Winnebago Landfill Company
8403 Lindenwood Road • Rockford, IL 611 Phone: 815.874.4806 • Fax 815.874.4630

201801AAF
Title V 10

August 25, 2008

33199

Illinois Environmental Protection Agency (IEPA)
Bureau of Air
Office of Air Quality
Compliance Section (MC-40)
P.O. Box 19276
1021 North Grand Avenue East
Springfield, IL 62794-9276

NPT

RECEIVED
AUG 29 2008
Environmental Protection Agency
Bureau of Air
STATE OF ILLINOIS

Re: Semi-annual Gas Collection and control System Report
Reporting Period: January 1, 2008 through June 30, 2008
Winnebago Landfill
CAAPP Application No. 99020102, I.D. No. 201801AAF

Winnebago Reclamation Service respectfully submits the enclosed report to meet compliance with 40 CFR Part 60, Subpart WWW, New Source Performance Standards for municipal solid waste landfills and 40 CFR 63 Subparts A and AAAA, National Emission Standard for Hazardous Air Pollutants for municipal solid waste landfills.

Enclosed is the Landfill Gas Collection and Control System (GCCS) Semi-Annual Report covering the period from January 1, 2008 through June 30, 2008. If you have any questions, please do not hesitate to contact me at 815-963-7533.

Sincerely,

Winnebago Reclamation Service

Evan Buskohl
Environmental Manager

Enclosure: Form 400-CAAPP
Semi-Annual GCCS Report

cc: Peoria Regional Office – IEPA-DAPC
Winnebago Landfill Site File
Sultana Haque – Cornerstone Environmental Group, LLC

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: _____ / _____ / _____
Page _____ of _____
Source Designation: _____

COMPLIANCE AND GENERAL REPORTING FORM	FOR AGENCY USE ONLY
	ID NUMBER:
	PERMIT #:
	DATE:

THIS FORM IS USED FOR EITHER OF THE FOLLOWING:

- TO REPORT AND CERTIFY COMPLIANCE OF AN ENTIRE SOURCE OR SPECIFIC ITEMS OF EQUIPMENT WITH ALL APPLICABLE REQUIREMENTS DURING A REPORTING PERIOD, OR
- TO IDENTIFY AND ENSURE PROPER PROCESSING OF A SUBMITTED REPORT. THIS FORM SHOULD BE USED AS THE COVER SHEET OF THE SUBMITTED REPORT.

SOURCE INFORMATION

1) SOURCE NAME:
Winnebago Landfill

2) DATE FORM PREPARED:	3) SOURCE ID NO. (IF KNOWN):
August 25, 2008	**201801AAF**

GENERAL INFORMATION

4) INDICATE FOR WHICH OF THE FOLLOWING THIS FORM IS BEING COMPLETED:

☐ **TO REPORT AND CERTIFY COMPLIANCE OF THE SOURCE OR SPECIFIC ITEMS OF EQUIPMENT WITH ALL APPLICABLE REQUIREMENTS**

☒ **TO IDENTIFY AND ENSURE PROPER PROCESSING OF A SUBMITTED REPORT**

5) PERIOD COVERED BY THIS REPORT:

FROM: 01 / 01 /2008 TO: 06 / 30 / 2008

6) NAME AND PHONE NUMBER OF PERSON TO CONTACT FOR QUESTIONS REGARDING THIS REPORT:

NAME: Evan Buskohl TITLE: Environmental Manager

PHONE#: (815) 963-7533 EXT: _____

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
_____

COMPLIANCE OF SOURCE OR EQUIPMENT DURING REPORTING PERIOD

- COMPLETE ITEM 7 BELOW IF THIS FORM IS BEING USED TO REPORT AND CERTIFY COMPLIANCE OF THE ENTIRE SOURCE.
- COMPLETE ITEM 8 BELOW IF THIS FORM IS BEING USED TO REPORT AND CERTIFY COMPLIANCE OF SPECIFIC ITEMS OF EQUIPMENT ONLY.

7) WAS THE SOURCE IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS FOR THE ENTIRE REPORTING PERIOD? ☐ Yes ☐ No

IF YES, THEN THE "REPORT INFORMATION" SECTION ON PAGE 3 OF THIS FORM DOES NOT NEED TO BE COMPLETED.

IF NO, THEN COMPLETE AND SUBMIT FORM CAAPP-405 -"EXCESS EMISSIONS, MONITORING EQUIPMENT DOWNTIME, AND MISCELLANEOUS REPORTING FORM."

8a) LIST THE EMISSION UNIT(S) AND CONTROL EQUIPMENT FOR WHICH THIS FORM IS BEING COMPLETED TO REPORT AND CERTIFY COMPLIANCE WITH (IF ADDITIONAL SPACE IS NEEDED FOR ITEM 10, ATTACH AND LABEL AS EXHIBIT 400-A):

b) IDENTIFY THE APPLICABLE REQIREMENT(S) FOR WHICH THIS FORM IS BEING USED TO REPORT AND CERTIFY COMPLIANCE WITH:

c) IDENTIFY THE APPLICABLE REQIREMENT(S) WHICH REQUIRE THAT THIS REPORT OR CERTIFICATION BE SUBMITTED:

d) WERE THE ABOVE REFERENCED ITEMS IN 8(a) IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS FOR THE ENTIRE REPORTING PERIOD? ☐ Yes ☐ No

IF YES, THEN THE "REPORT INFORMATION" SECTION ON PAGE 3 OF THIS FORM DOES NOT NEED TO BE COMPLETED.

IF NO, THEN COMPLETE AND SUBMIT FORM CAAPP-405 - "EXCESS EMISSIONS, MONITORING EQUIPMENT DOWNTIME, AND MISCELLANEOUS REPORTING FORM."

REPORT INFORMATION

9) TITLE OF REPORT BEING SUBMITTED:

Semi-Annual NSPS Compliance Report

10) IDENTIFY THE APPLICABLE REQIREMENT(S) WHICH REQUIRES THIS REPORT (IF APPLICABLE):

Permit Condition 7.1.3 and 7.1.10 of CAAPP Permit No. 99020102.
Permit Condition 5.2.5 of CAAPP Permit No. 99020102.

11) BRIEFLY EXPLAIN WHAT THIS REPORT COVERS:

Semi-annual NSPS compliance monitoring and reporting requirements for the GCCS at the facility as required by 40 CFR 60 Subpart WWW and 40 CFR 63 Subpart AAAA.

12) ATTACH THE REPORT TO THIS FORM.

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE RETURNED AS INCOMPLETE.

13) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

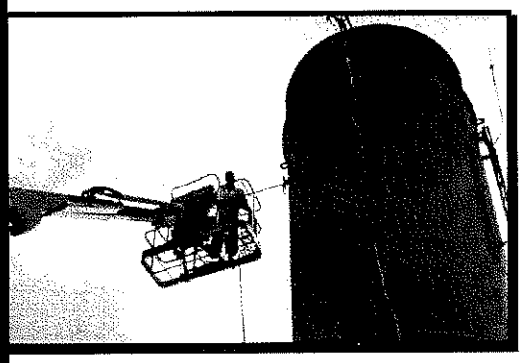
BY:

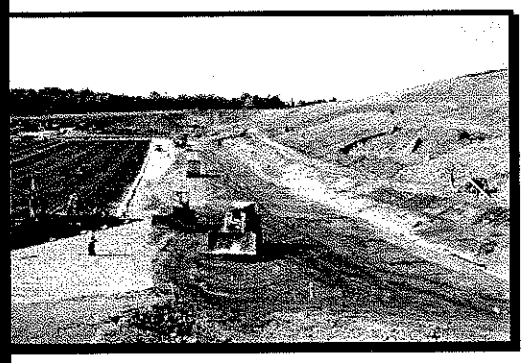
AUTHORIZED SIGNATURE

Vice President
TITLE OF SIGNATORY

Thomas Hilbert
TYPED OR PRINTED NAME OF SIGNATORY

08-19-2008
DATE





Winnebago Landfill Landfill Gas Collection and Control System Semi-annual Report January 1, 2008 – June 30, 2008

Project 70104
August 2008

RECEIVED
AUG 29 2008
Environmental Protection Agency
Bureau of Air
STATE OF ILLINOIS

Prepared for:
Winnebago Reclamation Services

Winnebago Landfill
8403 Lindenwood Road
Rockford, Illinois 61109

CORNERSTONE
Environmental Group, LLC

39395 W. Twelve Mile Rd., Suite 103, Farmington Hills, MI 48331

Building lifetime relationships with our clients and employees.

LANDFILL GAS COLLECTION AND CONTROL SYSTEM SEMI-ANNUAL REPORT JANUARY 1, 2008 - JUNE 30, 2008

WINNEBAGO LANDFILL

ROCKFORD, ILLINOIS

Prepared for
Winnebago Reclamation Service
August 2008

Prepared by

CORNERSTONE
Environmental Group, LLC
39395 W. Twelve Mile Road
Farmington Hills, Michigan 48331

Project 70104

Landfill Gas Collection and Control System Semi-annual Report
January 1, 2008 - June 30, 2008
Winnebago Landfill
Rockford, Illinois

The material and data in this report were prepared under the supervision and direction of the undersigned.

Cornerstone Environmental Group, LLC

Sultana Haque

Sultana Haque, P.E.
Project Engineer

Khaled Mahmood

Khaled Mahmood, P.E.
Senior Project Manager

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1 INTRODUCTION

1.1 Purpose

This document serves as a landfill gas collection and control system (GCCS) semi-annual report for the Winnebago Landfill pursuant to 40 Code of Federal Regulations (CFR) Part 60, Subpart WWW, New Source Performance Standards (NSPS) for municipal solid waste landfill and 40 CFR Part 63, Subparts A and AAAA, National Emissions Standards for Hazardous Air Pollutants (NESHAP) for municipal solid waste landfills. The purpose of this report is to provide performance documentation in accordance with the NSPS requirements for the GCCS at Winnebago Landfill for the referenced reporting period.

1.2 Record Keeping and Reporting

This report is being submitted pursuant to 40 CFR §60.757(f) and 40 CFR §63.1980. Records will be prepared and maintained in accordance with 40 CFR §60.758 and 40 CFR §63.1980. The primary location for records storage will be at the Winnebago Landfill facility.

2 EXISTING SITE CONDITIONS

2.1 Landfill Description

Winnebago Landfill, owned and operated by Winnebago Reclamation Service (WRS), is located in Rockford, Illinois and accepts municipal and other wastes under operating permit number 1991-138-LF issued by the Illinois Environmental Protection Agency (IEPA).

The Winnebago Landfill contains several separate fill areas as follows:

- The area filled to final grade, known as the north unit, is approximately 42.7 acres with an active GCCS.
- The active waste filling area, known as the south unit, is approximately 27.5 acres. An active GCCS is installed in portions of the south unit.

2.2 Landfill Gas Collection and Control System

A GCCS has been installed and currently operates in the areas filled to final grade or in active areas where the waste is five or more years old. The existing GCCS consists of approximately 32 vertical extraction wells in the north unit, 28 vertical extraction wells in the south unit and three horizontal collectors in each of north and south unit. These extraction wells convey the landfill gas (LFG) from the refuse, through a series of lateral and header pipes, to a flare station for destruction.

The primary control device for Winnebago Landfill consists of landfill gas (LFG) treatment system, four LFG fired reciprocating internal combustion engines, two backup open flares (North Unit and South Unit flares) and one backup enclosed flare. The LFG treatment system and the LFG fired engines are owned and operated by the Winnebago Energy Center, LLC that utilizes the LFG collected from the Winnebago Landfill to generate electricity. The engines started operating from December 28, 2007. The Open flares and the enclosed flare are owned and operated by the Winnebago Reclamation Service and they are operated when treatment system is not in service or flow of FLG is greater than the energy facility can handle. A copy of the GCCS drawing has been included in Appendix A.

3 SEMI-ANNUAL REPORT REQUIREMENTS

In accordance with §60.757(f) and §63.1980(a) a semi-annual report must be submitted to the regulatory agency by applicable facilities, which contains performance and monitoring data for the operation of the GCCS.

3.1 Semi-Annual Report Requirements

The requirements under the semi-annual report are as follows:

1. Value and length of time for exceedance of parameters monitored under §60.756(a), (b), (c), and (d) which include:

   - Monthly recording of gauge pressure at all wellheads, all wells must operate under negative pressure conditions
   - Monthly monitoring of oxygen or nitrogen concentrations at all wellheads, oxygen be less than 5% or nitrogen must be less than 20%
   - Monthly monitoring of temperatures at all wellheads, temperature be less than 55°C (131°F)
   - For open flares, all periods where landfill gas flow is not recorded at least once every 15 minutes and presence of flame is not continuously indicated
   - For enclosed combustors with a heat input capacity less than 44 megawatts, all periods where landfill gas flow is not recorded at least once every 15 minutes and temperature is not recorded continuously. Also, all three hour periods during which the average combustion temperature was more than 28°C below the average temperature recorded during the performance test for the control device.
   - Report all 3-hour averaging block of numerical continuous parameter (i.e., combustion temperature) monitoring data containing at least one hour of invalid data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour. Data collected during any of the events described in 40 CFR 63.1975 (monitoring system breakdowns, repairs, calibration checks; control device startup, shutdowns and malfunctions) are not to be included in any 3-hour averaging block (40 CFR 63.1955 – 40 CFR 63.1975).

2. Description and duration of all periods when the gas stream was diverted from the control device through a bypass line.

3. Description and duration of all periods when the control device was not operating for greater than one hour and the length of time that the device was not operating.

4. All periods greater than five (5) days when the collection system was not operating.

5. Location and concentration of all surface emission exceedances (≥ 500 ppm above background).

6. Date of installation and location of all wells or system expansions both planned and as the result of monitoring exceedances.

4 SEMI-ANNUAL REPORT

The information included in this section and applicable appendices, satisfies the requirements under §60.757(f) for the semi-annual report. The reporting period covered in this report is from January 1, 2008 through June 30, 2008.

4.1 Wellfield Monitoring

Monitoring data for the GCCS has been collected, at a minimum, on a monthly frequency for inclusion in the Winnebago Landfill's semi-annual report. Site personnel at Winnebago Landfill were responsible for collecting data. Wellhead monitoring data (pressure, temperature, and oxygen concentration) was recorded using a LANDTEC GEM-500. A complete copy of the results for the monthly monitoring is included in Appendix B.

Monthly monitoring, corrective measures, and 15-day re-monitoring were conducted at the facility in accordance with the Title V permit and the NSPS regulations. In most cases, there were no exceedances of the operational parameters at the wellheads. A description of the instances when corrective actions were needed or did not prove to be sufficient are detailed below.

4.1.1 Temperature

There was no exceedance of temperature during the reporting period covered in this report.

4.1.2 Oxygen

There was no exceedance for oxygen during the reporting period covered in this report.

4.1.3 Pressure

During the June wellfield monitoring event, Well GW191 showed positive pressure reading on June 2, 2008. Wellhead adjustments were made to correct the positive pressure within 5 days and re-monitoring was performed within 15 days. Investigation indicated that there may be subsurface damage or plugging of the lateral causing restriction of vacuum applied to the well. The Winnebago Reclamation Service submitted a letter to the USEPA dated June 18, 2008 requesting alternate compliance timeline of September 30, 2008 to correct this apparent exceedance. On July 8, 2008, the nearby leachate storage tank was found to be completely full after having been pumped empty only a few weeks earlier. Typically, this tank receives a trickle flow and only

requires pumping a few times a year. Coincidently, at this time well GW191 was found to have vacuum, and was back in compliance. The facility believes that the debris plugging the collection header pipe broke free on its own and the backed-up condensate promptly filled the tank. The facility performed daily inspection of well GW191 since this finding, and it has been in consistent compliance. These events were communicated to the USEPA on July 17, 2008 and the USEPA approved the alternate compliance timeline of July 17, 2008. A copy of the USEPA approval is included in Appendix E. This apparent exceedance was reported in a "Miscellaneous Incident of Possible Non-Compliance" report dated July 29, 2008.

Records of monthly wellfield monitoring, corrective actions and re-monitoring conducted are kept on site file.

4.2 LFG Bypass Operations

No bypass line has been installed. Therefore, during the period encompassed under this report, LFG was not diverted through a bypass line.

4.3 Control Device Operation

The primary control devices for the Winnebago Landfill are landfill gas treatment system and two back-up open flares and an enclosed flare. The engine #2 utilizes LFG from North Unit while the Engines #3, #4 and #5 utilize LFG from the South Unit to generate electricity. The North Unit flare is backup for engine #2 and the South Unit flare is backup for engines #3, #4 and #5. An enclosed flare is also available as a back-up control.

The operating records for the North Unit flare, South Unit flare, and the treatment system/engines were reviewed for the reporting period. There were seven (7) instances where the North Unit flare and the engine #2 and the South Unit flare and engines #3, #4 and #5 were down simultaneously for more than 1 hour due to maintenance, blower damage and repair, low oil pressure, trip after full load, uneven cylinder temperatures etc. Each downtime was minimized and the engines were re-started as soon as possible. No landfill gas was released to the atmosphere during the shutdowns since the gas collection system is automatically closed off when the control device is shutdown. A summary of downtime events greater than 1 hour is included in Appendix C.

The enclosed flare did not operate during the reporting period covered in this report. Therefore, there was no landfill gas flow or combustion temperature to be monitored or recorded.

During this reporting period there were no 3-hour averaging blocks of numerical continuous parameter monitoring data that contained at least one hour of invalid data as described in §40 CFR 63.1965 and §40 CFR 63.1975.

4.4 Collection System Operation

During the period encompassed under this report, the gas collection system was not shutdown for more than five days on any occasion.

4.5 Surface Emissions Monitoring

Quarterly surface emission monitoring was performed by Andrews Environmental Engineering, Inc. using a flame ionization detector/photo ionization detector (FID/PID) as required under §60.755(c)(3). Testing was conducted around the perimeter of the collection area and in a serpentine pattern across the collection area as depicted in the surface emissions monitoring plan included in the previously submitted GCCS design plan.

Surface emissions monitoring for the first and second quarters of 2008 were conducted on March 27, 2008 and June 20, 2008 respectively. During the first quarter 2008 monitoring event, surface methane concentration exceeded the 500 ppm threshold at one (1) location. An investigation indicated that the engines were down for maintenance and contributed to the surface methane concentration exceedance. The engines were brought back into operation as soon as the maintenance work was completed. The 10-day re-monitoring was performed on April 11, 2008 and methane concentration at this location was less than 500 ppm above background. The 30-day re-monitoring was conducted on April 25, 2008 and no exceedances were noted during this monitoring event. No exceedances of the 500 ppm background concentration was detected during the second quarter 2008 monitoring event.

Results of surface emissions monitoring events are maintained at the Winnebago Reclamation Service offices and are included in Appendix D.

4.6 Collection System Expansion

No additional extraction devices were installed during the period encompassed under this report due to operational parameter exceedances of due to normal GCCS expansion.

