IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

STERIGENICS U.S., LLC, a Delaware limited liability company, Plaintiff, v. JOHN KIM, not individually, but solely in his capacity as Acting Director of the Illinois Environmental Protection Agency, and the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, Defendants.	))))))))))))))	No. 19-cv-01219 Hon. Matthew Kennelly

DEFENDANT'S RESPONSE IN OPPOSITION
TO EMERGENCY MOTION FOR TEMPORARY RESTRAINING ORDER,
PRELIMINARY INJUNCTION, AND PERMANENT INJUNCTION

EXHIBIT C

Declaration of Dyron Hamlin

DECLARATION OF DYRON HAMLIN, MS, PE, CIH

I, Dyron Hamlin, do hereby declare as follows:

1. I am a principal of GHD Services, Inc. ("GHD"), and I work as a professional chemical engineer (PE, Arkansas #12728) and certified industrial hygienist (CIH) in the Little Rock, Arkansas office. I have been with GHD for over 8 years. I have a Master of Science in Engineering (MSE) – Chemical Engineering, from the University of Texas at Austin, and a Bachelor of Science in Chemical Engineering (BSChe) from the University of Arkansas.

2. My duties and responsibilities for GHD as a professional chemical engineer and certified industrial hygienist include, but are not limited to, conducting chemical and environmental engineering, meteorological, and industrial hygiene analyses for the transportation, industrial, academic and regulatory sectors.

3. Pursuant to a professional services agreement entered into between GHD and the Village of Willowbrook, Illinois ("Village") on or about September 10, 2018, (Village Resolution No. 18-R-60), GHD was retained to perform services in response to an ATSDR report issued in August 2018 ("Report"), which evaluated the air levels of ethylene oxide gas ("EtO") near a local business, Sterigenics USA, LLC ("Sterigenics"). The services provided by GHD included, but were not limited to, the preparation of a sampling plan related to the measurement of ethylene oxide levels in ambient air using accepted and scientific techniques in various locations in the Village, the transfer of these samples using established chain of custody techniques to SGS Galson Laboratories ("Galson") for certified testing of the samples, the review of the test results prepared by Galson of these samples, and the certification of the quality assurance and quality control of these test results.

4. On or about January 8, 2019, GHD submitted its "Proposal for Professional Industrial Hygiene and Risk Assessment Services Hazard Assessment and Ambient Air Sampling – Ethylene Oxide Village of Willowbrook, Illinois," (the "February 2019 Sampling Plan"), a true and correct copy of which is attached hereto as Exhibit A.

a. It is the regular practice of GHD that a sampling plan be prepared prior to conducting sampling of the nature set forth therein.

b. I assisted with the preparation of the February 2019 Sampling Plan.

c. The February 2019 Sampling Plan has been kept in the course of GHD's regularly conducted business activity.

5. Pursuant to the February 2019 Sampling Plan, on February 11-14, 2019, GHD collected ten (10) ambient air samples at five (5) discrete locations near the Source ("February 11-14, 2019 Sampling Program"). A true and correct copy of a map of the five (5) locations is attached hereto as Exhibit B.

a. It is the regular practice of GHD to prepare a map showing the locations of the areas to be tested in a sampling plan.

b. I assisted with the preparation of the map supporting the February 2019 Sampling Plan.

c. The map supporting the February 2019 Sampling Plan has been kept in the course of GHD's regularly conducted business activity.

6. GHD has conducted the February 11-14, 2019 Sampling Program identified herein in conformance with the February 11-14, 2019 Sampling Plans, using the following processes and procedures:

a. GHD received sample equipment (6-liter SUMMA canisters and pressure regulators set for a flowrate allowing for 24-hour sampling) from Galson under standard chain of custody procedures. The sample equipment is cleaned and validated by Galson prior to shipment.

b. GHD received the sample equipment from Galson at the GHD office in Rosemont, Illinois.

c. GHD deployed the sample equipment at the designated locations in or about the Village on mounting poles providing for sample collection at breathing zone height (approximately 5 to 6 feet above the ground).

d. At that place and time, as part of its regular practice, GHD recorded start times, GPS coordinates, initial pressures (where applicable), and other related information in GHD's iPad data collection system. These electronic notes are stored on GHD's internal computer servers as business records kept in the ordinary course of business. All of the electronic notes collected by GHD are subject to its internal ISO 9001 Quality System policy.

