in revolutions per minute (rpm). The digital signal from the speed sensor was converted into a frequency measurement with a counter module in the data acquisition system. The second means of monitoring fan operation was through current sensors which were installed in the power cord of each fan motor. Outputs from both sets of sensors were monitored by the data acquisition system. Impeller anemometers were placed downstream of each of the 92-cm PREF fans, along with one of the stage-3, 122-cm fans in barn 1 (Figures 2 and 3).

Static pressure differences were measured across the east-northeast end wall of each barn with differential static pressure sensors (Model 260, Setra Systems, Boxborough, MA). The outside port was located against the outside wall near the ventilation fans of the end walls. Static pressure in the OFIS was measured with the same type of sensor, to ensure that positive pressure was maintained.

In-situ airflow measurements were conducted at the inlet side of each fan with a 122-cm field-portable fan tester (Fan Assessment Numeration System or FANS, University of Kentucky, Lexington, KY) (Gates et al., 2004). The static pressure sensors were calibrated prior to the tests. During the first test, a five-point ΔP range was run to cover the range of operating pressures from 0 to -45 Pa or greater on each fan in barns 1, 2, and 3. During the second test, which was characteristic of winter operations, the tests were restricted to the 91-cm fans across three ΔP points which defined the normal winter (cold season) operation of the barns.

A total of two groups of *in-situ* fan tests with replication were conducted during: 1) October and November, 2009, and 2) February, 2010. Each of the wall fans was tested at least twice with the FANS. A total of 276 individual FANS runs were conducted, split evenly between the 91-cm and 122-cm fans.

All *in-situ* fan test data points for a single fan, which were within ±5 rpm and ±3 Pa, were averaged together, and used as single data points. This was done to avoid biasing the airflow curves with multiple, essentially identical, data points from the same fan. Data points which differed by more than 5 rpm and/or 3 Pa were retained as distinct points. This left a total of 48 and 51 points for the 121-cm and 91-cm fans, respectively. The field data was used to develop equations for calculating airflow as a function of differential pressure and fan rotational speed (both taken from AirDAC), and to assess the uncertainty in airflow predictions.

The airflow curves of the 91-cm and 122-cm diameter wall fans were obtained from the Bioenvironmental and Structural Systems (BESS) Lab at the University of Illinois at Urbana-

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Champaign (Tests #4089 and #6260). Each performance record consisted of airflow (Q1) measured at several static pressures (P1), and at normalized constant speeds (N1) of 849 and 576 rpm for the 91-cm and 122-cm diameter fans, respectively.

For each fan type, the BESS fan curve was adjusted to the mean speed (N2) of the fan tests. The mean speeds were 555 and 846 rpm for the 91-cm and 122-cm diameter wall fans, respectively. The new, speed-indexed baseline curves were derived using the first ($Q_2 = Q_1(N_2/N_1)$) and second ($\Delta P_2 = \Delta P_1(N_2/N_1)^{0.5}$) fan laws, where Q_2 is the speed-adjusted BESS fan curve at speed N_2. The speed-corrected airflow prediction model is $Q_4 = (a\Delta P_4 + b)\cdot(N_4/N_2)\cdot Q_2$, where ΔP_4 and N_4 are measured fan static pressure and speed. For a given test using the portable tester, the model is $Q_4 = k\cdot(a\cdot\Delta P_3 + b)\cdot(N_3/N_2)\cdot Q_2$, where ΔP_3 and N_3 are the measured fan static pressure and speed during the fan test, and the fan degradation factor $k = a\cdot\Delta P_3 + b$. The values for the coefficients a and b were those which minimized sum of square differences between Q_4 and Q_3 for all the valid fan tests within a speed regime. The resulting fan models are shown in [HYPERLINK \l "_bookmark14"]

Table 3. Fan airflow models.

Fan dia, cm	Reference speed (N_2)	Polynomial coefficients of $Q_2=f(\Delta P_2)$ at speed N_2				Coefficients of k	
		a3	a2	a1	a0	b1	b0
122	555	2E-05	1.03E-03	6.97E-02	1.13E+01	3E-03	0.933
91	846	-5.930E-06	2.0E-04	3.22E-02	5.21E+00	2E-03	0.037

3.4.4. Biomaterials Sampling Methods and Schedule

All analyses of biomaterials were conducted by either an independent laboratory (Midwest Laboratories, Omaha, NE) or by NCSU.

Water was evaluated based on analyses of three samples of the well water provided to the pigs, which was sampled on 6/2/09, 9/17/09 and 12/2/09 (Appendix E). Water usage for the whole farm was monitored with a single gauge.

A total of 49 feed samples were collected, with approximately 10 feed samples representing each of five feed formulations used at the farm. The samples were analyzed by NCSU, with results provided in Appendix D.

Manure in the barns was sampled multiple times from 2/15/09 to 6/10/09 (Appendix E) to determine pH, solids content, ammoniacal N, and total N.

3.5. Particulate Matter Monitoring

Real-time PM monitors (TEOM Model 1400a, Thermo Fisher Scientific, Waltham, MA) continuously sampled exhaust PM. A TEOM was placed in an empty pen of each finishing room, about 2 m in front of the inlet of fan 1, which was the PREF (Figure 2, Table 5).

A beta attenuation PM monitor (Beta Gauge Model FH62C-14, Thermo Fisher Scientific, Franklin, MA) continuously measured barn inlet PM concentration. The Beta Gauge was located on top of the OFIS (Figure 3). The closest barn fans (barn 2) with respect to the Beta Gauge inlet

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were approximately 10 m away to the NNE (Figure 2). The closest approach of the unpaved

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service road that circled the barns to the inlet for the Beta Gauge was approximately 20 m to the north-east. Infrequent vehicle traffic, mowing activities, and farm machinery in a nearby field could have caused "spikes" of measured inlet PM.

At any one time, the PM size class sampled at both TEOMs and the Beta Gauge was either PM_{10}, $PM_{2.5}$ or TSP. The $PM_{2.5}$ size class was sampled for five, 4-15 d periods that were spread over all four seasons and at different times during the pig growth cycles ([HYPERLINK \l "_bookmark17"]). The TSP inlet heads were placed on the TEOMs for six, 5-24 d periods that covered all four seasons and different times of the pig growth cycles. The PM_{10} concentration was measured at all other times.

Table 4. Sampling schedule for PM_{10}, TSP and $PM_{2.5}$.

Time and day, m/d/y		Test duration, d		
Start	**Stop**	**PM_{10}**	**TSP**	**$PM_{2.5}$**
12/4/07	5/31/08	179.5		
5/31/08	6/7/08		6.9	
6/7/08	6/15/08			8.0
6/15/08	10/5/08	112.1		
10/5/08	10/19/08			13.9
10/19/08	2/22/09	126.1		
2/22/09	2/27/09		5.1	
2/27/09	4/4/09	35.8		
4/4/09	4/19/09			15.0
4/19/09	4/25/09	6.0		
4/25/09	5/3/09		7.9	
5/3/09	6/21/09	49.1		
6/21/09	6/27/09		6.0	
6/27/09	7/26/09	28.9		
7/26/09	8/8/09			13.2
8/8/09	8/27/09		19.0	
8/27/09	11/28/09	93.0		
11/28/09	12/2/09			4.0
12/2/09	12/26/09		24.0	
12/26/09	1/1/10	5.5		

3.6. Continuous Gas Sampling and Monitoring

Air samples for continuous gas measurements were collected from multiple gas sampling probes (Table 5) with a custom-designed gas sampling system (GSS). Each probe was connected to the GSS with Teflon tubing. The sampling lines were heated and wrapped with insulation at locations vulnerable to cold air to prevent condensation inside the tubes.

For each of the finishing barns, a gas sampling probe was located 2 m in front of the inlet of fan 1, at the same height as the fan hub (Figure 3). Inlet gas concentrations were sampled at the baffled inlet of the south sidewall of barn 2, close to the midpoint of the barns' long axis.

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Each exhaust location was sampled individually for 10 min. The ventilation inlet location was monitored at least twice daily, with a 30-min sampling period.

Table 5. Analyte sampling locations.

Analyte(s)	Stream ID	Sampling location*	Sampling period, min
Gas (NH_3, H_2S, CO_2)	GSL A	Barn 1 Fan 1, 2 m from the hub	10
	GSL B	Barn 2 Fan 1, 2 m from the hub	10
	GSL C	Barn 3 Fan 1, 2 m from the hub	10
	GSL D	Inlet: B2 south sidewall near midpoint	30
$PM_{2.5}$, PM_{10}, TSP	B1, B2, B3	TEOM located 2 m in front of fan 1	Continuous
	Inlet	Inlet: Beta-Gauge on OFIS roof top	Continuous
VOC**	B1, B2, B3	2 m in front of Fan 1	1440

*Gas sampling probes were located at fan hub height, suspended from the ceiling.
** VOC samples were collected at fan hub height, within a 2-m radius of the fan.
GSL: Gas sampling location
OFIS: On farm instrument shelter

One set of gas analyzers in the OFIS was used to sequence through all the GSLs. Hydrogen sulfide was measured with a fluorescence H_2S analyzer (Model 450i, Thermo Fisher Scientific, Waltham, MA). Concentrations of NH_3 and CO_2 were measured with a photoacoustic infrared multi-gas monitor (INNOVA Model 1412, LumaSense Technologies, Ballerup, Denmark).

3.7. VOC Sampling and Analysis

Grab samples of VOC were collected at the PREFs (fan 1 each room) (Table 5), using methodology based on methods TO-15 and TO-16. Sampling was conducted with 6-L stainless-steel canisters (TO-Can, Restek Corp, Bellefonte, PA), equipped with ¼″ bellows valves (Swagelok SS4H) and 207-kPa vacuum gauges. Sampling trains contained flow controllers (Veriflo Model 423XL, Parker-Hannifin Corp., Richmond, CA) with 2- to 4-sccm critical orifices and 7-µm in-line stainless steel filters. Flow controllers were pre-set to a constant flow rate of 3.4 mL/min. Canister sampling was conducted for 24 h, and canister pressures were recorded at the beginning and end of the sampling periods for the calculation of total sample volumes. Sampling was conducted seven times between 4/24/09 and 12/26/09, with duplicate samples typically collected at each location. All canisters were cleaned and passed QC before sample collection.

Canister samples were analyzed at Purdue University's Trace Contaminant Laboratory. The canisters were pressurized to +207 kPa with ultrapure N2, and transferred to TDS tubes (Carbotrap 300, Supelco, Bellefonte, PA). The pressurized canisters initially yielded sample flows of 50 mL min^{-1} during sample transfer to tubes. Canister heating was introduced when a canister pressure decreased to 13.8 kPa to ensure maximal transfer of nonvolatile components.

The tube samples were analyzed on a thermodesorption-gas chromatograph-mass spectrometer (TDS-GC-MS), consisting of a gas chromatograph (Model 6890, Agilent Technologies, Palo Alto, CA) coupled with a Model 5795 mass spectrometer detector (Agilent Model 5795) and equipped with a thermal desorption system (Model TDS-G, Gerstel, Baltimore, MD) and a

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cooled injection system (Gerstel CIS). The GC-MS passed a leak check prior to analyzing each set of samples. Compounds were separated on a 60 m x 0.25 mm x 1µm column. The detector utilized the full scan mode covering masses from 27-270 Daltons in 8 scans/s. The MS quad hold temperature was 150°C, and the MS source hold temperature was 230°C. The analytical results were analyzed by ChemStation, and all integrations were manually checked. This method used an external standard compound for instrument monitoring and QA to avoid losses of low-molecular-weight analytes that would occur when purging solvent used with internal standard(s). All TDS tubes were cleaned with a tube conditioning system (Gerstel TC-2 TDS) for 3.5 h at 350°C prior to each use.

Response curves were generated at both the beginning and the end of the VOC analysis period. The response curves of all chemical standards reach good linearity as 55% of the response curves had $R^2 > 99\%$ and over 98% had $R^2 > 95\%$. Toluene was used as an external standard that was analyzed during each batch of samples to assure quality. The relative bias and standard deviation of 97 toluene checks were -4.3% and 18.8%, respectively. The uncertainty of the mean of duplicate field samples was calculated as 27%, based on the toluene checks.

3.8. Documentation of Quality Assurance

3.8.1. Oversight, Maintenance, and Calibration

NCSU personnel visited the site frequently during the first few months of the study; that frequency declined as site operation became more routine. A total of 82 and 142 visits were made during years 1 and 2 of the monitoring period. Remote connection to the site computer was conducted to check the monitoring was conducted during the majority of the monitoring period. Data files and correspondence were emailed from the site computer on a regular basis.

The NAEMS Science Advisor audited the site on 11/15/07. The Environmental Protection Agency (EPA) conducted site audits on 2/10/09 and 1/8/10.

Various site maintenance and calibration activities were conducted by site personnel ([HYPERLINK \l "_bookmark52"] B). Specific quality assurance tests of the GSS, gas analyzers and other sensors are discussed below.

3.8.2. Gas Sampling System

Two types of GSS leak tests were conducted. The first test examined GSS integrity, by briefly creating a "dead head" against the pump by closing all solenoid valves, while measuring exhaust airflow with a portable rotameter, and recording the leakage flow with the GSS mass flow meter. The second test consisted monitoring GSS flow and pressure after manually setting AirDAC to sample from a particular GSL and plugging the GSL's gas sampling probe, which created a GSS manifold vacuum of about -70,000 Pa or 0.31 atm. Preliminary tests indicated that GSS flows under dead-head conditions that were 10% or less ($<0.45\ L \cdot min^{-1}$) of the normal GSS flow rate of $4.5\ L \cdot min^{-1}$ were indicative of leak-free operation under normal GSS manifold vacuums of -4,000 to -10,000 Pa (0.90-0.96 atm). Leak tests of the GSS were conducted 17 times. The dead-head leakage flows were always less than the $0.45\ L \cdot min^{-1}$ threshold, except for times when the pump diaphragm was found to be damaged, and was rebuilt. Systematic checking of individual sampling lines was conducted on 11/15/07, 5/2/08, 1/18/09 and 11/6/09. Data was only

invalidated when leaks occurred away from the sampling location. If gas sampling probe filter maintenance eliminated a leak, no data was invalidated since leakage air would be the same as sampled air.

3.8.3. Gas Analyzers

Gas measurements were evaluated using multipoint calibrations and zero and span checks (Appendix C). The gas concentration data output by the analyzers was adjusted to correct for bias introduced by the gas sampling and measurement system.

3.8.3.1. Correction of Ammonia Concentrations

A multipoint calibration (MPC) was conducted through the barn 1 challenge line 12 times using purified air (Cat. # AIO.OCE-T, CEM zero-grade, Praxair, Indianapolis, IN) and four to five span concentrations of NH_3 (Cat. # NI-AM5MP-AS, Praxair Primary Standard). Each MPC was conducted with replication. The NH_3 was delivered using a 6-port gas dilutor (Model 4040, Environics, Tolland, CT). The R^2 values of each MPC exceeded 0.999, indicating linearity of instrument response to standard gas between 0 and 44 ppm (Table 6).

Table 6. Multipoint calibration record and results for the NH_3 measurements.

Date	# of points	Span concentration, ppm		R^2
		Minimum	Maximum	
11/29/07	5	14.1	43.7	0.9995
5/13/08	5	14.1	43.7	0.9994
8/8/08	6	5.44	39.7	0.9997
9/11/08	6	5.44	39.7	0.9999
11/4/08	6	5.44	39.7	0.9997
12/28/08	6	5.44	39.7	0.9996
3/8/09	6	5.44	39.7	0.9998
4/22/09	6	5.44	39.7	0.9997
5/15/09	6	5.44	39.7	0.9995
5/30/09	6	5.44	29.8	0.9991
10/11/09	6	5.44	29.8	0.9993
12/12/09	6	5.44	29.8	0.9998

Precision checks were conducted periodically using zero and span gases (Z/S checks), delivered via the dilutor through the challenge line, and responses were recorded to monitor changes in system performance over time. Span checks were conducted with 14.9 ppm of NH_3.

Significant downtime occurred due to equipment (chopper motor) failure, from 10/18/08 to 11/2/08 and from 12/2/08 to 12/27/08.

The average response of the analyzer to the zero and span gas applications (Appendix C) was assessed, and the results were combined based on changes to the instrument or gas sampling system to create time-weighted linear correction models (Table 7). The models were used to correct instrument readout data. The measurement accuracy was assessed based on model-corrected zero and span checks (Table 7).

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Table 7. Concentration correction and measurement accuracy for ammonia.

Start/end dates	# of checks		Linear model	Accuracy, % of span			
				Bias		Precision	
	Zero	Span		z	s	z	s
12/4/07-5/15/08	9	6	y = 1.035x - 0.21	0.4	0.0	1.5	0.6
5/13/08-10/5/08	18	18	y = 1.0876x - 0.33	-0.2	-0.2	1.2	1.2
10/5/08-1/13/10	48	49	y = 1.0493x - 0.32	0.0	0.2	1.3	2.1
All	75	73					

3.8.3.2. Correction of Hydrogen Sulfide Concentration

An MPC was conducted through the challenge line 15 times using purified air (Cat. # AIO.OCE-T, Praxair CEM zero air) and three to eight span concentrations (Cat. # NI-HSR1E-AS, Praxair EPA Protocol Standard). Except for 9/10/07, each MPC was conducted with replication (Table 8). The H_2S was delivered using a 6-port dilutor (Model 040, Environics, Tolland, CT). The R^2 values of each MPC exceeded 0.9994, indicating excellent linearity of instrument response to standard gas between 0 and 4000 ppb.

Precision checks were conducted periodically using zero gas and span gases (Z/S checks), delivered via the dilutor through the challenge line, and responses were recorded to monitor changes in system performance over time. Span checks were conducted with 454, 496 or 1,490 ppb of H_2S. Since the analyzer was demonstrated to have a linear response from 0 to 4000 ppb (above), analyzer responses at other span gas concentrations were adjusted ratiometrically to the expected response at 496 ppb for the purpose of constructing the control charts (Appendix C).

Table 8. Multipoint calibration record and results for the H_2S measurements.

Date	# points	Span concentration, ppb		R^2
		Minimum	Maximum	
11/29/07	4	547	1,774	0.999
5/13/08	4	711	2,145	0.999
8/09/08	4	762	2,231	0.999
8/27/08	9	774	5,657	0.999
8/31/08	9	535	3,992	0.999
9/11/08	9	549	3,993	0.999
10/21/08	9	545	4,084	0.999
12/17/08	9	565	4,192	0.999
12/30/08	9	549	4,091	0.999
1/18/09	9	403	2,964	0.999
1/22/09	9	378	2,813	0.999

The average response of the analyzer to the zero and span gas applications was assessed, and the results were combined based on changes to the instrument or GSS to create linear correction models (Table 9). The H_2S/air blend used from 11/2/08 until 6/25/09 degraded significantly prior to the expiration date and was replaced with H_2S/nitrogen blends by Praxair. Only span check data obtained from balance-N_2 H_2S cylinders was included in the data analysis. The models were used to correct instrument readout data. The measurement accuracy (Table 9) was assessed based on model-corrected zero and span checks (Appendix C).

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Table 9. Concentration correction and measurement accuracy for hydrogen sulfide.

Start/end dates	# of checks		Linear model	Accuracy, % of span			
				Bias		Precision	
	Zero	Span		z	s	z	s
3/16/08-4/20/08	3	3	y = 1.046x – 18.62	0.0	-0.1	0.5	3.3
5/3/08-8/31/08	16	16	y = 0.6842x – 11.63	0.0	0.2	0.2	3.0
8/31/08-1/18/09	19	7	y = 0.9635x – 15.32	0.0	0.0	0.2	4.2
1/21/09-6/30/09	26	3	y = 0.9455x – 15.79	0.0	6.0	0.4	1.7
6/30/09-1/13/10	25	23	y = 1.0674x – 15.90	0.0	1.2	0.5	1.8
All	89	52					

3.8.3.3. Noise Tests

Analyzer noise tests were conducted to assess the minimum detection limit (MDL) of the gas measurements. The analyzers measured CEM zero air (Praxair Cat. # AIO.OCE-T CEM) continuously for 26 to 59 min after equilibrium of the instrument readout was reached. The MDL was calculated as three times the standard deviation of the data collected during the equilibrated period (Table 10).

Table 10. Noise tests of gas analyzers with dry air on 1/16/10.

Gas	Statistical variable				Duration, min	T_{dew},°C
	Min	Max	SD	MDL		
NH_3, ppm	-0.10	0.44	0.12	0.27	59	-97.1
H_2S, ppb	13.0	16.0	1.3	3.2	26	-94.6

3.8.4. Particulate Matter Monitors

The quality of the exhaust PM data was assessed through periodic mass verifications and flow and leak checks of the TEOMs (Tables 11-13). The TEOMs met or exceeded the mass verification criteria (Ko actual within ±2.5% of Ko audit) on all occasions. The criteria for total and main flows were 16.67±1.0 and 3.0±0.2 $L \cdot min^{-1}$, respectively, and were met on all dates except in barn 3 where data had to be invalidated from 2/27/09 to 10/1/09 because of failed flow checks.

Leakage criteria were total flow ≤ 0.62 $L \cdot min^{-1}$ and main flow ≤ 0.15 $L \cdot min^{-1}$, respectively. All leak and flow tests of TEOMs were acceptable on all dates except 8/10/08 in barn 1.

The TEOM measurements were also evaluated based on collocated measurements of all three PM types (Table 14). When the B2 TEOM was collocated with B1 TEOM from 3/19/10 to 3/24/10, the differences in average PM_{10}, TSP and $PM_{2.5}$ concentrations over the collocation periods of 4.8, 3.1 and 3.6 d were 2.2, 2.2 and 14.2%, respectively. When the B2 TEOM was collocated with the B3 TEOM from 2/23/10 to 3/19/10, the differences in average PM_{10}, TSP and $PM_{2.5}$ concentrations over the collocation periods of 6.8, 5.9, and 6.9 d were 5.5, 2.5 and 3.2%, respectively.

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The quality assurance tests of inlet PM monitor are summarized in Table 15. The mass verification criteria were met each time. The flow rate tests were always well within the 16.67±1.0 L·min^{-1} range.

Table 11. Quality assurance tests of barn 1 TEOM (S/N 26508).

Date	Time since last test, d	Mass error, %	TEOM flows, L·min^{-1}		Leak test flows, L·min^{-1}	
			Main	Total	Main	Auxiliary
01/11/08	0	-	3.05	16.97	-	-
02/28/08	48	-	-	-	0.10	0.15
03/16/08	17	0.02	3.08	16.65	0.09	0.07
07/16/08	122	1.02	3.06	16.45	0.09	0.08
08/10/08	25	-	2.98	16.44	0.26	0.11
10/19/08	70	0.62	3.07	16.63	0.13	0.11
12/20/08	62	0.09	3.05	16.53	0.10	0.09
12/29/08	9	-	3.01	16.75	0.11	0.12
02/27/09	60	-	3.03	16.56	0.12	0.13
05/16/09	78	0.47	3.15	16.89	0.10	0.10
06/14/09	29	-	3.03	16.67	0.10	0.06
08/08/09	55	-	3.04	16.56	-	-
10/11/09	64	-	3.09	17.13	0.09	0.07

Table 12. Quality assurance tests of barn 2 TEOM (S/N 26469).

Date	Time since last test, d	Mass error, %	TEOM flows, L·min^{-1}		Leak test flows, L·min^{-1}	
			Main	Total	Main	Auxiliary
01/11/08	0	-	3.07	16.91	0.10	0.21
03/06/08	55	-	-	16.50	0.11	0.21
03/16/08	10	0.91	3.12	16.42	0.10	0.21
07/16/08	122	1.03	3.00	16.41	0.12	0.24
08/10/08	25	-	3.05	16.23	0.12	0.30
10/19/08	70	1.29	3.09	16.48	0.12	0.27
12/20/08	62	0.94	3.03	16.62	0.12	0.26
12/29/08	9	-	3.10	16.77	0.12	0.25
02/27/09	60	-	3.05	16.42	0.13	0.25
05/18/09	80	1.46	3.09	16.88	0.12	0.24
06/14/09	27	-	3.06	16.45	0.12	0.26
08/08/09	55	-	3.02	16.57	-	-
10/11/09	64	-	3.05	16.75	0.12	0.25

3.9. Data Analysis

3.9.1. Software

All emission data processing was conducted using custom software (CAPECAB, Fibre Recovery Systems, Inc., Calgary, AB). Data was carefully inspected and validated. If a datum was invalid for a known reason, the datum was marked (flagged) invalid and all calculations dependent on

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that datum were also invalid unless a substitution datum was identified. All periods of invalid data that were longer than one day are listed in Appendix D.

If the QA/QC checks described above indicated a measurement bias, the data was corrected prior to calculating emissions. The CAPECAB program provided a robust method to inspect data, invalidate if necessary, and implement various corrections over specified time periods.

Table 13. Quality assurance tests of barn 3 TEOM (S/N 26458).

Date	Time since last test, d	Mass error, %	TEOM flows, $L \cdot min^{-1}$		Leak test flows, $L \cdot min^{-1}$	
			Main	Total	Main	Auxiliary
01/11/08	0	-	3.10	17.01	0.09	0.19
03/16/08	65	0.08	3.02	16.08	0.14	0.46
04/05/08	20	-	3.06	16.74	0.09	0.11
07/16/08	102	1.00	3.01	16.47	0.10	0.11
10/19/08	95	1.19	3.20	16.47	0.11	0.12
12/20/08	62	1.41	3.03	16.60	0.11	0.12
12/29/08	9	-	3.09	16.46	0.10	0.12
02/27/09	60	-	2.99	16.37	0.11	0.11
05/24/09	86	1.36	2.95	14.33	0.10	0.14
06/14/09	21	-	3.10	15.08	0.11	0.18
08/08/09	55	-	3.00	19.84	0.12	0.18
10/01/09	54	-	3.05	16.85	0.01	0.21
10/14/09	13	-	3.00	16.78	0.04	0.21

Table 14. TEOM collocation test results (B2 TEOM vs B1 TEOM in B2).

PM type	Average concentration, $\mu g/m^3$		Difference, %
	Barn 2 TEOM	Barn 1 TEOM	
PM_{10}	422	432	2.2
TSP	861	880	2.2
$PM_{2.5}$	34	30	14.2
(B2 TEOM vs. B3 TEOM)			
PM type	**Average concentration, $\mu g/m^3$**		**Difference, %**
	Barn 2 TEOM	**Barn 3 TEOM**	
PM_{10}	384	364	5.5
TSP	1088	1061	2.5
$PM_{2.5}$	36	37	3.2

Table 15. Inlet PM monitoring quality assurance parameters.

Date	Time since last test, d	Mass verification, %	Total flow check, %
5/3/08	-	0.80	-0.78
10/19/08	169		1.68
12/17/08	59		2.70
7/26/09	221		1.98
8/8/09	13		-0.30
9/17/09	40		3.06
4/24/10	219	1.10	-0.30

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3.9.2. Data substitution, validation, correction and uncertainty

3.9.2.1. Pressure

All static pressures were corrected based on the zero-pressure check results. Since zero checks of the static pressure sensors were improperly recorded, readings of at least five minutes in duration under zero pressure conditions in the barn were identified. Zero pressure conditions were defined as wind<0.25 m/s, and all fans off. The control charts (Figure 4) confirmed the validity of this approach; as most data points were within 1.0 Pa of zero. The zero checks were time-weighted to determine correction factors of 0.46, 0.25 and 0.68 Pa for barns 1, 2 and 3, respectively.

Atmospheric pressure readings were obtained from the TEOM in Barn 1. The data compared very well with the atmospheric pressure data from the NCDC database for the nearest weather [HYPERLINK "http://www1.ncdc.noaa.gov/)" \h]a[HYPERLINK "http://www1.ncdc.noaa.gov/)" \h]

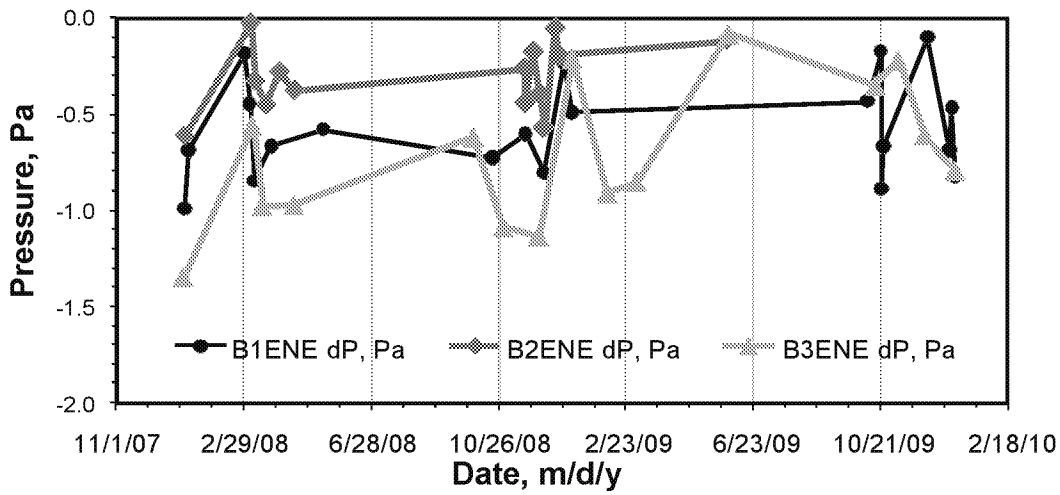

Figure 4. Barn static pressures under windless conditions with no operating fans.

3.9.2.2. Environmental Sensors

Barn indoor temperature was defined as the average of the four thermocouples distributed lengthwise along the barn's central axis (Figure 2).

Barn relative humidity (RH) was provided by the OMNI/NOVUS RH/T sensor at fan 1 in each barn, and RH was converted to humidity ratio using the standard conversion equations. Also, the INNOVA T_{dew} readings for the inlet location were converted to RH.

Solar radiation data was corrected to account for the zero offset of the pyranometer. Overnight readings throughout the study were a consistent 16 $W \cdot m^{-2}$, which was used as the offset.

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3.9.2.3. Fan Operation

The operational status and speed of each wall fan were monitored. Whenever possible, the fan operation status was calculated by the fan speed signal. Data from the current sensors were used whenever the fan speed sensors experienced failures and the normal operating speed of the fan was substituted for the measured fan speed.

3.9.2.4. Gas Concentrations

The first 7 min and 5 min of the 10-min exhaust gas concentration data were discarded for NH_3 and H_2S, respectively, because the system needed that much time to reach equilibrium after switching from one sampling location to another. Thus, the last three and five min of data of each sampling period were validated for NH_3 and H_2S, respectively.

Table 16 describes the time specified in the data processing software for gas concentration measurements to stabilize, based on gas and sampling location, and the maximum interval for interpolating between two valid concentration measurements for a sampling location.

Table 14. Gas concentration data validation and interpolation requirements.

Gas	Equilibration period, min		Maximum interpolation interval, min	
	Inlet	Exhaust	Inlet	Exhaust
NH_3	17	7	3000	300
H_2S	10	5	3000	300

Gas and water vapor concentrations, and sample relative humidity, temperature, pressure, flow rate, and flow direction were invalidated or automatically excluded during all gas analyzer MPCs and Z/S checks. Airflow rate, and gas and PM emission data were invalidated under conditions of positive barn static pressure, because barn airflow measurements required a negative or underpressure in the barn.

Gas concentration data were invalidated due to problems with the INNOVA 1412. The analyzer sustained two chopper motor failures, causing approximately 40 d of NH_3, CO2 and water-vapor concentration data to be lost or invalidated (Appendix D).

Standard gas concentrations were calculated on dry and moist bases with Eqns. 3-1 and 3-2, respectively.

$$C'' = \frac{C'}{(1-W)} \qquad (3\text{-}1)$$

and

$$C' = \frac{P' \cdot c \cdot M}{R \cdot (273+T')} \qquad (3\text{-}2)$$

where:

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C''	Dry standard mass concentration, dry basis (mg $d^{-1}sm^3$ or µg $d^{-1}sm^3$)
C'	Standard mass concentration, moist-air basis (mg sm^{-3} or µg sm^{-3})
P'	Standard pressure (1 atm)
T'	Standard temperature (20°C)
c	Volumetric concentration of gas (ppm or ppb)
M	Molecular weight of gas (g mol^{-1})
R	Universal Gas Constant (0.08206 L atm mol^{-1} $°K^{-1}$)
W	Humidity ratio

3.9.2.5. Particulate Matter Concentrations

Prior to 2/18/08, the TEOM flow rates were internally adjusted to 16.7 L min^{-1} for standard conditions (25°C and 1 atm), regardless of the surrounding conditions. The actual flow through the TEOM was verified by correcting for the surrounding conditions and confirming the flow was maintained between 15.7 and 17.7 L min^{-1}. PM concentration data was invalidated if the calculated flow was outside this range. The internal TEOM settings were changed on 2/18/08 to adjust the flow to 16.7 L min^{-1} based on actual rather than standard air density.

The TEOMs were configured to output the PM concentration data at the surrounding temperature and atmospheric pressure until 2/21/08, at which time they were reconfigured to output the PM data at standard conditions (20°C, 1 atm). All PM concentration data prior to 2/21/08 was corrected to standard conditions. Dry standard PM concentrations were obtained by dividing raw concentrations by the air humidity ratio.

Failed TEOM flow checks resulted in the invalidation of 236 d of B3 PM data.

3.9.3. Emission calculations

3.9.3.1. Particulate matter

PM emissions were calculated with Eqn. 3-3.

(3-3)

Where:

E	Net PM emission rate (µg s^{-1})
Q_0	Exhaust airflow rate at To (m^3 s^{-1})
P_0	Pressure of exhaust air (atm)
C_0	PM concentration of exhaust air (µg m^{-3})
Ci	Inlet PM concentration (µg m^{-3})
T_0	Temperature of exhaust air (°C)

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3.9.3.2. Gases

Barn emission rates were determined as follows:

$$E = Q_O \cdot \frac{P_O \cdot M}{R \cdot (273 + T_O)} \cdot (c_O - c_i) \qquad (3\text{-}4)$$

Where:

E	Barn emission rate (mg s^{-1} or µg s^{-1})
Q_O	Barn outlet moist airflow rate at To (m^3 s^{-1})
P_O	Exhaust air pressure (atm)
M	Gas molecular weight (g mol^{-1})
R	Universal Gas Constant (0.08206 L atm/mol^{-1} °K^{-1})
T_O	Exhaust air temperature (°C)
c_o	Exhaust air concentration (ppm or ppb)
c_i	Inlet or ventilation air inlet concentration (ppm or ppb)

Barn emission was divided by variables (barn inventory, animal units) or constants (floor area) to normalize emissions to site-specific characteristics.

3.9.3.3. Volatile Organic Compounds

The total VOC concentration was multiplied by building airflow for the 24-h canister sampling period to yield an average emission rate. If two samples were successfully collected for a building at one sampling event, the average concentration was used in the calculation.

4. RESULTS

4.1. Farm Production Information

The farm production information, including inventory, pig mass and density are presented in Table F1. Occupancy in the barns over the full duration of the study averaged 632, 617 and 625 hogs in barns 1, 2 and 3, respectively.

The two-year monitoring period extended across six growth cycles, including four complete growth cycles. Based on the four growth cycles, the average growth cycles lasted 128, 123, and 128 d for barns 1 to 3, respectively. The time between groups was typically two weeks long, with the exception of the 45-d period when the barns were empty because of the dysentery outbreak.

4.2. Characteristics of Biomaterials

The pH, solids, TAN, and TKN concentrations of the manure, solids and total N contents of the feed, and the nitrate/nitrite, total N, TKN, and sulfur contents of the water are presented in Appendix E.

A total of five different feed formulations were fed to each group of finishers. Table E1 summarizes the analyses of feed samples. The results represent composite feed samples taken

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randomly from at least four feed hoppers of each barn. A total of 49 separate feed samples across barns 1, 2 and 3 were collected and analyzed. The nitrogen content of the feed ranged from 2.4 to 3.31% nitrogen (wet-basis).

The TAN content of the pit manure ranged from 750 to 2320 $mg \cdot L^{-1}$, while the Kjeldahl N ranged from 820 to 4570 $mg \cdot L^{-1}$. Solids contents ranged from 0.6% to 7.0%, while pH varied between 7.18 and 8.06.

Water samples showed non-detectable or very low ($\leq$0.10 $mg \cdot L^{-1}$) nitrate/nitrite N, and 7 of 9 samples had $\leq$1.1 $mg \cdot L^{-1}$ or non-detectable TKN concentrations. Two of the water samples collected in December, 2009 showed between 75 and 81 $mg \cdot L^{-1}$ of TKN. The cause of this discrepancy is unknown. The total sulfur concentrations in the water ranged from 0.87 to 1.23 $mg \cdot L^{-1}$ for the three samples analyzed.

4.3. Environmental Conditions

4.3.1. Ambient conditions

According to historical climatic information (Table 15), average daytime high temperatures range from 13°C in the winter to 30°C in the summer. Average overnight lows range from 0°C in winter to 20°C in the summer. Prevailing winds for the region are from the west-southwest from December to March, west during March, southwest or west-southwest from April to August, and northeast to north from September to November.

Table F2 shows the daily average outdoor temperature, relative humidity, wind speed, wind direction, solar radiation and barometric pressure. The outside temperature ranged from -2 to 32°C . The ADM outdoor temperature during the study period was 17.8°C, while the historical annual average for the area was 17°C (Table 15).

Table 15. Monthly averages for weather conditions in the area*.

Month	Temperature*,°C			Wind speed** km/h	Wind direction**
	High	Low	Mean		
January	12	0	6	8	WSW
February	14	2	8	10	WSW
March	19	5	12	10	W
April	23	9	16	10	SW
May	27	13	21	8	SW
June	31	18	24	8	WSW
July	33	21	27	5	SW
August	32	20	26	5	SW
September	29	17	23	5	NE
October	24	10	17	5	N
November	19	6	13	8	N
December	14	2	8	8	WSW
Annual average	23	10	17		

* [HYPERLINK "http://www.weather.com/weather/wxclimatology/monthly/USNC0228" \h]
** Data collected at Fayetteville, NC, taken NOAA National Climate Data Center.

4.3.2. Barn Conditions

The daily average room temperatures (average of all interior thermocouples) are plotted in Figure 5, and are presented along with RH in Table F3. The average temperatures for barns 1 to 3 were 23.3±3.8, 23.0±3.4, and 24.0±3.4°C, respectively.

4.3.3. Ventilation Rates

The median static pressure differential was -20±5 Pa for all sensors. The fraction of time that the pressure was positive ranged from 1.7 to 5.2%. Most of the positive pressures were likely wind-induced. Static pressure was greater than -35 Pa over 90% of the time.

The ventilation rate of all three barns ranged from 0 m^3 s^{-1} when fans were turned off, to 35.0 m^3 s^{-1} during the summer with the barns full of pigs (Figure 5). The overall average ventilation rates were 10.3, 12.6, and 10.0 m^3 s^{-1} for barns 1 to 3, respectively.

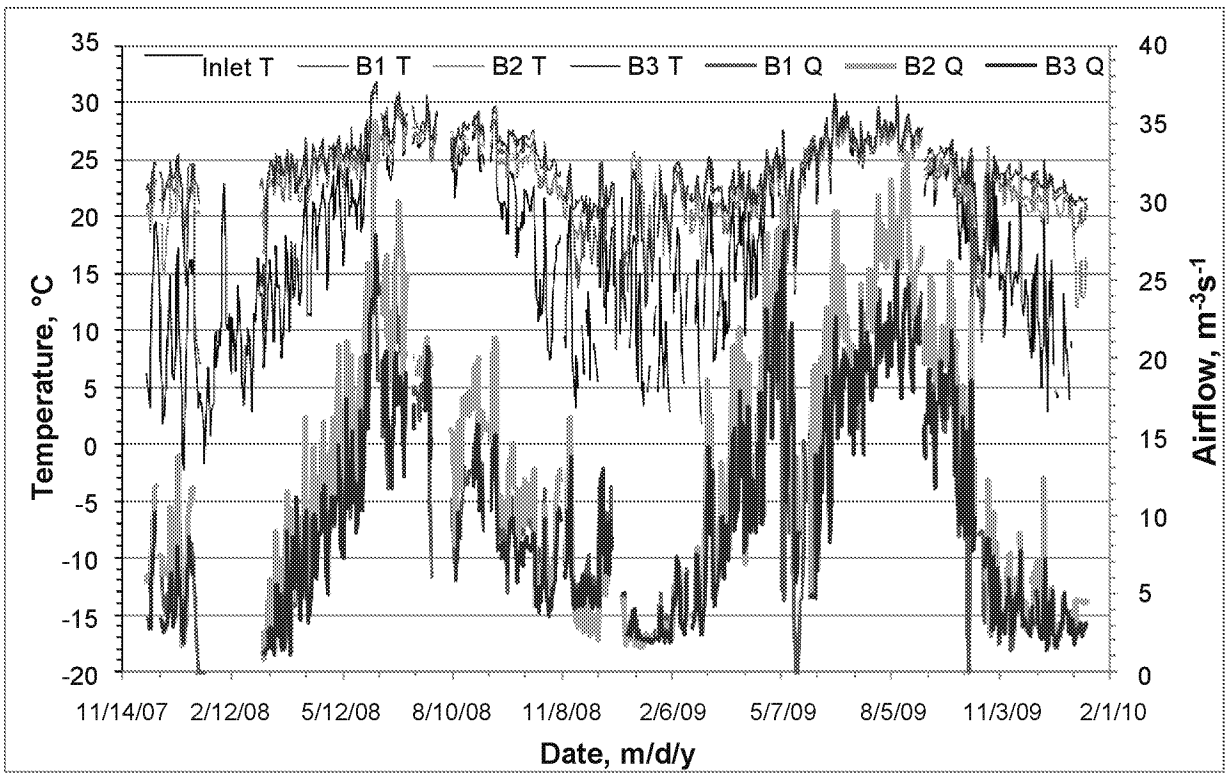

Figure 5. Inlet and exhaust temperatures and airflow rates of barns 1 to 3.

4.4. Particulate Matter Concentration and Emission

4.4.1. PM_{10}

Daily mean PM10 concentration and emission data for the site are provided in Table F4. The DM inlet PM_{10} concentration (n=579 d) ranged from 2.5 to 54.6 µg dsm^{-3}, whereas the DM PM_{10} exhaust concentrations of barns 1 to 3 ranged from 12.1 to 1,280 (n=503 d), -0.6 to 1,630 (n=487 d), and 12.2 to 1,300 (n=351 d) µg dsm^{-3}, respectively.

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The ADM PM_{10} concentrations of the inlet and barns 1 to 3 were 19.2±8.2, 288±192, 266±191, and 294±191 μg dsm^{-3}, respectively.

The overall mean PM_{10} emission rates (Table F4, Figure 6) were 188±112 g d^{-1} (287±204 mg $d^{-1}pig^{-1}$), 187±111 g d^{-1} (286±178 mg $d^{-1}pig^{-1}$), and 167±91 g d^{-1} (257±139 mg $d^{-1}pig^{-1}$) for barns 1 to 3, respectively.

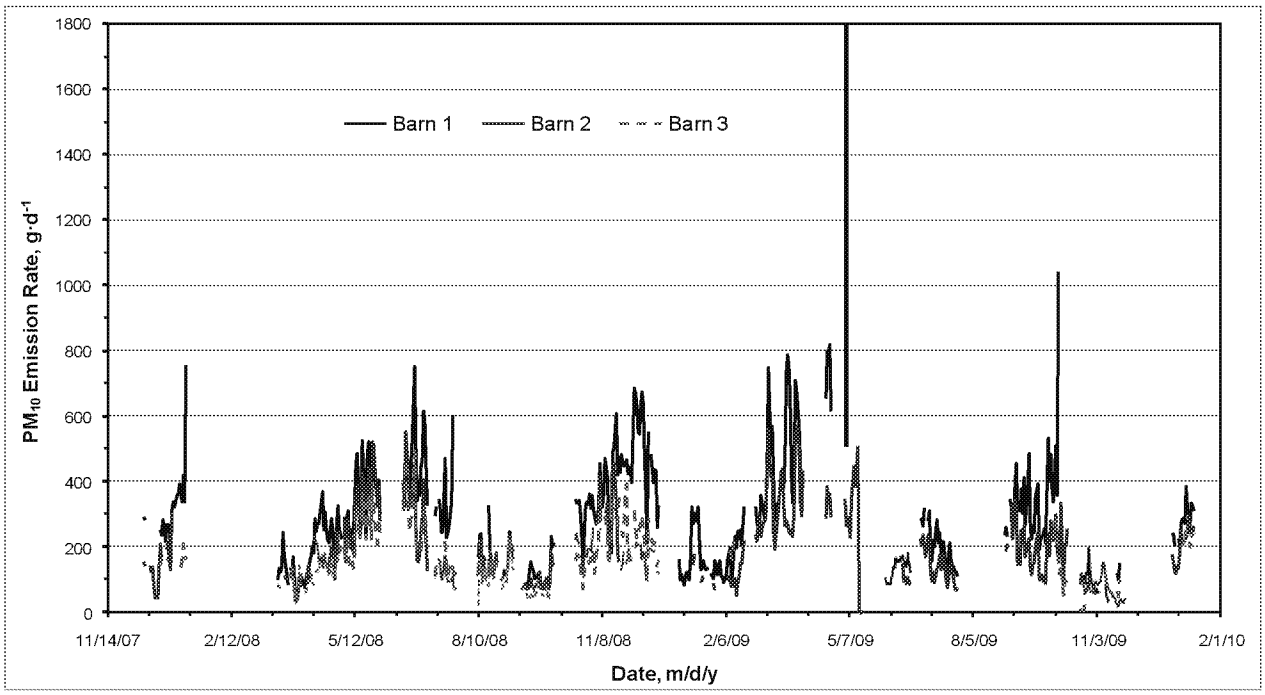

Figure 6. PM_{10} emissions.

4.4.2. $PM_{2.5}$

Daily mean concentrations of $PM_{2.5}$ (Table F5) ranged from 2.9 to 29.4 μg dsm^{-3} in the inlet air (n=57 d). Concentrations in the exhausts of barns 1 (n=57 d), 2 (n=57 d) and 3 (n=31 d) ranged from 20.0 to 52.0, 12.2 to 34.0 and 11.4 to 34.9 μg dsm^{-3}, respectively. The ADM concentrations of $PM_{2.5}$ were 32.1±8.4, 23.0±6.0, and 23.4±5.8 μg dsm^{-3} in the exhaust streams of the three barns.

The overall mean $PM_{2.5}$ emission rates (Table F5, Figure 7) were 24.1±8.2 g d^{-1} (31.8±10.8 mg $d^{-1}pig^{-1}$), 13.4±5.1 g d^{-1} (19.5±8.4 mg $d^{-1}pig^{-1}$), and 9.5±3.3 g d^{-1} (13.0±4.2 mg $d^{-1}pig^{-1}$) from B1 (n=48 d), B2 (n=55 d), and B3 (n=24 d), respectively.

4.4.3. TSP

Data from the six TSP measurement periods are shown in Table F6. Daily mean TSP concentrations ranged from 5.5 to 71.8 μg dsm^{-3} in the inlet air (n= 53 d), 127 to 2,350 μg dsm^{-3} in B1 exhaust air (n=53 d), 107 to 2,110 μg dsm^{-3} in barn 2 exhaust air (n=53 d), and from 264 to 1,650 μg dsm^{-3} in barn 3 exhaust air (n=23 d).

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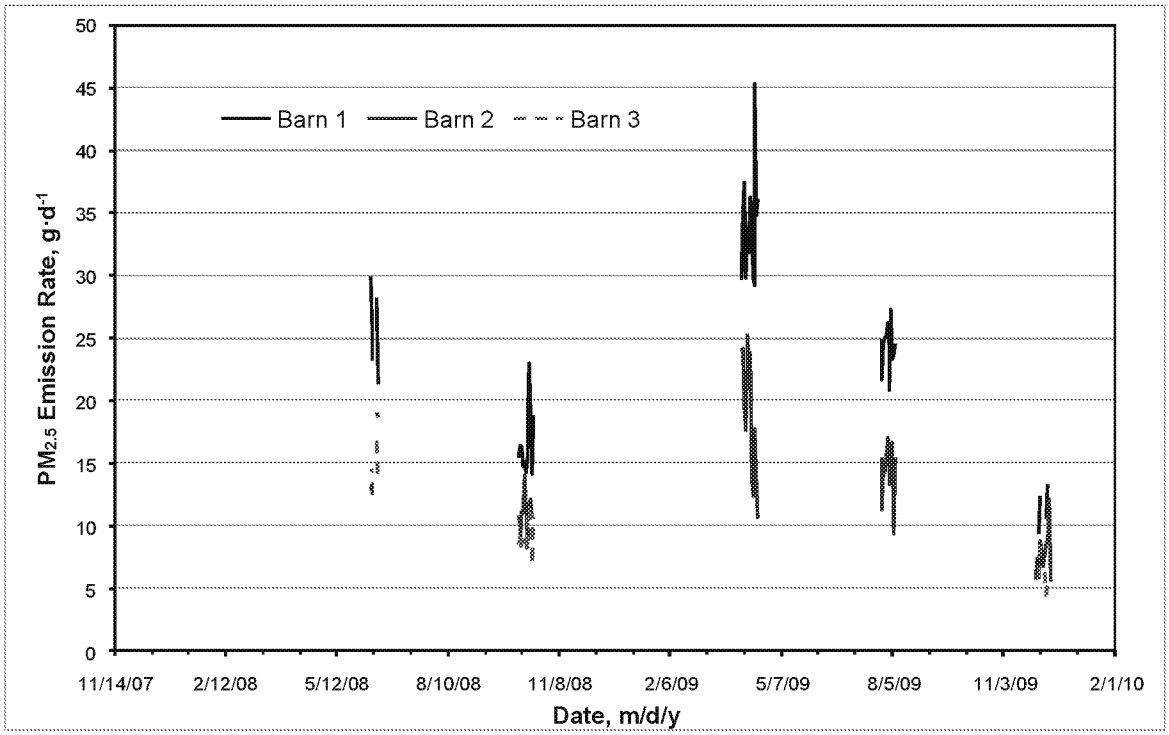

Figure 7. $PM_{2.5}$ emissions.

The ADM concentrations of the inlet, and exhaust air of barns 1 to 3 were 24.4±10.4, 657±539, 641±586, and 974±413 μg dsm^{-3}, respectively (Table F6).

TSP emission rates (Table F6, Figure 8) were 429±218 g d^{-1} (630±325 mg $d^{-1}pig^{-1}$) for barn 1 (n= 53 d), 410±283 g d^{-1} (607±453 mg $d^{-1}pig^{-1}$) for barn 2 (n= 61 d), and 375±246 g d^{-1} (498±320 mg $d^{-1}pig^{-1}$) for barn 3 (n= 27 d), respectively.

4.5. VOC Concentrations and Emissions

The 20 most prevalent VOC detected in the canister samples accounted for 84% of the total quantified mass (Table 18). The most prevalent compound was acetic acid, which was 10% of the total mass.

Concentrations of total VOC in exhaust air ranged from 0.21 to 1.01 mg m^{-3} in B1, 0.38 to 1.06 mg m^{-3} in B2, and 0.42 to 1.07 mg m^{-3} in B3. The mean total VOC concentrations were 0.63±0.32 mg m^{-3} in B1, 0.75±0.28 mg m^{-3} in B2, and 0.77±0.26 mg m^{-3} in B3, respectively.

Total VOC emissions rates during each sampling period were determined by multiplying the mean building airflow rate (m^3 s^{-1}) by the total VOC mass concentration (ng m^{-3}), and converting to kg d^{-1}. The VOC emission rates of B1, B2, and B3 ranged from 0.11 to 0.89, 0.18 to 1.81, and 0.09 to 1.33 kg d^{-1}, respectively (Table 19). The mean VOC emission rates from B1, B2, and B3 were 0.50±0.31, 0.72±0.77, and 0.63±0.47 kg d^{-1}, or 0.63±0.38, 0.90±0.96 and 0.79±0.59 g d^{-1} hd^{-1}, respectively.

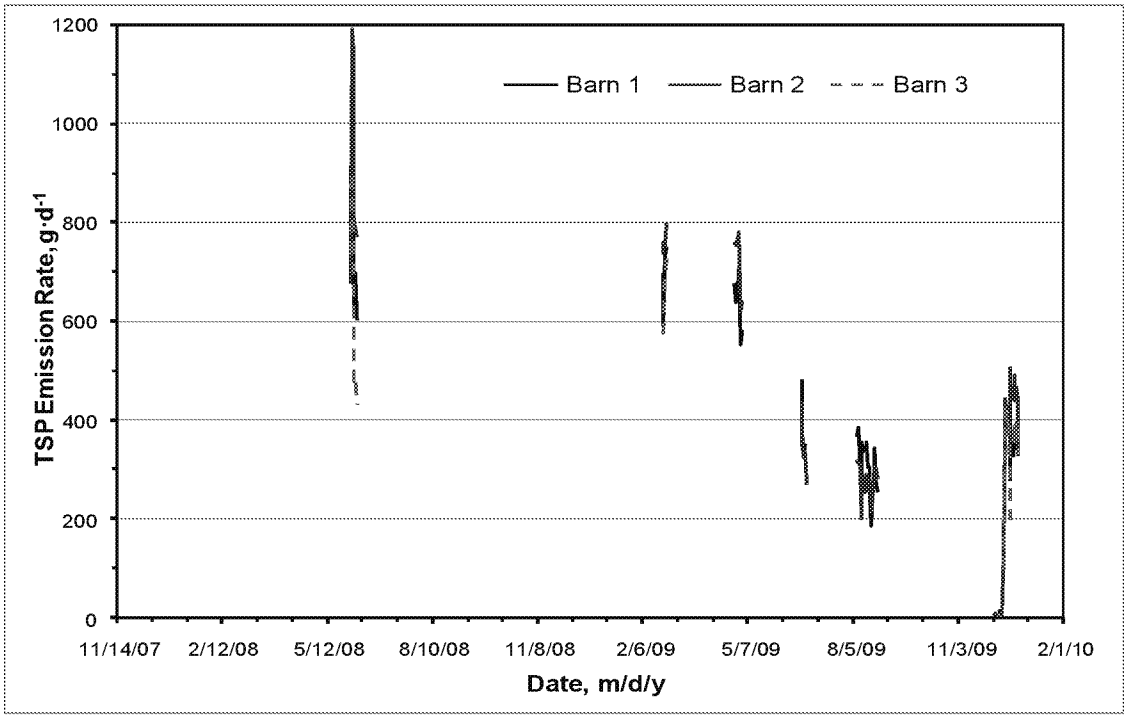

Figure 8. TSP emissions.

4.6. Hydrogen Sulfide Concentrations and Emissions

Daily mean inlet and exhaust H_2S concentrations for the entire test are provided in Table F7.

The average daily mean H_2S concentrations were approximately 4.8±6.0 (n=613) ppb in the inlet air, and 158±153 (n=567), 173±187 (n=565), and 196±182 (n=570) ppb in the exhausts of barns 1 to 3, respectively.

Daily mean H_2S emissions from barns 1 to 3 are tabulated in Table F8, and plotted in Figure 9 for the entire test period.

The ADM H_2S emission rates from barns 1 to 3 were 157±140 (n=509), 170±143 (n=494), and 193±141 (n=448) g d^{-1}, respectively.

The ADM pig-specific H_2S emission rates from barns 1 to 3 were 234±235 (n=491), 279±271 (n=484), and 299±235 (n=437) mg d^{-1} pig^{-1}, respectively.

4.7. Ammonia Concentrations and Emissions

Daily mean inlet and exhaust NH_3 concentrations for the entire test are provided in Table F9.

The average daily mean NH_3 concentrations were approximately 0.25±0.30 (n=629) ppm in the inlet air, and 11.9±7.3 (n=581), 10.1±6.4 (n=586), and 12.5 ±8.0 (n=584) ppm in the exhausts of barns 1 to 3, respectively.

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Daily mean NH_3 emissions from barns 1 to 3 are tabulated in Table F10, and plotted in Figure 10 for the entire test period.

The ADM NH_3 emission rates from barns 1 to 3 were 5.5±2.5 (n=527), 5.2±1.9 (n=509), and 5.6±2.1 (n=450) kg d^{-1}, respectively.

The ADM pig-specific NH_3 emission rates from barns 1 to 3 were 8.09±5.32 (n=509), 7.99±3.85 (n=499), and 8.40±3.85 (n=439) g d^{-1} pig^{-1}, respectively.

Table 16. Average concentrations of the 20 most prevalent VOC.

Compound	Concentration, ng m^{-3}	% of total	Cumulative %
Acetic acid	7.32E+04	10.36%	10.4
2-Butanone	6.52E+04	9.22%	19.6
Acetaldehyde	6.20E+04	8.76%	28.3
Propanoic acid	5.15E+04	7.29%	35.6
4-Methyl-phenol	5.07E+04	7.18%	42.8
2,3-Butanedione	5.02E+04	7.09%	49.9
iso-Propanol	2.77E+04	3.91%	53.8
Pentane	2.62E+04	3.70%	57.5
Phenol	2.46E+04	3.48%	61.0
Dimethyl sulfide	2.25E+04	3.18%	64.2
Dimethyl disulfide	2.12E+04	3.00%	67.2
Pentanal	1.75E+04	2.48%	69.7
Hexanal	1.54E+04	2.18%	71.8
1-Butanol	1.43E+04	2.02%	73.9
Hexane	1.29E+04	1.82%	75.7
n-Propanol	1.23E+04	1.74%	77.4
Octanal	1.23E+04	1.74%	79.1
Heptanal	1.22E+04	1.73%	80.9
Nonanal	1.19E+04	1.69%	82.6
Butanal	1.11E+04	1.57%	84.1

Table 17. Emissions of total VOC for each sampling day.

Date	# canisters			Concentration, mg m^{-3}			Airflow, m^3 s^{-1}			Emission, kg d^{-1}		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
04/24/09	1	1	1	0.37	0.72	0.67	23.4	29.3	23.0	0.74	1.81	1.33
07/11/09	2	2	0	0.21	0.38	-	22.0	21.9	-	0.39	0.72	-
08/03/09	2	0	2	0.49	-	0.42	21.2	-	21.3	0.89	-	0.78
12/02/09	2	0	2	1.01	-	1.07	7.36	-	6.81	0.64	-	0.63
12/11/09	0	2	2	-	1.06	0.70	-	1.93	1.53	-	0.18	0.09
12/18/09	2	2	0	0.91	0.85	-	1.43	2.52	-	0.11	0.19	-
12/26/09	2	0	2	0.78	-	0.97	3.31	-	3.74	0.22	-	0.31
Mean	1.6	1.0	1.3	0.63	0.75	0.77	13.1	13.9	11.3	0.50	0.72	0.63

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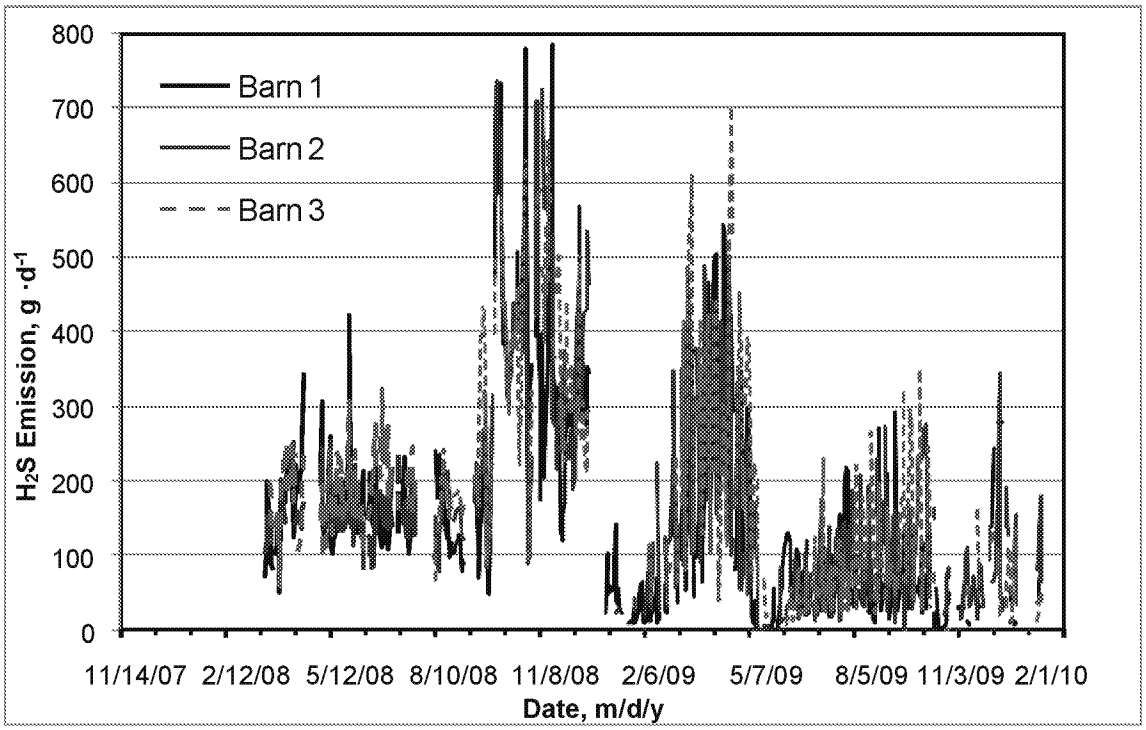

Figure 9. Daily mean H_2S emissions from the three finishing barns.

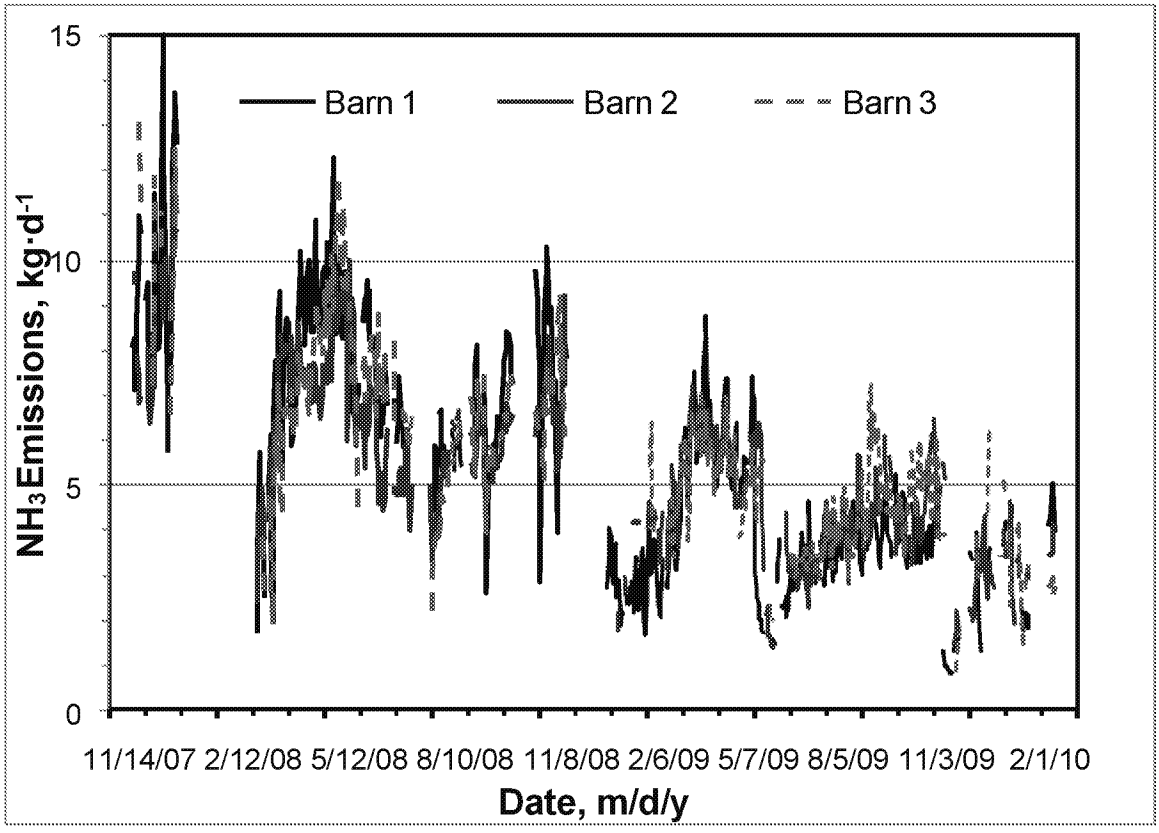

Figure 10. Daily mean NH_3 emissions from the three finishing barns.

4.8. Emission Data Completeness

Daily completeness data is given in Table F11. The number of complete data days (>75% valid required for reporting a daily mean) were calculated for emission measurements conducted from 12/4/07 to 1/13/10 (Table 20). The number of complete data days of NH_3 emissions was reduced by chopper motor failures and maintenance of the instrument. Completeness for all parameters was also reduced because of the interruption caused by the dysentery outbreak and its subsequent cleanup. The PM completeness was affected by TEOM failures.

Table 18. Emissions data completeness.

Location	Days with >75% valid emission data				
	NH_3	H_2S	PM_{10}	$PM_{2.5}$	TSP
Barn 1	528	523	494	48	63
Barn 2	510	508	477	55	63
Barn 3	451	462	348	24	33

4.9. Reconciliation with Data Quality Objectives

The data quality objectives prior to the study were to measure gas and PM emissions from mechanically-ventilated buildings with total relative uncertainties of 27% and 32%, respectively.

4.9.1. Airflow

The overall average airflows for B1, B2 and B3 were 10.3 ± 6.6 $dsm^3\ s^{-1}$ (n=674), 12.6 ± 8.3 $dsm^3\ s^{-1}$ (n=649) and 10.0 ± 6.7 $dsm^3\ s^{-1}$ (n=632) respectively. An average of two 91-cm fans and 0.2 122-cm fans operated in each barn, at which conditions the airflow measurement uncertainty was 10.5%, based on the fan models.

4.9.2. Gas Emissions

The bias and precision of NH_3 concentration measurements were derived from the NH_3 zero/span checks as compared with the NH_3 correction models (Table 7). The bias and precision of NH_3 measurements were -0.02% and 2.94%, respectively.

The bias and precision of H_2S concentration measurements were derived from the H_2S zero and span checks as compared with the H_2S correction models (Table 9). The bias and precision of H_2S measurements were 0.09% and 3.14%, respectively.

Based on these measurement errors calculated for concentrations and airflows, the uncertainties of NH_3 and H_2S emissions from B1, B2 and B3 were 12.4 and 12.6%, respectively.

4.9.3. PM Emissions

The precision of PM_{10}, TSP and $PM_{2.5}$ concentration measurements by the B1 TEOM were 1.66, 1.54, and 8.84% based on collocation tests of the B1 and B2 TEOMs in B2 exhaust air (Table 14). The precision of PM_{10}, TSP and $PM_{2.5}$ concentration measurements by the B3 TEOM were 3.78, 1.78, and 1.94% based on collocation tests of the B3 and B2 TEOMs in B2 exhaust air (Table 14). The precision of PM_{10}, TSP and $PM_{2.5}$ concentration measurements by the B2 TEOM

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were 2.72, 1.66, and 5.39% based on the combined results of the collocation tests with the B1 and B3 TEOMs in B2 exhaust air (Table 14).

The relative biases of the TEOMs were 1.79, 1.77 and 1.20% for B1, B2 and B3. (Tables 11-13). The uncertainties of PM_{10}, TSP and $PM_{2.5}$ emissions from B1 were 11.6, 11.5, and 20.9%, respectively. The uncertainties of PM_{10}, TSP and $PM_{2.5}$ emissions from B2 were 12.3, 11.6, and 15.4%, respectively. The uncertainties of PM_{10}, TSP and $PM_{2.5}$ emissions from B3 were 13.3, 11.6, and 11.7%, respectively.

5. SUMMARY

The emissions of NH_3, H_2S, PM_{10}, TSP, $PM_{2.5}$ and VOC from three 800-hd swine finishing barns at a 7,200-hd farm in North Carolina were measured during a two-year monitoring study. Manure accumulated in shallow underfloor pits and drained into a lagoon every week. The buildings were tunnel-ventilated with five large endwall fans.

The overall average emission rates from finishing barn 1 were 5.5 kg d^{-1} of NH_3, 157 g d^{-1} of H_2S, 188 g d^{-1} of PM_{10}, 24.1 g d^{-1} of $PM_{2.5}$, 429 g d^{-1} of TSP, and 0.50 kg d^{-1} of total VOC. The overall average emission rates from finishing barn 2 were 5.2 kg d^{-1} of NH_3, 170 g d^{-1} of H_2S, 187 g d^{-1} of PM_{10},13.4 g d^{-1} of $PM_{2.5}$, 411 g d^{-1} of TSP, and 0.72 kg d^{-1} of total VOC. The overall average emission rates from finishing barn 3 were 5.6 kg d^{-1} of NH_3, 193 g d^{-1} of H_2S, 167 g d^{-1} of PM_{10}, 9.5 g d^{-1} of $PM_{2.5}$, 375 g d^{-1} of TSP, and 0.63 kg d^{-1} of total VOC.

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7. DEFINITIONS AND ACRONYMS

AARC	Agricultural Air Research Council
AirDAC	Air Data Acquisition and Control – computer program
ADM	Average daily mean
B1	Barn 1
B2	Barn 2
B3	Barn 3
BESS	Bioenvironmental and Structural Systems
CAPECAB	Calculations of Air Pollutant Emissions from Confined Animal Buildings
CO_2	Carbon dioxide
DM	Daily mean
ΔP	Differential pressure
DQO	Data quality objective
FANS	Fan Airflow Numeration System
GC/MS	Gas chromatograph mass spectrometer
GLS	Gas sampling location(s)
GSS	Gas sampling system
H_2S	Hydrogen sulfide
MDL	Minimum detection limit
MPC	Multipoint calibration
MS	Mass spectrometer
n	Number or count
NAEMS	National Air Emissions Monitoring Study
NCDC	National Climatic Data Center
NIST	National Institute of Standards and Technology
NH_3	Ammonia
QA	Quality assurance
QAPP	Quality Assurance Project Plan
QC	Quality control
OFIS	On farm instrument shelter
PM	Particulate matter
PREF	Primary representative exhaust fan
RH/T	Relative humidity/temperature
RH	Relative humidity
SD	Standard deviation
SMP	Site monitoring plan
SOP	Standard operating procedure
T_{dew}	Dew point temperature
TAN	Total ammoniacal nitrogen
TDS	Thermal desorption system
TDS-GS-MS	Thermodesorption-gas chromatograph mass spectrometer
TEOM	Tapered element oscillating microbalance
TKN	Total Kjeldahl nitrogen
TSP	Total suspended particulate
VOC	Volatile organic compounds
Z/S	Zero/span

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APPENDIX A. MEASUREMENT VARIABLE LIST

Table A1. Site measurement variables, instruments and sensors.

Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range/target	DAC item
1	Date & time	---				---
2	Smpl loc#	---				---
3	Cal gas #	Environics	Rack			---
4	Cal gas, ppm	Environics	Rack			---
5	NH3, ppm	Innova 1412	Rack	4 GSLs		---
6	CO2, ppm	Innova 1412	Rack	4 GSLs		---
10	WV, %	Innova 1412: Water	Rack	4 GSLs		---
11	H2S, ppb	H2S analyzer	Rack	4 GSLs	1-800	FP-AI-112-1
12	SO2, ppb	H2S analyzer	Rack	4 GSLs	1-800	FP-AI-112-1
13	Smpl P, Pa	Setra 209 ΔP sensor	GSS	4 GSLs	0-14.7 psiv	FP-AI-112-1
14	Smpl Q, L/m	Mass flow	GSS	4 GSLs	0-10	FP-AI-112-1
15	Smpl RH, %	Humitter 50Y	GSS	4 GSLs	0-100	FP-AI-112-1
16	Smpl T, C	Humitter 50Y	GSS	4 GSLs	-40 to 60	FP-AI-112-1
17	Smpl dir, uV	Flow direction sensor	GSS	4 GSLs	-0.065-0.065	FP-AI-112-1
18	GSS T, C	AD 592D T sensor	GSS	GSS	0-70	FP-AI-112-1
19	B1 PM, ug/m3	TEOM #1	B1	B1 fan 2	-1000-9000	FP-AI-112-1
20	B1 Filter, %	TEOM #1	B1	B1 fan 2	0-140	FP-AI-112-1
21	B1 Atm P, atm	TEOM #1	B1	B1 fan 2	0.8-1.3	FP-AI-112-1
22	B2 PM, ug/m3	TEOM #2	B2	B2 fan 4	-1000-9000	FP-AI-112-1
23	B2 Filter, %	TEOM #2	B2	B2 fan 4	0-140	FP-AI-112-1
24	B3 PM, ug/m3	TEOM #3	B3	B3 fan 2	-1000-9000	FP-AI-112-1
25	B3 Filter, %	TEOM #3	B3	B3 fan 2	0-140	FP-AI-112-1
26	Amb PM, ug/m3	BG	Amb	1.8 m above the OFIS	-1000-9000	FP-AI-112-1
28	B1 dP, Pa	Setra 260 ΔP sensor #1	OFIS	B1 E wall	-100 to 100	FP-AI-112-2
29	B2 dP, Pa	Setra 260 ΔP sensor #2	OFIS	B2 E wall	-100 to 100	FP-AI-112-2
30	B3 dP, Pa	Setra 260 ΔP sensor #3	OFIS	B3 E wall	-100 to 100	FP-AI-112-2
31	OFIS dP, Pa	Setra 260 ΔP sensor #4	OFIS	Inside and outside OFIS	-100 to 100	FP-AI-112-2

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Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range/target	DAC item
32	Wind D, deg	05103-5 Wind monitor	Roof	Roof top tower	0-360	FP-AI-112-2
33	Wind V, m/s	05103-5 Wind monitor	Roof	Roof top tower	0-60	FP-AI-112-2
34	Solar, W/m2	Solar sensor	Roof	Roof top tower		FP-AI-112-2
35	Amb RH, %	NOVUS RHT-WM #1	Roof	Roof top tower	0-100	FP-AI-112-2
36	Amb T, C	NOVUS RHT-WM #1	Roof	Roof top tower	-40 - 120	FP-AI-112-2
37	B1 RH, %	NOVUS RHT-WM #2	B1	B1 fan 2	0-100	FP-AI-112-2
38	B1 T, C	NOVUS RHT-WM #2	B1	B1 fan 2	-40 - 120	FP-AI-112-2
39	B2 RH, %	NOVUS RHT-WM #3	B2	B2 fan 4	0-100	FP-AI-112-2
40	B2 T, C	NOVUS RHT-WM #3	B2	B2 fan 4	-40 - 120	FP-AI-112-2
41	B3 RH, %	NOVUS RHT-WM #4	B3	B3 fan 2	0-100	FP-AI-112-2
42	B3 T, C	NOVUS RHT-WM #4	B3	B3 fan 2	-40 - 120	FP-AI-112-2
43	B1S act , V	Activity sensor #1	B1S	B1 S side		FP-AI-112-3
44	B1N act , V	Activity sensor #2	B1N	B1 N side		FP-AI-112-3
45	B2S act , V	Activity sensor #3	B2S	B2 S side		FP-AI-112-3
46	B2N act , V	Activity sensor #4	B2N	B2 N side		FP-AI-112-3
47	B3S act , V	Activity sensor #5	B3S	B3 S side		FP-AI-112-3
48	B3N act , V	Activity sensor #6	B3N	B3 N side		FP-AI-112-3
49	OFIS act , V	Activity sensor #7	OFIS	OFIS		FP-AI-112-3
50	B1F1 Anem, V	Anemometer	B1F1	B1F1		FP-AI-112-3
51	B1F3 Anem, V	Anemometer	B1F3	B1F3		FP-AI-112-3
52	B2F1Anem, V	Anemometer	B2F1	B2F1		FP-AI-112-3
53	B3F1 Anem, V	Anemometer	B3F1	B3F1		FP-AI-112-3
59	B1W T, C	TC T type	B1W	B1 W end		FP-TC-120-1
60	B1MidW T, C	TC T type	B1MidW	B1 W of center		FP-TC-120-1
61	B1MidE T, C	TC T type	B1MidE	B1 E of center		FP-TC-120-1
62	B1E T, C	TC T type	B1E	B1 E end		FP-TC-120-1
63	B2W T, C	TC T type	B2W	B2 W end		FP-TC-120-1
64	B2MidW T, C	TC T type	B2MidW	B2 W of center		FP-TC-120-1
65	B2MidE T, C	TC T type	B2MidE	B2 E of center		FP-TC-120-1
66	B2E T, C	TC T type	B2E	B2 E end		FP-TC-120-1
67	B3W T, C	TC T type	B3W	B3 W end		FP-TC-120-2

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Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range/target	DAC item
68	B3MidW T, C	TC T type	B3MidW	B3 W of center		FP-TC-120-2
69	B3MidE T, C	TC T type	B3MidE	B3 E of center		FP-TC-120-2
70	B3E T, C	TC T type	B3E	B3 E end		FP-TC-120-2
71	RwyB1 T, C	TC T type	RwyB1	Raceway to B1		FP-TC-120-2
72	RwyB1 HT, C	TC T type	RwyB1 HT	Center of raceway to B1		FP-TC-120-2
73	RwyB2 T, C	TC T type	RwyB2	Raceway to B2		FP-TC-120-2
74	RwyB2 HT, C	TC T type	RwyB2 HT	Center of raceway to B2		FP-TC-120-2
75	RwyB3 T, C	TC T type	RwyB2	Raceway to B3		FP-TC-120-3
76	RwyB3 HT, C	TC T type	RwyB2 HT	Center of raceway to B3		FP-TC-120-3
77	OFIS T, C	TC T type	OFIS	DAC panel		FP-TC-120-3
78	OFIS AC T, C	TC T type	OFIS AC	Wall A/C exhaust		FP-TC-120-3
79	RwyThruB2 T, C	TC T type	RwyThruB2	Raceway thru B2		FP-TC-120-3
83	B1F1, rpm	Fan speed sensor #1	B1F1	Fan shaft or support	0-10	USB-4303-1
84	B1F2, rpm	Fan speed sensor #2	B1F2	Fan shaft or support	0-10	USB-4303-1
85	B1F3, rpm	Fan speed sensor #3	B1F3	Fan shaft or support	0-10	USB-4303-1
86	B1F4, rpm	Fan speed sensor #4	B1F4	Fan shaft or support	0-10	USB-4303-1
87	B1F5, rpm	Fan speed sensor #5	B1F5	Fan shaft or support	0-10	USB-4303-1
88	B2F1, rpm	Fan speed sensor #6	B2F1	Fan shaft or support	0-10	USB-4303-1
89	B2F2, rpm	Fan speed sensor #7	B2F2	Fan shaft or support	0-10	USB-4303-1
90	B2F3, rpm	Fan speed sensor #8	B2F3	Fan shaft or support	0-10	USB-4303-1
91	B2F4, rpm	Fan speed sensor #9	B2F4	Fan shaft or support	0-10	USB-4303-1
92	B2F5, rpm	Fan speed sensor #10	B2F5	Fan shaft or support	0-10	USB-4303-1
93	B3 F1, rpm	Fan speed sensor #11	B3 F1	Fan shaft or support	0-10	USB-4303-2
94	B3 F2, rpm	Fan speed sensor #12	B3 F2	Fan shaft or support	0-10	USB-4303-2
95	B3 F3, rpm	Fan speed sensor #13	B3 F3	Fan shaft or support	0-10	USB-4303-2
96	B3 F4, rpm	Fan speed sensor #14	B3 F4	Fan shaft or support	0-10	USB-4303-2
97	B3 F5, rpm	Fan speed sensor #15	B3 F5	Fan shaft or support	0-10	USB-4303-2
103	B1FstB1, %t	Barn controller	B1FstB1	Barn control cabinet	on/off	DIO 96H/50
104	B1FstB2, %t	Barn controller	B1FstB2	Barn control cabinet	on/off	DIO 96H/50
105	B1Fstg3, %t	Barn controller	B1Fstg3	Barn control cabinet	on/off	DIO 96H/50
106	B1Fstg4, %t	Barn controller	B1Fstg4	Barn control cabinet	on/off	DIO 96H/50

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Col#	Data heading	Instrument/sensor	Location	Monitoring/control location	Range/target	DAC item
107	B1Fstg5, %t	Barn controller	B1Fstg5	Barn control cabinet	on/off	DIO 96H/50
108	B2FstB1, %t	Barn controller	B2FstB1	Barn control cabinet	on/off	DIO 96H/50
109	B2FstB2, %t	Barn controller	B2FstB2	Barn control cabinet	on/off	DIO 96H/50
110	B2Fstg3, %t	Barn controller	B2Fstg3	Barn control cabinet	on/off	DIO 96H/50
111	B2Fstg4, %t	Barn controller	B2Fstg4	Barn control cabinet	on/off	DIO 96H/50
112	B2Fstg5, %t	Barn controller	B2Fstg5	Barn control cabinet	on/off	DIO 96H/50
113	B3FstB1, %t	Barn controller	B3FstB1	Barn control cabinet	on/off	DIO 96H/50
114	B3FstB2, %t	Barn controller	B3FstB2	Barn control cabinet	on/off	DIO 96H/50
115	B3Fstg3, %t	Barn controller	B3Fstg3	Barn control cabinet	on/off	DIO 96H/50
116	B3Fstg4, %t	Barn controller	B3Fstg4	Barn control cabinet	on/off	DIO 96H/50
117	B3Fstg5, %t	Barn controller	B3Fstg5	Barn control cabinet	on/off	DIO 96H/50

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APPENDIX B. RECORD OF MAINTENANCE AND CALIBRATION

Maintenance and Calibration Tasks	
Category	**Times completed**
Environment Sensing and Other	
Clean RH/T probe	11
Calibration check of RH/T probe	3
Calibration check of thermocouples	2
Performance check of weather station	0
Direction verification of wind indicator	0
Clean solar sensor	0
Check solar sensor with collocated sensor	0
Clean motion sensors	7
Air Flow Measurement System	
Fan test events	2
Zero check of pressure sensors (ΔP)	7
Multipoint calibration of pressure sensors (ΔP)	0
Drift & accuracy check of anemometer(s)	2
Particulate Matter Measurement System	
Clean TOEM screens	45
Check/clean TEOM inlet head(s)	45
Replace TEOM filters	42
Verify TEOM mass transducer calibration	0
Leak test of TEOM	16
Verify TEOM flow rate & MFC accuracy	16
Change TEOM in-line filters	0
Check/clean Beta Gauge inlet head	3
Check Beta Gauge airflow	7
Validate Beta Gauge mass w/foil set	2
Calibrate Beta Gauge mass & airflow	0
Gas Measurement System	
Clean/replace GSS membrane filters	9
Leak check of GSS	18
Leak checks of all lines	4
Replace GSS filters	4
Calibrate GSS pressure and flow sensors	2
Flow calibration/check MFC flow of Environics Dilutor	2
Precision check (NH_3) of Multigas Analyzer	75
Multipoint calibration (NH_3) of Multigas Analyzer	12
Precision check of TEC 450I	89
Multipoint calibration of TEC 450I	11

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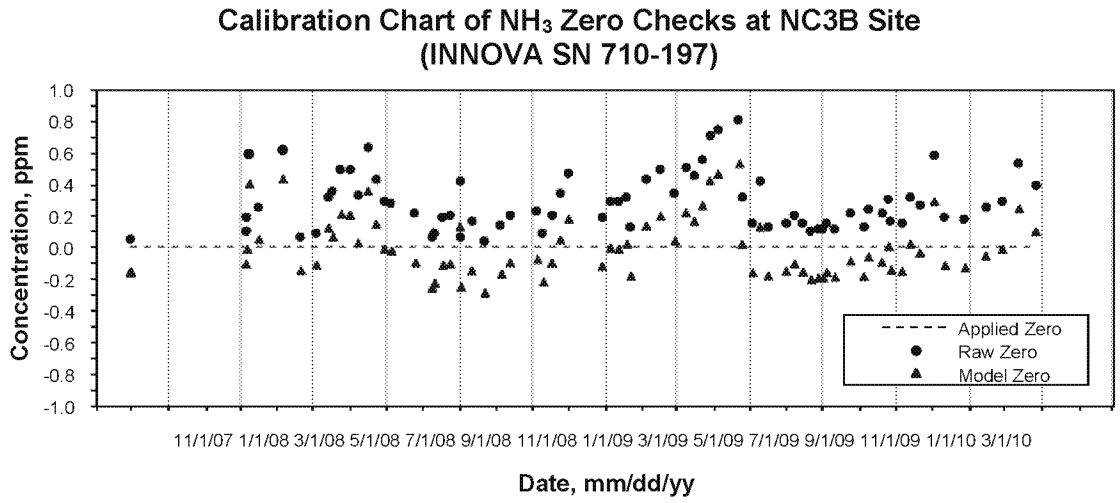
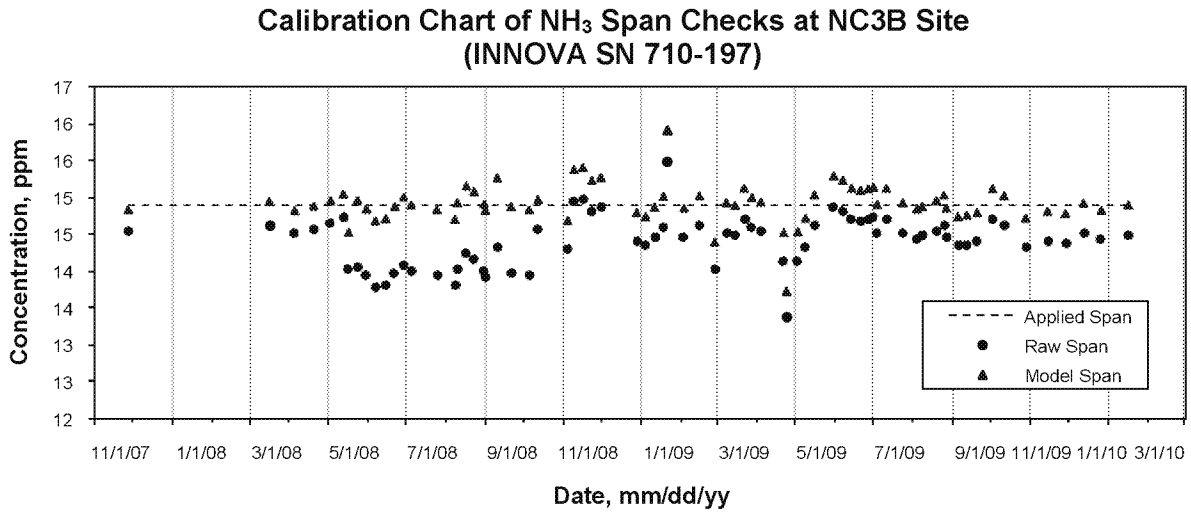
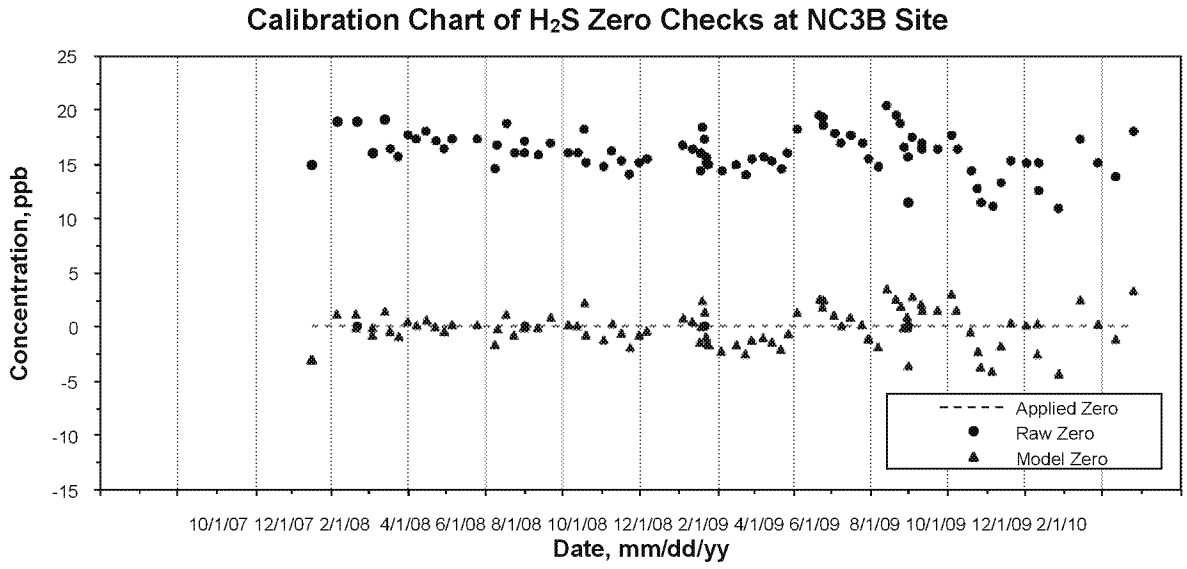
APPENDIX C. GAS ANALYZER CONTROL CHARTS

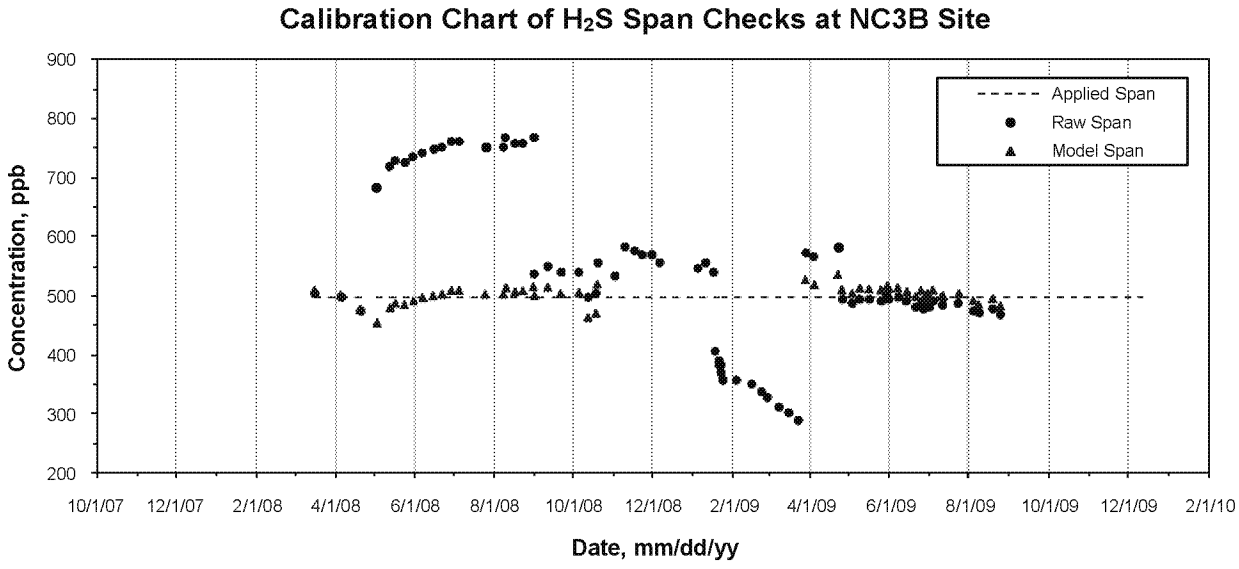
Ammonia





Hydrogen Sulfide





APPENDIX D. MAJOR DATA INVALIDATIONS

Variable	Start time	End time	Min	Comments
Solar, Wind V and dir, Ambient T/RH	11/27/07 9:36	12/1/07 0:00	5184	Weather sensors not yet operational
Amb PM	12/3/07 15:29	5/3/08 17:10	218981	Beta Gauge not yet properly connected
Smpl P	12/15/07 7:49	12/27/07 12:32	17563	Noisy sensor/loose wiring
B3 PM	12/20/07 14:24	12/21/07 14:32	1448	Pegged
Smpl P	12/30/07 22:34	1/1/08 16:22	2508	Noisy sensor/loose wiring
B2 PM	1/4/08 6:58	3/13/08 13:48	99770	TEOM malfunctioned, then shut off while barns empty
B1 PM, B1 Atm P	1/11/08 13:01	3/1/08 18:40	72339	TEOM shut off while barns empty
Raw NH3, Raw CO2, WV	1/11/08 9:08	2/28/08 14:37	69449	INNOVA failed (chopper), then shut off due to empty barns
B3 PM	1/15/08 16:58	3/21/08 18:57	95159	TEOM off while barns empty, operated improperly when reconnected
B1 T, B1 RH	1/21/08 12:29	2/29/08 7:55	55886	Flat-lined/failed sensor
Raw NH3, CO2, H2S, and SO2, WV	2/28/08 14:37	3/1/08 18:40	3123	GSS was sampling OFIS air
B1 Atm P	3/5/08 15:54	3/15/08 10:30	14076	Systematic Error
B3F4_CS	3/6/08 17:10	3/20/08 13:33	19943	Current switch not working when first installed
Raw NH3, Raw CO2, Raw H2S, Raw SO2, WV	3/12/08 12:10	3/14/08 19:06	3296	Low flow based on Sample Q data
B1F1-B1F5, B2F1-B2F5, B3F1-B3F5	4/21/08 15:44	5/3/08 8:51	16867	Both USB counter modules for fan speed sensors failed
B1F1-B1F5, B2F1-B2F5, B3F1-B3F5	7/8/08 9:35	7/13/08 14:37	7502	PC's USB ports failed - no data from fan speed sensor counter modules
B1 Atm P	7/25/08 10:57	8/9/08 12:20	21683	Systematic Error
B1 RH	7/25/08 12:59	7/30/08 0:00	6421	Sensor covered for power washing
B2 RH	7/25/08 13:21	7/30/08 0:00	6399	Sensor covered for power washing
B1F1-B1F5, B2F1-B2F5	8/8/08 10:38	8/9/08 13:20	1602	One USB counter module for fan speed sensors failed
B1F3	8/10/08 7:32	8/23/08 12:45	19033	Failed sensor based on comparison with stage signal
B2F2-B2F4	8/29/08 17:11	8/31/08 9:37	2426	Failed sensors based on comparison with stage signal
B1F1-B1F5, B2F1-B2F5, B3F1-B3F5	11/15/08 5:38	11/16/08 12:43	1865	Both USB counter modules for fan speed sensors offline - needed reset
Raw NH3, Raw CO2, WV	12/2/08 11:04	12/27/08 16:58	36354	INNOVA was down for repairs
B1 Atm P	12/20/08 11:44	12/27/08 13:02	10158	TEOM was turned off
B1 PM	12/20/08 11:52	12/28/08 14:58	11706	TEOM was turned off/covered for power washing

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Variable	Start time	End time	Min	Comments
B2 PM	12/20/08 9:37	12/28/08 15:01	11844	TEOM was turned off/covered for power washing
B3 PM	12/20/08 10:24	12/28/08 15:25	11821	TEOM was turned off/covered for power washing
B1 RH, B2 RH, B3 RH	12/20/08 13:58	12/27/08 16:12	10214	Sensors covered for power-washing
Raw H2S, Raw SO2	12/21/08 11:51	12/24/08 2:57	3786	GSS sampling OFIS air during barn cleaning
B1F1, B1F3, B1F5, B2F1, B2F3, B2F5, B3F1, B3F3, B3F5	12/31/08 12:03	1/2/09 10:48	2805	Both USB counter modules for fan speed sensors offline - needed reset
Amb T	1/15/09 21:54	1/17/09 12:38	2324	Pegged sensor output
Amb T	1/20/09 9:26	1/21/09 11:42	1576	Pegged sensor output
B3 PM	2/7/09 0:04	10/1/09 8:39	340355	TEOM badly failed several consecutive leak tests
B1F1, B1F3, B1F5, B2F1, B2F3, B2F5, B3F1, B3F3, B3F5	2/20/09 9:26	2/22/09 14:31	3185	Both USB counter modules for fan speed sensors offline - needed reset
B1F1-B1F5, B2F1-B2F5, B3F1-B3F5	5/5/09 9:14	5/6/09 14:58	1784	Apparent failure of fan speed sensor signal module
B2F2	5/8/09 14:51	6/14/09 17:39	53448	Failed sensor based on stage signal comparison
B1 PM	5/16/09 16:52	6/2/09 10:56	24124	TEOM was turned off, followed by maintenance for failed data cable
B1 Atm P	5/16/09 16:52	5/30/09 10:43	19791	TEOM was turned off
B2 PM	5/18/09 8:15	6/14/09 15:55	39340	TEOM pump problems, then off for maintenance
B2 RH	5/24/09 9:21	5/30/09 11:30	8769	Sensor covered for power washing
B3 RH	5/24/09 9:57	5/30/09 12:07	8770	Sensor covered for power washing
B2 dP	5/24/09 15:28	5/30/09 11:30	8402	Sensor covered for power washing
B3 dP	5/24/09 19:26	5/30/09 13:18	8272	Sensor covered for power washing
B2F3	8/17/09 8:54	8/19/09 10:10	2956	Failed sensor based on stage signal comparison
B3 RH	10/14/09 12:42	10/21/09 11:18	9996	Sensor covered for power washing
B2 RH	10/14/09 12:56	10/21/09 11:18	9982	Sensor covered for power washing
B2 PM	10/14/09 15:03	10/21/09 12:50	9947	TEOM was turned off, followed by maintenance
B3 PM	10/14/09 15:31	10/21/09 15:50	10099	TEOM was turned off
B2F4	10/16/09 19:14	10/17/09 17:40	1346	Noisy sensor
B2 dP	11/25/09 13:42	11/28/09 11:23	4181	Failure
B3 RH	11/30/09 2:47	12/2/09 12:21	3454	Failed chip in RH/T sensor

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APPENDIX E. BIOMATERIAL CHARACTERISTICS

Table E1. Feed characteristics (mean ± SD).

Ration	n	Nitrogen, %	Solids, %
1	13	3.31 ± 0.13	95.4 ± 1.7
2	8	2.90 ± 0.15	96.3 ± 0.7
3	9	2.68 ± 0.12	95.7 ± 1.8
4	9	2.40 ± 0.12	94.8 ± 2.0
5	10	2.67 ± 0.19	94.0 ± 1.8

Table E2. Water characteristics (mean ± SD).

Barn	Date	n	$mg \cdot L^{-1}$			
			Nitrate/nitrite	TKN	Total N*	Sulfur
1,2,3	6/2/09	3	-	0.50 ± 0.00	0.10 ± 0.06	0.87 ± 0.23
1,2,3	9/17/09	3	0.10 ± 0.00	1.03 ± 0.06	1.03 ± 0.06	1.20 ± 0.00
1,2,3	12/2/09	3	0.10 ± 0.00	52.7 ± 45.5	52.8 ± 45.4	1.23 ± 0.06

*By combustion

Table E3. Characterization of pit liquid in barn 1.

Date	TAN, $mg \cdot L^{-1}$	TKN, $mg \cdot L^{-1}$	pH, SU	Total solids, %
2/15/09	1700	-	-	3.7
2/16/09	750	-	-	0.6
2/17/09	870	-	7.88	1.3
2/20/09	990	-	7.36	2.5
2/22/09	1260	1800	7.36	1.9
2/23/09	1260	2140	7.24	2.3
2/24/09	1090	1740	7.67	2.2
3/10/09	1440	-	7.22	2.5
3/11/09	1620	-	7.23	3.1
3/13/09	1330	-	7.44	2.9
3/16/09	1710	-	7.33	2.9
3/27/09	1935	-	7.56	3.5
3/30/09	1800	-	7.42	2.9
4/1/09	2190	-	7.23	3.7
4/10/09	1310	1940	-	1.8
4/13/09	2320	4570	7.28	7.0
4/15/09	2320	4030	7.47	4.2
4/24/09	1380	1700	7.68	1.6
4/26/09	1650	2710	7.51	2.4
4/29/09	1810	2560	7.65	2.4
5/9/09	1090	1520	7.70	1.4
6/5/09	1070	1380	7.51	2.0
6/8/09	1120	1870	7.42	1.5
6/10/09	1160	1610	7.52	1.8

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Table E4. Characterization of pit liquid in barn 2.

Date	TAN, $mg \cdot L^{-1}$	TKN, $mg \cdot L^{-1}$	pH, SU	Total solids, %
2/15/09	1300	-	-	1.7
2/16/09	1400	-	-	1.6
2/17/09	940	-	7.33	1.1
2/20/09	1150	-	7.34	1.8
2/22/09	1290	1720	7.46	1.6
2/23/09	1430	2490	7.43	3.2
2/24/09	1010	1490	7.51	1.6
3/10/09	1700	-	7.22	3.6
3/11/09	1240	-	7.64	1.6
3/13/09	1450	-	7.33	2.2
3/16/09	1730	-	7.18	3.0
3/27/09	1760	-	7.28	2.4
3/30/09	1510	-	7.47	2.2
4/1/09	1290	-	7.41	2.4
4/10/09	1390	1580	7.32	1.7
4/13/09	1680	2700	7.30	2.4
4/15/09	1330	2490	7.48	2.5
4/24/09	1440	2260	7.47	2.3
4/26/09	1540	2680	7.48	2.5
4/29/09	950	1370	7.89	1.3
5/13/09	1540	2250	7.73	1.7
5/20/09	970	1570	7.78	1.4
6/5/09	780	920	7.79	0.92
6/8/09	820	880	7.84	0.87
6/10/09	880	920	7.70	1.1

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Table E5. Characterization of pit liquid in barn 3.

Date	TAN, $mg \cdot L^{-1}$	TKN, $mg \cdot L^{-1}$	pH, SU	Total solids, %
2/15/09	1680	-	-	3.4
2/16/09	930	-	-	0.9
2/17/09	1050	-	7.79	0.9
2/20/09	1400	-	7.62	2.9
2/22/09	1450	2230	7.63	2.3
2/23/09	1530	2510	7.53	2.9
2/24/09	1590	2420	7.47	2.2
3/10/09	1720	-	7.41	2.1
3/11/09	1720	-	7.33	2.0
3/13/09	1180	-	7.54	1.7
3/16/09	1550	-	7.33	1.8
3/27/09	1580	-	7.51	2.1
3/30/09	1300	-	7.26	2.3
4/1/09	1690	-	7.24	2.8
4/10/09	1180	1520	7.72	1.8
4/13/09	1520	1960	7.59	1.6
4/24/09	1240	1840	7.60	2.3
4/26/09	1420	2190	7.47	2.2
4/29/09	1500	2330	7.60	2.2
5/20/09	1390	2170	7.58	1.6
6/8/09	790	820	8.06	0.9
6/10/09	820	850	7.88	0.9

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APPENDIX F. DAILY MEANS

Table F1. Animal characteristics.

Table F1. Daily means (SD) of animal characteristics at Site NC3B for December, 2007.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	815	91	128	759	94	123	742	88	106
2	814	92	129	758	95	124	740	89	106
3	814	92	130	756	95	125	739	90	107
4	813	93	120	755	96	116	737	90	107
5	812	93	121	754	97	116	735	91	107
6	811	94	121	753	97	117	734	92	108
7	811	94	122	752	98	118	732	92	108
8	810	95	122	751	98	118	731	93	108
9	809	95	123	750	99	119	729	93	109
10	808	95	123	749	100	119	728	94	109
11	807	96	124	748	100	120	727	94	110
12	806	96	124	747	101	120	725	95	110
13	805	97	124	746	101	121	724	95	110
14	804	97	125	745	102	121	722	96	111
15	803	97	125	744	102	122	720	96	111
16	803	98	126	743	103	122	718	97	111
17	802	98	126	742	103	123	716	97	111
18	801	99	126	741	104	123	713	98	111
19	801	99	127	741	104	124	711	98	111
20	800	99	127	741	105	124	709	98	112
21	715	99	113	656	104	110	708	99	112
22	615	98	96	556	104	93	707	99	112
23	614	98	96	555	104	93	706	100	113
24	613	98	96	555	105	93	706	100	113
25	612	99	97	554	105	93	705	100	113
26	611	99	97	553	106	94	704	101	114
27	610	99	97	552	106	94	703	101	114
28	610	99	97	551	106	94	618	99	98
29	609	100	97	550	107	94	518	97	80
30	609	100	98	549	107	94	516	97	80
31	608	100	98	548	107	94	513	97	80
Avg	741	97	115	682	102	112	698	96	107
n	31	31	31	31	31	31	31	31	31
SD	91	3	13	91	4	13	63	4	9
Min	608	91	96	548	94	93	513	88	80
Max	815	100	130	759	107	125	742	101	114

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Table F1. Daily means (SD) of animal characteristics at Site NC3B for January, 2008.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	607	101	98	547	108	94	509	98	80
2	607	101	98	546	108	94	505	98	79
3	606	101	99	545	108	95	502	98	79
4	606	102	99	544	109	95	500	99	79
5	606	102	99	543	109	95	499	99	79
6	606	103	100	542	109	95	499	99	79
7	606	103	100	541	110	95	499	100	79
8	606	104	101	540	110	95	498	100	80
9	606	104	101	540	111	96	498	100	80
10	364	90	55	525	111	93	497	101	80
11	42	38	4	508	111	90	497	101	80
12	0	0	0	507	111	90	497	101	81
13	0	0	0	506	112	90	497	102	81
14	0	0	0	505	112	91	497	102	82
15	0	0	0	504	113	91	497	103	82
16	0	0	0	504	113	91	497	103	82
17	0	0	0	273	57	35	269	52	32
18	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0
Avg	189	34	31	281	59	49	266	53	42
n	31	31	31	31	31	31	31	31	31
SD	274	47	45	259	54	46	245	49	39
Min	0	0	0	0	0	0	0	0	0
Max	607	104	101	547	113	96	509	103	82

ED_004549_00015929-00050

Table F1. Daily means (SD) of animal characteristics at Site NC3B for February, 2008.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0
Avg	0	0	0	0	0	0	0	0	0
n	29	29	29	29	29	29	29	29	29
SD	0	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0
Max	0	0	0	0	0	0	0	0	0

ED_004549_00015929-00051

Table F1. Daily means (SD) of animal characteristics at Site NC3B for March, 2008.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}
1	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	537	14	18	223	14	7	0	0	0
4	860	22	30	357	22	13	0	0	0
5	860	23	31	357	23	13	0	0	0
6	860	23	32	357	24	14	0	0	0
7	859	24	33	357	24	14	0	0	0
8	859	24	34	357	25	14	0	0	0
9	859	25	34	357	25	14	0	0	0
10	859	25	35	635	26	26	497	14	16
11	859	26	35	802	26	34	794	22	28
12	858	26	36	801	27	34	793	23	29
13	858	27	36	800	27	35	791	24	30
14	857	27	37	799	28	35	790	24	31
15	857	27	38	798	28	36	788	25	31
16	856	28	38	797	29	36	787	25	32
17	856	28	39	796	29	37	785	26	32
18	856	29	39	796	29	38	784	26	33
19	856	29	40	795	30	38	783	27	33
20	856	29	40	795	30	39	782	27	34
21	856	30	41	795	31	39	781	27	34
22	856	30	41	794	31	40	780	28	35
23	856	31	42	794	32	40	779	28	35
24	856	31	43	793	32	41	778	29	36
25	856	32	43	793	33	42	778	29	36
26	856	32	44	792	33	42	777	29	37
27	855	33	45	792	34	43	777	30	37
28	855	33	45	792	34	44	777	30	38
29	855	34	46	791	35	44	776	31	38
30	855	34	47	791	36	45	776	31	39
31	855	35	47	790	36	46	776	32	39
Avg	791	26	36	635	27	30	546	19	24
n	31	31	31	31	31	31	31	31	31
SD	215	8	11	253	8	14	353	13	16
Min	0	0	0	0	0	0	0	0	0
Max	860	35	47	802	36	46	794	32	39

ED_004549_00015929-00052

Table F1. Daily means (SD) of animal characteristics at Site NC3B for April, 2008.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	855	35	48	790	37	47	776	32	40
2	855	36	49	789	38	47	776	33	40
3	855	36	50	789	38	48	776	33	41
4	854	37	51	788	39	49	775	34	42
5	854	38	52	787	40	50	775	34	42
6	854	38	53	787	40	51	775	35	43
7	854	39	54	786	41	52	775	35	44
8	854	40	55	786	42	53	775	36	44
9	853	41	56	786	43	54	774	36	45
10	853	41	57	786	44	55	774	37	46
11	853	42	58	786	45	56	774	38	47
12	852	43	59	786	46	57	773	38	47
13	852	44	60	786	46	58	773	39	48
14	852	45	61	786	47	60	773	40	49
15	852	46	62	785	48	61	773	40	50
16	852	46	63	785	49	62	773	41	51
17	852	47	65	785	50	63	773	42	52
18	851	48	66	784	51	65	772	43	53
19	851	49	67	784	52	66	772	43	54
20	851	50	68	784	54	67	772	44	55
21	851	51	70	783	55	69	772	45	56
22	850	52	71	783	56	70	772	46	57
23	850	53	72	783	57	71	771	47	58
24	849	54	74	783	58	73	771	48	59
25	848	55	75	783	59	74	771	49	60
26	848	56	76	783	60	75	770	50	61
27	847	57	78	783	61	77	770	51	62
28	847	58	79	783	63	78	770	51	63
29	847	59	81	783	64	80	770	52	65
30	847	60	82	782	65	81	770	53	66
Avg	851	47	64	785	50	62	773	41	51
n	30	30	30	30	30	30	30	30	30
SD	3	8	10	2	8	11	2	6	8
Min	847	35	48	782	37	47	770	32	40
Max	855	60	82	790	65	81	776	53	66

ED_004549_00015929-00053

Table F1. Daily means (SD) of animal characteristics at Site NC3B for May, 2008.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	847	62	83	782	66	83	770	54	67
2	846	63	85	782	67	84	770	55	68
3	846	64	86	782	68	86	770	56	70
4	846	65	88	781	70	87	770	58	71
5	846	66	89	781	71	89	770	59	72
6	846	67	91	781	72	90	770	60	73
7	845	68	92	781	73	92	770	61	75
8	845	69	93	781	74	93	770	62	76
9	845	70	95	781	76	94	770	63	77
10	844	71	96	781	77	96	770	64	79
11	844	72	98	781	78	97	770	65	80
12	844	73	99	781	79	99	770	66	82
13	844	74	100	781	80	100	770	67	83
14	844	75	102	780	81	101	770	68	84
15	844	76	103	780	82	103	770	69	86
16	844	77	105	780	84	104	770	71	87
17	844	78	106	780	85	106	770	72	88
18	844	79	107	779	86	107	770	73	90
19	844	80	109	779	87	108	770	74	91
20	844	81	110	779	88	109	769	75	92
21	844	82	111	779	89	111	769	76	94
22	844	83	112	779	90	112	769	77	95
23	844	84	114	779	91	113	769	78	96
24	844	85	115	779	92	114	768	79	97
25	844	86	116	779	93	116	768	80	99
26	843	87	117	779	94	117	768	81	100
27	842	88	118	779	95	118	768	82	101
28	842	88	119	778	95	119	767	83	102
29	841	89	120	778	96	120	767	84	103
30	841	90	121	778	97	121	767	85	105
31	840	91	122	778	98	122	766	86	106
Avg	844	77	104	780	83	104	769	71	87
n	31	31	31	31	31	31	31	31	31
SD	2	9	12	1	10	12	1	10	12
Min	840	62	83	778	66	83	766	54	67
Max	847	91	122	782	98	122	770	86	106

ED_004549_00015929-00054

Table F1. Daily means (SD) of animal characteristics at Site NC3B for June, 2008.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	839	92	123	777	99	123	766	87	107
2	839	92	124	777	100	124	766	88	108
3	838	93	125	777	100	125	765	89	109
4	838	94	126	777	101	126	764	90	110
5	838	94	126	777	102	127	764	91	111
6	837	95	127	777	103	127	763	92	112
7	837	96	128	776	103	128	762	93	113
8	836	96	129	776	104	129	761	94	114
9	835	97	130	776	104	130	761	94	115
10	834	98	130	776	105	130	761	95	116
11	833	98	131	775	106	131	761	96	117
12	832	99	131	774	106	132	761	97	118
13	830	99	132	773	107	132	760	98	119
14	829	100	132	772	107	133	760	98	120
15	828	100	133	771	108	133	760	99	120
16	827	101	133	770	109	134	760	100	121
17	826	101	134	769	109	134	759	100	122
18	825	102	134	769	110	135	758	101	123
19	824	102	135	769	110	136	757	102	123
20	823	103	135	769	111	136	756	103	124
21	822	103	136	768	111	137	755	103	125
22	821	104	136	768	112	138	754	104	125
23	821	104	137	768	112	138	754	104	126
24	736	104	122	683	113	123	669	105	113
25	636	103	105	583	113	106	569	106	96
26	636	103	105	582	114	106	568	106	97
27	636	104	106	581	114	106	568	107	97
28	635	104	106	581	115	107	567	107	98
29	635	105	106	580	115	107	566	108	98
30	635	105	107	579	116	107	566	109	98
Avg	789	100	126	732	108	126	719	99	113
n	30	30	30	30	30	30	30	30	30
SD	79	4	11	77	5	11	78	6	9
Min	635	92	105	579	99	106	566	87	96
Max	839	105	137	777	116	138	766	109	126

ED_004549_00015929-00055

Table F1. Daily means (SD) of animal characteristics at Site NC3B for July, 2008.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	591	105	99	537	116	99	566	109	99
2	540	104	90	487	115	90	566	110	99
3	540	104	90	487	116	90	566	110	100
4	540	104	90	487	116	91	566	111	100
5	539	105	90	487	117	91	566	111	101
6	539	105	91	487	117	91	566	112	101
7	539	105	91	487	117	92	566	112	101
8	538	106	91	487	118	92	566	112	102
9	537	106	91	486	118	92	550	113	99
10	537	106	91	486	119	92	531	113	96
11	536	107	92	485	119	93	531	114	97
12	535	107	92	485	120	93	531	114	97
13	534	108	92	484	120	93	531	115	97
14	534	108	92	484	121	93	531	115	98
15	534	108	93	483	121	94	531	115	98
16	534	109	93	483	122	94	531	115	98
17	534	109	93	398	122	78	530	115	98
18	534	110	94	298	122	58	529	116	98
19	534	110	94	298	123	59	528	116	98
20	534	111	95	298	123	59	527	116	98
21	534	111	95	298	124	59	526	117	98
22	334	101	56	240	124	47	525	117	98
23	53	45	5	171	123	34	524	117	99
24	0	0	0	171	124	34	524	118	99
25	0	0	0	171	124	34	524	118	99
26	0	0	0	171	125	34	524	119	99
27	0	0	0	171	125	34	524	119	100
28	0	0	0	93	63	13	433	119	83
29	0	0	0	0	0	0	325	120	62
30	0	0	0	0	0	0	325	121	63
31	0	0	0	0	0	0	325	121	63
Avg	378	77	65	342	107	65	516	115	95
n	31	31	31	31	31	31	31	31	31
SD	241	47	41	173	37	33	67	3	11
Min	0	0	0	0	0	0	325	109	62
Max	591	111	99	537	125	99	566	121	102

ED_004549_00015929-00056

Table F1. Daily means (SD) of animal characteristics at Site NC3B for August, 2008.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}
1	0	0	0	0	0	0	325	122	63
2	0	0	0	0	0	0	325	122	64
3	0	0	0	0	0	0	325	123	64
4	522	14	17	461	14	16	325	123	64
5	835	22	30	738	23	28	325	124	64
6	835	23	30	737	24	29	176	62	25
7	835	23	31	737	25	29	0	0	0
8	835	24	32	737	26	30	0	0	0
9	835	25	33	737	26	31	0	0	0
10	835	25	34	736	27	32	0	0	0
11	835	26	34	736	27	32	459	14	15
12	835	26	35	736	28	33	735	22	26
13	835	27	36	735	28	33	735	23	27
14	835	27	36	735	29	34	735	24	28
15	835	28	37	735	29	35	734	24	28
16	835	28	38	734	30	35	734	25	29
17	835	29	38	734	30	36	734	25	30
18	834	29	39	733	31	36	734	26	30
19	834	30	39	733	31	37	734	26	31
20	834	30	40	733	32	37	734	27	31
21	833	30	41	733	32	38	734	27	32
22	833	31	41	733	33	39	733	28	32
23	833	31	42	732	34	39	733	28	33
24	832	32	43	732	34	40	733	28	33
25	832	33	43	732	35	41	733	29	34
26	831	33	44	732	35	41	733	29	34
27	831	34	45	731	36	42	733	30	35
28	831	34	46	731	37	43	733	30	36
29	830	35	46	731	37	44	732	31	36
30	830	36	47	730	38	45	732	31	37
31	829	36	48	730	39	46	732	32	37
Avg	743	26	34	654	28	32	546	40	32
n	31	31	31	31	31	31	31	31	31
SD	249	10	13	219	10	12	271	38	18
Min	0	0	0	0	0	0	0	0	0
Max	835	36	48	738	39	46	735	124	64

ED_004549_00015929-00057

Table F1. Daily means (SD) of animal characteristics at Site NC3B for September, 2008.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	828	37	49	729	40	46	732	32	38
2	827	38	50	729	41	47	732	33	39
3	825	38	51	729	41	48	731	33	39
4	824	39	52	728	42	49	731	34	40
5	822	40	53	728	43	50	731	35	41
6	820	41	53	728	44	51	730	35	41
7	819	42	54	727	45	53	730	36	42
8	818	42	56	727	46	54	730	37	43
9	818	43	57	727	47	55	730	37	44
10	818	44	58	727	48	56	730	38	44
11	818	45	59	727	49	57	730	39	45
12	817	46	60	727	50	59	729	40	46
13	817	47	62	727	51	60	729	40	47
14	817	48	63	727	53	61	729	41	48
15	817	49	64	727	54	63	729	42	49
16	817	50	66	727	55	64	728	43	50
17	817	51	67	727	56	65	728	44	51
18	817	52	68	727	57	67	727	45	52
19	816	53	70	727	59	68	726	46	53
20	816	55	71	727	60	70	726	47	54
21	816	56	73	727	61	71	725	48	55
22	816	57	74	727	62	72	725	49	57
23	815	58	76	727	64	74	724	50	58
24	815	59	77	727	65	75	724	51	59
25	814	60	79	727	66	77	724	52	60
26	813	62	80	727	67	78	723	53	61
27	813	63	82	727	69	80	723	54	63
28	812	64	83	727	70	81	722	55	64
29	812	65	85	727	71	83	722	56	65
30	811	67	86	727	72	84	722	58	67
Avg	817	50	66	727	55	64	727	43	51
n	30	30	30	30	30	30	30	30	30
SD	4	9	11	1	10	12	3	8	9
Min	811	37	49	727	40	46	722	32	38
Max	828	67	86	729	72	84	732	58	67

ED_004549_00015929-00058

Table F1. Daily means (SD) of animal characteristics at Site NC3B for October, 2008.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	811	68	88	727	74	86	722	59	68
2	811	69	90	727	75	87	722	60	69
3	810	70	91	726	76	89	721	61	71
4	810	71	93	726	78	90	721	62	72
5	809	73	94	726	79	92	721	64	73
6	809	74	96	726	80	93	721	65	75
7	808	75	97	726	81	94	720	66	76
8	808	76	99	726	82	96	720	67	77
9	808	78	100	726	84	97	720	68	79
10	807	79	102	726	85	98	719	70	80
11	807	80	103	726	86	100	719	71	81
12	806	81	105	726	87	101	718	72	83
13	806	82	106	726	88	102	718	73	84
14	806	83	108	725	89	104	718	74	85
15	805	85	109	725	90	105	718	76	87
16	805	86	110	725	91	106	718	77	88
17	805	87	112	724	92	107	717	78	90
18	804	88	113	724	93	108	717	79	91
19	804	89	114	724	94	109	717	80	92
20	804	90	116	723	95	110	717	81	93
21	803	91	117	723	96	111	717	83	95
22	802	92	118	723	97	112	717	84	96
23	801	93	119	722	98	113	717	85	97
24	800	94	120	722	99	114	716	86	98
25	799	95	121	722	100	115	716	87	100
26	798	96	123	722	101	116	716	88	101
27	797	97	124	721	102	117	716	89	102
28	796	98	125	721	103	118	716	90	103
29	795	99	125	721	103	119	716	91	104
30	794	99	126	721	104	120	716	92	105
31	793	100	127	721	105	121	715	93	106
Avg	804	85	109	724	91	105	718	76	88
n	31	31	31	31	31	31	31	31	31
SD	5	10	12	2	9	11	2	10	12
Min	793	68	88	721	74	86	715	59	68
Max	811	100	127	727	105	121	722	93	106

ED_004549_00015929-00059

Table F1. Daily means (SD) of animal characteristics at Site NC3B for November, 2008.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	792	101	128	721	106	122	715	94	107
2	791	102	129	720	107	123	715	95	108
3	790	103	130	720	108	124	715	95	109
4	789	103	131	720	108	125	715	96	110
5	789	104	132	720	109	126	715	97	111
6	789	105	132	720	110	127	715	98	112
7	788	106	133	720	111	128	714	99	113
8	788	106	134	589	109	103	714	99	114
9	787	107	135	435	108	75	714	100	114
10	787	108	136	435	109	76	714	101	115
11	787	108	136	435	109	76	714	102	116
12	786	109	137	434	110	77	713	102	117
13	786	110	138	434	111	77	713	103	117
14	786	111	139	434	112	78	713	103	118
15	785	111	140	433	112	78	712	104	119
16	785	112	141	433	113	78	712	105	119
17	785	113	141	433	114	79	712	105	120
18	654	112	118	432	114	79	712	106	121
19	500	112	90	432	115	79	712	106	121
20	500	113	90	432	115	80	712	107	122
21	500	113	90	431	116	80	712	108	123
22	499	114	91	431	116	80	712	108	123
23	499	114	91	431	117	81	712	109	124
24	499	115	92	430	118	81	712	109	125
25	498	115	92	430	118	81	625	108	108
26	498	116	92	430	118	82	522	107	90
27	498	116	92	430	119	82	521	108	90
28	497	117	93	430	119	82	520	108	90
29	497	117	93	430	120	82	519	109	90
30	496	117	93	430	120	83	518	109	90
Avg	667	110	117	505	113	91	678	103	112
n	30	30	30	30	30	30	30	30	30
SD	140	5	21	122	4	20	73	5	11
Min	496	101	90	430	106	75	518	94	90
Max	792	117	141	721	120	128	715	109	125

ED_004549_00015929-00060

Table F1. Daily means (SD) of animal characteristics at Site NC3B for December, 2008.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}
1	496	118	94	430	121	83	518	109	91
2	496	118	94	430	121	83	518	110	91
3	495	119	94	430	121	84	517	110	91
4	495	119	94	429	122	84	517	111	91
5	495	119	95	429	122	84	517	111	92
6	494	120	95	429	123	84	516	111	92
7	494	120	95	429	123	84	516	112	92
8	494	120	95	428	123	85	516	112	93
9	494	121	96	428	124	85	515	112	93
10	494	121	96	428	124	85	515	113	93
11	494	122	96	428	125	85	514	113	93
12	494	122	97	428	125	86	513	114	93
13	494	123	97	428	126	86	513	114	94
14	494	123	97	427	126	86	512	115	94
15	494	124	98	427	127	87	512	115	95
16	494	124	98	427	127	87	512	116	95
17	494	125	99	427	128	87	455	117	85
18	494	125	99	427	128	88	387	118	73
19	494	126	100	427	129	88	387	119	73
20	494	127	100	427	130	89	387	119	74
21	494	127	101	231	65	34	210	60	28
22	268	64	38	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0
29	525	14	17	245	14	8	0	0	0
30	840	22	30	392	22	14	0	0	0
31	840	23	31	661	22	24	505	14	17
Avg	415	87	69	326	84	58	341	76	59
n	31	31	31	31	31	31	31	31	31
SD	224	53	41	187	56	38	227	52	42
Min	0	0	0	0	0	0	0	0	0
Max	840	127	101	661	130	89	518	119	95

ED_004549_00015929-00061

Table F1. Daily means (SD) of animal characteristics at Site NC3B for January, 2009.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	840	23	31	822	23	31	809	22	29
2	840	24	32	822	24	32	809	23	30
3	840	25	33	821	25	33	809	24	31
4	840	25	34	821	25	33	809	24	32
5	839	26	35	820	26	34	809	25	32
6	838	26	35	820	26	34	809	25	33
7	837	27	36	820	27	35	809	26	34
8	836	27	36	820	27	36	809	26	34
9	835	28	37	820	28	36	809	27	35
10	834	28	38	819	28	37	808	27	35
11	833	29	38	819	29	38	808	28	36
12	833	29	39	819	29	38	808	28	37
13	832	30	39	819	30	39	808	29	37
14	832	30	40	818	30	40	807	29	38
15	831	30	41	817	31	40	805	30	38
16	830	31	41	817	31	41	804	30	39
17	830	32	42	816	32	41	802	31	39
18	829	32	43	815	32	42	800	31	40
19	829	33	43	814	33	43	799	32	40
20	829	33	44	814	34	44	797	32	41
21	828	34	45	814	34	44	796	33	42
22	828	34	46	813	35	45	795	33	42
23	828	35	46	813	35	46	795	34	43
24	827	36	47	813	36	47	794	35	44
25	827	36	48	812	37	48	793	35	45
26	827	37	49	812	38	49	793	36	45
27	827	38	50	812	38	50	792	36	46
28	827	39	51	811	39	51	792	37	47
29	827	39	52	811	40	52	791	38	48
30	826	40	53	811	41	53	791	39	49
31	826	41	54	810	42	54	791	39	50
Avg	832	32	42	816	32	41	802	31	39
n	31	31	31	31	31	31	31	31	31
SD	5	5	6	4	5	7	7	5	6
Min	826	23	31	810	23	31	791	22	29
Max	840	41	54	822	42	54	809	39	50

ED_004549_00015929-00062

Table F1. Daily means (SD) of animal characteristics at Site NC3B for February, 2009.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}
1	826	42	55	810	43	55	790	40	51
2	826	43	57	809	43	56	790	41	52
3	825	44	58	809	44	57	789	42	53
4	825	45	59	808	45	59	789	43	54
5	825	46	60	807	46	60	788	44	55
6	824	47	61	807	47	61	788	45	56
7	824	48	63	806	48	63	788	46	58
8	823	49	64	805	50	64	787	47	59
9	823	50	66	804	51	65	787	48	60
10	823	51	67	804	52	67	787	49	61
11	823	52	68	804	53	68	786	50	63
12	823	53	70	803	54	70	786	51	64
13	822	54	71	803	55	71	785	52	65
14	822	56	73	803	56	72	784	53	66
15	822	57	75	802	58	74	783	54	68
16	822	58	76	802	59	76	782	55	69
17	821	59	78	802	60	77	781	56	71
18	821	60	79	802	61	79	781	58	72
19	821	62	81	801	63	80	781	59	73
20	820	63	82	801	64	82	780	60	75
21	820	64	84	801	65	83	780	61	76
22	819	65	86	800	66	85	780	62	78
23	819	67	87	800	68	87	779	64	79
24	819	68	89	800	69	88	779	65	81
25	818	69	91	800	70	90	779	66	82
26	818	70	92	800	71	91	779	67	84
27	818	72	94	800	73	93	779	69	86
28	817	73	96	799	74	95	779	70	87
Avg	822	57	74	803	57	74	784	54	68
n	28	28	28	28	28	28	28	28	28
SD	3	9	12	3	9	12	4	9	11
Min	817	42	55	799	43	55	779	40	51
Max	826	73	96	810	74	95	790	70	87

ED_004549_00015929-00063

Table F1. Daily means (SD) of animal characteristics at Site NC3B for March, 2009.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	817	74	97	799	75	96	778	71	89
2	817	76	99	799	76	98	778	72	90
3	817	77	100	799	78	99	778	74	92
4	817	78	102	798	79	101	778	75	93
5	817	79	104	797	80	102	778	76	95
6	817	81	105	796	81	103	777	77	96
7	817	82	107	795	82	105	777	79	98
8	817	83	108	794	84	106	777	80	99
9	817	84	110	793	85	108	776	81	101
10	817	85	112	793	86	109	776	82	102
11	817	86	113	793	87	110	776	83	104
12	817	88	114	793	88	112	775	85	105
13	817	89	116	793	89	113	775	86	106
14	817	90	117	792	90	114	775	87	108
15	817	91	119	792	91	116	774	88	109
16	817	92	120	792	92	117	774	89	110
17	816	93	121	792	93	118	773	90	112
18	816	94	123	792	94	119	773	91	113
19	816	95	124	792	95	121	773	92	114
20	816	96	125	792	96	122	773	93	115
21	815	97	126	791	97	123	773	94	117
22	815	98	127	791	98	124	772	95	118
23	815	99	129	791	99	125	772	96	119
24	814	99	130	791	100	126	772	97	120
25	814	100	131	790	101	127	772	98	121
26	813	101	132	789	101	128	772	99	122
27	812	102	132	789	102	129	771	100	123
28	812	103	133	788	103	130	771	101	124
29	811	103	134	787	104	131	771	101	125
30	811	104	135	786	105	132	770	102	126
31	811	105	136	786	105	132	770	103	127
Avg	815	91	119	792	92	116	774	88	109
n	31	31	31	31	31	31	31	31	31
SD	2	9	12	3	9	11	3	10	12
Min	811	74	97	786	75	96	770	71	89
Max	817	105	136	799	105	132	778	103	127

ED_004549_00015929-00064

Table F1. Daily means (SD) of animal characteristics at Site NC3B for April, 2009.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	811	105	137	786	106	133	770	104	128
2	811	106	137	786	107	134	770	104	129
3	810	107	138	786	108	135	769	105	129
4	810	107	139	786	108	136	769	106	130
5	810	108	140	786	109	137	769	106	131
6	810	108	140	701	108	121	768	107	132
7	810	109	141	601	107	103	768	108	132
8	810	109	142	601	107	103	768	108	133
9	810	110	142	600	108	104	768	109	134
10	810	110	143	600	109	104	768	109	135
11	810	111	144	600	109	105	768	110	135
12	810	111	144	599	110	105	768	111	136
13	810	112	145	599	110	106	768	111	137
14	810	112	146	599	111	106	768	112	137
15	810	113	146	598	111	107	768	112	138
16	810	114	147	598	112	107	768	113	139
17	725	113	131	598	112	108	768	113	139
18	625	112	112	597	113	108	768	114	140
19	625	113	113	597	114	108	768	115	141
20	625	113	113	596	114	109	768	115	142
21	582	113	105	553	114	101	683	116	127
22	532	112	95	503	114	92	583	116	108
23	531	112	96	503	114	92	498	115	92
24	531	113	96	503	115	92	398	113	72
25	531	113	96	502	115	92	398	113	72
26	530	114	96	502	115	93	398	114	72
27	530	114	97	502	116	93	397	114	73
28	530	114	97	502	116	93	397	114	73
29	529	115	97	501	116	94	397	115	73
30	529	115	98	501	117	94	397	115	73
Avg	697	111	124	603	112	107	664	111	118
n	30	30	30	30	30	30	30	30	30
SD	127	3	21	95	3	14	158	4	27
Min	529	105	95	501	106	92	397	104	72
Max	811	115	147	786	117	137	770	116	142

ED_004549_00015929-00065

Table F1. Daily means (SD) of animal characteristics at Site NC3B for May, 2009.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	529	116	98	501	117	94	397	116	73
2	528	117	99	500	118	94	397	116	74
3	528	117	99	500	118	94	396	116	74
4	528	118	100	499	119	95	396	117	74
5	528	119	100	499	119	95	396	117	74
6	286	60	38	499	120	95	396	118	75
7	0	0	0	499	120	96	396	118	75
8	0	0	0	499	121	96	396	118	75
9	0	0	0	499	121	97	396	119	75
10	0	0	0	499	122	97	396	119	76
11	0	0	0	499	122	98	396	120	76
12	0	0	0	499	123	98	396	120	76
13	0	0	0	270	62	38	396	121	77
14	0	0	0	0	0	0	396	121	77
15	0	0	0	0	0	0	396	122	77
16	0	0	0	0	0	0	396	123	78
17	0	0	0	0	0	0	396	123	78
18	0	0	0	0	0	0	215	62	30
19	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0
24	447	14	15	0	0	0	0	0	0
25	715	22	25	0	0	0	0	0	0
26	715	23	26	0	0	0	0	0	0
27	715	23	27	0	0	0	0	0	0
28	714	24	27	0	0	0	0	0	0
29	714	24	28	0	0	0	0	0	0
30	714	25	28	134	6	2	0	0	0
31	713	25	29	368	16	10	0	0	0
Avg	270	27	24	218	49	39	224	67	42
n	31	31	31	31	31	31	31	31	31
SD	310	42	35	237	57	46	193	58	37
Min	0	0	0	0	0	0	0	0	0
Max	715	119	100	501	123	98	397	123	78

ED_004549_00015929-00066

Table F1. Daily means (SD) of animal characteristics at Site NC3B for June, 2009.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}
1	711	26	29	401	18	12	0	0	0
2	708	26	30	401	19	12	0	0	0
3	706	27	30	401	19	12	0	0	0
4	704	27	31	647	19	20	506	11	13
5	701	28	31	794	20	26	810	18	23
6	699	28	31	793	21	26	810	19	24
7	697	28	32	792	21	27	810	19	25
8	696	29	32	791	22	27	810	20	26
9	694	29	32	789	22	28	810	20	26
10	693	30	33	786	22	28	810	21	27
11	692	30	33	784	23	29	810	21	28
12	690	30	34	782	23	29	809	22	28
13	689	31	34	779	24	30	809	22	29
14	688	31	35	777	24	30	808	23	29
15	687	32	35	776	25	30	808	23	30
16	686	32	36	775	25	31	807	24	31
17	685	33	36	774	25	31	807	24	31
18	684	34	37	773	26	32	806	24	32
19	683	34	37	772	26	32	806	25	32
20	682	35	38	771	27	33	805	25	33
21	681	35	38	770	27	33	805	26	33
22	681	36	39	769	27	34	805	26	34
23	681	37	40	768	28	34	804	27	34
24	681	37	41	767	28	35	804	27	35
25	680	38	41	766	29	36	803	28	36
26	680	39	42	765	29	36	803	28	36
27	680	39	43	764	30	37	802	29	37
28	680	40	44	763	31	37	802	29	38
29	679	41	45	762	31	38	801	30	38
30	679	42	45	761	32	39	800	31	39
Avg	689	33	36	734	25	29	716	21	28
n	30	30	30	30	30	30	30	30	30
SD	10	5	5	114	4	7	245	8	11
Min	679	26	29	401	18	12	0	0	0
Max	711	42	45	794	32	39	810	31	39

ED_004549_00015929-00067

Table F1. Daily means (SD) of animal characteristics at Site NC3B for July, 2009.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	679	43	46	759	32	39	800	31	40
2	678	43	47	758	33	40	799	32	41
3	678	44	48	756	34	41	799	33	42
4	677	45	49	754	34	42	798	33	42
5	677	46	50	753	35	42	797	34	43
6	677	47	51	752	36	43	796	35	44
7	677	48	52	752	37	44	795	36	45
8	677	49	53	752	37	45	794	36	46
9	677	50	54	752	38	46	793	37	47
10	677	51	55	752	39	47	793	38	48
11	677	52	56	752	40	48	793	39	49
12	677	53	58	752	41	49	793	40	50
13	677	54	59	752	41	50	793	41	52
14	677	55	60	752	42	51	793	42	53
15	677	56	61	752	43	52	793	43	54
16	677	57	62	751	44	53	793	44	55
17	677	58	63	751	45	54	792	45	57
18	677	60	65	751	46	55	792	46	58
19	677	61	66	751	47	57	792	47	59
20	677	62	67	751	48	58	791	48	61
21	677	63	68	751	49	59	791	49	62
22	677	64	69	750	50	60	791	50	63
23	677	65	71	750	51	61	790	51	65
24	677	66	72	750	52	63	790	52	66
25	677	67	73	749	53	64	790	53	67
26	677	69	74	749	54	65	790	55	69
27	677	70	76	749	55	66	790	56	70
28	677	71	77	748	56	68	789	57	72
29	676	72	78	748	57	69	789	58	73
30	676	73	79	747	59	70	789	59	75
31	676	74	80	747	60	71	789	60	76
Avg	677	58	63	751	45	54	793	44	56
n	31	31	31	31	31	31	31	31	31
SD	0	10	10	3	8	10	3	9	11
Min	676	43	46	747	32	39	789	31	40
Max	679	74	80	759	60	71	800	60	76

ED_004549_00015929-00068

Table F1. Daily means (SD) of animal characteristics at Site NC3B for August, 2009.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	676	75	82	746	61	73	788	62	78
2	676	76	83	746	62	74	788	63	79
3	676	78	84	745	63	75	787	64	81
4	676	79	85	745	64	76	786	65	82
5	676	80	86	744	65	78	786	66	84
6	676	81	87	744	66	79	785	68	85
7	676	82	88	743	67	80	785	69	86
8	676	83	90	742	69	81	785	70	88
9	676	84	91	742	70	83	785	71	89
10	675	85	92	741	71	84	785	72	91
11	675	86	93	741	72	85	785	74	92
12	675	87	94	740	73	86	785	75	94
13	675	88	95	740	74	88	785	76	95
14	674	89	96	740	75	89	784	77	97
15	674	89	96	739	76	90	783	78	98
16	674	90	97	739	77	91	783	79	99
17	673	91	98	738	78	92	782	80	100
18	673	92	99	738	79	94	782	81	102
19	673	93	100	737	80	95	781	82	103
20	672	94	101	737	81	96	780	84	104
21	672	94	101	737	82	97	780	85	105
22	671	95	102	736	83	98	780	86	107
23	671	96	103	736	84	99	780	87	108
24	671	96	103	736	85	100	780	87	109
25	670	97	104	735	86	101	779	88	110
26	670	98	105	735	87	102	779	89	111
27	670	98	105	735	88	103	779	90	112
28	669	99	106	735	89	104	779	91	113
29	669	100	107	735	89	105	779	92	114
30	668	100	107	734	90	106	778	93	115
31	667	101	108	734	91	107	778	94	116
Avg	673	90	96	739	77	91	783	79	98
n	31	31	31	31	31	31	31	31	31
SD	3	8	8	4	9	10	3	10	12
Min	667	75	82	734	61	73	778	62	78
Max	676	101	108	746	91	107	788	94	116

ED_004549_00015929-00069

Table F1. Daily means (SD) of animal characteristics at Site NC3B for September, 2009.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	666	101	108	734	92	108	778	94	117
2	665	102	108	734	93	109	777	95	118
3	664	102	109	734	93	109	777	96	119
4	663	103	109	733	94	110	777	96	120
5	662	104	110	733	95	111	777	97	121
6	661	104	110	733	95	112	777	98	122
7	661	105	111	733	96	112	777	98	122
8	661	105	111	732	97	113	777	99	123
9	661	106	112	732	97	114	777	100	124
10	661	106	112	732	98	114	777	100	125
11	619	106	105	732	98	115	777	101	125
12	569	107	97	732	99	116	777	101	126
13	568	107	97	732	99	116	777	102	127
14	568	108	98	731	100	117	776	102	127
15	527	106	90	731	100	117	776	103	128
16	477	105	80	731	101	118	776	103	128
17	476	105	80	731	101	118	776	104	129
18	474	105	80	731	102	119	776	104	130
19	473	106	80	730	102	119	776	105	130
20	472	106	80	730	102	120	776	105	131
21	471	106	80	730	103	120	715	105	120
22	471	107	80	729	103	120	643	105	108
23	471	107	81	729	103	121	642	105	108
24	470	107	81	728	104	121	641	106	108
25	470	108	81	728	104	121	641	106	109
26	469	108	81	728	105	122	641	106	109
27	468	108	81	727	105	122	641	107	110
28	467	109	81	727	105	123	641	107	110
29	465	109	81	727	106	123	640	108	110
30	464	110	82	727	106	123	640	108	111
Avg	551	106	93	731	100	117	734	102	120
n	30	30	30	30	30	30	30	30	30
SD	87	2	14	2	4	5	62	4	8
Min	464	101	80	727	92	108	640	94	108
Max	666	110	112	734	106	123	778	108	131

ED_004549_00015929-00070

Table F1. Daily means (SD) of animal characteristics at Site NC3B for October, 2009.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}
1	463	110	82	726	106	124	640	108	111
2	461	111	82	726	107	124	640	109	112
3	460	111	82	726	107	125	640	109	112
4	459	112	82	726	108	125	640	110	113
5	459	113	83	726	108	126	553	110	98
6	249	57	32	726	109	126	450	109	78
7	0	0	0	682	109	119	449	108	77
8	0	0	0	629	110	111	448	108	77
9	0	0	0	625	110	110	447	109	78
10	0	0	0	623	111	111	446	109	78
11	0	0	0	579	110	102	444	110	78
12	0	0	0	528	109	92	442	110	78
13	0	0	0	345	102	57	439	111	78
14	0	0	0	69	47	7	237	56	30
15	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0
19	432	15	16	437	13	13	0	0	0
20	691	25	28	699	20	23	0	0	0
21	691	26	28	699	21	24	0	0	0
22	691	26	29	699	22	24	0	0	0
23	691	27	30	699	22	25	0	0	0
24	691	27	30	699	23	26	0	0	0
25	691	28	31	699	24	27	0	0	0
26	691	29	32	699	24	27	465	15	17
27	691	29	32	699	25	28	745	25	30
28	691	30	33	699	25	28	745	26	31
29	690	30	33	699	26	29	745	27	32
30	690	31	34	699	26	30	744	27	32
31	690	31	34	699	27	30	744	28	33
Avg	364	31	27	557	57	58	358	52	44
n	31	31	31	31	31	31	31	31	31
SD	308	38	28	253	45	48	290	50	42
Min	0	0	0	0	0	0	0	0	0
Max	691	113	83	726	111	126	745	111	113

ED_004549_00015929-00071

Table F1. Daily means (SD) of animal characteristics at Site NC3B for November, 2009.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	690	32	35	699	27	31	744	28	34
2	690	32	35	699	28	31	744	29	34
3	690	32	36	699	28	32	744	29	35
4	690	33	36	699	29	32	744	30	36
5	690	34	37	699	30	33	744	30	36
6	690	34	38	699	30	34	744	31	37
7	690	35	38	699	31	34	744	31	37
8	690	35	39	699	31	35	744	32	38
9	689	36	39	698	32	36	744	32	38
10	689	36	40	698	33	36	743	33	39
11	689	37	41	698	33	37	743	33	40
12	689	38	42	698	34	38	743	34	40
13	688	38	42	697	35	39	742	34	41
14	688	39	43	697	35	39	742	35	41
15	688	40	44	697	36	40	742	36	42
16	687	41	45	696	37	41	741	36	43
17	687	41	45	696	38	42	741	37	44
18	686	42	46	695	39	43	741	37	44
19	685	43	47	694	40	44	741	38	45
20	685	44	48	694	40	45	741	39	46
21	684	45	49	693	41	46	740	40	47
22	684	46	50	692	42	47	740	41	48
23	684	47	51	691	43	48	740	41	49
24	684	48	52	689	45	49	740	42	50
25	684	49	53	688	46	50	740	43	51
26	684	50	55	686	47	51	739	44	52
27	684	51	56	684	48	52	739	45	53
28	684	52	57	683	49	54	739	46	54
29	684	53	58	682	50	55	738	47	55
30	683	54	59	681	51	56	738	48	57
Avg	687	41	45	694	38	42	742	37	44
n	30	30	30	30	30	30	30	30	30
SD	3	7	7	6	7	8	2	6	7
Min	683	32	35	681	27	31	738	28	34
Max	690	54	59	699	51	56	744	48	57

ED_004549_00015929-00072

Table F1. Daily means (SD) of animal characteristics at Site NC3B for December, 2009.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$	Inv., pigs	Mass, kg	$kg \cdot m^{-2}$
1	683	56	61	681	53	57	738	49	58
2	683	57	62	681	54	59	738	50	59
3	683	58	63	680	55	60	738	51	60
4	682	59	65	680	57	62	738	52	62
5	682	60	66	679	58	63	737	54	63
6	682	62	67	679	59	64	737	55	65
7	682	63	69	679	61	66	737	56	66
8	682	64	70	678	62	67	737	57	67
9	682	66	72	678	63	69	736	58	69
10	681	67	73	678	65	70	736	60	70
11	681	68	74	677	66	72	735	61	72
12	681	70	76	677	68	73	735	62	73
13	681	71	77	677	69	75	734	64	75
14	681	72	79	677	70	76	734	65	76
15	680	74	80	677	72	78	734	66	78
16	680	75	82	677	73	79	734	68	79
17	680	76	83	676	75	81	734	69	81
18	679	78	84	676	76	82	734	70	83
19	679	79	86	676	77	84	734	72	84
20	679	80	87	676	79	85	734	73	86
21	679	82	89	676	80	87	734	74	87
22	679	83	90	676	82	88	734	76	89
23	679	84	91	676	83	90	733	77	90
24	678	85	93	675	84	91	733	78	92
25	678	87	94	675	86	92	733	80	93
26	678	88	95	675	87	94	733	81	95
27	678	89	97	675	88	95	732	82	96
28	678	90	98	675	89	97	732	84	98
29	677	91	99	675	91	98	732	85	99
30	677	93	100	675	92	99	732	86	101
31	677	94	101	674	93	100	731	87	102
Avg	680	75	81	677	73	79	735	68	80
n	31	31	31	31	31	31	31	31	31
SD	2	12	12	2	12	13	2	12	14
Min	677	56	61	674	53	57	731	49	58
Max	683	94	101	681	93	100	738	87	102

ED_004549_00015929-00073

Table F1. Daily means (SD) of animal characteristics at Site NC3B for January, 2010.

Day	B1			B2			B3		
	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}	Inv., pigs	Mass, kg	kg·m^{-2}
1	676	95	103	674	94	102	731	89	104
2	676	96	104	674	95	103	731	90	105
3	676	97	105	674	97	104	731	91	106
4	675	98	106	673	98	105	730	92	107
5	674	99	106	673	99	106	730	93	109
6	673	100	107	672	100	107	730	94	110
7	672	101	108	671	101	108	730	95	111
8	671	102	109	671	102	109	730	96	112
9	670	102	110	670	103	110	730	97	113
10	669	103	111	670	103	111	729	98	114
11	668	104	111	669	104	112	729	99	115
12	668	105	112	669	105	113	729	100	116
13	667	106	113	669	106	113	729	101	117
14	666	106		668	107		729	101	
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
Avg	671	101	108	671	101	108	730	95	111
n	14	14	13	14	14	13	14	14	13
SD	3	4	3	2	4	4	1	4	4
Min	666	95	103	668	94	102	729	89	104
Max	676	106	113	674	107	113	731	101	117

ED_004549_00015929-00074

Table F2. Weather variables.