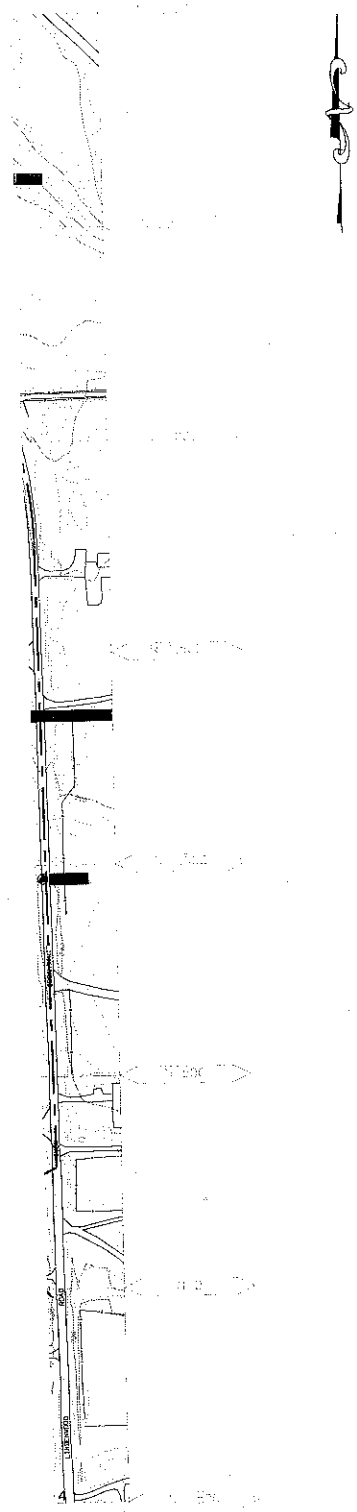
LIMITATIONS

The work product included in the attached was undertaken in full conformity with generally accepted professional consulting principles and practices and to the fullest extent as allowed by law we expressly disclaim all warranties, express or implied, including warranties of merchantability or fitness for a particular purpose. The work product was completed in full conformity with the contract with our client and this document is solely for the use and reliance of our client (unless previously agreed upon that a third party could rely on the work product) and any reliance on this work product by an unapproved outside party is at such party's risk.

The work product herein (including opinions, conclusions, suggestions, etc.) was prepared based on the situations and circumstances as found at the time, location, scope and goal of our performance and thus should be relied upon and used by our client recognizing these considerations and limitations. Cornerstone shall not be liable for the consequences of any change in environmental standards, practices, or regulations following the completion of our work and there is no warrant to the veracity of information provided by third parties, or the partial utilization of this work product.

APPENDIX A

AS-BUILT GCCS DRAWING



LEGEND

- PROPERTY BOUNDARY
- WASTE BOUNDARY
- 10' TOPOGRAPHIC CONTOUR
- 2' TOPOGRAPHIC CONTOUR
- 18" GAS LINE
- 12" GAS LINE
- 6" GAS LINE
- 4" GAS LINE
- 2"x4" DUAL-CONTAINED CONDENSATE LINE
- KNOCKOUT DISCHARGE LINE
- EXISTING SOUTH UNIT GAS WELL

GAS WELL	NORTHING	EASTING	AS-BUILT LINER ELEVATION	GROUND ELEVATION	WASTE DEPTH	BORING DEPTH
S-33	2,000,969.4	801,272.5	715.71	838.82	123.11	108.11
S-34	2,001,161.9	801,100.0	713.51	839.91	126.39	111.39
S-35	2,001,284.1	801,265.2	716.79	842.82	126.03	111.03
S-36	2,001,278.1	800,888.7	746.15	839.99	93.84	78.84
S-37	2,001,397.5	801,072.6	750.28	842.71	92.44	77.44
S-38	2,001,498.2	801,272.1	752.78	838.50	85.72	70.72
S-39	2,001,412.2	800,678.2	779.65	820.00	40.34	25.34
S-40	2,001,540.3	800,857.5	797.56	843.08	45.53	30.53
S-41	2,001,614.6	801,069.6	801.89	858.22	56.33	41.33
S-42	2,001,710.5	801,265.2	811.13	854.82	43.69	28.69

NOTES:

1) BASE MAP PROVIDED BY AEROMETRICS, INC. OF SHEBOYGAN, WISCONSIN. DATE OF TOPOGRAPHY NOVEMBER 25, 2003. SOUTH UNIT TOPOGRAPHY IS BASED ON DECEMBER 15, 2007 GROUND SURVEY BY ARNOLD LUNDGREN AND ASSOCIATES, INC. OF ROCKFORD, ILLINOIS.
2) CONTOUR INTERVAL PRESENTED IS 2 FEET.
3) FOR CLARITY, NOT ALL EXISTING LANDFILL FEATURES ARE SHOWN.
4) BENCHMARKS SHOWN ARE PROVIDED BY ARNOLD LUNDGREN AND ASSOCIATES, INC. OF ROCKFORD, ILLINOIS. ALL BENCHMARKS SHALL BE ESTABLISHED AND MAINTAINED BY A PROFESSIONAL LAND SURVEYOR.
5) THE APPROXIMATE 100 YEAR FLOODPLAIN BOUNDARY SHOWN IS BASED UPON INFORMATION PROVIDED BY THE ILLINOIS STATE WATER SURVEY AND THE APPLICABLE FEMA MAPS.
6) THE NORTHINGS AND EASTINGS ARE STATE PLANE COORDINATES WITH AN OFFSET OF N 2,000,000 E 800,000.

FEEZOR ENGINEERING, INC. (Engineering for a Better World)	PREPARED FOR: WINNEBAGO RECLAMATION SERVICE, INC. 8403 LINDENWOOD ROAD ROCKFORD, IL 61109
	WINNEBAGO LANDFILL GAS EXTRACTION SYSTEM
DESIGNED BY: NAC / SCALE: 1"=200'	EXISTING GAS EXTRACTION SYSTEM
APPROVED BY: DRF / DATE: 8-2008	
PATH: S:\FEI\PROJECTS\PL\PL030	PROJECT NO.: PL-030 / DRAWING NO.: 000

APPENDIX B

MONTHLY WELLHEAD MONITORING RESULTS

Winnebago Landfill
Wellfield Monitoring Data - North Unit
January 2008

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP	Temp	Adj. Flow Scfm	Vacuum (adj Flow)	Comments
WinGW100	1/16/2008 14:54	63.7	32.4	0	3.89	-0.1	52	0	0	
WinGW101	1/16/2008 14:48	54.5	32.3	0	13.2	-3.5	86	0	0	
WinGW103	1/16/2008 14:42	36	29.8	0.5	33.7	-7.4	95	0	0	
WinGW110	1/16/2008 14:57	64.3	35.5	0	0.19	-0.5	56	0	0	Increased 1/4
WinGW111	1/16/2008 14:16	57.9	40.7	0	1.39	-0.1	104	0	0	Increased 1/4
WinGW112	1/16/2008 14:20	57.9	42	0	0.09	-0.9	107	0	0	
WinGW113	1/16/2008 14:39	55.7	36	0	8.29	-0.1	66	0	0	
WinGW120	1/16/2008 15:07	53.1	30.1	0.9	15.9	-5.2	51	0	0	
WinGW121	1/16/2008 14:13	59.6	40.3	0	0.1	-0.2	84	0	0	
WinGW122	1/16/2008 14:22	57.9	39.8	0	2.29	-1.4	77	0	0	
WinGW123	1/16/2008 14:37	61.6	36.9	0	1.5	-0.3	84	0	0	
WinGW130	1/16/2008 15:10	60.1	31.8	0	8.1	-9.4	57	0	0	
WinGW131	1/16/2008 14:11	60.3	39.6	0	0.1	-2.5	78	0	0	
WinGW132	1/16/2008 14:26	58.2	38.5	0	3.29	-2	87	0	0	
WinGW133	1/16/2008 14:28	57.8	39.1	0.4	2.7	-1.2	89	0	0	
WinGW134	1/16/2008 14:31	63.4	36.5	0	0.09	-0.5	55	0	0	
WinGW140	1/16/2008 15:12	54.7	32.2	1.9	11.19	-2.8	66	0	0	
WinGW141	1/16/2008 14:09	62.1	37.8	0	0.1	-1.3	100	0	0	
WinGW142	1/16/2008 13:35	57.5	42.4	0	0.09	-13.2	51	0	0	
WinGW150	1/16/2008 15:14	63.2	36.6	0	0.2	-15.5	63	0	0	
WinGW151	1/16/2008 14:07	60.4	39.4	0	0.19	-2.3	99	0	0	
WinGW152	1/16/2008 13:39	57.8	42	0	0.2	-13.3	47	0	0	
WinGW160	1/16/2008 15:20	60.9	39	0	0.09	-7.6	66	0	0	
WinGW161	1/16/2008 14:04	58.2	41.7	0	0.09	-0.7	107	0	0	Increased 1/4
WinGW162	1/16/2008 13:47	56.7	43.2	0	0.09	-1.9	43	0	0	Increased 1/4
WinGW170	1/16/2008 15:22	61.7	38.2	0	0.09	-5.4	86	0	0	
WinGW171	1/16/2008 13:52	59	40.9	0	0.09	-0.8	104	0	0	
WinGW180	1/16/2008 15:25	63.1	36.8	0	0.1	-10.1	77	0	0	
WinGW181	1/16/2008 13:59	61	38.6	0	0.4	-1.6	94	0	0	
WinGW190	1/16/2008 15:28	64.2	35.7	0	0.1	-0.6	72	0	0	
WinGW191	1/16/2008 15:31	58.1	41.8	0	0.1	-4.9	82	0	0	
WINGWEEH	1/16/2008 13:54	59.5	40.4	0	0.09	-12.9	52	0	0	
WINGWEMH	1/16/2008 13:50	59.3	40.6	0	0.1	-0.3	67	0	0	Increased 1/4
WINGWEWH	1/16/2008 13:41	59.6	40.3	0	0.1	-1.3	73	0	0	Increased 1/4
WinGWFLA	1/16/2008 15:53	56.6	35.9	0.8	6.7	0.7	884	827	35	

Winnebago Landfill
Wellfield Monitoring Data - North Unit
February 2008

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP	Temp	Adj. Flow Scfm	Vacuum (adj Flow)	Comments
WINRGELE	2/5/2008 21:30	62.1	37.8	0	0.1	-8.4	0	0	0	
WinGW100	2/5/2008 21:25	50.8	25.1	2.7	21.4	-3.7	40	0	0	
WinGW101	2/5/2008 21:36	65.2	34.7	0	0.1	-4.2	60	0	0	Increased 1/4
WinGW103	2/5/2008 21:42	57.2	33.2	0	9.59	-4.4	87	0	0	
WinGW110	2/5/2008 21:22	65.2	34.3	0.4	0.1	-6.5	55	0	0	
WinGW111	2/5/2008 22:45	59.7	40.2	0	0.09	-2.1	101	0	0	
WinGW112	2/5/2008 22:52	61.5	38.4	0	0.09	-1.5	98	0	0	
WinGW113	2/5/2008 21:45	63.9	36	0	0.09	-1.8	60	0	0	
WinGW120	2/5/2008 21:11	67.8	32	0.1	0.09	-2.3	42	0	0	
WinGW121	2/5/2008 22:43	53.5	32.2	0	14.29	-1.2	77	0	0	
WinGW122	2/5/2008 22:55	60.4	35.2	0	4.39	-0.6	63	0	0	
WinGW123	2/5/2008 21:48	66.7	32.3	0.4	0.6	-1.7	77	0	0	
WinGW130	2/5/2008 21:07	50.1	21	0.8	28.1	-6.8	50	0	0	
WinGW131	2/5/2008 22:40	60.9	39	0	0.09	-2.3	0	0	0	
WinGW132	2/5/2008 22:00	59.7	40.2	0	0.09	-0.5	73	0	0	
WinGW133	2/5/2008 21:57	60.6	37.6	1.6	0.2	-1.6	84	0	0	
WinGW134	2/5/2008 21:54	64.8	35.1	0	0.09	-1.6	50	0	0	
WinGW140	2/5/2008 21:02	23.7	12	0.5	63.8	-0.3	55	0	0	
WinGW141	2/5/2008 22:38	60.9	38.8	0.2	0.09	-1.4	93	0	0	
WinGW142	2/5/2008 22:04	58.6	41	0.2	0.2	-7.2	33	0	0	
WinGW150	2/5/2008 20:57	52.7	27.1	0	20.19	-13.2	0	0	0	
WinGW151	2/5/2008 22:35	60.7	39.2	0	0.09	-3.9	92	0	0	
WinGW152	2/6/2008 0:00	56.8	42	0	1.2	-8.3	47	0	0	
WinGW160	2/5/2008 20:51	43	24.3	0.3	32.4	-6.6	56	0	0	
WinGW161	2/5/2008 22:33	59.5	40.4	0	0.09	-4.2	93	0	0	
WinGW162	2/5/2008 23:45	52.6	31.8	0	15.6	-5.6	33	0	0	
WinGW170	2/5/2008 20:47	62.2	37.7	0	0.09	-5.4	74	0	0	
WinGW171	2/5/2008 22:22	60.6	35.8	0	3.6	-2	104	0	0	
WinGW180	2/5/2008 20:44	48	24.3	0.6	27.1	-4.8	75	0	0	
WinGW181	2/5/2008 22:25	62.1	37	0.7	0.2	-2.9	90	0	0	
WinGW190	2/5/2008 20:40	46.3	21.7	0.2	31.8	-2.3	86	0	0	
WinGW191	2/5/2008 20:32	47.9	28.4	0	23.7	-5	61	0	0	
WINGWEEH	2/5/2008 23:41	59.8	34	0	6.2	-5.6	33	0	0	
WINGWEMH	2/5/2008 22:16	55.4	31.5	0.7	12.39	-4.4	62	0	0	
WINGWEWH	2/5/2008 22:09	63.7	36.2	0	0.09	-1.5	69	0	0	

Winnebago Landfill
Wellfield Monitoring Data - North Unit
March 2008

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP	Temp	Adj. Flow Scfm	Vacuum (adj Flow)	Comments
WinGW100	3/24/2008 11:29	55.8	27.2	0	17	-0.1	48	0	0	Increased 1/4
WinGW101	3/24/2008 11:26	51.8	30.4	0.3	17.5	-1	52	0	0	Increased 1/4
WinGW103	3/24/2008 11:21	34.4	28	2.4	35.19	-2.2	83	0	0	
WinGW110	3/24/2008 11:31	55.7	33.1	0.9	10.3	-1.4	59	0	0	
WinGW111	3/24/2008 10:57	55.5	39.3	0	5.2	-1.1	100	0	0	Increased 1/4
WinGW112	3/24/2008 11:03	58.9	41	0	0.09	-1	92	0	0	Increased 1/4
WinGW113	3/24/2008 11:19	59.7	36.9	0	3.39	-1.1	70	0	0	
WinGW120	3/24/2008 11:39	47.8	27.9	2.2	22.1	-3.1	50	0	0	Decreased 1/4
WinGW121	3/24/2008 10:50	60	39.9	0	0.09	-0.7	78	0	0	Increased 1/4
WinGW122	3/24/2008 11:05	58.8	41.1	0	0.1	-0.3	61	0	0	Increased 1/4
WinGW123	3/24/2008 11:17	62.1	37.8	0	0.1	-0.2	73	0	0	Increased 1/4
WinGW130	3/24/2008 11:41	67.1	32.2	0	0.7	-1.6	48	0	0	Increased 1/4
WinGW131	3/24/2008 10:42	56.5	37.4	1.3	4.79	-0.5	67	0	0	Increased 1/4
WinGW132	3/24/2008 10:47	57.9	42	0	0.09	-0.3	74	0	0	Increased 1/4
WinGW133	3/24/2008 11:09	58.6	41.3	0	0.1	-0.1	84	0	0	Increased 1/4
WinGW134	3/24/2008 11:12	61.6	38.3	0	0.1	-0.1	50	0	0	Increased 1/4
WinGW140	3/24/2008 11:43	52.6	30	3	14.4	-2.6	65	0	0	Decreased 1/4
WinGW141	3/24/2008 10:40	59.2	36.7	0.9	3.19	-1.6	93	0	0	
WinGW142	3/24/2008 10:08	58.6	40.7	0.5	0.2	-4.1	39	0	0	Increased 1/4
WinGW150	3/24/2008 11:46	62.1	37.7	0.1	0.1	-2.4	56	0	0	
WinGW151	3/24/2008 10:37	59	38.2	0.7	2.09	-1.5	98	0	0	
WinGW152	3/24/2008 10:11	57.4	42.3	0.2	0.09	-0.1	37	0	0	Increased 1/4
WinGW160	3/24/2008 11:49	61.1	38.8	0	0.1	-0.2	58	0	0	Increased 1/4
WinGW161	3/24/2008 10:32	59.8	40	0	0.2	-1.5	87	0	0	
WinGW162	3/24/2008 13:58	47.3	31.5	4.6	16.6	-3.5	40	0	0	Decreased 1/4
WinGW170	3/24/2008 11:53	62.2	37.6	0	0.2	-0.4	78	0	0	
WinGW171	3/24/2008 10:23	58	41.7	0.1	0.19	-0.1	104	0	0	Increased 1/4
WinGW180	3/24/2008 11:55	62.5	37.4	0	0.09	-1.5	73	0	0	Increased 1/4
WinGW181	3/24/2008 10:29	60.1	39.8	0	0.1	-0.6	93	0	0	Increased 1/4
WinGW190	3/24/2008 11:58	61.4	38.5	0	0.09	-0.2	88	0	0	Increased 1/4
WinGW191	3/25/2008 12:03	60.7	39.2	0	0.1	-0.5	65	0	0	
WINGWEEH	3/24/2008 10:25	59.4	39.9	0.5	0.19	-3.9	40	0	0	Increased 1/4
WINGWEMH	3/24/2008 10:17	59.2	40.7	0	0.09	-1.3	63	0	0	Increased 1/4
WINGWEWH	3/24/2008 10:13	58.9	41	0	0.09	-3.8	61	0	0	Increased 1/4
WINRGSSN	3/24/2008 14:17	61.3	38.6	0	0.1	-8.4	80	440	0	

Winnebago Landfill
Wellfield Monitoring Data - North Unit
April 2008

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP	Temp	Adj. Flow Scfm	Vacuum (adj Flow)	Comments
WinGW100	4/15/2008 15:08	47.1	24.5	1.9	26.5	-0.5	66	0	0	
WinGW101	4/15/2008 15:11	53.9	30.8	0	15.29	-0.9	65	0	0	Increased 1/4
WinGW103	4/15/2008 15:15	41.6	31.5	0.5	26.4	-2.2	85	0	0	
WinGW110	4/15/2008 15:03	57.1	33.2	1.2	8.5	-1.2	69	0	0	
WinGW111	4/15/2008 15:37	55.4	38.9	0	5.69	-0.5	102	0	0	Increased 1/4
WinGW112	4/15/2008 15:33	58.9	41	0	0.09	-0.9	98	0	0	Increased 1/4
WinGW113	4/15/2008 15:17	51	34.5	0.4	14.1	-1.4	74	0	0	
WinGW120	4/15/2008 14:57	53.1	29.8	1.5	15.6	-3.3	63	0	0	
WinGW121	4/15/2008 15:39	59.7	40.2	0	0.09	-0.2	82	0	0	Increased 1/4
WinGW122	4/15/2008 15:31	55.9	39.2	0	4.89	-0.6	75	0	0	Increased 1/4
WinGW123	4/15/2008 15:19	58.5	36.6	0	4.9	-1.7	80	0	0	Increased 1/4
WinGW130	4/15/2008 14:55	64.7	30.6	0	4.7	-2.1	58	0	0	Increased 1/4
WinGW131	4/15/2008 15:41	60.1	39.8	0	0.1	-0.5	81	0	0	Increased 1/4
WinGW132	4/15/2008 15:27	58	41.9	0	0.09	-0.7	87	0	0	Increased 1/4
WinGW133	4/15/2008 15:25	59.2	40.3	0.3	0.19	-1.4	89	0	0	Increased 1/4
WinGW134	4/15/2008 15:23	60.4	33.8	1	4.79	-2	66	0	0	Increased 1/4
WinGW140	4/15/2008 14:53	54.3	30.6	3	12.1	-2.9	75	0	0	Increased 1/4
WinGW141	4/15/2008 15:44	60.9	39	0	0.09	-0.4	96	0	0	Increased 1/4
WinGW142	4/15/2008 14:19	59	40.1	0.8	0.1	-3.3	62	0	0	Increased 1/4
WinGW150	4/15/2008 14:51	61.8	38	0	0.2	-2.5	63	0	0	Increased 1/4
WinGW151	4/15/2008 15:47	60.2	39.7	0	0.09	-0.4	95	0	0	Increased 1/4
WinGW152	4/15/2008 14:21	57.6	41.9	0.4	0.09	-3.2	63	0	0	Increased 1/4
WinGW160	4/15/2008 14:47	61.2	38.7	0	0.09	-1.4	73	0	0	Increased 1/4
WinGW161	4/15/2008 15:49	58.6	41.3	0	0.1	-0.3	87	0	0	Increased 1/4
WinGW162	4/15/2008 14:25	51.1	34.1	3.2	11.6	-3.1	59	0	0	
WinGW170	4/15/2008 14:44	61.5	38.4	0	0.09	-0.3	83	0	0	Increased 1/4
WinGW171	4/15/2008 14:29	58.9	41	0	0.09	-0.5	102	0	0	Increased 1/4
WinGW180	4/15/2008 14:42	62.2	37.7	0	0.09	-1.8	76	0	0	Increased 1/4
WinGW181	4/15/2008 14:35	60.2	39.7	0	0.09	-0.1	94	0	0	Increased 1/4
WinGW190	4/15/2008 14:40	61.1	38.2	0.5	0.2	-0.7	92	0	0	Increased 1/4
WinGW191	4/15/2008 15:55	37	26.6	4.8	31.6	-0.1	68	0	0	
WinGW191	4/22/2008 16:20	59.2	40.5	0.2	0.09	-1.6	90	0	0	
WINGWEEH	4/15/2008 14:30	59.7	40.2	0	0.09	-3.1	68	0	0	Increased 1/4
WINGWEMH	4/15/2008 14:27	59.6	40.3	0	0.1	-1.6	67	0	0	Increased 1/4
WINGWEWH	4/15/2008 14:22	59.6	40.3	0	0.1	-2.6	68	0	0	Increased 1/4
WINRGSSN	4/15/2008 16:03	60.5	38	0.2	1.3	-8.6	0	419	0	