e. GHD retrieved the sample equipment after approximately 24 hours of sampling, at which time the pressure regulators are removed from the sample equipment, and the stop time of sampling is noted in the iPad data collection system as described above.

f. The samples were then shipped overnight by FedEx pursuant to standard chain of custody procedures to Galson for testing as to the levels of ethylene oxide recorded by the sample equipment during the 24 hour sampling period. A Level IV data package is prepared by Galson and reviewed by a GHD Project Chemist,

f. The samples were then shipped overnight by FedEx pursuant to standard chain of custody procedures to Galson for testing as to the levels of ethylene oxide recorded by the sample equipment during the 24 hour sampling period. A Level IV data package is prepared by Galson and reviewed by a GHD Project Chemist, for each of the samples tested by Galson. This data package includes chromatograms, canister cleaning certifications, pressure measurements and calculations.

7. A true and correct copy of GHD's data table corresponding to the February 11-14, 2019 Sampling Program is attached hereto as Exhibit C (the "Full Data Table").

a. It is the regular practice of GHD that a table or chart be prepared following the completion of the analysis of the sampling data that sets forth the results of the sampling conducted by GHD.

b. I assisted with the preparation of the Full Data Table.

c. The Full Data Table has been kept in the course of GHD's regularly conducted business activity.

8. A true and correct copy of the February 11-14, 2019 "wind rose" information is attached hereto as Exhibit D.

I declare under the penalty of perjury that the foregoing statements are true and correct.

Dyron Hamlin, GHD Services Inc.

Dated this 19th day of February, 2019

EXHIBIT A

Exhibit "A"

RECEIVED
JAN - 9 2019
VILLAGE OF WILLOWBROOK

January 8, 2019

Reference No. 11183332

Tim Halik
Village Administrator
Village of Willowbrook
835 Midway Drive
Willowbrook, IL 60527

Dear Mr. Halik:

**Re: Proposal for Professional Industrial Hygiene and Risk Assessment Services
Hazard Assessment and Ambient Air Sampling – Ethylene Oxide
Village of Willowbrook, Illinois**

1. Introduction

GHD Services Inc. d/b/a GHD Environmental and Consulting Inc. (GHD) is pleased to submit this Proposed Scope of Work and Cost Estimate (Proposal) to provide additional indoor / outdoor air quality services for public sector properties located within the Village of Willowbrook, Illinois. The assessment of air quality within specified buildings and at locations outdoors shall be performed to evaluate the potential risk of exposure to ethylene oxide (EtO) aerosols. Specifically, GHD health professionals will collect ambient air samples for EtO from occupied spaces and outdoor locations. These services are requested on behalf of city officials for The Village of Willowbrook.

On July, 26, 2018 the Agency for Toxic Substances and Disease Registry (ATSDR) – Region 5, a division of the federal Department of Health and Human Services submitted a letter to the Director for Region 5 office for the Environmental Protection Agency (EPA) – Region 5 summarizing the health risk for residents potentially exposed to EtO. In this letter, the ATSDR references health assessment determinations (including air sampling data comparisons) related to EO emissions from the Sterigenics Corporation (Sterigenics) manufacturing facilities located in Willowbrook, Illinois. It is GHD's understanding that Sterigenics uses EtO as part of the sterilization processes for medical equipment and other devices. EtO is listed in the air permit for the Sterigenics – Willowbrook facility and is linked to adverse acute / chronic health effects in humans.

On November 16, 2018, GHD conducted air sampling for the Village of Willowbrook to assess the potential for exposures to Village workers and members of the community to EtO produced by the Sterigenics facilities in Willowbrook, Illinois. The sampling program for this assessment was designed to include public buildings, private residences, public parks, and schools, at locations upwind and downwind of the Sterigenics site. GHD evaluated the EtO concentrations inside buildings relative to the amounts of EtO outside buildings. The measured levels of EtO inside buildings were found to be higher than the outside at all locations sampled, with the exception of the Village Hall. This suggests possible indoor sources of EtO, which have been noted to be present in various household and consumer products such as cigarettes, auto products, cleaners, food which has been sterilized using EtO, and home maintenance products. Further research is needed to evaluate the potential adsorption of low levels of EtO to building

GHD Services Inc.
11719 Hinson Road, Suite 100, Little Rock, AR 72212
T 501 224 1926 W www.ghd.com

REGISTERED COMPANY FOR ISO 9001 ENGINEERING DESIGN

and indoor materials over time; for example, indoor sources such as those noted above could yield low levels of EtO indoors, which could temporarily accumulate until exchange with outdoor air.