Table F2. Daily means (SD) of weather at Site NC3B for December, 2007

Day	Temp., °C	RH, %	Wind	Wind	Solar, W·m^{-2}	Atm P, kPa
1						
2						
3						
4	6.2 (0.3)	46.5 (3.8)	1.69 (1.56)	286 (90)		100.5 (0.2)
5	4.8 (1.1)	56.0 (1.7)	1.23 (1.14)	168 (80)		99.8 (0.2)
6	3.1 (0.1)	64.5 (3.2)	3.39 (2.49)	29 (120)		101.5 (0.5)
7	7.8 (2.6)	72.5 (1.4)	0.71 (0.59)	38 (121)		101.9 (0.1)
8	13.6 (0.8)	79.0 (2.3)	0.90 (1.07)	237 (93)		101.7 (0.1)
9	17.2 (1.3)	81.5 (0.9)	0.91 (0.77)	161 (60)		101.9 (0.1)
10	19.2 (0.1)	81.0 (0.6)	1.37 (1.14)	218 (30)		101.7 (0.1)
11	19.4 (0.3)	79.5 (1.4)	1.21 (0.95)	207 (34)		101.7 (0.1)
12	19.2 (0.5)	77.5 (0.3)				
13	17.0 (0.8)	70.0 (4.6)				
14	11.7 (2.3)	73.0 (6.4)				
15	7.8 (0.0)	87.5 (2.0)	3.66 (1.28)	48 (52)		101.1 (0.5)
16	5.0 (1.6)	70.5 (11.8)	3.79 (2.33)	284 (72)		99.6 (0.5)
17	1.7 (0.3)	56.0 (3.5)	2.95 (1.73)	295 (59)		101.3 (0.4)
18	2.5 (0.8)	69.5 (4.3)				102.0 (0.1)
19	5.0 (0.6)	74.5 (1.4)				101.5 (0.2)
20	7.0 (0.5)	77.5 (3.2)				101.3 (0.1)
21	10.3 (1.4)	81.0 (1.2)	4.24 (1.39)	43 (50)		101.1 (0.1)
22	14.7 (1.1)	87.5 (4.9)	3.88 (1.20)	44 (62)		101.6 (0.1)
23	12.5 (2.4)	82.5 (7.8)	2.59 (1.66)	170 (71)		100.9 (0.3)
24	8.1 (0.1)	68.5 (0.3)				101.2 (0.2)
25	6.1 (1.0)	78.0 (5.8)		36 (81)		101.4 (0.2)
26	5.6 (0.7)	90.0 (1.2)	3.51 (1.83)	335 (139)		100.6 (0.2)
27	8.4 (1.0)	90.0 (1.2)	0.66 (0.74)	211 (73)		101.1 (0.2)
28	15.0 (2.9)	86.0 (1.2)	1.51 (1.12)	136 (55)		101.4 (0.2)
29	17.2 (1.6)	89.5 (3.2)	2.43 (1.23)	209 (33)		100.8 (0.1)
30	11.7 (1.6)	88.0 (4.0)	1.12 (0.81)	180 (44)		100.6 (0.3)
31	8.4 (0.3)	70.5 (6.1)	1.55 (1.34)	10 (119)		100.9 (0.3)
Avg	10.2	76.0	2.17	213		101.2
n	28	28	20	21	0	25
SD	5.4	10.8	1.19	99.4		0.6
Min	1.7	46.5	0.66	10.0		99.6
Max	19.4	90.0	4.24	335		102.0

ED_004549_00015929-00075

Table F2. Daily means (SD) of weather at Site NC3B for January, 2008

Day	Temp., °C	RH, %	Wind	Wind	Solar, W·m^{-2}	Atm P, kPa
1	4.2 (2.1)	50.0 (5.8)	2.35 (1.78)	295 (98)		100.7 (0.2)
2	-0.8 (0.8)	41.5 (0.9)	4.27 (2.02)	308 (50)		101.4 (0.4)
3	-2.2 (0.0)	51.0 (4.6)	3.03 (2.11)	348 (146)		103.0 (0.3)
4	0.0 (1.3)	58.0 (0.6)	0.65 (0.77)	197 (77)		103.0 (0.2)
5	7.0 (2.7)	65.5 (4.9)	0.96 (1.04)	190 (50)		102.3 (0.2)
6	13.0 (0.8)	84.0 (5.8)	0.92 (1.02)	199 (65)		101.9 (0.1)
7	15.0 (0.3)	93.5 (0.3)	0.84 (0.95)	191 (57)		101.9 (0.1)
8	16.1 (0.3)	90.0 (1.7)	1.43 (1.23)	167 (37)		101.6 (0.2)
9	15.0 (1.0)	81.0 (3.5)	1.90 (1.49)	218 (62)		101.0 (0.1)
10	16.1 (1.6)	80.0 (2.9)	1.36 (0.79)	124 (68)		100.9 (0.3)
11	15.0 (2.3)	79.5 (3.2)	2.76 (1.53)	196 (31)		
12	9.5 (1.0)	77.0 (1.7)	2.04 (1.08)	25 (119)		
13	7.3 (0.3)	75.5 (2.6)	2.43 (1.04)	12 (141)		
14	4.2 (1.4)	62.5 (4.9)	1.58 (1.42)	270 (61)		
15	3.1 (0.8)	50.5 (2.0)	1.49 (1.79)	293 (77)		
16	4.4 (0.0)	66.5 (11.3)	1.26 (1.21)	6 (135)		
17	3.9 (0.3)	91.0 (2.9)	2.84 (1.21)	30 (121)		
18	3.3 (0.0)	96.5 (0.3)	1.42 (0.87)	275 (48)		
19	1.1 (1.3)	80.5 (9.5)	2.43 (1.30)	340 (143)		
20	-1.7 (0.3)	54.5 (5.5)	2.83 (2.05)	321 (91)		
21	1.4 (2.1)	59.5 (8.4)	1.84 (1.19)	37 (104)		
22	6.4 (0.8)	84.0 (5.8)	0.97 (0.72)	319 (108)		
23	6.7 (0.6)	89.5 (2.6)	1.38 (1.06)	333 (120)		
24	2.5 (1.8)	65.0 (11.5)	2.05 (1.79)	278 (87)		
25	0.8 (0.8)	55.5 (6.1)	2.31 (1.76)	7 (140)		
26	3.1 (0.5)	71.5 (3.2)	0.45 (0.39)	177 (65)		
27	3.6 (0.2)	71.0 (3.5)	1.59 (1.78)	322 (119)		
28	7.0 (2.1)	58.5 (3.8)	0.91 (1.08)	330 (118)		
29	9.8 (0.5)	57.0 (2.9)	2.79 (1.43)	205 (25)		
30	6.7 (1.3)	55.0 (4.0)	3.28 (1.91)	282 (107)		
31	8.3 (2.3)	70.0 (12.7)	3.04 (1.85)	37 (82)		
Avg	6.1	69.8	1.92	301		101.8
n	31	31	31	31	0	10
SD	5.3	14.7	0.89	114		0.8
Min	-2.2	41.5	0.45	6.4		100.7
Max	16.1	96.5	4.27	348		103.0

ED_004549_00015929-00076

Table F2. Daily means (SD) of weather at Site NC3B for February, 2008

Day	Temp., °C	RH, %	Wind	Wind	Solar, W·m^{-2}	Atm P, kPa
1	10.0 (1.3)	81.5 (6.1)	3.19 (1.78)	213 (78)		
2	8.6 (0.5)	71.5 (0.3)	0.99 (0.74)	190 (83)		
3	11.3 (1.1)	76.5 (2.6)	0.68 (0.79)	208 (78)		
4	18.3 (2.9)	86.0 (2.9)	0.93 (1.00)	186 (63)		
5	22.8 (0.3)	82.0 (5.2)	2.42 (1.33)	207 (31)		
6	17.2 (2.9)	67.0 (3.5)	3.84 (1.39)	203 (27)		
7	10.6 (1.0)	67.5 (3.8)	2.59 (1.79)	240 (56)		
8	10.0 (0.6)	78.5 (2.6)	1.19 (1.35)	268 (97)		
9	11.4 (0.2)	56.5 (15.3)	1.94 (1.60)	190 (50)		
10	7.5 (2.4)	29.5 (0.3)	3.50 (2.13)	261 (31)		
11	6.1 (1.6)	52.0 (13.3)	1.74 (1.50)	39 (119)		
12	11.1 (1.3)	86.0 (6.4)	2.77 (1.87)	141 (43)		
13	9.2 (2.4)	87.0 (5.8)	3.08 (1.47)	233 (89)		
14	6.4 (0.8)	71.0 (3.5)	2.19 (1.75)	328 (115)		
15	8.4 (0.3)	67.0 (1.2)	1.17 (1.04)	206 (44)		
16	10.5 (1.0)	75.5 (3.8)	2.36 (1.75)	51 (100)		
17	13.9 (1.0)	85.0 (1.7)	2.47 (1.25)	122 (58)		
18	11.7 (2.3)	65.5 (13.0)	3.68 (1.49)	223 (35)		
19	8.1 (0.1)	48.5 (3.2)	2.33 (2.12)	251 (54)		
20	5.8 (1.4)	60.5 (3.8)	2.41 (1.88)	221 (46)		
21	3.3 (0.0)	81.5 (8.4)	3.72 (1.44)	58 (49)		
22	6.7 (1.9)	96.5 (0.3)	2.01 (1.12)	327 (123)		
23	8.6 (0.8)	82.5 (8.4)	1.69 (1.12)	242 (98)		
24	7.8 (0.3)	71.5 (2.0)	2.50 (1.56)	41 (107)		
25	10.2 (1.1)	82.5 (4.3)	1.01 (1.09)	250 (100)		
26	9.2 (1.8)	68.0 (12.7)	2.83 (1.63)	190 (41)		
27	3.6 (1.4)	46.0 (0.0)	3.98 (1.47)	301 (35)		
28	2.8 (1.0)	49.5 (2.0)	2.17 (1.74)	303 (100)		
29	8.9 (2.6)	55.0 (1.2)	1.74 (1.49)	159 (53)		
Avg	9.6	69.9	2.31	224		
n	29	29	29	29	0	0
SD	4.3	15.0	0.92	78.3		
Min	2.8	29.5	0.68	38.7		
Max	22.8	96.5	3.98	328		

ED_004549_00015929-00077

Table F2. Daily means (SD) of weather at Site NC3B for March, 2008

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	11.4 (1.1)	52.0 (2.9)	3.32 (1.75)	247 (42)		
2	10.8 (0.8)	59.0 (6.9)				
3	15.2 (1.8)	75.5 (2.6)				
4	16.4 (1.1)	76.5 (2.0)				
5	13.3 (0.6)	69.0 (2.3)				
6	13.0 (0.5)	81.0 (9.2)	1.42 (1.03)	45 (89)		
7	13.1 (0.5)	89.5 (4.3)	2.04 (1.28)	96 (64)		
8	8.9 (1.9)	63.5 (10.7)	4.49 (2.36)	216 (42)		
9	6.7 (0.6)	50.5 (3.2)	2.16 (1.72)	307 (92)		
10	9.5 (1.0)	59.0 (1.7)	1.30 (1.18)	136 (68)		
11	12.2 (0.6)	55.5 (3.8)	0.99 (0.90)	218 (83)		
12	13.3 (0.0)	51.5 (1.4)	2.08 (1.75)	257 (74)		
13	15.0 (1.0)	53.5 (0.3)	1.67 (1.36)	189 (61)		
14	16.2 (0.3)	67.0 (8.1)	2.65 (1.57)	189 (21)		
15	13.9 (1.0)	86.0 (2.9)	2.02 (1.31)	211 (75)		
16	10.0 (1.3)	71.0 (11.5)	3.53 (2.10)	322 (109)		100.6 (0.8)
17	8.9 (0.6)	61.5 (6.1)	3.03 (2.00)	39 (88)		102.2 (0.2)
18	14.4 (2.6)	76.0 (2.3)	1.74 (1.27)	133 (61)		101.8 (0.4)
19	17.3 (1.0)	69.0 (6.4)	4.49 (2.43)	189 (27)		100.3 (0.5)
20	13.7 (1.1)	48.5 (5.5)	4.75 (2.79)	297 (61)		100.3 (0.7)
21	13.9 (1.3)	47.0 (4.6)	1.73 (1.19)	286 (105)		101.4 (0.2)
22	12.5 (2.1)	51.0 (2.3)	3.09 (1.94)	223 (55)		100.4 (0.3)
23	8.4 (0.3)	52.0 (2.9)	3.12 (1.94)	33 (114)		101.0 (0.1)
24	7.5 (0.2)	53.0 (2.3)	3.73 (1.53)	1 (164)		101.1 (0.2)
25	10.2 (1.8)	48.0 (0.6)	2.25 (1.06)	312 (118)		101.8 (0.2)
26	15.0 (1.0)	49.0 (1.2)	2.60 (1.33)	213 (29)	250 (318)	101.5 (0.2)
27	18.3 (1.0)	54.5 (2.0)	2.99 (1.53)	205 (29)	256 (326)	100.9 (0.3)
28	16.4 (2.1)	66.5 (4.9)	3.01 (1.59)	211 (30)	247 (318)	100.6 (0.1)
29	9.8 (1.8)	80.0 (2.9)	4.21 (1.47)	41 (75)	52 (76)	101.6 (0.4)
30	10.5 (2.2)	92.0 (4.0)	4.02 (1.00)	42 (37)	22 (34)	102.2 (0.1)
31	17.7 (1.9)	92.5 (3.8)	2.56 (1.27)	115 (60)	78 (124)	101.8 (0.2)
Avg	12.7	64.5	2.78	225	151	101.2
n	31	31	27	27	6	16
SD	3.1	14.0	1.03	94.8	102	0.6
Min	6.7	47.0	0.99	1.0	22	100.3
Max	18.3	92.5	4.75	322	256	102.2

ED_004549_00015929-00078

Table F2. Daily means (SD) of weather at Site NC3B for April, 2008

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	17.8 (1.9)	78.5 (4.3)	3.12 (1.24)	185 (22)	144 (220)	101.1 (0.2)
2	12.8 (1.0)	74.5 (2.0)	3.52 (1.77)	46 (103)	238 (322)	101.4 (0.3)
3	13.9 (1.6)	88.0 (5.8)	2.03 (1.08)	62 (86)	25 (35)	101.7 (0.4)
4	17.5 (0.5)	96.0 (1.2)	2.09 (1.39)	215 (60)	109 (171)	100.7 (0.3)
5			1.52 (1.20)	111 (87)	11 (28)	100.4 (0.2)
6	16.3 (2.5)	88.4 (2.4)	2.49 (1.62)	7 (133)	40 (56)	100.6 (0.3)
7	12.1 (1.5)	84.8 (4.6)	3.85 (1.05)	33 (78)	107 (189)	101.1 (0.1)
8	13.5 (2.6)	77.9 (8.0)	3.59 (0.99)	21 (120)	146 (237)	101.3 (0.1)
9	16.3 (3.2)	78.5 (9.3)	2.13 (1.27)	26 (134)	120 (145)	101.2 (0.1)
10	18.9 (4.3)	76.6 (14.4)	1.15 (0.80)	101 (83)	193 (296)	101.0 (0.1)
11	22.3 (4.8)	69.9 (19.7)	2.27 (1.54)	202 (37)	252 (351)	100.5 (0.3)
12	22.6 (4.0)	68.1 (11.7)	3.91 (1.54)	219 (31)	189 (294)	99.8 (0.2)
13	17.8 (3.1)	50.8 (17.2)	2.70 (1.48)	285 (73)	267 (344)	99.9 (0.2)
14	11.2 (3.4)	61.8 (14.4)	1.60 (1.11)	359 (133)	155 (253)	100.5 (0.1)
15	11.4 (3.4)	54.5 (20.2)	3.53 (2.74)	18 (139)	288 (364)	101.0 (0.2)
16	11.2 (6.2)	51.2 (23.7)	2.32 (2.33)	24 (137)	313 (375)	101.4 (0.1)
17	15.5 (8.6)	48.5 (24.5)	1.30 (1.45)	339 (123)	308 (370)	101.1 (0.2)
18	20.9 (7.3)	44.5 (19.2)	1.61 (1.12)	223 (42)	292 (360)	100.9 (0.1)
19	21.3 (5.0)	55.6 (16.1)	2.67 (1.67)	193 (31)	273 (346)	100.6 (0.2)
20	20.3 (3.8)	66.7 (22.2)	1.89 (1.10)	206 (67)	192 (312)	100.2 (0.1)
21	15.3 (2.6)	81.6 (10.3)	1.61 (1.13)	347 (146)	106 (181)	100.3 (0.1)
22	18.5 (3.1)	77.6 (11.4)	3.94 (1.50)	31 (93)	140 (234)	100.4 (0.2)
23	19.6 (2.3)	78.3 (7.9)	2.77 (1.71)	36 (91)	148 (236)	100.9 (0.1)
24	20.1 (4.9)	70.8 (18.3)	1.07 (0.94)	51 (109)	270 (357)	101.2 (0.1)
25	21.3 (5.4)	64.3 (18.3)	1.25 (1.02)	174 (78)	261 (339)	101.1 (0.1)
26	22.9 (5.1)	64.4 (16.5)	1.73 (1.24)	206 (36)	278 (351)	100.8 (0.1)
27	21.7 (3.4)	77.5 (12.4)	0.98 (0.89)	183 (79)	172 (274)	100.7 (0.1)
28	20.8 (2.0)	82.1 (7.2)	2.25 (1.29)	195 (40)	92 (143)	100.1 (0.3)
29	14.9 (2.6)	57.2 (19.7)	2.90 (2.22)	316 (69)	309 (374)	100.3 (0.3)
30	13.5 (4.7)	57.6 (17.5)	1.63 (1.34)	0 (140)	316 (373)	101.0 (0.1)
Avg	17.3	69.9	2.31	25.6	192	100.8
n	29	29	30	30	30	30
SD	3.7	13.2	0.89	112	90	0.5
Min	11.2	44.5	0.98	0.0	11	99.8
Max	22.9	96.0	3.94	359	316	101.7

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Table F2. Daily means (SD) of weather at Site NC3B for May, 2008

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	17.5 (6.6)	59.9 (17.8)	1.86 (1.41)	165 (46)	292 (359)	101.1 (0.1)
2	21.3 (4.7)	65.2 (16.0)	2.42 (1.42)	191 (34)	279 (351)	101.0 (0.1)
3	21.8 (4.2)	67.7 (16.7)	2.23 (1.42)	192 (28)		100.6 (0.2)
4	23.5 (4.3)	67.3 (18.4)	1.59 (0.88)	201 (76)	287 (376)	100.5 (0.1)
5	19.7 (2.9)	81.4 (8.4)	1.11 (1.02)	48 (112)	120 (206)	100.6 (0.1)
6	20.3 (4.6)	68.8 (18.9)	0.98 (0.83)	36 (120)	272 (336)	100.7 (0.1)
7	21.7 (5.4)	62.4 (18.8)	1.87 (1.37)	192 (50)	287 (354)	100.7 (0.1)
8	23.0 (2.9)	73.3 (8.7)	2.58 (1.20)	188 (30)	141 (165)	100.2 (0.2)
9	25.6 (3.0)	66.8 (14.0)	3.05 (1.76)	236 (67)	242 (337)	99.4 (0.1)
10	22.7 (4.7)	65.8 (17.2)	2.59 (1.88)	357 (134)	302 (358)	99.8 (0.2)
11	18.9 (4.7)	73.6 (11.5)	2.54 (1.48)	86 (96)	150 (237)	99.2 (0.7)
12	17.1 (2.2)	60.3 (8.8)	4.29 (1.80)	315 (110)	171 (259)	99.4 (0.5)
13	15.7 (4.3)	56.4 (17.5)	2.93 (2.10)	4 (150)	331 (381)	100.9 (0.2)
14	18.7 (5.7)	56.5 (17.2)	1.48 (1.10)	212 (48)	261 (317)	101.0 (0.2)
15	21.8 (3.5)	70.6 (10.8)	1.54 (1.06)	204 (35)	163 (223)	100.6 (0.2)
16	24.3 (3.5)	68.8 (14.9)	3.50 (1.28)	241 (59)	199 (304)	99.6 (0.3)
17	20.0 (3.8)	50.5 (15.4)	2.19 (1.22)	277 (81)	337 (386)	99.9 (0.2)
18	20.6 (4.8)	65.8 (19.7)	2.80 (1.89)	220 (44)	270 (331)	99.3 (0.3)
19	20.9 (4.5)	61.0 (21.2)	1.67 (1.42)	259 (77)	323 (378)	99.6 (0.2)
20	23.2 (5.3)	67.5 (16.1)	3.01 (2.12)	215 (69)	196 (280)	99.1 (0.3)
21	21.2 (3.8)	65.7 (18.6)	1.17 (1.14)	292 (94)	277 (356)	99.3 (0.1)
22	20.9 (5.5)	55.4 (22.5)	1.50 (1.52)	313 (105)	333 (381)	99.9 (0.2)
23	21.5 (5.0)	59.7 (17.7)	1.23 (1.18)	50 (105)	266 (336)	100.4 (0.1)
24	18.8 (2.7)	76.8 (9.8)	1.72 (1.44)	29 (124)	134 (243)	100.5 (0.1)
25	20.7 (5.4)	59.1 (19.9)	0.89 (0.95)	39 (115)	313 (383)	101.0 (0.1)
26	21.6 (6.0)	59.6 (17.2)	1.65 (1.37)	169 (63)	321 (370)	100.9 (0.2)
27	24.3 (5.0)	63.1 (15.5)	2.29 (1.31)	202 (32)	313 (360)	100.7 (0.1)
28	18.6 (3.5)	81.3 (6.8)	2.55 (1.70)	41 (99)	37 (64)	101.0 (0.3)
29	19.7 (4.6)	63.0 (19.4)	1.81 (1.22)	55 (87)	317 (371)	101.2 (0.1)
30	23.5 (5.3)	70.1 (14.5)	1.41 (1.18)	167 (67)	273 (349)	101.0 (0.1)
31	26.4 (4.2)	72.9 (13.2)	2.41 (1.34)	204 (29)	261 (308)	100.6 (0.3)
Avg	21.1	65.7	2.09	216	249	100.3
n	31	31	31	31	30	31
SD	2.4	7.2	0.78	95.2	76	0.7
Min	15.7	50.5	0.89	4.4	37	99.1
Max	26.4	81.4	4.29	357	337	101.2

ED_004549_00015929-00080

Table F2. Daily means (SD) of weather at Site NC3B for June, 2008

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	27.1 (5.1)	67.3 (18.6)	1.90 (1.11)	237 (65)	284 (352)	100.3 (0.1)
2	25.0 (3.7)	63.8 (20.5)	1.55 (1.32)	19 (132)	285 (361)	100.5 (0.2)
3	24.8 (4.0)	66.7 (14.8)	1.85 (1.27)	161 (35)	243 (296)	100.6 (0.2)
4	28.2 (4.9)	69.9 (13.2)	2.65 (1.14)	191 (33)	266 (339)	100.3 (0.1)
5	30.5 (4.5)	63.4 (13.7)	1.98 (0.91)	216 (44)	269 (337)	100.7 (0.2)
6	30.9 (4.8)	63.0 (16.6)	1.56 (0.96)	223 (45)	293 (347)	101.1 (0.1)
7	31.1 (4.9)	61.2 (18.8)	1.39 (1.06)	228 (52)	311 (354)	101.0 (0.2)
8	31.6 (5.5)	60.3 (18.7)	1.24 (0.95)	216 (53)	304 (359)	100.7 (0.2)
9	31.8 (5.2)	59.1 (16.7)	1.31 (0.80)	221 (72)	301 (357)	100.5 (0.1)
10	30.3 (4.5)	61.9 (16.4)	1.77 (1.04)	199 (34)	295 (344)	100.5 (0.1)
11						
12						
13	26.7 (4.5)	63.9 (15.8)	1.40 (1.20)	110 (92)	297 (351)	101.2 (0.1)
14	27.2 (5.2)	64.4 (16.8)	1.43 (1.17)	173 (82)	285 (354)	100.7 (0.2)
15	25.3 (2.9)	77.9 (8.9)	0.87 (0.70)	216 (76)	141 (220)	100.3 (0.1)
16	27.4 (4.8)	66.5 (16.5)	1.61 (1.12)	195 (38)	274 (346)	100.2 (0.1)
17	28.1 (3.8)	61.8 (18.9)	1.64 (0.93)	304 (114)	251 (301)	99.9 (0.1)
18	24.1 (4.2)	49.2 (15.4)	1.87 (1.19)	5 (147)	318 (372)	100.1 (0.1)
19	24.4 (6.4)	53.1 (22.1)	1.12 (1.01)	310 (116)	320 (376)	100.3 (0.1)
20	23.5 (4.6)	67.7 (13.2)	1.17 (1.20)	210 (98)	194 (272)	100.8 (0.1)
21	23.1 (3.3)	77.6 (9.7)	1.01 (0.88)	126 (82)	159 (237)	100.8 (0.1)
22	24.6 (3.3)	78.2 (12.2)	1.03 (1.01)	163 (75)	151 (262)	100.6 (0.1)
23	25.9 (3.6)	72.9 (13.0)	1.27 (0.97)	207 (47)	226 (303)	100.5 (0.1)
24	27.1 (5.2)	60.0 (21.7)	1.30 (1.10)	292 (104)	316 (362)	101.1 (0.2)
25	28.3 (5.8)	61.8 (22.1)	1.48 (1.22)	172 (72)	286 (352)	101.2 (0.1)
26	29.6 (4.6)	63.5 (20.9)	2.11 (1.15)	208 (32)	276 (335)	100.8 (0.2)
27	28.9 (3.8)	64.3 (15.8)	2.13 (1.34)	211 (30)	261 (331)	100.6 (0.1)
28	30.2 (4.2)	62.6 (17.3)	2.40 (1.22)	217 (36)	274 (329)	100.6 (0.1)
29	28.3 (3.6)	66.7 (13.7)	3.07 (1.34)	209 (33)	243 (308)	100.4 (0.1)
30	28.1 (3.3)	64.1 (16.9)	2.67 (1.00)	220 (39)	211 (305)	100.2 (0.1)
Avg	27.6	64.7	1.67	209	262	100.6
n	28	28	28	28	28	28
SD	2.5	6.4	0.54	66.7	49	0.3
Min	23.1	49.2	0.87	5.1	141	99.9
Max	31.8	78.2	3.07	310	320	101.2

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Table F2. Daily means (SD) of weather at Site NC3B for July, 2008

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	25.3 (3.7)	51.4 (13.5)	2.01 (1.53)	311 (88)	310 (365)	100.5 (0.2)
2	25.7 (6.7)	50.3 (21.5)	1.23 (1.08)	205 (98)	315 (367)	100.9 (0.1)
3	26.7 (5.5)	56.6 (19.0)	1.73 (1.29)	176 (47)	272 (339)	100.9 (0.1)
4	27.8 (4.5)	66.4 (16.4)	1.99 (1.33)	185 (45)	243 (336)	100.8 (0.2)
5						
6						
7						
8						
9	26.3 (3.7)	78.3 (10.5)	2.01 (1.19)	193 (44)	140 (175)	100.7 (0.1)
10	27.1 (4.2)	74.0 (16.3)	1.67 (1.07)	241 (80)	261 (437)	100.7 (0.1)
11						
12	26.5 (4.1)	66.2 (18.3)	1.60 (1.52)	66 (78)	312 (355)	100.8 (0.1)
13	26.5 (5.3)	64.8 (16.5)	1.05 (0.93)	180 (62)	281 (344)	100.3 (0.2)
14	25.9 (3.5)	78.0 (11.0)	1.17 (1.02)	212 (86)	191 (279)	100.2 (0.1)
15	26.3 (2.9)	77.4 (12.9)	1.96 (1.31)	69 (89)	203 (300)	100.6 (0.2)
16	26.4 (4.0)	62.7 (16.0)	1.95 (1.68)	61 (84)	303 (365)	100.9 (0.1)
17	26.5 (5.5)	61.4 (18.8)	1.69 (1.69)	67 (74)	315 (362)	100.9 (0.1)
18	26.7 (3.5)	75.6 (10.7)	1.29 (1.17)	115 (74)	225 (309)	100.8 (0.1)
19	26.8 (2.7)	79.2 (8.6)	1.47 (1.01)	86 (65)	206 (284)	100.6 (0.1)
20	28.7 (3.5)	71.9 (13.1)	2.65 (1.55)	286 (100)	238 (304)	100.3 (0.1)
21	30.6 (4.5)	62.9 (14.3)	1.57 (1.02)	255 (55)	298 (347)	100.3 (0.1)
22	28.7 (5.3)	69.1 (17.1)	1.34 (1.47)	206 (55)	254 (340)	100.4 (0.1)
23	24.7 (3.1)	82.6 (8.0)	1.65 (1.24)	172 (43)	126 (209)	100.4 (0.1)
24	26.0 (3.9)	73.7 (16.1)	0.94 (0.76)	257 (80)	241 (321)	100.6 (0.1)
25	25.1 (4.2)	74.1 (14.8)	0.55 (0.56)	101 (91)	157 (226)	
26	26.0 (4.3)	71.0 (15.4)	0.87 (0.89)	204 (84)	203 (285)	
27	27.3 (2.9)	78.9 (9.0)	1.29 (0.96)	182 (25)	219 (300)	
28	29.1 (3.7)	69.4 (18.7)	1.01 (0.88)	243 (85)	293 (354)	
29	28.8 (3.9)	72.5 (13.3)	1.43 (1.08)	201 (27)	251 (300)	
30						
31						
Avg	26.9	69.5	1.50	187	244	100.6
n	24	24	24	24	24	19
SD	1.4	8.5	0.46	71.5	55	0.2
Min	24.7	50.3	0.55	61.2	126	100.2
Max	30.6	82.6	2.65	311	315	100.9

ED_004549_00015929-00082

Table F2. Daily means (SD) of weather at Site NC3B for August, 2008

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1						
2						
3						
4						
5						
6						
7						
8						
9	25.0 (3.9)	77.3 (12.3)	1.22 (1.07)	131 (99)	222 (329)	
10	25.4 (3.4)	74.2 (11.7)	1.55 (1.40)	191 (53)	181 (240)	100.2 (0.1)
11	23.8 (4.8)	70.4 (18.2)	1.50 (1.36)	258 (93)	284 (345)	100.1 (0.1)
12	24.3 (5.2)	63.8 (18.6)	1.02 (0.89)	120 (92)	292 (349)	100.2 (0.1)
13	21.6 (1.1)	87.4 (2.3)	1.39 (0.95)	70 (89)	31 (47)	99.9 (0.1)
14	23.6 (4.1)	74.9 (14.4)	0.97 (0.72)	215 (77)	245 (330)	100.2 (0.2)
15	25.4 (4.8)	72.7 (14.8)	1.03 (1.13)	168 (90)	251 (322)	100.5 (0.1)
16	24.8 (3.1)	77.6 (12.1)	1.00 (0.91)	72 (101)	193 (231)	100.6 (0.1)
17	24.4 (2.3)	80.0 (8.9)	0.56 (0.52)	89 (88)	88 (131)	100.7 (0.1)
18	25.3 (4.2)	73.9 (14.6)	1.00 (0.94)	84 (72)	231 (308)	100.6 (0.1)
19	26.5 (4.9)	70.7 (16.3)	0.81 (0.72)	142 (81)	254 (328)	100.6 (0.1)
20	26.5 (4.5)	71.2 (17.2)	1.35 (1.22)	89 (74)	265 (337)	100.8 (0.1)
21	25.8 (3.1)	74.9 (12.1)	2.56 (1.25)	68 (20)	166 (252)	101.1 (0.1)
22	25.3 (3.8)	70.3 (10.5)	2.65 (1.35)	69 (30)	240 (324)	101.2 (0.1)
23	25.7 (3.7)	69.1 (13.7)	1.56 (1.30)	75 (45)	230 (314)	101.1 (0.2)
24	26.2 (4.4)	71.1 (16.4)	0.90 (0.72)	114 (72)	257 (347)	100.7 (0.2)
25						
26						
27	26.7 (2.0)	85.3 (6.6)	1.68 (0.98)	119 (46)	129 (223)	100.2 (0.1)
28	28.1 (2.6)	79.4 (11.6)	1.02 (0.70)	179 (47)	189 (290)	100.1 (0.1)
29	26.9 (3.8)	79.5 (13.1)	0.88 (1.01)	181 (72)	184 (280)	100.3 (0.1)
30	27.9 (4.0)	76.2 (14.6)	0.71 (0.65)	179 (58)	212 (298)	100.6 (0.1)
31	27.8 (3.3)	74.8 (12.0)	1.82 (1.43)	66 (82)	235 (309)	100.8 (0.1)
Avg	25.6	75.0	1.29	121	208	100.5
n	21	21	21	21	21	20
SD	1.5	5.3	0.54	55.2	63	0.4
Min	21.6	63.8	0.56	65.8	31	99.9
Max	28.1	87.4	2.65	258	292	101.2

ED_004549_00015929-00083

Table F2. Daily means (SD) of weather at Site NC3B for September, 2008

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	25.3 (3.8)	65.4 (19.7)	1.94 (1.52)	54 (57)	262 (326)	101.0 (0.1)
2	23.8 (5.7)	65.3 (20.3)	0.83 (0.98)	51 (108)	274 (338)	100.8 (0.1)
3	25.2 (6.2)	64.5 (19.1)	0.72 (0.75)	177 (91)	267 (330)	100.5 (0.1)
4	25.4 (5.6)	67.5 (16.5)	0.86 (0.83)	125 (65)	265 (334)	100.5 (0.1)
5	24.4 (2.2)	86.5 (4.5)	2.66 (1.77)	57 (29)	74 (119)	100.1 (0.3)
6						
7						
8						
9						
10						
11	24.8 (2.0)	84.7 (8.3)	1.82 (1.06)	32 (111)	104 (165)	101.3 (0.1)
12	26.5 (3.4)	78.9 (13.0)	0.74 (0.62)	116 (89)	186 (286)	101.1 (0.2)
13	27.8 (3.5)	77.3 (12.7)	1.06 (0.94)	223 (42)	202 (299)	100.7 (0.1)
14	28.2 (3.0)	76.8 (12.1)	1.86 (1.23)	211 (27)	216 (291)	100.3 (0.2)
15	27.9 (3.4)	74.9 (11.0)	2.07 (0.98)	256 (99)	185 (271)	100.3 (0.1)
16	22.9 (1.3)	84.2 (5.8)	2.72 (1.32)	30 (103)	90 (163)	100.7 (0.2)
17	21.3 (1.9)	76.5 (10.6)	2.49 (1.34)	20 (131)	117 (172)	101.0 (0.1)
18	21.1 (4.1)	69.5 (15.9)	1.78 (1.91)	10 (153)	240 (311)	101.0 (0.1)
19	20.7 (2.9)	70.5 (12.0)	3.55 (1.94)	29 (84)	207 (287)	101.3 (0.1)
20	19.6 (2.9)	78.1 (4.0)	3.14 (1.00)	14 (132)	91 (153)	101.2 (0.1)
21	21.1 (2.4)	77.5 (8.4)	1.85 (1.22)	17 (143)	146 (222)	101.3 (0.1)
22	21.2 (2.1)	74.6 (12.1)	2.29 (1.32)	20 (123)	128 (182)	101.3 (0.1)
23	20.4 (2.5)	73.5 (10.8)	4.74 (1.48)	30 (80)	162 (239)	101.4 (0.1)
24	18.4 (2.2)	65.3 (9.2)	5.97 (1.55)	21 (109)	169 (265)	101.2 (0.2)
25	18.4 (1.9)	85.1 (6.2)	7.08 (2.02)	19 (126)	28 (48)	100.1 (0.3)
26	23.5 (1.7)	81.6 (7.3)	1.79 (1.21)	140 (51)	104 (156)	100.0 (0.2)
27	23.8 (3.5)	77.3 (13.4)	0.53 (0.50)	153 (80)	172 (264)	100.2 (0.1)
28	23.4 (3.5)	77.2 (12.0)	0.99 (1.08)	234 (42)	173 (276)	100.3 (0.1)
29	23.7 (3.8)	76.3 (13.2)	0.78 (0.82)	37 (114)	183 (273)	100.5 (0.1)
30	22.8 (2.3)	83.4 (7.3)	0.73 (0.69)	171 (46)	90 (143)	100.2 (0.2)
Avg	23.3	75.7	2.20	51.9	165	100.7
n	25	25	25	25	25	25
SD	2.7	6.6	1.63	80.3	66	0.5
Min	18.4	64.5	0.53	9.5	28	100.0
Max	28.2	86.5	7.08	256	274	101.4

ED_004549_00015929-00084

Table F2. Daily means (SD) of weather at Site NC3B for October, 2008

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	21.5 (3.2)	79.6 (9.2)	1.47 (1.13)	261 (77)	119 (224)	99.6 (0.2)
2	16.4 (4.4)	64.9 (18.2)	1.29 (1.27)	303 (104)	232 (306)	100.2 (0.1)
3	17.0 (6.2)	67.1 (19.6)	0.73 (0.84)	171 (71)	224 (297)	100.7 (0.2)
4	19.0 (6.3)	68.3 (17.9)	0.64 (0.70)	132 (84)	204 (283)	101.2 (0.1)
5	18.8 (5.9)	72.6 (16.3)	0.56 (0.69)	63 (104)	197 (298)	101.4 (0.1)
6	20.3 (6.0)	69.6 (17.6)	1.04 (1.06)	37 (122)	213 (286)	101.3 (0.1)
7	19.0 (2.6)	72.3 (13.3)	2.08 (1.49)	56 (45)	197 (269)	101.5 (0.1)
8	19.5 (4.9)	72.0 (10.9)	0.97 (0.93)	118 (59)	177 (266)	101.0 (0.2)
9	22.3 (3.3)	80.0 (10.2)	0.65 (0.58)	113 (66)	83 (124)	100.6 (0.1)
10	22.2 (1.4)	84.5 (6.4)	2.90 (1.28)	48 (43)	63 (108)	100.9 (0.1)
11	21.1 (1.1)	85.6 (5.0)	3.65 (1.09)	44 (38)	38 (76)	101.3 (0.2)
12	21.1 (2.9)	77.5 (7.7)	3.37 (1.20)	48 (42)	128 (192)	101.8 (0.1)
13	20.5 (4.4)	75.6 (15.1)	1.47 (1.13)	30 (117)	202 (278)	101.8 (0.2)
14	20.3 (6.4)	69.9 (20.4)	0.69 (0.79)	28 (124)	207 (279)	101.3 (0.2)
15	21.7 (6.9)	66.5 (20.1)	0.65 (0.68)	244 (60)	201 (273)	101.0 (0.1)
16	22.6 (5.5)	66.0 (16.4)	1.00 (1.13)	228 (32)	195 (268)	100.7 (0.1)
17	20.3 (3.0)	81.7 (6.5)	1.99 (1.50)	37 (113)	80 (143)	100.5 (0.1)
18	12.8 (0.9)	84.0 (7.3)	3.98 (1.14)	7 (159)	35 (71)	100.7 (0.1)
19	12.1 (3.2)	65.2 (13.6)	3.39 (2.27)	3 (166)	200 (272)	101.3 (0.2)
20	10.7 (5.6)	65.5 (22.1)	0.88 (1.06)	5 (141)	203 (277)	101.5 (0.2)
21	14.4 (6.4)	65.5 (16.9)	1.16 (1.16)	243 (69)	189 (263)	101.0 (0.2)
22	11.3 (3.5)	60.6 (15.8)	2.04 (1.78)	14 (149)	201 (275)	101.6 (0.2)
23	11.4 (4.5)	70.7 (13.6)	2.52 (1.68)	37 (76)	186 (264)	102.2 (0.1)
24	15.6 (2.4)	80.4 (5.6)	2.58 (0.99)	71 (51)	27 (50)	101.4 (0.4)
25	21.6 (2.7)	82.1 (8.2)	2.23 (1.15)	191 (66)	76 (141)	100.2 (0.2)
26	16.2 (3.9)	70.8 (13.8)	0.96 (0.93)	339 (129)	183 (259)	100.5 (0.1)
27	11.7 (4.8)	70.6 (13.7)	1.97 (1.92)	298 (103)	119 (208)	100.4 (0.2)
28	8.1 (4.1)	58.6 (18.6)	2.84 (1.86)	284 (34)	172 (249)	100.7 (0.2)
29	8.1 (5.0)	58.6 (16.7)	1.51 (1.39)	246 (57)	171 (248)	100.9 (0.2)
30	7.4 (5.1)	63.8 (20.9)	1.34 (1.59)	22 (132)	181 (255)	102.1 (0.3)
31	9.5 (7.3)	61.4 (24.6)	0.48 (0.49)	43 (109)	179 (253)	102.3 (0.2)
Avg	16.6	71.3	1.71	23.4	157	101.1
n	31	31	31	31	31	31
SD	4.9	7.8	1.00	107	61	0.6
Min	7.4	58.6	0.48	2.5	27	99.6
Max	22.6	85.6	3.98	339	232	102.3

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Table F2. Daily means (SD) of weather at Site NC3B for November, 2008

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	11.9 (8.2)	60.3 (24.7)	0.57 (0.64)	167 (98)	177 (251)	101.7 (0.2)
2	15.1 (8.4)	63.2 (21.4)	0.88 (0.86)	48 (79)	110 (206)	101.6 (0.1)
3	16.3 (0.8)	88.9 (1.3)	3.72 (0.93)	26 (92)	11 (20)	101.5 (0.2)
4	17.3 (0.7)	88.3 (3.4)	4.30 (1.07)	26 (94)	26 (56)	100.8 (0.2)
5	17.6 (1.2)	79.4 (8.6)	3.75 (1.64)	341 (152)	56 (107)	100.4 (0.1)
6	18.0 (4.7)	64.9 (17.1)	1.99 (1.72)	282 (49)	165 (237)	100.3 (0.1)
7	18.3 (5.5)	68.1 (16.5)	0.78 (0.75)	208 (73)	161 (232)	100.3 (0.1)
8				216 (91)	94 (167)	99.7 (0.2)
9				335 (124)	89 (211)	100.0 (0.3)
10	9.4 (5.1)	67.0 (19.2)	0.92 (1.13)	3 (141)	165 (237)	101.0 (0.2)
11	8.4 (4.8)	71.0 (14.5)	1.29 (1.29)	28 (120)	154 (228)	101.6 (0.1)
12	12.0 (4.4)	64.7 (15.6)	1.91 (1.12)	48 (64)	106 (181)	101.5 (0.2)
13	18.2 (3.1)	87.5 (3.2)	1.39 (0.93)	54 (105)	23 (43)	100.6 (0.3)
14	18.0 (1.7)	90.9 (0.9)	0.91 (0.86)	124 (101)	6 (16)	100.3 (0.1)
15	20.9 (4.3)	79.6 (9.8)	3.77 (1.46)	217 (45)	84 (143)	99.5 (0.2)
16	10.4 (2.8)	58.9 (13.2)	2.47 (1.80)	274 (41)	158 (231)	100.4 (0.4)
17	7.5 (4.1)	65.1 (17.8)	0.98 (0.95)	333 (131)	144 (212)	100.9 (0.2)
18	5.3 (1.6)	50.1 (7.7)	3.84 (1.79)	331 (97)	108 (192)	101.1 (0.2)
19	3.2 (2.3)	50.5 (10.0)	1.77 (1.43)	294 (93)	155 (225)	101.3 (0.3)
20	7.8 (5.2)	55.7 (13.6)	1.42 (1.32)	252 (94)	147 (217)	100.5 (0.1)
21	5.0 (1.9)	49.4 (16.1)	4.16 (2.07)	340 (142)	113 (209)	101.2 (0.5)
22		45.3 (12.7)	1.42 (1.38)	302 (87)	152 (224)	102.4 (0.1)
23	5.7 (5.2)	52.4 (21.3)	0.55 (0.62)	160 (87)	150 (220)	102.1 (0.1)
24		61.9 (19.8)	1.13 (1.07)	162 (68)	108 (169)	101.3 (0.5)
25	10.3 (3.1)	56.1 (21.5)	2.77 (1.84)	280 (48)	146 (218)	100.4 (0.2)
26	6.1 (4.8)	57.6 (17.9)	0.96 (1.04)	237 (55)	146 (214)	100.8 (0.1)
27		63.1 (17.8)	0.60 (0.64)	155 (68)	139 (205)	100.7 (0.1)
28	11.8 (5.2)	64.2 (17.1)	0.67 (0.55)	211 (71)	118 (184)	100.3 (0.1)
29	9.4 (1.1)	80.2 (11.3)	1.93 (1.13)	46 (90)	10 (17)	100.1 (0.2)
30	13.3 (3.5)	89.6 (2.3)	2.06 (1.47)	128 (93)	13 (27)	99.0 (0.4)
Avg	11.9	66.9	1.89	313	108	100.8
n	25	28	28	30	30	30
SD	5.0	13.4	1.20	111	54	0.8
Min	3.2	45.3	0.55	3.1	6	99.0
Max	20.9	90.9	4.30	341	177	102.4

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Table F2. Daily means (SD) of weather at Site NC3B for December, 2008

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	10.4 (2.5)	61.3 (14.5)	3.15 (2.00)	218 (33)	144 (220)	99.9 (0.6)
2	5.6 (2.9)	66.9 (12.7)	1.01 (1.00)	246 (59)	93 (174)	101.2 (0.2)
3		66.9 (17.2)	0.66 (0.75)	151 (53)	140 (210)	101.7 (0.1)
4	8.3 (5.9)	65.9 (19.3)	1.13 (1.34)	190 (49)	129 (199)	101.3 (0.2)
5	8.7 (2.0)	74.6 (6.7)	1.93 (1.56)	9 (139)	20 (34)	101.2 (0.1)
6	7.1 (5.0)	72.0 (12.2)	0.87 (0.85)	52 (114)	113 (189)	100.7 (0.3)
7	5.5 (2.3)	62.9 (21.3)	2.12 (2.24)	297 (87)	138 (205)	100.7 (0.5)
8		57.2 (21.3)	0.55 (0.55)	111 (83)	131 (198)	101.8 (0.2)
9	13.7 (6.4)	73.0 (6.4)	1.98 (1.36)	136 (45)	60 (114)	101.5 (0.3)
10	20.6 (2.0)	85.5 (4.9)	2.64 (0.97)	179 (25)	44 (77)	100.7 (0.2)
11	20.7 (2.0)	88.0 (2.5)	2.67 (1.80)	174 (49)	19 (42)	99.7 (0.5)
12	12.0 (2.8)	62.7 (16.3)	3.63 (1.69)	293 (70)	125 (200)	99.9 (0.7)
13		59.3 (14.7)	1.57 (1.52)	6 (143)	134 (201)	101.8 (0.3)
14	10.5 (6.1)	72.3 (7.7)	1.17 (0.89)	93 (67)	94 (162)	102.1 (0.1)
15	17.9 (2.8)	76.6 (8.2)	1.19 (1.05)	150 (31)	51 (93)	101.8 (0.1)
16	13.4 (2.7)	89.3 (2.0)	1.52 (1.51)	47 (109)	29 (51)	101.5 (0.1)
17	15.9 (4.3)	86.8 (5.3)	0.82 (0.88)	176 (72)	57 (107)	101.2 (0.1)
18	16.8 (1.2)	90.4 (1.0)	1.01 (0.84)	76 (90)	14 (26)	101.3 (0.1)
19	19.0 (3.4)	78.8 (12.8)	2.57 (1.81)	207 (39)	64 (116)	100.6 (0.4)
20	18.6 (2.7)	78.8 (11.2)	1.31 (0.92)	233 (85)	84 (152)	
21	13.9 (3.4)	71.2 (20.6)	2.93 (1.15)	252 (68)	37 (77)	
22		41.5 (11.3)	3.26 (2.13)	309 (76)	136 (202)	
23		57.3 (14.0)	1.35 (0.83)	60 (72)	121 (192)	
24						
25	16.2 (3.4)	80.9 (7.0)	1.89 (1.42)	333 (121)	13 (25)	
26	9.7 (2.1)	81.2 (6.7)	2.10 (0.92)	35 (85)	43 (79)	
27	13.8 (3.4)	88.4 (5.2)	0.71 (0.61)	10 (121)	52 (106)	
28	21.6 (2.5)	75.5 (14.6)	2.32 (1.33)	208 (27)	123 (189)	101.1 (0.2)
29	13.4 (4.2)	73.5 (12.3)	1.40 (1.08)	302 (122)	56 (110)	100.8 (0.1)
30	11.5 (4.9)	53.8 (20.6)	1.43 (0.98)	237 (58)	137 (203)	100.6 (0.2)
31						
Avg	13.5	72.2	1.75	200	83	101.0
n	24	29	29	29	29	22
SD	4.7	11.9	0.84	98	45	0.7
Min	5.5	41.5	0.55	6.0	13	99.7
Max	21.6	90.4	3.63	333	144	102.1

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Table F2. Daily means (SD) of weather at Site NC3B for January, 2009

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1		43.1 (11.0)	1.73 (1.45)	32 (133)	142 (211)	101.6 (0.1)
2		75.9 (5.3)	0.89 (0.78)	292 (105)	26 (46)	100.8 (0.3)
3	8.5 (4.0)	76.6 (15.3)	0.70 (0.58)	306 (109)	90 (174)	100.8 (0.1)
4	12.3 (3.0)	85.3 (3.5)	0.58 (0.61)	178 (83)	25 (52)	100.9 (0.1)
5	16.9 (1.8)	84.6 (5.5)	1.60 (1.21)	234 (42)	58 (119)	100.6 (0.2)
6	18.3 (2.0)	82.0 (8.6)	1.58 (1.19)	195 (32)	28 (51)	99.9 (0.2)
7	17.7 (3.8)	63.4 (15.2)	5.61 (1.66)	222 (40)	33 (65)	98.9 (0.3)
8	9.3 (2.6)	54.7 (6.8)	2.41 (1.24)	250 (52)	50 (82)	99.6 (0.2)
9	5.4 (3.4)	50.4 (13.6)	1.64 (1.20)	341 (124)	143 (212)	101.1 (0.4)
10	11.7 (7.5)	65.2 (9.8)	2.60 (1.91)	179 (39)	120 (190)	101.0 (0.4)
11	15.0 (2.2)	75.9 (9.3)	2.51 (1.07)	296 (121)	42 (86)	100.2 (0.1)
12	6.1 (2.4)	63.1 (10.2)	2.27 (1.59)	26 (140)	143 (212)	101.2 (0.3)
13	4.9 (1.2)	81.6 (8.1)	1.74 (0.83)	356 (131)	5 (13)	100.5 (0.4)
14	3.3 (2.3)	66.9 (17.0)	1.22 (1.32)	243 (101)	154 (233)	101.0 (0.3)
15	5.5 (3.5)	54.3 (17.2)	2.87 (1.57)	298 (120)	140 (209)	101.3 (0.4)
16		35.9 (6.2)	3.18 (1.58)	358 (168)	153 (224)	102.5 (0.2)
17		45.8 (19.8)	1.00 (1.02)	97 (92)	154 (225)	102.2 (0.4)
18	4.6 (1.9)	77.7 (12.7)	1.72 (0.98)	206 (33)	8 (15)	100.4 (0.5)
19	6.8 (3.8)	77.6 (13.0)	1.16 (1.13)	214 (58)	94 (153)	99.4 (0.2)
20		85.3 (3.0)	3.07 (2.16)	347 (138)	19 (34)	99.4 (0.5)
21		67.1 (10.1)	1.21 (1.13)	279 (58)	120 (196)	100.8 (0.2)
22		54.9 (15.7)	1.55 (1.19)	209 (22)	159 (231)	101.1 (0.1)
23	9.4 (5.3)	62.5 (12.2)	2.24 (1.26)	212 (22)	143 (218)	100.8 (0.2)
24	12.2 (1.9)	67.1 (15.9)	2.12 (1.25)	287 (119)	35 (55)	100.7 (0.2)
25						
26	4.6 (1.7)	62.9 (8.7)	1.85 (0.82)	34 (100)	31 (52)	101.7 (0.1)
27	8.8 (2.4)	78.4 (6.3)	1.34 (0.95)	102 (94)	65 (120)	101.6 (0.2)
28	16.4 (5.2)	80.5 (10.3)	3.18 (2.58)	197 (52)	74 (132)	100.4 (0.4)
29	9.3 (2.8)	70.5 (11.2)	1.51 (1.15)	12 (144)	116 (189)	100.4 (0.1)
30	6.1 (3.9)	61.5 (21.1)	1.61 (1.32)	332 (118)	120 (197)	100.4 (0.1)
31	4.9 (3.4)	45.2 (12.5)	1.98 (1.61)	279 (69)	174 (248)	101.1 (0.2)
Avg	9.5	66.5	1.96	276	89	100.7
n	23	30	30	30	30	30
SD	4.6	13.6	0.97	101	54	0.8
Min	3.3	35.9	0.58	12.4	5	98.9
Max	18.3	85.3	5.61	358	174	102.5

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Table F2. Daily means (SD) of weather at Site NC3B for February, 2009

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	9.1 (5.0)	54.7 (13.3)	2.34 (1.48)	202 (21)	166 (240)	101.1 (0.2)
2	10.7 (4.6)	69.1 (12.3)	1.20 (1.02)	192 (34)	98 (151)	100.4 (0.4)
3	5.8 (2.3)	62.2 (19.9)	3.44 (2.28)	305 (102)	147 (237)	100.0 (0.2)
4	2.8 (1.3)	54.3 (19.9)	3.96 (2.23)	335 (141)	164 (248)	100.7 (0.5)
5		41.9 (9.2)	2.91 (1.95)	326 (110)	182 (257)	102.1 (0.2)
6		47.9 (19.5)	1.61 (1.49)	190 (63)	176 (250)	102.1 (0.2)
7	11.4 (7.1)	50.4 (14.3)	1.78 (1.15)	206 (31)	178 (252)	101.8 (0.2)
8	14.9 (6.0)	54.1 (14.4)	1.95 (1.42)	237 (57)	173 (244)	101.3 (0.2)
9	13.4 (4.7)	57.3 (20.1)	1.35 (1.33)	94 (60)	178 (257)	101.7 (0.2)
10	15.7 (4.6)	73.7 (9.8)	1.65 (1.10)	174 (33)	81 (132)	101.4 (0.2)
11	18.9 (3.7)	68.7 (12.9)	3.61 (2.22)	198 (27)	114 (179)	100.6 (0.5)
12	17.8 (2.8)	41.8 (15.5)	3.67 (1.83)	267 (29)	176 (247)	100.2 (0.2)
13	14.9 (4.4)	36.2 (8.9)	2.13 (1.86)	277 (69)	187 (263)	100.6 (0.1)
14	11.1 (2.3)	68.4 (10.4)	1.27 (0.89)	176 (74)	40 (70)	100.2 (0.2)
15	8.7 (2.2)	58.8 (13.7)	2.61 (1.90)	30 (113)	166 (246)	100.7 (0.2)
16	5.3 (1.8)	62.7 (10.9)	2.62 (1.68)	12 (149)	91 (167)	101.0 (0.2)
17		51.9 (14.5)	1.26 (1.10)	357 (121)	197 (270)	101.4 (0.2)
18	10.4 (4.4)	76.1 (11.2)	2.84 (1.81)	183 (39)	24 (55)	100.1 (0.6)
19	14.8 (1.9)	62.9 (24.4)	3.44 (1.89)	271 (55)		99.2 (0.2)
20						
21		52.3 (21.3)	1.35 (1.31)	127 (60)	210 (285)	101.4 (0.2)
22	9.1 (3.1)	50.9 (18.7)	3.82 (2.41)	268 (71)	120 (216)	100.8 (0.4)
23		43.8 (10.5)	2.28 (1.89)	314 (82)	212 (285)	101.7 (0.1)
24		45.4 (12.4)	1.60 (1.40)	17 (141)	214 (287)	101.9 (0.1)
25		54.0 (20.2)	0.62 (0.65)	100 (75)	136 (198)	101.9 (0.1)
26	10.5 (5.1)	65.7 (11.1)	0.87 (0.71)	161 (60)	53 (70)	101.6 (0.2)
27	16.2 (4.3)	63.0 (8.3)	2.59 (1.80)	177 (24)	131 (209)	100.9 (0.3)
28	13.1 (2.9)	86.8 (5.3)	1.98 (1.58)	92 (78)	12 (22)	100.4 (0.2)
Avg	11.7	57.6	2.25	220	139	101.0
n	20	27	27	27	26	27
SD	4.1	11.5	0.94	95.0	58	0.7
Min	2.8	36.2	0.62	12.1	12	99.2
Max	18.9	86.8	3.96	357	214	102.1

ED_004549_00015929-00089

Table F2. Daily means (SD) of weather at Site NC3B for March, 2009

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	5.0 (0.9)	90.4 (1.1)	4.28 (1.56)	39 (77)	6 (15)	99.7 (0.3)
2	1.8 (1.3)	75.2 (9.7)	4.17 (2.04)	337 (137)	56 (141)	100.4 (0.6)
3		52.9 (12.2)	3.10 (1.89)	3 (153)	231 (306)	101.7 (0.2)
4		55.2 (21.1)	0.85 (0.87)	206 (98)	218 (289)	102.0 (0.1)
5	10.1 (5.0)	52.1 (20.7)	1.40 (1.11)	183 (44)	231 (305)	102.0 (0.2)
6	15.0 (6.2)	59.6 (13.5)	2.88 (1.89)	204 (28)	218 (292)	101.5 (0.3)
7	18.8 (5.3)	61.3 (11.7)	2.23 (1.08)	215 (29)	215 (286)	101.2 (0.2)
8	20.5 (4.9)	58.6 (15.0)	3.13 (1.33)	221 (31)	220 (298)	100.7 (0.2)
9	21.7 (5.5)	49.6 (18.9)	2.64 (1.82)	269 (74)	234 (309)	100.6 (0.2)
10	16.7 (3.8)	59.7 (9.1)	2.85 (1.00)	104 (49)	212 (291)	101.2 (0.1)
11	21.3 (5.2)	65.4 (17.0)	1.92 (1.23)	200 (59)	185 (269)	100.9 (0.1)
12	14.9 (2.6)	38.8 (6.6)	3.94 (1.27)	47 (85)	172 (254)	101.6 (0.2)
13	7.2 (1.2)	71.6 (16.9)	3.91 (1.06)	35 (79)	20 (36)	101.6 (0.1)
14	7.6 (1.4)	90.6 (1.1)	2.32 (0.86)	44 (75)	24 (39)	101.3 (0.1)
15	10.6 (1.6)	90.9 (1.1)	1.15 (0.77)	18 (135)	20 (30)	101.0 (0.1)
16	11.6 (0.7)	90.5 (0.9)	1.85 (0.91)	31 (109)	25 (39)	101.1 (0.1)
17	11.3 (1.1)	83.6 (6.2)	3.52 (1.25)	14 (148)	58 (89)	101.2 (0.2)
18	12.6 (5.6)	65.6 (17.8)	0.85 (0.85)	21 (122)	251 (325)	101.3 (0.2)
19	15.4 (6.8)	61.6 (19.2)	2.16 (2.24)	253 (90)	237 (313)	100.8 (0.2)
20	11.2 (2.8)	63.1 (21.2)	3.31 (1.75)	25 (133)	243 (337)	101.2 (0.2)
21	8.2 (3.5)	59.7 (17.9)	2.37 (1.90)	38 (91)	260 (333)	102.0 (0.1)
22	10.0 (6.7)	57.2 (21.8)	1.01 (1.00)	54 (106)	261 (333)	101.8 (0.2)
23	12.4 (5.8)	59.1 (18.0)	1.67 (1.48)	357 (108)	248 (322)	101.4 (0.1)
24	9.7 (3.3)	52.6 (19.0)	2.73 (1.51)	70 (50)	232 (309)	101.7 (0.1)
25	10.5 (3.8)	58.7 (10.3)	1.70 (0.76)	88 (32)	82 (114)	101.5 (0.2)
26	16.7 (3.3)	84.7 (4.5)	2.47 (1.39)	169 (32)	63 (139)	100.6 (0.3)
27	19.3 (1.3)	85.9 (3.2)	1.20 (0.81)	174 (29)	49 (82)	100.2 (0.2)
28	21.3 (2.0)	84.5 (8.0)	1.84 (1.49)	190 (37)	95 (171)	99.8 (0.2)
29	20.5 (3.9)	62.0 (20.2)	4.51 (1.72)	223 (42)	230 (334)	99.1 (0.3)
30	14.2 (4.3)	51.1 (16.6)	2.47 (1.84)	309 (106)	275 (351)	100.3 (0.2)
31	15.1 (5.9)	57.8 (21.7)	1.27 (1.10)	115 (57)	226 (308)	100.8 (0.1)
Avg	13.5	66.1	2.44	50.4	164	101.0
n	29	31	31	31	31	31
SD	5.1	14.3	1.04	104	92	0.7
Min	1.8	38.8	0.85	2.9	6	99.1
Max	21.7	90.9	4.51	357	275	102.0

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Table F2. Daily means (SD) of weather at Site NC3B for April, 2009

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	17.3 (2.6)	79.4 (4.8)	0.96 (0.74)	122 (46)	68 (98)	100.4 (0.1)
2	17.7 (1.5)	88.5 (1.9)	1.48 (1.04)	111 (63)	26 (39)	99.9 (0.4)
3	21.5 (2.6)	61.8 (19.6)	4.26 (1.92)	235 (51)	250 (339)	98.8 (0.3)
4	17.4 (4.5)	46.3 (15.7)	2.17 (1.49)	273 (49)	284 (351)	100.0 (0.2)
5	19.6 (6.4)	56.0 (22.4)	2.00 (1.65)	191 (60)	266 (342)	100.0 (0.3)
6	20.4 (3.9)	58.3 (23.5)	4.62 (1.97)	236 (53)	168 (270)	98.7 (0.4)
7	9.4 (1.8)	44.8 (9.4)	3.31 (1.87)	279 (32)	164 (232)	99.4 (0.3)
8	10.1 (4.6)	48.3 (16.6)	2.63 (1.72)	241 (47)	277 (343)	100.1 (0.2)
9	16.2 (4.2)	47.4 (19.2)	2.49 (1.66)	241 (71)	285 (354)	100.2 (0.2)
10	20.3 (4.9)	61.6 (21.5)	3.33 (1.85)	190 (34)	238 (321)	100.4 (0.2)
11	18.2 (3.2)	67.8 (16.9)	3.33 (1.69)	295 (114)	168 (270)	100.0 (0.3)
12	12.7 (4.2)	56.9 (19.3)	1.81 (1.76)	16 (129)	298 (360)	101.1 (0.2)
13	13.4 (4.1)	74.1 (12.1)	1.44 (1.16)	126 (71)	62 (98)	100.9 (0.3)
14	18.5 (0.7)	85.8 (4.3)	1.40 (1.00)	152 (68)	35 (68)	99.7 (0.3)
15	16.1 (2.3)	76.0 (12.2)	3.30 (1.21)	354 (163)	140 (230)	100.0 (0.4)
16	12.9 (3.6)	50.0 (18.2)	4.47 (1.70)	25 (127)	292 (360)	101.2 (0.2)
17	13.2 (6.6)	48.0 (16.7)	1.33 (1.20)	4 (127)	300 (361)	101.6 (0.2)
18	17.6 (7.0)	49.7 (20.5)	1.70 (1.24)	223 (35)	296 (363)	101.0 (0.2)
19	18.4 (5.0)	63.2 (12.2)	1.94 (1.31)	206 (33)	174 (242)	100.5 (0.2)
20	21.1 (3.5)	73.5 (12.2)	2.40 (1.60)	183 (29)	166 (258)	99.8 (0.2)
21	19.7 (3.6)	62.4 (22.2)	1.72 (1.56)	228 (70)	252 (342)	99.7 (0.1)
22	15.2 (2.8)	50.4 (23.6)	2.98 (2.89)	251 (62)	279 (355)	100.1 (0.3)
23	17.8 (7.7)	50.9 (20.5)	1.63 (1.82)	234 (79)	304 (362)	100.8 (0.2)
24	21.7 (7.4)	68.4 (16.9)	1.74 (1.35)	154 (59)	252 (337)	101.4 (0.1)
25	24.9 (4.6)	68.0 (17.9)	2.18 (0.99)	200 (34)	280 (346)	101.6 (0.1)
26	24.4 (5.3)	64.3 (21.8)	1.64 (0.99)	213 (46)	293 (355)	101.7 (0.1)
27	23.1 (5.7)	61.7 (21.4)	1.25 (1.12)	194 (45)	297 (356)	101.9 (0.1)
28	21.8 (5.4)	64.1 (18.1)	1.46 (1.35)	200 (47)	289 (352)	101.7 (0.2)
29	22.2 (5.0)	65.0 (19.4)	1.46 (1.23)	204 (74)	260 (322)	101.5 (0.1)
30	19.8 (4.1)	78.1 (11.8)	1.77 (0.81)	112 (71)	185 (286)	101.5 (0.2)
Avg	18.1	62.4	2.27	211	222	100.5
n	30	30	30	30	30	30
SD	3.9	11.8	0.98	79.0	84	0.9
Min	9.4	44.8	0.96	4.4	26	98.7
Max	24.9	88.5	4.62	354	304	101.9

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Table F2. Daily means (SD) of weather at Site NC3B for May, 2009

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	23.4 (4.0)	71.6 (16.8)	2.64 (1.45)	200 (33)	233 (327)	100.9 (0.3)
2	24.4 (3.2)	67.2 (13.3)	2.73 (1.32)	207 (37)	214 (297)	100.4 (0.1)
3	25.2 (3.7)	66.6 (15.8)	3.05 (1.25)	198 (34)	235 (299)	100.3 (0.1)
4	24.7 (3.6)	69.7 (15.2)	2.90 (1.43)	203 (40)	203 (284)	100.4 (0.1)
5	21.8 (2.4)	83.7 (4.6)	1.60 (1.14)	168 (58)	86 (160)	100.5 (0.1)
6	24.9 (2.7)	73.8 (12.7)	3.18 (1.28)	186 (27)	209 (304)	100.5 (0.1)
7	23.4 (2.5)	80.6 (9.1)	2.14 (1.07)	190 (47)	174 (299)	100.2 (0.2)
8	24.9 (3.7)	75.3 (11.4)	1.72 (1.13)	203 (59)	218 (279)	100.2 (0.1)
9	27.5 (3.8)	63.8 (16.5)	3.04 (1.70)	225 (38)	301 (356)	100.1 (0.1)
10	23.6 (2.9)	61.3 (15.0)	1.32 (1.20)	338 (133)	267 (333)	100.5 (0.2)
11	16.8 (2.5)	77.7 (6.9)	2.38 (2.05)	30 (122)	77 (117)	100.7 (0.1)
12	17.3 (5.4)	66.9 (17.4)	1.33 (1.31)	17 (131)	309 (366)	101.1 (0.1)
13	19.5 (4.4)	63.4 (16.9)	1.34 (1.14)	76 (70)	240 (297)	101.5 (0.1)
14	21.0 (3.1)	83.6 (4.7)	1.32 (0.97)	117 (66)	105 (143)	101.3 (0.1)
15	23.2 (2.8)	81.1 (10.0)	1.12 (0.91)	113 (72)	163 (237)	101.2 (0.1)
16	24.0 (2.3)	81.2 (9.5)	1.64 (0.89)	187 (30)	173 (243)	
17	19.8 (4.9)	83.3 (8.0)	3.59 (2.09)	296 (119)	127 (239)	
18	13.2 (2.0)	73.6 (12.6)	4.01 (1.78)	33 (78)	141 (225)	
19	14.9 (3.3)	60.3 (12.1)	4.42 (1.96)	39 (53)	235 (277)	
20	18.4 (5.4)	74.9 (9.6)	3.35 (1.30)	48 (60)	257 (332)	
21	21.7 (4.0)	68.6 (14.7)	1.90 (1.29)	78 (60)	289 (342)	
22	23.2 (4.1)	72.2 (12.7)	1.30 (1.19)	99 (74)	252 (320)	
23	23.6 (4.0)	73.4 (12.2)	1.44 (1.29)	136 (68)	220 (306)	
24	24.5 (2.9)	74.7 (11.1)	1.57 (1.30)	152 (45)	196 (245)	
25	24.8 (3.2)	73.6 (11.9)	1.37 (1.22)	150 (32)	214 (277)	
26	24.0 (1.6)	80.8 (6.5)	1.19 (0.96)	139 (48)	132 (166)	
27	25.7 (3.9)	69.3 (17.7)	1.15 (0.91)	29 (130)	293 (362)	
28	25.1 (2.9)	78.2 (9.9)	1.12 (0.83)	186 (47)	214 (295)	
29	25.1 (3.7)	76.8 (11.7)	2.02 (1.21)	209 (40)	225 (331)	
30	24.0 (4.0)	68.7 (16.1)	1.55 (1.45)	338 (127)	283 (337)	
31	26.2 (5.1)	64.9 (19.7)	1.35 (1.31)	241 (74)	310 (362)	100.1 (0.1)
Avg	22.6	72.9	2.09	152	213	100.6
n	31	31	31	31	31	16
SD	3.4	6.7	0.93	85.6	63	0.4
Min	13.2	60.3	1.12	17.3	77	100.1
Max	27.5	83.7	4.42	338	310	101.5

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Table F2. Daily means (SD) of weather at Site NC3B for June, 2009

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	25.0 (4.1)	76.4 (14.1)	1.33 (1.22)	103 (89)	246 (357)	100.6 (0.2)
2	26.7 (4.0)	70.1 (16.3)	1.72 (1.12)	203 (39)	304 (353)	100.8 (0.1)
3	26.5 (3.7)	70.7 (17.6)	2.13 (1.07)	204 (36)	280 (350)	100.6 (0.2)
4	25.5 (3.4)	74.7 (15.5)	1.39 (1.07)	188 (36)	190 (295)	100.2 (0.2)
5	24.6 (2.9)	79.9 (12.0)	2.61 (1.45)	200 (68)	202 (300)	99.8 (0.1)
6	21.0 (1.1)	86.4 (3.7)	2.08 (0.99)	39 (77)	63 (109)	100.4 (0.2)
7	24.2 (2.7)	80.1 (8.9)	1.33 (0.90)	85 (70)	184 (256)	100.6 (0.1)
8	26.3 (3.8)	74.9 (13.3)	1.15 (1.02)	163 (72)	304 (374)	100.4 (0.1)
9	26.1 (3.9)	78.3 (12.9)	1.11 (1.17)	190 (74)	181 (291)	100.3 (0.1)
10	25.1 (4.1)	75.5 (13.5)	1.30 (0.91)	211 (104)	281 (346)	100.2 (0.1)
11	27.0 (3.5)	74.3 (12.3)	1.41 (1.00)	195 (46)	240 (318)	100.1 (0.1)
12	27.4 (4.4)	73.7 (12.3)	1.65 (1.27)	231 (51)	270 (335)	99.9 (0.1)
13	28.6 (4.3)	69.1 (15.4)	1.09 (0.91)	243 (74)	259 (315)	100.0 (0.1)
14	27.0 (3.7)	74.0 (12.3)	1.48 (1.18)	23 (126)	256 (325)	100.2 (0.1)
15	25.5 (3.8)	77.1 (13.7)	1.30 (1.08)	105 (64)	236 (324)	100.4 (0.1)
16	22.0 (0.6)	87.5 (1.9)	1.82 (1.15)	59 (64)	44 (74)	100.6 (0.1)
17	24.7 (2.6)	79.6 (9.0)	1.42 (0.84)	101 (77)	147 (204)	100.7 (0.1)
18	27.1 (3.9)	76.9 (11.9)	1.25 (0.88)	195 (59)	221 (311)	100.2 (0.2)
19	28.8 (3.6)	70.0 (15.5)	1.60 (1.48)	256 (98)	285 (329)	100.0 (0.1)
20	30.7 (4.1)	66.4 (15.4)	1.75 (1.17)	247 (35)	265 (313)	99.7 (0.2)
21	29.3 (2.6)	56.2 (12.1)	2.92 (2.17)	312 (99)	283 (358)	99.4 (0.1)
22	26.3 (3.8)	64.1 (15.0)	1.71 (1.69)	338 (135)	296 (358)	99.5 (0.1)
23	26.0 (3.6)	70.0 (15.4)	1.63 (1.31)	63 (108)	278 (348)	99.6 (0.1)
24	27.5 (4.9)	66.3 (17.5)	0.90 (0.83)	254 (90)	288 (359)	99.9 (0.1)
25	28.6 (4.6)	63.2 (19.7)	0.93 (0.81)	346 (119)	308 (359)	100.0 (0.1)
26	26.4 (3.6)	78.2 (10.3)	1.77 (1.41)	195 (43)	203 (288)	99.9 (0.1)
27	28.7 (4.5)	68.5 (14.6)	1.50 (1.07)	315 (119)	267 (334)	99.7 (0.1)
28	27.7 (4.6)	61.1 (19.0)	0.94 (0.82)	271 (108)	303 (356)	99.6 (0.2)
29	29.1 (4.1)	58.6 (18.3)	1.19 (1.03)	274 (97)	274 (337)	99.2 (0.1)
30	28.2 (5.3)	54.1 (20.3)	1.05 (0.93)	250 (104)	311 (365)	99.2 (0.1)
Avg	26.6	71.9	1.52	220	242	100.1
n	30	30	30	30	30	30
SD	2.1	8.0	0.46	87.3	66	0.4
Min	21.0	54.1	0.90	22.9	44	99.2
Max	30.7	87.5	2.92	346	311	100.8

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Table F2. Daily means (SD) of weather at Site NC3B for July, 2009

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	28.4 (5.5)	56.9 (19.5)	1.80 (1.60)	220 (66)	291 (353)	99.5 (0.1)
2	27.9 (4.3)	65.5 (18.0)	0.97 (0.97)	286 (100)	236 (335)	99.9 (0.1)
3	25.7 (3.7)	60.2 (15.5)	1.79 (1.28)	343 (146)	310 (365)	100.4 (0.1)
4	25.2 (5.2)	60.7 (18.5)	1.05 (1.09)	287 (111)	308 (361)	100.5 (0.1)
5	27.5 (3.6)	72.9 (10.7)	1.59 (1.13)	194 (33)	148 (201)	100.1 (0.2)
6	25.7 (1.4)	82.2 (4.0)	1.64 (0.92)	312 (107)	90 (136)	99.8 (0.1)
7	26.8 (3.3)	69.7 (17.2)	1.30 (1.10)	51 (109)	273 (341)	99.8 (0.1)
8	26.6 (4.3)	70.4 (16.9)	0.91 (0.87)	102 (101)	229 (310)	100.1 (0.1)
9	24.8 (1.8)	71.4 (10.6)	1.66 (0.97)	50 (76)	126 (195)	100.7 (0.3)
10	24.5 (4.0)	64.5 (14.9)	1.63 (1.44)	53 (90)	300 (352)	101.3 (0.1)
11	25.4 (4.4)	66.7 (13.2)	1.30 (0.93)	195 (78)	239 (311)	101.2 (0.2)
12	28.3 (4.5)	62.5 (10.9)	2.43 (1.05)	226 (34)	267 (334)	100.6 (0.2)
13	24.3 (0.9)	81.8 (6.2)	1.00 (0.70)	160 (96)	47 (60)	100.3 (0.1)
14	25.5 (3.5)	75.7 (14.9)	1.66 (1.53)	13 (132)	268 (341)	100.7 (0.2)
15	26.6 (4.6)	63.1 (22.4)	0.90 (0.83)	100 (101)	298 (356)	100.9 (0.1)
16	26.4 (3.9)	76.9 (14.2)	1.30 (1.23)	195 (41)	173 (279)	100.4 (0.2)
17	26.9 (4.3)	78.8 (12.5)	2.07 (1.71)	202 (56)	200 (266)	99.9 (0.2)
18	27.0 (3.0)	72.8 (14.2)	1.25 (0.98)	283 (109)	223 (291)	100.2 (0.2)
19	26.6 (3.2)	64.7 (9.2)	1.89 (1.20)	50 (102)	244 (325)	100.6 (0.1)
20	25.9 (2.4)	75.8 (12.5)	0.80 (0.68)	137 (51)	124 (184)	100.6 (0.1)
21	25.4 (4.2)	73.4 (16.3)	1.11 (0.85)	101 (99)	220 (322)	100.7 (0.1)
22	25.7 (4.0)	78.3 (12.1)	0.84 (0.84)	118 (73)	214 (321)	100.7 (0.1)
23	26.4 (3.1)	80.9 (11.6)	1.17 (1.07)	202 (79)	213 (319)	100.3 (0.1)
24	26.6 (2.8)	79.2 (9.3)	1.37 (1.09)	205 (80)	186 (274)	100.2 (0.1)
25	27.8 (3.7)	74.4 (11.3)	1.63 (1.25)	171 (28)	249 (318)	100.4 (0.1)
26	29.5 (4.0)	67.7 (16.7)	2.73 (0.98)	193 (26)	285 (343)	100.4 (0.1)
27	26.2 (3.5)	79.5 (9.5)	2.07 (1.45)	191 (47)	183 (255)	100.5 (0.1)
28	26.7 (3.9)	79.0 (12.8)	1.72 (1.18)	179 (42)	254 (342)	100.5 (0.1)
29	27.0 (2.4)	79.9 (8.9)	2.47 (1.36)	196 (25)	177 (228)	100.3 (0.1)
30	27.8 (3.9)	76.5 (13.3)	1.79 (0.95)	214 (36)	245 (330)	100.5 (0.1)
31	27.4 (4.3)	77.6 (13.3)	2.44 (1.48)	197 (34)	255 (337)	100.6 (0.1)
Avg	26.5	72.2	1.56	182	222	100.4
n	31	31	31	31	31	31
SD	1.2	7.1	0.51	81.1	64	0.4
Min	24.3	56.9	0.80	13.4	47	99.5
Max	29.5	82.2	2.73	343	310	101.3

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Table F2. Daily means (SD) of weather at Site NC3B for August, 2009

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	27.8 (3.1)	77.6 (11.4)	1.59 (1.12)	194 (35)	210 (313)	100.7 (0.1)
2	26.7 (1.9)	84.1 (7.5)	2.08 (1.19)	200 (41)	116 (192)	100.4 (0.1)
3	26.7 (2.5)	82.4 (9.0)	0.89 (0.75)	189 (53)	156 (262)	100.5 (0.1)
4	28.2 (4.2)	73.0 (14.8)	1.06 (0.94)	167 (54)	257 (322)	100.5 (0.1)
5	27.4 (3.5)	77.4 (12.1)	1.67 (1.18)	185 (52)	232 (323)	100.4 (0.1)
6	28.0 (2.5)	75.6 (11.2)	1.54 (1.28)	243 (82)	224 (286)	100.3 (0.1)
7	27.0 (3.7)	69.0 (17.2)	1.11 (0.90)	89 (89)	268 (341)	100.9 (0.2)
8	27.2 (4.6)	68.5 (15.0)	1.04 (0.86)	177 (78)	254 (322)	101.2 (0.1)
9	28.8 (4.8)	68.3 (15.0)	1.42 (1.05)	223 (42)	260 (330)	101.1 (0.2)
10	30.6 (4.9)	63.3 (14.6)	1.52 (0.98)	231 (52)	251 (327)	100.7 (0.2)
11	28.7 (4.7)	71.4 (15.0)	1.99 (1.52)	223 (76)	218 (311)	100.3 (0.1)
12	26.4 (2.4)	84.1 (7.7)	0.66 (0.69)	211 (68)	101 (185)	100.3 (0.1)
13	25.7 (1.4)	84.7 (5.6)	0.62 (0.56)	4 (121)	73 (108)	100.7 (0.1)
14	25.7 (2.0)	82.9 (8.3)	0.74 (0.68)	108 (88)	142 (219)	100.9 (0.1)
15	26.4 (3.2)	79.3 (11.8)	0.75 (0.68)	40 (123)	188 (299)	101.0 (0.1)
16	27.6 (3.3)	76.2 (13.5)	0.63 (0.63)	144 (101)	193 (256)	101.1 (0.1)
17	28.2 (3.9)	74.1 (14.6)	0.69 (0.54)	201 (78)	217 (302)	101.2 (0.1)
18	28.6 (3.5)	73.5 (13.5)	1.21 (0.97)	191 (45)	232 (302)	101.0 (0.1)
19	28.7 (3.8)	73.4 (15.1)	1.45 (1.05)	197 (43)	263 (342)	100.7 (0.1)
20	29.0 (3.6)	74.4 (14.1)	1.77 (1.22)	196 (36)	240 (334)	100.6 (0.1)
21	27.5 (1.7)	83.4 (5.9)	1.52 (0.73)	176 (27)	102 (146)	100.3 (0.2)
22	26.1 (3.2)	83.8 (9.4)	1.21 (0.98)	187 (76)	117 (210)	99.9 (0.1)
23	25.3 (3.1)	83.4 (7.6)	0.80 (0.67)	117 (97)	135 (210)	100.1 (0.1)
24	25.7 (3.7)	79.2 (11.3)	0.88 (0.90)	43 (117)	200 (282)	100.6 (0.1)
25	26.8 (4.2)	74.5 (14.0)	0.80 (0.81)	105 (93)	212 (305)	100.8 (0.1)
26	27.4 (4.5)	74.1 (15.4)	0.66 (0.65)	161 (82)	205 (300)	100.8 (0.1)
27	27.7 (4.4)	73.6 (15.7)	0.83 (0.94)	184 (87)	223 (302)	100.7 (0.1)
28	26.6 (2.9)	82.0 (10.2)	1.15 (0.92)	37 (125)	130 (209)	100.4 (0.2)
29	27.3 (2.6)	78.8 (11.4)	1.37 (0.92)	271 (90)	175 (286)	99.9 (0.1)
30	27.8 (3.3)	76.5 (14.4)	1.22 (0.84)	222 (63)	194 (289)	100.2 (0.1)
31						
Avg	27.4	76.7	1.16	181	193	100.6
n	30	30	30	30	30	30
SD	1.2	5.5	0.41	65.8	55	0.4
Min	25.3	63.3	0.62	4.1	73	99.9
Max	30.6	84.7	2.08	271	268	101.2

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Table F2. Daily means (SD) of weather at Site NC3B for September, 2009

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	22.3 (2.2)	76.1 (10.5)	3.09 (1.49)	28 (98)	171 (272)	101.0 (0.1)
2	21.8 (2.6)	73.2 (7.6)	3.36 (1.22)	26 (100)	169 (237)	101.0 (0.1)
3	23.1 (2.4)	74.6 (6.0)	3.06 (1.40)	10 (155)	153 (208)	100.6 (0.1)
4	23.3 (3.8)	69.4 (17.0)	1.31 (1.31)	11 (143)	216 (295)	100.6 (0.1)
5	24.1 (5.3)	69.2 (15.4)	1.07 (1.08)	42 (121)	219 (281)	100.9 (0.1)
6	24.1 (3.4)	69.4 (14.1)	2.19 (1.69)	46 (87)	192 (252)	101.0 (0.1)
7	23.5 (1.0)	84.9 (2.6)	3.48 (1.12)	32 (88)	58 (91)	100.5 (0.2)
8	24.2 (2.0)	80.1 (7.9)	3.45 (1.54)	360 (169)	164 (268)	100.3 (0.1)
9	23.0 (3.2)	72.8 (14.7)	1.89 (1.41)	9 (151)	220 (298)	100.7 (0.1)
10	20.8 (1.6)	82.2 (4.7)	2.48 (1.36)	7 (160)	45 (69)	101.0 (0.1)
11	21.9 (3.1)	71.3 (11.5)	1.49 (1.14)	335 (127)	210 (291)	100.8 (0.2)
12	23.5 (4.6)	75.4 (13.7)	0.98 (0.92)	231 (79)	165 (261)	100.4 (0.2)
13	23.4 (3.5)	72.3 (14.4)	1.70 (1.38)	12 (136)	210 (299)	100.3 (0.1)
14	23.6 (5.3)	67.4 (18.7)	1.16 (1.23)	330 (124)	245 (322)	100.5 (0.1)
15	24.8 (5.4)	67.5 (17.4)	0.78 (0.72)	163 (81)	188 (264)	100.5 (0.1)
16	24.9 (2.9)	75.4 (9.7)	0.99 (1.06)	33 (116)	112 (190)	100.5 (0.1)
17	23.9 (1.9)	81.4 (8.5)	1.18 (0.86)	23 (134)	98 (164)	100.8 (0.1)
18	23.7 (2.8)	78.8 (10.5)	0.86 (0.63)	19 (132)	112 (153)	100.8 (0.1)
19	24.4 (3.5)	75.1 (11.9)	1.40 (1.20)	58 (86)	125 (202)	101.0 (0.1)
20	23.2 (3.4)	74.5 (12.3)	1.99 (1.26)	61 (42)	176 (262)	101.2 (0.1)
21	23.8 (4.2)	72.6 (13.3)	1.57 (1.07)	53 (78)	213 (298)	101.1 (0.1)
22	25.1 (1.3)	88.2 (2.7)	1.51 (0.90)	67 (59)	66 (94)	101.0 (0.1)
23	25.9 (2.4)	83.3 (8.6)	0.90 (0.86)	121 (89)	145 (243)	101.0 (0.1)
24	26.7 (3.9)	76.6 (12.5)	0.67 (0.57)	209 (77)	184 (279)	100.8 (0.1)
25	25.2 (3.6)	81.2 (8.7)	2.15 (1.67)	331 (117)	137 (225)	100.7 (0.2)
26	21.6 (1.5)	87.3 (3.6)	2.40 (0.95)	50 (82)	42 (74)	100.6 (0.4)
27	24.1 (2.7)	80.5 (12.2)	1.41 (1.25)	242 (54)	136 (239)	99.6 (0.1)
28	23.9 (4.5)	69.1 (15.0)	2.18 (1.58)	218 (47)	222 (291)	99.5 (0.3)
29	19.4 (4.3)	51.6 (17.4)	1.70 (1.40)	297 (69)	237 (309)	99.9 (0.2)
30	16.2 (4.8)	69.5 (16.8)	1.18 (1.34)	328 (124)	201 (280)	100.4 (0.1)
Avg	23.3	75.0	1.79	17.1	161	100.6
n	30	30	30	30	30	30
SD	2.0	7.2	0.83	124	57	0.4
Min	16.2	51.6	0.67	7.2	42	99.5
Max	26.7	88.2	3.48	360	245	101.2

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Table F2. Daily means (SD) of weather at Site NC3B for October, 2009

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	18.0 (5.5)	67.4 (17.4)	0.90 (0.88)	26 (111)	210 (290)	100.6 (0.1)
2	19.5 (5.0)	78.7 (10.7)	0.81 (0.82)	139 (59)	104 (160)	100.3 (0.2)
3	23.5 (3.8)	72.2 (15.5)	1.10 (0.92)	209 (50)	197 (279)	100.1 (0.1)
4	19.5 (3.7)	65.2 (18.5)	0.96 (1.07)	281 (94)	150 (218)	100.5 (0.2)
5	17.6 (0.6)	84.8 (6.4)	1.18 (0.88)	49 (102)	33 (56)	100.7 (0.2)
6	20.0 (1.8)	88.0 (3.5)	1.68 (0.99)	18 (108)	45 (77)	100.2 (0.1)
7	22.8 (4.5)	75.3 (14.2)	2.38 (1.43)	268 (82)	131 (220)	100.1 (0.2)
8	17.8 (4.1)	60.6 (16.0)	1.19 (1.26)	71 (105)	214 (286)	101.0 (0.2)
9	23.6 (6.6)	75.8 (10.0)	1.91 (1.41)	178 (65)	155 (235)	100.5 (0.3)
10	25.3 (2.7)	81.4 (8.1)	2.37 (1.40)	260 (104)	114 (204)	100.3 (0.2)
11	18.5 (1.6)	79.4 (3.9)	2.37 (1.45)	37 (89)	68 (115)	101.1 (0.2)
12	16.8 (0.6)	83.4 (4.6)	2.02 (1.00)	37 (96)	28 (38)	101.2 (0.1)
13	18.9 (4.1)	77.7 (14.3)	1.98 (1.30)	344 (147)	185 (270)	100.9 (0.1)
14	14.0 (1.8)	84.0 (6.1)	3.08 (1.14)	39 (82)	29 (45)	100.8 (0.2)
15	13.5 (1.9)	88.2 (2.9)	2.08 (1.23)	325 (130)	45 (68)	99.8 (0.3)
16	13.5 (1.3)	85.1 (3.5)	3.13 (1.07)	8 (152)	50 (82)	99.8 (0.2)
17	12.6 (2.4)	73.6 (10.6)	3.10 (1.02)	353 (164)	149 (253)	100.2 (0.1)
18	9.5 (1.0)	76.5 (3.5)	3.14 (1.34)	344 (143)	44 (67)	100.7 (0.3)
19	10.4 (4.0)	66.4 (15.4)	2.17 (1.64)	352 (142)	197 (268)	101.3 (0.1)
20	11.9 (7.3)	66.4 (20.7)	0.61 (0.67)	225 (70)	196 (268)	101.4 (0.1)
21	14.7 (7.5)	65.2 (20.3)	0.54 (0.55)	165 (83)	186 (261)	101.3 (0.1)
22	18.2 (7.3)	71.9 (14.5)	1.02 (1.06)	171 (46)	176 (257)	100.9 (0.2)
23	22.9 (4.2)	70.8 (14.6)	1.94 (1.46)	164 (29)	157 (235)	100.4 (0.2)
24	25.0 (2.7)	73.7 (9.9)	2.92 (1.75)	190 (42)	124 (184)	99.9 (0.2)
25	17.4 (2.8)	68.4 (6.9)	3.02 (1.16)	15 (135)	122 (210)	100.6 (0.3)
26	14.6 (1.5)	83.9 (7.0)	3.27 (1.12)	23 (111)	22 (43)	100.9 (0.1)
27	17.2 (1.2)	88.2 (2.5)	1.30 (0.63)	5 (130)	32 (49)	100.5 (0.2)
28	23.2 (3.8)	76.5 (15.9)	2.14 (1.49)	234 (61)	131 (211)	100.1 (0.2)
29	17.7 (2.8)	75.4 (9.0)	2.27 (1.31)	37 (99)	137 (224)	101.0 (0.2)
30	16.9 (1.8)	85.8 (4.5)	1.85 (1.02)	37 (93)	65 (106)	101.1 (0.2)
31	21.7 (2.5)	87.7 (2.5)	1.40 (1.04)	170 (65)	58 (89)	100.4 (0.2)
Avg	18.0	76.7	1.93	11.9	115	100.6
n	31	31	31	31	31	31
SD	4.2	7.9	0.82	119	63	0.4
Min	9.5	60.6	0.54	4.6	22	99.8
Max	25.3	88.2	3.27	353	214	101.4

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Table F2. Daily means (SD) of weather at Site NC3B for November, 2009

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	18.6 (4.4)	88.0 (2.3)	2.96 (1.79)	48 (112)	28 (57)	100.3 (0.2)
2	13.5 (1.4)	83.4 (4.8)	2.91 (1.50)	7 (155)	36 (62)	100.8 (0.1)
3	14.2 (4.8)	73.0 (16.7)	0.72 (0.84)	324 (110)	168 (240)	101.0 (0.1)
4	15.0 (4.4)	70.1 (11.6)	1.33 (1.08)	91 (95)	162 (233)	101.3 (0.2)
5	14.2 (4.5)	62.1 (21.8)	1.45 (1.57)	296 (86)	166 (240)	101.1 (0.1)
6	9.3 (5.6)	61.1 (19.6)	1.17 (1.47)	24 (128)	171 (244)	101.5 (0.1)
7	10.7 (7.2)	64.6 (20.2)	0.80 (0.88)	155 (100)	163 (234)	101.5 (0.2)
8	14.9 (7.0)	67.5 (19.3)	0.69 (0.78)	196 (73)	158 (228)	101.5 (0.1)
9	16.8 (6.6)	74.3 (11.6)	0.61 (0.57)	71 (66)	83 (149)	101.7 (0.1)
10	19.5 (1.9)	82.2 (7.4)	1.69 (1.15)	43 (93)	32 (55)	101.1 (0.3)
11	16.0 (1.5)	91.6 (0.4)	5.17 (1.44)	35 (82)	3 (8)	100.0 (0.3)
12	12.2 (1.5)	89.4 (3.0)	6.68 (1.59)	356 (169)	16 (25)	99.1 (0.1)
13	12.7 (1.0)	87.2 (2.7)	5.78 (1.52)	352 (164)	16 (28)	99.3 (0.2)
14	14.4 (1.6)	85.4 (3.5)	2.81 (1.86)	343 (144)	36 (56)	100.0 (0.2)
15	15.1 (4.3)	81.7 (12.2)	1.16 (0.98)	347 (147)	125 (200)	100.4 (0.1)
16	14.9 (6.3)	74.9 (16.1)	0.61 (0.83)	28 (146)	151 (222)	100.6 (0.1)
17	14.0 (3.6)	78.5 (8.5)	1.82 (1.39)	43 (70)	101 (170)	100.9 (0.1)
18	17.4 (2.6)	86.4 (3.8)	2.71 (0.92)	49 (44)	35 (73)	101.0 (0.1)
19	21.4 (2.1)	84.6 (7.6)	1.14 (0.92)	114 (79)	82 (151)	100.7 (0.1)
20	17.1 (1.8)	79.5 (10.4)	2.58 (1.42)	8 (156)	129 (211)	100.7 (0.1)
21	12.4 (2.2)	74.6 (11.8)	2.19 (1.80)	22 (117)	108 (167)	100.9 (0.1)
22	11.2 (3.5)	77.9 (11.3)	2.19 (1.66)	32 (108)	88 (157)	101.0 (0.1)
23	14.4 (0.9)	90.7 (0.6)	2.70 (1.06)	16 (142)	12 (20)	100.8 (0.1)
24	13.7 (0.6)	86.0 (3.9)	1.38 (0.98)	316 (109)	19 (34)	100.9 (0.1)
25	12.6 (0.9)	84.1 (4.3)	0.80 (0.74)	235 (69)	31 (51)	100.6 (0.1)
26	11.1 (2.6)	84.2 (6.3)	1.00 (1.47)	274 (75)	95 (167)	99.9 (0.3)
27	9.0 (2.9)	62.4 (14.5)	2.65 (1.60)	285 (64)	140 (206)	100.0 (0.2)
28	7.6 (4.3)	57.8 (14.8)	1.35 (1.28)	286 (87)	140 (208)	100.6 (0.1)
29	13.6 (5.9)	58.4 (15.0)	1.56 (1.11)	206 (26)	136 (209)	100.6 (0.1)
30	14.9 (3.7)	64.2 (12.9)	2.75 (1.34)	224 (55)	98 (168)	100.0 (0.3)
Avg	14.1	76.9	2.11	4.2	91	100.7
n	30	30	30	30	30	30
SD	3.0	10.3	1.48	128	57	0.6
Min	7.6	57.8	0.61	6.5	3	99.1
Max	21.4	91.6	6.68	356	171	101.7

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Table F2. Daily means (SD) of weather at Site NC3B for December, 2009

Day	Temp., °C	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	8.1 (3.7)	67.2 (16.6)	0.89 (0.96)	22 (128)	120 (184)	100.9 (0.2)
2	15.6 (4.8)	83.5 (8.7)	2.40 (1.31)	111 (59)	13 (25)	100.1 (0.6)
3	16.7 (2.8)	73.6 (9.7)	2.39 (1.48)	249 (59)	104 (173)	99.8 (0.4)
4	11.1 (2.8)	73.6 (7.7)	1.62 (0.92)	26 (132)	74 (136)	100.7 (0.1)
5	9.8 (2.4)	87.9 (3.5)	2.68 (1.54)	341 (144)	11 (19)	100.2 (0.3)
6	5.0 (2.3)	76.8 (9.9)	1.34 (1.49)	31 (125)	106 (166)	101.5 (0.2)
7	7.7 (3.7)	76.9 (6.6)	0.82 (0.80)	8 (141)	44 (75)	101.4 (0.1)
8	8.8 (1.8)	79.4 (7.0)	2.30 (1.42)	48 (95)	40 (72)	101.1 (0.4)
9	20.5 (3.1)	83.7 (6.6)	4.09 (1.57)	205 (41)	58 (119)	99.1 (0.3)
10	12.6 (3.8)	39.3 (3.9)	2.75 (1.49)	275 (30)	59 (109)	100.0 (0.5)
11	2.9 (1.3)	43.8 (14.4)	2.45 (1.90)	328 (115)	50 (79)	101.8 (0.4)
12	5.1 (2.5)	57.2 (16.3)	1.66 (1.20)	44 (101)	50 (80)	102.3 (0.2)
13	14.2 (3.9)	85.8 (6.8)	2.28 (1.27)	191 (88)	15 (27)	100.9 (0.4)
14	11.3 (1.6)	87.8 (3.5)	1.06 (0.69)	219 (71)	36 (57)	100.9 (0.1)
15	16.1 (2.1)	86.3 (6.0)	1.41 (1.39)	263 (66)	23 (40)	100.6 (0.2)
16	6.9 (3.3)	58.8 (12.2)	2.62 (1.99)	352 (160)	87 (134)	101.6 (0.2)
17		63.8 (17.7)	1.35 (1.46)	24 (111)	127 (194)	101.6 (0.1)
18	4.7 (2.1)	74.1 (9.7)	3.98 (2.43)	59 (33)	24 (44)	100.4 (0.9)
19	4.1 (2.0)	84.9 (5.1)	3.60 (1.92)	308 (106)	13 (21)	99.0 (0.5)
20	4.3 (3.2)	73.7 (13.0)	1.56 (1.65)	318 (114)	120 (187)	100.4 (0.4)
21		70.4 (15.0)	0.90 (1.05)	261 (80)	127 (192)	101.0 (0.1)
22		70.7 (15.4)	0.69 (0.87)	41 (98)	126 (190)	101.3 (0.1)
23		69.9 (16.1)	0.70 (0.86)	30 (132)	126 (193)	101.4 (0.1)
24	6.0 (3.7)	68.0 (17.5)	2.64 (1.87)	51 (39)	128 (194)	101.4 (0.1)
25	13.2 (4.8)	84.7 (4.9)	2.86 (1.48)	103 (60)	11 (24)	100.3 (0.5)
26	9.6 (1.9)	86.4 (2.5)	1.67 (1.11)	261 (40)	22 (34)	100.3 (0.2)
27	8.8 (3.2)	71.7 (17.0)	1.12 (0.78)	225 (67)	111 (185)	100.5 (0.1)
28	7.3 (2.3)	56.1 (13.3)	2.69 (1.43)	265 (49)	125 (193)	100.2 (0.2)
29	3.8 (2.4)	50.3 (10.3)	2.71 (1.85)	326 (116)	136 (203)	101.3 (0.4)
30		52.7 (10.8)	1.45 (0.82)	64 (50)	97 (164)	101.9 (0.3)
31	8.5 (3.6)	88.4 (2.0)	0.90 (0.69)	352 (111)	23 (39)	100.9 (0.3)
Avg	9.3	71.9	1.99	349	71	100.8
n	26	31	31	31	31	31
SD	4.5	13.4	0.94	123	45	0.8
Min	2.9	39.3	0.69	8.0	11	99.0
Max	20.5	88.4	4.09	352	136	102.3

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Table F2. Daily means (SD) of weather at Site NC3B for January, 2010

Day	Temp.,	RH, %	Wind	Wind	Solar,	Atm P, kPa
1	9.0 (2.0)	78.8 (9.4)	2.12 (0.84)	320 (77)	24 (36)	100.3 (0.1)
2		47.1 (9.8)	4.56 (2.01)	322 (80)	136 (203)	100.6 (0.2)
3		41.8 (7.9)	3.75 (1.78)	301 (51)	137 (203)	100.6 (0.2)
4		49.8 (7.6)	2.07 (1.49)	294 (46)	136 (201)	100.4 (0.1)
5		53.7 (9.7)	2.05 (1.77)	287 (39)	130 (195)	100.4 (0.1)
6		54.0 (8.6)	2.08 (1.47)	281 (30)	135 (201)	100.6 (0.1)
7		50.6 (12.3)	1.67 (0.94)	253 (78)	136 (202)	100.7 (0.2)
8	4.6 (1.9)	52.2 (15.0)	3.65 (1.66)	295 (69)	92 (162)	100.4 (0.3)
9		50.7 (8.5)	2.10 (1.34)	326 (122)	103 (163)	101.1 (0.1)
10		52.1 (13.8)	2.42 (2.19)	339 (150)	141 (209)	101.5 (0.2)
11		49.5 (19.4)	1.08 (1.03)	216 (51)	139 (205)	101.4 (0.3)
12	3.9 (1.9)	51.4 (5.4)	2.17 (1.69)	309 (98)	112 (175)	101.1 (0.2)
13		54.3 (13.0)	0.89 (0.79)	330 (118)	142 (212)	101.6 (0.2)
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
Avg	5.8	52.8	2.35	298	120	100.8
n	3	13	13	13	13	13
SD	2.3	8.2	1.05	34	32	0.4
Min	3.9	41.8	0.89	216	24	100.3
Max	9.0	78.8	4.56	339	142	101.6

ED_004549_00015929-00100

Table F3. Building environment.

Table F3. Daily means (SD) of environmental parameters at Site NC3B for December, 2007.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1												
2												
3												
4	20.5 (1.2)	53.5 (4.2)	-16.3 (10.1)	5.67 (3.18)	20.0 (1.1)	55.1 (3.8)	-20.2 (11.9)	5.72 (2.85)	22.3 (1.8)	60.3 (3.9)	-13.9 (14.8)	3.34 (3.31)
5	21.0 (1.5)	53.7 (3.7)	-19.3 (9.8)	6.05 (2.79)	20.3 (1.2)	56.2 (3.8)	-24.1 (11.1)	6.25 (2.31)	22.8 (2.0)	59.8 (3.6)	-13.4 (13.6)	3.42 (3.35)
6	19.1 (2.0)	56.8 (4.0)	-18.1 (10.4)	5.38 (3.20)	19.9 (1.1)	59.7 (3.9)	-20.6 (12.1)	5.71 (2.87)	21.6 (2.3)	62.9 (4.4)	-13.7 (14.0)	2.81 (3.27)
7	18.6 (2.8)	61.3 (2.6)	-19.1 (12.0)	5.56 (2.96)	19.3 (1.4)	60.9 (4.2)	-17.9 (12.4)	5.29 (3.13)	21.3 (3.1)	66.2 (3.5)	-11.5 (13.5)	2.81 (3.35)
8	21.7 (3.4)	61.7 (2.8)	-24.5 (9.9)	7.67 (3.29)	20.5 (2.3)	57.2 (2.9)	-20.5 (9.6)	8.47 (4.45)	23.8 (1.9)	62.8 (3.2)	-16.8 (13.2)	5.52 (4.67)
9	23.6 (1.7)	65.2 (2.2)	-27.3 (5.0)	9.31 (3.10)	21.5 (2.0)	60.3 (2.5)	-24.0 (3.6)	10.6 (3.56)	24.5 (1.5)	65.7 (2.6)	-19.9 (11.5)	7.25 (5.00)
10	24.4 (2.0)	64.6 (4.9)	-27.7 (2.3)	10.1 (3.43)	22.5 (2.3)	57.9 (5.9)	-23.3 (1.6)	11.6 (3.49)	24.8 (2.2)	64.4 (4.3)	-22.2 (9.5)	9.24 (4.70)
11	24.6 (2.2)	63.8 (4.7)	-24.8 (4.4)	10.7 (3.25)	23.1 (2.2)	57.2 (6.3)	-23.4 (2.3)	11.9 (3.19)	24.6 (2.3)	64.7 (4.9)	-23.5 (8.6)	10.1 (4.71)
12												
13												
14												
15	21.4 (0.8)	65.8 (2.7)	-20.4 (9.3)	6.24 (2.60)	19.3 (0.9)	61.2 (2.4)	-10.3 (4.2)	7.40 (1.71)	23.8 (1.6)	67.2 (4.1)	-16.2 (13.7)	3.33 (3.33)
16	21.2 (1.6)	61.7 (7.4)	-12.0 (8.4)	6.64 (2.94)	19.3 (1.3)	58.4 (5.8)	-8.5 (4.7)	7.25 (1.72)	23.1 (1.9)	64.0 (5.1)	-12.3 (12.7)	3.44 (3.37)
17	20.2 (3.0)	59.8 (4.6)	-4.9 (5.2)	4.36 (4.12)	15.9 (2.6)	54.6 (3.8)	-5.6 (4.4)	6.27 (1.77)	21.5 (2.3)	62.8 (3.8)	-9.3 (12.9)	2.45 (3.23)
18	22.2 (1.9)	63.1 (6.2)	-6.8 (7.6)	3.72 (3.87)	14.7 (4.0)	56.9 (6.6)	-5.2 (4.0)	6.32 (1.80)	21.5 (2.8)	62.8 (4.5)	-11.4 (13.9)	2.65 (3.25)
19	22.5 (1.4)	63.7 (3.3)	-9.5 (9.2)	4.21 (3.81)	16.6 (2.7)	57.9 (3.1)	-6.1 (4.5)	6.51 (1.82)	22.5 (1.9)	64.6 (2.7)	-10.9 (13.4)	2.75 (3.32)
20	22.9 (1.7)	62.1 (4.2)	-12.3 (9.8)	4.86 (3.64)	17.8 (3.6)	57.5 (5.1)	-7.8 (5.3)	6.45 (2.89)	22.6 (2.3)	62.4 (4.5)	-12.8 (13.4)	3.27 (3.39)
21	22.7 (1.1)	65.8 (5.3)	-13.5 (9.2)	4.53 (3.62)	19.6 (1.4)	62.1 (5.6)	-8.8 (5.3)	6.14 (3.71)	23.2 (1.5)	65.9 (5.2)	-15.1 (13.0)	2.95 (3.21)
22	22.2 (3.0)	66.4 (4.0)	-19.1 (13.3)	5.17 (3.32)	20.0 (2.3)	61.9 (2.8)	-10.2 (6.9)	7.71 (3.83)	23.9 (1.4)	64.5 (2.4)	-18.9 (13.2)	4.28 (3.27)
23	24.3 (1.2)	71.0 (3.6)	-22.4 (11.2)	7.62 (3.54)	22.0 (1.6)	66.1 (3.0)	-14.7 (7.6)	10.5 (3.32)	24.7 (1.5)	68.9 (4.0)	-19.7 (11.2)	6.36 (4.15)
24	23.0 (1.2)	62.9 (5.6)	-16.9 (14.2)	4.25 (3.28)	20.5 (1.2)	59.4 (6.9)	-5.9 (4.4)	6.06 (4.04)	23.5 (1.7)	60.7 (7.1)	-14.7 (13.6)	3.86 (3.39)
25	22.7 (1.3)	60.6 (5.3)	-15.7 (13.4)	3.91 (3.32)	20.5 (1.1)	57.0 (7.0)	-5.5 (4.3)	5.37 (4.23)	23.3 (1.7)	59.4 (5.3)	-15.7 (13.6)	3.76 (3.38)
26	22.0 (1.0)	68.7 (4.7)	-12.6 (14.0)	2.89 (3.15)	20.2 (1.0)	64.7 (3.7)	-3.0 (4.3)	3.31 (4.04)	23.3 (1.7)	69.4 (5.6)	-10.3 (12.4)	2.87 (3.30)
27	22.7 (1.3)	67.7 (3.0)	-16.1 (14.8)	3.87 (3.23)	20.4 (1.2)	63.7 (2.7)	-5.5 (4.7)	5.28 (4.18)	24.0 (1.8)	70.1 (2.9)	-11.8 (12.0)	3.66 (3.42)
28	24.2 (1.2)	66.2 (3.1)	-23.1 (10.7)	6.13 (2.72)	21.6 (1.2)	61.0 (3.7)	-12.3 (7.0)	9.43 (3.93)	24.9 (1.2)	67.4 (3.3)	-17.8 (9.4)	6.09 (2.96)
29	25.5 (0.8)	71.3 (2.7)	-28.8 (3.1)	10.3 (2.40)	23.8 (1.1)	63.5 (2.9)	-24.0 (4.8)	13.8 (1.70)	25.3 (0.9)	70.4 (3.1)	-14.3 (10.6)	8.04 (1.95)
30	24.6 (0.4)	75.0 (2.4)	-27.3 (1.8)	7.64 (1.11)	22.3 (0.6)	67.5 (1.3)	-17.6 (5.6)	11.1 (1.69)	24.5 (0.8)	72.8 (2.4)	-17.2 (10.2)	5.85 (2.90)
31	23.7 (1.1)	64.7 (5.3)	-21.3 (12.6)	5.39 (2.88)	21.2 (1.2)	58.3 (6.4)	-8.1 (5.3)	7.61 (3.88)	23.4 (1.5)	63.5 (6.0)	-12.90 (11.6)	4.35 (3.52)
Avg	22.5	63.9	-18.4	6.09	20.1	59.8	-13.3	7.68	23.4	64.9	-15.0	4.58
n	25	25	25	25	25	25	25	25	25	25	25	25
SD	1.7	4.9	6.42	2.14	2.1	3.3	7.27	2.53	1.2	3.4	3.64	2.12
Min	18.6	53.5	-28.8	2.89	14.7	54.6	-24.1	3.31	21.3	59.4	-23.5	2.45
Max	25.5	75.0	-4.93	10.7	23.8	67.5	-3.03	13.80	25.3	72.8	-9.27	10.1

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for January, 2008.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	22.9 (1.2)	59.2 (5.9)	-14.0 (12.8)	4.13 (3.48)	21.0 (1.2)	54.9 (7.6)	-5.17 (5.17)	5.41 (4.51)	22.3 (1.4)	59.9 (6.1)	-9.76 (10.9)	3.64 (3.62)
2	19.6 (1.9)	59.3 (3.4)	-8.19 (11.9)	2.48 (3.44)	19.2 (1.4)	55.5 (3.9)	-1.23 (3.00)	1.64 (2.92)	19.8 (1.8)	62.2 (3.4)	-4.89 (9.50)	1.95 (3.06)
3	17.2 (2.3)	63.0 (3.6)	-8.54 (11.5)	2.53 (3.55)	19.1 (1.9)	61.6 (4.5)	-1.60 (3.18)	1.74 (3.08)	18.3 (2.4)	66.2 (3.7)	-5.59 (10.1)	1.92 (3.04)
4	18.1 (3.6)	65.3 (4.4)	-8.44 (11.7)	2.66 (3.52)	20.4 (1.3)	64.0 (6.3)	-2.80 (3.95)	2.75 (3.78)	16.4 (4.1)	65.2 (8.2)	-10.6 (11.3)	4.02 (3.64)
5	19.9 (3.7)	62.1 (5.4)	-10.5 (12.0)	3.33 (3.56)	20.7 (1.1)	59.3 (8.0)	-2.49 (2.73)	4.41 (4.38)	13.9 (5.7)	61.4 (9.1)	-13.6 (7.80)	5.63 (1.18)
6	23.5 (1.6)	62.9 (3.4)	-17.3 (12.6)	5.55 (3.92)	21.3 (1.5)	59.8 (5.2)	-4.87 (4.03)	7.92 (4.95)	19.8 (3.4)	62.6 (4.0)	-15.3 (8.12)	6.13 (1.39)
7	24.2 (1.8)	66.0 (3.2)	-19.4 (11.7)	6.69 (3.98)	21.8 (1.7)	61.7 (5.2)	-6.73 (5.94)	9.71 (5.33)	20.8 (2.5)	65.8 (4.4)	-17.0 (9.84)	7.88 (4.15)
8	24.5 (1.6)	66.7 (2.9)	-21.5 (10.8)	7.54 (4.00)	22.4 (1.9)	61.9 (4.9)	-8.95 (7.46)	10.70 (5.05)	21.7 (2.6)	66.5 (3.4)	-19.0 (10.3)	8.63 (4.53)
9	24.6 (1.4)	69.1 (2.4)	-26.5 (8.04)	8.28 (3.25)	22.6 (1.5)	62.6 (4.1)	-10.8 (6.63)	11.80 (3.14)	23.9 (1.5)	66.9 (2.7)	-19.4 (10.7)	6.89 (3.67)
10	23.8 (1.2)	67.6 (3.3)	-28.7 (8.40)	7.29 (2.56)	22.0 (1.2)	60.9 (2.5)	-8.77 (5.71)	10.80 (3.14)	23.8 (1.2)	66.8 (3.0)	-16.1 (9.47)	6.15 (3.24)
11	22.1 (2.4)	67.3 (6.3)	-11.1 (15.8)	6.53 (3.83)	22.9 (1.0)	61.1 (4.9)	-14.2 (3.94)		24.6 (0.8)	69.3 (4.4)	-19.2 (4.14)	
12	13.6 (2.4)	64.9 (4.3)	-0.28 (1.16)	4.85 (4.62)	21.0 (0.9)	57.4 (3.3)	-5.13 (2.71)		23.4 (1.2)	63.6 (3.9)	-13.4 (10.2)	
13	9.2 (1.4)	67.8 (1.2)	-0.47 (1.35)	4.57 (4.68)	20.2 (1.1)	59.0 (2.3)	-3.20 (2.60)		22.8 (1.4)	65.9 (3.5)	-9.04 (10.5)	
14	8.3 (3.4)	72.5 (4.7)	0.44 (0.43)	1.46 (3.44)	20.3 (1.3)	58.1 (5.3)	-2.64 (2.66)		22.7 (1.5)	63.3 (4.1)	-7.60 (9.90)	
15	8.0 (1.8)	66.0 (1.2)	0.30 (0.46)	0.00 (0.00)	20.5 (1.3)	57.9 (6.0)	-1.23 (2.12)		21.8 (1.7)	63.2 (4.4)	-6.01 (9.27)	
16	7.1 (1.9)	66.2 (1.0)	0.03 (0.81)	0.00 (0.00)	20.1 (1.3)	58.1 (3.4)	-7.25 (10.00)		21.0 (2.1)	63.3 (3.1)	-6.74 (9.61)	
17		65.9 (0.3)	-0.83 (1.65)	0.00 (0.00)		62.0 (4.1)	-13.8 (12.10)			66.1 (4.4)	-7.71 (9.54)	
18		66.2 (0.4)	0.43 (0.23)	0.00 (0.01)		60.3 (3.1)	-2.56 (8.40)			62.0 (1.8)	-1.55 (6.33)	
19		65.9 (0.3)	-0.07 (0.86)	0.00 (0.00)		62.5 (0.7)	0.45 (0.65)			60.6 (0.5)	0.28 (1.05)	
20		66.8 (0.3)	0.24 (0.83)	0.00 (0.00)		58.3 (4.9)	0.48 (0.58)			59.4 (0.5)	0.84 (0.92)	
21			-0.53 (1.23)			59.6 (2.8)	-0.05 (0.95)			58.4 (0.7)	-0.60 (1.22)	
22			0.20 (0.40)			59.6 (3.0)	0.47 (0.34)			60.1 (1.4)	0.28 (0.45)	
23			0.02 (0.80)			58.9 (2.2)	0.40 (0.56)			61.0 (0.6)	0.16 (0.76)	
24			0.29 (0.47)			60.4 (1.1)	0.56 (0.47)			60.3 (0.5)	0.57 (0.61)	
25			-0.41 (1.37)			56.4 (2.9)	0.27 (0.82)			58.7 (0.6)	0.01 (1.36)	
26			0.23 (0.23)			61.2 (0.5)	0.44 (0.17)			59.4 (0.5)	0.20 (0.19)	
27			0.13 (0.62)			57.2 (6.4)	0.39 (0.42)			60.0 (0.8)	0.34 (0.72)	
28			0.17 (0.48)			56.9 (5.6)	0.39 (0.37)			60.0 (0.9)	0.19 (0.51)	
29			0.15 (1.35)			52.3 (6.9)	0.89 (1.35)			60.6 (1.2)	0.38 (1.34)	
30			-0.02 (0.96)			59.5 (6.0)	0.75 (0.86)			61.2 (0.9)	0.54 (0.87)	
31			-2.09 (2.27)			72.6 (6.0)	-0.88 (1.80)			59.5 (0.3)	-2.31 (2.53)	
Avg	17.9	65.5	-5.68	3.39	21.0	59.7	-3.19	6.69	21.1	62.6	-6.50	5.28
n	16	20	31	20	16	31	31	10	16	31	31	10
SD	6.4	3.0	8.63	2.83	1.1	3.4	4.29	3.77	2.8	2.9	6.94	2.21
Min	7.1	59.2	-28.7	0.00	19.1	52.3	-14.20	1.64	13.9	58.4	-19.4	1.92
Max	24.6	72.5	0.44	8.28	22.9	72.6	0.89	11.8	24.6	69.3	0.84	8.63

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for February, 2008.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1			-0.12 (1.04)			76.7 (3.1)	0.67 (1.09)			61.1 (1.3)	-0.10 (1.25)	
2			0.22 (0.33)			70.7 (0.6)	-0.30 (8.30)			61.1 (1.0)	0.19 (0.34)	
3			0.24 (0.25)			67.8 (3.4)	0.47 (0.28)			61.3 (1.1)	0.28 (0.34)	
4			0.35 (0.27)			68.6 (1.6)	0.60 (0.31)			62.5 (1.2)	0.37 (0.32)	
5			0.30 (0.45)			64.3 (4.0)	0.81 (0.49)			63.5 (0.9)	0.45 (0.52)	
6			0.44 (0.71)			60.0 (5.1)	1.18 (0.70)			65.1 (1.2)	0.77 (1.22)	
7			0.04 (0.50)			53.5 (6.3)	0.74 (0.64)			64.6 (0.8)	0.76 (0.90)	
8			0.08 (0.39)			58.1 (7.0)	0.40 (0.38)			63.6 (1.2)	0.39 (0.60)	
9			0.23 (0.43)			55.3 (10.0)	0.69 (0.54)			65.5 (1.9)	0.55 (1.07)	
10			-0.19 (0.84)			44.9 (8.9)	0.81 (0.85)			65.7 (1.1)	0.86 (1.25)	
11			-0.47 (1.12)			49.5 (7.0)	0.17 (0.77)			64.6 (1.0)	-0.35 (1.24)	
12			0.33 (0.59)			61.1 (3.9)	0.88 (0.68)			66.5 (1.9)	0.00 (0.73)	
13			0.31 (0.59)			62.2 (2.3)	0.83 (0.52)			67.8 (0.6)	0.56 (0.70)	
14			-0.01 (0.75)			56.0 (4.8)	0.33 (0.54)			66.2 (0.6)	0.44 (0.91)	
15			0.22 (0.25)			58.2 (7.5)	0.56 (0.35)			66.4 (1.0)	0.34 (0.34)	
16			-1.38 (1.99)			55.5 (7.3)	-0.66 (1.37)			66.6 (0.8)	-1.71 (2.12)	
17			0.15 (0.76)			60.3 (3.5)	0.54 (0.77)			67.0 (1.6)	-0.12 (0.83)	
18			0.57 (0.89)			57.9 (7.8)	0.97 (0.72)			64.7 (8.1)	0.33 (0.77)	
19			0.74 (0.87)			48.0 (12.6)	0.58 (0.72)			56.1 (14.6)	0.39 (0.69)	
20			1.22 (1.16)			47.5 (15.7)	1.46 (1.40)			53.9 (18.0)	1.45 (1.69)	
21			-3.05 (2.78)			50.3 (7.0)	-1.92 (1.87)			58.2 (8.8)	-3.23 (2.67)	
22			-0.34 (1.26)			70.3 (1.1)	0.27 (0.91)			82.3 (1.4)	-0.07 (1.34)	
23			0.28 (1.05)			68.7 (2.5)	0.66 (0.81)			81.8 (2.3)	0.45 (1.16)	
24			-1.54 (2.22)			56.5 (7.4)	-0.79 (1.71)			66.0 (8.3)	-1.55 (2.25)	
25			0.36 (0.69)			56.5 (9.4)	0.69 (0.55)			65.7 (10.5)	0.59 (0.80)	
26			0.19 (0.88)			65.8 (3.2)	0.89 (0.68)			78.7 (3.5)	0.24 (0.86)	
27			-2.02 (3.39)			49.7 (8.4)	-0.05 (1.70)			57.5 (11.4)	-0.86 (2.83)	
28			-8.57 (4.34)			46.9 (9.8)	-3.63 (1.56)			52.6 (11.1)	-8.11 (3.48)	
29			-8.66 (8.30)			49.4 (16.9)	-4.05 (0.67)			56.6 (18.9)	-8.68 (1.99)	
Avg			-0.69			58.3	0.13			64.6	-0.53	
n	0	0	29	0	0	29	29	0	0	29	29	0
SD			2.32			8.2	1.26			6.9	2.32	
Min			-8.66			44.9	-4.05			52.6	-8.68	
Max			1.22			76.7	1.46			82.3	1.45	

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for March, 2008.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	13.1 (4.8)	55.2 (15.7)	-5.33 (10.20)	1.28 (2.44)	13.1 (4.8)	49.7 (15.3)	-3.98 (0.63)	4.90 (0.07)	13.4 (4.8)	59.4 (17.2)	-6.50 (0.91)	4.83 (0.09)
2												
3												
4												
5												
6	22.5 (2.4)	61.5 (8.5)	-10.2 (13.5)	1.95 (2.60)	19.8 (2.6)	55.1 (8.4)	-3.57 (5.76)	2.38 (3.57)	15.3 (3.2)	67.2 (10.9)	-0.58 (2.09)	0.34 (1.55)
7	23.4 (0.7)		-5.61 (10.7)		20.4 (1.4)	63.6 (1.8)	-2.23 (4.74)		13.8 (2.4)	81.0 (4.1)	-1.66 (3.50)	
8	22.1 (2.9)	60.6 (9.8)	-4.57 (5.78)	1.84 (2.62)	20.6 (2.7)	55.7 (10.6)	-3.00 (6.42)	2.46 (3.46)	15.8 (3.0)	70.6 (15.8)	-1.77 (4.73)	1.21 (2.54)
9	19.2 (2.9)	59.4 (7.3)	-2.21 (4.52)	1.17 (2.41)	16.7 (2.1)	54.1 (10.9)	-1.10 (2.78)	0.82 (1.70)	9.9 (2.3)	59.2 (12.9)	-1.60 (4.95)	1.04 (2.15)
10	21.6 (2.5)	58.4 (11.1)	-3.39 (5.75)	1.78 (3.03)	19.0 (3.4)	54.6 (13.8)	-2.63 (5.15)	1.65 (2.90)	14.4 (6.7)	64.3 (13.4)	-2.61 (5.72)	1.04 (2.13)
11	23.2 (1.5)	57.6 (7.4)	-4.89 (6.84)	2.50 (3.52)	22.1 (0.9)	51.9 (8.8)	-5.77 (7.16)	3.13 (3.75)	22.3 (2.1)	67.4 (8.3)	-4.76 (9.04)	1.43 (2.49)
12	23.6 (1.2)	52.7 (10.6)	-5.28 (6.80)	2.86 (3.69)	22.5 (1.1)	45.3 (11.2)	-6.87 (7.44)	3.88 (4.03)	23.1 (1.7)	59.6 (12.1)	-5.56 (11.0)	1.52 (2.65)
13	24.0 (2.3)	51.1 (12.2)	-7.93 (8.09)	4.56 (4.71)	22.7 (2.1)	45.3 (13.0)	-11.8 (12.0)	5.75 (5.46)	23.3 (2.7)	57.4 (15.6)	-10.7 (13.7)	2.66 (3.26)
14	24.4 (1.1)	52.3 (6.6)	-6.12 (6.51)	4.11 (4.09)	22.8 (1.3)	47.2 (6.9)	-10.6 (10.8)	5.58 (4.89)	24.4 (1.0)	59.8 (7.8)	-5.74 (10.7)	1.61 (2.76)
15	24.6 (1.3)	57.1 (6.1)	-8.50 (7.78)	4.67 (4.19)	23.1 (1.4)	54.9 (7.4)	-10.7 (9.51)	5.84 (4.73)	25.0 (0.9)	60.6 (7.2)	-11.5 (13.9)	2.88 (3.21)
16	23.6 (0.8)	58.4 (4.5)	-4.79 (6.54)	2.55 (3.58)	22.3 (0.8)	55.6 (6.3)	-5.11 (6.62)	3.37 (3.90)	24.3 (0.9)	62.9 (5.0)	-5.07 (10.6)	1.50 (2.56)
17	21.9 (1.6)	55.4 (5.0)	-4.03 (4.47)	1.44 (2.76)	21.7 (1.0)	50.7 (6.8)	-3.49 (4.80)	2.20 (3.51)	22.6 (1.7)	61.0 (5.6)	-5.33 (7.36)	1.10 (2.26)
18	22.7 (1.4)	60.6 (4.3)	-5.00 (6.64)	2.82 (3.69)	22.3 (0.9)	57.8 (4.6)	-5.62 (6.34)	3.71 (4.00)	23.3 (1.9)	65.2 (4.2)	-5.74 (10.2)	1.57 (2.64)
19	24.9 (1.9)	60.0 (3.9)	-9.30 (6.22)	7.06 (4.58)	24.1 (1.7)	59.0 (5.2)	-16.5 (9.77)	8.99 (4.92)	25.5 (1.2)	63.0 (4.6)	-14.2 (12.2)	5.55 (5.13)
20	24.1 (0.8)	51.1 (8.0)	-6.49 (6.79)	3.68 (3.86)	22.9 (0.9)	47.8 (10.7)	-8.30 (6.74)	5.19 (3.95)	24.8 (0.8)	55.9 (8.0)	-7.11 (12.1)	2.24 (3.03)
21	23.7 (1.3)	47.8 (10.6)	-6.48 (6.95)	3.60 (3.89)	22.7 (1.3)	44.7 (11.5)	-7.13 (6.95)	4.35 (4.09)	24.5 (1.1)	52.8 (11.6)	-9.51 (12.0)	2.60 (3.00)
22	24.8 (1.5)	47.8 (9.7)	-11.6 (11.5)	5.66 (5.01)	23.6 (1.7)	45.0 (10.6)	-12.9 (10.2)	7.15 (5.10)	25.2 (1.4)	50.9 (11.5)	-14.6 (13.2)	4.91 (4.77)
23	22.7 (1.6)	50.5 (5.8)	-5.24 (5.63)	2.22 (3.39)	22.4 (0.9)	46.7 (6.1)	-5.27 (5.97)	3.24 (3.87)	24.3 (1.2)	55.4 (5.9)	-8.34 (10.9)	1.77 (2.78)
24	21.8 (1.7)	56.7 (3.8)	-3.11 (4.69)	1.51 (2.86)	22.2 (0.9)	51.4 (5.0)	-2.98 (5.20)	2.23 (3.51)	23.7 (1.3)	60.0 (3.9)	-4.85 (9.49)	1.30 (2.40)
25	21.3 (2.4)	56.2 (7.6)	-3.37 (5.47)	1.81 (3.16)	22.2 (1.0)	49.7 (8.4)	-4.25 (5.97)	2.76 (3.76)	23.5 (1.8)	58.8 (7.5)	-5.64 (10.3)	1.45 (2.54)
26	23.0 (2.4)	50.3 (9.6)	-5.53 (6.47)	3.62 (4.04)	22.9 (1.3)	45.7 (10.0)	-9.93 (10.0)	5.52 (4.87)	24.9 (1.1)	51.6 (10.0)	-12.4 (13.6)	3.17 (3.36)
27	24.7 (1.8)	48.2 (8.3)	-13.5 (11.9)	6.27 (5.17)	23.8 (1.8)	45.9 (7.7)	-14.7 (11.1)	7.83 (5.25)	24.5 (1.8)	49.3 (9.0)	-17.9 (12.1)	7.53 (5.44)
28	25.8 (1.9)	49.0 (7.4)	-23.0 (10.9)	8.80 (5.06)	24.8 (2.2)	48.2 (9.3)	-17.9 (9.25)	11.5 (6.83)	25.4 (2.5)	51.1 (9.3)	-21.5 (11.6)	8.97 (4.92)
29	23.6 (0.8)	56.7 (3.3)	-13.2 (11.4)	2.92 (3.27)	22.3 (0.8)	55.4 (2.3)	-13.2 (11.8)	4.52 (3.71)	23.0 (1.7)	61.9 (3.2)	-15.6 (13.8)	3.53 (4.09)
30	22.3 (0.6)	63.1 (4.7)	-6.64 (8.10)	1.07 (2.23)	21.5 (0.7)	61.6 (3.5)	-12.9 (14.8)	2.61 (3.17)	23.3 (1.0)	66.5 (3.9)	-6.63 (7.56)	1.08 (2.17)
31	24.5 (1.0)	65.4 (1.4)	-17.2 (12.1)	4.80 (3.33)	22.9 (1.2)	64.2 (1.4)	-22.7 (12.0)	6.61 (3.99)	25.3 (0.9)	67.0 (2.1)	-15.6 (13.2)	4.06 (3.45)
Avg	22.8	55.5	-7.50	3.33	21.7	52.1	-8.34	4.55	21.8	60.7	-8.26	2.73
n	27	26	27	26	27	27	27	26	27	27	27	26
SD	2.4	4.9	4.64	1.93	2.4	5.7	5.43	2.41	4.5	6.8	5.39	2.08
Min	13.1	47.8	-23.0	1.07	13.1	44.7	-22.7	0.82	9.9	49.3	-21.5	0.34
Max	25.8	65.4	-2.21	8.80	24.8	64.2	-1.10	11.5	25.5	81.0	-0.58	8.97

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for April, 2008.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	25.2 (0.8)	64.6 (2.6)	-25.1 (7.7)	9.31 (4.14)	24.4 (1.3)	65.0 (2.8)	-22.9 (7.88)	10.3 (3.18)	25.5 (0.8)	65.7 (3.2)	-25.7 (10.8)	8.66 (4.83)
2	24.6 (1.3)	53.6 (8.8)	-20.2 (8.9)	7.22 (2.94)	24.2 (0.7)	53.3 (10.7)	-12.4 (9.36)	8.36 (4.25)	24.7 (1.1)	54.1 (9.6)	-24.5 (12.6)	7.09 (4.56)
3	22.7 (1.1)	59.4 (5.6)	-11.5 (9.6)	4.19 (3.60)	22.7 (1.2)	58.6 (5.3)	-4.86 (3.97)	4.54 (4.27)	21.9 (2.6)	62.3 (6.4)	-17.3 (13.7)	5.27 (4.79)
4	24.4 (1.4)	63.3 (2.7)	-21.3 (10.9)	7.17 (3.47)	23.2 (1.7)	64.0 (2.3)	-15.7 (11.1)	9.38 (4.39)	22.9 (1.9)	66.2 (3.0)	-11.7 (13.6)	9.39 (6.55)
5	24.9 (0.7)	69.4 (2.8)	-29.9 (4.1)	7.33 (1.29)	23.7 (0.8)	70.5 (1.8)	-11.2 (8.98)	10.0 (1.76)	22.2 (0.8)	71.3 (1.9)	-6.75 (6.49)	11.2 (4.50)
6	23.6 (1.0)	66.2 (2.4)	-20.7 (12.1)	5.34 (2.99)	22.6 (1.0)	66.5 (2.5)	-8.43 (3.64)	8.15 (2.57)	22.8 (1.5)	68.0 (3.9)	-4.78 (5.02)	6.59 (5.46)
7	22.6 (0.9)	61.6 (2.4)	-11.2 (9.5)	3.53 (3.59)	21.3 (0.9)	60.7 (1.6)	-6.19 (4.24)	5.78 (4.00)	23.0 (1.4)	61.6 (2.3)	-10.5 (12.4)	3.32 (3.55)
8	23.0 (1.0)	57.3 (2.3)	-14.4 (9.6)	4.94 (3.56)	21.5 (1.2)	57.1 (1.7)	-6.96 (4.10)	6.50 (3.72)	24.0 (1.0)	61.1 (1.7)	-21.1 (15.0)	4.30 (3.05)
9	23.9 (1.3)	58.9 (1.7)	-17.0 (8.4)	6.25 (3.02)	21.9 (1.2)	59.1 (1.7)	-11.9 (8.99)	8.24 (3.95)	24.3 (1.1)	62.9 (2.1)	-22.6 (14.4)	4.83 (2.96)
10	24.5 (1.6)	59.5 (3.4)	-21.1 (8.8)	7.74 (3.36)	23.3 (2.2)	60.8 (4.0)	-17.0 (12.6)	9.83 (4.23)	24.4 (1.2)	63.1 (5.0)	-20.6 (14.1)	6.53 (5.37)
11	26.1 (2.2)	56.7 (8.5)	-23.0 (6.6)	11.4 (5.98)	24.8 (3.1)	58.7 (10.7)	-11.6 (13.7)	16.2 (10.5)	25.9 (2.3)	60.1 (9.7)	-12.2 (10.5)	9.09 (6.11)
12	26.8 (2.0)	58.0 (6.3)	-18.0 (7.9)	12.4 (5.99)	24.6 (3.8)	59.7 (6.8)	-3.25 (6.28)	9.23 (5.54)	25.7 (2.5)	58.7 (5.9)	-6.90 (7.09)	10.3 (7.31)
13	24.2 (1.1)	48.2 (7.7)	-17.7 (8.2)	7.70 (3.33)	22.2 (1.4)	45.8 (8.5)	-4.34 (3.12)	9.29 (3.86)	23.7 (1.5)	47.4 (9.2)	-2.16 (2.20)	5.63 (4.34)
14	22.6 (1.4)	53.3 (4.2)	-10.3 (8.7)	4.42 (3.79)	20.9 (1.6)	51.4 (4.1)	-4.16 (4.01)	5.18 (4.15)	21.9 (2.7)	54.9 (4.3)	-9.29 (13.6)	3.19 (3.68)
15	22.7 (1.3)	50.1 (5.9)	-11.0 (8.2)	4.73 (3.81)	21.8 (1.2)	48.8 (7.2)	-5.27 (4.05)	5.91 (4.07)	23.2 (1.6)	54.2 (6.8)	-16.8 (15.6)	3.39 (3.21)
16	22.9 (1.8)	49.0 (7.9)	-10.7 (8.1)	5.04 (3.90)	22.0 (1.7)	46.6 (9.6)	-7.55 (7.09)	6.18 (4.61)	23.4 (2.2)	51.7 (9.2)	-19.2 (15.6)	3.95 (3.19)
17	24.0 (2.6)	45.7 (9.8)	-16.6 (12.0)	7.14 (5.08)	23.3 (2.7)	43.3 (11.9)	-15.7 (14.8)	9.25 (6.86)	24.4 (2.3)	47.6 (13.2)	-20.7 (14.5)	6.31 (5.12)
18	25.3 (3.0)	43.2 (10.0)	-19.2 (10.2)	11.1 (7.49)	25.1 (3.5)	41.8 (10.8)	-20.6 (15.0)	14.0 (9.26)	26.3 (2.6)	43.8 (11.6)	-20.4 (12.5)	9.75 (6.82)
19	25.2 (2.5)	49.3 (7.6)	-21.3 (8.8)	11.3 (5.73)	25.0 (2.7)	48.8 (9.0)	-22.0 (12.8)	14.3 (7.78)	26.2 (2.3)	49.6 (8.0)	-19.7 (11.1)	10.0 (4.86)
20	24.9 (1.6)	55.5 (8.4)	-20.0 (7.8)	9.73 (2.62)	24.5 (1.7)	55.9 (10.9)	-18.8 (12.2)	11.6 (4.17)	25.7 (1.5)	55.6 (9.4)	-17.5 (9.90)	8.81 (3.57)
21	23.3 (1.3)	59.8 (2.6)	-15.7 (7.8)	6.85 (2.96)	22.6 (1.0)	62.3 (3.3)	-9.61 (6.25)	8.12 (3.59)	24.3 (1.3)	61.9 (3.3)	-9.40 (6.21)	5.98 (3.68)
22	24.6 (1.3)	59.7 (2.5)	-25.5 (8.1)	8.31 (2.41)	23.7 (1.4)	61.5 (3.7)	-16.3 (10.6)	10.4 (2.96)	24.8 (1.1)	60.1 (3.3)	-15.7 (10.6)	8.54 (3.95)
23	25.1 (0.8)	61.1 (2.0)	-28.6 (2.8)	8.85 (2.04)	24.0 (1.1)	63.0 (2.5)	-17.5 (9.62)	10.8 (2.40)	25.2 (1.1)	61.1 (2.1)	-21.7 (10.9)	8.77 (3.46)
24	25.0 (1.7)	57.0 (6.0)	-28.6 (4.2)	9.71 (3.51)	24.3 (2.3)	58.0 (7.3)	-24.0 (13.5)	11.9 (5.59)	25.8 (1.9)	57.3 (6.0)	-24.9 (10.7)	8.73 (4.32)
25	25.4 (2.0)	53.9 (7.0)	-28.2 (4.2)	10.7 (4.59)	24.6 (2.8)	53.5 (7.3)	-33.9 (4.08)	12.8 (6.57)	26.2 (2.0)	54.3 (7.1)	-24.4 (9.74)	9.44 (4.60)
26	26.2 (2.2)	53.5 (5.9)	-28.6 (2.0)	13.1 (6.38)	25.8 (2.8)	54.3 (6.1)	-31.0 (5.67)	15.9 (8.15)	26.8 (2.3)	54.2 (6.2)	-26.4 (8.08)	11.4 (5.48)
27	25.5 (1.3)	61.9 (5.7)	-29.4 (2.5)	10.2 (3.25)	24.8 (1.8)	63.2 (6.0)	-32.7 (5.32)	12.5 (4.41)	25.5 (1.7)	62.6 (5.5)	-28.1 (6.05)	10.8 (3.48)
28	25.0 (0.9)	64.5 (2.5)	-24.4 (7.9)	9.57 (2.05)	24.3 (1.1)	66.7 (2.2)	-33.6 (4.61)	10.8 (1.84)	23.8 (1.2)	66.3 (2.9)	-29.1 (5.10)	11.9 (3.01)
29	23.8 (1.2)	53.3 (5.6)	-26.0 (7.7)	6.88 (2.06)	22.8 (1.1)	52.0 (7.5)	-23.1 (8.40)	7.74 (2.51)	23.5 (2.1)	55.1 (6.8)	-16.1 (11.4)	5.90 (4.14)
30	23.0 (1.6)	51.8 (5.1)	-23.3 (12.5)	5.98 (3.38)	22.4 (1.6)	51.5 (5.8)	-21.9 (13.4)	6.75 (3.56)	24.6 (1.4)	53.1 (5.4)	-15.0 (11.1)	4.88 (3.52)
Avg	24.4	56.6	-20.6	7.94	23.4	56.8	-15.8	9.67	24.4	58.2	-17.4	7.46
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	1.1	6.2	6.04	2.56	1.3	7.2	9.11	3.01	1.4	6.5	7.11	2.59
Min	22.6	43.2	-29.9	3.53	20.9	41.8	-33.9	4.54	21.9	43.8	-29.10	3.19
Max	26.8	69.4	-10.3	13.1	25.8	70.5	-3.25	16.20	26.8	71.3	-2.16	11.9

ED_004549_00015929-00105

Table F3. Daily means (SD) of environmental parameters at Site NC3B for May, 2008.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	24.0 (2.2)	51.5 (6.8)	-24.2 (10.8)	8.17 (4.69)	23.7 (2.4)	50.8 (6.7)	-25.1 (11.8)	9.90 (5.66)	25.4 (1.8)	51.6 (6.4)	-21.3 (12.0)	7.63 (4.72)
2	25.3 (2.0)	54.1 (6.1)	-28.3 (3.7)	11.7 (5.69)	24.9 (2.4)	54.5 (6.4)	-30.7 (6.5)	13.9 (6.92)	26.1 (1.8)	54.4 (5.3)	-24.1 (9.6)	9.59 (4.53)
3	25.3 (1.9)	55.8 (6.6)	-27.8 (2.1)	11.8 (5.16)	25.2 (2.1)	55.9 (6.8)	-29.6 (5.1)	13.9 (6.99)	25.8 (1.9)	55.5 (5.9)	-25.2 (9.0)	9.98 (4.57)
4	25.9 (1.9)	57.5 (8.1)	-27.5 (2.5)	13.4 (5.66)	25.9 (2.3)	57.8 (7.9)	-35.0 (4.5)	16.2 (7.12)	26.3 (2.2)	56.5 (6.5)	-27.5 (6.4)	11.2 (4.41)
5	24.7 (1.1)	65.1 (3.3)	-27.2 (2.4)	9.30 (2.56)	24.1 (1.4)	65.6 (3.2)	-30.6 (6.8)	10.5 (3.00)	24.0 (1.9)	62.2 (2.4)	-28.4 (8.3)	10.4 (3.68)
6	24.8 (1.6)	58.0 (6.1)	-28.7 (1.9)	9.99 (3.31)	24.3 (2.1)	57.8 (6.6)	-29.1 (7.4)	11.4 (4.58)	25.6 (1.3)	54.1 (6.7)	-24.7 (10.0)	9.50 (4.46)
7	25.3 (2.1)	53.9 (7.7)	-27.9 (3.3)	12.4 (5.56)	25.0 (2.6)	53.0 (7.6)	-29.4 (7.7)	14.4 (7.55)	26.0 (2.1)	51.9 (7.2)	-25.4 (8.8)	11.0 (4.21)
8	25.7 (1.3)	61.7 (2.7)	-28.3 (1.9)	12.0 (3.28)	25.0 (1.5)	61.9 (2.9)	-32.6 (2.6)	16.8 (6.80)	26.3 (1.3)	57.9 (2.5)	-27.9 (4.2)	11.3 (3.28)
9	27.0 (1.8)	59.7 (6.5)	-25.3 (8.5)	16.3 (5.43)	26.5 (2.1)	59.8 (7.1)	-32.3 (2.0)	20.8 (6.50)	27.1 (2.1)	56.2 (5.3)	-30.8 (2.8)	14.5 (2.83)
10	26.0 (2.4)	56.0 (7.8)	-17.1 (11.0)	14.3 (6.07)	25.3 (3.1)	56.8 (7.7)	-30.9 (8.9)	17.0 (7.64)	26.5 (2.3)	54.0 (7.1)	-27.0 (6.7)	11.6 (4.33)
11	24.1 (2.1)	59.4 (5.6)	-10.3 (7.8)	10.3 (3.80)	23.5 (2.1)	61.3 (5.6)	-17.1 (12.4)	13.1 (5.35)	25.7 (1.5)	56.2 (4.9)	-22.1 (8.7)	8.20 (3.22)
12	23.6 (1.2)	53.3 (3.4)	-7.0 (3.9)	8.91 (2.68)	22.9 (0.9)	53.7 (3.6)	-10.0 (4.6)	10.9 (2.51)	25.2 (1.0)	50.7 (3.1)	-16.6 (6.7)	7.30 (2.40)
13	22.9 (1.8)	49.3 (6.5)	-7.3 (5.8)	8.18 (4.48)	22.4 (1.8)	49.0 (8.3)	-10.6 (7.8)	10.4 (4.48)	24.8 (1.3)	50.0 (6.6)	-17.1 (11.5)	7.25 (4.51)
14	23.9 (2.0)	50.2 (5.5)	-11.9 (6.5)	9.49 (4.41)	23.2 (2.1)	49.7 (7.4)	-16.0 (8.4)	12.9 (5.96)	25.4 (1.3)	52.0 (7.8)	-13.0 (6.8)	9.57 (4.81)
15	25.2 (1.4)	59.2 (3.8)	-16.0 (1.7)	11.8 (3.62)	24.4 (1.8)	60.5 (4.6)	-20.0 (4.5)	16.5 (7.16)	25.7 (1.7)	62.3 (4.6)	-14.8 (5.0)	12.7 (3.23)
16	26.3 (1.9)	59.5 (6.7)	-15.9 (2.0)	15.7 (6.19)	26.0 (2.1)	60.3 (7.5)	-20.9 (1.7)	21.0 (8.36)	26.1 (2.4)	62.4 (8.2)	-18.4 (2.3)	17.4 (4.11)
17	24.7 (1.3)	47.9 (6.1)	-15.6 (2.2)	10.9 (3.49)	23.7 (1.7)	46.4 (7.5)	-18.5 (6.5)	13.9 (5.68)	25.1 (1.4)	49.0 (7.3)	-11.6 (5.9)	10.4 (3.81)
18	25.3 (2.1)	54.8 (8.3)	-16.0 (3.2)	13.1 (5.71)	24.5 (2.3)	55.7 (10.3)	-16.8 (5.8)	17.2 (8.78)	25.8 (1.9)	57.3 (8.9)	-12.0 (5.6)	11.3 (4.56)
19	26.2 (2.5)	56.3 (8.0)	-11.8 (5.3)	9.72 (2.75)	24.5 (2.0)	55.3 (12.6)	-15.7 (7.4)	17.0 (7.64)	25.5 (1.5)	55.8 (10.6)	-14.3 (6.7)	10.7 (3.67)
20	27.7 (2.8)	59.4 (6.6)	-11.2 (5.3)	12.2 (8.92)	25.8 (3.1)	58.8 (7.8)	-20.0 (4.4)	20.2 (9.37)	26.8 (2.3)	59.6 (7.9)	-17.7 (2.6)	15.4 (8.10)
21	24.9 (1.7)	56.3 (6.4)	-13.8 (5.5)	11.4 (3.35)	24.0 (1.8)	58.1 (9.5)	-24.4 (4.6)	14.7 (4.77)	25.8 (1.2)	60.8 (9.8)	-19.0 (4.0)	11.1 (2.95)
22	25.0 (2.3)	48.9 (9.2)	-14.3 (6.7)	12.9 (6.09)	24.3 (2.6)	48.0 (9.9)	-27.0 (4.5)	15.7 (8.58)	25.9 (1.8)	52.3 (11.7)	-19.0 (6.2)	10.8 (4.50)
23	25.3 (2.1)	52.0 (8.3)	-16.1 (6.4)	13.8 (6.11)	24.8 (2.5)	51.0 (7.7)	-27.5 (3.8)	16.6 (8.34)	26.1 (1.8)	54.8 (9.2)	-19.5 (5.3)	11.9 (4.85)
24	24.5 (1.0)	61.6 (3.0)	-14.2 (6.6)	10.1 (2.07)	23.1 (1.2)	61.5 (3.2)	-28.1 (3.6)	11.4 (2.36)	25.2 (1.0)	65.5 (3.3)	-18.8 (4.9)	8.86 (2.33)
25	24.8 (2.2)	52.5 (7.9)	-14.4 (6.6)	11.8 (5.13)	24.0 (2.6)	51.8 (8.8)	-26.7 (4.3)	14.8 (7.88)	25.3 (1.9)	55.2 (10.5)	-18.9 (7.8)	9.93 (4.60)
26	25.5 (2.6)	51.3 (7.5)	-14.9 (6.0)	14.3 (7.26)	24.8 (3.1)	51.1 (7.6)	-26.5 (4.2)	17.7 (9.30)	25.8 (2.4)	53.6 (9.2)	-17.7 (7.1)	12.3 (7.10)
27	26.9 (2.5)	54.3 (6.6)	-16.8 (4.5)	18.2 (9.62)	26.2 (3.5)	54.8 (6.6)	-28.2 (2.5)	20.1 (8.49)	27.2 (2.3)	56.3 (7.5)	-20.2 (2.6)	16.7 (8.57)
28	24.2 (1.2)	63.2 (3.4)	-15.5 (6.4)	10.6 (2.62)	23.3 (1.2)	64.2 (2.9)	-26.2 (5.1)	11.7 (3.34)	24.6 (1.1)	67.6 (3.9)	-20.1 (5.0)	10.3 (3.37)
29	24.8 (1.9)	52.5 (6.6)	-23.3 (10.4)	10.3 (3.32)	24.1 (2.2)	54.1 (8.7)	-29.4 (12.6)	13.7 (6.04)	25.3 (1.6)	57.1 (8.7)	-20.0 (5.7)	10.5 (3.69)
30	26.2 (2.2)	58.2 (5.1)	-28.3 (2.0)	14.5 (7.09)	26.0 (3.2)	59.6 (5.8)	-33.8 (9.9)	17.5 (7.52)	26.7 (2.1)	62.5 (6.1)	-19.9 (4.5)	14.3 (6.37)
31	27.8 (2.7)	62.5 (4.9)	-28.9 (1.9)	19.4 (8.06)	27.7 (3.2)	63.7 (5.7)	-34.5 (6.0)	22.0 (6.57)	27.6 (2.9)	66.2 (5.6)	-21.7 (3.1)	20.2 (6.98)
Avg	25.3	56.0	-18.9	12.2	24.6	56.2	-25.3	15.3	25.8	56.8	-20.5	11.4
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	1.1	4.4	7.03	2.69	1.2	5.0	6.78	3.33	0.8	4.8	4.86	2.91
Min	22.9	47.9	-28.9	8.17	22.4	46.4	-35.0	9.90	24.0	49.0	-30.8	7.25
Max	27.8	65.1	-7.04	19.40	27.7	65.6	-10.0	22.0	27.6	67.6	-11.6	20.2