Winnebago Landfill
Wellfield Monitoring Data - North Unit
May 2008

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP	Temp	Adj. Flow Scfm	Vacuum (adj Flow)	Comments
WinGW100	5/13/2008 14:03	50	24.8	1.9	23.3	-0.3	80	0	0	
WinGW101	5/13/2008 14:06	53.3	29.9	0.4	16.4	-0.7	70	0	0	
WinGW102	5/13/2008 14:10	63.1	35.3	0.2	1.4	0.4	70	0	0	
WinGW103	5/13/2008 14:14	42.6	31	0.8	25.6	-2.7	91	0	0	Increased 1/4
WinGW110	5/13/2008 14:00	50.8	31.7	2.7	14.8	-0.4	74	0	0	Decreased 1/4
WinGW111	5/13/2008 14:34	56.1	39	0	4.9	-0.3	106	0	0	
WinGW112	5/13/2008 14:29	59.3	39.8	0.1	0.8	-0.6	100	0	0	
WinGW113	5/13/2008 14:17	49.1	34.2	0.5	16.2	-1.3	80	0	0	Increased 1/4
WinGW120	5/13/2008 13:52	51.5	28.7	2.3	17.5	-2.8	70	0	0	
WinGW121	5/13/2008 14:37	59.8	39.6	0	0.6	-0.2	86	0	0	Increased 1/4
WinGW122	5/13/2008 14:45	55.3	39.2	0	5.5	-0.4	92	0	0	Increased 1/4
WinGW123	5/13/2008 14:19	57.9	35.5	0.2	6.39	-1.4	80	0	0	
WinGW130	5/13/2008 13:47	64.8	28.8	0.7	5.69	-1.8	69	0	0	
WinGW131	5/13/2008 14:41	59.5	39.4	0.1	0.99	-0.8	88	0	0	
WinGW132	5/13/2008 14:47	59.2	39	0.3	1.49	-0.9	91	0	0	
WinGW133	5/13/2008 14:49	58.6	41.2	0	0.2	-0.7	91	0	0	Increased 1/4
WinGW134	5/13/2008 14:25	58.2	33	0.9	7.89	-1.6	72	0	0	
WinGW140	5/13/2008 13:44	51.4	30.4	3.5	14.69	-2.5	80	0	0	Decreased 1/4
WinGW141	5/13/2008 14:55	60.4	39.1	0.3	0.19	-0.6	100	0	0	
WinGW142	5/13/2008 15:55	58.2	40.1	0.4	0.2	-7.2	85	0	0	
WinGW150	5/13/2008 13:37	62.2	37.5	0.2	0.09	-2.1	70	0	0	
WinGW151	5/13/2008 14:58	59.5	39.9	0	0.59	-0.3	98	0	0	
WinGW152	5/13/2008 15:26	43.3	31.4	5	20.3	-2.5	78	0	0	Decreased 1/2
WinGW152	5/14/2008 14:14	57.3	41.5	1	0.2	-4.5	75	0	0	
WinGW160	5/13/2008 13:30	60.3	37.4	0.7	1.59	-1.5	79	0	0	
WinGW161	5/13/2008 15:01	59.2	40.7	0	0.09	-0.1	88	0	0	
WinGW162	5/13/2008 15:18	52.3	34.6	2.5	10.6	-2.4	72	0	0	
WinGW170	5/13/2008 13:28	62.1	36.5	0.6	0.8	-0.4	88	0	0	
WinGW171	5/13/2008 15:04	58.9	40.9	0	0.19	-0.4	103	0	0	
WinGW180	5/13/2008 13:25	61.2	35.9	0.8	2.09	-1.4	76	0	0	
WinGW181	5/13/2008 15:10	60.2	39.7	0	0.09	0.3	98	0	0	Decreased 1/4
WinGW190	5/13/2008 15:14	60.1	39.7	0.1	0.1	-2.5	97	0	0	Decreased 1/2
WinGW191	5/13/2008 15:32	42.1	29.2	5.8	22.9	-2.2	76	0	0	Decreased 1/2
WinGW191	5/14/2008 14:57	55.2	37.3	1.8	5.7	-4.7	80	0	0	Increased 1/2
WINGWEEH	5/13/2008 15:06	59.7	40.2	0	0.09	-2.4	80	0	0	
WINGWEMH	5/13/2008 15:20	59.7	40.1	0	0.2	-2.5	78	0	0	
WINGWEWH	5/13/2008 15:27	60.1	39.4	0.3	0.19	-2	74	0	0	
WINRGSSN	5/27/2008 13:50	44.9	32.3	2.9	19.9	-10.6	0	0	0	

Winnebago Landfill
Wellfield Monitoring Data - North Unit
June 2008

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP	Temp	Adj. Flow Scfm	Vacuum (adj Flow)	Comments
WinGW100	6/2/2008 14:37	55.2	28.6	0.9	15.29	-0.7	0	89	0	
WinGW101	6/4/2008 15:48	54.6	31.6	0.3	13.5	-1.4	86	0	0	
WinGW102	6/2/2008 15:02	60.7	33.5	0.5	5.29	0	0	95	0	
WinGW103	6/2/2008 15:00	29	28	1.3	41.7	-3.7	0	100	0	
WinGW110	6/2/2008 14:01	57.1	34.2	0.8	7.9	-1.1	0	90	0	
WinGW111	6/2/2008 14:40	53.4	37.2	0.6	8.79	-1.5	0	110	0	
WinGW112	6/2/2008 14:44	53.4	39.2	0.2	7.19	-1.8	0	110	0	
WinGW113	6/2/2008 14:55	35.7	28.3	1.9	34.1	-2.8	0	92	0	
WinGW120	6/2/2008 13:56	52.5	29.6	1.7	16.19	-4.1	0	89	0	
WinGW121	6/2/2008 15:05	53.2	36.8	0.6	9.39	-1.6	0	900	0	
WinGW122	6/4/2008 14:35	52.2	38.3	0.2	9.3	-2.1	0	89	0	
WinGW123	6/2/2008 14:52	52	35.5	0.2	12.3	-2.5	0	82	0	
WinGW130	6/2/2008 13:52	67.3	29.1	0.1	3.49	-2.5	0	90	0	
WinGW131	6/2/2008 15:08	52	35.5	1.5	11	-3.6	0	93	0	
WinGW132	6/4/2008 14:27	57.3	42.2	0.3	0.19	-2.3	99	0	0	
WinGW133	6/4/2008 14:33	56	38.1	1.1	4.8	-2.3	92	0	0	Decreased 1/4
WinGW134	6/2/2008 14:48	53.5	30.5	2.4	13.6	-2.9	0	86	0	
WinGW140	6/2/2008 13:50	49.7	29.7	3.6	16.99	-3.6	0	90	0	Decreased 1/4
WinGW141	6/2/2008 15:12	50.9	35.5	1.9	11.69	-1.6	0	102	0	
WinGW142	6/2/2008 15:43	59.8	39.2	0.7	0.3	-3.6	0	90	0	
WinGW150	6/2/2008 13:47	56.1	35.1	1.7	7.1	-3.3	0	75	0	
WinGW151	6/2/2008 15:16	55.2	37.4	0.8	6.59	-1.4	0	100	0	
WinGW152	6/2/2008 15:40	13	7.8	16	63.19	-3.7	0	89	0	Decreased 1/2
WinGW152	6/4/2008 14:50	6.1	3.8	18.6	71.5	0	82	0	0	Decreased 1/2
WinGW152	6/16/2008 10:00	49.4	33.5	3.7	12.8	-2.2	80	0	0	
WinGW160	6/2/2008 13:42	61.1	38	0.1	0.8	-3.1	0	99	0	
WinGW161	6/2/2008 15:18	54.8	39	0.4	5.8	-1.2	0	90	0	
WinGW162	6/2/2008 15:29	39.6	26.5	6.3	27.6	2	0	0	0	Decreased 1/2
WinGW162	6/4/2008 14:46	47.9	32.8	3.9	15.4	-3.9	81	0	0	Decreased 1/2
WinGW170	6/2/2008 13:28	62.8	37.1	0	0.1	-2	0	98	0	
WinGW171	6/2/2008 15:26	58	38.9	0.8	2.29	-1	0	102	0	
WinGW180	6/2/2008 13:26	59.1	37	0.1	3.8	-3.1	0	95	0	
WinGW181	6/2/2008 15:20	56.4	38.4	0.1	5.09	-0.4	0	100	0	Increased 1/4
WinGW190	6/2/2008 13:23	57.9	36.8	0.8	4.49	-1.9	0	99	0	
WinGW191	6/2/2008 15:48	26.7	17.1	11	45.2	-3.9	0	92	0	Decreased 1/2
WinGW191	6/4/2008 14:56	10.4	6.3	17.3	66	-4	90	0	0	Decreased 1/2
WinGW191	6/16/2008 10:05	5.7	3.7	18.7	71.8	-3.8	84	0	0	Decreased 2
WINGWEEH	6/2/2008 15:25	58.8	39.7	0.1	1.4	-1.3	0	94	0	
WINGWEMH	6/2/2008 15:32	60.4	39	0.5	0.09	-2.1	0	86	0	
WINGWEWH	6/2/2008 15:36	59	36.8	0.3	3.9	-1.1	0	84	0	

Winnebago Landfill
Wellfield Monitoring Data - South Unit
January 2008

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP in H2O	Temp degF	Init. Flow Scfm	Vacuum (adj Flow)	Comments
WINGS02A	1/16/2008 11:54	58.5	41.4	0	0.09	-18.9	70	63	60	
WINGS04A	1/16/2008 11:58	25	27	2.4	45.6	-2.5	115	29	20	Decreased 1/4
WINGS06A	1/16/2008 11:56	52	40.5	0	7.5	-3.9	82	44	26	Increased 1/4
WINGS12A	1/16/2008 12:39	57.5	42.4	0	0.09	-2.3	74	37	18	Increased 1/4
WINGS13A	1/16/2008 11:28	55.9	44	0	0.09	-3.3	90	40	24	Increased 1/4
WINGS15A	1/16/2008 12:31	55.5	44.4	0	0.09	-3.4	84	41	27	
WINGS16A	1/16/2008 12:25	56.7	43.2	0	0.09	-2.1	87	36	18	
WINGS18A	1/16/2008 11:26	55.8	44.1	0	0.1	-2.4	87	41	21	
WINGS21A	1/16/2008 11:37	37.5	32.7	0.6	29.2	-7	71	49	36	Decreased 1/4
WINGS22A	1/16/2008 11:24	53.9	46	0	0.09	-3.3	85	43	24	Increased 1/4
WINGS25A	1/16/2008 12:20	53.6	46.3	0	0.1	-1.3	94	37	12	Increased 1/4
WINGS26A	1/16/2008 11:35	48.4	34.5	0.4	16.69	-11.5	69	56	47	
WINGS27A	1/16/2008 11:21	54.3	45.6	0	0.1	-2.3	78	40	21	Increased 1/4
WINGS28A	1/16/2008 11:18	52.1	42.9	0	5	-4.6	70	43	29	Increased 1/4
WINGWS01	1/16/2008 11:49	34.6	30.1	2.6	32.7	-6.5	72	43	34	Decreased 1/4
WINGWS03	1/16/2008 11:52	46	36.7	0	17.29	-14.2	98	57	53	Decreased 1/4
WINGWS05	1/16/2008 12:04	58.8	41.1	0	0.1	-18.9	73	66	60	
WINGWS08	1/16/2008 11:46	35.8	30.7	2.6	30.89	-10.9	85	50	44	Decreased 1/4
WINGWS09	1/16/2008 11:31	53.4	40.6	0	6	-4.4	74	45	28	Increased 1/4
WINGWS10	1/16/2008 12:06	58.4	41.4	0	0.19	-18.9	66	66	60	
WINGWS11	1/16/2008 11:43	59.1	40.7	0	0.2	-9.8	73	53	44	
WINGWS14	1/16/2008 12:08	57.3	42.6	0	0.1	-6.1	99	46	34	
WINGWS17	1/16/2008 11:40	42	33.5	2.8	21.7	-4.7	76	42	29	Decreased 1/4
WINGWS20	1/16/2008 12:10	58.4	41.5	0	0.09	-9.9	88	53	45	
WINGWS24	1/16/2008 12:13	53.8	39.3	0	6.9	-12	101	55	48	
WINGWS30	1/16/2008 12:18	55.1	44.8	0	0.1	-1.9	80	37	17	Increased 1/4
WINGWS32	1/16/2008 12:15	59	40.9	0	0.09	-4.9	94	44	30	
WINGWS7A	1/16/2008 12:41	52.7	40.5	0.4	6.39	-0.9	73	35	3	Increased 1/4
WINGWSFL	1/16/2008 12:57	57	42.8	0	0.2	0.2	963	233	0	
WINGWSMH	1/16/2008 12:29	52.6	47.2	0	0.2	-6	0	132	88	Decreased 1/4
WINGWSNH	1/16/2008 12:23	51.1	42.3	2.2	4.4	-3	0	106	61	Decreased 1/4
WINGWSSH	1/16/2008 12:37	54.7	44.5	0.7	0.09	-0.5	0	6	7	

Winnebago Landfill
Wellfield Monitoring Data - South Unit
February 2008

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP in H2O	Temp degF	Init. Flow Scfm	Vacuum (adj Flow)	Comments
WINGS02A	2/5/2008 19:06	52.4	32.3	0.1	15.19	-13.6	72	57	53	
WINGS04A	2/5/2008 19:16	40.4	29.7	0	29.89	-0.2	50	39	4	
WINGS06A	2/5/2008 19:10	48.2	32.1	0	19.7	-2.7	78	40	24	
WINGS12A	2/5/2008 20:16	53.9	35.4	0	10.69	-2.6	71	34	<<<	
WINGS13A	2/5/2008 18:28	61.2	38.3	0	0.5	-2.7	89	39	24	
WINGS15A	2/5/2008 20:09	42.5	27.9	0	29.6	-5.3	86	34	<<<	
WINGS16A	2/5/2008 19:57	60.8	35.7	0	3.5	-4.4	85	32	<<<	
WINGS18A	2/5/2008 18:24	61.2	38.1	0.5	0.2	-2.2	89	30	22	
WINGS21A	2/5/2008 18:41	59.1	36.4	0	4.5	-0.2	60	33	7	
WINGS22A	2/5/2008 18:20	50.9	35	0	14.09	-3	87	25	25	
WINGS25A	2/5/2008 19:53	55.8	44.1	0	0.1	-2.7	95	30	<<<	
WINGS26A	2/5/2008 18:03	57.6	42.3	0	0.1	-1.2	60	21	20	
WINGS27A	2/5/2008 18:16	51.5	46.5	0.7	1.3	-2.3	81	38	22	
WINGS28A	2/5/2008 18:08	55.6	44.3	0	0.1	-4.1	74	<<<	<<<	
WINGWS01	2/5/2008 18:59	60.7	39.2	0	0.09	-2.6	70	39	24	
WINGWS03	2/5/2008 19:02	60.7	37.8	0.9	0.6	-9.4	94	46	35	
WINGWS05	2/5/2008 19:21	57.8	33.4	0.1	8.69	-12.9	62	60	53	
WINGWS08	2/5/2008 18:55	61.2	38.3	0.3	0.19	-9.2	80	53	44	
WINGWS09	2/5/2008 18:34	43.6	40.9	0	15.5	-3.3	72	38	24	
WINGWS10	2/5/2008 19:26	53.5	27.5	0	19	-13.2	60	62	53	
WINGWS11	2/5/2008 18:51	54.3	32.7	0.8	12.2	-9.4	70	52	44	
WINGWS14	2/5/2008 19:30	58.3	34.9	0	6.79	-3.5	98	47	28	
WINGWS17	2/5/2008 18:48	56.5	36.4	0.9	6.19	-7.5	79	50	45	
WINGWS20	2/5/2008 19:35	57.4	41.4	0	1.19	-7.1	86	49	38	
WINGWS24	2/5/2008 19:40	59.8	36.8	0.8	2.6	-8.1	102	20	31	
WINGWS30	2/5/2008 19:44	53.9	32.2	0	13.89	-5.2	85	36	<<<	
WINGWS32	2/5/2008 19:49	51	43.9	0	5.09	-1.3	68	28	<<<	
WINGWS7A	2/5/2008 20:19	51.9	32.4	0	15.69	-6	68	37	<<<	
WINGWSFL	2/19/2008 10:49	55.9	43.8	0.2	0.09	1.1	600	494	6	
WINGWSMH	2/5/2008 20:05	57.9	41.6	0.4	0.09	-6.7	0	120	63	
WINGWSNH	2/5/2008 20:01	37.9	24.8	0.6	36.7	-6.2	0	119	50	
WINNRG18	2/5/2008 21:33	54	45.2	0	0.8	-24.2	0	0	0	
WINGWSSH	2/14/2008 15:27	53.7	38.3	2.6	5.4	-13.2	0	138	138	