GHD envisions the additional assessment services shall consist of two main tasks, as follows:

- Task 1 – Over a longer term testing period, quantify EtO concentrations inside occupied spaces and compare the air sampling data. Characterize indoor concentrations of EtO and otherwise provide guidance on the risk for occupancy.
- Task 2 – Quantify EtO concentrations from selected locations in outside ambient air within the Village of Willowbrook to assess potential impacts for recognized receptors and to compare to results received from indoor locations. Identify whether additional sources of EtO emissions within the immediate areas around the Sterigenics facility or other external influences are impacting sampling results.

2. Scope of Work

GHD will rely on an experienced team of health professionals to meet the expectations for this project. The GHD team includes professionals from industry and regulatory agencies having a broad range of applicable industrial hygiene, risk assessment, chemical engineering, and toxicology experience. The on-site portion of the project will be conducted by GHD Certified Industrial Hygienists (CIH) with support from additional GHD resources.

It is GHD's understanding that five locations within the Village of Willowbrook have been identified for assessment based on the potential of exposures to EtO for building occupants. GHD proposes to collect a total of seven air samples at these locations over a thirty day sampling period. GHD shall collect outdoor air samples at each location on a rotating interval (i.e. air sample deployment every three days). Indoor air samples shall be collected daily from the identified indoor test sites. A list of the buildings / areas to be included in air quality assessment is included in Table 2.1.

Table 2.1 List of Buildings / Areas for Assessment

Test Site #	Name / Facility Type	Building Address	Sample Type	
			Indoor	Outdoor
1	Gower Middle Elementary School	7941 S. Madison Street		X
2	Gower West Elementary School	7650 Clarendon Hills Road		X
3	Willowbrook Public Works Building	701 75th Street		X
4	Willowbrook Village Hall	835 Midway Drive	X	X
5	Willowbrook Police Station	7760 Quincy Street	X	X

GHD will perform the following field activities expected to be representative of normal operating conditions.

2.1 Area Airborne Sampling

To determine the representative inhalation exposures for building occupants, GHD will collect area air samples for EtO inside the occupied spaces. The area air samples shall be collected at breathing zone height (approximately 5 to 6 feet) in an effort to simulate representative inhalation exposures for the affected occupants in each area. GHD anticipates collecting one area air sample in two selected buildings and five area air samples in selected outdoor locations during each sample period. Area air samples shall be collected using evacuated SUMMA canisters with 24-hour metered flow regulators. All air samples for shall

be collected according to the Environmental Protection Agency (EPA) Method TO-15 including the analysis for EtO. All samples shall be shipped under appropriate Chain of Custody (COC) procedures to SGS Galson Laboratory for analysis. Galson is accredited by the American Industrial Hygiene Association (AIHA) for the analysis of air samples. The laboratory results for the air samples will be relied on to identify any occupied areas where airborne EtO concentrations are present in greater concentrations compared to background.

2.2 Field Documentation

Appropriate field documentation will be collected including a daily activity log, sampling field forms, site observations, and other pertinent documentation. All sampling data and supporting documentation collected during this assessment shall be stored in a comprehensive on-Site electronic database. GHD shall use custom database application (i.e. mobile data collection and data management tools for field data collection, archiving and reporting) that upload field data directly to a secure GHD server.

2.3 Schedules and Deliverables

GHD will work with the Village of Willowbrook to set up a mutually agreeable schedule for the additional assessment activities. GHD understands that air sampling is scheduled for completion during the first quarter of 2019. To ensure that this deadline is met, GHD will make the necessary personnel and resources available for this project.

At the completion of the sampling activities, GHD will provide a written report to the Village of Willowbrook within twenty business days after receiving the laboratory results. The report will include the following:

- An executive summary
- A comparison of sampling results reported at indoors / outdoors locations
- A site plan presenting monitoring and sampling locations
- Determination on the occupancy for building occupants
- Conclusions and recommendations

3. Estimated Cost

This proposal describes the estimated cost for providing the services described above. Costs for any additional services or labor will be billed on a time and materials basis and will require prior approval by the Village of Willowbrook. We estimate the cost to provide these services will be approximately **$125,000**. This figure includes the estimated costs for labor, expenses, travel, laboratory fees, and equipment usage and represents our good-faith attempt to approximate the cost to achieve the goals of this project and the deliverables noted above. For your consideration, GHD has divided the estimated costs accordingly.