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for June, 2008.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	28.4 (3.0)	59.4 (9.0)	-29.1 (1.29)	18.6 (8.41)	28.2 (3.8)	61.5 (12.4)	-13.8 (13.90)	26.0 (8.45)	28.3 (3.1)	61.8 (9.6)	-22.5 (2.45)	19.9 (7.92)
2	26.8 (2.2)	55.9 (11.1)	-25.5 (9.70)	15.5 (7.94)	27.0 (3.0)	59.5 (13.8)	-26.1 (16.70)	20.7 (4.80)	26.7 (2.6)	58.1 (12.1)	-23.2 (3.80)	18.3 (5.33)
3	26.8 (2.1)	57.5 (6.8)	-28.7 (2.24)	16.3 (7.75)	26.4 (3.2)	58.6 (6.9)	-34.3 (11.20)	19.4 (5.76)	27.2 (2.0)	60.4 (8.4)	-19.8 (3.33)	15.5 (6.41)
4	29.1 (3.4)	61.7 (6.5)	-27.5 (2.45)	21.2 (8.32)	29.2 (4.0)	62.9 (6.5)	-33.7 (9.18)	23.8 (6.28)	29.0 (3.6)	64.6 (7.2)	-21.2 (2.75)	22.6 (7.68)
5	30.2 (3.3)	59.9 (7.9)	-26.9 (1.44)	23.5 (7.31)	30.9 (3.6)	60.8 (7.8)	-39.1 (7.69)	25.1 (3.27)	30.6 (3.1)	62.0 (8.2)	-21.1 (2.40)	23.8 (7.93)
6	30.4 (3.6)	59.8 (9.7)	-26.6 (1.66)	23.2 (7.39)	31.1 (3.8)	60.8 (9.4)	-42.4 (0.66)	24.2 (2.10)	30.7 (3.3)	61.8 (10.2)	-20.9 (2.27)	23.8 (7.88)
7	30.5 (3.8)	58.6 (11.7)	-26.4 (1.65)	22.9 (7.10)	31.2 (3.9)	59.9 (13.0)	-26.9 (18.60)	29.2 (7.23)	30.8 (3.5)	60.6 (12.3)	-21.1 (2.43)	23.4 (8.05)
8	30.9 (4.1)	58.1 (11.5)	-26.1 (1.46)	23.4 (7.88)	31.8 (3.8)	60.5 (15.6)	-5.3 (6.42)	35.1 (4.14)	31.6 (3.9)	60.4 (12.7)	-12.9 (9.54)	26.7 (10.0)
9	31.0 (4.0)	58.0 (11.1)	-26.6 (1.51)	24.2 (6.93)	31.5 (3.7)	59.1 (13.9)	-9.8 (8.39)	34.3 (3.72)	31.8 (3.5)	60.3 (13.1)	-5.6 (9.27)	27.9 (8.85)
10	30.5 (3.6)	57.3 (10.6)	-26.2 (2.26)	18.6 (4.80)	30.0 (3.8)	59.3 (12.6)	-12.7 (8.61)	32.6 (4.69)	30.7 (3.2)	60.2 (12.3)	-13.0 (9.88)	24.0 (7.29)
11												
12												
13	28.9 (2.3)	52.6 (7.1)	-24.8 (7.77)	15.0 (7.33)	26.9 (3.6)	57.0 (9.5)	-20.2 (3.95)	24.3 (8.28)	28.4 (2.6)	58.5 (9.7)	-21.1 (2.65)	19.5 (9.64)
14	28.6 (2.6)	55.0 (6.3)	-27.2 (2.36)	18.6 (10.0)	27.3 (3.9)	58.1 (9.4)	-20.2 (4.46)	24.8 (8.24)	28.7 (2.8)	59.5 (10.0)	-21.1 (2.14)	19.8 (9.66)
15	26.2 (1.8)	67.6 (3.7)	-27.7 (2.37)	15.1 (5.25)	25.7 (1.9)	69.8 (4.4)	-21.2 (3.00)	22.8 (7.09)	27.0 (1.5)	70.7 (3.7)	-21.7 (2.65)	15.6 (4.95)
16	28.7 (3.2)	59.0 (8.5)	-25.3 (7.08)	15.2 (6.72)	27.5 (3.7)	61.3 (10.1)	-17.0 (4.99)	25.9 (8.72)	28.7 (2.7)	61.9 (9.6)	-19.2 (6.12)	20.0 (10.1)
17	29.4 (1.9)	56.3 (11.1)	-23.9 (6.05)	14.7 (6.80)	27.7 (3.0)	58.5 (13.3)	-20.4 (3.53)	26.5 (6.22)	28.7 (2.4)	59.1 (11.7)	-20.8 (1.81)	20.5 (8.77)
18	27.6 (1.6)	46.3 (10.1)	-26.8 (3.56)	11.7 (6.46)	25.2 (2.7)	44.5 (9.6)	-18.6 (4.97)	21.4 (9.06)	27.1 (2.0)	47.1 (9.7)	-23.8 (3.38)	14.1 (6.07)
19	27.8 (2.3)	47.6 (12.3)	-24.2 (4.75)	12.6 (7.53)	25.5 (3.8)	45.9 (12.2)	-17.8 (4.23)	21.1 (10.6)	27.3 (2.6)	48.9 (13.4)	-24.3 (5.89)	16.0 (9.33)
20	26.4 (2.0)	57.7 (5.9)	-25.3 (3.85)	13.5 (7.83)	24.8 (2.8)	58.2 (6.1)	-17.8 (7.77)	19.1 (9.23)	26.9 (1.8)	60.5 (6.1)	-28.4 (1.83)	12.9 (7.08)
21	25.5 (1.6)	63.8 (4.6)	-26.6 (2.70)	12.6 (5.07)	24.5 (1.9)	66.0 (5.4)	-17.6 (6.16)	18.5 (8.37)	26.4 (1.3)	67.2 (4.6)	-27.5 (2.11)	11.7 (4.29)
22	26.2 (2.0)	65.3 (5.7)	-25.4 (2.29)	15.0 (6.46)	25.4 (2.2)	68.1 (7.0)	-17.0 (4.14)	20.6 (7.60)	26.8 (1.8)	68.3 (6.1)	-26.9 (2.15)	14.1 (6.17)
23	27.4 (2.1)	61.8 (6.2)	-24.3 (5.97)	17.2 (7.49)	26.4 (2.6)	65.3 (7.2)	-17.1 (5.28)	23.1 (8.42)	27.5 (2.0)	65.4 (5.7)	-26.6 (3.40)	15.8 (7.16)
24	27.7 (3.8)	52.1 (11.8)	-27.2 (2.16)	19.9 (8.38)	27.2 (3.9)	53.8 (13.7)	-17.1 (3.97)	23.5 (9.06)	28.4 (3.1)	54.5 (13.0)	-26.8 (2.14)	18.3 (9.82)
25	28.5 (4.4)	54.3 (13.6)	-18.6 (11.7)	23.4 (9.38)	28.2 (4.3)	55.8 (14.9)	-16.4 (4.85)	25.9 (8.82)	29.6 (3.6)	56.0 (14.5)	-21.1 (11.3)	20.4 (11.0)
26	29.9 (3.6)	55.5 (12.6)	-26.7 (1.41)	21.3 (8.48)	29.1 (4.0)	58.3 (14.9)	-19.9 (3.16)	27.0 (7.05)	30.5 (3.2)	59.7 (13.9)	-27.2 (1.30)	17.1 (4.86)
27	29.2 (3.2)	56.1 (9.7)	-26.1 (2.26)	21.0 (7.74)	28.5 (3.5)	59.8 (11.9)	-19.1 (4.36)	27.5 (5.68)	29.8 (2.9)	60.1 (10.1)	-27.0 (0.86)	17.2 (4.41)
28	30.3 (3.5)	55.9 (11.0)	-26.1 (2.22)	22.7 (7.72)	29.6 (3.9)	59.0 (13.1)	-16.2 (1.82)	30.0 (5.92)	30.8 (3.1)	59.7 (11.2)	-26.7 (1.21)	17.8 (4.82)
29	29.0 (2.9)	58.7 (8.4)	-24.7 (4.32)	20.4 (7.12)	28.2 (3.2)	61.2 (9.7)	-19.1 (3.71)	27.2 (5.05)	29.5 (2.5)	61.5 (8.4)	-27.2 (1.23)	18.8 (7.35)
30	28.6 (2.4)	57.2 (10.6)	-21.7 (7.12)	20.2 (7.41)	27.9 (2.7)	58.8 (11.8)	-18.3 (2.74)	26.4 (6.74)	29.2 (2.0)	59.9 (11.0)	-27.1 (1.23)	18.0 (6.60)
Avg	28.6	57.5	-25.8	18.5	28.0	59.4	-20.5	25.2	28.9	60.3	-22.3	19.1
n	28	28	28	28	28	28	28	28	28	28	28	28
SD	1.5	4.5	2.04	3.84	2.1	5.2	8.09	4.21	1.6	4.8	5.10	3.96
Min	25.5	46.3	-29.1	11.7	24.5	44.5	-42.4	18.5	26.4	47.1	-28.4	11.7
Max	31.0	67.6	-18.6	24.2	31.8	69.8	-5.31	35.1	31.8	70.7	-5.58	27.9

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for July, 2008.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	25.9 (3.1)	47.5 (8.7)	-26.0 (6.65)	16.8 (5.78)	25.7 (2.9)	47.7 (9.7)	-16.3 (5.70)	18.6 (7.24)	27.5 (2.1)	49.5 (9.4)	-23.9 (7.10)	12.4 (4.84)
2	25.8 (5.3)	46.1 (12.8)	-21.9 (9.51)	19.8 (8.20)	26.3 (4.3)	44.6 (12.9)	-11.8 (5.28)	23.5 (11.50)	28.0 (3.3)	47.1 (13.4)	-20.2 (10.60)	12.8 (7.71)
3	27.1 (4.5)	51.4 (11.9)	-24.6 (5.61)	20.3 (8.34)	27.0 (4.1)	50.4 (12.0)	-16.4 (4.91)	23.5 (10.00)	28.6 (3.0)	51.9 (12.5)	-24.4 (3.80)	18.8 (9.66)
4	28.2 (3.7)	59.0 (10.3)	-26.8 (2.13)	20.2 (7.22)	27.8 (3.8)	59.8 (10.7)	-19.1 (4.25)	25.4 (7.84)	29.0 (3.0)	60.4 (10.2)	-26.6 (2.25)	19.1 (8.02)
5												
6												
7												
8												
9	27.7 (1.8)	66.0 (3.8)	-20.8 (9.15)	17.7 (8.30)	26.8 (2.6)	69.8 (5.3)	-34.8 (6.11)	20.0 (6.37)	29.6 (2.7)	71.5 (5.8)	-21.5 (11.20)	15.5 (8.41)
10	27.8 (2.7)	63.2 (7.4)	-27.4 (1.71)	18.2 (8.20)	27.3 (3.2)	67.0 (9.1)	-37.8 (2.98)	20.0 (5.38)	28.0 (2.6)	66.8 (8.5)	-26.1 (2.90)	17.0 (8.46)
11												
12	27.4 (3.1)	56.3 (9.9)	-22.1 (7.58)	17.9 (9.23)	26.9 (3.8)	59.8 (12.1)	-34.7 (7.20)	19.0 (6.50)	28.0 (2.8)		-24.8 (3.54)	
13	27.2 (3.4)	55.8 (7.3)	-21.8 (7.31)	17.6 (9.04)	26.7 (3.9)	58.8 (9.3)	-31.2 (10.0)	19.2 (7.49)	27.7 (3.1)		-23.9 (5.29)	
14	27.0 (2.2)	65.8 (4.7)	-24.8 (6.25)	16.0 (7.91)	26.4 (2.7)	69.2 (6.3)	-30.9 (12.9)	19.5 (7.65)	27.5 (1.9)		-24.2 (5.56)	
15	27.5 (2.1)	64.6 (6.8)	-26.6 (2.48)	17.4 (7.53)	27.0 (2.5)	68.0 (8.0)	-37.5 (3.32)	20.0 (6.32)	27.6 (2.1)		-27.7 (1.18)	
16	27.4 (3.0)	53.9 (8.6)	-23.1 (6.94)	18.4 (8.86)	26.9 (3.7)	56.7 (10.5)	-37.0 (8.19)	19.0 (5.92)	27.9 (2.7)		-26.0 (2.76)	
17	27.5 (3.9)	52.3 (10.1)	-23.6 (9.67)	18.0 (9.30)	27.3 (4.6)	55.3 (11.6)	-33.5 (12.3)	18.8 (6.78)	28.2 (3.6)		-25.9 (4.42)	
18	27.2 (2.3)	63.5 (4.0)	-28.9 (1.91)	17.3 (7.80)	27.0 (2.9)	67.2 (5.9)	-37.2 (7.12)	20.0 (5.69)	27.9 (2.1)	66.2 (4.4)	-25.8 (3.23)	16.8 (7.63)
19	27.2 (1.9)	66.2 (2.9)	-30.4 (1.22)	16.9 (6.23)	27.1 (2.0)	70.8 (4.3)	-40.9 (4.24)	20.3 (4.54)	27.7 (1.6)	70.2 (3.2)	-27.4 (1.44)	16.6 (5.98)
20	28.8 (2.7)	61.5 (6.6)	-30.3 (2.68)	20.1 (7.26)	28.4 (3.0)	67.6 (7.9)	-39.0 (7.90)	21.3 (3.34)	29.0 (2.3)	66.6 (6.2)	-27.4 (1.95)	19.0 (8.06)
21	30.0 (3.5)	56.6 (7.6)	-29.8 (3.64)	21.3 (7.51)	29.7 (3.9)	60.9 (9.5)	-33.8 (5.92)	19.3 (2.88)	30.2 (3.3)	60.2 (8.5)	-26.3 (3.77)	20.7 (8.89)
22	28.9 (4.2)	59.6 (9.6)	-25.2 (6.87)	18.6 (7.53)	28.4 (4.5)	63.5 (11.3)	-32.6 (6.69)	19.9 (4.65)	29.1 (3.9)	62.1 (10.5)	-28.3 (1.90)	17.9 (8.17)
23	25.0 (2.3)	68.0 (4.3)	-8.9 (8.72)	10.8 (4.11)	25.4 (2.2)	72.7 (4.5)	-19.7 (13.2)	19.5 (8.62)	26.6 (1.9)	70.3 (3.8)	-28.0 (4.08)	13.6 (5.33)
24	25.7 (3.2)	63.3 (9.5)	-4.7 (7.44)	6.0 (7.28)	25.7 (2.6)	68.7 (9.0)	-20.5 (3.78)	20.3 (8.26)	27.1 (2.2)	65.8 (8.2)	-29.7 (5.32)	14.9 (6.57)
25	25.7 (2.5)				25.0 (2.7)				26.7 (2.2)	64.2 (6.8)		
26	25.6 (2.0)				25.7 (3.0)				27.2 (2.4)	62.4 (7.5)		
27	26.4 (2.6)				26.8 (2.4)				28.0 (2.0)	70.7 (4.4)		
28	27.1 (2.9)				28.0 (2.9)				29.0 (2.4)	64.6 (11.9)		
29	27.3 (3.5)				28.1 (3.3)				29.1 (2.7)	66.7 (6.9)		
30												
31												
Avg	27.1	59.0	-23.6	17.3	27.0	62.0	-29.7	20.4	28.1	63.2	-25.7	16.6
n	24	19	19	19	24	19	19	19	24	18	19	13
SD	1.1	6.4	6.45	3.43	1.1	8.0	8.93	1.79	0.9	7.0	2.28	2.49
Min	25.0	46.1	-30.4	6.02	25.0	44.6	-40.9	18.6	26.6	47.1	-29.7	12.4
Max	30.0	68.0	-4.72	21.3	29.7	72.7	-11.8	25.4	30.2	71.5	-20.2	20.7

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for August, 2008.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1												
2												
3												
4												
5												
6												
7												
8												
9	27.4 (2.2)	64.7 (6.9)	-21.6 (9.28)	11.0 (5.49)	26.2 (2.4)	67.4 (6.2)	-23.9 (6.09)	15.5 (8.05)	26.9 (2.7)	69.1 (3.9)		
10	27.3 (2.0)	61.1 (4.9)	-20.5 (9.62)	9.4 (3.69)	25.9 (2.0)	66.2 (5.5)	-20.3 (3.18)	15.2 (7.47)	24.0 (3.4)		-17.7 (1.02)	
11	26.7 (2.3)	58.1 (6.9)	-16.9 (10.8)	8.8 (4.83)	25.2 (2.4)	62.3 (8.9)	-18.4 (5.01)	13.4 (8.30)	24.3 (4.4)		-15.9 (10.40)	
12	26.9 (2.3)	54.7 (8.2)	-17.0 (12.2)	8.1 (4.80)	25.6 (2.6)	57.5 (9.8)	-18.2 (10.4)	12.7 (10.2)	26.9 (2.5)		-22.4 (12.00)	
13	25.7 (0.5)	68.4 (2.5)	-24.4 (7.47)	6.5 (1.84)	24.3 (0.5)	71.7 (1.7)	-27.4 (5.46)	8.2 (1.89)	25.8 (0.5)	73.0 (1.7)	-11.6 (8.21)	5.80 (3.39)
14	26.6 (1.8)	62.0 (5.1)	-24.6 (8.90)	8.0 (3.66)	25.1 (1.9)	65.3 (5.2)	-28.7 (5.64)	11.6 (6.08)	26.9 (1.7)	67.3 (6.0)	-13.5 (9.38)	8.09 (4.72)
15	27.5 (2.3)	61.7 (5.9)	-25.8 (8.05)	9.9 (4.48)	26.2 (2.6)	64.0 (6.4)	-28.3 (4.38)	16.0 (9.32)	27.7 (2.2)	66.1 (6.7)	-16.0 (8.90)	10.1 (5.26)
16	27.3 (1.3)	65.2 (4.8)			26.2 (1.4)	68.7 (5.6)	-27.3 (5.89)	13.6 (5.21)	27.2 (1.5)	69.6 (5.4)	-16.8 (7.98)	9.51 (3.42)
17	26.7 (1.2)	63.5 (4.2)	-25.8 (4.49)	9.0 (2.20)	25.5 (1.3)	70.5 (3.7)	-28.0 (6.61)	11.6 (3.59)	26.7 (1.1)	71.6 (3.8)	-18.0 (7.32)	8.55 (2.75)
18	27.2 (2.2)	61.4 (6.5)	-22.5 (7.20)	10.6 (5.04)	26.1 (2.8)	65.2 (7.3)	-25.6 (7.07)	15.8 (8.55)	27.5 (2.3)		-17.0 (8.94)	
19	27.7 (2.6)	60.3 (7.3)	-23.1 (7.34)	12.1 (6.31)	26.7 (3.2)	63.2 (8.0)	-26.5 (6.77)	17.5 (9.28)	28.1 (2.6)		-16.3 (9.38)	
20	28.0 (2.7)	60.0 (8.7)	-23.4 (5.65)	13.1 (6.78)	27.2 (3.2)	62.8 (9.8)	-27.4 (6.85)	17.6 (9.25)	28.3 (2.8)		-16.3 (8.57)	
21	27.9 (1.8)	62.7 (5.7)	-24.4 (6.41)	11.9 (4.94)	26.9 (2.3)	66.0 (6.6)	-31.8 (3.12)	17.5 (8.04)	27.9 (2.0)		-16.8 (8.57)	
22	27.6 (2.2)	58.6 (4.5)	-23.8 (6.79)	12.1 (5.27)	26.7 (2.6)	61.3 (4.8)	-27.3 (6.89)	16.6 (8.16)	27.8 (2.3)		-16.3 (9.30)	
23	27.8 (2.5)	59.6 (6.5)	-21.6 (7.50)	12.0 (6.85)	26.7 (2.6)	61.2 (7.0)	-26.8 (6.71)	16.4 (8.21)	27.9 (2.2)		-16.7 (8.89)	
24	27.6 (2.4)	60.0 (7.7)	-24.5 (5.97)	12.8 (6.57)	26.7 (2.8)	62.8 (8.3)	-26.2 (6.41)	17.9 (9.26)	28.0 (2.2)		-16.7 (9.01)	
25												
26												
27	28.1 (1.2)	69.8 (2.4)	-25.6 (3.21)	12.7 (2.52)	27.2 (1.3)	75.1 (2.7)	-30.7 (2.80)	16.7 (5.18)	27.9 (1.3)	76.9 (2.9)	-11.3 (8.03)	11.8 (3.01)
28	28.8 (1.5)	65.5 (4.8)	-27.1 (2.33)	14.4 (4.28)	27.9 (1.7)	72.8 (5.9)	-30.1 (3.35)	19.5 (6.64)	28.7 (1.5)	75.0 (5.9)	-19.4 (7.55)	13.5 (4.22)
29	28.3 (2.2)	63.8 (5.6)	-23.6 (7.33)	14.4 (6.19)	27.3 (2.4)	70.9 (6.4)	-30.9 (2.99)	17.2 (8.47)	28.2 (2.2)	73.9 (6.2)	-16.4 (7.09)	12.3 (5.42)
30	28.7 (2.1)	63.2 (6.1)	-23.9 (7.43)	14.8 (6.39)	27.7 (2.6)	69.7 (7.2)	-29.8 (3.16)	19.1 (8.30)	28.6 (2.3)	73.2 (7.4)	-20.4 (7.32)	13.8 (5.62)
31	29.1 (2.3)	61.1 (6.1)	-26.1 (6.10)	16.5 (7.77)	28.3 (2.8)	66.7 (7.2)	-30.2 (2.49)	20.0 (7.99)	29.1 (2.4)	70.1 (7.5)	-17.7 (7.67)	15.8 (8.17)
Avg	27.6	62.2	-23.3	11.4	26.4	66.3	-26.9	15.7	27.3	71.4	-16.7	10.9
n	21	21	20	20	21	21	21	21	21	11	20	10
SD	0.8	3.4	2.66	2.55	1.0	4.3	3.74	2.87	1.3	3.2	2.50	2.90
Min	25.7	54.7	-27.1	6.45	24.3	57.5	-31.8	8.19	24.0	66.1	-22.4	5.80
Max	29.1	69.8	-16.9	16.5	28.3	75.1	-18.2	20.0	29.1	76.9	-11.3	15.8

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for September, 2008.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	27.9 (2.2)	53.4 (10.0)	-20.8 (10.0)	13.1 (5.31)	26.7 (2.8)	57.4 (12.1)	-29.6 (6.14)	16.9 (8.39)	27.9 (2.2)	60.7 (12.4)	-19.2 (7.67)	12.0 (5.81)
2	27.0 (2.8)	52.7 (9.3)	-16.7 (11.5)	11.6 (6.47)	25.6 (3.3)	56.6 (10.8)	-21.9 (10.3)	14.9 (9.76)	27.4 (2.5)	59.8 (11.8)	-17.2 (9.51)	10.3 (6.71)
3	27.6 (3.0)	53.3 (8.2)	-17.7 (11.4)	12.4 (6.92)	26.2 (3.5)	57.7 (9.3)	-22.8 (9.34)	16.2 (10.0)	27.8 (2.7)	59.9 (9.7)	-17.6 (9.05)	11.5 (7.11)
4	27.7 (2.9)	55.0 (6.9)	-18.1 (10.7)	13.4 (7.65)	26.4 (3.5)	59.5 (7.9)	-23.4 (8.60)	16.6 (9.48)	28.0 (2.8)	61.3 (8.8)	-17.7 (8.35)	12.4 (8.10)
5	26.4 (1.0)	67.2 (3.9)	-7.09 (9.60)	9.86 (1.75)	26.0 (1.3)	74.6 (6.0)	-11.5 (13.40)	15.5 (4.86)	26.5 (1.0)	76.6 (6.0)	-9.87 (10.5)	8.96 (1.92)
6												
7												
8												
9												
10												
11	27.4 (1.1)	66.5 (3.2)	-19.8 (8.78)	11.2 (2.02)	26.2 (1.3)	73.2 (2.9)	-24.3 (5.15)	14.8 (3.74)	27.8 (0.9)	74.0 (2.5)	-9.92 (6.34)	10.3 (2.16)
12	28.2 (1.7)	63.3 (5.4)	-21.2 (9.05)	13.4 (4.95)	26.9 (2.2)	70.8 (5.6)	-26.7 (6.03)	18.0 (6.80)	28.5 (1.7)	72.3 (5.0)	-14.1 (9.18)	12.1 (4.10)
13	28.9 (2.0)	61.6 (5.4)	-23.0 (7.75)	15.3 (6.29)	27.9 (2.4)	70.3 (5.7)	-26.6 (4.31)	19.8 (7.65)	29.1 (2.0)	71.5 (4.8)	-17.4 (9.30)	14.1 (5.10)
14	29.2 (2.1)	59.8 (5.6)	-25.5 (4.67)	16.8 (6.70)	28.4 (2.3)	69.6 (6.5)	-28.3 (2.89)	21.3 (7.25)	29.6 (1.7)	71.2 (5.3)	-18.3 (9.05)	14.7 (5.14)
15	29.1 (2.1)	59.1 (5.6)	-24.2 (6.81)	16.6 (6.68)	28.3 (2.3)	68.1 (5.2)	-27.8 (5.89)	21.1 (7.65)	29.5 (1.9)	70.3 (4.5)	-17.0 (9.15)	15.1 (6.17)
16	26.3 (1.0)	59.6 (1.9)	-10.8 (6.52)	10.1 (2.39)	25.2 (0.9)	70.5 (1.9)	-21.1 (6.16)	12.6 (1.66)	26.9 (0.8)	72.3 (1.5)	-8.31 (3.91)	9.22 (1.70)
17	25.4 (1.0)	54.2 (3.3)	-7.59 (5.42)	8.71 (3.08)	24.5 (1.0)	65.1 (3.3)	-14.7 (8.19)	10.6 (2.12)	26.3 (0.9)	68.1 (2.4)	-6.42 (2.89)	7.70 (2.99)
18	26.0 (2.0)	50.2 (5.4)	-11.5 (9.71)	9.41 (4.55)	24.5 (2.4)	60.0 (7.1)	-16.3 (12.0)	11.3 (5.95)	27.0 (1.6)	63.9 (5.8)	-12.6 (9.74)	7.93 (4.28)
19	26.0 (1.4)	50.9 (3.5)	-8.69 (6.00)	9.60 (3.16)	25.1 (1.5)	60.6 (5.0)	-12.1 (10.2)	9.35 (3.86)	26.6 (1.3)	64.4 (4.0)	-16.0 (8.87)	8.11 (3.41)
20	25.4 (1.0)	54.6 (2.6)	-6.00 (3.52)	8.37 (2.82)	24.5 (0.8)	64.3 (2.5)	-12.3 (9.64)	9.47 (3.57)	26.2 (1.0)	68.5 (2.9)	-12.2 (4.99)	7.22 (2.86)
21	25.8 (1.0)	56.3 (2.3)	-8.97 (5.44)	9.68 (2.49)	24.9 (1.1)	65.0 (3.0)	-16.4 (10.7)	10.5 (3.84)	26.5 (1.0)	68.7 (2.4)	-16.1 (7.76)	8.23 (2.67)
22	25.7 (0.9)	56.9 (3.4)	-9.58 (6.45)	9.46 (2.25)	24.5 (1.2)	63.2 (5.1)	-14.6 (9.70)	10.7 (3.30)	26.3 (1.0)	66.3 (4.1)	-14.9 (7.35)	7.74 (2.72)
23	25.5 (1.3)	55.1 (2.8)	-10.9 (6.53)	8.51 (3.39)	24.2 (1.5)	61.3 (4.0)	-14.1 (8.38)	10.9 (2.65)	26.2 (1.1)	64.8 (3.6)	-15.3 (7.24)	7.54 (3.21)
24	24.3 (1.3)	50.5 (3.3)	-7.24 (4.52)	5.41 (4.14)	23.3 (1.3)	56.2 (3.7)	-9.02 (5.91)	9.34 (2.95)	25.8 (1.1)	60.5 (3.0)	-11.7 (5.75)	6.19 (3.47)
25	24.0 (1.0)	58.7 (4.2)	-8.07 (3.98)	5.00 (4.06)	23.6 (0.8)	68.3 (5.8)	-6.49 (5.50)	8.95 (2.01)	25.7 (0.7)	70.7 (5.6)	-11.4 (5.06)	6.15 (3.44)
26	26.9 (0.8)	59.1 (1.7)	-9.84 (4.21)	10.4 (1.88)	25.5 (1.1)	70.6 (2.1)	-22.8 (5.36)	12.9 (1.33)	27.5 (0.6)	73.7 (1.8)	-16.9 (6.27)	9.50 (1.47)
27	27.4 (1.4)	57.5 (3.7)	-12.4 (8.13)	11.2 (2.80)	25.5 (1.8)	68.3 (4.9)	-19.1 (8.86)	13.6 (5.39)	27.2 (1.4)	71.5 (4.2)	-18.6 (7.33)	9.72 (2.68)
28	27.1 (1.8)	57.1 (3.9)	-14.6 (9.56)	11.0 (2.75)	25.4 (2.0)	67.2 (4.7)	-19.1 (9.70)	13.8 (5.70)	27.1 (1.6)	70.2 (4.1)	-18.6 (7.84)	9.41 (3.23)
29	27.2 (1.9)	56.8 (3.9)	-15.0 (9.95)	10.9 (3.04)	25.5 (2.3)	66.1 (5.1)	-20.3 (9.10)	14.5 (5.66)	27.5 (1.7)	69.5 (5.2)	-19.3 (8.47)	9.72 (3.53)
30	26.5 (1.1)	61.4 (1.5)	-11.7 (5.54)	10.0 (1.67)	25.1 (1.3)	71.2 (1.8)	-18.7 (8.22)	11.9 (2.67)	27.0 (1.1)	73.5 (1.5)	-19.0 (6.97)	8.95 (1.39)
Avg	26.8	57.2	-13.9	10.9	25.6	65.4	-19.2	13.8	27.3	68.2	-15.0	9.79
n	25	25	25	25	25	25	25	25	25	25	25	25
SD	1.3	4.4	5.83	2.82	1.3	5.4	6.21	3.61	1.0	4.9	3.65	2.43
Min	24.0	50.2	-25.5	5.00	23.3	56.2	-29.6	8.95	25.7	59.8	-19.3	6.15
Max	29.2	67.2	-6.00	16.8	28.4	74.6	-6.49	21.3	29.6	76.6	-6.42	15.1

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for October, 2008.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	26.2 (1.6)	58.7 (4.0)	-11.4 (8.12)	9.54 (2.75)	24.6 (1.8)	68.1 (4.6)	-15.5 (8.69)	11.6 (4.44)	26.8 (1.4)	71.2 (3.9)	-16.5 (8.06)	8.30 (3.06)
2	25.0 (1.6)	50.7 (5.0)	-6.99 (5.31)	6.83 (3.92)	23.1 (1.7)	57.1 (6.5)	-9.74 (7.10)	7.95 (4.22)	26.1 (1.4)	62.8 (6.4)	-10.1 (6.75)	5.72 (3.65)
3	25.3 (1.8)	51.1 (5.6)	-9.14 (7.63)	7.26 (4.58)	23.9 (2.1)	57.9 (7.3)	-11.7 (11.1)	8.24 (4.92)	26.3 (1.5)	62.9 (7.9)	-13.3 (10.5)	6.36 (4.27)
4	25.5 (2.2)	51.4 (4.1)	-10.9 (9.08)	8.05 (4.59)	24.8 (1.7)	58.9 (6.3)	-13.2 (12.3)	9.80 (5.72)	26.7 (1.7)	63.6 (6.4)	-15.5 (11.1)	7.08 (4.21)
5	25.6 (2.2)	52.5 (3.9)	-11.4 (9.97)	8.28 (4.62)	24.7 (2.0)	60.6 (5.8)	-12.1 (11.6)	9.84 (5.90)	26.6 (1.8)	65.6 (5.7)	-14.5 (10.7)	7.09 (4.54)
6	26.3 (2.4)	52.3 (5.2)	-12.7 (9.95)	9.69 (4.39)	25.1 (2.5)	58.5 (7.5)	-14.0 (11.9)	11.8 (6.79)	27.0 (1.9)	62.8 (7.4)	-15.0 (10.2)	8.19 (4.92)
7	25.5 (1.2)	53.3 (3.8)	-9.27 (5.64)	9.29 (2.84)	24.3 (1.5)	60.0 (5.0)	-10.7 (7.16)	9.46 (2.98)	26.2 (1.2)	64.6 (4.5)	-12.6 (8.22)	6.75 (3.77)
8	25.6 (1.7)	54.0 (3.2)	-10.1 (6.90)	8.75 (3.66)	24.9 (1.5)	61.2 (3.8)	-11.5 (9.44)	9.26 (4.15)	26.4 (1.4)	64.6 (3.6)	-14.4 (9.56)	7.14 (3.83)
9	26.4 (1.4)	60.0 (3.8)	-12.2 (7.97)	9.73 (2.76)	25.3 (1.5)	67.8 (4.2)	-17.8 (9.43)	12.2 (4.63)	27.0 (1.3)	69.3 (3.5)	-18.1 (8.25)	8.37 (2.65)
10	26.4 (0.6)	62.7 (1.8)	-12.1 (5.83)	10.0 (1.58)	25.2 (1.0)	70.5 (2.1)	-17.6 (4.14)	12.0 (1.23)	27.1 (0.6)	72.2 (1.5)	-19.4 (5.27)	8.62 (1.11)
11	26.0 (0.5)	62.3 (2.0)	-10.4 (4.81)	9.41 (1.17)	24.5 (0.7)	70.8 (2.0)	-16.4 (7.42)	11.1 (2.82)	26.7 (0.7)	72.2 (2.3)	-17.3 (3.12)	7.97 (1.13)
12	26.1 (1.3)	58.5 (1.7)	-11.5 (6.10)	9.88 (2.09)	25.1 (1.5)	64.8 (2.2)	-13.7 (9.78)	10.0 (3.62)	26.6 (1.1)	67.9 (1.9)	-19.3 (8.22)	8.03 (2.87)
13	26.0 (1.9)	56.5 (3.6)	-13.8 (10.6)	9.60 (3.74)	25.4 (2.0)	61.3 (5.3)	-15.1 (13.2)	10.4 (5.15)	26.9 (1.7)	66.5 (4.7)	-18.2 (9.92)	7.77 (3.84)
14	26.0 (2.5)	53.7 (5.6)	-13.3 (10.9)	9.16 (4.50)	25.5 (2.2)	58.5 (8.2)	-14.0 (13.1)	10.8 (7.06)	27.1 (1.9)	63.5 (7.9)	-16.9 (10.6)	7.77 (4.83)
15	26.3 (2.7)	51.8 (6.8)	-13.6 (11.1)	10.5 (6.37)	25.8 (2.6)	57.9 (8.4)	-15.3 (12.8)	12.3 (8.02)	27.4 (2.2)	62.1 (8.9)	-17.0 (9.59)	8.76 (5.63)
16	26.6 (2.5)	53.2 (6.3)	-14.8 (11.1)	11.1 (5.60)	25.9 (2.5)	59.3 (7.9)	-17.3 (12.6)	12.9 (7.53)	27.5 (2.1)	62.9 (7.3)	-18.1 (8.77)	8.87 (4.50)
17	25.6 (1.3)	61.4 (2.7)	-10.1 (5.96)	9.23 (2.47)	25.0 (1.4)	68.3 (2.8)	-13.2 (9.70)	9.91 (3.90)	26.6 (1.1)	69.3 (2.6)	-17.2 (7.99)	7.55 (2.96)
18	23.9 (1.0)	58.7 (3.5)	-4.88 (3.12)	5.35 (4.14)	24.0 (0.8)	67.1 (3.8)	-1.08 (4.70)	5.46 (1.85)	25.4 (1.4)	68.0 (3.2)	-8.52 (7.85)	4.11 (3.81)
19	23.8 (1.4)	52.4 (3.3)	-4.90 (4.05)	5.41 (4.35)	23.5 (1.2)	60.1 (2.5)	-1.82 (5.35)	5.48 (2.36)	25.3 (1.5)	62.3 (3.3)	-8.58 (8.05)	4.30 (4.01)
20	22.5 (1.8)	51.2 (5.6)	-5.38 (4.33)	6.28 (4.33)	22.6 (1.4)	59.1 (5.4)	-3.35 (5.16)	5.37 (3.04)	24.9 (1.6)	62.1 (6.2)	-7.56 (7.78)	3.83 (3.82)
21	23.0 (2.2)	51.8 (4.7)	-9.67 (8.06)	7.87 (4.52)	23.5 (1.6)	58.5 (5.9)	-6.79 (7.82)	6.83 (3.87)	24.9 (1.6)	60.3 (6.8)	-12.3 (10.3)	5.37 (4.19)
22	22.4 (1.5)	49.6 (4.4)	-6.21 (3.55)	6.78 (3.72)	22.9 (1.2)	57.4 (3.7)	-2.09 (4.37)	5.25 (2.13)	24.2 (1.5)	59.1 (4.9)	-9.77 (8.58)	4.45 (3.80)
23	22.5 (1.5)	52.3 (3.4)	-6.84 (4.27)	7.08 (3.83)	23.0 (1.4)	60.3 (2.8)	-2.51 (5.58)	5.39 (2.64)	24.3 (1.5)	63.1 (3.3)	-11.5 (8.43)	5.10 (3.74)
24	23.2 (0.9)	58.2 (5.4)	-7.42 (2.09)	8.53 (2.03)	24.0 (0.8)	66.0 (5.4)	-3.23 (5.93)	6.00 (2.54)	24.6 (1.0)	68.1 (4.5)	-14.1 (6.95)	6.21 (3.20)
25	25.2 (1.3)	62.0 (2.1)	-18.1 (8.72)	11.7 (2.62)	25.0 (1.4)	69.3 (2.8)	-14.7 (9.50)	10.6 (3.87)	26.5 (1.1)	71.8 (2.2)	-18.9 (6.70)	9.79 (2.57)
26	23.4 (1.4)	54.2 (2.8)	-10.9 (6.58)	9.09 (2.89)	24.1 (0.8)	60.5 (4.0)	-7.33 (8.05)	7.32 (3.55)	25.3 (1.4)	65.5 (3.4)	-14.3 (8.42)	6.23 (3.43)
27	22.6 (1.7)	52.8 (3.2)	-7.53 (6.06)	7.28 (4.17)	22.9 (1.2)	60.9 (3.7)	-3.84 (5.61)	5.97 (3.03)	24.5 (1.8)	63.8 (4.3)	-9.68 (8.60)	4.63 (3.80)
28	22.0 (1.5)	50.3 (4.1)	-5.29 (3.62)	5.92 (4.10)	22.4 (1.3)	59.1 (4.0)	-1.73 (1.67)	4.32 (1.58)	24.0 (1.7)	61.9 (4.1)	-7.29 (8.68)	3.52 (3.82)
29	22.0 (1.7)	50.6 (4.5)	-5.37 (3.84)	5.89 (4.09)	22.3 (1.5)	58.8 (3.8)	-2.09 (3.19)	4.26 (2.25)	24.1 (1.8)	63.1 (4.9)	-8.40 (8.60)	3.82 (3.81)
30	21.8 (1.7)	51.0 (5.0)	-5.08 (3.47)	5.89 (4.11)	22.2 (1.5)	60.5 (3.4)	-1.76 (3.22)	4.44 (2.38)	24.1 (1.9)	64.5 (5.4)	-8.99 (8.47)	3.98 (3.75)
31	22.1 (2.0)	48.5 (6.5)	-5.68 (4.73)	6.00 (4.35)	22.3 (1.6)	58.5 (6.3)	-3.18 (4.83)	5.12 (3.13)	24.4 (1.9)	63.1 (7.4)	-10.2 (8.56)	4.53 (3.81)
Avg	24.6	54.4	-9.57	8.24	24.1	61.9	-9.49	8.43	25.9	65.2	-13.7	6.46
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	1.7	4.1	3.37	1.73	1.1	4.2	5.80	2.78	1.1	3.5	3.84	1.81
Min	21.8	48.5	-18.1	5.35	22.2	57.1	-17.8	4.26	24.0	59.1	-19.4	3.52
Max	26.6	62.7	-4.88	11.7	25.9	70.8	-1.08	12.9	27.5	72.2	-7.29	9.79

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for November, 2008.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	22.7 (2.2)	48.0 (6.6)	-8.20 (7.48)	6.83 (4.88)	23.0 (1.7)	55.7 (8.1)	-5.90 (7.06)	6.62 (4.02)	24.9 (2.0)	60.0 (8.2)	-12.4 (10.4)	5.33 (4.19)
2	23.4 (2.3)	49.2 (5.0)	-11.6 (10.9)	8.14 (4.65)	23.6 (1.8)	56.6 (6.6)	-8.73 (10.9)	6.98 (4.10)	25.0 (1.9)	59.7 (6.8)	-14.6 (10.5)	5.81 (4.44)
3	23.9 (0.7)	61.6 (3.6)	-7.32 (3.17)	9.11 (1.17)	24.1 (1.0)	69.7 (4.1)	-3.99 (7.31)	6.87 (3.18)	24.6 (1.2)	69.4 (2.8)	-13.6 (6.54)	6.44 (3.15)
4	23.1 (1.0)	63.6 (2.5)	-14.7 (6.20)	11.4 (1.66)	22.6 (1.4)	69.4 (2.3)	-13.1 (8.16)	10.7 (3.28)	23.9 (0.8)	69.9 (2.0)	-23.1 (9.17)	9.12 (2.50)
5	22.4 (0.7)	59.7 (3.1)	-17.1 (5.16)	12.0 (1.36)	21.5 (0.9)	65.2 (2.7)	-16.8 (3.31)	12.4 (1.54)	23.5 (0.5)	66.3 (2.7)	-24.1 (7.11)	9.96 (1.43)
6	22.6 (2.2)	51.3 (5.8)	-14.9 (11.2)	12.3 (4.54)	22.4 (2.3)	56.5 (6.9)	-16.7 (11.8)	12.7 (6.62)	23.5 (1.8)	57.9 (6.3)	-19.8 (6.93)	10.4 (4.06)
7	22.4 (2.7)	52.8 (5.3)	-14.5 (11.3)	12.2 (5.47)	22.4 (2.4)	58.1 (6.3)	-16.5 (12.1)	12.9 (7.20)	23.9 (2.3)	59.9 (5.9)	-19.1 (8.21)	9.63 (4.57)
8	22.3 (0.9)		-13.6 (6.85)		22.3 (1.5)		-11.0 (8.53)				-17.9 (9.63)	
9	21.6 (1.6)		-10.6 (8.81)		22.4 (1.6)		-4.94 (7.70)				-11.7 (10.7)	
10	20.0 (1.9)	49.8 (5.1)	-6.55 (5.13)	7.99 (4.30)	19.9 (1.3)	55.7 (6.5)	-5.86 (6.75)	7.18 (3.76)	21.7 (1.9)	56.3 (5.6)	-11.5 (7.96)	6.37 (3.98)
11	19.7 (1.8)	52.4 (3.5)	-5.90 (4.49)	7.53 (4.04)	19.8 (1.3)	57.8 (4.2)	-5.15 (7.01)	6.75 (3.46)	21.3 (1.9)	59.8 (3.6)	-11.2 (7.26)	5.93 (3.73)
12	20.3 (1.5)	50.4 (3.7)	-6.77 (4.70)	8.68 (3.27)	20.6 (0.9)	55.4 (4.9)	-7.71 (8.09)	8.16 (3.81)	21.7 (1.5)	57.8 (4.2)	-14.1 (6.71)	7.32 (3.06)
13	22.3 (1.5)	64.9 (5.7)	-14.6 (8.59)	11.5 (2.40)	22.1 (1.4)	70.5 (6.4)	-15.4 (8.24)	11.4 (3.50)	23.4 (1.2)	69.6 (4.5)	-22.5 (6.68)	10.3 (2.21)
14	22.4 (0.8)	65.9 (2.6)	-15.5 (6.06)	11.8 (1.72)	21.6 (1.1)	72.5 (3.3)	-17.8 (5.73)	12.3 (2.41)	23.4 (0.5)	70.7 (2.5)	-22.2 (7.64)	9.77 (1.77)
15	24.6 (1.9)	61.1 (5.9)	-21.1 (9.40)	16.1 (4.61)	24.1 (2.0)	68.8 (6.0)	-24.2 (10.2)	16.2 (5.86)	24.6 (1.7)	67.0 (4.2)	-22.8 (5.98)	13.7 (4.36)
16	20.3 (1.5)	49.7 (3.6)	-6.48 (3.85)	8.78 (2.73)	20.6 (1.1)	56.9 (4.5)	-6.41 (6.89)	7.17 (3.35)	21.4 (1.5)	57.4 (4.4)	-10.9 (6.05)	6.53 (3.39)
17	19.4 (1.8)	51.3 (3.8)	-4.76 (2.87)	7.26 (3.73)	19.6 (1.2)	59.2 (4.0)	-3.87 (5.54)	5.99 (2.70)	20.9 (1.9)	59.1 (4.6)	-9.94 (6.76)	5.60 (3.72)
18	19.0 (1.2)	49.4 (3.4)	-3.54 (2.59)	6.31 (4.10)	19.1 (0.7)	58.0 (3.5)	-0.60 (1.15)	4.19 (1.67)	20.6 (1.8)	58.0 (5.0)	-6.35 (7.55)	4.29 (4.07)
19	14.6 (3.3)	50.0 (3.8)	-2.64 (3.18)	4.89 (4.59)	18.5 (0.9)	59.1 (4.7)	-1.52 (1.68)	3.20 (2.24)	20.9 (1.9)	60.1 (4.3)	-7.95 (8.00)	4.09 (3.96)
20	16.5 (3.4)	50.9 (5.8)	-3.96 (3.14)	5.57 (4.32)	18.7 (1.3)	57.0 (6.3)	-6.26 (10.2)	4.23 (3.12)	21.4 (1.8)	57.6 (5.0)	-9.98 (7.69)	5.16 (3.96)
21	15.3 (2.0)	47.9 (4.2)	-3.00 (2.96)	5.01 (4.47)	17.9 (0.8)	56.1 (3.8)	-1.63 (1.84)	2.89 (2.23)	21.0 (1.6)	56.2 (4.1)	-7.19 (7.89)	4.35 (4.07)
22	13.7 (3.1)	50.1 (4.3)	-3.30 (3.21)	4.87 (4.51)	17.9 (1.0)	58.4 (4.8)	-2.06 (1.71)	2.80 (2.29)	21.2 (2.0)	59.7 (5.6)	-8.37 (8.21)	4.17 (3.95)
23	15.6 (3.4)	49.3 (6.8)	-3.78 (3.50)	5.28 (4.41)	19.3 (1.6)	57.7 (7.5)	-4.61 (7.74)	3.12 (3.26)	21.5 (1.9)	57.7 (6.6)	-10.5 (8.15)	5.00 (3.88)
24	16.6 (4.4)	51.5 (7.6)	-3.81 (3.00)	5.65 (4.28)	20.5 (1.1)	59.8 (8.0)	-7.38 (8.48)	3.60 (4.13)	21.4 (1.9)	59.6 (6.2)	-11.2 (7.48)	5.56 (3.72)
25	19.4 (1.8)	47.0 (7.3)	-4.29 (2.96)	6.22 (4.04)	20.5 (1.1)	54.9 (7.9)	-7.94 (8.59)	4.01 (4.13)	21.7 (1.4)	56.4 (5.9)	-12.0 (6.89)	6.25 (3.43)
26	16.4 (3.1)	49.3 (5.8)	-3.59 (2.89)	5.31 (4.27)	20.4 (1.3)	58.8 (6.8)	-5.13 (7.41)	2.60 (3.79)	20.1 (2.0)	57.5 (5.7)	-7.90 (7.69)	4.20 (3.99)
27	17.3 (3.6)	49.9 (6.0)	-4.18 (2.89)	5.95 (4.15)	20.6 (1.3)	59.2 (7.3)	-7.70 (8.72)	3.58 (4.11)	20.4 (2.4)	57.0 (6.4)	-10.1 (8.12)	4.78 (3.91)
28	19.3 (2.5)	50.0 (5.3)	-6.06 (5.25)	6.97 (4.42)	21.0 (1.5)	58.1 (6.4)	-9.06 (8.53)	4.48 (4.17)	21.8 (1.7)	57.4 (5.3)	-13.6 (10.2)	6.02 (4.04)
29	19.4 (0.9)	54.2 (3.4)	-4.00 (2.64)	5.62 (4.25)	20.5 (1.1)	64.0 (4.5)	-6.82 (8.16)	3.08 (3.84)	17.8 (3.8)	62.4 (4.2)	-6.10 (7.70)	4.91 (4.12)
30	21.0 (1.5)	59.6 (3.3)	-5.40 (3.15)	7.51 (3.37)	20.7 (0.9)	69.4 (3.5)	-12.8 (8.70)	5.70 (3.81)	19.0 (3.2)	68.3 (2.8)	-2.55 (5.01)	6.00 (4.34)
Avg	19.9	53.2	-8.19	8.10	20.9	60.7	-8.58	6.85	22.0	61.0	-13.2	6.68
n	30	28	30	28	30	28	30	28	28	28	30	28
SD	3.0	5.6	5.11	2.88	1.7	5.4	5.62	3.77	1.8	4.7	5.67	2.40
Min	13.7	47.0	-21.1	4.87	17.9	54.9	-24.2	2.60	17.8	56.2	-24.1	4.09
Max	24.6	65.9	-2.64	16.1	24.1	72.5	-0.60	16.2	25.0	70.7	-2.55	13.7

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for December, 2008.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	19.9 (1.6)	49.1 (4.7)	-5.02 (2.75)	6.94 (3.68)	20.7 (1.0)	57.4 (5.3)	-7.26 (8.42)	3.86 (4.11)	21.6 (1.3)	57.0 (4.8)	-7.95 (5.48)	6.01 (3.72)
2	16.9 (2.3)	51.5 (3.5)	-3.81 (3.45)	5.09 (4.41)	20.4 (1.3)	62.3 (3.9)	-4.97 (7.84)	2.29 (3.57)	20.5 (1.7)	60.0 (3.6)	-6.82 (6.38)	4.35 (3.97)
3	15.8 (3.7)	51.5 (5.3)	-3.81 (3.20)	5.32 (4.46)	20.4 (1.3)	62.6 (6.5)	-5.31 (7.72)	2.56 (3.77)	19.7 (2.1)	59.2 (5.0)	-5.76 (6.25)	4.08 (4.13)
4	17.9 (3.4)	49.6 (6.3)	-4.52 (3.12)	6.11 (4.24)	20.4 (1.2)	60.1 (8.2)	-7.88 (8.95)	3.62 (4.12)	21.1 (1.9)	57.2 (5.7)	-7.55 (5.66)	5.37 (4.11)
5	19.3 (1.2)	52.4 (2.2)	-3.76 (2.73)	5.53 (4.24)	20.5 (1.2)	62.5 (2.4)	-5.58 (7.97)	2.74 (3.79)	20.9 (1.4)	61.5 (4.0)	-7.27 (5.67)	5.23 (4.06)
6	18.1 (2.5)	51.8 (3.2)	-4.42 (4.39)	5.85 (4.33)	20.4 (1.2)	62.0 (4.0)	-7.31 (9.28)	3.25 (4.03)	20.8 (1.7)	60.7 (3.4)	-7.39 (6.19)	5.12 (4.09)
7	17.3 (2.3)	50.1 (4.2)	-3.53 (3.27)	4.92 (4.46)	20.4 (1.3)	59.4 (5.2)	-4.23 (7.11)	2.03 (3.37)	20.3 (1.8)	59.8 (3.6)	-5.52 (5.93)	4.27 (4.16)
8	15.4 (3.5)	51.0 (6.4)	-3.58 (3.15)	4.92 (4.49)	20.4 (1.3)	60.8 (6.4)	-4.77 (7.37)	2.22 (3.55)	19.8 (2.2)	59.3 (5.0)	-6.10 (5.73)	4.22 (4.11)
9	20.0 (3.2)	54.4 (1.8)	-7.37 (5.64)	8.08 (4.09)	21.4 (1.3)	63.5 (1.8)	-13.1 (8.92)	5.88 (3.91)	22.3 (1.9)	61.8 (2.5)	-12.9 (8.54)	7.76 (4.11)
10	23.5 (0.9)	64.1 (2.7)	-17.10 (8.30)	11.9 (2.08)	23.1 (0.9)	71.8 (2.3)	-27.3 (7.70)	11.70 (3.29)	24.6 (0.9)	70.9 (2.4)	-22.7 (5.99)	12.3 (1.77)
11	23.5 (1.1)	65.8 (2.0)	-19.00 (7.16)	13.0 (1.41)	23.3 (1.0)	73.4 (2.3)	-25.0 (9.45)	11.10 (2.92)	24.7 (0.8)	72.6 (1.3)	-21.9 (6.28)	13.0 (1.49)
12	20.7 (1.6)	49.6 (5.4)	-5.53 (2.44)	7.99 (2.98)	20.5 (0.9)	59.3 (5.3)	-10.6 (8.96)	5.04 (4.06)	21.5 (1.3)	58.3 (5.3)	-7.75 (4.06)	7.43 (3.20)
13	16.8 (2.2)	51.0 (4.0)			20.4 (1.3)	59.7 (3.9)			19.9 (1.8)	58.3 (3.8)		
14	18.5 (3.2)	54.5 (2.4)	-5.04 (2.81)	6.85 (3.83)	20.6 (1.2)	63.3 (2.2)	-11.1 (9.48)	4.80 (4.14)	21.1 (1.8)	60.9 (2.4)	-8.28 (4.98)	6.32 (3.90)
15	22.0 (1.3)	57.4 (1.7)	-11.7 (7.46)	10.1 (2.41)	21.6 (1.4)	65.0 (2.3)	-20.4 (9.14)	8.74 (3.83)	22.7 (1.2)	63.6 (1.8)	-15.3 (7.38)	9.52 (2.73)
16	20.7 (1.1)	59.7 (3.5)	-6.80 (3.86)	8.11 (3.16)	20.8 (1.1)	68.6 (3.5)	-12.9 (8.75)	5.81 (3.89)	21.1 (1.4)	65.7 (3.3)	-8.19 (4.89)	6.24 (3.79)
17	21.5 (1.7)	60.2 (2.5)	-9.43 (7.28)	8.78 (3.46)	21.4 (1.4)	68.9 (2.6)	-18.1 (10.4)	7.65 (4.36)	21.7 (1.6)	66.4 (2.8)	-11.2 (7.44)	7.39 (3.77)
18	22.1 (0.6)	61.8 (1.9)	-9.27 (4.35)	9.62 (1.18)	21.7 (0.7)	72.0 (2.1)	-12.6 (8.86)	7.47 (3.27)	21.6 (0.6)	70.2 (1.1)	-10.1 (3.47)	7.89 (2.43)
19	23.0 (1.5)	57.7 (3.7)	-14.5 (7.63)	11.8 (2.65)	22.9 (1.5)	66.3 (5.1)	-5.41 (3.64)	8.40 (4.06)	22.8 (1.6)	64.9 (5.1)	-15.1 (8.02)	9.63 (3.80)
20	22.9 (1.2)		-14.1 (8.78)		22.7 (1.3)		-6.49 (5.16)		22.8 (1.3)		-15.0 (7.29)	
21	20.9 (1.9)		-6.61 (3.72)		22.0 (0.9)		-2.13 (3.07)		21.1 (1.4)		-8.21 (4.74)	
22	9.5 (3.2)		-2.05 (3.25)		12.6 (4.3)		0.26 (1.03)		12.3 (3.1)		-1.45 (4.33)	
23	8.3 (2.5)		-0.31 (0.67)		9.7 (2.5)		-0.30 (1.64)		9.9 (1.9)		-0.56 (0.81)	
24												
25	15.8 (1.7)		0.12 (0.48)		15.9 (1.6)		0.69 (0.54)		16.2 (1.7)		0.40 (0.61)	
26	11.0 (1.1)		-0.47 (0.89)		11.5 (0.8)		0.15 (0.69)		11.3 (1.0)		-0.52 (1.02)	
27	13.3 (1.9)		-0.44 (3.10)		13.6 (1.9)		-0.04 (3.03)		13.7 (1.9)		-0.43 (4.31)	
28	20.0 (2.7)	60.2 (9.8)	-0.84 (0.53)	4.91 (0.05)	20.1 (2.6)	70.3 (7.3)	-0.14 (0.43)	4.92 (0.06)	20.3 (2.6)	68.3 (7.0)	-0.46 (0.50)	4.89 (0.05)
29	15.5 (2.4)	58.3 (3.3)	-0.52 (0.93)	4.97 (0.17)	15.5 (2.0)	72.4 (5.5)	0.31 (0.93)	4.10 (1.57)	13.9 (3.2)	69.4 (6.1)	-0.39 (1.00)	5.00 (0.05)
30	16.8 (4.2)	50.8 (10.2)	-2.44 (3.01)	3.94 (3.53)	16.0 (3.6)	64.2 (13.0)	-0.19 (0.42)	1.69 (0.68)	10.8 (4.5)	59.4 (16.5)	-1.40 (0.45)	5.02 (0.07)
31												
Avg	18.2	55.1	-5.92	7.37	19.3	64.8	-7.56	5.23	19.3	63.0	-7.71	6.72
n	29	22	28	21	29	22	28	21	29	22	28	21
SD	4.0	5.0	5.13	2.59	3.6	4.8	7.59	2.88	4.1	4.7	6.14	2.51
Min	8.3	49.1	-19.0	3.94	9.7	57.4	-27.3	1.69	9.9	57.0	-22.7	4.08
Max	23.5	65.8	0.12	13.0	23.3	73.4	0.69	11.7	24.7	72.6	0.40	13.0

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for January, 2009.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	13.4 (2.4)	50.7 (6.4)	-3.79 (4.83)		16.5 (3.0)	62.6 (4.7)	-7.84 (10.8)	2.46 (2.73)	14.5 (1.7)	62.0 (7.2)	-2.73 (4.67)	2.42 (3.68)
2	14.9 (1.8)	56.6 (2.4)	-6.20 (6.25)		18.0 (3.4)	67.8 (3.0)	-8.04 (12.6)	2.13 (2.56)	15.1 (2.9)	68.9 (2.3)	-3.32 (5.56)	2.61 (3.76)
3	18.4 (3.0)	53.1 (3.5)	-4.12 (5.56)	2.69 (3.72)	20.4 (2.1)	68.9 (4.6)	-7.98 (11.3)	2.00 (2.32)	17.4 (1.5)	65.1 (5.6)	-4.23 (5.87)	3.25 (3.94)
4	20.7 (1.8)	56.4 (1.8)	-3.89 (5.61)	2.49 (3.62)	22.8 (2.0)	72.5 (1.6)	-8.13 (9.35)	2.16 (2.22)	20.7 (2.1)	68.8 (1.7)	-2.74 (5.16)	2.25 (3.40)
5	22.9 (0.9)	55.9 (1.5)	-5.04 (5.73)	3.56 (3.94)	24.9 (0.6)	70.8 (1.6)	-15.3 (15.4)	3.40 (3.14)	23.4 (0.9)	68.4 (1.3)	-3.69 (5.60)	3.18 (3.84)
6	23.9 (0.7)	55.5 (1.3)	-4.77 (5.21)	3.73 (3.98)	25.7 (0.6)	70.3 (1.8)	-16.1 (15.8)	3.33 (2.97)	24.0 (0.8)	67.5 (1.8)	-4.83 (6.01)	3.86 (4.02)
7	23.0 (2.1)	49.4 (4.8)	-4.70 (4.82)	3.84 (4.12)	24.8 (1.4)	63.1 (5.8)	-15.6 (15.1)	3.32 (3.05)	22.8 (2.1)	59.7 (7.1)	-3.78 (5.42)	4.07 (4.20)
8	19.0 (1.5)	51.9 (2.7)	-2.78 (4.19)	2.25 (3.52)	22.7 (1.0)	64.2 (2.7)	-5.58 (6.04)	1.64 (1.79)	19.2 (1.5)	59.1 (3.1)	-1.91 (4.39)	2.21 (3.51)
9	17.6 (2.5)	51.8 (4.8)	-2.91 (3.89)	2.14 (3.39)	22.1 (2.3)	64.8 (3.7)	-5.77 (5.92)	1.67 (1.70)	18.3 (2.5)	60.4 (4.9)	-1.99 (4.12)	2.08 (3.35)
10	20.2 (3.9)	51.1 (5.5)	-3.13 (4.48)	2.68 (3.73)	23.3 (2.5)	65.2 (5.5)	-5.94 (7.85)	2.13 (2.41)	20.7 (3.6)	61.4 (4.6)	-2.00 (4.39)	2.39 (3.60)
11	22.8 (1.6)		-3.01 (3.98)		25.3 (0.9)	66.7 (2.7)	-6.95 (10.8)	2.20 (2.93)	22.9 (1.5)	63.8 (3.4)	-2.42 (5.74)	2.57 (3.77)
12	18.3 (1.9)	59.0 (5.0)	-2.75 (3.53)	2.19 (3.50)	22.7 (1.6)	64.9 (3.8)	-5.75 (9.63)	1.49 (2.58)	19.0 (2.0)	61.3 (3.7)	-2.08 (4.23)	2.09 (3.53)
13	17.8 (1.4)	66.6 (2.7)	-3.00 (3.97)	2.08 (3.37)	21.9 (0.9)	70.6 (2.2)	-5.99 (9.38)	1.49 (2.57)	18.1 (1.4)	66.2 (1.9)	-2.18 (4.08)	2.01 (3.47)
14	17.6 (2.3)	65.3 (3.8)	-3.13 (4.26)	2.02 (3.44)	22.2 (1.8)	68.7 (3.9)	-6.00 (6.73)	1.64 (1.95)	17.8 (2.2)	63.8 (4.6)	-2.25 (4.01)	1.97 (3.23)
15	17.4 (3.1)	60.4 (6.3)	-2.92 (3.65)	2.15 (3.56)	19.7 (3.3)	61.9 (7.8)	-3.76 (5.24)	2.08 (2.87)	17.2 (2.6)	59.3 (7.0)	-1.97 (4.33)	2.09 (3.34)
16	12.2 (2.3)	61.2 (2.8)	-2.48 (2.51)	2.05 (3.34)	12.0 (1.9)	61.6 (3.1)	-1.99 (2.93)	2.47 (3.36)	12.0 (2.0)	61.7 (3.4)	-1.83 (4.32)	1.98 (3.28)
17	13.8 (3.4)	63.4 (5.8)	-2.74 (2.58)	2.06 (3.32)	13.5 (3.7)	65.7 (6.2)	-4.59 (5.00)	2.35 (2.83)	13.0 (3.2)	63.3 (5.9)	-2.63 (4.41)	1.96 (3.26)
18	17.3 (2.1)	63.8 (3.3)	-2.35 (2.69)	2.19 (3.37)	17.5 (2.0)	67.5 (2.5)	-4.71 (5.19)	2.27 (2.48)	15.9 (2.0)	65.7 (2.3)	-2.06 (4.61)	2.02 (3.31)
19	20.4 (2.3)	62.6 (2.5)	-2.57 (2.78)	2.21 (3.46)	20.8 (2.3)	66.7 (2.4)	-4.79 (4.98)	2.23 (2.29)	18.8 (2.3)	64.4 (3.7)	-2.27 (4.71)	2.08 (3.36)
20	15.9 (2.3)	64.9 (3.2)	-3.24 (2.86)	2.02 (3.24)	17.1 (2.1)	68.1 (2.4)	-4.60 (4.89)	2.28 (2.29)	14.8 (2.2)	67.2 (1.7)	-2.57 (5.29)	1.89 (3.25)
21	15.1 (2.4)	65.1 (3.5)	-2.51 (2.64)	1.99 (3.28)	15.9 (2.3)	67.9 (3.8)	-5.26 (7.66)	2.19 (2.77)	14.2 (2.5)	66.2 (3.7)	-2.80 (5.86)	1.87 (3.29)
22	17.2 (3.9)	60.0 (7.1)	-2.42 (2.88)	2.17 (3.54)	18.3 (3.7)	63.4 (6.7)	-5.22 (8.70)	2.07 (3.45)	16.4 (3.7)	61.6 (6.8)	-3.03 (5.94)	2.02 (3.35)
23	20.6 (2.7)	56.9 (4.7)	-2.62 (3.00)	2.49 (3.69)	21.8 (3.1)	61.3 (4.2)	-5.09 (7.85)	2.14 (3.14)	20.0 (3.2)	60.1 (5.0)	-3.09 (6.09)	2.14 (3.31)
24	22.2 (1.5)	57.5 (4.9)	-3.08 (2.83)	2.68 (3.75)	23.7 (1.3)	63.0 (4.2)	-5.20 (7.39)	2.13 (3.11)	21.9 (1.7)	60.8 (4.7)	-3.69 (6.26)	2.28 (3.32)
25												
26	18.1 (1.5)	58.2 (2.1)	-2.77 (2.45)	2.15 (3.65)	18.5 (1.1)	63.2 (1.5)	-5.47 (6.57)	2.20 (2.94)	18.2 (1.8)	62.2 (1.7)	-3.57 (5.75)	1.97 (3.39)
27	20.7 (1.8)	60.2 (1.8)	-2.64 (2.75)	2.39 (3.61)	21.0 (2.0)	64.9 (1.2)	-5.43 (6.07)	2.21 (2.65)	20.7 (1.7)	63.4 (1.8)	-3.63 (6.11)	2.14 (3.39)
28	23.9 (1.8)	61.5 (2.1)	-4.17 (3.10)	5.10 (4.22)	24.6 (1.5)	64.7 (2.4)	-11.0 (10.4)	4.32 (3.59)	23.9 (1.9)	63.4 (2.3)	-5.36 (6.35)	4.12 (4.03)
29	21.9 (1.8)	57.8 (2.7)	-3.09 (2.63)	2.76 (3.80)	23.2 (1.9)	62.0 (2.3)	-6.92 (7.64)	2.54 (2.78)	22.3 (1.6)	59.5 (3.1)	-3.59 (5.63)	2.25 (3.43)
30	19.9 (2.2)	57.7 (5.9)	-2.68 (2.75)	2.46 (3.75)	17.6 (2.3)	58.3 (8.3)	-3.76 (7.47)	3.05 (3.30)	20.6 (2.1)		-3.30 (7.77)	
31	19.4 (2.2)	55.1 (5.1)	-2.48 (2.80)	2.11 (3.61)	16.5 (3.6)	57.1 (5.2)	-4.98 (7.61)	3.03 (3.30)	19.7 (2.1)	56.9 (6.0)	-2.78 (6.29)	1.89 (3.35)
Avg	18.9	58.3	-3.27	2.54	20.5	65.3	-6.79	2.35	18.8	63.2	-2.94	2.40
n	30	29	30	27	30	30	30	30	30	29	30	29
SD	3.1	4.7	0.91	0.71	3.5	3.6	3.38	0.62	3.3	3.2	0.88	0.64
Min	12.2	49.4	-6.20	1.99	12.0	57.1	-16.1	1.49	12.0	56.9	-5.36	1.87
Max	23.9	66.6	-2.35	5.10	25.7	72.5	-1.99	4.32	24.0	68.9	-1.83	4.12

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for February, 2009.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	20.9 (2.3)	53.7 (6.2)	-2.98 (3.06)	3.15 (4.10)	20.3 (3.6)	57.5 (5.6)	-7.16 (8.44)	2.93 (3.03)	21.2 (2.4)	56.4 (6.4)	-3.77 (6.62)	2.50 (3.63)
2	21.7 (1.9)	56.7 (3.6)	-3.44 (3.05)	3.61 (4.15)	22.0 (2.7)	60.9 (2.8)	-8.00 (8.74)	3.10 (3.10)	21.7 (2.1)	58.7 (3.7)	-4.31 (6.69)	2.61 (3.61)
3	19.3 (1.9)	55.4 (4.1)	-2.49 (2.67)	2.43 (3.72)	19.4 (1.9)	58.4 (4.6)	-6.66 (7.80)	2.85 (3.04)	18.8 (1.9)	57.2 (4.5)	-2.85 (6.37)	2.32 (3.51)
4	17.3 (1.5)	55.8 (4.5)	-4.02 (5.60)	2.10 (3.43)	16.6 (1.7)	59.5 (4.3)	-6.70 (7.79)	2.91 (3.05)	17.5 (1.6)	58.0 (4.0)	-2.85 (6.02)	2.09 (3.43)
5	17.0 (2.4)	59.2 (2.8)	-5.30 (7.80)	1.81 (3.03)	15.3 (2.9)	60.9 (3.8)	-6.27 (8.80)	2.45 (2.97)	16.8 (2.8)	59.6 (3.4)	-3.68 (7.85)	1.85 (3.11)
6	19.8 (3.1)	57.3 (7.6)	-7.03 (9.06)	2.28 (3.23)	19.4 (4.0)	61.0 (7.2)	-5.55 (9.81)	2.07 (3.06)	20.2 (3.3)	57.7 (6.6)	-6.14 (9.95)	2.11 (3.14)
7	22.2 (2.1)	51.7 (8.4)	-11.8 (10.6)	3.98 (3.76)	22.8 (2.4)	55.4 (7.6)	-12.5 (13.9)	3.90 (3.83)	22.9 (2.0)	52.8 (7.7)	-12.3 (12.0)	3.92 (3.62)
8	22.9 (2.1)	50.8 (7.5)	-14.2 (12.10)	4.87 (4.30)	24.4 (0.9)	53.4 (7.0)	-17.1 (15.8)	5.50 (4.69)	24.2 (1.8)	52.1 (6.7)	-17.3 (16.1)	4.81 (3.97)
9	22.1 (1.8)	51.3 (8.5)	-11.6 (9.86)	4.06 (3.75)	24.3 (0.7)	55.1 (7.7)	-14.4 (13.6)	4.49 (3.66)	23.9 (1.4)	52.7 (7.7)	-13.7 (11.7)	4.27 (3.59)
10	22.6 (1.7)	56.7 (2.6)	-13.9 (10.3)	4.73 (3.62)	24.5 (0.6)	61.4 (3.0)	-13.7 (12.1)	4.51 (3.43)	24.2 (1.3)	60.1 (2.6)	-16.7 (12.0)	5.13 (3.46)
11	23.9 (1.7)	55.0 (4.6)	-18.2 (9.51)	7.25 (3.61)	24.8 (0.8)	58.7 (4.4)	-21.8 (14.9)	7.00 (3.98)	24.8 (1.1)	58.5 (5.9)	-20.5 (11.2)	7.29 (3.29)
12	23.8 (1.4)	43.3 (7.3)	-16.9 (8.40)	6.64 (3.12)	24.8 (0.6)	48.2 (7.7)	-17.6 (12.5)	6.52 (4.04)	24.4 (1.1)	45.5 (8.1)	-16.6 (9.52)	6.73 (3.66)
13	23.0 (1.8)	43.5 (6.1)	-13.0 (9.31)	5.08 (3.70)	24.5 (0.7)	49.2 (6.8)	-14.9 (14.3)	4.87 (3.86)	24.3 (1.5)	46.4 (7.0)	-13.6 (11.3)	4.60 (3.61)
14	22.1 (1.3)	55.1 (4.0)	-11.2 (9.90)	3.67 (3.55)	24.2 (0.6)	62.3 (4.1)	-7.79 (8.36)	2.85 (3.02)	23.9 (1.2)	61.4 (5.4)	-10.0 (11.4)	3.17 (3.49)
15	21.6 (1.4)	53.7 (4.2)	-10.4 (9.15)	3.14 (3.52)	22.9 (1.2)	60.1 (2.3)	-8.14 (8.29)	3.04 (3.07)	23.8 (1.3)	59.8 (3.7)	-9.63 (10.9)	2.90 (3.41)
16	20.7 (1.5)	55.3 (3.1)	-8.12 (8.64)	2.43 (3.32)	21.1 (1.5)	62.7 (2.0)	-7.44 (8.10)	2.85 (2.99)	22.4 (1.8)	62.0 (3.7)	-7.34 (10.3)	2.32 (3.21)
17	19.6 (1.9)	54.7 (5.0)	-9.16 (9.62)	2.94 (3.53)	19.1 (2.4)	60.4 (5.8)	-8.38 (8.73)	3.09 (3.11)	20.7 (1.8)	60.5 (5.6)	-8.63 (11.0)	2.70 (3.43)
18	20.9 (1.2)	58.4 (5.2)	-14.2 (10.2)	4.72 (3.49)	21.0 (1.7)	63.2 (4.1)	-11.4 (10.1)	4.12 (3.29)	21.7 (1.1)	65.0 (4.8)	-12.6 (11.6)	4.11 (3.51)
19	21.9 (1.2)	54.1 (8.3)	-19.7 (8.18)	6.60 (2.65)	22.5 (0.6)	57.7 (8.0)	-21.5 (12.9)	6.43 (3.05)	22.7 (1.0)	58.2 (10.2)	-19.2 (9.30)	6.35 (2.71)
20												
21	19.9 (1.8)	52.2 (7.9)	-10.9 (9.92)		18.4 (2.9)	56.7 (8.3)	-12.7 (10.3)		21.5 (1.7)	57.2 (8.1)	-10.9 (11.5)	
22	20.6 (1.4)	49.5 (4.8)	-10.5 (8.93)		20.3 (1.3)	54.5 (5.3)	-12.7 (9.77)		21.9 (1.2)	55.2 (5.4)	-11.2 (11.6)	
23	19.9 (1.6)	53.2 (4.1)	-7.31 (8.48)	2.77 (3.50)	18.5 (2.1)	58.5 (3.6)	-9.49 (9.50)	3.53 (3.43)	21.3 (1.7)	59.8 (4.3)	-8.08 (10.9)	2.81 (3.48)
24	19.6 (1.7)	54.3 (4.1)	-7.65 (8.40)	2.82 (3.52)	18.6 (1.8)	57.6 (4.9)	-9.48 (9.66)	3.47 (3.56)	21.4 (1.7)	60.3 (4.3)	-8.95 (10.9)	2.90 (3.47)
25	20.2 (1.5)	53.1 (6.3)	-13.8 (13.2)	3.67 (3.47)	19.5 (2.5)	58.1 (5.5)	-11.0 (10.0)	3.92 (3.39)	21.8 (1.7)	58.7 (7.5)	-10.1 (11.3)	3.25 (3.54)
26	20.8 (1.3)	54.3 (2.5)	-20.0 (13.1)	4.88 (3.17)	20.7 (2.1)	58.7 (2.6)	-15.0 (10.3)	5.15 (3.28)	22.5 (1.4)	58.9 (3.1)	-14.2 (11.7)	4.47 (3.52)
27	22.5 (1.8)	53.8 (3.2)	-18.9 (9.77)	7.84 (3.44)	23.0 (1.2)	56.5 (3.1)	-18.5 (12.2)	7.94 (4.00)	23.6 (1.3)	57.4 (3.6)	-18.1 (9.90)	7.45 (3.62)
28	21.5 (0.9)	63.1 (4.5)	-16.5 (7.88)	6.68 (2.75)	22.2 (0.9)	65.1 (4.3)	-11.1 (6.53)	6.05 (3.32)	23.0 (1.0)	67.7 (5.0)	-14.0 (8.60)	5.55 (3.34)
Avg	21.1	53.9	-11.2	4.17	21.3	58.2	-11.7	4.22	22.1	57.7	-11.0	3.93
n	27	27	27	25	27	27	27	25	27	27	27	25
SD	1.7	4.0	5.11	1.69	2.6	3.8	4.57	1.55	2.0	4.7	5.06	1.66
Min	17.0	43.3	-20.0	1.81	15.3	48.2	-21.8	2.07	16.8	45.5	-20.5	1.85
Max	23.9	63.1	-2.49	7.84	24.8	65.1	-5.55	7.94	24.8	67.7	-2.85	7.45

ED_004549_00015929-00115

Table F3. Daily means (SD) of environmental parameters at Site NC3B for March, 2009.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	19.9 (1.1)	63.7 (3.7)	-12.2 (10.1)	3.01 (3.39)	19.2 (0.8)	65.2 (3.0)	-9.38 (7.21)	4.23 (3.39)	22.0 (1.4)	67.8 (4.4)	-9.96 (10.0)	2.72 (3.47)
2	19.8 (1.3)	63.2 (2.6)	-9.4 (10.4)	2.76 (3.41)	17.0 (1.6)	63.4 (2.4)	-8.35 (7.92)	4.32 (3.52)	21.0 (1.6)	66.4 (3.5)	-5.82 (9.96)	2.33 (3.39)
3	19.1 (1.7)	59.5 (2.2)	-9.4 (10.3)	2.65 (3.43)	15.2 (2.5)	59.7 (2.0)	-8.44 (8.24)	4.08 (3.70)	20.3 (2.1)	64.3 (2.7)	-6.87 (9.75)	2.37 (3.41)
4	19.6 (1.8)	57.1 (5.7)	-11.3 (11.2)	3.42 (3.61)	16.6 (4.3)	59.8 (4.4)	-8.59 (8.49)	3.91 (3.67)	21.0 (2.3)	63.0 (5.4)	-8.75 (10.6)	3.00 (3.56)
5	20.0 (2.0)	50.7 (10.0)	-14.5 (11.1)	4.64 (3.67)	18.5 (3.5)	53.9 (8.0)	-11.2 (8.08)	5.29 (3.62)	21.3 (2.0)	54.4 (10.7)	-11.5 (10.8)	4.13 (3.73)
6	22.5 (2.6)	50.6 (4.7)	-14.8 (8.7)	8.14 (4.47)	22.0 (2.5)	53.4 (5.1)	-16.9 (11.2)	10.1 (6.10)	23.3 (1.9)	54.6 (4.9)	-13.4 (8.73)	7.70 (4.53)
7	23.5 (2.6)	52.9 (4.3)	-20.0 (9.1)	11.4 (5.41)	23.7 (1.8)	54.5 (4.7)	-13.1 (11.3)	15.1 (10.0)	24.3 (2.1)	55.7 (4.4)	-15.8 (8.57)	10.3 (5.42)
8	24.2 (2.6)	51.4 (7.1)	-21.4 (7.3)	13.1 (5.53)	24.1 (2.2)	52.7 (7.5)	-9.37 (11.7)	18.6 (10.6)	24.8 (2.1)	53.8 (7.5)	-16.5 (7.70)	12.5 (6.22)
9	24.6 (3.0)	46.0 (11.2)	-15.9 (9.1)	15.7 (10.0)	24.7 (2.6)	48.2 (10.9)	-17.4 (12.7)	17.0 (9.86)	25.2 (2.6)	48.4 (11.9)	-16.4 (7.81)	14.3 (8.47)
10	22.0 (1.9)	51.8 (4.4)	-10.9 (9.2)	9.35 (3.65)	22.7 (1.2)	53.5 (4.5)	-18.4 (8.92)	10.2 (4.23)	23.2 (1.6)	55.3 (4.5)	-13.2 (7.00)	8.69 (3.51)
11	24.2 (2.7)	55.9 (8.0)	-21.1 (6.8)	13.8 (7.26)	24.2 (2.4)	56.9 (7.4)	-22.0 (9.09)	16.4 (9.10)	25.0 (2.4)	58.6 (8.3)	-17.2 (8.93)	12.8 (6.61)
12	22.2 (1.0)	43.0 (3.3)	-18.9 (7.1)	8.90 (2.11)	22.1 (0.9)	46.5 (2.7)	-20.8 (9.62)	8.77 (2.59)	23.3 (1.0)	46.9 (3.6)	-14.7 (6.37)	7.17 (2.95)
13	20.1 (1.1)	55.9 (8.5)	-12.0 (6.9)	5.18 (3.73)	20.6 (1.0)	60.0 (7.9)	-10.2 (7.12)	4.79 (3.48)	21.9 (1.7)	61.1 (9.3)	-10.4 (8.81)	4.15 (3.85)
14	20.2 (1.2)	62.1 (4.0)	-13.0 (7.5)	5.58 (3.49)	20.7 (1.1)	65.6 (4.1)	-11.6 (8.01)	4.95 (3.34)	22.3 (1.6)	69.2 (4.7)	-10.2 (9.20)	4.14 (3.80)
15	20.7 (0.8)	64.0 (4.2)	-15.4 (6.5)	6.86 (2.71)	21.2 (0.9)	66.5 (4.2)	-14.6 (8.16)	6.04 (3.16)	22.5 (1.3)	70.7 (4.5)	-12.2 (8.96)	5.31 (3.59)
16	20.8 (0.6)	64.3 (3.8)	-16.3 (5.0)	7.44 (2.06)	21.3 (0.8)	66.7 (4.0)	-16.2 (7.24)	6.62 (2.77)	22.7 (1.2)	71.0 (4.0)	-13.2 (8.85)	5.66 (3.45)
17	20.7 (0.9)	61.2 (3.6)	-15.9 (4.8)	7.68 (1.91)	20.9 (0.9)	63.3 (3.0)	-14.5 (7.11)	6.83 (2.85)	22.1 (1.2)	67.2 (3.4)	-13.3 (8.48)	6.04 (3.29)
18	20.9 (1.9)	54.5 (4.5)	-16.6 (8.0)	8.07 (3.59)	20.9 (1.5)	56.4 (4.9)	-16.8 (9.61)	8.02 (4.53)	22.4 (1.8)	59.4 (6.9)	-15.5 (9.70)	7.26 (4.17)
19	21.5 (2.5)	51.1 (7.5)	-17.8 (8.5)	10.9 (6.28)	21.3 (2.0)	53.1 (7.5)	-19.3 (9.64)	13.4 (9.17)	22.7 (2.1)	55.7 (8.8)	-14.3 (8.77)	9.87 (5.67)
20	19.3 (1.2)	51.0 (6.4)	-19.4 (5.7)	9.47 (1.76)	19.3 (1.1)	54.0 (6.7)	-20.0 (8.44)	9.45 (3.22)	20.9 (1.4)	56.1 (6.7)	-11.8 (9.09)	7.26 (3.83)
21	18.5 (1.5)	49.9 (5.0)	-16.1 (7.6)	8.19 (3.18)	19.0 (1.0)	54.1 (4.9)	-17.3 (10.8)	7.56 (3.69)	20.4 (1.6)	56.3 (6.2)	-11.1 (7.50)	5.96 (3.69)
22	19.0 (2.2)	48.9 (7.3)	-16.4 (8.3)	8.66 (4.03)	18.8 (1.8)	52.2 (8.0)	-17.4 (9.47)	9.06 (4.80)	20.6 (2.1)	54.7 (8.8)	-14.2 (10.0)	7.31 (4.52)
23	19.6 (2.4)	49.7 (5.8)	-14.9 (9.3)	10.3 (4.54)	19.7 (1.5)	51.7 (6.3)	-16.7 (11.0)	11.9 (6.95)	20.8 (1.9)	54.3 (6.9)	-12.0 (8.54)	9.45 (5.21)
24	18.4 (1.5)	47.7 (7.3)	-9.3 (7.9)	8.71 (3.92)	19.2 (1.1)	49.7 (5.9)	-12.6 (9.62)	8.59 (3.92)	20.2 (1.6)	51.9 (6.1)	-13.2 (8.96)	7.99 (3.76)
25	18.9 (1.9)	51.5 (4.1)	-11.0 (7.3)	8.29 (3.00)	19.6 (1.1)	54.0 (4.3)	-14.7 (9.50)	7.84 (3.07)	20.9 (1.7)	57.4 (5.6)	-18.4 (8.27)	7.14 (2.60)
26	21.5 (1.5)	65.3 (4.1)	-20.5 (4.1)	12.9 (3.22)	21.0 (1.0)	65.4 (3.6)	-22.7 (5.67)	12.6 (3.44)	22.4 (0.9)	69.1 (3.8)	-22.5 (2.81)	10.4 (2.42)
27	22.7 (0.8)	70.9 (2.0)	-22.4 (2.0)	15.5 (1.87)	21.3 (0.6)	69.6 (3.0)	-25.4 (4.30)	15.4 (3.87)	22.9 (0.7)	72.6 (3.1)	-21.9 (1.57)	11.9 (2.04)
28	23.5 (1.1)	71.3 (4.1)	-22.4 (1.5)	17.1 (3.10)	22.4 (1.3)	71.6 (4.6)	-25.3 (4.28)	20.8 (6.38)	23.7 (1.1)	73.7 (3.8)	-21.0 (1.34)	14.7 (3.79)
29	23.9 (1.8)	54.5 (13.1)	-21.8 (3.5)	19.4 (6.74)	22.7 (2.0)	55.1 (11.3)	-23.5 (5.00)	20.6 (8.78)	24.1 (1.8)	57.7 (12.2)	-19.7 (3.24)	15.5 (5.60)
30	20.8 (1.6)	47.3 (6.4)	-15.8 (7.6)	10.8 (2.90)	20.5 (1.2)	49.1 (6.0)	-18.4 (8.38)	10.3 (4.73)	21.7 (1.5)	51.3 (6.4)	-16.7 (6.69)	9.05 (3.32)
31	20.7 (2.3)	48.8 (8.7)	-18.6 (6.2)	11.2 (4.33)	20.9 (1.6)	50.0 (9.2)	-20.0 (9.39)	12.5 (7.59)	22.2 (2.0)	52.9 (9.6)	-17.4 (7.06)	9.81 (4.46)
Avg	21.1	55.4	-16.0	9.32	20.7	57.3	-16.2	10.2	22.3	59.7	-14.2	7.96
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	1.8	7.2	3.97	4.16	2.2	6.7	4.94	4.89	1.4	7.4	4.02	3.62
Min	18.4	43.0	-22.4	2.65	15.2	46.5	-25.4	3.91	20.2	46.9	-22.5	2.33
Max	24.6	71.3	-9.32	19.4	24.7	71.6	-8.35	20.8	25.2	73.7	-5.82	15.5

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for April, 2009.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	21.2 (1.2)	62.9 (4.0)	-20.9 (3.48)	11.5 (2.61)	21.0 (0.9)	63.0 (3.9)	-22.4 (6.20)	12.4 (3.16)	22.6 (0.9)	67.0 (4.3)	-20.0 (3.04)	10.5 (2.09)
2	21.3 (0.8)	68.4 (3.1)	-21.2 (2.84)	11.0 (1.67)	20.8 (0.6)	68.5 (3.7)	-22.9 (6.01)	13.3 (2.74)	22.6 (0.6)	71.8 (3.1)	-21.2 (2.99)	11.0 (1.74)
3	25.0 (2.4)	54.8 (10.9)	-17.1 (7.35)	17.9 (6.45)	23.1 (1.6)	55.3 (10.2)	-26.0 (3.43)	22.0 (7.59)	24.5 (1.6)	57.6 (10.8)	-19.7 (4.80)	17.9 (5.28)
4	21.7 (2.2)	44.1 (8.5)	-18.4 (6.73)	12.9 (5.62)	21.5 (1.6)	45.9 (8.0)	-18.0 (8.23)	15.2 (9.08)	22.3 (1.8)	48.0 (9.7)	-16.1 (7.55)	12.5 (4.43)
5	22.8 (3.4)	47.7 (10.9)	-19.6 (4.88)	16.7 (8.83)	22.8 (3.1)	48.8 (10.0)	-19.7 (7.91)	18.7 (10.3)	23.5 (3.0)	49.7 (12.5)	-18.4 (5.68)	15.9 (9.54)
6	23.7 (2.0)	51.6 (15.8)	-18.9 (7.32)	16.8 (7.42)	22.8 (2.0)	53.5 (14.1)	-21.4 (7.50)	20.2 (8.62)	23.9 (1.8)	54.4 (15.7)	-18.2 (6.19)	15.5 (6.00)
7	19.4 (1.3)	46.8 (4.3)	-9.36 (4.99)	7.95 (2.71)	19.5 (0.9)	50.1 (4.1)	-9.06 (4.61)	6.96 (3.10)	19.7 (1.2)	50.0 (5.2)	-9.27 (4.34)	7.56 (2.83)
8	19.7 (1.9)	46.5 (6.2)	-13.7 (8.74)	8.83 (3.40)	19.3 (2.0)	49.0 (5.5)	-13.0 (8.61)	7.88 (3.68)	20.1 (1.9)	49.5 (7.0)	-11.8 (7.27)	8.14 (3.79)
9	21.7 (1.7)	44.3 (9.1)	-17.4 (7.22)	11.9 (3.50)	21.0 (1.6)	45.8 (8.5)	-18.1 (8.99)	12.7 (6.33)	21.8 (1.9)	47.2 (9.8)	-16.3 (6.05)	11.3 (3.27)
10	24.0 (3.0)	51.3 (11.7)	-18.1 (6.63)	18.7 (8.88)	23.1 (2.6)	52.4 (10.0)	-22.2 (7.17)	19.6 (9.70)	23.7 (2.5)	53.8 (12.4)	-17.6 (4.97)	16.9 (8.68)
11	22.6 (1.5)	56.7 (8.2)	-17.5 (6.73)	14.8 (4.40)	21.7 (1.2)	57.1 (7.0)	-21.9 (5.99)	16.5 (7.28)	22.8 (1.6)	59.4 (8.1)	-14.7 (6.86)	12.20 (3.52)
12	19.7 (1.8)	48.4 (6.1)	-12.7 (8.93)	10.5 (3.61)	20.4 (1.1)	50.4 (6.0)	-13.6 (8.11)	9.55 (5.02)	20.9 (1.8)	51.0 (7.3)	-13.0 (7.85)	8.84 (4.07)
13	19.7 (1.7)	57.9 (5.0)	-15.2 (9.55)	9.98 (3.38)	20.3 (1.0)	58.6 (5.0)	-16.5 (8.56)	9.45 (3.53)	20.9 (1.3)	60.8 (5.8)	-15.9 (8.44)	9.55 (3.28)
14	21.9 (0.4)	67.8 (3.9)	-23.8 (0.99)	13.3 (1.74)	21.5 (0.5)	67.6 (3.7)	-22.0 (3.22)	13.8 (2.18)	22.5 (0.6)	71.3 (4.1)	-22.4 (1.72)	12.3 (0.87)
15	21.1 (1.1)	60.0 (5.2)	-23.5 (3.98)	12.6 (1.86)	21.0 (0.6)	59.8 (4.4)	-18.0 (6.79)	12.2 (3.30)	21.8 (1.0)	63.4 (5.2)	-19.3 (6.10)	10.6 (2.15)
16	20.1 (1.5)	45.3 (7.2)	-17.4 (8.24)	11.0 (2.44)	20.4 (1.2)	47.2 (6.2)	-13.9 (7.51)	10.6 (3.79)	21.0 (1.6)	48.9 (7.0)	-15.4 (7.53)	8.92 (3.30)
17	19.8 (2.5)	44.4 (7.9)	-13.9 (9.28)	9.54 (4.89)	19.8 (2.0)	45.6 (6.6)	-12.4 (9.83)	9.46 (6.98)	21.0 (2.4)	48.2 (7.1)	-15.6 (7.97)	9.78 (4.72)
18	21.6 (3.4)	43.5 (10.6)	-16.5 (8.58)	14.5 (9.50)	20.9 (3.5)	44.6 (9.3)	-16.6 (8.57)	16.2 (11.3)	22.6 (3.1)	46.6 (10.5)	-17.5 (6.87)	14.6 (8.61)
19	21.9 (2.6)	52.9 (4.8)	-18.7 (7.20)	14.1 (6.27)	21.3 (2.2)	53.1 (4.0)	-17.7 (7.99)	16.7 (10.6)	22.6 (2.4)	56.6 (4.9)	-19.0 (4.78)	14.3 (5.83)
20	23.3 (2.2)	62.0 (6.1)	-16.5 (7.00)	17.6 (7.59)	22.5 (2.2)	61.8 (5.4)	-14.9 (7.26)	20.1 (9.78)	23.7 (2.0)	65.0 (6.6)	-15.0 (6.41)	17.8 (7.49)
21	22.7 (1.8)	52.9 (12.1)	-12.1 (5.86)	15.6 (5.77)	21.5 (1.9)	52.6 (10.8)	-9.21 (4.08)	18.8 (10.0)	23.0 (1.7)	55.7 (11.7)	-10.8 (1.69)	14.8 (5.79)
22	20.7 (1.6)	47.2 (11.3)	-9.62 (6.33)	10.2 (3.23)	19.4 (1.5)	47.0 (11.0)	-6.66 (4.52)	10.0 (4.43)	20.4 (1.7)	48.7 (12.1)	-9.29 (4.89)	9.45 (3.82)
23	21.8 (3.6)	44.4 (11.5)	-9.95 (7.04)	15.7 (10.9)	20.4 (4.3)	45.7 (10.2)	-8.37 (5.20)	17.5 (12.9)	22.1 (3.4)	46.5 (11.4)	-10.1 (4.96)	14.8 (10.8)
24	23.9 (4.3)	56.9 (8.3)	-11.6 (5.43)	20.6 (11.3)	23.5 (4.4)	57.9 (8.6)	-7.17 (4.49)	23.7 (13.7)	24.2 (4.2)	59.6 (9.2)	-11.5 (4.36)	20.0 (11.7)
25	25.7 (3.4)	59.6 (10.2)	-15.4 (1.32)	23.5 (9.35)	25.2 (3.6)	61.2 (10.2)	-7.60 (6.51)	27.9 (8.45)	25.8 (3.3)	62.3 (10.9)	-11.9 (2.93)	23.2 (9.39)
26	25.1 (3.8)	56.1 (12.9)	-16.3 (2.11)	22.7 (9.73)	24.2 (4.3)	56.6 (11.7)	-11.8 (4.68)	24.7 (9.61)	25.3 (3.7)	58.2 (13.4)	-12.3 (2.75)	22.2 (10.0)
27	24.2 (3.9)	53.0 (12.0)	-11.1 (4.14)	20.3 (11.4)	23.3 (4.4)	53.4 (10.4)	-10.4 (5.69)	21.5 (11.4)	24.6 (3.8)	55.0 (12.4)	-11.6 (3.62)	19.6 (11.3)
28	23.5 (3.5)	54.3 (9.0)	-11.0 (3.41)	20.1 (11.0)	22.7 (3.8)	54.4 (7.6)	-11.9 (5.12)	21.1 (11.7)	23.8 (3.3)	57.0 (9.6)	-11.8 (2.44)	19.2 (10.8)
29	23.6 (3.0)	55.5 (10.3)	-11.5 (3.38)	20.0 (10.5)	23.0 (3.2)	55.3 (8.8)	-16.2 (3.97)	20.8 (10.6)	23.9 (2.9)	57.9 (10.8)	-11.5 (2.46)	19.1 (10.2)
30	22.4 (2.1)	62.9 (4.6)	-11.2 (3.75)	16.0 (6.43)	21.8 (2.0)	62.3 (3.8)	-15.1 (3.81)	18.1 (10.0)	23.0 (1.9)	65.3 (4.7)	-10.8 (2.00)	14.9 (6.52)
Avg	22.2	53.3	-15.7	14.9	21.7	54.2	-15.5	16.3	22.7	56.2	-14.9	14.1
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	1.7	7.1	4.01	4.21	1.5	6.6	5.28	5.33	1.5	7.2	3.71	4.30
Min	19.4	43.5	-23.8	7.95	19.3	44.6	-26.0	6.96	19.7	46.5	-22.4	7.56
Max	25.7	68.4	-9.36	23.5	25.2	68.5	-6.66	27.9	25.8	71.8	-9.27	23.2

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for May, 2009.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	24.4 (3.0)	61.2 (9.6)	-12.2 (1.47)	22.7 (9.03)	23.8 (3.2)	61.5 (8.4)	-16.9 (3.87)	24.1 (8.87)	24.7 (2.8)	63.7 (9.8)	-11.9 (2.56)	21.5 (9.08)
2	25.0 (2.4)	59.4 (7.7)	-12.2 (1.56)	22.9 (8.68)	24.2 (2.7)	60.3 (7.1)	-17.1 (2.93)	26.5 (7.27)	25.3 (2.2)	61.9 (7.8)	-10.8 (2.80)	22.3 (8.40)
3	25.8 (3.0)	58.9 (9.8)	-12.4 (1.66)	24.8 (8.88)	25.1 (3.2)	59.8 (9.1)	-17.7 (3.16)	27.2 (7.11)	26.0 (2.7)	61.6 (10.0)	-11.0 (3.34)	24.1 (8.86)
4	25.4 (2.6)	61.2 (8.9)	-12.4 (1.24)	24.3 (8.76)	24.6 (3.0)	62.6 (9.2)	-15.6 (3.71)	28.1 (6.64)	25.7 (2.4)	65.1 (9.7)	-11.1 (2.49)	24.2 (8.44)
5	23.0 (1.4)	71.9 (2.4)	-12.7 (2.41)	17.4 (4.60)	22.1 (1.6)	71.0 (3.2)	-15.5 (3.60)	21.3 (8.29)	23.4 (1.2)	76.3 (2.4)	-10.5 (2.11)	18.6 (5.95)
6	25.2 (2.2)	66.1 (8.2)	-11.7 (1.37)	24.5 (7.77)	24.6 (2.4)	66.6 (7.9)	-16.5 (3.56)	28.3 (5.86)	25.3 (2.2)	69.6 (9.0)	-11.2 (3.15)	25.6 (7.53)
7	23.5 (2.1)	72.0 (5.6)	-10.4 (4.71)	16.1 (8.28)	23.5 (2.1)	70.1 (4.5)	-17.6 (3.19)	22.8 (7.20)	24.0 (1.9)	74.5 (4.9)	-9.26 (2.76)	21.8 (6.77)
8	24.2 (3.8)	71.0 (8.9)	-8.25 (4.13)	5.24 (2.52)	24.4 (3.0)	67.4 (5.9)	-17.0 (3.44)	26.8 (8.28)	24.9 (2.8)	72.3 (6.8)	-11.3 (3.61)	24.8 (8.87)
9	26.8 (3.5)	61.5 (13.2)	-11.2 (3.33)	11.2 (11.70)	26.7 (3.7)	60.8 (11.3)	-16.1 (3.60)	30.3 (4.98)	27.2 (3.4)	63.4 (12.7)	-11.3 (4.00)	28.2 (7.29)
10	24.0 (2.8)	58.4 (11.4)	-7.34 (0.68)	4.53 (0.04)	23.1 (2.3)	56.3 (8.5)	-16.7 (3.66)	23.5 (8.68)	23.6 (2.2)	60.1 (10.8)	-10.4 (3.43)	21.7 (8.56)
11	16.7 (3.1)	71.5 (5.3)	-11.7 (3.98)	13.0 (9.64)	19.9 (0.6)	61.8 (3.8)	-12.8 (4.22)	11.5 (3.44)	20.2 (1.2)	68.0 (4.7)	-11.1 (3.06)	10.8 (2.91)
12	15.8 (5.7)	66.0 (14.9)	-13.1 (2.97)	16.5 (2.50)	20.7 (2.2)	54.0 (5.9)	-13.0 (6.31)	15.5 (11.1)	20.8 (2.8)	58.9 (8.9)	-9.20 (5.03)	13.0 (7.98)
13	18.0 (4.4)	61.6 (14.5)	-12.5 (1.24)	12.6 (4.08)	21.0 (2.3)	54.5 (7.9)	-10.7 (6.86)	16.8 (11.8)	21.5 (2.5)	56.6 (8.9)	-9.71 (3.91)	15.2 (7.91)
14	19.5 (3.0)	78.4 (2.9)	-11.6 (0.77)	8.88 (0.10)	20.2 (2.5)	76.5 (2.4)	-10.9 (5.89)	13.5 (7.67)	22.2 (1.9)	74.6 (4.2)	-8.87 (3.16)	16.2 (5.99)
15	21.7 (2.7)	77.5 (7.2)	-11.3 (0.71)	8.82 (0.11)	21.9 (2.5)	74.9 (4.8)	-13.0 (4.70)	18.3 (11.4)	23.5 (2.1)	75.4 (5.4)	-13.0 (3.67)	21.5 (7.76)
16	22.7 (2.1)	76.2 (6.5)	-11.1 (1.59)	10.7 (7.47)	22.8 (2.1)	75.1 (4.7)	-11.4 (6.78)	14.8 (11.9)	24.2 (1.6)	76.0 (5.2)	-15.5 (1.94)	22.3 (7.34)
17	19.9 (4.4)	72.0 (1.0)	-11.3 (3.06)	7.44 (4.30)	20.1 (4.0)	74.2 (4.8)	-5.91 (5.39)	6.14 (1.93)	22.4 (2.4)	73.2 (4.9)	-14.5 (3.02)	16.4 (8.05)
18	13.6 (1.7)	70.2 (0.2)	-4.74 (6.67)	3.63 (6.05)	13.5 (1.6)	68.6 (7.3)	-14.5 (2.53)	8.87 (0.56)	18.6 (2.1)	62.6 (5.2)	-10.1 (7.08)	7.40 (3.38)
19	14.9 (2.5)	70.2 (0.6)	-1.17 (2.56)	0.00 (0.00)	14.8 (3.4)	58.9 (9.2)	-11.1 (5.25)	7.09 (3.59)	15.6 (3.2)	59.9 (9.9)	-6.43 (6.63)	5.70 (4.36)
20	17.8 (4.3)	73.0 (1.7)	0.11 (1.56)	0.00 (0.00)	18.2 (5.2)	68.3 (6.0)	-13.9 (2.58)	13.7 (10.0)	18.7 (4.6)	70.6 (6.2)	-8.65 (5.06)	7.19 (3.72)
21	21.4 (3.5)	74.1 (0.9)	1.34 (1.20)	0.00 (0.00)	20.8 (3.9)	65.7 (10.3)	-13.5 (0.66)	8.70 (0.09)	21.0 (3.8)	67.8 (11.2)	-10.6 (1.64)	8.94 (0.14)
22	23.1 (3.9)	66.3 (7.4)	-4.06 (5.96)	3.83 (5.90)	21.8 (4.0)	68.9 (8.6)	-13.5 (0.64)	8.65 (0.08)	22.0 (4.0)	71.3 (9.6)	-10.7 (0.65)	8.89 (0.10)
23	23.1 (3.9)	69.0 (9.5)	-8.59 (0.94)	4.51 (0.06)	22.2 (3.9)	69.9 (8.2)	-13.5 (0.64)	8.63 (0.08)	22.4 (3.9)	72.5 (9.1)	-10.6 (0.75)	8.88 (0.08)
24	24.1 (3.3)	69.9 (9.1)	-8.55 (1.43)	4.62 (0.68)	23.4 (3.1)				23.7 (3.0)			
25	24.3 (3.2)	70.1 (9.2)	-8.84 (4.66)	8.67 (5.17)	23.8 (3.1)				24.1 (3.0)			
26	24.3 (1.2)	74.5 (4.5)	-8.96 (5.71)	14.7 (9.78)	22.4 (0.9)				23.2 (1.7)			
27	25.9 (3.0)	63.7 (11.8)	-11.6 (6.22)	12.7 (7.08)	24.7 (3.1)				24.1 (3.2)			
28	25.7 (2.2)	70.5 (5.1)	-14.9 (4.84)	10.9 (5.05)	25.1 (2.4)				24.8 (2.2)			
29	26.1 (2.7)	69.5 (6.9)	-13.3 (4.87)	12.6 (7.38)	25.3 (2.8)				24.9 (2.8)			
30	25.3 (2.5)	61.7 (9.3)	-12.2 (6.51)	9.96 (5.68)	24.4 (2.9)				24.4 (2.8)			
31	26.6 (3.4)	59.1 (11.5)	-12.5 (6.07)	15.2 (11.3)	25.0 (4.7)	62.7 (13.6)	-1.45 (0.33)	4.73 (0.07)	25.1 (4.3)	65.6 (14.7)	1.20 (0.38)	4.83 (0.07)
Avg	22.5	67.9	-9.73	11.4	22.4	65.4	-13.6	17.3	23.1	67.6	-10.3	16.7
n	31	31	31	31	31	24	24	24	31	24	24	24
SD	3.6	5.8	3.99	7.23	2.9	6.4	3.73	8.08	2.4	6.0	2.98	7.13
Min	13.6	58.4	-14.9	0.00	13.5	54.0	-17.7	4.73	15.6	56.6	-15.5	4.83
Max	26.8	78.4	1.34	24.8	26.7	76.5	-1.45	30.3	27.2	76.3	1.20	28.2

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for June, 2009.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	26.0 (2.9)	66.9 (7.8)	-13.2 (4.76)	13.8 (9.78)	24.8 (3.8)	71.6 (9.4)	-2.41 (5.59)	12.5 (11.0)	24.7 (3.5)	72.7 (9.9)	1.36 (0.79)	4.86 (0.07)
2	27.0 (3.2)	64.3 (10.2)	-14.8 (4.37)	16.7 (10.4)	26.4 (3.2)	66.7 (11.6)	-11.0 (8.32)	19.0 (12.2)	26.0 (3.6)	69.3 (12.9)	1.44 (0.31)	4.85 (0.06)
3	27.0 (2.9)	63.0 (11.2)	-14.8 (1.07)	16.8 (9.78)	26.4 (2.8)	65.7 (12.1)	-15.1 (2.74)	19.5 (10.7)	26.3 (3.1)	68.1 (13.7)	1.45 (0.41)	4.84 (0.06)
4	26.2 (2.4)	66.4 (9.3)	-15.2 (2.37)	13.7 (7.08)	25.6 (2.3)	69.0 (10.4)	-13.8 (4.46)	16.8 (10.7)	25.4 (2.7)	71.3 (11.8)	-3.76 (5.40)	4.63 (0.25)
5	25.9 (2.1)	70.5 (6.4)	-13.5 (4.07)	12.7 (5.96)	25.0 (2.0)	72.0 (7.5)	-14.1 (2.81)	16.0 (9.85)	24.7 (2.3)	75.3 (7.4)	-9.97 (6.76)	13.9 (13.1)
6	23.8 (0.7)	72.3 (1.5)	-14.2 (5.49)	7.13 (2.53)	23.0 (0.7)	72.3 (1.7)	-11.8 (4.08)	7.94 (2.47)	23.5 (0.8)	74.1 (1.5)	-6.90 (8.07)	6.46 (5.99)
7	25.6 (2.0)	70.8 (3.9)	-15.1 (4.03)	10.5 (4.20)	24.5 (1.9)	71.2 (3.8)	-15.1 (2.86)	14.4 (7.50)	25.5 (1.9)	72.2 (4.3)	-9.31 (6.54)	10.0 (5.48)
8	26.7 (2.7)	68.5 (7.2)	-15.3 (3.45)	15.5 (8.79)	25.8 (2.8)	68.5 (7.8)	-14.8 (2.43)	20.0 (11.1)	26.8 (2.6)	69.8 (7.5)	-8.62 (5.15)	13.8 (8.28)
9	26.7 (2.3)	70.8 (5.9)	-14.7 (1.41)	15.1 (8.13)	25.8 (2.5)	70.7 (6.8)	-14.7 (2.15)	19.2 (10.7)	26.6 (2.4)	73.2 (6.7)	-10.8 (4.51)	14.3 (7.94)
10	26.0 (2.3)	68.6 (5.7)	-15.5 (3.84)	13.1 (6.90)	25.0 (2.3)	68.5 (5.8)	-14.3 (3.62)	17.7 (10.4)	26.1 (2.2)	70.7 (6.2)	-12.5 (4.69)	11.4 (5.65)
11	27.2 (2.5)	69.1 (6.2)	-14.6 (1.51)	17.1 (8.44)	26.4 (2.5)	68.7 (6.8)	-14.9 (1.59)	21.7 (10.8)	27.3 (2.3)	71.0 (6.8)	-12.2 (1.67)	15.8 (7.77)
12	27.9 (3.1)	68.7 (7.1)	-14.1 (1.95)	18.8 (10.5)	26.9 (3.4)	68.0 (7.4)	-15.3 (1.80)	21.4 (10.6)	27.7 (3.1)	71.0 (7.5)	-12.6 (2.07)	18.3 (10.2)
13	28.0 (2.9)	66.3 (8.9)	-14.6 (1.41)	19.7 (10.6)	27.1 (3.3)	66.3 (9.5)	-15.8 (2.13)	23.2 (9.94)	28.2 (2.7)	68.5 (9.3)	-12.6 (1.69)	18.8 (10.6)
14	27.3 (2.7)	67.6 (6.8)	-15.1 (1.50)	17.9 (9.84)	26.6 (2.9)	67.1 (7.0)	-15.3 (2.39)	21.2 (10.0)	27.5 (2.6)	70.0 (7.5)	-13.5 (2.04)	17.0 (9.45)
15	26.4 (2.5)	67.9 (6.5)	-15.3 (1.16)	14.6 (8.48)	25.5 (2.7)	68.0 (7.3)	-15.3 (2.58)	18.8 (10.5)	26.6 (2.4)	70.4 (7.5)	-13.1 (1.59)	13.7 (7.32)
16	24.2 (0.4)	74.1 (1.2)	-17.3 (1.25)	8.87 (1.72)	23.4 (0.3)	74.6 (1.5)	-14.1 (1.92)	10.8 (2.27)	24.6 (0.6)	76.5 (1.2)	-16.8 (1.59)	8.19 (0.48)
17	25.5 (1.7)	71.0 (3.9)	-16.1 (1.69)	11.5 (3.49)	24.7 (1.5)	71.8 (4.4)	-14.6 (2.09)	17.7 (8.61)	25.8 (1.6)	73.3 (4.2)	-14.2 (2.70)	11.1 (3.52)
18	27.2 (2.6)	71.3 (5.4)	-15.7 (1.81)	17.4 (9.07)	26.4 (2.7)	71.8 (6.4)	-15.6 (2.19)	22.6 (10.2)	27.3 (2.5)	73.2 (5.8)	-13.7 (2.38)	16.4 (8.45)
19	28.2 (2.8)	67.3 (9.6)	-15.1 (1.57)	20.6 (9.38)	27.5 (3.0)	67.0 (10.7)	-16.1 (1.59)	25.4 (8.54)	28.5 (2.5)	68.4 (9.8)	-13.3 (1.86)	19.5 (9.70)
20	29.7 (3.6)	65.5 (10.8)	-14.9 (1.54)	23.5 (9.23)	29.2 (3.8)	65.6 (11.0)	-12.6 (3.95)	29.4 (8.08)	29.9 (3.4)	66.9 (11.1)	-14.0 (1.86)	22.7 (9.16)
21	28.5 (2.4)	56.3 (9.8)	-15.3 (2.04)	21.3 (8.47)	28.0 (2.6)	56.7 (10.8)	-13.3 (5.72)	29.4 (5.39)	28.6 (2.4)	58.1 (10.7)	-13.8 (2.26)	20.6 (8.65)
22	26.8 (2.6)	59.5 (8.9)	-15.3 (3.30)	16.7 (9.73)	26.1 (3.0)	59.1 (9.2)	-14.3 (4.10)	20.7 (11.4)	27.0 (2.6)	61.1 (9.8)	-14.3 (3.67)	14.9 (8.34)
23	26.6 (2.3)	63.0 (9.5)	-15.2 (1.41)	16.1 (8.27)	25.9 (2.8)	63.2 (9.8)	-14.9 (2.86)	22.5 (10.3)	27.1 (2.4)	65.0 (9.9)	-15.2 (2.77)	15.7 (8.35)
24	27.2 (3.1)	61.9 (10.6)	-15.3 (3.18)	18.6 (10.5)	26.8 (3.3)	62.4 (10.5)	-15.6 (1.94)	23.8 (10.8)	27.6 (3.1)	63.9 (10.7)	-14.8 (3.14)	18.1 (10.2)
25	27.9 (3.1)	59.7 (13.1)	-15.5 (1.47)	19.8 (10.6)	27.3 (3.6)	60.0 (12.9)	-15.9 (1.91)	24.9 (9.85)	28.4 (3.2)	61.2 (13.2)	-14.5 (2.10)	19.5 (10.5)
26	27.1 (2.6)	71.2 (6.7)	-9.49 (8.13)	16.9 (8.49)	26.3 (2.8)	71.0 (6.5)	-10.0 (7.53)	22.6 (7.27)	27.3 (2.5)	72.6 (5.8)	-14.0 (1.66)	15.6 (8.44)
27	28.5 (2.8)	65.4 (9.2)	-10.8 (7.17)	20.6 (10.5)	27.8 (3.4)	65.6 (9.5)	-11.6 (7.27)	25.9 (8.67)	28.6 (3.1)	67.0 (8.7)	-14.2 (1.74)	20.2 (10.7)
28	27.3 (2.8)	58.1 (11.3)	-15.4 (2.19)	18.3 (10.1)	26.7 (3.3)	58.5 (10.8)	-16.2 (2.25)	21.2 (8.95)	27.7 (2.8)	59.9 (11.4)	-14.7 (2.41)	18.1 (9.60)
29	28.2 (3.0)	57.1 (12.9)	-15.6 (1.60)	20.3 (9.93)	27.9 (3.1)	57.6 (12.6)	-15.4 (3.33)	22.7 (9.09)	28.7 (2.9)	59.0 (13.1)	-14.3 (1.80)	20.1 (9.93)
30	27.8 (3.5)	51.8 (13.6)	-15.0 (2.12)	19.4 (11.0)	27.7 (3.5)	52.5 (12.3)	-14.6 (3.59)	21.4 (10.6)	28.2 (3.4)	53.6 (14.0)	-15.3 (2.69)	19.0 (10.8)
Avg	26.9	65.8	-14.7	16.4	26.2	66.4	-14.0	20.3	26.9	68.2	-11.3	14.4
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	1.2	5.3	1.44	3.75	1.4	5.3	2.62	4.77	1.5	5.6	5.00	5.27
Min	23.8	51.8	-17.3	7.13	23.0	52.5	-16.2	7.94	23.5	53.6	-16.8	4.63
Max	29.7	74.1	-9.49	23.5	29.2	74.6	-2.41	29.4	29.9	76.5	1.45	22.7

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for July, 2009.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	28.5 (4.0)	53.4 (13.4)	-13.4 (5.71)	20.1 (11.40)	28.2 (4.0)	54.2 (12.5)	-15.4 (3.59)	21.2 (11.1)	28.7 (3.9)	55.2 (13.6)	-15.0 (2.13)	19.7 (11.4)
2	27.7 (2.6)	62.4 (11.5)	-9.15 (7.89)	19.3 (10.30)	27.1 (2.9)	63.0 (11.0)	-15.1 (3.74)	21.2 (10.1)	27.9 (2.7)	64.8 (11.2)	-14.2 (1.72)	18.7 (10.3)
3	26.5 (2.2)	55.1 (9.6)	-15.1 (2.15)	15.1 (7.30)	26.1 (2.3)	56.6 (8.9)	-15.5 (3.28)	16.8 (7.72)	26.6 (2.3)	58.3 (10.0)	-14.0 (1.63)	15.3 (7.20)
4	26.2 (2.7)	55.0 (10.3)	-14.2 (4.40)	15.5 (9.67)	26.2 (2.6)	56.7 (9.7)	-13.7 (5.90)	15.8 (8.71)	26.3 (2.9)	58.1 (11.0)	-14.9 (3.82)	15.6 (9.76)
5	27.5 (2.3)	67.4 (6.6)	-14.8 (1.55)	19.3 (8.88)	27.3 (2.3)	67.5 (6.7)	-15.2 (1.79)	20.8 (8.01)	27.8 (2.4)	69.9 (6.7)	-13.7 (1.80)	19.4 (8.85)
6	26.1 (0.8)	74.0 (1.7)	-14.5 (4.73)	15.0 (4.68)	25.7 (1.1)	75.4 (1.9)	-14.9 (5.44)	18.6 (7.04)	26.6 (1.0)	76.1 (1.7)	-13.0 (4.22)	13.8 (2.21)
7	26.6 (2.3)	64.2 (11.1)	-15.5 (1.72)	20.1 (8.88)	26.5 (2.5)	65.2 (11.0)	-14.7 (4.40)	19.9 (5.78)	26.8 (2.7)	66.5 (12.1)	-15.1 (2.05)	20.5 (7.16)
8	26.6 (2.7)	64.5 (10.5)	-15.8 (1.83)	18.9 (9.53)	26.6 (2.8)	64.5 (10.1)	-15.2 (2.86)	20.2 (9.20)	26.5 (3.4)	67.3 (11.8)	-14.9 (2.86)	19.7 (8.20)
9	25.4 (1.4)	65.1 (6.8)	-15.0 (1.76)	15.5 (4.60)	25.0 (1.4)	65.8 (7.0)	-15.1 (3.69)	18.5 (5.11)	25.3 (1.8)	67.6 (7.9)	-14.9 (2.24)	17.0 (2.86)
10	25.6 (2.6)	57.9 (9.3)	-15.7 (1.92)	17.8 (9.85)	25.8 (2.6)	57.8 (8.1)	-14.2 (4.08)	17.0 (8.29)	25.4 (3.4)	60.2 (10.4)	-14.8 (3.15)	17.6 (6.56)
11	26.0 (2.6)	60.8 (6.3)	-15.4 (1.88)	18.8 (9.81)	26.0 (2.5)	60.8 (5.6)	-15.8 (3.80)	18.5 (7.57)	26.0 (3.2)	63.2 (7.1)	-14.3 (2.86)	17.9 (6.75)
12	28.2 (3.5)	59.0 (7.1)	-16.2 (1.70)	23.6 (9.36)	28.0 (3.5)	59.2 (6.7)	-16.2 (4.04)	24.7 (8.42)	28.3 (3.7)	61.2 (7.3)	-15.4 (2.41)	23.7 (8.19)
13	25.1 (0.7)	73.0 (4.5)	-14.9 (1.80)	13.9 (1.68)	24.6 (0.5)	73.7 (4.5)	-16.3 (3.90)	17.1 (3.99)	25.4 (1.1)	75.0 (5.1)	-14.7 (1.91)	13.9 (1.88)
14	26.3 (2.3)	67.1 (8.9)	-16.7 (2.02)	19.4 (9.29)	25.9 (2.5)	67.5 (8.8)	-15.5 (5.79)	21.2 (10.3)	26.0 (3.0)	69.9 (9.9)	-15.1 (3.19)	19.5 (7.34)
15	26.7 (2.8)	57.2 (14.4)	-16.0 (1.92)	20.0 (10.4)	26.5 (3.0)	58.0 (13.9)	-15.5 (3.64)	22.3 (11.0)	26.6 (3.5)	59.9 (15.9)	-15.0 (3.01)	20.7 (9.05)
16	26.7 (3.0)	69.2 (9.4)	-16.4 (1.97)	19.0 (8.55)	26.3 (3.0)	69.4 (9.5)	-16.0 (4.72)	22.9 (9.52)	26.7 (3.1)	71.8 (9.3)	-14.5 (2.65)	19.2 (7.66)
17	27.3 (3.3)	71.0 (7.0)	-15.7 (1.37)	21.0 (9.39)	26.9 (3.5)	71.3 (7.2)	-16.8 (4.34)	23.1 (8.43)	27.4 (3.5)	73.2 (7.7)	-15.5 (2.20)	21.6 (8.21)
18	26.7 (1.9)	67.9 (8.3)	-15.8 (1.54)	20.9 (8.30)	26.2 (2.2)	68.5 (8.9)	-17.4 (1.68)	25.7 (7.32)	27.0 (2.3)	70.0 (8.9)	-14.3 (1.82)	19.3 (5.40)
19	26.7 (2.1)	60.7 (5.7)	-15.8 (1.73)	20.9 (8.58)	26.3 (2.4)	60.9 (6.1)	-16.7 (4.20)	25.7 (8.28)	27.0 (2.5)	62.1 (5.6)	-13.9 (2.44)	19.4 (6.72)
20	25.9 (1.6)	69.1 (7.5)	-15.2 (1.45)	17.3 (5.84)	25.4 (1.8)	70.1 (7.9)	-17.2 (1.90)	23.0 (6.97)	26.0 (2.0)	71.3 (8.5)	-14.8 (2.12)	17.3 (3.70)
21	26.0 (2.4)	65.1 (8.7)	-16.5 (1.78)	18.7 (9.37)	25.6 (2.7)	65.5 (8.7)	-15.9 (5.76)	21.7 (10.2)	25.9 (3.1)	67.3 (9.7)	-15.0 (3.11)	19.4 (7.62)
22	26.2 (2.2)	69.6 (6.8)	-15.9 (1.62)	18.2 (9.24)	25.8 (2.5)	69.9 (7.3)	-16.0 (4.06)	22.9 (9.82)	26.2 (3.1)	71.6 (7.0)	-14.7 (2.95)	18.9 (8.01)
23	26.5 (2.4)	73.4 (7.1)	-15.4 (3.58)	18.7 (7.81)	25.9 (2.7)	74.4 (7.3)	-15.9 (6.13)	25.0 (6.96)	26.9 (2.6)	74.8 (7.1)	-12.0 (5.03)	19.2 (7.71)
24	26.4 (2.0)	72.7 (4.7)	-15.4 (1.82)	18.8 (7.40)	25.9 (2.2)	73.9 (5.4)	-17.1 (2.24)	25.2 (6.64)	27.0 (2.0)	74.1 (4.3)	-13.9 (1.94)	18.2 (7.02)
25	27.5 (2.9)	68.9 (6.4)	-15.1 (1.36)	22.5 (9.06)	27.1 (3.1)	69.8 (7.1)	-17.6 (1.83)	27.3 (7.64)	27.8 (3.2)	70.7 (7.1)	-15.2 (2.18)	23.2 (7.88)
26	29.1 (3.3)	63.2 (12.0)	-15.3 (1.42)	24.5 (8.59)	28.7 (3.6)	64.3 (11.9)	-17.9 (1.55)	30.4 (4.18)	29.7 (3.1)	64.6 (11.8)	-14.6 (2.20)	23.7 (8.67)
27	26.6 (2.5)	71.4 (5.1)	-16.2 (2.07)	19.7 (8.41)	26.1 (2.8)	72.8 (5.8)	-17.7 (1.49)	26.3 (6.97)	27.3 (2.4)	75.4 (6.9)	-10.3 (6.75)	21.2 (7.10)
28	26.8 (3.0)	71.8 (7.7)	-16.3 (1.73)	20.1 (8.50)	26.3 (3.3)	72.6 (8.3)	-17.2 (1.24)	26.4 (7.05)	27.6 (2.7)	75.8 (8.8)	-12.1 (6.86)	21.9 (6.84)
29	27.3 (1.6)	73.3 (5.0)	-15.3 (2.52)	21.9 (7.26)	26.5 (2.2)	73.9 (5.7)	-17.9 (1.49)	28.4 (4.16)	27.7 (1.6)	75.2 (5.0)	-14.0 (2.37)	20.1 (7.18)
30	28.1 (2.6)	70.6 (7.4)	-14.3 (3.30)	22.2 (8.87)	27.2 (3.3)	71.3 (8.1)	-15.8 (4.41)	27.5 (5.84)	28.3 (2.7)	72.7 (7.5)	-14.0 (1.73)	21.8 (8.98)
31	27.8 (3.3)	70.3 (7.7)	-15.9 (1.58)	21.2 (9.05)	27.5 (3.5)	71.5 (9.0)	-10.2 (7.01)	27.7 (6.23)	28.5 (3.0)	71.9 (7.8)	-13.7 (1.70)	20.7 (9.36)
Avg	26.8	65.9	-15.3	19.3	26.4	66.6	-15.9	22.7	27.0	68.3	-14.2	19.3
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	0.9	6.0	1.33	2.46	0.9	6.1	1.48	3.79	1.0	6.0	1.09	2.45
Min	25.1	53.4	-16.7	13.9	24.6	54.2	-17.9	15.8	25.3	55.2	-15.5	13.8
Max	29.1	74.0	-9.15	24.5	28.7	75.4	-10.2	30.4	29.7	76.1	-10.3	23.7

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for August, 2009.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	27.7 (2.3)	71.9 (6.8)	-15.4 (1.93)	22.3 (8.56)	27.5 (2.5)	72.7 (7.7)	-13.0 (5.98)	27.8 (3.05)	28.3 (2.2)	73.5 (7.1)	-13.1 (3.21)	22.0 (8.33)
2	27.0 (1.5)	76.6 (4.7)	-16.3 (1.59)	19.7 (5.91)	26.4 (1.8)	76.2 (5.0)	-16.1 (0.89)	25.8 (1.62)	27.4 (1.4)	77.7 (4.6)	-13.8 (2.34)	18.8 (6.12)
3	26.8 (1.9)	76.6 (4.2)	-15.0 (3.81)	19.8 (7.68)	26.1 (2.3)	76.4 (4.5)	-13.5 (6.18)	28.1 (5.39)	27.1 (1.8)	77.3 (4.2)	-10.3 (5.02)	18.9 (8.63)
4	27.4 (3.2)	69.5 (9.1)	-15.8 (1.75)	23.6 (8.51)	27.1 (3.3)	69.3 (9.3)	-17.7 (2.08)	27.7 (7.39)	27.7 (3.4)	70.1 (8.8)	-15.8 (2.67)	23.6 (7.84)
5	27.8 (2.6)	72.1 (7.8)	-11.7 (6.23)	21.4 (7.65)	26.6 (3.2)	72.1 (8.0)	-17.9 (1.98)	31.4 (3.05)	27.8 (2.7)	72.0 (6.9)	-13.9 (2.56)	19.5 (8.28)
6	27.9 (1.9)	71.8 (8.2)	-12.6 (6.18)	22.5 (8.64)	27.1 (2.7)	71.3 (7.6)	-16.5 (5.21)	30.2 (7.23)	28.0 (2.0)	71.9 (6.3)	-13.2 (4.14)	20.3 (9.52)
7	26.9 (2.4)	63.9 (10.4)	-16.2 (1.93)	21.2 (9.01)	26.7 (2.8)	64.8 (11.2)	-10.9 (5.81)	26.9 (7.35)	27.2 (2.8)	65.0 (10.8)	-15.2 (2.50)	22.2 (8.16)
8	27.2 (3.1)	63.7 (9.1)	-16.4 (1.76)	21.5 (9.73)	27.0 (3.2)	64.2 (9.6)	-13.0 (7.37)	26.1 (6.66)	27.4 (3.5)	65.0 (9.3)	-15.4 (2.79)	22.4 (8.52)
9	28.4 (3.7)	64.5 (9.5)	-16.4 (1.66)	24.0 (9.08)	28.2 (4.0)	64.8 (9.6)	-15.5 (1.71)	21.3 (4.07)	28.7 (3.8)	66.4 (9.5)	-15.5 (2.24)	24.6 (7.96)
10	29.7 (4.1)	62.1 (10.3)	-14.3 (4.67)	26.1 (9.07)	29.7 (3.9)	61.8 (9.7)	-14.9 (6.10)	25.1 (6.96)	30.2 (3.6)	63.4 (10.1)	-11.6 (5.65)	26.2 (9.62)
11	28.6 (3.4)	67.6 (10.1)	-14.0 (5.81)	23.2 (7.62)	27.7 (4.0)	67.6 (10.0)	-17.2 (2.62)	28.9 (4.10)	28.9 (3.4)	68.6 (9.0)	-11.8 (5.90)	22.0 (8.01)
12	26.5 (1.3)	78.8 (4.5)	-12.8 (6.36)	19.8 (6.28)	25.3 (2.2)	77.1 (4.0)	-15.3 (1.80)	27.6 (3.34)	26.4 (1.7)	78.7 (4.0)	-5.86 (4.56)	19.6 (5.82)
13	25.7 (0.9)	77.1 (2.6)	-16.9 (2.04)	17.7 (3.37)	25.0 (1.2)	77.7 (2.5)	-15.3 (1.29)	25.8 (0.32)	26.2 (0.8)	78.0 (2.5)	-3.85 (2.49)	17.4 (3.92)
14	25.7 (1.1)	74.9 (3.6)	-15.8 (2.02)	18.0 (5.00)	24.8 (1.6)	76.2 (4.3)	-17.3 (3.57)	29.5 (6.00)	26.2 (1.1)	75.8 (3.3)	-4.67 (3.56)	18.4 (5.24)
15	26.2 (2.0)	72.6 (5.9)	-15.9 (2.02)	20.5 (8.04)	25.3 (2.6)	74.1 (7.2)	-16.6 (2.25)	30.2 (4.51)	26.5 (2.3)	73.7 (5.9)	-6.94 (5.77)	21.6 (7.30)
16	26.9 (2.3)	71.2 (8.0)	-15.5 (1.94)	22.3 (8.44)	26.1 (3.0)	72.4 (9.2)	-17.8 (1.03)	32.0 (3.08)	27.4 (2.4)	72.5 (7.9)	-7.98 (5.89)	22.7 (7.79)
17	27.5 (2.8)	70.1 (7.8)	-15.0 (4.54)	23.6 (9.27)	26.8 (3.4)	71.0 (9.1)	-17.6 (4.86)	32.2 (3.38)	28.0 (2.8)	71.1 (7.8)	-7.09 (6.66)	24.4 (9.18)
18	27.9 (2.8)	69.1 (8.5)	-15.9 (1.75)	24.3 (8.26)	27.4 (3.4)	69.7 (9.5)	-18.8 (0.43)	33.2 (0.36)	28.5 (2.8)	70.2 (8.3)	-10.5 (7.05)	23.6 (8.04)
19	28.1 (3.2)	68.6 (10.1)	-15.5 (3.44)	23.9 (8.37)	27.6 (3.6)	69.4 (10.4)	-18.0 (1.93)	30.9 (3.36)	28.6 (3.1)	70.3 (9.6)	-11.0 (6.94)	24.1 (8.06)
20	28.5 (3.2)	69.5 (9.9)	-15.9 (1.69)	25.2 (7.82)	28.3 (3.4)	69.7 (9.5)	-16.9 (2.29)	28.1 (3.23)	29.0 (3.0)	71.6 (9.8)	-11.3 (6.65)	24.7 (7.52)
21	27.2 (1.2)	77.2 (2.8)	-15.0 (1.29)	22.3 (5.97)	27.0 (1.5)	76.8 (2.8)	-14.9 (0.35)	25.5 (0.15)	27.7 (1.2)	79.6 (2.8)	-9.46 (4.90)	23.0 (5.13)
22	26.3 (2.2)	75.5 (5.4)	-15.8 (1.76)	19.0 (6.49)	25.7 (2.5)	76.1 (5.5)	-16.0 (2.48)	25.2 (3.56)	26.7 (2.2)	78.5 (5.5)	-6.57 (5.31)	19.0 (6.37)
23	25.4 (1.9)	74.5 (3.0)	-16.7 (1.93)	17.9 (6.65)	24.9 (2.3)	75.7 (3.5)	-16.3 (1.70)	22.6 (4.11)	25.9 (1.9)	77.4 (3.5)	-5.80 (5.21)	17.8 (6.71)
24	25.8 (2.7)	71.8 (5.9)	-14.2 (5.63)	20.7 (9.76)	25.4 (3.1)	73.5 (6.0)	-16.3 (6.46)	22.9 (4.46)	26.3 (2.5)	74.7 (6.0)	-6.01 (6.74)	19.9 (9.16)
25	26.2 (3.1)	68.5 (8.2)	-16.2 (1.91)	22.3 (9.26)	26.1 (3.5)	69.2 (8.8)	-16.9 (1.63)	25.3 (6.13)	27.1 (3.0)	70.0 (8.0)	-11.9 (6.62)	21.9 (9.40)
26	26.4 (3.1)	69.5 (7.9)	-15.6 (1.63)	23.0 (8.90)	26.4 (3.4)	69.6 (8.4)	-16.9 (2.24)	25.4 (5.84)	27.4 (3.0)	71.1 (8.2)	-15.4 (2.96)	22.7 (8.73)
27	26.9 (3.3)	68.0 (9.3)	-15.7 (1.38)	22.5 (8.92)	26.6 (3.6)	68.8 (9.8)	-17.4 (2.98)	26.3 (5.15)	27.7 (3.2)	70.0 (9.4)	-14.6 (2.83)	22.2 (8.53)
28	26.4 (2.3)	73.7 (6.5)	-15.1 (1.70)	21.4 (7.75)	26.0 (2.7)	74.5 (7.1)	-16.4 (2.22)	26.2 (3.17)	27.1 (2.2)	76.3 (6.7)	-14.4 (3.12)	20.9 (7.40)
29	26.7 (1.8)	72.7 (6.0)	-15.5 (1.84)	23.2 (7.35)	26.5 (2.0)	72.9 (6.9)	-17.2 (1.02)	26.0 (2.49)	27.3 (1.7)	75.5 (6.1)	-14.2 (2.99)	22.8 (6.78)
30	27.2 (2.6)	71.2 (9.2)	-15.4 (1.54)	24.2 (7.31)	27.0 (2.8)	71.0 (9.3)	-17.5 (1.42)	27.1 (3.18)	27.7 (2.4)	74.0 (8.9)	-15.0 (3.19)	23.5 (6.93)
31												
Avg	27.1	71.2	-15.3	21.9	26.6	71.5	-16.2	27.4	27.5	72.7	-11.1	21.7
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	1.0	4.2	1.19	2.12	1.1	4.1	1.72	2.85	1.0	4.3	3.70	2.24
Min	25.4	62.1	-16.9	17.7	24.8	61.8	-18.8	21.3	25.9	63.4	-15.8	17.4
Max	29.7	78.8	-11.7	26.1	29.7	77.7	-10.9	33.2	30.2	79.6	-3.85	26.2

ED_004549_00015929-00121

Table F3. Daily means (SD) of environmental parameters at Site NC3B for September, 2009.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	24.0 (1.6)	64.5 (5.7)	-17.9 (2.11)	15.7 (4.66)	23.5 (1.9)	66.1 (6.4)	-17.2 (2.47)	20.4 (3.89)	24.7 (1.5)	67.0 (5.4)	-16.4 (2.92)	15.4 (4.60)
2	24.0 (1.3)	61.5 (3.3)	-16.7 (1.87)	13.9 (4.60)	23.6 (1.8)	63.0 (3.8)	-20.6 (10.8)	19.6 (5.92)	24.8 (1.3)	63.9 (3.0)	-14.5 (2.62)	13.6 (4.21)
3	24.2 (1.5)	63.8 (2.6)	-16.6 (2.08)	16.4 (5.28)	23.7 (1.8)	64.8 (3.5)	-15.1 (2.54)	22.4 (4.54)	25.1 (1.3)	66.3 (3.2)	-15.0 (2.70)	16.1 (5.12)
4	24.4 (2.2)	59.7 (9.6)	-16.4 (1.61)	16.2 (8.12)	23.9 (2.6)	61.2 (10.1)	-15.6 (6.46)	19.7 (6.41)	25.2 (2.0)	62.9 (9.2)	-14.6 (2.28)	15.9 (7.22)
5	24.9 (3.3)	60.4 (7.5)	-16.6 (1.57)	19.4 (10.9)	24.9 (3.6)	60.1 (7.7)	-16.2 (4.14)	20.8 (9.04)	25.8 (3.2)	62.4 (7.1)	-15.3 (2.99)	19.3 (10.5)
6	25.1 (2.5)	60.3 (8.2)	-17.3 (1.77)	19.1 (8.88)	24.7 (3.0)	61.5 (8.7)	-14.6 (4.76)	22.2 (5.85)	26.0 (2.3)	62.7 (8.0)	-15.7 (3.66)	18.6 (8.83)
7	24.7 (0.7)	71.7 (1.9)	-16.7 (1.74)	15.8 (2.08)	23.8 (1.0)	73.8 (2.0)	-15.0 (3.11)	25.2 (2.45)	25.4 (0.7)	74.3 (2.6)	-15.2 (2.54)	15.3 (1.66)
8	25.1 (1.5)	68.6 (3.9)	-16.3 (2.09)	18.3 (6.54)	24.4 (2.0)	70.1 (5.6)	-15.5 (2.32)	24.9 (2.45)	25.8 (1.4)	71.2 (3.8)	-13.7 (2.68)	17.8 (5.97)
9	24.3 (2.1)	62.4 (8.3)	-17.1 (1.98)	17.4 (7.92)	23.9 (2.6)	63.3 (8.9)	-17.0 (4.30)	20.0 (5.08)	25.2 (2.0)	64.3 (8.2)	-15.1 (2.73)	16.2 (7.16)
10	23.3 (0.8)	67.6 (1.7)	-17.2 (1.59)	12.3 (2.28)	22.3 (0.8)	68.4 (2.3)	-15.7 (5.58)	18.9 (5.75)	24.1 (0.7)	69.6 (2.9)	-14.3 (2.28)	11.7 (2.09)
11	23.7 (1.7)	61.7 (5.5)	-16.6 (2.99)	14.5 (5.85)	23.0 (1.9)	62.0 (6.4)	-15.7 (5.35)	19.0 (6.25)	24.6 (1.5)	63.9 (5.1)	-15.1 (2.51)	13.9 (5.43)
12	24.1 (2.9)	65.7 (6.9)	-16.9 (1.91)	17.1 (9.48)	24.0 (3.0)	64.7 (7.7)	-16.4 (2.14)	18.5 (7.52)	25.3 (2.5)	66.8 (7.0)	-14.5 (2.68)	17.2 (9.07)
13	24.3 (2.3)	62.8 (7.7)	-17.0 (1.80)	17.2 (8.28)	23.9 (2.7)	62.7 (8.7)	-15.1 (5.30)	19.6 (6.56)	25.4 (2.1)	65.0 (7.2)	-15.3 (2.86)	17.2 (7.54)
14	24.4 (3.4)	58.5 (10.0)	-16.6 (1.71)	18.3 (10.7)	24.3 (3.6)	57.7 (9.7)	-15.1 (3.62)	18.3 (7.65)	25.6 (3.0)	59.8 (9.2)	-15.7 (2.73)	18.2 (10.1)
15	25.1 (3.4)	60.5 (9.0)	-15.8 (3.33)	19.7 (10.8)	25.1 (3.6)	59.6 (8.9)	-14.7 (4.84)	20.0 (7.70)	26.2 (3.0)	60.8 (8.6)	-15.0 (2.77)	19.8 (10.3)
16	24.6 (2.0)	68.0 (4.8)	-16.3 (1.85)	17.8 (7.15)	24.5 (2.3)	67.7 (5.8)	-15.4 (3.68)	22.1 (5.67)	25.8 (1.7)	68.3 (4.4)	-14.7 (2.71)	18.8 (6.60)
17	23.9 (1.4)	71.4 (4.2)	-16.1 (1.76)	15.5 (4.48)	23.8 (1.5)	72.4 (5.1)	-17.2 (1.70)	20.8 (4.31)	25.4 (1.2)	71.6 (3.9)	-13.8 (2.24)	16.1 (4.60)
18	23.7 (1.8)	69.1 (4.0)	-17.3 (1.71)	15.2 (5.46)	23.5 (2.0)	70.4 (5.4)	-17.1 (3.71)	20.2 (5.05)	25.1 (1.6)	69.8 (4.1)	-15.6 (2.60)	16.2 (5.01)
19	24.5 (2.4)	66.2 (5.5)	-16.2 (1.75)	17.6 (8.56)	24.5 (2.8)	66.2 (6.5)	-15.3 (4.85)	20.9 (6.74)	25.9 (2.2)	66.5 (5.3)	-14.7 (3.05)	19.0 (8.47)
20	24.1 (2.4)	64.1 (5.8)	-16.6 (1.97)	16.1 (8.34)	24.0 (2.8)	64.7 (6.8)	-17.5 (5.03)	19.5 (6.03)	25.4 (2.2)	64.9 (5.4)	-15.4 (3.20)	17.7 (8.01)
21	24.4 (2.6)	63.7 (6.6)	-16.1 (1.70)	17.4 (9.19)	24.4 (2.9)	63.2 (7.4)	-15.3 (4.85)	20.9 (7.31)	25.9 (2.3)	63.9 (6.4)	-15.1 (3.13)	18.6 (8.89)
22	24.9 (0.8)	77.6 (2.0)	-15.7 (1.44)	17.1 (4.35)	24.6 (1.2)	78.4 (1.2)	-14.1 (0.56)	26.1 (0.17)	26.0 (0.7)	77.3 (2.4)	-9.71 (5.17)	18.9 (3.95)
23	25.2 (1.9)	75.3 (3.8)	-15.8 (1.74)	19.1 (7.59)	25.0 (2.3)	75.7 (5.0)	-16.6 (2.08)	25.2 (1.75)	26.2 (1.8)	77.0 (4.1)	-7.31 (5.79)	20.4 (6.93)
24	25.7 (2.9)	72.0 (5.8)	-16.9 (1.91)	21.1 (9.11)	25.7 (3.1)	71.8 (6.9)	-16.9 (2.97)	22.5 (4.49)	26.7 (2.6)	73.3 (5.9)	-8.84 (6.94)	21.7 (8.56)
25	25.2 (2.4)	72.7 (4.4)	-17.3 (1.88)	18.8 (8.07)	24.8 (2.8)	73.0 (5.5)	-16.6 (2.16)	23.7 (3.60)	26.1 (2.4)	74.2 (5.0)	-7.44 (6.00)	19.5 (7.74)
26	23.0 (0.9)	73.0 (2.5)	-16.6 (1.85)	12.5 (2.04)	22.4 (0.8)	74.5 (3.0)	-16.5 (5.17)	18.3 (5.18)	24.2 (0.8)	73.7 (3.3)	-9.36 (6.69)	12.7 (2.44)
27	24.2 (1.8)	71.3 (6.0)	-17.1 (1.37)	15.7 (5.83)	23.9 (2.0)	72.2 (7.0)	-16.8 (3.63)	21.0 (5.52)	25.4 (1.6)	72.7 (6.3)	-14.4 (2.23)	15.9 (5.92)
28	24.8 (3.0)	62.8 (7.9)	-16.7 (1.58)	18.8 (9.64)	24.6 (3.0)	61.7 (7.7)	-17.7 (3.68)	19.4 (7.65)	25.7 (2.7)	63.7 (8.3)	-15.6 (2.77)	18.2 (9.22)
29	22.7 (2.0)	49.1 (9.5)	-15.1 (4.05)	11.5 (4.06)	22.0 (1.6)	48.2 (9.4)	-16.7 (4.58)	14.5 (8.08)	23.7 (1.7)	49.9 (10.1)	-16.2 (3.83)	11.4 (3.93)
30	21.0 (2.3)	57.8 (7.5)	-12.1 (7.84)	8.63 (5.05)	21.3 (1.3)	56.3 (7.2)	-15.4 (5.01)	10.8 (7.67)	22.8 (1.6)	59.4 (7.7)	-16.3 (5.57)	9.41 (4.26)
Avg	24.3	65.5	-16.5	16.5	23.9	65.9	-16.2	20.5	25.3	66.9	-14.0	16.7
n	30	30	30	30	30	30	30	30	30	30	30	30
SD	0.9	6.0	0.99	2.66	1.0	6.5	1.25	3.02	0.8	5.9	2.55	2.81
Min	21.0	49.1	-17.9	8.63	21.3	48.2	-20.6	10.8	22.8	49.9	-16.4	9.41
Max	25.7	77.6	-12.1	21.1	25.7	78.4	-14.1	26.1	26.7	77.3	-7.31	21.7

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for October, 2009.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	22.0 (2.4)	56.9 (7.0)	-14.5 (5.68)	9.88 (5.34)	21.8 (1.8)	56.4 (7.3)	-15.9 (4.69)	12.7 (8.46)	23.3 (2.0)	59.6 (8.4)	-15.9 (4.94)	10.5 (4.74)
2	22.3 (1.9)	66.0 (5.8)	-15.7 (5.59)	10.8 (4.59)	22.0 (1.4)	66.2 (7.0)	-15.8 (3.74)	15.5 (7.89)	23.6 (1.6)	68.7 (6.0)	-16.3 (4.89)	11.4 (4.25)
3	24.1 (2.4)	63.9 (7.8)	-16.8 (1.66)	16.2 (8.11)	23.7 (2.6)	64.2 (8.3)	-15.9 (3.39)	18.3 (6.81)	25.1 (2.2)	65.8 (8.1)	-14.8 (2.59)	16.3 (7.49)
4	22.3 (1.7)	57.2 (9.5)	-16.4 (2.92)	10.6 (3.92)	22.0 (1.4)	57.4 (9.8)	-18.1 (4.47)	13.5 (7.94)	23.5 (1.4)	59.6 (10.0)	-15.6 (3.36)	10.9 (3.74)
5	21.8 (0.4)	67.2 (3.3)	-16.4 (0.94)	8.48 (0.80)	21.8 (0.4)	67.3 (4.0)	-18.7 (3.87)	8.77 (2.21)	22.8 (0.5)	69.1 (4.4)	-13.2 (1.09)	8.69 (0.66)
6	22.8 (0.7)	70.6 (2.0)	-17.7 (1.64)	10.6 (2.06)	22.2 (0.7)	72.3 (3.5)	-17.1 (5.01)	13.6 (4.16)	23.7 (0.7)	72.7 (2.8)	-15.9 (2.66)	10.8 (1.96)
7	22.8 (2.9)	73.3 (2.9)	-2.21 (4.64)	3.13 (4.42)	23.8 (3.0)	67.1 (7.1)	-17.8 (4.38)	16.9 (7.02)	24.8 (2.6)	67.7 (6.8)	-13.8 (6.11)	15.4 (8.99)
8	18.9 (1.4)	81.9 (8.7)	-0.24 (0.79)	0.00 (0.00)	21.5 (1.3)	54.1 (7.5)	-17.0 (4.70)	12.3 (7.28)	22.8 (1.7)	55.8 (8.3)	-15.9 (6.24)	8.73 (3.98)
9	23.2 (4.5)	83.3 (6.7)	-20.1 (16.9)	18.5 (14.2)	25.1 (3.7)	65.6 (5.3)	-16.4 (3.31)	18.9 (8.49)	25.8 (3.5)	69.1 (5.4)	-15.4 (5.38)	18.5 (10.9)
10	23.7 (2.8)	79.8 (6.5)	-33.1 (1.33)	29.1 (0.30)	25.2 (2.4)	73.3 (5.7)	-16.6 (1.15)	23.7 (3.17)	26.0 (2.0)	75.2 (5.2)	-13.9 (2.60)	18.6 (7.05)
11	17.5 (1.5)	76.7 (3.0)	-23.6 (11.0)	17.7 (10.2)	21.7 (0.6)	65.9 (1.9)	-17.4 (5.73)	12.4 (4.14)	22.7 (0.7)	66.9 (1.5)	-15.6 (3.58)	8.68 (1.30)
12	16.1 (0.7)	78.0 (2.2)	-14.6 (0.66)	8.74 (0.07)	21.8 (0.4)	65.7 (2.6)	-18.2 (3.00)	8.61 (1.71)	22.1 (0.4)	68.7 (1.9)	-18.9 (3.12)	7.77 (1.20)
13	18.1 (3.8)	73.1 (9.5)	-14.7 (0.77)	8.64 (0.13)	22.2 (1.5)	62.4 (5.0)	-18.2 (2.92)	13.6 (7.27)	23.0 (1.7)	65.4 (5.3)	-16.2 (4.70)	9.83 (4.26)
14	13.7 (1.3)	76.9 (3.3)	-14.7 (0.83)	8.77 (0.11)	18.9 (2.6)		-14.3 (5.77)		20.4 (2.0)		-14.5 (7.88)	
15	12.8 (1.5)	81.0 (0.9)	-14.6 (0.89)	8.73 (0.14)	14.5 (1.7)		-6.24 (5.20)		16.0 (1.2)		-7.14 (9.29)	
16	13.0 (1.1)	78.5 (2.5)	-14.3 (0.90)	8.75 (0.09)	15.3 (0.9)		-0.14 (0.60)		16.5 (0.6)		-0.17 (0.95)	
17	12.5 (2.6)	68.8 (8.2)	-14.1 (0.85)	8.84 (0.10)	14.3 (1.7)		-0.24 (0.42)		16.5 (1.8)		0.35 (0.94)	
18	9.0 (0.9)	71.8 (2.1)	-14.4 (0.81)	8.97 (0.07)	12.0 (0.4)		-0.34 (0.45)		14.9 (0.4)		0.71 (0.77)	
19	11.2 (4.4)	63.3 (10.7)	-14.9 (2.18)	8.91 (0.20)	14.7 (3.3)		-2.28 (5.48)		14.9 (1.5)		0.34 (0.83)	
20	16.6 (7.0)	64.5 (10.2)	-8.57 (9.81)	3.92 (4.05)	19.0 (3.8)		-7.95 (9.26)		15.6 (3.7)		0.78 (0.42)	
21	21.6 (3.0)	59.2 (11.0)	-9.23 (11.2)	3.12 (3.64)	20.9 (3.2)		-10.3 (9.91)		16.1 (4.3)		-8.36 (12.7)	
22	24.1 (1.7)	61.5 (6.8)	-12.3 (10.1)	5.17 (4.87)	22.6 (3.1)	61.9 (5.7)	-14.6 (12.6)	5.92 (5.95)	17.3 (5.8)	72.3 (9.3)	-16.7 (14.3)	6.71 (2.46)
23	25.2 (1.7)	61.2 (6.8)	-16.5 (7.83)	8.00 (5.11)	24.7 (1.8)	61.3 (6.9)	-18.4 (10.5)	9.35 (8.00)	21.0 (4.4)	72.4 (11.7)	-15.3 (0.67)	8.47 (0.14)
24	26.1 (2.0)	66.2 (5.1)	-19.8 (4.92)	10.9 (3.81)	25.9 (1.5)	64.5 (4.6)	-20.9 (5.74)	12.2 (7.82)	23.7 (2.6)	74.1 (7.7)	-15.1 (1.33)	8.34 (0.10)
25	23.4 (1.2)	60.4 (3.9)	-13.2 (9.86)	4.18 (3.14)	23.2 (1.1)	61.2 (3.3)	-11.5 (9.43)	4.02 (3.00)	17.6 (2.7)	66.8 (5.9)	-16.6 (1.37)	8.47 (0.14)
26	22.2 (0.8)	66.4 (3.2)	-7.91 (9.48)	2.23 (3.17)	22.2 (0.7)	67.2 (2.9)	-7.38 (8.93)	2.44 (2.99)	17.1 (3.9)	76.4 (2.5)	-12.1 (9.65)	5.33 (3.85)
27	22.5 (0.9)	68.3 (1.5)	-12.4 (12.6)	3.97 (3.72)	22.4 (0.8)	68.9 (1.1)	-12.0 (10.9)	3.81 (3.41)	23.0 (1.0)	73.1 (1.1)	-7.47 (11.0)	2.63 (3.31)
28	25.0 (1.9)	65.6 (8.7)	-20.2 (13.5)	8.16 (4.78)	24.6 (1.5)	66.7 (9.3)	-22.8 (8.81)	10.2 (6.41)	25.2 (1.6)	69.1 (10.0)	-19.0 (9.74)	7.32 (3.97)
29	23.3 (1.4)	60.9 (3.2)	-14.9 (11.5)	4.89 (3.73)	23.1 (1.3)	62.5 (3.1)	-14.4 (9.90)	5.92 (6.46)	23.8 (1.3)	64.6 (3.8)	-12.0 (11.2)	4.26 (3.71)
30	23.2 (1.1)	66.0 (2.3)	-12.2 (11.2)	3.81 (3.57)	23.0 (1.2)	67.0 (2.4)	-12.0 (8.84)	3.88 (2.84)	23.4 (1.0)	69.6 (1.9)	-8.75 (11.1)	3.05 (3.54)
31	24.2 (1.0)	71.4 (2.0)	-21.1 (8.07)	7.19 (3.11)	24.2 (0.7)	73.5 (2.8)	-22.9 (6.87)	8.25 (3.82)	24.7 (1.0)	74.9 (2.6)	-19.8 (9.61)	6.59 (3.29)
Avg	20.2	69.0	-14.9	8.74	21.3	64.9	-13.6	11.1	21.2	68.6	-12.0	9.45
n	31	31	31	31	31	23	31	23	31	23	31	23
SD	4.7	7.5	5.86	5.59	3.5	4.8	6.32	5.35	3.6	5.1	6.22	4.25
Min	9.0	56.9	-33.1	0.00	12.0	54.1	-22.9	2.44	14.9	55.8	-19.8	2.63
Max	26.1	83.3	-0.24	29.1	25.9	73.5	-0.14	23.7	26.0	76.4	0.78	18.6

ED_004549_00015929-00123

Table F3. Daily means (SD) of environmental parameters at Site NC3B for November, 2009.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	23.5 (1.1)	70.5 (3.0)	-16.4 (10.1)	5.25 (3.80)	23.7 (1.2)	72.8 (3.0)	-17.6 (9.87)	6.40 (3.81)	24.2 (1.2)	73.7 (3.7)	-16.1 (11.3)	5.12 (3.70)
2	22.6 (0.7)	67.9 (1.6)	-6.03 (8.72)	1.79 (2.96)	22.1 (0.9)	67.9 (1.0)	-9.87 (10.6)	3.16 (3.32)	23.2 (0.9)	68.9 (1.6)	-6.57 (10.4)	2.24 (3.19)
3	22.8 (1.2)	63.6 (8.2)	-9.34 (10.8)	3.06 (3.55)	22.6 (1.1)	63.1 (6.4)	-12.4 (10.7)	3.91 (3.34)	23.6 (1.2)	62.9 (6.4)	-10.8 (11.9)	3.49 (3.50)
4	22.6 (1.4)	63.1 (6.3)	-9.91 (11.2)	3.09 (3.54)	22.5 (1.1)	61.6 (4.7)	-12.8 (10.9)	3.92 (3.24)	23.7 (1.3)	62.5 (4.6)	-11.6 (12.0)	3.72 (3.56)
5	22.8 (1.2)	58.5 (11.2)	-9.79 (11.1)	3.03 (3.51)	22.4 (1.2)	57.7 (8.1)	-12.5 (10.6)	3.85 (3.31)	23.7 (1.2)	58.5 (9.4)	-10.5 (11.7)	3.55 (3.64)
6	21.3 (1.5)	59.5 (11.2)	-6.29 (8.58)	2.32 (2.93)	20.9 (1.1)	59.0 (7.8)	-10.8 (10.4)	3.41 (3.29)	22.7 (1.2)	59.2 (9.0)	-7.33 (10.7)	2.52 (3.34)
7	21.5 (2.1)	61.0 (10.8)	-6.67 (10.2)	2.33 (3.24)	21.1 (1.8)	59.9 (7.9)	-11.8 (11.0)	3.59 (3.33)	22.7 (1.8)	60.2 (8.5)	-8.57 (11.1)	2.88 (3.44)
8	23.0 (1.9)	59.4 (10.4)	-10.2 (11.5)	3.70 (4.08)	22.5 (1.6)	58.7 (8.0)	-16.0 (12.9)	5.75 (5.29)	23.9 (1.6)	59.3 (8.4)	-12.3 (12.2)	4.53 (4.49)
9	23.2 (1.3)	63.4 (4.7)	-11.8 (11.9)	3.86 (3.66)	22.9 (1.4)	62.9 (3.5)	-18.4 (12.0)	6.70 (5.12)	24.3 (1.5)	64.4 (3.7)	-15.2 (11.6)	5.06 (3.82)
10	23.4 (0.8)	66.9 (2.7)	-14.8 (11.6)	4.69 (3.53)	23.3 (0.6)	67.3 (2.8)	-22.2 (6.78)	7.53 (3.28)	24.5 (0.8)	68.9 (3.2)	-19.3 (9.70)	5.97 (2.77)
11	22.6 (0.7)	69.5 (0.6)	-10.9 (9.72)	2.58 (3.35)	23.0 (0.5)	71.0 (1.7)	-13.6 (6.63)	5.12 (1.27)	23.7 (0.7)	71.9 (1.6)	-15.0 (10.8)	4.18 (3.44)
12	21.3 (1.3)	69.2 (1.1)	-5.22 (6.53)	1.30 (2.63)	22.0 (0.7)	70.0 (1.1)	-7.07 (5.31)	3.73 (2.08)	23.1 (0.8)	70.7 (1.3)	-6.15 (10.1)	2.33 (3.23)
13	21.8 (1.0)	68.9 (0.8)	-4.33 (6.44)	1.55 (2.85)	21.4 (0.9)	68.7 (0.9)	-9.43 (9.48)	3.29 (3.33)	23.2 (0.8)	70.1 (1.5)	-6.41 (10.4)	2.56 (3.32)
14	22.6 (1.0)	67.1 (1.0)	-6.96 (9.34)	2.91 (3.56)	21.6 (1.1)	68.3 (0.6)	-12.8 (9.80)	4.17 (3.06)	23.5 (0.9)	69.0 (1.2)	-10.4 (11.8)	3.55 (3.49)
15	22.0 (1.5)	64.6 (3.9)	-11.6 (10.4)	4.90 (4.29)	22.0 (1.3)	65.6 (4.3)	-15.5 (11.8)	5.25 (4.42)	24.0 (1.5)	66.5 (3.6)	-13.4 (12.4)	4.30 (3.70)
16	22.0 (1.8)	61.1 (6.4)	-12.0 (11.0)	5.11 (4.62)	22.3 (1.7)	62.1 (7.1)	-22.1 (16.4)	6.00 (5.13)	24.1 (1.7)	61.8 (6.2)	-14.4 (12.9)	4.91 (4.33)
17	21.5 (1.2)	62.2 (3.3)	-10.5 (10.1)	4.07 (3.74)	21.3 (1.2)	63.9 (3.9)	-21.7 (18.7)	3.70 (3.91)	23.6 (1.1)	62.3 (2.9)	-13.0 (12.3)	3.95 (3.53)
18	22.2 (1.0)	67.8 (2.9)	-16.2 (8.88)	5.83 (3.26)	21.5 (1.2)	69.3 (2.9)	-30.7 (15.1)	5.22 (2.99)	23.9 (0.8)	65.3 (1.3)	-18.0 (11.0)	5.25 (3.15)
19	23.6 (1.1)	70.2 (2.0)	-22.0 (1.81)	8.86 (2.10)	23.0 (1.0)	71.0 (3.1)	-37.1 (3.46)	8.78 (4.18)	24.9 (1.0)	68.2 (2.9)	-23.4 (6.11)	7.79 (2.51)
20	22.6 (1.1)	63.6 (4.9)	-17.7 (8.40)	6.67 (3.14)	22.3 (0.8)	64.7 (5.6)	-30.3 (10.4)	6.29 (2.80)	24.2 (1.0)	64.2 (5.2)	-17.8 (11.2)	5.39 (3.17)
21	21.6 (1.1)	61.8 (4.1)	-10.8 (10.5)	3.90 (3.63)	20.9 (1.1)	62.9 (4.5)	-20.8 (15.8)	3.90 (2.67)	23.4 (1.1)	61.9 (4.5)	-10.7 (12.4)	3.14 (3.54)
22	21.4 (1.1)	62.4 (3.8)	-9.42 (10.1)	3.32 (3.56)	20.8 (1.0)	63.9 (4.4)	-19.3 (15.3)	3.62 (2.65)	23.2 (1.1)	63.2 (4.3)	-9.92 (12.0)	2.85 (3.50)
23	21.7 (0.9)	67.5 (1.8)	-12.1 (10.1)	4.32 (3.59)	21.0 (0.8)	68.7 (0.9)	-23.3 (11.5)	4.45 (1.78)	23.5 (0.9)	68.1 (1.6)	-11.5 (12.1)	3.41 (3.54)
24	21.7 (1.0)	66.4 (1.3)	-11.6 (10.5)	4.31 (3.56)	20.8 (1.0)	67.6 (0.9)	-22.3 (14.6)	4.16 (2.30)	23.3 (1.1)	65.5 (1.6)	-8.78 (12.0)	2.86 (3.40)
25	21.6 (1.1)	65.5 (1.3)	-11.3 (10.8)	4.08 (3.57)	20.0 (0.9)	65.5 (1.7)			23.2 (1.1)	64.5 (1.6)	-8.09 (11.6)	2.60 (3.31)
26	21.6 (1.2)	65.2 (1.9)	-10.4 (10.7)	3.79 (3.63)	20.4 (1.2)	65.0 (2.0)			23.1 (1.2)	63.6 (2.3)	-7.86 (11.4)	2.56 (3.29)
27	21.4 (1.1)	58.9 (5.4)	-7.16 (9.78)	2.73 (3.39)	20.3 (1.1)	58.5 (5.7)			23.1 (1.2)	58.7 (5.6)	-6.43 (10.5)	2.30 (3.19)
28	20.8 (1.6)	59.4 (6.3)	-7.65 (9.97)	2.86 (3.44)	20.3 (1.1)	58.8 (6.7)			22.9 (1.4)	58.4 (6.7)	-7.13 (10.8)	2.37 (3.21)
29	22.3 (1.7)	56.2 (8.7)	-12.1 (10.7)	4.67 (4.16)	21.3 (1.6)	55.6 (8.9)	-24.1 (15.5)	5.72 (4.25)	23.5 (1.9)	55.4 (7.9)	-13.0 (12.0)	4.13 (3.67)
30	22.8 (1.4)	56.8 (4.2)	-12.9 (9.93)	5.14 (3.75)	21.3 (1.4)	56.7 (4.8)	-28.6 (13.5)	6.26 (3.44)	23.9 (1.3)		-14.0 (11.7)	
Avg	22.2	63.9	-10.8	3.87	21.7	64.3	-18.6	4.92	23.6	64.4	-11.8	3.78
n	30	30	30	30	30	30	26	26	30	29	30	29
SD	0.7	4.1	3.83	1.56	1.0	4.7	7.39	1.43	0.5	4.5	4.24	1.30
Min	20.8	56.2	-22.0	1.30	20.0	55.6	-37.1	3.16	22.7	55.4	-23.4	2.24
Max	23.6	70.5	-4.33	8.86	23.7	72.8	-7.07	8.78	24.9	73.7	-6.15	7.79

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for December, 2009.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	21.6 (1.3)	60.5 (5.0)	-8.22 (9.90)	3.00 (3.48)	20.4 (1.3)	60.8 (5.1)	-17.3 (14.8)	3.57 (2.63)	23.0 (1.5)		-8.71 (11.4)	
2	22.7 (1.5)	67.4 (4.9)	-14.2 (9.27)	5.50 (3.48)	21.5 (1.4)	69.3 (5.5)	-30.3 (14.0)	6.76 (4.01)	23.9 (1.3)		-15.7 (11.3)	
3	23.1 (1.4)	62.9 (4.4)	-15.7 (8.41)	6.31 (3.04)	21.8 (0.9)	62.9 (5.2)	-29.5 (9.67)	7.18 (2.97)	24.1 (1.1)	57.7 (4.1)	-16.8 (11.3)	5.18 (3.24)
4	21.8 (1.2)	61.7 (2.9)	-10.1 (10.5)	3.59 (3.70)	20.6 (1.1)	62.5 (2.6)	-22.2 (13.6)	4.41 (2.18)	23.1 (1.3)	57.0 (2.5)	-9.88 (12.0)	2.96 (3.44)
5	21.7 (1.2)	65.8 (2.0)	-8.46 (10.3)	3.05 (3.59)	20.6 (1.0)	67.8 (1.6)	-19.0 (10.6)	4.08 (1.73)	22.9 (1.3)	61.7 (2.3)	-8.18 (11.6)	2.67 (3.33)
6	21.2 (1.4)	66.1 (2.2)	-6.76 (9.47)	2.30 (3.30)	19.3 (1.3)	66.1 (3.0)	-16.3 (15.5)	3.17 (2.72)	22.5 (1.6)	62.1 (2.1)	-7.60 (10.6)	2.14 (3.05)
7	21.3 (1.4)	65.8 (2.4)	-8.07 (9.85)	2.93 (3.45)	19.7 (1.1)	66.4 (1.8)	-17.2 (13.4)	3.54 (2.36)	22.6 (1.5)	61.6 (2.0)	-8.27 (11.1)	2.41 (3.18)
8	21.4 (1.3)	65.1 (2.0)	-8.91 (9.93)	2.99 (3.51)	20.0 (1.2)	66.2 (1.3)	-17.1 (12.9)	3.89 (2.20)	22.4 (1.3)	60.3 (1.9)	-8.07 (10.6)	2.14 (3.12)
9	24.4 (1.4)	69.4 (2.0)	-16.2 (6.73)	8.59 (2.60)	22.7 (1.3)	71.5 (2.4)	-35.4 (6.01)	12.40 (4.55)	25.0 (1.1)	65.9 (1.9)	-18.4 (7.73)	7.28 (2.91)
10	22.5 (1.2)	53.8 (5.2)	-11.9 (10.5)	4.30 (3.60)	21.7 (0.9)	53.0 (4.8)	-18.1 (13.2)	5.22 (3.71)	23.5 (1.2)	48.9 (4.3)	-11.4 (12.1)	3.57 (3.47)
11	19.3 (3.3)	60.8 (5.5)	-8.48 (11.7)	2.55 (3.36)	21.5 (0.9)	63.1 (3.0)	-7.44 (10.2)	1.73 (2.35)	22.5 (1.2)	58.0 (3.5)	-4.82 (9.46)	1.31 (2.48)
12	21.3 (1.4)	64.8 (3.2)	-6.51 (10.1)	1.71 (2.74)	21.6 (1.0)	64.9 (2.9)	-10.4 (13.2)	2.13 (2.69)	22.7 (1.4)	60.6 (2.7)	-7.84 (11.2)	1.74 (2.77)
13	23.0 (1.3)	67.4 (5.8)	-14.2 (11.8)	4.52 (3.54)	22.8 (1.2)	67.6 (4.5)	-24.4 (14.5)	4.67 (2.65)	23.7 (1.1)	63.5 (4.6)	-18.0 (13.5)	4.43 (3.25)
14	22.7 (1.1)	67.1 (2.6)	-12.4 (13.4)	3.37 (3.37)	22.7 (1.0)	68.2 (2.8)	-16.8 (10.8)	3.91 (2.14)	23.0 (1.4)	62.7 (2.3)	-12.4 (12.6)	3.51 (3.44)
15	23.2 (0.8)	68.4 (3.5)	-20.5 (11.6)	5.44 (2.89)	23.4 (0.5)	69.4 (3.4)	-24.3 (9.15)	5.43 (1.21)	23.5 (0.9)	63.3 (3.2)	-18.7 (11.7)	5.22 (3.16)
16	22.3 (1.3)	62.2 (4.3)	-8.87 (11.7)	2.40 (3.23)	21.9 (1.1)	61.1 (3.5)	-11.3 (12.5)	2.82 (2.77)	22.3 (1.5)	56.1 (4.2)	-9.16 (11.9)	2.61 (3.35)
17	22.1 (1.4)	66.4 (3.4)	-8.28 (11.4)	2.22 (3.13)	21.5 (1.0)	65.0 (3.5)	-11.2 (13.0)	2.56 (2.75)	22.3 (1.6)	60.5 (3.5)	-8.32 (11.4)	2.21 (3.22)
18	21.4 (1.3)	66.4 (2.4)	-9.47 (10.1)	1.67 (2.81)	21.3 (0.9)	66.7 (2.3)	-12.6 (12.3)	2.40 (2.90)	21.9 (1.2)	62.2 (2.1)	-9.09 (9.38)	1.56 (2.67)
19	21.6 (1.1)	67.3 (3.3)	-5.77 (9.81)	1.46 (2.66)	20.5 (1.3)	67.4 (3.2)	-11.5 (14.1)	2.51 (3.08)	22.1 (1.4)	63.0 (2.9)	-5.86 (9.80)	1.72 (2.72)
20	21.8 (1.4)	65.6 (2.4)	-7.85 (11.4)	2.16 (3.09)	20.1 (1.7)	64.6 (1.9)	-13.6 (14.7)	2.93 (3.10)	22.3 (1.7)	60.9 (2.8)	-8.30 (11.4)	2.35 (3.19)
21	21.7 (1.5)	65.0 (3.1)	-8.00 (11.5)	2.20 (3.07)	19.8 (1.9)	63.8 (2.3)	-14.3 (15.1)	3.04 (3.03)	22.4 (1.8)	60.3 (3.1)	-9.02 (11.8)	2.48 (3.32)
22	21.8 (1.5)	64.7 (3.6)	-8.17 (11.4)	2.22 (3.02)	20.1 (1.9)	63.3 (3.4)	-13.8 (13.9)	3.19 (2.99)	22.3 (1.8)	59.6 (3.3)	-9.99 (11.8)	2.71 (3.37)
23	22.0 (1.5)	63.9 (4.0)	-9.78 (12.2)	2.65 (3.20)	20.2 (1.8)	62.1 (3.4)	-15.1 (14.8)	3.26 (2.97)	22.5 (1.8)	58.9 (3.8)	-11.2 (12.1)	3.07 (3.45)
24	21.9 (1.4)	62.5 (4.0)	-11.6 (12.3)	2.80 (3.25)	20.5 (1.3)	60.2 (4.1)	-15.4 (14.0)	3.19 (2.83)	22.6 (1.7)	57.9 (3.9)	-12.9 (12.1)	3.17 (3.45)
25	22.6 (1.1)	67.1 (4.7)	-17.5 (11.8)	4.65 (3.24)	21.6 (0.9)	65.9 (4.6)	-25.3 (13.4)	4.88 (2.61)	23.1 (1.1)	62.4 (4.2)	-19.2 (10.6)	5.02 (3.18)
26	22.3 (1.3)	67.4 (3.4)	-12.9 (13.1)	3.48 (3.33)	21.7 (0.9)	66.2 (3.8)	-16.0 (15.5)	3.31 (2.94)	22.6 (1.6)	62.0 (3.3)	-13.7 (12.7)	3.81 (3.41)
27	22.0 (1.5)	64.3 (3.5)	-12.4 (12.7)	3.46 (3.38)	21.3 (1.0)	61.7 (3.5)	-16.7 (15.4)	3.50 (3.10)	22.1 (1.6)	57.7 (4.0)	-14.1 (12.8)	3.95 (3.37)
28	22.0 (1.4)	61.4 (3.3)	-11.1 (12.2)	3.08 (3.34)	21.4 (1.2)	60.2 (2.9)	-14.5 (13.4)	3.26 (2.64)	22.0 (1.6)	54.4 (3.3)	-11.8 (12.4)	3.57 (3.46)
29	21.1 (1.5)	63.6 (3.1)	-8.78 (11.1)	2.65 (3.32)	19.9 (1.7)	61.8 (2.9)	-12.4 (13.2)	2.92 (2.81)	21.5 (1.7)	55.5 (3.3)	-7.92 (11.3)	2.55 (3.24)
30	20.5 (1.6)	64.4 (3.3)	-9.68 (11.4)	2.76 (3.35)	19.8 (2.1)	64.5 (2.9)	-13.2 (13.5)	2.83 (2.70)	21.3 (1.7)	57.3 (3.1)	-8.67 (11.3)	2.39 (3.16)
31	21.4 (1.4)	67.6 (3.3)	-13.6 (12.4)	3.88 (3.46)	21.5 (1.0)	67.8 (3.9)	-18.0 (15.2)	3.72 (2.94)	21.9 (1.5)	61.8 (3.5)	-12.1 (12.6)	3.43 (3.48)
Avg	21.9	64.7	-10.8	3.35	21.1	64.6	-17.4	3.95	22.7	59.8	-11.2	3.14
n	31	31	31	31	31	31	31	31	31	29	31	29
SD	0.9	3.0	3.44	1.49	1.0	3.6	6.24	1.96	0.8	3.4	3.88	1.29
Min	19.3	53.8	-20.5	1.46	19.3	53.0	-35.4	1.73	21.3	48.9	-19.2	1.31
Max	24.4	69.4	-5.77	8.59	23.4	71.5	-7.44	12.40	25.0	65.9	-4.82	7.28

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Table F3. Daily means (SD) of environmental parameters at Site NC3B for January, 2010.