Winnebago Landfill
Wellfield Monitoring Data - South Unit
March 2008

		%	%	%	%	in H2O	degF	Scfm	(adj Flow)	
WINRGSSS	3/24/2008 13:04	57	42.9	0	0.09	4.2	450	827	9	
WINGS02A	3/24/2008 12:57	58.3	41.6	0	0.1	-3.3	72	45	26	
WINGS04A	3/24/2008 12:53	58.3	41.6	0	0.1	-0.1	42	<<<	<<<	Increased 1/4
WINGS06A	3/24/2008 12:55	55.6	41	0	3.4	-0.6	78	46	16	
WINGS12A	3/24/2008 12:26	57.8	42	0.1	0.1	-0.3	76	62	5	Increased 1/4
WINGS13A	3/24/2008 13:46	57.7	42.2	0	0.09	-0.6	83	81	8	
WINGS15A	3/24/2008 12:21	56.4	43.4	0	0.19	-0.4	87	55	8	Increased 1/4
WINGS16A	3/24/2008 12:17	57.5	42.4	0	0.09	-0.1	0	57	1	Increased 1/4
WINGS18A	3/24/2008 13:44	56.7	42.9	0.3	0.09	-1.6	82	87	32	
WINGS21A	3/24/2008 13:27	60	39.9	0	0.09	-0.1	57	26	6	
WINGS22A	3/24/2008 13:39	54	45.8	0	0.2	-1.8	82	86	44	
WINGS25A	3/24/2008 12:11	57	42.9	0	0.09	-0.1	93	1	1	Increased 1/4
WINGS26A	3/24/2008 13:29	58.3	41.6	0	0.1	-0.1	55	43	31	
WINGS27A	3/24/2008 13:36	54	45.7	0.1	0.19	-0.5	72	35	19	
WINGS28A	3/24/2008 13:33	53.8	43.9	0	2.29	-0.9	67	43	27	
WINGWS01	3/24/2008 13:02	59.4	39.3	0	1.29	-1	63	45	<<<	Increased 1/4
WINGWS03	3/24/2008 13:08	56.1	40.6	0	3.3	-3.3	89	46	25	
WINGWS05	3/24/2008 12:32	58.5	41.4	0	0.09	-2.9	59	46	32	
WINGWS08	3/24/2008 13:18	56.2	38.1	0	5.7	-2.4	70	47	28	
WINGWS09	3/24/2008 13:13	58	41.9	0	0.09	-0.3	71	43	6	
WINGWS10	3/24/2008 12:33	56.8	43.1	0	0.1	-2.9	56	46	24	
WINGWS11	3/24/2008 13:21	53.8	41.6	0	4.6	-1.6	67	39	18	
WINGWS14	3/24/2008 12:38	60	39.9	0	0.09	-1.9	95	21	3	
WINGWS17	3/24/2008 13:25	56.7	39.7	0	3.59	-2	75	44	34	
WINGWS20	3/24/2008 12:40	59.3	40.4	0.2	0.09	-0.7	86	42	24	
WINGWS24	3/24/2008 12:42	59	40.9	0	0.09	-1.2	89	44	16	
WINGWS30	3/24/2008 12:44	58.6	41.3	0	0.1	-0.3	94	42	8	
WINGWS32	3/24/2008 12:06	55.3	44.6	0	0.1	-0.1	70	51	26	Increased 1/4
WINGWS7A	3/24/2008 12:30	58.3	41.4	0	0.29	-0.6	67	43	9	
WINGWSMH	3/24/2008 12:19	42.2	39.3	1.4	17.1	-1.6	0	157	82	
WINGWSNH	3/24/2008 12:15	53.5	46.4	0	0.09	-1.2	0	150	5	
WINGWSSH	3/24/2008 12:23	40.5	42	0	17.5	-1.4	0	166	80	

Winnebago Landfill
Wellfield Monitoring Data - South Unit
April 2008

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP in H2O	Temp degF	Init. Flow Scfm	Vacuum (adj Flow)	Comments
WINGS02A	4/7/2008 15:19	58.3	41.6	0	0.1	-18.7	82	67	61	
WINGS04A	4/7/2008 15:24	58.6	41.3	0	0.1	-0.1	50	44	<<<	Increased 1/4
WINGS06A	4/7/2008 15:21	56.6	41.9	0	1.5	-3.7	82	50	26	Increased 1/4
WINGS12A	4/7/2008 15:56	55.5	44.4	0	0.09	-4.6	81	43	23	Increased 1/4
WINGS13A	4/7/2008 14:34	54.7	45.2	0	0.09	-3.1	92	49	25	Increased 1/4
WINGS15A	4/7/2008 15:53	54.3	45.6	0	0.1	-3.6	88	47	18	Increased 1/4
WINGS16A	4/7/2008 15:49	55	41.6	0	3.4	-1.8	92	42	<<<	Increased 1/4
WINGS18A	4/7/2008 14:37	57.1	42.8	0	0.1	-2.8	91	48	36	Increased 1/4
WINGS21A	4/7/2008 14:56	57.4	42.5	0	0.09	-2	71	47	19	
WINGS22A	4/7/2008 14:41	53.1	46.8	0	0.1	-3.2	87	48	25	Increased 1/4
WINGS25A	4/7/2008 15:45	55.3	44.6	0	0.1	-1.3	98	42	12	Increased 1/4
WINGS26A	4/7/2008 14:50	57.6	42.3	0	0.1	-12.4	67	62	49	Decreased 1/4
WINGS27A	4/7/2008 14:43	51.4	48.5	0	0.09	-3.7	81	47	26	Decreased 1/4
WINGS28A	4/7/2008 14:47	53.9	46	0	0.09	-4.7	75	50	12	Decreased 1/4
WINGWS01	4/7/2008 15:14	51.7	37.3	1.3	9.7	-7.9	70	56	39	Decreased 1/4
WINGWS03	4/7/2008 15:17	50.8	37.9	0	11.29	-16.2	98	52	56	
WINGWS05	4/7/2008 15:29	58.4	41.5	0	0.09	-17.9	68	69	60	
WINGWS08	4/7/2008 15:09	57.5	39.7	0	2.79	-7	77	53	37	
WINGWS09	4/7/2008 14:29	55.8	43.8	0.2	0.2	-4.5	81	28	29	Increased 1/4
WINGWS10	4/7/2008 15:30	59.2	40.7	0	0.09	-18.6	68	67	60	
WINGWS11	4/7/2008 15:06	57.9	42	0	0.09	-6.6	73	54	36	
WINGWS14	4/7/2008 15:33	57.4	42.5	0	0.09	-7.8	105	56	39	Increased 1/4
WINGWS17	4/7/2008 15:03	49	37.2	1.2	12.6	-5.8	81	53	34	Decreased 1/4
WINGWS20	4/7/2008 15:35	58	41.9	0	0.09	-11.6	97	61	54	Increased 1/4
WINGWS24	4/7/2008 15:37	57.6	42.3	0	0.1	-12.2	98	58	48	
WINGWS30	4/7/2008 15:40	58.5	41.4	0	0.09	-4.3	95	44	29	Increased 1/4
WINGWS32	4/7/2008 15:43	54.1	45.8	0	0.1	-1.4	76	<<<	<<<	Increased 1/4
WINGWS7A	4/7/2008 15:27	55.1	40.7	0	4.2	-5.6	74	47	33	
WINGWSH4	4/7/2008 15:57	0.6	1.3	19.5	78.6	-0.1	0	<<<	<<<	Needs Repair
WINGWSH4	4/9/2008 10:31	52.7	47.2	0	0.09	-2.9	0	114	57	Repaired
WINGWSH5	4/7/2008 15:51	53.7	46.2	0	0.09	-7	0	93	84	Increased 1/4
WINGWSH6	4/7/2008 15:47	52.6	47.3	0	0.1	-3.5	0	123	64	Increased 1/4
WINRGSSS	4/7/2008 16:20	56.5	43.4	0	0.09	-28.6	0	1200	2	

Winnebago Landfill
Wellfield Monitoring Data - South Unit
May 2008

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP in H2O	Temp degF	Init. Flow Scfm	Vacuum (adj Flow)	Comments
WINGS02A	5/20/2008 13:24	58.8	40.5	0.5	0.2	-10.1	91	44	31	
WINGS04A	5/20/2008 12:31	36.3	31.5	3.1	29.1	-0.1	112	13	<<<	Decreased 1/4
WINGS06A	5/20/2008 12:28	50.4	39.7	0.3	9.59	-2	96	<<<	<<<	Increased 1/4
WINGS12A	5/20/2008 12:37	57.7	41.7	0.2	0.39	-2.4	94	27	<<<	
WINGS13A	5/20/2008 12:22	56.8	42.8	0.2	0.2	-2.3	100	21	<<<	
WINGS15A	5/20/2008 12:42	54.5	42.5	0.1	2.9	-1.9	100	22	<<<	
WINGS16A	5/20/2008 12:44	56.8	42.4	0.7	0.09	-1.1	101	0	0	
WINGS18A	5/20/2008 12:18	57.6	42.1	0.1	0.2	-1.8	100	18	<<<	
WINGS21A	5/20/2008 13:39	52.2	38.6	0.1	9.1	-2.8	88	11	<<<	
WINGS22A	5/20/2008 12:11	55.9	43.2	0.1	0.79	-2.3	100	21	<<<	
WINGS25A	5/20/2008 12:49	55.6	44.1	0.2	0.1	-0.9	107	22	<<<	
WINGS26A	5/20/2008 15:48	58.7	39.3	0.6	1.4	-4.9	80	33	<<<	
WINGS27A	5/20/2008 12:06	53.2	46.5	0.1	0.19	-0.6	90	<<<	<<<	
WINGS28A	5/20/2008 12:01	53.3	46.1	0.4	0.2	-1.2	80	21	<<<	
WINGWS01	5/20/2008 13:50	49.6	36.1	1.5	12.8	-3.3	81	5	<<<	Decreased 1/4
WINGWS03	5/20/2008 13:27	49.5	36.7	0.5	13.29	-8.7	109	38	26	Increased 1/4
WINGWS05	5/20/2008 13:18	59.8	39.6	0.5	0.1	-9.3	88	33	29	
WINGWS08	5/20/2008 13:47	46.8	34.6	0.9	17.7	-6.4	90	37	16	Decreased 1/4
WINGWS09	5/20/2008 13:32	55.3	40.4	0.1	4.19	-2.8	92	31	<<<	
WINGWS10	5/20/2008 13:15	59	40.5	0.4	0.09	-9.2	80	34	28	
WINGWS11	5/20/2008 13:44	60.7	38.9	0.2	0.19	-7.5	86	20	22	
WINGWS14	5/20/2008 13:12	58.1	41.4	0.3	0.19	-3.8	110	22	<<<	
WINGWS17	5/20/2008 13:36	43	34.2	1.7	21.09	-6.3	99	13	14	Decreased 1/4
WINGWS20	5/20/2008 13:06	60	39	0.7	0.3	-5.7	102	35	11	
WINGWS24	5/20/2008 13:04	56.3	39	0.8	3.9	-6.3	105	31	16	
WINGWS30	5/20/2008 12:51	58.4	41.2	0.2	0.19	-2.8	105	30	<<<	
WINGWS32	5/20/2008 12:55	55.7	44.1	0.1	0.1	-1	88	<<<	<<<	
WINGWS7A	5/20/2008 12:34	45.7	37.4	0.3	16.59	-3	96	<<<	<<<	Increased 1/4
WINGWSH1	5/20/2008 12:13	54.6	45.1	0.2	0.1	-6	0	34	9	
WINGWSH2	5/20/2008 12:20	54.6	45	0.3	0.1	-1.2	0	22	<<<	
WINGWSH3	5/20/2008 13:30	31.4	33.7	0.6	34.3	-11.1	0	40	34	Decreased 1/2
WINGWSH4	5/20/2008 12:39	44.2	42.1	0.4	13.3	-2.8	0	92	<<<	Increased 1/4
WINGWSH5	5/20/2008 13:08	52.6	43.8	0.6	3	-4	0	88	24	
WINGWSH6	5/20/2008 13:00	53.9	45.7	0.2	0.19	-3.2	0	78	<<<	
WINRGSSS	5/27/2008 16:31	49.3	37.3	3	10.4	-25.8	0	0	0	

Winnebago Landfill
Wellfield Monitoring Data - South Unit
June 2008

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP in H2O	Temp degF	Init. Flow Scfm	Vacuum (adj Flow)	Comments
WINGS02A	6/3/2008 15:10	58.7	40.9	0.2	0.19	-10.2	90	45	0	Increased 1/4
WINGS04A	6/3/2008 14:59	40.3	34.7	2.1	22.9	-0.4	106	3	0	Decreased 1/2
WINGS06A	6/3/2008 14:21	50.9	40.9	0	8.19	-2.5	91	20	0	Increased 1/4
WINGS12A	6/3/2008 14:26	56.7	43.2	0	0.09	-3	91	23	0	Increased 1/4
WINGS13A	6/3/2008 14:09	55.4	44.5	0	0.09	-2.8	100	22	0	Increased 1/4
WINGS15A	6/3/2008 14:30	55.1	43.4	0	1.5	-2.5	97	20	0	Increased 1/4
WINGS16A	6/3/2008 14:33	56.9	43	0	0.09	-1.6	98	16	0	Increased 1/4
WINGS18A	6/3/2008 14:07	57.2	42.7	0	0.09	-2.3	100	32	0	Increased 1/4
WINGS21A	6/3/2008 15:26	54.7	39.5	0	5.79	-3.3	88	24	0	Decreased 1/4
WINGS22A	6/3/2008 14:02	54	45.7	0.1	0.19	-2.7	98	21	0	Increased 1/4
WINGS25A	6/3/2008 14:36	55.3	44.6	0	0.1	-1.4	102	14	0	Increased 1/4
WINGS26A	6/3/2008 15:29	60.3	39.6	0	0.1	-5.7	82	33	0	Increased 1/4
WINGS27A	6/3/2008 13:59	52.8	46.9	0.1	0.19	-1	90	10	0	Increased 1/4
WINGS28A	6/3/2008 13:57	53.4	46.1	0.3	0.19	-1.5	82	15	0	
WINGWS01	6/3/2008 15:14	55.1	39	0.4	5.5	-2.9	85	23	0	
WINGWS03	6/3/2008 14:18	51.2	38.2	0	10.59	-9.5	109	43	0	
WINGWS05	6/3/2008 14:56	58.8	41	0	0.2	-9.7	88	43	0	Increased 1/4
WINGWS08	6/3/2008 15:17	52.8	37.4	0	9.79	-6.6	90	36	0	Decreased 1/4
WINGWS09	6/3/2008 14:14	57.1	42	0	0.9	-3.4	90	24	0	Increased 1/4
WINGWS10	6/3/2008 14:53	58.4	41.5	0	0.09	-9.7	80	44	0	Increased 1/4
WINGWS11	6/3/2008 15:20	58.2	41.7	0	0.09	-8.1	83	40	0	Increased 1/4
WINGWS14	6/3/2008 14:50	58.6	41.3	0	0.1	-4.3	104	28	0	Increased 1/4
WINGWS17	6/3/2008 15:24	45.2	35.8	1	18	-6.7	98	35	0	
WINGWS20	6/3/2008 14:48	58.5	41.4	0	0.09	-6.3	100	35	0	Increased 1/4
WINGWS24	6/3/2008 14:46	56	43.9	0	0.09	-7.2	107	38	0	Increased 1/4
WINGWS30	6/3/2008 14:41	58.5	41.4	0	0.09	-3	109	24	0	Increased 1/4
WINGWS32	6/3/2008 14:39	55.3	44.6	0	0.1	-1.6	82	14	0	Increased 1/4
WINGWS7A	6/3/2008 14:24	49.1	39.2	0	11.7	-3.6	88	26	0	Decreased 1/4
WINGWSH1	6/3/2008 14:04	53.8	45.5	0.5	0.2	-5.9	0	31	0	Increased 1/4
WINGWSH2	6/3/2008 14:11	54	45.9	0	0.09	-1.7	0	16	0	Increased 1/4
WINGWSH3	6/3/2008 14:16	33.9	36.4	0	29.69	-0.7	0	23	0	Decreased 1/2
WINGWSH4	6/3/2008 14:28	47.1	43.6	0	9.3	-3.2	0	81	0	Decreased 1/4
WINGWSH5	6/4/2008 15:03	53.1	46.3	0.4	0.2	-4.3	0	72	0	
WINGWSH6	6/3/2008 14:44	53.2	46.7	0	0.09	-3.9	0	70	0	Increased 1/4
WINRGSSS	6/4/2008 15:51	54.5	42.5	0.1	2.9	-29.4	0	0	0	Blower On

APPENDIX C

CONTROL DEVICE DOWNTIME RECORDS

Winnebago Landfill
Control Device Downtime Events Greater than One Hour
Reporting Period January 1, 2008 – June 30, 2008

Date	Duration of Downtime (Hour)	Reason for Downtime
3/3/08	2.12	Oil change for engine #2 and PM on engine and north blower skid
3/4/08	2.62	Engine #2 shutdown due to failed ignition transformer on cylinder #18
3/14/08	2.0	Engine #3, 4, 5 shutdown due to South Unit blower damage caused by vibration
3/22/08 – 3/23/08	40.9	Engine #3, 4, 5 shutdown due to vibration causing pipe to break and seizing blower.
3/24/08	3.5	Engine #2 shutdown due to low oil pressure
4/26/08	3.0	Engine #2 tripped after full load
4/27/08	1.33	Engine #2 shutdown due to due to uneven cylinder temperatures

APPENDIX D

QUARTERLY SURFACE EMISSIONS MONITORING RESULTS

ANDREWS
ENGINEERING, INC.

May 27, 2008

Mr. Evan Buskohl
5450 Wansford Way
Suite 201B
Rockford, IL 61109

Subject: WRS-Pagel Landfill
1st Quarter 2008 NSPS Surface Monitoring Results

Dear Evan,

The required NSPS surface methane monitoring event for the first quarter of 2008 was conducted at Pagel Landfill on March 27, 2008. The monitoring event indicated that surface methane concentrations exceeded the 500 ppm concentration threshold specified in the NSPS regulations at 1 location. The exceedance occurred near the ramp to the top of the south landfill unit. Approximate coordinates for this location are 2,001,130N/800,350E.

Because the 10th day after the initial event fell on a Sunday, the area was re-monitored on April 7, 11 days after the initial exceedance. Methane concentrations at this location were less than 500 ppm above background during the re-monitoring event. The 30-day re-monitoring event was conducted on April 25, 2008. No exceedances were noted during this monitoring event

Attached are the field data sheets for this monitoring event. Although you are not required to submit these records to the IEPA or the U.S. EPA (unless specifically required under your CAAPP permit or other permit), the NSPS regulations require that you keep the monitoring records on file for 5 years. In accordance with condition 1.1.10.c.v. of the Joint Construction and Operating Permit – NSPS Source, information on this exceedance should be included in your annual NSPS report. If you have any questions, please feel free to call me at (317) 595-6492 or contact me via email at bparaskevas@andrews-eng.com.

Sincerely,

Bill Paraskevas, P.E.
Andrews Engineering, Inc.

attachments

7478 Shadeland Station Way, Indianapolis, Indiana 46256 • 317.595.6492 fax 317.598.9929 www.andrews-eng.com
Corporate Office 3300 Ginger Creek Drive, Springfield, Illinois 62711 • 217.787.2334

ANDREWS ENVIRONMENTAL ENGINEERING

NSPS Surface Methane Monitoring
Monitoring Event Data Form

Instructions: Complete a new form for each monitoring event, including re-monitoring events.

Date: 3/27/08 Site: Pagel LF Project No.: 90-114SRF

Quarter (circle): (1st) 2nd 3rd 4th 2008 Technician: S. Radulovic

Monitoring Event (circle): (*initial*) *1st 10-day re-monitor* *2nd 10-day re-monitor*

1-month re-monitor *1-month+10 day re-monitor*

Instrument: Foxboro TVA-1000

Instrument Calibration:

Calibrate instrument immediately prior to performing a monitoring event. A calibration performed in the office before proceeding into the field is acceptable. Calibration must involve actually setting the instrument to 500 ppm against the methane calibration gas, not just merely checking the instrument reading (field checking) against the calibration gas. See the Instrument Preparation Instructions located in the TVA case for instructions on performing the calibration.