Table 3.1 Cost Estimate

Description	Estimated Cost
Labor (travel, project coordination, on-site activities)	$63,000
Labor (data review, reporting, conclusions)	$20,000
Sample Analysis (equipment use and laboratory fees)	$36,000
Expenses (travel, shipping, transportation)	$6,000
Total	**$125,000**

4. Closing

We appreciate the opportunity to submit this Proposal to the Village of Willowbrook and look forward to working with you. Please do not hesitate to contact us if you require further information or clarification regarding the Scope of Work and Cost Estimate presented herein.

Sincerely,

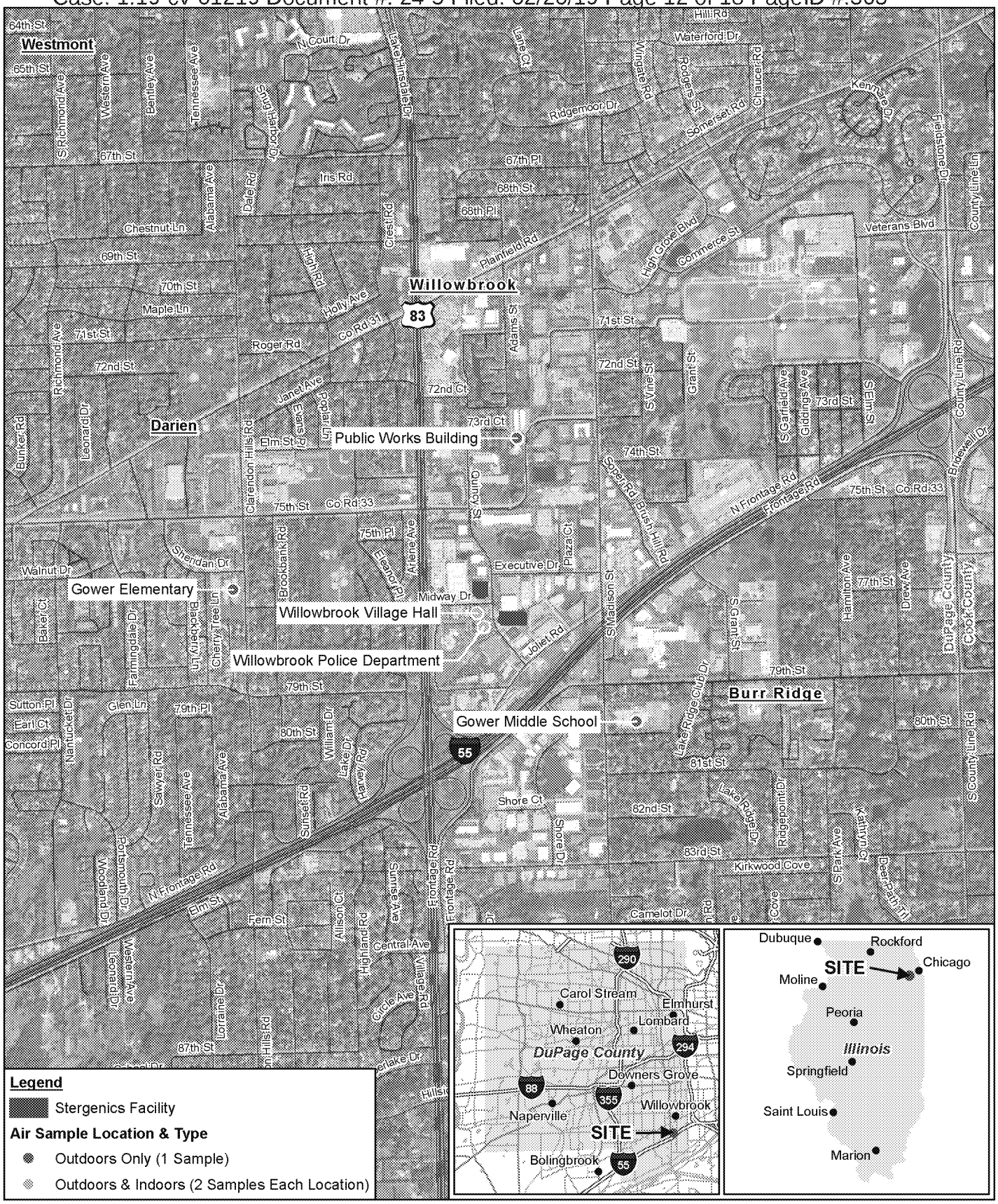
GHD Services Inc.