Day	Barn 1				Barn 2				Barn 3			
	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,	Temp., °C	RH, %	ΔP, Pa	Airflow,
1	21.5 (1.3)	65.2 (3.0)	-12.5 (12.3)	3.68 (3.44)	21.5 (1.1)	66.1 (3.3)	-17.1 (15.3)	3.57 (3.02)	21.7 (1.5)	59.7 (2.6)	-10.9 (12.5)	3.22 (3.47)
2	19.2 (1.6)	62.2 (3.7)	-5.83 (9.34)	1.77 (2.84)	18.3 (1.8)	60.5 (2.7)	-11.9 (13.9)	2.57 (3.16)	21.2 (1.5)	56.9 (3.0)	-4.59 (9.79)	1.75 (3.05)
3	18.6 (2.2)	63.1 (2.7)	-6.30 (10.1)	1.90 (3.01)	15.2 (2.5)	59.0 (3.1)	-13.5 (14.4)	2.96 (3.21)	20.9 (1.8)	58.3 (2.4)	-5.35 (10.1)	1.90 (3.10)
4	18.9 (2.3)	64.1 (3.0)	-8.19 (11.5)	2.35 (3.39)	12.1 (2.8)	58.4 (2.5)	-20.0 (13.1)	4.48 (2.81)	21.4 (2.0)	60.3 (2.7)	-7.77 (11.1)	2.36 (3.19)
5	19.0 (2.2)	64.5 (2.7)	-8.26 (11.6)	2.34 (3.39)	11.9 (3.0)	58.0 (3.1)	-19.8 (12.6)	4.54 (2.69)	21.3 (1.9)	60.3 (3.2)	-7.90 (10.7)	2.35 (3.11)
6	19.7 (2.0)	62.6 (3.1)	-8.88 (11.7)	2.52 (3.43)	13.4 (3.0)	57.1 (1.9)	-19.8 (12.6)	4.53 (2.59)	21.5 (2.0)	58.9 (2.7)	-9.40 (11.4)	2.75 (3.27)
7	20.2 (2.1)	61.5 (4.0)	-10.1 (11.7)	3.00 (3.50)	15.5 (3.4)	56.2 (3.0)	-20.1 (12.9)	4.48 (2.53)	21.8 (1.9)	56.3 (3.7)	-11.0 (12.0)	3.17 (3.39)
8	20.7 (1.6)	61.5 (3.6)	-9.28 (11.3)	2.77 (3.39)	16.2 (2.1)	56.3 (2.2)	-20.0 (13.2)	4.44 (2.55)	21.6 (1.7)	56.1 (3.8)	-8.38 (11.6)	2.60 (3.27)
9	19.2 (2.2)	66.0 (3.7)	-8.21 (10.9)	2.38 (3.34)	12.8 (2.7)	59.0 (2.2)	-20.2 (14.0)	4.46 (2.68)	21.2 (1.9)	60.3 (4.0)	-7.62 (10.7)	2.20 (3.08)
10	19.6 (2.1)	66.4 (2.8)	-8.69 (10.7)	2.48 (3.35)	12.8 (3.2)	59.5 (2.6)	-19.9 (14.7)	4.45 (2.86)	21.4 (1.9)	60.5 (2.5)	-8.44 (10.8)	2.39 (3.21)
11	19.7 (2.6)	65.0 (4.9)	-10.3 (11.6)	3.01 (3.43)	13.6 (4.6)	58.9 (4.9)	-20.4 (16.1)	4.31 (3.00)	21.4 (1.9)	59.0 (5.0)	-10.1 (11.9)	2.74 (3.36)
12	21.2 (1.7)	62.5 (3.4)	-10.8 (11.6)	3.19 (3.42)	16.4 (2.3)	57.1 (2.6)	-19.6 (13.9)	4.42 (2.85)	21.6 (1.9)	55.7 (4.0)	-10.2 (12.0)	2.82 (3.35)
13	20.5 (2.8)	63.7 (4.8)	-9.81 (11.5)	3.07 (4.17)	15.3 (3.5)	59.3 (3.3)	-20.4 (12.8)	4.50 (2.57)	21.5 (2.0)	57.3 (3.3)	-11.1 (12.1)	2.96 (3.31)
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Avg	19.8	63.7	-9.02	2.65	15.0	58.9	-18.7	4.13	21.4	58.4	-8.67	2.55
n	13	13	13	13	13	13	13	13	13	13	13	13
SD	0.9	1.6	1.73	0.51	2.6	2.5	2.71	0.64	0.2	1.8	1.99	0.43
Min	18.6	61.5	-12.5	1.77	11.9	56.2	-20.4	2.57	20.9	55.7	-11.1	1.75
Max	21.5	#NAME?	-5.83	3.68	21.5	#NAME?	-11.9	4.54	21.8	#NAME?	-4.59	3.22

ED_004549_00015929-00126

Table F4. PM10 concentrations and emissions.

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for December, 2007.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1																
2																
3																
4		529 (419)	354 (165)	431 (288)												
5		425 (307)	334 (151)	427 (311)												
6		559 (444)	366 (240)	501 (355)												
7		553 (437)	374 (260)	459 (407)												
8		396 (286)	303 (167)	343 (295)												
9		278 (213)	219 (129)	281 (292)												
10	22 (5)	274 (279)	184 (115)	175 (241)	234 (337)	290 (417)	1520 (2190)	374 (539)	151 (127)	201 (170)	1010 (854)	241 (204)				
11	26 (9)	279 (298)	173 (112)	170 (224)	227 (323)	281 (400)	1470 (2090)	363 (517)	139 (110)	187 (147)	933 (735)	223 (176)	133 (172)	183 (237)	968 (1260)	212 (275)
12	17 (7)															
13	20 (6)															
14	27 (7)															
15	32 (11)		237 (151)	283 (385)					140 (112)	189 (150)	923 (736)	225 (179)	152 (200)	212 (278)	1100 (1440)	244 (320)
16	7 (3)		186 (144)	341 (412)					123 (104)	166 (140)	806 (683)	197 (167)				
17	10 (5)		230 (183)	518 (515)					136 (128)	183 (173)	885 (838)	217 (205)				
18	20 (5)		128 (175)	440 (460)					74 (112)	100 (151)	481 (728)	118 (179)				
19	17 (7)		76 (134)	489 (478)					44 (85)	59 (114)	282 (549)	70 (136)				
20	30 (6)		56 (197)						42 (111)	57 (150)	271 (717)	67 (178)				
21	29 (7)		204 (239)						135 (137)	220 (230)	1050 (1100)	216 (219)				
22	29 (13)	370 (183)	337 (163)	394 (154)	153 (136)	250 (222)	1280 (1140)	246 (218)	209 (136)	376 (245)	1800 (1180)	334 (218)	146 (130)	207 (184)	1040 (930)	234 (209)
23	13 (6)	233 (111)	192 (81)	276 (112)	143 (86)	233 (140)	1190 (714)	229 (137)	152 (67)	274 (120)	1310 (576)	243 (107)	164 (112)	233 (158)	1170 (794)	263 (179)
24	11 (4)	413 (166)	359 (134)	376 (137)	173 (150)	282 (245)	1430 (1250)	276 (240)								
25	23 (8)	444 (174)	367 (115)	436 (165)	160 (157)	261 (256)	1320 (1300)	255 (251)					171 (165)	243 (234)	1210 (1160)	273 (264)
26	14 (8)	396 (155)	325 (127)	404 (192)	131 (140)	214 (230)	1080 (1160)	209 (225)								
27	18 (6)	427 (203)	323 (119)	378 (198)	163 (162)	267 (265)	1350 (1340)	261 (259)	192 (128)	348 (231)	1640 (1090)	308 (204)	163 (160)	232 (228)	1150 (1120)	261 (256)
28	18 (8)	317 (155)	265 (134)	286 (147)	163 (110)	268 (181)	1350 (909)	262 (176)	216 (128)	391 (233)	1840 (1100)	345 (206)	159 (107)	258 (160)	1310 (801)	254 (171)
29	11 (3)	177 (93)	142 (95)	122 (111)	150 (104)	246 (171)	1230 (856)	240 (166)	157 (125)	286 (228)	1340 (1070)	252 (200)				
30	9 (4)	205 (131)	149 (83)	137 (98)	126 (95)	208 (156)	1040 (779)	202 (152)	130 (84)	236 (153)	1100 (715)	208 (134)	92 (59)	179 (113)	922 (584)	148 (94)
31	15 (9)	363 (198)	363 (311)	232 (176)	187 (143)	308 (235)	1530 (1170)	299 (229)	300 (335)	548 (612)	2550 (2850)	480 (536)				
Avg	19	369	250	343	167	259	1320	268	146	239	1140	234	148	218	1110	236
n	22	18	25	23	12	12	12	12	16	16	16	16	8	8	8	8
SD	7	111	96	116	32	29	153	52	63	126	584	100	24	26	119	38
Min	7	177	56	122	126	208	1040	202	42	57	271	67	92	179	922	148
Max	32	559	374	518	234	308	1530	374	300	548	2550	480	171	258	1310	273

ED_004549_00015929-00127

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for January, 2008.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	12 (5)	460 (217)	411 (143)	309 (175)	205 (187)	337 (307)	1670 (1520)	327 (299)					149 (149)	292 (292)	1500 (1500)	238 (238)
2	22 (13)	590 (292)	480 (174)	400 (225)	194 (254)	320 (418)	1580 (2060)	310 (406)								
3	20 (5)	661 (353)	490 (256)	438 (325)	215 (312)	355 (514)	1750 (2530)	344 (499)								
4	25 (18)	629 (427)		390 (390)	219 (317)	361 (522)	1770 (2560)	350 (506)								
5	23 (10)	571 (374)			238 (283)	393 (467)	1920 (2280)	381 (453)								
6	13 (5)	377 (306)		259 (169)	221 (218)	364 (359)	1770 (1750)	353 (349)					137 (102)	274 (204)	1380 (1030)	219 (163)
7	8 (4)	315 (283)		257 (278)	204 (224)	337 (370)	1630 (1790)	327 (359)					157 (163)	316 (326)	1580 (1640)	252 (260)
8	9 (3)	349 (261)		248 (212)	253 (263)	418 (434)	2010 (2090)	405 (421)					209 (239)	419 (481)	2090 (2400)	334 (383)
9	10 (6)	269 (242)		213 (304)	204 (242)	337 (399)	1610 (1910)	327 (387)					180 (316)	361 (635)	1800 (3160)	287 (505)
10	20 (6)	316 (281)		251 (264)	190 (204)	755 (970)	4480 (6070)	303 (326)					161 (185)	323 (372)	1600 (1850)	257 (296)
11	14 (6)															
12	28 (10)															
13	38 (6)															
14	24 (13)															
15	17 (6)															
16	23 (10)															
17	17 (6)															
18	24 (8)															
19	27 (14)															
20	13 (4)															
21	9 (4)															
22	13 (5)															
23	21 (4)															
24	23 (6)															
25	17 (4)															
26	23 (5)															
27	21 (7)															
28	23 (6)															
29	17 (5)															
30	13 (4)															
31	14 (6)															
Avg	19	454	460	307	214	398	2020	343					165	331	1660	264
n	31	10	3	9	10	10	10	10	0	0	0	0	6	6	6	6
SD	7	140	35	77	19	122	830	30					23	48	231	37
Min	8	269	411	213	190	320	1580	303					137	274	1380	219
Max	38	661	490	438	253	755	4480	405					209	419	2090	334

ED_004549_00015929-00128

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for February, 2008.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	14 (8)															
2	16 (12)															
3	21 (9)															
4	24 (7)															
5	16 (5)															
6	17 (6)															
7	10 (6)															
8	16 (5)															
9	27 (16)															
10	29 (35)															
11	17 (9)															
12	22 (4)															
13	9 (6)															
14	18 (5)															
15	22 (5)															
16	27 (6)															
17	16 (4)															
18	8 (5)															
19	7 (3)															
20	12 (6)															
21	16 (4)															
22	13 (6)															
23	22 (8)															
24	28 (3)															
25	25 (4)															
26	22 (12)															
27	7 (3)															
28	10 (4)															
29	13 (3)															
Avg	17															
n	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SD	7															
Min	7															
Max	29															

ED_004549_00015929-00129

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for March, 2008.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	15 (4)															
2	13 (4)															
3	19 (6)															
4	20 (6)															
5	9 (5)															
6	16 (5)															
7	15 (6)															
8	14 (8)															
9	11 (4)															
10	14 (6)															
11	29 (9)															
12	25 (8)															
13	28 (10)															
14	32 (4)															
15	28 (10)															
16	14 (5)	370 (183)	217 (79)													
17	18 (5)	502 (262)	296 (103)		85 (193)	99 (226)	1760 (4010)	135 (309)	84 (125)	105 (157)	1810 (2700)	134 (200)				
18	16 (4)	298 (137)	196 (81)		114 (135)	133 (157)	2340 (2750)	183 (215)	78 (78)	98 (98)	1660 (1660)	125 (124)				
19	29 (16)	166 (103)	109 (39)		105 (91)	123 (106)	2120 (1840)	168 (145)	75 (51)	94 (64)	1570 (1070)	120 (81)				
20	16 (10)	286 (240)	193 (117)		118 (177)	138 (206)	2340 (3510)	188 (283)								
21	14 (4)	388 (325)	224 (111)		208 (282)	243 (330)	4070 (5520)	333 (451)								
22	25 (11)	248 (365)	152 (55)	258 (85)	149 (311)	174 (363)	2870 (6010)	238 (498)	111 (65)	139 (82)	2230 (1310)	177 (104)				
23	23 (8)	412 (174)	224 (89)	357 (131)	101 (166)	118 (194)	1930 (3160)	162 (265)	97 (101)	123 (128)	1930 (2010)	156 (162)	67 (108)	86 (139)	1520 (2460)	107 (173)
24	25 (12)	417 (148)	225 (96)	388 (154)	69 (126)	81 (147)	1300 (2370)	111 (202)								
25	24 (5)	418 (212)	226 (102)	371 (182)												
26	32 (6)	281 (165)	195 (82)	288 (100)	117 (150)	137 (175)	2140 (2740)	188 (240)					107 (98)	138 (126)	2340 (2150)	171 (157)
27	38 (5)	180 (81)	172 (84)	226 (96)	99 (102)	116 (119)	1770 (1820)	158 (162)	120 (96)	151 (121)	2230 (1790)	191 (153)	136 (118)	175 (151)	2930 (2530)	218 (188)
28	29 (6)	193 (117)	118 (63)	180 (88)	146 (154)	170 (180)	2570 (2720)	233 (246)	100 (98)	127 (124)	1840 (1800)	161 (157)	127 (91)	164 (117)	2700 (1930)	203 (146)
29	30 (9)	309 (172)	206 (120)	251 (154)	79 (117)	92 (137)	1370 (2040)	126 (188)	84 (89)	106 (113)	1510 (1610)	134 (143)	49 (80)	64 (103)	1040 (1680)	79 (128)
30	15 (4)	272 (120)	180 (76)	227 (146)	28 (64)	33 (75)	482 (1100)	45 (103)	54 (66)	68 (83)	950 (1170)	86 (106)	27 (60)	35 (78)	554 (1250)	43 (97)
31	20 (6)	154 (91)	106 (73)	140 (107)	55 (61)	65 (71)	931 (1030)	88 (97)	54 (60)	69 (75)	952 (1040)	87 (95)	55 (68)	71 (87)	1120 (1380)	88 (108)
Avg	21	306	190	269	105	123	2000	168	86	108	1670	137	81	104	1740	130
n	31	16	16	10	14	14	14	14	10	10	10	10	7	7	7	7
SD	7	101	49	78	43	50	849	68	21	26	426	33	39	50	848	63
Min	9	154	106	140	28	33	482	45	54	68	950	86	27	35	554	43
Max	38	502	296	388	208	243	4070	333	120	151	2230	191	136	175	2930	218

ED_004549_00015929-00130

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for April, 2008.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	17 (8)	84 (71)	63 (53)	105 (77)	54 (67)	63 (78)	894 (1110)	86 (107)	38 (52)	48 (66)	653 (892)	61 (83)	72 (66)	92 (85)	1440 (1320)	114 (105)
2	22 (8)	157 (141)	122 (132)	196 (156)	98 (114)	114 (133)	1590 (1850)	156 (182)	88 (130)	111 (164)	1480 (2190)	140 (208)	139 (160)	179 (206)	2740 (3160)	222 (256)
3	19 (6)	198 (122)	172 (113)	246 (179)	96 (97)	112 (113)	1530 (1550)	153 (155)	84 (99)	106 (125)	1390 (1640)	134 (158)	99 (135)	128 (174)	1930 (2640)	159 (216)
4	18 (15)	135 (96)	104 (82)	165 (160)	83 (70)	97 (82)	1300 (1110)	132 (112)	80 (75)	102 (95)	1310 (1220)	128 (120)	112 (139)	145 (179)	2160 (2680)	179 (223)
5		114 (55)	72 (49)	83 (84)	65 (39)	76 (46)	1010 (603)	104 (62)								
6	14 (5)	195 (70)	153 (59)	123 (51)	86 (61)	101 (72)	1320 (927)	138 (98)	101 (49)	129 (63)	1590 (772)	162 (79)	57 (49)	74 (63)	1070 (913)	92 (78)
7	13 (5)	244 (115)	217 (68)	220 (102)	77 (92)	90 (108)	1150 (1380)	123 (148)	123 (84)	156 (107)	1900 (1290)	197 (134)	68 (85)	87 (110)	1240 (1560)	108 (136)
8	18 (4)	226 (84)	227 (77)	232 (84)	103 (86)	121 (101)	1510 (1260)	165 (137)	139 (83)	176 (105)	2100 (1250)	222 (132)	94 (73)	121 (95)	1690 (1330)	150 (117)
9	16 (5)	236 (78)	185 (66)	202 (89)	134 (78)	157 (92)	1930 (1130)	214 (125)	138 (76)	175 (97)	2040 (1130)	220 (122)	94 (63)	121 (81)	1670 (1120)	150 (100)
10	10 (4)	215 (68)	126 (46)	178 (74)	148 (74)	173 (87)	2090 (1050)	237 (119)	102 (47)	130 (60)	1490 (689)	164 (76)	117 (76)	151 (98)	2040 (1320)	187 (121)
11	8 (4)	179 (64)	74 (41)	123 (54)	171 (112)	201 (132)	2380 (1560)	274 (180)					113 (69)	146 (89)	1940 (1180)	181 (110)
12	17 (14)	165 (62)	90 (82)	100 (78)	154 (99)	181 (116)	2110 (1350)	247 (158)					82 (77)	106 (100)	1380 (1310)	131 (124)
13	18 (5)	344 (149)	258 (111)	175 (82)	242 (156)	284 (183)	3240 (2090)	387 (250)	227 (147)	289 (187)	3110 (2000)	364 (235)				
14	18 (9)	451 (189)	330 (135)	291 (127)	210 (194)	247 (228)	2760 (2540)	337 (310)	214 (141)	272 (179)	2870 (1890)	342 (225)	123 (128)	160 (166)	2020 (2090)	197 (205)
15	28 (9)	487 (185)	305 (145)	334 (188)	231 (200)	271 (235)	2970 (2570)	369 (320)	206 (136)	262 (174)	2700 (1790)	329 (218)	129 (126)	166 (163)	2060 (2020)	206 (202)
16	29 (9)	475 (184)	266 (118)	308 (135)	230 (195)	270 (229)	2900 (2470)	368 (312)	175 (129)	223 (165)	2250 (1670)	279 (207)	123 (105)	159 (136)	1940 (1660)	197 (168)
17	31 (13)	415 (186)	204 (97)	305 (205)	261 (213)	306 (250)	3230 (2630)	417 (340)	146 (110)	186 (140)	1840 (1390)	233 (176)	141 (132)	183 (170)	2190 (2040)	226 (211)
18	36 (8)	385 (221)	171 (99)	243 (148)	311 (261)	366 (306)	3780 (3160)	498 (417)	172 (136)	220 (173)	2140 (1680)	276 (217)	169 (151)	219 (196)	2570 (2300)	271 (242)
19	38 (32)	279 (189)	158 (92)	225 (149)	213 (238)	250 (280)	2540 (2840)	340 (381)	134 (129)	171 (164)	1630 (1570)	214 (206)	163 (141)	211 (183)	2440 (2110)	261 (226)
20	17 (6)	311 (166)	179 (91)	231 (112)	261 (183)	306 (216)	3050 (2140)	417 (294)	178 (145)	227 (185)	2120 (1720)	285 (231)	184 (132)	238 (170)	2690 (1920)	294 (211)
21	24 (9)	355 (110)	216 (61)	251 (72)	214 (110)	252 (129)	2460 (1260)	343 (175)	151 (63)	193 (81)	1770 (741)	242 (101)	145 (78)	188 (101)	2090 (1130)	233 (125)
22	17 (3)	273 (62)	175 (51)	189 (51)	185 (67)	218 (78)	2090 (748)	296 (106)	145 (62)	185 (79)	1660 (705)	232 (99)	130 (57)	168 (74)	1830 (803)	207 (91)
23	22 (6)	260 (85)	146 (46)	172 (48)	178 (68)	210 (79)	1970 (747)	285 (108)	112 (40)	143 (52)	1260 (454)	180 (65)	116 (55)	150 (71)	1610 (763)	186 (88)
24	23 (6)	285 (87)	182 (62)	184 (70)	214 (87)	252 (103)	2330 (947)	343 (140)	165 (90)	211 (114)	1820 (983)	264 (143)	123 (60)	159 (78)	1670 (817)	197 (96)
25	21 (4)	301 (139)	219 (97)	196 (83)	242 (142)	286 (167)	2590 (1510)	388 (227)	205 (123)	262 (157)	2210 (1330)	328 (197)	147 (92)	191 (120)	1970 (1230)	236 (148)
26	22 (6)	237 (109)	173 (54)	160 (62)	205 (87)	242 (102)	2150 (904)	328 (138)	192 (99)	246 (127)	2040 (1050)	308 (159)	132 (72)	171 (93)	1720 (938)	211 (115)
27	20 (9)	198 (104)	139 (67)	135 (67)	150 (97)	177 (115)	1550 (1000)	240 (156)	124 (80)	158 (102)	1290 (829)	198 (127)	101 (64)	131 (83)	1290 (822)	161 (102)
28	17 (4)	174 (81)	122 (50)	126 (62)	129 (73)	152 (86)	1300 (740)	206 (117)	98 (49)	126 (63)	1000 (505)	157 (79)	114 (77)	147 (100)	1430 (970)	182 (123)
29	20 (8)	371 (185)	270 (108)	301 (166)	226 (142)	266 (168)	2240 (1410)	361 (228)	184 (86)	235 (109)	1840 (856)	294 (137)	164 (120)	214 (155)	2040 (1480)	263 (191)
30	28 (8)	465 (213)	348 (135)	324 (197)	273 (213)	323 (252)	2670 (2080)	437 (341)	246 (115)	314 (147)	2420 (1130)	393 (184)	154 (136)	199 (177)	1870 (1660)	246 (218)
Avg	21	274	182	204	175	205	2150	280	147	187	1850	235	122	157	1880	194
n	29	30	30	30	30	30	30	30	27	27	27	27	28	28	28	28
SD	7	110	73	69	69	82	725	111	50	64	545	79	31	40	414	50
Min	8	84	63	83	54	63	894	86	38	48	653	61	57	74	1070	92
Max	38	487	348	334	311	366	3780	498	246	314	3110	393	184	238	2740	294

ED_004549_00015929-00131

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for May, 2008.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	24 (5)	365 (225)	223 (105)	289 (140)	217 (190)	256 (224)	2080 (1820)	347 (303)	176 (96)	225 (122)	1700 (924)	281 (153)	176 (119)	228 (154)	2090 (1420)	281 (190)
2	27 (9)	237 (125)	205 (80)	275 (105)	190 (162)	225 (191)	1790 (1520)	304 (259)	197 (132)	253 (168)	1880 (1250)	316 (211)	205 (97)	266 (126)	2400 (1130)	328 (155)
3		297 (74)	258 (71)	287 (79)												
4	21 (8)	240 (85)	220 (66)	231 (65)	246 (147)	291 (173)	2250 (1340)	394 (235)	282 (164)	360 (210)	2590 (1500)	450 (263)	198 (81)	257 (106)	2240 (915)	317 (130)
5	23 (10)	227 (81)	198 (70)	194 (64)	158 (70)	187 (83)	1420 (633)	253 (113)	153 (76)	196 (97)	1390 (686)	246 (121)	154 (71)	200 (92)	1710 (785)	246 (113)
6	30 (10)	311 (81)	277 (87)	281 (111)	243 (110)	288 (130)	2150 (966)	390 (175)	243 (146)	311 (187)	2160 (1290)	389 (233)	221 (135)	287 (176)	2400 (1470)	353 (216)
7	26 (6)	295 (122)	263 (82)	250 (93)	260 (138)	308 (163)	2260 (1190)	416 (220)	283 (154)	362 (197)	2470 (1340)	453 (246)	211 (120)	273 (155)	2250 (1270)	337 (191)
8	24 (6)	206 (93)	187 (84)	194 (116)	174 (85)	205 (101)	1490 (730)	278 (136)	208 (81)	266 (103)	1790 (694)	332 (129)	143 (69)	186 (89)	1510 (727)	229 (110)
9	24 (8)	175 (65)	140 (63)	146 (64)	211 (126)	249 (150)	1780 (1060)	337 (202)	197 (113)	252 (145)	1670 (957)	315 (181)	151 (90)	196 (117)	1560 (929)	242 (144)
10	25 (9)	206 (94)	192 (89)	202 (98)	212 (126)	251 (149)	1760 (1040)	339 (201)	228 (137)	292 (176)	1900 (1140)	365 (219)	166 (102)	215 (132)	1680 (1030)	265 (163)
11	16 (7)	273 (198)	203 (115)	220 (139)	202 (151)	239 (179)	1660 (1240)	323 (242)	180 (89)	230 (113)	1480 (729)	288 (142)	133 (93)	173 (121)	1330 (933)	213 (149)
12	16 (15)	359 (191)	273 (128)	281 (144)	276 (182)	327 (215)	2230 (1470)	442 (291)	239 (140)	307 (179)	1940 (1140)	383 (224)	177 (108)	230 (140)	1740 (1060)	283 (172)
13	20 (12)	491 (238)	372 (174)	430 (207)	376 (225)	446 (266)	3000 (1790)	602 (359)	337 (187)	431 (240)	2690 (1500)	539 (300)	323 (215)	420 (279)	3120 (2070)	517 (344)
14	15 (5)	502 (239)	360 (146)	422 (213)	411 (268)	487 (317)	3230 (2110)	658 (429)	388 (181)	497 (231)	3060 (1420)	621 (289)	324 (204)	421 (265)	3080 (1940)	518 (327)
15	20 (8)	289 (124)	218 (91)	228 (82)	264 (138)	313 (163)	2050 (1070)	423 (221)	266 (143)	341 (184)	2070 (1110)	425 (229)	219 (82)	284 (107)	2050 (767)	350 (131)
16	22 (6)	250 (116)	174 (61)	204 (83)	275 (117)	326 (138)	2110 (893)	441 (187)	260 (117)	334 (151)	2000 (898)	416 (188)	264 (112)	343 (145)	2430 (1030)	422 (179)
17	24 (45)	487 (194)	371 (141)	412 (155)	443 (253)	524 (299)	3340 (1910)	708 (404)	423 (279)	542 (358)	3200 (2110)	676 (447)	361 (211)	468 (274)	3270 (1910)	577 (338)
18	28 (30)	374 (160)	292 (126)	304 (114)	371 (221)	440 (262)	2770 (1640)	594 (353)	402 (312)	516 (400)	3010 (2330)	644 (499)	272 (140)	354 (181)	2430 (1240)	436 (223)
19	23 (7)	365 (230)	261 (127)	361 (181)	278 (193)	329 (228)	2050 (1420)	445 (308)	356 (273)	456 (350)	2630 (2010)	569 (436)	332 (210)	432 (273)	2930 (1850)	532 (337)
20	39 (17)	301 (245)	239 (113)	249 (158)	201 (325)	239 (386)	1470 (2370)	322 (521)	315 (209)	405 (268)	2310 (1530)	505 (335)	224 (180)	291 (234)	1940 (1560)	358 (288)
21	24 (6)	451 (268)	298 (131)	298 (159)	407 (250)	482 (296)	2930 (1800)	651 (400)	356 (216)	457 (277)	2570 (1560)	569 (345)	259 (162)	337 (211)	2220 (1390)	415 (259)
22	27 (9)	432 (213)	372 (142)	377 (190)	439 (300)	520 (356)	3120 (2140)	702 (481)	443 (253)	568 (325)	3160 (1800)	709 (405)	353 (273)	459 (355)	2980 (2300)	565 (437)
23	44 (22)	422 (251)	374 (170)	362 (219)	407 (299)	482 (354)	2860 (2100)	651 (478)	429 (256)	551 (329)	3030 (1810)	687 (410)	345 (323)	449 (420)	2870 (2690)	552 (517)
24	30 (12)	375 (139)	384 (130)	308 (144)	302 (143)	358 (170)	2100 (998)	483 (229)	352 (160)	452 (205)	2460 (1120)	563 (256)	224 (142)	291 (185)	1840 (1170)	358 (228)
25	29 (18)	452 (148)	461 (183)	438 (145)	420 (174)	498 (207)	2900 (1200)	673 (279)	520 (318)	668 (408)	3600 (2190)	832 (508)	386 (208)	503 (270)	3140 (1680)	618 (332)
26	19 (7)	385 (177)	396 (164)	357 (217)	393 (140)	466 (166)	2680 (955)	628 (223)	508 (253)	653 (325)	3480 (1730)	813 (405)	329 (206)	429 (268)	2640 (1650)	527 (329)
27	17 (8)	282 (137)	291 (131)	227 (85)	331 (104)	393 (123)	2240 (702)	530 (166)	429 (190)	552 (244)	2920 (1290)	687 (304)	266 (112)	347 (146)	2110 (882)	426 (179)
28	16 (8)	347 (208)	326 (173)	255 (126)	304 (217)	362 (258)	2040 (1460)	487 (347)	320 (250)	411 (322)	2150 (1690)	511 (401)	206 (127)	269 (166)	1610 (998)	330 (204)
29	31 (13)	411 (196)	348 (190)	346 (159)	338 (212)	402 (251)	2250 (1410)	541 (338)	384 (325)	494 (418)	2560 (2170)	615 (520)	285 (177)	372 (231)	2200 (1370)	456 (283)
30	15 (6)	285 (220)	225 (136)	239 (130)	253 (169)	301 (201)	1670 (1120)	404 (271)	279 (164)	358 (211)	1840 (1090)	446 (263)	242 (114)	316 (149)	1850 (874)	387 (183)
31																
Avg	24	336	280	289	297	352	2270	475	316	405	2400	505	246	320	2260	394
n	29	30	30	30	29	29	29	29	29	29	29	29	29	29	29	29
SD	7	91	79	77	86	102	546	137	99	128	595	159	72	94	543	115
Min	15	175	140	146	158	187	1420	253	153	196	1390	246	133	173	1330	213
Max	44	502	461	438	443	524	3340	708	520	668	3600	832	386	503	3270	618

ED_004549_00015929-00132

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for June, 2008.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16	23 (8)	272 (149)	234 (131)	241 (129)	282 (153)	341 (185)	1690 (919)	451 (245)	397 (182)	516 (237)	2370 (1090)	635 (292)	311 (132)	410 (174)	2050 (873)	498 (212)
17	32 (12)	288 (164)	192 (75)	250 (92)	266 (143)	322 (173)	1590 (851)	426 (228)	339 (126)	441 (164)	2020 (752)	543 (202)	347 (144)	458 (190)	2280 (944)	556 (231)
18	43 (11)	508 (231)	391 (183)	444 (179)	392 (180)	476 (218)	2330 (1070)	628 (288)	552 (241)	718 (313)	3270 (1430)	883 (385)	462 (245)	610 (324)	3020 (1600)	740 (392)
19	35 (8)	489 (294)	407 (278)	399 (172)	371 (196)	450 (238)	2200 (1160)	593 (313)	497 (220)	646 (287)	2930 (1300)	795 (353)	438 (213)	578 (281)	2840 (1380)	701 (341)
20	32 (13)	417 (243)	356 (205)	373 (186)	345 (204)	420 (248)	2040 (1200)	553 (326)	431 (236)	561 (307)	2530 (1390)	690 (377)	318 (189)	421 (250)	2050 (1220)	509 (302)
21	21 (8)	335 (215)	264 (162)	293 (153)	296 (166)	360 (202)	1740 (977)	474 (265)	326 (176)	424 (229)	1910 (1030)	522 (281)	248 (131)	329 (173)	1590 (839)	397 (209)
22	23 (8)	325 (140)	234 (104)	274 (109)	356 (160)	433 (195)	2090 (940)	570 (257)	338 (161)	440 (210)	1970 (936)	541 (258)	281 (126)	373 (167)	1790 (805)	450 (202)
23	23 (11)	330 (129)	226 (100)	294 (209)	418 (220)	509 (269)	2440 (1290)	669 (353)	349 (118)	455 (153)	2020 (682)	559 (188)	295 (152)	392 (202)	1880 (968)	473 (243)
24	51 (67)	402 (214)	296 (153)	426 (291)	549 (315)	750 (436)	3610 (2100)	879 (504)	433 (262)	638 (398)	2830 (1760)	693 (420)	490 (349)	752 (578)	3580 (2750)	783 (559)
25	49 (30)	251 (236)	203 (164)	224 (156)	321 (346)	505 (545)	2450 (2640)	513 (554)	263 (203)	451 (349)	1990 (1540)	421 (325)	231 (266)	407 (468)	1920 (2210)	370 (426)
26	36 (9)	168 (89)	112 (56)	165 (72)	216 (165)	340 (259)	1640 (1250)	346 (263)	156 (112)	268 (193)	1180 (848)	250 (180)	196 (143)	345 (251)	1620 (1180)	313 (229)
27	31 (11)	178 (81)	103 (55)	169 (79)	235 (134)	369 (211)	1780 (1010)	376 (214)	153 (105)	263 (180)	1150 (788)	245 (167)	196 (120)	346 (212)	1620 (990)	314 (192)
28	30 (5)	158 (69)	103 (47)	153 (64)	225 (117)	355 (185)	1700 (885)	360 (188)	180 (108)	309 (186)	1350 (809)	287 (173)	181 (94)	319 (165)	1490 (768)	290 (150)
29	29 (16)	200 (99)	135 (76)	157 (85)	281 (179)	442 (281)	2110 (1340)	449 (286)	242 (175)	417 (303)	1810 (1310)	387 (281)	193 (157)	341 (277)	1570 (1280)	309 (251)
30	29 (8)	214 (95)	155 (63)	179 (76)	297 (181)	467 (286)	2220 (1360)	475 (290)	281 (169)	484 (291)	2090 (1260)	449 (270)	225 (131)	397 (232)	1830 (1070)	360 (210)
Avg	32	302	227	269	323	436	2110	517	329	469	2100	527	294	432	2080	471
n	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
SD	9	109	97	97	84	103	492	134	116	129	596	186	98	118	589	157
Min	21	158	103	153	216	322	1590	346	153	263	1150	245	181	319	1490	290
Max	51	508	407	444	549	750	3610	879	552	718	3270	883	490	752	3580	783

ED_004549_00015929-00133

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for July, 2008.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	21 (10)	285 (188)	288 (192)	298 (178)	363 (253)	616 (421)	2950 (2010)	581 (405)	404 (314)	765 (616)	3310 (2670)	646 (503)	305 (208)	539 (368)	2470 (1680)	488 (333)
2	39 (42)	258 (212)	238 (209)	290 (196)	315 (280)	584 (518)	2810 (2500)	505 (447)	287 (265)	590 (544)	2560 (2360)	460 (424)	322 (308)	569 (543)	2590 (2480)	515 (492)
3	55 (89)	210 (201)	191 (199)	237 (179)	238 (239)	441 (443)	2110 (2130)	380 (383)	211 (214)	434 (439)	1870 (1900)	338 (342)	240 (207)	425 (365)	1930 (1660)	385 (331)
4	30 (14)	145 (84)	95 (61)	160 (103)	175 (159)	325 (295)	1560 (1410)	281 (254)	126 (134)	259 (275)	1110 (1180)	202 (214)	182 (169)	322 (298)	1450 (1350)	291 (270)
5																
6																
7																
8																
9	18 (8)	149 (94)	85 (36)	91 (84)	158 (78)	295 (145)	1390 (682)	253 (124)	106 (50)	218 (103)	920 (436)	169 (80)	111 (119)	206 (216)	910 (958)	178 (190)
10	21 (8)	146 (71)	91 (40)	136 (84)	173 (98)	322 (183)	1510 (859)	276 (157)	119 (77)	245 (159)	1030 (669)	190 (124)	147 (99)	278 (187)	1230 (824)	236 (159)
11																
12	40 (11)	184 (88)	137 (43)		184 (106)	344 (198)	1600 (923)	294 (169)	160 (97)	330 (200)	1380 (837)	256 (155)				
13	30 (6)	181 (106)	137 (67)		172 (98)	322 (184)	1500 (856)	275 (157)	155 (94)	321 (194)	1340 (806)	249 (150)				
14	28 (10)	146 (89)	105 (67)		130 (84)	244 (157)	1130 (730)	208 (134)	102 (78)	210 (161)	873 (668)	163 (125)				
15	34 (13)	135 (78)	93 (38)		132 (103)	246 (193)	1140 (891)	211 (165)	98 (66)	203 (136)	838 (559)	157 (105)				
16	42 (12)	197 (114)	136 (72)		193 (130)	361 (243)	1660 (1120)	308 (208)	139 (110)	288 (228)	1180 (934)	223 (176)				
17	47 (34)	244 (181)	165 (100)		251 (229)	470 (429)	2150 (1960)	401 (366)	173 (170)	449 (504)	1840 (2060)	277 (272)	217 (139)	409 (262)	1770 (1140)	347 (222)
18	16 (9)	126 (107)	91 (58)	118 (70)	121 (116)	226 (217)	1030 (990)	193 (186)	120 (97)	403 (324)	1640 (1320)	192 (154)	118 (53)	224 (100)	967 (435)	189 (85)
19	21 (9)	125 (70)	76 (42)	106 (42)	130 (89)	244 (167)	1110 (760)	208 (143)	89 (77)	299 (258)	1220 (1050)	143 (123)	108 (46)	204 (87)	880 (376)	172 (74)
20	32 (19)	126 (82)	83 (62)	121 (57)	140 (150)	263 (281)	1190 (1270)	224 (241)	90 (102)	303 (341)	1230 (1380)	145 (163)	130 (103)	247 (196)	1060 (843)	208 (165)
21	39 (7)	144 (70)	104 (55)	138 (55)	179 (120)	336 (225)	1510 (1010)	287 (193)	100 (73)	334 (244)	1350 (984)	159 (116)	153 (75)	291 (143)	1250 (614)	245 (121)
22	39 (13)	140 (82)	103 (53)	131 (44)	153 (167)	604 (642)	3080 (3310)	245 (267)	110 (108)	477 (491)	1930 (1990)	176 (172)	132 (83)	251 (159)	1070 (678)	211 (133)
23	27 (14)	72 (95)	80 (58)	125 (53)					70 (134)	412 (785)	1670 (3190)	113 (215)	102 (67)	195 (128)	829 (545)	163 (107)
24	27 (9)	41 (51)	69 (39)	130 (67)					71 (91)	414 (532)	1680 (2150)	113 (146)	122 (80)	232 (153)	986 (650)	195 (128)
25	33 (12)			163 (77)												
26	30 (5)			155 (85)												
27	26 (9)			98 (59)												
28	31 (8)			108 (60)												
29	24 (7)			80 (61)												
30																
31																
Avg	31	161	124	149	189	367	1730	302	144	366	1520	230	171	314	1390	273
n	24	19	19	18	17	17	17	17	19	19	19	19	14	14	14	14
SD	9	58	57	61	65	126	642	105	80	137	596	127	70	120	564	113
Min	16	41	69	80	121	226	1030	193	70	203	838	113	102	195	829	163
Max	55	285	288	298	363	616	3080	581	404	765	3310	646	322	569	2590	515

ED_004549_00015929-00134

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for August, 2008.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm	g d^{-1}	mg d^{-1} hd	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1																
2																
3																
4																
5																
6																
7																
8																
9	24 (15)		150 (135)						112 (90)	152 (122)	2920 (2340)	179 (143)				
10	22 (8)	202 (88)	165 (94)		141 (62)	169 (75)	3360 (1480)	226 (100)	142 (69)	193 (93)	3610 (1740)	227 (110)	20 (26)			33 (42)
11	18 (10)	257 (103)	211 (106)		195 (113)	234 (135)	4550 (2630)	312 (181)	180 (73)	244 (99)	4480 (1810)	287 (116)	170 (157)			272 (251)
12	21 (5)	274 (141)	238 (161)		199 (109)	238 (131)	4550 (2510)	318 (175)	220 (154)	299 (209)	5370 (3760)	352 (246)	167 (108)	227 (147)	5100 (3310)	267 (173)
13	19 (11)	203 (52)	178 (51)	154 (48)	109 (38)	131 (46)	2460 (865)	175 (62)	111 (42)	151 (57)	2670 (1010)	178 (67)	83 (47)	113 (64)	2460 (1380)	133 (75)
14	15 (7)	216 (87)	201 (97)	162 (61)	140 (64)	168 (77)	3100 (1430)	225 (103)	163 (76)	222 (104)	3850 (1800)	261 (122)	117 (59)	159 (81)	3380 (1720)	187 (95)
15	19 (9)	179 (113)	155 (113)	170 (86)	130 (72)	156 (86)	2820 (1560)	208 (115)	135 (85)	184 (116)	3130 (1970)	216 (136)	134 (81)	183 (110)	3790 (2280)	215 (129)
16	30 (12)	172 (75)	124 (40)	138 (51)					104 (52)	141 (70)	2370 (1180)	166 (83)	91 (54)	124 (74)	2530 (1500)	146 (87)
17	36 (8)	370 (140)	158 (63)	138 (50)	271 (164)	325 (197)	5680 (3430)	434 (263)	112 (63)	153 (86)	2510 (1410)	179 (101)	77 (42)	105 (58)	2070 (1140)	123 (68)
18	29 (10)	215 (190)	185 (99)		155 (154)	186 (185)	3200 (3190)	248 (247)	185 (127)	253 (173)	4100 (2800)	297 (203)	148 (121)	201 (165)	3910 (3200)	236 (193)
19	21 (8)	158 (106)	158 (90)		124 (114)	149 (137)	2530 (2310)	199 (182)	175 (124)	239 (169)	3810 (2700)	280 (199)	104 (96)	142 (131)	2710 (2510)	167 (154)
20	21 (8)	140 (84)	136 (68)		109 (102)	130 (122)	2170 (2030)	174 (163)	143 (107)	196 (146)	3070 (2280)	229 (171)	160 (124)	218 (168)	4090 (3150)	256 (198)
21	27 (8)	139 (72)	119 (45)		102 (86)	123 (103)	2010 (1690)	163 (137)	127 (87)	173 (119)	2660 (1830)	203 (139)	96 (67)	130 (91)	2400 (1680)	153 (107)
22	19 (7)	163 (85)	157 (73)		130 (78)	156 (93)	2520 (1510)	208 (124)	166 (79)	227 (108)	3430 (1630)	266 (126)	137 (106)	187 (144)	3390 (2630)	219 (170)
23	16 (5)	149 (166)	160 (83)		118 (207)	141 (249)	2250 (3950)	188 (331)	184 (147)	251 (200)	3740 (2970)	294 (235)	153 (95)	209 (129)	3740 (2310)	245 (152)
24	15 (6)	146 (134)	142 (112)		118 (146)	142 (176)	2220 (2740)	189 (234)	152 (155)	208 (212)	3040 (3100)	244 (249)	157 (155)	214 (212)	3770 (3720)	252 (249)
25																
26																
27	17 (7)	94 (34)	89 (32)	92 (44)	82 (29)	99 (34)	1470 (515)	132 (46)	99 (36)	135 (49)	1880 (683)	158 (57)	72 (30)	98 (41)	1640 (693)	115 (48)
28	18 (7)	89 (20)	80 (20)	84 (26)	85 (30)	103 (36)	1500 (526)	137 (48)	101 (47)	138 (65)	1870 (881)	161 (76)	73 (31)	100 (42)	1640 (692)	117 (49)
29	24 (15)	116 (54)	102 (46)	116 (58)	107 (97)	129 (117)	1850 (1670)	171 (155)	108 (110)	147 (150)	1970 (2000)	172 (175)	94 (95)	129 (130)	2090 (2120)	151 (153)
30	23 (8)	105 (40)	101 (33)	106 (40)	95 (50)	115 (61)	1610 (852)	152 (80)	115 (57)	157 (78)	2060 (1020)	183 (92)	89 (44)	122 (60)	1950 (964)	143 (71)
31	30 (6)	120 (37)	115 (31)	135 (43)	117 (59)	141 (71)	1950 (979)	187 (94)	132 (48)	180 (66)	2310 (839)	211 (77)	131 (76)	179 (104)	2800 (1630)	209 (122)
Avg	22	175	149	130	133	160	2730	213	141	193	3090	226	114	158	2970	182
n	21	20	21	10	19	19	19	19	21	21	21	21	20	18	18	20
SD	5	67	40	28	45	53	1110	71	33	45	905	53	39	44	941	62
Min	15	89	80	84	82	99	1470	132	99	135	1870	158	20	98	1640	33
Max	36	370	238	170	271	325	5680	434	220	299	5370	352	170	227	5100	272

ED_004549_00015929-00135

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for September, 2008.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm	g d^{-1}	mg d^{-1} hd	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	24 (8)	212 (69)	183 (50)	232 (66)	205 (102)	248 (123)	3360 (1670)	328 (163)	230 (138)	315 (189)	3950 (2360)	367 (220)	220 (128)	301 (174)	4640 (2690)	352 (204)
2	24 (8)	227 (111)	220 (100)	246 (97)	199 (101)	241 (122)	3200 (1630)	318 (162)	227 (124)	311 (170)	3830 (2090)	363 (198)	211 (114)	288 (155)	4380 (2360)	337 (182)
3	28 (6)	189 (92)	202 (97)	197 (87)	158 (83)	192 (100)	2500 (1310)	253 (132)	205 (107)	282 (147)	3400 (1770)	328 (171)	159 (84)	217 (115)	3250 (1730)	254 (135)
4	21 (10)	161 (91)	185 (94)	157 (75)	134 (77)	162 (93)	2080 (1200)	214 (123)	188 (97)	258 (133)	3050 (1570)	301 (155)	130 (75)	178 (103)	2620 (1510)	209 (120)
5	19 (12)	99 (86)	100 (92)	94 (83)												
6																
7																
8																
9																
10																
11	22 (9)	82 (15)	79 (23)	95 (25)	58 (19)	71 (24)	788 (259)	93 (31)	72 (30)	99 (41)	1000 (417)	115 (48)	65 (24)	89 (33)	1150 (426)	104 (39)
12	14 (8)	70 (20)	72 (24)	86 (28)	63 (28)	78 (34)	841 (364)	101 (44)	84 (32)	115 (44)	1150 (439)	134 (51)	73 (30)	100 (41)	1260 (522)	117 (48)
13	13 (7)	70 (23)	69 (31)	81 (39)	69 (32)	84 (39)	895 (413)	110 (51)	86 (53)	119 (73)	1160 (711)	138 (85)	70 (32)	96 (44)	1190 (542)	112 (51)
14	13 (5)	60 (15)	51 (14)	62 (30)	67 (31)	81 (38)	845 (392)	106 (50)	67 (33)	92 (46)	878 (433)	107 (53)	58 (42)	80 (58)	966 (699)	93 (67)
15	16 (10)	69 (21)	61 (21)	51 (19)	71 (34)	87 (41)	880 (419)	113 (54)	76 (54)	104 (74)	969 (686)	121 (86)	42 (29)	57 (40)	677 (471)	66 (46)
16	20 (8)	140 (45)	83 (37)	64 (30)	106 (53)	130 (65)	1300 (646)	170 (85)	70 (46)	96 (63)	878 (571)	112 (73)	35 (23)	48 (31)	555 (363)	56 (36)
17	20 (6)	181 (100)	106 (32)	80 (42)	124 (84)	152 (103)	1490 (1010)	199 (135)	79 (35)	109 (49)	968 (433)	126 (57)	43 (35)	59 (48)	672 (550)	69 (56)
18	30 (6)	151 (55)	138 (67)	90 (36)	111 (55)	135 (67)	1290 (639)	177 (87)	100 (67)	138 (92)	1200 (801)	160 (107)	52 (38)	72 (53)	801 (591)	84 (62)
19	21 (6)	143 (43)	115 (61)	82 (31)	103 (45)	126 (55)	1180 (512)	165 (71)	76 (63)	104 (87)	892 (743)	121 (101)	45 (28)	63 (38)	683 (415)	73 (44)
20	20 (5)	134 (68)	96 (51)	78 (37)	82 (59)	101 (72)	922 (665)	131 (94)	61 (47)	84 (64)	702 (539)	98 (75)	38 (31)	53 (42)	562 (451)	61 (49)
21	19 (5)	120 (55)	108 (46)	87 (35)	86 (51)	105 (62)	940 (558)	137 (81)	82 (52)	113 (72)	923 (587)	131 (84)	50 (27)	70 (38)	727 (392)	81 (44)
22	22 (6)	128 (62)	116 (63)	115 (54)	88 (53)	108 (66)	946 (575)	140 (85)	85 (66)	116 (91)	934 (732)	135 (106)	67 (42)	93 (58)	949 (590)	107 (67)
23	27 (9)	152 (62)	125 (53)	131 (74)	97 (67)	119 (82)	1020 (705)	155 (107)	91 (51)	125 (70)	980 (549)	145 (81)	67 (56)	93 (78)	936 (782)	108 (90)
24	24 (7)	206 (114)	170 (76)	156 (56)	99 (101)	122 (124)	1030 (1050)	159 (162)	119 (64)	163 (89)	1260 (686)	190 (103)	79 (56)	108 (77)	1070 (757)	126 (89)
25	9 (10)	154 (109)	122 (69)	112 (65)	61 (77)	75 (95)	617 (786)	97 (123)	84 (50)	115 (68)	870 (520)	134 (80)	57 (50)	79 (69)	758 (671)	91 (80)
26	10 (5)	74 (38)	78 (40)	69 (39)	57 (38)	70 (46)	567 (376)	91 (60)	74 (43)	102 (59)	756 (437)	118 (68)	47 (32)	65 (44)	613 (412)	75 (51)
27	18 (7)	87 (46)	101 (54)	91 (38)	65 (50)	80 (61)	639 (486)	104 (80)	91 (66)	125 (91)	913 (662)	146 (106)	61 (37)	84 (51)	775 (473)	97 (59)
28	23 (7)	103 (53)	117 (56)	107 (61)	73 (54)	90 (66)	703 (515)	117 (86)	100 (70)	138 (96)	988 (688)	161 (112)	69 (51)	95 (71)	864 (639)	110 (82)
29	22 (6)	117 (65)	117 (59)	104 (62)	86 (63)	106 (78)	810 (598)	137 (101)	107 (68)	147 (94)	1040 (657)	172 (109)	78 (69)	108 (96)	958 (849)	125 (111)
30	29 (8)	98 (52)	106 (57)	76 (37)	58 (49)	71 (60)	534 (452)	92 (78)	72 (59)	99 (81)	683 (560)	115 (94)	35 (30)	49 (41)	426 (356)	57 (47)
Avg	20	129	117	110	97	118	1220	155	105	145	1390	168	77	106	1310	123
n	25	25	25	25	24	24	24	24	24	24	24	24	24	24	24	24
SD	5	48	44	50	41	49	764	65	50	69	990	80	50	68	1150	80
Min	9	60	51	51	57	70	534	91	61	84	683	98	35	48	426	56
Max	30	227	220	246	205	248	3360	328	230	315	3950	367	220	301	4640	352

ED_004549_00015929-00136

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for October, 2008.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	30 (11)	120 (89)	121 (90)	98 (70)	74 (80)	92 (98)	677 (725)	119 (128)	82 (95)	113 (131)	766 (887)	131 (152)	52 (57)	72 (80)	610 (675)	83 (92)
2	12 (6)	239 (137)	220 (113)	167 (90)	187 (110)	231 (136)	1670 (984)	299 (176)	184 (95)	253 (131)	1690 (873)	294 (152)				
3	13 (5)	231 (148)	231 (140)	179 (104)	163 (129)	201 (159)	1430 (1140)	260 (207)	179 (124)	247 (170)	1620 (1120)	287 (198)				
4	21 (6)	230 (164)	219 (136)	154 (94)	173 (139)	213 (172)	1490 (1200)	276 (222)	141 (120)	194 (166)	1250 (1070)	226 (192)	105 (77)	146 (106)	1170 (857)	169 (123)
5																
6																
7																
8																
9																
10																
11																
12																
13	6 (5)															
14	9 (5)															
15	13 (5)															
16	16 (6)															
17	18 (9)															
18	6 (5)															
19	9 (7)															
20	13 (6)	497 (135)	475 (149)	387 (164)	278 (191)	346 (238)	1920 (1320)	445 (306)	218 (125)	302 (172)	1580 (904)	349 (199)	158 (164)	221 (229)	1360 (1410)	253 (263)
21	16 (7)	420 (197)	419 (189)	335 (168)	266 (177)	331 (220)	1820 (1210)	425 (283)	238 (176)	329 (244)	1710 (1260)	380 (282)	175 (146)	245 (204)	1480 (1240)	281 (234)
22	20 (9)	418 (165)	454 (200)	343 (175)	274 (167)	341 (208)	1850 (1130)	438 (267)	207 (163)	287 (226)	1480 (1160)	332 (261)	168 (151)	235 (211)	1410 (1260)	269 (241)
23	19 (8)	380 (165)	399 (168)	260 (111)	235 (166)	294 (207)	1580 (1120)	377 (266)					125 (102)	175 (142)	1030 (837)	200 (163)
24	16 (6)	248 (136)	282 (166)	185 (115)	169 (111)	212 (139)	1130 (740)	271 (178)	156 (138)	216 (191)	1090 (966)	249 (221)	98 (86)	136 (120)	794 (703)	156 (138)
25	11 (5)	138 (78)	136 (114)	101 (59)	122 (89)	153 (112)	807 (588)	196 (143)	113 (122)	156 (169)	783 (848)	181 (196)	72 (47)	100 (66)	576 (377)	115 (75)
26	15 (5)	261 (125)	264 (140)	202 (112)	204 (112)	256 (141)	1330 (732)	327 (180)	159 (124)	220 (171)	1090 (849)	254 (198)	135 (87)	189 (121)	1070 (690)	216 (139)
27	14 (6)	364 (206)	352 (190)	262 (167)	260 (191)	327 (239)	1690 (1230)	417 (305)	174 (136)	241 (188)	1190 (926)	278 (217)				
28	8 (6)	426 (246)	424 (226)	323 (230)	268 (235)	336 (295)	1720 (1510)	428 (376)	167 (112)	231 (155)	1130 (755)	266 (179)				
29	11 (7)	423 (247)	495 (267)	309 (198)	262 (230)	330 (289)	1670 (1460)	419 (367)	192 (156)	267 (216)	1290 (1050)	307 (250)	156 (162)	218 (226)	1200 (1240)	249 (259)
30	17 (6)	449 (352)	446 (348)	312 (213)	287 (300)	362 (378)	1820 (1900)	460 (481)	192 (249)	267 (346)	1280 (1660)	308 (399)	147 (163)	206 (228)	1120 (1240)	235 (262)
31	14 (5)	398 (292)	381 (282)	314 (213)	250 (248)	316 (313)	1570 (1560)	401 (397)	189 (238)	262 (331)	1250 (1570)	303 (381)	159 (160)	222 (223)	1200 (1200)	254 (256)
Avg	14	328	332	246	217	271	1510	347	173	239	1280	276	129	180	1080	207
n	23	16	16	16	16	16	16	16	15	15	15	15	12	12	12	12
SD	5	113	118	88	61	77	352	98	38	53	284	61	38	53	280	61
Min	6	120	121	98	74	92	677	119	82	113	766	131	52	72	576	83
Max	30	497	495	387	287	362	1920	460	238	329	1710	380	175	245	1480	281

ED_004549_00015929-00137

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for November, 2008.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	17 (5)	421 (311)	341 (218)	331 (281)	283 (289)	357 (365)	1770 (1810)	452 (463)	185 (189)	257 (263)	1210 (1240)	296 (303)	188 (214)	263 (299)	1410 (1590)	301 (342)
2	24 (9)	361 (232)	451 (201)	372 (197)	248 (213)	314 (270)	1540 (1320)	397 (341)	256 (197)	356 (273)	1660 (1280)	410 (315)	182 (186)	254 (260)	1340 (1380)	291 (297)
3	31 (8)	323 (104)	348 (110)	231 (80)	231 (94)	292 (120)	1420 (582)	369 (151)					117 (73)	164 (101)	859 (531)	187 (116)
4	18 (8)	245 (77)	292 (121)	243 (102)	214 (72)	272 (91)	1310 (440)	343 (115)	266 (136)	370 (189)	1700 (872)	426 (218)	173 (96)	241 (134)	1250 (697)	276 (153)
5	19 (7)	257 (72)	289 (92)	265 (71)	246 (78)	312 (98)	1500 (471)	393 (124)	290 (101)	402 (140)	1840 (640)	463 (161)	211 (66)	296 (92)	1520 (471)	338 (105)
6	11 (6)	369 (194)	406 (261)	394 (241)	359 (174)	455 (221)	2170 (1050)	574 (279)	413 (306)	574 (425)	2600 (1930)	661 (490)	345 (255)	483 (357)	2470 (1820)	553 (409)
7	19 (6)	340 (245)	345 (212)	342 (218)	298 (187)	379 (237)	1790 (1120)	478 (299)	306 (183)	424 (254)	1910 (1140)	489 (293)	252 (169)	353 (236)	1790 (1200)	403 (270)
8					251 (191)	319 (242)	1500 (1140)	402 (305)								
9					286 (245)	363 (311)	1690 (1450)	457 (392)								
10	20 (6)	489 (204)	519 (245)	476 (228)	369 (227)	469 (289)	2170 (1340)	590 (364)	311 (203)	715 (467)	3290 (2150)	497 (325)	293 (217)	410 (304)	2030 (1510)	469 (347)
11	30 (9)	493 (263)	548 (249)	489 (267)	347 (249)	442 (316)	2040 (1460)	556 (398)	305 (231)	702 (530)	3210 (2420)	489 (369)	275 (225)	385 (316)	1900 (1560)	439 (360)
12	29 (9)	432 (260)	487 (280)	386 (212)	324 (248)	412 (316)	1890 (1450)	518 (397)	336 (253)	772 (583)	3510 (2650)	537 (405)	244 (170)	343 (239)	1680 (1170)	391 (273)
13	16 (9)	236 (168)	243 (197)	194 (140)	200 (141)	255 (180)	1160 (820)	321 (226)	209 (202)	482 (465)	2170 (2100)	335 (323)	144 (108)	202 (151)	984 (734)	231 (172)
14	16 (8)	168 (127)	205 (131)	239 (432)	158 (132)	201 (167)	907 (758)	252 (211)	204 (145)	470 (333)	2110 (1490)	326 (231)	188 (390)	264 (547)	1280 (2640)	301 (624)
15	9 (7)	127 (153)	174 (178)	254 (792)	141 (178)	179 (227)	805 (1020)	225 (285)	204 (216)	471 (499)	2100 (2220)	327 (346)	231 (607)	325 (852)	1560 (4080)	370 (971)
16	4 (6)	507 (246)	661 (326)	504 (651)	383 (232)	488 (296)	2180 (1320)	613 (372)	423 (328)	977 (757)	4330 (3350)	677 (524)	332 (379)	466 (532)	2220 (2540)	531 (606)
17	13 (6)	592 (167)	860 (255)	539 (189)	394 (225)	502 (286)	2230 (1270)	631 (359)	454 (276)	1050 (638)	4620 (2810)	726 (442)	285 (200)	401 (281)	1900 (1330)	457 (320)
18	11 (6)	555 (265)	895 (510)	666 (387)	391 (273)	606 (433)	2700 (1930)	625 (438)	342 (214)	790 (494)	3460 (2170)	547 (342)				
19	11 (5)	356 (257)	542 (325)	533 (233)	208 (229)	417 (458)	1860 (2050)	333 (367)	182 (164)	421 (381)	1840 (1660)	291 (263)	263 (248)	369 (349)	1730 (1640)	421 (397)
20	19 (8)	400 (208)	385 (153)	635 (393)	236 (206)	473 (412)	2100 (1830)	378 (329)	153 (151)	355 (349)	1540 (1510)	245 (241)	348 (359)	488 (504)	2280 (2350)	556 (574)
21	22 (23)	350 (180)	390 (157)	364 (219)	213 (176)	427 (352)	1890 (1560)	341 (282)								
22		397 (287)	450 (177)	446 (293)	240 (265)	480 (530)	2110 (2330)	383 (424)	130 (112)	301 (259)	1290 (1110)	208 (179)	247 (250)	347 (351)	1600 (1620)	395 (400)
23	15 (7)	415 (204)	483 (178)	485 (249)	225 (207)	450 (414)	1970 (1810)	359 (331)	143 (171)	333 (397)	1420 (1700)	229 (274)	230 (219)	322 (307)	1480 (1410)	367 (350)
24		405 (166)	490 (194)	606 (312)	223 (171)	447 (343)	1950 (1500)	357 (274)	179 (183)	416 (426)	1770 (1810)	287 (293)	282 (237)	396 (333)	1810 (1530)	451 (380)
25	13 (6)	366 (121)	425 (154)	648 (325)	228 (140)	457 (281)	1980 (1220)	364 (224)					375 (287)	613 (504)	2830 (2340)	599 (459)
26	14 (6)	458 (141)	526 (194)	783 (900)	233 (193)	467 (389)	2020 (1680)	372 (310)	150 (207)	349 (482)	1470 (2030)	240 (331)	393 (726)	754 (1390)	3510 (6490)	629 (1160)
27		391 (129)	462 (197)	314 (157)	211 (158)	424 (318)	1820 (1370)	337 (253)	160 (177)	372 (412)	1560 (1730)	256 (284)	145 (137)	279 (262)	1290 (1220)	232 (219)
28	20 (5)	351 (128)	395 (182)	309 (150)	219 (146)	441 (294)	1890 (1260)	350 (234)	193 (163)	449 (380)	1880 (1590)	309 (261)	174 (140)	334 (269)	1550 (1240)	278 (223)
29	23 (6)	388 (177)	397 (175)	321 (194)	211 (189)	426 (380)	1820 (1620)	338 (302)	158 (183)	368 (426)	1540 (1780)	253 (293)	152 (169)	293 (325)	1350 (1500)	243 (270)
30	10 (6)	294 (135)	296 (173)	245 (392)	196 (127)	395 (255)	1680 (1090)	314 (203)	164 (138)	380 (322)	1580 (1340)	262 (221)				
Avg	17	374	439	415	259	397	1800	414	245	502	2220	391	243	362	1750	388
n	25	28	28	28	30	30	30	30	25	25	25	25	25	25	25	25
SD	7	105	163	153	68	93	395	109	93	207	934	149	75	126	571	120
Min	4	127	174	194	141	179	805	225	130	257	1210	208	117	164	859	187
Max	31	592	895	783	394	606	2700	631	454	1050	4620	726	393	754	3510	629

ED_004549_00015929-00138

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for December, 2008.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	9 (5)	511 (236)	531 (256)	438 (462)	339 (239)	683 (482)	2900 (2050)	542 (382)					308 (340)	595 (657)	2720 (3000)	493 (544)
2	12 (6)	586 (243)	610 (281)	454 (280)	331 (288)	668 (580)	2830 (2460)	530 (460)	196 (278)	457 (647)	1890 (2670)	314 (445)	245 (254)	474 (490)	2160 (2230)	392 (406)
3		558 (255)	685 (339)	498 (339)	311 (282)	627 (569)	2640 (2400)	497 (451)	210 (298)	489 (694)	2010 (2860)	336 (477)	225 (264)	435 (510)	1970 (2310)	360 (422)
4	15 (4)	457 (252)	579 (358)	434 (277)	273 (247)	551 (498)	2320 (2090)	436 (395)	203 (260)	474 (606)	1940 (2490)	325 (416)	232 (233)	448 (451)	2030 (2040)	371 (373)
5	24 (8)	463 (215)	463 (234)	400 (255)	270 (235)	545 (474)	2280 (1990)	431 (375)					258 (220)	500 (425)	2250 (1920)	413 (351)
6	17 (7)	555 (224)	578 (288)	530 (253)	312 (259)	631 (523)	2630 (2180)	499 (414)	207 (258)	483 (601)	1970 (2450)	331 (412)	273 (250)	529 (484)	2380 (2180)	437 (400)
7	15 (6)	702 (190)	699 (212)	659 (189)	333 (299)	675 (606)	2810 (2520)	533 (479)	160 (244)	374 (569)	1520 (2310)	257 (390)	294 (264)	569 (512)	2550 (2290)	470 (423)
8		664 (297)	714 (264)	604 (232)	315 (326)	638 (660)	2650 (2740)	504 (522)	175 (279)	408 (651)	1650 (2640)	280 (446)	240 (252)	466 (489)	2080 (2180)	385 (403)
9	13 (7)	352 (170)	410 (235)	358 (186)	237 (151)	481 (306)	1990 (1270)	380 (242)	183 (155)	427 (361)	1730 (1460)	293 (248)	220 (157)	427 (305)	1900 (1360)	352 (251)
10	11 (8)	187 (77)	158 (96)	140 (76)	176 (77)	356 (156)	1470 (643)	281 (123)	133 (80)	311 (187)	1250 (753)	213 (128)	137 (85)	265 (164)	1180 (728)	218 (135)
11	10 (10)	105 (61)	133 (78)	92 (66)	104 (64)	211 (130)	865 (536)	166 (103)	106 (60)	247 (140)	990 (563)	169 (96)	89 (71)	173 (137)	762 (605)	142 (113)
12	6 (7)	366 (148)	427 (181)	392 (164)	272 (130)	551 (262)	2250 (1070)	435 (207)					287 (137)	559 (266)	2460 (1170)	459 (219)
13		593 (210)	654 (250)	616 (258)												
14	14 (6)	414 (212)	467 (291)	415 (226)	238 (198)	482 (401)	1960 (1630)	381 (317)	191 (202)	446 (472)	1770 (1870)	305 (323)	222 (202)	433 (393)	1890 (1720)	355 (322)
15	14 (5)	241 (129)	237 (158)	256 (133)	195 (112)	395 (226)	1600 (915)	312 (179)	183 (141)	429 (331)	1700 (1310)	294 (226)	206 (131)	402 (255)	1740 (1110)	329 (209)
16	10 (7)	302 (252)	295 (185)	344 (246)	215 (211)	435 (427)	1750 (1720)	344 (338)	187 (161)	437 (377)	1720 (1480)	299 (258)	214 (213)	417 (416)	1800 (1800)	342 (341)
17	8 (7)	267 (155)	263 (164)	315 (230)	213 (152)	431 (308)	1730 (1230)	341 (243)								
18	20 (15)	171 (93)	206 (140)	169 (212)	128 (88)	259 (177)	1030 (709)	204 (140)	138 (115)	323 (269)	1260 (1050)	220 (184)	117 (163)	303 (421)	1290 (1790)	188 (261)
19	12 (5)	178 (82)	207 (122)	149 (621)	161 (76)	326 (154)	1300 (612)	258 (122)	157 (111)	368 (259)	1430 (1000)	252 (177)	122 (545)	314 (1410)	1320 (5940)	195 (872)
20	16 (7)															
21	13 (15)															
22																
23																
24																
25	9 (5)															
26	10 (5)															
27	9 (5)															
28	8 (5)															
29	7 (6)	531 (667)		16 (33)												
30	7 (5)	279 (151)	122 (78)	12 (80)	126 (120)	150 (142)	3400 (3210)	202 (191)					2 (36)			4 (57)
31																
Avg	12	404	422	347	239	479	2130	383	174	405	1630	278	205	430	1910	328
n	24	21	20	21	19	19	19	19	14	14	14	14	18	17	17	18
SD	4	172	200	188	74	159	673	118	30	69	295	48	79	110	511	126
Min	6	105	122	12	104	150	865	166	106	247	990	169	2	173	762	4
Max	24	702	714	659	339	683	3400	542	210	489	2010	336	308	595	2720	493

ED_004549_00015929-00139

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for January, 2009.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1		432 (227)	380 (173)	486 (281)					97 (109)	118 (133)	2520 (2830)	156 (175)				
2		297 (114)	219 (92)	232 (114)												
3	13 (8)	378 (232)	131 (82)	228 (98)	134 (204)	160 (243)	3250 (4920)	215 (326)								
4	17 (5)	260 (134)	180 (82)	196 (92)	84 (121)	100 (145)	1990 (2880)	134 (194)								
5	13 (6)	208 (129)	197 (108)	164 (127)	96 (110)	114 (132)	2210 (2550)	153 (176)								
6	13 (5)	146 (104)	207 (103)	158 (79)	81 (89)	96 (106)	1830 (2020)	129 (142)								
7	5 (7)	167 (152)	244 (130)	204 (139)	68 (98)	81 (117)	1530 (2180)	109 (156)	86 (83)	105 (101)	1970 (1880)	138 (132)				
8	7 (5)	315 (161)	384 (201)	384 (190)	87 (133)	104 (159)	1910 (2920)	139 (212)								
9	11 (4)	341 (173)	350 (139)	403 (187)	100 (161)	120 (193)	2160 (3480)	160 (258)	66 (60)	80 (73)	1440 (1320)	105 (96)				
10	9 (5)	239 (118)	282 (158)	283 (156)	82 (125)	98 (150)	1750 (2660)	131 (200)								
11	11 (7)		407 (281)	358 (249)	134 (239)	161 (287)	2800 (5000)	214 (382)								
12	17 (5)	1280 (510)	1130 (489)	1220 (568)	267 (458)	320 (550)	5510 (9460)	427 (733)								
13	17 (6)	1090 (414)	948 (312)	1030 (383)	225 (384)	270 (462)	4570 (7810)	360 (615)	146 (240)	178 (293)	3000 (4940)	234 (384)				
14	18 (8)	1190 (533)	1090 (367)	1050 (310)	250 (463)	300 (556)	5000 (9260)	399 (740)	178 (195)	218 (238)	3600 (3950)	285 (312)				
15	13 (5)	988 (449)	1230 (542)	989 (298)	230 (410)	276 (493)	4530 (8090)	367 (656)								
16		1070 (512)	1630 (610)	1300 (461)	247 (424)	297 (511)	4800 (8250)	395 (679)								
17		1110 (544)	1300 (401)	1180 (395)	266 (468)	321 (564)	5090 (8950)	426 (749)	287 (342)	352 (419)	5550 (6600)	460 (547)				
18	11 (4)	776 (817)	710 (483)	577 (397)	180 (405)	216 (488)	3380 (7620)	287 (648)								
19	10 (5)	516 (210)	363 (176)	254 (94)	107 (184)	129 (222)	1980 (3390)	171 (294)	90 (86)	111 (105)	1680 (1590)	144 (137)				
20		588 (210)	408 (146)	266 (90)	110 (186)	133 (224)	2000 (3380)	176 (298)	99 (87)	121 (107)	1810 (1590)	158 (139)				
21		686 (278)	528 (212)	329 (104)	130 (232)	157 (280)	2330 (4150)	208 (372)	108 (145)	133 (178)	1950 (2610)	173 (232)				
22		494 (200)	477 (196)	278 (98)	117 (198)	141 (239)	2050 (3480)	187 (316)								
23	24 (6)	369 (183)	436 (179)	244 (112)	106 (171)	128 (207)	1820 (2950)	169 (274)								
24	19 (7)	332 (189)	373 (138)	205 (95)	112 (175)	135 (211)	1890 (2950)	179 (279)								
25																
26	19 (7)	341 (232)	493 (223)	272 (159)	98 (181)	118 (219)	1600 (2960)	157 (290)	105 (141)	129 (173)	1720 (2310)	168 (225)				
27	18 (9)	229 (206)	326 (144)	144 (99)	89 (150)	108 (181)	1420 (2400)	142 (240)								
28	11 (8)	147 (147)	179 (137)	105 (75)	85 (108)	102 (130)	1330 (1690)	135 (172)	84 (88)	104 (109)	1330 (1390)	135 (141)				
29	11 (6)	303 (270)	253 (180)	260 (173)	129 (206)	156 (250)	1980 (3170)	206 (330)	65 (98)	81 (120)	1010 (1510)	104 (156)				
30	13 (8)	321 (259)	269 (149)		119 (202)	144 (244)	1790 (3040)	190 (323)								
31	14 (20)	300 (234)	331 (175)	354 (202)	94 (175)	114 (211)	1390 (2580)	150 (279)								
Avg	14	514	515	454	137	164	2640	218	118	144	2300	188				
n	23	29	30	29	28	28	28	28	12	12	12	12	0	0	0	0
SD	4	344	383	362	62	75	1290	100	60	73	1200	95				
Min	5	146	131	105	68	81	1330	109	65	80	1010	104				
Max	24	1280	1630	1300	267	321	5510	427	287	352	5550	460				

ED_004549_00015929-00140

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for February, 2009.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	13 (6)	233 (212)	292 (146)	297 (173)	116 (173)	141 (209)	1680 (2500)	186 (276)								
2	15 (5)	219 (261)	255 (175)	333 (221)	130 (181)	157 (219)	1840 (2560)	208 (289)								
3	8 (5)	210 (255)	264 (228)	365 (217)	90 (155)	108 (188)	1240 (2140)	143 (248)	80 (112)	99 (138)	1110 (1560)	128 (179)				
4	10 (5)	375 (273)	316 (185)	475 (239)	88 (157)	106 (190)	1190 (2130)	141 (251)								
5		419 (159)	334 (134)	553 (179)	74 (125)	89 (152)	977 (1660)	118 (200)	80 (94)	99 (116)	1070 (1250)	128 (150)				
6		387 (136)	312 (128)	547 (210)	94 (143)	114 (174)	1220 (1860)	150 (229)								
7	29 (8)	361 (131)	244 (98)	453 (182)	132 (146)	160 (177)	1670 (1850)	211 (233)	97 (104)	120 (128)	1240 (1320)	155 (166)				
8	26 (9)	337 (149)	203 (63)	356 (151)	144 (149)	175 (181)	1790 (1860)	230 (238)	110 (98)	136 (122)	1370 (1220)	176 (157)				
9	26 (11)	366 (236)	212 (91)	340 (167)	162 (189)	197 (230)	1980 (2310)	259 (302)	95 (97)	118 (120)	1170 (1180)	152 (154)	187 (139)	237 (177)	2490 (1860)	299 (223)
10	20 (8)	166 (95)	163 (89)	250 (133)	73 (73)	88 (88)	867 (868)	116 (116)	78 (70)	97 (87)	935 (839)	125 (112)	161 (107)	205 (136)	2110 (1400)	258 (171)
11	13 (6)	169 (103)	123 (65)	237 (129)	104 (81)	126 (98)	1210 (946)	166 (129)	77 (60)	96 (74)	902 (703)	123 (96)	176 (123)	224 (156)	2260 (1570)	282 (196)
12	13 (5)	262 (157)	155 (87)	312 (190)	154 (129)	188 (157)	1760 (1470)	247 (206)	97 (73)	120 (91)	1110 (838)	154 (117)	229 (165)	291 (210)	2870 (2070)	366 (264)
13	13 (8)	371 (239)	193 (101)	387 (208)	188 (186)	229 (226)	2110 (2080)	301 (297)	102 (105)	127 (130)	1150 (1180)	164 (168)				
14	16 (6)	390 (238)	182 (88)	365 (213)	162 (185)	197 (225)	1780 (2030)	259 (296)	49 (58)	62 (72)	546 (639)	79 (93)				
15	20 (6)	621 (443)	310 (164)	451 (240)	202 (296)	246 (360)	2170 (3180)	324 (474)	92 (111)	114 (138)	988 (1190)	146 (177)				
16	19 (5)	788 (311)	403 (152)	530 (161)	183 (283)	223 (344)	1920 (2970)	293 (452)	107 (114)	133 (142)	1130 (1210)	171 (182)				
17		673 (262)	504 (207)	647 (221)	207 (276)	252 (336)	2130 (2850)	331 (442)	149 (169)	185 (210)	1540 (1750)	238 (270)				
18	10 (6)	396 (210)	352 (172)	383 (224)	167 (172)	204 (210)	1690 (1740)	267 (275)	145 (113)	180 (142)	1470 (1160)	231 (182)				
19	10 (6)	446 (280)	335 (166)	287 (165)	264 (221)	322 (269)	2620 (2180)	423 (354)	218 (142)	272 (177)	2170 (1420)	348 (227)	188 (122)	241 (157)	2050 (1330)	300 (196)
20																
21		510 (276)	485 (156)	461 (201)												
22																
23																
24																
25																
26																
27																
28	12 (8)	460 (116)	419 (102)		262 (130)	320 (159)	2190 (1090)	419 (208)	233 (127)	291 (159)	1970 (1080)	372 (203)				
Avg	16	388	288	401	150	182	1700	240	113	141	1240	181	188	240	2350	301
n	17	21	21	20	20	20	20	20	16	16	16	16	5	5	5	5
SD	6	158	103	107	55	68	445	89	49	61	388	78	22	29	298	36
Min	8	166	123	237	73	88	867	116	49	62	546	79	161	205	2050	258
Max	29	788	504	647	264	322	2620	423	233	291	2170	372	229	291	2870	366

ED_004549_00015929-00141

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for March, 2009.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	8 (5)	799 (334)	567 (200)		225 (289)	275 (354)	1850 (2390)	360 (463)	215 (189)	269 (236)	1790 (1570)	345 (302)				
2	11 (6)	701 (343)	621 (288)		210 (295)	257 (361)	1700 (2390)	335 (472)	274 (231)	342 (290)	2240 (1900)	438 (370)				
3		646 (246)	708 (273)		191 (258)	234 (316)	1520 (2050)	306 (413)	288 (254)	360 (317)	2320 (2050)	460 (406)				
4		756 (361)	629 (237)		290 (343)	355 (420)	2270 (2690)	464 (550)	231 (229)	290 (288)	1840 (1830)	370 (367)				
5	12 (5)	618 (400)	545 (357)		253 (291)	310 (356)	1950 (2250)	405 (466)	274 (243)	343 (305)	2150 (1910)	438 (389)				
6	14 (7)	350 (199)	322 (178)		232 (174)	284 (213)	1760 (1330)	371 (279)	276 (217)	347 (273)	2130 (1680)	442 (347)				
7	22 (8)	314 (175)	275 (158)		265 (158)	324 (194)	1980 (1190)	424 (253)	290 (184)	365 (232)	2210 (1410)	464 (295)				
8	24 (6)	372 (132)	296 (125)		383 (219)	468 (268)	2820 (1610)	612 (351)	444 (348)	559 (438)	3340 (2620)	710 (557)				
9	21 (7)	503 (157)	407 (123)		612 (383)	749 (469)	4450 (2780)	979 (613)	558 (325)	703 (409)	4150 (2410)	893 (520)				
10	25 (9)	662 (317)	552 (249)		508 (315)	622 (386)	3650 (2270)	813 (505)	457 (281)	576 (354)	3350 (2060)	731 (449)				
11	29 (12)	424 (301)	357 (169)		392 (230)	480 (281)	2770 (1630)	627 (368)	414 (241)	522 (304)	3000 (1750)	663 (386)				
12	30 (20)	622 (297)	563 (240)		464 (274)	569 (335)	3250 (1910)	743 (438)	412 (231)	520 (291)	2950 (1650)	659 (369)				
13	20 (11)	654 (331)	556 (263)		334 (302)	409 (370)	2310 (2090)	535 (484)	241 (220)	304 (277)	1700 (1560)	385 (352)				
14	14 (5)	425 (214)	429 (158)		231 (191)	283 (234)	1580 (1300)	370 (306)	191 (146)	241 (185)	1330 (1030)	305 (234)				
15	14 (8)	399 (156)	425 (116)		248 (135)	303 (165)	1670 (910)	397 (216)	240 (121)	302 (153)	1660 (839)	383 (194)				
16	15 (9)	411 (166)	456 (165)		269 (126)	330 (154)	1800 (838)	431 (201)	283 (134)	357 (169)	1930 (919)	452 (215)				
17	16 (11)	410 (169)	506 (190)		272 (130)	333 (159)	1790 (855)	435 (207)	321 (159)	406 (201)	2170 (1080)	514 (254)				
18	14 (8)	426 (169)	541 (211)		330 (171)	405 (210)	2150 (1120)	528 (274)	427 (263)	540 (332)	2860 (1760)	683 (420)				
19	15 (9)	408 (269)	421 (207)		359 (231)	440 (284)	2320 (1500)	575 (370)	437 (256)	553 (323)	2900 (1700)	700 (409)				
20	24 (11)	393 (159)	391 (160)		310 (155)	380 (190)	1980 (988)	496 (248)	323 (186)	408 (235)	2120 (1220)	516 (297)				
21	23 (7)	512 (176)	360 (152)		397 (183)	487 (225)	2510 (1160)	635 (293)	261 (161)	330 (203)	1700 (1050)	418 (257)				
22	21 (8)	683 (278)	327 (149)		599 (318)	734 (391)	3750 (2000)	958 (509)	277 (211)	350 (266)	1790 (1360)	443 (337)				
23	26 (17)	684 (324)	288 (158)		642 (387)	788 (475)	4000 (2410)	1030 (619)	271 (223)	342 (281)	1730 (1420)	433 (356)				
24	26 (14)	718 (468)	308 (198)		612 (420)	752 (515)	3780 (2590)	979 (671)	245 (193)	310 (244)	1550 (1220)	392 (309)				
25	26 (11)	673 (532)	347 (231)		536 (467)	659 (574)	3290 (2860)	858 (747)	239 (212)	302 (269)	1500 (1340)	382 (340)				
26	15 (7)	339 (249)	256 (151)		340 (264)	419 (324)	2070 (1600)	545 (422)	251 (148)	318 (188)	1570 (927)	402 (237)				
27	18 (7)	217 (245)	201 (149)		269 (341)	331 (419)	1620 (2060)	430 (545)	229 (193)	291 (245)	1420 (1200)	367 (309)				
28	16 (6)	227 (121)	188 (65)		315 (180)	388 (222)	1890 (1080)	504 (289)	304 (134)	386 (171)	1870 (827)	486 (215)				
29	20 (17)	359 (106)	333 (97)		574 (289)	708 (356)	3430 (1720)	919 (462)	533 (252)	678 (321)	3260 (1540)	854 (404)				
30	12 (8)	595 (208)	605 (202)		552 (271)	681 (334)	3270 (1600)	884 (433)	568 (360)	722 (457)	3450 (2190)	908 (576)				
31	22 (9)	494 (194)	493 (194)		463 (230)	571 (284)	2730 (1360)	741 (368)	503 (300)	640 (382)	3040 (1810)	805 (480)				
Avg	19	510	428		377	462	2510	603	331	419	2290	530				
n	29	31	31	0	31	31	31	31	31	31	31	31	0	0	0	0
SD	6	159	134		138	169	822	220	108	137	720	173				
Min	8	217	188		191	234	1520	306	191	241	1330	305				
Max	30	799	708		642	788	4450	1030	568	722	4150	908				

ED_004549_00015929-00142

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for April, 2009.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	16 (7)	381 (190)	340 (138)		368 (226)	454 (279)	2160 (1320)	589 (362)	338 (142)	430 (181)	2030 (854)	541 (228)				
2	10 (6)	290 (178)	274 (118)		258 (169)	318 (209)	1500 (986)	413 (271)	294 (121)	374 (154)	1750 (722)	470 (194)				
3	23 (11)	244 (98)	243 (110)		336 (200)	415 (246)	1940 (1150)	537 (319)	432 (298)	549 (379)	2550 (1760)	691 (477)				
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20	18 (7)	296 (105)	186 (65)		409 (198)	654 (317)	2890 (1400)	654 (317)	286 (189)	479 (317)	2100 (1390)	457 (302)				
21	15 (7)	359 (131)	257 (98)		462 (249)	800 (442)	3560 (1970)	738 (399)	385 (253)	705 (471)	3100 (2070)	616 (405)				
22	41 (41)	484 (186)	397 (134)		420 (207)	789 (390)	3520 (1740)	672 (332)	333 (158)	662 (313)	2910 (1380)	533 (252)				
23	34 (53)	400 (215)	327 (171)		435 (211)	818 (396)	3640 (1760)	696 (337)	362 (194)	720 (386)	3150 (1690)	579 (310)				
24	29 (12)	278 (183)	236 (170)		327 (161)	616 (304)	2730 (1350)	523 (258)	288 (150)	572 (299)	2500 (1300)	460 (240)				
25																
26																
27																
28																
29																
30																
Avg	23	341	283		377	608	2740	603	340	561	2510	543				
n	8	8	8	0	8	8	8	8	8	8	8	8	0	0	0	0
SD	10	74	63		63	181	759	101	49	120	487	78				
Min	10	244	186		258	318	1500	413	286	374	1750	457				
Max	41	484	397		462	818	3640	738	432	720	3150	691				

ED_004549_00015929-00143

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for May, 2009.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1																
2																
3																
4	24 (12)	213 (68)	169 (62)		370 (152)	701 (287)	2970 (1220)	592 (243)	345 (175)	692 (351)	2920 (1480)	552 (280)				
5	14 (7)	203 (91)	180 (95)		268 (112)	508 (212)	2140 (893)	430 (179)	262 (102)	525 (205)	2200 (862)	419 (164)				
6	13 (6)	160 (62)	134 (57)		284 (98)	2850 (14500)	53500 (363000)	454 (157)	288 (148)	577 (297)	2410 (1240)	460 (237)				
7	13 (7)	112 (103)	160 (77)		174 (202)			278 (323)	273 (129)	547 (259)	2280 (1080)	437 (207)				
8	22 (6)	33 (32)	137 (70)		5 (11)			8 (18)	228 (88)	457 (176)	1900 (731)	365 (141)				
9	22 (6)	29 (12)	155 (63)		4 (26)			7 (41)	345 (165)	692 (331)	2850 (1360)	553 (264)				
10	22 (9)	25 (9)	257 (89)		1 (5)			2 (8)	448 (191)	897 (384)	3680 (1570)	716 (306)				
11	23 (8)	21 (12)	412 (174)		-8 (26)			-12 (42)	383 (167)	767 (334)	3130 (1360)	613 (267)				
12	20 (12)	21 (15)	435 (220)		1 (22)			2 (35)	448 (234)	897 (469)	3640 (1900)	716 (374)				
13	27 (13)	34 (34)	348 (286)		6 (28)			10 (45)	503 (518)			805 (830)				
14	14 (7)	27 (14)	22 (34)		10 (9)			16 (15)	4 (47)			7 (76)				
15	7 (4)	20 (10)	6 (28)		10 (7)			15 (12)	-6 (78)			-9 (124)				
16	8 (5)		7 (44)						0 (117)			0 (186)				
17	12 (6)		-1 (34)						-6 (15)			-9 (23)				
18	11 (6)															
19	13 (7)															
20	15 (19)															
21	11 (8)															
22	13 (10)															
23	10 (6)															
24	10 (5)															
25	10 (6)															
26	9 (5)															
27	15 (12)															
28	13 (7)															
29	16 (7)															
30	19 (7)															
31	17 (6)															
Avg	15	75	173		94	1350	19500	150	251	672	2780	402				
n	28	12	14	0	12	3	3	12	14	9	9	14	0	0	0	0
SD	5	73	140		134	1060	24000	214	176	150	597	282				
Min	7	20	-1		-8	508	2140	-12	-6	457	1900	-9				
Max	27	213	435		370	2850	53500	592	503	897	3680	805				

ED_004549_00015929-00144

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for June, 2009.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	26 (7)															
2	19 (6)															
3	16 (9)	72 (43)			71 (62)	101 (88)	1900 (1660)	114 (100)								
4	18 (9)	72 (87)			62 (88)	87 (125)	1620 (2320)	98 (141)								
5	13 (7)	68 (53)			60 (55)	86 (78)	1560 (1410)	96 (87)								
6	15 (6)	103 (36)			60 (29)	85 (41)	1530 (732)	96 (46)								
7	11 (7)	94 (37)			76 (46)	109 (66)	1930 (1160)	122 (73)								
8	12 (6)	93 (43)			96 (72)	137 (103)	2390 (1790)	153 (114)								
9	15 (10)	94 (35)			93 (61)	134 (88)	2300 (1500)	149 (98)								
10	12 (7)	121 (51)			114 (62)	165 (90)	2780 (1520)	183 (100)								
11	19 (7)	98 (44)			105 (82)	152 (118)	2540 (1970)	169 (131)								
12	23 (8)	108 (58)			110 (77)	159 (112)	2610 (1830)	176 (123)								
13	18 (8)	88 (55)			106 (109)	154 (158)	2480 (2550)	169 (174)								
14	22 (8)	111 (53)			116 (91)	169 (133)	2680 (2110)	185 (146)								
15	23 (12)	131 (54)	116 (55)		118 (76)	172 (111)	2680 (1740)	188 (122)	149 (148)	192 (190)	3930 (3880)	239 (236)				
16	13 (7)	157 (48)	114 (34)		110 (42)	160 (61)	2470 (946)	175 (67)	95 (43)	123 (55)	2470 (1110)	152 (69)				
17	19 (4)	120 (46)	92 (27)		96 (55)	141 (80)	2140 (1210)	154 (87)	107 (61)	138 (79)	2730 (1560)	171 (98)				
18	17 (6)	93 (58)	69 (29)		93 (84)	136 (122)	2030 (1820)	148 (134)	87 (51)	113 (66)	2190 (1280)	139 (81)				
19	26 (9)	94 (52)	76 (26)		123 (123)	180 (180)	2640 (2640)	196 (197)	107 (72)	139 (93)	2670 (1790)	172 (115)				
20	30 (14)	78 (43)	66 (22)		82 (104)	120 (153)	1740 (2210)	131 (167)	81 (63)	106 (82)	1990 (1530)	130 (101)				
21																
22																
23																
24																
25																
26																
27																
28	26 (7)	173 (78)	162 (77)		193 (90)	284 (132)	3540 (1650)	308 (144)	223 (106)	293 (139)	4790 (2270)	357 (170)				
29	28 (6)	146 (62)	136 (54)		192 (161)	283 (237)	3460 (2890)	308 (257)	203 (128)	266 (168)	4280 (2700)	325 (205)				
30	34 (21)	168 (75)	182 (101)		178 (130)	263 (192)	3150 (2300)	286 (209)	233 (209)	306 (275)	4830 (4330)	373 (334)				
Avg	20	109	112		107	156	2390	172	143	186	3320	229				
n	23	21	9	0	21	21	21	21	9	9	9	9	0	0	0	0
SD	6	30	39		38	57	562	61	58	76	1070	92				
Min	11	68	66		60	85	1530	96	81	106	1990	130				
Max	34	173	182		193	284	3540	308	233	306	4830	373				

ED_004549_00015929-00145

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for July, 2009.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	26 (11)	166 (74)	158 (68)		215 (116)	317 (170)	3720 (1990)	344 (185)	207 (107)	273 (140)	4220 (2160)	332 (171)				
2	25 (7)	121 (51)	121 (46)						167 (110)	220 (146)	3330 (2200)	267 (177)				
3	21 (8)	175 (74)	188 (74)		188 (107)	277 (157)	3130 (1780)	300 (171)	234 (152)	309 (201)	4590 (2980)	374 (243)				
4	22 (13)	199 (125)	210 (111)		209 (182)	308 (269)	3410 (2960)	334 (291)	219 (158)	290 (209)	4220 (3040)	350 (253)				
5	26 (7)	111 (69)	113 (76)		105 (78)	154 (115)	1680 (1250)	167 (125)	118 (92)	156 (122)	2230 (1740)	188 (147)				
6	24 (10)	105 (53)	86 (60)		105 (55)	156 (81)	1650 (856)	169 (87)	95 (62)	127 (82)	1770 (1150)	153 (99)				
7	32 (7)	123 (48)	103 (48)		148 (98)	218 (145)	2270 (1510)	236 (158)	121 (94)	161 (125)	2200 (1710)	194 (151)				
8	27 (9)	131 (76)	93 (61)		135 (131)	199 (193)	2030 (1970)	216 (210)	92 (117)	122 (155)	1640 (2080)	147 (187)				
9	27 (8)	157 (55)	98 (41)		169 (81)	249 (120)	2490 (1190)	270 (130)	112 (72)	148 (95)	1950 (1250)	178 (115)				
10	21 (7)	171 (87)	134 (66)		192 (121)	283 (178)	2780 (1740)	307 (193)	135 (73)	180 (97)	2320 (1250)	216 (117)				
11	16 (9)	130 (62)	119 (54)		143 (63)	211 (93)	2030 (892)	228 (101)	142 (61)	189 (82)	2380 (1020)	227 (98)				
12	18 (9)	117 (54)	113 (52)		164 (58)	242 (85)	2280 (807)	262 (92)	171 (67)	228 (90)	2810 (1110)	274 (108)				
13	17 (6)	124 (50)	106 (40)		127 (61)	188 (89)	1740 (831)	204 (97)	128 (61)	170 (82)	2060 (992)	205 (98)				
14	26 (14)	99 (22)	109 (35)		110 (47)	162 (69)	1470 (627)	176 (75)	134 (74)	178 (98)	2110 (1160)	214 (118)				
15	29 (10)	122 (41)	131 (61)		147 (103)	217 (152)	1930 (1350)	235 (165)	176 (155)	234 (207)	2710 (2390)	281 (249)				
16	24 (8)	90 (39)	86 (48)		96 (57)	142 (84)	1240 (736)	153 (91)	102 (81)	136 (108)	1540 (1220)	163 (129)				
17	18 (10)	73 (37)	61 (26)		76 (62)	112 (92)	958 (787)	121 (100)	75 (60)	99 (80)	1100 (891)	119 (97)				
18	22 (10)	90 (26)	67 (27)		117 (59)	172 (88)	1440 (732)	186 (95)	95 (63)	127 (84)	1380 (912)	152 (101)				
19	29 (7)	122 (57)	105 (56)		144 (62)	213 (92)	1760 (759)	230 (99)	148 (82)	197 (110)	2100 (1170)	237 (132)				
20	22 (9)	96 (37)	88 (37)		106 (67)	157 (99)	1270 (800)	170 (107)	139 (117)	185 (156)	1930 (1610)	222 (187)				
21	27 (11)	98 (47)	104 (49)		96 (88)	141 (130)	1120 (1030)	153 (141)	122 (110)	163 (147)	1660 (1490)	195 (176)				
22	19 (11)	95 (61)	90 (68)		93 (87)	137 (129)	1070 (1010)	149 (140)	103 (86)	137 (115)	1370 (1150)	164 (138)				
23	15 (9)	74 (46)	51 (31)		83 (75)	122 (111)	937 (851)	132 (120)	71 (74)	95 (99)	930 (966)	114 (118)				
24	22 (9)	80 (40)	56 (33)		82 (66)	121 (98)	915 (735)	132 (106)	66 (82)	88 (109)	845 (1050)	106 (131)				
25	23 (6)	74 (46)	60 (34)		74 (85)	109 (125)	806 (927)	118 (136)	76 (81)	101 (108)	952 (1020)	121 (130)				
26																
27																
28																
29																
30																
31																
Avg	23	118	106		130	192	1840	208	130	173	2170	208				
n	25	25	25	0	24	24	24	24	25	25	25	25	0	0	0	0
SD	4	33	37		41	61	794	66	45	59	996	72				
Min	15	73	51		74	109	806	118	66	88	845	106				
Max	32	199	210		215	317	3720	344	234	309	4590	374				

ED_004549_00015929-00146

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for August, 2009.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm	mg dsm	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd	mg d^{-1} AU	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1																
2																
3																
4																
5																
6																
7																
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25																
26																
27																
28	27 (14)	127 (47)	111 (32)		157 (52)	234 (78)	1180 (395)	251 (84)	187 (73)	255 (99)	1440 (561)	300 (116)				
29	23 (9)	114 (38)	106 (25)		172 (61)	257 (91)	1290 (458)	275 (98)	188 (68)	256 (92)	1430 (512)	300 (108)				
30	31 (26)	111 (45)	118 (81)		155 (127)	232 (189)	1160 (944)	248 (203)	206 (224)	281 (306)	1560 (1690)	330 (359)				
31																
Avg	27	117	112		161	241	1210	258	194	264	1480	310				
n	3	3	3	0	3	3	3	3	3	3	3	3	0	0	0	0
SD	3	7	5		8	11	57	12	9	12	59	14				
Min	23	111	106		155	232	1160	248	187	255	1430	300				
Max	31	127	118		172	257	1290	275	206	281	1560	330				

ED_004549_00015929-00147

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for September, 2009.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	28 (7)	202 (72)	212 (65)		229 (94)	343 (141)	1690 (693)	366 (150)	324 (128)	441 (174)	2400 (947)	518 (204)				
2	28 (6)	222 (85)	239 (113)		216 (89)	326 (133)	1600 (654)	346 (142)	325 (152)	443 (207)	2390 (1120)	520 (243)				
3	24 (6)	157 (70)	147 (62)		175 (72)	263 (109)	1290 (531)	280 (116)	222 (87)	303 (118)	1630 (633)	356 (138)				
4	25 (8)	177 (70)	203 (101)		192 (100)	290 (151)	1410 (733)	307 (160)	289 (168)	394 (229)	2100 (1220)	462 (268)				
5	26 (7)	216 (100)	255 (132)		256 (132)	387 (200)	1870 (965)	410 (212)	346 (183)	472 (249)	2490 (1310)	554 (292)				
6	37 (34)	240 (111)	219 (173)		300 (200)	454 (302)	2180 (1450)	480 (319)	318 (351)	434 (478)	2280 (2510)	509 (561)				
7	14 (8)	170 (70)	81 (30)		211 (90)	319 (136)	1520 (652)	337 (144)	145 (61)	198 (83)	1030 (434)	232 (97)				
8	11 (5)	149 (51)	79 (26)		204 (87)	308 (131)	1470 (625)	326 (139)	145 (53)	198 (72)	1020 (374)	232 (85)				
9	44 (38)	224 (120)	187 (112)		248 (158)	375 (239)	1780 (1130)	397 (253)	249 (229)	340 (313)	1750 (1610)	398 (366)				
10	24 (6)	214 (84)	159 (64)		200 (97)	303 (147)	1430 (693)	321 (155)	210 (103)	287 (141)	1470 (722)	336 (165)				
11	28 (41)	239 (162)	201 (153)		251 (175)	409 (297)	1920 (1400)	402 (281)	262 (188)	358 (257)	1820 (1310)	419 (301)				
12	20 (7)	142 (64)	151 (98)		152 (98)	268 (172)	1250 (808)	244 (157)	167 (102)	229 (140)	1160 (707)	268 (163)				
13	20 (10)	160 (85)	142 (95)		187 (113)	328 (200)	1530 (931)	298 (181)	194 (157)	265 (214)	1330 (1080)	310 (251)				
14	48 (53)	210 (132)	194 (134)		217 (182)	382 (320)	1770 (1490)	347 (291)	197 (151)	269 (206)	1350 (1030)	315 (241)				
15	40 (63)	194 (132)	188 (135)		252 (326)	484 (635)	2280 (3000)	403 (521)	225 (196)	307 (269)	1530 (1340)	359 (314)				
16	34 (19)	127 (80)	111 (66)		122 (115)	257 (241)	1230 (1150)	196 (184)	133 (102)	182 (140)	901 (695)	212 (164)				
17	38 (34)	119 (58)	101 (41)		106 (92)	223 (194)	1060 (926)	170 (148)	112 (123)	153 (168)	754 (830)	179 (196)				
18	23 (7)	125 (59)	107 (55)		124 (80)	262 (169)	1250 (803)	199 (128)	143 (101)	196 (139)	966 (682)	229 (162)				
19	22 (7)	119 (72)	117 (66)		115 (87)	244 (184)	1150 (869)	184 (139)	154 (99)	211 (135)	1040 (661)	247 (158)				
20	31 (24)	173 (84)	157 (74)		166 (88)	352 (186)	1660 (877)	266 (140)	203 (120)	279 (165)	1360 (804)	325 (192)				
21	22 (6)	180 (116)	177 (92)		184 (111)	390 (235)	1830 (1110)	294 (177)	244 (125)	334 (171)	1620 (833)	390 (200)				
22	12 (10)	78 (34)	56 (17)		90 (36)	192 (77)	898 (362)	144 (58)	99 (46)	136 (63)	659 (305)	159 (73)				
23	11 (6)	80 (30)	61 (18)		103 (41)	218 (87)	1020 (407)	164 (66)	108 (40)	149 (55)	719 (265)	173 (64)				
24	11 (5)	88 (71)	74 (30)		108 (69)	229 (147)	1070 (683)	172 (110)	115 (39)	157 (54)	758 (259)	183 (63)				
25	18 (8)	93 (34)	64 (22)		110 (66)	234 (141)	1090 (653)	176 (106)	92 (40)	127 (55)	608 (264)	148 (64)				
26	17 (7)	129 (62)	89 (41)		119 (64)	254 (137)	1180 (633)	191 (103)	108 (54)	148 (74)	710 (355)	173 (86)				
27	12 (7)	92 (42)	63 (28)		100 (45)	213 (95)	983 (439)	160 (71)	86 (39)	118 (54)	564 (255)	138 (62)				
28	20 (7)	139 (70)	164 (103)		171 (116)	367 (248)	1690 (1140)	274 (185)	213 (189)	293 (259)	1390 (1230)	340 (302)				
29	16 (5)	270 (121)	238 (149)		248 (126)	533 (270)	2440 (1230)	397 (201)	240 (156)	330 (215)	1560 (1020)	384 (250)				
30	15 (7)	217 (87)	226 (93)		184 (112)	398 (241)	1810 (1090)	295 (178)	174 (108)	239 (148)	1130 (698)	278 (172)				
Avg	24	165	149		178	320	1510	285	195	266	1350	312				
n	30	30	30	0	30	30	30	30	30	30	30	30	0	0	0	0
SD	10	53	61		57	84	393	92	75	102	561	120				
Min	11	78	56		90	192	898	144	86	118	564	138				
Max	48	270	255		300	533	2440	480	346	472	2490	554				

ED_004549_00015929-00148

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for October, 2009.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-1}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	13 (6)	266 (91)	283 (120)		222 (150)	481 (325)	2180 (1470)	356 (240)	276 (233)	380 (321)	1790 (1510)	442 (373)				
2	12 (6)	230 (154)	231 (163)	262 (147)	176 (127)	381 (275)	1720 (1240)	281 (203)	221 (142)	305 (195)	1430 (913)	354 (227)	229 (120)	358 (187)	1640 (859)	367 (192)
3	18 (9)	149 (92)	172 (96)	199 (96)	155 (101)	336 (219)	1510 (982)	247 (161)	221 (144)	305 (198)	1420 (924)	354 (230)	228 (116)	356 (181)	1620 (827)	364 (185)
4	17 (6)	267 (116)	288 (130)	313 (101)	233 (153)	508 (333)	2270 (1490)	373 (245)	296 (208)	407 (286)	1890 (1330)	473 (333)	280 (149)	437 (232)	1990 (1060)	448 (238)
5	16 (7)	236 (97)	270 (110)	300 (111)	164 (88)	357 (192)	1580 (854)	262 (141)	197 (126)	271 (173)	1250 (802)	315 (201)	215 (92)	388 (162)	1760 (735)	343 (147)
6	17 (7)	172 (87)	162 (103)	196 (99)	137 (78)	1040 (5300)	18000 (140000)	220 (124)	155 (108)	213 (148)	982 (682)	248 (172)	162 (90)	360 (200)	1650 (914)	259 (144)
7	16 (6)	70 (111)	158 (122)	134 (131)					172 (135)	253 (203)	1160 (928)	275 (217)	114 (131)	255 (291)	1180 (1350)	183 (209)
8	16 (6)	26 (52)	351 (168)	194 (97)					334 (229)	532 (364)	2420 (1660)	535 (366)	145 (92)	324 (205)	1500 (946)	232 (147)
9	14 (6)	26 (41)	202 (177)	109 (96)	27 (98)			44 (157)	213 (158)	341 (253)	1550 (1140)	342 (253)	95 (99)	213 (221)	979 (1020)	152 (158)
10	14 (6)	12 (39)	53 (79)	52 (68)	-5 (97)			-9 (155)	81 (168)	129 (270)	584 (1220)	129 (269)	51 (136)	115 (306)	526 (1400)	82 (218)
11	19 (6)		222 (131)	148 (66)					206 (137)	357 (242)	1620 (1100)	329 (219)	97 (54)	219 (121)	999 (550)	156 (86)
12	19 (6)	28 (6)	289 (154)	154 (74)	7 (6)			11 (9)	202 (138)	383 (261)	1750 (1200)	323 (221)	91 (54)	207 (122)	937 (551)	146 (86)
13	15 (6)	28 (4)	249 (140)	136 (65)	10 (4)			15 (7)	254 (198)	934 (821)	4690 (4210)	406 (317)	108 (73)	246 (167)	1110 (751)	172 (117)
14	23 (12)	27 (7)			4 (6)			6 (10)								
15	8 (5)	20 (3)			9 (4)			15 (6)								
16	9 (5)	22 (3)			10 (4)			16 (6)								
17	7 (5)	20 (10)			10 (8)			16 (13)								
18	6 (4)	17 (7)			9 (7)			15 (10)								
19	11 (5)	226 (331)			165 (258)			264 (413)								
20	14 (7)	348 (188)														
21	16 (5)	266 (137)														
22	11 (6)	190 (96)	205 (107)	26 (44)	61 (58)	88 (83)	1680 (1590)	97 (92)	93 (110)	133 (158)	3060 (3620)	149 (177)	8 (21)			13 (33)
23	9 (6)	140 (105)	150 (67)	16 (3)	68 (50)	99 (73)	1840 (1350)	110 (80)	117 (135)	167 (193)	3720 (4300)	187 (216)	5 (4)			8 (7)
24	13 (6)	92 (40)	111 (44)	19 (3)	75 (47)	108 (68)	1970 (1230)	119 (75)	105 (95)	150 (136)	3250 (2940)	168 (152)	5 (5)			8 (7)
25	14 (7)	211 (102)	217 (86)	20 (12)	76 (69)	109 (99)	1950 (1770)	121 (110)	80 (68)	114 (97)	2410 (2040)	128 (108)	4 (9)			7 (15)
26	11 (7)	237 (108)	211 (94)	107 (108)	61 (93)	88 (135)	1540 (2360)	97 (149)	55 (68)	79 (98)	1620 (2020)	88 (109)	32 (62)			51 (99)
27	9 (7)	177 (103)	155 (69)	181 (95)	83 (79)	120 (114)	2070 (1970)	133 (126)	63 (62)	90 (89)	1800 (1790)	100 (99)				
28	11 (8)	123 (108)	100 (66)	141 (78)	79 (91)	115 (132)	1940 (2230)	127 (146)	77 (98)	110 (140)	2170 (2750)	123 (156)	100 (79)	134 (106)	2590 (2030)	160 (126)
29	17 (7)	247 (125)	228 (145)	214 (93)	135 (110)	196 (159)	3260 (2650)	217 (175)	108 (145)	155 (207)	2990 (4020)	173 (232)				
30	16 (8)	219 (125)	195 (123)	210 (96)	78 (87)	113 (126)	1860 (2070)	125 (139)	63 (72)	90 (103)	1710 (1950)	101 (115)				
31	12 (8)	101 (67)	104 (64)	104 (61)	55 (45)	79 (65)	1280 (1050)	88 (72)	58 (42)	83 (60)	1550 (1120)	93 (67)	57 (37)	76 (50)	1380 (908)	91 (60)
Avg	14	140	200	147	81	264	2910	129	159	260	2040	254	107	263	1420	171
n	31	30	23	22	26	16	16	26	23	23	23	23	19	14	14	19
SD	4	100	70	85	70	247	3910	112	83	190	935	133	82	106	502	132
Min	6	12	53	16	-5	79	1280	-9	55	79	584	88	4	76	526	7
Max	23	348	351	313	233	1040	18000	373	334	934	4690	535	280	437	2590	448

ED_004549_00015929-00149

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for November, 2009.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	8 (5)	97 (79)	148 (101)	142 (98)	41 (52)	59 (76)	934 (1200)	65 (84)	67 (54)	95 (77)	1740 (1400)	107 (86)	60 (68)	81 (91)	1430 (1600)	96 (108)
2	18 (6)	160 (84)	262 (116)	270 (131)	37 (64)	54 (92)	841 (1440)	59 (102)	94 (106)	134 (152)	2400 (2720)	150 (170)				
3	17 (7)	157 (80)	251 (97)	280 (124)	48 (63)	70 (91)	1070 (1400)	77 (100)	89 (89)	127 (127)	2220 (2230)	142 (142)				
4	20 (5)	147 (90)	237 (114)	276 (112)	41 (58)	60 (84)	905 (1270)	66 (92)	83 (85)	118 (122)	2040 (2100)	132 (136)				
5	17 (6)	138 (90)	247 (128)	315 (167)	41 (61)	59 (88)	879 (1310)	65 (97)	91 (103)	130 (147)	2200 (2490)	145 (164)				
6	17 (7)	216 (95)	318 (166)	406 (188)					95 (145)	136 (207)	2250 (3440)	152 (232)				
7	15 (6)	212 (68)	353 (134)	411 (156)					122 (131)	174 (187)	2850 (3050)	195 (209)				
8	17 (7)	164 (44)	299 (95)	343 (119)					154 (162)	220 (232)	3520 (3710)	246 (259)				
9	20 (6)	153 (45)	270 (127)	297 (135)					143 (152)	205 (218)	3210 (3420)	229 (244)				
10	16 (10)	114 (42)	176 (79)	190 (97)	55 (34)	80 (49)	1110 (675)	89 (54)	108 (81)	154 (116)	2370 (1780)	172 (129)	108 (66)	145 (89)	2220 (1360)	173 (106)
11	5 (8)	129 (51)	188 (87)	172 (87)	32 (46)	46 (67)	626 (913)	51 (74)	82 (48)	117 (68)	1770 (1030)	131 (76)	74 (71)	100 (95)	1500 (1430)	118 (113)
12	3 (5)	151 (60)	208 (80)	196 (76)	22 (43)	32 (63)	419 (835)	35 (69)	72 (49)	103 (70)	1530 (1040)	115 (79)				
13	5 (6)	166 (55)	167 (69)	188 (79)					60 (65)	86 (93)	1250 (1340)	96 (104)				
14	6 (5)	183 (92)	138 (67)	180 (94)					59 (54)	85 (77)	1200 (1090)	95 (86)				
15	8 (6)	203 (85)	103 (58)	195 (176)					45 (42)	65 (61)	893 (840)	72 (68)				
16	15 (6)	240 (91)	101 (65)	223 (111)					42 (50)	61 (72)	822 (978)	68 (80)				
17	25 (10)	267 (115)	113 (114)	205 (109)					32 (61)	46 (88)	603 (1160)	51 (98)				
18	17 (10)	169 (94)	65 (63)	127 (86)	80 (70)	117 (102)	1390 (1220)	128 (112)	21 (29)	31 (41)	397 (532)	34 (46)	64 (57)	86 (77)	1150 (1030)	102 (91)
19	10 (6)	96 (44)	32 (29)	77 (46)	66 (42)	97 (61)	1120 (706)	106 (67)	15 (29)	22 (41)	280 (518)	25 (46)	47 (37)	64 (50)	836 (654)	76 (59)
20	15 (7)	153 (87)	70 (58)	156 (101)	102 (74)	148 (108)	1690 (1230)	163 (118)	31 (38)	45 (55)	552 (684)	50 (61)	102 (64)	138 (86)	1770 (1100)	163 (102)
21	19 (5)	248 (129)	111 (102)	246 (153)					39 (47)	56 (67)	679 (810)	62 (74)				
22	18 (7)	283 (127)	107 (89)	261 (173)					33 (38)	47 (55)	553 (648)	52 (61)				
23	13 (10)	213 (116)	79 (64)	164 (135)	121 (96)	177 (140)	1900 (1500)	194 (153)	28 (29)	41 (42)	466 (489)	45 (47)	103 (92)	140 (124)	1690 (1510)	165 (147)
24	7 (6)	225 (143)	93 (95)	162 (161)					38 (42)	55 (61)	619 (684)	61 (67)				
25	8 (5)	250 (154)	126 (112)	162 (179)												
26	11 (7)	290 (164)	152 (119)	184 (180)												
27	6 (5)	396 (189)	204 (142)	249 (226)												
28																
29																
30																
Avg	13	193	171	225	57	83	1070	92	68	98	1520	109	80	108	1510	128
n	27	27	27	27	12	12	12	12	24	24	24	24	7	7	7	7
SD	6	66	84	80	29	42	400	46	38	54	940	60	23	31	413	36
Min	3	96	32	77	22	32	419	35	15	22	280	25	47	64	836	76
Max	25	396	353	411	121	177	1900	194	154	220	3520	246	108	145	2220	173

ED_004549_00015929-00150

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for December, 2009.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
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27	10 (6)	410 (143)	460 (159)	461 (154)									199 (159)	271 (217)	1650 (1320)	318 (254)
28	7 (5)	459 (166)	508 (180)	507 (197)	159 (169)	234 (249)	1300 (1380)	254 (270)	175 (141)	259 (208)	1450 (1170)	279 (225)				
29	9 (5)	478 (266)	527 (193)	549 (241)	161 (225)	237 (332)	1300 (1810)	257 (360)	157 (163)	232 (242)	1280 (1330)	251 (261)				
30		458 (220)	493 (191)	522 (187)	137 (183)	203 (270)	1100 (1460)	220 (293)	126 (139)	187 (206)	1020 (1120)	202 (222)	140 (193)	192 (264)	1110 (1530)	225 (308)
31	10 (6)	321 (175)	321 (155)	367 (178)	139 (138)	205 (204)	1100 (1090)	222 (221)	117 (105)	173 (156)	928 (839)	186 (168)				
Avg	9	425	462	481	149	220	1200	238	143	213	1170	230	170	232	1380	271
n	4	5	5	5	4	4	4	4	4	4	4	4	2	2	2	2
SD	1	57	74	64	11	16	100	17	23	34	206	37	29	40	267	47
Min	7	321	321	367	137	203	1100	220	117	173	928	186	140	192	1110	225
Max	10	478	527	549	161	237	1300	257	175	259	1450	279	199	271	1650	318

ED_004549_00015929-00151

Table F4. Daily means (SD) of PM10 emissions and concentration at Site NC3B for January, 2010.

Day	PM10 Concentration				PM10 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	mg d^{-1} AU^{-1}	mg d^{-1} m^{-2}
1	8 (6)	348 (190)	330 (183)	414 (219)					138 (122)	205 (181)	1090 (963)	221 (196)				
2		648 (328)	509 (218)	658 (336)	150 (223)	222 (330)	1160 (1720)	240 (357)	134 (163)	198 (242)	1040 (1270)	214 (261)				
3		513 (235)	570 (226)	551 (274)	139 (195)	206 (289)	1070 (1490)	223 (312)	178 (180)	264 (267)	1360 (1380)	284 (288)				
4		563 (305)	615 (364)	569 (342)	182 (257)	269 (381)	1380 (1950)	291 (411)	249 (220)	369 (327)	1890 (1670)	398 (352)				
5		637 (409)	504 (225)	586 (379)	192 (300)	286 (445)	1450 (2250)	308 (480)	208 (153)	309 (227)	1570 (1150)	332 (245)	205 (273)	281 (374)	1510 (2010)	329 (437)
6		514 (320)	514 (221)	560 (348)	182 (254)	270 (377)	1350 (1890)	290 (406)	218 (148)	325 (221)	1630 (1110)	349 (237)	230 (269)	315 (369)	1670 (1960)	367 (431)
7		583 (435)	537 (271)	569 (398)	256 (321)	382 (477)	1900 (2370)	410 (513)	228 (166)	340 (247)	1690 (1230)	365 (265)	265 (294)	363 (402)	1910 (2110)	423 (470)
8	10 (6)	619 (369)	589 (283)	703 (346)	213 (268)	318 (400)	1570 (1970)	341 (429)	243 (176)	362 (262)	1780 (1290)	389 (281)				
9		806 (290)	745 (203)	862 (280)	196 (277)	293 (414)	1430 (2020)	314 (444)	295 (186)	440 (277)	2150 (1350)	472 (297)	210 (275)	288 (377)	1490 (1940)	337 (440)
10		698 (228)	661 (194)	738 (216)	176 (247)	264 (369)	1280 (1790)	282 (395)	263 (180)	392 (268)	1900 (1300)	420 (287)	189 (249)	259 (341)	1320 (1740)	302 (398)
11		673 (312)	611 (211)	733 (298)	222 (273)	333 (408)	1600 (1960)	356 (437)	234 (182)	350 (271)	1680 (1300)	375 (291)	220 (288)	301 (395)	1520 (2000)	351 (462)
12	16 (7)	576 (272)	605 (255)	739 (349)	216 (243)	324 (364)	1540 (1740)	346 (389)	238 (187)	355 (279)	1690 (1330)	380 (298)	250 (310)	342 (426)	1710 (2130)	399 (496)
13		661 (370)	675 (328)	695 (321)	207 (332)	310 (497)	1470 (2360)	331 (531)	262 (207)	391 (310)	1850 (1460)	419 (331)	233 (278)	319 (382)	1580 (1890)	372 (445)
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31																
Avg	12	603	574	644	194	290	1430	311	222	331	1640	355	225	309	1590	360
n	3	13	13	13	12	12	12	12	13	13	13	13	8	8	8	8
SD	4	106	98	112	31	46	208	49	46	69	304	73	23	31	164	37
Min	8	348	330	414	139	206	1070	223	134	198	1040	214	189	259	1320	302
Max	16	806	745	862	256	382	1900	410	295	440	2150	472	265	363	1910	423

ED_004549_00015929-00152

Table F5. PM2.5 concentrations and emissions.

Table F5. Daily means (SD) of PM2.5 concentration and emissions at Site NC3B for June, 2008.

Date	PM2.5 Concentration				PM2.5 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}
1																
2																
3																
4																
5																
6																
7																
8	24.4 (7.1)	39.7 (8.0)	28.9 (6.4)	31.4 (6.3)	29.9 (18.1)	35.8 (21.6)	186 (112)	47.9 (28.9)	12.8 (21.1)	16.5 (27.1)	79.5 (131)	20.5 (33.7)	14.5 (16.5)	19.1 (21.7)	102 (116)	23.3 (26.4)
9	29.4 (9.9)	41.8 (11.4)	34.0 (11.5)	34.9 (11.6)	25.9 (19.2)	31.0 (23.0)	160 (119)	41.5 (30.7)	13.3 (22.7)	17.1 (29.3)	81.7 (140)	21.2 (36.4)	14.4 (26.5)	18.9 (34.8)	100 (184)	23.0 (42.4)
10	24.7 (6.0)	40.0 (11.0)	29.5 (6.7)	31.7 (7.7)	23.2 (20.5)	27.8 (24.5)	142 (126)	37.0 (32.7)	12.5 (27.4)	16.1 (35.4)	76.4 (168)	19.9 (43.9)	14.5 (25.0)	19.1 (32.9)	100 (173)	23.3 (40.1)
11																
12																
13	19.2 (9.3)	46.3 (23.9)	29.9 (16.4)	32.6 (22.4)	28.3 (26.3)	34.1 (31.6)	172 (159)	45.2 (42.0)	19.1 (32.9)	24.7 (42.6)	116 (199)	30.5 (52.7)	16.8 (34.7)	22.2 (45.6)	114 (234)	27.0 (55.5)
14	15.0 (4.6)	35.9 (27.5)	26.2 (13.2)	26.5 (14.9)	21.3 (44.3)	25.7 (53.5)	129 (268)	34.1 (70.9)	18.7 (26.2)	24.2 (33.9)	112 (158)	29.8 (41.9)	13.6 (26.1)	17.8 (34.4)	90.8 (175)	21.7 (41.8)
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30																
Avg	22.5	40.7	29.7	31.4	25.7	30.9	158	41.2	15.3	19.7	93.1	24.4	14.8	19.4	101	23.6
n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
SD	5.0	3.4	2.5	2.8	3.2	3.8	20.2	5.1	3.0	3.9	17.2	4.8	1.1	1.5	7.3	1.8
Min	15.0	35.9	26.2	26.5	21.3	25.7	129	34.1	12.5	16.1	76.4	19.9	13.6	17.8	90.8	21.7
Max	29.4	46.3	34.0	34.9	29.9	35.8	186	47.9	19.1	24.7	116	30.5	16.8	22.2	114	27.0

ED_004549_00015929-00153

Table F5. Daily means (SD) of PM2.5 concentration and emissions at Site NC3B for October, 2008.

Date	PM2.5 Concentration				PM2.5 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}
1																
2																
3																
4																
5																
6	18.7 (5.9)	36.6 (4.2)	31.4 (5.0)	29.2 (4.5)	15.5 (6.3)	19.2 (7.8)	130 (53)	24.8 (10.1)	10.8 (6.6)	14.9 (9.0)	92.9 (56.5)	17.3 (10.5)	8.5 (5.2)	11.8 (7.2)	91.1 (55.6)	13.6 (8.3)
7	17.1 (7.6)	36.3 (8.7)	29.5 (9.7)	29.5 (8.7)	16.4 (6.8)	20.3 (8.4)	135 (56)	26.2 (10.9)	10.1 (7.4)	13.9 (10.1)	85.6 (62.5)	16.1 (11.8)	9.0 (6.5)	12.4 (9.1)	94.4 (68.8)	14.3 (10.5)
8	6.0 (4.8)	25.5 (7.2)	17.9 (6.9)	17.7 (6.9)	16.0 (7.9)	19.9 (9.8)	130 (65)	25.7 (12.7)	8.8 (6.0)	12.1 (8.3)	73.3 (50.4)	14.0 (9.7)	8.0 (6.2)	11.1 (8.6)	82.8 (64.0)	12.8 (9.9)
9	5.3 (4.7)	24.2 (6.8)	16.1 (4.8)	16.8 (4.9)	16.3 (7.0)	20.2 (8.7)	131 (56)	26.2 (11.2)	11.1 (7.7)	15.3 (10.6)	91.4 (63.4)	17.7 (12.3)	8.9 (5.0)	12.3 (6.9)	90.1 (50.6)	14.2 (7.9)
10	4.2 (4.6)	21.0 (5.5)	14.6 (5.9)	15.5 (5.2)	14.8 (5.5)	18.3 (6.8)	116 (43)	23.7 (8.8)	11.0 (7.8)	15.2 (10.7)	89.7 (63.2)	17.7 (12.4)	8.6 (4.9)	12.0 (6.8)	86.2 (49.1)	13.8 (7.9)
11	7.3 (5.3)	25.4 (5.8)	20.7 (5.9)	20.2 (5.1)	15.1 (5.4)	18.7 (6.7)	117 (42)	24.1 (8.6)	14.0 (7.4)	19.2 (10.2)	112.0 (59.4)	22.4 (11.9)	9.2 (5.0)	12.8 (6.9)	90.4 (48.8)	14.7 (8.0)
12	5.5 (4.8)	22.9 (6.5)	18.7 (10.1)	18.6 (7.9)	14.3 (6.7)	17.7 (8.3)	109 (51)	22.8 (10.7)	11.5 (12.2)	15.9 (16.8)	91.3 (96.8)	18.4 (19.5)	8.8 (7.2)	12.3 (10.1)	85.6 (70.1)	14.1 (11.6)
13	5.6 (5.0)	23.2 (6.2)	15.2 (6.1)	15.7 (5.6)	15.5 (7.7)	19.3 (9.5)	117 (58)	24.9 (12.3)	8.3 (8.3)	11.4 (11.4)	64.5 (64.5)	13.2 (13.2)	7.8 (6.3)	10.8 (8.7)	73.8 (59.6)	12.4 (10.0)
14	8.8 (5.0)	28.3 (8.7)	21.3 (7.7)	20.4 (7.3)	18.3 (10.4)	22.7 (12.9)	136 (77)	29.3 (16.6)	10.6 (10.5)	14.6 (14.5)	81.6 (81.3)	16.9 (16.9)	10.6 (8.1)	14.8 (11.3)	99.5 (76.1)	17.0 (13.0)
15	12.5 (4.6)	35.0 (14.7)	24.9 (11.0)	24.5 (11.3)	23.0 (24.2)	28.6 (30.1)	169 (178)	36.8 (38.8)	11.8 (19.2)	16.2 (26.5)	89.8 (146.0)	18.8 (30.7)	11.5 (14.2)	16.0 (19.8)	106 (131)	18.3 (22.8)
16	15.7 (5.4)	34.5 (9.2)	27.6 (9.9)	26.9 (8.6)	19.0 (11.1)	23.7 (13.7)	138 (80)	30.5 (17.7)	12.1 (11.7)	16.6 (16.2)	91.1 (88.6)	19.3 (18.8)	10.5 (9.1)	14.7 (12.7)	95.7 (82.7)	16.9 (14.6)
17	17.1 (8.7)	33.7 (13.0)	26.6 (13.8)	25.5 (12.4)	14.1 (10.0)	17.6 (12.4)	101 (72)	22.6 (16.0)	10.6 (12.8)	14.6 (17.6)	79.2 (95.5)	17.0 (20.4)	6.9 (8.0)	9.6 (11.2)	61.7 (71.8)	11.0 (12.8)
18	5.7 (5.3)	33.8 (17.3)	22.7 (14.4)	20.5 (12.9)	18.8 (16.7)	23.4 (20.8)	133 (118)	30.1 (26.7)					10.8 (10.1)	15.0 (14.1)	95.1 (89.2)	17.3 (16.2)
19																
20																
21																
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31																
Avg	10.0	29.3	22.1	21.6	16.7	20.7	128	26.7	10.9	15.0	86.9	17.4	9.2	12.7	88.6	14.7
n	13	13	13	13	13	13	13	13	12	12	12	12	13	13	13	13
SD	5.2	5.6	5.3	4.8	2.4	3.0	16.1	3.8	1.4	2.0	11.3	2.3	1.3	1.8	10.9	2.1
Min	4.2	21.0	14.6	15.5	14.1	17.6	101	22.6	8.3	11.4	64.5	13.2	6.9	9.6	61.7	11.0
Max	18.7	36.6	31.4	29.5	23.0	28.6	169	36.8	14.0	19.2	112	22.4	11.5	16.0	106	18.3

ED_004549_00015929-00154

Table F5. Daily means (SD) of PM2.5 concentration and emissions at Site NC3B for April, 2009.

Date	PM2.5 Concentration				PM2.5 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}
1																
2																
3																
4																
5	11.6 (5.0)	34.4 (9.4)	28.3 (9.3)		29.7 (14.5)	36.6 (17.9)	170 (83)	47.4 (23.2)	24.0 (14.5)	30.5 (18.5)	140 (85)	38.4 (23.3)				
6	9.8 (5.9)	33.0 (8.7)	23.6 (8.4)		34.9 (22.0)	43.1 (27.2)	199 (125)	55.9 (35.3)	24.2 (24.5)	35.6 (37.0)	165 (172)	38.8 (39.2)				
7	3.5 (4.8)	52.0 (28.0)	31.3 (8.8)		37.4 (25.3)	46.1 (31.2)	212 (143)	59.8 (40.4)	19.7 (8.8)	32.7 (14.7)	153 (69)	31.4 (14.1)				
8	7.9 (5.6)	42.5 (12.7)	31.6 (8.6)		29.8 (11.9)	36.7 (14.6)	168 (67)	47.6 (19.0)	17.6 (9.6)	29.3 (16.0)	136 (74)	28.1 (15.4)				
9	13.0 (5.7)	44.8 (11.6)	33.8 (9.4)		32.9 (16.2)	40.6 (20.0)	185 (91)	52.6 (26.0)	22.9 (13.0)	38.1 (21.6)	176 (100)	36.6 (20.8)				
10	8.6 (5.6)	31.9 (11.1)	25.5 (9.8)		33.9 (16.6)	41.8 (20.5)	189 (93)	54.2 (26.6)	25.3 (16.0)	42.1 (26.7)	194 (123)	40.4 (25.7)				
11	6.3 (5.8)	31.1 (11.8)	23.0 (9.2)		31.8 (17.3)	39.2 (21.4)	177 (96)	50.9 (27.8)	23.4 (16.5)	39.1 (27.6)	179 (126)	37.5 (26.4)				
12	6.8 (4.2)	43.2 (13.9)	32.6 (10.4)		36.2 (18.9)	44.7 (23.3)	201 (105)	57.9 (30.2)	23.8 (12.4)	39.7 (20.7)	181 (94)	38.1 (19.9)				
13	7.7 (4.1)	44.9 (26.3)	24.9 (12.8)		34.1 (22.1)	42.1 (27.2)	188 (122)	54.6 (35.3)	13.8 (10.8)	23.0 (18.0)	104 (82)	22.1 (17.3)				
14	6.0 (5.2)	30.9 (16.8)	16.0 (7.4)		29.8 (20.5)	36.8 (25.3)	164 (113)	47.7 (32.8)	12.4 (10.6)	20.6 (17.7)	93 (80)	19.8 (17.0)				
15	6.9 (4.9)	32.7 (12.9)	20.3 (8.6)		29.2 (16.6)	36.1 (20.5)	160 (91)	46.7 (26.5)	14.3 (9.8)	24.0 (16.4)	108 (74)	22.9 (15.7)				
16	5.3 (4.0)	50.1 (26.3)	23.3 (12.2)		45.3 (33.8)	55.9 (41.7)	246 (184)	72.5 (54.1)	17.7 (16.4)	29.6 (27.4)	132 (122)	28.3 (26.2)				
17	8.0 (6.8)	49.2 (32.3)	25.4 (10.9)		34.8 (22.1)	48.0 (28.2)	212 (124)	55.6 (35.3)	13.6 (13.7)	22.7 (22.9)	101 (102)	21.7 (21.9)				
18	9.8 (5.9)	40.1 (15.7)	20.2 (8.1)		36.1 (19.5)	57.7 (31.2)	257 (139)	57.7 (31.2)	10.5 (12.3)	17.7 (20.7)	78 (92)	16.9 (19.8)				
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30																
Avg	7.9	40.1	25.7		34.0	43.3	195	54.4	18.8	30.3	139	30.1				
n	14	14	14	0	14	14	14	14	14	14	14	14	0	0	0	0
SD	2.4	7.3	5.1		4.1	6.6	28.3	6.5	5.0	7.6	36.0	8.0				
Min	3.5	30.9	16.0		29.2	36.1	160	46.7	10.5	17.7	78	16.9				
Max	13.0	52.0	33.8		45.3	57.7	257	72.5	25.3	42.1	194	40.4				

ED_004549_00015929-00155

Table F5. Daily means (SD) of PM2.5 concentration and emissions at Site NC3B for July, 2009.