Calibration gas: Methane @ 500 ppm

Date: 3/27/08 Time of calibration: 9:00 (am) ~~pm~~

Calibration location (circle): office (field)

If calibrated in field, specify field location: 100 N 700E

Instrument set to read 500 ppm methane? (Y) N If no, explain:

Calibration Precision Test:

Review the requirements for performing a Calibration Precision Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.

Include a copy of the most recent Calibration Precision Test results (from the blue folder in the TVA case) with the field data forms for this quarter.

Response Time Test:

Review the requirements for performing a Response Time Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.

Include a copy of the most recent Response Time Test results (from the blue folder in the TVA case) with the field data forms for this quarter.

Monitoring Event Data:

If site has a meteorological station, obtain weather information from the site station, otherwise, estimate or obtain info from the internet using the nearest representative station.

Temperature: 36 °F Wind direction/speed: NNE / 10 mph Weather: Overcast Light Snow

Barometric Pressure—Beginning: 29.99 in. Hg @ 8:54 (am) pm

Ending: 29.98 in. Hg @ 12:30 ~~am~~ (pm)

Background Concentrations

(remain at least 100' from perimeter LFG collection wells located inside the landfill footprint)

Identification (show on map)	Time	Location	Approx. Northing	Approx. Easting	Methane Conc. (ppmv)	Notes
BG-U-1-08	9:30	Upwind	2400	0	1.2	
BG-D-1-08	12:00	Downwind	-50	1200	7.8	

Monitoring Data

Exceedance # (show on map)	Time	Location		>500 ppm detected?	Methane Conc. read	Notes/Comments
		Approx. N	Approx. E			
1	11:00	1100	350	Yes	800	Near ramp to top of 5. unit

History for Rockford, IL

Thursday, March 27, 2008 — View Current Conditions
Daily Summary

« Previous Day March 27 2008 View Next Day »

Daily Weekly Monthly Custom

	Actual:	Average :	Record :
Temperature:			
Mean Temperature	36 °F / 2 °C	40 °F / 4 °C	
Max Temperature	42 °F / 5 °C	51 °F / 10 °C	79 °F / 26 °C (1945)
Min Temperature	29 °F / -1 °C	30 °F / -1 °C	2 °F / -16 °C (1965)
Degree Days:			
Heating Degree Days	29	25	
Month to date heating degree days	860	816	
Since 1 July heating degree days	5861	6064	
Cooling Degree Days	0	0	
Month to date cooling degree days	0	0	
Year to date cooling degree days	0	0	
Moisture:			

Yes No

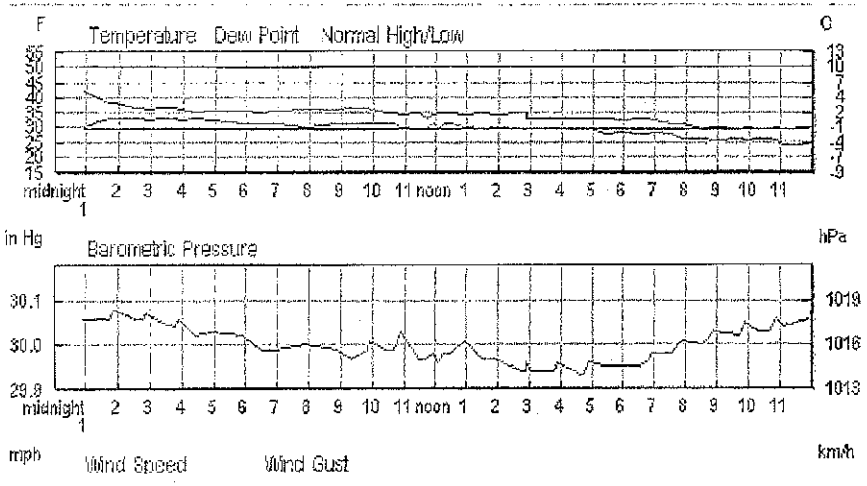
Yes No

Yes No

Dew Point	**33** °F / **0** °C		
Average Humidity	85		
Maximum Humidity	92		
Minimum Humidity	78		
Precipitation:			
Precipitation	**0.21** in / **0.53** cm	**0.09** in / **0.23** cm	**1.91** in / **4.85** cm (1991)
Month to date precipitation	1.23	1.99	
Year to date precipitation	5.42	4.74	
Sea Level Pressure:			
Sea Level Pressure	**30.05** in / **1017** hPa		
Wind:			
Wind Speed	**14** mph / **22** km/h (NE)		
Max Wind Speed	**22** mph / **35** km/h		
Max Gust Speed	**29** mph / **47** km/h		
Visibility	**5** miles / **8** kilometers		
Events	Rain , Snow		

T = Trace of Precipitation, MM = Missing Value

Source: NWS Daily Summary



Time (CDT):	Temp.:	Dew Point:	Humidity:	Sea Level Pressure:	Visibility:	Wind Dir:	Wind Speed:	Gust Speed:	Precip:	Events:	Conditions:
4:25 AM	35.6 °F / 2.0 °C	33.8 °F / 1.0 °C	93%	30.02 in / 1016.5 hPa	8.0 miles / 12.9 kilometers	NNE	5.1 m/s 13.8 mph / 22.2 km/h / 6.2 m/s	-	0.00 in / 0.0 cm	Rain	Light Rain
4:54 AM	36.0 °F / 2.2 °C	33.1 °F / 0.6 °C	89%	30.03 in / 1016.8 hPa	8.0 miles / 12.9 kilometers	North	13.8 mph / 22.2 km/h / 6.2 m/s	-	0.01 in / 0.0 cm	Rain	Light Rain
5:54 AM	36.0 °F / 2.2 °C	32.0 °F / 0.0 °C	86%	30.02 in / 1016.4 hPa	9.0 miles / 14.5 kilometers	North	13.8 mph / 22.2 km/h / 6.2 m/s	-	0.00 in / 0.0 cm	Rain	Light Rain
6:29 AM	35.6 °F / 2.0 °C	32.0 °F / 0.0 °C	87%	29.99 in / 1015.5 hPa	7.0 miles / 11.3 kilometers	North	13.8 mph / 22.2 km/h / 6.2 m/s	-	0.00 in / 0.0 cm	Rain	Light Rain
6:54 AM	36.0 °F / 2.2 °C	32.0 °F / 0.0 °C	86%	29.99 in / 1015.3 hPa	10.0 miles / 16.1 kilometers	North	13.8 mph / 22.2 km/h / 6.2 m/s	-	0.00 in / 0.0 cm	Rain	Light Rain
7:54 AM	37.0 °F / 2.8 °C	30.9 °F / -0.6 °C	79%	30.00 in / 1015.9 hPa	10.0 miles / 16.1 kilometers	NE	8.1 mph / 13.0 km/h / 3.6 m/s	-	0.00 in / 0.0 cm		Overcast
8:54 AM	37.0 °F / 2.8 °C	32.0 °F / 0.0 °C	82%	29.99 in / 1015.6 hPa	7.0 miles / 11.3 kilometers	NE	16.1 mph / 25.9 km/h / 7.2 m/s	-	0.00 in / 0.0 cm	Rain , Snow	Light Rain
9:19 AM	37.4 °F / 3.0 °C	32.0 °F / 0.0 °C	81%	29.97 in / 1014.8 hPa	6.0 miles / 9.7 kilometers	NE	17.3 mph / 27.8 km/h / 7.7 m/s	-	0.00 in / 0.0 cm	Rain , Snow	Light Rain
9:51 AM	37.4 °F / 3.0 °C	32.0 °F / 0.0 °C	81%	29.99 in / 1015.5 hPa	7.0 miles / 11.3 kilometers	NE	11.5 mph / 18.5 km/h / 5.1 m/s	-	0.00 in / 0.0 cm	Rain , Snow	Light Rain
9:54	37.0 °F /	32.0 °F /	82%	30.01 in /	7.0 miles /	ENE	13.8 mph /	-	0.00 in /	Rain ,	Light Rain

Time (CDT):	Temp.:	Dew Point:	Humidity:	Sea Level Pressure:	Visibility:	Wind Dir:	Wind Speed:	Gust Speed:	Precip:	Events:	Conditions:
AM	2.8 °C	0.0 °C		1016.0 hPa	11.3 kilometers		22.2 km/h / 6.2 m/s		0.0 cm	Snow	
10:26 AM	35.6 °F / 2.0 °C	32.0 °F / 0.0 °C	87%	29.99 in / 1015.5 hPa	2.5 miles / 4.0 kilometers	ENE	11.5 mph / 18.5 km/h / 5.1 m/s	-	0.01 in / 0.0 cm	Snow	Light Snow
10:40 AM	35.6 °F / 2.0 °C	32.0 °F / 0.0 °C	87%	29.99 in / 1015.5 hPa	3.0 miles / 4.8 kilometers	ENE	10.4 mph / 16.7 km/h / 4.6 m/s	-	0.01 in / 0.0 cm	Snow	Light Snow
10:54 AM	35.1 °F / 1.7 °C	30.9 °F / -0.6 °C	85%	30.03 in / 1016.9 hPa	5.0 miles / 8.0 kilometers	ENE	11.5 mph / 18.5 km/h / 5.1 m/s	-	0.01 in / 0.0 cm	Snow	Light Snow
11:29 AM	35.6 °F / 2.0 °C	30.2 °F / -1.0 °C	81%	29.97 in / 1014.8 hPa	2.0 miles / 3.2 kilometers	East	11.5 mph / 18.5 km/h / 5.1 m/s	-	0.01 in / 0.0 cm	Snow	Light Snow
11:42 AM	33.8 °F / 1.0 °C	30.2 °F / -1.0 °C	87%	29.97 in / 1014.8 hPa	1.2 miles / 2.0 kilometers	ENE	9.2 mph / 14.8 km/h / 4.1 m/s	-	0.01 in / 0.0 cm	Snow	Light Snow
11:54 AM	35.1 °F / 1.7 °C	32.0 °F / 0.0 °C	89%	29.98 in / 1015.2 hPa	2.0 miles / 3.2 kilometers	ENE	9.2 mph / 14.8 km/h / 4.1 m/s	-	0.02 in / 0.1 cm	Snow	Light Snow
12:04 PM	35.6 °F / 2.0 °C	30.2 °F / -1.0 °C	81%	29.96 in / 1014.4 hPa	1.5 miles / 2.4 kilometers	NE	11.5 mph / 18.5 km/h / 5.1 m/s	-	0.00 in / 0.0 cm	Snow	Light Snow
12:16 PM	35.6 °F / 2.0 °C	32.0 °F / 0.0 °C	87%	29.98 in / 1015.1 hPa	2.0 miles / 3.2 kilometers	NE	10.4 mph / 16.7 km/h / 4.6 m/s	-	0.01 in / 0.0 cm	Snow	Light Snow
12:30 PM	35.6 °F / 2.0 °C	32.0 °F / 0.0 °C	87%	29.98 in / 1015.1 hPa	3.0 miles / 4.8 kilometers	NE	11.5 mph / 18.5 km/h / 5.1 m/s	-	0.01 in / 0.0 cm	Snow	Light Snow

Calibration Precision Test Log

For instructions on how to complete this form or calculate values, see the Instrument Preparation Instructions forms.

Instrument: Foxboro TVA-1000 *Serial Number:* 121029088

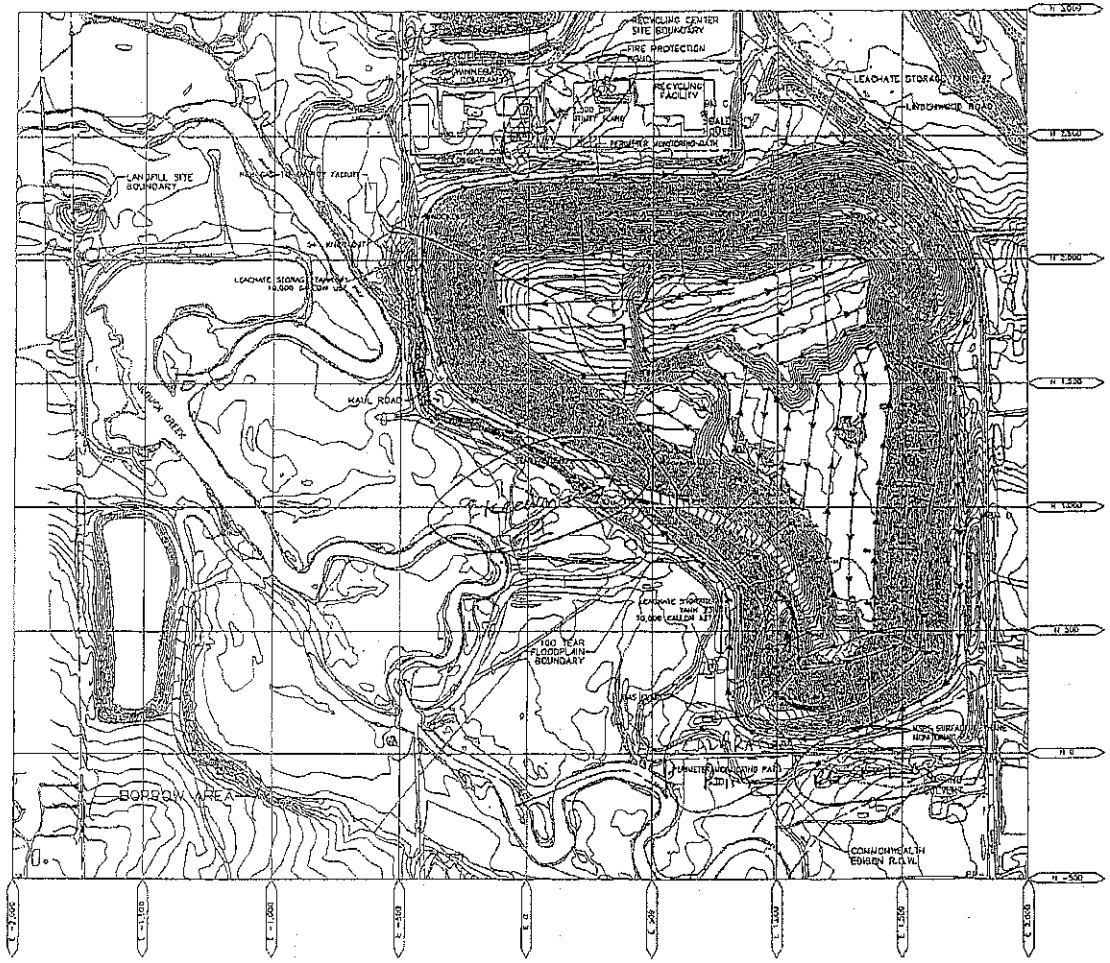
Date	Time	Calib. Gas	Calib. Gas Conc. (ppm)	Calibration Gas Readings (ppm)		Difference between 500 ppm & readings = |500 – a,b,c| (ppm)		Avg. Difference = (1+2+3)/3 (ppm)	Calib. Precision (%)	Calib. Precision ≤10%? (Y/N)	Tech. Initials
7/18/07	7:48	methane	500	a	504	1	4	4	0.8	YES	RGF
				b	506	2	6				
				c	502	3	2				
8/1/07	9:02	methane	500	a	501	1	1	0.3	.06	Yes	RGF
				b	500	2	0				
				c	500	3	0				
8/26/07	3:49	methane	500	a	497	1	3	2.7	0.5	Yes	RGF
				b	497	2	3				
				c	498	3	2				
11/25/07	11:01	methane	500	a	506	1	6	3.6	0.7	Y	RGF
				b	504	2	4				
				c	501	3	1				
12/14/07	6:40 AM	methane	500	a	501	1	1	1.3	0.3	Y	RGF
				b	501	2	1				
				c	502	3	2				
3/11/08	2:40	methane	500	a	499	1	1	1	0.2	Y	RGF
				b	498	2	2				
				c	500	3	0				
3/24/08	11:04	methane	500	a	5	1	5	3.3	.7	Y	RGF
				b	4	2	4				
				c	1	3	1				

Response Time Test Log

For instructions on how to complete this form or calculate values, see the Instrument Preparation Instructions forms.

Instrument: Foxboro TVA-1000 *Serial Number:* 121029088

Date	Time	Calib. Gas	Calib. Gas Conc. (ppm)	90% of Calib. Gas Conc. (ppm)	Time to reach 90% value (seconds)		Average Response Time = (a+b+c)/3 (seconds)	≤ 30 seconds? (Y/N)	Tech. Initials
3/28/08	9:30	methane	500	450	a	6	5.7	Y	SR
					b	6			
					c	5			
4/7/08	3:00pm	methane	500	450	a	6	6.3	Y	SR
					b	7			
					c	7			
4/25/08	2:00pm	methane	500	450	a	6	6.0	Y	SR
					b	6			
					c	6			
		methane	500	450	a				
					b				
					c				
		methane	500	450	a				
					b				
					c				
		methane	500	450	a				
					b				
					c				



LEGEND

- PROPERTY BOUNDARY
- WASTE BOUNDARY
- 10' TOPOGRAPHIC CONTOUR
- 2' TOPOGRAPHIC CONTOUR
- 18" GAS LINE
- 12" GAS LINE
- 8" GAS LINE
- 4" GAS LINE
- 3"x4" OVAL-CONTOURED CONDENSATE LINE
- KNOCKOUT DISCHARGE LINE
- 2000 SOUTH UNIT GAS WELL
- 2007 SOUTH UNIT GAS WELL
- EXISTING SOUTH UNIT GAS WELL

NOTES:

1) BASE MAP PROVIDED BY AEROMETRICS, INC. OF SHEBOYGAN, WISCONSIN, DATE OF TOPOGRAPHY NOVEMBER 25, 2003. SOUTH UNIT TOPOGRAPHY IS BASED ON DECEMBER 12, 2007 GROUND SURVEY BY ARNOLD LUNGGREN AND ASSOCIATES, INC. OF ROCKFORD, ILLINOIS.
2) CONTOUR INTERVAL PRESENTED IS 2 FEET.
3) FOR CLARITY, NOT ALL EXISTING LANDFILL FEATURES ARE SHOWN.
4) BENCHMARKS SHOWN ARE PROVIDED BY ARNOLD LUNGGREN AND ASSOCIATES, INC. OF ROCKFORD, ILLINOIS. ALL BENCHMARKS SHALL BE ESTABLISHED AND MAINTAINED BY A PROFESSIONAL LAND SURVEYOR.
5) THE APPROXIMATE 100 YEAR FLOODPLAIN BOUNDARY SHOWN IS BASED UPON INFORMATION PROVIDED BY THE ILLINOIS STATE WATER SURVEY AND THE APPLICABLE FEMA MAPS.
6) THE NORTHINGS AND EASTINGS ARE STATE PLANE COORDINATES WITH AN OFFSET OF N 2,000,000 E 500,000.

N

200 0 100 200 400 600

(IN FEET)

GRAPHIC SCALE

NO.	DATE	REVISION	BY

ANDREWS ENGINEERING, INC.
1555 N. RIVER CENTER DR., SUITE 203
MILWAUKEE, WISCONSIN 53212
PH (414) 964-7474
FAX (414) 964-7475
E-MAIL: andrews@andrewseng.com
WEB SITE: www.andrewseng.com

APPROVED BY: DGK | DRAWN BY: MDC | CHECKED BY: MDC | DRAWN BY: MDC

2008 MONITORING PATHS
PLANS PREPARED FOR
WINNEBAGO RECLAMATION SERVICE, INC.
ROCKFORD, ILLINOIS

DATE: MARCH, 2008

PROJECT #: 1990-114(2008)01

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ANDREWS ENVIRONMENTAL ENGINEERING

NSPS Surface Methane Monitoring
Monitoring Event Data Form

Instructions: Complete a new form for each monitoring event, including re-monitoring events.