Benjamin Chandler, M.S., CIH, CSP

BLC/lf/1/PR/Clt.

cc: Renee Cipirano, Schiff Harden, LLC
Gayle Neal, Village of Willowbrook
Dyron Hamlin, GHD
Lucy Frazier, Lucy Frazier Consulting

EXHIBIT B



Sources: 2018 TIGER/Line Shapefiles, prepared by the U.S. Census Bureau. U.S. Geological Survey, National Geospatial Technical Operations Center, 2015. ESRI Base Data.

0 0.2 0.4
Miles

Coordinate System:
NAD 1983 HARN StatePlane
Illinois East FIPS 1201 Feet

VILLAGE OF WILLOWBROOK, ILLINOIS
FEBRUARY 2019 SAMPLING

11183332
Feb 18, 2019

SITE LOCATION MAP

FIGURE 1

GIS File: Q:\GIS\PROJECTS\11183000s\11183332\Layouts\PRES001\11183332-00(PRES001)GIS-WA001.mxd

EXHIBIT C

Summary of Area Air Sampling Results for Ethylene Oxide – Village of Willowbrook, Illinois
(Collected on February 11 - 14, 2019) – Lab Login: L470996

Location ID	GHD Sample ID	Sample Location	Sample Dates	Measured Airborne Concentration	
				µg/m³	ppb
1	Air-11183332-061	Willowbrook Village Hall – Third Floor	February 11 – 12, 2019	54	30
	Air-11183332-066	Willowbrook Village Hall – Third Floor	February 12 – 13, 2019	2.9	1.6
	Air-11183332-068	Willowbrook Village Hall – Third Floor	February 13 – 14, 2019	0.81	0.45
	Air-11183332-060	Willowbrook Village Hall – Outdoors	February 11 – 12, 2019	9.2	5.1
2	Air-11183332-058	Willowbrook Police Department – Records Front Office	February 11 – 12, 2019	250	140
	Air-11183332-065	Willowbrook Police Department – Records Front Office	February 12 – 13, 2019	49	27
	Air-11183332-067	Willowbrook Police Department – Records Front Office	February 13 – 14, 2019	6.5	3.6
	Air-11183332-059	Willowbrook Police Department – Outdoors	February 11 – 12, 2019	320	180
6	Air-11183332-062	Public Works Building – Outdoors	February 11 – 12, 2019	0.38	0.21
9	Air-11183332-064	Gower Elementary – Outdoors	February 11 – 12, 2019	0.62	0.35
10	Air-11183332-063	Gower Middle School – Outdoors	February 11 – 12, 2019	0.39	0.22