Date	PM2.5 Concentration				PM2.5 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-1}	g $d^{-1}AU^{-1}$	mg $d^{-1}m^{-2}$	g d^{-1}	mg d^{-1} hd^{-1}	g $d^{-1}AU^{-1}$	mg $d^{-1}m^{-2}$	g d^{-1}	mg d^{-1} hd^{-1}	g $d^{-1}AU^{-1}$	mg $d^{-1}m^{-2}$
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25																
26																
27	11.3 (9.2)	26.0 (5.0)	18.1 (4.8)		24.9 (15.9)	36.7 (23.5)	264 (168)	39.8 (25.4)	15.4 (17.1)	20.6 (22.8)	187 (206)	24.7 (27.3)				
28	12.8 (5.2)	25.8 (3.5)	18.0 (3.1)		21.7 (11.3)	32.0 (16.7)	226 (118)	34.7 (18.1)	11.3 (12.8)	15.2 (17.0)	135 (151)	18.2 (20.4)				
29	8.1 (4.6)	21.4 (3.7)	14.0 (3.3)		24.5 (9.8)	36.3 (14.5)	252 (100)	39.2 (15.7)	14.4 (11.3)	19.2 (15.1)	167 (131)	23.0 (18.1)				
30	13.2 (8.1)	26.5 (5.6)	19.2 (5.9)		25.0 (13.1)	37.0 (19.4)	253 (132)	40.1 (21.0)	14.3 (14.6)	19.1 (19.5)	163 (167)	22.9 (23.4)				
31	7.7 (5.4)	21.7 (4.1)	14.2 (4.3)		25.1 (12.8)	37.1 (18.9)	250 (127)	40.2 (20.4)	15.4 (14.2)	20.6 (19.0)	173 (159)	24.6 (22.7)				
Avg	10.6	24.3	16.7		24.2	35.8	249	38.8	14.2	18.9	165	22.7				
n	5	5	5	0	5	5	5	5	5	5	5	5	0	0	0	0
SD	2.3	2.2	2.2		1.3	1.9	12.4	2.1	1.5	2.0	17.1	2.4				
Min	7.7	21.4	14.0		21.7	32.0	226	34.7	11.3	15.2	135	18.2				
Max	13.2	26.5	19.2		25.1	37.1	264	40.2	15.4	20.6	187	24.7				

ED_004549_00015929-00156

Table F5. Daily means (SD) of PM2.5 concentration and emissions at Site NC3B for August, 2009.

Date	PM2.5 Concentration				PM2.5 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}
1	7.7 (5.4)	21.6 (9.0)	14.6 (4.7)		26.2 (22.6)	38.8 (33.5)	257 (222)	41.9 (36.2)	17.0 (14.2)	22.7 (19.0)	187 (157)	27.2 (22.7)				
2	8.0 (5.3)	22.4 (10.1)	15.1 (4.3)		24.4 (19.5)	36.0 (28.8)	236 (189)	39.0 (31.2)	16.3 (11.1)	21.8 (14.9)	177 (121)	26.1 (17.8)				
3	10.5 (7.2)	23.4 (11.6)	16.2 (6.2)		20.8 (21.3)	30.8 (31.6)	199 (203)	33.3 (34.1)	13.3 (18.9)	17.9 (25.3)	142 (201)	21.3 (30.2)				
4	14.7 (7.6)	28.6 (10.9)	21.4 (5.9)		27.3 (25.7)	40.4 (38.0)	257 (242)	43.7 (41.2)	14.9 (15.6)	20.0 (20.9)	156 (163)	23.9 (24.9)				
5	17.1 (6.4)	30.0 (10.7)	23.2 (6.3)		23.4 (23.5)	34.6 (34.7)	217 (218)	37.4 (37.6)	16.6 (21.8)	22.3 (29.4)	171 (225)	26.6 (35.0)				
6	18.5 (5.8)	30.3 (11.2)	22.7 (12.4)		23.7 (26.9)	35.0 (39.8)	217 (246)	37.9 (43.0)	9.4 (25.3)	12.7 (34.0)	96 (256)	15.1 (40.4)				
7	19.5 (7.5)	33.0 (34.4)	26.6 (7.5)		24.5 (87.9)	36.3 (130)	222 (796)	39.2 (141.0)	15.4 (22.3)	20.8 (30.0)	154 (222)	24.7 (35.6)				
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Avg	13.7	27.1	20.0		24.3	36.0	229	38.9	14.7	19.8	155	23.5				
n	7	7	7	0	7	7	7	7	7	7	7	7	0	0	0	0
SD	4.6	4.2	4.3		1.9	2.9	20.2	3.1	2.4	3.3	27.9	3.9				
Min	7.7	21.6	14.6		20.8	30.8	199	33.3	9.4	12.7	96	15.1				
Max	19.5	33.0	26.6		27.3	40.4	257	43.7	17.0	22.7	187	27.2				

ED_004549_00015929-00157

Table F5. Daily means (SD) of PM2.5 concentration and emissions at Site NC3B for November, 2009.

Date	PM2.5 Concentration				PM2.5 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}
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29	8.3 (5.3)	25.2 (4.1)	19.5 (4.8)	24.2 (5.4)					5.6 (5.2)	8.3 (7.6)	82.0 (76.0)	9.0 (8.3)				
30	6.8 (4.7)	25.6 (4.9)	19.0 (3.7)	25.5 (7.2)					7.5 (4.8)	10.9 (7.0)	106 (68)	11.9 (7.6)				
Avg	7.5	25.4	19.2	24.8					6.5	9.6	94.1	10.5				
n	2	2	2	2	0	0	0	0	2	2	2	2	0	0	0	0
SD	0.7	0.2	0.2	0.6					0.9	1.3	12.0	1.5				
Min	6.8	25.2	19.0	24.2					5.6	8.3	82.0	9.0				
Max	8.3	25.6	19.5	25.5					7.5	10.9	106	11.9				

ED_004549_00015929-00158

Table F5. Daily means (SD) of PM2.5 concentration and emissions at Site NC3B for December, 2009.

Date	PM2.5 Concentration				PM2.5 Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-1}	g $d^{-1}AU^{-1}$	mg $d^{-1}m^{-2}$	g d^{-1}	mg d^{-1} hd^{-1}	g $d^{-1}AU^{-1}$	mg $d^{-1}m^{-2}$	g d^{-1}	mg d^{-1} hd^{-1}	g $d^{-1}AU^{-1}$	mg $d^{-1}m^{-2}$
1	4.1 (5.2)	25.6 (5.0)	19.0 (5.4)	28.4 (9.2)												
2	3.5 (5.2)	20.0 (4.7)	13.2 (5.6)	16.3 (8.4)	9.4 (6.5)	13.8 (9.5)	121 (83)	15.1 (10.3)	5.9 (5.6)	8.6 (8.2)	79.5 (75.7)	9.4 (9.0)	5.8 (6.1)	7.9 (8.2)	79.0 (82.5)	9.3 (9.7)
3	4.1 (5.0)	22.4 (5.0)	18.1 (5.5)	17.7 (6.2)	12.3 (4.6)	18.1 (6.8)	156 (58)	19.8 (7.4)	8.8 (5.5)	12.9 (8.0)	117 (73)	14.0 (8.7)	8.5 (4.7)	11.6 (6.4)	113 (62)	13.7 (7.5)
4	7.0 (4.6)	27.9 (6.0)	24.0 (6.0)	23.0 (7.4)					7.8 (4.5)	11.4 (6.7)	101 (59)	12.4 (7.3)				
5	3.2 (5.1)	24.8 (5.6)	20.3 (6.0)	18.9 (6.9)					6.7 (3.7)	9.8 (5.5)	85.1 (46.9)	10.7 (5.9)				
6	9.8 (6.7)	35.8 (9.0)	30.5 (7.9)	26.0 (8.3)					8.1 (6.0)	12.0 (8.8)	101 (75)	13.0 (9.6)	5.9 (7.5)	8.0 (10.1)	73.4 (92.9)	9.5 (12.0)
7	9.8 (3.6)	35.6 (10.2)	29.7 (8.7)	22.8 (9.1)					7.6 (5.5)	11.2 (8.1)	92.0 (67.0)	12.1 (8.8)	6.1 (7.0)	8.2 (9.5)	73.4 (85.1)	9.7 (11.2)
8	11.3 (5.6)	35.0 (12.0)	30.8 (11.3)	22.2 (10.5)	10.5 (11.3)	15.4 (16.5)	120 (128)	16.8 (18.0)	8.6 (6.0)	12.7 (8.8)	103 (72)	13.8 (9.6)	4.5 (6.6)	6.1 (8.9)	53.7 (78.1)	7.2 (10.5)
9	3.1 (9.8)	20.5 (8.0)	12.2 (6.2)	11.4 (6.8)	13.3 (8.8)	19.6 (12.9)	149 (99)	21.4 (14.1)	8.7 (8.8)	12.8 (13.0)	102 (103)	13.9 (14.1)	5.4 (7.0)	7.3 (9.4)	62.8 (81.1)	8.6 (11.1)
10	4.1 (4.4)	35.7 (14.5)	26.5 (13.8)	24.1 (13.0)					12.1 (10.2)	17.9 (15.0)	138 (116)	19.4 (16.3)				
11	2.9 (4.6)	42.3 (15.4)	28.5 (9.3)	27.6 (11.0)					5.5 (6.9)	8.1 (10.1)	61.3 (76.6)	8.8 (11.0)				
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Avg	5.7	29.6	23.0	21.7	11.4	16.7	137	18.2	8.0	11.7	97.9	12.8	6.1	8.2	75.9	9.7
n	11	11	11	11	4	4	4	4	10	10	10	10	6	6	6	6
SD	3.0	7.2	6.5	4.9	1.5	2.3	16.3	2.5	1.8	2.6	19.8	2.8	1.2	1.7	18.6	2.0
Min	2.9	20.0	12.2	11.4	9.4	13.8	120	15.1	5.5	8.1	61.3	8.8	4.5	6.1	53.7	7.2
Max	11.3	42.3	30.8	28.4	13.3	19.6	156	21.4	12.1	17.9	138	19.4	8.5	11.6	113	13.7

ED_004549_00015929-00159

Table F6. TSP concentrations and emissions.

Table F6. Daily means (SD) of TSP emissions at Site NC3B for June, 2008.

Date	TSP Concentration				TSP Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-1}	g $d^{-1}AU^{-1}$	mg $d^{-1}m^{-2}$	g d^{-1}	mg d^{-1} hd^{-1}	g $d^{-1}AU^{-1}$	mg $d^{-1}m^{-2}$	g d^{-1}	mg d^{-1} hd^{-1}	g $d^{-1}AU^{-1}$	mg $d^{-1}m^{-2}$
1	24 (8)	661 (284)	340 (208)	476 (176)	878 (207)	1050 (246)	5720 (1350)	1410 (331)	677 (327)	871 (420)	4410 (2130)	1080 (523)	736 (248)	960 (324)	5510 (1860)	1180 (398)
2	41 (17)	796 (385)	655 (340)	586 (246)	976 (547)	1160 (652)	6300 (3530)	1560 (875)	1190 (720)	1530 (927)	7690 (4650)	1910 (1150)	901 (465)	1180 (608)	6670 (3440)	1440 (744)
3	25 (6)	744 (411)	717 (309)	586 (304)	828 (321)	988 (383)	5310 (2060)	1330 (513)	1140 (465)	1460 (599)	7280 (2980)	1820 (744)	662 (246)	865 (322)	4860 (1810)	1060 (394)
4	28 (7)	472 (353)	447 (196)	318 (210)	635 (353)	757 (421)	4040 (2250)	1020 (565)	809 (284)	1040 (366)	5150 (1810)	1290 (455)	473 (249)	619 (325)	3440 (1810)	756 (398)
5	32 (14)	430 (314)	390 (141)	308 (181)	698 (442)	833 (528)	4410 (2800)	1120 (708)	786 (288)	1010 (371)	4970 (1820)	1260 (462)	483 (219)	633 (287)	3480 (1580)	773 (350)
6	30 (14)	372 (215)	389 (101)	264 (133)	603 (269)	720 (322)	3790 (1690)	964 (431)	771 (216)	993 (278)	4840 (1350)	1230 (345)	432 (190)	566 (250)	3080 (1360)	691 (305)
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Avg	30	579	490	423	770	918	4930	1230	895	1150	5720	1430	614	803	4510	983
n	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
SD	6	162	143	133	135	160	913	216	195	251	1270	312	168	219	1290	269
Min	24	372	340	264	603	720	3790	964	677	871	4410	1080	432	566	3080	691
Max	41	796	717	586	976	1160	6300	1560	1190	1530	7690	1910	901	1180	6670	1440

ED_004549_00015929-00160

Table F6. Daily means (SD) of TSP emissions at Site NC3B for February, 2009.

Date	TSP Concentration				TSP Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-1}	g $d^{-1}AU^{-1}$	mg $d^{-1}m^{-2}$	g d^{-1}	mg d^{-1} hd^{-1}	g $d^{-1}AU^{-1}$	mg $d^{-1}m^{-2}$	g d^{-1}	mg d^{-1} hd^{-}	g $d^{-1}AU^{-1}$	mg $d^{-1}m^{-2}$
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23	18 (5)	2350 (843)	1960 (925)	1650 (606)	697 (949)	852 (1160)	6390 (8700)	1120 (1520)	736 (812)	920 (1020)	6810 (7510)	1180 (1300)				
24	22 (10)	1910 (761)	2110 (925)	1490 (536)	592 (820)	723 (1000)	5330 (7380)	947 (1310)	759 (878)	949 (1100)	6900 (7980)	1210 (1410)	574 (611)	737 (784)	5680 (6040)	919 (978)
25	25 (6)	1870 (874)	1920 (891)	1600 (731)	729 (795)	891 (972)	6440 (7020)	1170 (1270)	752 (788)	941 (986)	6710 (7030)	1200 (1260)	692 (727)	888 (933)	6710 (7050)	1110 (1160)
26	23 (9)	1560 (800)	1440 (655)	1330 (580)	750 (639)	916 (781)	6500 (5550)	1200 (1020)	799 (569)	1000 (711)	7000 (4980)	1280 (910)	726 (508)	933 (652)	6920 (4850)	1160 (813)
27																
28																
Avg	22	1920	1860	1520	692	846	6160	1110	762	952	6860	1220	664	853	6430	1060
n	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3
SD	3	280	249	120	61	74	485	97	23	29	107	37	65	84	543	104
Min	18	1560	1440	1330	592	723	5330	947	736	920	6710	1180	574	737	5680	919
Max	25	2350	2110	1650	750	916	6500	1200	799	1000	7000	1280	726	933	6920	1160

ED_004549_00015929-00161

Table F6. Daily means (SD) of TSP emissions at Site NC3B for April, 2009.

Date	TSP Concentration				TSP Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}
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26	19 (8)	399 (168)	414 (187)		678 (298)	1280 (561)	5630 (2470)	1080 (476)	759 (303)	1510 (603)	6560 (2610)	1220 (484)				
27	33 (29)	512 (316)	563 (365)		638 (258)	1200 (486)	5280 (2130)	1020 (412)	753 (362)	1500 (721)	6480 (3120)	1200 (579)				
28	72 (157)	564 (418)	638 (510)		646 (291)	1220 (549)	5320 (2400)	1030 (465)	767 (460)	1530 (918)	6580 (3950)	1230 (737)				
29	26 (16)	544 (378)	566 (349)		709 (400)	1340 (756)	5830 (3290)	1130 (640)	781 (383)	1560 (764)	6690 (3280)	1250 (613)				
30	32 (12)	585 (322)	633 (349)		699 (360)	1320 (680)	5720 (2940)	1120 (575)	757 (277)	1510 (554)	6460 (2370)	1210 (444)				
Avg	36	521	563		674	1270	5560	1080	763	1520	6550	1220				
n	5	5	5	0	5	5	5	5	5	5	5	5	0	0	0	0
SD	18	66	81		28	54	217	45	10	20	81	16				
Min	19	399	414		638	1200	5280	1020	753	1500	6460	1200				
Max	72	585	638		709	1340	5830	1130	781	1560	6690	1250				

ED_004549_00015929-00162

Table F6. Daily means (SD) of TSP emissions at Site NC3B for May, 2009.

Date	TSP Concentration				TSP Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-1}	g $d^{-1}AU^{-1}$	mg $d^{-1}m^{-2}$	g d^{-1}	mg d^{-1} hd^{-1}	g $d^{-1}AU^{-1}$	mg $d^{-1}m^{-2}$	g d^{-1}	mg d^{-1} hd^{-1}	g $d^{-1}AU^{-1}$	mg $d^{-1}m^{-2}$
1	29 (14)	356 (218)	367 (194)		554 (290)	1050 (548)	4510 (2360)	886 (464)	620 (278)	1240 (555)	5280 (2370)	992 (445)				
2	20 (5)	354 (190)	327 (184)		583 (242)	1100 (457)	4730 (1960)	933 (386)	642 (285)	1280 (570)	5450 (2420)	1030 (456)				
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Avg	24	355	347		568	1080	4620	909	631	1260	5370	1010				
n	2	2	2	0	2	2	2	2	2	2	2	2	0	0	0	0
SD	4	1	20		15	28	108	23	11	22	85	17				
Min	20	354	327		554	1050	4510	886	620	1240	5280	992				
Max	29	356	367		583	1100	4730	933	642	1280	5450	1030				

ED_004549_00015929-00163

Table F6. Daily means (SD) of TSP emissions at Site NC3B for June, 2009.

Date	TSP Concentration				TSP Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}
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22	31 (22)	405 (195)	341 (286)		482 (294)	707 (432)	9850 (6010)	771 (471)	436 (338)	567 (440)	10300 (8020)	697 (541)				
23	22 (8)	312 (175)	252 (139)		352 (194)	517 (286)	7080 (3910)	563 (311)	381 (188)	496 (245)	8870 (4380)	609 (301)				
24	25 (11)	292 (183)	233 (157)		329 (143)	483 (210)	6500 (2820)	526 (228)	324 (152)	422 (198)	7420 (3490)	518 (243)				
25	33 (17)	287 (189)	228 (163)		351 (201)	515 (295)	6810 (3900)	561 (321)	335 (170)	438 (222)	7570 (3850)	537 (273)				
26	32 (14)	215 (119)	178 (82)						268 (146)	350 (191)	5950 (3250)	429 (234)				
27																
28																
29																
30																
Avg	28	302	246		378	556	7560	605	349	455	8030	558				
n	5	5	5	0	4	4	4	4	5	5	5	5	0	0	0	0
SD	4	61	53		60	89	1340	97	56	73	1480	90				
Min	22	215	178		329	483	6500	526	268	350	5950	429				
Max	33	405	341		482	707	9850	771	436	567	10300	697				

ED_004549_00015929-00164

Table F6. Daily means (SD) of TSP emissions at Site NC3B for August, 2009.

Date	TSP Concentration				TSP Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-1}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}
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9	30 (18)	243 (140)	206 (72)		365 (129)	540 (190)	3220 (1140)	584 (206)	319 (99)	430 (133)	3090 (965)	510 (158)				
10	38 (17)	244 (155)	199 (97)		385 (228)	570 (337)	3360 (1990)	615 (364)	314 (160)	424 (216)	3000 (1530)	503 (256)				
11	31 (13)	199 (136)	152 (73)		318 (244)	471 (362)	2750 (2110)	509 (391)	306 (184)	414 (249)	2880 (1730)	490 (295)				
12	27 (7)	167 (83)	107 (33)		234 (124)	347 (184)	2000 (1060)	375 (199)	201 (88)	272 (119)	1870 (820)	322 (141)				
13	28 (9)	263 (118)	132 (41)		355 (158)	527 (234)	3010 (1340)	568 (253)	240 (98)	324 (132)	2190 (891)	383 (156)				
14	20 (12)	253 (130)	143 (109)		338 (137)	501 (204)	2830 (1160)	540 (220)	288 (149)	390 (201)	2600 (1340)	461 (238)				
15	28 (14)	256 (150)	124 (48)		346 (158)	514 (234)	2880 (1310)	554 (252)	253 (120)	343 (162)	2250 (1070)	405 (192)				
16	24 (8)	238 (160)	117 (57)		339 (188)	503 (280)	2790 (1550)	542 (301)	257 (145)	349 (197)	2260 (1270)	412 (232)				
17	33 (48)	243 (171)	135 (126)		356 (352)	529 (523)	2900 (2870)	570 (564)	290 (385)	393 (522)	2510 (3330)	464 (617)				
18	22 (7)	197 (133)	115 (50)		303 (187)	450 (278)	2450 (1510)	485 (299)	278 (141)	377 (191)	2380 (1200)	445 (225)				
19	14 (5)	194 (165)	117 (72)		304 (287)	452 (427)	2440 (2300)	486 (460)	280 (198)	380 (268)	2370 (1670)	449 (316)				
20	18 (9)	155 (114)	129 (56)		254 (191)	377 (284)	2020 (1520)	406 (306)	278 (147)	377 (199)	2320 (1220)	445 (235)				
21	19 (10)	127 (81)	114 (45)		187 (134)	279 (200)	1480 (1060)	300 (215)	217 (103)	294 (140)	1790 (854)	347 (166)				
22	16 (7)	201 (135)	131 (79)		265 (220)	394 (328)	2070 (1720)	423 (352)	250 (166)	339 (226)	2040 (1360)	399 (266)				
23	23 (8)	251 (174)	179 (100)		303 (198)	452 (295)	2360 (1540)	486 (317)	291 (156)	396 (212)	2350 (1260)	466 (250)				
24	36 (15)	271 (215)	200 (132)		344 (393)	512 (586)	2660 (3040)	550 (629)	308 (233)	419 (317)	2460 (1860)	493 (373)				
25	38 (11)	217 (176)	182 (119)		272 (311)	406 (464)	2090 (2390)	436 (497)	300 (250)	408 (341)	2380 (1980)	480 (401)				
26	18 (10)	178 (180)	150 (109)		254 (376)	379 (561)	1940 (2870)	407 (602)	281 (256)	382 (348)	2200 (2000)	449 (410)				
27																
28																
29																
30																
31																
Avg	26	216	146		307	456	2510	491	275	373	2380	440				
n	18	18	18	0	18	18	18	18	18	18	18	18	0	0	0	0
SD	7	40	32		51	76	490	82	32	43	337	51				
Min	14	127	107		187	279	1480	300	201	272	1790	322				
Max	38	271	206		385	570	3360	615	319	430	3090	510				

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Table F6. Daily means (SD) of TSP emissions at Site NC3B for December, 2009.

Date	TSP Concentration				TSP Emission											
	Inlet	Barn 1	Barn 2	Barn 3	Barn 1				Barn 2				Barn 3			
	mg dsm	mg dsm^{-3}	mg dsm^{-3}	mg dsm^{-3}	g d^{-1}	mg d^{-1} hd^{-}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}	g d^{-1}	mg d^{-1} hd^{-}	g d^{-1}AU^{-1}	mg d^{-1}m^{-2}
1																
2																
3					12 (5)	18 (7)	156 (58)	20 (7)	9 (6)	13 (8)	117 (73)	14 (9)	9 (5)	12 (6)	113 (62)	14 (8)
4									8 (5)	11 (7)	101 (59)	12 (7)				
5									7 (4)	10 (6)	85 (47)	11 (6)				
6									8 (6)	12 (9)	101 (75)	13 (10)	6 (8)	8 (10)	73 (93)	10 (12)
7									8 (6)	11 (8)	92 (67)	12 (9)	6 (7)	8 (10)	73 (85)	10 (11)
8					11 (11)	15 (17)	120 (128)	17 (18)	9 (6)	13 (9)	103 (72)	14 (10)	5 (7)	6 (9)	54 (78)	7 (11)
9					13 (9)	20 (13)	149 (99)	21 (14)	9 (9)	13 (13)	102 (103)	14 (14)	5 (7)	7 (9)	63 (81)	9 (11)
10									12 (10)	18 (15)	138 (116)	19 (16)				
11									6 (7)	8 (10)	61 (77)	9 (11)				
12					111 (292)	163 (429)	1160 (3070)	178 (467)	119 (275)	176 (406)	1300 (3000)	191 (440)	96 (263)	131 (358)	1040 (2860)	153 (421)
13	11 (6)	831 (376)	785 (293)	804 (335)	396 (276)	581 (405)	4100 (2860)	633 (441)	362 (260)	535 (384)	3880 (2790)	579 (416)	348 (260)	474 (354)	3730 (2790)	557 (416)
14	17 (11)	1100 (504)	1070 (518)	969 (478)					444 (366)	656 (541)	4660 (3850)	710 (586)	432 (406)	589 (553)	4540 (4260)	692 (650)
15	15 (6)	758 (377)	853 (375)	691 (317)	444 (264)	653 (388)	4440 (2640)	711 (423)	421 (250)	622 (369)	4330 (2570)	673 (400)	399 (260)	544 (354)	4110 (2670)	639 (415)
16	15 (6)	1330 (635)	1720 (746)	1130 (611)									407 (517)	555 (704)	4100 (5210)	651 (827)
17	21 (9)	1380 (754)	1790 (903)	1190 (921)	395 (612)	582 (900)	3810 (5890)	632 (979)	509 (638)	753 (944)	5050 (6320)	815 (1020)	319 (557)	435 (759)	3160 (5510)	511 (892)
18	12 (8)	1430 (592)	1450 (629)	1120 (557)	279 (503)	411 (741)	2650 (4780)	447 (805)	334 (456)	494 (674)	3250 (4440)	535 (730)	197 (378)	268 (515)	1910 (3670)	315 (605)
19	6 (7)	1260 (620)	1230 (775)	1170 (537)												
20	11 (5)	1220 (453)	1210 (414)	1300 (493)	324 (422)	477 (621)	2970 (3870)	518 (675)	437 (386)	646 (571)	4100 (3630)	699 (618)	354 (491)	482 (669)	3300 (4570)	566 (785)
21	13 (6)	1220 (504)	1340 (573)	1310 (588)	367 (495)	541 (729)	3320 (4470)	588 (792)	492 (500)	728 (740)	4540 (4620)	787 (800)	394 (563)	537 (767)	3610 (5150)	630 (901)
22	19 (6)	1310 (871)	1250 (489)	1160 (493)	356 (557)	525 (821)	3170 (4950)	570 (891)	440 (435)	651 (645)	3990 (3950)	704 (697)	359 (477)	489 (650)	3230 (4290)	574 (763)
23	23 (7)	1140 (478)	1360 (789)	1120 (485)	370 (445)	546 (656)	3240 (3900)	592 (713)	467 (500)	691 (740)	4170 (4460)	747 (799)	398 (479)	542 (653)	3520 (4240)	637 (767)
24	20 (9)	1170 (660)	1330 (624)	1080 (567)	384 (505)	567 (744)	3320 (4360)	615 (807)	439 (485)	650 (718)	3860 (4260)	703 (776)	390 (480)	533 (655)	3400 (4180)	625 (769)
25	9 (8)	790 (474)	840 (505)	739 (449)	334 (338)	493 (498)	2850 (2880)	535 (541)	327 (286)	484 (423)	2830 (2480)	523 (457)	330 (332)	451 (453)	2830 (2850)	529 (532)
26																
27																
28																
29																
30																
31																
Avg	15	1150	1250	1060	271	399	2530	434	232	343	2230	371	247	337	2380	396
n	13	13	13	13	14	14	14	14	21	21	21	21	18	18	18	18
SD	5	215	297	193	154	227	1440	247	208	308	1980	333	168	229	1620	269
Min	6	758	785	691	11	15	120	17	6	8	61	9	5	6	54	7
Max	23	1430	1790	1310	444	653	4440	711	509	753	5050	815	432	589	4540	692

ED_004549_00015929-00166

Table F7. Hydrogen sulfide concentrations.

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for March, 2008.

Day	Inlet		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1								
2								
3								
4								
5								
6	5.4 (2.5)	7.7 (3.6)	154 (253)	243 (385)				
7	5.4 (4.6)	7.7 (6.6)						
8	3.5 (1.1)	4.9 (1.6)	127 (44)	184 (63)	127 (54)	184 (78)	11 (9)	16 (13)
9	4.5 (1.5)	6.5 (2.1)	250 (62)	357 (91)	225 (82)	317 (118)	22 (5)	31 (7)
10	5.4 (2.3)	7.7 (3.3)	307 (116)	440 (166)	271 (112)	387 (160)	29 (19)	41 (27)
11	6.2 (2.0)	8.8 (2.9)	320 (102)	459 (147)	341 (142)	488 (203)	129 (43)	185 (62)
12								
13								
14								
15	9.1 (10.7)	12.9 (15.2)	219 (67)	314 (96)	191 (55)	274 (79)	389 (103)	560 (148)
16	6.0 (3.0)	8.6 (4.2)	264 (78)	379 (112)	213 (52)	304 (74)	532 (137)	764 (198)
17	11.6 (3.6)	16.5 (5.0)	414 (203)	592 (290)	325 (71)	465 (102)	666 (130)	954 (187)
18	3.8 (2.7)	5.4 (3.8)	325 (121)	466 (174)	247 (83)	354 (119)	621 (137)	890 (195)
19	1.2 (1.2)	1.7 (1.7)	206 (60)	296 (86)	144 (55)	207 (79)	379 (172)	544 (247)
20	2.0 (1.6)	2.9 (2.3)	328 (130)	471 (187)	223 (80)	320 (115)	615 (261)	882 (379)
21	2.1 (1.4)	2.9 (2.0)	398 (171)	571 (247)	268 (122)	386 (175)	692 (283)	996 (410)
22	0.6 (1.2)	0.9 (1.7)	260 (123)	372 (176)	175 (86)	250 (123)	415 (241)	595 (346)
23	12.5 (3.0)	17.7 (4.2)	336 (84)	481 (121)	258 (53)	368 (75)	573 (145)	820 (209)
24	8.3 (2.5)	11.8 (3.6)	374 (69)	536 (99)	258 (43)	369 (62)	598 (137)	857 (196)
25	4.2 (2.9)	5.9 (4.1)	456 (345)	654 (499)	280 (103)	402 (147)	662 (272)	948 (394)
26	1.0 (2.1)	1.4 (3.0)	237 (83)	339 (119)	177 (69)	253 (99)	386 (174)	554 (249)
27	0.5 (1.5)	0.6 (2.2)	191 (89)	273 (127)	143 (55)	204 (79)	257 (172)	368 (247)
28	-0.9 (1.2)	-1.3 (1.7)	149 (53)	213 (76)	115 (46)	164 (65)	169 (106)	243 (153)
29	8.0 (2.6)	11.3 (3.7)	322 (77)	462 (111)	276 (72)	394 (103)	335 (133)	481 (191)
30	9.4 (1.7)	13.4 (2.4)	384 (31)	551 (44)	345 (18)	495 (26)	447 (29)	641 (41)
31	4.1 (3.7)	5.9 (5.3)	323 (161)	464 (231)	263 (93)	378 (134)	424 (329)	609 (473)
Avg	4.94	7.04	288	414	232	331	398	570
n	23	23	22	22	21	21	21	21
SD	3.53	5.02	88.3	125	66.3	94.6	217	312
Min	-0.9	-1.3	127	184	115	164	11	16
Max	12.5	17.7	456	654	345	495	692	996

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Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for April, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	0.9 (0.4)	1.3 (0.6)	159 (43)	228 (62)	136 (43)	195 (62)	217 (85)	312 (122)
2	8.3 (4.9)	11.8 (6.9)	212 (58)	305 (82)	189 (76)	271 (108)	297 (96)	425 (137)
3	5.5 (4.0)	7.9 (5.7)	314 (22)	450 (31)	271 (76)	387 (108)	373 (137)	535 (197)
4	0.1 (1.1)	0.1 (1.6)	218 (78)	313 (112)	134 (50)	192 (72)	243 (118)	348 (169)
5	5.6 (2.7)		257 (43)	367 (63)	141 (31)	205 (45)	162 (33)	236 (47)
6	7.6 (3.6)	10.9 (5.1)	356 (115)	537 (163)	224 (72)	322 (103)	264 (95)	379 (136)
7	10.9 (1.9)	15.6 (2.8)	495 (127)	710 (182)	327 (75)	468 (107)	434 (68)	622 (98)
8	10.2 (2.4)	14.6 (3.5)	377 (160)	541 (229)	277 (91)	397 (131)	423 (76)	607 (108)
9	8.1 (3.3)	11.6 (4.7)	286 (83)	411 (120)	231 (105)	332 (150)	392 (79)	563 (113)
10	4.4 (2.9)	6.4 (4.2)	146 (31)	209 (45)	227 (105)	326 (150)	324 (136)	465 (195)
11	6.0 (7.7)	8.6 (11.0)	113 (41)	162 (60)	82 (57)	117 (82)	189 (115)	272 (166)
12	7.4 (12.1)	10.6 (17.4)	155 (62)	223 (89)	82 (51)	118 (74)	179 (157)	257 (225)
13	0.8 (1.1)	1.2 (1.5)	238 (61)	341 (87)	126 (40)	181 (57)	174 (59)	249 (85)
14	4.9 (3.5)	6.9 (5.0)	346 (87)	496 (125)	207 (55)	295 (78)	219 (35)	314 (50)
15	11.6 (4.3)	16.5 (6.1)	366 (103)	524 (148)	207 (64)	296 (92)	246 (53)	352 (76)
16	9.6 (3.7)	13.6 (5.3)	400 (140)	572 (201)	222 (97)	318 (138)	265 (86)	379 (124)
17	2.4 (1.8)	3.4 (2.6)	323 (157)	463 (225)	179 (107)	256 (153)	261 (131)	373 (187)
18	1.2 (1.2)	1.7 (1.7)	282 (177)	403 (254)	133 (87)	190 (124)	238 (148)	341 (212)
19	0.6 (0.9)	0.8 (1.2)	325 (202)	466 (290)	124 (68)	177 (98)	212 (82)	304 (117)
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
Avg	5.59	7.97	282	406	185	265	269	386
n	19	18	19	19	19	19	19	19
SD	3.66	5.36	97.2	140	65.7	93.9	81.6	117
Min	0.1	0.1	113	162	82	117	162	236
Max	11.6	16.5	495	710	327	468	434	622

ED_004549_00015929-00168

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for May, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1								
2								
3								
4	1.4 (0.7)	2.0 (1.0)	162 (108)	233 (156)	117 (57)	169 (82)	117 (39)	168 (56)
5	6.2 (5.9)	8.9 (8.5)	273 (124)	393 (179)	195 (46)	280 (66)	147 (96)	211 (138)
6	1.9 (1.1)	2.7 (1.6)	131 (47)	189 (68)	121 (51)	174 (73)	90 (30)	129 (44)
7	0.9 (0.5)	1.3 (0.7)	100 (51)	145 (73)	97 (50)	140 (72)	83 (28)	119 (39)
8	0.8 (0.4)	1.1 (0.6)	117 (58)	168 (83)	80 (37)	115 (52)	97 (28)	140 (40)
9	0.8 (0.9)	1.1 (1.4)	84 (34)	121 (48)	62 (27)	90 (39)	103 (20)	147 (29)
10	6.0 (2.7)	8.5 (3.8)	126 (67)	181 (96)	116 (67)	167 (96)	164 (60)	236 (86)
11	5.4 (4.4)	7.7 (6.3)	183 (71)	263 (102)	161 (67)	231 (96)	228 (55)	327 (78)
12	2.1 (2.6)	3.0 (3.7)	231 (169)	331 (243)	198 (65)	283 (93)	256 (86)	366 (123)
13	4.3 (2.0)	6.2 (2.8)	115 (30)	165 (43)	136 (56)	195 (80)	155 (34)	222 (49)
14	0.9 (0.5)	1.3 (0.7)	95 (33)	136 (47)	98 (62)	141 (89)	122 (50)	175 (72)
15	0.6 (0.7)	0.8 (1.0)	135 (110)	194 (158)	91 (68)	131 (98)	136 (64)	195 (91)
16	0.4 (0.5)	0.5 (0.7)	75 (32)	108 (46)	61 (20)	88 (29)	80 (28)	115 (40)
17	0.5 (0.8)	0.7 (1.1)	152 (58)	218 (84)	108 (49)	154 (70)	190 (71)	272 (102)
18	0.8 (0.5)	1.1 (0.7)	155 (89)	223 (127)	95 (50)	137 (72)	193 (81)	277 (116)
19	17.7 (23.4)	25.3 (33.4)	182 (67)	262 (97)	99 (47)	142 (67)	207 (131)	297 (188)
20	2.0 (1.4)	2.8 (1.9)	141 (69)	203 (99)	83 (46)	120 (65)	110 (58)	158 (83)
21	0.8 (0.7)	1.2 (1.1)	124 (50)	179 (72)	91 (40)	130 (58)	136 (44)	195 (63)
22	2.3 (2.0)	3.4 (2.9)	157 (89)	226 (128)	131 (62)	188 (89)	185 (78)	265 (111)
23	6.9 (5.1)	9.8 (7.3)	115 (58)	165 (84)	95 (55)	136 (79)	125 (54)	179 (77)
24	7.1 (5.5)	10.1 (7.9)	161 (32)	231 (47)	110 (34)	158 (49)	164 (31)	235 (44)
25	4.1 (3.1)	5.9 (4.4)	164 (79)	235 (114)	108 (63)	155 (91)	161 (65)	231 (93)
26	1.8 (1.8)	2.6 (2.6)	144 (93)	206 (133)	98 (70)	140 (100)	136 (78)	196 (112)
27	1.0 (0.4)	1.4 (0.6)	130 (99)	188 (142)	76 (46)	109 (66)	137 (74)	197 (106)
28	6.8 (4.8)	9.8 (6.9)	210 (68)	302 (97)	140 (58)	201 (83)	264 (70)	379 (101)
29	11.5 (10.5)	16.4 (15.1)	395 (830)	567 (1190)	164 (142)	235 (204)	236 (130)	338 (186)
30	1.0 (1.0)	1.4 (1.4)	106 (71)	153 (102)	83 (47)	119 (67)	112 (61)	161 (87)
31	0.5 (0.6)	0.7 (0.9)	75 (38)	108 (54)	58 (21)	83 (31)	74 (38)	107 (55)
Avg	3.44	4.92	151	218	110	158	150	216
n	28	28	28	28	28	28	28	28
SD	3.9	5.57	64.5	92.7	35.5	50.9	52.1	74.7
Min	0.4	0.5	75	108	58	83	74	107
Max	17.7	25.3	395	567	198	283	264	379

ED_004549_00015929-00169

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for June, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	2.9 (2.6)	4.2 (3.8)	93 (48)	134 (69)	44 (20)	63 (28)	106 (59)	153 (86)
2	6.4 (3.1)	9.2 (4.4)	152 (134)	219 (194)	90 (38)	129 (54)	129 (102)	185 (147)
3	0.8 (0.4)	1.2 (0.6)	91 (57)	132 (83)	69 (18)	100 (26)	98 (50)	141 (72)
4	0.1 (0.6)	0.1 (0.8)	62 (37)	90 (53)	53 (14)	77 (20)	72 (39)	104 (57)
5	0.3 (0.5)	0.4 (0.7)	60 (30)	86 (43)	58 (26)	83 (38)	88 (89)	128 (128)
6	0.5 (0.6)	0.7 (0.9)	60 (29)	86 (42)	49 (7)	71 (10)	65 (42)	94 (60)
7	0.7 (0.7)	1.0 (1.0)	69 (33)	100 (48)	39 (17)	56 (24)	75 (45)	109 (65)
8	1.1 (1.2)	1.5 (1.8)	80 (55)	115 (79)	31 (14)	44 (21)	64 (48)	93 (70)
9	1.4 (0.9)	2.1 (1.3)	87 (59)	125 (85)	37 (27)	53 (38)	34 (31)	49 (44)
10	1.7 (2.0)	2.4 (2.9)	72 (34)	104 (49)	23 (10)	33 (15)	27 (15)	39 (22)
11								
12								
13	2.5 (3.8)	3.6 (5.4)	113 (78)	163 (112)	52 (30)	75 (43)	87 (56)	125 (81)
14	1.0 (1.2)	1.5 (1.8)	116 (82)	166 (118)	52 (34)	75 (49)	96 (67)	138 (96)
15	2.7 (2.9)	3.9 (4.2)	133 (67)	192 (97)	41 (14)	59 (20)	113 (40)	162 (58)
16	0.7 (0.6)	1.0 (0.8)	135 (89)	195 (128)	36 (22)	52 (32)	116 (84)	167 (121)
17	1.5 (2.0)	2.1 (2.9)	111 (67)	161 (97)	29 (11)	41 (15)	88 (41)	127 (59)
18	6.3 (3.4)	9.0 (4.8)	138 (78)	198 (112)	49 (29)	71 (42)	168 (94)	242 (134)
19	2.5 (2.7)	3.6 (3.9)	138 (85)	198 (123)	66 (48)	94 (68)	194 (146)	278 (210)
20	3.0 (3.1)	4.4 (4.4)	204 (333)	295 (481)	106 (125)	152 (180)	229 (134)	330 (193)
21	1.1 (1.1)	1.5 (1.6)	97 (47)	140 (68)	72 (37)	104 (53)	168 (70)	242 (100)
22	1.4 (1.1)	2.0 (1.6)						
23	0.9 (0.5)	1.3 (0.7)	121 (161)	175 (232)	84 (81)	120 (116)	170 (117)	245 (168)
24	1.1 (0.7)	1.6 (1.0)	64 (29)	92 (42)	82 (52)	118 (75)	133 (85)	191 (122)
25	0.6 (0.9)	0.8 (1.2)	49 (35)	71 (50)	70 (57)	101 (82)	128 (95)	185 (137)
26	0.2 (0.5)	0.3 (0.7)	83 (126)	120 (182)	56 (30)	80 (43)	161 (62)	232 (90)
27	0.5 (0.6)	0.7 (0.9)	52 (22)	75 (31)	46 (26)	67 (38)	111 (27)	160 (39)
28	-0.2 (0.6)	-0.3 (0.9)	54 (24)	77 (34)	46 (23)	66 (33)	116 (27)	168 (39)
29	-0.1 (0.6)	-0.1 (0.8)	66 (29)	96 (41)	55 (16)	79 (24)	115 (45)	166 (66)
30	0.1 (0.6)	0.1 (0.8)	67 (28)	97 (40)	55 (22)	80 (32)	134 (64)	193 (92)
Avg	1.48	2.12	95.1	137	55.1	79.3	114	165
n	28	28	27	27	27	27	27	27
SD	1.62	2.32	37.1	53.5	19.3	27.7	45.9	66
Min	-0.2	-0.3	49	71	23	33	27	39
Max	6.4	9.2	204	295	106	152	229	330

ED_004549_00015929-00170

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for July, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	5.4 (9.8)	7.7 (14.0)	66 (35)	94 (50)	72 (39)	103 (56)	125 (59)	179 (85)
2	1.5 (2.3)	2.1 (3.2)	76 (59)	108 (85)	83 (73)	118 (105)	142 (94)	203 (136)
3	1.2 (1.5)	1.7 (2.1)	84 (58)	121 (83)	81 (58)	117 (83)	134 (94)	193 (135)
4	0.2 (0.6)	0.3 (0.8)	66 (34)	95 (49)	76 (24)	110 (35)	89 (39)	128 (56)
5								
6								
7								
8								
9	2.7 (3.5)	3.9 (5.0)	82 (46)	118 (67)	95 (44)	137 (64)	154 (128)	185 (154)
10	0.7 (0.6)	1.1 (0.8)	100 (50)	147 (71)	99 (26)	140 (35)	109 (54)	156 (79)
11	3.7 (1.4)							
12	6.6 (2.1)	9.4 (3.0)	112 (68)	161 (97)	78 (29)	112 (41)	116 (64)	
13	2.9 (1.0)	4.2 (1.5)	111 (74)	165 (106)	77 (42)	113 (61)	121 (81)	
14	2.1 (0.9)	3.1 (1.2)	163 (234)	235 (339)	79 (24)	114 (35)	153 (166)	
15	6.9 (4.5)	10.0 (6.4)	88 (35)	126 (51)	74 (31)	107 (45)	82 (27)	
16	9.9 (1.9)	14.4 (2.7)	89 (53)	132 (76)	69 (27)	101 (39)	111 (70)	
17	9.1 (2.0)	13.1 (2.8)	111 (84)	159 (121)	90 (47)	129 (67)	162 (151)	
18	4.9 (2.7)	7.1 (3.9)	71 (45)	103 (65)	61 (25)	88 (36)	108 (61)	156 (88)
19	9.5 (2.2)	13.7 (3.2)	66 (25)	96 (36)	64 (15)	93 (22)	107 (44)	154 (64)
20	3.5 (2.3)	5.0 (3.4)	67 (31)	97 (44)	73 (18)	105 (26)	130 (83)	188 (120)
21	0.6 (0.4)	0.9 (0.6)	73 (49)	106 (70)	90 (60)	130 (87)	156 (252)	225 (365)
22	0.9 (0.6)	1.2 (0.8)	63 (25)	91 (35)	73 (19)	105 (28)	90 (39)	130 (57)
23	5.7 (2.6)	8.2 (3.7)	75 (38)	109 (55)	70 (34)	101 (49)	114 (36)	165 (52)
24	2.1 (1.2)	3.1 (1.8)	146 (112)	210 (161)	85 (35)	123 (51)	136 (57)	195 (82)
25	6.6 (0.6)	9.5 (0.9)						
26	4.8 (4.4)	6.8 (6.3)					135 (74)	194 (106)
27	1.1 (1.0)	1.5 (1.5)					108 (38)	156 (55)
28	4.1 (2.8)	5.9 (4.1)					119 (91)	172 (131)
29	14.6 (16.6)	21.0 (24.0)					32 (22)	45 (31)
30								
31								
Avg	4.44	6.45	89.9	130	78.4	113	119	166
n	25	24	19	19	19	19	23	17
SD	3.49	5.14	27.1	39.5	9.75	13.7	28.3	39.2
Min	0.2	0.3	63	91	61	88	32	45
Max	14.6	21.0	163	235	99	140	162	225

ED_004549_00015929-00171

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for August, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1								
2								
3								
4								
5								
6								
7								
8								
9	4.2 (1.0)	6.0 (1.5)	98 (60)	143 (87)	72 (41)	105 (59)		
10	0.2 (0.6)	0.3 (0.9)	153 (63)	221 (91)	68 (25)	97 (35)	16 (9)	
11	1.2 (2.6)	1.7 (3.8)	234 (100)	337 (145)	114 (102)	164 (146)	92 (55)	
12	5.0 (8.2)	7.2 (11.8)	197 (108)	284 (155)	69 (35)	100 (50)	131 (50)	
13	21.6 (16.1)	31.1 (23.1)	301 (40)	435 (58)	102 (19)	147 (28)	212 (29)	306 (42)
14	10.1 (7.7)	14.4 (11.1)	235 (67)	339 (97)	113 (32)	163 (46)	183 (75)	263 (109)
15	3.6 (2.7)	5.2 (3.9)	160 (76)	231 (110)	102 (46)	146 (67)	152 (60)	218 (87)
16	3.2 (2.6)	4.6 (3.8)	157 (53)	226 (77)	106 (31)	153 (45)	186 (53)	268 (76)
17	0.1 (0.7)	0.2 (1.1)	170 (62)	248 (89)	133 (30)	192 (43)	213 (58)	311 (84)
18	3.6 (1.1)	5.2 (1.5)	170 (80)	245 (116)	134 (51)	193 (74)	230 (127)	
19	0.4 (0.9)	0.6 (1.2)	113 (60)	164 (87)	115 (52)	166 (75)	170 (116)	
20	1.5 (1.5)	2.2 (2.1)	100 (50)	144 (72)	113 (52)	163 (74)	141 (77)	
21	7.7 (1.1)	11.1 (1.6)	126 (40)	182 (58)	117 (30)	168 (44)	157 (46)	
22	6.2 (2.5)	8.9 (3.6)	86 (34)	124 (49)	113 (49)	163 (71)	134 (60)	
23	4.0 (2.7)	5.7 (3.9)	82 (32)	118 (46)	105 (44)	152 (64)	127 (53)	
24	2.8 (0.4)	4.1 (0.6)	93 (41)	134 (59)	100 (51)	144 (74)	140 (76)	
25	1.8 (0.6)							
26	3.9 (0.8)							
27	3.4 (1.9)	4.9 (2.8)	73 (4)	105 (6)	77 (15)	112 (22)	130 (31)	188 (44)
28	1.1 (0.5)	1.6 (0.7)	68 (19)	99 (28)	71 (18)	103 (26)	119 (35)	172 (51)
29	3.6 (1.8)	5.3 (2.6)	84 (33)	120 (47)	97 (36)	140 (52)	146 (56)	212 (81)
30	1.5 (1.0)	2.2 (1.4)	84 (38)	122 (55)	84 (34)	121 (48)	137 (58)	198 (84)
31	5.4 (2.1)	7.7 (3.0)						
Avg	4.18	6.2	139	201	100	145	148	237
n	23	21	20	20	20	20	19	9
SD	4.41	6.58	62.7	90.4	19.9	28.6	46.5	48.3
Min	0.1	0.2	68	99	68	97	16	172
Max	21.6	31.1	301	435	134	193	230	311

ED_004549_00015929-00172

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for September, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	5.2 (0.7)	7.5 (1.0)	104 (44)	150 (63)	124 (39)	179 (56)	163 (57)	235 (83)
2	3.7 (1.2)	5.3 (1.6)	66 (28)	95 (40)	95 (47)	136 (67)	155 (82)	223 (118)
3	0.8 (0.5)	1.2 (0.8)	71 (31)	103 (45)	83 (42)	119 (60)	143 (79)	205 (114)
4	4.6 (4.7)	6.6 (6.8)	74 (36)	106 (51)	85 (44)	123 (63)	159 (94)	229 (136)
5	19.3 (1.6)	27.8 (2.3)	77 (34)	111 (49)	73 (37)	105 (53)	129 (79)	186 (114)
6								
7								
8								
9								
10								
11								
12	1.0 (1.0)	1.4 (1.4)	119 (47)	172 (67)	89 (29)	129 (42)	155 (53)	224 (76)
13	1.4 (1.0)	2.0 (1.5)	114 (49)	164 (71)	87 (29)	126 (42)	126 (59)	182 (85)
14	1.6 (0.8)	2.3 (1.2)	110 (47)	159 (67)	87 (32)	126 (46)	120 (51)	173 (74)
15	5.0 (4.4)	7.2 (6.3)	105 (39)	151 (56)	99 (32)	143 (46)	139 (63)	201 (91)
16	13.8 (6.8)	19.8 (9.8)	92 (19)	133 (27)	113 (26)	163 (37)	163 (32)	235 (46)
17	18.0 (8.0)	25.8 (11.5)	84 (16)	120 (24)	151 (28)	217 (41)	263 (55)	379 (78)
18	8.9 (3.0)	12.8 (4.3)	126 (40)	180 (57)	184 (90)	265 (129)	386 (141)	555 (202)
19	12.3 (2.6)	17.7 (3.7)	156 (38)	224 (54)	233 (104)	335 (149)	416 (94)	599 (136)
20	10.9 (2.0)	15.6 (2.9)	210 (31)	302 (45)	267 (121)	384 (173)	481 (83)	692 (118)
21	10.1 (0.7)	14.4 (1.0)						
22	14.3 (2.0)	20.4 (2.8)	307 (215)	441 (310)	284 (218)	408 (314)	443 (246)	637 (354)
23	12.4 (1.4)	17.7 (2.0)	180 (28)	258 (40)	144 (81)	207 (117)	176 (98)	253 (141)
24	11.0 (2.9)	15.7 (4.2)	177 (87)	255 (124)	82 (13)	117 (19)	123 (14)	177 (20)
25	10.6 (3.6)	15.2 (5.1)	81 (12)	116 (17)	111 (18)	160 (26)	144 (9)	207 (13)
26	1.5 (1.4)	2.1 (2.0)	102 (19)	147 (28)	100 (18)	144 (26)	141 (25)	204 (36)
27	3.5 (1.7)	5.0 (2.5)	162 (30)	233 (43)	153 (63)	221 (91)	173 (40)	250 (57)
28	0.7 (1.0)	1.1 (1.4)	230 (49)	330 (71)	218 (92)	313 (132)	217 (59)	312 (85)
29	3.0 (0.0)	4.3 (0.0)						
30	1.9 (0.7)	2.8 (1.0)	391 (66)	562 (95)	409 (112)	589 (162)	366 (63)	528 (90)
Avg	7.31	10.5	143	205	149	214	217	313
n	24	24	22	22	22	22	22	22
SD	5.65	8.11	80	115	83.7	120	115	165
Min	0.7	1.1	66	95	73	105	120	173
Max	19.3	27.8	391	562	409	589	481	692

ED_004549_00015929-00173

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for October, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	3.7 (1.7)	5.4 (2.5)	510 (97)	733 (139)	522 (176)	752 (253)	496 (131)	716 (188)
2	4.5 (3.0)	6.4 (4.2)	713 (157)	1020 (226)	709 (227)	1020 (326)	762 (177)	1090 (255)
3	6.1 (5.0)	8.7 (7.1)	673 (223)	965 (319)	753 (306)	1080 (439)	735 (234)	1060 (336)
4	3.0 (2.8)	4.3 (3.9)	669 (199)	959 (285)	708 (354)	1020 (507)	657 (222)	945 (319)
5	13.9 (5.0)	19.4 (7.3)	670 (169)	984 (238)	792 (284)	1140 (408)	734 (260)	1100 (364)
6	19.5 (2.3)	28.0 (3.3)	543 (210)	778 (301)	547 (362)	785 (520)	605 (273)	869 (392)
7	11.8 (4.1)	17.0 (5.9)	347 (67)	497 (97)	425 (179)	610 (257)	492 (84)	708 (120)
8	5.7 (2.7)	8.1 (3.9)	362 (73)	520 (104)	481 (267)	691 (383)	492 (159)	707 (228)
9	3.9 (1.6)	5.6 (2.3)	343 (92)	493 (132)	334 (160)	481 (230)	422 (141)	608 (203)
10	18.2 (4.1)	26.2 (5.9)	334 (48)	480 (69)	313 (99)	451 (143)	421 (235)	607 (340)
11	22.5 (4.6)	32.4 (6.7)	296 (45)	426 (64)	268 (72)	386 (104)	339 (19)	489 (27)
12	20.9 (3.4)	29.9 (4.9)	268 (48)	386 (69)	287 (115)	413 (165)	321 (54)	462 (78)
13	13.9 (3.8)	19.9 (5.4)	297 (87)	427 (124)	335 (163)	482 (234)	351 (89)	505 (128)
14	13.1 (4.7)	18.7 (6.8)	328 (118)	471 (169)	403 (234)	579 (335)	397 (145)	572 (209)
15	3.2 (0.7)	4.6 (1.1)	335 (159)	480 (228)	381 (247)	548 (354)	410 (186)	591 (268)
16	2.8 (0.7)	4.0 (1.0)	329 (129)	472 (185)	334 (198)	480 (284)	388 (154)	559 (222)
17	14.0 (8.8)	20.1 (12.6)	389 (85)	560 (121)	393 (144)	565 (207)	425 (79)	613 (114)
18	15.3 (3.4)	21.8 (4.9)	601 (68)	863 (97)	753 (61)	1080 (88)	610 (54)	879 (77)
19	21.1 (2.9)	30.1 (4.0)	606 (108)	868 (154)	779 (121)	1120 (173)	723 (167)	1040 (239)
20	11.7 (6.7)	16.6 (9.5)	687 (604)	984 (866)	906 (677)	1300 (972)	851 (579)	1220 (833)
21	2.4 (2.6)	3.5 (3.7)	382 (132)	547 (189)	408 (124)	585 (178)	355 (130)	509 (187)
22	7.5 (2.5)	10.6 (3.6)	450 (108)	645 (154)	482 (73)	690 (104)	401 (75)	575 (108)
23	8.4 (3.5)	12.0 (4.9)	467 (131)	669 (187)	529 (109)	758 (156)	485 (93)	695 (134)
24	15.5 (2.7)	22.2 (3.8)	452 (52)	648 (75)	559 (85)	803 (122)	533 (57)	767 (81)
25	2.8 (3.0)	4.1 (4.3)	378 (103)	544 (147)	305 (117)	439 (168)	462 (101)	666 (145)
26	1.5 (0.7)	2.1 (1.0)	620 (137)	889 (196)	594 (216)	853 (310)	717 (135)	1030 (195)
27	7.9 (5.8)	11.3 (8.2)	826 (459)	1180 (659)	713 (374)	1020 (537)	725 (383)	1040 (550)
28	1.8 (3.7)	2.6 (5.3)	427 (65)	611 (93)	297 (98)	425 (141)	231 (77)	331 (110)
29	1.1 (2.9)	1.5 (4.2)	413 (70)	592 (99)	173 (44)	249 (62)	178 (38)	254 (54)
30	10.9 (4.0)	15.5 (5.6)	415 (81)	594 (115)	190 (27)	272 (39)	234 (57)	335 (82)
31	5.7 (3.9)	8.0 (5.7)	457 (118)	653 (168)	253 (65)	362 (94)	373 (107)	535 (154)
Avg	9.49	13.6	471	676	481	691	494	712
n	31	31	31	31	31	31	31	31
SD	6.53	9.34	147	212	197	282	173	250
Min	1.1	1.5	268	386	173	249	178	254
Max	22.5	32.4	826	1180	906	1300	851	1220

ED_004549_00015929-00174

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for November, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	8.3 (5.3)	11.8 (7.5)	503 (176)	720 (252)	348 (128)	498 (184)	564 (192)	809 (275)
2	16.7 (1.7)	23.9 (2.5)						
3	14.5 (6.0)	20.7 (8.7)						
4	23.1 (8.0)	33.2 (11.5)						
5	11.9 (6.1)	17.1 (8.8)	278 (39)	399 (56)	292 (71)	420 (101)	463 (75)	665 (107)
6	0.3 (1.1)	0.4 (1.5)	364 (217)	522 (311)	528 (351)	757 (504)	493 (152)	707 (217)
7	-0.6 (0.7)	-0.8 (1.0)	283 (103)	405 (148)	427 (194)	612 (278)	520 (176)	746 (252)
8	-3.6 (2.7)		256 (100)		360 (168)		423 (175)	
9	-0.1 (4.5)		239 (118)		410 (444)		370 (272)	
10	2.7 (2.6)	3.8 (3.7)	403 (470)	576 (673)	945 (332)	1350 (475)	658 (251)	942 (360)
11	15.2 (5.2)	21.6 (7.5)	245 (63)	350 (90)	796 (227)	1140 (325)	617 (104)	883 (148)
12	22.8 (7.0)	32.4 (9.9)	231 (42)	331 (60)	644 (215)	921 (308)	457 (83)	655 (118)
13	7.6 (6.3)	10.9 (8.9)	215 (114)	308 (164)	447 (167)	642 (239)	426 (177)	613 (256)
14	4.8 (4.2)	6.8 (6.0)	199 (30)	286 (44)	382 (69)	549 (99)	384 (66)	552 (94)
15	0.0 (2.5)	-0.1 (3.6)	206 (91)	296 (130)	344 (161)	494 (231)	320 (149)	460 (213)
16	0.3 (1.6)	0.4 (2.3)	513 (95)	734 (135)	747 (140)	1070 (200)	720 (96)	1030 (137)
17	2.6 (2.0)	3.8 (2.8)	606 (126)	867 (181)	711 (165)	1020 (235)	781 (125)	1120 (179)
18	6.3 (3.3)	8.9 (4.8)	848 (326)	1210 (466)	930 (385)	1330 (552)	906 (418)	1300 (599)
19	0.9 (3.6)	1.5 (5.7)	506 (190)	721 (272)	653 (87)	932 (124)	671 (98)	960 (140)
20	2.2 (2.0)	2.6 (2.7)	453 (107)	647 (153)	569 (140)	813 (200)	604 (148)	865 (211)
21	10.4 (3.3)	14.8 (4.7)	414 (63)	591 (90)	555 (64)	792 (92)	646 (80)	924 (114)
22	3.8 (2.4)		382 (59)	544 (84)	614 (109)	876 (155)	800 (127)	1140 (181)
23	4.9 (5.4)	6.5 (7.5)	320 (58)	456 (82)	602 (143)	860 (204)	796 (148)	1140 (212)
24	6.5 (3.3)		444 (485)	634 (692)	671 (242)	959 (346)	770 (325)	1100 (465)
25	5.8 (4.6)	8.3 (6.6)	177 (32)	253 (45)	530 (141)	758 (202)	481 (93)	688 (133)
26	5.3 (3.0)	6.6 (4.2)	206 (132)	294 (188)	746 (193)	1070 (277)	581 (145)	831 (208)
27	2.9 (2.4)		173 (48)	246 (68)	673 (214)	962 (306)	447 (108)	638 (154)
28	3.0 (1.9)	4.2 (2.8)	183 (44)	261 (63)	588 (160)	841 (229)	429 (76)	614 (108)
29	12.8 (2.8)	18.2 (3.9)	247 (28)	353 (39)	623 (53)	893 (75)	379 (86)	542 (124)
30	6.1 (2.2)	8.7 (3.2)	228 (36)	328 (52)	500 (110)	717 (158)	292 (79)	417 (114)
Avg	6.57	10.6	338	493	579	851	556	814
n	30	25	27	25	27	25	27	25
SD	6.6	9.58	157	230	169	236	163	232
Min	-3.6	-0.8	173	246	292	420	292	417
Max	23.1	33.2	848	1210	945	1350	906	1300

ED_004549_00015929-00175

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for December, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	3.0 (3.3)	4.3 (4.7)	351 (80)	501 (114)	665 (244)	951 (350)	507 (101)	725 (144)
2	3.2 (2.9)	4.7 (4.1)	442 (49)	630 (70)	738 (118)	1060 (168)	548 (66)	784 (94)
3	1.7 (2.4)		406 (105)	579 (149)	749 (221)	1070 (317)	572 (111)	818 (159)
4	0.5 (1.3)	0.7 (1.9)	376 (108)	536 (155)	647 (196)	926 (281)	469 (106)	671 (151)
5	6.5 (3.1)	9.3 (4.4)	436 (48)	623 (69)	601 (174)	860 (249)	501 (94)	717 (135)
6	9.9 (4.0)	14.2 (5.7)	389 (73)	555 (104)	617 (126)	883 (180)	480 (83)	686 (119)
7	5.8 (2.8)	9.3 (3.5)	432 (38)	617 (55)	650 (143)	929 (205)	483 (58)	691 (82)
8	2.6 (2.9)		388 (105)	554 (150)	709 (271)	1010 (389)	568 (175)	812 (250)
9	1.3 (2.8)	1.8 (3.9)	271 (65)	388 (92)	453 (120)	649 (171)	344 (140)	493 (199)
10	0.7 (0.5)	1.0 (0.7)	211 (37)	303 (53)	299 (76)	430 (109)	176 (35)	253 (51)
11	0.8 (0.5)	1.1 (0.8)	230 (34)	331 (48)	362 (81)	521 (116)	218 (62)	314 (89)
12	2.1 (1.7)	2.9 (2.5)	548 (549)	783 (786)	738 (222)	1060 (317)	495 (90)	709 (128)
13	10.2 (4.7)							
14	2.9 (3.3)	4.2 (4.7)	347 (74)	496 (105)	534 (155)	765 (221)	359 (125)	514 (179)
15	1.2 (1.0)	1.7 (1.5)	288 (60)	412 (86)	369 (75)	529 (107)	259 (27)	371 (39)
16	12.4 (5.6)	17.7 (8.1)	366 (136)	524 (195)	519 (92)	744 (132)	357 (121)	513 (173)
17	2.4 (2.6)	3.4 (3.7)	266 (62)	383 (88)	427 (99)	615 (142)	236 (70)	342 (101)
18	-1.3 (0.6)	-1.8 (0.8)	224 (20)	321 (29)	432 (47)	620 (67)	209 (27)	300 (39)
19	0.2 (0.8)	0.3 (1.2)	246 (89)	352 (128)	461 (83)	662 (120)	239 (92)	342 (132)
20	-0.2 (0.4)	-0.4 (0.6)	258 (51)		415 (113)		253 (42)	
21								
22								
23								
24								
25			1 (2)		1 (3)		1 (3)	
26	3.2 (4.6)	4.5 (6.5)	2 (2)		2 (2)		2 (2)	
27	26.5 (24.2)	38.6 (34.7)	8 (12)		9 (13)		5 (7)	
28	5.7 (4.0)	8.2 (5.7)						
29	5.5 (5.2)	7.9 (7.5)	109 (226)	156 (323)	82 (132)	117 (189)	96 (197)	137 (282)
30	-0.3 (1.3)	-0.4 (1.8)	58 (18)	82 (25)	49 (48)	70 (68)	187 (465)	267 (662)
31	3.8 (2.9)		49 (14)		32 (8)		38 (11)	
Avg	4.24	6.04	268	456	422	723	304	523
n	26	22	25	20	25	20	25	20
SD	5.58	8.56	152	166	253	283	186	212
Min	-1.3	-1.8	1	82	1	70	1	137
Max	26.5	38.6	548	783	749	1070	572	818

ED_004549_00015929-00176

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for January, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	4.9 (3.7)		75 (12)	107 (18)	48 (3)	68 (5)	55 (9)	78 (13)
2	0.3 (0.6)		54 (22)	76 (31)	36 (8)	52 (12)	43 (13)	62 (19)
3	6.5 (2.5)	9.1 (3.6)	66 (11)	95 (15)	46 (11)	66 (16)	44 (15)	64 (21)
4	5.2 (4.1)	7.4 (5.8)	71 (8)	102 (12)	60 (7)	87 (10)	49 (8)	70 (12)
5	0.4 (0.5)	0.6 (0.7)	152 (234)	218 (338)	147 (201)	209 (291)	107 (113)	153 (163)
6	1.4 (1.0)	2.1 (1.4)	91 (14)	130 (20)	118 (12)	169 (17)	83 (9)	120 (13)
7	0.5 (0.6)	0.7 (0.9)	96 (19)	138 (27)	129 (25)	185 (36)	91 (58)	131 (84)
8	3.0 (3.2)	4.3 (4.5)	179 (99)	256 (141)	172 (97)	246 (138)	139 (44)	199 (63)
9	11.1 (6.6)	15.8 (9.4)	194 (24)	276 (34)	163 (25)	234 (36)	185 (26)	265 (38)
10	6.0 (3.2)	8.5 (4.5)	158 (40)	230 (61)	197 (40)	282 (57)	176 (37)	252 (53)
11	5.2 (3.4)	7.4 (4.9)	229 (74)		358 (125)	515 (179)	261 (73)	375 (104)
12	7.3 (3.7)	10.4 (5.2)	495 (864)	708 (1240)	600 (998)	859 (1430)	556 (796)	796 (1140)
13	5.4 (1.6)	7.7 (2.2)	153 (15)	219 (22)	108 (13)	155 (18)	156 (18)	224 (26)
14	1.7 (1.1)	2.4 (1.6)	133 (11)	190 (15)	117 (20)	168 (28)	153 (15)	219 (21)
15	5.5 (4.4)	7.1 (6.1)	208 (279)	298 (399)	242 (552)	347 (791)	184 (228)	262 (327)
16	3.0 (2.9)		92 (11)	131 (16)	72 (10)	102 (14)	94 (13)	134 (18)
17	0.9 (1.4)		83 (7)	119 (10)	59 (8)	84 (11)	84 (7)	119 (10)
18								
19								
20								
21								
22								
23	-0.1 (0.6)	-0.1 (0.9)	25 (6)	36 (9)	46 (8)	66 (11)	24 (5)	34 (6)
24	2.3 (1.8)	3.3 (2.5)	32 (7)	46 (10)	71 (11)	101 (15)	28 (7)	41 (9)
25	4.6 (1.0)							
26	1.9 (0.8)	2.7 (1.2)	42 (20)	60 (29)	72 (35)	103 (50)	72 (9)	103 (13)
27	1.1 (2.0)	1.6 (2.9)	28 (5)	40 (7)	35 (6)	50 (9)	81 (10)	116 (15)
28	-0.2 (1.4)	-0.2 (1.9)	42 (78)	61 (112)	49 (50)	71 (72)	90 (33)	129 (47)
29	-0.4 (0.7)	-0.5 (1.0)	28 (4)	41 (6)	65 (6)	93 (9)	241 (51)	349 (75)
30	0.4 (0.8)	0.6 (1.1)	47 (17)	67 (24)	51 (13)	73 (18)	350 (45)	
31	-0.7 (1.0)	-0.9 (1.5)	94 (20)	134 (29)	56 (15)	79 (22)	412 (55)	584 (80)
Avg	2.97	4.28	115	157	125	179	150	203
n	26	21	25	24	25	25	25	24
SD	2.9	4.36	97.9	139	122	175	127	175
Min	-0.7	-0.9	25	36	35	50	24	34
Max	11.1	15.8	495	708	600	859	556	796

ED_004549_00015929-00177

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for February, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	-0.1 (1.0)	-0.2 (1.5)	108 (25)	154 (35)	70 (12)	100 (17)	360 (83)	516 (118)
2	0.7 (0.8)	1.1 (1.2)	141 (26)	202 (38)	106 (19)	152 (28)	400 (776)	560 (1090)
3	-0.5 (0.8)	-0.8 (1.1)	181 (38)	259 (55)	181 (255)	259 (365)	48 (6)	68 (8)
4	2.5 (3.2)	3.6 (3.9)	223 (366)	319 (523)	33 (6)	47 (9)	38 (5)	54 (7)
5	0.3 (1.7)		42 (5)	60 (7)	28 (7)	40 (10)	50 (14)	72 (20)
6	-1.4 (1.3)		28 (7)	40 (11)	31 (7)	44 (10)	62 (10)	89 (14)
7	-1.6 (0.3)	-2.3 (0.4)	20 (6)	28 (9)	40 (10)	57 (15)	69 (17)	99 (24)
8	-0.8 (0.3)	-1.1 (0.4)	28 (12)	40 (17)	78 (34)	112 (49)	89 (30)	127 (43)
9	5.9 (7.1)	8.5 (10.1)	83 (144)	119 (206)	170 (46)	244 (67)	134 (33)	191 (48)
10	0.0 (1.0)	0.0 (1.5)	19 (6)	28 (8)	189 (211)	272 (304)	150 (35)	219 (50)
11	-0.8 (1.1)	-1.1 (1.5)	13 (4)	18 (6)	31 (8)	45 (12)	141 (152)	202 (218)
12	-1.2 (1.3)	-1.8 (1.8)	21 (10)	31 (14)	58 (36)	84 (52)	38 (15)	54 (21)
13	-0.3 (2.4)	-0.5 (3.4)	45 (15)	65 (21)	142 (53)	203 (76)	85 (23)	122 (32)
14	7.3 (6.1)	10.4 (8.6)	85 (10)	121 (15)	286 (38)	410 (54)	141 (13)	202 (19)
15	29.9 (9.6)	42.5 (13.6)	144 (23)	206 (32)	452 (62)	647 (89)	203 (29)	291 (41)
16	18.0 (8.8)	26.0 (12.9)	242 (390)	346 (559)	582 (51)	833 (72)	205 (87)	293 (125)
17	28.0 (23.6)		56 (11)	80 (15)	545 (580)	780 (830)	108 (36)	155 (51)
18	0.8 (0.9)	1.2 (1.3)	31 (14)	44 (20)	49 (16)	71 (23)	205 (344)	294 (493)
19	-1.2 (0.5)	-1.8 (0.8)	27 (9)	39 (13)	36 (16)	52 (23)	36 (8)	51 (11)
20	0.6 (1.0)							
21	3.2 (3.8)		73 (14)	104 (20)	119 (20)	169 (28)	83 (11)	119 (16)
22	-1.2 (0.8)	-1.7 (1.1)	83 (29)	119 (41)	133 (33)	192 (47)	105 (26)	151 (38)
23	1.8 (3.6)		165 (186)	236 (266)	216 (25)	308 (35)	181 (23)	259 (33)
24	0.7 (2.4)		69 (7)	99 (10)	294 (645)	421 (924)	230 (32)	329 (46)
25	0.9 (1.5)		53 (7)	75 (10)	60 (13)	86 (18)	246 (235)	352 (336)
26	-1.8 (0.6)	-2.6 (0.8)	54 (9)	77 (12)	49 (9)	71 (13)	55 (13)	79 (19)
27	-1.1 (0.3)	-1.6 (0.4)						
28	11.7 (11.9)	16.6 (17.0)	164 (57)	236 (81)	162 (52)	233 (75)	121 (44)	173 (63)
Avg	3.59	4.73	84.5	121	159	228	138	197
n	28	20	26	26	26	26	26	26
SD	8.25	11.3	65.1	93.1	153	220	93.6	133
Min	-1.8	-2.6	13	18	28	40	36	51
Max	29.9	42.5	242	346	582	833	400	560

ED_004549_00015929-00178

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for March, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	22.8 (4.3)	32.4 (6.2)	354 (38)	507 (54)	324 (34)	463 (49)	286 (40)	410 (57)
2	10.6 (8.3)	16.9 (11.1)	421 (47)	602 (68)	382 (36)	546 (52)	403 (58)	577 (84)
3	12.7 (8.3)		461 (76)	659 (109)	600 (997)	858 (1430)	515 (45)	737 (64)
4	1.3 (1.5)		365 (82)	522 (118)	167 (23)	239 (33)	511 (104)	730 (149)
5	-0.5 (1.3)	-1.3 (1.6)	339 (438)	484 (627)	78 (18)	111 (26)	452 (526)	647 (754)
6	-0.4 (0.7)	-0.6 (0.9)	43 (19)	62 (27)	65 (21)	93 (30)	85 (45)	121 (65)
7	-0.3 (0.7)	-0.5 (1.0)	31 (11)	44 (16)	96 (45)	138 (65)	49 (14)	70 (20)
8	-0.3 (0.3)	-0.4 (0.5)						
9	8.5 (16.5)	12.1 (23.5)	77 (47)	110 (67)	224 (127)	320 (182)	133 (73)	191 (105)
10	27.3 (27.3)	38.9 (38.8)	161 (48)	231 (69)	324 (372)	464 (533)	265 (47)	379 (68)
11	-1.0 (2.0)	-1.4 (2.9)	140 (65)	201 (93)	49 (20)	71 (29)	297 (115)	427 (165)
12	24.3 (13.5)	34.5 (19.2)	364 (329)	520 (470)	177 (68)	253 (97)	340 (235)	486 (336)
13	21.0 (6.4)	29.8 (9.1)	107 (25)	153 (36)	371 (39)	532 (56)	170 (46)	243 (65)
14	11.7 (3.9)	16.6 (5.6)	151 (16)	216 (23)	457 (43)	654 (62)	297 (41)	425 (59)
15	18.9 (6.9)	27.0 (9.8)	194 (61)	278 (88)	495 (54)	710 (77)	382 (27)	548 (39)
16	12.3 (6.1)	17.6 (8.8)	225 (32)	323 (47)	555 (53)	797 (75)	554 (86)	796 (123)
17	20.8 (2.2)	29.7 (3.1)	276 (39)	396 (56)	456 (538)	654 (772)	636 (90)	911 (129)
18	5.1 (3.9)	7.2 (5.6)	352 (72)	504 (102)	107 (38)	153 (55)	651 (224)	931 (321)
19	9.6 (13.6)	13.6 (19.5)	359 (473)	514 (678)	119 (59)	170 (84)	514 (487)	735 (698)
20	22.4 (9.2)	31.9 (13.2)	61 (12)	88 (17)	213 (62)	305 (89)	132 (42)	188 (59)
21	10.1 (2.7)	14.3 (3.8)	79 (19)	113 (27)	336 (84)	481 (120)	218 (45)	311 (64)
22	3.5 (2.6)	4.9 (3.7)			386 (129)	552 (185)	279 (72)	398 (103)
23	24.2 (24.9)	34.4 (35.4)	108 (45)	154 (65)	350 (171)	500 (245)	271 (106)	387 (152)
24	56.6 (48.3)	80.5 (68.7)	162 (43)	232 (62)	359 (406)	513 (580)	344 (50)	491 (72)
25	9.4 (5.2)	13.3 (7.4)	204 (48)	291 (69)	104 (17)	149 (25)	447 (40)	640 (57)
26	0.1 (1.9)	0.1 (2.6)	157 (176)	225 (252)	89 (23)	128 (32)	308 (259)	443 (371)
27	-0.6 (1.3)	-0.9 (1.8)	32 (7)	46 (11)	111 (28)	160 (41)	89 (19)	128 (27)
28	0.8 (1.0)	1.2 (1.4)	55 (17)	79 (24)	120 (48)	173 (69)	103 (25)	149 (36)
29	1.3 (1.4)	1.9 (2.1)	87 (50)	125 (72)	196 (108)	282 (154)	141 (71)	202 (101)
30	5.1 (4.2)	7.3 (6.0)	233 (52)	332 (74)	428 (151)	612 (216)	308 (73)	440 (104)
31	3.7 (2.7)	5.3 (3.9)	275 (83)	394 (119)	351 (254)	502 (363)	338 (108)	484 (154)
Avg	11	16.1	203	290	270	386	317	454
n	31	29	29	29	30	30	30	30
SD	12.2	17.8	127	182	158	226	163	233
Min	-1.0	-1.4	31	44	49	71	49	70
Max	56.6	80.5	461	659	600	858	651	931

ED_004549_00015929-00179

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for April, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	3.9 (0.8)	5.6 (1.1)	348 (92)	499 (131)	123 (30)	176 (43)	336 (53)	483 (76)
2	3.6 (1.1)	5.1 (1.5)	310 (243)	444 (348)	167 (29)	240 (41)	267 (211)	384 (303)
3	2.2 (0.3)	3.1 (0.5)	54 (25)	77 (35)	134 (44)	192 (63)	55 (22)	78 (32)
4	0.7 (1.1)	1.0 (1.6)	127 (54)	181 (77)	284 (106)	406 (152)	159 (49)	227 (71)
5	1.5 (0.8)	2.2 (1.1)	164 (88)	235 (126)	238 (141)	341 (202)	155 (98)	222 (140)
6	1.2 (1.3)	1.7 (1.8)	249 (139)	357 (198)	210 (113)	301 (161)	167 (83)	240 (119)
7	1.0 (0.6)	1.4 (0.8)	485 (96)	692 (136)	374 (216)	534 (309)	412 (65)	588 (93)
8	1.2 (1.2)	1.8 (1.8)	447 (106)	638 (151)	158 (46)	225 (65)	415 (124)	593 (177)
9	2.0 (0.7)	2.8 (0.9)	319 (326)	456 (466)	149 (61)	212 (87)	250 (215)	357 (308)
10	2.4 (0.7)	3.4 (1.0)	102 (51)	147 (73)	134 (58)	192 (83)	26 (12)	37 (17)
11	2.1 (1.5)	3.0 (2.1)	191 (79)	274 (113)	185 (81)	265 (116)	47 (21)	67 (30)
12	2.8 (1.3)	4.0 (1.9)	269 (65)	385 (93)	336 (127)	481 (182)	107 (27)	153 (38)
13	2.7 (1.6)	3.9 (2.3)	253 (60)	362 (85)	364 (103)	522 (147)	148 (19)	212 (28)
14	15.5 (8.2)	22.3 (11.8)	204 (40)	294 (57)	235 (179)	338 (257)	169 (33)	243 (47)
15	6.1 (5.9)	8.8 (8.5)	361 (72)	517 (102)	157 (44)	225 (64)	241 (39)	345 (56)
16	16.1 (5.9)	22.9 (8.4)	446 (621)	638 (889)	243 (64)	348 (92)	284 (311)	406 (445)
17	5.3 (1.1)	7.5 (1.5)	112 (39)	159 (56)	285 (112)	407 (161)	97 (28)	139 (41)
18	2.3 (0.8)	3.2 (1.1)	129 (85)	184 (121)	273 (157)	391 (225)	142 (67)	203 (96)
19	2.8 (0.8)	3.9 (1.1)	142 (73)	203 (104)	298 (170)	426 (244)	220 (84)	315 (120)
20	3.1 (2.2)	4.5 (3.1)	141 (54)	202 (77)	244 (101)	350 (145)	261 (112)	375 (161)
21	16.0 (12.1)	22.8 (17.3)	196 (76)	280 (109)	222 (205)	318 (294)	442 (166)	634 (238)
22	3.2 (2.9)	4.7 (4.2)	323 (73)	463 (104)	86 (37)	123 (53)	560 (205)	803 (294)
23	2.9 (0.5)	4.2 (0.7)	239 (208)	342 (297)	97 (63)	139 (90)	441 (385)	630 (551)
24	2.6 (0.4)	3.7 (0.5)	99 (68)	142 (97)	107 (92)	153 (131)	95 (60)	136 (86)
25	2.0 (0.3)	2.9 (0.4)	39 (27)	57 (38)	59 (35)	85 (50)	76 (44)	110 (63)
26	0.5 (1.5)	0.7 (2.2)	61 (37)	87 (53)	106 (64)	152 (91)	116 (65)	166 (94)
27	3.5 (1.2)	5.0 (1.8)	100 (65)	144 (94)	176 (114)	253 (164)	187 (112)	269 (161)
28	3.8 (1.8)	5.4 (2.6)	144 (89)	206 (128)	183 (145)	263 (208)	247 (138)	354 (197)
29	1.9 (0.9)	2.8 (1.3)	172 (99)	247 (141)	28 (12)	40 (16)	264 (139)	378 (199)
30	3.6 (1.1)	5.2 (1.5)	213 (203)	305 (292)	34 (13)	49 (18)	275 (203)	394 (291)
Avg	3.95	5.64	215	307	190	272	222	318
n	30	30	30	30	30	30	30	30
SD	4.15	5.93	119	170	91.3	131	131	187
Min	0.5	0.7	39	57	28	40	26	37
Max	16.1	22.9	485	692	374	534	560	803

ED_004549_00015929-00180

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for May, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	2.1 (0.4)	3.0 (0.6)	41 (16)	58 (23)	31 (12)	44 (17)	76 (35)	110 (50)
2	1.4 (1.2)	2.0 (1.7)	47 (20)	68 (29)	35 (12)	51 (18)	94 (35)	136 (50)
3	1.7 (1.1)	2.4 (1.6)						
4	2.0 (2.6)	2.8 (3.7)	87 (52)	126 (75)	61 (33)	88 (48)	118 (46)	170 (67)
5	0.9 (1.5)	1.3 (2.2)	150 (55)	215 (79)	117 (138)	168 (199)	186 (95)	268 (137)
6	1.3 (0.4)	1.9 (0.6)	121 (77)	174 (110)	15 (5)	22 (8)	137 (54)	197 (78)
7	3.1 (4.1)	4.5 (5.9)	120 (111)	173 (159)	24 (10)	35 (14)	155 (134)	223 (194)
8	4.6 (4.6)	6.7 (6.6)	66 (65)	95 (94)	27 (12)	38 (17)	35 (17)	50 (24)
9	1.2 (1.0)	1.7 (1.4)	28 (18)	41 (26)	26 (9)	38 (13)	34 (10)	49 (14)
10	1.0 (0.9)	1.5 (1.3)	38 (3)	54 (5)	66 (28)	95 (40)	74 (32)	107 (46)
11	9.3 (4.2)	13.3 (6.0)	22 (13)	32 (19)	135 (38)	194 (54)	176 (38)	252 (55)
12	3.5 (2.2)	5.0 (3.2)	22 (41)	31 (58)	132 (72)	189 (103)	153 (64)	219 (91)
13	5.8 (3.7)	8.3 (5.2)	7 (3)	10 (4)	87 (69)	125 (98)	142 (57)	204 (82)
14	1.0 (0.9)	1.4 (1.2)	5 (2)	7 (3)	43 (87)	62 (125)	113 (120)	162 (172)
15	0.2 (1.1)	0.2 (1.6)	4 (1)	6 (2)	1 (1)	2 (2)	22 (11)	31 (16)
16	1.5 (1.0)	2.1 (1.4)						
17	7.3 (7.9)	10.4 (11.2)			10 (7)	14 (10)		
18	19.5 (11.2)	27.8 (16.0)			13 (4)	19 (6)	137 (21)	196 (30)
19	6.4 (2.1)	9.1 (3.0)			11 (2)	15 (3)	134 (55)	191 (79)
20	3.9 (2.0)	5.6 (2.8)			9 (3)	12 (4)	90 (79)	129 (112)
21	5.0 (4.1)	7.1 (5.9)			8 (4)	11 (6)	21 (9)	30 (13)
22	3.1 (1.8)	4.5 (2.5)			8 (6)	12 (9)	20 (12)	29 (17)
23	2.1 (1.1)	3.0 (1.6)	7 (2)	11 (3)	6 (4)	8 (6)	21 (10)	30 (15)
24	1.1 (1.8)	1.6 (2.6)	9 (9)	13 (13)				
25	0.4 (1.2)	0.6 (1.7)	7 (8)	10 (12)				
26	2.1 (6.5)	2.9 (9.3)	4 (4)	6 (6)				
27	3.1 (5.3)	4.5 (7.7)	6 (4)	9 (5)				
28	0.1 (1.6)	0.2 (2.2)	27 (58)	39 (83)				
29	-0.7 (1.7)	-1.0 (2.4)	7 (11)	9 (16)				
30	1.9 (1.6)	2.7 (2.3)						
31	3.3 (8.3)	4.7 (12.0)	8 (6)	11 (8)	3 (4)	5 (5)	13 (7)	18 (10)
Avg	3.19	4.57	37.9	54.4	39.5	56.6	92.9	133
n	31	31	22	22	22	22	21	21
SD	3.7	5.29	42.7	61.5	41.4	59.4	56.3	80.8
Min	-0.7	-1.0	4	6	1	2	13	18
Max	19.5	27.8	150	215	135	194	186	268

ED_004549_00015929-00181

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for June, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-}
1	4.1 (4.4)	5.8 (6.4)	13 (7)	19 (10)	17 (68)	25 (98)	17 (10)	25 (14)
2	-1.2 (0.5)	-1.7 (0.7)	23 (18)	33 (26)	22 (25)	32 (36)	12 (6)	17 (9)
3	-1.0 (0.9)	-1.5 (1.3)	26 (15)	37 (21)	4 (2)	5 (3)	11 (5)	16 (8)
4	0.0 (1.8)	0.0 (2.6)	42 (19)	60 (27)	7 (4)	10 (5)	11 (5)	16 (8)
5	0.4 (2.4)	0.6 (3.4)	56 (19)	81 (27)	9 (5)	13 (7)	11 (8)	16 (12)
6	3.9 (2.2)	5.6 (3.2)	122 (14)	176 (20)	18 (8)	26 (11)	45 (79)	64 (113)
7	1.3 (0.7)	1.9 (1.0)	103 (35)	148 (50)	12 (4)	17 (6)	6 (3)	8 (5)
8	-2.9 (1.5)	-4.2 (2.1)	90 (57)	130 (82)	10 (6)	14 (9)	2 (3)	3 (4)
9	-3.2 (0.8)	-4.6 (1.1)	91 (51)	131 (73)	14 (10)	20 (15)	10 (14)	15 (19)
10	-2.6 (0.9)	-3.8 (1.3)	102 (59)	147 (85)	18 (12)	26 (17)	22 (10)	32 (15)
11	-2.5 (0.6)	-3.6 (0.8)	66 (40)	95 (58)	13 (6)	19 (9)	23 (12)	33 (17)
12	-2.9 (0.4)	-4.2 (0.6)	28 (19)	40 (27)	15 (11)	22 (15)	22 (35)	32 (51)
13	-1.4 (0.5)	-2.0 (0.7)	18 (12)	26 (17)	18 (11)	26 (16)	4 (3)	6 (5)
14	1.2 (1.8)	1.8 (2.6)	32 (14)	46 (20)	37 (16)	54 (22)	11 (6)	16 (9)
15	4.7 (1.2)	6.8 (1.7)	59 (30)	85 (43)	58 (30)	83 (43)	29 (20)	42 (29)
16	10.0 (1.1)	14.4 (1.6)	112 (20)	161 (29)	75 (52)	108 (75)	48 (15)	69 (21)
17	3.8 (1.9)	5.4 (2.8)	79 (31)	114 (45)	32 (28)	46 (41)	39 (6)	56 (8)
18	4.3 (1.0)	6.2 (1.4)	67 (45)	97 (64)	10 (2)	14 (3)	47 (51)	68 (74)
19	3.0 (0.9)	4.3 (1.3)	43 (23)	62 (33)	11 (3)	16 (5)	18 (18)	25 (27)
20	2.9 (0.8)	4.1 (1.1)	12 (3)	18 (4)	14 (3)	20 (5)	10 (3)	15 (4)
21	7.0 (3.8)	10.1 (5.5)	22 (8)	31 (11)	18 (8)	26 (11)	16 (6)	23 (9)
22	10.5 (5.3)	15.1 (7.6)	56 (42)	80 (61)	39 (18)	56 (26)	29 (10)	42 (14)
23	8.1 (1.4)	11.6 (2.0)	21 (7)	30 (11)	35 (25)	51 (35)	31 (13)	44 (19)
24	4.2 (0.8)	6.0 (1.2)	22 (10)	32 (14)	36 (20)	52 (28)	18 (9)	26 (14)
25	4.4 (0.9)	6.4 (1.4)	55 (68)	79 (98)	11 (3)	16 (5)	37 (31)	53 (44)
26	0.1 (0.6)	0.2 (0.9)	9 (5)	13 (8)	14 (9)	20 (13)	11 (6)	16 (9)
27	2.0 (0.8)	2.9 (1.1)			18 (6)	26 (8)		
28	2.7 (2.2)	3.9 (3.2)	18 (10)	25 (15)	31 (15)	44 (22)	20 (12)	29 (18)
29	1.3 (1.6)	1.9 (2.3)	26 (25)	38 (36)	34 (20)	49 (29)	25 (16)	37 (22)
30	3.4 (1.3)	4.9 (1.8)						
Avg	2.19	3.15	50.4	72.5	22.4	32.3	20.9	30.1
n	30	30	28	28	29	29	28	28
SD	3.63	5.22	33.4	48	15.6	22.5	12.7	18.3
Min	-3.2	-4.6	9	13	4	5	2	3
Max	10.5	15.1	122	176	75	108	48	69

ED_004549_00015929-00182

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for July, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	-1.4 (0.8)	-2.0 (1.1)	19 (13)	27 (19)	13 (15)	18 (21)	34 (24)	49 (35)
2	0.4 (1.3)	0.6 (1.9)	22 (16)	32 (24)	7 (6)	10 (9)	49 (25)	73 (36)
3	1.2 (1.8)	1.7 (2.6)	30 (50)	43 (72)	20 (12)	29 (18)	14 (8)	20 (11)
4	3.1 (0.3)	4.4 (0.5)	17 (9)	24 (13)	39 (18)	56 (26)	19 (9)	27 (12)
5	3.6 (0.6)	5.1 (0.8)	22 (10)	32 (15)	36 (15)	51 (21)	19 (9)	27 (13)
6	6.5 (3.2)	9.4 (4.6)	49 (37)	70 (53)	47 (11)	67 (16)	41 (8)	59 (11)
7	5.6 (0.9)	8.0 (1.3)	43 (38)	62 (54)	71 (59)	103 (85)	38 (13)	55 (18)
8	5.3 (0.9)	7.6 (1.3)	19 (8)	28 (11)	22 (16)	31 (23)	48 (20)	70 (29)
9	7.3 (3.1)	10.5 (4.4)	60 (51)	87 (73)	19 (6)	27 (8)	114 (185)	165 (267)
10	8.0 (1.6)	11.5 (2.3)	36 (21)	52 (31)	29 (7)	41 (10)	18 (5)	26 (7)
11	4.4 (0.9)	6.3 (1.3)	26 (21)	37 (30)	34 (11)	48 (16)	18 (4)	25 (6)
12	3.5 (0.7)	5.0 (1.0)	13 (14)	19 (21)	28 (12)	41 (17)	18 (7)	26 (9)
13	7.4 (3.4)	10.6 (4.9)	29 (23)	41 (34)	50 (11)	72 (16)	48 (16)	69 (22)
14	7.3 (2.9)	10.5 (4.1)	18 (10)	25 (15)	66 (65)	95 (93)	47 (44)	68 (63)
15	1.6 (2.0)	2.3 (2.9)	19 (10)	27 (14)	24 (21)	35 (30)	18 (8)	26 (12)
16	1.8 (1.0)	2.6 (1.4)	42 (32)	61 (46)	8 (4)	12 (5)	34 (21)	50 (30)
17	1.0 (1.6)	1.5 (2.3)	13 (15)	19 (22)	14 (4)	20 (6)	11 (6)	16 (9)
18	1.6 (0.9)	2.3 (1.3)	11 (4)	16 (6)	22 (6)	31 (9)	20 (6)	29 (8)
19	6.7 (3.9)	9.7 (5.6)	22 (10)	31 (14)	35 (14)	50 (20)	32 (10)	46 (14)
20	-0.6 (0.7)	-0.8 (0.9)	32 (12)	46 (18)	38 (9)	54 (13)	37 (11)	54 (15)
21	3.1 (2.4)	4.4 (3.5)	49 (25)	71 (36)	54 (38)	78 (54)	47 (20)	68 (29)
22	1.6 (0.8)	2.3 (1.1)	62 (35)	90 (50)	49 (39)	71 (56)	63 (30)	90 (43)
23	4.6 (2.0)	6.6 (2.8)	81 (175)	117 (254)	8 (4)	12 (6)	59 (55)	85 (80)
24	3.0 (3.2)	4.3 (4.6)	34 (13)	49 (19)	16 (7)	23 (10)	49 (60)	70 (87)
25	1.9 (1.5)	2.7 (2.2)	34 (17)	49 (24)	25 (8)	37 (11)	11 (5)	15 (7)
26	1.0 (0.6)	1.5 (0.9)	40 (18)	58 (27)	29 (5)	41 (7)	19 (9)	27 (14)
27	2.3 (1.1)	3.3 (1.6)	78 (39)	112 (56)	51 (21)	74 (31)	36 (38)	52 (55)
28	2.9 (1.2)	4.1 (1.7)	93 (40)	135 (58)	46 (34)	67 (50)	23 (19)	33 (28)
29	2.4 (1.1)	3.5 (1.6)	94 (38)	135 (55)	39 (32)	57 (46)	15 (8)	22 (12)
30	1.9 (1.0)	2.8 (1.4)	90 (55)	130 (79)	14 (4)	20 (6)	32 (19)	47 (28)
31	2.9 (1.4)	4.2 (2.0)	27 (17)	39 (25)	19 (5)	28 (6)	16 (9)	22 (14)
Avg	3.28	4.72	39.4	56.9	31.3	45.1	33.7	48.7
n	31	31	31	31	31	31	31	31
SD	2.43	3.49	24.6	35.5	16.7	24	20.8	30
Min	-1.4	-2.0	11	16	7	10	11	15
Max	8.0	11.5	94	135	71	103	114	165

ED_004549_00015929-00183

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for August, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	1.1 (1.6)	1.6 (2.4)	15 (7)	21 (10)	28 (8)	41 (12)	20 (9)	28 (13)
2	1.7 (1.5)	2.5 (2.2)	25 (16)	36 (24)	44 (7)	64 (10)	33 (12)	47 (17)
3	1.3 (0.6)	1.9 (0.9)	17 (11)	25 (15)	44 (12)	64 (17)	37 (16)	54 (24)
4	2.0 (0.6)	2.8 (0.9)	19 (15)	28 (22)	63 (64)	91 (92)	36 (15)	52 (21)
5	1.7 (0.6)	2.5 (0.9)	15 (6)	22 (9)	21 (16)	30 (24)	60 (26)	87 (38)
6	1.3 (1.1)	1.9 (1.6)	34 (43)	50 (62)	10 (6)	15 (9)	89 (153)	129 (222)
7	4.2 (0.7)	6.0 (1.1)	31 (26)	45 (37)	18 (6)	26 (8)	15 (3)	21 (5)
8	3.4 (0.5)	4.9 (0.7)						
9	1.8 (1.0)	2.5 (1.5)	22 (22)	32 (31)	36 (9)	51 (13)	24 (11)	35 (16)
10	1.6 (0.9)	2.2 (1.3)	18 (23)	26 (33)	38 (15)	54 (21)	30 (17)	43 (24)
11	5.1 (5.5)	7.3 (7.9)	22 (17)	31 (24)	62 (58)	90 (83)	63 (28)	91 (40)
12	5.4 (2.3)	7.7 (3.4)	21 (12)	30 (17)	19 (17)	27 (25)	87 (29)	125 (42)
13	2.1 (0.4)	3.0 (0.6)			12 (5)	17 (7)	72 (39)	104 (57)
14	2.1 (0.4)	3.0 (0.6)	24 (14)	34 (21)	18 (13)	26 (18)	33 (13)	47 (18)
15	2.3 (1.0)	3.3 (1.4)	26 (20)	38 (29)	19 (4)	28 (6)	46 (20)	67 (30)
16	2.7 (0.9)	4.0 (1.3)	24 (16)	34 (24)	24 (4)	35 (6)	58 (28)	84 (41)
17	1.3 (0.6)	1.9 (0.9)	19 (21)	28 (30)	28 (6)	40 (8)	60 (37)	87 (54)
18	2.0 (1.2)	2.9 (1.7)	12 (6)	17 (9)	49 (27)	71 (39)	71 (38)	102 (54)
19	0.0 (1.4)	0.0 (2.0)	15 (11)	22 (16)	11 (7)	16 (10)	85 (45)	123 (64)
20	-4.5 (0.7)	-6.5 (1.0)	23 (23)	33 (34)	7 (4)	10 (5)	94 (150)	136 (218)
21	-3.1 (0.8)	-4.5 (1.2)	3 (3)	4 (5)			55 (48)	79 (69)
22	7.0 (13.0)	10.1 (18.7)	14 (10)	20 (14)			24 (25)	35 (36)
23	14.7 (12.8)	21.2 (18.5)	19 (8)	28 (12)			23 (26)	34 (38)
24	-2.5 (1.2)	-3.6 (1.8)	24 (11)	35 (16)	54 (13)	78 (19)	26 (33)	38 (48)
25	-1.5 (0.6)	-2.2 (0.8)	30 (16)	43 (22)	76 (126)	110 (181)	22 (35)	31 (50)
26	-3.2 (2.0)	-4.7 (2.9)	30 (17)	43 (24)	16 (30)	23 (43)	13 (8)	19 (12)
27	-4.1 (0.5)	-5.9 (0.7)	105 (197)	154 (288)			66 (45)	94 (64)
28	-0.2 (3.1)	-0.3 (4.4)	11 (6)	16 (9)	32 (8)	47 (12)	34 (32)	50 (46)
29	-2.1 (1.2)	-3.0 (1.8)	14 (6)	20 (9)	39 (9)	57 (13)	24 (21)	34 (30)
30	-1.4 (2.7)	-2.0 (4.0)	21 (12)	31 (17)	50 (10)	72 (14)	21 (18)	31 (26)
31	10.6 (3.3)							
Avg	1.7	2.02	23.3	33.7	32.7	47.2	45.6	65.8
n	31	30	28	28	25	25	29	29
SD	3.98	5.32	17.1	25.1	18.4	26.5	24.3	35.1
Min	-4.5	-6.5	3	4	7	10	13	19
Max	14.7	21.2	105	154	76	110	94	136

Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for September, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	13.8 (6.5)	19.8 (9.3)	80 (23)	115 (33)	124 (152)	179 (218)	39 (11)	56 (16)
2	11.2 (2.8)	16.1 (4.0)	97 (39)	140 (55)	29 (37)	41 (53)	71 (16)	103 (23)
3	4.1 (3.3)	5.9 (4.7)	131 (267)	189 (384)	13 (5)	19 (8)	94 (111)	135 (160)
4	3.6 (2.9)	5.2 (4.1)	13 (7)	19 (11)	26 (14)	38 (21)	37 (40)	53 (58)
5	4.8 (1.7)	6.8 (2.4)	25 (13)	36 (18)	47 (25)	67 (36)	41 (32)	59 (46)
6	5.2 (2.2)	7.5 (3.1)	37 (15)	54 (22)	52 (16)	75 (23)	46 (38)	66 (55)
7	13.8 (1.8)	19.8 (2.5)	55 (12)	80 (17)	53 (11)	76 (15)	52 (41)	75 (60)
8	8.2 (1.8)	11.7 (2.6)	65 (18)	93 (26)	58 (16)	84 (22)	44 (37)	64 (54)
9	14.3 (3.3)	20.5 (4.7)	95 (36)	137 (52)	83 (64)	119 (92)	49 (53)	70 (77)
10	22.7 (13.8)	32.6 (19.8)	211 (416)	303 (598)	27 (44)	39 (63)	65 (48)	94 (69)
11	2.1 (3.0)	3.0 (4.2)	19 (10)	27 (14)	64 (59)	92 (85)	36 (14)	52 (20)
12	0.5 (4.1)	0.7 (5.8)	28 (13)	41 (19)	28 (16)	40 (23)	51 (19)	74 (28)
13	9.1 (2.6)	13.1 (3.7)	51 (23)	73 (34)	35 (22)	50 (31)	78 (26)	113 (37)
14	7.6 (3.9)	10.9 (5.5)	62 (34)	89 (48)	37 (44)	54 (64)	111 (48)	159 (69)
15	0.2 (0.8)	0.3 (1.1)						
16	5.2 (4.3)	7.5 (6.1)	75 (30)	107 (43)	28 (27)	40 (38)	155 (48)	224 (68)
17	33.7 (16.2)	48.4 (23.3)	78 (35)	112 (50)	15 (7)	22 (10)	145 (71)	209 (102)
18	7.0 (3.0)	10.0 (4.2)	39 (47)	56 (67)	19 (7)	28 (10)	44 (44)	63 (64)
19	5.8 (4.3)	8.3 (6.2)	21 (9)	30 (13)	34 (11)	48 (15)	40 (17)	58 (25)
20	10.0 (4.5)	14.4 (6.6)	39 (15)	57 (21)	65 (16)	94 (22)	87 (29)	127 (41)
21	8.9 (3.9)	12.8 (5.6)	57 (53)	81 (76)	72 (36)	103 (52)	131 (52)	189 (75)
22	7.0 (4.0)	10.0 (5.8)	38 (36)	54 (52)	58 (41)	83 (60)	140 (42)	202 (61)
23	4.7 (6.8)	6.8 (9.8)	17 (9)	25 (13)	21 (22)	31 (31)	127 (57)	184 (82)
24	0.7 (1.5)	1.0 (2.2)	45 (47)	64 (67)	11 (5)	15 (7)	141 (229)	204 (331)
25	13.2 (9.9)	19.0 (14.3)	67 (61)	96 (88)	29 (18)	42 (26)	36 (26)	52 (37)
26	26.0 (24.3)	37.3 (34.9)	55 (53)	79 (76)	63 (17)	90 (24)	89 (22)	129 (31)
27	5.6 (12.3)	8.1 (17.7)	29 (30)	42 (43)	55 (27)	79 (39)	81 (30)	117 (42)
28	-0.7 (1.0)	-1.0 (1.4)	35 (48)	51 (68)	86 (49)	124 (71)	84 (44)	121 (63)
29	6.9 (7.0)	9.9 (10.0)	48 (47)	68 (67)	193 (120)	276 (172)	186 (61)	266 (88)
30	7.0 (3.2)	10.0 (4.7)	62 (67)	85 (98)	248 (133)	370 (187)	220 (70)	323 (100)
Avg	8.73	12.5	57.6	82.8	57.6	83.4	86.9	125
n	30	30	29	29	29	29	29	29
SD	7.53	10.8	39.3	56.5	51.3	75.5	49.1	71.2
Min	-0.7	-1.0	13	19	11	15	36	52
Max	33.7	48.4	211	303	248	370	220	323

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Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for October, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	3.6 (4.1)	5.2 (5.9)	40 (46)	57 (66)	222 (119)	318 (171)	251 (274)	360 (392)
2	0.1 (1.1)	0.1 (1.6)	78 (94)	112 (134)	177 (126)	253 (181)	20 (17)	29 (24)
3	-1.2 (0.8)	-1.7 (1.2)	12 (6)	17 (9)	116 (50)	166 (71)	27 (13)	38 (18)
4	3.7 (2.4)	5.3 (3.4)	40 (12)	57 (17)	223 (108)	319 (156)	71 (20)	102 (29)
5	3.5 (3.0)	5.1 (4.3)	71 (70)	103 (101)	236 (38)	339 (54)	99 (15)	142 (22)
6	7.7 (4.4)	11.0 (6.4)	29 (10)	41 (15)	186 (227)	268 (327)	99 (14)	143 (20)
7	0.3 (1.2)	0.5 (1.7)			30 (21)	43 (30)	123 (64)	176 (92)
8	4.7 (3.1)	6.8 (4.4)			41 (19)	58 (28)	299 (690)	428 (989)
9	0.0 (0.7)	0.0 (1.0)			40 (26)	58 (37)	53 (67)	76 (97)
10	4.0 (4.2)	5.7 (6.0)			49 (19)	71 (27)	21 (16)	30 (23)
11	11.9 (2.7)	17.1 (3.9)						
12	4.2 (2.8)	6.0 (4.0)	25 (52)	36 (74)	159 (33)	228 (47)	81 (25)	116 (36)
13	0.1 (1.7)	0.2 (2.5)	2 (3)	3 (4)	129 (244)	186 (351)	49 (28)	70 (41)
14	11.3 (4.2)	16.1 (6.0)						
15	1.4 (4.0)	2.0 (5.7)	53 (144)	76 (206)				
16	6.2 (3.0)	8.9 (4.2)	12 (17)	17 (24)				
17	2.2 (2.3)	3.2 (3.2)	1 (3)	1 (4)				
18	-0.3 (1.8)	-0.4 (2.6)	-1 (2)	-1 (3)				
19	0.6 (3.2)	0.9 (4.6)	3 (6)	4 (8)				
20	-1.9 (1.0)	-2.7 (1.4)	3 (4)	4 (6)				
21	3.8 (2.4)	5.4 (3.5)	8 (6)	12 (9)				
22	-1.1 (1.3)	-1.6 (1.8)	10 (7)	15 (10)	31 (11)	44 (15)		
23	-0.1 (3.8)	-0.2 (5.4)	13 (6)	19 (9)	41 (15)	59 (21)	-1 (2)	-1 (2)
24	-2.5 (1.4)	-3.6 (1.9)	19 (7)	27 (9)	54 (20)	78 (29)	-1 (1)	-2 (2)
25	3.1 (2.5)	4.5 (3.6)	110 (35)	158 (51)	175 (50)	251 (72)	5 (3)	7 (4)
26	4.9 (4.2)	7.1 (6.0)	133 (21)	191 (30)	200 (35)	287 (50)	8 (3)	12 (4)
27	1.5 (2.5)	2.1 (3.6)						
28	4.3 (2.7)	6.1 (3.8)						
29								
30								
31								
Avg	2.71	3.88	33	47.4	124	178	75.1	108
n	28	28	20	20	17	17	16	16
SD	3.5	5.01	37.2	53.4	75.5	108	84.9	122
Min	-2.5	-3.6	-1	-1	30	43	-1	-2
Max	11.9	17.1	133	191	236	339	299	428

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Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for November, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1								
2								
3								
4	4.4 (2.2)	6.3 (3.1)	85 (31)	122 (44)	74 (103)	106 (147)	88 (19)	126 (27)
5	3.1 (1.2)	4.4 (1.7)	117 (38)	168 (55)	35 (11)	51 (15)	126 (97)	181 (138)
6	6.8 (2.8)	9.6 (4.0)	122 (70)	175 (101)	75 (21)	107 (30)	89 (72)	128 (104)
7	5.4 (2.1)	7.6 (3.0)	59 (18)	84 (26)	106 (21)	152 (30)	34 (7)	48 (10)
8	4.3 (2.9)	6.2 (4.2)	62 (26)	88 (38)	130 (40)	186 (57)	34 (10)	48 (14)
9	2.8 (1.9)	4.0 (2.6)	105 (158)	151 (227)	148 (50)	212 (72)	46 (10)	66 (14)
10	6.0 (1.6)	8.7 (2.2)	19 (4)	28 (5)	135 (131)	194 (188)	61 (8)	88 (12)
11	12.1 (4.2)	17.3 (6.0)	33 (8)	47 (11)	66 (11)	94 (16)	124 (33)	179 (48)
12	5.3 (2.0)	7.5 (2.9)	52 (13)	74 (19)	73 (16)	104 (23)	226 (43)	324 (61)
13	3.3 (1.1)	4.8 (1.5)	63 (8)	90 (12)	82 (14)	118 (20)	256 (13)	368 (19)
14	4.5 (1.5)	6.5 (2.2)	75 (16)	107 (23)	101 (18)	145 (26)	277 (56)	399 (80)
15	5.0 (1.8)	7.2 (2.5)	89 (24)	127 (34)	114 (33)	164 (47)	322 (90)	463 (130)
16	5.7 (2.5)	8.1 (3.5)	88 (71)	127 (102)	143 (57)	206 (81)	350 (137)	503 (196)
17	7.6 (1.0)	10.9 (1.5)	42 (29)	60 (41)	121 (84)	173 (120)	353 (96)	506 (138)
18	9.6 (2.9)	13.7 (4.1)	27 (6)	39 (8)	55 (38)	79 (54)	250 (53)	360 (76)
19	5.9 (2.8)	8.5 (4.0)	42 (27)	61 (39)	40 (13)	58 (19)	168 (147)	242 (212)
20	13.7 (8.1)	19.5 (11.5)	50 (12)	72 (17)	102 (34)	146 (49)	68 (16)	98 (22)
21	9.6 (2.0)	13.7 (2.8)	86 (17)	123 (25)	198 (36)	283 (51)	111 (24)	159 (34)
22	20.7 (15.2)	29.6 (21.7)	125 (132)	180 (189)	218 (43)	313 (62)	153 (22)	220 (31)
23	17.5 (11.7)	25.1 (16.7)	43 (19)	62 (27)	137 (102)	196 (147)	188 (43)	269 (61)
24	4.9 (0.7)	7.0 (1.0)	56 (14)	80 (20)	63 (60)	91 (86)	156 (102)	223 (147)
25	2.9 (1.6)	4.1 (2.2)	108 (26)	156 (37)	42 (70)	60 (100)	62 (22)	88 (32)
26	1.8 (1.3)	2.5 (1.9)	179 (123)	256 (177)	26 (8)	37 (11)	101 (113)	145 (163)
27	6.0 (5.1)	8.5 (7.3)	105 (97)	151 (139)	63 (19)	90 (27)	51 (13)	74 (19)
28	4.4 (7.1)	6.2 (10.1)	44 (8)	63 (11)	126 (27)	181 (39)	82 (20)	117 (29)
29	-1.1 (0.6)	-1.6 (0.9)	54 (18)	78 (25)	136 (42)	194 (60)	90 (26)	128 (38)
30	-0.1 (0.8)	-0.1 (1.1)	107 (31)	154 (44)	175 (38)	250 (55)	127 (33)	
Avg	6.37	9.1	75.5	108	103	148	148	214
n	27	27	27	27	27	27	27	26
SD	4.81	6.87	36.4	52.1	48.7	69.7	95.7	140
Min	-1.1	-1.6	19	28	26	37	34	48
Max	20.7	29.6	179	256	218	313	353	506

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Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for December, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1	4.2 (4.3)	6.0 (6.1)	264 (46)	378 (66)	386 (568)	552 (813)	258 (44)	
2	7.8 (8.4)	11.1 (12.0)	209 (65)	301 (93)	93 (40)	133 (58)	212 (68)	
3	2.4 (3.1)	3.4 (4.5)	296 (118)	424 (170)	79 (18)	113 (26)	150 (95)	215 (137)
4	7.5 (6.4)	10.8 (9.1)	458 (109)	657 (157)	133 (19)	191 (27)	67 (26)	97 (37)
5	7.2 (7.7)	10.3 (10.9)	476 (119)	682 (170)	217 (57)	312 (81)	105 (35)	151 (51)
6	3.9 (0.6)	5.5 (0.8)	647 (95)	927 (136)	365 (57)	523 (82)	217 (24)	311 (35)
7	2.2 (2.2)	3.2 (3.1)	612 (121)	878 (173)	404 (72)	578 (102)	278 (25)	398 (35)
8	8.1 (4.9)	11.6 (7.0)	615 (79)	881 (113)	596 (626)	853 (896)	182 (154)	261 (221)
9	3.0 (4.8)	4.2 (6.9)	275 (90)	396 (128)	54 (54)	78 (78)	21 (8)	31 (12)
10	0.0 (1.3)	0.0 (1.8)	628 (656)	899 (940)	48 (29)	69 (42)	114 (77)	163 (109)
11	1.5 (1.7)	2.6 (2.2)	159 (115)	228 (164)	147 (35)	210 (51)	70 (45)	100 (65)
12	5.2 (2.0)	8.3 (2.2)						
13	2.0 (0.9)	2.8 (1.3)	25 (10)	36 (14)	223 (50)	321 (71)	51 (11)	73 (16)
14	1.1 (1.2)	1.6 (1.7)	39 (16)	57 (22)	342 (40)	491 (58)	115 (20)	165 (28)
15	0.9 (1.1)	1.3 (1.6)	42 (7)	60 (10)	198 (180)	285 (259)	115 (30)	165 (42)
16	11.5 (2.8)	16.3 (3.9)	109 (26)	157 (37)	41 (19)	58 (27)	293 (79)	419 (113)
17	11.4 (2.5)		196 (71)	281 (102)	39 (9)	55 (12)	352 (329)	504 (471)
18	13.3 (2.1)	19.0 (3.0)	123 (67)	176 (96)	65 (13)	94 (18)	69 (38)	98 (54)
19	0.7 (2.9)	1.1 (4.2)	22 (8)	32 (12)	104 (23)	150 (33)	66 (27)	94 (39)
20	1.6 (1.0)	2.5 (1.2)	21 (6)	30 (9)	151 (35)	216 (49)	127 (27)	181 (38)
21	0.5 (2.8)		33 (16)	47 (24)	254 (53)	364 (76)	205 (36)	294 (52)
22	5.1 (3.0)		31 (15)	44 (21)	351 (275)	502 (394)	296 (45)	424 (64)
23	4.2 (2.4)		28 (7)	39 (11)	89 (67)	128 (95)	367 (60)	526 (86)
24	12.6 (1.9)	17.9 (2.6)			54 (23)	77 (33)		
25	6.1 (2.5)	8.7 (3.5)	67 (8)	96 (12)	26 (19)	38 (27)	320 (59)	458 (84)
26	5.7 (2.4)	8.1 (3.5)	153 (42)	220 (60)	30 (13)	43 (18)	408 (47)	585 (67)
27	3.6 (0.7)	5.2 (1.0)	274 (44)	393 (63)	76 (21)	109 (30)	404 (46)	579 (66)
28	4.5 (0.7)	6.4 (1.0)	420 (86)	601 (123)	152 (27)	217 (39)	437 (66)	626 (95)
29							289 (204)	414 (292)
30							123 (69)	176 (99)
31							107 (141)	154 (202)
Avg	4.92	6.99	239	343	175	250	201	284
n	28	24	26	26	27	27	29	27
SD	3.73	5.25	212	304	144	206	120	178
Min	0.0	0.0	21	30	26	38	21	31
Max	13.3	19.0	647	927	596	853	437	626

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Table F7. Daily mean (SD) of H2S concentrations at Site NC3B for January, 2010.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppb	mg·dsm^{-}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}	ppb	mg·dsm^{-3}
1							43 (23)	62 (33)
2							30 (9)	43 (13)
3								
4			60 (11)	86 (16)				
5								
6					29 (19)	41 (27)		
7					30 (9)	43 (12)		
8					72 (25)	103 (36)		
9	4.7 (0.6)		119 (10)	171 (14)	143 (23)	204 (32)	43 (10)	61 (14)
10	5.0 (2.4)		123 (14)	176 (20)	201 (21)	286 (29)	87 (26)	124 (38)
11	4.6 (0.8)		162 (26)	232 (37)	249 (21)	356 (30)	133 (45)	191 (65)
12	6.8 (2.2)	9.7 (3.1)	229 (33)	328 (47)	319 (281)	456 (401)	99 (33)	142 (47)
13	5.0 (0.9)		192 (116)	274 (166)	119 (36)	169 (52)	137 (39)	196 (55)
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
Avg	5.25		148	211	145	207	81.8	117
n	5	1	6	6	8	8	7	7
SD	0.8		54.4	77.9	98.2	140	40.8	58.4
Min	4.6		60	86	29	41	30	43
Max	6.8		229	328	319	456	137	196

ED_004549_00015929-00189

Table F8. Hydrogen sulfide emissions.

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for March, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11	95 (121)	110 (141)	2.14 (2.74)	152 (193)					26 (41)	33 (52)	0.73 (1.16)	42 (66)
12												
13												
14												
15	121 (91)	141 (106)	2.57 (1.93)	193 (145)								
16												
17	69 (143)	81 (167)	1.43 (2.98)	110 (229)	101 (133)	127 (167)	2.18 (2.88)	161 (213)	94 (189)	119 (241)	2.33 (4.70)	150 (303)
18	114 (129)	133 (151)	2.33 (2.66)	182 (207)	118 (99)	148 (124)	2.50 (2.10)	188 (158)				
19	198 (70)	231 (81)	3.99 (1.41)	316 (112)	156 (40)	196 (50)	3.28 (0.84)	250 (63)				
20	155 (149)	181 (174)	3.08 (2.95)	247 (238)								
21	145 (159)	170 (185)	2.85 (3.11)	233 (254)					198 (209)	253 (267)	4.62 (4.88)	317 (334)
22	147 (116)	172 (135)	2.84 (2.24)	235 (185)	147 (65)	185 (81)	2.97 (1.31)	236 (103)	187 (154)	240 (197)	4.32 (3.55)	300 (246)
23	88 (130)	102 (151)	1.67 (2.47)	140 (207)	114 (109)	144 (138)	2.26 (2.17)	183 (175)	118 (179)	151 (230)	2.68 (4.07)	189 (286)
24	80 (134)	94 (157)	1.50 (2.53)	128 (215)								
25												
26	100 (100)	117 (117)	1.82 (1.83)	160 (161)					135 (128)	174 (165)	2.96 (2.80)	216 (205)
27	114 (86)	134 (101)	2.05 (1.55)	183 (138)	137 (42)	173 (52)	2.56 (0.78)	219 (66)	154 (99)	198 (127)	3.31 (2.13)	246 (158)
28	151 (55)	177 (65)	2.67 (0.98)	242 (89)	148 (30)	187 (37)	2.71 (0.54)	236 (47)	156 (56)	201 (72)	3.31 (1.19)	249 (89)
29	102 (116)	119 (135)	1.78 (2.02)	163 (185)	141 (116)	178 (146)	2.54 (2.08)	225 (185)	92 (113)	119 (146)	1.94 (2.37)	148 (181)
30	50 (104)	59 (122)	0.86 (1.79)	80 (167)	119 (133)	150 (169)	2.11 (2.37)	190 (213)	59 (119)	76 (153)	1.22 (2.45)	94 (190)
31	175 (155)	205 (181)	2.95 (2.62)	280 (248)	202 (104)	256 (131)	3.54 (1.81)	324 (166)	202 (244)	260 (315)	4.12 (4.98)	323 (390)
Avg	119	139	2.28	190	138	174	2.66	221	129	166	2.87	207
n	16	16	16	16	10	10	10	10	11	11	11	11
SD	39	45	0.76	62	27	35	0.45	44	55	71	1.19	88
Min	50	59	0.86	80	101	127	2.11	161	26	33	0.73	42
Max	198	231	3.99	316	202	256	3.54	324	202	260	4.62	323

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Table F8. Daily mean (SD) of H2S emissions at Site NC3B for April, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1	169 (38)	198 (44)	2.81 (0.63)	271 (60)	157 (21)	199 (26)	2.70 (0.35)	251 (33)	212 (66)	274 (86)	4.27 (1.34)	340 (106)
2	175 (71)	204 (83)	2.85 (1.15)	279 (113)	162 (84)	205 (107)	2.74 (1.41)	259 (135)	227 (115)	292 (149)	4.49 (2.28)	362 (184)
3	171 (137)	200 (161)	2.75 (2.20)	274 (220)	145 (134)	184 (170)	2.40 (2.23)	232 (215)	190 (174)	245 (225)	3.71 (3.40)	304 (279)
4	186 (73)	218 (86)	2.94 (1.16)	298 (117)	152 (40)	193 (50)	2.48 (0.65)	244 (63)	252 (114)	325 (147)	4.84 (2.18)	404 (182)
5	225 (43)	263 (50)	3.48 (0.66)	360 (68)					244 (81)	315 (105)	4.62 (1.54)	391 (130)
6	225 (142)	264 (167)	3.43 (2.16)	361 (228)	215 (83)	273 (105)	3.37 (1.28)	343 (132)	181 (139)	233 (180)	3.37 (2.59)	289 (223)
7	197 (211)	231 (247)	2.95 (3.15)	315 (337)	242 (156)	308 (198)	3.74 (2.40)	388 (249)	181 (191)	234 (246)	3.33 (3.50)	290 (305)
8	201 (172)	235 (202)	2.95 (2.55)	322 (276)	219 (127)	278 (162)	3.31 (1.93)	350 (203)	224 (150)	290 (194)	4.06 (2.72)	359 (241)
9	226 (120)	265 (141)	3.26 (1.74)	362 (193)	216 (108)	275 (137)	3.21 (1.60)	346 (172)	247 (125)	319 (162)	4.39 (2.23)	395 (201)
10	134 (41)	157 (48)	1.90 (0.58)	214 (65)	254 (99)	324 (126)	3.70 (1.46)	407 (159)	228 (120)	294 (155)	3.99 (2.11)	364 (192)
11	125 (27)	147 (31)	1.74 (0.37)	200 (42)					171 (73)	221 (94)	2.94 (1.26)	273 (116)
12	194 (53)	228 (62)	2.65 (0.71)	311 (84)					238 (239)	307 (309)	4.02 (4.05)	380 (382)
13	221 (73)	259 (86)	2.95 (0.98)	353 (117)	142 (39)	181 (50)	1.95 (0.53)	228 (62)				
14	186 (158)	218 (186)	2.43 (2.08)	297 (253)	157 (92)	200 (117)	2.11 (1.23)	252 (147)	106 (100)	137 (129)	1.74 (1.63)	170 (160)
15	194 (166)	227 (194)	2.49 (2.13)	310 (265)	157 (85)	199 (108)	2.06 (1.12)	250 (136)	116 (90)	150 (116)	1.85 (1.44)	185 (144)
16	208 (182)	244 (213)	2.62 (2.30)	332 (291)	147 (105)	187 (134)	1.89 (1.35)	235 (168)	114 (98)	148 (126)	1.80 (1.54)	183 (156)
17	215 (158)	253 (185)	2.67 (1.96)	345 (253)	136 (94)	173 (120)	1.72 (1.20)	218 (151)	147 (109)	191 (141)	2.28 (1.69)	236 (174)
18	245 (162)	287 (190)	2.97 (1.97)	391 (259)	160 (56)	204 (71)	1.98 (0.70)	256 (90)	192 (107)	248 (139)	2.91 (1.63)	306 (171)
19	346 (166)	407 (195)	4.13 (1.99)	554 (265)	171 (43)	218 (55)	2.08 (0.53)	274 (69)	234 (87)	303 (113)	3.49 (1.30)	375 (139)
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
Avg	202	237	2.84	324	177	225	2.59	283	195	251	3.45	312
n	19	19	19	19	16	16	16	16	18	18	18	18
SD	45	53	0.52	72	37	47	0.66	60	47	60	0.98	74
Min	125	147	1.74	200	136	173	1.72	218	106	137	1.74	170
Max	346	407	4.13	554	254	324	3.74	407	252	325	4.84	404

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Table F8. Daily mean (SD) of H2S emissions at Site NC3B for May, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1}hd^{-2}$	$g \cdot d^{-1}AU^{-1}$	$mg \cdot d^{-1}m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1}hd^{-2}$	$g \cdot d^{-1}AU^{-1}$	$mg \cdot d^{-1}m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1}hd^{-2}$	$g \cdot d^{-1}AU^{-1}$	$mg \cdot d^{-1}m^{2}$
1												
2												
3												
4	208 (94)	245 (112)	1.90 (0.87)	332 (151)	192 (37)	246 (47)	1.76 (0.34)	307 (59)	147 (30)	191 (39)	1.66 (0.34)	236 (48)
5	305 (171)	361 (202)	2.74 (1.54)	488 (274)	243 (88)	311 (113)	2.19 (0.80)	388 (141)	192 (167)	249 (217)	2.13 (1.86)	307 (267)
6	143 (26)	169 (31)	1.26 (0.23)	229 (42)	143 (27)	184 (35)	1.28 (0.24)	229 (43)	96 (19)	124 (25)	1.04 (0.21)	153 (30)
7	123 (30)	146 (36)	1.07 (0.26)	197 (49)	135 (26)	173 (33)	1.18 (0.23)	216 (41)	100 (21)	129 (27)	1.06 (0.22)	159 (34)
8	156 (46)	184 (55)	1.33 (0.40)	249 (74)	141 (28)	181 (36)	1.22 (0.24)	226 (45)	126 (20)	164 (26)	1.33 (0.21)	202 (32)
9	150 (31)	178 (36)	1.27 (0.26)	240 (49)	140 (23)	180 (29)	1.19 (0.19)	224 (36)	179 (30)	232 (38)	1.85 (0.30)	286 (47)
10	167 (47)	198 (56)	1.39 (0.39)	268 (75)	179 (52)	229 (67)	1.49 (0.44)	286 (83)	201 (43)	262 (56)	2.04 (0.44)	322 (69)
11	205 (70)	242 (83)	1.68 (0.57)	327 (111)	214 (42)	274 (54)	1.76 (0.35)	343 (67)	214 (65)	278 (85)	2.14 (0.65)	343 (104)
12	259 (201)	307 (238)	2.09 (1.63)	414 (322)	255 (92)	327 (118)	2.07 (0.75)	409 (147)	241 (100)	313 (129)	2.37 (0.98)	386 (159)
13	114 (44)	135 (52)	0.91 (0.35)	182 (70)	156 (47)	200 (60)	1.25 (0.37)	250 (74)	147 (52)	191 (67)	1.42 (0.50)	235 (83)
14	101 (39)	120 (46)	0.80 (0.30)	162 (62)	127 (47)	163 (61)	1.00 (0.38)	204 (76)	127 (50)	165 (65)	1.20 (0.47)	203 (80)
15	177 (116)	210 (137)	1.37 (0.90)	283 (185)	156 (87)	200 (112)	1.21 (0.68)	249 (139)	196 (55)	254 (72)	1.83 (0.52)	313 (88)
16	124 (28)	146 (33)	0.95 (0.21)	198 (44)	140 (23)	180 (30)	1.08 (0.18)	225 (37)	160 (36)	207 (47)	1.47 (0.33)	256 (58)
17	184 (38)	218 (45)	1.39 (0.29)	294 (61)	154 (29)	197 (37)	1.17 (0.22)	246 (46)	224 (58)	291 (76)	2.03 (0.53)	358 (94)
18	199 (65)	236 (77)	1.49 (0.49)	319 (104)	157 (30)	201 (38)	1.18 (0.23)	251 (48)	237 (59)	308 (76)	2.12 (0.53)	380 (94)
19	193 (96)	229 (114)	1.43 (0.71)	309 (154)	133 (91)	171 (116)	0.98 (0.67)	213 (145)	231 (178)	300 (231)	2.04 (1.57)	369 (284)
20	157 (49)	187 (58)	1.15 (0.36)	252 (78)	161 (36)	207 (46)	1.18 (0.26)	258 (58)	156 (43)	203 (56)	1.36 (0.38)	250 (70)
21	158 (32)	187 (38)	1.14 (0.23)	252 (51)	145 (32)	186 (41)	1.05 (0.23)	231 (51)	173 (32)	225 (41)	1.48 (0.27)	277 (51)
22	202 (101)	239 (119)	1.44 (0.72)	323 (161)	195 (56)	250 (72)	1.39 (0.40)	311 (90)	226 (99)	294 (128)	1.91 (0.84)	362 (158)
23	145 (49)	171 (57)	1.02 (0.34)	231 (78)	132 (33)	169 (42)	0.93 (0.23)	211 (53)	148 (45)	193 (58)	1.23 (0.37)	237 (72)
24	187 (33)	222 (40)	1.30 (0.23)	300 (53)	137 (24)	175 (31)	0.96 (0.17)	219 (38)	170 (34)	221 (45)	1.39 (0.28)	271 (55)
25	200 (63)	237 (74)	1.38 (0.43)	320 (100)	140 (38)	180 (49)	0.97 (0.26)	225 (61)	176 (54)	229 (70)	1.43 (0.44)	281 (86)
26	187 (74)	222 (87)	1.28 (0.51)	300 (118)	143 (38)	184 (48)	0.98 (0.26)	229 (60)	160 (56)	208 (73)	1.28 (0.45)	256 (90)
27	193 (74)	230 (88)	1.31 (0.51)	309 (119)	144 (31)	186 (40)	0.98 (0.21)	231 (50)	209 (57)	272 (75)	1.66 (0.45)	335 (92)
28	253 (58)	301 (69)	1.70 (0.39)	405 (93)	174 (39)	224 (50)	1.17 (0.26)	279 (62)	305 (67)	398 (87)	2.39 (0.53)	488 (107)
29	421 (875)	501 (1040)	2.81 (5.83)	674 (1400)	214 (167)	276 (215)	1.43 (1.12)	343 (267)	253 (101)	330 (132)	1.96 (0.79)	405 (162)
30	137 (39)	164 (46)	0.91 (0.26)	220 (62)	140 (25)	180 (32)	0.93 (0.16)	224 (39)	157 (37)	205 (48)	1.20 (0.28)	252 (59)
31	146 (25)	174 (30)	0.96 (0.17)	233 (40)	142 (23)	182 (30)	0.93 (0.15)	227 (37)	156 (50)	203 (66)	1.18 (0.38)	249 (81)
Avg	186	220	1.41	297	162	208	1.25	259	182	237	1.65	292
n	28	28	28	28	28	28	28	28	28	28	28	28
SD	64	75	0.48	102	34	43	0.33	54	47	62	0.40	76
Min	101	120	0.80	162	127	163	0.93	204	96	124	1.04	153
Max	421	501	2.81	674	255	327	2.19	409	305	398	2.39	488

ED_004549_00015929-00192

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for June, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1	162 (33)	193 (39)	1.05 (0.22)	259 (53)	113 (31)	146 (40)	0.74 (0.20)	181 (50)	204 (73)	266 (96)	1.52 (0.55)	326 (117)
2	212 (149)	253 (178)	1.37 (0.97)	339 (239)	221 (119)	284 (153)	1.43 (0.77)	353 (191)	240 (155)	314 (203)	1.78 (1.15)	384 (248)
3	136 (44)	163 (52)	0.88 (0.28)	218 (70)	155 (34)	199 (43)	0.99 (0.21)	248 (54)	151 (30)	197 (39)	1.11 (0.22)	242 (48)
4	129 (26)	153 (32)	0.82 (0.17)	206 (42)	149 (30)	192 (38)	0.95 (0.19)	238 (47)	168 (50)	220 (66)	1.22 (0.37)	270 (81)
5	149 (37)	178 (44)	0.94 (0.23)	239 (58)	178 (87)	229 (112)	1.13 (0.55)	285 (139)	204 (159)	267 (208)	1.47 (1.15)	326 (254)
6	147 (23)	175 (27)	0.92 (0.14)	234 (37)	146 (19)	188 (25)	0.92 (0.12)	234 (31)	153 (44)	200 (57)	1.09 (0.31)	244 (70)
7	169 (38)	202 (46)	1.05 (0.24)	270 (61)	125 (35)	161 (45)	0.78 (0.22)	200 (56)	174 (50)	228 (65)	1.23 (0.35)	278 (79)
8	179 (55)	214 (66)	1.11 (0.35)	287 (89)	123 (41)	158 (52)	0.76 (0.25)	196 (65)	155 (54)	204 (71)	1.09 (0.38)	248 (86)
9	212 (85)	253 (102)	1.31 (0.53)	339 (136)	145 (97)	187 (125)	0.90 (0.60)	232 (156)	97 (95)	127 (125)	0.67 (0.66)	155 (152)
10	151 (48)	181 (57)	0.93 (0.29)	241 (76)	81 (29)	105 (37)	0.50 (0.18)	130 (46)				
11												
12												
13	148 (43)	178 (51)	0.90 (0.26)	236 (68)	126 (21)	163 (27)	0.76 (0.13)	202 (33)	146 (35)	191 (46)	0.98 (0.23)	233 (55)
14	171 (48)	206 (58)	1.03 (0.29)	273 (77)	124 (33)	161 (42)	0.75 (0.20)	198 (52)	161 (41)	212 (54)	1.08 (0.28)	258 (66)
15	210 (71)	253 (86)	1.26 (0.43)	336 (114)	99 (17)	129 (22)	0.60 (0.10)	159 (28)	192 (32)	253 (42)	1.28 (0.21)	307 (52)
16	188 (77)	227 (94)	1.13 (0.47)	300 (124)	98 (59)	128 (76)	0.59 (0.35)	157 (94)	187 (61)	246 (80)	1.23 (0.40)	299 (98)
17	149 (44)	181 (53)	0.89 (0.26)	239 (70)	84 (16)	109 (20)	0.50 (0.09)	134 (25)	180 (26)	237 (34)	1.18 (0.17)	287 (42)
18	139 (45)	168 (54)	0.83 (0.27)	222 (72)	86 (23)	112 (30)	0.51 (0.14)	138 (37)	221 (60)	292 (80)	1.44 (0.39)	354 (96)
19	139 (50)	169 (60)	0.83 (0.29)	223 (80)	110 (24)	143 (31)	0.65 (0.14)	176 (38)	242 (91)	320 (119)	1.57 (0.59)	387 (145)
20	230 (308)	280 (375)	1.36 (1.82)	368 (493)	186 (198)	242 (257)	1.09 (1.16)	297 (316)	275 (129)	364 (171)	1.77 (0.83)	440 (206)
21	128 (34)	155 (41)	0.75 (0.20)	204 (54)	131 (30)	170 (38)	0.76 (0.17)	209 (47)	211 (41)	280 (54)	1.36 (0.26)	338 (65)
22												
23	180 (172)	220 (209)	1.05 (1.00)	288 (275)	189 (190)	246 (248)	1.10 (1.10)	303 (304)	260 (153)	345 (203)	1.65 (0.97)	417 (245)
24	126 (23)	172 (31)	0.83 (0.15)	202 (36)	181 (56)	267 (83)	1.18 (0.37)	289 (89)	204 (53)	309 (92)	1.47 (0.44)	327 (85)
25	110 (48)	172 (75)	0.84 (0.36)	175 (76)	166 (63)	285 (108)	1.26 (0.48)	266 (101)	210 (91)	369 (159)	1.75 (0.75)	336 (145)
26	180 (247)	283 (389)	1.37 (1.88)	288 (395)	161 (36)	276 (61)	1.21 (0.27)	257 (57)	325 (124)	572 (218)	2.69 (1.03)	520 (198)
27	115 (16)	182 (26)	0.87 (0.12)	185 (26)	140 (36)	240 (61)	1.05 (0.27)	224 (57)	224 (26)	395 (46)	1.85 (0.22)	358 (42)
28	131 (17)	206 (26)	0.99 (0.13)	209 (27)	156 (31)	270 (53)	1.17 (0.23)	250 (49)	244 (36)	431 (64)	2.00 (0.30)	391 (58)
29	147 (27)	231 (43)	1.10 (0.20)	235 (43)	177 (21)	305 (36)	1.32 (0.16)	283 (34)	231 (37)	407 (65)	1.88 (0.30)	369 (59)
30	149 (40)	234 (62)	1.11 (0.30)	238 (63)	164 (24)	284 (41)	1.23 (0.18)	263 (38)	272 (133)	481 (235)	2.21 (1.08)	436 (213)
Avg	159	203	1.02	254	141	199	0.92	226	205	297	1.48	328
n	27	27	27	27	27	27	27	27	26	26	26	26
SD	31	37	0.18	50	35	62	0.27	56	49	100	0.43	78
Min	110	153	0.75	175	81	105	0.50	130	97	127	0.67	155
Max	230	283	1.37	368	221	305	1.43	353	325	572	2.69	520

ED_004549_00015929-00193

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for July, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1	109 (59)	185 (100)	0.89 (0.48)	175 (94)	135 (44)	253 (83)	1.09 (0.36)	216 (70)	170 (44)	300 (78)	1.37 (0.36)	272 (71)
2	140 (73)	259 (135)	1.25 (0.65)	224 (117)	142 (50)	292 (103)	1.26 (0.45)	228 (80)	207 (60)	365 (107)	1.67 (0.49)	331 (97)
3	163 (70)	302 (130)	1.45 (0.62)	261 (112)	169 (33)	348 (68)	1.50 (0.30)	271 (53)	217 (97)	383 (171)	1.74 (0.78)	347 (155)
4	138 (40)	256 (73)	1.23 (0.35)	221 (63)	218 (29)	448 (60)	1.93 (0.26)	349 (47)	177 (34)	312 (61)	1.41 (0.28)	283 (55)
5												
6												
7												
8												
9	131 (35)	243 (65)	1.15 (0.31)	209 (56)	196 (36)	404 (73)	1.71 (0.31)	314 (57)	161 (64)	295 (115)	1.31 (0.51)	258 (103)
10	184 (33)	343 (62)	1.61 (0.29)	294 (53)	234 (79)	483 (163)	2.03 (0.69)	375 (126)	184 (72)	347 (136)	1.53 (0.60)	294 (116)
11												
12	161 (49)	302 (92)	1.41 (0.43)	258 (79)	145 (18)	300 (37)	1.25 (0.16)	233 (29)				
13	170 (48)	318 (90)	1.48 (0.42)	272 (77)	145 (21)	300 (43)	1.25 (0.18)	233 (33)				
14	233 (215)	436 (403)	2.02 (1.87)	372 (344)	172 (55)	355 (114)	1.47 (0.47)	275 (88)				
15	142 (32)	266 (60)	1.23 (0.28)	228 (51)	151 (60)	313 (123)	1.29 (0.51)	242 (95)				
16	135 (42)	252 (79)	1.16 (0.36)	216 (67)	124 (22)	256 (46)	1.05 (0.19)	198 (35)				
17	149 (86)	280 (162)	1.28 (0.74)	239 (138)	153 (41)	384 (70)	1.57 (0.29)	244 (66)	212 (128)	400 (242)	1.73 (1.05)	339 (205)
18	107 (33)	200 (62)	0.91 (0.28)	170 (53)	125 (15)	418 (50)	1.71 (0.20)	199 (24)	165 (35)	311 (67)	1.35 (0.29)	264 (57)
19	102 (25)	191 (47)	0.87 (0.21)	163 (40)	130 (15)	436 (49)	1.77 (0.20)	208 (24)	171 (46)	324 (86)	1.40 (0.37)	274 (73)
20	134 (28)	251 (53)	1.13 (0.24)	214 (45)	181 (41)	607 (138)	2.46 (0.56)	289 (66)	228 (88)	432 (166)	1.86 (0.72)	365 (140)
21	163 (73)	305 (137)	1.37 (0.62)	261 (117)	209 (131)	702 (440)	2.83 (1.78)	335 (210)	246 (250)	467 (475)	2.00 (2.04)	393 (400)
22	123 (21)	554 (397)	2.86 (2.19)	197 (34)	169 (22)	731 (167)	2.96 (0.69)	270 (35)	161 (22)	306 (42)	1.31 (0.18)	257 (35)
23					127 (49)	743 (284)	3.02 (1.15)	203 (78)	164 (28)	312 (53)	1.33 (0.23)	262 (45)
24					179 (37)	1040 (218)	4.22 (0.88)	286 (60)	216 (71)	412 (135)	1.75 (0.58)	345 (114)
25												
26												
27												
28												
29												
30												
31												
Avg	146	291	1.37	234	163	464	1.91	261	191	355	1.55	306
n	17	17	17	17	19	19	19	19	14	14	14	14
SD	31	88	0.46	50	32	205	0.81	51	28	54	0.23	44
Min	102	185	0.87	163	124	253	1.05	198	161	295	1.31	257
Max	233	554	2.86	372	234	1040	4.22	375	246	467	2.00	393

ED_004549_00015929-00194

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for August, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1												
2												
3												
4												
5												
6												
7												
8												
9	104 (47)	125 (57)	2.53 (1.16)	166 (75)	98 (21)	134 (29)	2.56 (0.57)	157 (34)				
10					93 (14)	126 (19)	2.35 (0.34)	148 (22)	67 (38)			108 (61)
11	239 (86)	287 (103)	5.59 (2.01)	383 (137)	151 (109)	205 (148)	3.76 (2.72)	241 (174)	122 (56)			195 (89)
12	178 (83)	213 (100)	4.06 (1.92)	284 (133)	85 (33)	116 (45)	2.08 (0.82)	136 (53)	123 (35)	167 (48)	3.74 (1.08)	196 (56)
13	235 (58)	281 (69)	5.27 (1.30)	375 (93)	78 (28)	105 (37)	1.86 (0.66)	124 (44)	158 (69)	215 (94)	4.69 (2.02)	253 (110)
14	220 (60)	264 (72)	4.86 (1.33)	353 (96)	130 (33)	176 (44)	3.06 (0.76)	208 (52)	170 (60)	231 (81)	4.90 (1.74)	271 (96)
15	167 (49)	200 (59)	3.63 (1.07)	268 (78)	143 (19)	195 (25)	3.32 (0.42)	229 (30)	170 (43)	232 (59)	4.80 (1.22)	272 (69)
16					157 (21)	214 (28)	3.58 (0.46)	251 (33)	206 (40)	280 (54)	5.69 (1.10)	329 (63)
17	180 (41)	216 (49)	3.78 (0.87)	288 (65)	181 (31)	247 (42)	4.06 (0.70)	290 (50)	222 (54)	303 (74)	6.01 (1.47)	355 (87)
18	188 (63)	225 (76)	3.88 (1.31)	301 (101)	211 (46)	287 (63)	4.66 (1.02)	337 (74)	242 (93)	330 (126)	6.42 (2.47)	387 (148)
19	133 (34)	160 (41)	2.71 (0.70)	213 (55)	196 (24)	268 (33)	4.27 (0.52)	314 (38)	188 (85)	256 (116)	4.90 (2.24)	301 (136)
20	121 (24)	146 (29)	2.43 (0.49)	194 (39)	189 (20)	258 (27)	4.05 (0.42)	303 (31)	175 (49)	238 (67)	4.47 (1.27)	279 (79)
21	160 (64)	192 (77)	3.16 (1.25)	256 (102)	213 (69)	291 (94)	4.48 (1.44)	341 (110)	195 (65)	266 (89)	4.91 (1.64)	312 (105)
22	100 (15)	121 (18)	1.95 (0.30)	161 (24)	177 (19)	241 (26)	3.66 (0.40)	283 (31)	149 (51)	203 (70)	3.68 (1.27)	238 (82)
23	98 (28)	117 (34)	1.87 (0.53)	156 (45)	166 (25)	226 (35)	3.37 (0.52)	265 (41)	148 (41)	202 (56)	3.61 (1.01)	237 (66)
24	116 (20)	139 (24)	2.17 (0.38)	185 (32)	164 (25)	224 (34)	3.28 (0.50)	262 (40)	181 (61)	247 (84)	4.33 (1.48)	289 (98)
25												
26												
27	103 (12)	124 (14)	1.84 (0.20)	165 (19)	147 (25)	201 (35)	2.79 (0.48)	236 (41)	180 (33)	246 (44)	4.12 (0.75)	288 (52)
28	112 (15)	135 (18)	1.96 (0.26)	179 (24)	158 (21)	216 (29)	2.94 (0.39)	252 (34)	182 (19)	248 (26)	4.09 (0.43)	290 (31)
29	121 (26)	145 (31)	2.08 (0.45)	193 (42)	163 (19)	223 (26)	2.98 (0.34)	261 (30)	183 (22)	249 (30)	4.05 (0.50)	292 (36)
30	127 (27)	153 (33)	2.16 (0.46)	203 (43)	163 (12)	224 (16)	2.93 (0.21)	261 (19)	196 (20)	268 (27)	4.29 (0.45)	314 (32)
31												
Avg	150	180	3.11	240	153	209	3.30	245	171	246	4.63	274
n	18	18	18	18	20	20	20	20	19	17	17	19
SD	46	55	1.20	74	39	53	0.76	62	38	38	0.78	61
Min	98	117	1.84	156	78	105	1.86	124	67	167	3.61	108
Max	239	287	5.59	383	213	291	4.66	341	242	330	6.42	387

ED_004549_00015929-00195

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for September, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1	126 (46)	152 (56)	2.06 (0.77)	201 (74)	175 (31)	240 (42)	3.01 (0.55)	280 (49)	176 (37)	240 (51)	3.72 (0.80)	281 (60)
2	78 (18)	95 (22)	1.26 (0.29)	125 (28)	125 (24)	172 (33)	2.12 (0.41)	200 (38)	156 (57)	214 (77)	3.25 (1.18)	250 (91)
3	93 (17)	113 (21)	1.47 (0.27)	149 (28)	122 (22)	167 (31)	2.02 (0.37)	195 (36)	155 (47)	213 (64)	3.18 (0.97)	249 (75)
4	90 (22)	109 (27)	1.40 (0.34)	144 (35)	121 (17)	166 (23)	1.96 (0.27)	193 (26)	169 (60)	231 (82)	3.40 (1.21)	271 (96)
5												
6												
7												
8												
9												
10												
11												
12	172 (33)	210 (41)	2.28 (0.44)	274 (53)	175 (17)	241 (23)	2.39 (0.22)	280 (27)	208 (26)	285 (35)	3.60 (0.45)	332 (41)
13	179 (33)	219 (40)	2.32 (0.43)	286 (52)	185 (22)	255 (30)	2.48 (0.29)	296 (35)	185 (34)	253 (46)	3.14 (0.59)	295 (54)
14	191 (36)	234 (44)	2.43 (0.46)	306 (58)	201 (26)	276 (36)	2.63 (0.34)	322 (42)	185 (35)	253 (48)	3.07 (0.58)	295 (56)
15	179 (45)	219 (55)	2.23 (0.56)	287 (71)	224 (72)	308 (99)	2.86 (0.92)	358 (115)	210 (47)	288 (64)	3.43 (0.77)	336 (75)
16	97 (25)	119 (31)	1.18 (0.31)	155 (41)	152 (21)	210 (29)	1.91 (0.27)	244 (34)	168 (31)	231 (43)	2.68 (0.49)	269 (50)
17	70 (26)	86 (32)	0.84 (0.31)	112 (42)	167 (25)	230 (35)	2.05 (0.31)	268 (40)	244 (93)	335 (127)	3.81 (1.44)	390 (148)
18	135 (40)	166 (49)	1.58 (0.46)	217 (64)	203 (59)	280 (82)	2.44 (0.71)	325 (95)	386 (131)	531 (181)	5.92 (2.03)	617 (210)
19	166 (42)	203 (52)	1.90 (0.48)	266 (68)	229 (107)	315 (147)	2.69 (1.25)	366 (171)	406 (127)	558 (175)	6.10 (1.91)	649 (203)
20	208 (68)	254 (83)	2.33 (0.76)	332 (108)	267 (110)	368 (151)	3.08 (1.27)	428 (176)	434 (148)	598 (204)	6.39 (2.19)	695 (237)
21												
22	321 (161)	393 (197)	3.46 (1.74)	513 (257)	318 (189)	438 (260)	3.52 (2.10)	510 (303)	428 (248)	590 (342)	6.06 (3.52)	684 (396)
23	172 (64)	211 (79)	1.82 (0.67)	275 (102)	167 (97)	229 (134)	1.81 (1.06)	267 (156)	144 (105)	198 (144)	2.00 (1.46)	230 (168)
24	121 (114)	148 (140)	1.26 (1.18)	194 (182)	82 (20)	113 (27)	0.87 (0.21)	131 (31)	89 (48)	122 (67)	1.20 (0.65)	142 (77)
25	47 (40)	58 (49)	0.48 (0.40)	75 (63)	114 (22)	156 (30)	1.18 (0.23)	182 (35)	104 (57)	144 (79)	1.39 (0.76)	167 (91)
26	128 (20)	157 (25)	1.27 (0.20)	204 (32)	158 (28)	217 (38)	1.61 (0.28)	252 (44)	162 (17)	224 (24)	2.11 (0.22)	259 (28)
27	213 (33)	262 (41)	2.09 (0.32)	341 (53)	220 (49)	303 (68)	2.20 (0.49)	352 (79)	196 (29)	271 (41)	2.51 (0.37)	314 (47)
28	299 (42)	368 (51)	2.87 (0.39)	478 (67)	313 (56)	430 (77)	3.08 (0.54)	501 (90)	245 (43)	339 (59)	3.06 (0.53)	391 (69)
29												
30	473 (45)	582 (56)	4.38 (0.41)	756 (72)	573 (89)	789 (123)	5.44 (0.84)	917 (143)	398 (50)	551 (69)	4.79 (0.59)	637 (79)
Avg	169	208	1.95	271	204	281	2.44	327	231	318	3.56	369
n	21	21	21	21	21	21	21	21	21	21	21	21
SD	96	118	0.87	153	102	141	0.92	163	107	148	1.47	171
Min	47	58	0.48	75	82	113	0.87	131	89	122	1.20	142
Max	473	582	4.38	756	573	789	5.44	917	434	598	6.39	695