Date: 4/7/08 Site: Page 1 LF Project No.: 90-114SRF

Quarter (circle): (1st) 2nd 3rd 4th 2008 Technician: S. Radulovic

Monitoring Event (circle): *initial* (1st 10-day re-monitor) *2nd 10-day re-monitor*

1-month re-monitor *1-month+10 day re-monitor*

Instrument: Foxboro TVA-1000

Instrument Calibration:
Calibrate instrument immediately prior to performing a monitoring event. A calibration performed in the office before proceeding into the field is acceptable. Calibration must involve actually setting the instrument to 500 ppm against the methane calibration gas, not just merely checking the instrument reading (field checking) against the calibration gas. See the Instrument Preparation Instructions located in the TVA case for instructions on performing the calibration.

Calibration gas: Methane @ 500 ppm

Date: 4/7/08 Time of calibration: 3:00 am (pm)

Calibration location (circle): office (field)

If calibrated in field, specify field location: _____

Instrument set to read 500 ppm methane? (Y) N If no, explain: 150N 770E

Calibration Precision Test:
Review the requirements for performing a Calibration Precision Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.

Include a copy of the most recent Calibration Precision Test results (from the blue folder in the TVA case) with the field data forms for this quarter.

Response Time Test:
Review the requirements for performing a Response Time Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.

Include a copy of the most recent Response Time Test results (from the blue folder in the TVA case) with the field data forms for this quarter.

Monitoring Event Data:

If site has a meteorological station, obtain weather information from the site station, otherwise, estimate or obtain info from the internet using the nearest representative station.

Temperature: 45 °F Wind direction/speed: W / 20 mph Weather: overcast

Barometric Pressure—Beginning: 30.01 in. Hg @ 2:54 am (pm)

Ending: 30.01 in. Hg @ 3:26 am (pm)

Background Concentrations
(remain at least 100' from perimeter LFG collection wells located inside the landfill footprint)

Identification (show on map)	Time	Location	Approx. Northing	Approx. Easting	Methane Conc. (ppmv)	Notes
BG-U-E-1-08	3:00	Upwind	480	250	0.8	
BG-D-E-1-08	3:10	Downwind	500	1800	2.2	

Monitoring Data

Exceedance # (show on map)	Time	Location		>500 ppm detected?	Methane Conc. read	Notes/Comments
		Approx. N	Approx. E			
No exceedances						

ANDREWS ENVIRONMENTAL ENGINEERING

NSPS Surface Methane Monitoring
Quarterly Exceedance Summary

Use this form to record an individual monitoring exceedance and follow-up monitoring activities. This form is only used when a reading of 500 ppm or more above background is encountered during the surface monitoring. **Use a separate form for each initial exceedance.**

Quarter (circle): (1st) 2nd 3rd 4th 2008

Exceedance #: 1

Initial Monitoring Exceedance:
Date: 3/27/08 Time: 11:00 (am) pm Monitoring Technician Initials S.R.

Instrument Concentration readings: Upwind Conc.: 1.2 ppm
Downwind Conc.: 7.8 ppm

Exceedance Concentration: 800 ppm

Location of monitored exceedance (include description of field marker used): 1160 N 350 E

Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before re-monitoring in 10 days: Turbines were down for repair, was working again within 10 days

Re-monitor location within 10 calendar days of initial exceedance:
Date: 4/7/08 Time: 3:00 am (pm) Monitoring Technician Initials S.R.

Instrument Concentration readings: Upwind Conc.: 0.8 ppm
Downwind Conc.: 2.2 ppm

Exceedance Concentration: 0.9 ppm

If 10-day re-monitoring shows an exceedance, describe additional corrective action taken before re-monitoring again within 10 days: N.A.

- *If the 10-day re-monitoring is ≥500 ppm above background, re-monitor within 10 calendar days of second exceedance, or*
- *If the 10-day re-monitoring is <500 ppm above background, re-monitor 1 month from initial exceedance.*

History for Rockford, IL

Monday, April 7, 2008 — View Current Conditions
Daily Summary

« Previous Day | April | 7 | 2008 | View | Next Day »

Daily Weekly Monthly Custom

	Actual:	Average :	Record :
Temperature:			
Mean Temperature	46 °F / 7 °C	45 °F / 7 °C	
Max Temperature	54 °F / 12 °C	55 °F / 12 °C	85 °F / 29 °C (1893)
Min Temperature	37 °F / 2 °C	34 °F / 1 °C	5 °F / -15 °C (1982)
Degree Days:			
Heating Degree Days	19	21	
Month to date heating degree days	140	153	
Since 1 July heating degree days	6100	6313	
Cooling Degree Days	0	0	
Month to date cooling degree days	0	0	
Year to date cooling degree days	0	1	
Moisture:			

Change Location:

Airport: KRFD

Recent: KRFD , KVPZ

Submit

Trip Planner:

Search our historical database for the weather conditions in past years. The results will help you decide how hot, cold, wet, or windy it will be!

Go To The Trip Planner

Radar Archive:

View Animated Radar Loop
This image may take a moment to generate.

Local Photos:

Dew Point	**35** °F / **1** °C		
Average Humidity	70		
Maximum Humidity	86		
Minimum Humidity	53		
Precipitation:			
Precipitation	**0.00** in / **0.00** cm	**0.11** in / **0.28** cm	**1.65** in / **4.19** cm (1954)
Month to date precipitation	0.48	0.76	
Year to date precipitation	7.19	5.90	
Sea Level Pressure:			
Sea Level Pressure	**29.98** in / **1015** hPa		
Wind:			
Wind Speed	**11** mph / **18** km/h (WSW)		
Max Wind Speed	**24** mph / **39** km/h		
Max Gust Speed	**30** mph / **48** km/h		
Visibility	**9** miles / **15** kilometers		
Events			

T = Trace of Precipitation, MM = Missing Value

Source: NWS Daily Summary

There were no photos found matching this date and location.

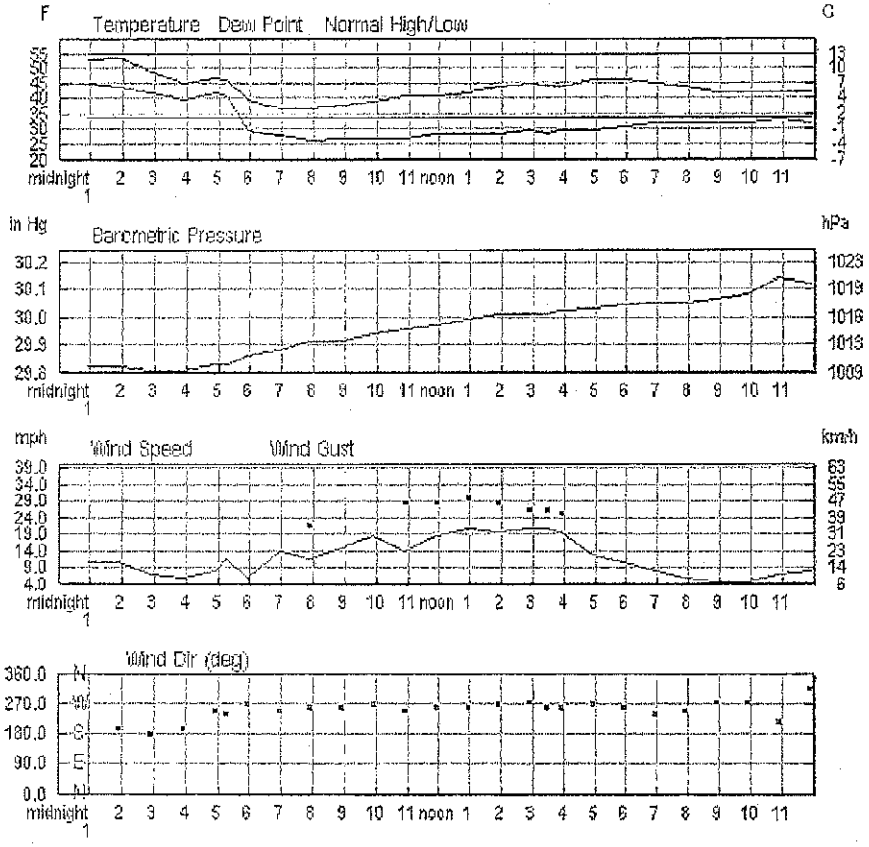
View More WunderPhotos

Astronomy for April 7, 2008:

	Rise:	Set:
Actual Time:	6:28 AM CDT	7:29 PM CDT
Civil Twilight:	5:59 AM CDT	7:58 PM CDT
Nautical Twilight:	5:25 AM CDT	8:32 PM CDT
Astronomical Twilight:	4:49 AM CDT	9:08 PM CDT
Moon:	6:53 AM CDT (4/7)	10:00 PM CDT (4/7)
Length Of Visible Light:	13h 58m	
Length of Day:	13h 01m	

For more information about the solar system, view the complete star chart!

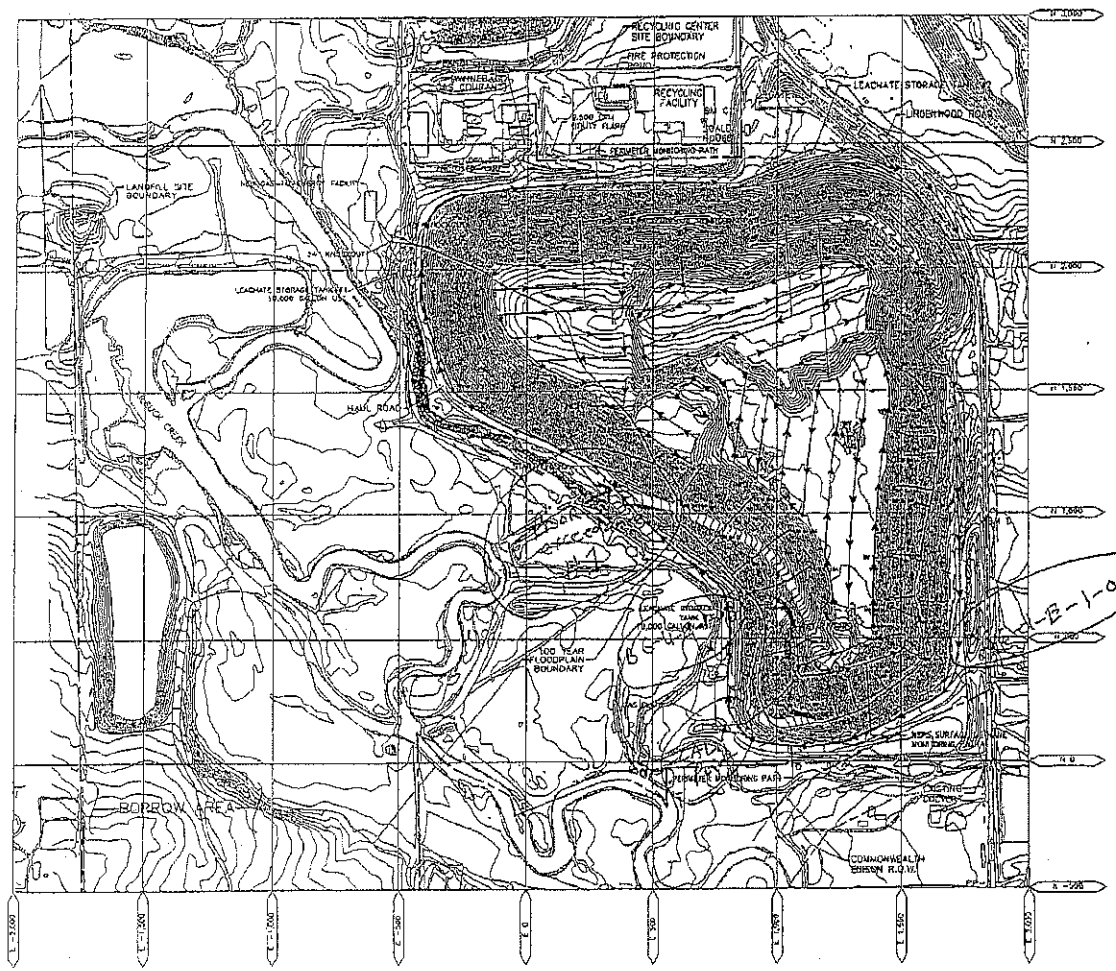
Definitions of Astronomy Terms



: Top of Page :

Hourly Observations

Time (CDT):	Temp.:	Dew Point:	Humidity:	Sea Level Pressure:	Visibility:	Wind Dir:	Wind Speed:	Gust Speed:	Precip:	Events:	Conditions:
9:54 AM	39.0 °F / 3.9 °C	27.0 °F / -2.8 °C	62%	29.94 in / 1013.7 hPa	10.0 miles / 16.1 kilometers	West	6.7 m/s 18.4 mph / 29.6 km/h / 8.2 m/s	24.2 mph / 38.9 km/h / 10.8 m/s	N/A		Overcast
10:54 AM	41.0 °F / 5.0 °C	27.0 °F / -2.8 °C	57%	29.96 in / 1014.3 hPa	10.0 miles / 16.1 kilometers	WSW	13.8 mph / 22.2 km/h / 6.2 m/s	28.8 mph / 46.3 km/h / 12.9 m/s	N/A		Overcast
11:54 AM	41.0 °F / 5.0 °C	28.9 °F / -1.7 °C	62%	29.97 in / 1014.9 hPa	10.0 miles / 16.1 kilometers	West	18.4 mph / 29.6 km/h / 8.2 m/s	28.8 mph / 46.3 km/h / 12.9 m/s	N/A		Overcast
12:54 PM	42.1 °F / 5.6 °C	28.9 °F / -1.7 °C	60%	29.99 in / 1015.4 hPa	10.0 miles / 16.1 kilometers	West	20.7 mph / 33.3 km/h / 9.3 m/s	29.9 mph / 48.2 km/h / 13.4 m/s	N/A		Overcast
1:54 PM	44.1 °F / 6.7 °C	28.9 °F / -1.7 °C	55%	30.01 in / 1016.2 hPa	10.0 miles / 16.1 kilometers	West	19.6 mph / 31.5 km/h / 8.7 m/s	28.8 mph / 46.3 km/h / 12.9 m/s	N/A		Overcast
2:54 PM	45.0 °F / 7.2 °C	30.0 °F / -1.1 °C	56%	30.01 in / 1016.3 hPa	10.0 miles / 16.1 kilometers	West	20.7 mph / 33.3 km/h / 9.3 m/s	26.5 mph / 42.6 km/h / 11.8 m/s	N/A		Overcast
3:26 PM	44.6 °F / 7.0 °C	28.4 °F / -2.0 °C	53%	30.01 in / 1016.1 hPa	10.0 miles / 16.1 kilometers	West	20.7 mph / 33.3 km/h / 9.3 m/s	26.5 mph / 42.6 km/h / 11.8 m/s	N/A		Overcast
3:54 PM	44.1 °F / 6.7 °C	30.0 °F / -1.1 °C	58%	30.02 in / 1016.5 hPa	10.0 miles / 16.1 kilometers	West	19.6 mph / 31.5 km/h / 8.7 m/s	25.3 mph / 40.7 km/h / 11.3 m/s	N/A		Overcast
4:54 PM	46.0 °F / 7.8 °C	30.0 °F / -1.1 °C	54%	30.03 in / 1016.9 hPa	10.0 miles / 16.1 kilometers	West	12.7 mph / 20.4 km/h / 5.7 m/s	-	N/A		Overcast



LEGEND

- PROPERTY BOUNDARY
- WASTE BOUNDARY
- 800 — 10' TOPOGRAPHIC CONTOUR
- 2' TOPOGRAPHIC CONTOUR
- 18" GAS LINE
- 12" GAS LINE
- 6" GAS LINE
- 4" GAS LINE
- 2"x4" GUM=CONTAINED CONDENSATE LINE
- WENCHOUT DISCHARGE LINE
- 2069 SOUTH UNIT GAS WELL
- 2067 SOUTH UNIT GAS WELL
- EXISTING SOUTH UNIT GAS WELL

NOTES:

1) BASE MAP PROVIDED BY AEROMETRICS, INC. OF SHEBOYGAN, WISCONSIN. DATE OF TOPOGRAPHY NOVEMBER 23, 2003. SOUTH UNIT TOPOGRAPHY IS BASED ON DECEMBER 17, 2007 GROUND SURVEY BY ARNOLD LUNDGREN AND ASSOCIATES, INC. OF ROCKFORD, ILLINOIS.
2) CONTOUR INTERVAL PRESENTED IS 2 FEET.
3) FOR CLARITY, NOT ALL EXISTING LANDFILL FEATURES ARE SHOWN.
4) BENCHMARKS SHOWN ARE PROVIDED BY ARNOLD LUNDGREN AND ASSOCIATES, INC. OF ROCKFORD, ILLINOIS. ALL BENCHMARKS SHALL BE ESTABLISHED AND MAINTAINED BY A PROFESSIONAL LAND SURVEYOR.
5) THE APPROXIMATE 100 YEAR FLOODPLAIN BOUNDARY SHOWN IS BASED UPON INFORMATION PROVIDED BY THE ILLINOIS STATE WATER SURVEY AND THE APPLICABLE FEMA MAPS.
6) THE NORTHINGS AND EASTINGS ARE STATE PLANE COORDINATES WITH AN OFFSET OF N 2,000,000 E 800,000.

N

200 0 100 200 400 800

(IN FEET)

GRAPHIC SCALE

REVISIONS

NO.	DATE	DESCRIPTION	BY

ANDREWS ENGINEERING, INC.

2008 MONITORING PATHS

PLANS PREPARED FOR

WINNEBAGO RECLAMATION SERVICE, INC.

ROCKFORD, ILLINOIS

DATE: MARCH, 2008

PROJECT #: 1030-114RRF0801

1

ANDREWS ENVIRONMENTAL ENGINEERING

NSPS Surface Methane Monitoring
Monitoring Event Data Form

Instructions: Complete a new form for each monitoring event, including re-monitoring events.

Date: 4/25/08 Site: Pagel LF Project No.: 90-1145RF

Quarter (circle): (1st) 2nd 3rd 4th 2008 Technician: Savo Radulovic

Monitoring Event (circle): *initial* *1st 10-day re-monitor* *2nd 10-day re-monitor*

1-month re-monitor *1-month+10 day re-monitor*

Instrument: Foxboro TVA-1000

Instrument Calibration:

Calibrate instrument immediately prior to performing a monitoring event. A calibration performed in the office before proceeding into the field is acceptable. Calibration must involve actually setting the instrument to 500 ppm against the methane calibration gas, not just merely checking the instrument reading (field checking) against the calibration gas. See the Instrument Preparation Instructions located in the TVA case for instructions on performing the calibration.

Calibration gas: Methane @ 500 ppm

Date: 4/25/08 Time of calibration: 2:30 am (pm)

Calibration location (circle): office (field)

If calibrated in field, specify field location: 1200 N 200 E

Instrument set to read 500 ppm methane? (Y) N If no, explain: _____

Calibration Precision Test:

Review the requirements for performing a Calibration Precision Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.

Include a copy of the most recent Calibration Precision Test results (from the blue folder in the TVA case) with the field data forms for this quarter.

Response Time Test:

Review the requirements for performing a Response Time Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.

Include a copy of the most recent Response Time Test results (from the blue folder in the TVA case) with the field data forms for this quarter.

Monitoring Event Data:

If site has a meteorological station, obtain weather information from the site station, otherwise, estimate or obtain info from the internet using the nearest representative station.