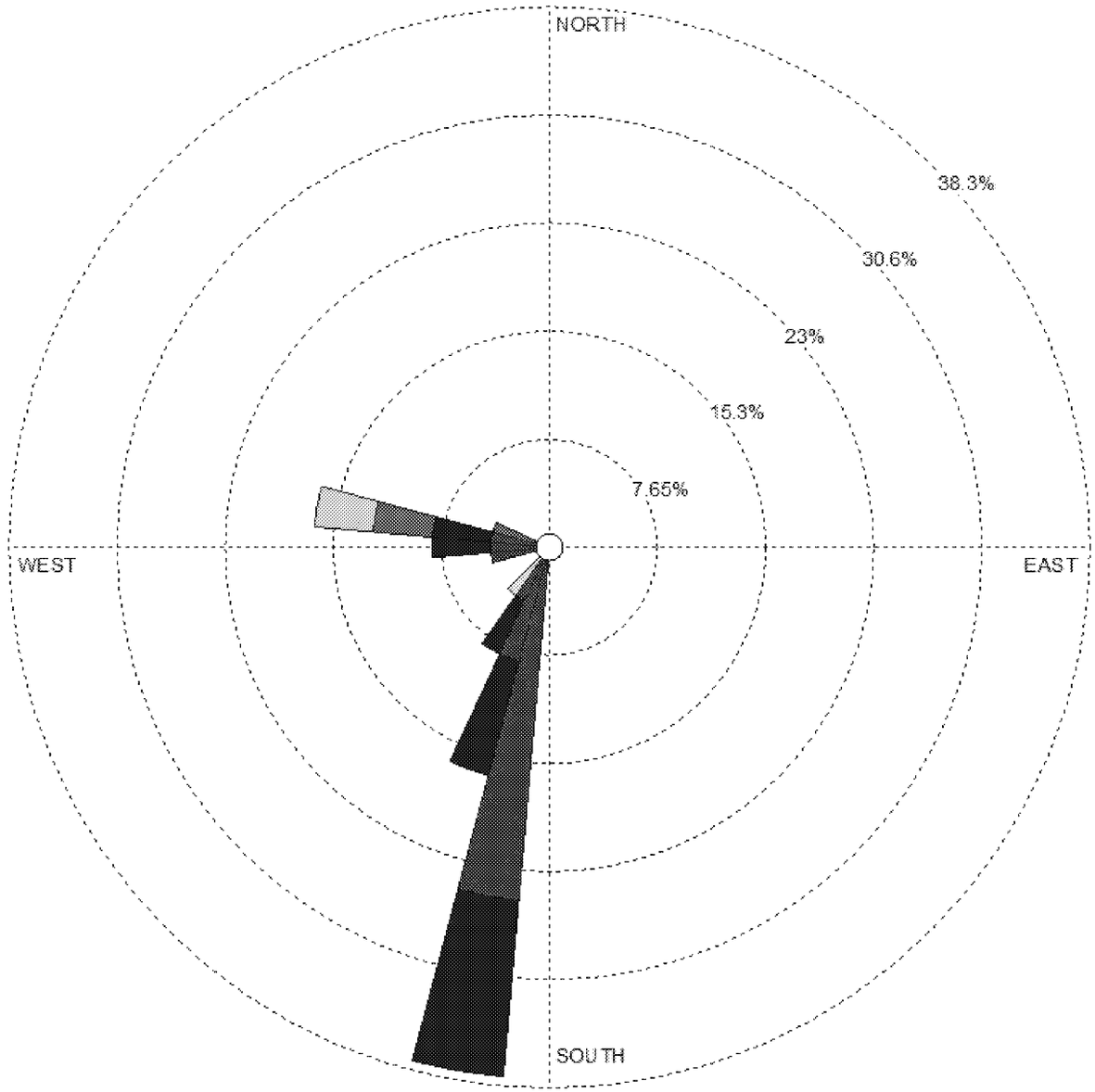
EXHIBIT D

WIND ROSE PLOT:

Surface Observations 02/14/2019
Chicago Midway Airport

DISPLAY:

Wind Speed
Direction (blowing from)



WIND SPEED (Knots)

- >= 21.58
- 17.11 - 21.58
- 11.08 - 17.11
- 7.00 - 11.08
- 4.08 - 7.00
- 0.97 - 4.08

Calms: 0.00%

COMMENTS:

DATA PERIOD:

Start Date: 2/14/2019 - 00:00
End Date: 2/14/2019 - 23:00

TOTAL COUNT:	CALM WINDS:
24 hrs.	**0.00%**

AVG. WIND SPEED:

11.35 Knots

COMPANY NAME:

GHD

MODELER:

Tom Ashcraft

DATE:

2/19/2019

PROJECT NO.:

11183332

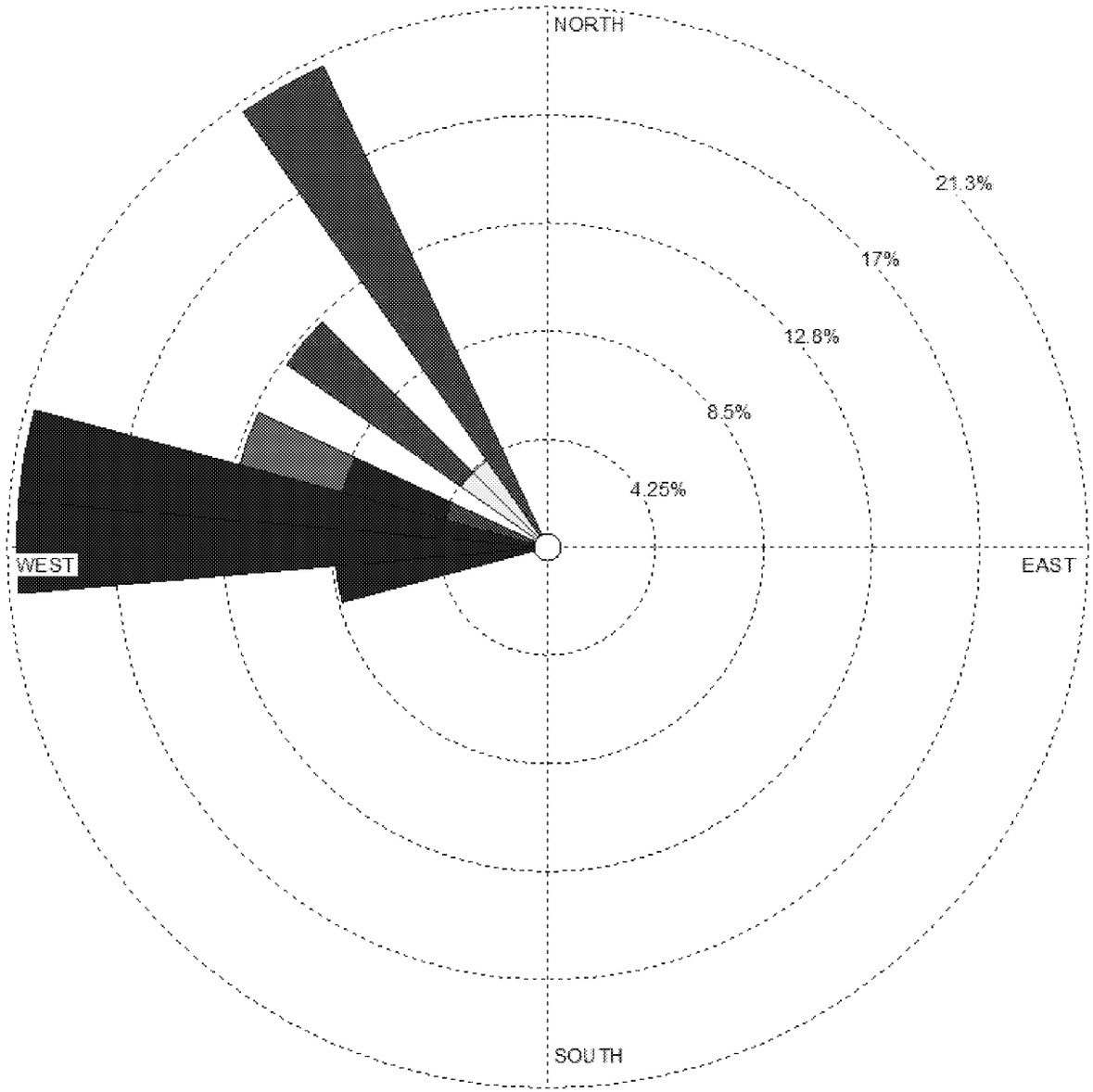
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Surface Observations 02/15/2019
Chicago Midway Airport

DISPLAY:

Wind Speed
Direction (blowing from)



WIND SPEED (Knots)

- >= 21.58
- 17.11 - 21.58
- 11.08 - 17.11
- 7.00 - 11.08
- 4.08 - 7.00
- 0.97 - 4.08

Calms: 0.00%

COMMENTS:

DATA PERIOD:

Start Date: 2/15/2019 - 00:00
End Date: 2/15/2019 - 23:00

TOTAL COUNT:	CALM WINDS:
24 hrs.	**0.00%**

AVG. WIND SPEED:

11.31 Knots

COMPANY NAME:

GHD

MODELER:

Tom Ashcraft

DATE:

2/19/2019

PROJECT NO.:

11183332

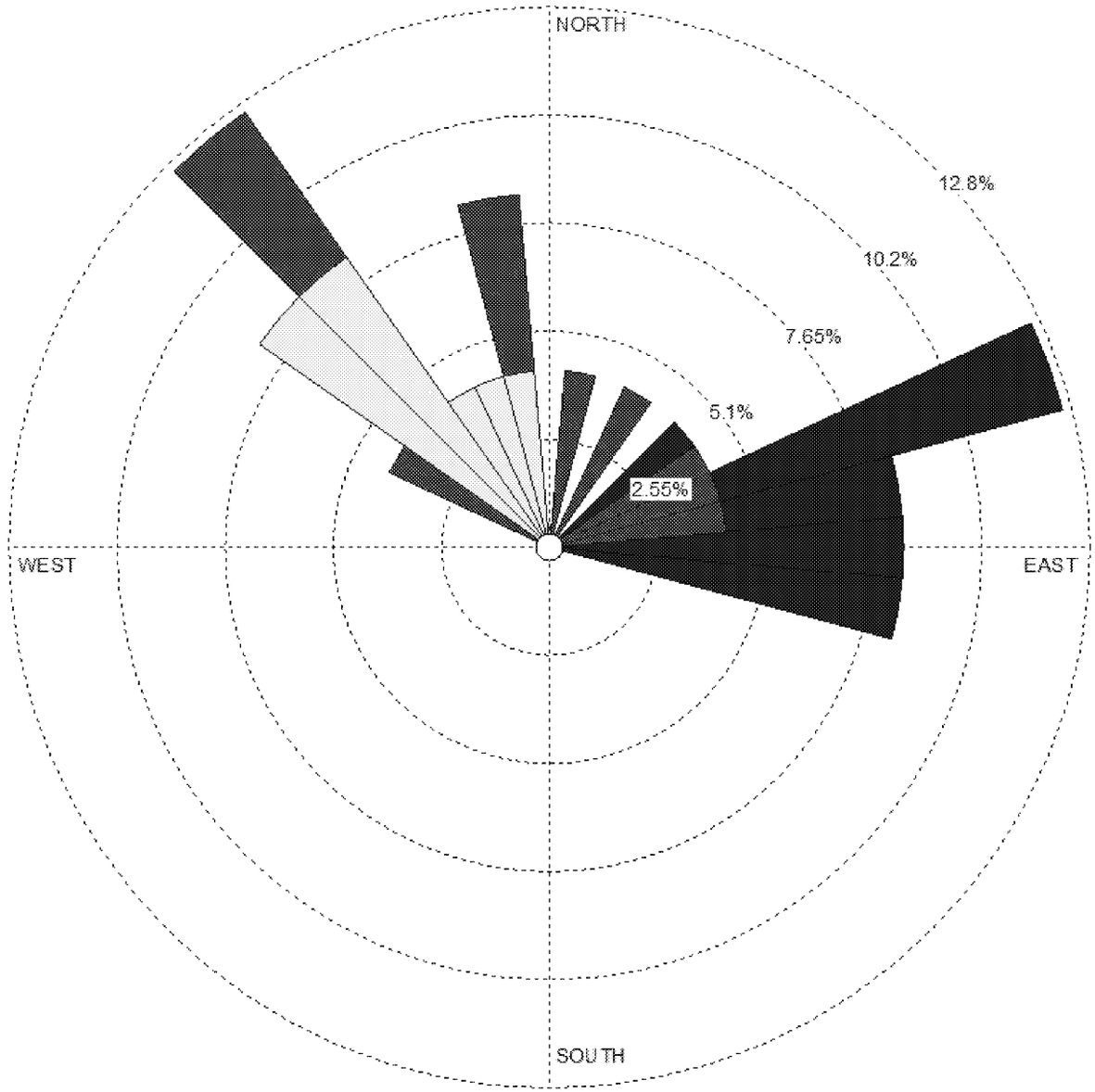
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Surface Observations 02/16/2019
Chicago Midway Airport

DISPLAY:

Wind Speed
Direction (blowing from)



WIND SPEED (Knots)

- >= 21.58
- 17.11 - 21.58
- 11.08 - 17.11
- 7.00 - 11.08
- 4.08 - 7.00
- 0.97 - 4.08

Calms: 0.00%

COMMENTS:

DATA PERIOD:

Start Date: 2/16/2019 - 00:00
End Date: 2/16/2019 - 23:00

TOTAL COUNT:	CALM WINDS:
23 hrs.	**0.00%**

AVG. WIND SPEED:

8.75 Knots

COMPANY NAME:

GHD

MODELER:

Tom Ashcraft

DATE:

2/19/2019

PROJECT NO.:

11183332

WRPLOT View - Lakes Environmental Software