ED_004549_00015929-00196

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for October, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1	591 (82)	729 (101)	5.38 (0.74)	946 (131)	666 (96)	916 (132)	6.21 (0.89)	1060 (154)	506 (121)	701 (168)	5.96 (1.42)	809 (194)
2	688 (236)	849 (291)	6.16 (2.11)	1100 (377)	737 (224)	1010 (309)	6.77 (2.07)	1180 (359)				
3	584 (310)	720 (383)	5.13 (2.74)	934 (497)	706 (271)	972 (373)	6.37 (2.45)	1130 (433)				
4	669 (259)	827 (320)	5.78 (2.24)	1070 (414)	643 (192)	885 (265)	5.71 (1.70)	1030 (307)	612 (222)	848 (307)	6.81 (2.47)	979 (354)
5	733 (208)	905 (257)	6.23 (1.77)	1170 (332)	672 (172)	926 (237)	5.88 (1.50)	1080 (275)				
6	598 (230)	740 (285)	5.01 (1.94)	957 (368)	535 (241)	737 (332)	4.61 (2.10)	857 (386)	575 (246)	798 (341)	6.17 (2.66)	920 (393)
7	384 (86)	475 (106)	3.16 (0.70)	614 (137)	442 (152)	609 (209)	3.75 (1.28)	708 (243)	431 (176)	599 (244)	4.54 (1.85)	690 (281)
8	386 (112)	478 (139)	3.13 (0.91)	618 (179)	436 (145)	601 (199)	3.65 (1.21)	698 (231)	425 (177)	590 (245)	4.39 (1.83)	680 (283)
9	395 (77)	489 (96)	3.15 (0.62)	632 (124)	431 (163)	594 (224)	3.56 (1.35)	690 (260)	426 (121)	592 (167)	4.33 (1.24)	681 (193)
10	387 (58)	480 (72)	3.05 (0.46)	620 (93)	439 (161)	605 (221)	3.57 (1.31)	702 (257)	436 (270)	606 (376)	4.35 (2.71)	697 (432)
11	315 (42)	391 (52)	2.45 (0.33)	504 (67)	331 (100)	456 (138)	2.66 (0.80)	530 (161)	314 (47)	437 (66)	3.09 (0.47)	503 (76)
12	294 (47)	364 (59)	2.25 (0.36)	470 (76)	313 (143)	431 (197)	2.48 (1.14)	501 (229)	290 (91)	404 (127)	2.80 (0.88)	464 (146)
13	326 (84)	405 (104)	2.46 (0.63)	522 (134)	336 (156)	463 (216)	2.63 (1.22)	538 (250)	327 (106)	456 (148)	3.11 (1.01)	524 (170)
14	347 (109)	431 (135)	2.58 (0.81)	556 (174)	352 (147)	486 (203)	2.72 (1.14)	564 (236)	371 (123)	517 (171)	3.47 (1.15)	593 (196)
15	361 (143)	448 (177)	2.65 (1.05)	578 (228)	372 (141)	513 (194)	2.84 (1.07)	595 (225)	394 (134)	549 (186)	3.63 (1.24)	631 (214)
16	394 (93)	490 (115)	2.86 (0.68)	631 (148)	379 (155)	523 (214)	2.86 (1.17)	607 (248)	397 (107)	554 (149)	3.61 (0.98)	636 (171)
17	416 (95)	517 (118)	2.97 (0.67)	665 (152)	437 (185)	604 (256)	3.27 (1.38)	700 (296)	383 (122)	535 (171)	3.43 (1.09)	614 (196)
18	406 (304)	504 (378)	2.87 (2.15)	649 (487)					378 (272)	526 (379)	3.33 (2.39)	604 (435)
19	416 (302)	517 (375)	2.90 (2.11)	665 (483)					461 (314)	643 (438)	4.01 (2.73)	738 (503)
20	507 (641)	631 (797)	3.51 (4.44)	812 (1030)	570 (437)	789 (605)	4.14 (3.18)	913 (700)	407 (506)	567 (705)	3.49 (4.35)	651 (809)
21									221 (148)	309 (207)	1.87 (1.25)	354 (237)
22	386 (195)	482 (243)	2.62 (1.32)	618 (312)	316 (108)	438 (150)	2.25 (0.77)	506 (173)	247 (168)	345 (235)	2.06 (1.40)	395 (269)
23	389 (223)	486 (278)	2.61 (1.50)	622 (356)					305 (206)	426 (288)	2.51 (1.70)	488 (330)
24	459 (118)	574 (147)	3.05 (0.78)	735 (188)	415 (172)	575 (239)	2.90 (1.20)	665 (276)	400 (204)	558 (285)	3.25 (1.66)	640 (327)
25	518 (73)	648 (91)	3.41 (0.48)	829 (116)	371 (148)	514 (205)	2.57 (1.03)	593 (237)	537 (76)	749 (106)	4.31 (0.60)	858 (121)
26	694 (159)	870 (200)	4.53 (1.04)	1110 (255)	466 (146)	645 (202)	3.20 (1.00)	745 (233)	628 (207)	877 (290)	4.99 (1.65)	1000 (332)
27	781 (599)	980 (751)	5.06 (3.88)	1250 (958)	538 (439)	746 (609)	3.67 (3.00)	861 (703)				
28	325 (215)	408 (270)	2.09 (1.38)	520 (345)	163 (74)	226 (102)	1.10 (0.50)	261 (118)				
29	297 (205)	373 (258)	1.89 (1.31)	475 (328)	89 (43)	124 (60)	0.60 (0.29)	143 (69)	94 (87)	132 (121)	0.72 (0.67)	151 (139)
30	285 (200)	359 (251)	1.80 (1.26)	455 (319)	100 (50)	139 (69)	0.67 (0.33)	160 (79)	109 (103)	152 (144)	0.83 (0.78)	174 (165)
31	309 (229)	390 (289)	1.94 (1.44)	495 (367)	147 (72)	203 (100)	0.97 (0.48)	235 (115)	190 (169)	266 (237)	1.43 (1.28)	304 (271)
Avg	455	565	3.42	728	422	583	3.39	676	379	528	3.56	607
n	30	30	30	30	27	27	27	27	26	26	26	26
SD	143	177	1.30	229	173	238	1.65	277	134	186	1.47	214
Min	285	359	1.80	455	89	124	0.60	143	94	132	0.72	151
Max	781	980	6.23	1250	737	1010	6.77	1180	628	877	6.81	1000

ED_004549_00015929-00197

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for November, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1	357 (257)	451 (324)	2.23 (1.60)	571 (411)	231 (83)	321 (115)	1.51 (0.54)	370 (132)	321 (261)	448 (364)	2.39 (1.94)	513 (417)
2												
3												
4												
5	393 (50)	498 (63)	2.39 (0.31)	628 (80)	427 (100)	593 (139)	2.71 (0.63)	684 (161)	550 (81)	770 (113)	3.96 (0.58)	880 (129)
6	487 (225)	618 (285)	2.95 (1.36)	780 (360)	704 (471)	978 (654)	4.44 (2.97)	1130 (753)	583 (107)	815 (150)	4.16 (0.77)	932 (171)
7	372 (75)	472 (96)	2.24 (0.45)	596 (121)	538 (187)	747 (259)	3.36 (1.17)	860 (299)	580 (142)	812 (199)	4.12 (1.01)	929 (228)
8	333 (178)	422 (226)	1.99 (1.06)	532 (285)					589 (118)	825 (166)	4.16 (0.84)	943 (190)
9	174 (98)	221 (125)	1.03 (0.58)	278 (157)								
10	398 (515)	505 (654)	2.35 (3.04)	636 (823)	726 (254)	1670 (583)	7.69 (2.69)	1160 (406)	486 (326)	680 (457)	3.37 (2.27)	777 (521)
11	205 (113)	261 (144)	1.20 (0.66)	328 (181)	582 (195)	1340 (449)	6.12 (2.05)	932 (313)	437 (268)	612 (376)	3.02 (1.85)	699 (429)
12	216 (80)	275 (102)	1.26 (0.47)	346 (128)	564 (193)	1300 (444)	5.89 (2.01)	902 (309)	386 (158)	541 (221)	2.64 (1.08)	617 (252)
13	299 (226)	381 (288)	1.73 (1.31)	479 (362)	582 (201)	1340 (464)	6.05 (2.10)	932 (322)	546 (358)	765 (502)	3.72 (2.44)	873 (573)
14	281 (45)	358 (58)	1.62 (0.26)	450 (73)	566 (123)	1310 (283)	5.85 (1.27)	906 (196)	450 (54)	631 (75)	3.05 (0.37)	720 (86)
15	366 (80)	466 (102)	2.10 (0.46)	586 (128)	596 (154)	1370 (354)	6.12 (1.57)	953 (246)	476 (92)	668 (129)	3.21 (0.62)	761 (147)
16	529 (168)	674 (214)	3.01 (0.96)	847 (269)	590 (253)	1360 (585)	6.03 (2.59)	944 (405)	659 (222)	926 (311)	4.42 (1.49)	1050 (355)
17	536 (277)	683 (353)	3.03 (1.57)	858 (443)	501 (155)	1160 (358)	5.10 (1.58)	801 (248)	565 (339)	793 (477)	3.77 (2.26)	904 (543)
18	784 (502)	1200 (744)	5.36 (3.31)	1260 (803)	530 (298)	1230 (690)	5.37 (3.02)	847 (477)				
19	364 (333)	728 (666)	3.25 (2.98)	582 (533)	282 (169)	652 (390)	2.84 (1.70)	451 (270)	390 (318)	548 (447)	2.57 (2.10)	624 (509)
20	325 (243)	650 (487)	2.89 (2.16)	520 (390)	274 (155)	636 (360)	2.75 (1.56)	439 (249)	363 (284)	510 (399)	2.38 (1.86)	581 (454)
21	323 (212)	646 (425)	2.86 (1.88)	517 (339)								
22	271 (211)	542 (423)	2.39 (1.86)	433 (338)	214 (160)	496 (372)	2.13 (1.60)	342 (256)	453 (381)	637 (535)	2.94 (2.47)	725 (610)
23	222 (171)	445 (343)	1.95 (1.50)	355 (274)	219 (211)	508 (490)	2.17 (2.09)	350 (338)	466 (366)	654 (515)	3.01 (2.37)	745 (586)
24	326 (466)	654 (935)	2.85 (4.08)	522 (746)	306 (303)	710 (704)	3.02 (2.99)	489 (485)	502 (385)	705 (541)	3.22 (2.48)	803 (617)
25	146 (77)	292 (154)	1.27 (0.67)	233 (123)					368 (187)	587 (326)	2.71 (1.51)	588 (299)
26	136 (147)	273 (296)	1.18 (1.28)	218 (236)	236 (320)	548 (745)	2.31 (3.14)	377 (513)	292 (280)	561 (536)	2.61 (2.50)	468 (447)
27	120 (89)	242 (179)	1.04 (0.77)	193 (143)	260 (282)	604 (657)	2.54 (2.76)	416 (452)	242 (205)	464 (393)	2.15 (1.83)	386 (328)
28	154 (89)	310 (179)	1.33 (0.77)	246 (142)	345 (260)	802 (605)	3.36 (2.53)	551 (416)	304 (194)	585 (374)	2.70 (1.73)	487 (311)
29	169 (123)	341 (248)	1.46 (1.06)	271 (197)	288 (298)	670 (694)	2.80 (2.90)	461 (477)	226 (200)	436 (385)	2.01 (1.77)	362 (320)
30	209 (89)	422 (179)	1.80 (0.76)	335 (142)	375 (196)	872 (457)	3.63 (1.90)	600 (314)				
Avg	315	483	2.18	504	432	922	4.08	691	445	651	3.14	712
n	27	27	27	27	23	23	23	23	23	23	23	23
SD	146	206	0.92	234	164	368	1.71	262	117	131	0.69	187
Min	120	221	1.03	193	214	321	1.51	342	226	436	2.01	362
Max	784	1200	5.36	1260	726	1670	7.69	1160	659	926	4.42	1050

ED_004549_00015929-00198

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for December, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1	302 (154)	609 (311)	2.58 (1.32)	483 (246)					435 (207)	840 (400)	3.84 (1.83)	696 (332)
2	310 (235)	626 (475)	2.65 (2.01)	496 (376)	249 (329)	580 (765)	2.40 (3.16)	399 (526)	313 (262)	605 (507)	2.75 (2.31)	501 (420)
3	273 (229)	552 (463)	2.33 (1.95)	437 (367)	228 (319)	531 (742)	2.19 (3.06)	365 (510)	299 (296)	578 (572)	2.62 (2.60)	479 (473)
4	275 (206)	555 (416)	2.33 (1.75)	439 (329)	268 (276)	624 (643)	2.56 (2.64)	428 (442)	290 (231)	561 (447)	2.54 (2.02)	464 (370)
5	308 (226)	623 (456)	2.61 (1.91)	493 (361)					356 (254)	688 (492)	3.10 (2.22)	569 (407)
6	273 (204)	552 (412)	2.30 (1.72)	437 (326)	259 (282)	605 (657)	2.47 (2.68)	415 (451)	302 (231)	585 (448)	2.63 (2.01)	483 (370)
7	284 (235)	575 (476)	2.39 (1.98)	454 (376)	187 (274)	437 (640)	1.78 (2.60)	300 (439)	289 (241)	561 (467)	2.51 (2.09)	463 (386)
8	246 (229)	497 (464)	2.06 (1.93)	393 (367)	201 (314)	469 (733)	1.90 (2.97)	322 (502)	300 (311)	581 (603)	2.59 (2.69)	479 (498)
9	274 (111)	554 (225)	2.29 (0.93)	438 (178)	335 (171)	782 (400)	3.16 (1.62)	536 (274)	303 (155)	588 (300)	2.61 (1.33)	485 (247)
10	301 (35)	610 (70)	2.51 (0.29)	482 (55)	408 (60)	954 (140)	3.84 (0.56)	653 (96)	261 (34)	508 (66)	2.25 (0.29)	418 (54)
11	369 (59)	747 (120)	3.07 (0.49)	591 (95)	475 (59)	1110 (138)	4.45 (0.55)	759 (95)	345 (72)	672 (140)	2.97 (0.62)	553 (115)
12	567 (597)	1150 (1210)	4.70 (4.95)	908 (956)					501 (139)	975 (270)	4.29 (1.19)	801 (222)
13												
14	283 (167)	572 (338)	2.32 (1.37)	452 (267)	301 (241)	705 (565)	2.79 (2.24)	482 (386)	256 (179)	499 (348)	2.17 (1.52)	409 (286)
15	346 (65)	701 (131)	2.83 (0.53)	554 (103)	413 (70)	966 (163)	3.81 (0.64)	660 (112)	307 (61)	599 (118)	2.60 (0.51)	491 (97)
16	355 (198)	719 (402)	2.90 (1.62)	568 (317)	422 (221)	988 (518)	3.88 (2.03)	675 (354)	280 (194)	546 (379)	2.36 (1.64)	448 (310)
17	281 (93)	569 (187)	2.28 (0.75)	450 (148)	426 (128)	997 (299)	3.90 (1.17)	681 (204)	220 (91)	491 (181)	2.10 (0.78)	352 (146)
18	267 (33)	541 (66)	2.16 (0.26)	428 (53)	430 (143)	1010 (336)	3.92 (1.31)	688 (230)	211 (55)	545 (141)	2.31 (0.60)	338 (88)
19	353 (143)	714 (289)	2.84 (1.15)	565 (229)	534 (119)	1250 (278)	4.84 (1.07)	854 (190)	293 (117)	756 (302)	3.19 (1.28)	468 (187)
20	345 (45)	698 (92)	2.76 (0.36)	551 (72)	463 (154)	1090 (361)	4.18 (1.39)	742 (247)	295 (55)	761 (143)	3.19 (0.60)	471 (88)
21												
22												
23												
24												
25												
26												
27												
28												
29												
30	33 (20)	40 (23)	0.90 (0.53)	53 (31)					115 (295)			185 (472)
31												
Avg	302	610	2.54	484	350	818	3.25	560	298	628	2.77	478
n	20	20	20	20	16	16	16	16	20	19	19	20
SD	91	188	0.66	145	105	248	0.93	169	76	123	0.55	122
Min	33	40	0.90	53	187	437	1.78	300	115	491	2.10	185
Max	567	1150	4.70	908	534	1250	4.84	854	501	975	4.29	801

ED_004549_00015929-00199

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for January, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1}hd^{-2}$	$g \cdot d^{-1}AU^{-1}$	$mg \cdot d^{-1}m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-}$	$g \cdot d^{-1}AU^{-1}$	$mg \cdot d^{-1}m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1}hd^{-2}$	$g \cdot d^{-1}AU^{-1}$	$mg \cdot d^{-1}m^{2}$
1					16 (15)	19 (19)	0.41 (0.40)	25 (25)				
2												
3	23 (29)	28 (35)	0.56 (0.71)	37 (47)								
4	23 (31)	27 (37)	0.54 (0.73)	37 (49)								
5	102 (252)	121 (300)	2.36 (5.84)	163 (403)								
6	48 (43)	58 (52)	1.10 (0.98)	77 (69)								
7	54 (48)	64 (58)	1.21 (1.08)	86 (77)	62 (42)	76 (51)	1.41 (0.95)	99 (67)				
8	59 (96)	70 (114)	1.30 (2.11)	94 (153)								
9	54 (81)	64 (97)	1.16 (1.75)	86 (129)	40 (32)	49 (40)	0.87 (0.71)	64 (52)				
10	59 (72)	71 (87)	1.27 (1.54)	95 (116)								
11	91 (123)	109 (147)	1.91 (2.57)	146 (197)								
12	140 (517)	168 (621)	2.90 (10.70)	224 (827)								
13	39 (62)	47 (75)	0.80 (1.27)	63 (100)	23 (35)	28 (43)	0.47 (0.72)	36 (56)				
14	34 (57)	41 (68)	0.68 (1.14)	54 (91)	27 (28)	33 (34)	0.54 (0.57)	43 (45)				
15	56 (172)	67 (206)	1.11 (3.40)	90 (275)								
16	24 (38)	29 (45)	0.47 (0.73)	38 (60)								
17	21 (34)	26 (41)	0.41 (0.65)	34 (55)	19 (21)	23 (26)	0.36 (0.41)	30 (34)				
18												
19												
20												
21												
22												
23	8 (12)	10 (14)	0.14 (0.21)	13 (19)								
24	10 (15)	12 (18)	0.17 (0.25)	16 (23)								
25												
26	11 (21)	13 (25)	0.17 (0.34)	17 (34)	23 (32)	28 (39)	0.37 (0.53)	36 (51)				
27	8 (13)	10 (15)	0.13 (0.20)	13 (20)								
28	28 (72)	33 (87)	0.43 (1.13)	44 (115)	42 (63)	52 (77)	0.66 (0.99)	67 (100)				
29	10 (14)	12 (17)	0.15 (0.21)	16 (22)	24 (23)	30 (28)	0.37 (0.35)	39 (37)				
30	14 (23)	17 (28)	0.22 (0.35)	23 (38)								
31	26 (44)	31 (53)	0.38 (0.65)	41 (71)								
Avg	41	49	0.85	66	31	37	0.61	49				
n	23	23	23	23	9	9	9	9	0	0	0	0
SD	33	39	0.73	53	14	17	0.33	22				
Min	8	10	0.13	13	16	19	0.36	25				
Max	140	168	2.90	224	62	76	1.41	99				

ED_004549_00015929-00200

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for February, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1	42 (54)	50 (66)	0.60 (0.79)	67 (87)								
2	62 (72)	75 (87)	0.88 (1.02)	99 (115)								
3	61 (89)	73 (107)	0.84 (1.23)	97 (142)	84 (166)	104 (205)	1.17 (2.32)	134 (266)				
4	65 (221)	78 (268)	0.88 (3.01)	103 (354)								
5	10 (16)	12 (20)	0.14 (0.22)	16 (26)	10 (11)	12 (13)	0.13 (0.14)	16 (17)				
6	8 (12)	10 (14)	0.11 (0.15)	13 (19)								
7	9 (9)	11 (11)	0.12 (0.11)	15 (14)	21 (17)	26 (21)	0.27 (0.21)	34 (27)				
8	14 (14)	17 (17)	0.18 (0.17)	23 (22)	49 (31)	61 (38)	0.62 (0.38)	79 (49)				
9	55 (138)	67 (168)	0.67 (1.69)	88 (221)	87 (62)	108 (77)	1.06 (0.76)	139 (99)	79 (49)	101 (62)	1.06 (0.65)	127 (78)
10	11 (9)	14 (11)	0.13 (0.11)	18 (15)	102 (154)	127 (192)	1.23 (1.86)	163 (246)	117 (42)	149 (53)	1.53 (0.55)	187 (67)
11	12 (6)	14 (8)	0.14 (0.07)	19 (10)	28 (10)	35 (13)	0.33 (0.12)	45 (16)	120 (139)	152 (177)	1.54 (1.79)	191 (223)
12	17 (11)	21 (13)	0.19 (0.13)	27 (18)	45 (25)	56 (31)	0.51 (0.28)	71 (40)	35 (13)	45 (16)	0.44 (0.16)	56 (21)
13	26 (21)	32 (26)	0.29 (0.24)	42 (34)	82 (51)	103 (63)	0.93 (0.57)	132 (81)				
14	36 (35)	43 (43)	0.39 (0.39)	57 (56)	115 (104)	143 (130)	1.27 (1.15)	184 (167)				
15	39 (50)	48 (61)	0.42 (0.54)	63 (80)								
16	69 (236)	84 (288)	0.73 (2.49)	111 (378)	224 (209)	280 (261)	2.38 (2.22)	359 (335)				
17	9 (18)	11 (22)	0.09 (0.19)	14 (29)	210 (372)	261 (463)	2.18 (3.87)	335 (594)				
18	15 (14)	19 (17)	0.16 (0.14)	25 (23)	29 (17)	36 (22)	0.29 (0.18)	46 (28)				
19	22 (11)	27 (14)	0.22 (0.11)	36 (18)	31 (14)	38 (17)	0.30 (0.13)	49 (22)	33 (10)	42 (13)	0.35 (0.11)	52 (17)
20												
21												
22												
23	61 (146)	74 (178)	0.56 (1.34)	97 (233)	103 (89)	129 (111)	0.96 (0.82)	165 (143)				
24	24 (30)	29 (37)	0.22 (0.27)	39 (48)	125 (417)	156 (521)	1.14 (3.79)	200 (666)	102 (98)	130 (125)	1.00 (0.97)	163 (156)
25	23 (22)	28 (27)	0.21 (0.20)	37 (36)	30 (25)	37 (31)	0.26 (0.22)	47 (39)	119 (202)	152 (260)	1.15 (1.97)	190 (324)
26	34 (23)	41 (28)	0.29 (0.20)	54 (36)	37 (19)	46 (24)	0.32 (0.17)	59 (31)	38 (22)	48 (28)	0.36 (0.21)	60 (34)
27												
28	120 (59)	147 (72)	1.01 (0.49)	192 (95)	116 (59)	145 (74)	0.98 (0.50)	185 (95)	77 (46)	99 (59)	0.70 (0.42)	123 (74)
Avg	35	43	0.39	56	80	100	0.86	129	80	102	0.91	128
n	24	24	24	24	19	19	19	19	9	9	9	9
SD	27	33	0.29	43	59	74	0.62	94	35	45	0.44	56
Min	8	10	0.09	13	10	12	0.13	16	33	42	0.35	52
Max	120	147	1.01	192	224	280	2.38	359	120	152	1.54	191

ED_004549_00015929-00201

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for March, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1	127 (144)	155 (176)	1.05 (1.19)	203 (231)	165 (125)	206 (157)	1.37 (1.04)	263 (201)	96 (116)	123 (149)	0.86 (1.05)	153 (186)
2	150 (179)	183 (219)	1.21 (1.45)	240 (287)	236 (154)	295 (193)	1.94 (1.26)	378 (246)				
3	152 (196)	186 (240)	1.21 (1.57)	242 (314)	348 (778)	436 (975)	2.81 (6.29)	557 (1250)	195 (225)	251 (289)	1.70 (1.96)	312 (360)
4	143 (159)	175 (195)	1.12 (1.25)	229 (254)	87 (76)	109 (95)	0.69 (0.60)	140 (121)	210 (225)	270 (289)	1.80 (1.93)	336 (360)
5	177 (365)	217 (446)	1.37 (2.82)	283 (584)	55 (31)	69 (39)	0.43 (0.25)	88 (50)	235 (442)	303 (568)	1.99 (3.74)	376 (707)
6	36 (20)	44 (24)	0.27 (0.15)	57 (31)	77 (25)	96 (31)	0.59 (0.19)	122 (40)	78 (34)	100 (43)	0.65 (0.28)	125 (54)
7	37 (11)	46 (14)	0.28 (0.08)	60 (18)	142 (40)	179 (50)	1.09 (0.30)	228 (64)	64 (14)	82 (18)	0.52 (0.11)	102 (22)
8												
9	94 (26)	115 (32)	0.68 (0.19)	150 (42)	349 (84)	440 (106)	2.59 (0.62)	558 (135)	171 (37)	221 (47)	1.36 (0.29)	274 (58)
10	146 (56)	179 (68)	1.05 (0.40)	234 (89)	305 (391)	385 (493)	2.25 (2.88)	488 (625)	252 (94)	324 (121)	1.97 (0.73)	403 (150)
11	194 (50)	238 (61)	1.38 (0.35)	311 (80)	85 (21)	107 (27)	0.61 (0.15)	135 (34)	413 (99)	532 (128)	3.19 (0.76)	661 (159)
12	393 (388)	481 (475)	2.75 (2.71)	629 (620)	155 (56)	195 (70)	1.11 (0.40)	248 (89)	303 (263)	391 (340)	2.32 (2.02)	485 (421)
13	54 (45)	66 (55)	0.37 (0.31)	86 (72)	219 (147)	277 (186)	1.55 (1.04)	351 (236)	80 (76)	103 (98)	0.60 (0.57)	128 (121)
14	97 (62)	118 (75)	0.66 (0.42)	155 (99)	286 (179)	361 (226)	2.00 (1.25)	458 (287)	166 (139)	215 (179)	1.24 (1.03)	266 (222)
15	154 (79)	189 (97)	1.04 (0.53)	247 (126)	387 (163)	488 (206)	2.67 (1.13)	619 (261)	300 (127)	388 (164)	2.20 (0.93)	480 (203)
16	206 (49)	252 (61)	1.37 (0.33)	329 (79)	489 (138)	618 (175)	3.35 (0.95)	783 (221)	476 (179)	615 (232)	3.45 (1.29)	761 (287)
17	251 (59)	308 (72)	1.66 (0.39)	402 (94)	393 (556)	497 (702)	2.67 (3.77)	629 (890)	547 (183)	707 (237)	3.92 (1.31)	875 (293)
18	372 (85)	456 (104)	2.43 (0.55)	595 (136)	103 (28)	131 (36)	0.69 (0.19)	166 (45)	610 (180)	789 (233)	4.32 (1.28)	976 (288)
19	374 (512)	459 (627)	2.42 (3.31)	599 (819)	138 (34)	174 (43)	0.91 (0.23)	221 (54)	469 (484)	607 (626)	3.29 (3.40)	751 (774)
20	45 (10)	55 (13)	0.29 (0.07)	72 (17)	212 (60)	268 (76)	1.40 (0.39)	340 (96)	106 (48)	138 (62)	0.74 (0.33)	170 (77)
21	73 (21)	89 (26)	0.46 (0.13)	116 (33)	311 (94)	394 (119)	2.03 (0.61)	498 (151)	184 (71)	239 (92)	1.26 (0.49)	295 (114)
22												
23	96 (50)	117 (62)	0.60 (0.31)	153 (81)	377 (108)	476 (137)	2.41 (0.70)	603 (173)	272 (86)	353 (112)	1.83 (0.58)	436 (138)
24	128 (55)	157 (68)	0.79 (0.34)	205 (88)	314 (443)	398 (560)	2.00 (2.81)	503 (708)	308 (108)	399 (140)	2.05 (0.72)	493 (173)
25	209 (65)	257 (80)	1.28 (0.40)	335 (104)	91 (34)	115 (42)	0.57 (0.21)	145 (54)	413 (98)	535 (126)	2.73 (0.65)	661 (156)
26	223 (248)	275 (305)	1.36 (1.51)	358 (397)	133 (20)	169 (25)	0.83 (0.12)	213 (32)	345 (279)	447 (362)	2.26 (1.83)	552 (447)
27	63 (17)	78 (21)	0.38 (0.10)	101 (28)	203 (43)	257 (54)	1.26 (0.26)	325 (68)	131 (29)	170 (38)	0.85 (0.19)	210 (47)
28	111 (28)	137 (34)	0.67 (0.16)	178 (44)	276 (57)	350 (73)	1.70 (0.35)	442 (92)	178 (32)	231 (41)	1.15 (0.20)	285 (51)
29	173 (64)	214 (79)	1.03 (0.38)	277 (102)	392 (74)	497 (94)	2.40 (0.45)	626 (118)	224 (59)	291 (76)	1.44 (0.38)	359 (94)
30	292 (50)	361 (62)	1.73 (0.30)	468 (81)	488 (104)	620 (132)	2.96 (0.63)	780 (167)	341 (59)	443 (76)	2.16 (0.37)	545 (94)
31	355 (82)	438 (101)	2.09 (0.48)	568 (130)	409 (276)	520 (351)	2.47 (1.67)	654 (442)	392 (70)	509 (91)	2.47 (0.44)	628 (112)
Avg	170	208	1.14	272	249	315	1.70	399	270	349	1.94	432
n	29	29	29	29	29	29	29	29	28	28	28	28
SD	103	126	0.66	164	128	162	0.84	205	145	187	1.00	231
Min	36	44	0.27	57	55	69	0.43	88	64	82	0.52	102
Max	393	481	2.75	629	489	620	3.35	783	610	789	4.32	976

ED_004549_00015929-00202

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for April, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1	466 (87)	575 (107)	2.73 (0.51)	746 (139)	174 (29)	221 (37)	1.04 (0.17)	278 (47)	422 (62)	548 (80)	2.64 (0.38)	675 (99)
2	389 (314)	480 (388)	2.27 (1.83)	623 (503)	263 (38)	334 (49)	1.56 (0.23)	420 (61)	336 (278)	436 (362)	2.09 (1.73)	537 (445)
3	104 (35)	128 (43)	0.60 (0.20)	166 (56)	321 (43)	408 (55)	1.90 (0.26)	514 (69)	103 (26)	134 (34)	0.64 (0.16)	165 (42)
4	169 (44)	209 (54)	0.97 (0.25)	270 (70)	365 (56)	464 (72)	2.14 (0.33)	583 (90)	202 (40)	262 (52)	1.24 (0.25)	323 (64)
5	249 (90)	307 (111)	1.43 (0.51)	398 (144)	398 (67)	507 (85)	2.32 (0.39)	637 (107)	207 (75)	269 (98)	1.26 (0.46)	330 (120)
6	436 (115)	538 (142)	2.48 (0.65)	698 (184)	441 (61)	639 (130)	2.96 (0.62)	705 (97)	283 (65)	369 (85)	1.72 (0.39)	453 (104)
7	501 (115)	618 (142)	2.84 (0.65)	801 (184)	358 (239)	596 (397)	2.79 (1.86)	573 (382)	417 (89)	543 (115)	2.52 (0.53)	667 (142)
8	505 (91)	624 (112)	2.85 (0.52)	809 (145)	155 (46)	258 (77)	1.20 (0.36)	247 (74)	438 (111)	570 (145)	2.63 (0.67)	701 (178)
9	435 (478)	537 (590)	2.45 (2.68)	696 (764)	194 (35)	323 (58)	1.49 (0.27)	310 (56)	323 (303)	420 (395)	1.93 (1.81)	516 (485)
10	179 (53)	222 (65)	1.00 (0.30)	287 (85)	253 (34)	422 (56)	1.94 (0.26)	406 (54)	38 (9)	49 (12)	0.22 (0.05)	60 (15)
11	310 (84)	382 (103)	1.72 (0.47)	496 (134)	316 (50)	526 (83)	2.41 (0.38)	505 (79)	65 (27)	84 (35)	0.38 (0.16)	103 (43)
12	342 (53)	423 (65)	1.90 (0.29)	548 (85)	362 (105)	604 (175)	2.75 (0.80)	579 (168)	122 (34)	159 (44)	0.72 (0.20)	195 (54)
13	318 (49)	393 (61)	1.76 (0.27)	509 (78)	413 (84)	690 (140)	3.12 (0.63)	661 (134)	179 (31)	234 (40)	1.05 (0.18)	287 (49)
14	308 (64)	380 (79)	1.69 (0.35)	492 (102)	388 (368)	647 (615)	2.92 (2.77)	620 (589)	234 (44)	304 (58)	1.36 (0.26)	374 (71)
15	543 (90)	671 (111)	2.97 (0.49)	869 (144)	217 (45)	362 (75)	1.62 (0.34)	347 (72)	301 (33)	392 (43)	1.74 (0.19)	481 (53)
16	534 (733)	659 (905)	2.90 (3.99)	854 (1170)	280 (58)	469 (97)	2.09 (0.43)	449 (92)	275 (336)	358 (438)	1.59 (1.94)	439 (538)
17	124 (37)	175 (53)	0.78 (0.24)	199 (59)	310 (115)	520 (193)	2.31 (0.86)	497 (185)	111 (28)	144 (36)	0.64 (0.16)	177 (44)
18	154 (67)	247 (108)	1.10 (0.48)	247 (108)	368 (94)	616 (158)	2.72 (0.70)	588 (151)	200 (56)	260 (73)	1.14 (0.32)	320 (90)
19	195 (64)	312 (103)	1.38 (0.46)	312 (103)	435 (102)	729 (171)	3.21 (0.76)	696 (163)	333 (91)	433 (118)	1.89 (0.51)	533 (145)
20	259 (72)	414 (115)	1.83 (0.51)	414 (115)	502 (165)	842 (278)	3.69 (1.22)	803 (265)	488 (124)	635 (161)	2.76 (0.70)	781 (198)
21	303 (92)	527 (184)	2.34 (0.82)	485 (147)	344 (293)	600 (499)	2.63 (2.19)	550 (468)	676 (115)	1000 (228)	4.34 (0.98)	1080 (184)
22	423 (71)	795 (134)	3.55 (0.59)	676 (114)	98 (33)	196 (67)	0.86 (0.29)	157 (54)	703 (139)	1210 (239)	5.18 (1.03)	1120 (223)
23	292 (227)	550 (428)	2.45 (1.91)	468 (364)	122 (43)	242 (86)	1.06 (0.38)	195 (69)	524 (440)	992 (770)	4.31 (3.33)	838 (704)
24												
25	81 (43)	152 (82)	0.67 (0.36)	129 (69)	164 (62)	327 (123)	1.42 (0.54)	263 (99)	166 (51)	418 (128)	1.85 (0.56)	266 (81)
26	126 (40)	238 (76)	1.05 (0.33)	202 (64)	252 (59)	502 (118)	2.18 (0.51)	404 (95)	241 (62)	607 (156)	2.67 (0.69)	386 (99)
27	163 (62)	308 (117)	1.35 (0.51)	261 (99)	316 (121)	630 (242)	2.72 (1.04)	506 (194)	311 (84)	783 (210)	3.43 (0.92)	498 (134)
28	233 (81)	439 (152)	1.92 (0.66)	372 (129)	348 (243)	693 (484)	2.98 (2.09)	556 (389)	401 (87)	1010 (219)	4.41 (0.96)	642 (139)
29	299 (95)	565 (180)	2.46 (0.78)	478 (152)	55 (15)	109 (30)	0.47 (0.13)	87 (24)	453 (94)	1140 (236)	4.97 (1.03)	725 (150)
30	347 (327)	657 (618)	2.84 (2.68)	556 (523)	53 (11)	106 (23)	0.46 (0.10)	85 (18)	378 (243)	953 (613)	4.13 (2.66)	605 (389)
Avg	303	432	1.94	485	285	468	2.10	456	308	508	2.26	493
n	29	29	29	29	29	29	29	29	29	29	29	29
SD	135	177	0.79	216	117	190	0.84	187	164	326	1.40	262
Min	81	128	0.60	129	53	106	0.46	85	38	49	0.22	60
Max	543	795	3.55	869	502	842	3.69	803	703	1210	5.18	1120

ED_004549_00015929-00203

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for May, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1}hd^{-2}$	$g \cdot d^{-1}AU^{-1}$	$mg \cdot d^{-1}m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1}hd^{-2}$	$g \cdot d^{-1}AU^{-1}$	$mg \cdot d^{-1}m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1}hd^{-2}$	$g \cdot d^{-1}AU^{-1}$	$mg \cdot d^{-1}m^{2}$
1	91 (15)	172 (28)	0.74 (0.12)	145 (24)	74 (18)	148 (35)	0.63 (0.15)	118 (28)	162 (31)	409 (79)	1.77 (0.34)	259 (50)
2	110 (22)	208 (42)	0.89 (0.18)	176 (35)	101 (16)	202 (31)	0.86 (0.13)	161 (25)	221 (26)	559 (66)	2.41 (0.29)	354 (42)
3												
4	204 (73)	387 (139)	1.64 (0.59)	327 (117)	183 (30)	367 (60)	1.55 (0.25)	293 (48)	302 (42)	763 (106)	3.27 (0.45)	484 (67)
5	297 (82)	563 (156)	2.37 (0.66)	476 (132)	249 (271)	499 (543)	2.10 (2.28)	398 (434)	391 (139)	988 (350)	4.21 (1.50)	626 (222)
6	297 (138)	2900 (21300)	58.50 (533.00)	475 (221)	48 (18)	95 (36)	0.40 (0.15)	76 (29)	385 (67)	973 (170)	4.14 (0.72)	617 (108)
7	262 (249)			420 (398)	54 (12)	108 (24)	0.45 (0.10)	86 (19)	380 (313)	960 (791)	4.07 (3.35)	608 (501)
8	42 (38)			67 (61)	65 (20)	130 (39)	0.54 (0.16)	104 (31)	79 (14)	199 (36)	0.84 (0.15)	126 (23)
9	17 (9)			27 (14)	91 (20)	182 (39)	0.75 (0.16)	145 (31)	106 (14)	267 (34)	1.12 (0.14)	169 (22)
10	21 (2)			33 (3)	163 (25)	327 (50)	1.34 (0.20)	261 (40)	168 (30)	424 (75)	1.78 (0.31)	268 (48)
11	9 (25)			14 (40)	171 (26)	342 (52)	1.40 (0.21)	273 (42)	224 (61)	565 (155)	2.36 (0.65)	358 (98)
12	39 (90)			62 (143)	172 (42)	344 (84)	1.40 (0.34)	275 (67)	212 (35)	534 (88)	2.22 (0.37)	338 (56)
13	1 (7)			1 (11)	120 (63)			193 (101)	211 (32)	533 (82)	2.21 (0.34)	338 (52)
14	4 (3)			7 (4)	84 (168)			134 (269)	205 (275)	517 (695)	2.13 (2.86)	327 (440)
15	5 (2)			8 (3)	1 (4)			2 (7)	50 (21)	127 (52)	0.52 (0.21)	80 (33)
16												
17					1 (6)			1 (10)				
18					-7 (10)			-11 (16)	122 (36)	1120 (1900)	16.90 (41.70)	195 (58)
19					3 (4)			5 (6)				
20					6 (3)			9 (5)	67 (75)			107 (119)
21					3 (6)			5 (9)	18 (12)			29 (18)
22					5 (6)			9 (10)	19 (13)			31 (20)
23	3 (1)			5 (2)	4 (4)			6 (6)	21 (11)			34 (17)
24	5 (5)			7 (8)								
25												
26	3 (8)	4 (12)	0.09 (0.26)	4 (13)								
27	4 (7)	6 (10)	0.13 (0.22)	7 (12)								
28	54 (127)	76 (177)	1.59 (3.72)	87 (203)								
29	11 (18)	16 (26)	0.33 (0.52)	18 (29)								
30												
31	4 (9)	6 (13)	0.11 (0.26)	6 (15)	0 (4)	1 (12)	0.08 (0.41)	0 (7)				
Avg	71	433	6.64	113	72	229	0.96	116	176	596	3.33	282
n	21	10	10	21	22	12	12	22	19	15	15	19
SD	100	840	17.30	160	74	139	0.57	119	120	294	3.79	192
Min	1	4	0.09	1	-7	1	0.08	-11	18	127	0.52	29
Max	297	2900	58.50	476	249	499	2.10	398	391	1120	16.90	626

ED_004549_00015929-00204

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for June, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1	13 (11)	18 (16)	0.34 (0.30)	20 (18)								
2	39 (27)	55 (37)	1.05 (0.72)	63 (42)	84 (74)	209 (184)	5.60 (4.96)	134 (118)				
3	43 (11)	61 (16)	1.15 (0.30)	69 (18)	10 (5)	24 (12)	0.64 (0.31)	16 (8)				
4	57 (13)	82 (18)	1.51 (0.33)	92 (20)	12 (6)	18 (7)	0.46 (0.18)	19 (9)				
5	78 (16)	111 (23)	2.01 (0.42)	124 (26)	15 (10)	18 (12)	0.45 (0.30)	23 (15)	12 (7)	15 (8)	0.41 (0.22)	19 (11)
6	111 (31)	159 (45)	2.86 (0.80)	178 (50)	15 (9)	19 (11)	0.45 (0.28)	24 (15)				
7	121 (30)	174 (42)	3.07 (0.74)	194 (47)	16 (5)	21 (7)	0.49 (0.16)	26 (8)	6 (5)	7 (6)	0.19 (0.15)	9 (7)
8	127 (35)	182 (50)	3.18 (0.87)	203 (56)	27 (10)	34 (13)	0.78 (0.29)	43 (16)	8 (4)	10 (5)	0.25 (0.13)	13 (7)
9	131 (27)	189 (38)	3.25 (0.66)	210 (43)	33 (17)	42 (21)	0.96 (0.48)	53 (27)	20 (14)	24 (18)	0.59 (0.43)	31 (23)
10	131 (35)	189 (50)	3.20 (0.86)	210 (56)	37 (11)	47 (14)	1.04 (0.32)	59 (18)	34 (11)	41 (14)	0.99 (0.33)	54 (18)
11	115 (51)	167 (74)	2.78 (1.23)	185 (81)	36 (17)	47 (21)	1.01 (0.46)	58 (27)	48 (41)	59 (50)	1.38 (1.17)	76 (65)
12	53 (25)	76 (36)	1.26 (0.59)	84 (40)	35 (9)	45 (11)	0.97 (0.24)	57 (14)	55 (72)	68 (89)	1.57 (2.05)	88 (115)
13	34 (10)	50 (15)	0.80 (0.23)	55 (16)	44 (14)	56 (18)	1.18 (0.38)	70 (23)	11 (6)	13 (8)	0.29 (0.18)	17 (10)
14	54 (13)	79 (18)	1.25 (0.29)	87 (20)	66 (13)	85 (17)	1.77 (0.34)	106 (21)	17 (11)	21 (13)	0.46 (0.29)	27 (17)
15	73 (24)	107 (34)	1.67 (0.53)	117 (38)	93 (39)	120 (50)	2.46 (1.01)	149 (62)	33 (25)	40 (31)	0.87 (0.66)	52 (39)
16	109 (15)	159 (22)	2.45 (0.34)	174 (25)	89 (86)	115 (111)	2.32 (2.23)	143 (138)	39 (15)	48 (19)	1.01 (0.40)	62 (24)
17	95 (16)	139 (24)	2.11 (0.36)	152 (26)	65 (76)	83 (98)	1.65 (1.94)	103 (122)	47 (14)	59 (17)	1.22 (0.36)	76 (22)
18	101 (49)	148 (72)	2.21 (1.08)	161 (79)	15 (9)	19 (12)	0.38 (0.23)	24 (15)	79 (85)	98 (105)	2.01 (2.15)	127 (136)
19	101 (73)	148 (107)	2.17 (1.57)	162 (117)	24 (14)	31 (18)	0.60 (0.34)	39 (22)	30 (30)	38 (38)	0.75 (0.76)	48 (48)
20	26 (9)	37 (14)	0.54 (0.19)	41 (15)	39 (17)	51 (21)	0.96 (0.40)	63 (26)	19 (9)	24 (11)	0.47 (0.21)	31 (14)
21	33 (8)	49 (12)	0.69 (0.16)	53 (13)	37 (12)	48 (16)	0.89 (0.29)	59 (19)	20 (7)	24 (9)	0.47 (0.18)	31 (12)
22	79 (71)	116 (104)	1.61 (1.45)	126 (113)	59 (33)	77 (43)	1.39 (0.77)	94 (52)	32 (15)	39 (19)	0.75 (0.36)	51 (25)
23	19 (9)	28 (13)	0.38 (0.18)	30 (14)	61 (65)	80 (85)	1.42 (1.53)	98 (105)	41 (26)	51 (32)	0.95 (0.60)	66 (41)
24	33 (11)	48 (17)	0.65 (0.22)	53 (18)	102 (89)	133 (116)	2.33 (2.04)	163 (142)	23 (11)	29 (13)	0.53 (0.25)	37 (17)
25	119 (137)	175 (202)	2.30 (2.67)	190 (220)	19 (11)	25 (14)	0.44 (0.24)	31 (17)	83 (98)	103 (121)	1.86 (2.19)	133 (156)
26					35 (22)	46 (29)	0.78 (0.48)	56 (35)	16 (8)	20 (10)	0.36 (0.17)	26 (13)
27					44 (16)	58 (21)	0.96 (0.35)	70 (26)				
28	23 (8)	34 (12)	0.43 (0.15)	37 (13)	61 (16)	80 (21)	1.31 (0.34)	98 (25)	28 (10)	35 (12)	0.60 (0.20)	45 (15)
29	52 (54)	77 (79)	0.94 (0.97)	84 (86)	75 (22)	98 (29)	1.58 (0.46)	120 (35)	45 (13)	56 (16)	0.93 (0.26)	72 (20)
30												
Avg	73	106	1.70	117	45	62	1.26	71	32	40	0.82	52
n	27	27	27	27	28	28	28	28	23	23	23	23
SD	39	56	0.94	62	26	43	1.02	42	20	25	0.49	32
Min	13	18	0.34	20	10	18	0.38	16	6	7	0.19	9
Max	131	189	3.25	210	102	209	5.60	163	83	103	2.01	133

ED_004549_00015929-00205

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for July, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1	34 (11)	50 (16)	0.59 (0.19)	55 (18)	36 (48)	48 (63)	0.74 (0.98)	58 (77)	55 (14)	69 (18)	1.10 (0.28)	88 (23)
2					13 (11)	17 (14)	0.25 (0.21)	20 (17)	123 (114)	154 (142)	2.41 (2.22)	197 (182)
3	37 (54)	55 (80)	0.62 (0.91)	59 (87)	33 (13)	44 (18)	0.65 (0.26)	53 (21)	20 (9)	25 (11)	0.39 (0.17)	32 (15)
4	21 (9)	31 (14)	0.34 (0.15)	34 (15)	53 (21)	71 (27)	1.03 (0.40)	85 (33)	25 (11)	32 (14)	0.48 (0.21)	41 (18)
5	35 (12)	52 (17)	0.56 (0.18)	56 (19)	71 (23)	95 (31)	1.35 (0.44)	114 (37)	29 (10)	36 (13)	0.53 (0.18)	46 (16)
6	80 (78)	118 (115)	1.25 (1.23)	127 (125)	95 (17)	126 (23)	1.76 (0.32)	152 (28)	57 (8)	71 (10)	1.03 (0.14)	91 (13)
7	77 (66)	113 (98)	1.18 (1.02)	123 (106)	175 (195)	233 (260)	3.19 (3.56)	280 (312)	72 (14)	91 (18)	1.28 (0.26)	116 (23)
8	26 (10)	39 (15)	0.39 (0.15)	42 (17)	44 (50)	58 (66)	0.78 (0.89)	70 (80)	88 (26)	111 (33)	1.52 (0.46)	140 (42)
9	110 (111)	162 (164)	1.62 (1.63)	175 (177)	26 (13)	35 (17)	0.46 (0.22)	42 (20)	229 (395)	289 (498)	3.89 (6.73)	366 (633)
10	76 (73)	112 (107)	1.10 (1.05)	121 (116)	40 (18)	53 (24)	0.68 (0.31)	63 (29)	22 (15)	28 (19)	0.36 (0.24)	35 (23)
11	44 (49)	65 (73)	0.63 (0.70)	70 (79)	52 (17)	69 (23)	0.87 (0.29)	83 (28)	23 (9)	29 (11)	0.38 (0.15)	37 (14)
12	25 (36)	37 (53)	0.35 (0.50)	40 (58)	68 (18)	90 (24)	1.11 (0.29)	108 (29)	38 (11)	48 (14)	0.60 (0.17)	61 (18)
13	37 (44)	55 (65)	0.51 (0.60)	60 (70)	87 (18)	116 (24)	1.40 (0.29)	139 (29)	69 (23)	87 (29)	1.07 (0.36)	110 (37)
14	18 (19)	27 (28)	0.24 (0.25)	29 (30)	137 (141)	182 (188)	2.16 (2.23)	219 (226)	79 (91)	99 (115)	1.19 (1.39)	126 (146)
15	33 (9)	48 (13)	0.43 (0.11)	52 (14)	70 (76)	93 (101)	1.08 (1.18)	112 (122)	36 (15)	46 (19)	0.54 (0.22)	58 (24)
16	98 (100)	145 (148)	1.26 (1.29)	157 (160)	18 (16)	24 (21)	0.27 (0.24)	28 (26)	88 (91)	111 (115)	1.28 (1.32)	141 (146)
17	26 (31)	39 (46)	0.33 (0.40)	42 (50)	35 (12)	47 (16)	0.52 (0.18)	56 (19)	22 (8)	28 (11)	0.32 (0.12)	36 (14)
18	22 (10)	33 (14)	0.28 (0.12)	36 (15)	60 (18)	80 (24)	0.87 (0.26)	96 (29)	42 (10)	52 (12)	0.57 (0.13)	66 (15)
19	32 (13)	47 (18)	0.39 (0.15)	51 (20)	80 (28)	107 (37)	1.14 (0.39)	129 (44)	54 (16)	69 (20)	0.74 (0.21)	87 (25)
20	63 (15)	93 (22)	0.75 (0.18)	101 (24)	104 (22)	138 (29)	1.44 (0.30)	166 (35)	78 (16)	98 (20)	1.03 (0.20)	125 (25)
21	79 (25)	117 (36)	0.93 (0.29)	127 (39)	118 (136)	158 (181)	1.61 (1.84)	190 (218)	89 (35)	112 (45)	1.15 (0.46)	142 (57)
22	102 (27)	151 (39)	1.18 (0.31)	163 (42)	134 (118)	179 (157)	1.79 (1.57)	215 (188)	119 (44)	150 (55)	1.50 (0.56)	190 (70)
23	155 (373)	230 (551)	1.76 (4.23)	249 (597)	11 (15)	14 (20)	0.14 (0.19)	17 (23)	117 (148)	148 (187)	1.45 (1.84)	187 (236)
24	66 (15)	97 (22)	0.73 (0.17)	105 (24)	41 (20)	54 (27)	0.52 (0.26)	65 (32)	109 (123)	138 (155)	1.33 (1.49)	175 (196)
25	73 (17)	108 (25)	0.80 (0.18)	117 (27)	77 (23)	103 (31)	0.97 (0.29)	123 (38)	23 (11)	30 (13)	0.28 (0.12)	37 (17)
26	101 (22)	149 (32)	1.09 (0.23)	161 (35)	103 (14)	138 (18)	1.27 (0.17)	165 (22)	44 (14)	56 (18)	0.51 (0.17)	71 (23)
27	149 (41)	220 (61)	1.58 (0.43)	238 (66)	144 (28)	192 (38)	1.74 (0.34)	230 (46)	88 (90)	112 (114)	1.01 (1.03)	141 (144)
28	187 (49)	276 (73)	1.95 (0.51)	299 (79)	123 (84)	164 (112)	1.46 (1.00)	196 (134)	53 (47)	68 (60)	0.60 (0.53)	85 (75)
29	218 (46)	322 (68)	2.24 (0.47)	348 (74)	133 (111)	178 (149)	1.55 (1.30)	213 (178)	28 (13)	36 (16)	0.31 (0.14)	45 (20)
30	213 (104)	315 (153)	2.16 (1.05)	341 (166)	39 (14)	53 (19)	0.45 (0.16)	63 (23)	84 (78)	106 (99)	0.90 (0.83)	134 (124)
31	62 (53)	92 (78)	0.62 (0.53)	100 (85)	54 (15)	72 (20)	0.60 (0.17)	86 (24)	25 (20)	32 (26)	0.26 (0.21)	40 (33)
Avg	77	113	0.93	123	73	98	1.09	117	65	83	0.97	105
n	30	30	30	30	31	31	31	31	31	31	31	31
SD	56	83	0.57	90	43	57	0.64	68	44	55	0.72	70
Min	18	27	0.24	29	11	14	0.14	17	20	25	0.26	32
Max	218	322	2.24	348	175	233	3.19	280	229	289	3.89	366

ED_004549_00015929-00206

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for August, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1	32 (10)	48 (15)	0.32 (0.10)	52 (17)	92 (27)	123 (37)	1.01 (0.30)	147 (44)	44 (12)	56 (16)	0.45 (0.13)	71 (20)
2	58 (43)	85 (63)	0.56 (0.42)	92 (68)	136 (20)	182 (27)	1.47 (0.21)	217 (32)	65 (19)	83 (24)	0.66 (0.19)	105 (31)
3	38 (26)	56 (39)	0.36 (0.25)	61 (42)	145 (26)	194 (35)	1.54 (0.28)	231 (42)	70 (29)	89 (37)	0.70 (0.29)	112 (47)
4	51 (46)	75 (68)	0.48 (0.43)	81 (73)	189 (187)	254 (251)	1.98 (1.96)	302 (299)	87 (18)	111 (23)	0.85 (0.18)	139 (29)
5	31 (10)	46 (15)	0.29 (0.09)	50 (16)	75 (64)	101 (87)	0.78 (0.66)	120 (103)	122 (51)	156 (65)	1.17 (0.48)	196 (81)
6	99 (109)	147 (162)	0.91 (1.00)	159 (175)	30 (14)	41 (19)	0.31 (0.14)	48 (23)	222 (327)	283 (416)	2.09 (3.09)	355 (523)
7	73 (69)	108 (102)	0.66 (0.62)	116 (110)	44 (15)	59 (21)	0.43 (0.15)	70 (25)	28 (11)	36 (14)	0.26 (0.10)	45 (17)
8												
9	53 (53)	78 (78)	0.47 (0.46)	85 (84)	86 (11)	116 (15)	0.83 (0.11)	137 (18)	61 (20)	78 (25)	0.55 (0.18)	98 (32)
10	41 (45)	61 (66)	0.36 (0.39)	66 (71)	102 (23)	137 (31)	0.97 (0.22)	163 (37)	75 (24)	96 (31)	0.66 (0.21)	120 (39)
11	48 (49)	72 (72)	0.42 (0.42)	77 (78)	206 (188)	278 (254)	1.93 (1.77)	329 (301)	136 (29)	173 (36)	1.18 (0.25)	217 (46)
12	32 (27)	48 (40)	0.28 (0.23)	52 (44)	45 (53)	61 (72)	0.42 (0.49)	73 (85)	178 (44)	227 (56)	1.52 (0.38)	285 (70)
13					31 (15)	42 (21)	0.28 (0.14)	50 (24)	141 (64)	179 (81)	1.18 (0.54)	225 (102)
14	54 (49)	80 (73)	0.45 (0.41)	86 (79)	52 (27)	70 (37)	0.47 (0.25)	83 (44)	66 (20)	84 (25)	0.54 (0.16)	105 (32)
15	64 (59)	96 (87)	0.53 (0.49)	103 (94)	63 (18)	86 (24)	0.56 (0.16)	101 (28)	104 (29)	133 (37)	0.85 (0.24)	167 (46)
16	67 (68)	100 (101)	0.55 (0.56)	108 (109)	86 (16)	116 (22)	0.75 (0.14)	137 (26)	133 (41)	170 (52)	1.07 (0.33)	213 (65)
17	45 (45)	67 (67)	0.37 (0.37)	72 (72)	104 (18)	142 (25)	0.90 (0.16)	167 (29)	140 (56)	179 (72)	1.11 (0.45)	224 (90)
18	24 (13)	35 (20)	0.19 (0.11)	38 (21)	194 (112)	263 (152)	1.65 (0.96)	310 (179)	168 (45)	214 (57)	1.32 (0.35)	268 (72)
19	33 (15)	49 (22)	0.26 (0.12)	53 (24)	43 (27)	58 (37)	0.36 (0.23)	68 (44)	193 (50)	247 (64)	1.50 (0.39)	309 (81)
20	90 (99)	134 (147)	0.72 (0.79)	144 (158)	40 (13)	55 (18)	0.34 (0.11)	64 (21)	266 (359)	341 (460)	2.04 (2.76)	425 (574)
21	15 (6)	22 (9)	0.12 (0.05)	23 (10)					185 (159)	237 (204)	1.40 (1.21)	296 (255)
22	17 (21)	26 (31)	0.14 (0.16)	28 (33)					54 (83)	69 (107)	0.41 (0.63)	87 (133)
23	9 (27)	13 (40)	0.07 (0.21)	14 (43)					22 (51)	28 (66)	0.16 (0.38)	35 (82)
24	58 (13)	87 (20)	0.45 (0.10)	93 (21)	156 (35)	212 (48)	1.25 (0.28)	249 (56)	63 (60)	81 (76)	0.46 (0.44)	100 (95)
25	72 (19)	107 (29)	0.55 (0.15)	115 (31)	229 (368)	311 (500)	1.81 (2.92)	366 (589)	52 (62)	66 (80)	0.38 (0.45)	83 (99)
26	76 (21)	113 (31)	0.58 (0.16)	121 (33)	54 (73)	74 (99)	0.43 (0.57)	87 (116)	39 (17)	50 (22)	0.28 (0.12)	63 (27)
27	271 (348)	404 (520)	2.06 (2.65)	433 (557)					197 (154)	253 (197)	1.40 (1.09)	316 (246)
28	26 (12)	39 (18)	0.20 (0.09)	42 (19)	105 (23)	144 (32)	0.81 (0.18)	169 (37)	99 (104)	127 (133)	0.70 (0.73)	158 (166)
29	42 (12)	62 (18)	0.31 (0.09)	67 (19)	134 (30)	182 (41)	1.02 (0.23)	214 (48)	80 (75)	103 (96)	0.56 (0.52)	128 (119)
30	60 (19)	90 (29)	0.45 (0.14)	96 (31)	170 (20)	232 (27)	1.28 (0.15)	272 (32)	73 (70)	94 (90)	0.51 (0.49)	117 (113)
31												
Avg	56	84	0.47	90	104	141	0.94	167	109	139	0.90	174
n	28	28	28	28	25	25	25	25	29	29	29	29
SD	47	70	0.36	75	59	79	0.53	94	62	80	0.51	100
Min	9	13	0.07	14	30	41	0.28	48	22	28	0.16	35
Max	271	404	2.06	433	229	311	1.98	366	266	341	2.09	425

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Table F8. Daily mean (SD) of H2S emissions at Site NC3B for September, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1	115 (29)	173 (44)	0.86 (0.22)	185 (47)	272 (329)	370 (448)	2.02 (2.44)	435 (526)	42 (24)	54 (31)	0.29 (0.16)	68 (38)
2	128 (29)	192 (44)	0.94 (0.22)	205 (47)	35 (73)	47 (100)	0.26 (0.54)	56 (117)	95 (20)	122 (26)	0.64 (0.13)	152 (32)
3	209 (391)	315 (589)	1.54 (2.88)	334 (626)	26 (16)	36 (22)	0.19 (0.12)	42 (26)	162 (164)	208 (211)	1.09 (1.10)	259 (262)
4	16 (10)	23 (15)	0.11 (0.07)	25 (16)	49 (23)	66 (32)	0.35 (0.17)	78 (37)	62 (62)	80 (80)	0.42 (0.42)	100 (100)
5	34 (17)	51 (25)	0.25 (0.12)	54 (27)	80 (25)	109 (35)	0.58 (0.18)	128 (41)	82 (76)	106 (97)	0.54 (0.50)	131 (121)
6	62 (20)	94 (30)	0.45 (0.14)	100 (31)	120 (27)	163 (37)	0.86 (0.20)	192 (43)	89 (79)	115 (101)	0.59 (0.52)	143 (126)
7	82 (25)	124 (38)	0.59 (0.18)	131 (40)	122 (35)	167 (48)	0.87 (0.25)	195 (56)	71 (72)	91 (93)	0.46 (0.47)	113 (115)
8	119 (28)	179 (42)	0.85 (0.20)	190 (45)	151 (33)	207 (45)	1.07 (0.23)	242 (52)	71 (67)	92 (86)	0.46 (0.43)	114 (107)
9	144 (38)	217 (57)	1.03 (0.27)	230 (61)	159 (152)	217 (208)	1.12 (1.07)	254 (243)	48 (68)	62 (87)	0.31 (0.44)	77 (109)
10	292 (642)	442 (971)	2.09 (4.58)	468 (1030)	8 (87)	11 (119)	0.06 (0.61)	13 (139)	66 (77)	85 (100)	0.43 (0.50)	106 (124)
11	26 (14)	42 (25)	0.20 (0.12)	41 (23)	149 (130)	203 (177)	1.03 (0.90)	238 (207)	55 (23)	71 (30)	0.35 (0.15)	89 (37)
12	47 (11)	83 (19)	0.39 (0.09)	75 (17)	71 (68)	97 (93)	0.49 (0.47)	114 (109)	94 (29)	120 (38)	0.59 (0.19)	150 (47)
13	70 (23)	123 (40)	0.58 (0.19)	112 (36)	73 (74)	100 (101)	0.50 (0.51)	117 (118)	129 (28)	165 (36)	0.81 (0.18)	206 (44)
14	81 (30)	143 (53)	0.66 (0.25)	130 (49)	56 (69)	77 (95)	0.38 (0.48)	90 (111)	177 (40)	228 (51)	1.11 (0.25)	283 (64)
15												
16	130 (23)	271 (49)	1.30 (0.23)	207 (37)	63 (83)	86 (113)	0.43 (0.56)	100 (133)	316 (50)	407 (64)	1.97 (0.31)	506 (79)
17	87 (78)	183 (165)	0.87 (0.78)	139 (125)	-51 (44)	-70 (61)	-0.35 (0.30)	-82 (71)	218 (117)	281 (151)	1.35 (0.73)	348 (188)
18	55 (90)	115 (190)	0.55 (0.90)	88 (144)	28 (18)	38 (25)	0.19 (0.12)	45 (29)	63 (70)	81 (90)	0.39 (0.43)	101 (112)
19	27 (11)	57 (22)	0.27 (0.11)	43 (17)	66 (20)	90 (28)	0.44 (0.14)	105 (32)	73 (27)	94 (34)	0.45 (0.16)	117 (43)
20	47 (17)	100 (36)	0.47 (0.17)	76 (27)	128 (37)	175 (51)	0.86 (0.25)	205 (60)	152 (42)	196 (54)	0.93 (0.25)	243 (67)
21	78 (82)	164 (174)	0.77 (0.82)	124 (131)	137 (44)	188 (61)	0.91 (0.30)	219 (71)	231 (56)	327 (93)	1.56 (0.45)	370 (90)
22	62 (68)	132 (143)	0.62 (0.67)	99 (108)	165 (135)	227 (186)	1.10 (0.90)	265 (216)	296 (65)	460 (102)	2.19 (0.49)	474 (105)
23	27 (22)	58 (46)	0.27 (0.22)	44 (35)	53 (66)	72 (90)	0.35 (0.44)	84 (105)	272 (66)	424 (103)	2.01 (0.49)	435 (106)
24	127 (160)	270 (340)	1.26 (1.59)	203 (256)	27 (12)	38 (16)	0.18 (0.08)	44 (19)	284 (403)	443 (628)	2.10 (2.97)	454 (644)
25	115 (109)	245 (232)	1.14 (1.08)	184 (175)	42 (32)	58 (44)	0.28 (0.21)	67 (51)	38 (40)	59 (62)	0.28 (0.29)	61 (63)
26	48 (106)	102 (225)	0.47 (1.04)	77 (169)	81 (68)	111 (93)	0.53 (0.45)	130 (109)	97 (57)	151 (88)	0.71 (0.41)	154 (90)
27	50 (73)	106 (155)	0.49 (0.72)	80 (117)	118 (59)	162 (81)	0.77 (0.38)	189 (94)	134 (38)	210 (60)	0.98 (0.28)	215 (61)
28	59 (66)	127 (141)	0.58 (0.65)	95 (106)	166 (33)	228 (46)	1.08 (0.22)	265 (53)	145 (26)	227 (41)	1.06 (0.19)	232 (42)
29	52 (64)	111 (138)	0.51 (0.63)	83 (103)	231 (62)	317 (86)	1.50 (0.40)	369 (100)	229 (45)	357 (70)	1.66 (0.32)	366 (72)
30	70 (89)	151 (191)	0.69 (0.87)	112 (142)	227 (63)	312 (86)	1.47 (0.41)	363 (100)	240 (54)	375 (84)	1.74 (0.39)	384 (86)
Avg	85	152	0.72	136	98	135	0.67	157	139	196	0.95	222
n	29	29	29	29	29	29	29	29	29	29	29	29
SD	58	90	0.43	93	72	98	0.50	115	85	129	0.60	135
Min	16	23	0.11	25	-51	-70	-0.35	-82	38	54	0.28	61
Max	292	442	2.09	468	272	370	2.02	435	316	460	2.19	506

ED_004549_00015929-00208

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for October, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1	44 (76)	96 (164)	0.43 (0.74)	71 (121)	234 (56)	322 (77)	1.51 (0.36)	374 (89)	351 (467)	549 (729)	2.53 (3.36)	562 (747)
2	115 (149)	248 (323)	1.12 (1.46)	183 (238)	231 (51)	318 (71)	1.49 (0.33)	370 (82)	28 (18)	43 (28)	0.20 (0.13)	44 (28)
3	23 (11)	50 (23)	0.23 (0.10)	37 (17)	229 (53)	315 (73)	1.47 (0.34)	366 (84)	49 (17)	77 (27)	0.35 (0.12)	79 (27)
4	45 (14)	97 (30)	0.44 (0.14)	72 (22)	271 (61)	373 (84)	1.73 (0.39)	433 (98)	85 (23)	133 (36)	0.61 (0.16)	137 (37)
5	72 (76)	156 (166)	0.69 (0.74)	115 (122)	249 (54)	343 (75)	1.59 (0.35)	398 (87)	103 (20)	189 (39)	0.86 (0.18)	165 (32)
6	28 (15)	361 (2120)	7.41 (56.00)	44 (24)	277 (357)	382 (491)	1.76 (2.26)	443 (571)	122 (24)	271 (52)	1.24 (0.24)	195 (38)
7					64 (54)	94 (78)	0.43 (0.36)	102 (87)	178 (42)	398 (94)	1.85 (0.44)	286 (67)
8					45 (21)	72 (33)	0.33 (0.15)	72 (33)	246 (561)	550 (1250)	2.55 (5.80)	394 (898)
9					71 (22)	114 (35)	0.52 (0.16)	114 (35)	96 (134)	215 (301)	0.99 (1.39)	154 (215)
10					130 (35)	209 (56)	0.94 (0.25)	208 (56)	31 (20)	69 (46)	0.32 (0.21)	49 (32)
11												
12	23 (56)			37 (90)	164 (47)	311 (89)	1.42 (0.41)	263 (75)	74 (26)	166 (60)	0.75 (0.27)	118 (42)
13	2 (4)			3 (7)	148 (246)	391 (480)	1.91 (2.29)	236 (394)	52 (26)	118 (58)	0.53 (0.26)	83 (41)
14												
15	56 (158)			90 (253)								
16	6 (17)			10 (28)								
17	-2 (3)			-3 (6)								
18	0 (3)			-1 (5)								
19	2 (8)			4 (12)								
20												
21												
22	4 (4)	6 (6)	0.12 (0.11)	7 (6)	19 (14)	26 (21)	0.61 (0.47)	30 (23)				
23	12 (7)	18 (10)	0.33 (0.18)	20 (11)	38 (24)	54 (34)	1.19 (0.75)	60 (38)	-1 (4)			-1 (7)
24	27 (8)	39 (11)	0.72 (0.20)	44 (12)	72 (30)	103 (43)	2.23 (0.93)	115 (49)	1 (2)			2 (3)
25	50 (39)	72 (57)	1.29 (1.01)	80 (63)	83 (60)	119 (86)	2.51 (1.80)	133 (96)	2 (4)			2 (6)
26	36 (51)	53 (74)	0.92 (1.29)	58 (81)	68 (72)	98 (104)	2.02 (2.13)	109 (116)	0 (4)			-1 (6)
27												
28												
29												
30												
31												
Avg	30	109	1.24	48	141	214	1.39	225	89	232	1.06	142
n	18	11	11	18	17	17	17	17	16	12	12	16
SD	29	103	1.98	47	88	129	0.62	141	95	170	0.79	152
Min	-2	6	0.12	-3	19	26	0.33	30	-1	43	0.20	-1
Max	115	361	7.41	183	277	391	2.51	443	351	550	2.55	562

ED_004549_00015929-00209

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for November, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-}$	$g \cdot d^{-1}AU^{-1}$	$mg \cdot d^{-}$	$g \cdot d^{-1}$	$mg \cdot d^{-1}hd^{-2}$	$g \cdot d^{-1}AU^{-1}$	$mg \cdot d^{-1}m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1}hd^{-2}$	$g \cdot d^{-1}AU^{-1}$	$mg \cdot d^{-1}m^{2}$
1												
2												
3												
4	24 (30)	35 (43)	0.53 (0.66)	39 (48)	27 (50)	38 (71)	0.66 (1.24)	43 (80)				
5	35 (44)	50 (63)	0.75 (0.94)	56 (70)	15 (13)	22 (19)	0.36 (0.33)	24 (22)				
6					29 (30)	41 (43)	0.68 (0.72)	46 (48)				
7					44 (40)	63 (58)	1.03 (0.94)	70 (64)				
8					71 (55)	101 (79)	1.62 (1.26)	113 (88)				
9					93 (57)	133 (81)	2.09 (1.27)	149 (90)				
10	10 (6)	15 (8)	0.21 (0.11)	17 (9)	110 (120)	158 (172)	2.44 (2.65)	177 (192)	48 (14)	64 (19)	0.98 (0.29)	76 (23)
11	6 (9)	9 (13)	0.12 (0.17)	10 (14)	34 (11)	49 (16)	0.74 (0.24)	55 (18)	58 (50)	78 (67)	1.17 (1.00)	93 (80)
12	9 (17)	13 (24)	0.17 (0.32)	14 (27)	30 (20)	44 (29)	0.64 (0.42)	49 (32)				
13					37 (35)	53 (50)	0.77 (0.72)	59 (56)				
14					52 (36)	75 (51)	1.06 (0.72)	84 (57)				
15					60 (42)	86 (60)	1.19 (0.83)	96 (67)				
16					71 (50)	102 (71)	1.38 (0.97)	114 (80)				
17					46 (59)	67 (85)	0.89 (1.14)	74 (95)				
18	13 (9)	19 (13)	0.22 (0.15)	21 (14)	21 (14)	30 (20)	0.39 (0.26)	33 (22)	160 (89)	216 (120)	2.88 (1.60)	256 (142)
19	40 (28)	58 (40)	0.67 (0.47)	64 (44)	34 (12)	49 (17)	0.62 (0.22)	54 (19)	149 (135)	202 (182)	2.65 (2.39)	239 (216)
20	31 (14)	46 (20)	0.52 (0.23)	50 (22)	61 (19)	88 (27)	1.09 (0.33)	98 (30)	43 (18)	59 (25)	0.75 (0.32)	69 (29)
21					88 (61)	128 (89)	1.54 (1.07)	141 (98)				
22					82 (61)	118 (88)	1.39 (1.04)	131 (97)				
23	18 (21)	27 (30)	0.29 (0.33)	29 (33)	67 (61)	97 (89)	1.11 (1.02)	107 (98)	99 (83)	133 (112)	1.61 (1.35)	158 (133)
24					32 (35)	46 (51)	0.51 (0.57)	51 (56)				
25												
26												
27												
28												
29					93 (29)	137 (42)	1.36 (0.42)	149 (46)				
30					137 (35)	201 (52)	1.95 (0.51)	219 (57)				
Avg	21	30	0.39	33	58	84	1.11	93	93	125	1.67	148
n	9	9	9	9	23	23	23	23	6	6	6	6
SD	12	17	0.22	19	31	45	0.54	49	47	64	0.82	76
Min	6	9	0.12	10	15	22	0.36	24	43	59	0.75	69
Max	40	58	0.75	64	137	201	2.44	219	160	216	2.88	256

ED_004549_00015929-00210

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for December, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$
1												
2	139 (76)	203 (111)	1.79 (0.98)	222 (121)	64 (28)	94 (41)	0.87 (0.38)	103 (45)	120 (77)	163 (104)	1.62 (1.04)	192 (123)
3	242 (95)	355 (138)	3.06 (1.18)	388 (151)	66 (24)	97 (36)	0.88 (0.33)	105 (39)	136 (84)	185 (114)	1.81 (1.12)	218 (134)
4					79 (22)	116 (32)	1.03 (0.28)	126 (35)				
5					112 (52)	164 (77)	1.42 (0.66)	179 (84)				
6					180 (105)	266 (155)	2.24 (1.30)	289 (168)	74 (86)	101 (117)	0.92 (1.07)	119 (138)
7					193 (109)	285 (160)	2.35 (1.32)	309 (174)	108 (112)	146 (152)	1.30 (1.36)	172 (180)
8	276 (266)	405 (390)	3.15 (3.03)	442 (425)	346 (377)	510 (556)	4.12 (4.50)	553 (603)	57 (106)	77 (144)	0.67 (1.27)	91 (170)
9	282 (60)	414 (88)	3.15 (0.67)	452 (96)	63 (68)	93 (101)	0.74 (0.80)	101 (109)	18 (8)	25 (11)	0.21 (0.09)	29 (13)
10					26 (17)	39 (25)	0.30 (0.20)	42 (28)				
11					41 (48)	60 (70)	0.46 (0.53)	65 (76)				
12												
13	15 (9)	22 (13)	0.16 (0.09)	24 (14)	137 (66)	203 (98)	1.47 (0.71)	220 (106)	30 (19)	41 (26)	0.32 (0.21)	49 (31)
14					190 (67)	281 (99)	2.00 (0.71)	305 (107)	65 (50)	89 (68)	0.68 (0.52)	104 (79)
15	33 (10)	49 (15)	0.33 (0.10)	53 (17)	126 (122)	186 (180)	1.30 (1.26)	202 (194)	81 (43)	111 (58)	0.84 (0.44)	130 (68)
16									110 (123)	149 (168)	1.10 (1.24)	175 (197)
17	56 (87)	83 (128)	0.54 (0.84)	90 (139)	9 (10)	14 (15)	0.09 (0.10)	15 (16)	102 (236)	138 (322)	1.01 (2.34)	163 (378)
18	25 (50)	37 (73)	0.24 (0.47)	40 (80)	16 (20)	24 (30)	0.16 (0.20)	26 (33)	11 (25)	15 (35)	0.11 (0.25)	18 (41)
19												
20	7 (8)	10 (13)	0.06 (0.08)	11 (14)	70 (58)	103 (86)	0.65 (0.54)	112 (93)	39 (50)	53 (67)	0.36 (0.46)	62 (79)
21	12 (17)	17 (25)	0.10 (0.15)	19 (27)	114 (90)	168 (134)	1.05 (0.83)	182 (145)	65 (84)	89 (114)	0.60 (0.76)	104 (134)
22	8 (12)	12 (18)	0.07 (0.11)	13 (20)	156 (215)	231 (318)	1.42 (1.95)	249 (343)	97 (120)	132 (164)	0.87 (1.08)	155 (192)
23	8 (10)	12 (14)	0.07 (0.08)	13 (16)	33 (44)	49 (64)	0.30 (0.39)	53 (70)	132 (149)	180 (203)	1.17 (1.32)	211 (239)
24												
25	35 (24)	52 (35)	0.30 (0.20)	57 (38)	12 (13)	18 (19)	0.10 (0.11)	19 (20)	185 (120)	252 (163)	1.58 (1.03)	295 (191)
26												
27									227 (157)	310 (214)	1.88 (1.30)	363 (251)
28	174 (168)	257 (248)	1.42 (1.37)	278 (269)	66 (46)	98 (68)	0.55 (0.38)	106 (73)				
29												
30												
31												
Avg	94	138	1.03	150	100	148	1.12	160	92	125	0.95	147
n	14	14	14	14	21	21	21	21	18	18	18	18
SD	103	151	1.20	164	79	117	0.94	127	55	74	0.52	87
Min	7	10	0.06	11	9	14	0.09	15	11	15	0.11	18
Max	282	414	3.15	452	346	510	4.12	553	227	310	1.88	363

ED_004549_00015929-00211

Table F8. Daily mean (SD) of H2S emissions at Site NC3B for January, 2010.

Day	Barn 1				Barn 2				Barn 3			
	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-1} m^{2}$	$g \cdot d^{-1}$	$mg \cdot d^{-}$	$g \cdot d^{-1} AU^{-1}$	$mg \cdot d^{-}$
1												
2												
3												
4												
5												
6												
7												
8												
9	37 (48)	56 (72)	0.27 (0.35)	60 (77)	80 (46)	119 (68)	0.58 (0.33)	127 (73)	13 (16)	18 (22)	0.09 (0.11)	21 (26)
10	37 (49)	55 (74)	0.27 (0.36)	59 (79)	112 (68)	168 (101)	0.81 (0.49)	180 (108)	26 (35)	36 (48)	0.18 (0.24)	42 (56)
11	62 (68)	92 (102)	0.44 (0.49)	99 (109)	135 (90)	202 (134)	0.97 (0.64)	217 (143)	42 (54)	57 (74)	0.29 (0.37)	67 (86)
12	93 (94)	139 (141)	0.66 (0.67)	148 (151)	179 (220)	268 (329)	1.27 (1.56)	287 (352)	34 (43)	46 (58)	0.23 (0.29)	54 (68)
13	73 (138)	110 (207)	0.52 (0.98)	117 (221)	64 (42)	96 (62)	0.45 (0.29)	103 (67)	48 (55)	66 (76)	0.33 (0.38)	77 (88)
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Avg	60	90	0.43	97	114	171	0.82	183	32	45	0.22	52
n	5	5	5	5	5	5	5	5	5	5	5	5
SD	21	32	0.15	34	41	61	0.29	65	12	17	0.08	20
Min	37	55	0.27	59	64	96	0.45	103	13	18	0.09	21
Max	93	139	0.66	148	179	268	1.27	287	48	66	0.33	77

ED_004549_00015929-00212

Table F9. Ammonia concentrations.

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for December, 2007.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1								
2								
3								
4	0.3 (0.1)	0.2 (0.1)	21.2 (1.5)	15.1 (1.1)	25.7 (5.1)	18.3 (3.6)	36.1 (3.3)	25.8 (2.4)
5	0.4 (0.1)	0.3 (0.1)	21.3 (1.8)	15.2 (1.3)	24.4 (4.5)	17.4 (3.2)	36.4 (3.7)	26.0 (2.7)
6	0.6 (0.2)	0.5 (0.1)	21.7 (1.9)	15.4 (1.4)	25.6 (3.8)	18.3 (2.7)	37.8 (2.6)	27.0 (1.8)
7	0.5 (0.1)	0.4 (0.1)	21.6 (2.3)	15.4 (1.6)	25.4 (5.7)	18.2 (4.1)	43.3 (6.9)	30.9 (4.9)
8	0.5 (0.1)	0.3 (0.1)	18.9 (2.4)	13.5 (1.7)	18.1 (7.6)	13.0 (5.4)	39.8 (15.1)	28.5 (10.8)
9	0.5 (0.1)	0.3 (0.1)	18.4 (2.6)	13.2 (1.9)	13.1 (3.8)	9.4 (2.7)	29.8 (8.2)	21.4 (5.8)
10	0.4 (0.1)	0.3 (0.0)	19.1 (3.2)	13.7 (2.3)	11.2 (4.1)	8.0 (3.0)	23.1 (6.7)	16.6 (4.8)
11	0.3 (0.1)	0.2 (0.1)	17.3 (3.6)	12.4 (2.6)	11.0 (4.8)	7.9 (3.4)	18.8 (6.1)	13.5 (4.3)
12								
13								
14								
15	0.7 (0.1)	0.5 (0.1)	24.2 (1.0)	17.3 (0.7)	18.2 (1.0)	13.0 (0.7)	31.4 (2.6)	22.5 (1.9)
16	0.4 (0.1)	0.3 (0.1)	22.4 (1.4)	16.0 (1.0)	18.3 (1.2)	13.1 (0.9)	32.4 (3.1)	23.2 (2.2)
17	0.4 (0.1)	0.3 (0.1)	28.6 (4.7)	20.4 (3.4)	18.4 (0.7)	13.1 (0.5)	38.7 (5.8)	27.7 (4.1)
18	0.5 (0.1)	0.3 (0.1)	35.1 (6.2)	25.1 (4.5)	16.8 (0.8)	12.0 (0.6)	39.9 (6.0)	28.5 (4.3)
19	0.5 (0.1)	0.4 (0.1)	32.6 (7.7)	23.3 (5.5)	16.6 (1.5)	11.9 (1.1)	40.1 (6.7)	28.7 (4.7)
20	0.6 (0.1)	0.4 (0.1)	30.0 (5.1)	21.5 (3.6)	17.6 (3.0)	12.5 (2.2)	41.4 (6.3)	29.6 (4.5)
21	0.9 (0.1)	0.6 (0.1)	29.4 (2.6)	21.1 (1.9)	19.7 (1.0)	14.1 (0.7)	39.9 (1.8)	28.6 (1.3)
22	1.4 (1.3)	1.0 (1.0)	24.1 (5.1)	17.3 (3.7)	15.3 (4.0)	10.9 (2.8)	35.5 (6.3)	25.4 (4.5)
23	0.6 (0.2)	0.4 (0.2)	25.5 (4.1)	18.3 (2.9)	14.9 (3.1)	10.7 (2.2)	31.3 (8.2)	22.4 (5.9)
24	0.5 (0.1)	0.3 (0.1)	34.6 (5.7)	24.8 (4.1)	21.5 (5.8)	15.5 (4.0)	37.7 (10.6)	27.1 (7.7)
25	0.8 (0.1)	0.5 (0.1)	35.3 (6.1)	25.3 (4.4)	24.6 (7.1)	17.6 (5.1)	36.7 (7.5)	26.3 (5.4)
26	0.6 (0.2)	0.5 (0.1)	39.2 (3.7)	28.0 (2.7)	27.1 (3.1)	19.4 (2.2)	44.3 (2.7)	31.7 (1.9)
27	0.5 (0.1)	0.4 (0.1)	39.6 (6.7)	28.3 (4.8)	25.8 (6.4)	18.4 (4.6)	42.5 (6.2)	30.5 (4.4)
28	0.5 (0.1)	0.4 (0.1)	31.0 (4.9)	22.2 (3.5)	17.2 (4.3)	12.3 (3.1)	30.5 (7.6)	21.9 (5.4)
29	0.4 (0.1)	0.3 (0.1)	24.2 (3.1)	17.4 (2.2)	10.7 (1.6)	7.7 (1.1)	17.2 (8.6)	12.4 (6.2)
30	0.4 (0.1)	0.3 (0.0)	25.9 (1.7)	18.6 (1.2)	13.4 (1.7)	9.6 (1.2)	26.3 (1.7)	18.9 (1.2)
31	0.5 (0.1)	0.4 (0.1)	30.5 (6.1)	21.8 (4.3)	19.5 (3.7)	14.0 (2.7)	28.7 (5.1)	20.6 (3.7)
Avg	0.5	0.4	26.9	19.2	18.8	13.4	34.4	24.6
n	25	25	25	25	25	25	25	25
SD	0.2	0.2	6.5	4.6	5	3.5	7.2	5.1
Min	0.3	0.2	17.3	12.4	10.7	7.7	17.2	12.4
Max	1.4	1.0	39.6	28.3	27.1	19.4	44.3	31.7

ED_004549_00015929-00213

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for January, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.5 (0.1)	0.3 (0.1)	35.7 (7.5)	25.5 (5.4)	24.7 (4.7)	17.6 (3.3)	31.9 (7.4)	22.8 (5.3)
2	0.6 (0.1)	0.4 (0.1)	35.6 (3.6)	25.4 (2.6)	26.9 (6.9)	19.2 (4.9)	35.8 (3.9)	25.6 (2.8)
3	0.5 (0.1)	0.4 (0.1)	33.8 (2.8)	24.1 (2.0)	33.4 (8.7)	23.8 (6.3)	38.0 (3.6)	27.1 (2.6)
4	0.4 (0.1)	0.3 (0.0)						
5	0.5 (0.1)	0.3 (0.1)	34.0 (4.2)	24.3 (3.0)	35.8 (14.0)	25.5 (10.0)	19.4 (2.2)	13.8 (1.6)
6	0.5 (0.1)	0.3 (0.1)	30.8 (6.1)	22.1 (4.4)	22.4 (7.6)	16.0 (5.4)	23.4 (2.4)	16.7 (1.7)
7	0.5 (0.1)	0.3 (0.1)	30.4 (4.3)	21.8 (3.0)	20.4 (6.2)	14.6 (4.5)	22.1 (6.4)	15.8 (4.6)
8	0.5 (0.2)	0.4 (0.1)	30.1 (6.3)	21.6 (4.5)	16.1 (4.1)	11.5 (2.9)	21.0 (4.9)	15.0 (3.5)
9	0.4 (0.1)	0.3 (0.1)	27.0 (2.8)	19.4 (2.0)	15.2 (1.9)	10.9 (1.3)	26.9 (2.6)	19.3 (1.9)
10	0.7 (0.3)	0.5 (0.2)	28.7 (4.2)	20.6 (3.0)	17.0 (3.3)	12.2 (2.3)	28.1 (3.9)	20.1 (2.8)
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
Avg	0.5	0.4	31.8	22.7	23.5	16.8	27.4	19.6
n	10	10	9	9	9	9	9	9
SD	0.1	0.1	2.9	2	7	5	6.3	4.5
Min	0.4	0.3	27.0	19.4	15.2	10.9	19.4	13.8
Max	0.7	0.5	35.7	25.5	35.8	25.5	38.0	27.1

ED_004549_00015929-00214

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for March, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1								
2								
3								
4								
5								
6	0.4 (0.2)	0.3 (0.2)						
7	0.7 (0.2)	0.5 (0.2)						
8	0.8 (0.2)	0.5 (0.2)	11.9 (2.7)	8.7 (1.9)	10.5 (3.9)	7.6 (2.8)	9.5 (8.4)	6.8 (6.1)
9	1.1 (0.2)	0.7 (0.1)	20.6 (4.2)	14.7 (3.1)	19.6 (6.4)	13.8 (4.6)	20.9 (5.9)	14.7 (4.2)
10	1.2 (0.2)	0.8 (0.2)	24.2 (5.8)	17.3 (4.2)	21.0 (7.9)	15.0 (5.6)	21.1 (7.1)	15.0 (5.1)
11	1.1 (0.3)	0.8 (0.2)	23.5 (6.0)	16.8 (4.3)	18.9 (7.8)	13.5 (5.6)	28.3 (8.5)	20.3 (6.1)
12								
13								
14								
15	0.7 (0.1)	0.5 (0.1)	15.7 (4.2)	11.3 (3.0)	11.7 (3.0)	8.4 (2.1)	20.9 (7.3)	15.0 (5.2)
16	0.7 (0.1)	0.5 (0.1)	17.2 (4.0)	12.3 (2.9)	13.0 (2.7)	9.3 (2.0)	25.2 (4.9)	18.1 (3.6)
17	0.8 (0.1)	0.6 (0.1)	20.3 (4.0)	14.5 (2.8)	16.5 (3.7)	11.8 (2.7)	26.0 (4.6)	18.6 (3.3)
18	0.7 (0.1)	0.5 (0.1)	20.9 (6.1)	15.0 (4.3)	15.9 (5.6)	11.3 (4.0)	24.9 (5.7)	17.8 (4.1)
19	0.6 (0.1)	0.5 (0.1)	13.4 (4.9)	9.6 (3.5)	9.1 (3.5)	6.5 (2.5)	14.4 (7.5)	10.3 (5.4)
20	0.5 (0.1)	0.4 (0.0)	16.5 (4.7)	11.9 (3.4)	10.4 (2.9)	7.4 (2.1)	16.4 (5.6)	11.8 (4.1)
21	0.5 (0.2)	0.3 (0.1)	21.1 (7.6)	15.1 (5.5)	15.5 (5.4)	11.1 (3.9)	23.5 (8.0)	16.8 (5.8)
22	0.3 (0.1)	0.2 (0.1)	16.4 (7.0)	11.7 (5.0)	11.9 (5.6)	8.5 (4.0)	17.0 (9.0)	12.2 (6.5)
23	0.5 (0.1)	0.3 (0.1)	21.4 (4.8)	15.3 (3.4)	16.6 (3.5)	11.8 (2.5)	23.2 (4.7)	16.6 (3.4)
24	0.5 (0.1)	0.3 (0.0)	23.3 (5.1)	16.7 (3.6)	18.7 (3.9)	13.4 (2.8)	26.8 (5.4)	19.2 (3.9)
25	0.4 (0.1)	0.3 (0.1)	24.7 (4.1)	17.7 (3.0)	19.8 (4.6)	14.2 (3.3)	29.5 (6.0)	21.2 (4.3)
26	0.4 (0.1)	0.3 (0.1)	21.3 (8.5)	15.2 (6.1)	16.2 (6.7)	11.6 (4.8)	25.2 (10.7)	18.1 (7.7)
27	0.3 (0.1)	0.2 (0.1)	18.3 (9.9)	13.1 (7.1)	13.0 (5.9)	9.3 (4.2)	16.3 (10.8)	11.7 (7.7)
28	0.3 (0.1)	0.2 (0.1)	13.2 (5.8)	9.5 (4.2)	9.8 (4.5)	7.0 (3.2)	10.2 (6.1)	7.3 (4.4)
29	0.7 (0.1)	0.5 (0.1)	22.9 (5.3)	16.4 (3.8)	19.0 (4.1)	13.6 (2.9)	18.5 (7.9)	13.3 (5.6)
30	0.8 (0.1)	0.6 (0.0)	30.4 (1.9)	21.8 (1.3)	25.6 (1.6)	18.3 (1.2)	28.9 (2.0)	20.7 (1.4)
31	0.6 (0.2)	0.4 (0.1)	24.5 (6.9)	17.6 (5.0)	17.8 (6.3)	12.7 (4.5)	21.2 (7.0)	15.3 (5.0)
Avg	0.6	0.5	20.1	14.4	15.7	11.2	21.3	15.3
n	23	23	21	21	21	21	21	21
SD	0.2	0.2	4.4	3.2	4.2	3	5.6	4
Min	0.3	0.2	11.9	8.7	9.1	6.5	9.5	6.8
Max	1.2	0.8	30.4	21.8	25.6	18.3	29.5	21.2

ED_004549_00015929-00215

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for April, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.4 (0.0)	0.3 (0.0)	15.3 (5.0)	11.0 (3.6)	11.4 (3.2)	8.2 (2.3)	13.0 (5.3)	9.4 (3.8)
2	0.6 (0.1)	0.4 (0.1)	18.4 (4.2)	13.2 (3.0)	13.9 (4.8)	10.0 (3.4)	15.4 (5.1)	11.0 (3.7)
3	0.6 (0.1)	0.4 (0.1)	27.5 (2.4)	19.7 (1.7)	23.0 (5.6)	16.5 (4.0)	20.4 (6.4)	14.6 (4.6)
4	0.4 (0.0)	0.3 (0.0)	20.3 (6.2)	14.6 (4.4)	14.2 (4.9)	10.2 (3.5)	14.9 (7.5)	10.7 (5.4)
5	0.7 (0.3)		21.4 (2.2)	15.3 (1.7)	12.9 (2.2)	9.4 (1.6)	8.9 (2.0)	6.5 (1.4)
6	0.7 (0.2)	0.5 (0.1)	22.9 (4.1)	17.1 (2.3)	17.1 (2.3)	12.3 (1.7)	14.3 (5.0)	10.3 (3.6)
7	0.8 (0.0)	0.5 (0.0)	26.3 (5.1)	18.9 (3.6)	21.4 (2.8)	15.3 (2.0)	21.4 (2.2)	15.3 (1.6)
8	0.8 (0.0)	0.5 (0.0)	22.3 (4.6)	16.0 (3.3)	19.4 (4.4)	13.9 (3.1)	21.2 (3.0)	15.2 (2.2)
9	0.7 (0.1)	0.5 (0.1)	21.0 (2.2)	15.1 (1.6)	16.2 (4.6)	11.6 (3.3)	21.1 (3.2)	15.2 (2.3)
10	0.6 (0.2)	0.4 (0.2)	19.4 (5.3)	13.9 (3.8)	14.7 (4.4)	10.5 (3.1)	19.0 (7.5)	13.7 (5.4)
11	0.7 (0.3)	0.5 (0.2)	15.0 (6.9)	10.8 (4.9)	8.5 (5.9)	6.1 (4.2)	14.5 (7.6)	10.4 (5.4)
12	0.6 (0.3)	0.5 (0.2)	13.9 (4.9)	10.0 (3.5)	8.0 (4.4)	5.7 (3.2)	11.2 (4.2)	8.0 (3.0)
13	0.3 (0.1)	0.2 (0.1)	17.1 (4.1)	12.2 (3.0)	12.5 (4.4)	8.9 (3.1)	15.9 (3.8)	11.4 (2.8)
14	0.6 (0.1)	0.4 (0.1)	23.6 (4.0)	16.9 (2.9)	22.1 (5.8)	15.8 (4.2)	26.7 (5.8)	19.1 (4.2)
15	0.7 (0.1)	0.5 (0.0)	22.1 (5.2)	15.8 (3.7)	20.7 (5.2)	14.8 (3.7)	30.3 (7.1)	21.6 (5.1)
16	0.6 (0.1)	0.4 (0.1)	23.5 (7.6)	16.8 (5.5)	21.8 (8.1)	15.6 (5.8)	27.5 (8.1)	19.6 (5.8)
17	0.4 (0.1)	0.3 (0.1)	19.9 (8.4)	14.2 (6.0)	18.0 (10.2)	12.9 (7.3)	22.4 (11.5)	16.0 (8.2)
18	0.3 (0.1)	0.2 (0.1)	14.9 (8.2)	10.6 (5.9)	13.0 (8.2)	9.3 (5.9)	15.7 (9.6)	11.3 (6.9)
19	0.3 (0.1)	0.2 (0.1)	14.0 (6.9)	10.0 (4.9)	10.9 (5.6)	7.8 (4.0)	12.9 (5.4)	9.3 (3.9)
20	0.5 (0.1)	0.3 (0.1)	14.6 (3.0)	10.5 (2.2)	12.2 (3.5)	8.8 (2.6)	13.7 (3.0)	9.9 (2.2)
21	0.7 (0.2)	0.5 (0.2)	19.8 (2.3)	14.2 (1.6)	16.9 (3.2)	12.1 (2.3)	19.1 (2.4)	13.7 (1.7)
22	0.9 (0.1)	0.7 (0.1)	20.9 (5.2)	14.7 (3.7)	13.9 (3.4)	9.9 (2.5)	15.8 (4.2)	11.2 (3.1)
23	0.9 (0.1)	0.7 (0.1)	20.6 (6.2)	14.8 (4.4)	13.1 (3.2)	9.4 (2.3)	15.6 (2.9)	11.2 (2.1)
24	0.8 (0.3)	0.6 (0.2)	17.7 (6.6)	12.9 (4.7)	12.8 (5.5)	9.3 (3.9)	15.5 (5.2)	11.3 (3.7)
25	0.3 (0.1)	0.2 (0.0)	15.6 (6.7)	11.2 (4.8)	12.4 (6.3)	8.9 (4.5)	14.1 (5.3)	10.1 (3.8)
26	0.4 (0.1)	0.3 (0.0)	13.6 (7.3)	9.8 (5.3)	10.2 (4.9)	7.3 (3.5)	12.0 (5.0)	8.7 (3.6)
27	0.4 (0.1)	0.3 (0.1)	16.7 (4.4)	12.0 (3.1)	10.8 (3.1)	7.8 (2.2)	12.4 (3.0)	8.9 (2.2)
28	0.4 (0.0)	0.3 (0.0)	16.9 (3.7)	12.1 (2.6)	11.6 (1.7)	8.3 (1.2)	10.1 (1.1)	7.3 (0.8)
29	0.3 (0.1)	0.2 (0.1)	23.6 (3.7)	16.9 (2.7)	15.5 (3.6)	11.1 (2.6)	17.4 (5.0)	12.4 (3.6)
30	0.5 (0.1)	0.3 (0.1)	25.7 (5.8)	18.4 (4.1)	17.4 (4.7)	12.4 (3.4)	22.0 (5.1)	15.8 (3.7)
Avg	0.6	0.4	19.5	14	14.9	10.7	17.2	12.3
n	30	29	30	30	30	30	30	30
SD	0.2	0.1	3.9	2.8	4.1	2.9	5.1	3.6
Min	0.3	0.2	13.6	9.8	8.0	5.7	8.9	6.5
Max	0.9	0.7	27.5	19.7	23.0	16.5	30.3	21.6

ED_004549_00015929-00216

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for May, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm⁻	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.3 (0.0)	0.2 (0.0)	22.4 (11.1)	16.0 (7.9)	13.7 (6.5)	9.8 (4.6)	17.7 (6.9)	12.7 (4.9)
2	0.4 (0.1)	0.3 (0.1)	15.5 (7.9)	11.4 (5.6)	10.0 (4.2)	7.3 (3.0)	14.1 (5.0)	10.3 (3.6)
3	0.4 (0.1)	0.3 (0.1)	12.9 (5.6)	10.1 (3.9)	9.6 (4.2)	7.5 (3.0)	13.7 (5.3)	10.4 (4.0)
4	0.4 (0.1)	0.3 (0.1)	13.0 (5.6)	9.4 (4.1)	9.2 (2.8)	6.6 (2.0)	13.0 (3.6)	9.3 (2.6)
5	0.6 (0.2)	0.4 (0.1)	20.3 (3.9)	14.6 (2.8)	12.7 (1.9)	9.1 (1.4)	14.2 (3.9)	10.2 (2.8)
6	0.5 (0.1)	0.4 (0.1)	19.1 (7.2)	13.7 (5.2)	11.7 (4.1)	8.4 (2.9)	17.3 (6.0)	12.4 (4.3)
7	0.4 (0.1)	0.3 (0.0)	14.5 (7.6)	10.5 (5.5)	10.3 (4.6)	7.4 (3.3)	14.7 (4.9)	10.5 (3.5)
8	0.4 (0.1)	0.3 (0.0)	14.0 (5.0)	10.1 (3.6)	8.4 (3.3)	6.0 (2.4)	14.1 (4.4)	10.1 (3.2)
9	0.4 (0.1)	0.3 (0.1)	9.7 (3.2)	7.0 (2.3)	5.9 (1.5)	4.2 (1.1)	9.7 (1.3)	7.0 (1.0)
10	0.7 (0.1)	0.5 (0.1)	12.2 (5.3)	8.8 (3.8)	8.5 (3.1)	6.1 (2.2)	12.7 (3.8)	9.1 (2.7)
11	0.5 (0.1)	0.4 (0.1)	16.9 (4.5)	12.1 (3.2)	11.1 (3.3)	8.0 (2.4)	16.9 (2.6)	12.1 (1.8)
12	0.4 (0.2)	0.3 (0.1)	18.3 (2.4)	13.1 (1.7)	12.0 (2.7)	8.6 (1.9)	17.4 (2.7)	12.5 (1.9)
13	0.5 (0.2)	0.4 (0.1)	19.4 (6.5)	13.9 (4.6)	13.1 (4.3)	9.3 (3.1)	20.1 (5.0)	14.4 (3.6)
14	0.3 (0.1)	0.2 (0.1)	17.7 (7.1)	12.7 (5.1)	10.8 (5.2)	7.7 (3.7)	16.6 (7.1)	11.9 (5.1)
15	0.3 (0.1)	0.2 (0.0)	15.5 (4.1)	11.1 (2.9)	9.1 (2.8)	6.5 (2.0)	13.4 (3.4)	9.6 (2.4)
16	0.3 (0.1)	0.2 (0.1)	10.7 (4.6)	7.7 (3.3)	7.2 (2.2)	5.2 (1.6)	8.4 (2.2)	6.0 (1.6)
17	0.2 (0.1)	0.2 (0.0)	15.6 (5.0)	11.2 (3.6)	10.5 (4.0)	7.5 (2.9)	15.4 (4.7)	11.1 (3.4)
18	0.2 (0.1)	0.2 (0.0)	14.0 (6.0)	10.1 (4.3)	10.3 (4.6)	7.4 (3.3)	16.0 (4.7)	11.5 (3.4)
19	1.5 (1.7)	1.1 (1.2)	19.3 (6.9)	13.9 (5.0)	9.9 (4.0)	7.1 (2.9)	15.9 (5.7)	11.4 (4.1)
20	0.3 (0.1)	0.2 (0.0)	21.6 (9.6)	15.6 (7.0)	10.0 (4.5)	7.2 (3.3)	12.5 (6.1)	9.0 (4.4)
21	0.3 (0.1)	0.2 (0.1)	16.3 (5.3)	11.7 (3.8)	10.9 (3.7)	7.8 (2.6)	15.7 (4.2)	11.2 (3.0)
22	0.3 (0.1)	0.2 (0.1)	14.7 (6.5)	10.5 (4.7)	13.2 (6.1)	9.4 (4.4)	17.6 (5.6)	12.6 (4.0)
23	0.8 (0.2)	0.5 (0.2)	12.7 (5.7)	9.1 (4.1)	11.5 (5.7)	8.2 (4.1)	17.0 (6.2)	12.2 (4.5)
24	0.7 (0.3)	0.5 (0.2)	16.8 (2.2)	12.1 (1.6)	13.6 (3.2)	9.8 (2.3)	22.5 (2.6)	16.1 (1.8)
25	0.5 (0.2)	0.3 (0.1)	15.2 (5.4)	10.9 (3.9)	13.4 (6.5)	9.6 (4.6)	18.9 (6.1)	13.6 (4.4)
26	0.3 (0.1)	0.2 (0.1)	12.3 (6.1)	8.9 (4.4)	11.8 (6.7)	8.5 (4.8)	16.7 (8.4)	12.0 (6.0)
27	0.3 (0.1)	0.2 (0.1)	10.6 (6.5)	7.6 (4.6)	9.1 (4.1)	6.6 (3.0)	12.4 (6.6)	8.9 (4.7)
28	0.7 (0.3)	0.5 (0.2)	16.1 (4.4)	11.6 (3.1)	14.6 (4.6)	10.5 (3.3)	19.6 (5.1)	14.1 (3.6)
29	0.7 (0.3)	0.5 (0.2)	17.2 (5.9)	12.4 (4.2)	13.1 (4.6)	9.4 (3.3)	18.2 (4.8)	13.1 (3.4)
30	0.4 (0.1)	0.3 (0.1)	14.7 (10.9)	10.6 (7.8)	10.5 (5.3)	7.6 (3.8)	14.4 (6.8)	10.4 (4.9)
31	0.4 (0.1)	0.3 (0.0)	9.2 (4.9)	6.7 (3.6)	7.4 (2.1)	5.3 (1.5)	9.3 (4.0)	6.7 (2.9)
Avg	0.5	0.3	15.4	11.1	10.7	7.7	15.4	11
n	31	31	31	31	31	31	31	31
SD	0.2	0.2	3.3	2.4	2.1	1.5	3.1	2.2
Min	0.2	0.2	9.2	6.7	5.9	4.2	8.4	6.0
Max	1.5	1.1	22.4	16.0	14.6	10.5	22.5	16.1

ED_004549_00015929-00217

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for June, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-}	ppm	mg·dsm^{-}
1	0.5 (0.1)	0.4 (0.1)	8.9 (4.2)	6.4 (3.1)	4.8 (2.1)	3.4 (1.5)	9.7 (4.4)	7.0 (3.2)
2	0.9 (0.3)	0.6 (0.2)	10.7 (4.3)	7.7 (3.1)	8.5 (2.3)	6.1 (1.6)	10.0 (3.2)	7.2 (2.3)
3	0.4 (0.1)	0.3 (0.1)	11.3 (7.4)	8.2 (5.4)	8.4 (1.6)	6.0 (1.1)	11.7 (6.0)	8.4 (4.3)
4	0.4 (0.1)	0.3 (0.0)	7.9 (5.5)	5.7 (4.0)	6.8 (1.4)	4.9 (1.0)	7.3 (3.8)	5.3 (2.8)
5	0.4 (0.1)	0.3 (0.0)	5.9 (3.2)	4.3 (2.3)	6.3 (1.5)	4.6 (1.1)	6.3 (3.4)	4.5 (2.5)
6	0.5 (0.1)	0.3 (0.0)	5.9 (3.1)	4.2 (2.2)	6.3 (0.6)	4.5 (0.5)	6.3 (3.4)	4.5 (2.5)
7	0.4 (0.1)	0.3 (0.1)	6.4 (3.3)	4.6 (2.4)	4.8 (2.1)	3.4 (1.5)	7.1 (3.5)	5.1 (2.6)
8	0.5 (0.1)	0.4 (0.0)	6.3 (3.8)	4.6 (2.8)	3.3 (1.5)	2.4 (1.1)	5.7 (3.6)	4.1 (2.6)
9	0.5 (0.1)	0.3 (0.0)	6.1 (3.7)	4.4 (2.7)	3.7 (1.2)	2.7 (0.9)	3.1 (1.1)	2.2 (0.8)
10	0.5 (0.1)	0.3 (0.1)	7.3 (4.0)	5.3 (2.9)	3.4 (1.6)	2.5 (1.1)	4.7 (1.8)	3.4 (1.3)
11								
12								
13	0.5 (0.3)	0.4 (0.2)	14.3 (11.4)	10.3 (8.2)	5.7 (2.7)	4.1 (1.9)	9.1 (5.4)	6.6 (3.9)
14	0.4 (0.1)	0.3 (0.1)	12.8 (10.3)	9.2 (7.4)	5.5 (2.6)	4.0 (1.8)	9.1 (5.8)	6.5 (4.2)
15	0.5 (0.1)	0.4 (0.1)	11.8 (5.5)	8.5 (3.9)	4.6 (1.3)	3.3 (0.9)	9.4 (2.5)	6.8 (1.8)
16	0.4 (0.1)	0.3 (0.0)	12.1 (7.0)	8.7 (5.1)	4.5 (1.6)	3.2 (1.2)	8.1 (5.1)	5.8 (3.7)
17	0.4 (0.2)	0.3 (0.1)	14.9 (9.8)	10.8 (7.1)	4.9 (2.0)	3.5 (1.4)	7.3 (3.2)	5.3 (2.3)
18	0.6 (0.2)	0.4 (0.1)	18.3 (10.7)	13.1 (7.7)	6.5 (3.5)	4.7 (2.5)	10.5 (4.9)	7.6 (3.5)
19	0.4 (0.2)	0.3 (0.1)	16.4 (10.4)	11.8 (7.5)	7.7 (5.4)	5.5 (3.9)	11.2 (6.9)	8.0 (5.0)
20	0.5 (0.3)	0.4 (0.2)	15.7 (8.6)	11.3 (6.2)	8.4 (4.4)	6.0 (3.1)	13.1 (5.8)	9.5 (4.2)
21	0.6 (0.2)	0.4 (0.1)	14.7 (7.2)	10.6 (5.2)	8.1 (3.5)	5.8 (2.5)	13.5 (4.7)	9.7 (3.4)
22	0.5 (0.1)	0.4 (0.1)						
23	0.4 (0.1)	0.3 (0.0)	10.1 (5.1)	7.3 (3.7)	6.4 (3.1)	4.6 (2.3)	10.3 (4.4)	7.4 (3.1)
24	0.4 (0.1)	0.3 (0.1)	7.7 (3.8)	5.5 (2.8)	6.1 (3.7)	4.4 (2.6)	10.0 (6.4)	7.2 (4.6)
25	0.4 (0.1)	0.3 (0.1)	6.3 (4.4)	4.6 (3.2)	5.0 (3.4)	3.6 (2.4)	8.0 (5.3)	5.7 (3.9)
26	0.4 (0.1)	0.3 (0.1)	6.9 (3.7)	5.0 (2.7)	4.0 (2.0)	2.9 (1.5)	9.0 (2.2)	6.5 (1.6)
27	0.4 (0.1)	0.3 (0.1)	5.9 (2.8)	4.2 (2.0)	3.3 (1.7)	2.4 (1.2)	7.7 (1.8)	5.6 (1.3)
28	0.4 (0.1)	0.3 (0.0)	5.6 (2.9)	4.0 (2.1)	3.1 (1.4)	2.2 (1.0)	7.6 (1.9)	5.5 (1.4)
29	0.3 (0.1)	0.2 (0.0)	6.5 (2.6)	4.7 (1.9)	3.6 (1.0)	2.6 (0.7)	7.3 (2.5)	5.3 (1.8)
30	0.4 (0.1)	0.3 (0.1)	6.3 (2.5)	4.5 (1.8)	3.7 (1.4)	2.6 (1.0)	8.1 (2.8)	5.8 (2.1)
Avg	0.5	0.3	9.7	7	5.5	3.9	8.6	6.2
n	28	28	27	27	27	27	27	27
SD	0.1	0.1	3.9	2.8	1.7	1.2	2.4	1.7
Min	0.3	0.2	5.6	4.0	3.1	2.2	3.1	2.2
Max	0.9	0.6	18.3	13.1	8.5	6.1	13.5	9.7

ED_004549_00015929-00218

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for July, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}
1	0.7 (0.7)	0.5 (0.5)	7.9 (4.5)	5.6 (3.2)	5.0 (2.3)	3.6 (1.7)	10.2 (4.2)	7.3 (3.0)
2	0.2 (0.1)	0.2 (0.1)	8.6 (6.8)	6.1 (4.9)	5.6 (4.7)	4.0 (3.4)	11.3 (7.3)	8.1 (5.2)
3	0.3 (0.1)	0.2 (0.1)	8.1 (5.4)	5.8 (3.9)	5.3 (3.6)	3.8 (2.6)	9.5 (6.0)	6.8 (4.3)
4	0.4 (0.1)	0.3 (0.1)	6.7 (3.0)	4.8 (2.1)	4.7 (1.4)	3.4 (1.0)	7.5 (3.5)	5.4 (2.5)
5								
6								
7								
8								
9	0.6 (0.1)	0.4 (0.1)	8.8 (4.9)	6.3 (3.5)	4.7 (1.1)	3.4 (0.8)	21.7 (24.0)	11.5 (13.4)
10	0.6 (0.1)	0.4 (0.1)	7.3 (3.0)	5.3 (2.2)	4.7 (0.9)	3.4 (0.6)	7.9 (3.6)	5.7 (2.6)
11	0.6 (0.1)							
12	0.9 (0.2)	0.6 (0.1)	8.3 (4.4)	6.0 (3.2)	5.3 (1.2)	3.8 (0.9)	8.7 (4.6)	
13	0.4 (0.1)	0.3 (0.1)	8.2 (4.3)	6.0 (3.1)	5.1 (2.0)	3.7 (1.5)	8.1 (4.9)	
14	0.6 (0.1)	0.4 (0.1)	9.2 (3.1)	6.7 (2.2)	5.3 (1.2)	3.8 (0.8)	9.7 (3.6)	
15	0.8 (0.1)	0.6 (0.1)	8.3 (3.3)	6.0 (2.4)	5.4 (1.2)	3.9 (0.9)	7.8 (2.6)	
16	1.0 (0.1)	0.7 (0.1)	8.2 (4.5)	6.1 (3.3)	5.3 (1.4)	3.9 (1.0)	8.6 (4.8)	
17	0.9 (0.2)	0.6 (0.1)	9.1 (5.6)	6.5 (4.0)	5.8 (2.1)	4.2 (1.5)	9.6 (5.6)	
18	1.0 (0.4)	0.7 (0.3)	8.5 (5.2)	6.1 (3.7)	5.2 (1.6)	3.7 (1.2)	8.8 (4.2)	6.3 (3.0)
19	1.2 (0.1)	0.9 (0.1)	7.6 (2.7)	5.5 (1.9)	5.2 (1.0)	3.8 (0.7)	8.3 (2.7)	6.0 (2.0)
20	0.7 (0.3)	0.5 (0.2)	6.6 (2.8)	4.7 (2.0)	5.2 (0.7)	3.7 (0.5)	7.5 (3.3)	5.4 (2.4)
21	0.5 (0.1)	0.4 (0.1)	5.9 (2.3)	4.2 (1.7)	5.3 (0.8)	3.8 (0.6)	6.4 (3.3)	4.6 (2.4)
22	0.5 (0.1)	0.3 (0.0)	6.9 (2.8)	5.0 (2.0)	4.9 (1.1)	3.5 (0.8)	6.9 (2.6)	5.0 (1.9)
23	0.8 (0.2)	0.6 (0.2)	8.7 (3.5)	6.2 (2.5)	4.9 (1.8)	3.5 (1.3)	8.5 (2.1)	6.1 (1.5)
24	0.6 (0.1)	0.4 (0.1)	21.1 (20.7)	15.2 (14.9)	5.2 (1.6)	3.7 (1.2)	8.6 (2.7)	6.2 (2.0)
25	0.8 (0.1)	0.6 (0.1)						
26	0.6 (0.3)	0.5 (0.2)					8.4 (4.2)	6.1 (3.1)
27	0.6 (0.1)	0.4 (0.1)					6.8 (2.2)	4.9 (1.6)
28	0.6 (0.2)	0.5 (0.1)					6.5 (2.5)	4.7 (1.8)
29	0.6 (0.1)	0.5 (0.1)					4.6 (2.9)	3.3 (2.1)
30								
31								
Avg	0.7	0.5	8.6	6.2	5.2	3.7	8.8	6.1
n	25	24	19	19	19	19	23	17
SD	0.2	0.2	3.1	2.2	0.3	0.2	3.1	1.7
Min	0.2	0.2	5.9	4.2	4.7	3.4	4.6	3.3
Max	1.2	0.9	21.1	15.2	5.8	4.2	21.7	11.5

ED_004549_00015929-00219

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for August, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm⁻	ppm	mg·dsm⁻³	ppm	mg·dsm⁻	ppm	mg·dsm⁻
1								
2								
3								
4								
5								
6								
7								
8								
9	0.5 (0.1)	0.4 (0.1)	9.1 (3.5)	6.6 (2.5)	6.4 (1.8)	4.7 (1.3)		
10	0.3 (0.1)	0.2 (0.0)	7.4 (2.4)	5.4 (1.7)	5.1 (1.9)	3.7 (1.4)	1.3 (0.1)	
11	0.2 (0.0)	0.1 (0.0)	9.0 (3.0)	6.5 (2.2)	5.6 (2.4)	4.0 (1.7)	5.2 (3.1)	
12	0.3 (0.1)	0.2 (0.0)	9.8 (5.2)	7.1 (3.8)	6.5 (3.7)	4.6 (2.7)	8.1 (3.1)	
13	0.7 (0.1)	0.5 (0.0)	14.8 (1.2)	10.6 (0.9)	8.6 (1.6)	6.2 (1.2)	9.5 (1.1)	6.9 (0.8)
14	0.4 (0.1)	0.3 (0.1)	12.4 (3.4)	8.9 (2.4)	7.7 (2.9)	5.6 (2.1)	8.3 (3.4)	6.0 (2.5)
15	0.6 (0.1)	0.4 (0.1)	10.1 (4.7)	7.3 (3.4)	6.0 (3.0)	4.3 (2.2)	7.4 (3.2)	5.3 (2.3)
16	0.6 (0.1)	0.4 (0.1)	10.7 (3.1)	7.7 (2.2)	5.8 (1.6)	4.2 (1.1)	7.2 (1.9)	5.2 (1.3)
17	0.5 (0.1)	0.4 (0.0)	12.9 (4.2)	9.4 (3.1)	7.4 (1.5)	5.3 (1.1)	8.0 (2.0)	5.8 (1.5)
18	0.6 (0.1)	0.4 (0.0)	12.3 (4.9)	8.9 (3.5)	6.9 (2.4)	5.0 (1.8)	8.4 (3.8)	
19	0.4 (0.1)	0.3 (0.0)	9.9 (5.1)	7.1 (3.7)	6.4 (2.7)	4.6 (1.9)	8.6 (5.0)	
20	0.4 (0.1)	0.3 (0.1)	8.8 (4.4)	6.4 (3.2)	6.4 (2.7)	4.6 (2.0)	7.7 (4.1)	
21	0.8 (0.1)	0.5 (0.0)	9.8 (2.9)	7.1 (2.1)	6.7 (1.5)	4.8 (1.1)	8.0 (2.1)	
22	0.7 (0.1)	0.5 (0.1)	9.2 (3.8)	6.6 (2.7)	6.9 (2.4)	5.0 (1.7)	8.9 (3.8)	
23	0.7 (0.1)	0.5 (0.1)	9.6 (3.9)	6.9 (2.8)	7.3 (2.6)	5.3 (1.9)	8.9 (3.4)	
24	0.7 (0.1)	0.5 (0.1)	9.4 (4.5)	6.8 (3.2)	7.5 (3.5)	5.4 (2.5)	8.8 (4.6)	
25	0.5 (0.0)							
26	0.8 (0.1)							
27	0.8 (0.1)	0.6 (0.1)	9.2 (1.0)	6.7 (0.7)	7.2 (1.3)	5.2 (1.0)	9.1 (2.0)	6.6 (1.4)
28	0.7 (0.1)	0.5 (0.1)	8.0 (1.8)	5.8 (1.3)	6.4 (1.4)	4.6 (1.0)	7.8 (2.0)	5.6 (1.4)
29	0.5 (0.1)	0.4 (0.1)	8.2 (2.6)	5.9 (1.9)	7.5 (2.2)	5.4 (1.6)	9.0 (2.8)	6.5 (2.0)
30	0.6 (0.1)	0.4 (0.0)	7.5 (2.8)	5.4 (2.0)	6.7 (2.2)	4.8 (1.6)	8.2 (3.0)	5.9 (2.2)
31	0.9 (0.1)	0.7 (0.1)						
Avg	0.6	0.4	9.9	7.2	6.8	4.9	7.8	6
n	23	21	20	20	20	20	19	9
SD	0.2	0.1	1.8	1.3	0.8	0.6	1.8	0.5
Min	0.2	0.1	7.4	5.4	5.1	3.7	1.3	5.2
Max	0.9	0.7	14.8	10.6	8.6	6.2	9.5	6.9

ED_004549_00015929-00220

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for September, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}
1	0.7 (0.1)	0.5 (0.1)	8.9 (3.1)	6.4 (2.2)	8.0 (2.4)	5.7 (1.8)	10.0 (3.5)	7.2 (2.5)
2	0.5 (0.1)	0.4 (0.1)	10.4 (5.1)	7.5 (3.7)	10.6 (5.7)	7.6 (4.1)	12.7 (6.1)	9.1 (4.4)
3	0.5 (0.1)	0.3 (0.1)	10.3 (5.3)	7.4 (3.8)	9.6 (5.3)	6.9 (3.8)	11.9 (6.4)	8.5 (4.6)
4	0.9 (0.4)	0.6 (0.3)	9.5 (4.8)	6.8 (3.4)	8.9 (4.3)	6.4 (3.1)	11.5 (6.2)	8.3 (4.4)
5	2.1 (0.2)	1.5 (0.1)	8.5 (4.2)	6.1 (3.0)	7.4 (3.5)	5.3 (2.5)	8.7 (5.0)	6.3 (3.6)
6								
7								
8								
9								
10								
11								
12	0.7 (0.1)	0.5 (0.1)	9.2 (3.4)	6.7 (2.4)	6.2 (1.9)	4.5 (1.4)	11.0 (3.5)	7.9 (2.5)
13	0.6 (0.1)	0.4 (0.0)	8.1 (3.0)	5.8 (2.1)	5.7 (1.8)	4.1 (1.3)	9.4 (3.5)	6.8 (2.5)
14	0.6 (0.1)	0.4 (0.1)	7.3 (2.6)	5.2 (1.9)	5.0 (1.4)	3.6 (1.0)	8.3 (3.6)	6.0 (2.6)
15	0.7 (0.1)	0.5 (0.1)	7.4 (2.6)	5.3 (1.9)	5.1 (1.4)	3.7 (1.0)	7.3 (2.9)	5.3 (2.1)
16	0.9 (0.0)	0.6 (0.0)	13.3 (2.3)	9.6 (1.6)	7.8 (1.2)	5.6 (0.9)	11.9 (1.3)	8.6 (0.9)
17	0.7 (0.1)	0.5 (0.1)	15.7 (3.2)	11.3 (2.3)	9.9 (1.6)	7.1 (1.2)	13.2 (1.8)	9.5 (1.3)
18	0.6 (0.1)	0.4 (0.1)	13.4 (4.4)	9.6 (3.2)	11.7 (5.3)	8.4 (3.8)	14.7 (4.6)	10.5 (3.3)
19	0.7 (0.1)	0.5 (0.1)	11.7 (2.5)	8.4 (1.8)	12.2 (4.2)	8.8 (3.0)	14.0 (2.7)	10.1 (1.9)
20	0.6 (0.0)	0.5 (0.0)	13.4 (1.4)	9.6 (1.0)	12.6 (3.9)	9.0 (2.8)	14.6 (1.8)	10.5 (1.3)
21	0.6 (0.0)	0.4 (0.0)						
22	0.6 (0.1)	0.5 (0.0)	12.8 (1.9)	9.2 (1.4)	10.8 (2.5)	7.8 (1.8)	15.4 (2.6)	11.1 (1.9)
23	0.6 (0.1)	0.4 (0.0)	15.2 (2.7)	10.9 (1.9)	9.0 (2.9)	6.4 (2.1)	12.7 (4.8)	9.2 (3.4)
24	0.4 (0.0)	0.3 (0.0)	15.5 (5.4)	11.1 (3.9)	8.2 (1.5)	5.8 (1.1)	10.4 (0.7)	7.4 (0.5)
25	0.4 (0.1)	0.3 (0.1)	8.8 (0.7)	6.3 (0.5)	9.1 (1.2)	6.5 (0.8)	11.1 (0.9)	8.0 (0.7)
26	0.4 (0.1)	0.3 (0.1)	7.9 (0.7)	5.7 (0.5)	6.6 (0.5)	4.7 (0.3)	10.1 (1.3)	7.3 (0.9)
27	0.5 (0.1)	0.3 (0.1)	8.5 (0.9)	6.1 (0.7)	7.1 (2.0)	5.1 (1.4)	9.9 (1.4)	7.1 (1.0)
28	0.4 (0.0)	0.3 (0.0)	8.8 (1.2)	6.3 (0.8)	7.1 (2.1)	5.1 (1.5)	10.6 (1.9)	7.6 (1.4)
29	0.5 (0.0)	0.3 (0.0)						
30	0.4 (0.0)	0.3 (0.0)	9.5 (0.8)	6.8 (0.6)	7.5 (1.3)	5.4 (0.9)	10.3 (1.1)	7.4 (0.8)
Avg	0.6	0.5	10.6	7.6	8.4	6.1	11.4	8.2
n	24	24	22	22	22	22	22	22
SD	0.3	0.2	2.7	1.9	2.1	1.5	2.1	1.5
Min	0.4	0.3	7.3	5.2	5.0	3.6	7.3	5.3
Max	2.1	1.5	15.7	11.3	12.6	9.0	15.4	11.1

ED_004549_00015929-00221

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for October, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.4 (0.1)	0.3 (0.1)	10.3 (1.2)	7.4 (0.9)	8.2 (1.8)	5.9 (1.3)	12.2 (2.3)	8.8 (1.7)
2	0.2 (0.1)	0.1 (0.0)	12.2 (2.0)	8.8 (1.4)	10.6 (2.5)	7.6 (1.8)	16.9 (3.7)	12.1 (2.7)
3	0.2 (0.0)	0.1 (0.0)	12.5 (2.7)	9.0 (2.0)	11.7 (3.8)	8.4 (2.7)	16.3 (4.9)	11.7 (3.5)
4	0.3 (0.1)	0.2 (0.0)	12.6 (2.9)	9.0 (2.1)	11.4 (4.4)	8.2 (3.1)	14.8 (4.5)	10.6 (3.2)
5	0.3 (0.1)	0.2 (0.0)	11.7 (2.2)	8.6 (1.5)	12.8 (3.5)	9.2 (2.5)	13.6 (3.6)	10.0 (2.5)
6	0.6 (0.2)	0.4 (0.1)	11.4 (3.2)	8.2 (2.3)	10.6 (5.2)	7.6 (3.7)	12.1 (4.0)	8.7 (2.9)
7	0.6 (0.1)	0.4 (0.1)	12.0 (2.4)	8.6 (1.8)	10.9 (3.2)	7.8 (2.3)	14.3 (2.6)	10.3 (1.9)
8	0.5 (0.2)	0.4 (0.1)	13.3 (3.4)	9.5 (2.4)	12.5 (5.3)	9.0 (3.8)	14.3 (4.5)	10.3 (3.2)
9	0.4 (0.1)	0.3 (0.1)	13.2 (2.6)	9.5 (1.9)	9.9 (3.3)	7.2 (2.4)	12.7 (2.3)	9.1 (1.6)
10	0.8 (0.2)	0.6 (0.1)	13.4 (1.5)	9.7 (1.1)	9.4 (1.0)	6.8 (0.7)	13.0 (1.1)	9.4 (0.8)
11	0.7 (0.1)	0.5 (0.0)	14.6 (1.4)	10.5 (1.0)	9.7 (2.3)	7.0 (1.6)	14.0 (0.9)	10.1 (0.6)
12	0.9 (0.1)	0.6 (0.1)	14.8 (1.6)	10.6 (1.1)	11.9 (3.4)	8.5 (2.4)	14.1 (2.1)	10.1 (1.5)
13	0.7 (0.1)	0.5 (0.0)	14.6 (2.7)	10.4 (2.0)	12.8 (5.0)	9.2 (3.6)	15.1 (3.5)	10.9 (2.5)
14	0.7 (0.1)	0.5 (0.1)	15.2 (4.1)	10.9 (2.9)	14.0 (7.1)	10.0 (5.1)	15.6 (4.8)	11.3 (3.4)
15	0.3 (0.0)	0.2 (0.0)	14.5 (5.6)	10.4 (4.0)	12.9 (7.2)	9.2 (5.1)	15.1 (5.9)	10.9 (4.3)
16	0.3 (0.0)	0.2 (0.0)	12.3 (4.3)	8.8 (3.1)	11.2 (6.0)	8.0 (4.3)	14.2 (5.1)	10.2 (3.7)
17	0.6 (0.1)	0.4 (0.1)	13.4 (1.8)	9.7 (1.3)	11.7 (3.1)	8.4 (2.2)	16.1 (3.0)	11.6 (2.1)
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
Avg	0.5	0.3	13.1	9.4	11.3	8.1	14.4	10.4
n	17	17	17	17	17	17	17	17
SD	0.2	0.2	1.3	0.9	1.4	1	1.4	1
Min	0.2	0.1	10.3	7.4	8.2	5.9	12.1	8.7
Max	0.9	0.6	15.2	10.9	14.0	10.0	16.9	12.1

ED_004549_00015929-00222

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for November, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1								
2								
3								
4	0.3 (0.1)	0.2 (0.0)						
5	0.2 (0.1)	0.1 (0.1)	13.4 (1.3)	9.6 (0.9)	8.1 (1.0)	5.8 (0.7)	11.0 (1.1)	7.9 (0.8)
6	0.0 (0.1)	0.0 (0.1)	13.7 (5.0)	9.8 (3.5)	9.9 (3.3)	7.1 (2.4)	10.4 (2.9)	7.5 (2.1)
7	0.0 (0.0)	0.0 (0.0)	13.4 (5.9)	9.6 (4.2)	10.0 (5.0)	7.2 (3.6)	10.9 (3.2)	7.8 (2.3)
8	0.2 (0.2)		11.6 (4.8)		8.4 (2.1)		10.9 (1.3)	
9	1.3 (0.6)		7.8 (2.5)		11.6 (5.5)		14.2 (3.6)	
10	0.0 (0.1)	0.0 (0.1)	13.0 (3.2)	9.3 (2.3)	18.0 (5.3)	12.9 (3.8)	15.2 (3.4)	10.9 (2.4)
11	0.3 (0.1)	0.2 (0.1)	17.6 (4.2)	12.6 (3.0)	18.0 (5.1)	12.9 (3.6)	15.5 (2.8)	11.1 (2.0)
12	0.4 (0.1)	0.3 (0.0)	16.2 (3.5)	11.5 (2.5)	15.5 (5.2)	11.1 (3.7)	11.8 (1.5)	8.4 (1.1)
13	0.2 (0.1)	0.2 (0.1)	12.9 (2.4)	9.3 (1.7)	11.0 (3.0)	7.9 (2.1)	10.2 (1.1)	7.4 (0.8)
14	0.1 (0.1)	0.1 (0.0)	13.5 (1.5)	9.7 (1.1)	9.8 (1.1)	7.0 (0.8)	12.5 (2.0)	9.0 (1.5)
15	0.0 (0.1)	0.0 (0.0)	11.4 (4.4)	8.2 (3.2)	8.7 (3.4)	6.2 (2.4)	9.7 (3.2)	7.0 (2.3)
16	0.0 (0.1)	0.0 (0.0)	17.9 (1.6)	12.8 (1.1)	20.4 (4.0)	14.6 (2.9)	16.5 (1.6)	11.8 (1.1)
17	0.1 (0.1)	0.1 (0.0)	19.3 (3.2)	13.8 (2.3)	23.2 (3.6)	16.6 (2.6)	18.0 (2.0)	12.9 (1.4)
18	0.2 (0.1)	0.1 (0.1)	20.0 (2.9)	14.2 (2.0)	26.4 (1.9)	18.9 (1.4)	20.5 (2.9)	14.6 (2.1)
19	0.2 (0.1)	0.1 (0.1)	19.2 (6.6)	13.7 (4.7)	30.2 (3.6)	21.6 (2.5)	25.5 (2.8)	18.2 (2.0)
20	0.1 (0.1)	0.1 (0.1)	19.4 (4.6)	13.8 (3.3)	27.4 (6.8)	19.6 (4.8)	22.5 (3.9)	16.1 (2.8)
21	0.4 (0.0)	0.3 (0.0)	18.6 (2.1)	13.3 (1.5)	25.2 (2.6)	18.0 (1.9)	23.2 (2.0)	16.6 (1.4)
22	0.2 (0.1)		17.7 (1.9)	12.6 (1.4)	30.3 (5.6)	21.6 (4.0)	28.0 (4.0)	20.0 (2.9)
23	0.2 (0.0)	0.1 (0.0)	11.3 (1.2)	8.1 (0.8)	29.9 (7.2)	21.4 (5.2)	27.2 (4.6)	19.5 (3.3)
24	0.2 (0.1)		13.4 (2.7)	9.6 (2.0)	31.3 (11.0)	22.4 (7.9)	25.9 (5.4)	18.5 (3.8)
25	0.3 (0.1)	0.2 (0.0)	16.6 (3.9)	11.8 (2.8)	25.7 (6.6)	18.4 (4.7)	24.3 (4.6)	17.3 (3.3)
26	0.2 (0.0)	0.2 (0.0)	19.3 (2.6)	13.8 (1.9)	35.8 (9.1)	25.6 (6.5)	30.1 (6.7)	21.5 (4.8)
27	0.2 (0.0)		18.3 (4.5)	13.0 (3.2)	35.0 (11.6)	25.0 (8.3)	27.7 (6.4)	19.8 (4.6)
28	0.2 (0.1)	0.1 (0.0)	18.5 (5.1)	13.2 (3.6)	29.5 (8.8)	21.1 (6.3)	23.8 (5.9)	17.0 (4.2)
29	0.4 (0.0)	0.3 (0.0)	21.6 (1.2)	15.5 (0.8)	31.3 (2.9)	22.4 (2.1)	19.8 (5.0)	14.1 (3.6)
30	0.3 (0.0)	0.2 (0.0)	18.0 (3.5)	12.9 (2.5)	24.9 (5.7)	17.9 (4.1)	13.3 (2.8)	9.5 (2.0)
Avg	0.2	0.1	15.9	11.7	21.4	16	18.4	13.5
n	27	22	26	24	26	24	26	24
SD	0.2	0.1	3.4	2.1	9.1	6.3	6.6	4.7
Min	0.0	0.0	7.8	8.1	8.1	5.8	9.7	7.0
Max	1.3	0.3	21.6	15.5	35.8	25.6	30.1	21.5

ED_004549_00015929-00223

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for December, 2008.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.2 (0.1)	0.1 (0.1)	18.0 (3.4)	12.9 (2.4)	27.0 (5.2)	19.3 (3.7)	22.6 (4.1)	16.1 (2.9)
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28	0.0 (0.1)	0.0 (0.0)						
29	0.1 (0.1)	0.1 (0.1)	10.7 (4.0)	7.6 (2.8)	8.1 (2.0)	5.8 (1.4)	8.8 (1.3)	6.3 (1.0)
30	0.0 (0.1)	0.0 (0.0)	9.3 (2.3)	6.6 (1.6)	8.0 (1.9)	5.7 (1.3)	5.3 (2.6)	3.8 (1.8)
31	0.1 (0.0)		9.3 (1.9)		8.2 (2.0)			
Avg	0.1	0.1	11.8	9.1	12.8	10.3	12.2	8.7
n	5	4	4	3	4	3	3	3
SD	0.1	0.1	3.6	2.7	8.2	6.4	7.5	5.3
Min	0.0	0.0	9.3	6.6	8.0	5.7	5.3	3.8
Max	0.2	0.1	18.0	12.9	27.0	19.3	22.6	16.1

ED_004549_00015929-00224

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for January, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.0 (0.1)		11.9 (1.9)	8.5 (1.4)	11.6 (1.2)	8.3 (0.9)	9.9 (1.4)	7.0 (1.0)
2	0.1 (0.0)		11.2 (3.4)	8.0 (2.4)	13.4 (0.8)	9.6 (0.6)	9.9 (2.5)	7.0 (1.8)
3	0.1 (0.1)	0.1 (0.0)	14.5 (2.0)	10.4 (1.5)	15.3 (1.8)	10.9 (1.3)	10.0 (2.4)	7.2 (1.7)
4	0.2 (0.1)	0.1 (0.1)	16.2 (1.2)	11.6 (0.8)	17.7 (1.3)	12.7 (0.9)	11.6 (0.8)	8.3 (0.6)
5	0.1 (0.1)	0.1 (0.1)	14.6 (2.5)	10.5 (1.8)	17.0 (3.7)	12.3 (2.6)	11.2 (2.2)	8.1 (1.6)
6	0.1 (0.0)	0.0 (0.0)	15.4 (2.3)	11.0 (1.6)	19.3 (2.9)	13.9 (2.1)	13.1 (1.9)	9.4 (1.4)
7	0.1 (0.0)	0.1 (0.0)	13.5 (1.7)	9.7 (1.2)	15.1 (1.7)	10.8 (1.2)	10.7 (1.2)	7.6 (0.9)
8	0.0 (0.1)	0.0 (0.1)	18.3 (3.2)	13.0 (2.3)	17.6 (3.9)	12.6 (2.8)	13.6 (2.4)	9.7 (1.7)
9	0.1 (0.0)	0.1 (0.0)	19.8 (2.1)	14.1 (1.5)	18.3 (1.5)	13.1 (1.0)	16.4 (2.0)	11.7 (1.5)
10	0.2 (0.1)	0.1 (0.1)	17.9 (3.7)	13.1 (2.8)	17.7 (2.9)	12.7 (2.0)	14.9 (3.0)	10.7 (2.1)
11	0.1 (0.1)	0.1 (0.1)	18.4 (1.9)		17.5 (1.9)	12.6 (1.4)	15.1 (1.8)	10.8 (1.3)
12	0.2 (0.0)	0.2 (0.0)	18.1 (2.8)	12.9 (2.0)	15.8 (2.7)	11.3 (2.0)	17.2 (2.0)	12.3 (1.4)
13	0.2 (0.0)	0.1 (0.0)	20.6 (1.3)	14.7 (1.0)	16.2 (1.1)	11.6 (0.8)	18.2 (1.6)	13.0 (1.2)
14	0.1 (0.1)	0.1 (0.0)	22.9 (0.8)	16.4 (0.6)	18.9 (1.2)	13.5 (0.8)	19.7 (1.5)	14.1 (1.1)
15	0.1 (0.1)	0.1 (0.1)	17.0 (4.1)	12.2 (2.9)	14.3 (4.8)	10.2 (3.5)	14.5 (3.8)	10.4 (2.7)
16	0.0 (0.1)		13.9 (1.4)	9.9 (1.0)	9.6 (0.9)	6.8 (0.7)	11.8 (0.9)	8.4 (0.7)
17	0.0 (0.0)		16.9 (0.7)	12.0 (0.5)	11.9 (0.8)	8.5 (0.6)	13.9 (0.8)	9.9 (0.6)
18	0.1 (0.0)	0.1 (0.0)						
19	0.2 (0.0)	0.1 (0.0)	20.3 (1.8)	14.5 (1.3)	16.3 (1.1)	11.6 (0.8)	15.9 (1.5)	11.4 (1.1)
20	0.1 (0.0)		18.5 (2.4)	13.2 (1.7)	14.5 (1.8)	10.4 (1.3)	14.4 (2.2)	10.3 (1.6)
21	0.0 (0.0)							
22	0.1 (0.0)							
23	0.1 (0.1)	0.1 (0.1)	14.7 (1.7)	10.5 (1.2)	17.9 (1.3)	12.8 (1.0)	11.8 (0.7)	8.4 (0.5)
24	0.1 (0.1)	0.1 (0.0)	17.2 (1.8)	12.3 (1.3)	21.9 (1.5)	15.7 (1.1)	14.7 (1.0)	10.5 (0.7)
25	0.2 (0.0)							
26	0.2 (0.0)	0.1 (0.0)	16.6 (3.4)	11.8 (2.4)	16.7 (3.5)	11.9 (2.5)	17.0 (1.2)	12.2 (0.9)
27	0.1 (0.1)	0.1 (0.1)	16.5 (1.3)	11.8 (1.0)	15.7 (1.5)	11.3 (1.1)	17.8 (1.0)	12.7 (0.7)
28	0.0 (0.0)	0.0 (0.0)	12.7 (4.4)	9.1 (3.1)	14.8 (4.6)	10.6 (3.3)	14.4 (3.9)	10.3 (2.8)
29	0.1 (0.1)	0.1 (0.0)	16.7 (1.6)	12.0 (1.1)	22.7 (1.4)	16.2 (1.0)	20.3 (1.5)	14.6 (1.1)
30	0.1 (0.0)	0.1 (0.0)	16.9 (2.1)	12.1 (1.5)	15.5 (5.5)	11.1 (3.9)	19.7 (3.1)	
31	0.1 (0.1)	0.0 (0.1)	16.6 (1.8)	11.9 (1.3)	14.6 (3.4)	10.4 (2.5)	17.8 (2.0)	12.6 (1.5)
Avg	0.1	0.1	16.6	11.8	16.2	11.6	14.6	10.3
n	31	23	27	26	27	27	27	26
SD	0.1	0	2.7	1.9	2.8	2	3.1	2.1
Min	0.0	0.0	11.2	8.0	9.6	6.8	9.9	7.0
Max	0.2	0.2	22.9	16.4	22.7	16.2	20.3	14.6

ED_004549_00015929-00225

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for February, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.0 (0.0)	0.0 (0.0)	15.8 (2.2)	11.3 (1.6)	17.8 (1.6)	12.7 (1.1)	17.1 (1.9)	12.2 (1.3)
2	0.0 (0.1)	0.0 (0.1)	16.6 (2.6)	11.9 (1.8)	20.4 (1.7)	14.6 (1.2)	14.6 (4.4)	10.4 (3.1)
3	0.0 (0.0)	0.0 (0.0)	14.6 (1.7)	10.4 (1.2)	15.0 (4.0)	10.7 (2.9)	11.0 (1.9)	7.9 (1.3)
4	0.0 (0.1)	0.0 (0.0)	12.4 (2.9)	8.9 (2.1)	12.0 (0.7)	8.6 (0.5)	12.6 (1.1)	9.0 (0.8)
5	-0.1 (0.0)		13.9 (1.5)	9.9 (1.1)	13.5 (1.8)	9.6 (1.3)	16.0 (3.1)	11.4 (2.2)
6	0.0 (0.1)		16.4 (1.6)	11.7 (1.1)	17.3 (1.4)	12.4 (1.0)	20.4 (2.3)	14.5 (1.7)
7	0.1 (0.1)	0.1 (0.1)	16.0 (4.1)	11.5 (3.0)	16.8 (4.3)	12.0 (3.1)	18.5 (5.2)	13.2 (3.7)
8	0.1 (0.1)	0.0 (0.0)	16.6 (5.2)	11.8 (3.7)	15.9 (5.8)	11.4 (4.2)	17.7 (6.1)	12.6 (4.4)
9	0.2 (0.2)	0.2 (0.1)	15.6 (7.3)	11.1 (5.2)	18.8 (5.5)	13.4 (4.0)	18.7 (5.8)	13.4 (4.1)
10	0.1 (0.1)	0.1 (0.0)	11.5 (2.3)	8.2 (1.6)	15.1 (7.2)	10.8 (5.2)	16.6 (4.1)	12.0 (3.0)
11	-0.1 (0.1)	0.0 (0.1)	9.2 (2.7)	6.6 (1.9)	9.7 (3.0)	6.9 (2.1)	10.3 (5.3)	7.4 (3.8)
12	0.0 (0.1)	0.0 (0.0)	9.7 (2.2)	7.0 (1.6)	10.4 (4.2)	7.4 (3.0)	8.7 (2.4)	6.2 (1.7)
13	0.0 (0.1)	0.0 (0.1)	13.3 (3.2)	9.5 (2.3)	15.1 (4.6)	10.8 (3.3)	14.7 (3.7)	10.5 (2.6)
14	0.1 (0.0)	0.1 (0.0)	16.8 (1.2)	12.0 (0.9)	20.5 (1.0)	14.7 (0.7)	21.4 (1.3)	15.3 (0.9)
15	0.4 (0.1)	0.3 (0.1)	19.4 (1.6)	13.8 (1.1)	20.0 (1.0)	14.3 (0.7)	23.9 (2.0)	17.1 (1.4)
16	0.2 (0.1)	0.2 (0.1)	16.1 (4.5)	11.5 (3.2)	20.2 (0.7)	14.5 (0.5)	21.9 (5.8)	15.7 (4.1)
17	0.1 (0.0)		12.0 (1.7)	8.6 (1.2)	15.7 (3.0)	11.2 (2.2)	16.5 (2.1)	11.8 (1.5)
18	0.0 (0.1)	0.0 (0.1)	8.6 (1.6)	6.2 (1.1)	12.5 (1.9)	9.0 (1.4)	12.7 (3.6)	9.1 (2.6)
19	-0.1 (0.0)	-0.1 (0.0)	8.2 (1.3)	5.9 (1.0)	10.1 (1.8)	7.2 (1.3)	8.5 (0.5)	6.1 (0.4)
20	0.0 (0.0)							
21	0.1 (0.1)		15.2 (2.9)	10.9 (2.1)	13.8 (1.8)	9.9 (1.3)	14.8 (2.7)	10.5 (1.9)
22	0.0 (0.0)	0.0 (0.0)	12.8 (2.1)	9.2 (1.5)	13.2 (2.1)	9.5 (1.5)	13.5 (1.7)	9.7 (1.2)
23	0.0 (0.0)		16.7 (3.2)	11.9 (2.3)	16.5 (1.2)	11.8 (0.9)	17.7 (1.9)	12.6 (1.4)
24	0.0 (0.1)		16.0 (1.9)	11.4 (1.3)	13.9 (3.1)	9.9 (2.2)	19.1 (2.0)	13.7 (1.4)
25	0.0 (0.0)		16.2 (2.0)	11.6 (1.4)	13.5 (1.2)	9.7 (0.8)	16.4 (5.1)	11.7 (3.7)
26	-0.1 (0.1)	0.0 (0.0)	15.0 (2.1)	10.7 (1.5)	13.0 (1.4)	9.3 (1.0)	12.6 (1.7)	9.0 (1.2)
27	0.0 (0.0)	0.0 (0.0)						
28	0.1 (0.1)	0.1 (0.1)	13.6 (2.4)	9.7 (1.7)	13.8 (2.4)	9.9 (1.7)	13.3 (2.5)	9.5 (1.8)
Avg	0.1	0	14.2	10.1	15.2	10.9	15.7	11.2
n	28	20	26	26	26	26	26	26
SD	0.1	0.1	2.8	2	3.1	2.2	3.9	2.8
Min	-0.1	-0.1	8.2	5.9	9.7	6.9	8.5	6.1
Max	0.4	0.3	19.4	13.8	20.5	14.7	23.9	17.1

ED_004549_00015929-00226

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for March, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.3 (0.0)	0.2 (0.0)	19.8 (1.2)	14.1 (0.8)	17.1 (1.1)	12.3 (0.8)	19.0 (1.3)	13.6 (0.9)
2	0.1 (0.1)	0.1 (0.1)	19.5 (1.4)	13.9 (1.0)	16.1 (1.3)	11.5 (1.0)	20.4 (1.9)	14.6 (1.4)
3	0.1 (0.1)		18.4 (1.0)	13.1 (0.7)	13.3 (1.9)	9.5 (1.4)	22.1 (1.2)	15.8 (0.9)
4	0.1 (0.0)		19.0 (3.3)	13.6 (2.4)	13.6 (1.8)	9.7 (1.3)	23.5 (2.4)	16.8 (1.7)
5	0.0 (0.1)	0.0 (0.0)	15.1 (5.6)	10.8 (4.0)	12.7 (1.9)	9.1 (1.4)	16.9 (6.9)	12.1 (4.9)
6	-0.1 (0.1)	-0.1 (0.0)	9.9 (3.2)	7.1 (2.3)	10.0 (3.8)	7.2 (2.7)	10.3 (3.7)	7.4 (2.7)
7	-0.1 (0.0)	-0.1 (0.0)	9.1 (3.1)	6.5 (2.2)	8.1 (3.8)	5.8 (2.7)	9.0 (2.7)	6.4 (1.9)
8	0.0 (0.0)	0.0 (0.0)						
9	-0.1 (0.1)	-0.1 (0.1)	8.0 (3.7)	5.7 (2.7)	6.4 (3.0)	4.6 (2.2)	8.2 (3.7)	5.9 (2.7)
10	0.0 (0.1)	0.0 (0.1)	11.4 (2.1)	8.1 (1.5)	9.5 (3.7)	6.8 (2.6)	11.6 (2.5)	8.3 (1.8)
11	-0.1 (0.0)	-0.1 (0.0)	8.6 (3.4)	6.2 (2.5)	6.3 (2.8)	4.5 (2.0)	8.2 (3.3)	5.9 (2.4)
12	0.2 (0.1)	0.1 (0.1)	10.9 (1.7)	7.8 (1.2)	9.8 (2.0)	7.0 (1.5)	10.4 (1.5)	7.4 (1.1)
13	0.3 (0.1)	0.2 (0.0)	14.8 (2.3)	10.6 (1.7)	16.4 (2.0)	11.7 (1.5)	14.0 (1.6)	10.0 (1.2)
14	0.3 (0.1)	0.2 (0.0)	16.7 (1.5)	11.9 (1.1)	17.3 (1.6)	12.4 (1.1)	15.7 (0.9)	11.2 (0.7)
15	0.2 (0.0)	0.1 (0.0)	14.3 (1.4)	10.2 (1.0)	16.1 (1.3)	11.5 (0.9)	14.8 (1.0)	10.6 (0.7)
16	0.2 (0.1)	0.2 (0.1)	14.6 (2.1)	10.5 (1.5)	16.1 (1.6)	11.6 (1.2)	15.3 (1.6)	11.0 (1.1)
17	0.1 (0.0)	0.1 (0.0)	14.2 (1.9)	10.2 (1.4)	13.4 (2.4)	9.6 (1.7)	14.6 (1.2)	10.4 (0.9)
18	0.1 (0.0)	0.1 (0.0)	13.8 (1.8)	9.9 (1.3)	12.1 (3.4)	8.7 (2.5)	12.9 (4.3)	9.2 (3.1)
19	-0.1 (0.1)	-0.1 (0.0)	10.7 (5.1)	7.6 (3.6)	9.8 (5.0)	7.0 (3.6)	10.7 (5.0)	7.7 (3.6)
20	0.3 (0.1)	0.2 (0.1)	9.7 (1.1)	6.9 (0.8)	10.7 (2.1)	7.7 (1.5)	11.8 (1.9)	8.4 (1.4)
21	0.3 (0.1)	0.2 (0.0)	11.2 (1.3)	8.0 (0.9)	14.0 (2.6)	10.0 (1.9)	15.3 (2.7)	10.9 (1.9)
22	0.0 (0.1)	0.0 (0.0)			12.8 (3.8)	9.1 (2.7)	15.7 (3.6)	11.2 (2.6)
23	0.2 (0.2)	0.2 (0.1)	11.2 (2.9)	8.0 (2.1)	11.5 (5.0)	8.2 (3.6)	12.5 (4.6)	9.0 (3.3)
24	0.3 (0.1)	0.2 (0.1)	12.0 (1.7)	8.6 (1.2)	11.4 (3.2)	8.1 (2.3)	11.1 (1.3)	7.9 (1.0)
25	0.2 (0.1)	0.1 (0.0)	11.8 (1.1)	8.4 (0.8)	11.9 (1.6)	8.5 (1.1)	12.8 (1.2)	9.1 (0.8)
26	0.0 (0.0)	0.0 (0.0)	9.8 (2.0)	7.0 (1.4)	9.0 (1.8)	6.5 (1.3)	9.7 (2.5)	7.0 (1.8)
27	0.0 (0.1)	0.0 (0.0)	8.5 (1.9)	6.1 (1.4)	7.0 (1.3)	5.1 (1.0)	8.2 (0.9)	5.9 (0.6)
28	-0.1 (0.0)	-0.1 (0.0)	8.3 (1.7)	6.0 (1.3)	5.2 (1.6)	3.7 (1.2)	7.3 (1.2)	5.3 (0.9)
29	-0.1 (0.0)	-0.1 (0.0)	6.5 (3.2)	4.7 (2.3)	5.1 (2.3)	3.7 (1.7)	6.1 (2.1)	4.4 (1.5)
30	-0.1 (0.1)	0.0 (0.0)	10.2 (1.6)	7.3 (1.1)	11.1 (3.2)	8.0 (2.3)	9.6 (1.5)	6.9 (1.1)
31	0.0 (0.1)	0.0 (0.0)	9.9 (2.7)	7.1 (1.9)	9.8 (5.3)	7.0 (3.8)	9.6 (2.7)	6.8 (1.9)
Avg	0.1	0.1	12.3	8.8	11.5	8.2	12.9	9.2
n	31	29	29	29	30	30	30	30
SD	0.2	0.1	3.6	2.6	3.5	2.5	4.3	3.1
Min	-0.1	-0.1	6.5	4.7	5.1	3.7	6.1	4.4
Max	0.3	0.2	19.8	14.1	17.3	12.4	23.5	16.8