Temperature: 64 °F Wind direction/speed: SSW, 18.4 mph Weather: Cloudy

Barometric Pressure—Beginning: 29.66 in. Hg @ 2:54 am (pm)

Ending: 29.58 in. Hg @ 3:54 am (pm)

Background Concentrations (remain at least 100' from perimeter LFG collection wells located inside the landfill footprint)						
Identification (show on map)	Time	Location	Approx. Northing	Approx. Easting	Methane Conc. (ppmv)	Notes
BG-U-30day	1-08 3:00	Upwind	2300 N	-450 E	1.2	
BG-D-30day	1-08 3:15	Downwind	1200 N	200 E	6.3	

Monitoring Data						
Exceedance # (show on map)	Time	Location		>500 ppm detected?	Methane Conc. read	Notes/Comments
		Approx. N	Approx. E			
	No	exceedances				

History for Rockford, IL

Friday, April 25, 2008 — View Current Conditions
Daily Summary

« Previous Day | April | 25 | 2008 | View | Next Day »

Daily Weekly Monthly Custom

	Actual:	Average :	Record :
Temperature:			
Mean Temperature	**60** °F / **15** °C	**52** °F / **11** °C	
Max Temperature	**78** °F / **25** °C	**63** °F / **17** °C	**90** °F / **32** °C (1986)
Min Temperature	**42** °F / **5** °C	**40** °F / **4** °C	**25** °F / **-3** °C (1934)
Degree Days:			
Heating Degree Days	5	14	
Month to date heating degree days	342	459	
Since 1 July heating degree days	6302	6619	
Cooling Degree Days	0	1	
Month to date cooling degree days	2	2	
Year to date cooling degree days	2	3	

Change Location:

Airport: KRFD

Recent: KRFD , KVPZ

Submit

Trip Planner:

Search our historical database for the weather conditions in past years. The results will help you decide how hot, cold, wet, or windy it will be!

Go To The Trip Planner

Radar Archive:

View Animated Radar Loop
This image may take a moment to generate.

Local Photos:

Growing Degree Days	12 (Base 50)		
Moisture:			
Dew Point	**59** °F / **15** °C		
Average Humidity	79		
Maximum Humidity	93		
Minimum Humidity	64		
Precipitation:			
Precipitation	**1.37** in / **3.48** cm	**0.13** in / **0.33** cm	**2.17** in / **5.51** cm (1979)
Month to date precipitation	5.28	2.99	
Year to date precipitation	11.99	8.13	
Sea Level Pressure:			
Sea Level Pressure	**29.71** in / **1006** hPa		
Wind:			
Wind Speed	**15** mph / **24** km/h (SSW)		
Max Wind Speed	**30** mph / **48** km/h		
Max Gust Speed	**45** mph / **72** km/h		
Visibility	6 miles / **10** kilometers		
Events	Rain , Hail , Thunderstorm		

T = Trace of Precipitation, MM = Missing Value

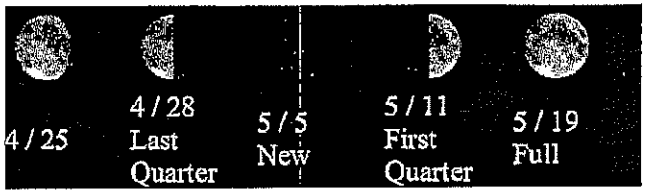
Source: NWS Daily Summary

There were no photos found matching this date and location.

View More WunderPhotos

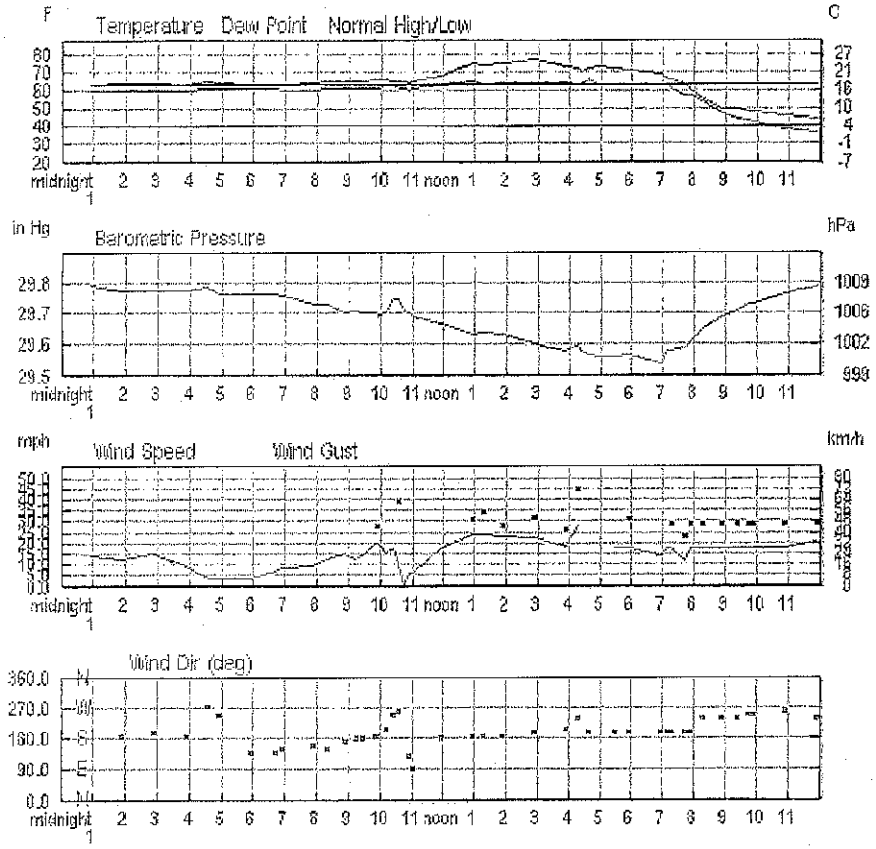
Astronomy for April 25, 2008:

	Rise:	Set:
Actual Time:	5:59 AM CDT	7:49 PM CDT
Civil Twilight:	5:29 AM CDT	8:19 PM CDT
Nautical Twilight:	4:53 AM CDT	8:56 PM CDT
Astronomical Twilight:	4:13 AM CDT	9:35 PM CDT
Moon:	12:26 AM CDT (4/25)	8:56 AM CDT (4/25)
Length Of Visible Light:	14h 49m	
Length of Day:	13h 49m	



For more information about the solar system, view the complete star chart!

Definitions of Astronomy Terms

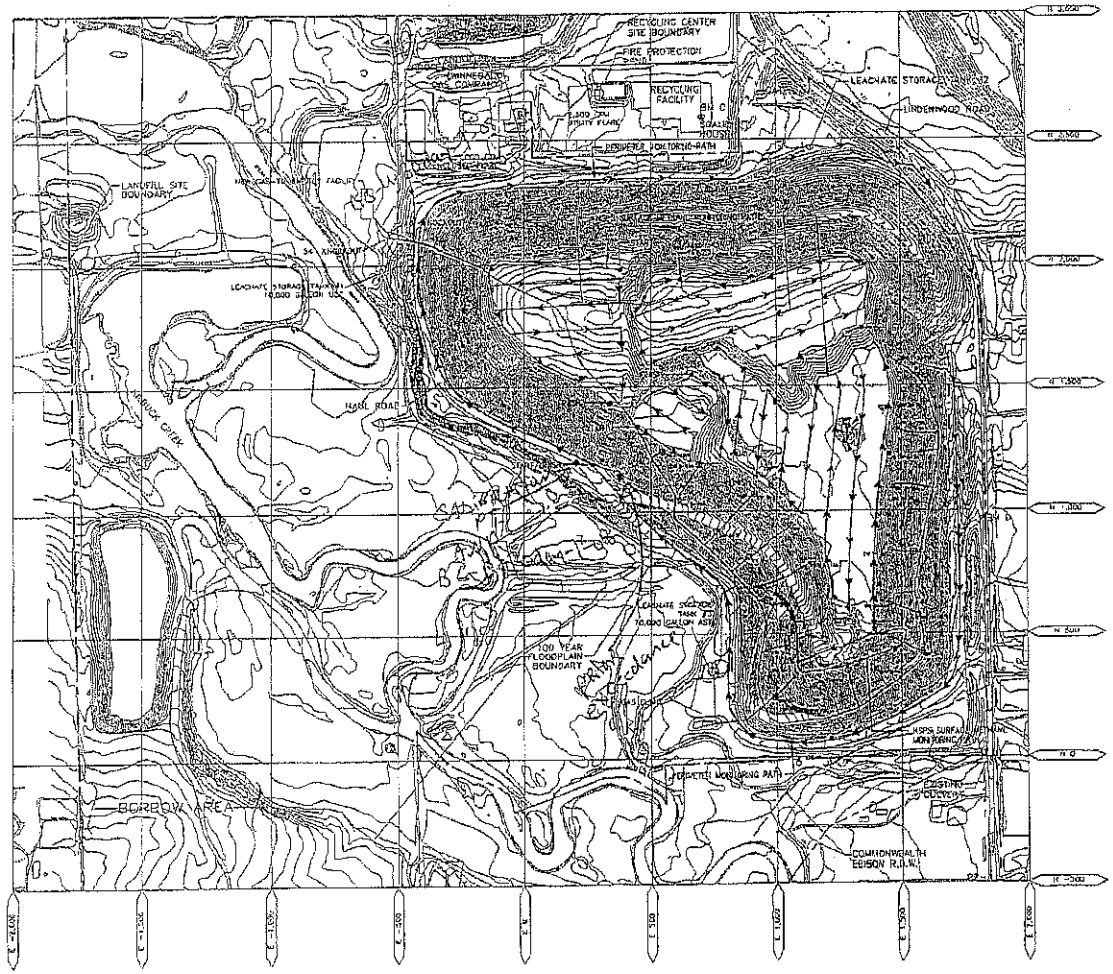


: Top of Page :

Hourly Observations

Time (CDT):	Temp.:	Dew Point:	Humidity:	Sea Level Pressure:	Visibility:	Wind Dir:	Wind Speed:	Gust Speed:	Precip:	Events:	Conditions:
AM	/ 18.0 °C	/ 16.0 °C		1006.0 hPa	14.5 kilometers				/ 2.2 cm	Thunderstorm	Thunderstorms and Rain
10:54 AM	64.0 °F / 17.8 °C	60.1 °F / 15.6 °C	87%	29.70 in / 1005.6 hPa	10.0 miles / 16.1 kilometers	SE	5.8 mph / 9.3 km/h / 2.6 m/s	-	0.85 in / 2.2 cm	Thunderstorm	Thunderstorm
11:01 AM	64.4 °F / 18.0 °C	60.8 °F / 16.0 °C	88%	29.69 in / 1005.3 hPa	10.0 miles / 16.1 kilometers	East	5.8 mph / 9.3 km/h / 2.6 m/s	-	N/A		Overcast
11:54 AM	68.0 °F / 20.0 °C	63.0 °F / 17.2 °C	84%	29.67 in / 1004.6 hPa	10.0 miles / 16.1 kilometers	South	17.3 mph / 27.8 km/h / 7.7 m/s	20.7 mph / 33.3 km/h / 9.3 m/s	N/A		Overcast
12:54 PM	75.0 °F / 23.9 °C	64.9 °F / 18.3 °C	71%	29.63 in / 1003.4 hPa	9.0 miles / 14.5 kilometers	South	24.2 mph / 38.9 km/h / 10.8 m/s	31.1 mph / 50.0 km/h / 13.9 m/s	N/A		Mostly Cloudy
1:17 PM	73.4 °F / 23.0 °C	62.6 °F / 17.0 °C	69%	29.64 in / 1003.6 hPa	9.0 miles / 14.5 kilometers	South	24.2 mph / 38.9 km/h / 10.8 m/s	34.5 mph / 55.6 km/h / 15.4 m/s	N/A		Overcast
1:54 PM	75.0 °F / 23.9 °C	64.0 °F / 17.8 °C	69%	29.63 in / 1003.3 hPa	9.0 miles / 14.5 kilometers	South	23.0 mph / 37.0 km/h / 10.3 m/s	27.6 mph / 44.4 km/h / 12.3 m/s	N/A		Scattered Clouds
2:54 PM	77.0 °F / 25.0 °C	64.0 °F / 17.8 °C	64%	29.60 in / 1002.3 hPa	10.0 miles / 16.1 kilometers	SSW	21.9 mph / 35.2 km/h / 9.8 m/s	32.2 mph / 51.9 km/h / 14.4 m/s	N/A		Overcast
3:54 PM	73.0 °F / 22.8 °C	64.0 °F / 17.8 °C	73%	29.58 in / 1001.6 hPa	10.0 miles / 16.1 kilometers	SSW	18.4 mph / 29.6 km/h / 8.2 m/s	26.5 mph / 42.6 km/h / 11.8 m/s	0.00 in / 0.0 cm		Overcast
4:19 PM	71.6 °F / 22.0 °C	62.6 °F / 17.0 °C	73%	29.60 in / 1002.3 hPa	1.8 miles / 2.8 kilometers	WSW	27.6 mph / 44.4 km/h / 12.3 m/s	44.9 mph / 72.2 km/h / 20.1 m/s	0.00 in / 0.0 cm	Rain , Thunderstorm	Thunderstorms and Rain

Time (CDT):	Temp.:	Dew Point:	Humidity:	Sea Level Pressure:	Visibility:	Wind Dir:	Wind Speed:	Gust Speed:	Precip:	Events:	Conditions:
4:21 PM	69.8 °F / 21.0 °C	62.6 °F / 17.0 °C	78%	29.58 in / 1001.6 hPa	0.5 miles / 0.8 kilometers	North	-	-	0.03 in / 0.1 cm	Rain , Hail , Thunderstorm	Heavy Thunderstorms with Hail
4:36 PM	71.6 °F / 22.0 °C	66.2 °F / 19.0 °C	83%	29.57 in / 1001.2 hPa	8.0 miles / 12.9 kilometers	SSW	17.3 mph / 27.8 km/h / 7.7 m/s	27.6 mph / 44.4 km/h / 12.3 m/s	0.21 in / 0.5 cm	Thunderstorm	Thunderstorm
4:54 PM	73.0 °F / 22.8 °C	63.0 °F / 17.2 °C	71%	29.56 in / 1000.9 hPa	9.0 miles / 14.5 kilometers	North	-	-	0.21 in / 0.5 cm		Mostly Cloudy
5:29 PM	71.6 °F / 22.0 °C	62.6 °F / 17.0 °C	73%	29.56 in / 1000.9 hPa	6.0 miles / 9.7 kilometers	SSW	17.3 mph / 27.8 km/h / 7.7 m/s	31.1 mph / 50.0 km/h / 13.9 m/s	0.00 in / 0.0 cm	Rain , Thunderstorm	Light Thunderstorms and Rain



LEGEND

- PROPERTY BOUNDARY
- WASTE BOUNDARY
- 876 — 10' TOPOGRAPHIC CONTOUR
- 2' TOPOGRAPHIC CONTOUR
- 18" GAS LINE
- 12" GAS LINE
- 6" GAS LINE
- 4" GAS LINE
- 3"x4" DUAL-CONTAINED CONDENSATE LINE
- WIDENOUT DISCHARGE LINE
- 2006 SOUTH UNIT GAS WELL
- 2007 SOUTH UNIT GAS WELL
- EXISTING SOUTH UNIT GAS WELL

NOTES:

1) BASE MAP PROVIDED BY AERONETRICS, INC. OF SHEBOYGAN, WISCONSIN. DATE OF TOPOGRAPHY MAPPING IS 2006. SOUTH UNIT TOPOGRAPHY IS BASED ON DECEMBER 15, 2007 GROUND SURVEY BY ARNOLD LUNDGREN AND ASSOCIATES, INC. OF ROCKFORD, ILLINOIS.
2) CONTOUR INTERVAL PRESENTED IS 2 FEET.
3) FOR CLARITY, NOT ALL EXISTING LANDFILL FEATURES ARE SHOWN.
4) BENCHMARKS SHOWN ARE PROVIDED BY ARNOLD LUNDGREN AND ASSOCIATES, INC. OF ROCKFORD, ILLINOIS. ALL BENCHMARKS SHALL BE ESTABLISHED AND MAINTAINED BY A PROFESSIONAL LAND SURVEYOR.
5) THE APPROXIMATE 100 YEAR FLOODPLAIN BOUNDARY SHOWN IS BASED UPON INFORMATION PROVIDED BY THE ILLINOIS STATE WATER SURVEY AND THE APPLICABLE FEMA MAPS.
6) THE NORTHINGS AND EASTINGS ARE STATE PLANE COORDINATES WITH AN OFFSET OF N 2,000,000 E 500,000.

N

200 0 100 200 400 800

(IN FEET)

GRAPHIC SCALE

NO.	DATE	REVISIONS DESCRIPTION	BY

ANDREWS ENGINEERING, INC.

2006 MONITORING PATHS

PLANS PREPARED FOR
WINNEBAGO RECLAMATION SERVICE, INC.
ROCKFORD, ILLINOIS

DATE: MARCH, 2008

PROJECT NO: 1969-11450/0011

1

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ANDREWS
ENGINEERING, INC.

July 23, 2008

Mr. Evan Buskohl
5450 Wansford Way
Suite 201B
Rockford, IL 61109

Subject: WRS-Pagel Landfill
2nd Quarter 2008 NSPS Surface Monitoring Results

Dear Evan,

The required NSPS surface methane monitoring event for the second quarter of 2008 was conducted at Pagel Landfill on June 20, 2008. The monitoring event indicated that no surface methane concentrations exceeded the 500 ppm concentration threshold specified in the NSPS regulations.

Attached are the field data sheets for this monitoring event. Although you are not required to submit these records to the IEPA or the U.S. EPA (unless specifically required under your CAAPP permit or other permit), the NSPS regulations require that you keep the monitoring records on file for 5 years. In accordance with condition 1.1.10.c.v. of the Joint Construction and Operating Permit – NSPS Source, information on this exceedance should be included in your annual NSPS report. If you have any questions, please feel free to call me at (317) 595-6492 or contact me via email at bparaskevas@andrews-eng.com.

Sincerely,

Bill Paraskevas, P.E.
Andrews Engineering, Inc.

attachments

7478 Shadeland Station Way, Indianapolis, Indiana 46256 • 317.595.6492 fax 317.598.9929 www.andrews-eng.com
Corporate Office 3300 Ginger Creek Drive, Springfield, Illinois 62711 • 217.787.2334

ANDREWS ENVIRONMENTAL ENGINEERING

NSPS Surface Methane Monitoring
Monitoring Event Data Form

Instructions: Complete a new form for each monitoring event, including re-monitoring events.

Date: 6/20/08 Site: Pagel LF Project No.: 90-114SRF

Quarter (circle): 1st (2nd) 3rd 4th 2008 Technician: S. Radulovic

Monitoring Event (circle): (Initial) *1st 10-day re-monitor* *2nd 10-day re-monitor*

1-month re-monitor *1-month+10 day re-monitor*

Instrument: Foxboro TVA-1000

Instrument Calibration:

Calibrate instrument immediately prior to performing a monitoring event. A calibration performed in the office before proceeding into the field is acceptable. Calibration must involve actually setting the instrument to 500 ppm against the methane calibration gas, not just merely checking the instrument reading (field checking) against the calibration gas. See the Instrument Preparation Instructions located in the TVA case for instructions on performing the calibration.

Calibration gas: Methane @ 500 ppm

Date: 6/20/08 Time of calibration: _____ am pm

Calibration location (circle): office (field)

If calibrated in field, specify field location: 2,000,450 N 800,700 E

Instrument set to read 500 ppm methane? (Y) N If no, explain: _____

Calibration Precision Test:

Review the requirements for performing a Calibration Precision Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.

Include a copy of the most recent Calibration Precision Test results (from the blue folder in the TVA case) with the field data forms for this quarter.

Response Time Test:

Review the requirements for performing a Response Time Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.

Include a copy of the most recent Response Time Test results (from the blue folder in the TVA case) with the field data forms for this quarter.

Monitoring Event Data:

If site has a meteorological station, obtain weather information from the site station, otherwise, estimate or obtain info from the internet using the nearest representative station.

Temperature: 75 °F Wind direction/speed: SW, 7 mph Weather: Cloudy

Barometric Pressure—Beginning: 29.98 in. Hg @ 9:54 (am) pm

Ending: 29.96 in. Hg @ 1:54 am (pm)

Background Concentrations (remain at least 100' from perimeter LFG collection wells located inside the landfill footprint)						
Identification (show on map)	Time	Location	Approx. Northing	Approx. Easting	Methane Conc. (ppmv)	Notes
BG-U-2-08	10:00	Upwind	1,999,900	800,900	2.0	
BG-D-2-08	11:00	Downwind	2,002,600	801,200	3.2	

Monitoring Data						
Exceedance # (show on map)	Time	Location		>500 ppm detected?	Methane Conc. read	Notes/Comments
		Approx. N	Approx. E			
No exceedances						

History for Rockford, IL

Friday, June 20, 2008 — View Current Conditions
Daily Summary

« Previous Day June 20 2008 View Next Day »

Daily Weekly Monthly Custom

	Actual:	Average :	Record :
Temperature:			
Mean Temperature	70 °F / 21 °C	70 °F / 21 °C	
Max Temperature	84 °F / 28 °C	81 °F / 27 °C	101 °F / 38 °C (1988)
Min Temperature	55 °F / 12 °C	59 °F / 15 °C	40 °F / 4 °C (1926)
Degree Days:			
Heating Degree Days	0	1	
Month to date heating degree days	1	34	
Since 1 July heating degree days	6654	6931	
Cooling Degree Days	5	6	
Month to date cooling degree days	112	95	
Year to date cooling degree days	127	152	
Growing Degree Days	18 (Base 50)		

Change Location:

Airport: KRFD

Recent: KRFD , KVPZ

Submit

Trip Planner:

Search our historical database for the weather conditions in past years. The results will help you decide how hot, cold, wet, or windy it will be!

Go To The Trip Planner

Radar Archive:

View Animated Radar Loop
This image may take a moment to generate.

Local Photos:

Moisture:			
Dew Point	53 °F / 11 °C		
Average Humidity	63		
Maximum Humidity	86		
Minimum Humidity	40		
Precipitation:			
Precipitation	0.05 in / 0.13 cm	0.16 in / 0.41 cm	1.55 in / 3.94 cm (1906)
Month to date precipitation	5.52	3.23	
Year to date precipitation	20.77	16.02	
Sea Level Pressure:			
Sea Level Pressure	**29.96** in / **1014** hPa		
Wind:			
Wind Speed	5 mph / 7 km/h (SW)		
Max Wind Speed	17 mph / 27 km/h		
Max Gust Speed	24 mph / 39 km/h		
Visibility	10 miles / 16 kilometers		
Events	Thunderstorm		

T = Trace of Precipitation, MM = Missing Value

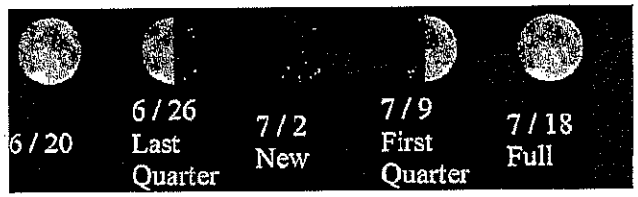
Source: NWS Daily Summary

There were no photos found matching this date and location.

View More WunderPhotos

Astronomy for June 20, 2008:

	Rise:	Set:
Actual Time:	5:20 AM CDT	8:36 PM CDT
Civil Twilight:	4:45 AM CDT	9:10 PM CDT
Nautical Twilight:	4:00 AM CDT	9:55 PM CDT
Astronomical Twilight:	3:06 AM CDT	10:50 PM CDT
Moon:	10:24 PM CDT (6/20)	6:44 AM CDT (6/20)
Length Of Visible Light:	16h 25m	
Length of Day:	15h 16m	



For more information about the solar system, view the complete star chart!

Definitions of Astronomy Terms

Time (CDT):	Temp.:	Dew Point:	Humidity:	Sea Level Pressure:	Visibility:	Wind Dir:	Wind Speed:	Gust Speed:	Precip:	Events:	Conditions:
9:54 AM	22.0 °C / 71.1 °F / 21.7 °C	12.0 °C / 54.0 °F / 12.2 °C	55%	**29.98** in / **1015.0** hPa	10.0 miles / 16.1 kilometers	SW	3.1 m/s / 5.8 mph / 9.3 km/h / 2.6 m/s	-	0.0 cm / 0.00 in / 0.0 cm	Thunderstorm	Thunderstorm
10:34 AM	69.8 °F / 21.0 °C	60.8 °F / 16.0 °C	73%	**29.99** in / **1015.5** hPa	10.0 miles / 16.1 kilometers	ENE	6.9 mph / 11.1 km/h / 3.1 m/s	-	0.05 in / 0.1 cm		Mostly Cloudy
10:54 AM	72.0 °F / 22.2 °C	59.0 °F / 15.0 °C	64%	**29.98** in / **1015.1** hPa	10.0 miles / 16.1 kilometers	South	4.6 mph / 7.4 km/h / 2.1 m/s	-	0.05 in / 0.1 cm		Mostly Cloudy
11:54 AM	78.1 °F / 25.6 °C	54.0 °F / 12.2 °C	43%	**29.98** in / **1015.1** hPa	10.0 miles / 16.1 kilometers	SSW	12.7 mph / 20.4 km/h / 5.7 m/s	-	N/A		Scattered Clouds
12:54 PM	82.0 °F / 27.8 °C	55.0 °F / 12.8 °C	39%	**29.97** in / **1014.9** hPa	10.0 miles / 16.1 kilometers	SW	10.4 mph / 16.7 km/h / 4.6 m/s	-	N/A		Scattered Clouds
1:54 PM	80.1 °F / 26.7 °C	57.0 °F / 13.9 °C	45%	**29.96** in / **1014.4** hPa	10.0 miles / 16.1 kilometers	WSW	10.4 mph / 16.7 km/h / 4.6 m/s	-	N/A		Mostly Cloudy
1:57 PM	80.6 °F / 27.0 °C	57.2 °F / 14.0 °C	45%	**29.96** in / **1014.4** hPa	10.0 miles / 16.1 kilometers	WSW	8.1 mph / 13.0 km/h / 3.6 m/s	-	N/A	Thunderstorm	Thunderstorm
2:14 PM	82.4 °F / 28.0 °C	59.0 °F / 15.0 °C	45%	**29.95** in / **1014.1** hPa	10.0 miles / 16.1 kilometers	WSW	15.0 mph / 24.1 km/h / 6.7 m/s	20.7 mph / 33.3 km/h / 9.3 m/s	N/A		Mostly Cloudy
2:54 PM	81.0 °F / 27.2 °C	59.0 °F / 15.0 °C	47%	**29.94** in / **1013.9** hPa	10.0 miles / 16.1 kilometers	West	11.5 mph / 18.5 km/h / 5.1 m/s	18.4 mph / 29.6 km/h / 8.2 m/s	N/A		Mostly Cloudy
3:00	80.6 °F	57.2 °F	45%	**29.95** in /	10.0 miles /	West	10.4 mph /	-	N/A	Thunderstorm	Thunderstorm

Calibration Precision Test Log

For instructions on how to complete this form or calculate values, see the Instrument Preparation Instructions forms.

Instrument: Foxboro TVA-1000 *Serial Number:* 121029088

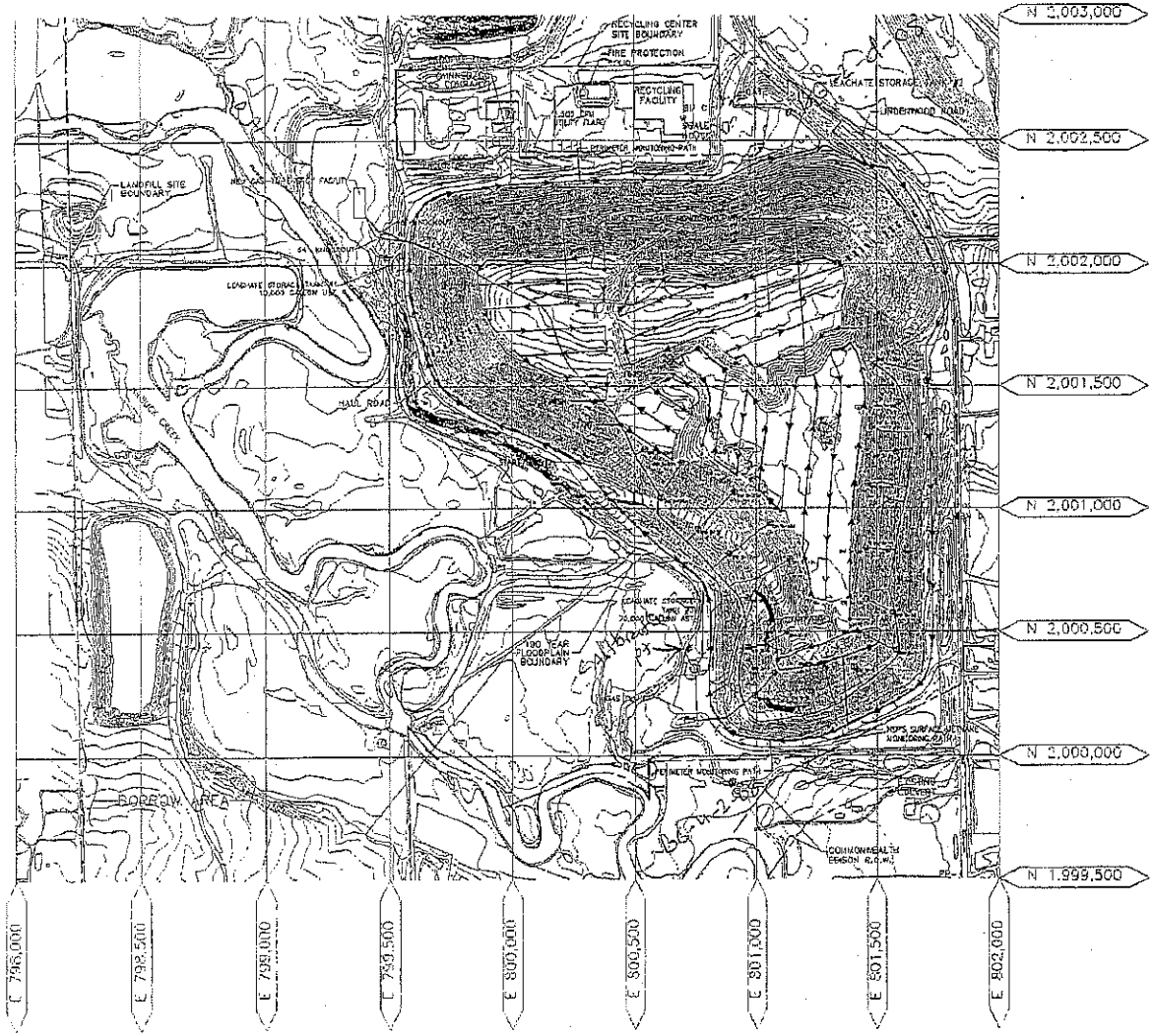
Date	Time	Calib. Gas	Calib. Gas Conc. (ppm)	Calibration Gas Readings (ppm)		Difference between 500 ppm & readings = |500 – a,b,c| (ppm)		Avg. Difference = (1+2+3)/3 (ppm)	Calib. Precision (%)	≤10%? (Y/N)	Tech. Initials
6/24/08	8:41	methane	500	a	496	1	4	3.3	0.7	Y	RGF
				b	497	2	3				
				c	497	3	3				
6/25/08	7:58	methane	500	a	504	1	4	4.3	0.9	Y	RGF
				b	503	2	3				
				c	506	3	6				
		methane	500	a		1					
				b		2					
				c		3					
		methane	500	a		1					
				b		2					
				c		3					
		methane	500	a		1					
				b		2					
				c		3					
		methane	500	a		1					
				b		2					
				c		3					
		methane	500	a		1					
				b		2					
				c		3					

Response Time Test Log

For instructions on how to complete this form or calculate values, see the Instrument Preparation Instructions forms.

Instrument: Foxboro TVA-1000 *Serial Number:* 121029088

Date	Time	Calib. Gas	Calib. Gas Conc. (ppm)	90% of Calib. Gas Conc. (ppm)	Time to reach 90% value (seconds)		Average Response Time = (a+b+c)/3 (seconds)	≤ 30 seconds? (Y/N)	Tech. Initials
6/20/08		methane	500	450	a	6	6	Yes	S.R.
					b	6			
					c	6			
		methane	500	450	a				
					b				
					c				
		methane	500	450	a				
					b				
					c				
		methane	500	450	a				
					b				
					c				
		methane	500	450	a				
					b				
					c				
		methane	500	450	a				
					b				
					c				


N 2,003,000
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N 1,999,500
E 796,000
E 798,500
E 799,000
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E 800,000
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E 801,000
E 801,500
E 802,000
RECYCLING CENTER SITE BOUNDARY
FIRE PROTECTION
RECYCLING FACILITY
LEACHATE STORAGE TANK
UNDERWOOD ROAD
LANDFILL SITE BOUNDARY
LANDFILL
HAUL ROAD
BORROW AREA
COMMONWEALTH EDISON R.O.W.
100 YEAR FLOODPLAIN BOUNDARY
LEGEND
PROPERTY BOUNDARY
WASTE BOUNDARY
10' TOPOGRAPHIC CONTOUR
2' TOPOGRAPHIC CONTOUR
12" GAS LINE
12" GAS LINE
6" GAS LINE
4" GAS LINE
2"x4" DUAL-CONTAINED CONDENSATE LINE
KNOCKOUT DISCHARGE LINE
2006 SOUTH UNIT GAS WELL
2007 SOUTH UNIT GAS WELL
EXISTING SOUTH UNIT GAS WELL
NOTES:
1) BASE MAP PROVIDED BY AERIOMETRICS, INC. OF SHEBOYGAN, WISCONSIN. DATE OF TOPOGRAPHY NOVEMBER 25, 2003. SOUTH UNIT TOPOGRAPHY IS BASED ON DECEMBER 13, 2007 GROUND SURVEY BY ARNOLD LUNDGREN AND ASSOCIATES, INC. OF ROCKFORD, ILLINOIS.
2) CONTOUR INTERVAL PRESENTED IS 2 FEET.
3) FOR CLARITY, NOT ALL ENGINEERED LANDFILL FEATURES ARE SHOWN.
4) BENCHMARKS SHOWN ARE PROVIDED BY ARNOLD LUNDGREN AND ASSOCIATES, INC. OF ROCKFORD, ILLINOIS. ALL BENCHMARKS SHALL BE ESTABLISHED AND MAINTAINED BY A PROFESSIONAL LAND SURVEYOR.
5) THE APPROXIMATE 100 YEAR FLOODPLAIN BOUNDARY SHOWN IS BASED UPON INFORMATION PROVIDED BY THE ILLINOIS STATE WATER SURVEY AND THE APPLICABLE FEMA MAPS.
6) THE NORTHINGS AND EASTINGS ARE STATE PLANE COORDINATES WITH AN OFFSET OF N 2,000,000 E 800,000.
N
200 0 100 200 400 600
(IN FEET)
GRAPHIC SCALE
ANDREWS ENGINEERING, INC.
2009 MONITORING PATHS
PLANS PREPARED FOR
WINNEBAGO RECLAMATION SERVICE, INC.
ROCKFORD, ILLINOIS
MARCH, 2008
1
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APPENDIX E

CORRESPONDENCES

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUL 28 2008

REPLY TO THE ATTENTION OF:
(AE-17J)

Sultana Haque, P.E.
Project Engineer
Cornerstone Environmental Group, LLC
39395 West Twelve Mile Road, Suite 103
Farmington Hills, Michigan 48331

Re: Request for Alternative Timeline for Winnebago Reclamation Service

Dear Mr. Haque:

Thank you for your June 18, 2008 letter to the U.S. Environmental Protection Agency, requesting an alternative compliance timeline to correct exceedances at Winnebago Reclamation Service's Landfill, located in Rockford, Illinois ("Winnebago"). Winnebago is subject to the New Source Performance Standards ("NSPS") for Municipal Solid Waste Landfills ("40 CFR Part 60, Subpart WWW"). The NSPS sets forth compliance provisions for gas collection and control systems under 40 CFR § 60.755.

Your letter requested an alternative timeline to correct the positive pressure exhibited at Well GW191 on June 2, 2008. The regulation at 40 CFR § 60.755(a)(3) states that "If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days...If negative pressure cannot be achieved without excess air filtration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. . . . An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval."

On June 2, 2008, Well GW191 showed a positive pressure reading. Wellhead adjustments were made to correct the positive pressure and re-monitoring was performed within 5 days. The re-monitoring also showed a positive pressure exceedance. Initial investigation indicated that there might be subsurface damage or plugging of the lateral causing restriction of vacuum applied to the well. Winnebago requested until September 30, 2008 or 120 days of alternate compliance timeline for well GW191 from the date of the initial exceedance to continue the investigation and bring the well into compliance.

On July 17, 2008, in response to a telephone inquiry by Ms. Linda H. Rosen, of my staff, you provided an electronic mail update on the status of well GW191. Specifically, Mr. Evan Buskohl of Winnebago landfill explained that on July 8, the well's nearby leachate storage tank was found to be completely full after having been pumped empty only a few

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weeks earlier. Typically, this tank receives a trickle flow and only requires pumping a few times a year. Coincidently, at this time well GW191 was found to have vacuum, and was back in compliance. Mr. Buskohl believes the debris broke free on its own and the back-up of condensate promptly filled the leachate storage tank. You have performed daily inspections of well GW191 since this finding, and the well has been in consistent compliance. Therefore, U.S. EPA is approving an alternative timeline for Winnebago's well GW191 to correct the positive pressure exceedance until July 17, 2008. There is no need to approve a longer time frame.

You plan to proceed with the routine monthly monitoring of this well and will contact us if you require additional information regarding this mater, or if you have any areas of non-compliance at well GW191 next month. If you have any questions regarding this letter, feel free to contact Linda H. Rosen, of my staff, at (312) 886-6810.

Sincerely,

George T. Czerniak
Chief
Air Enforcement and Compliance Assurance Branch

cc: Ray Pilapil, Manager
Bureau of Air – Compliance and Enforcement Section
Illinois Environmental Protection Agency

Khaled Mahmood, P.E.
Senior Project Manager
Cornerstone Environmental Group, LLC
39395 West Twelve Mile Road, Suite 103
Farmington Hills, Michigan 48331

171604 REV. 9/05 LPS

IEPA - BUREAU OF AIR
1021 N GRAND AVE E

SPRINGFIELD IL 62702-4072

P: WHITE S: I:

GREN-FL3

1Z296R2F039525 4045

XXXXXX, IL-PR115 Aug 29 07:55:17 2008
US 6270 HP 7.0.6 INT4420

KAROL MICHALCZAK
630.633.5520 5859
CORNERSTONE ENVIRONMENTAL GROU
39395 WEST 12 MILE ROAD
FARMINGTON HILLS MI 48331

1 LBS

1 OF 1

SHIP TO:
COMPLIANCE SECTION (MC #40)
IEPA - BUREAU OF AIR
1021 NORTH GRAND AVENUE EAST
SPRINGFIELD IL 62702-4059

IL 627 0-01

UPS GROUND
TRACKING #: 1Z 296 R2F 03 9525 4045

BILLING: P/P

Reference#1: 70104
Reference#2: Winnebago Reclamation Services

UIS 10.5.18. WXPIE60 78.0A 04/2008

TM

https://www.ups.com/uis/create?ActionOriginPair=print__UISReceipt&POPUP_LEVEL.