ED_004549_00015929-00227

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for April, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-}	ppm	mg·dsm^{-}	ppm	mg·dsm^{-}
1	0.0 (0.1)	0.0 (0.0)	9.8 (1.4)	7.0 (1.0)	8.0 (1.4)	5.7 (1.0)	9.2 (1.0)	6.6 (0.7)
2	0.0 (0.0)	0.0 (0.0)	9.2 (2.1)	6.6 (1.5)	7.7 (1.1)	5.6 (0.8)	8.9 (1.4)	6.4 (1.0)
3	-0.1 (0.1)	-0.1 (0.1)	5.6 (1.7)	4.0 (1.2)	4.5 (1.3)	3.2 (1.0)	4.7 (2.2)	3.4 (1.6)
4	-0.1 (0.1)	-0.1 (0.0)	8.2 (2.9)	5.8 (2.0)	8.6 (3.0)	6.2 (2.2)	7.8 (1.8)	5.6 (1.3)
5	-0.2 (0.1)	-0.1 (0.0)	6.2 (3.4)	4.5 (2.5)	7.2 (4.3)	5.1 (3.1)	7.1 (4.2)	5.1 (3.0)
6	-0.2 (0.0)	-0.1 (0.0)	5.1 (2.0)	3.7 (1.5)	5.0 (2.1)	3.6 (1.5)	5.9 (1.9)	4.2 (1.3)
7	-0.1 (0.1)	0.0 (0.1)	10.1 (1.3)	7.2 (0.9)	12.4 (1.8)	8.9 (1.3)	10.2 (1.1)	7.3 (0.8)
8	-0.1 (0.0)	-0.1 (0.0)	10.0 (1.9)	7.2 (1.3)	11.0 (3.0)	7.9 (2.1)	10.2 (1.8)	7.3 (1.3)
9	-0.1 (0.1)	-0.1 (0.0)	7.8 (1.9)	5.6 (1.4)	7.6 (2.6)	5.5 (1.8)	8.0 (1.8)	5.7 (1.3)
10	-0.2 (0.0)	-0.1 (0.0)	6.2 (3.4)	4.4 (2.4)	5.6 (2.5)	4.0 (1.8)	6.3 (2.6)	4.5 (1.9)
11	-0.1 (0.1)	0.0 (0.1)	7.5 (2.3)	5.4 (1.7)	6.3 (2.2)	4.5 (1.6)	8.0 (1.5)	5.8 (1.1)
12	0.0 (0.1)	0.0 (0.0)	10.3 (1.6)	7.3 (1.2)	11.1 (3.3)	7.9 (2.4)	9.7 (1.0)	6.9 (0.7)
13	-0.1 (0.0)	-0.1 (0.0)	11.2 (2.6)	8.0 (1.8)	11.4 (3.2)	8.2 (2.3)	9.7 (1.1)	7.0 (0.8)
14	0.0 (0.1)	0.0 (0.1)	8.9 (1.1)	6.4 (0.8)	7.5 (0.6)	5.4 (0.5)	9.1 (1.1)	6.6 (0.8)
15	0.0 (0.0)	0.0 (0.0)	9.5 (1.7)	6.8 (1.2)	8.4 (1.8)	6.1 (1.3)	9.9 (1.5)	7.1 (1.1)
16	0.2 (0.1)	0.1 (0.1)	9.6 (2.6)	6.9 (1.9)	9.8 (2.0)	7.0 (1.5)	9.5 (1.8)	6.8 (1.3)
17	0.0 (0.1)	0.0 (0.0)	8.7 (2.7)	6.2 (1.9)	10.2 (3.6)	7.3 (2.6)	8.7 (2.0)	6.2 (1.4)
18	-0.1 (0.1)	-0.1 (0.1)	6.9 (3.8)	5.0 (2.7)	7.6 (4.7)	5.4 (3.4)	6.8 (2.8)	4.8 (2.0)
19	-0.1 (0.0)	-0.1 (0.0)	6.9 (2.7)	4.9 (1.9)	7.1 (4.0)	5.1 (2.8)	7.2 (2.2)	5.1 (1.6)
20	-0.1 (0.1)	-0.1 (0.0)	5.9 (1.7)	4.2 (1.3)	5.1 (1.6)	3.7 (1.2)	6.1 (1.9)	4.4 (1.4)
21	0.1 (0.1)	0.0 (0.1)	6.7 (2.2)	4.8 (1.6)	5.1 (2.6)	3.6 (1.9)	7.2 (2.1)	5.1 (1.5)
22	-0.1 (0.0)	-0.1 (0.0)	9.6 (2.2)	6.9 (1.6)	7.4 (2.4)	5.3 (1.7)	8.4 (2.8)	6.0 (2.0)
23	-0.1 (0.1)	0.0 (0.0)	8.4 (5.4)	6.0 (3.9)	6.5 (4.2)	4.7 (3.0)	7.8 (5.1)	5.5 (3.6)
24	0.0 (0.0)	0.0 (0.0)	8.0 (4.7)	5.7 (3.4)	6.3 (4.6)	4.5 (3.3)	6.0 (3.7)	4.3 (2.7)
25	-0.1 (0.1)	-0.1 (0.0)	4.1 (2.7)	2.9 (1.9)	3.0 (1.2)	2.2 (0.9)	3.2 (1.6)	2.3 (1.2)
26	-0.2 (0.1)	-0.1 (0.0)	4.5 (2.7)	3.3 (1.9)	3.4 (1.8)	2.4 (1.3)	3.4 (1.8)	2.5 (1.3)
27	-0.1 (0.0)	-0.1 (0.0)	5.4 (3.4)	3.8 (2.4)	4.6 (2.6)	3.3 (1.9)	4.2 (2.4)	3.0 (1.7)
28	-0.2 (0.1)	-0.1 (0.0)	5.7 (3.3)	4.1 (2.4)	5.0 (3.3)	3.5 (2.4)	5.1 (2.9)	3.7 (2.1)
29	-0.1 (0.1)	-0.1 (0.0)	6.0 (3.1)	4.3 (2.2)	4.8 (2.6)	3.5 (1.9)	5.2 (2.6)	3.7 (1.9)
30	0.1 (0.2)	0.1 (0.1)	6.6 (2.6)	4.8 (1.9)	5.8 (2.7)	4.2 (1.9)	6.4 (2.5)	4.6 (1.8)
Avg	-0.1	0	7.6	5.5	7.2	5.1	7.3	5.2
n	30	30	30	30	30	30	30	30
SD	0.1	0.1	1.9	1.4	2.4	1.7	2	1.4
Min	-0.2	-0.1	4.1	2.9	3.0	2.2	3.2	2.3
Max	0.2	0.1	11.2	8.0	12.4	8.9	10.2	7.3

ED_004549_00015929-00228

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for May, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-}	ppm	mg·dsm^{-}	ppm	mg·dsm^{-}
1	-0.1 (0.0)	-0.1 (0.0)	4.7 (2.6)	3.4 (1.9)	4.0 (1.8)	2.9 (1.3)	3.9 (2.1)	2.8 (1.5)
2	-0.2 (0.1)	-0.1 (0.0)	4.5 (2.5)	3.3 (1.8)	3.3 (1.4)	2.4 (1.0)	3.5 (1.4)	2.5 (1.0)
3	-0.2 (0.0)	-0.1 (0.0)						
4	-0.2 (0.1)	-0.1 (0.0)	4.7 (2.5)	3.3 (1.8)	3.3 (1.2)	2.3 (0.8)	3.6 (1.3)	2.6 (0.9)
5	-0.1 (0.1)	-0.1 (0.0)	7.2 (2.1)	5.2 (1.5)	5.2 (2.1)	3.7 (1.5)	5.4 (1.9)	3.9 (1.4)
6	-0.1 (0.0)	-0.1 (0.0)	5.3 (2.9)	3.9 (2.1)	3.3 (0.9)	2.3 (0.7)	3.4 (1.5)	2.5 (1.1)
7	-0.1 (0.0)	-0.1 (0.0)	6.5 (3.1)	4.7 (2.2)	4.7 (1.6)	3.4 (1.2)	4.3 (1.4)	3.1 (1.0)
8	-0.1 (0.0)	-0.1 (0.0)	8.3 (3.1)	6.0 (2.3)	3.9 (1.7)	2.8 (1.3)	3.5 (2.2)	2.5 (1.6)
9	-0.2 (0.0)	-0.1 (0.0)	7.2 (4.9)	5.2 (3.6)	3.1 (1.2)	2.2 (0.8)	2.4 (0.9)	1.8 (0.7)
10	-0.1 (0.1)	-0.1 (0.1)	8.9 (3.0)	6.4 (2.2)	5.0 (1.9)	3.6 (1.3)	4.3 (1.6)	3.1 (1.2)
11	0.4 (0.1)	0.3 (0.1)	5.8 (4.2)	4.2 (3.0)	9.6 (2.8)	6.9 (2.0)	8.2 (1.3)	5.9 (0.9)
12	0.0 (0.1)	0.0 (0.1)	1.9 (0.6)	1.4 (0.4)	9.4 (5.4)	6.8 (3.8)	7.4 (3.0)	5.3 (2.1)
13	0.3 (0.2)	0.2 (0.1)	3.0 (1.0)	2.1 (0.7)	8.5 (4.8)	6.1 (3.4)	7.0 (2.8)	5.0 (2.0)
14	-0.1 (0.1)	-0.1 (0.0)	3.1 (1.2)	2.2 (0.9)	6.6 (3.2)	4.7 (2.3)	6.3 (2.4)	4.5 (1.7)
15	-0.1 (0.1)	0.0 (0.0)	3.1 (0.9)	2.2 (0.7)	4.1 (2.9)	2.9 (2.1)	4.6 (1.7)	3.3 (1.2)
16	-0.1 (0.0)	-0.1 (0.0)						
17	-0.1 (0.1)	0.0 (0.1)			5.2 (1.3)	3.7 (0.9)		
18	0.2 (0.1)	0.2 (0.0)			4.5 (0.5)	3.2 (0.4)	10.0 (2.1)	7.1 (1.5)
19	0.1 (0.1)	0.1 (0.0)			3.4 (0.9)	2.4 (0.6)	5.7 (2.0)	4.1 (1.4)
20	0.2 (0.1)	0.1 (0.1)			2.8 (1.2)	2.0 (0.9)	5.2 (2.3)	3.7 (1.7)
21	0.1 (0.2)	0.1 (0.1)			2.8 (1.1)	2.0 (0.8)	3.8 (1.5)	2.7 (1.1)
22	0.4 (0.5)	0.3 (0.4)			2.9 (1.4)	2.1 (1.0)	3.9 (1.8)	2.8 (1.3)
23	-0.1 (0.1)	-0.1 (0.1)	5.5 (3.5)	3.9 (2.5)	2.7 (1.2)	1.9 (0.8)	3.6 (1.6)	2.6 (1.2)
24	-0.2 (0.0)	-0.1 (0.0)	5.0 (2.6)	3.6 (1.9)				
25	-0.2 (0.1)	-0.1 (0.1)	5.6 (3.0)	4.0 (2.2)				
26	0.0 (0.3)	0.0 (0.2)	4.7 (2.2)	3.4 (1.6)				
27	0.6 (0.6)	0.4 (0.4)	5.2 (3.0)	3.7 (2.1)				
28	0.0 (0.1)	0.0 (0.1)	6.2 (2.4)	4.5 (1.7)				
29	0.0 (0.1)	0.0 (0.1)	5.5 (3.0)	4.0 (2.2)				
30	0.2 (0.2)	0.2 (0.1)						
31	0.0 (0.2)	0.0 (0.1)	4.0 (3.0)	2.9 (2.2)	3.9 (3.2)	2.8 (2.3)	3.9 (2.3)	2.8 (1.6)
Avg	0	0	5.3	3.8	4.6	3.3	4.9	3.5
n	31	31	22	22	22	22	21	21
SD	0.2	0.1	1.7	1.2	2.1	1.5	1.8	1.3
Min	-0.2	-0.1	1.9	1.4	2.7	1.9	2.4	1.8
Max	0.6	0.4	8.9	6.4	9.6	6.9	10.0	7.1

ED_004549_00015929-00229

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for June, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-}	ppm	mg·dsm^{-}	ppm	mg·dsm^{-}
1	0.1 (0.2)	0.1 (0.1)	3.9 (2.0)	2.8 (1.5)	4.0 (2.6)	2.9 (1.8)	4.4 (2.2)	3.2 (1.6)
2	-0.2 (0.1)	-0.1 (0.0)	3.2 (1.9)	2.3 (1.4)	3.9 (1.9)	2.8 (1.4)	3.9 (2.1)	2.8 (1.5)
3	-0.1 (0.1)	-0.1 (0.0)	2.8 (1.9)	2.0 (1.3)	4.3 (2.8)	3.1 (2.0)	4.4 (2.2)	3.1 (1.6)
4	-0.1 (0.1)	-0.1 (0.0)	3.4 (1.9)	2.4 (1.4)	4.3 (2.5)	3.1 (1.8)	5.4 (2.7)	3.9 (1.9)
5	-0.1 (0.1)	-0.1 (0.1)	3.7 (1.6)	2.7 (1.1)	4.1 (2.0)	3.0 (1.5)	4.3 (3.7)	3.1 (2.7)
6	0.3 (0.1)	0.2 (0.0)	6.6 (0.5)	4.8 (0.4)	7.0 (1.0)	5.0 (0.7)	6.7 (1.1)	4.8 (0.8)
7	0.5 (0.2)	0.3 (0.1)	5.1 (1.8)	3.7 (1.3)	4.5 (1.6)	3.3 (1.2)	5.6 (1.3)	4.1 (1.0)
8	-0.1 (0.1)	0.0 (0.0)	3.9 (2.4)	2.8 (1.7)	3.3 (2.0)	2.4 (1.5)	4.5 (2.2)	3.2 (1.6)
9	-0.1 (0.0)	-0.1 (0.0)	4.1 (2.1)	2.9 (1.5)	3.3 (1.7)	2.4 (1.2)	4.5 (1.8)	3.3 (1.3)
10	-0.1 (0.0)	-0.1 (0.0)	4.7 (2.4)	3.4 (1.7)	3.7 (2.2)	2.7 (1.6)	5.3 (1.7)	3.8 (1.3)
11	-0.1 (0.0)	-0.1 (0.0)	3.7 (2.3)	2.7 (1.6)	2.8 (1.6)	2.0 (1.2)	3.6 (1.8)	2.6 (1.3)
12	-0.2 (0.1)	-0.1 (0.0)	3.6 (2.5)	2.6 (1.8)	2.7 (1.8)	2.0 (1.3)	3.2 (1.2)	2.3 (0.9)
13	-0.1 (0.1)	-0.1 (0.0)	3.0 (2.0)	2.2 (1.4)	2.2 (1.3)	1.6 (0.9)	3.8 (2.1)	2.7 (1.5)
14	0.0 (0.0)	0.0 (0.0)	3.5 (2.1)	2.6 (1.5)	3.2 (1.6)	2.3 (1.1)	4.1 (1.9)	3.0 (1.3)
15	0.0 (0.1)	0.0 (0.1)	4.4 (2.4)	3.2 (1.7)	3.4 (1.8)	2.5 (1.3)	4.9 (2.1)	3.5 (1.5)
16	0.2 (0.1)	0.2 (0.1)	7.6 (1.2)	5.4 (0.8)	4.8 (0.7)	3.5 (0.5)	6.7 (0.2)	4.8 (0.2)
17	0.1 (0.2)	0.1 (0.1)	5.5 (2.4)	4.0 (1.8)	3.8 (1.3)	2.7 (0.9)	5.5 (1.2)	4.0 (0.8)
18	-0.1 (0.1)	-0.1 (0.0)	4.2 (2.7)	3.0 (2.0)	2.8 (1.7)	2.0 (1.2)	4.3 (1.9)	3.1 (1.3)
19	-0.1 (0.0)	0.0 (0.0)	3.2 (1.2)	2.3 (0.9)	2.0 (1.0)	1.4 (0.7)	3.8 (1.9)	2.7 (1.4)
20	-0.1 (0.1)	-0.1 (0.0)	2.5 (1.2)	1.8 (0.9)	1.7 (0.7)	1.2 (0.5)	2.7 (1.6)	2.0 (1.1)
21	0.1 (0.3)	0.1 (0.2)	3.0 (1.3)	2.1 (0.9)	1.5 (0.7)	1.1 (0.5)	3.1 (1.4)	2.2 (1.0)
22	0.2 (0.2)	0.1 (0.2)	6.0 (2.9)	4.3 (2.1)	3.4 (1.9)	2.4 (1.4)	4.6 (2.2)	3.3 (1.6)
23	0.3 (0.2)	0.2 (0.1)	5.2 (3.2)	3.8 (2.3)	3.1 (1.9)	2.3 (1.4)	4.7 (1.7)	3.3 (1.2)
24	-0.1 (0.1)	-0.1 (0.0)	4.5 (2.9)	3.2 (2.1)	3.2 (1.8)	2.3 (1.3)	4.2 (2.3)	3.0 (1.7)
25	0.1 (0.1)	0.1 (0.1)	4.4 (2.6)	3.2 (1.9)	2.7 (1.9)	2.0 (1.3)	4.1 (2.1)	2.9 (1.5)
26	-0.1 (0.1)	-0.1 (0.0)	3.7 (2.0)	2.7 (1.4)	2.6 (0.9)	1.9 (0.6)	4.7 (1.9)	3.4 (1.4)
27	0.5 (0.2)	0.4 (0.2)			2.9 (1.1)	2.1 (0.8)		
28	0.4 (0.5)	0.3 (0.4)	4.1 (2.9)	3.0 (2.1)	3.2 (1.9)	2.3 (1.4)	4.3 (2.6)	3.1 (1.9)
29	-0.1 (0.0)	-0.1 (0.0)	3.4 (2.1)	2.5 (1.5)	3.0 (1.7)	2.1 (1.3)	3.8 (2.3)	2.7 (1.7)
30	0.0 (0.1)	0.0 (0.0)						
Avg	0	0	4.2	3	3.4	2.4	4.5	3.2
n	30	30	28	28	29	29	28	28
SD	0.2	0.1	1.2	0.8	1.1	0.8	0.9	0.7
Min	-0.2	-0.1	2.5	1.8	1.5	1.1	2.7	2.0
Max	0.5	0.4	7.6	5.4	7.0	5.0	6.7	4.8

ED_004549_00015929-00230

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for July, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-}	ppm	mg·dsm^{-}	ppm	mg·dsm^{-}
1	0.1 (0.1)	0.1 (0.1)	3.6 (2.6)	2.6 (1.9)	4.2 (2.7)	3.0 (2.0)	3.8 (2.7)	2.8 (1.9)
2	0.1 (0.1)	0.1 (0.0)	2.9 (2.0)	2.2 (1.5)	3.5 (2.0)	2.6 (1.5)	4.5 (2.5)	3.3 (1.8)
3	0.1 (0.2)	0.1 (0.1)	4.0 (1.8)	2.9 (1.3)	4.8 (2.2)	3.4 (1.6)	5.0 (2.3)	3.6 (1.6)
4	0.0 (0.1)	0.0 (0.1)	4.0 (2.1)	2.9 (1.5)	5.7 (3.3)	4.1 (2.4)	5.2 (2.9)	3.7 (2.1)
5	-0.1 (0.0)	-0.1 (0.0)	2.9 (1.7)	2.1 (1.2)	4.0 (2.1)	2.9 (1.5)	3.7 (2.2)	2.7 (1.6)
6	0.3 (0.3)	0.2 (0.2)	4.2 (0.6)	3.1 (0.4)	4.3 (1.1)	3.1 (0.8)	5.7 (1.0)	4.1 (0.7)
7	0.1 (0.1)	0.1 (0.1)	3.8 (1.6)	2.7 (1.1)	4.2 (1.6)	3.1 (1.2)	3.9 (1.5)	2.8 (1.1)
8	0.2 (0.1)	0.1 (0.1)	3.8 (2.0)	2.7 (1.4)	4.2 (2.2)	3.1 (1.6)	4.0 (1.6)	2.9 (1.2)
9	0.3 (0.0)	0.2 (0.0)	4.5 (0.8)	3.2 (0.6)	3.9 (0.9)	2.8 (0.7)	4.6 (0.7)	3.3 (0.5)
10	0.5 (0.2)	0.3 (0.2)	5.0 (2.5)	3.6 (1.8)	5.1 (2.5)	3.6 (1.8)	3.8 (1.4)	2.7 (1.0)
11	0.0 (0.1)	0.0 (0.1)	5.1 (2.3)	3.6 (1.6)	5.0 (2.5)	3.6 (1.8)	4.1 (0.9)	2.9 (0.7)
12	-0.1 (0.0)	-0.1 (0.0)	2.4 (1.5)	1.7 (1.1)	2.7 (1.4)	1.9 (1.0)	2.5 (1.3)	1.8 (0.9)
13	0.1 (0.1)	0.1 (0.1)	5.0 (1.1)	3.6 (0.8)	4.5 (1.2)	3.2 (0.9)	5.6 (1.0)	4.0 (0.7)
14	0.3 (0.2)	0.2 (0.2)	3.9 (1.6)	2.8 (1.2)	4.5 (2.3)	3.2 (1.7)	4.4 (1.5)	3.1 (1.1)
15	0.1 (0.2)	0.1 (0.1)	3.6 (2.3)	2.6 (1.6)	3.9 (2.4)	2.8 (1.7)	3.7 (1.9)	2.7 (1.4)
16	0.0 (0.1)	0.0 (0.0)	3.8 (1.7)	2.7 (1.2)	3.1 (1.4)	2.2 (1.0)	4.1 (1.7)	2.9 (1.2)
17	0.0 (0.0)	0.0 (0.0)	3.6 (1.6)	2.6 (1.2)	3.1 (1.1)	2.2 (0.8)	3.3 (1.5)	2.4 (1.0)
18	0.1 (0.1)	0.0 (0.1)	3.4 (1.4)	2.4 (1.0)	2.6 (1.0)	1.9 (0.7)	3.6 (1.3)	2.6 (0.9)
19	0.2 (0.1)	0.2 (0.1)	3.4 (1.6)	2.4 (1.1)	3.0 (1.2)	2.1 (0.9)	4.0 (1.5)	2.9 (1.1)
20	0.0 (0.0)	0.0 (0.0)	4.0 (1.5)	2.9 (1.1)	3.4 (0.9)	2.4 (0.7)	4.7 (1.2)	3.4 (0.9)
21	0.0 (0.0)	0.0 (0.0)	4.5 (2.4)	3.2 (1.7)	4.3 (2.3)	3.1 (1.7)	4.5 (2.0)	3.2 (1.4)
22	0.2 (0.1)	0.1 (0.1)	5.1 (2.6)	3.7 (1.9)	4.3 (2.3)	3.1 (1.7)	5.3 (2.3)	3.8 (1.6)
23	0.0 (0.1)	0.0 (0.1)	4.3 (1.7)	3.1 (1.2)	2.6 (0.8)	1.8 (0.6)	4.4 (1.7)	3.2 (1.2)
24	-0.1 (0.1)	-0.1 (0.1)	3.7 (1.4)	2.7 (1.0)	2.5 (0.8)	1.8 (0.5)	4.1 (1.3)	3.0 (0.9)
25	0.0 (0.1)	0.0 (0.0)	2.9 (2.1)	2.1 (1.5)	2.0 (1.3)	1.5 (0.9)	2.7 (1.8)	1.9 (1.3)
26	0.0 (0.1)	0.0 (0.0)	2.6 (1.6)	1.8 (1.2)	2.0 (0.5)	1.4 (0.4)	2.8 (1.7)	2.1 (1.2)
27	-0.1 (0.1)	0.0 (0.0)	4.0 (1.9)	2.9 (1.3)	2.9 (0.9)	2.1 (0.7)	3.1 (1.7)	2.2 (1.3)
28	-0.1 (0.1)	-0.1 (0.0)	4.2 (2.0)	3.0 (1.4)	2.7 (1.2)	2.0 (0.9)	2.7 (1.4)	2.0 (1.0)
29	-0.1 (0.0)	-0.1 (0.0)	3.8 (1.7)	2.8 (1.2)	2.3 (0.4)	1.7 (0.3)	3.1 (1.3)	2.2 (0.9)
30	-0.1 (0.1)	-0.1 (0.0)	3.9 (2.2)	2.9 (1.6)	2.3 (0.7)	1.7 (0.5)	3.1 (1.4)	2.2 (1.0)
31	-0.1 (0.0)	-0.1 (0.0)	3.9 (2.0)	2.8 (1.5)	2.2 (0.9)	1.6 (0.7)	3.5 (1.6)	2.5 (1.1)
Avg	0.1	0	3.9	2.8	3.5	2.5	4	2.9
n	31	31	31	31	31	31	31	31
SD	0.1	0.1	0.7	0.5	1	0.7	0.8	0.6
Min	-0.1	-0.1	2.4	1.7	2.0	1.4	2.5	1.8
Max	0.5	0.3	5.1	3.7	5.7	4.1	5.7	4.1

ED_004549_00015929-00231

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for August, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-}	ppm	mg·dsm^{-}	ppm	mg·dsm^{-}
1	-0.1 (0.1)	-0.1 (0.0)	3.2 (1.9)	2.3 (1.4)	2.6 (0.9)	1.9 (0.6)	3.4 (1.6)	2.5 (1.2)
2	0.0 (0.0)	0.0 (0.0)	3.9 (1.3)	2.8 (0.9)	3.5 (0.4)	2.5 (0.3)	4.4 (1.3)	3.2 (0.9)
3	-0.1 (0.0)	0.0 (0.0)	3.7 (1.3)	2.6 (0.9)	3.3 (0.7)	2.3 (0.5)	4.8 (2.1)	3.5 (1.5)
4	-0.1 (0.0)	0.0 (0.0)	2.6 (1.3)	1.9 (0.9)	3.1 (1.5)	2.2 (1.1)	3.8 (1.8)	2.7 (1.3)
5	-0.1 (0.0)	-0.1 (0.0)	2.5 (1.2)	1.8 (0.9)	2.3 (0.5)	1.6 (0.4)	4.9 (1.6)	3.5 (1.1)
6	0.0 (0.1)	0.0 (0.1)	2.5 (1.3)	1.8 (1.0)	2.2 (0.8)	1.6 (0.6)	4.1 (1.8)	3.0 (1.3)
7	0.2 (0.2)	0.2 (0.1)	3.6 (1.8)	2.6 (1.3)	2.5 (1.3)	1.8 (0.9)	3.3 (1.4)	2.4 (1.0)
8	-0.1 (0.0)	0.0 (0.0)						
9	-0.1 (0.0)	0.0 (0.0)	3.0 (2.0)	2.2 (1.4)	3.2 (1.0)	2.3 (0.7)	3.1 (1.5)	2.2 (1.1)
10	-0.1 (0.0)	0.0 (0.0)	2.7 (1.7)	2.0 (1.3)	3.1 (1.4)	2.2 (1.0)	2.9 (1.9)	2.1 (1.3)
11	0.0 (0.0)	0.0 (0.0)	3.0 (1.6)	2.2 (1.2)	2.4 (0.6)	1.7 (0.4)	4.6 (1.9)	3.3 (1.4)
12	0.1 (0.1)	0.1 (0.0)	3.3 (1.8)	2.4 (1.3)	2.2 (0.5)	1.6 (0.4)	6.3 (2.1)	4.6 (1.5)
13	0.1 (0.1)	0.1 (0.1)			2.5 (0.4)	1.8 (0.3)	7.1 (1.7)	5.1 (1.2)
14	0.0 (0.1)	0.0 (0.1)	4.4 (1.5)	3.1 (1.1)	2.7 (1.1)	1.9 (0.8)	5.6 (2.4)	4.1 (1.7)
15	0.0 (0.0)	0.0 (0.0)	3.9 (1.8)	2.8 (1.3)	2.2 (0.5)	1.6 (0.4)	5.6 (2.6)	4.1 (1.9)
16	0.0 (0.1)	0.0 (0.1)	3.6 (1.8)	2.6 (1.3)	2.3 (0.5)	1.6 (0.3)	5.3 (2.8)	3.8 (2.0)
17	-0.1 (0.1)	-0.1 (0.0)	3.4 (1.9)	2.4 (1.4)	2.6 (0.7)	1.9 (0.5)	4.8 (3.0)	3.5 (2.1)
18	-0.1 (0.0)	-0.1 (0.0)	2.9 (1.8)	2.1 (1.3)	2.2 (0.5)	1.6 (0.3)	4.9 (2.4)	3.5 (1.7)
19	0.0 (0.0)	0.0 (0.0)	3.3 (2.1)	2.4 (1.5)	2.3 (0.4)	1.7 (0.3)	5.3 (2.5)	3.9 (1.8)
20	0.0 (0.1)	0.0 (0.0)	2.4 (1.5)	1.7 (1.1)	2.6 (0.5)	1.8 (0.4)	4.1 (2.6)	3.0 (1.9)
21	0.0 (0.1)	0.0 (0.0)	2.7 (1.0)	1.9 (0.7)			3.3 (1.4)	2.4 (1.0)
22	0.2 (0.2)	0.1 (0.1)	3.9 (1.3)	2.8 (0.9)			4.8 (1.7)	3.5 (1.3)
23	0.0 (0.0)	0.0 (0.0)	4.4 (1.6)	3.2 (1.2)			5.1 (2.3)	3.7 (1.6)
24	0.0 (0.0)	0.0 (0.0)	4.5 (2.1)	3.3 (1.5)	4.4 (1.0)	3.2 (0.8)	4.8 (2.4)	3.5 (1.7)
25	-0.1 (0.0)	-0.1 (0.0)	4.2 (2.1)	3.0 (1.5)	3.7 (1.3)	2.7 (1.0)	4.4 (2.2)	3.1 (1.6)
26	-0.1 (0.0)	-0.1 (0.0)	3.8 (2.2)	2.7 (1.6)	3.1 (1.0)	2.2 (0.7)	3.4 (1.6)	2.5 (1.1)
27	-0.1 (0.0)	-0.1 (0.0)	3.5 (2.5)	2.6 (1.8)			3.6 (1.7)	2.7 (1.2)
28	0.0 (0.1)	0.0 (0.1)	3.3 (1.5)	2.4 (1.0)	3.5 (0.8)	2.5 (0.6)	4.4 (1.3)	3.2 (0.9)
29	0.1 (0.0)	0.0 (0.0)	3.0 (1.4)	2.1 (1.0)	3.3 (0.5)	2.4 (0.4)	3.4 (1.1)	2.5 (0.8)
30	0.0 (0.1)	0.0 (0.0)	2.6 (1.3)	1.9 (1.0)	3.1 (0.7)	2.2 (0.5)	3.1 (1.0)	2.2 (0.7)
31	0.2 (0.1)							
Avg	0	0	3.4	2.4	2.8	2	4.4	3.2
n	31	30	28	28	25	25	29	29
SD	0.1	0.1	0.6	0.4	0.6	0.4	1	0.7
Min	-0.1	-0.1	2.4	1.7	2.2	1.6	2.9	2.1
Max	0.2	0.2	4.5	3.3	4.4	3.2	7.1	5.1

ED_004549_00015929-00232

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for September, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm⁻	ppm	mg·dsm⁻	ppm	mg·dsm⁻	ppm	mg·dsm⁻
1	0.3 (0.0)	0.2 (0.0)	5.7 (1.5)	4.1 (1.1)	4.1 (1.2)	2.9 (0.8)	5.1 (1.3)	3.7 (0.9)
2	0.3 (0.1)	0.2 (0.1)	7.0 (2.3)	5.0 (1.7)	3.9 (1.4)	2.8 (1.0)	6.1 (2.0)	4.4 (1.5)
3	0.1 (0.1)	0.1 (0.1)	5.0 (2.4)	3.6 (1.7)	2.7 (1.1)	2.0 (0.8)	4.7 (1.7)	3.4 (1.2)
4	0.0 (0.1)	0.0 (0.0)	4.7 (2.2)	3.4 (1.6)	3.8 (1.7)	2.7 (1.2)	5.0 (2.1)	3.6 (1.5)
5	0.1 (0.1)	0.0 (0.1)	4.4 (2.5)	3.2 (1.8)	4.6 (2.5)	3.3 (1.8)	5.3 (2.8)	3.8 (2.0)
6	0.2 (0.0)	0.1 (0.0)	4.2 (2.0)	3.0 (1.5)	3.9 (1.5)	2.8 (1.1)	4.8 (2.0)	3.4 (1.4)
7	0.3 (0.1)	0.2 (0.0)	4.8 (0.8)	3.5 (0.6)	2.8 (0.6)	2.0 (0.5)	5.2 (1.0)	3.8 (0.8)
8	0.2 (0.1)	0.1 (0.1)	4.8 (1.4)	3.5 (1.0)	2.7 (0.6)	1.9 (0.4)	4.5 (1.1)	3.2 (0.8)
9	0.2 (0.1)	0.2 (0.1)	5.6 (2.2)	4.0 (1.6)	3.8 (1.3)	2.7 (1.0)	4.7 (2.3)	3.4 (1.7)
10	0.2 (0.1)	0.1 (0.1)	6.5 (1.9)	4.7 (1.4)	3.3 (1.4)	2.4 (1.0)	4.9 (1.3)	3.5 (0.9)
11	0.0 (0.1)	0.0 (0.0)	4.7 (1.8)	3.4 (1.3)	3.4 (1.4)	2.4 (1.0)	4.9 (1.6)	3.5 (1.2)
12	0.0 (0.0)	0.0 (0.0)	4.0 (2.2)	2.9 (1.5)	4.0 (2.2)	2.9 (1.6)	4.9 (2.3)	3.6 (1.7)
13	0.1 (0.1)	0.1 (0.0)	5.1 (1.6)	3.7 (1.1)	3.3 (1.3)	2.4 (0.9)	5.3 (1.9)	3.8 (1.4)
14	0.1 (0.1)	0.0 (0.1)	5.1 (3.0)	3.7 (2.2)	4.1 (2.3)	2.9 (1.7)	6.3 (3.4)	4.5 (2.4)
15	0.0 (0.1)	0.0 (0.0)						
16	0.2 (0.1)	0.1 (0.1)	5.2 (2.2)	3.7 (1.5)	2.7 (1.0)	2.0 (0.7)	5.6 (1.8)	4.0 (1.3)
17	0.4 (0.1)	0.3 (0.0)	5.1 (1.5)	3.7 (1.1)	3.2 (0.6)	2.3 (0.4)	5.9 (1.7)	4.3 (1.2)
18	0.1 (0.1)	0.1 (0.1)	4.5 (1.2)	3.2 (0.9)	3.3 (0.9)	2.3 (0.6)	5.0 (1.1)	3.6 (0.8)
19	0.2 (0.1)	0.1 (0.1)	4.1 (2.0)	2.9 (1.5)	3.5 (1.4)	2.5 (1.0)	4.6 (1.9)	3.3 (1.4)
20	0.2 (0.0)	0.1 (0.0)	4.6 (2.2)	3.4 (1.5)	4.3 (1.3)	3.1 (0.9)	5.3 (1.9)	3.9 (1.3)
21	0.3 (0.2)	0.2 (0.2)	4.7 (2.8)	3.4 (2.0)	4.5 (2.5)	3.2 (1.8)	5.7 (2.7)	4.1 (1.9)
22	0.3 (0.0)	0.2 (0.0)	4.0 (0.9)	2.9 (0.6)	2.7 (0.5)	1.9 (0.3)	5.4 (1.5)	3.9 (1.1)
23	0.0 (0.1)	0.0 (0.0)	3.3 (1.3)	2.4 (1.0)	2.5 (0.3)	1.8 (0.3)	5.4 (2.3)	3.9 (1.7)
24	0.0 (0.0)	0.0 (0.0)	3.2 (1.9)	2.3 (1.4)	2.8 (0.9)	2.0 (0.6)	4.7 (3.4)	3.4 (2.4)
25	0.2 (0.2)	0.2 (0.2)	3.9 (1.5)	2.8 (1.1)	2.9 (0.6)	2.1 (0.5)	4.8 (1.8)	3.5 (1.3)
26	0.3 (0.1)	0.2 (0.1)	5.4 (0.7)	3.9 (0.5)	4.3 (1.1)	3.1 (0.8)	7.2 (1.8)	5.2 (1.3)
27	0.0 (0.1)	0.0 (0.0)	4.1 (1.2)	3.0 (0.9)	3.6 (1.2)	2.6 (0.9)	5.9 (1.9)	4.3 (1.4)
28	0.0 (0.1)	0.0 (0.1)	3.9 (2.3)	2.8 (1.7)	5.8 (3.5)	4.2 (2.5)	6.1 (3.6)	4.4 (2.6)
29	0.0 (0.1)	0.0 (0.0)	6.0 (1.9)	4.3 (1.4)	7.5 (4.4)	5.4 (3.1)	8.8 (3.1)	6.3 (2.2)
30	0.1 (0.1)	0.0 (0.0)	6.9 (1.6)	5.0 (1.1)	10.5 (5.0)	7.8 (3.5)	10.3 (3.2)	7.5 (2.3)
Avg	0.1	0.1	4.8	3.5	3.9	2.8	5.6	4
n	30	30	29	29	29	29	29	29
SD	0.1	0.1	0.9	0.7	1.6	1.2	1.2	0.9
Min	0.0	0.0	3.2	2.3	2.5	1.8	4.5	3.2
Max	0.4	0.3	7.0	5.0	10.5	7.8	10.3	7.5

ED_004549_00015929-00233

Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for October, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-}	ppm	mg·dsm^{-}	ppm	mg·dsm^{-}
1	0.0 (0.1)	0.0 (0.1)	7.6 (2.3)	5.5 (1.7)	10.0 (4.8)	7.1 (3.5)	9.2 (4.5)	6.6 (3.2)
2	0.0 (0.1)	0.0 (0.0)	7.0 (2.8)	5.0 (2.0)	8.6 (5.1)	6.2 (3.6)	6.5 (2.7)	4.6 (1.9)
3	0.0 (0.1)	0.0 (0.0)	4.3 (2.1)	3.1 (1.5)	6.3 (2.7)	4.5 (1.9)	5.0 (2.3)	3.6 (1.6)
4	0.0 (0.1)	0.0 (0.0)	7.1 (2.1)	5.1 (1.5)	9.6 (4.7)	6.9 (3.4)	7.6 (2.1)	5.4 (1.5)
5	0.1 (0.1)	0.1 (0.1)	8.3 (0.9)	6.0 (0.7)	12.2 (1.5)	8.8 (1.1)	10.4 (1.3)	7.5 (0.9)
6	0.4 (0.1)	0.3 (0.1)	7.1 (0.9)	5.1 (0.6)	7.1 (3.4)	5.1 (2.5)	8.8 (1.5)	6.4 (1.1)
7	0.1 (0.0)	0.0 (0.0)			4.2 (1.4)	3.0 (1.0)	8.1 (3.2)	5.8 (2.3)
8	0.1 (0.1)	0.1 (0.1)			6.4 (2.5)	4.6 (1.8)	10.4 (3.2)	7.4 (2.3)
9	0.1 (0.1)	0.1 (0.1)			5.1 (2.9)	3.7 (2.1)	5.9 (5.2)	4.3 (3.7)
10	0.1 (0.1)	0.0 (0.1)			3.5 (0.7)	2.5 (0.5)	3.7 (1.3)	2.7 (0.9)
11	0.3 (0.0)	0.2 (0.0)						
12	0.2 (0.1)	0.1 (0.0)	2.6 (0.2)	1.8 (0.1)	10.5 (0.9)	7.6 (0.7)	8.2 (0.9)	5.9 (0.6)
13	0.0 (0.1)	0.0 (0.1)	1.8 (0.5)	1.3 (0.3)	7.8 (3.6)	5.6 (2.6)	6.9 (2.2)	4.9 (1.5)
14	0.2 (0.1)	0.2 (0.1)						
15	-0.1 (0.1)	-0.1 (0.1)	1.7 (0.3)	1.2 (0.2)				
16	-0.1 (0.1)	-0.1 (0.1)	1.6 (0.2)	1.1 (0.1)				
17	-0.1 (0.1)	-0.1 (0.1)	1.4 (0.4)	1.0 (0.3)				
18	-0.2 (0.1)	-0.1 (0.0)	1.4 (0.2)	1.0 (0.1)				
19	-0.2 (0.0)	-0.1 (0.0)	1.3 (0.5)	0.9 (0.4)				
20	-0.1 (0.1)	-0.1 (0.0)	5.5 (2.8)	3.9 (2.0)				
21	0.2 (0.2)	0.1 (0.1)	8.1 (3.5)	5.9 (2.5)				
22	0.0 (0.0)	0.0 (0.0)	7.8 (4.6)	5.6 (3.3)	6.0 (2.6)	4.3 (1.8)		
23	0.1 (0.2)	0.1 (0.1)	5.0 (3.1)	3.6 (2.3)	5.0 (2.8)	3.6 (2.0)	1.8 (0.5)	1.3 (0.4)
24	0.0 (0.1)	0.0 (0.0)	2.9 (0.9)	2.1 (0.6)	3.8 (1.5)	2.7 (1.1)	2.0 (0.5)	1.4 (0.4)
25	0.1 (0.1)	0.1 (0.1)	8.1 (2.4)	5.8 (1.7)	7.8 (1.8)	5.6 (1.3)	3.1 (0.7)	2.2 (0.5)
26	0.1 (0.1)	0.1 (0.0)	11.1 (1.0)	8.0 (0.7)	10.0 (0.7)	7.2 (0.5)	5.4 (2.6)	3.9 (1.9)
27	0.1 (0.0)	0.0 (0.0)						
28	0.0 (0.0)	0.0 (0.0)	5.8 (2.5)	4.1 (1.8)	4.7 (2.0)	3.4 (1.5)	5.4 (1.8)	3.9 (1.3)
29					7.5 (2.2)	5.4 (1.6)		
30					7.7 (1.0)	5.5 (0.7)		
31					5.8 (1.6)	4.2 (1.2)		
Avg	0	0	5.1	3.7	7.1	5.1	6.4	4.6
n	28	28	21	21	21	21	17	17
SD	0.1	0.1	2.9	2.1	2.3	1.7	2.6	1.9
Min	-0.2	-0.1	1.3	0.9	3.5	2.5	1.8	1.3
Max	0.4	0.3	11.1	8.0	12.2	8.8	10.4	7.5

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Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for November, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1					7.5 (2.3)	5.4 (1.7)		
2					11.1 (1.0)	7.9 (0.7)		
3					11.7 (3.5)	8.4 (2.5)		
4	0.1 (0.0)	0.1 (0.0)	24.9 (9.8)	17.8 (7.0)	11.3 (4.3)	8.1 (3.1)	15.4 (4.7)	11.1 (3.4)
5	0.0 (0.1)	0.0 (0.0)	25.9 (11.0)	18.6 (7.9)	10.2 (2.6)	7.3 (1.9)	16.1 (5.5)	11.5 (4.0)
6	0.1 (0.0)	0.1 (0.0)	24.8 (11.0)	17.8 (7.9)	11.2 (2.8)	8.0 (2.0)	16.1 (7.0)	11.6 (5.0)
7	0.1 (0.1)	0.0 (0.1)	20.2 (6.5)	14.5 (4.6)	10.8 (2.7)	7.7 (1.9)	12.0 (3.3)	8.6 (2.4)
8	0.1 (0.1)	0.1 (0.1)	19.9 (9.0)	14.2 (6.4)	9.8 (3.8)	7.0 (2.7)	11.2 (4.0)	8.0 (2.8)
9	0.1 (0.0)	0.1 (0.0)	16.7 (9.6)	12.0 (6.9)	9.5 (3.5)	6.8 (2.5)	11.2 (3.5)	8.1 (2.5)
10	0.2 (0.1)	0.2 (0.0)	11.0 (1.6)	7.9 (1.2)	8.5 (1.4)	6.1 (1.0)	9.4 (0.7)	6.7 (0.5)
11	0.2 (0.1)	0.1 (0.1)	13.0 (1.2)	9.3 (0.9)	11.5 (1.1)	8.2 (0.8)	11.3 (1.5)	8.1 (1.1)
12	0.0 (0.1)	0.0 (0.0)	13.7 (2.1)	9.9 (1.5)	13.2 (1.5)	9.5 (1.1)	13.4 (1.0)	9.6 (0.7)
13	0.1 (0.0)	0.1 (0.0)	15.7 (1.0)	11.2 (0.7)	14.3 (0.6)	10.2 (0.4)	13.2 (0.5)	9.5 (0.3)
14	0.1 (0.0)	0.1 (0.0)	15.4 (1.6)	11.0 (1.1)	14.9 (1.9)	10.7 (1.4)	13.2 (1.8)	9.5 (1.3)
15	0.2 (0.1)	0.1 (0.1)	11.8 (3.0)	8.5 (2.2)	15.5 (4.5)	11.1 (3.2)	14.3 (3.2)	10.3 (2.3)
16	0.1 (0.1)	0.1 (0.1)	10.5 (4.9)	7.5 (3.5)	17.1 (7.1)	12.2 (5.1)	14.5 (4.7)	10.4 (3.4)
17	0.2 (0.1)	0.1 (0.0)	8.8 (2.0)	6.3 (1.4)	15.0 (7.4)	10.7 (5.3)	15.7 (3.5)	11.3 (2.5)
18	0.3 (0.1)	0.2 (0.1)	7.4 (1.1)	5.3 (0.8)	8.8 (2.1)	6.3 (1.5)	13.0 (1.2)	9.4 (0.9)
19	0.2 (0.1)	0.1 (0.1)	6.0 (1.0)	4.3 (0.7)	6.7 (1.6)	4.8 (1.2)	11.0 (2.4)	7.9 (1.7)
20	0.3 (0.1)	0.2 (0.1)	8.3 (1.8)	6.0 (1.3)	9.5 (2.1)	6.8 (1.5)	16.4 (3.3)	11.8 (2.4)
21	0.3 (0.1)	0.2 (0.1)	13.6 (2.2)	9.8 (1.6)	13.5 (2.1)	9.7 (1.5)	22.8 (4.8)	16.4 (3.4)
22	0.4 (0.1)	0.3 (0.0)	12.5 (4.6)	9.0 (3.3)	14.8 (3.4)	10.6 (2.4)	25.4 (6.4)	18.2 (4.6)
23	0.3 (0.1)	0.2 (0.0)	9.2 (0.6)	6.6 (0.5)	10.7 (2.0)	7.6 (1.4)	22.3 (1.8)	16.0 (1.3)
24	0.1 (0.1)	0.1 (0.0)	9.4 (0.4)	6.8 (0.3)	10.2 (1.6)	7.3 (1.1)	17.0 (5.5)	12.2 (4.0)
25	0.1 (0.0)	0.0 (0.0)	10.4 (0.7)	7.4 (0.5)	8.6 (2.0)	6.2 (1.4)	11.9 (1.0)	8.5 (0.7)
26	0.0 (0.1)	0.0 (0.1)	12.8 (1.7)	9.2 (1.2)	9.9 (1.2)	7.1 (0.8)	14.1 (1.7)	10.1 (1.2)
27	0.0 (0.1)	0.0 (0.1)	12.4 (3.1)	8.8 (2.2)	10.8 (2.0)	7.7 (1.4)	16.5 (3.5)	11.8 (2.5)
28	0.1 (0.1)	0.0 (0.1)	11.8 (2.0)	8.5 (1.4)	12.7 (2.4)	9.1 (1.7)	19.8 (4.7)	14.2 (3.4)
29	0.0 (0.1)	0.0 (0.0)	10.3 (3.2)	7.3 (2.3)	10.3 (3.7)	7.4 (2.7)	16.2 (5.8)	11.6 (4.1)
30	0.1 (0.1)	0.0 (0.0)	9.7 (2.1)	7.0 (1.5)	8.9 (1.9)	6.4 (1.3)	14.6 (3.0)	
Avg	0.1	0.1	13.6	9.7	11.3	8.1	15.1	10.9
n	27	27	27	27	30	30	27	26
SD	0.1	0.1	5.3	3.8	2.5	1.8	3.8	2.7
Min	0.0	0.0	6.0	4.3	6.7	4.8	9.4	6.7
Max	0.4	0.3	25.9	18.6	17.1	12.2	25.4	18.2

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Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for December, 2009.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1	0.1 (0.1)	0.1 (0.0)	13.8 (2.4)	9.9 (1.7)	14.2 (2.4)	10.1 (1.7)	23.0 (3.9)	
2	0.2 (0.1)	0.1 (0.1)	10.5 (2.3)	7.6 (1.6)	11.2 (4.3)	8.0 (3.1)	17.6 (5.1)	
3	0.0 (0.0)	0.0 (0.0)	9.6 (2.2)	6.9 (1.6)	8.7 (2.0)	6.2 (1.4)	11.4 (2.4)	8.2 (1.8)
4	0.1 (0.0)	0.1 (0.0)	14.0 (2.0)	10.0 (1.4)	11.1 (1.4)	7.9 (1.0)	12.7 (1.3)	9.1 (0.9)
5	0.0 (0.0)	0.0 (0.0)	15.5 (1.4)	11.1 (1.0)	12.5 (1.0)	9.0 (0.7)	16.4 (1.9)	11.8 (1.4)
6	0.1 (0.1)	0.1 (0.0)	20.2 (1.6)	14.4 (1.1)	14.6 (2.1)	10.4 (1.5)	21.4 (2.3)	15.3 (1.6)
7	0.1 (0.1)	0.1 (0.0)	19.4 (2.7)	13.9 (1.9)	15.3 (2.1)	10.9 (1.5)	20.9 (2.7)	15.0 (2.0)
8	0.2 (0.1)	0.1 (0.0)	16.8 (2.0)	12.0 (1.4)	16.5 (1.5)	11.8 (1.1)	14.8 (4.5)	10.6 (3.3)
9	0.1 (0.1)	0.0 (0.1)	8.8 (2.4)	6.3 (1.7)	6.0 (3.9)	4.3 (2.8)	7.0 (2.3)	5.0 (1.7)
10	0.0 (0.1)	0.0 (0.1)	15.7 (4.8)	11.2 (3.5)	8.3 (3.4)	5.9 (2.5)	12.7 (4.7)	9.1 (3.4)
11	0.1 (0.0)	0.1 (0.0)	17.6 (8.4)	12.6 (6.0)	13.7 (0.7)	9.8 (0.5)	19.9 (3.2)	14.2 (2.3)
12	0.1 (0.0)	0.1 (0.0)						
13	0.0 (0.1)	0.0 (0.1)	9.1 (1.9)	6.5 (1.3)	10.5 (1.8)	7.6 (1.3)	13.3 (2.5)	9.5 (1.8)
14	0.0 (0.1)	0.0 (0.1)	10.4 (1.0)	7.5 (0.7)	12.3 (1.0)	8.8 (0.7)	15.0 (1.2)	10.7 (0.9)
15	0.0 (0.0)	0.0 (0.0)	8.8 (0.8)	6.3 (0.5)	9.0 (2.4)	6.4 (1.8)	10.8 (2.9)	7.7 (2.0)
16	0.0 (0.0)	0.0 (0.0)	13.0 (2.0)	9.3 (1.4)	10.1 (1.4)	7.2 (1.0)	13.6 (2.4)	9.7 (1.7)
17	0.2 (0.1)		16.9 (2.4)	12.1 (1.7)	12.0 (1.5)	8.6 (1.1)	17.2 (2.4)	12.3 (1.7)
18	0.2 (0.1)	0.1 (0.1)	16.2 (4.6)	11.6 (3.3)	12.0 (1.0)	8.6 (0.7)	14.2 (3.3)	10.1 (2.4)
19	0.0 (0.0)	0.0 (0.0)	12.5 (1.1)	9.0 (0.8)	11.3 (0.6)	8.1 (0.4)	15.2 (2.3)	10.9 (1.7)
20	0.0 (0.1)	0.0 (0.0)	13.0 (1.4)	9.3 (1.0)	11.7 (0.7)	8.4 (0.5)	17.1 (2.1)	12.2 (1.5)
21	0.0 (0.0)		12.3 (1.6)	8.8 (1.1)	12.4 (1.0)	8.8 (0.7)	18.3 (1.8)	13.1 (1.3)
22	0.1 (0.0)		12.5 (1.3)	8.9 (0.9)	14.4 (2.1)	10.3 (1.5)	18.9 (2.1)	13.5 (1.5)
23	0.1 (0.1)		12.1 (1.7)	8.7 (1.2)	13.9 (2.7)	9.9 (1.9)	17.9 (3.3)	12.8 (2.4)
24	0.3 (0.1)	0.2 (0.0)			11.8 (2.2)	8.4 (1.6)		
25	0.1 (0.0)	0.1 (0.0)	11.7 (1.7)	8.4 (1.2)	8.6 (2.0)	6.2 (1.4)	13.4 (2.2)	9.6 (1.6)
26	0.1 (0.1)	0.1 (0.1)	13.5 (1.5)	9.7 (1.0)	10.6 (1.7)	7.6 (1.2)	18.1 (2.3)	13.0 (1.6)
27	0.0 (0.1)	0.0 (0.0)	14.9 (1.4)	10.7 (1.0)	12.0 (1.5)	8.6 (1.1)	18.3 (3.4)	13.1 (2.4)
28	0.0 (0.0)	0.0 (0.0)	15.8 (1.7)	11.3 (1.2)	13.1 (1.1)	9.4 (0.8)	19.1 (2.6)	13.6 (1.8)
29							19.0 (4.6)	13.6 (3.3)
30							15.1 (2.6)	10.8 (1.9)
31							13.1 (2.0)	9.4 (1.4)
Avg	0.1	0.1	13.6	9.8	11.8	8.4	16	11.3
n	28	24	26	26	27	27	29	27
SD	0.1	0.1	3.1	2.2	2.3	1.7	3.5	2.4
Min	0.0	0.0	8.8	6.3	6.0	4.3	7.0	5.0
Max	0.3	0.2	20.2	14.4	16.5	11.8	23.0	15.3

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Table F9. Daily mean (SD) of NH3 concentration at Site NC3B for January, 2010.

Day	Ambient		Barn 1		Barn 2		Barn 3	
	ppm	mg·dsm^{-}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}	ppm	mg·dsm^{-3}
1							12.1 (1.7)	8.7 (1.2)
2							13.8 (1.6)	9.9 (1.1)
3								
4			14.0 (1.3)	10.0 (0.9)				
5								
6					8.0 (1.5)	5.7 (1.1)		
7					10.0 (2.4)	7.2 (1.7)		
8					11.5 (1.5)	8.2 (1.1)		
9	0.0 (0.1)		25.0 (2.5)	17.8 (1.8)	12.2 (1.9)	8.7 (1.4)	17.2 (1.4)	12.3 (1.0)
10	0.1 (0.1)		27.4 (1.7)	19.6 (1.2)	12.2 (1.7)	8.7 (1.2)	17.6 (1.4)	12.6 (1.0)
11	0.1 (0.1)		26.1 (2.4)	18.7 (1.7)	12.7 (2.2)	9.1 (1.6)	17.6 (2.6)	12.6 (1.9)
12	0.1 (0.1)	0.1 (0.1)	24.1 (2.4)	17.2 (1.7)	14.6 (1.5)	10.4 (1.1)	13.8 (2.0)	9.9 (1.4)
13	0.1 (0.1)		19.8 (5.1)	14.2 (3.7)	14.3 (1.6)	10.2 (1.2)	14.8 (1.5)	10.6 (1.1)
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
Avg	0.1		22.7	16.2	11.9	8.5	15.2	10.9
n	5	1	6	6	8	8	7	7
SD	0		4.6	3.3	2	1.5	2	1.5
Min	0.0		14.0	10.0	8.0	5.7	12.1	8.7
Max	0.1		27.4	19.6	14.6	10.4	17.6	12.6

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Table F10. Ammonia emissions.

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for December, 2007.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1												
2												
3												
4	8.06 (3.48)	9.92 (4.28)	53.5 (23.1)	12.9 (5.57)								
5	8.27 (3.11)	10.2 (3.82)	54.7 (20.5)	13.2 (4.97)	9.75 (2.67)	12.9 (3.54)	67.0 (18.4)	15.6 (4.27)				
6	7.12 (4.03)	8.78 (4.96)	46.9 (26.5)	11.4 (6.44)	9.47 (3.72)	12.6 (4.95)	64.8 (25.5)	15.2 (5.96)	6.99 (7.65)	9.52 (10.4)	52.0 (56.9)	11.2 (12.2)
7	7.69 (3.40)	9.48 (4.19)	50.4 (22.3)	12.3 (5.44)								
8	8.76 (2.59)	10.8 (3.20)	57.3 (16.9)	14.0 (4.15)	7.94 (2.67)	10.6 (3.55)	53.8 (18.1)	12.7 (4.27)				
9	9.96 (2.31)	12.3 (2.86)	64.9 (15.0)	15.9 (3.69)	7.45 (1.22)	9.95 (1.63)	50.3 (8.25)	11.9 (1.96)				
10	11.0 (2.18)	13.6 (2.71)	71.5 (14.2)	17.6 (3.50)	6.84 (1.46)	9.13 (1.95)	45.9 (9.77)	10.9 (2.33)	13.1 (3.05)	18.0 (4.19)	95.9 (22.3)	21.0 (4.88)
11	10.6 (1.87)	13.2 (2.32)	68.9 (12.1)	17.0 (3.00)	6.97 (1.87)	9.33 (2.50)	46.6 (12.5)	11.2 (3.00)	11.3 (2.52)	15.5 (3.46)	82.1 (18.4)	18.0 (4.03)
12												
13												
14												
15	9.09 (3.78)	11.3 (4.71)	58.1 (24.2)	14.5 (6.05)	8.01 (1.82)	10.8 (2.45)	52.7 (12.0)	12.8 (2.92)	6.56 (6.38)	9.12 (8.87)	47.4 (46.1)	10.5 (10.2)
16	9.49 (3.53)	11.8 (4.39)	60.5 (22.5)	15.2 (5.64)	8.01 (1.85)	10.8 (2.49)	52.5 (12.1)	12.8 (2.96)				
17	8.29 (7.04)	10.3 (8.78)	52.6 (44.7)	13.3 (11.3)	6.97 (2.04)	9.39 (2.75)	45.5 (13.3)	11.2 (3.26)				
18	7.77 (8.22)	9.69 (10.3)	49.1 (52.0)	12.4 (13.1)	6.36 (1.86)	8.58 (2.51)	41.4 (12.1)	10.2 (2.97)				
19	8.03 (7.45)	10.0 (9.31)	50.6 (47.0)	12.8 (11.9)	6.43 (1.74)	8.67 (2.35)	41.6 (11.3)	10.3 (2.79)				
20	8.35 (6.44)	10.4 (8.05)	52.5 (40.5)	13.4 (10.3)	6.92 (2.77)	9.34 (3.74)	44.6 (17.8)	11.1 (4.44)	8.31 (8.35)	11.7 (11.8)	59.5 (59.9)	13.3 (13.4)
21	8.01 (6.45)	11.3 (9.07)	57.2 (46.1)	12.8 (10.3)	7.38 (4.24)	11.4 (6.74)	54.8 (32.3)	11.8 (6.78)	7.16 (7.77)	10.1 (11.0)	51.2 (55.6)	11.5 (12.4)
22	7.28 (5.00)	11.9 (8.13)	60.7 (41.7)	11.7 (8.00)	7.15 (3.49)	12.9 (6.27)	61.8 (30.1)	11.4 (5.58)	8.66 (6.69)	12.2 (9.47)	61.7 (47.7)	13.9 (10.7)
23	11.5 (4.02)	18.8 (6.55)	95.8 (33.5)	18.4 (6.43)	8.84 (1.92)	15.9 (3.46)	76.2 (16.6)	14.1 (3.07)	11.9 (5.70)	16.8 (8.07)	84.3 (40.5)	19.0 (9.12)
24	9.09 (6.81)	14.8 (11.1)	75.4 (56.5)	14.5 (10.9)								
25	8.01 (7.00)	13.1 (11.4)	66.4 (58.0)	12.8 (11.2)					8.44 (7.46)	12.0 (10.6)	59.6 (52.7)	13.5 (11.9)
26	8.04 (7.63)	13.1 (12.5)	66.5 (63.2)	12.9 (12.2)								
27	9.29 (7.53)	15.2 (12.3)	76.8 (62.2)	14.9 (12.0)	9.50 (5.46)	17.2 (9.88)	81.2 (46.6)	15.2 (8.74)	10.3 (8.65)	14.6 (12.3)	72.0 (60.8)	16.4 (13.8)
28	11.4 (4.65)	18.8 (7.62)	94.4 (38.3)	18.3 (7.44)	9.85 (2.22)	17.9 (4.03)	84.0 (19.0)	15.8 (3.55)	11.1 (5.16)	18.2 (7.82)	92.3 (39.4)	17.7 (8.25)
29	15.0 (3.07)	24.6 (5.04)	123 (25.3)	23.9 (4.91)	8.70 (1.25)	15.8 (2.27)	74.1 (10.6)	13.9 (2.00)				
30	12.1 (2.13)	19.9 (3.51)	99.6 (17.5)	19.4 (3.41)	8.79 (1.16)	16.0 (2.12)	74.8 (9.88)	14.1 (1.86)	11.3 (2.58)	21.9 (4.99)	113 (25.7)	18.1 (4.13)
31	9.97 (5.05)	16.4 (8.31)	81.6 (41.4)	15.9 (8.09)	10.1 (2.24)	18.5 (4.10)	86.2 (19.1)	16.2 (3.59)				
Avg	9.29	13.2	67.6	14.9	8.07	12.4	60.0	12.9	9.58	14.1	72.6	15.3
n	25	25	25	25	20	20	20	20	12	12	12	12
SD	1.79	3.81	18.5	2.87	1.19	3.25	14.6	1.91	2.07	3.85	19.9	3.32
Min	7.12	8.78	46.9	11.4	6.36	8.58	41.4	10.2	6.56	9.12	47.4	10.5
Max	15.0	24.6	123	23.9	10.1	18.5	86.2	16.2	13.1	21.9	113	21.0

ED_004549_00015929-00238

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for January, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	9.11 (7.06)	15.0 (11.6)	74.4 (57.7)	14.6 (11.3)					7.98 (6.68)	15.7 (13.1)	80.3 (67.2)	12.8 (10.7)
2	6.79 (7.93)	11.2 (13.1)	55.3 (64.6)	10.9 (12.7)								
3	5.71 (7.52)	9.42 (12.4)	46.4 (61.1)	9.14 (12.0)								
4												
5	7.24 (7.32)	12.0 (12.1)	58.4 (58.9)	11.6 (11.7)	8.93 (7.98)	16.4 (14.7)	75.4 (67.4)	14.3 (12.8)	6.56 (1.56)	13.1 (3.13)	66.4 (15.8)	10.5 (2.50)
6	10.0 (6.27)	16.5 (10.3)	80.3 (50.3)	16.0 (10.0)	10.4 (4.86)	19.3 (8.96)	87.9 (40.9)	16.7 (7.77)	8.62 (1.85)	17.3 (3.70)	87.0 (18.6)	13.8 (2.96)
7	12.1 (6.41)	20.0 (10.6)	96.9 (51.2)	19.4 (10.3)	11.7 (3.67)	21.7 (6.77)	98.6 (30.8)	18.8 (5.87)	9.28 (2.39)	18.6 (4.80)	93.5 (24.1)	14.9 (3.83)
8	13.2 (6.07)	21.8 (10.0)	105 (48.3)	21.1 (9.71)	10.3 (2.43)	19.0 (4.50)	86.0 (20.4)	16.4 (3.89)	10.3 (2.93)	20.7 (5.88)	104 (29)	16.5 (4.69)
9	13.7 (4.22)	22.5 (6.96)	108 (33.3)	21.9 (6.75)	10.6 (2.04)	19.6 (3.78)	88.5 (17.0)	16.9 (3.26)	12.5 (4.20)	25.2 (8.45)	126 (42)	20.1 (6.73)
10	12.6 (3.86)	58.3 (43.4)	350 (287)	20.2 (6.18)	10.7 (2.47)	20.4 (4.70)	92.3 (21.3)	17.1 (3.95)	10.8 (4.85)	21.6 (9.75)	107 (48)	17.2 (7.75)
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Avg	10.1	20.7	108	16.1	10.4	19.4	88.1	16.7	9.44	18.9	94.8	15.1
n	9	9	9	9	6	6	6	6	7	7	7	7
SD	2.83	14.0	88.0	4.53	0.83	1.59	7.01	1.32	1.82	3.72	18.0	2.91
Min	5.71	9.42	46.4	9.14	8.93	16.4	75.4	14.3	6.56	13.1	66.4	10.5
Max	13.7	58.3	350	21.9	11.7	21.7	98.6	18.8	12.50	25.2	126	20.1

ED_004549_00015929-00239

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for March, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11	3.58 (4.39)	4.17 (5.11)	81.2 (99.5)	5.73 (7.02)					2.78 (4.20)	3.50 (5.29)	78.2 (119.0)	4.44 (6.73)
12												
13												
14												
15	4.55 (3.26)	5.31 (3.80)	97.1 (69.6)	7.28 (5.21)								
16												
17	1.69 (3.19)	1.97 (3.73)	35.1 (66.3)	2.70 (5.11)	2.35 (3.10)	2.95 (3.90)	50.8 (67.2)	3.76 (4.97)	1.76 (3.53)	2.25 (4.49)	43.9 (87.7)	2.82 (5.64)
18	3.70 (4.09)	4.32 (4.78)	75.7 (83.8)	5.92 (6.54)	3.53 (3.01)	4.43 (3.79)	75.2 (64.3)	5.65 (4.82)				
19	5.74 (2.10)	6.70 (2.45)	116 (42.7)	9.18 (3.36)	4.57 (1.23)	5.74 (1.54)	96.0 (26.0)	7.30 (1.96)				
20	3.92 (3.55)	4.58 (4.15)	78.2 (70.6)	6.28 (5.68)								
21	4.03 (4.10)	4.70 (4.79)	78.9 (80.5)	6.44 (6.56)					3.45 (3.57)	4.42 (4.57)	80.7 (83.5)	5.52 (5.71)
22	4.63 (3.59)	5.40 (4.19)	89.5 (69.5)	7.40 (5.74)	4.98 (2.12)	6.28 (2.66)	100 (43)	7.97 (3.38)	3.93 (3.10)	5.04 (3.98)	90.7 (71.7)	6.29 (4.96)
23	2.90 (4.23)	3.39 (4.94)	55.3 (80.5)	4.65 (6.77)	3.79 (3.63)	4.77 (4.57)	75.1 (71.9)	6.06 (5.80)	2.46 (3.69)	3.16 (4.74)	56.0 (84.0)	3.94 (5.91)
24	2.51 (4.23)	2.93 (4.94)	47.2 (79.6)	4.01 (6.77)								
25												
26	4.20 (4.45)	4.90 (5.21)	76.5 (81.3)	6.71 (7.13)					4.38 (4.17)	5.64 (5.36)	95.8 (91.2)	7.01 (6.66)
27	4.99 (4.12)	5.84 (4.81)	89.6 (74.1)	7.99 (6.59)	5.82 (2.07)	7.35 (2.61)	109 (39)	9.31 (3.31)	4.73 (3.10)	6.08 (3.99)	102 (67)	7.56 (4.96)
28	6.13 (2.31)	7.16 (2.70)	108 (41)	9.81 (3.70)	5.78 (1.34)	7.31 (1.70)	106 (25)	9.25 (2.15)	4.64 (1.78)	5.98 (2.29)	98.6 (38.0)	7.43 (2.85)
29	3.62 (4.07)	4.24 (4.76)	63.2 (71.0)	5.80 (6.52)	4.87 (3.90)	6.15 (4.93)	87.9 (70.3)	7.78 (6.24)	2.54 (3.09)	3.27 (3.98)	53.3 (64.7)	4.06 (4.94)
30	1.97 (4.10)	2.31 (4.79)	33.8 (70.3)	3.16 (6.56)	4.35 (4.89)	5.50 (6.19)	77.2 (86.9)	6.95 (7.83)	1.89 (3.80)	2.43 (4.90)	39.0 (78.6)	3.02 (6.08)
31	6.41 (4.28)	7.50 (5.01)	108 (72)	10.3 (6.85)	6.31 (3.00)	7.98 (3.80)	110 (53)	10.1 (4.81)	4.74 (4.00)	6.11 (5.15)	96.6 (81.6)	7.58 (6.39)
Avg	4.04	4.72	77.1	6.46	4.63	5.85	88.8	7.41	3.39	4.35	75.9	5.43
n	16	16	16	16	10	10	10	10	11	11	11	11
SD	1.33	1.56	24.2	2.13	1.14	1.45	18.1	1.82	1.10	1.42	22.5	1.76
Min	1.69	1.97	33.8	2.70	2.35	2.95	50.8	3.76	1.76	2.25	39.0	2.82
Max	6.41	7.50	116	10.3	6.31	7.98	110	10.10	4.74	6.11	102	7.58

ED_004549_00015929-00240

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for April, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	7.77 (1.88)	9.09 (2.20)	129 (31)	12.4 (3.01)	6.43 (0.68)	8.14 (0.86)	110 (12)	10.3 (1.09)	6.07 (1.95)	7.83 (2.51)	122 (39)	9.72 (3.12)
2	7.65 (2.94)	8.95 (3.44)	125 (48)	12.2 (4.71)	6.12 (2.98)	7.76 (3.77)	103 (50)	9.80 (4.76)	5.76 (2.97)	7.43 (3.83)	114 (59)	9.22 (4.75)
3	7.34 (5.85)	8.59 (6.85)	118 (94)	11.7 (9.36)	6.14 (5.56)	7.78 (7.05)	102 (92)	9.82 (8.90)	5.28 (4.74)	6.80 (6.11)	103 (92)	8.44 (7.58)
4	8.62 (3.00)	10.1 (3.52)	136 (48)	13.8 (4.81)	7.90 (1.94)	10.0 (2.46)	129 (32)	12.6 (3.10)	7.31 (3.40)	9.43 (4.38)	140 (65)	11.7 (5.44)
5	9.30 (1.45)	10.9 (1.70)	144 (23)	14.9 (2.32)					6.57 (2.07)	8.47 (2.68)	124 (39)	10.5 (3.32)
6	7.51 (4.10)	8.79 (4.80)	114 (62)	12.0 (6.57)	8.37 (2.26)	10.6 (2.87)	131 (35)	13.4 (3.62)	4.82 (3.66)	6.21 (4.72)	89.9 (68.1)	7.70 (5.85)
7	5.29 (5.47)	6.20 (6.41)	79.1 (81.9)	8.47 (8.76)	8.02 (4.67)	10.2 (5.94)	124 (72)	12.8 (7.47)	4.34 (4.54)	5.61 (5.86)	79.7 (83.3)	6.95 (7.26)
8	6.31 (4.56)	7.39 (5.34)	92.5 (67.1)	10.1 (7.30)	7.83 (3.85)	9.96 (4.90)	118 (59)	12.5 (6.16)	5.60 (3.68)	7.23 (4.75)	101 (67)	8.96 (5.89)
9	8.15 (3.35)	9.56 (3.93)	117 (48)	13.0 (5.36)	7.93 (2.69)	10.1 (3.42)	118 (40)	12.7 (4.30)	6.65 (3.21)	8.59 (4.15)	118 (57)	10.6 (5.14)
10	8.70 (2.78)	10.2 (3.26)	123 (40)	13.9 (4.45)	8.15 (1.87)	10.4 (2.38)	118 (28)	13.0 (2.99)	6.72 (3.38)	8.68 (4.37)	118 (59)	10.7 (5.41)
11	7.96 (2.38)	9.34 (2.79)	111 (33)	12.7 (3.81)					6.68 (2.37)	8.63 (3.07)	115 (41)	10.7 (3.80)
12	8.62 (1.02)	10.1 (1.19)	118 (14)	13.8 (1.62)					6.33 (1.98)	8.18 (2.56)	107 (33)	10.1 (3.17)
13	7.84 (2.58)	9.20 (3.03)	105 (35)	12.5 (4.13)	6.80 (2.02)	8.65 (2.57)	93.2 (27.7)	10.9 (3.23)				
14	6.39 (5.22)	7.50 (6.13)	83.8 (68.5)	10.2 (8.36)	8.29 (4.76)	10.6 (6.06)	111 (64)	13.3 (7.61)	6.33 (5.89)	8.19 (7.63)	103 (96)	10.1 (9.43)
15	5.90 (4.91)	6.93 (5.77)	76.0 (63.2)	9.45 (7.86)	8.08 (4.15)	10.3 (5.28)	106 (55)	12.9 (6.64)	7.14 (5.67)	9.24 (7.33)	115 (91)	11.4 (9.07)
16	6.14 (5.21)	7.21 (6.12)	77.6 (66.0)	9.83 (8.34)	7.60 (4.94)	9.68 (6.29)	97.9 (63.8)	12.2 (7.90)	6.10 (4.98)	7.90 (6.45)	96.2 (78.6)	9.76 (7.97)
17	6.73 (4.64)	7.90 (5.45)	83.4 (57.7)	10.8 (7.43)	6.95 (4.51)	8.85 (5.75)	87.8 (57.3)	11.1 (7.22)	6.12 (4.50)	7.92 (5.83)	94.7 (69.9)	9.79 (7.20)
18	6.75 (3.57)	7.92 (4.19)	82.0 (43.6)	10.8 (5.71)	7.86 (2.44)	10.0 (3.10)	97.5 (30.6)	12.6 (3.90)	6.29 (3.36)	8.15 (4.34)	95.6 (51.3)	10.1 (5.37)
19	7.79 (2.54)	9.15 (2.98)	93.0 (30.5)	12.5 (4.06)	7.52 (1.58)	9.60 (2.01)	91.5 (19.5)	12.0 (2.52)	6.83 (2.56)	8.85 (3.32)	102 (39)	10.9 (4.10)
20	8.21 (1.08)	9.65 (1.27)	96.1 (12.7)	13.1 (1.72)	7.74 (1.12)	9.88 (1.43)	92.2 (13.4)	12.4 (1.79)	7.08 (2.15)	9.17 (2.78)	104 (32)	11.3 (3.44)
21	8.54 (2.84)	10.0 (3.33)	98.0 (32.5)	13.7 (4.54)	8.62 (2.13)	11.0 (2.72)	101 (25)	13.8 (3.41)	7.94 (3.29)	10.3 (4.27)	114 (47)	12.7 (5.27)
22	9.71 (2.46)	11.4 (2.89)	109 (28)	15.5 (3.93)	7.95 (1.28)	10.2 (1.63)	91.1 (14.9)	12.7 (2.05)	7.35 (2.55)	9.52 (3.31)	104 (36)	11.8 (4.08)
23	10.2 (2.07)	12.0 (2.44)	113 (23)	16.4 (3.32)	7.77 (0.88)	9.92 (1.12)	87.3 (10.2)	12.4 (1.41)	7.76 (2.02)	10.1 (2.61)	108 (28)	12.4 (3.23)
24	9.09 (1.73)	10.7 (2.04)	98.8 (19.0)	14.5 (2.77)	7.53 (1.70)	9.61 (2.17)	83.0 (19.0)	12.0 (2.72)	7.59 (2.26)	9.84 (2.93)	103 (31)	12.1 (3.62)
25	8.51 (1.77)	10.0 (2.09)	90.8 (19.0)	13.6 (2.83)	7.36 (1.21)	9.40 (1.55)	79.7 (13.3)	11.8 (1.94)	7.19 (2.13)	9.33 (2.76)	95.9 (28.6)	11.5 (3.40)
26	8.13 (1.98)	9.59 (2.33)	85.3 (20.9)	13.0 (3.16)	7.59 (0.91)	9.70 (1.17)	80.6 (9.9)	12.1 (1.46)	7.14 (1.56)	9.26 (2.03)	93.5 (20.6)	11.4 (2.50)
27	9.51 (1.81)	11.2 (2.13)	97.9 (18.6)	15.2 (2.89)	7.35 (0.82)	9.39 (1.05)	76.5 (8.6)	11.8 (1.31)	7.53 (1.58)	9.77 (2.05)	96.8 (20.3)	12.0 (2.53)
28	9.61 (2.35)	11.4 (2.77)	97.3 (24.0)	15.4 (3.75)	7.38 (0.87)	9.43 (1.11)	75.4 (9.0)	11.8 (1.38)	7.08 (1.68)	9.19 (2.18)	89.4 (21.3)	11.3 (2.69)
29	10.0 (2.37)	11.8 (2.80)	99.7 (23.6)	16.0 (3.80)	7.31 (1.24)	9.34 (1.58)	73.4 (12.4)	11.7 (1.98)	6.57 (3.25)	8.53 (4.22)	81.4 (40.1)	10.5 (5.19)
30	9.28 (4.17)	11.0 (4.93)	90.7 (40.8)	14.9 (6.67)	7.65 (2.08)	9.78 (2.66)	75.3 (20.6)	12.2 (3.33)	7.17 (4.05)	9.31 (5.26)	87.2 (49.4)	11.5 (6.48)
Avg	8.05	9.46	103	12.9	7.56	9.64	98.3	12.1	6.60	8.54	104	10.6
n	30	30	30	30	27	27	27	27	29	29	29	29
SD	1.26	1.50	17.8	2.02	0.62	0.80	16.9	0.99	0.84	1.10	13.4	1.35
Min	5.29	6.20	76.0	8.47	6.12	7.76	73.4	9.80	4.34	5.61	79.7	6.95
Max	10.2	12.0	144	16.4	8.62	11.0	131	13.8	7.94	10.3	140	12.7

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Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for May, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	8.43 (4.21)	9.96 (4.97)	80.9 (40.6)	13.5 (6.73)	6.98 (1.85)	8.93 (2.37)	67.5 (18.1)	11.2 (2.96)	6.97 (3.61)	9.06 (4.69)	83.2 (43.2)	11.2 (5.78)
2	8.84 (2.06)	10.4 (2.43)	83.5 (19.6)	14.1 (3.29)	6.83 (0.87)	8.74 (1.11)	65.0 (8.34)	10.9 (1.38)	7.60 (1.87)	9.87 (2.43)	89.1 (22.0)	12.2 (2.99)
3	8.41 (1.75)	9.94 (2.07)	78.1 (16.3)	13.5 (2.80)	7.01 (0.91)	8.96 (1.16)	65.5 (8.61)	11.2 (1.45)	7.99 (2.31)	10.4 (3.00)	92.0 (26.7)	12.8 (3.69)
4	8.77 (2.11)	10.4 (2.49)	80.1 (19.4)	14.0 (3.37)	7.74 (1.40)	9.91 (1.79)	71.2 (12.8)	12.4 (2.23)	8.14 (1.78)	10.6 (2.31)	92.0 (20.0)	13.0 (2.84)
5	10.9 (1.53)	12.9 (1.81)	97.7 (13.7)	17.4 (2.46)	7.56 (1.21)	9.67 (1.55)	68.3 (10.9)	12.1 (1.94)	8.46 (2.40)	11.0 (3.12)	93.8 (26.5)	13.5 (3.84)
6	10.1 (1.84)	12.0 (2.18)	89.7 (16.3)	16.2 (2.94)	6.87 (0.91)	8.80 (1.17)	61.1 (8.13)	11.0 (1.46)	9.09 (1.87)	11.8 (2.42)	99.0 (20.6)	14.5 (2.99)
7	8.64 (2.14)	10.2 (2.53)	75.3 (18.8)	13.8 (3.42)	7.13 (1.04)	9.13 (1.33)	62.4 (9.21)	11.4 (1.67)	8.66 (1.96)	11.2 (2.55)	92.7 (20.9)	13.9 (3.14)
8	9.36 (1.81)	11.1 (2.15)	80.3 (15.8)	15.0 (2.90)	7.18 (1.25)	9.20 (1.60)	61.8 (10.8)	11.5 (2.00)	8.80 (1.29)	11.4 (1.68)	92.6 (13.6)	14.1 (2.06)
9	8.43 (1.34)	9.98 (1.58)	71.2 (11.3)	13.5 (2.14)	6.50 (0.81)	8.32 (1.04)	55.1 (6.92)	10.4 (1.30)	8.18 (1.15)	10.6 (1.49)	84.6 (12.0)	13.1 (1.84)
10	8.48 (1.40)	10.0 (1.65)	70.6 (11.8)	13.6 (2.24)	6.98 (1.05)	8.93 (1.34)	58.2 (8.70)	11.2 (1.67)	7.85 (1.55)	10.2 (2.02)	79.7 (15.8)	12.6 (2.49)
11	9.72 (2.63)	11.5 (3.11)	79.7 (21.6)	15.6 (4.21)	7.68 (1.03)	9.83 (1.32)	63.1 (8.50)	12.3 (1.65)	8.08 (2.47)	10.5 (3.21)	80.6 (24.7)	12.9 (3.96)
12	9.83 (2.43)	11.6 (2.88)	79.5 (19.6)	15.7 (3.90)	7.43 (0.86)	9.51 (1.11)	60.2 (7.02)	11.9 (1.38)	7.94 (1.89)	10.3 (2.46)	78.0 (18.4)	12.7 (3.03)
13	9.38 (4.03)	11.1 (4.77)	74.8 (32.1)	15.0 (6.45)	7.62 (1.66)	9.76 (2.13)	60.9 (13.3)	12.2 (2.66)	9.32 (3.09)	12.1 (4.02)	90.0 (29.9)	14.9 (4.95)
14	9.12 (3.76)	10.8 (4.45)	71.7 (29.7)	14.6 (6.01)	7.25 (1.79)	9.29 (2.30)	57.2 (14.3)	11.6 (2.87)	8.34 (3.33)	10.8 (4.33)	79.2 (31.8)	13.4 (5.33)
15	10.4 (2.27)	12.3 (2.69)	80.7 (17.7)	16.7 (3.64)	7.87 (1.34)	10.1 (1.71)	61.2 (10.4)	12.6 (2.14)	9.66 (0.88)	12.5 (1.14)	90.3 (8.3)	15.5 (1.41)
16	8.58 (1.94)	10.2 (2.30)	65.7 (15.0)	13.7 (3.10)	7.95 (1.02)	10.2 (1.31)	61.0 (7.79)	12.7 (1.63)	8.25 (1.38)	10.7 (1.79)	76.0 (12.9)	13.2 (2.21)
17	9.49 (1.48)	11.2 (1.75)	71.7 (11.3)	15.2 (2.36)	7.57 (0.89)	9.71 (1.14)	57.4 (6.79)	12.1 (1.42)	9.19 (1.89)	11.9 (2.46)	83.3 (17.2)	14.7 (3.03)
18	9.32 (1.98)	11.0 (2.35)	69.6 (14.8)	14.9 (3.17)	8.67 (1.29)	11.1 (1.66)	64.9 (9.71)	13.9 (2.07)	10.1 (1.62)	13.2 (2.11)	90.5 (14.6)	16.2 (2.60)
19	10.2 (3.67)	12.1 (4.35)	75.3 (26.9)	16.4 (5.87)	7.30 (2.37)	9.37 (3.04)	54.0 (17.6)	11.7 (3.79)	8.88 (2.93)	11.5 (3.80)	78.3 (25.9)	14.2 (4.68)
20	12.3 (3.53)	14.6 (4.19)	89.5 (25.9)	19.7 (5.65)	9.89 (1.33)	12.7 (1.71)	72.3 (9.73)	15.8 (2.13)	8.98 (2.17)	11.7 (2.82)	78.0 (18.9)	14.4 (3.48)
21	10.4 (1.56)	12.3 (1.85)	75.0 (11.4)	16.7 (2.49)	8.76 (1.24)	11.2 (1.59)	63.3 (9.04)	14.0 (1.98)	9.96 (1.67)	12.9 (2.17)	85.2 (14.3)	15.9 (2.67)
22	9.59 (2.53)	11.4 (3.00)	68.3 (18.1)	15.4 (4.05)	9.74 (1.76)	12.5 (2.25)	69.7 (12.6)	15.6 (2.81)	10.6 (2.32)	13.7 (3.02)	89.1 (19.6)	16.9 (3.72)
23	8.35 (2.27)	9.89 (2.69)	58.8 (16.1)	13.4 (3.63)	8.44 (1.26)	10.8 (1.62)	59.7 (9.03)	13.5 (2.02)	10.5 (2.11)	13.6 (2.75)	87.2 (17.7)	16.7 (3.38)
24	9.88 (1.39)	11.7 (1.65)	68.8 (9.7)	15.8 (2.22)	8.72 (1.05)	11.2 (1.34)	60.9 (7.25)	13.9 (1.67)	11.9 (1.97)	15.5 (2.57)	98.2 (16.2)	19.1 (3.16)
25	9.70 (2.10)	11.5 (2.49)	66.9 (14.6)	15.5 (3.37)	9.15 (1.32)	11.7 (1.69)	63.3 (9.12)	14.6 (2.10)	10.6 (2.65)	13.8 (3.46)	86.1 (21.6)	17.0 (4.25)
26	8.53 (2.18)	10.1 (2.59)	58.3 (15.0)	13.6 (3.49)	9.24 (1.25)	11.9 (1.61)	63.4 (8.67)	14.8 (2.01)	10.1 (2.88)	13.1 (3.74)	80.5 (23.2)	16.1 (4.60)
27	8.28 (1.85)	9.82 (2.20)	56.1 (12.6)	13.2 (2.96)	9.14 (1.26)	11.7 (1.62)	62.1 (8.61)	14.6 (2.02)	9.42 (1.65)	12.3 (2.14)	74.6 (13.2)	15.1 (2.63)
28	9.70 (2.09)	11.5 (2.48)	65.1 (14.0)	15.5 (3.34)	9.32 (1.56)	12.0 (2.00)	62.7 (10.4)	14.9 (2.50)	11.2 (2.19)	14.5 (2.86)	87.3 (17.1)	17.9 (3.51)
29	9.74 (2.53)	11.6 (3.01)	64.9 (16.8)	15.6 (4.04)	9.12 (1.41)	11.7 (1.81)	60.8 (9.43)	14.6 (2.25)	10.6 (2.09)	13.8 (2.72)	81.7 (16.2)	16.9 (3.34)
30	8.96 (3.53)	10.7 (4.20)	59.2 (23.4)	14.3 (5.65)	8.84 (1.21)	11.4 (1.55)	58.4 (8.03)	14.1 (1.93)	10.2 (2.20)	13.3 (2.88)	78.0 (16.9)	16.3 (3.53)
31	8.63 (3.32)	10.3 (3.95)	56.6 (21.8)	13.8 (5.31)	8.79 (1.21)	11.3 (1.56)	57.6 (7.92)	14.1 (1.94)	9.58 (2.42)	12.5 (3.16)	72.5 (18.4)	15.3 (3.87)
Avg	9.37	11.1	73.0	15.0	8.04	10.3	62.3	12.9	9.20	12.0	85.3	14.7
n	31	31	31	31	31	31	31	31	31	31	31	31
SD	0.89	1.05	9.95	1.42	0.96	1.24	4.29	1.53	1.15	1.50	6.83	1.83
Min	8.28	9.82	56.1	13.2	6.50	8.32	54.0	10.4	6.97	9.06	72.5	11.2
Max	12.3	14.6	97.7	19.7	9.89	12.7	72.3	15.8	11.90	15.5	99.0	19.1

ED_004549_00015929-00242

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for June, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	7.59 (1.52)	9.04 (1.81)	49.4 (9.94)	12.1 (2.44)	5.97 (2.16)	7.68 (2.77)	38.9 (14.1)	9.55 (3.45)	9.36 (2.11)	12.2 (2.75)	70.0 (15.9)	15.0 (3.38)
2	7.50 (2.01)	8.94 (2.40)	48.4 (13.0)	12.0 (3.22)	10.0 (4.08)	12.9 (5.25)	64.8 (26.4)	16.1 (6.53)	9.31 (2.15)	12.2 (2.80)	69.0 (16.0)	14.9 (3.43)
3	8.09 (3.12)	9.65 (3.73)	51.9 (20.1)	12.9 (5.00)	9.22 (1.88)	11.9 (2.41)	59.1 (12.0)	14.7 (3.00)	8.82 (2.02)	11.5 (2.64)	64.8 (14.9)	14.1 (3.23)
4	7.30 (2.79)	8.71 (3.33)	46.5 (17.8)	11.7 (4.46)	8.96 (1.55)	11.5 (2.00)	57.0 (9.88)	14.3 (2.49)	8.04 (2.37)	10.5 (3.09)	58.4 (17.3)	12.9 (3.79)
5	6.69 (1.94)	7.99 (2.32)	42.3 (12.3)	10.7 (3.10)	9.18 (2.55)	11.8 (3.28)	58.0 (16.1)	14.7 (4.07)	7.16 (1.82)	9.37 (2.38)	51.5 (13.2)	11.4 (2.91)
6	6.56 (1.53)	7.84 (1.82)	41.3 (9.65)	10.5 (2.44)	8.79 (1.08)	11.3 (1.39)	55.2 (6.75)	14.1 (1.73)	7.13 (1.55)	9.34 (2.03)	50.9 (11.1)	11.4 (2.48)
7	7.26 (2.39)	8.68 (2.85)	45.3 (14.9)	11.6 (3.82)	7.02 (2.43)	9.05 (3.13)	43.9 (15.2)	11.2 (3.88)	8.17 (2.04)	10.7 (2.67)	57.8 (14.5)	13.1 (3.26)
8	6.84 (1.89)	8.18 (2.26)	42.5 (11.8)	11.0 (3.02)	5.90 (2.39)	7.60 (3.08)	36.6 (14.9)	9.44 (3.82)	6.68 (2.10)	8.77 (2.75)	46.9 (14.8)	10.7 (3.35)
9	7.04 (2.30)	8.42 (2.75)	43.5 (14.3)	11.3 (3.68)	6.75 (2.08)	8.70 (2.68)	41.6 (12.8)	10.8 (3.33)	4.28 (1.65)	5.63 (2.16)	29.8 (11.5)	6.86 (2.64)
10	7.28 (3.07)	8.73 (3.67)	44.8 (18.9)	11.6 (4.90)	6.24 (2.32)	8.05 (2.99)	38.3 (14.2)	9.98 (3.71)				
11												
12												
13	8.71 (3.76)	10.5 (4.53)	52.9 (22.9)	13.9 (6.02)	6.81 (0.95)	8.82 (1.22)	41.2 (5.74)	10.9 (1.51)	7.66 (1.74)	10.1 (2.29)	51.6 (11.8)	12.3 (2.78)
14	8.66 (3.10)	10.4 (3.74)	52.4 (18.8)	13.9 (4.96)	6.69 (1.32)	8.67 (1.70)	40.3 (7.96)	10.7 (2.11)	7.59 (1.74)	9.98 (2.29)	50.8 (11.7)	12.1 (2.79)
15	9.16 (2.85)	11.1 (3.45)	55.2 (17.2)	14.7 (4.57)	5.38 (0.93)	6.99 (1.21)	32.3 (5.61)	8.61 (1.49)	7.96 (1.26)	10.5 (1.66)	52.9 (8.39)	12.7 (2.01)
16	8.64 (2.98)	10.5 (3.61)	51.9 (17.9)	13.8 (4.77)	5.88 (1.34)	7.64 (1.75)	35.2 (8.05)	9.41 (2.15)	6.88 (1.81)	9.06 (2.38)	45.4 (12.0)	11.0 (2.89)
17	9.54 (3.68)	11.6 (4.46)	57.0 (22.0)	15.3 (5.89)	6.76 (1.67)	8.79 (2.18)	40.3 (9.98)	10.8 (2.68)	7.13 (1.31)	9.39 (1.73)	46.8 (8.65)	11.4 (2.10)
18	9.22 (3.41)	11.2 (4.13)	54.9 (20.3)	14.8 (5.45)	6.14 (1.56)	7.99 (2.03)	36.4 (9.24)	9.83 (2.49)	7.09 (1.65)	9.36 (2.18)	46.3 (10.8)	11.3 (2.65)
19	8.20 (3.01)	9.95 (3.65)	48.6 (17.8)	13.1 (4.81)	6.41 (1.60)	8.34 (2.09)	37.8 (9.49)	10.3 (2.57)	7.45 (1.93)	9.84 (2.55)	48.3 (12.6)	11.9 (3.10)
20	9.30 (3.68)	11.3 (4.46)	54.9 (21.7)	14.9 (5.88)	7.25 (2.42)	9.43 (3.14)	42.6 (14.2)	11.6 (3.86)	7.92 (2.14)	10.5 (2.83)	51.1 (13.8)	12.7 (3.43)
21	9.30 (2.90)	11.3 (3.53)	54.7 (17.1)	14.9 (4.64)	7.03 (1.40)	9.15 (1.82)	41.1 (8.20)	11.2 (2.24)	8.34 (1.51)	11.0 (2.00)	53.5 (9.72)	13.3 (2.42)
22												
23	8.29 (2.41)	10.1 (2.94)	48.4 (14.1)	13.3 (3.86)	7.19 (2.82)	9.36 (3.67)	41.6 (16.3)	11.5 (4.51)	7.99 (2.03)	10.6 (2.70)	50.7 (12.9)	12.8 (3.25)
24	7.20 (1.84)	9.73 (1.98)	46.9 (9.50)	11.5 (2.94)	6.56 (1.93)	9.56 (2.31)	42.4 (10.3)	10.5 (3.08)	7.59 (2.15)	11.3 (2.73)	53.8 (13.0)	12.1 (3.45)
25	6.73 (3.30)	10.6 (5.19)	51.3 (25.2)	10.8 (5.28)	5.85 (1.95)	10.0 (3.35)	44.3 (14.8)	9.36 (3.12)	6.52 (2.13)	11.5 (3.74)	54.3 (17.7)	10.4 (3.40)
26	6.96 (1.89)	10.9 (2.98)	52.9 (14.4)	11.1 (3.03)	5.29 (1.52)	9.09 (2.61)	40.0 (11.5)	8.46 (2.43)	8.81 (2.46)	15.5 (4.32)	73.0 (20.4)	14.1 (3.93)
27	6.06 (1.07)	9.54 (1.68)	45.9 (8.11)	9.70 (1.71)	4.61 (1.25)	7.93 (2.15)	34.7 (9.43)	7.37 (2.00)	7.49 (1.02)	13.2 (1.80)	61.8 (8.42)	12.0 (1.63)
28	6.06 (1.22)	9.54 (1.91)	45.7 (9.20)	9.70 (1.95)	4.62 (1.22)	7.95 (2.11)	34.7 (9.20)	7.39 (1.96)	7.53 (1.08)	13.3 (1.91)	61.7 (8.86)	12.0 (1.73)
29	6.88 (1.38)	10.8 (2.17)	51.7 (10.4)	11.0 (2.20)	5.28 (1.12)	9.10 (1.93)	39.5 (8.38)	8.45 (1.79)	7.10 (1.15)	12.5 (2.03)	58.0 (9.41)	11.4 (1.84)
30	6.40 (1.25)	10.1 (1.97)	47.9 (9.42)	10.2 (2.01)	4.90 (1.10)	8.46 (1.91)	36.6 (8.26)	7.84 (1.77)	7.72 (2.33)	13.6 (4.12)	62.8 (19.0)	12.4 (3.73)
Avg	7.68	9.82	49.2	12.3	6.69	9.18	42.8	10.7	7.60	10.8	54.7	12.2
n	27	27	27	27	27	27	27	27	26	26	26	26
SD	1.05	1.09	4.37	1.69	1.42	1.48	8.30	2.28	0.98	1.91	8.98	1.57
Min	6.06	7.84	41.3	9.70	4.61	6.99	32.3	7.37	4.28	5.63	29.8	6.86
Max	9.54	11.6	57.0	15.3	10.0	12.9	64.8	16.1	9.36	15.5	73.0	15.0

ED_004549_00015929-00243

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for July, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	6.48 (3.46)	11.0 (5.78)	52.5 (27.7)	10.4 (5.54)	4.46 (1.43)	8.35 (2.70)	36.1 (11.7)	7.14 (2.29)	6.85 (1.62)	12.1 (2.86)	55.4 (13.1)	11.0 (2.59)
2	7.72 (4.50)	14.3 (8.34)	68.9 (40.2)	12.3 (7.20)	4.71 (1.65)	9.67 (3.39)	41.9 (14.7)	7.53 (2.64)	8.08 (2.45)	14.3 (4.33)	65.1 (19.8)	12.9 (3.92)
3	7.59 (3.17)	14.1 (5.87)	67.5 (28.2)	12.1 (5.07)	5.42 (1.09)	11.1 (2.23)	48.0 (9.7)	8.67 (1.74)	7.55 (2.14)	13.3 (3.79)	60.6 (17.2)	12.1 (3.43)
4	6.77 (1.51)	12.5 (2.79)	60.1 (13.4)	10.8 (2.41)	6.29 (1.18)	12.9 (2.42)	55.5 (10.4)	10.1 (1.89)	6.89 (1.45)	12.2 (2.57)	55.0 (11.6)	11.0 (2.33)
5												
6												
7												
8												
9	6.90 (1.45)	12.9 (2.70)	60.6 (12.8)	11.0 (2.32)	4.79 (0.91)	9.85 (1.87)	41.6 (7.92)	7.67 (1.46)	8.23 (6.24)	14.9 (10.90)	66.1 (48.5)	13.2 (9.99)
10	6.43 (1.08)	12.0 (2.01)	56.3 (9.47)	10.3 (1.73)	5.00 (1.06)	10.3 (2.18)	43.3 (9.19)	8.00 (1.70)	6.17 (1.68)	11.6 (3.17)	51.3 (14.0)	9.87 (2.69)
11												
12	5.93 (1.41)	11.1 (2.63)	51.7 (12.3)	9.48 (2.25)	4.74 (0.94)	9.77 (1.93)	40.9 (8.08)	7.58 (1.50)				
13	6.54 (1.49)	12.2 (2.78)	56.9 (12.9)	10.5 (2.38)	4.97 (1.05)	10.3 (2.16)	42.7 (9.02)	7.95 (1.68)				
14	7.41 (1.52)	13.9 (2.84)	64.3 (13.2)	11.9 (2.43)	5.24 (1.10)	10.8 (2.27)	44.9 (9.38)	8.39 (1.75)				
15	6.72 (1.35)	12.6 (2.53)	58.0 (11.7)	10.7 (2.16)	5.38 (1.30)	11.1 (2.68)	45.9 (11.1)	8.60 (2.08)				
16	6.35 (1.81)	11.9 (3.39)	54.6 (15.6)	10.2 (2.89)	4.79 (0.82)	9.91 (1.71)	40.7 (7.00)	7.66 (1.32)				
17	6.24 (2.15)	11.7 (4.03)	53.5 (18.5)	9.98 (3.45)	4.93 (1.08)	12.5 (2.38)	51.3 (9.72)	7.89 (1.72)	6.65 (1.64)	12.5 (3.09)	54.4 (13.4)	10.6 (2.62)
18	5.89 (1.92)	11.0 (3.59)	50.3 (16.4)	9.42 (3.07)	4.81 (1.11)	16.1 (3.72)	65.9 (15.2)	7.70 (1.77)	6.46 (1.52)	12.2 (2.88)	52.9 (12.5)	10.3 (2.44)
19	5.78 (1.14)	10.8 (2.13)	49.1 (9.70)	9.25 (1.82)	4.84 (1.04)	16.2 (3.50)	66.0 (14.2)	7.74 (1.67)	6.45 (1.56)	12.2 (2.96)	52.7 (12.8)	10.3 (2.50)
20	6.23 (1.12)	11.7 (2.10)	52.6 (9.49)	9.96 (1.79)	5.89 (1.32)	19.8 (4.42)	80.0 (17.9)	9.42 (2.11)	6.59 (1.33)	12.5 (2.52)	53.8 (10.8)	10.5 (2.13)
21	6.25 (1.35)	11.7 (2.53)	52.5 (11.4)	10.0 (2.16)	5.82 (1.14)	19.5 (3.82)	78.6 (15.4)	9.31 (1.82)	6.02 (1.39)	11.4 (2.63)	49.1 (11.3)	9.64 (2.22)
22	6.26 (1.00)	27.0 (18.4)	139 (103.00)	10.0 (1.59)	5.28 (1.04)	22.6 (4.66)	91.7 (19.1)	8.45 (1.67)	5.97 (0.90)	11.4 (1.71)	48.6 (7.34)	9.55 (1.44)
23					3.97 (1.23)	23.2 (7.17)	94.2 (29.1)	6.34 (1.96)	5.89 (1.06)	11.2 (2.03)	47.9 (8.64)	9.43 (1.70)
24					5.05 (0.74)	29.5 (4.32)	120 (17.5)	8.08 (1.18)	6.52 (1.47)	12.4 (2.81)	52.8 (11.9)	10.4 (2.36)
25												
26												
27												
28												
29												
30												
31												
Avg	6.56	13.1	61.7	10.5	5.07	14.4	59.4	8.11	6.74	12.5	54.7	10.8
n	17	17	17	17	19	19	19	19	14	14	14	14
SD	0.56	3.63	20.1	0.89	0.52	5.76	22.6	0.83	0.71	1.03	5.44	1.14
Min	5.78	10.8	49.1	9.25	3.97	8.35	36.1	6.34	5.89	11.2	47.9	9.43
Max	7.72	27.0	139	12.3	6.29	29.5	120	10.1	8.23	14.9	66.1	13.2

ED_004549_00015929-00244

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for August, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1												
2												
3												
4												
5												
6												
7												
8												
9	5.38 (2.49)	6.45 (2.99)	131 (60)	8.61 (3.99)	5.05 (1.79)	6.86 (2.43)	131 (46)	8.09 (2.86)				
10					3.31 (0.36)	4.49 (0.49)	84.1 (9.3)	5.29 (0.58)	2.19 (0.32)			3.51 (0.52)
11	4.66 (1.29)	5.59 (1.54)	109 (30)	7.46 (2.06)	3.55 (0.56)	4.82 (0.76)	88.4 (13.9)	5.68 (0.90)	3.12 (1.02)			4.99 (1.63)
12	4.43 (2.02)	5.30 (2.42)	101 (47)	7.08 (3.24)	3.72 (1.43)	5.06 (1.94)	91.0 (35.1)	5.96 (2.28)	3.69 (1.10)	5.02 (1.49)	113 (34)	5.90 (1.75)
13	5.89 (1.22)	7.05 (1.46)	132 (27)	9.42 (1.95)	3.93 (0.71)	5.34 (0.97)	94.1 (16.9)	6.28 (1.14)	3.70 (1.46)	5.03 (1.99)	110 (43)	5.92 (2.34)
14	5.78 (1.18)	6.92 (1.41)	127 (26)	9.24 (1.88)	4.38 (0.58)	5.96 (0.79)	103 (14)	7.00 (0.93)	3.87 (1.29)	5.26 (1.75)	112 (38)	6.19 (2.06)
15	4.89 (1.42)	5.86 (1.70)	106 (31)	7.82 (2.28)	3.84 (0.59)	5.22 (0.81)	89.0 (13.9)	6.14 (0.95)	3.82 (1.13)	5.20 (1.53)	108 (32)	6.11 (1.80)
16					3.90 (0.44)	5.31 (0.61)	88.9 (10.0)	6.24 (0.71)	3.71 (0.73)	5.05 (1.00)	103 (20)	5.94 (1.17)
17	6.56 (1.47)	7.86 (1.76)	138 (31)	10.5 (2.35)	4.71 (0.88)	6.42 (1.19)	106 (20)	7.53 (1.40)	3.91 (0.94)	5.33 (1.28)	106 (25)	6.26 (1.51)
18	6.69 (1.71)	8.01 (2.05)	138 (36)	10.7 (2.74)	5.10 (0.98)	6.96 (1.33)	113 (22)	8.17 (1.56)	4.40 (1.26)	5.99 (1.71)	117 (34)	7.03 (2.01)
19	5.54 (1.49)	6.64 (1.79)	113 (31)	8.86 (2.39)	5.20 (0.77)	7.09 (1.05)	113 (17)	8.31 (1.23)	4.78 (1.73)	6.51 (2.36)	125 (46)	7.65 (2.77)
20	5.18 (1.21)	6.22 (1.45)	104 (25)	8.29 (1.94)	5.21 (0.94)	7.11 (1.29)	111 (20)	8.33 (1.51)	4.63 (1.36)	6.31 (1.85)	118 (35)	7.40 (2.17)
21	5.88 (0.92)	7.05 (1.10)	116 (18)	9.40 (1.47)	5.74 (1.16)	7.83 (1.59)	121 (24)	9.18 (1.86)	4.66 (0.68)	6.35 (0.92)	117 (17)	7.46 (1.08)
22	5.27 (0.91)	6.33 (1.10)	102 (18)	8.44 (1.46)	5.33 (0.78)	7.27 (1.06)	110 (16)	8.53 (1.25)	4.81 (1.64)	6.56 (2.24)	119 (41)	7.69 (2.62)
23	5.58 (1.77)	6.70 (2.13)	107 (34)	8.92 (2.84)	5.59 (0.91)	7.64 (1.24)	114 (19)	8.95 (1.45)	5.07 (1.21)	6.92 (1.65)	124 (30)	8.12 (1.94)
24	5.43 (1.29)	6.53 (1.55)	102 (25)	8.69 (2.06)	5.80 (1.02)	7.93 (1.39)	116 (21)	9.29 (1.63)	5.38 (2.12)	7.34 (2.88)	129 (51)	8.61 (3.38)
25												
26												
27	6.25 (0.72)	7.52 (0.86)	112 (13)	10.0 (1.15)	6.41 (1.41)	8.76 (1.92)	122 (27)	10.30 (2.25)	5.93 (0.99)	8.09 (1.35)	136 (23)	9.49 (1.58)
28	6.11 (0.68)	7.36 (0.82)	107 (12)	9.78 (1.09)	6.39 (0.77)	8.74 (1.05)	119 (14)	10.20 (1.23)	5.46 (0.52)	7.45 (0.70)	123 (12)	8.74 (0.83)
29	5.98 (1.04)	7.21 (1.25)	103 (18)	9.58 (1.66)	6.33 (1.01)	8.66 (1.38)	116 (18)	10.10 (1.61)	5.56 (0.47)	7.60 (0.64)	124 (10)	8.90 (0.75)
30	5.35 (0.98)	6.44 (1.18)	91 (17)	8.56 (1.57)	6.22 (0.80)	8.52 (1.09)	111 (14)	9.95 (1.27)	5.60 (0.65)	7.65 (0.89)	122 (15)	8.97 (1.04)
31												
Avg	5.60	6.72	113	8.96	4.98	6.80	107	7.98	4.44	6.33	118	7.10
n	18	18	18	18	20	20	20	20	19	17	17	19
SD	0.59	0.71	13.6	0.95	0.99	1.37	13.0	1.59	0.94	1.02	8.45	1.51
Min	4.43	5.30	90.8	7.08	3.31	4.49	84.1	5.29	2.19	5.02	103	3.51
Max	6.69	8.01	138	10.7	6.41	8.76	131	10.3	5.93	8.09	136	9.49

ED_004549_00015929-00245

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for September, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	5.83 (1.12)	7.03 (1.36)	95.5 (18.40)	9.32 (1.80)	6.49 (1.28)	8.90 (1.75)	112 (22)	10.4 (2.04)	5.91 (1.00)	8.08 (1.36)	125 (21)	9.46 (1.59)
2	5.86 (1.80)	7.08 (2.17)	94.2 (29.20)	9.37 (2.88)	6.68 (1.51)	9.17 (2.07)	113 (26)	10.7 (2.41)	6.40 (2.03)	8.75 (2.77)	133 (43)	10.2 (3.24)
3	6.02 (1.85)	7.29 (2.24)	95.1 (29.60)	9.63 (2.97)	6.46 (1.41)	8.86 (1.94)	107 (24)	10.3 (2.26)	6.28 (1.95)	8.59 (2.67)	128 (40)	10.1 (3.13)
4	5.42 (1.75)	6.58 (2.13)	84.2 (27.50)	8.67 (2.81)	6.07 (1.09)	8.34 (1.49)	98.5 (18.0)	9.71 (1.74)	6.04 (1.92)	8.27 (2.62)	122 (39)	9.67 (3.07)
5												
6												
7												
8												
9												
10												
11												
12	6.18 (1.06)	7.56 (1.30)	82.0 (14.30)	9.88 (1.70)	5.43 (0.51)	7.46 (0.71)	74.1 (7.19)	8.68 (0.82)	6.95 (0.89)	9.53 (1.22)	120 (16)	11.1 (1.43)
13	6.08 (0.92)	7.45 (1.12)	79.1 (12.10)	9.74 (1.47)	5.48 (0.65)	7.54 (0.89)	73.3 (8.83)	8.78 (1.04)	6.70 (1.02)	9.19 (1.40)	114 (18)	10.7 (1.63)
14	5.97 (0.90)	7.31 (1.10)	76.0 (11.60)	9.56 (1.43)	5.30 (0.63)	7.29 (0.87)	69.3 (8.31)	8.48 (1.01)	6.00 (1.21)	8.22 (1.67)	99.8 (20.6)	9.59 (1.94)
15	5.99 (0.90)	7.33 (1.11)	74.5 (11.20)	9.58 (1.45)	5.20 (0.72)	7.16 (0.99)	66.6 (9.35)	8.33 (1.15)	5.22 (0.98)	7.17 (1.34)	85.1 (16.1)	8.36 (1.57)
16	7.64 (1.47)	9.36 (1.80)	93.2 (17.90)	12.2 (2.35)	5.34 (0.62)	7.34 (0.85)	66.8 (7.52)	8.54 (0.99)	6.27 (0.99)	8.61 (1.36)	100 (16)	10.0 (1.59)
17	8.11 (2.32)	9.93 (2.83)	96.9 (27.80)	13.0 (3.70)	5.86 (0.62)	8.06 (0.85)	71.8 (7.54)	9.38 (0.99)	6.27 (2.04)	8.62 (2.81)	98.3 (31.9)	10.0 (3.27)
18	7.37 (2.00)	9.03 (2.45)	86.2 (23.70)	11.8 (3.20)	6.47 (1.84)	8.90 (2.53)	77.7 (22.3)	10.4 (2.95)	7.34 (2.10)	10.1 (2.89)	113 (33)	11.7 (3.36)
19	6.40 (1.49)	7.84 (1.82)	73.3 (17.10)	10.2 (2.38)	6.15 (2.21)	8.46 (3.04)	72.3 (26.0)	9.84 (3.54)	6.75 (2.00)	9.30 (2.75)	102 (30)	10.8 (3.19)
20	6.66 (2.04)	8.16 (2.50)	74.7 (22.90)	10.7 (3.26)	6.67 (2.02)	9.18 (2.78)	76.7 (23.4)	10.7 (3.23)	6.53 (2.07)	9.00 (2.86)	96 (31)	10.4 (3.32)
21												
22	7.06 (1.21)	8.66 (1.48)	76.1 (12.80)	11.3 (1.93)	6.41 (1.66)	8.82 (2.28)	70.8 (18.4)	10.3 (2.65)	7.45 (1.70)	10.3 (2.34)	105 (24)	11.9 (2.72)
23	7.41 (2.69)	9.09 (3.30)	78.3 (28.50)	11.8 (4.31)	5.38 (1.26)	7.40 (1.74)	58.3 (14.0)	8.61 (2.02)	5.40 (2.85)	7.45 (3.94)	74.9 (39.8)	8.64 (4.56)
24	5.02 (4.18)	6.16 (5.14)	52.1 (43.60)	8.03 (6.69)	4.42 (1.06)	6.08 (1.46)	46.9 (11.3)	7.08 (1.69)	3.93 (2.11)	5.43 (2.92)	53.4 (28.7)	6.29 (3.38)
25	2.62 (2.13)	3.22 (2.61)	26.6 (21.60)	4.20 (3.40)	4.90 (0.83)	6.74 (1.14)	51.0 (8.57)	7.83 (1.32)	4.19 (2.27)	5.79 (3.14)	55.6 (30.2)	6.70 (3.64)
26	4.80 (0.60)	5.90 (0.73)	47.9 (5.86)	7.68 (0.95)	4.92 (0.48)	6.76 (0.66)	50.2 (4.88)	7.87 (0.77)	5.63 (0.55)	7.78 (0.76)	73.3 (7.0)	9.00 (0.88)
27	5.48 (0.90)	6.74 (1.10)	53.6 (8.70)	8.76 (1.43)	5.04 (0.80)	6.93 (1.10)	50.5 (8.03)	8.06 (1.28)	5.55 (0.89)	7.68 (1.23)	70.9 (11.3)	8.88 (1.42)
28	5.54 (0.72)	6.82 (0.88)	53.2 (6.81)	8.87 (1.14)	5.09 (0.60)	7.00 (0.82)	50.1 (5.90)	8.14 (0.96)	5.90 (1.06)	8.17 (1.46)	73.9 (13.1)	9.45 (1.69)
29												
30	5.55 (0.56)	6.84 (0.69)	51.4 (5.17)	8.88 (0.90)	5.06 (0.75)	6.96 (1.02)	48.0 (7.06)	8.09 (1.19)	5.43 (0.60)	7.52 (0.84)	65.3 (7.20)	8.69 (0.97)
Avg	6.05	7.40	73.5	9.68	5.66	7.78	71.7	9.05	6.01	8.26	95.6	9.61
n	21	21	21	21	21	21	21	21	21	21	21	21
SD	1.15	1.40	18.7	1.83	0.67	0.92	20.2	1.07	0.87	1.18	23.7	1.38
Min	2.62	3.22	26.6	4.20	4.42	6.08	46.9	7.08	3.93	5.43	53.4	6.29
Max	8.11	9.93	96.9	13.0	6.68	9.18	113	10.7	7.45	10.3	133	11.9

ED_004549_00015929-00246

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for October, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	5.87 (0.84)	7.23 (1.03)	53.4 (7.53)	9.39 (1.34)	5.23 (0.61)	7.20 (0.84)	48.8 (5.65)	8.37 (0.98)	6.15 (1.27)	8.52 (1.76)	72.4 (14.8)	9.83 (2.03)
2	5.91 (1.83)	7.29 (2.26)	52.8 (16.3)	9.45 (2.93)	5.60 (1.39)	7.71 (1.91)	51.4 (12.7)	8.97 (2.22)				
3	5.59 (2.70)	6.90 (3.33)	49.1 (23.7)	8.94 (4.31)	5.66 (1.84)	7.79 (2.54)	51.1 (16.7)	9.06 (2.95)				
4	6.31 (2.30)	7.79 (2.84)	54.5 (19.9)	10.1 (3.67)	5.40 (1.55)	7.43 (2.13)	47.9 (13.7)	8.63 (2.47)	6.86 (2.33)	9.52 (3.23)	76.4 (26.1)	11.0 (3.73)
5	6.53 (1.76)	8.06 (2.17)	55.5 (14.9)	10.4 (2.81)	5.62 (1.46)	7.74 (2.02)	49.1 (12.7)	8.99 (2.34)				
6	6.25 (1.60)	7.73 (1.98)	52.3 (13.5)	10.0 (2.56)	5.54 (1.64)	7.64 (2.26)	47.7 (14.3)	8.87 (2.63)	6.01 (1.74)	8.34 (2.42)	64.4 (18.8)	9.62 (2.79)
7	6.48 (1.40)	8.02 (1.74)	53.4 (11.5)	10.4 (2.24)	5.67 (1.47)	7.82 (2.03)	48.1 (12.4)	9.08 (2.35)	6.17 (2.54)	8.57 (3.53)	64.9 (26.7)	9.87 (4.07)
8	6.81 (2.11)	8.43 (2.62)	55.2 (17.2)	10.9 (3.38)	5.83 (1.56)	8.03 (2.15)	48.8 (13.0)	9.33 (2.50)	6.07 (2.51)	8.43 (3.48)	62.7 (26.0)	9.71 (4.01)
9	7.58 (1.24)	9.38 (1.53)	60.4 (9.96)	12.1 (1.98)	6.50 (1.93)	8.96 (2.66)	53.6 (16.0)	10.4 (3.10)	6.49 (1.15)	9.02 (1.60)	65.9 (11.8)	10.4 (1.84)
10	7.76 (0.74)	9.61 (0.91)	61.0 (5.74)	12.4 (1.18)	6.41 (0.88)	8.83 (1.22)	52.1 (7.24)	10.3 (1.41)	6.51 (0.71)	9.05 (0.98)	65.0 (7.1)	10.4 (1.13)
11	8.02 (0.68)	9.94 (0.84)	62.2 (5.29)	12.8 (1.09)	6.18 (1.74)	8.51 (2.40)	49.6 (13.9)	9.89 (2.79)	6.58 (1.02)	9.16 (1.41)	64.7 (9.9)	10.5 (1.62)
12	8.41 (1.45)	10.4 (1.79)	64.3 (11.0)	13.5 (2.31)	6.83 (2.37)	9.40 (3.27)	54.0 (18.8)	10.9 (3.80)	6.44 (2.07)	8.96 (2.88)	62.2 (20.0)	10.3 (3.31)
13	8.28 (1.75)	10.3 (2.17)	62.4 (13.2)	13.2 (2.80)	6.59 (2.44)	9.08 (3.37)	51.5 (19.1)	10.5 (3.91)	7.10 (2.26)	9.89 (3.15)	67.5 (21.5)	11.4 (3.61)
14	8.36 (1.94)	10.4 (2.41)	62.2 (14.5)	13.4 (3.11)	6.32 (2.05)	8.71 (2.82)	48.8 (15.8)	10.1 (3.28)	7.47 (2.09)	10.40 (2.92)	69.9 (19.7)	12.0 (3.35)
15	8.13 (2.62)	10.1 (3.25)	59.7 (19.3)	13.0 (4.19)	6.56 (1.96)	9.05 (2.71)	50.1 (15.0)	10.5 (3.14)	7.50 (2.16)	10.50 (3.00)	69.2 (20.0)	12.0 (3.45)
16	7.45 (1.65)	9.26 (2.05)	54.0 (12.1)	11.9 (2.64)	6.43 (2.28)	8.87 (3.14)	48.5 (17.2)	10.3 (3.64)	7.33 (2.02)	10.20 (2.82)	66.5 (18.5)	11.7 (3.24)
17	7.25 (1.55)	9.01 (1.93)	51.9 (11.1)	11.6 (2.49)	6.57 (2.32)	9.07 (3.20)	49.1 (17.3)	10.5 (3.71)	7.21 (2.31)	10.10 (3.21)	64.5 (20.5)	11.5 (3.69)
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Avg	7.12	8.81	56.7	11.4	6.06	8.34	50.0	9.69	6.71	9.33	66.9	10.7
n	17	17	17	17	17	17	17	17	14	14	14	14
SD	0.93	1.17	4.51	1.49	0.49	0.68	1.89	0.78	0.52	0.73	3.78	0.82
Min	5.59	6.90	49.1	8.94	5.23	7.20	47.7	8.37	6.01	8.34	62.2	9.62
Max	8.41	10.4	64.3	13.5	6.83	9.40	54.0	10.9	7.50	10.5	76.4	12.0

ED_004549_00015929-00247

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for November, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1												
2												
3												
4												
5	9.80 (1.20)	12.4 (1.52)	59.6 (7.35)	15.7 (1.92)	6.07 (0.93)	8.43 (1.29)	38.6 (5.88)	9.71 (1.49)	6.64 (1.13)	9.29 (1.58)	47.9 (8.15)	10.6 (1.81)
6	9.15 (1.63)	11.6 (2.06)	55.3 (9.84)	14.6 (2.60)	6.72 (2.41)	9.33 (3.35)	42.3 (15.2)	10.7 (3.86)	6.35 (1.42)	8.88 (1.99)	45.4 (10.2)	10.2 (2.28)
7	8.55 (2.34)	10.9 (2.97)	51.4 (14.1)	13.7 (3.75)	6.24 (2.17)	8.67 (3.02)	39.0 (13.6)	9.99 (3.47)	6.31 (1.73)	8.84 (2.43)	44.8 (12.3)	10.1 (2.77)
8	7.58 (4.09)	9.63 (5.19)	45.3 (24.4)	12.1 (6.55)					6.23 (1.67)	8.72 (2.33)	43.9 (11.7)	9.97 (2.67)
9	2.84 (2.04)	3.61 (2.59)	16.9 (12.1)	4.55 (3.27)								
10	6.40 (3.09)	8.13 (3.92)	37.7 (18.2)	10.2 (4.94)	7.00 (2.12)	16.1 (4.87)	74.0 (22.4)	11.2 (3.39)	5.84 (3.45)	8.19 (4.83)	40.6 (24.0)	9.35 (5.52)
11	7.76 (4.06)	9.87 (5.16)	45.5 (23.8)	12.4 (6.50)	6.55 (2.11)	15.1 (4.85)	68.9 (22.1)	10.5 (3.37)	5.49 (3.39)	7.69 (4.75)	37.9 (23.4)	8.78 (5.42)
12	8.16 (2.99)	10.4 (3.80)	47.5 (17.5)	13.0 (4.79)	6.82 (2.31)	15.7 (5.32)	71.2 (24.1)	10.9 (3.70)	5.13 (2.00)	7.19 (2.81)	35.2 (13.8)	8.20 (3.21)
13	8.83 (1.59)	11.2 (2.02)	51.1 (9.17)	14.1 (2.54)	7.31 (2.11)	16.8 (4.85)	75.9 (21.9)	11.7 (3.37)	6.36 (1.14)	8.92 (1.60)	43.3 (7.77)	10.2 (1.83)
14	9.71 (1.34)	12.4 (1.70)	55.9 (7.68)	15.5 (2.14)	7.31 (1.36)	16.9 (3.14)	75.5 (14.0)	11.7 (2.18)	7.39 (1.25)	10.4 (1.76)	50.1 (8.48)	11.8 (2.01)
15	10.3 (2.82)	13.1 (3.59)	59.0 (16.2)	16.5 (4.51)	7.69 (1.67)	17.7 (3.85)	79.0 (17.1)	12.3 (2.67)	7.44 (1.23)	10.4 (1.73)	50.2 (8.33)	11.9 (1.97)
16	9.37 (2.71)	11.9 (3.45)	53.3 (15.4)	15.0 (4.33)	8.05 (3.27)	18.6 (7.54)	82.3 (33.4)	12.9 (5.23)	7.66 (2.51)	10.8 (3.53)	51.4 (16.8)	12.3 (4.02)
17	8.61 (4.27)	11.0 (5.44)	48.7 (24.1)	13.8 (6.83)	8.31 (2.87)	19.2 (6.64)	84.5 (29.2)	13.3 (4.60)	6.57 (3.85)	9.23 (5.41)	43.8 (25.7)	10.5 (6.17)
18	8.96 (4.24)	14.1 (7.88)	62.9 (35.2)	14.3 (6.78)	7.34 (2.01)	17.0 (4.65)	74.4 (20.3)	11.7 (3.21)				
19	6.82 (6.05)	13.6 (12.1)	60.9 (54.1)	10.9 (9.68)	6.38 (3.82)	14.8 (8.85)	64.4 (38.6)	10.2 (6.12)	7.41 (6.01)	10.4 (8.44)	48.9 (39.6)	11.9 (9.62)
20	6.90 (5.15)	13.8 (10.3)	61.3 (45.8)	11.0 (8.24)	6.62 (3.81)	15.3 (8.82)	66.4 (38.2)	10.6 (6.09)	6.96 (5.23)	9.77 (7.35)	45.6 (34.3)	11.1 (8.37)
21	7.30 (4.65)	14.6 (9.32)	64.6 (41.2)	11.7 (7.45)								
22	6.24 (4.74)	12.5 (9.50)	55.0 (41.8)	9.99 (7.59)	5.26 (3.97)	12.2 (9.21)	52.4 (39.5)	8.42 (6.35)	7.94 (6.66)	11.2 (9.36)	51.5 (43.2)	12.7 (10.7)
23	3.92 (2.93)	7.86 (5.87)	34.4 (25.7)	6.28 (4.69)	5.43 (5.19)	12.6 (12.0)	53.8 (51.4)	8.69 (8.30)	7.95 (6.27)	11.2 (8.80)	51.3 (40.5)	12.7 (10.0)
24	5.21 (3.39)	10.5 (6.79)	45.6 (29.6)	8.34 (5.42)	6.75 (6.78)	15.7 (15.7)	66.7 (67.0)	10.8 (10.8)	8.61 (5.55)	12.1 (7.80)	55.2 (35.6)	13.8 (8.88)
25	6.80 (3.76)	13.6 (7.54)	59.2 (32.7)	10.9 (6.01)					9.26 (4.75)	14.8 (8.32)	68.4 (38.7)	14.8 (7.59)
26	6.48 (4.91)	13.0 (9.85)	56.3 (42.6)	10.4 (7.85)	5.58 (7.50)	13.0 (17.4)	54.8 (73.6)	8.93 (12.0)	7.58 (7.09)	14.5 (13.6)	67.7 (63.3)	12.1 (11.3)
27	6.43 (4.64)	12.9 (9.32)	55.7 (40.1)	10.3 (7.42)	6.68 (7.33)	15.5 (17.1)	65.3 (71.7)	10.7 (11.7)	7.49 (6.34)	14.4 (12.2)	66.7 (56.4)	12.0 (10.1)
28	7.59 (4.46)	15.3 (8.98)	65.5 (38.5)	12.1 (7.14)	8.54 (6.56)	19.9 (15.3)	83.2 (63.9)	13.7 (10.5)	8.11 (5.40)	15.6 (10.4)	72.0 (48.0)	13.0 (8.64)
29	7.67 (5.47)	15.4 (11.0)	66.0 (47.0)	12.3 (8.75)	7.23 (7.50)	16.8 (17.4)	70.2 (72.8)	11.6 (12.0)	6.07 (5.38)	11.7 (10.4)	53.8 (47.7)	9.71 (8.61)
30	8.22 (3.59)	16.6 (7.22)	70.6 (30.8)	13.2 (5.74)	9.28 (4.89)	21.6 (11.4)	89.8 (47.3)	14.9 (7.83)				
Avg	7.52	11.9	53.3	12.0	6.96	15.3	66.9	11.1	7.04	10.6	50.7	11.3
n	26	26	26	26	22	22	22	22	22	22	22	22
SD	1.73	2.69	11.2	2.76	0.98	3.39	14.3	1.57	1.01	2.33	9.78	1.62
Min	2.84	3.61	16.9	4.55	5.26	8.43	38.6	8.42	5.13	7.19	35.2	8.20
Max	10.3	16.6	70.6	16.5	9.28	21.6	89.8	14.9	9.26	15.6	72.0	14.8

ED_004549_00015929-00248

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for December, 2008.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	7.82 (3.83)	15.8 (7.73)	66.9 (32.8)	12.5 (6.13)					9.39 (4.29)	18.1 (8.28)	82.9 (37.8)	15.0 (6.86)
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30	2.60 (1.86)	3.09 (2.22)	70.2 (49.9)	4.16 (2.98)					1.65 (0.82)			2.65 (1.31)
31												
Avg	5.21	9.43	68.5	8.33					5.52			8.84
n	2	2	2	2	0	0	0	0	2	1	1	2
SD	2.61	6.33	1.63	4.17					3.87			6.19
Min	2.60	3.09	66.9	4.16					1.65			2.65
Max	7.82	15.8	70.2	12.50					9.39			15.0

ED_004549_00015929-00249

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for January, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1					2.13 (2.04)	2.59 (2.48)	55.1 (52.8)	3.40 (3.27)				
2												
3	2.72 (3.41)	3.24 (4.06)	65.8 (82.4)	4.36 (5.46)								
4	2.74 (3.66)	3.27 (4.36)	64.9 (86.7)	4.39 (5.86)								
5	3.42 (3.38)	4.08 (4.03)	79.4 (78.5)	5.48 (5.41)								
6	4.06 (3.63)	4.84 (4.34)	92.4 (82.8)	6.49 (5.82)								
7	3.83 (3.35)	4.58 (4.01)	86.0 (75.2)	6.13 (5.37)	3.71 (2.44)	4.53 (2.98)	84.7 (55.9)	5.94 (3.91)				
8	3.05 (4.15)	3.64 (4.96)	67.1 (91.4)	4.87 (6.64)								
9	2.81 (4.18)	3.37 (5.01)	60.9 (90.5)	4.50 (6.69)	2.38 (1.87)	2.90 (2.29)	52.3 (41.2)	3.81 (3.00)				
10	3.47 (4.15)	4.16 (4.98)	74.0 (88.6)	5.55 (6.64)								
11	3.68 (4.58)	4.42 (5.50)	77.3 (96.2)	5.89 (7.33)								
12	2.52 (3.94)	3.02 (4.73)	52.0 (81.5)	4.03 (6.31)								
13	2.73 (4.31)	3.28 (5.17)	55.5 (87.5)	4.36 (6.89)	1.76 (2.69)	2.15 (3.28)	36.1 (55.3)	2.81 (4.30)				
14	2.92 (4.89)	3.51 (5.88)	58.5 (97.9)	4.67 (7.82)	2.18 (2.30)	2.66 (2.81)	44.0 (46.5)	3.48 (3.67)				
15	2.32 (3.88)	2.80 (4.67)	45.9 (76.8)	3.72 (6.20)								
16	1.88 (2.94)	2.26 (3.54)	36.5 (57.2)	3.00 (4.71)								
17	2.16 (3.47)	2.61 (4.18)	41.4 (66.3)	3.46 (5.54)	1.88 (2.08)	2.30 (2.55)	36.2 (40.1)	3.00 (3.32)				
18												
19	2.82 (4.32)	3.40 (5.21)	52.2 (79.9)	4.51 (6.91)	2.95 (2.18)	3.63 (2.68)	55.1 (40.6)	4.72 (3.49)				
20	2.37 (3.77)	2.86 (4.55)	43.2 (68.7)	3.79 (6.03)	2.61 (1.97)	3.21 (2.43)	47.9 (36.2)	4.18 (3.16)				
21												
22												
23	2.36 (3.38)	2.85 (4.08)	40.7 (58.4)	3.77 (5.41)								
24	2.86 (4.03)	3.46 (4.87)	48.5 (68.2)	4.58 (6.44)								
25												
26	2.18 (3.82)	2.63 (4.61)	35.5 (62.4)	3.48 (6.11)	2.66 (3.24)	3.27 (3.99)	43.6 (53.3)	4.25 (5.19)				
27	2.48 (3.73)	3.00 (4.51)	39.7 (59.6)	3.98 (5.96)								
28	3.42 (3.04)	4.13 (3.68)	53.6 (47.8)	5.47 (4.87)	4.26 (2.12)	5.25 (2.61)	67.1 (33.4)	6.81 (3.39)				
29	2.79 (3.85)	3.37 (4.66)	42.9 (59.3)	4.46 (6.17)	4.11 (3.83)	5.07 (4.72)	63.5 (59.1)	6.58 (6.12)				
30	2.57 (3.89)	3.11 (4.71)	38.7 (58.7)	4.11 (6.22)								
31	2.21 (3.75)	2.68 (4.54)	32.6 (55.3)	3.54 (6.00)								
Avg	2.81	3.38	55.4	4.50	2.78	3.41	53.3	4.45				
n	25	25	25	25	11	11	11	11	0	0	0	0
SD	0.55	0.65	16.4	0.88	0.84	1.04	13.8	1.34				
Min	1.88	2.26	32.6	3.00	1.76	2.15	36.1	2.81				
Max	4.06	4.84	92.4	6.49	4.26	5.25	84.7	6.81				

ED_004549_00015929-00250

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for February, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	3.08 (3.88)	3.72 (4.70)	44.5 (56.1)	4.92 (6.21)								
2	3.60 (4.14)	4.36 (5.02)	51.0 (58.7)	5.76 (6.63)								
3	2.41 (3.45)	2.92 (4.18)	33.4 (47.9)	3.85 (5.53)	3.43 (2.99)	4.24 (3.70)	47.8 (41.9)	5.49 (4.79)				
4	1.71 (2.79)	2.07 (3.39)	23.2 (38.0)	2.74 (4.47)								
5	1.68 (2.66)	2.04 (3.23)	22.3 (35.4)	2.69 (4.26)	2.43 (2.53)	3.01 (3.14)	32.5 (33.8)	3.89 (4.05)				
6	2.35 (3.22)	2.85 (3.90)	30.6 (41.9)	3.76 (5.15)								
7	3.32 (3.25)	4.03 (3.94)	42.3 (41.4)	5.31 (5.19)	4.04 (3.40)	5.01 (4.22)	51.7 (43.7)	6.46 (5.44)				
8	3.97 (3.58)	4.83 (4.35)	49.5 (44.6)	6.36 (5.72)	4.63 (2.50)	5.75 (3.10)	57.9 (31.3)	7.40 (4.00)				
9	3.02 (3.47)	3.67 (4.21)	36.9 (42.5)	4.83 (5.55)	4.62 (3.17)	5.74 (3.94)	56.7 (38.9)	7.39 (5.07)	5.44 (3.48)	6.92 (4.42)	72.6 (46.6)	8.71 (5.57)
10	3.06 (2.40)	3.72 (2.91)	36.6 (28.7)	4.90 (3.84)	4.10 (2.59)	5.10 (3.22)	49.4 (31.2)	6.57 (4.14)	6.39 (2.27)	8.13 (2.88)	83.6 (29.9)	10.2 (3.63)
11	3.75 (1.84)	4.55 (2.23)	43.8 (21.5)	5.99 (2.94)	4.18 (1.45)	5.20 (1.80)	49.1 (17.1)	6.69 (2.32)	4.49 (1.98)	5.71 (2.52)	57.6 (25.7)	7.19 (3.17)
12	3.77 (1.88)	4.58 (2.28)	43.1 (21.4)	6.03 (3.01)	4.09 (1.66)	5.09 (2.07)	47.1 (19.1)	6.55 (2.66)	4.00 (0.99)	5.09 (1.27)	50.2 (12.3)	6.40 (1.59)
13	3.76 (2.89)	4.57 (3.51)	42.0 (32.3)	6.01 (4.62)	4.44 (2.43)	5.52 (3.03)	50.0 (27.4)	7.10 (3.89)				
14	3.73 (3.62)	4.54 (4.40)	40.9 (39.7)	5.97 (5.79)	4.24 (3.79)	5.28 (4.72)	46.7 (41.8)	6.78 (6.07)				
15	3.14 (3.95)	3.82 (4.81)	33.7 (42.4)	5.03 (6.33)								
16	2.34 (3.35)	2.85 (4.08)	24.6 (35.4)	3.75 (5.37)	3.99 (3.70)	4.98 (4.61)	42.3 (39.2)	6.39 (5.92)				
17	2.08 (2.52)	2.53 (3.06)	21.4 (25.9)	3.32 (4.03)	3.23 (3.04)	4.03 (3.79)	33.6 (31.7)	5.17 (4.87)				
18	2.40 (1.82)	2.92 (2.21)	24.2 (18.4)	3.84 (2.91)	3.88 (2.14)	4.84 (2.66)	39.5 (21.7)	6.21 (3.42)				
19	3.33 (1.38)	4.06 (1.68)	33.0 (13.6)	5.32 (2.21)	4.37 (1.21)	5.46 (1.50)	43.7 (12.1)	6.99 (1.93)	3.79 (0.80)	4.86 (1.03)	41.4 (8.7)	6.07 (1.28)
20												
21												
22												
23	2.86 (3.60)	3.50 (4.39)	26.3 (33.0)	4.58 (5.75)	4.02 (3.46)	5.02 (4.32)	37.2 (32.0)	6.43 (5.53)				
24	2.70 (3.36)	3.30 (4.11)	24.3 (30.3)	4.33 (5.38)	3.09 (3.11)	3.86 (3.89)	28.1 (28.4)	4.94 (4.98)	4.24 (4.05)	5.44 (5.20)	41.9 (40.0)	6.78 (6.48)
25	3.55 (3.38)	4.33 (4.13)	31.3 (29.8)	5.67 (5.40)	3.49 (2.84)	4.37 (3.55)	31.1 (25.3)	5.59 (4.55)	3.75 (3.64)	4.82 (4.67)	36.4 (35.4)	6.00 (5.82)
26	4.42 (2.88)	5.40 (3.53)	38.3 (25.0)	7.07 (4.61)	4.62 (2.27)	5.78 (2.84)	40.5 (19.9)	7.39 (3.63)	4.26 (2.31)	5.47 (2.97)	40.5 (22.1)	6.81 (3.70)
27												
28	5.41 (2.28)	6.62 (2.78)	45.3 (19.0)	8.65 (3.64)	5.37 (2.51)	6.72 (3.14)	45.5 (21.2)	8.60 (4.01)	4.71 (2.54)	6.05 (3.26)	43.2 (23.2)	7.53 (4.06)
Avg	3.14	3.82	35.1	5.03	4.01	5.00	43.7	6.42	4.56	5.83	51.9	7.30
n	24	24	24	24	19	19	19	19	9	9	9	9
SD	0.85	1.04	8.89	1.36	0.65	0.81	8.21	1.04	0.81	1.02	15.4	1.30
Min	1.68	2.04	21.4	2.69	2.43	3.01	28.1	3.89	3.75	4.82	36.4	6.00
Max	5.41	6.62	51.0	8.65	5.37	6.72	57.9	8.60	6.39	8.13	83.6	10.2

ED_004549_00015929-00251

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for March, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	3.65 (4.12)	4.47 (5.04)	30.1 (33.9)	5.84 (6.58)	4.63 (3.51)	5.80 (4.39)	38.6 (29.2)	7.41 (5.61)	3.40 (4.08)	4.37 (5.25)	30.7 (36.8)	5.44 (6.53)
2	3.49 (4.14)	4.28 (5.07)	28.3 (33.5)	5.59 (6.62)	5.09 (3.28)	6.37 (4.11)	41.8 (26.9)	8.15 (5.25)				
3	3.09 (3.89)	3.78 (4.76)	24.6 (31.0)	4.94 (6.22)	3.95 (3.02)	4.95 (3.78)	31.9 (24.4)	6.32 (4.83)	4.28 (4.91)	5.50 (6.31)	37.3 (42.8)	6.84 (7.85)
4	3.79 (4.11)	4.64 (5.03)	29.7 (32.2)	6.07 (6.57)	3.58 (3.07)	4.48 (3.85)	28.4 (24.4)	5.72 (4.92)	4.98 (5.17)	6.40 (6.64)	42.7 (44.3)	7.97 (8.26)
5	3.68 (3.35)	4.51 (4.10)	28.4 (25.9)	5.89 (5.36)	4.53 (2.49)	5.69 (3.13)	35.6 (19.5)	7.26 (3.99)	4.47 (3.76)	5.75 (4.83)	37.7 (31.8)	7.15 (6.01)
6	4.30 (2.08)	5.26 (2.54)	32.6 (15.8)	6.87 (3.32)	5.65 (1.67)	7.09 (2.10)	43.7 (13.0)	9.03 (2.67)	5.10 (1.47)	6.56 (1.88)	42.4 (12.3)	8.16 (2.34)
7	5.59 (1.50)	6.84 (1.83)	41.9 (11.2)	8.94 (2.40)	5.86 (1.29)	7.37 (1.62)	44.7 (9.87)	9.37 (2.06)	5.65 (1.16)	7.27 (1.50)	46.2 (9.57)	9.04 (1.86)
8												
9	5.83 (1.22)	7.14 (1.49)	42.5 (8.86)	9.34 (1.95)	5.54 (1.32)	6.98 (1.67)	41.2 (9.79)	8.86 (2.11)	5.76 (1.04)	7.41 (1.34)	45.7 (8.20)	9.21 (1.66)
10	6.29 (2.19)	7.69 (2.68)	45.1 (15.7)	10.1 (3.50)	5.28 (1.84)	6.66 (2.31)	38.8 (13.5)	8.45 (2.94)	6.01 (2.21)	7.74 (2.85)	47.0 (17.4)	9.62 (3.54)
11	6.21 (1.07)	7.60 (1.31)	44.0 (7.61)	9.93 (1.71)	5.33 (1.05)	6.73 (1.32)	38.7 (7.59)	8.53 (1.67)	5.72 (0.96)	7.37 (1.23)	44.2 (7.45)	9.15 (1.53)
12	5.84 (1.46)	7.14 (1.79)	40.8 (10.3)	9.34 (2.34)	5.01 (1.43)	6.31 (1.81)	35.9 (10.2)	8.01 (2.29)	4.45 (1.78)	5.73 (2.29)	33.9 (13.5)	7.11 (2.84)
13	4.61 (3.41)	5.65 (4.18)	31.8 (23.5)	7.38 (5.46)	5.08 (3.45)	6.41 (4.35)	36.0 (24.4)	8.13 (5.51)	3.73 (3.20)	4.81 (4.13)	28.1 (24.0)	5.97 (5.12)
14	5.68 (3.59)	6.95 (4.40)	38.7 (24.5)	9.08 (5.75)	5.52 (3.49)	6.97 (4.41)	38.6 (24.4)	8.84 (5.59)	4.41 (3.59)	5.69 (4.63)	32.7 (26.6)	7.05 (5.74)
15	6.20 (2.30)	7.59 (2.81)	41.8 (15.5)	9.92 (3.67)	6.50 (2.69)	8.21 (3.40)	45.0 (18.6)	10.4 (4.31)	5.96 (2.51)	7.71 (3.24)	43.7 (18.4)	9.54 (4.01)
16	6.95 (1.62)	8.51 (1.99)	46.3 (10.8)	11.1 (2.60)	7.18 (2.05)	9.06 (2.59)	49.1 (14.0)	11.5 (3.29)	6.56 (2.30)	8.48 (2.98)	47.5 (16.7)	10.5 (3.69)
17	6.92 (1.56)	8.48 (1.92)	45.6 (10.3)	11.1 (2.50)	6.11 (2.00)	7.72 (2.52)	41.4 (13.6)	9.78 (3.20)	6.41 (2.03)	8.29 (2.63)	45.9 (14.6)	10.3 (3.25)
18	7.51 (1.74)	9.21 (2.13)	49.0 (11.3)	12.0 (2.78)	6.28 (1.42)	7.93 (1.80)	42.1 (9.58)	10.0 (2.28)	6.07 (1.76)	7.85 (2.27)	43.0 (12.5)	9.71 (2.81)
19	6.37 (1.93)	7.81 (2.37)	41.1 (12.5)	10.2 (3.09)	6.38 (1.46)	8.06 (1.85)	42.3 (9.75)	10.2 (2.34)	5.98 (1.81)	7.74 (2.34)	41.9 (12.8)	9.56 (2.90)
20	5.46 (1.09)	6.69 (1.33)	34.9 (6.93)	8.73 (1.74)	5.90 (1.19)	7.45 (1.50)	38.8 (7.79)	9.44 (1.90)	5.79 (1.78)	7.49 (2.30)	40.1 (12.3)	9.26 (2.84)
21	5.87 (1.30)	7.20 (1.60)	37.2 (8.22)	9.40 (2.08)	6.71 (1.92)	8.48 (2.43)	43.7 (12.5)	10.7 (3.07)	6.57 (2.38)	8.51 (3.08)	45.1 (16.3)	10.5 (3.80)
22												
23	6.93 (1.57)	8.51 (1.92)	43.1 (9.78)	11.1 (2.51)	6.84 (1.73)	8.65 (2.19)	43.7 (11.1)	10.9 (2.77)	7.02 (1.84)	9.09 (2.38)	47.2 (12.4)	11.2 (2.94)
24	6.85 (1.61)	8.41 (1.98)	42.3 (9.95)	11.0 (2.57)	5.76 (2.22)	7.28 (2.81)	36.5 (14.1)	9.21 (3.56)	5.64 (1.81)	7.31 (2.34)	37.6 (12.1)	9.03 (2.89)
25	6.46 (1.39)	7.94 (1.71)	39.6 (8.53)	10.3 (2.22)	5.73 (1.99)	7.26 (2.52)	36.1 (12.6)	9.17 (3.19)	5.99 (1.50)	7.76 (1.94)	39.5 (9.88)	9.58 (2.39)
26	7.62 (1.60)	9.37 (1.97)	46.3 (9.70)	12.2 (2.56)	6.81 (1.12)	8.63 (1.42)	42.5 (6.96)	10.9 (1.79)	5.96 (1.19)	7.73 (1.54)	39.0 (7.81)	9.54 (1.91)
27	8.27 (2.25)	10.2 (2.76)	50.0 (13.5)	13.2 (3.59)	6.51 (0.92)	8.25 (1.17)	40.4 (5.71)	10.4 (1.48)	6.07 (1.19)	7.87 (1.54)	39.4 (7.69)	9.72 (1.90)
28	8.74 (1.57)	10.8 (1.94)	52.5 (9.42)	14.0 (2.52)	6.34 (0.93)	8.04 (1.18)	39.1 (5.70)	10.1 (1.48)	6.61 (1.16)	8.58 (1.51)	42.6 (7.47)	10.6 (1.86)
29	6.98 (2.37)	8.60 (2.93)	41.6 (14.2)	11.2 (3.80)	5.60 (1.12)	7.11 (1.42)	34.3 (6.89)	8.95 (1.79)	5.45 (1.25)	7.07 (1.62)	34.9 (8.05)	8.72 (2.00)
30	6.72 (0.90)	8.29 (1.11)	39.8 (5.36)	10.8 (1.44)	6.69 (1.49)	8.51 (1.89)	40.7 (9.03)	10.7 (2.38)	5.62 (1.24)	7.29 (1.61)	35.7 (7.89)	8.99 (1.99)
31	6.49 (1.29)	8.00 (1.59)	38.2 (7.61)	10.4 (2.07)	5.81 (1.79)	7.39 (2.28)	35.1 (10.9)	9.30 (2.87)	5.75 (1.18)	7.47 (1.53)	36.3 (7.47)	9.20 (1.89)
Avg	5.94	7.29	39.6	9.51	5.73	7.24	39.5	9.17	5.55	7.17	40.3	8.88
n	29	29	29	29	29	29	29	29	28	28	28	28
SD	1.43	1.76	6.91	2.28	0.85	1.10	4.28	1.37	0.88	1.15	5.18	1.40
Min	3.09	3.78	24.6	4.94	3.58	4.48	28.4	5.72	3.40	4.37	28.1	5.44
Max	8.74	10.8	52.5	14.0	7.18	9.06	49.1	11.5	7.02	9.09	47.5	11.2

ED_004549_00015929-00252

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for April, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	6.89 (1.41)	8.50 (1.73)	40.4 (8.23)	11.0 (2.25)	6.01 (1.08)	7.65 (1.38)	36.0 (6.48)	9.62 (1.73)	5.96 (1.21)	7.74 (1.58)	37.3 (7.57)	9.53 (1.94)
2	6.09 (1.16)	7.52 (1.43)	35.5 (6.78)	9.75 (1.86)	6.26 (0.98)	7.97 (1.24)	37.3 (5.80)	10.0 (1.56)	5.95 (1.09)	7.73 (1.42)	37.0 (6.80)	9.51 (1.75)
3	5.82 (1.10)	7.19 (1.36)	33.7 (6.37)	9.32 (1.76)	5.84 (1.09)	7.43 (1.39)	34.5 (6.48)	9.35 (1.75)	4.73 (1.38)	6.15 (1.79)	29.3 (8.54)	7.57 (2.20)
4	5.74 (1.01)	7.09 (1.24)	33.1 (5.81)	9.19 (1.61)	5.75 (0.94)	7.32 (1.19)	33.8 (5.51)	9.21 (1.50)	5.22 (0.88)	6.79 (1.14)	32.1 (5.41)	8.35 (1.40)
5	4.93 (1.08)	6.09 (1.34)	28.3 (6.23)	7.89 (1.73)	6.31 (1.23)	8.03 (1.57)	36.8 (7.20)	10.1 (1.97)	5.18 (1.31)	6.74 (1.71)	31.6 (8.03)	8.29 (2.10)
6	4.97 (0.99)	6.13 (1.23)	28.3 (5.67)	7.95 (1.59)	5.75 (0.91)	8.26 (1.33)	38.3 (6.29)	9.20 (1.46)	5.55 (0.96)	7.22 (1.25)	33.7 (5.88)	8.87 (1.54)
7	5.37 (1.11)	6.63 (1.37)	30.4 (6.30)	8.59 (1.78)	5.95 (1.61)	9.90 (2.68)	46.4 (12.5)	9.52 (2.57)	5.31 (1.05)	6.91 (1.37)	32.1 (6.35)	8.49 (1.68)
8	5.91 (1.09)	7.30 (1.34)	33.4 (6.15)	9.46 (1.74)	5.56 (1.58)	9.26 (2.63)	43.1 (12.3)	8.90 (2.53)	5.67 (1.17)	7.39 (1.52)	34.1 (7.03)	9.08 (1.87)
9	5.39 (0.83)	6.66 (1.02)	30.3 (4.66)	8.63 (1.33)	5.29 (0.89)	8.81 (1.48)	40.8 (6.84)	8.47 (1.42)	5.37 (0.93)	6.99 (1.21)	32.1 (5.55)	8.59 (1.48)
10	5.61 (1.39)	6.92 (1.72)	31.3 (7.80)	8.97 (2.23)	5.63 (0.94)	9.38 (1.57)	43.2 (7.20)	9.01 (1.51)	5.54 (1.03)	7.21 (1.34)	32.9 (6.12)	8.86 (1.65)
11	6.43 (1.16)	7.93 (1.43)	35.8 (6.47)	10.3 (1.86)	5.69 (1.04)	9.49 (1.73)	43.4 (7.89)	9.10 (1.66)	6.01 (1.57)	7.82 (2.04)	35.5 (9.27)	9.61 (2.51)
12	6.81 (1.09)	8.41 (1.34)	37.7 (6.01)	10.9 (1.74)	6.31 (1.57)	10.5 (2.63)	47.9 (12.0)	10.1 (2.52)	5.82 (1.45)	7.58 (1.89)	34.2 (8.55)	9.31 (2.33)
13	7.32 (1.40)	9.03 (1.73)	40.3 (7.72)	11.7 (2.24)	6.65 (1.45)	11.1 (2.42)	50.3 (11.0)	10.6 (2.32)	6.17 (1.18)	8.04 (1.54)	36.1 (6.90)	9.88 (1.89)
14	7.35 (1.45)	9.07 (1.79)	40.3 (7.94)	11.8 (2.31)	6.39 (1.12)	10.7 (1.86)	48.1 (8.40)	10.2 (1.79)	6.96 (1.00)	9.07 (1.30)	40.5 (5.77)	11.1 (1.59)
15	7.35 (1.53)	9.08 (1.89)	40.2 (8.37)	11.8 (2.45)	6.09 (1.02)	10.2 (1.71)	45.6 (7.67)	9.74 (1.64)	6.40 (1.13)	8.34 (1.47)	37.1 (6.55)	10.2 (1.81)
16	6.19 (1.36)	7.65 (1.68)	33.7 (7.43)	9.91 (2.18)	6.08 (1.25)	10.2 (2.09)	45.4 (9.32)	9.73 (2.00)	5.14 (1.32)	6.70 (1.72)	29.7 (7.64)	8.23 (2.12)
17	5.14 (1.40)	7.19 (1.80)	31.9 (7.97)	8.22 (2.24)	5.63 (2.06)	9.43 (3.45)	41.9 (15.3)	9.01 (3.30)	5.32 (1.23)	6.92 (1.60)	30.5 (7.05)	8.51 (1.97)
18	4.87 (1.14)	7.80 (1.82)	34.7 (8.12)	7.80 (1.82)	5.32 (1.48)	8.91 (2.47)	39.4 (11.0)	8.51 (2.36)	5.16 (0.93)	6.71 (1.21)	29.4 (5.32)	8.25 (1.49)
19	5.23 (1.03)	8.36 (1.64)	37.1 (7.28)	8.36 (1.64)	5.50 (1.32)	9.22 (2.21)	40.6 (9.74)	8.80 (2.11)	5.73 (1.06)	7.46 (1.38)	32.5 (6.00)	9.16 (1.70)
20	5.91 (1.26)	9.45 (2.02)	41.7 (8.93)	9.45 (2.02)	5.73 (1.62)	9.61 (2.72)	42.1 (11.9)	9.16 (2.59)	6.13 (0.84)	7.98 (1.09)	34.6 (4.73)	9.81 (1.34)
21	5.74 (1.10)	9.89 (1.98)	43.9 (8.84)	9.18 (1.76)	4.48 (0.83)	8.10 (1.41)	35.6 (6.20)	7.16 (1.33)	5.80 (0.85)	8.57 (1.37)	37.0 (5.90)	9.29 (1.36)
22	6.37 (1.05)	12.0 (1.98)	53.4 (8.81)	10.2 (1.68)	4.60 (1.05)	9.14 (2.09)	40.2 (9.16)	7.36 (1.68)	5.33 (0.96)	9.14 (1.65)	39.3 (7.08)	8.52 (1.54)
23	5.59 (1.98)	10.5 (3.72)	46.8 (16.6)	8.94 (3.16)	4.50 (1.32)	8.96 (2.63)	39.2 (11.5)	7.20 (2.11)	4.93 (1.55)	10.0 (2.21)	43.7 (9.47)	7.89 (2.49)
24												
25	4.65 (2.28)	8.77 (4.29)	38.8 (19.0)	7.45 (3.64)	4.84 (0.83)	9.63 (1.65)	41.9 (7.21)	7.74 (1.33)	3.82 (0.76)	9.60 (1.91)	42.4 (8.44)	6.11 (1.21)
26	5.13 (1.43)	9.67 (2.70)	42.6 (11.9)	8.20 (2.29)	4.48 (0.72)	8.92 (1.43)	38.7 (6.22)	7.16 (1.15)	3.94 (0.96)	9.90 (2.41)	43.5 (10.6)	6.30 (1.53)
27	4.85 (1.66)	9.16 (3.14)	40.2 (13.8)	7.77 (2.66)	4.68 (0.89)	9.32 (1.76)	40.3 (7.63)	7.49 (1.42)	3.89 (0.81)	9.79 (2.04)	42.9 (8.95)	6.22 (1.30)
28	5.23 (1.47)	9.88 (2.77)	43.1 (12.1)	8.37 (2.34)	4.55 (1.08)	9.07 (2.15)	39.1 (9.27)	7.28 (1.73)	4.54 (0.91)	11.4 (2.28)	49.9 (9.97)	7.26 (1.45)
29	5.64 (1.64)	10.7 (3.10)	46.4 (13.5)	9.03 (2.62)	4.79 (0.79)	9.56 (1.57)	41.0 (6.76)	7.67 (1.26)	4.72 (0.82)	11.9 (2.07)	51.8 (9.02)	7.56 (1.31)
30	5.60 (1.16)	10.6 (2.19)	45.8 (9.48)	8.95 (1.85)	4.98 (0.63)	9.94 (1.27)	42.5 (5.40)	7.97 (1.01)	5.00 (0.71)	12.6 (1.78)	54.7 (7.72)	8.00 (1.13)
Avg	5.80	8.45	37.9	9.28	5.51	9.17	41.1	8.81	5.35	8.29	37.2	8.57
n	29	29	29	29	29	29	29	29	29	29	29	29
SD	0.76	1.47	6.05	1.22	0.65	0.94	4.06	1.04	0.73	1.63	6.57	1.16
Min	4.65	6.09	28.3	7.45	4.48	7.32	33.8	7.16	3.82	6.15	29.3	6.11
Max	7.35	12.0	53.4	11.8	6.65	11.1	50.3	10.6	6.96	12.60	54.7	11.1

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Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for May, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	5.46 (1.65)	10.3 (3.11)	44.5 (13.40)	8.73 (2.63)	5.31 (0.70)	10.6 (1.40)	45.2 (6.00)	8.49 (1.13)	4.36 (0.99)	11.0 (2.50)	47.6 (10.8)	6.98 (1.58)
2	5.49 (1.62)	10.4 (3.07)	44.5 (13.20)	8.78 (2.60)	5.16 (0.61)	10.3 (1.22)	43.8 (5.21)	8.25 (0.98)	4.39 (0.48)	11.1 (1.22)	47.7 (5.25)	7.02 (0.77)
3												
4	6.00 (1.70)	11.4 (3.22)	48.2 (13.70)	9.60 (2.72)	5.49 (0.64)	11.0 (1.29)	46.4 (5.44)	8.78 (1.03)	4.97 (0.67)	12.5 (1.70)	53.7 (7.30)	7.95 (1.08)
5	7.41 (1.33)	14.0 (2.53)	59.1 (10.60)	11.9 (2.13)	6.06 (1.14)	12.1 (2.29)	51.0 (9.62)	9.69 (1.83)	5.80 (1.22)	14.7 (3.09)	62.5 (13.2)	9.28 (1.96)
6	7.08 (2.32)	66 (424)	1280 (10600)	11.3 (3.71)	5.65 (0.57)	11.3 (1.15)	47.4 (4.81)	9.04 (0.92)	5.07 (1.15)	12.8 (2.90)	54.5 (12.4)	8.12 (1.84)
7	6.87 (2.50)			11.0 (4.00)	6.16 (1.01)	12.3 (2.02)	51.4 (8.38)	9.85 (1.61)	5.39 (0.89)	13.6 (2.24)	57.7 (9.50)	8.62 (1.42)
8	3.10 (1.66)			4.96 (2.66)	5.96 (0.83)	11.9 (1.66)	49.5 (6.89)	9.53 (1.33)	4.53 (1.13)	11.4 (2.86)	48.3 (12.1)	7.25 (1.81)
9	2.64 (1.03)			4.22 (1.64)	5.84 (0.84)	11.7 (1.68)	48.3 (6.97)	9.34 (1.34)	4.18 (0.49)	10.5 (1.24)	44.4 (5.25)	6.68 (0.79)
10	2.52 (0.85)			4.04 (1.36)	6.40 (0.78)	12.8 (1.56)	52.6 (6.44)	10.2 (1.25)	5.05 (0.81)	12.8 (2.05)	53.5 (8.62)	8.08 (1.30)
11	2.30 (0.71)			3.67 (1.14)	6.20 (0.97)	12.4 (1.95)	50.7 (7.94)	9.92 (1.56)	5.21 (0.79)	13.1 (1.99)	54.9 (8.34)	8.33 (1.26)
12	2.00 (0.67)			3.20 (1.06)	6.40 (1.51)	12.8 (3.02)	52.0 (12.3)	10.2 (2.41)	5.37 (0.97)	13.6 (2.44)	56.4 (10.2)	8.59 (1.54)
13	2.03 (0.95)			3.25 (1.52)	6.01 (1.85)			9.62 (2.96)	5.18 (0.84)	13.1 (2.11)	54.1 (8.73)	8.29 (1.34)
14	1.74 (0.67)			2.79 (1.07)	4.71 (1.36)			7.54 (2.17)	5.59 (0.83)	14.1 (2.09)	58.2 (8.61)	8.95 (1.32)
15	1.73 (0.53)			2.78 (0.84)	3.09 (0.82)			4.95 (1.31)	5.52 (0.71)	13.9 (1.80)	57.1 (7.39)	8.83 (1.14)
16												
17					2.12 (0.83)			3.39 (1.33)				
18					2.32 (0.26)			3.72 (0.42)	5.30 (1.43)	44.2 (70.9)	649 (1570)	8.48 (2.29)
19					1.62 (0.79)			2.59 (1.27)				
20					1.68 (0.50)			2.69 (0.79)	2.30 (1.30)			3.68 (2.09)
21					1.44 (0.54)			2.30 (0.86)	2.06 (0.78)			3.30 (1.24)
22					1.36 (0.60)			2.17 (0.96)	1.94 (0.88)			3.11 (1.41)
23	1.56 (0.97)			2.50 (1.55)	1.48 (0.59)			2.36 (0.95)	2.02 (0.89)			3.24 (1.42)
24	1.48 (0.72)			2.37 (1.16)								
25												
26	3.27 (0.83)	4.57 (1.16)	101 (25.70)	5.23 (1.32)								
27	2.83 (1.09)	3.96 (1.53)	85.3 (33.40)	4.53 (1.75)								
28	3.80 (1.02)	5.32 (1.43)	112 (29.80)	6.09 (1.63)								
29	3.52 (1.00)	4.94 (1.39)	101 (29.10)	5.64 (1.59)								
30												
31	2.33 (0.84)	3.27 (1.18)	64.6 (23.50)	3.73 (1.35)	1.16 (0.92)	3.45 (3.01)	119 (117)	1.86 (1.47)				
Avg	3.58	13.4	194	5.73	4.16	11.1	54.7	6.66	4.43	14.8	93.3	7.09
n	21	10	10	21	22	12	12	22	19	15	15	19
SD	1.91	17.9	363	3.06	2.03	2.43	19.5	3.25	1.29	7.94	148	2.06
Min	1.48	3.27	44.5	2.37	1.16	3.45	43.8	1.86	1.94	10.5	44.4	3.11
Max	7.41	66.0	1280	11.9	6.40	12.8	119	10.2	5.80	44.2	649	9.28

ED_004549_00015929-00254

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for June, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	2.28 (0.62)	3.21 (0.87)	62.2 (17.0)	3.64 (0.99)								
2	2.49 (0.49)	3.51 (0.69)	67.0 (13.2)	3.98 (0.78)	4.40 (0.62)	11.0 (1.55)	293 (40.8)	7.03 (0.99)				
3	2.07 (0.53)	2.94 (0.75)	55.3 (14.3)	3.32 (0.85)	3.68 (0.58)	9.18 (1.44)	243 (38.0)	5.89 (0.92)				
4	2.25 (0.50)	3.19 (0.71)	59.0 (13.2)	3.60 (0.80)	3.26 (0.52)	5.49 (2.31)	142 (62.7)	5.22 (0.83)				
5	2.51 (0.40)	3.58 (0.56)	65.1 (10.4)	4.02 (0.63)	3.04 (0.44)	3.83 (0.55)	94.6 (13.7)	4.87 (0.70)	2.25 (0.60)	2.77 (0.74)	77.4 (21.0)	3.59 (0.96)
6	2.95 (0.77)	4.22 (1.10)	75.6 (19.6)	4.72 (1.23)	3.44 (0.63)	4.33 (0.80)	105 (19.5)	5.50 (1.01)				
7	2.72 (0.60)	3.90 (0.87)	68.8 (15.4)	4.35 (0.97)	2.93 (0.40)	3.70 (0.51)	87.4 (12.2)	4.69 (0.64)	3.47 (1.05)	4.28 (1.29)	111 (34.5)	5.55 (1.68)
8	2.65 (0.71)	3.81 (1.02)	66.4 (17.8)	4.24 (1.13)	2.99 (0.41)	3.77 (0.52)	87.4 (12.3)	4.78 (0.66)	3.17 (0.65)	3.92 (0.80)	99.1 (20.5)	5.08 (1.03)
9	2.97 (0.46)	4.28 (0.67)	73.4 (11.4)	4.75 (0.74)	3.06 (0.49)	3.88 (0.62)	88.3 (14.0)	4.90 (0.78)	3.36 (0.58)	4.14 (0.72)	102 (17.5)	5.37 (0.93)
10	3.13 (0.65)	4.51 (0.94)	76.2 (16.0)	5.00 (1.05)	3.07 (0.49)	3.91 (0.62)	87.1 (14.1)	4.92 (0.79)	3.50 (0.61)	4.32 (0.76)	104 (18.3)	5.60 (0.98)
11	3.05 (0.53)	4.40 (0.77)	73.4 (13.0)	4.87 (0.86)	2.90 (0.36)	3.70 (0.46)	80.7 (10.0)	4.64 (0.57)	2.93 (0.65)	3.62 (0.80)	85.1 (19.1)	4.69 (1.04)
12	2.98 (0.71)	4.31 (1.03)	70.8 (17.2)	4.76 (1.14)	2.78 (0.46)	3.56 (0.59)	76.3 (12.8)	4.45 (0.74)	3.11 (0.79)	3.84 (0.97)	88.1 (21.9)	4.97 (1.26)
13	2.74 (0.47)	3.98 (0.68)	64.3 (11.0)	4.38 (0.75)	2.66 (0.58)	3.42 (0.74)	72.1 (15.7)	4.26 (0.92)	3.24 (0.53)	4.00 (0.66)	89.9 (15.0)	5.18 (0.85)
14	2.92 (0.66)	4.24 (0.95)	67.5 (15.3)	4.67 (1.05)	2.92 (0.45)	3.76 (0.58)	78.0 (12.2)	4.67 (0.72)	3.35 (0.50)	4.15 (0.61)	91.4 (13.6)	5.37 (0.79)
15	2.95 (0.63)	4.30 (0.92)	67.3 (14.3)	4.72 (1.01)	3.01 (0.54)	3.88 (0.69)	79.2 (14.3)	4.82 (0.86)	3.35 (0.54)	4.15 (0.67)	89.6 (14.7)	5.36 (0.87)
16	3.96 (0.45)	5.78 (0.66)	89.0 (10.1)	6.34 (0.73)	2.99 (0.36)	3.87 (0.47)	77.6 (9.4)	4.79 (0.58)	3.28 (0.25)	4.06 (0.31)	86.0 (6.6)	5.24 (0.41)
17	3.42 (0.67)	5.00 (0.98)	75.9 (15.0)	5.48 (1.07)	3.54 (0.70)	4.57 (0.90)	90.3 (17.6)	5.66 (1.11)	3.52 (0.56)	4.36 (0.69)	90.9 (14.3)	5.63 (0.89)
18	3.40 (0.72)	4.97 (1.05)	74.2 (15.9)	5.43 (1.15)	3.10 (0.50)	4.02 (0.64)	78.2 (12.6)	4.97 (0.79)	3.60 (0.63)	4.46 (0.78)	91.2 (15.9)	5.75 (1.01)
19	3.63 (0.78)	5.32 (1.14)	78.1 (16.8)	5.81 (1.25)	2.71 (0.51)	3.51 (0.66)	67.3 (12.8)	4.33 (0.82)	3.58 (0.65)	4.44 (0.80)	89.3 (16.2)	5.73 (1.03)
20	3.12 (0.36)	4.57 (0.53)	66.1 (7.8)	4.99 (0.58)	2.96 (0.33)	3.85 (0.43)	72.4 (8.2)	4.74 (0.53)	3.14 (0.61)	3.90 (0.75)	77.0 (15.0)	5.03 (0.97)
21	3.16 (0.62)	4.64 (0.92)	65.9 (13.2)	5.06 (1.00)	2.28 (0.88)	2.96 (1.14)	54.9 (21.2)	3.65 (1.40)	3.08 (0.74)	3.83 (0.91)	74.3 (17.9)	4.93 (1.18)
22	4.64 (0.89)	6.82 (1.31)	95.0 (18.0)	7.43 (1.42)	3.11 (0.80)	4.04 (1.03)	73.6 (18.8)	4.97 (1.27)	3.22 (0.53)	4.01 (0.66)	76.3 (12.6)	5.16 (0.85)
23	3.47 (1.11)	5.09 (1.63)	69.7 (22.6)	5.55 (1.77)	2.77 (1.04)	3.61 (1.35)	64.7 (24.3)	4.44 (1.66)	3.34 (0.55)	4.15 (0.68)	77.6 (12.6)	5.34 (0.87)
24	3.64 (0.86)	5.34 (1.27)	71.8 (17.3)	5.82 (1.38)	3.75 (0.51)	4.89 (0.66)	85.9 (11.5)	6.00 (0.81)	3.45 (0.73)	4.30 (0.91)	78.8 (16.7)	5.52 (1.17)
25	3.62 (1.16)	5.31 (1.70)	70.2 (22.4)	5.79 (1.85)	2.95 (0.77)	3.85 (1.01)	66.5 (17.6)	4.71 (1.24)	3.41 (0.65)	4.25 (0.80)	76.6 (14.5)	5.46 (1.03)
26					3.43 (0.54)	4.48 (0.70)	76.0 (11.8)	5.48 (0.86)	3.71 (0.77)	4.63 (0.96)	81.7 (17.1)	5.94 (1.24)
27					2.96 (0.77)	3.87 (1.00)	64.7 (17.0)	4.74 (1.23)				
28	2.81 (0.81)	4.14 (1.19)	51.6 (15.0)	4.50 (1.29)	2.99 (0.49)	3.92 (0.64)	64.1 (10.5)	4.79 (0.79)	3.05 (0.77)	3.80 (0.96)	64.7 (16.3)	4.88 (1.23)
29	3.24 (0.96)	4.78 (1.41)	58.4 (17.3)	5.19 (1.53)	3.37 (0.95)	4.43 (1.25)	71.2 (20.2)	5.40 (1.52)	3.43 (0.97)	4.28 (1.21)	71.3 (20.4)	5.48 (1.55)
30												
Avg	3.06	4.45	69.6	4.90	3.11	4.40	93.6	4.97	3.28	4.07	85.8	5.25
n	27	27	27	27	28	28	28	28	23	23	23	23
SD	0.55	0.84	9.01	0.88	0.40	1.66	51.4	0.63	0.29	0.37	11.0	0.47
Min	2.07	2.94	51.6	3.32	2.28	2.96	54.9	3.65	2.25	2.77	64.7	3.59
Max	4.64	6.82	95.0	7.43	4.40	11.0	293	7.03	3.71	4.63	111	5.94

ED_004549_00015929-00255

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for July, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	2.91 (0.76)	4.29 (1.12)	50.5 (13.4)	4.66 (1.22)	3.74 (0.97)	4.92 (1.27)	76.2 (19.9)	5.98 (1.55)	2.88 (0.90)	3.60 (1.12)	57.7 (18.2)	4.61 (1.44)
2					3.37 (0.89)	4.45 (1.17)	67.5 (17.8)	5.40 (1.42)	3.60 (1.05)	4.50 (1.31)	70.6 (20.5)	5.76 (1.67)
3	2.88 (0.63)	4.25 (0.93)	48.1 (10.6)	4.61 (1.01)	3.89 (0.64)	5.14 (0.85)	76.4 (12.8)	6.22 (1.03)	3.67 (0.74)	4.60 (0.92)	70.7 (14.4)	5.88 (1.18)
4	2.84 (0.63)	4.20 (0.93)	46.5 (10.4)	4.55 (1.00)	3.96 (0.82)	5.25 (1.09)	76.5 (15.9)	6.34 (1.32)	3.62 (0.80)	4.53 (1.00)	68.2 (15.2)	5.79 (1.28)
5	2.73 (0.68)	4.04 (1.00)	43.8 (10.8)	4.37 (1.09)	4.30 (0.59)	5.71 (0.78)	81.5 (11.0)	6.88 (0.94)	3.41 (0.79)	4.28 (0.99)	63.0 (14.5)	5.46 (1.26)
6	3.74 (0.48)	5.53 (0.71)	58.7 (7.49)	5.99 (0.77)	4.57 (0.76)	6.08 (1.01)	85.0 (14.0)	7.31 (1.22)	4.54 (0.60)	5.70 (0.76)	82.0 (10.8)	7.26 (0.96)
7	3.84 (0.90)	5.67 (1.33)	59.1 (14.0)	6.15 (1.44)	4.63 (1.17)	6.16 (1.55)	84.4 (21.5)	7.41 (1.87)	4.15 (0.88)	5.22 (1.11)	73.6 (15.9)	6.64 (1.41)
8	3.16 (0.81)	4.67 (1.20)	47.7 (12.3)	5.06 (1.30)	3.96 (0.86)	5.27 (1.14)	70.7 (15.5)	6.34 (1.38)	3.95 (1.12)	4.98 (1.41)	68.6 (19.5)	6.32 (1.79)
9	3.76 (0.39)	5.56 (0.57)	55.6 (5.56)	6.02 (0.62)	3.80 (0.61)	5.05 (0.81)	66.5 (10.6)	6.08 (0.97)	4.40 (0.67)	5.55 (0.84)	74.7 (11.7)	7.04 (1.07)
10	3.60 (0.52)	5.32 (0.77)	52.1 (7.64)	5.76 (0.83)	3.69 (0.69)	4.91 (0.92)	63.2 (11.9)	5.91 (1.10)	3.14 (0.76)	3.96 (0.96)	52.1 (12.7)	5.02 (1.22)
11	3.71 (0.58)	5.48 (0.85)	52.8 (8.39)	5.93 (0.92)	3.99 (0.65)	5.31 (0.86)	67.0 (10.9)	6.39 (1.04)	3.56 (0.81)	4.49 (1.02)	57.8 (13.2)	5.70 (1.29)
12	2.86 (0.83)	4.22 (1.23)	39.8 (11.7)	4.57 (1.33)	3.63 (0.83)	4.83 (1.10)	59.6 (13.7)	5.81 (1.32)	3.15 (0.81)	3.98 (1.02)	50.1 (13.0)	5.05 (1.29)
13	4.22 (0.79)	6.24 (1.16)	57.6 (10.6)	6.75 (1.26)	4.46 (0.75)	5.93 (0.99)	71.6 (11.8)	7.13 (1.19)	4.72 (0.81)	5.95 (1.02)	73.1 (12.2)	7.55 (1.29)
14	3.45 (0.87)	5.10 (1.28)	46.3 (11.7)	5.52 (1.38)	4.10 (1.34)	5.46 (1.78)	64.7 (21.3)	6.57 (2.14)	4.29 (1.23)	5.41 (1.55)	65.0 (18.9)	6.86 (1.97)
15	3.05 (0.82)	4.51 (1.21)	40.1 (10.9)	4.88 (1.31)	3.71 (0.96)	4.93 (1.27)	57.2 (14.8)	5.93 (1.53)	3.66 (1.27)	4.61 (1.60)	54.2 (18.9)	5.85 (2.03)
16	3.65 (1.09)	5.39 (1.60)	47.0 (13.9)	5.84 (1.74)	3.68 (0.88)	4.90 (1.17)	55.5 (13.3)	5.89 (1.41)	4.15 (1.29)	5.23 (1.62)	60.0 (18.8)	6.64 (2.06)
17	3.85 (0.66)	5.69 (0.97)	48.7 (8.41)	6.17 (1.05)	3.97 (0.83)	5.28 (1.11)	58.7 (12.4)	6.35 (1.33)	3.78 (0.88)	4.77 (1.11)	53.5 (12.6)	6.04 (1.41)
18	3.65 (0.57)	5.40 (0.85)	45.3 (7.16)	5.84 (0.92)	3.71 (0.68)	4.93 (0.91)	53.6 (9.87)	5.93 (1.09)	3.92 (0.62)	4.95 (0.78)	54.2 (8.63)	6.27 (0.99)
19	3.34 (0.75)	4.94 (1.11)	40.7 (9.24)	5.35 (1.20)	3.81 (0.69)	5.08 (0.92)	54.0 (9.95)	6.10 (1.11)	3.95 (0.84)	4.98 (1.06)	53.4 (11.5)	6.31 (1.34)
20	3.80 (0.77)	5.62 (1.14)	45.4 (9.25)	6.08 (1.23)	4.43 (0.68)	5.90 (0.90)	61.5 (9.39)	7.09 (1.08)	4.84 (0.84)	6.12 (1.06)	64.1 (11.2)	7.74 (1.35)
21	3.95 (1.10)	5.84 (1.63)	46.4 (13.0)	6.32 (1.76)	4.43 (1.40)	5.90 (1.87)	60.3 (19.3)	7.09 (2.25)	4.57 (1.51)	5.78 (1.91)	59.2 (19.7)	7.32 (2.42)
22	4.12 (1.11)	6.09 (1.65)	47.5 (12.9)	6.59 (1.78)	4.43 (0.80)	5.91 (1.07)	59.1 (10.7)	7.09 (1.28)	4.96 (1.60)	6.28 (2.03)	62.9 (20.5)	7.94 (2.56)
23	4.31 (1.01)	6.36 (1.49)	48.8 (11.5)	6.89 (1.61)	3.73 (0.54)	4.97 (0.72)	48.7 (7.02)	5.96 (0.86)	4.71 (1.25)	5.96 (1.59)	58.4 (15.8)	7.53 (2.01)
24	3.92 (0.62)	5.79 (0.92)	43.7 (6.88)	6.28 (1.00)	3.73 (0.55)	4.98 (0.73)	47.8 (7.03)	5.97 (0.88)	4.27 (0.67)	5.41 (0.85)	51.8 (8.11)	6.83 (1.07)
25	2.86 (1.73)	4.22 (2.56)	31.3 (19.0)	4.57 (2.77)	2.82 (1.47)	3.77 (1.96)	35.4 (18.5)	4.51 (2.35)	2.96 (1.79)	3.74 (2.26)	35.2 (21.3)	4.73 (2.86)
26	3.20 (1.28)	4.72 (1.88)	34.5 (13.8)	5.12 (2.04)	3.71 (0.53)	4.96 (0.71)	45.7 (6.62)	5.94 (0.85)	3.39 (1.18)	4.30 (1.50)	39.5 (13.8)	5.43 (1.90)
27	4.04 (0.99)	5.97 (1.46)	42.8 (10.4)	6.46 (1.58)	4.45 (0.50)	5.95 (0.67)	53.8 (6.01)	7.12 (0.81)	3.74 (1.29)	4.74 (1.63)	42.6 (14.8)	5.98 (2.06)
28	4.36 (1.13)	6.45 (1.67)	45.5 (11.8)	6.98 (1.81)	4.12 (0.85)	5.50 (1.14)	48.8 (10.3)	6.59 (1.36)	3.42 (0.99)	4.33 (1.25)	38.1 (10.9)	5.47 (1.58)
29	4.65 (1.10)	6.87 (1.63)	47.7 (11.4)	7.44 (1.77)	4.14 (0.50)	5.54 (0.67)	48.2 (5.77)	6.63 (0.80)	3.41 (0.75)	4.32 (0.95)	37.3 (8.25)	5.46 (1.20)
30	4.38 (1.27)	6.48 (1.88)	44.3 (12.9)	7.01 (2.03)	3.91 (0.74)	5.23 (0.99)	44.7 (8.51)	6.26 (1.18)	3.48 (0.74)	4.41 (0.94)	37.3 (7.96)	5.57 (1.19)
31	4.13 (1.07)	6.11 (1.58)	41.2 (10.7)	6.61 (1.71)	3.60 (0.98)	4.82 (1.31)	40.4 (11.1)	5.75 (1.56)	3.77 (0.68)	4.78 (0.87)	39.6 (7.17)	6.04 (1.09)
Avg	3.63	5.37	46.7	5.81	3.95	5.26	60.8	6.32	3.87	4.89	57.0	6.20
n	30	30	30	30	31	31	31	31	31	31	31	31
SD	0.53	0.79	6.27	0.85	0.39	0.52	12.7	0.62	0.55	0.70	12.5	0.89
Min	2.73	4.04	31.3	4.37	2.82	3.77	35.4	4.51	2.88	3.60	35.2	4.61
Max	4.65	6.87	59.1	7.44	4.63	6.16	85.0	7.41	4.96	6.28	82.0	7.94

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Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for August, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	3.61 (1.10)	5.34 (1.63)	35.5 (10.9)	5.78 (1.76)	4.45 (1.29)	5.96 (1.73)	49.0 (14.2)	7.12 (2.07)	4.02 (0.93)	5.10 (1.18)	41.4 (9.66)	6.43 (1.49)
2	4.48 (0.98)	6.63 (1.45)	43.3 (9.47)	7.17 (1.57)	5.66 (0.62)	7.59 (0.83)	61.3 (6.67)	9.05 (0.98)	4.78 (0.77)	6.07 (0.98)	48.3 (7.78)	7.65 (1.23)
3	4.04 (0.83)	5.98 (1.22)	38.5 (7.92)	6.46 (1.32)	5.63 (0.99)	7.56 (1.33)	60.0 (10.6)	9.01 (1.59)	4.69 (1.62)	5.97 (2.05)	46.6 (16.0)	7.51 (2.58)
4	3.31 (0.84)	4.89 (1.23)	31.1 (7.91)	5.29 (1.34)	4.77 (0.81)	6.40 (1.08)	49.9 (8.60)	7.63 (1.29)	4.86 (1.06)	6.17 (1.35)	47.4 (10.5)	7.77 (1.70)
5	3.00 (0.83)	4.43 (1.23)	27.9 (7.79)	4.80 (1.33)	4.56 (0.94)	6.13 (1.27)	47.0 (9.76)	7.30 (1.51)	5.37 (1.42)	6.83 (1.81)	51.4 (13.6)	8.59 (2.28)
6	3.24 (0.95)	4.79 (1.40)	29.7 (8.65)	5.18 (1.51)	3.81 (0.93)	5.13 (1.26)	38.6 (9.49)	6.10 (1.49)	4.62 (1.09)	5.89 (1.38)	43.6 (10.4)	7.40 (1.74)
7	3.53 (0.92)	5.23 (1.36)	32.0 (8.35)	5.66 (1.47)	3.37 (1.18)	4.53 (1.59)	33.6 (11.9)	5.39 (1.89)	3.67 (0.83)	4.67 (1.06)	34.0 (7.81)	5.87 (1.33)
8												
9	3.57 (1.20)	5.28 (1.77)	31.5 (10.6)	5.71 (1.92)	4.09 (0.72)	5.52 (0.96)	39.6 (7.00)	6.55 (1.14)	4.13 (0.99)	5.26 (1.26)	37.0 (8.89)	6.61 (1.58)
10	3.66 (1.10)	5.42 (1.63)	32.0 (9.67)	5.85 (1.76)	4.43 (1.15)	5.98 (1.55)	42.2 (11.00)	7.09 (1.84)	3.78 (1.19)	4.81 (1.52)	33.3 (10.5)	6.04 (1.91)
11	3.89 (1.33)	5.76 (1.98)	33.6 (11.6)	6.22 (2.14)	4.20 (0.76)	5.67 (1.02)	39.4 (7.16)	6.71 (1.21)	5.41 (1.12)	6.89 (1.43)	46.9 (9.72)	8.66 (1.79)
12	3.69 (1.75)	5.46 (2.60)	31.5 (14.9)	5.90 (2.81)	3.68 (0.71)	4.97 (0.96)	34.1 (6.66)	5.89 (1.14)	6.93 (1.61)	8.83 (2.05)	59.1 (13.7)	11.1 (2.57)
13					3.90 (0.55)	5.27 (0.74)	35.5 (4.89)	6.24 (0.87)	7.24 (1.21)	9.23 (1.54)	60.8 (10.3)	11.6 (1.93)
14	4.50 (0.97)	6.68 (1.44)	37.7 (8.16)	7.21 (1.55)	4.58 (1.29)	6.20 (1.75)	41.3 (11.7)	7.34 (2.07)	5.79 (1.54)	7.39 (1.96)	48.0 (12.8)	9.27 (2.46)
15	4.27 (0.99)	6.33 (1.47)	35.4 (8.23)	6.83 (1.58)	4.20 (0.73)	5.68 (0.98)	37.3 (6.44)	6.72 (1.16)	6.59 (1.95)	8.41 (2.49)	53.9 (16.1)	10.5 (3.12)
16	4.14 (0.98)	6.15 (1.46)	34.1 (8.11)	6.63 (1.57)	4.41 (0.87)	5.97 (1.18)	38.7 (7.72)	7.06 (1.40)	6.29 (2.13)	8.03 (2.73)	50.8 (17.3)	10.1 (3.42)
17	4.12 (1.09)	6.11 (1.62)	33.6 (8.89)	6.59 (1.74)	5.36 (1.09)	7.26 (1.48)	46.4 (9.48)	8.58 (1.75)	5.89 (2.17)	7.53 (2.77)	47.0 (17.3)	9.43 (3.47)
18	3.68 (1.26)	5.47 (1.87)	29.8 (10.2)	5.89 (2.02)	4.82 (1.03)	6.54 (1.40)	41.2 (8.93)	7.71 (1.65)	6.27 (1.30)	8.03 (1.67)	49.4 (10.3)	10.0 (2.09)
19	3.55 (1.41)	5.28 (2.10)	28.5 (11.3)	5.68 (2.26)	4.36 (0.77)	5.92 (1.05)	36.8 (6.58)	6.98 (1.24)	6.12 (1.41)	7.83 (1.81)	47.5 (11.1)	9.79 (2.26)
20	3.16 (1.26)	4.70 (1.87)	25.2 (10.0)	5.06 (2.01)	4.48 (0.70)	6.08 (0.95)	37.4 (5.86)	7.17 (1.12)	5.33 (1.77)	6.83 (2.27)	40.9 (13.7)	8.53 (2.83)
21	3.37 (0.76)	5.02 (1.13)	26.6 (5.99)	5.39 (1.21)					4.34 (1.17)	5.56 (1.50)	32.9 (8.93)	6.94 (1.88)
22	4.00 (0.95)	5.96 (1.42)	31.4 (7.45)	6.40 (1.52)					4.92 (1.28)	6.31 (1.64)	36.9 (9.57)	7.88 (2.04)
23	4.35 (0.85)	6.49 (1.27)	33.9 (6.64)	6.97 (1.36)					4.93 (1.40)	6.33 (1.80)	36.6 (10.4)	7.89 (2.24)
24	4.70 (1.11)	7.01 (1.65)	36.3 (8.58)	7.52 (1.77)	6.10 (1.31)	8.30 (1.78)	48.8 (10.5)	9.77 (2.10)	4.94 (1.72)	6.34 (2.20)	36.2 (12.6)	7.90 (2.75)
25	4.84 (1.43)	7.22 (2.13)	37.2 (11.0)	7.74 (2.28)	5.58 (1.02)	7.59 (1.39)	44.2 (8.12)	8.93 (1.63)	5.04 (1.29)	6.47 (1.66)	36.6 (9.44)	8.07 (2.07)
26	4.54 (1.18)	6.78 (1.76)	34.7 (9.00)	7.27 (1.88)	4.88 (1.05)	6.64 (1.43)	38.2 (8.25)	7.81 (1.68)	4.41 (1.15)	5.66 (1.48)	31.7 (8.30)	7.06 (1.85)
27	3.94 (1.68)	5.89 (2.50)	29.9 (12.8)	6.31 (2.68)					4.46 (1.05)	5.72 (1.34)	31.7 (7.45)	7.13 (1.67)
28	3.77 (1.20)	5.64 (1.79)	28.4 (9.02)	6.04 (1.91)	5.61 (1.29)	7.64 (1.76)	43.1 (9.92)	8.98 (2.06)	5.20 (1.24)	6.68 (1.59)	36.7 (8.73)	8.32 (1.98)
29	3.67 (1.05)	5.49 (1.56)	27.5 (7.87)	5.88 (1.68)	5.22 (0.85)	7.10 (1.16)	39.7 (6.44)	8.35 (1.36)	4.45 (0.96)	5.71 (1.24)	31.1 (6.77)	7.11 (1.54)
30	3.42 (1.12)	5.12 (1.67)	25.5 (8.33)	5.48 (1.78)	5.10 (0.98)	6.95 (1.33)	38.5 (7.40)	8.17 (1.56)	4.14 (0.88)	5.32 (1.12)	28.7 (6.06)	6.62 (1.40)
31												
Avg	3.86	5.73	32.2	6.17	4.69	6.34	42.5	7.50	5.12	6.55	42.3	8.20
n	28	28	28	28	25	25	25	25	29	29	29	29
SD	0.48	0.72	4.18	0.77	0.69	0.94	6.96	1.10	0.92	1.18	8.55	1.48
Min	3.00	4.43	25.2	4.80	3.37	4.53	33.6	5.39	3.67	4.67	28.7	5.87
Max	4.84	7.22	43.3	7.74	6.10	8.30	61.3	9.77	7.24	9.23	60.8	11.6

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Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for September, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	4.85 (0.64)	7.28 (0.97)	35.9 (4.76)	7.76 (1.03)	4.56 (0.98)	6.21 (1.34)	33.8 (7.32)	7.29 (1.57)	4.29 (0.86)	5.51 (1.10)	29.2 (5.86)	6.86 (1.37)
2	5.25 (0.84)	7.90 (1.26)	38.7 (6.21)	8.40 (1.35)	4.01 (1.13)	5.47 (1.55)	29.6 (8.37)	6.42 (1.82)	4.56 (1.04)	5.86 (1.34)	30.8 (7.05)	7.29 (1.67)
3	4.42 (1.25)	6.66 (1.88)	32.5 (9.20)	7.08 (2.00)	3.45 (0.76)	4.70 (1.04)	25.2 (5.59)	5.52 (1.22)	4.26 (0.89)	5.48 (1.14)	28.6 (5.96)	6.81 (1.42)
4	3.71 (0.83)	5.60 (1.25)	27.2 (6.08)	5.93 (1.33)	4.14 (1.24)	5.65 (1.69)	30.0 (9.00)	6.63 (1.99)	4.18 (0.85)	5.37 (1.10)	27.9 (5.69)	6.68 (1.37)
5	3.68 (1.17)	5.56 (1.77)	26.9 (8.58)	5.89 (1.88)	4.32 (1.00)	5.89 (1.36)	31.1 (7.21)	6.90 (1.60)	4.80 (1.61)	6.18 (2.07)	31.8 (10.7)	7.69 (2.57)
6	3.78 (1.01)	5.71 (1.53)	27.5 (7.34)	6.04 (1.61)	4.71 (1.23)	6.43 (1.68)	33.7 (8.84)	7.53 (1.97)	4.46 (0.99)	5.74 (1.28)	29.3 (6.54)	7.14 (1.59)
7	4.39 (0.95)	6.64 (1.44)	31.7 (6.85)	7.02 (1.52)	3.92 (1.12)	5.36 (1.53)	27.9 (7.98)	6.28 (1.80)	4.63 (0.96)	5.95 (1.23)	30.2 (6.24)	7.40 (1.53)
8	4.77 (0.81)	7.21 (1.22)	34.3 (5.82)	7.63 (1.29)	3.83 (0.76)	5.23 (1.03)	27.1 (5.32)	6.13 (1.21)	4.46 (0.83)	5.73 (1.07)	28.9 (5.42)	7.13 (1.34)
9	4.83 (0.84)	7.30 (1.27)	34.6 (6.03)	7.72 (1.34)	4.15 (1.02)	5.67 (1.39)	29.2 (7.16)	6.65 (1.62)	3.74 (1.06)	4.82 (1.36)	24.2 (6.84)	5.99 (1.69)
10	4.69 (1.12)	7.10 (1.70)	33.5 (8.05)	7.51 (1.80)	3.38 (1.03)	4.61 (1.41)	23.6 (7.25)	5.40 (1.66)	3.39 (0.86)	4.36 (1.10)	21.7 (5.50)	5.42 (1.37)
11	3.65 (0.74)	5.92 (1.21)	27.8 (5.66)	5.84 (1.18)	3.46 (0.95)	4.73 (1.29)	24.1 (6.57)	5.54 (1.51)	3.80 (0.98)	4.89 (1.26)	24.3 (6.22)	6.08 (1.56)
12	3.16 (0.66)	5.56 (1.16)	26.1 (5.43)	5.06 (1.06)	3.83 (1.41)	5.23 (1.93)	26.5 (9.77)	6.13 (2.26)	4.23 (0.99)	5.44 (1.28)	26.8 (6.29)	6.76 (1.59)
13	3.77 (0.75)	6.64 (1.32)	31.0 (6.17)	6.03 (1.20)	3.49 (1.03)	4.77 (1.41)	24.0 (7.11)	5.59 (1.65)	4.86 (0.99)	6.26 (1.28)	30.7 (6.26)	7.77 (1.59)
14	3.82 (0.93)	6.73 (1.64)	31.3 (7.61)	6.12 (1.49)	3.60 (0.98)	4.92 (1.34)	24.7 (6.71)	5.76 (1.57)	5.27 (1.11)	6.78 (1.43)	33.1 (7.01)	8.43 (1.78)
15												
16	4.61 (0.77)	9.66 (1.61)	46.2 (7.72)	7.37 (1.23)	3.18 (0.74)	4.34 (1.02)	21.6 (5.05)	5.08 (1.19)	5.72 (1.12)	7.37 (1.45)	35.6 (6.98)	9.15 (1.80)
17	4.32 (0.99)	9.08 (2.08)	43.3 (9.94)	6.92 (1.59)	3.63 (0.80)	4.97 (1.09)	24.6 (5.40)	5.82 (1.28)	5.25 (1.07)	6.77 (1.38)	32.6 (6.65)	8.40 (1.71)
18	3.73 (0.61)	7.86 (1.28)	37.3 (6.06)	5.96 (0.97)	3.74 (0.81)	5.12 (1.10)	25.2 (5.43)	5.99 (1.29)	4.64 (0.97)	5.98 (1.25)	28.6 (5.99)	7.43 (1.55)
19	3.26 (0.81)	6.91 (1.72)	32.7 (8.15)	5.22 (1.30)	3.80 (1.00)	5.21 (1.37)	25.5 (6.74)	6.09 (1.60)	4.34 (0.98)	5.59 (1.26)	26.6 (5.99)	6.94 (1.56)
20	3.58 (0.70)	7.59 (1.48)	35.8 (6.99)	5.73 (1.12)	4.70 (1.22)	6.44 (1.67)	31.4 (8.18)	7.52 (1.96)	4.91 (0.99)	6.33 (1.27)	30.0 (6.02)	7.86 (1.58)
21	3.42 (0.95)	7.26 (2.01)	34.1 (9.48)	5.47 (1.52)	4.48 (1.34)	6.14 (1.84)	29.9 (8.95)	7.17 (2.14)	5.05 (1.16)	7.09 (1.61)	33.7 (7.67)	8.08 (1.85)
22	3.80 (0.63)	8.08 (1.33)	37.9 (6.24)	6.09 (1.00)	3.94 (0.70)	5.41 (0.97)	26.2 (4.69)	6.31 (1.13)	5.80 (1.28)	9.03 (1.99)	43.0 (9.50)	9.28 (2.05)
23	3.36 (0.79)	7.13 (1.67)	33.3 (7.82)	5.37 (1.26)	3.94 (0.62)	5.40 (0.85)	26.1 (4.10)	6.30 (0.99)	5.98 (1.34)	9.31 (2.09)	44.2 (9.96)	9.56 (2.15)
24	3.23 (1.01)	6.88 (2.16)	32.0 (10.0)	5.17 (1.62)	3.71 (0.80)	5.09 (1.10)	24.5 (5.27)	5.93 (1.28)	4.96 (1.73)	7.73 (2.69)	36.6 (12.8)	7.93 (2.76)
25	3.72 (0.69)	7.91 (1.48)	36.7 (6.84)	5.94 (1.11)	3.83 (0.70)	5.27 (0.96)	25.3 (4.59)	6.13 (1.11)	4.89 (1.00)	7.63 (1.56)	35.9 (7.34)	7.82 (1.60)
26	3.94 (0.69)	8.41 (1.46)	38.9 (6.76)	6.31 (1.10)	4.31 (1.06)	5.92 (1.45)	28.3 (6.95)	6.89 (1.69)	5.27 (0.98)	8.23 (1.53)	38.6 (7.18)	8.44 (1.57)
27	3.64 (0.62)	7.76 (1.31)	35.8 (6.05)	5.82 (0.98)	4.38 (0.85)	6.02 (1.16)	28.6 (5.53)	7.00 (1.35)	5.29 (0.95)	8.26 (1.48)	38.6 (6.94)	8.47 (1.52)
28	3.35 (0.72)	7.17 (1.54)	32.9 (7.09)	5.36 (1.15)	5.43 (1.16)	7.46 (1.60)	35.4 (7.60)	8.68 (1.86)	5.06 (1.04)	7.90 (1.62)	36.8 (7.57)	8.09 (1.66)
29	3.92 (0.89)	8.43 (1.91)	38.5 (8.71)	6.27 (1.42)	4.90 (1.37)	6.74 (1.89)	31.9 (8.93)	7.83 (2.20)	5.60 (1.13)	8.75 (1.77)	40.6 (8.23)	8.97 (1.82)
30	3.95 (1.14)	8.52 (2.45)	38.7 (11.2)	6.32 (1.82)	5.20 (1.23)	7.15 (1.69)	33.7 (7.98)	8.32 (1.97)	5.70 (1.19)	8.90 (1.85)	41.2 (8.58)	9.12 (1.90)
Avg	3.95	7.26	34.2	6.32	4.07	5.57	27.9	6.51	4.81	6.66	32.4	7.69
n	29	29	29	29	29	29	29	29	29	29	29	29
SD	0.55	1.02	4.70	0.88	0.54	0.75	3.57	0.87	0.64	1.36	5.71	1.02
Min	3.16	5.56	26.1	5.06	3.18	4.34	21.6	5.08	3.39	4.36	21.7	5.42
Max	5.25	9.66	46.2	8.40	5.43	7.46	35.4	8.68	5.98	9.31	44.2	9.56

ED_004549_00015929-00258

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for October, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1	4.09 (1.54)	8.85 (3.34)	40.1 (15.1)	6.55 (2.47)	5.63 (1.42)	7.75 (1.95)	36.4 (9.16)	9.01 (2.27)	5.24 (1.87)	8.19 (2.92)	37.8 (13.5)	8.39 (2.99)
2	4.09 (1.56)	8.86 (3.37)	40.0 (15.2)	6.54 (2.49)	6.05 (1.36)	8.34 (1.88)	39.0 (8.79)	9.69 (2.18)	4.21 (0.97)	6.58 (1.51)	30.2 (6.96)	6.74 (1.55)
3	3.42 (0.75)	7.43 (1.63)	33.4 (7.34)	5.47 (1.20)	6.12 (1.25)	8.42 (1.72)	39.3 (8.03)	9.79 (2.00)	4.14 (0.77)	6.46 (1.20)	29.5 (5.48)	6.62 (1.23)
4	4.21 (0.82)	9.18 (1.79)	41.0 (8.02)	6.74 (1.32)	5.97 (1.28)	8.23 (1.77)	38.2 (8.21)	9.56 (2.05)	4.71 (0.80)	7.35 (1.24)	33.4 (5.65)	7.53 (1.27)
5	4.31 (0.61)	9.40 (1.32)	41.7 (5.88)	6.90 (0.97)	6.50 (1.24)	8.95 (1.70)	41.4 (7.87)	10.4 (1.98)	5.56 (0.89)	10.3 (2.13)	46.5 (9.62)	8.90 (1.42)
6	4.36 (0.81)	51 (278)	1030 (7320)	6.97 (1.29)	5.02 (1.99)	6.92 (2.75)	31.9 (12.7)	8.04 (3.19)	5.56 (0.86)	12.4 (1.91)	56.7 (8.69)	8.90 (1.37)
7					3.83 (0.98)	5.61 (1.38)	25.7 (6.33)	6.13 (1.57)	6.09 (1.05)	13.6 (2.34)	63.1 (10.9)	9.74 (1.68)
8					3.86 (0.96)	6.14 (1.52)	27.9 (6.95)	6.18 (1.54)	5.30 (1.43)	11.8 (3.19)	54.7 (14.8)	8.47 (2.28)
9					4.48 (1.10)	7.17 (1.77)	32.5 (8.01)	7.17 (1.77)	3.84 (1.78)	8.61 (3.99)	39.6 (18.4)	6.15 (2.85)
10					5.00 (1.03)	8.03 (1.65)	36.2 (7.41)	8.00 (1.64)	3.75 (0.60)	8.41 (1.36)	38.5 (6.20)	6.00 (0.97)
11												
12	1.30 (0.11)			2.08 (0.18)	5.50 (0.97)	10.4 (1.83)	47.6 (8.39)	8.79 (1.55)	3.88 (0.73)	8.79 (1.64)	39.8 (7.44)	6.21 (1.16)
13	0.97 (0.22)			1.55 (0.36)	5.15 (0.99)	18.8 (10.10)	94.4 (55.10)	8.24 (1.58)	3.87 (0.89)	8.82 (2.02)	39.7 (9.14)	6.20 (1.43)
14												
15	0.98 (0.14)			1.57 (0.22)								
16	0.92 (0.12)			1.47 (0.19)								
17	0.83 (0.23)			1.33 (0.36)								
18	0.87 (0.08)			1.39 (0.13)								
19	0.81 (0.30)			1.30 (0.48)								
20												
21												
22	1.33 (1.02)	1.92 (1.48)	36.6 (28.3)	2.12 (1.64)	1.47 (1.12)	2.10 (1.60)	48.2 (36.8)	2.35 (1.79)				
23	1.60 (0.65)	2.32 (0.94)	43.1 (17.5)	2.56 (1.03)	1.75 (1.08)	2.50 (1.55)	55.7 (34.7)	2.80 (1.73)	0.88 (0.26)			1.41 (0.42)
24	1.77 (0.22)	2.57 (0.32)	46.8 (5.76)	2.84 (0.35)	2.19 (0.61)	3.13 (0.87)	67.7 (18.7)	3.50 (0.97)	1.05 (0.28)			1.68 (0.44)
25	1.81 (1.35)	2.63 (1.96)	46.9 (34.9)	2.90 (2.17)	1.90 (1.29)	2.72 (1.85)	57.5 (39.0)	3.04 (2.07)	1.57 (0.41)			2.51 (0.65)
26	1.57 (2.17)	2.27 (3.15)	39.7 (55.1)	2.51 (3.48)	1.77 (1.85)	2.53 (2.65)	52.1 (54.6)	2.83 (2.97)	1.65 (0.81)			2.63 (1.30)
27												
28	2.74 (0.91)	3.96 (1.31)	67.1 (22.1)	4.38 (1.45)	2.26 (0.87)	3.23 (1.24)	63.8 (24.5)	3.61 (1.39)	2.51 (0.58)	3.37 (0.78)	65.2 (15.1)	4.01 (0.93)
29												
30												
31												
Avg	2.21	9.23	125	3.54	4.14	6.72	46.4	6.62	3.75	8.82	44.2	6.01
n	19	12	12	19	18	18	18	18	17	13	13	17
SD	1.36	13.0	272	2.17	1.74	3.91	16.5	2.78	1.61	2.62	11.5	2.58
Min	0.81	1.92	33.4	1.30	1.47	2.10	25.7	2.35	0.88	3.37	29.5	1.41
Max	4.36	51.3	1030	6.97	6.50	18.8	94.4	10.4	6.09	13.6	65.2	9.74

ED_004549_00015929-00259

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for November, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1												
2												
3												
4	3.49 (4.47)	5.06 (6.48)	76.8 (98.4)	5.59 (7.15)	2.26 (1.85)	3.24 (2.65)	55.9 (45.8)	3.62 (2.96)				
5	3.37 (4.52)	4.88 (6.55)	72.9 (98.0)	5.39 (7.23)	2.08 (1.81)	2.98 (2.59)	50.5 (44.0)	3.33 (2.90)				
6					1.96 (1.87)	2.80 (2.67)	46.6 (44.5)	3.13 (2.99)				
7					2.08 (1.95)	2.98 (2.79)	48.6 (45.6)	3.33 (3.12)				
8					2.40 (1.93)	3.44 (2.77)	55.1 (44.4)	3.85 (3.09)				
9					2.94 (1.84)	4.21 (2.64)	66.1 (41.5)	4.71 (2.95)				
10	3.95 (1.79)	5.73 (2.60)	78.9 (35.9)	6.32 (2.87)	3.60 (0.90)	5.16 (1.29)	79.4 (19.7)	5.77 (1.44)	3.82 (0.99)	5.14 (1.33)	78.4 (20.3)	6.11 (1.58)
11	2.03 (2.62)	2.95 (3.80)	40.0 (51.4)	3.25 (4.19)	3.54 (0.73)	5.07 (1.05)	76.6 (16.0)	5.67 (1.18)	2.94 (2.31)	3.96 (3.11)	59.6 (46.7)	4.71 (3.69)
12	1.30 (2.41)	1.89 (3.50)	25.1 (46.5)	2.08 (3.86)	3.03 (1.72)	4.34 (2.47)	64.1 (36.3)	4.84 (2.76)				
13					3.23 (2.91)	4.63 (4.17)	66.9 (60.3)	5.16 (4.65)				
14					3.92 (2.67)	5.63 (3.83)	79.7 (54.3)	6.28 (4.28)				
15					4.08 (2.88)	5.86 (4.14)	81.1 (57.4)	6.53 (4.61)				
16					4.32 (3.06)	6.20 (4.40)	84.0 (59.7)	6.91 (4.90)				
17					2.92 (3.12)	4.19 (4.48)	55.7 (59.7)	4.66 (4.99)				
18	2.56 (1.32)	3.74 (1.93)	44.2 (22.9)	4.10 (2.12)	2.46 (1.10)	3.54 (1.58)	45.7 (20.3)	3.93 (1.75)	4.38 (2.24)	5.92 (3.02)	78.9 (40.3)	7.01 (3.58)
19	3.11 (0.35)	4.54 (0.51)	52.7 (5.7)	4.97 (0.56)	3.15 (0.54)	4.53 (0.77)	57.3 (9.8)	5.04 (0.86)	5.06 (1.18)	6.84 (1.59)	89.6 (20.8)	8.10 (1.88)
20	3.58 (0.95)	5.23 (1.39)	59.5 (15.7)	5.73 (1.53)	3.30 (0.83)	4.75 (1.20)	58.7 (14.8)	5.28 (1.33)	6.39 (2.19)	8.63 (2.95)	111 (37.9)	10.2 (3.50)
21					3.07 (2.11)	4.43 (3.04)	53.4 (36.8)	4.91 (3.37)				
22					2.97 (2.21)	4.29 (3.19)	50.5 (37.7)	4.75 (3.54)				
23	2.91 (1.79)	4.26 (2.61)	45.5 (27.9)	4.66 (2.86)	2.83 (1.38)	4.10 (1.99)	47.3 (23.2)	4.53 (2.20)	6.22 (4.70)	8.40 (6.36)	102 (76.9)	9.95 (7.53)
24					2.69 (1.40)	3.90 (2.04)	43.8 (22.8)	4.30 (2.24)				
25												
26												
27												
28												
29					3.38 (1.19)	4.96 (1.74)	49.3 (17.6)	5.41 (1.90)				
30					3.45 (0.91)	5.06 (1.34)	49.2 (13.1)	5.52 (1.46)				
Avg	2.92	4.25	55.1	4.68	3.03	4.36	59.4	4.85	4.80	6.48	86.5	7.69
n	9	9	9	9	23	23	23	23	6	6	6	6
SD	0.79	1.15	17.4	1.26	0.63	0.91	12.5	1.00	1.24	1.68	16.7	1.98
Min	1.30	1.89	25.1	2.08	1.96	2.80	43.8	3.13	2.94	3.96	59.6	4.71
Max	3.95	5.73	78.9	6.32	4.32	6.20	84.0	6.91	6.39	8.63	111	10.2

ED_004549_00015929-00260

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for December, 2009.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1												
2	3.63 (1.86)	5.32 (2.73)	46.8 (24.1)	5.81 (2.98)	3.97 (1.56)	5.84 (2.30)	54.1 (21.4)	6.36 (2.50)	5.11 (3.28)	6.93 (4.44)	69.1 (44.5)	8.18 (5.24)
3	4.19 (1.05)	6.14 (1.54)	53.0 (13.1)	6.71 (1.68)	3.62 (0.90)	5.32 (1.32)	48.2 (12.1)	5.79 (1.44)	4.79 (1.57)	6.49 (2.13)	63.5 (20.9)	7.66 (2.51)
4					3.40 (0.87)	5.00 (1.28)	44.1 (11.4)	5.43 (1.39)				
5					3.41 (1.07)	5.02 (1.57)	43.4 (13.5)	5.46 (1.71)				
6					3.57 (2.09)	5.26 (3.08)	44.4 (26.0)	5.71 (3.35)	3.61 (4.15)	4.90 (5.63)	44.7 (51.4)	5.78 (6.64)
7					3.67 (1.96)	5.40 (2.89)	44.5 (23.9)	5.87 (3.13)	4.01 (4.19)	5.44 (5.68)	48.6 (50.8)	6.41 (6.70)
8	3.78 (3.64)	5.54 (5.34)	43.1 (41.5)	6.05 (5.82)	4.64 (1.58)	6.85 (2.33)	55.2 (18.8)	7.43 (2.53)	2.33 (3.13)	3.16 (4.25)	27.7 (37.2)	3.73 (5.00)
9	4.56 (0.87)	6.69 (1.27)	50.9 (9.8)	7.29 (1.38)	3.72 (1.04)	5.48 (1.54)	43.3 (12.4)	5.95 (1.67)	3.10 (0.81)	4.21 (1.10)	36.0 (9.6)	4.96 (1.30)
10					2.62 (1.01)	3.87 (1.49)	29.9 (11.4)	4.20 (1.62)				
11					1.90 (2.06)	2.81 (3.04)	21.3 (23.0)	3.05 (3.30)				
12												
13	2.99 (1.55)	4.40 (2.28)	31.0 (16.0)	4.79 (2.48)	3.30 (1.46)	4.87 (2.16)	35.4 (15.7)	5.28 (2.34)	3.94 (2.37)	5.37 (3.23)	42.2 (25.4)	6.31 (3.79)
14					3.44 (1.19)	5.08 (1.76)	36.1 (12.6)	5.50 (1.90)	4.18 (3.03)	5.69 (4.13)	43.8 (31.8)	6.68 (4.85)
15	3.52 (0.99)	5.17 (1.46)	35.1 (9.9)	5.63 (1.59)	2.96 (0.88)	4.37 (1.30)	30.5 (9.2)	4.73 (1.41)	3.84 (1.97)	5.23 (2.69)	39.5 (20.4)	6.14 (3.16)
16									2.64 (2.86)	3.59 (3.89)	26.6 (28.8)	4.22 (4.57)
17	2.35 (3.19)	3.46 (4.69)	22.7 (30.7)	3.76 (5.10)	1.92 (1.91)	2.84 (2.82)	19.0 (18.9)	3.08 (3.05)	2.27 (3.30)	3.09 (4.50)	22.4 (32.6)	3.63 (5.28)
18	1.74 (3.05)	2.56 (4.48)	16.5 (28.9)	2.79 (4.87)	1.77 (2.11)	2.62 (3.13)	17.3 (20.6)	2.84 (3.38)	1.36 (2.49)	1.86 (3.39)	13.2 (24.2)	2.18 (3.98)
19												
20	2.15 (2.55)	3.17 (3.76)	19.7 (23.4)	3.44 (4.09)	2.78 (2.17)	4.12 (3.21)	26.1 (20.4)	4.45 (3.47)	2.69 (3.35)	3.66 (4.56)	25.1 (31.2)	4.30 (5.35)
21	2.00 (2.37)	2.95 (3.50)	18.1 (21.5)	3.20 (3.80)	2.86 (2.23)	4.23 (3.30)	26.4 (20.6)	4.57 (3.57)	2.96 (3.75)	4.04 (5.11)	27.2 (34.3)	4.74 (6.00)
22	1.83 (2.31)	2.70 (3.41)	16.3 (20.6)	2.93 (3.70)	3.14 (2.58)	4.65 (3.82)	28.5 (23.4)	5.02 (4.13)	3.12 (3.83)	4.26 (5.22)	28.1 (34.5)	5.00 (6.12)
23	2.11 (2.33)	3.11 (3.43)	18.5 (20.4)	3.37 (3.72)	2.88 (2.45)	4.27 (3.62)	25.8 (21.9)	4.62 (3.91)	3.21 (3.64)	4.38 (4.97)	28.4 (32.3)	5.14 (5.83)
24												
25	3.28 (2.19)	4.84 (3.23)	27.9 (18.6)	5.25 (3.50)	2.41 (1.31)	3.57 (1.94)	20.8 (11.4)	3.85 (2.10)	3.94 (2.56)	5.37 (3.49)	33.7 (21.9)	6.30 (4.09)
26												
27									5.08 (3.60)	6.94 (4.92)	42.2 (29.9)	8.13 (5.77)
28	3.38 (3.20)	4.99 (4.72)	27.7 (26.1)	5.41 (5.11)	3.02 (2.03)	4.47 (3.01)	25.0 (16.8)	4.83 (3.25)				
29												
30												
31												
Avg	2.97	4.36	30.5	4.75	3.10	4.57	34.3	4.95	3.45	4.70	36.8	5.53
n	14	14	14	14	21	21	21	21	18	18	18	18
SD	0.90	1.31	12.7	1.43	0.70	1.02	11.4	1.11	0.99	1.34	13.8	1.58
Min	1.74	2.56	16.3	2.79	1.77	2.62	17.3	2.84	1.36	1.86	13.2	2.18
Max	4.56	6.69	53.0	7.29	4.64	6.85	55.2	7.43	5.11	6.94	69.1	8.18

ED_004549_00015929-00261

Table F10. Daily mean (SD) of NH3 emissions at Site NC3B for January, 2010.

Day	Barn 1				Barn 2				Barn 3			
	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$	$kg \cdot d^{-1}$	$g \cdot d^{-1} hd^{-2}$	$g \cdot d^{-1} AU^{-1}$	$g \cdot d^{-1} m^{2}$
1												
2												
3												
4												
5												
6												
7												
8												
9	4.07 (5.28)	6.08 (7.89)	29.7 (38.5)	6.51 (8.45)	3.52 (2.02)	5.25 (3.02)	25.6 (14.7)	5.63 (3.23)	2.82 (3.43)	3.87 (4.70)	19.9 (24.2)	4.52 (5.48)
10	4.27 (5.67)	6.39 (8.48)	30.9 (41.0)	6.84 (9.07)	3.47 (2.12)	5.18 (3.17)	25.0 (15.3)	5.55 (3.40)	2.75 (3.46)	3.77 (4.74)	19.2 (24.2)	4.40 (5.53)
11	5.06 (5.48)	7.58 (8.21)	36.4 (39.4)	8.10 (8.77)	3.51 (2.40)	5.24 (3.58)	25.1 (17.1)	5.61 (3.83)	2.97 (3.60)	4.08 (4.94)	20.6 (24.9)	4.76 (5.76)
12	4.99 (5.04)	7.48 (7.54)	35.7 (36.0)	7.99 (8.06)	4.13 (2.50)	6.18 (3.74)	29.4 (17.8)	6.61 (4.00)	2.55 (2.89)	3.49 (3.96)	17.5 (19.9)	4.07 (4.62)
13	3.92 (5.68)	5.87 (8.51)	27.8 (40.4)	6.27 (9.09)	4.06 (2.24)	6.07 (3.36)	28.7 (15.8)	6.50 (3.59)	2.73 (2.99)	3.74 (4.10)	18.6 (20.4)	4.36 (4.79)
14												
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31												
Avg	4.46	6.68	32.1	7.14	3.74	5.58	26.7	5.98	2.76	3.79	19.2	4.42
n	5	5	5	5	5	5	5	5	5	5	5	5
SD	0.47	0.71	3.36	0.76	0.30	0.45	1.87	0.47	0.14	0.19	1.07	0.22
Min	3.92	5.87	27.8	6.27	3.47	5.18	25.0	5.55	2.55	3.49	17.5	4.07
Max	5.06	7.58	36.4	8.10	4.13	6.18	29.4	6.61	2.97	4.08	20.6	4.76

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Table F9. Completeness of airflow and emissions data.

Table F11. Airflow and emission data completeness (%) at Site NC3B for December, 2007.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	91.9	91.8	88.5	80	74.9	62.7	0	0	0	0	0	0	0	0	0	0	0	0
5	87.7	89.2	82.1	81.3	81.9	62.8	0	0	0	0	0	0	0	0	0	0	0	0
6	89.1	88.8	84	85.8	80.1	76.9	0	0	0	0	0	0	0	0	0	0	0	0
7	82.7	83.2	75.1	75.2	71.6	63.8	0	0	0	0	0	0	0	0	0	0	0	0
8	87.6	88.4	79	82.8	78.8	69.7	0	0	0	0	0	0	0	0	0	0	0	0
9	92.6	93.1	83.5	92.4	93	69	0	0	0	0	0	0	0	0	0	0	0	0
10	95.6	95.8	89	95.6	95.8	77.8	0	0	0	80.4	80.6	74.2	0	0	0	0	0	0
11	97	98.5	87.9	96.9	98.5	79.5	0	0	0	97	98.5	87.9	0	0	0	0	0	0
12	13.1	13	10.6	12.4	11	7.5	0	0	0	13.1	13	10.6	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	58.3	58.2	52.9	56.4	56.4	44.6	0	0	0	58.3	58.2	52.9	0	0	0	0	0	0
15	89.7	90.6	83.2	89.4	90.6	80.1	0	0	0	44.6	90.6	83.2	0	0	0	0	0	0
16	92.6	93.1	85.6	87.6	92.7	61.5	0	0	0	0	93.1	85.6	0	0	0	0	0	0
17	90.5	90.1	83.8	78.9	89.9	59.4	0	0	0	0	90.1	83.8	0	0	0	0	0	0
18	89	89.4	83.8	87.4	89.4	74.8	0	0	0	0	89.4	83.8	0	0	0	0	0	0
19	92.2	92.4	87.2	88.7	92.4	72.7	0	0	0	0	92.4	87.2	0	0	0	0	0	0
20	91.9	91.7	85.1	91.3	86.4	79.9	0	0	0	0	91.7	51.7	0	0	0	0	0	0
21	92.7	92.6	85.1	92.6	89.8	84.6	0	0	0	41.9	89	32	0	0	0	0	0	0
22	90.4	90.7	78.1	90.1	86.6	76.2	0	0	0	90.4	90.7	78.1	0	0	0	0	0	0
23	94.4	94.6	86.1	90.6	93.3	77.6	0	0	0	94.4	94.6	86.1	0	0	0	0	0	0
24	90.2	90.4	83.3	84.7	65.7	59.6	0	0	0	90.2	90.4	83.3	0	0	0	0	0	0
25	91.7	91.3	84	91	72.2	78	0	0	0	91.7	91.3	84	0	0	0	0	0	0
26	98	96.7	95.2	83.3	54.9	65.4	0	0	0	98	96.7	95.2	0	0	0	0	0	0
27	100	98.5	98.5	94.6	76	87.3	0	0	0	100	98.5	98.5	0	0	0	0	0	0
28	99.9	99.2	96.5	96.8	90	91.2	0	0	0	99.9	99.2	96.5	0	0	0	0	0	0
29	100	99.9	94.9	100	99.9	67.8	0	0	0	100	99.9	94.9	0	0	0	0	0	0
30	97.6	97.2	92	97.6	97.2	75.2	0	0	0	97.6	97.2	92	0	0	0	0	0	0
31	96.7	99.4	93.5	91.3	81.8	71	0	0	0	96.7	99.4	93.5	0	0	0	0	0	0
Avg	77.2	77.3	71.9	74	70.7	60.5	0	0	0	41.8	59.5	52.7	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	33.6	33.6	31.6	32.4	32	27.5	0	0	0	44.5	43.9	40.7	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	99.9	98.5	100	99.9	91.2	0	0	0	100	99.9	98.5	0	0	0	0	0	0

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Table F11. Airflow and emission data completeness (%) at Site NC3B for January, 2008.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	97.8	99.8	96.1	87.6	65.8	76.3	0	0	0	95.6	97.8	94.8	0	0	0	0	0	0
2	98.2	100	96.2	75.7	54.2	52.8	0	0	0	98.2	100	96.2	0	0	0	0	0	0
3	96.8	100	95.1	86.9	67.1	58.2	0	0	0	96.8	100	95.1	0	0	0	0	0	0
4	97.5	99.9	96.4	52.4	47.7	52	0	0	0	93.4	29	78.5	0	0	0	0	0	0
5	99.2	99.4	97.1	90.9	82.3	97.1	0	0	0	99.2	0	60.1	0	0	0	0	0	0
6	99.8	99.7	96.9	94.3	86	96.9	0	0	0	99.8	0	96.9	0	0	0	0	0	0
7	99.9	99.9	96	96.4	88.1	94.7	0	0	0	99.9	0	96	0	0	0	0	0	0
8	99.9	99.8	94.7	97.1	90.3	89.9	0	0	0	99.9	0	94.7	0	0	0	0	0	0
9	99.9	100	95.8	97.4	99.5	83.5	0	0	0	99.9	0	95.8	0	0	0	0	0	0
10	99.9	99.9	96.9	97.7	97.8	90.5	0	0	0	99.9	0	96.9	0	0	0	0	0	0
11	95.4	95.4	89.8	36.7	35.9	34.2	0	0	0	38	0	35.5	0	0	0	0	0	0
12	96.9	99.2	94.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	97.7	96.9	94.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	97.8	97.4	94.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	98	97.5	94.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	97.9	97.3	92.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	97.1	97	94.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	98.1	98.1	97.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	98.8	98.6	98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	97.7	96.9	92.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	99.2	99.2	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	98.5	98.7	98.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	98	98	97.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	98.8	98.1	96.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	99.2	99.3	98.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	98.8	99	98.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	98.8	98.6	97.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	98.1	98.1	97.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	98.9	97.2	92.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	98.5	93	87.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	98.6	98.5	98.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg	98.4	98.4	95.7	29.5	26.3	26.6	0	0	0	32.9	10.5	30.3	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	1	1.5	2.7	41.4	37.5	38	0	0	0	45.6	29.5	42.5	0	0	0	0	0	0
Min	95.4	93	87.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	99.9	100	99	97.7	99.5	97.1	0	0	0	99.9	100	96.9	0	0	0	0	0	0

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Table F11. Airflow and emission data completeness (%) at Site NC3B for February, 2

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	98.2	91.3	88.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	99	98.2	98.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	97.8	97.7	97.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	97	96.7	96.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	96.2	93.3	92.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	97.8	85.1	78.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	98.5	94.7	89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	97.8	97.5	96.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	97.8	96	91.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	97.2	82.6	75.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	98.5	98.2	98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	95.8	88.9	84.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	96.4	94.4	91.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	97.7	94.9	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	97.5	97.3	97.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	93.5	89.6	92.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	97	95.4	92.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	92.5	81	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	96.7	90.8	88.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	96.9	87.4	92.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	95.8	96.5	90.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	95.8	95.8	94.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	98.1	98	97.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	97.6	97.4	96.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	96.6	96.1	95.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	96.8	92.4	94.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	95.1	89.6	90.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	94.9	96	95.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	95.5	95.7	95.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg	96.8	93.4	91.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
n	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
SD	1.5	4.7	5.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min	92.5	81	75.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	99	98.2	98.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ED_004549_00015929-00265

Table F11. Airflow and emission data completeness (%) at Site NC3B for March, 2008.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	75.8	75.8	75.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	31	31.5	31.3	14.9	4.7	1.3	15.1	4.7	1.3	0	0	0	0	0	0	0	0	0
6	83.2	81.5	80.6	55.8	24	24.8	67.4	24	24.8	0	0	0	0	0	0	0	0	0
7	78	74	73.5	57.6	37.3	45.6	57.7	37.4	45.7	0	0	0	0	0	0	0	0	0
8	95.3	91.6	90.1	71.6	36	56.9	71.6	36	56.9	0	0	0	0	0	0	0	0	0
9	95.8	95.8	95.8	72.8	40.8	29.5	72.8	40.8	29.5	0	0	0	0	0	0	0	0	0
10	100	100	99.9	74.3	61.8	47.2	74.3	61.8	47.2	0	0	0	0	0	0	0	0	0
11	100	100	100	81.7	67.8	75.3	81.7	67.8	75.3	0	0	0	0	0	0	0	0	0
12	100	100	100	40.5	26.4	32.9	40.5	26.4	32.9	0	0	0	0	0	0	0	0	0
13	99.7	99.7	99.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	100	100	99.9	11.3	10.4	6.5	11.5	10.6	6.5	0	0	0	0	0	0	0	0	0
15	99.6	99.6	99.3	81.2	70.1	69.9	81.2	70.1	69.9	55.7	55.7	0	0	0	0	0	0	0
16	98.9	98.9	98.9	74.7	55.2	48.9	74.7	55.2	48.9	91.6	91.7	0	0	0	0	0	0	0
17	100	100	100	96.4	76.9	94.4	96.4	76.9	94.4	100	100	0	0	0	0	0	0	0
18	100	100	99.9	77.8	76.6	74	77.8	76.6	74	100	100	0	0	0	0	0	0	0
19	100	100	99.9	79.9	84.7	73.8	79.9	84.7	73.8	100	100	0	0	0	0	0	0	0
20	97.4	97.4	97.4	80.6	74.8	53.8	80.6	74.8	53.8	97.4	97.4	0	0	0	0	0	0	0
21	97.8	97.8	97.8	84.1	73.1	79	84.1	73.1	79	97.8	97.8	21	0	0	0	0	0	0
22	100	100	100	85.9	75.1	78.9	85.9	75.1	78.9	100	100	91.3	0	0	0	0	0	0
23	100	100	100	91.5	76	91.5	91.5	76	91.5	100	100	100	0	0	0	0	0	0
24	100	100	100	81.4	53.3	59.2	81.4	53.3	59.2	100	100	100	0	0	0	0	0	0
25	98.4	98.4	98.4	70.2	58.8	62.1	70.2	58.8	62.1	98.4	98.4	98.4	0	0	0	0	0	0
26	100	100	100	81	74.3	79.5	81	74.3	79.5	100	100	100	0	0	0	0	0	0
27	100	100	100	89.9	78.7	91.2	89.9	78.7	91.2	100	100	100	0	0	0	0	0	0
28	100	100	100	90.9	89.4	86.3	90.9	89.4	86.3	100	100	100	0	0	0	0	0	0
29	99.9	99.9	99.9	98.5	96.2	99.2	98.5	96.2	99.2	99.9	99.9	99.9	0	0	0	0	0	0
30	100	100	100	99.6	91.3	99.4	99.6	91.3	99.4	100	100	100	0	0	0	0	0	0
31	100	100	100	96	93.5	92	96	93.5	92	100	100	100	0	0	0	0	0	0
Avg	85.5	85.2	85.1	62.6	51.8	53.3	63	51.9	53.3	52.9	52.9	32.6	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	30.9	30.9	30.9	34.1	32.4	34.1	34.1	32.3	34.1	48.6	48.6	46	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	99.6	96.2	99.4	99.6	96.2	99.4	100	100	100	0	0	0	0	0	0

ED_004549_00015929-00266

Table F11. Airflow and emission data completeness (%) at Site NC3B for April, 2008.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	97.3	100	91	97.3	100	91	100	100	100	0	0	0	0	0	0
2	100	100	100	98	98	95	98	98	95	100	100	100	0	0	0	0	0	0
3	100	100	100	93.5	91.2	98.6	93.5	91.2	98.6	100	100	100	0	0	0	0	0	0
4	100	100	100	91.5	88.3	81.8	91.5	88.3	81.8	100	100	100	0	0	0	0	0	0
5	92.2	92.2	92.2	91.5	72.2	77.8	91.5	72.2	77.8	91.5	91.4	87.7	0.1	0	0	0.1	0.1	0.1
6	100	100	100	98.8	97	93.3	98.8	97	93.3	84	100	100	0	0	0	0	0	0
7	100	100	100	98.5	89	97	98.5	89	97	100	100	100	0	0	0	0	0	0
8	100	100	100	97	89.5	93.4	97	89.5	93.4	100	100	100	0	0	0	0	0	0
9	100	100	100	94.3	90.4	87.6	94.3	90.4	87.6	100	100	100	0	0	0	0	0	0
10	99.9	99.9	99.9	95	94.2	82.4	95	94.2	82.4	99.9	99.9	99.9	0	0	0	0	0	0
11	100	100	100	98.2	72.3	81.3	98.2	72.3	81.3	100	100	100	0	0	0	0	0	0
12	99.9	99.9	99.9	99.9	60.5	81.9	99.9	60.5	81.9	99.9	99.9	99.9	0	0	0	0	0	0
13	100	100	100	95.3	91.9	69.2	95.3	91.9	69.2	100	100	100	0	0	0	0	0	0
14	100	100	100	93.5	75.6	79.8	93.5	75.6	79.8	100	100	100	0	0	0	0	0	0
15	100	100	100	97.1	81.1	81	97.1	81.1	81	100	100	100	0	0	0	0	0	0
16	100	100	100	97.9	84.9	92.7	97.9	84.9	92.7	100	100	100	0	0	0	0	0	0
17	100	100	100	96.6	91.8	92.2	96.6	91.8	92.2	100	100	100	0	0	0	0	0	0
18	100	100	100	97.4	88.4	93.5	97.4	88.4	93.5	100	100	100	0	0	0	0	0	0
19	99.9	99.9	99.9	96.5	94.7	95.2	96.5	94.7	95.2	99.9	99.9	99.9	0	0	0	0	0	0
20	95.1	95.1	95.1	94.5	94.1	91.9	94.5	94.1	91.9	91.5	91.5	91.5	0	0	0	0	0	0
21	100	100	100	93.7	89.7	83.5	93.7	89.7	83.5	100	100	100	0	0	0	0	0	0
22	93.5	93.5	93.5	92.6	91.7	89.3	92.6	91.7	89.3	93.5	93.5	93.5	0	0	0	0	0	0
23	100	100	100	100	100	97.8	100	100	97.8	100	100	100	0	0	0	0	0	0
24	96.9	96.9	96.9	96.1	93.6	89.5	96.1	93.6	89.5	96.9	96.9	96.9	0	0	0	0	0	0
25	100	100	100	99.2	100	94.1	99.2	100	94.1	100	100	100	0	0	0	0	0	0
26	100	100	100	100	100	95.1	100	100	95.1	100	100	100	0	0	0	0	0	0
27	100	100	100	100	100	99.6	100	100	99.6	100	100	100	0	0	0	0	0	0
28	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
29	100	100	100	96.9	93.9	84.3	96.9	93.9	84.3	100	100	100	0	0	0	0	0	0
30	100	100	100	92.3	83.3	82.4	92.3	83.3	82.4	100	100	100	0	0	0	0	0	0
Avg	99.2	99.2	99.2	96.4	89.9	89.1	96.4	89.9	89.1	98.6	99.1	99	0	0	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	2	2	2	2.6	9.4	7.5	2.6	9.4	7.5	3.6	2.4	2.9	0	0	0	0	0	0
Min	92.2	92.2	92.2	91.5	60.5	69.2	91.5	60.5	69.2	84	91.4	87.7	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0.1	0	0	0.1	0.1	0.1

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Table F11. Airflow and emission data completeness (%) at Site NC3B for May, 2008.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	98.7	89.7	95.4	98.7	89.7	95.4	100	100	100	0	0	0	0	0	0
2	96.4	96.4	96.4	96.4	96.3	89.7	96.4	96.3	89.7	92.4	92.4	92.4	0	0	0	0	0	0
3	81.1	81.1	81.1	81.1	81.1	76.6	81.1	81.1	76.6	68.7	68.7	68.7	0	0	0	0	0	0
4	99.7	99.7	99.7	99.7	99.7	98.3	99.7	99.7	98.3	99.7	99.7	99.7	0.1	0.1	0.1	0.1	0.1	0.1
5	100	100	100	100	100	96.5	100	100	96.5	100	100	100	0	0	0	0	0	0
6	100	100	100	100	99.9	92.6	100	99.9	92.6	100	100	100	0	0	0	0	0	0
7	99.4	99.4	99.4	99.4	97.5	99.4	99.4	97.5	99.4	99.4	99.4	99.4	0	0	0	0	0	0
8	100	100	100	100	100	99.9	100	100	99.9	100	100	100	0	0	0	0	0	0
9	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
10	100	100	100	100	100	99.7	100	100	99.7	100	100	100	0	0	0	0	0	0
11	100	100	100	99.1	100	98.7	99.1	100	98.7	100	100	100	0	0	0	0	0	0
12	100	100	100	98.3	100	94.7	98.3	100	94.7	100	100	100	0	0	0	0	0	0
13	99.7	99.4	99.4	88.5	93	83.6	88.5	93	83.6	96.3	96.3	97.1	0	0	0	0	0	0
14	100	100	100	95.7	92.7	94.1	95.7	92.7	94.1	100	100	100	0	0	0	0	0	0
15	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
16	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0
17	99.9	99.9	99.9	99.7	99.8	96.7	99.7	99.8	96.7	99.9	99.9	99.9	0	0	0	0	0	0
18	100	100	100	100	100	97.6	100	100	97.6	100	100	100	0	0	0	0	0	0
19	100	94.7	100	96.5	94.7	94.7	96.5	94.7	94.7	100	94.7	100	0	0	0	0	0	0
20	100	100	100	94	100	99.7	94	100	99.7	100	100	100	0	0	0	0	0	0
21	100	100	100	100	100	99.9	100	100	99.9	100	100	100	0	0	0	0	0	0
22	100	100	100	98.3	100	97.1	98.3	100	97.1	100	100	100	0	0	0	0	0	0
23	100	100	100	99.7	100	98.4	99.7	100	98.4	100	100	100	0	0	0	0	0	0
24	99.4	99.4	99.4	99.3	99.4	97.7	99.3	99.4	97.7	96.5	96.5	96.5	0	0	0	0	0	0
25	100	100	100	96.9	100	93.5	96.9	100	93.5	100	100	100	0	0	0	0	0	0
26	100	100	100	96.1	100	91	96.1	100	91	100	100	100	0	0	0	0	0	0
27	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
28	100	100	100	99.9	100	100	99.9	100	100	100	100	100	0	0	0	0	0	0
29	100	100	100	99.8	99.9	99.5	99.8	99.9	99.5	99.9	99.9	99.9	0	0	0	0	0	0
30	99.9	99.9	99.9	99.9	99.9	97.6	99.9	99.9	97.6	99.8	99.8	99.8	0	0	0	0	0	0
31	100	100	100	100	99.8	100	100	99.8	100	54.9	55.3	55.8	0	0	0	37.4	37.4	37.4
Avg	99.2	99	99.2	98	98.2	96.2	98	98.2	96.2	97	96.9	97.1	0	0	0	1.2	1.2	1.2
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	3.4	3.5	3.4	3.9	4.1	5.2	3.9	4.1	5.2	9.5	9.5	9.4	0	0	0	6.6	6.6	6.6
Min	81.1	81.1	81.1	81.1	81.1	76.6	81.1	81.1	76.6	54.9	55.3	55.8	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0.1	0.1	0.1	37.4	37.4	37.4

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Table F11. Airflow and emission data completeness (%) at Site NC3B for June, 2008.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	100	94.1	100	100	94.1	100	0	0	0	0	0	0	100	100	100
2	100	100	100	99.5	96.1	99.9	99.5	96.1	99.9	0	0	0	0	0	0	100	100	100
3	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	100
4	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	100
5	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	100
6	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	100
7	100	100	100	100	100	100	100	100	100	0	0	0	51.7	51.7	51.7	43.9	43.9	43.9
8	100	100	100	100	99.9	97.9	100	99.9	97.9	0	0	0	100	99.9	97.9	0	0	0
9	100	99.5	100	100	99.5	76.7	100	99.5	76.7	0	0	0	89.6	99.5	76.7	0	0	0
10	100	100	100	77.8	77.8	54.6	77.8	77.8	54.6	0	0	0	100	100	76.8	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	99.9	99.9	99.9	96.6	96	98.1	96.7	96.1	98.5	0	0	0	99.9	99.9	99.9	0	0	0
14	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	0.1	0.1	0.1	99.6	99.6	99.6	0.1	0.1	0.1
15	100	100	100	100	100	99.9	100	100	99.9	41.5	41.5	41.5	43.9	43.9	43.9	0	0	0
16	94.7	99.4	92.2	94.7	99.4	92.2	94.7	99.4	92.2	94.7	99.4	92.2	0	0	0	0	0	0
17	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
18	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
19	100	100	100	100	100	98.1	100	100	98.1	100	100	100	0	0	0	0	0	0
20	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0
21	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0
22	98.2	98.2	98.2	69.1	69.1	69.1	69.2	69.2	69.2	96	95.2	95.2	0	0	0	0	0	0
23	98.3	98.1	99	98.3	98.1	99	98.3	98.1	99	98.3	98.1	99	0	0	0	0	0	0
24	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
25	100	100	100	96	99.9	97.2	96	99.9	97.2	100	100	100	0	0	0	0	0	0
26	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
27	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
28	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
29	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	98.7	98.7	98.7	0	0	0	0	0	0
30	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
Avg	93	93.1	92.9	91	91	89.4	91	91	89.4	51	51.1	50.9	19.5	19.8	18.2	21.5	21.5	21.5
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	24.9	24.9	24.9	25.2	25.2	26	25.2	25.2	26	48.8	48.9	48.7	37	37.7	34.6	40	40	40
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	99.9	100	100	100

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Table F11. Airflow and emission data completeness (%) at Site NC3B for July, 2008.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	98.5	96.5	96.3	98.5	96.5	96.3	100	100	100	0	0	0	0	0	0
2	100	100	100	96.5	97.7	86.7	96.5	97.7	86.7	100	100	100	0	0	0	0	0	0
3	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
4	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
5	72.4	72.4	72.4	67.1	67	67	67.1	67	67	66.2	66.2	65.5	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	60.1	60.1	60.1	59	58.1	42.2	59.1	58.3	42.2	60.1	60.1	60.1	0	0	0	0	0	0
9	100	100	100	100	99.9	85	100	99.9	85	99.9	99.9	99.9	0	0	0	0	0	0
10	96.9	96.9	96.9	95.8	96.4	95	95.8	96.4	96.9	96.9	96.9	96.9	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	100	100	0	97.8	99.2	0	97.9	99.3	0	100	100	0	0	0	0	0	0	0
13	94.8	94.8	0	94.8	94.8	0	94.8	94.8	0	94.8	94.8	0	0	0	0	0	0	0
14	100	99.9	0	98.6	98.8	0	98.6	98.8	0	100	99.9	0	0	0	0	0	0	0
15	100	100	0	99.8	100	0	99.8	100	0	100	100	0	0	0	0	0	0	0
16	95.6	95.6	50.3	95.6	95.6	50.3	95.6	95.6	50.3	85.1	86.5	40.1	0	0	0	0	0	0
17	100	100	100	99.2	100	99.4	99.2	100	99.4	100	100	100	0	0	0	0	0	0
18	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
19	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
20	100	100	100	100	99.7	100	100	99.7	100	100	100	100	0	0	0	0	0	0
21	100	100	100	99	98.7	98.3	99	98.7	98.3	100	100	100	0	0	0	0	0	0
22	100	100	100	100	99.9	100	100	99.9	100	99.8	99.8	99.8	0	0	0	0	0	0
23	100	100	100	73.9	93.3	100	73.9	93.3	100	100	100	100	0	0	0	0	0	0
24	100	100	100	54.7	100	100	54.7	100	100	100	100	100	0	0	0	0	0	0
25	59.9	59.9	59.9	2.5	40.6	39.2	2.5	40.6	39.2	44.7	44.7	58.4	0	0	0	0	0	0
26	0.1	0.1	0.1	0	0	0.1	0	0	0.1	0	0	0.1	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg	67.1	67.1	52.9	62.3	65.7	50.3	62.3	65.7	50.4	66	66.1	52.3	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	44.2	44.2	46.7	44.4	44	45.6	44.4	44	45.7	44.1	44.1	46.7	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0

ED_004549_00015929-00270

Table F11. Airflow and emission data completeness (%) at Site NC3B for August, 2008.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	34.7	34.7	0	0	0	0	16.8	17.5	0	0	33.2	0	0	0	0	0	0	0
9	99.2	99.2	50.4	94	98	41.7	94.6	98.6	41.9	44.1	98.7	27.6	0	0	0	0	0	0
10	99.8	99.8	99.8	71.7	77.1	77.1	71.8	77.2	77.2	95.1	98.1	99.8	0.1	0.1	0.1	0.1	0.1	0.1
11	100	100	100	88	96.3	86.9	88	96.3	86.9	100	100	100	0	0	0	0	0	0
12	100	100	100	77.6	86	86.1	77.6	86	86.1	100	100	100	0	0	0	0	0	0
13	100	100	100	95.8	99.9	84.9	95.8	99.9	84.9	100	100	100	0	0	0	0	0	0
14	100	100	100	92.8	98.3	82.4	92.8	98.3	82.4	100	100	100	0	0	0	0	0	0
15	85.6	100	100	80.7	100	89.7	80.7	100	89.7	85.6	100	100	0	0	0	0	0	0
16	72.6	100	100	72.6	100	96.5	72.6	100	96.5	72.6	100	100	0	0	0	0	0	0
17	97.4	97.4	97.4	97.2	97.4	94.5	97.2	97.4	94.5	95.4	95.4	95.4	0	0	0	0	0	0
18	100	100	100	97.2	100	90.3	97.2	100	90.3	100	100	100	0	0	0	0	0	0
19	100	100	100	97.2	100	88.5	97.2	100	88.5	100	100	100	0	0	0	0	0	0
20	100	100	100	100	100	93.9	100	100	93.9	100	100	100	0	0	0	0	0	0
21	100	100	100	100	100	99.8	100	100	99.8	100	100	100	0	0	0	0	0	0
22	100	100	100	100	100	97.6	100	100	97.6	100	100	100	0	0	0	0	0	0
23	99.6	99.6	99.6	99.2	99.6	95.9	99.2	99.6	95.9	99.6	99.6	99.6	0	0	0	0	0	0
24	99.4	99.4	99.4	98.5	99.4	93	98.5	99.4	93	96.5	96.5	96.5	0	0	0	0	0	0
25	65.5	65.5	65.5	64.3	65.3	57.1	64.3	65.3	57.1	59	62.3	62	0	0	0	0	0	0
26	57.1	57.1	57.1	56.6	55.9	55.2	56.7	56	55.3	57.1	57.1	57.1	0	0	0	0	0	0
27	99.9	99.9	99.9	75.3	99.9	99.9	75.6	99.9	99.9	99.8	99.8	99.8	0	0	0	0	0	0
28	100	100	100	100	100	100	100	100	100	99.9	99.9	99.9	0	0	0	0	0	0
29	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
30	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
31	99.5	99.5	99.5	50.3	54.3	52.2	50.6	54.4	52.4	98.4	98.5	98.8	0	0	0	0	0	0
Avg	71.3	72.6	70	64.8	68.6	63.3	65.4	69.2	63.3	67.8	72.2	68.9	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	41.2	41.8	43.1	40.4	42.3	40.1	39.6	41.5	40.1	42.4	41.7	43.5	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0.1	0.1	0.1	0.1	0.1	0.1

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Table F11. Airflow and emission data completeness (%) at Site NC3B for September, 2008.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	99.8	100	97.8	75.1	75.3	75.3	100	100	100	0	0	0	0	0	0
2	100	100	100	91	94.6	87.6	91	94.6	87.6	100	100	100	0	0	0	0	0	0
3	100	100	100	90.4	96.5	90.3	90.4	96.5	90.3	100	100	100	0	0	0	0	0	0
4	100	100	100	95.1	98.8	92.1	95.1	98.8	92.1	100	100	100	0	0	0	0	0	0
5	100	100	100	69	68.6	74.8	69	68.6	74.8	99.9	99.9	99.9	0	0	0	0	0	0
6	19.3	19.3	19.3	2.2	6.7	8.6	2.2	6.7	8.6	19.3	19.3	19.3	0	0.1	0.2	0.2	0.2	0.2
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0.1	0.1	0	0	0	0	0	0	0	0.1	0.1	0	0	0	0	0	0
10	15.9	15.9	15.9	0	0	0	0	0	0	15.9	15.9	15.9	0	0	0	0	0	0
11	100	100	100	23.2	25.1	22.2	23.7	25.6	22.4	99.9	99.9	99.9	0	0	0	0	0	0
12	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0
13	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
14	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
15	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
16	100	100	100	99.4	100	100	99.4	100	100	100	100	100	0	0	0	0	0	0
17	100	100	100	96.3	100	94.2	96.3	100	94.2	100	100	100	0	0	0	0	0	0
18	100	100	100	88.8	94.4	82.5	88.8	94.4	82.5	99.9	99.9	99.9	0	0	0	0	0	0
19	100	100	100	96.9	88.7	94.1	96.9	88.7	94.1	100	100	100	0	0	0	0	0	0
20	100	100	100	97.8	82.3	94	97.8	82.3	94	100	100	100	0	0	0	0	0	0
21	100	100	100	71.5	72.4	66.5	71.6	72.5	66.6	97.2	97.2	97.1	0	0	0	0	0	0
22	99.9	99.9	99.9	97.4	98.2	93.1	97.4	98.2	93.1	99.9	99.9	99.9	0	0	0	0	0	0
23	100	100	100	99.4	99.7	99.5	99.4	99.7	99.5	100	100	100	0	0	0	0	0	0
24	100	100	100	98.5	97	97.4	98.5	97	97.4	100	100	100	0	0	0	0	0	0
25	100	100	100	99.4	91.2	98	99.4	91.2	98	100	100	100	0	0	0	0	0	0
26	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
27	100	100	100	100	100	99.3	100	100	99.3	100	100	100	0	0	0	0	0	0
28	99.9	99.9	99.9	99.9	99.9	96.4	99.9	99.9	96.4	99.9	99.9	99.9	0.1	0.1	0.1	0.1	0.1	0.1
29	99.7	99.7	99.7	59.2	59.4	57.6	59.4	59.5	57.7	99.7	99.7	99.7	0	0	0	0	0	0
30	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	0	0	0	0	0	0
Avg	84.5	84.5	84.5	75.8	75.8	74.9	75	75	74.1	84.4	84.4	84.4	0	0	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	34.8	34.8	34.8	37.3	36.8	36.4	37	36.5	36.2	34.8	34.8	34.8	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0.1	0.1	0.2	0.2	0.2	0.2

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Table F11. Airflow and emission data completeness (%) at Site NC3B for October, 2008.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	97.3	99.4	94.4	97.3	99.4	94.4	100	100	100	0	0	0	0	0	0
2	100	100	100	82.3	84.2	74.7	82.3	84.2	74.7	100	100	100	0	0	0	0	0	0
3	100	100	100	89.7	88.2	74.7	89.7	88.2	74.7	100	100	100	0	0	0	0	0	0
4	100	100	100	88	99.9	80.9	88	99.9	80.9	100	100	100	0	0	0	0	0	0
5	91.6	91.6	91.6	78.3	76.7	70.4	78.3	76.9	70.4	51.9	52.2	52.2	27.6	30.8	27.6	0	0	0
6	100	100	100	91.7	95.1	81.3	91.7	95.1	81.3	0	0	0	91.7	95.1	81.3	0	0	0
7	100	100	100	96.7	97.7	88.5	96.7	97.7	88.5	0	0	0	96.7	97.7	88.5	0	0	0
8	100	100	100	94.4	99.8	89	94.4	99.8	89	0	0	0	94.4	99.8	89	0	0	0
9	100	100	100	97.8	100	94.9	97.8	100	94.9	0	0	0	97.8	100	94.9	0	0	0
10	100	100	100	100	99.9	100	100	99.9	100	0	0	0	100	99.9	100	0	0	0
11	100	100	100	100	94.3	99.9	100	94.3	99.9	0	0	0	100	94.3	99.9	0	0	0
12	99.7	99.7	99.7	99.7	85	98.8	99.7	85	98.8	0	0	0	92.4	84.9	98.7	0	0	0
13	100	100	100	94.2	96.5	90.7	94.2	96.5	90.7	0	0	0	94.2	96.5	90.7	0	0	0
14	100	100	100	88.3	100	81.7	88.3	100	81.7	0	0	0	88.1	100	81.7	0	0	0
15	100	100	100	90.6	100	85.1	90.6	100	85.1	0	0	0	90.6	100	85.1	0	0	0
16	100	100	100	93.8	100	89.4	93.8	100	89.4	0	0	0	93.8	100	89.4	0	0	0
17	100	100	100	99.4	90.8	96.7	99.4	90.8	96.7	0	0	0	99.4	90.8	96.7	0	0	0
18	98.1	98.1	98.1	14	6.7	12.8	94.4	39.8	79.2	0	0	0	94.4	39.8	79.2	0	0	0
19	100	100	100	0	0	0	90.7	64.2	75.9	44.7	41.3	37	37.6	24.2	37.4	0	0	0
20	100	100	100	0	0	0	93.5	93.5	87.8	100	100	100	0	0	0	0	0	0
21	100	100	100	0	0	0	71.5	74.2	86.6	100	100	100	0	0	0	0	0	0
22	100	100	100	0	0	0	90.8	81.3	82.4	100	100	100	0	0	0	0	0	0
23	100	100	100	0	0	0	95.7	74	91.9	100	100	100	0	0	0	0	0	0
24	100	100	100	0	0	0	99.7	80	98.5	100	100	100	0	0	0	0	0	0
25	100	100	100	0	0	0	100	95.9	99.4	100	100	100	0	0	0	0	0	0
26	100	100	100	0	0	0	96	98.1	84	100	100	100	0	0	0	0	0	0
27	100	100	100	0	0	0	89.4	93	73.5	100	100	100	0	0	0	0	0	0
28	100	100	100	0	0	0	94.5	92.4	74.9	100	100	100	0	0	0	0	0	0
29	100	100	100	0	0	0	95.7	94.9	85.7	99.8	99.8	98.8	0	0	0	0	0	0
30	100	100	100	0	0	0	97	87.1	95.5	100	100	100	0	0	0	0	0	0
31	100	100	100	0	0	0	97.2	98.5	96.9	100	100	100	0	0	0	0	0	0
Avg	99.7	99.7	99.7	51.5	52.1	48.5	93.2	89.5	87.2	54.7	54.6	54.5	41.9	40.4	40	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	1.5	1.5	1.5	46.1	47.1	43.8	6.4	13	8.8	48.1	48.2	48.2	45.8	45.6	43.8	0	0	0
Min	91.6	91.6	91.6	0	0	0	71.5	39.8	70.4	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0

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Table F11. Airflow and emission data completeness (%) at Site NC3B for November, 2008.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	0	0	0	96.7	98.7	96.2	100	100	98.4	0	0	0	0	0	0
2	100	100	100	0	0	0	61.7	61.7	56.5	95.2	96.3	95.4	0	0	0	0	0	0
3	100	100	100	4.3	2.2	4.3	49.9	25.6	46.5	100	100	99.1	0	0	0	0	0	0
4	100	100	100	65.3	45.8	62.8	65.4	46	62.9	100	100	98.9	0	0	0	0	0	0
5	100	100	100	100	99.5	100	100	99.5	100	100	100	100	0	0	0	0	0	0
6	100	100	100	100	99.8	98.3	100	99.8	98.3	100	100	100	0	0	0	0	0	0
7	100	100	100	97.6	100	94	97.6	100	94	100	100	100	0	0	0	0	0	0
8	100	100	100	97.3	74.6	76.7	97.3	74.6	76.7	100	100	74.5	0	0	0	0	0	0
9	100	99.8	100	80.8	51.7	53.6	80.8	51.7	53.6	100	97.1	48.9	0	0	0	0	0	0
10	100	100	100	95.2	97.6	95.8	95.2	97.6	95.8	100	100	100	0	0	0	0	0	0
11	100	100	100	96.4	88.7	96.6	96.4	88.7	96.6	100	100	100	0	0	0	0	0	0
12	100	100	100	98.5	94.1	97.6	98.5	94.1	97.6	100	100	100	0	0	0	0	0	0
13	100	100	100	100	97.4	100	100	97.4	100	100	100	100	0	0	0	0	0	0
14	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
15	100	100	100	99.9	99.9	99.7	99.9	99.9	99.7	99.9	99.9	99.9	0	0	0	0	0	0
16	99.6	99.4	99.6	75.8	77.1	86.3	75.9	77.2	86.3	94.2	95.4	96.2	0	0	0	0	0	0
17	100	100	100	96.7	97.1	92.5	96.7	97.1	92.5	100	100	100	0	0	0	0	0	0
18	100	100	100	84	75.2	60.5	84	75.2	60.5	100	100	100	0	0	0	0	0	0
19	100	100	100	77.1	85.9	84.8	77.1	85.9	84.8	100	100	100	0	0	0	0	0	0
20	100	100	100	90.2	94	96.5	90.2	94	96.5	100	100	100	0	0	0	0	0	0
21	100	100	100	76.9	73.1	66.5	76.9	73.1	66.5	100	100	100	0	0	0	0	0	0
22	100	100	100	83.8	91	87.5	83.8	91	87.5	100	100	100	0	0	0	0	0	0
23	100	99.9	100	91	90.8	98.7	91	90.8	98.7	97.5	96.8	96.9	0	0	0	0	0	0
24	100	100	100	86.1	79.7	95	86.1	79.7	95	100	100	100	0	0	0	0	0	0
25	100	100	100	86.5	69.4	94.8	86.5	69.4	94.8	100	100	100	0	0	0	0	0	0
26	100	100	100	93.7	85.2	94.2	93.7	85.2	94.2	100	100	100	0	0	0	0	0	0
27	100	100	100	95.5	87.4	97.8	95.5	87.4	97.8	100	100	100	0	0	0	0	0	0
28	100	100	100	93.3	79.1	97.8	93.3	79.1	97.8	100	100	100	0	0	0	0	0	0
29	100	100	100	95.7	80.7	82.4	95.7	80.7	82.4	100	100	100	0	0	0	0	0	0
30	98.3	98.2	98.3	94.6	83.5	47.9	94.6	83.5	47.9	96.9	96.8	96.9	0	0	0	0	0	0
Avg	99.9	99.9	99.9	81.9	76.7	78.8	88.7	82.8	85.3	99.5	99.4	96.8	0	0	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	0.3	0.3	0.3	28.2	28.5	29.6	12.4	17.6	17.2	1.5	1.3	10	0	0	0	0	0	0
Min	98.3	98.2	98.3	0	0	0	49.9	25.6	46.5	94.2	95.4	48.9	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0

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Table F11. Airflow and emission data completeness (%) at Site NC3B for December, 2008.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	93.8	58.3	84.9	93.8	58.3	84.9	100	100	100	0	0	0	0	0	0
2	100	100	100	5.8	5.1	5.6	88.4	78.3	91.9	100	100	100	0	0	0	0	0	0
3	100	100	100	0	0	0	93.1	85.5	90.3	100	100	100	0	0	0	0	0	0
4	100	100	100	0	0	0	95.1	84.8	98	100	100	100	0	0	0	0	0	0
5	100	100	100	0	0	0	95.1	66	90.5	100	100	97.9	0	0	0	0	0	0
6	100	100	100	0	0	0	95.8	84	93.5	96.7	96.5	95.7	0	0	0	0	0	0
7	100	100	100	0	0	0	90.7	79.7	85.1	100	100	100	0	0	0	0	0	0
8	99.7	99.7	99.7	0	0	0	94.3	86.3	96.7	99.7	99.7	99.7	0	0	0	0	0	0
9	100	100	100	0	0	0	91.8	85.1	93.8	100	100	100	0	0	0	0	0	0
10	100	100	100	0	0	0	100	100	100	100	100	100	0	0	0	0	0	0
11	100	100	100	0	0	0	100	99.8	100	99.9	98.4	99.9	0	0	0	0	0	0
12	100	100	100	0	0	0	92.8	70.6	88.5	100	100	100	0	0	0	0	0	0
13	62.7	62.7	62.7	0	0	0	50.9	46.6	46.2	62.7	62.7	62.7	0	0	0	0	0	0
14	100	100	100	0	0	0	98.3	90.3	96.4	100	100	100	0	0	0	0	0	0
15	100	100	100	0	0	0	100	90.7	97.4	100	100	100	0	0	0	0	0	0
16	100	100	100	0	0	0	98.5	84.9	94.5	100	100	100	0	0	0	0	0	0
17	96.5	96.5	96.5	0	0	0	93.5	83.1	87	83	83	82.1	0	0	0	0	0	0
18	100	100	100	0	0	0	99.9	92.2	96.3	99.9	99.9	99.9	0	0	0	0	0	0
19	100	100	100	0	0	0	100	86.7	93.1	100	100	100	0	0	0	0	0	0
20	100	100	100	0	0	0	100	85.9	99.6	35	39.2	42.5	0	0	0	0	0	0
21	100	100	100	0	0	0	16.6	9.4	16	0	0	0	0	0	0	0	0	0
22	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	89.7	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	100	100	100	0	0	0	18	2.3	13.3	0	0	0	0	0	0	0	0	0
26	100	100	100	0	0	0	64.2	26.7	68.7	0	0	0	0	0	0	0	0	0
27	97.1	97.1	97.1	0	0	0	56.3	20.1	50	0	0	0	0	0	0	0	0	0
28	100	100	100	46.7	37.4	45.8	66.3	44.2	62.6	37.7	35.8	35.7	0	0	0	0	0	0
29	100	100	100	69.3	54.5	61.7	69.3	54.5	61.7	87.2	67.5	100	0	0	0	0	0	0
30	100	100	100	77.2	73.5	97.8	77.2	73.5	97.8	100	100	100	0	0	0	0	0	0
31	28.7	65.3	67.8	17.7	37.6	35.4	17.7	37.7	35.5	28.7	65.3	67.8	0	0	0	0	0	0
Avg	92.7	94.2	94.3	10	8.6	10.7	72.8	61.5	71.9	68.7	69.3	70.5	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	22	19.3	19.2	24.7	19.9	25.7	34.2	32.7	33.5	42	41.2	41.4	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	93.8	73.5	97.8	100	100	100	100	100	100	0	0	0	0	0	0

ED_004549_00015929-00275

Table F11. Airflow and emission data completeness (%) at Site NC3B for January, 2009.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	0	95.9	99.9	0	75.5	58.8	0	75.5	58.8	0	95.9	99.9	0	0	0	0	0	0
2	53.3	97.4	98.9	44.1	65.4	54.9	44.1	65.4	54.9	53.3	97.4	98.9	0	0	0	0	0	0
3	97.6	97.8	97.6	84.6	58.2	45	84.6	58.2	45	97.6	97.8	97.6	0	0	0	0	0	0
4	100	100	100	88.9	50.6	41.2	88.9	50.6	41.2	100	100	100	0	0	0	0	0	0
5	97.9	98.1	98	84.4	60.1	45.4	84.4	60.1	45.4	96.9	97.2	98	0	0	0	0	0	0
6	100	100	100	82.2	66.9	50.3	82.2	66.9	50.3	100	100	100	0	0	0	0	0	0
7	99.6	99.7	99.6	80.1	80.1	57.4	80.1	80.1	57.4	99.6	99	99.6	0	0	0	0	0	0
8	100	100	100	81.9	61.6	30.8	81.9	61.6	30.8	100	100	100	0	0	0	0	0	0
9	100	100	100	91.7	79.2	36.5	91.7	79.2	36.5	100	100	100	0	0	0	0	0	0
10	100	100	100	78.5	69.8	35.2	78.5	69.8	35.2	100	100	100	0	0	0	0	0	0
11	99.5	100	100	88	52.8	39	88	52.8	39	96.4	96.5	95.8	0	0	0	0	0	0
12	100	100	100	95.3	69.9	46.1	95.3	69.9	46.1	100	100	100	0	0	0	0	0	0
13	100	100	100	96	84	50.6	96	84	50.6	100	100	100	0	0	0	0	0	0
14	99.2	99.3	99.2	96.7	87	41.5	96.7	87	41.5	99.2	99.2	99.2	0	0	0	0	0	0
15	100	100	100	94.9	70.5	40.5	94.9	70.5	40.5	100	100	100	0	0	0	0	0	0
16	100	100	100	93.5	68.6	47.1	93.5	68.6	47.1	100	100	100	0	0	0	0	0	0
17	100	100	100	99	91.3	66.2	99	91.3	66.2	100	100	100	0	0	0	0	0	0
18	100	100	100	50.1	33.8	17.5	36.6	22.6	12.9	96.4	96.4	93.5	0	0	0	0	0	0
19	100	100	100	97	75.1	33.6	0	0	0	100	100	100	0	0	0	0	0	0
20	100	100	100	97.5	77.5	50.1	0	0	0	100	100	100	0	0	0	0	0	0
21	94.2	94.2	94.2	49	51.1	29.7	0	0	0	94.2	94.2	94.2	0	0	0	0	0	0
22	100	100	100	67.2	54.5	25.8	16.3	11.2	4.8	99.8	99.8	99.8	0	0	0	0	0	0
23	100	100	100	94.4	61.6	37.6	94.4	61.6	37.6	99.9	99.9	99.9	0	0	0	0	0	0
24	100	100	100	98.1	60.6	48.7	99.9	60.6	48.7	100	100	100	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	100	100	100	97.8	83.7	73.5	98	83.8	73.5	100	100	100	0	0	0	0	0	0
27	100	100	100	98.5	73.4	50.1	98.5	73.4	50.1	100	100	100	0	0	0	0	0	0
28	100	100	100	97.3	75.6	54.9	97.3	75.6	54.9	100	100	100	0	0	0	0	0	0
29	100	100	100	99.8	85.1	53.9	99.8	85.1	53.9	100	100	100	0	0	0	0	0	0
30	99.7	99.7	100	97.4	59.7	49.2	97.4	59.7	49.2	98.5	98.4	99.7	0	0	0	0	0	0
31	100	100	100	96.4	68.6	47.2	96.4	68.6	47.2	100	100	100	0	0	0	0	0	0
Avg	91.6	96.2	96.4	81.3	66.2	43.8	71.4	57.9	39.3	91.3	95.9	96	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	25.4	17.6	17.6	26	17.4	13.9	36.5	27.6	19.9	25.4	17.6	17.6	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	99.8	91.3	73.5	99.9	91.3	73.5	100	100	100	0	0	0	0	0	0

ED_004549_00015929-00276

Table F11. Airflow and emission data completeness (%) at Site NC3B for February, 2009.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	94.2	69.6	45	94.2	69.6	45	99.9	99.9	99.9	0	0	0	0	0	0
2	100	100	100	98.4	74.8	45.1	98.4	74.8	45.1	100	100	100	0	0	0	0	0	0
3	100	100	100	90.5	76.6	37.2	90.5	76.6	37.2	100	100	100	0	0	0	0	0	0
4	100	100	100	94.6	74.6	43.3	94.6	74.6	43.3	96.9	96.9	96.9	0	0	0	0	0	0
5	100	100	100	92.3	81.9	51.9	92.3	81.9	51.9	100	100	100	0	0	0	0	0	0
6	100	100	100	95.9	69.7	64.4	95.9	69.7	64.4	99.8	99.8	99.8	0	0	0	0	0	0
7	100	100	100	99.6	83.8	74.1	99.6	83.8	74.1	100	100	100	0	0	0	0	0	0
8	100	100	100	99.9	85.8	66	99.9	85.8	66	99.8	99.8	99.8	0	0	0	0	0	0
9	100	100	100	100	92.6	76.7	100	92.6	76.7	100	100	100	0	0	0	0	0	0
10	100	100	100	99.7	82.7	75.3	99.7	82.7	75.3	100	100	100	0	0	0	0	0	0
11	100	100	100	99.9	87.3	87	99.9	87.3	87	100	100	100	0	0	0	0	0	0
12	100	100	100	100	83.8	82.3	100	83.8	82.3	100	100	100	0	0	0	0	0	0
13	100	100	100	99.9	83.8	65.6	99.9	83.8	65.6	100	100	100	0	0	0	0	0	0
14	100	100	100	99.9	84.8	64.2	99.9	84.8	64.2	100	100	100	0	0	0	0	0	0
15	100	100	100	75.2	64.6	52.8	75.3	64.7	52.9	95.6	96.7	95.2	0	0	0	0	0	0
16	100	100	100	99.8	88.1	74.4	99.8	88.1	74.4	100	100	100	0	0	0	0	0	0
17	100	100	100	99.5	91.1	72.1	99.5	91.1	72.1	100	100	100	0	0	0	0	0	0
18	99.7	99.7	99.7	98.7	78.7	64.9	98.7	78.7	64.9	99.7	99.7	99.7	0	0	0	0	0	0
19	87.6	87.6	87.6	86.8	76.5	76.6	86.8	78.1	76.6	87.6	87.6	87.6	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	39	38.8	38.5	36.3	32.4	17.8	36.3	32.4	17.8	0	0	0	0	0	0	39	38.8	38.5
23	100	100	100	95.5	88.7	67.2	95.5	88.7	67.2	0	0	0	0	0	0	100	100	100
24	99.7	100	100	98.5	92.6	78.1	98.5	92.6	78.1	0	0	0	0	0	0	99.7	100	100
25	100	100	100	99	94.2	81.7	99	94.2	81.7	0	0	0	0	0	0	100	100	100
26	100	100	100	99	87.4	79	99	87.4	79	0	0	0	0	0	0	100	100	100
27	100	100	100	73.1	58.1	57.3	73.2	58.2	57.4	32	31.8	0.1	0	0	0	55.3	55.3	55.3
28	100	100	100	99.8	92.8	93	99.8	92.8	93	100	100	0	0	0	0	0	0	0
Avg	90.2	90.2	90.2	86.6	74.2	60.5	86.7	74.2	60.5	71.8	71.9	67.1	0	0	0	17.6	17.6	17.6
n	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
SD	27.5	27.5	27.6	27.3	24.1	23.4	27.3	24.1	23.4	43.3	43.4	46.2	0	0	0	35.8	35.8	35.8
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	94.2	93	100	94.2	93	100	100	100	0	0	0	100	100	100

ED_004549_00015929-00277

Table F11. Airflow and emission data completeness (%) at Site NC3B for March, 2009.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	99.5	95.3	92.8	99.5	95.3	92.8	100	100	0	0	0	0	0	0	0
2	100	100	100	94.6	81.9	48.2	94.6	81.9	48.2	100	100	0	0	0	0	0	0	0
3	100	100	100	96.7	84	75.1	96.7	84	75.1	100	100	0	0	0	0	0	0	0
4	100	100	100	99.2	91.2	85.4	99.2	91.2	85.4	100	100	0	0	0	0	0	0	0
5	100	100	100	99	87.6	80.8	99	87.6	80.8	100	100	0	0	0	0	0	0	0
6	100	100	100	99.9	91	81.1	99.9	91	81.1	100	100	0	0	0	0	0	0	0
7	100	100	100	100	94.2	89.9	100	94.2	89.9	99.8	99.8	0	0	0	0	0	0	0
8	100	100	100	64.9	58.8	59.6	65	58.9	59.7	90.9	96.3	0	0	0	0	0	0	0
9	100	100	100	100	93.4	97.1	100	93.4	97.1	100	100	0	0	0	0	0	0	0
10	100	100	100	99.9	99.9	98.8	99.9	99.9	98.8	99.3	99.3	0	0	0	0	0	0	0
11	100	100	100	98.6	97.9	92.1	98.6	97.9	92.1	100	100	0	0	0	0	0	0	0
12	100	100	100	100	99.6	98.8	100	99.6	98.8	100	100	0	0	0	0	0	0	0
13	100	100	100	99.7	94	92.6	99.7	94	92.6	100	100	0	0	0	0	0	0	0
14	100	100	100	99.8	94.9	89.9	99.8	94.9	89.9	100	100	0	0	0	0	0	0	0
15	99.7	99.7	99.7	96.8	90.9	80.1	96.8	90.9	80.1	95.2	95.3	0	0	0	0	0	0	0
16	100	100	100	95.8	91	80.6	95.8	91	80.6	100	100	0	0	0	0	0	0	0
17	100	100	100	96.1	89.6	83.1	96.1	89.6	83.1	100	100	0	0	0	0	0	0	0
18	100	100	100	88.8	84.1	81.3	88.8	84.1	81.3	100	100	0	0	0	0	0	0	0
19	100	100	100	88.5	89	87.2	88.5	89	87.2	100	100	0	0	0	0	0	0	0
20	100	100	100	99.8	97.4	85.6	99.8	97.4	85.6	100	100	0	0	0	0	0	0	0
21	100	100	100	91.7	89.4	79.4	91.7	89.4	79.4	100	100	0	0	0	0	0	0	0
22	99.9	99.9	99.9	61.3	67.5	54.9	61.4	67.6	55	96.9	96.9	0	0	0	0	0	0	0
23	100	100	100	92.1	92.6	85.4	92.1	92.6	85.4	100	100	0	0	0	0	0	0	0
24	100	100	100	88.5	94.3	91.2	88.5	94.3	91.2	100	100	0	0	0	0	0	0	0
25	100	100	100	91.7	96.7	93.1	91.7	96.7	93.1	100	100	0	0	0	0	0	0	0
26	100	100	100	100	99	99.9	100	99	99.9	100	100	0	0	0	0	0	0	0
27	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
28	100	100	100	100	100	100	100	100	100	96.8	96.6	0	0	0	0	0	0	0
29	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
30	100	100	100	98.7	94	93.1	98.7	94	93.1	100	100	0	0	0	0	0	0	0
31	100	100	100	96.3	93.8	91	96.3	93.8	91	100	100	0	0	0	0	0	0	0
Avg	100	100	100	94.8	91.4	86.1	94.8	91.4	86.1	99.3	99.5	0	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	0.1	0.1	0.1	9.1	8.9	12.6	9.1	8.9	12.6	1.9	1.3	0	0	0	0	0	0	0
Min	99.7	99.7	99.7	61.3	58.8	48.2	61.4	58.9	48.2	90.9	95.3	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0

ED_004549_00015929-00278

Table F11. Airflow and emission data completeness (%) at Site NC3B for April, 2009.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
2	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
3	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
4	99.9	99.9	99.9	99.9	77.4	79.3	99.9	77.5	79.4	45.5	45.5	0	48.6	48.6	0	0	0	0
5	100	100	100	100	96.5	95.8	100	96.5	95.8	0	0	0	100	96.5	0	0	0	0
6	100	100	100	96	97.7	96.2	96	97.7	96.2	0	0	0	95.8	97.7	0	0	0	0
7	100	100	100	91.9	88.1	89.9	91.9	88.1	89.9	0	0	0	91.9	88.1	0	0	0	0
8	100	100	100	89.9	89.8	86.6	89.9	89.8	86.6	0	0	0	89.9	89.8	0	0	0	0
9	100	100	100	100	97.5	99.7	100	97.5	99.7	0	0	0	100	97.5	0	0	0	0
10	100	100	100	100	100	100	100	100	100	0	0	0	100	100	0	0	0	0
11	99.9	99.9	99.9	99.9	99.6	99.2	99.9	99.6	99.2	0	0	0	99.9	99.6	0	0	0	0
12	100	100	100	94.9	90.8	89	94.9	90.8	89	0	0	0	94.7	90.6	0	0	0	0
13	100	100	100	91.5	92.8	91.7	91.5	92.8	91.7	0	0	0	91.5	92.8	0	0	0	0
14	100	100	100	100	100	100	100	100	100	0	0	0	100	100	0	0	0	0
15	100	100	100	100	100	100	100	100	100	0	0	0	100	100	0	0	0	0
16	100	100	100	100	97.5	94.8	100	97.5	94.8	0	0	0	100	97.5	0	0	0	0
17	100	100	100	88.7	84.2	90.3	88.7	84.2	90.3	0	0	0	88.7	84.2	0	0	0	0
18	99.7	99.7	99.7	90.6	93	94.4	90.6	93	94.4	0	0	0	90.6	93	0	0	0	0
19	99.9	99.9	99.9	97.4	94	99.7	97.4	94	99.7	46.3	46.3	0	44.4	40.9	0	0	0	0
20	100	100	100	97.4	99.4	98.3	97.4	99.4	98.3	100	100	0	0	0	0	0	0	0
21	100	100	100	100	99.2	100	100	99.2	100	100	100	0	0	0	0	0	0	0
22	98.8	98.8	98.8	89.5	84.8	85.3	89.5	84.8	85.3	98.8	98.8	0	0	0	0	0	0	0
23	100	100	100	89	92.4	88.2	89	92.4	88.2	100	100	0	0	0	0	0	0	0
24	100	100	100	73.5	73	72.9	73.7	73.1	73.1	100	100	0	0	0	0	0	0	0
25	99.8	99.8	99.8	99.8	98.6	99.8	99.8	98.6	99.8	49.5	49.9	0	0	0	0	47.2	46.9	0
26	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	99.9	99.9	0
27	100	100	100	98.5	98.6	97.8	98.5	98.6	97.8	0	0	0	0	0	0	100	100	0
28	100	100	100	100	98.8	100	100	98.8	100	0	0	0	0	0	0	100	100	0
29	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
30	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
Avg	99.9	99.9	99.9	96.3	94.8	95	96.3	94.8	95	31.3	31.3	0	47.9	47.2	0	18.2	18.2	0
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	0.2	0.2	0.2	5.9	7	6.9	5.8	7	6.9	43.6	43.6	0	46.4	45.9	0	37.5	37.5	0
Min	98.8	98.8	98.8	73.5	73	72.9	73.7	73.1	73.1	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	0	100	100	0	100	100	0

ED_004549_00015929-00279

Table F11. Airflow and emission data completeness (%) at Site NC3B for May, 2009.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
2	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
3	99.8	99.8	99.8	68.9	68.8	66.8	69	69	66.9	52.2	52.2	0	0	0	0	43.1	44	0
4	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
5	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
6	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	0	0	0	0	0	0	0
7	100	100	100	91.7	100	100	91.7	100	100	100	100	0	0	0	0	0	0	0
8	100	100	100	90.4	100	100	90.4	100	100	100	100	0	0	0	0	0	0	0
9	100	100	100	100	99.9	100	100	99.9	100	100	98.5	0	0	0	0	0	0	0
10	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
11	100	100	100	99.9	97	97.6	99.9	97	97.6	100	100	0	0	0	0	0	0	0
12	100	100	100	98.1	92.1	88.2	98.1	92.1	88.2	100	100	0	0	0	0	0	0	0
13	100	100	100	100	85.3	97.2	100	85.3	97.2	100	100	0	0	0	0	0	0	0
14	100	100	100	100	91.6	99.8	100	91.6	99.8	100	100	0	0	0	0	0	0	0
15	100	100	100	100	95.3	100	100	95.3	100	100	100	0	0	0	0	0	0	0
16	100	100	100	67.6	71.7	73.1	67.7	74.9	73.3	59.1	99.8	0	0	0	0	0	0	0
17	100	100	100	42.1	75.2	68.7	42.1	75.3	68.8	0	100	0	0	0	0	0	0	0
18	100	100	100	0	100	78.4	0	100	78.4	0	38.5	0	0	0	0	0	0	0
19	100	100	100	0	94.2	71.3	0	94.2	71.3	0	0	0	0	0	0	0	0	0
20	99.2	99.8	99.8	0	99.8	87.1	0	99.8	87.1	0	0	0	0	0	0	0	0	0
21	99.9	99.9	99.9	0	99.9	99.9	0	99.9	99.9	0	0	0	0	0	0	0	0	0
22	100	100	100	54.5	100	100	54.5	100	100	0	0	0	0	0	0	0	0	0
23	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0
24	99.5	40.4	41.7	99.5	40.3	41.7	99.5	40.3	41.7	0	0	0	0	0	0	0	0	0
25	99.9	0	0	74.4	0	0	74.7	0	0	0	0	0	0	0	0	0	0	0
26	100	0	0	95.8	0	0	95.8	0	0	0	0	0	0	0	0	0	0	0
27	100	0	0	92	0	0	92	0	0	0	0	0	0	0	0	0	0	0
28	100	0	0	94.9	0	0	94.9	0	0	0	0	0	0	0	0	0	0	0
29	100	0	0	94.2	0	0	94.2	0	0	0	0	0	0	0	0	0	0	0
30	99.7	45.5	44.2	58.1	40.1	0.1	58.2	40.3	0.1	0	0	0	0	0	0	0	0	0
31	100	100	100	87.6	99.7	0.6	87.6	99.7	0.6	0	0	0	0	0	0	0	0	0
Avg	99.9	80.2	80.2	77.7	75.8	70	77.7	75.9	70	42.3	48	0	0	0	0	7.8	7.9	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	0.2	37.8	37.8	33.6	36.7	40.1	33.6	36.7	40.1	47.7	48.3	0	0	0	0	25.4	25.4	0
Min	99.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	100	100	0

ED_004549_00015929-00280

Table F11. Airflow and emission data completeness (%) at Site NC3B for June, 2009.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	93.1	55.7	5.7	93.1	55.7	5.7	0	0	0	0	0	0	0	0	0
2	100	100	100	97.8	75.7	0	97.8	75.7	0	54.4	0	0	0	0	0	0	0	0
3	100	100	100	100	100	0.2	100	100	0.2	100	0	0	0	0	0	0	0	0
4	100	100	100	99.4	96	49.4	99.4	96	49.4	100	0	0	0	0	0	0	0	0
5	100	100	100	99.9	99.9	83.3	99.9	99.9	83.3	99.9	0	0	0	0	0	0	0	0
6	100	100	100	94.4	93.6	59.1	94.4	93.6	59.1	100	0	0	0	0	0	0	0	0
7	100	100	100	97.6	99.7	82.8	97.6	99.7	82.8	97.2	0	0	0	0	0	0	0	0
8	100	100	100	98.6	98.8	90	98.6	98.8	90	100	0	0	0	0	0	0	0	0
9	99.3	100	100	99.3	100	98.8	99.3	100	98.8	99.3	0	0	0	0	0	0	0	0
10	100	100	100	96.8	96.7	93.9	96.8	96.7	93.9	100	0	0	0	0	0	0	0	0
11	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	0	0	0	0	0	0	0	0
12	100	100	100	100	100	99.5	100	100	99.5	100	0	0	0	0	0	0	0	0
13	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0
14	97.8	97.8	97.8	97.7	79	97.8	97.7	79.1	97.8	93.7	29.7	0	0	0	0	0	0	0
15	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
16	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
17	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
18	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
19	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
20	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
21	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	48.3	48.3	0	0	0	0	44.3	47.2	0
22	100	100	100	99.5	96.9	97.6	99.5	96.9	97.6	0	0	0	0	0	0	100	100	0
23	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
24	100	100	100	98.4	100	99.5	98.4	100	99.5	0	0	0	0	0	0	100	100	0
25	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
26	100	100	100	70.8	98.5	100	70.8	98.5	100	0	0	0	0	0	0	98.4	100	0
27	99	99	99	48.2	76.7	74.8	48.3	76.8	74.9	43.4	43.3	0	0	0	0	47.8	47.8	0
28	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0
29	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
30	99.1	99.1	99.1	71.3	71.3	73.1	73.3	71.5	73.3	99.1	99.1	0	0	0	0	0	0	0
Avg	99.8	99.8	99.8	95.4	94.6	83.5	95.5	94.6	83.5	74.5	34	0	0	0	0	19.7	19.8	0
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	0.5	0.5	0.5	11.3	10.9	30	11.2	10.9	30	40.2	44.8	0	0	0	0	37.6	37.7	0
Min	97.8	97.8	97.8	48.2	55.7	0	48.3	55.7	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	100	100	0

ED_004549_00015929-00281

Table F11. Airflow and emission data completeness (%) at Site NC3B for July, 2009.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	99.9	99.9	99.9	86.9	99.9	99.9	86.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0
2	92.8	92.8	92.8	64.6	92.8	92.8	64.6	92.8	92.8	92.8	92.8	0	0	0	0	0	0	0
3	100	100	100	100	99.9	100	100	99.9	100	100	100	0	0	0	0	0	0	0
4	100	100	100	95.6	100	97.1	95.6	100	97.1	100	100	0	0	0	0	0	0	0
5	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
6	100	100	100	92.2	91.4	93.2	92.2	91.4	93.2	100	100	0	0	0	0	0	0	0
7	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	0	0	0	0	0	0	0
9	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
10	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
11	100	100	100	75.5	75.5	75.5	75.6	75.6	75.6	96.3	96	0	0	0	0	0	0	0
12	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
13	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
14	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
15	100	100	100	99.9	100	99.9	99.9	100	99.9	99.9	99.9	0	0	0	0	0	0	0
16	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
17	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
18	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
19	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
20	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
21	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	0	0	0	0	0	0	0
22	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0
23	100	100	100	99.9	100	100	99.9	100	100	100	100	0	0	0	0	0	0	0
24	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	0	0	0	0	0	0	0
25	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	0	0	0	0	0	0	0
26	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	35.3	34.9	0	54.4	55.3	0	0	0	0
27	100	100	100	100	100	94.7	100	100	94.7	0	0	0	100	100	0	0	0	0
28	100	100	100	100	100	97.3	100	100	97.3	0	0	0	100	100	0	0	0	0
29	100	100	100	100	100	100	100	100	100	0	0	0	100	100	0	0	0	0
30	100	100	100	100	100	100	100	100	100	0	0	0	100	100	0	0	0	0
31	100	100	100	100	99.9	100	100	99.9	100	0	0	0	100	99.9	0	0	0	0
Avg	99.7	99.7	99.7	97.2	98.6	98.3	97.2	98.6	98.3	81.4	81.4	0	17.9	17.9	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	1.3	1.3	1.3	7.8	4.7	4.6	7.7	4.6	4.6	37.5	37.5	0	37.3	37.3	0	0	0	0
Min	92.8	92.8	92.8	64.6	75.5	75.5	64.6	75.6	75.6	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	0	100	100	0	0	0	0

ED_004549_00015929-00282

Table F11. Airflow and emission data completeness (%) at Site NC3B for August, 2009.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	99.7	100	100	99.7	100	100	99.7	100	0	0	0	99.9	99.7	0	0	0	0
2	100	100	100	100	100	100	100	100	100	0	0	0	100	100	0	0	0	0
3	99.4	99.4	99.4	99.3	99.3	98.7	99.3	99.3	98.7	0	0	0	99.3	99.3	0	0	0	0
4	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	0	0	0	99.8	99.8	0	0	0	0
5	99.7	99.7	99.7	99.5	99.7	99.7	99.5	99.7	99.7	0	0	0	99.5	99.4	0	0	0	0
6	100	100	100	96.3	97.4	96	96.3	97.4	96	0	0	0	96.3	97.4	0	0	0	0
7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	0	0	0	99.8	99.8	0	0	0	0
8	99.7	99.7	99.7	72.2	74.2	74.2	72.3	74.4	74.4	0	0	0	50.2	50.2	0	39.4	43.7	0
9	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
10	100	100	100	99.9	99.9	99.7	99.9	99.9	99.7	0	0	0	0	0	0	100	100	0
11	100	100	100	98.2	99.8	99.7	98.2	99.8	99.7	0	0	0	0	0	0	99.4	99.5	0
12	99.6	99.6	99.6	78.3	78.3	78.3	78.5	78.5	78.5	0	0	0	0	0	0	99.6	99.6	0
13	100	100	100	54.6	77.3	77.3	54.9	77.4	77.4	0	0	0	0	0	0	100	100	0
14	100	100	100	100	99.8	100	100	99.8	100	0	0	0	0	0	0	100	100	0
15	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	99.9	99.9	0
16	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
17	100	100	100	100	100	99.9	100	100	99.9	0	0	0	0	0	0	100	100	0
18	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
19	100	100	100	77.4	100	77.4	77.6	100	77.6	0	0	0	0	0	0	100	100	0
20	100	100	100	100	96.5	100	100	100	100	0	0	0	0	0	0	100	100	0
21	100	100	100	100	38.8	100	100	40.6	100	0	0	0	0	0	0	100	100	0
22	99.8	99.8	99.8	99.7	18.8	99.7	99.7	18.9	99.7	0	0	0	0	0	0	99.7	99.7	0
23	99.3	99.3	99.3	99.2	49.4	99.2	99.2	49.6	99.2	0	0	0	0	0	0	99.2	99.2	0
24	100	100	100	99.3	100	98.8	99.3	100	98.8	0	0	0	0	0	0	100	100	0
25	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
26	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	100	100	0
27	96.8	96.8	96.8	96.8	71.7	96.8	96.8	71.9	96.8	42	42	0	0	0	0	48.7	51	0
28	100	100	100	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0
29	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
30	100	100	100	98.8	99.5	98.1	98.8	99.5	100	100	100	0	0	0	0	0	0	0
31	63.4	63.4	63.4	62.9	62.3	61.6	63.1	62.4	61.7	63.4	63.4	0	0	0	0	0	0	0
Avg	98.6	98.6	98.6	94.6	89.1	95.3	94.6	89.3	95.4	13.1	13.1	0	24	24.1	0	60.8	61	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	6.5	6.5	6.5	11.8	20.6	9.8	11.7	20.4	9.8	31.4	31.4	0	41.6	41.6	0	47.1	47	0
Min	63.4	63.4	63.4	54.6	18.8	61.6	54.9	18.9	61.7	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	0	100	100	0	100	100	0

ED_004549_00015929-00283

Table F11. Airflow and emission data completeness (%) at Site NC3B for September, 2009.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
2	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
3	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
4	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
5	100	100	100	100	77.9	100	100	78.1	100	92.4	95.6	0	0	0	0	0	0	0
6	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
7	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
8	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
9	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
10	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
11	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
12	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	97.3	0	0	0	0	0	0	0
13	100	100	100	76.7	100	100	100	100	100	100	100	0	0	0	0	0	0	0
14	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
15	99.8	99.8	99.8	58.1	56	59.9	58.2	56.1	60.1	99.8	99.8	0	0	0	0	0	0	0
16	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
17	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
18	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
19	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
20	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	92.8	93.3	0	0	0	0	0	0	0
21	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
22	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
23	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0
24	100	100	100	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0
25	100	100	100	100	100	99.9	100	100	99.9	100	100	0	0	0	0	0	0	0
26	100	100	100	100	100	99.7	100	100	99.7	100	100	0	0	0	0	0	0	0
27	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	0	0	0	0	0	0	0
28	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0	0	0	0	0	0	0
29	100	100	100	99	100	99.2	99	100	99.2	100	100	0	0	0	0	0	0	0
30	93.9	93.9	93.9	79.2	93.9	88.8	79.2	93.9	88.8	93.9	93.9	0	0	0	0	0	0	0
Avg	99.6	99.6	99.6	97	97.4	98.1	97.7	97.5	98.1	99.3	99.3	0	0	0	0	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	1.3	1.3	1.3	9.1	8.7	7.4	8.3	8.7	7.4	2.1	1.8	0	0	0	0	0	0	0
Min	93.9	93.9	93.9	58.1	56	59.9	58.2	56.1	60.1	92.4	93.3	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0

ED_004549_00015929-00284

Table F11. Airflow and emission data completeness (%) at Site NC3B for October, 2009.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	98.5	100	96.3	98.5	100	96.3	96.5	97.1	59.5	0	0	0	0	0	0
2	100	100	100	99.3	99.9	95.6	99.3	99.9	95.6	99.9	99.9	99.8	0	0	0	0	0	0
3	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
4	100	100	100	99.2	100	100	99.2	100	100	100	100	100	0	0	0	0	0	0
5	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
6	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
7	100	100	100	60.5	100	99.8	60.5	100	99.8	100	100	100	0	0	0	0	0	0
8	100	100	100	0	100	93.5	0	100	93.5	100	100	100	0	0	0	0	0	0
9	100	100	100	0	100	95.1	0	100	95.1	100	100	100	0	0	0	0	0	0
10	100	100	100	0	100	100	0	100	100	99.2	100	99.9	0	0	0	0	0	0
11	99.8	99.8	99.8	17.7	61.8	62.4	17.8	61.9	73.1	74	99.8	99.8	0	0	0	0	0	0
12	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
13	100	100	100	100	100	97.4	100	100	97.4	100	100	100	0	0	0	0	0	0
14	100	100	100	51.6	52.3	52.3	58.5	52.3	52.3	100	62.7	64.7	0	0	0	0	0	0
15	100	100	100	76.8	0	0	100	0	0	100	0	0	0	0	0	0	0	0
16	100	100	100	100	0	0	100	0	0	100	0	0	0	0	0	0	0	0
17	100	100	100	100	0	0	100	0	0	100	0	0	0	0	0	0	0	0
18	100	100	100	100	0	0	100	0	0	100	0	0	0	0	0	0	0	0
19	100	100	100	100	0	0	100	0	0	100	0	0	0	0	0	0	0	0
20	100	100	100	51.3	0	0	51.3	0	0	100	0	0	0	0	0	0	0	0
21	98.1	98.1	98.1	63.6	48.5	43.8	63.6	48.7	43.9	98.1	37.4	33.5	0	0	0	0	0	0
22	100	100	100	96.5	98.4	59.7	96.5	98.4	59.9	100	100	100	0	0	0	0	0	0
23	100	100	100	97.4	99.4	100	97.4	99.4	100	100	100	100	0	0	0	0	0	0
24	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0
25	100	100	100	97.7	91.4	99.9	97.7	91.4	99.9	99.9	99.9	98	0	0	0	0	0	0
26	100	100	100	96.4	84.5	76.7	96.4	84.5	76.7	100	100	100	0	0	0	0	0	0
27	100	100	100	54.5	64.2	31.7	54.7	64.4	31.7	100	100	100	0	0	0	0	0	0
28	99.9	99.9	99.9	87.9	98.6	83	57.5	68.3	52.6	99.9	99.9	99.9	0	0	0	0	0	0
29	100	100	100	0	0	0	0	0	0	99.2	97.2	100	0	0	0	0	0	0
30	100	100	100	0	0	0	0	0	0	99.5	100	100	0	0	0	0	0	0
31	100	100	100	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0
Avg	99.9	99.9	99.9	69.3	64.5	60.9	69.3	63.5	60.3	98.9	77.2	76	0	0	0	0	0	0
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	0.3	0.3	0.3	39.3	43.6	42.7	39.5	43.1	42.6	4.6	39.9	39.9	0	0	0	0	0	0
Min	98.1	98.1	98.1	0	0	0	0	0	0	74	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0

ED_004549_00015929-00285

Table F11. Airflow and emission data completeness (%) at Site NC3B for November, 2009.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0
2	100	100	100	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0
3	100	100	100	53.8	56.7	37.6	54.2	57	37.8	100	100	100	0	0	0	0	0	0
4	99.7	99.7	99.7	95.9	96.8	60.1	95.9	96.8	60.1	99.7	99.7	99.7	0	0	0	0	0	0
5	100	100	100	97.2	99.9	54	97.2	99.9	54	100	100	100	0	0	0	0	0	0
6	99.9	99.9	99.9	57.2	99.4	40.4	57.2	99.4	40.4	85.5	83.3	79.8	0	0	0	0	0	0
7	100	100	100	36	98.2	45.3	36	98.2	45.3	100	100	100	0	0	0	0	0	0
8	100	100	100	49	99.7	57.3	49	99.7	57.3	100	100	100	0	0	0	0	0	0
9	100	100	100	56.1	100	69	56.1	100	69	100	100	100	0	0	0	0	0	0
10	100	100	100	75.3	100	87.5	75.3	100	87.5	100	100	100	0	0	0	0	0	0
11	100	100	100	97.9	100	95	97.9	100	95	100	100	100	0	0	0	0	0	0
12	100	100	100	84.7	96.9	53	84.7	96.9	53	100	100	100	0	0	0	0	0	0
13	100	100	100	74.5	89.2	49.3	74.5	89.2	49.3	100	100	100	0	0	0	0	0	0
14	99.9	99.9	99.9	54.1	95.5	55.1	54.1	95.5	55.1	99.9	99.9	99.9	0	0	0	0	0	0
15	100	100	100	63.7	98.2	60.4	63.7	98.2	60.4	100	100	100	0	0	0	0	0	0
16	100	100	100	61	99.9	61.5	61	99.9	61.5	100	100	100	0	0	0	0	0	0
17	100	100	100	66.7	98.7	67.8	66.7	98.7	67.8	100	100	100	0	0	0	0	0	0
18	100	100	100	95.1	99	92.2	95.1	99	92.2	100	100	100	0	0	0	0	0	0
19	100	100	100	100	100	98.5	100	100	98.5	100	100	100	0	0	0	0	0	0
20	100	100	100	87.6	100	79.9	87.6	100	79.9	100	100	100	0	0	0	0	0	0
21	99.7	99.7	99.7	63.9	98.2	60.7	63.9	98.2	60.7	99.7	99.7	99.7	0	0	0	0	0	0
22	100	100	100	67	99.2	64.6	67	99.2	64.6	100	100	100	0	0	0	0	0	0
23	100	100	100	81	99.9	75	81	99.9	75	100	100	100	0	0	0	0	0	0
24	100	100	100	64.4	96.9	46.3	64.4	96.9	46.3	100	100	100	0	0	0	0	0	0
25	100	57.1	100	60.2	36.9	42.8	60.2	36.9	42.8	100	57.1	100	0	0	0	0	0	0
26	100	0	100	58.8	0	44.6	58.8	0	44.6	100	0	100	0	0	0	0	0	0
27	100	0	100	46.9	0	38.8	46.9	0	38.8	100	0	100	0	0	0	0	0	0
28	100	52.4	100	48	39.2	44.4	48	39.2	44.4	52.8	5.3	54	18.9	16.5	18.1	0	0	0
29	100	100	100	64.9	83.2	66.7	64.9	83.2	66.7	0	0	0	64.9	83.2	66.7	0	0	0
30	100	100	100	73.8	90.7	69.2	73.8	90.7	69.2	0	0	0	73.8	90.7	69.2	0	0	0
Avg	100	90.3	100	64.5	79.1	57.2	64.5	79.1	57.2	91.3	81.5	91.1	5.3	6.4	5.1	0	0	0
n	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
SD	0.1	26.6	0.1	24	35.1	22.5	24	35.1	22.5	25.9	36.9	25.9	17.5	21.8	17.1	0	0	0
Min	99.7	0	99.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	100	100	98.5	100	100	98.5	100	100	100	73.8	90.7	69.2	0	0	0

ED_004549_00015929-00286

Table F11. Airflow and emission data completeness (%) at Site NC3B for December, 2009.

Day	Airflow			Ammonia			Hydrogen			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	62.4	73.5	58.5	62.4	73.5	58.5	0	0	0	62.4	73.5	58.5	0	0	0
2	99.6	99.6	99.6	88.6	93.4	87.6	88.6	93.4	87.6	0	0	0	88.6	93.4	87.6	39.5	39.5	39.5
3	100	100	100	84	99.6	76	84	99.6	76	0	0	0	83.9	99.6	76	99.9	100	100
4	100	100	100	73.4	85.5	61.1	73.4	85.5	61.1	0	0	0	73.4	85.5	61.1	100	100	100
5	100	100	100	68.1	92.1	48.4	68.1	92.1	48.4	0	0	0	68.1	92.1	48.4	100	100	100
6	99.9	100	100	71.6	75.8	76.5	71.6	75.8	76.5	0	0	0	71.6	75.7	76.4	99.9	99.9	99.9
7	100	100	100	66	87.2	75.7	66	87.2	75.7	0	0	0	66	87.2	75.7	100	100	100
8	99.9	99.9	99.9	80.3	84.9	82.8	80.3	84.9	82.8	0	0	0	80.2	84.9	82.8	99.9	99.9	99.9
9	100	100	100	95.8	98.7	91.6	95.8	98.7	91.6	0	0	0	95.7	98.6	91.5	99.9	99.9	99.9
10	99.9	99.9	99.9	67.2	78.2	64.1	67.2	78.2	64.1	0	0	0	67.2	78.2	64.1	99.9	99.9	99.9
11	100	100	100	73.8	76.2	66.6	73.8	76.2	66.6	0	0	0	73.8	76.2	66.6	100	100	100
12	100	100	100	51	51.5	52.9	51.1	51.6	53.1	0	0	0	52.8	53.4	55.1	96.2	96.7	99.2
13	100	100	100	77.4	88	86.3	77.4	88	86.3	0	0	0	0	0	0	100	100	100
14	100	100	100	57.7	85.9	77.5	57.7	85.9	77.5	0	0	0	0	0	0	100	100	100
15	100	100	100	83.8	100	86.2	83.8	100	86.2	0	0	0	0	0	0	100	100	100
16	100	100	100	74.7	74.4	79.8	74.7	74.4	79.8	0	0	0	0	0	0	100	100	100
17	100	100	100	93.5	92.1	98.2	93.5	92.1	98.2	0	0	0	0	0	0	100	100	100
18	100	100	100	98.7	98.5	99.9	98.7	98.5	99.9	0	0	0	0	0	0	100	100	100
19	100	100	100	66	72.8	64.4	66	72.8	64.4	0	0	0	0	0	0	90.7	97.2	95.7
20	100	100	100	78.3	75.5	88.5	78.3	75.5	88.5	0	0	0	0	0	0	100	100	100
21	100	100	100	80.6	81.3	92.3	80.6	81.3	92.3	0	0	0	0	0	0	99.8	99.8	99.8
22	100	100	100	90.2	87.8	97.1	90.2	87.8	97.1	0	0	0	0	0	0	100	100	100
23	100	100	100	89.5	92	98.2	89.5	92	98.2	0	0	0	0	0	0	100	100	100
24	100	100	100	71.5	72.7	73.8	71.7	72.8	73.9	0	0	0	0	0	0	100	100	100
25	100	100	100	96.5	98.9	99.4	96.5	98.9	99.4	0	0	0	0	0	0	100	100	100
26	100	100	100	47.3	50.1	66.7	47.4	50.1	66.9	43.3	43.3	43.1	0	0	0	52	51.3	52
27	99.2	98.8	100	74.2	68.8	84.2	74.2	68.8	84.2	99.2	98.8	100	0	0	0	0	0	0
28	100	100	100	86.6	86.7	63.7	86.6	86.7	63.7	100	100	100	0	0	0	0	0	0
29	100	100	100	30.8	36	20.8	30.8	36	20.8	99.4	100	100	0	0	0	0	0	0
30	100	100	100	0	0	0	0	0	0	99.6	100	100	0	0	0	0	0	0
31	100	100	100	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0
Avg	100	99.9	100	70.3	76.1	71.6	70.3	76.1	71.6	17.5	17.5	17.5	28.5	32.2	27.2	76.7	76.9	77
n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
SD	0.2	0.2	0.1	23.7	24.8	25.5	23.7	24.8	25.5	36.8	36.9	37	36.6	41.2	35.2	39.9	40	40
Min	99.2	98.8	99.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	100	100	100	98.7	100	99.9	98.7	100	99.9	100	100	100	95.7	99.6	91.5	100	100	100

ED_004549_00015929-00287

Table F11. Airflow and emission data completeness (%) at Site NC3B for January, 2010.

Day	Airflow			Ammonia			Hydrogen sulfide			PM_{10}			$PM_{2.5}$			TSP		
	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3	B1	B2	B3
1	100	100	100	0	0	0	0	0	0	99.9	99.9	99.9	0	0	0	0	0	0
2	100	100	100	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0
3	100	100	100	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0
4	100	100	100	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0
5	100	100	100	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0
6	100	100	100	0	0	0	0	0	0	99.8	99.8	99.8	0	0	0	0	0	0
7	100	100	100	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0
8	100	100	100	19.5	22.4	16.6	19.8	22.7	16.8	95.6	96.1	96.5	0	0	0	0	0	0
9	100	100	100	90	95.5	83.1	90	95.5	83.1	100	100	100	0	0	0	0	0	0
10	100	100	100	97.1	95.5	92.1	97.1	95.5	92.1	99.8	99.8	99.8	0	0	0	0	0	0
11	100	100	100	93.8	95.7	96.8	93.8	95.7	96.8	100	100	100	0	0	0	0	0	0
12	100	100	100	93.1	96	92.3	93.1	96	92.3	100	100	100	0	0	0	0	0	0
13	100	100	100	91.6	94.2	95.1	91.6	94.2	95.1	99.8	99.8	99.8	0	0	0	0	0	0
14																		
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27																		
28																		
29																		
30																		
31																		
Mean	100	100	100	37.3	38.4	36.6	37.3	38.4	36.6	99.6	99.6	99.7	0	0	0	0	0	0
n	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Std. Dev	0	0	0	46.2	47.3	45.8	46.2	47.3	45.8	1.2	1.1	1.0	0	0	0	0	0	0
Min	100	100	100	0	0	0	0	0	0	95.6	96.1	96.5	0	0	0	0	0	0
Max	100	100	100	97.1	96.0	96.8	97.1	96.0	96.8	100	100	100	0	0	0	0	0	0

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