PRECISION
ENVIRONMENTAL SERVICES, INC.
831 RT. 67, LOT 38 A
BALLSTON SPA, NY 12020
TEL: 518-885-4399
FAX: 518-885-4416
CERTIFIED WOMEN-OWNED BUSINESS ENTERPRISE

25 YEARS 1991 - 2016

March 9, 2021

Via Electronic Mail: Parag.amin@dec.ny.gov

Mr. Parag Amin, P.E.
Project Manager – Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway, Albany, New York 12233-7014

RE: Soil Boring Investigation & SVI Sampling Work Plan and HASP
Lubricant Packaging Co.
17 Industrial Place, Middletown, NY (Orange County)
NYSDEC Site No.: 336034

Mr. Amin:

Precision Environmental Services, Inc. (PES) submits this work plan for your acceptance. The New York State Department of Environmental Conservation (Department) requests PES advance and sample five (5) soil borings on the 17 Industrial Place property, logging the soil followed by sampling of soil and groundwater for each location. PES will also conduct sub-slab vapor intrusion (SVI) sampling at the 79 Industrial Place property. These planned activities are detailed herein, and a site location map is provided as Figure 1. Work completed by PES will be completed in accordance with Prime Contract C100614.

HASP & Coronavirus
PES has prepared and attached a site-specific health and safety plan (HASP) under separate cover. The HASP addresses all necessary work-related safety precautions and procedures for the sample activities. Additionally, PES has included Novel Coronavirus Disease 2019 awareness and preparedness information in the HASP which will be followed during all field work activities or until a time at which the federal government, State Health Department and local government no longer require such measures be taken.

Soil Boring Investigation – 17 Industrial Place
All soil boring sample activities will be performed following the Departments *Guidelines for Sampling and Analysis of Per- and Polyfluoroalkyl Substances (PFAS)*, under the Department's Part 375 Remedial Programs. PES has scheduled the soil and groundwater investigation to be performed on March 24th and 25th, 2021 This guidance reference will be reviewed and followed by PES staff, specifically as it pertains to Appendix B – Sampling Protocols for PFAS in Soils, Sediments and Solids and Appendix C – Sampling Protocols for PFAS in Monitoring Wells. The proposed soil boring locations are presented on Figure 2. The reference document can be found using the following link:

https://www.dec.ny.gov/docs/remediation_hudson_pdf/pfassampanaly.pdf

A PES geologist will complete a soil boring log for each of the direct push technology advanced boring locations (Attachment A). In addition to volatile headspace analysis using a calibrated photo-ionization detector (PID) PES will collect soil samples from the 0"-6" and 2'-4' interval and interface directly above groundwater at each of the five boring locations. These soil samples will be analyzed for 1,4-Dioxane (EPA Method 8270) and Per-and Polyfluoroalkyl substances (PFAS). The PFAS soil sample will be analyzed using EPA Method 537. Should any of the Perfluorooctanoic Acid (PFOA) or Perfluorooctane Sulfonate (PFOS) sample results exceed 1 part per billion those samples will then be analyzed again using the Synthetic Precipitation Leaching Procedure (SPLP) Modified EPA Method 537. PES will collect sufficient sample volume for the laboratory to complete the SPLP method analysis if and as needed for each sample location and interval.

Once groundwater is reached a temporary PVC well will be installed and a grab sample for water will be collected using a disposable, PFAS free micro-bailer. The wells will be constructed with 1-inch ID, 0.010 slot size and 5-foot length screens. PES will position the screen interval across the groundwater level encountered in each of the borings. PES will purge the well of 3 to 5 well volumes prior to sampling. These water samples will be analyzed for 1,4-Dioxane (EPA Method 8270 SIM) and PFAS (EPA Method 537). Upon completion the PVC will be extracted, and each hole filled with the cuttings and bentonite chips as needed to fill the open borehole to grade. All samples will be stored on ice and delivered to Eurofins Test America (an ELAP certified laboratory) under proper chain of custody (COC).

Sub-Slab Vapor Intrusion Sampling – 79 Industrial Place

All SVI sample activities will be performed following the New York State Department of Health (DOH), *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. PES has scheduled the SVI sampling to be performed on March 30th and 31st, 2021. This guidance reference will be reviewed and followed by PES staff, specifically as it pertains to procedures required to thoroughly and accurately complete indoor air quality sampling for analysis. PES has included a Standard Operating Procedure (SOP) for SVI studies as Attachment B.

Based on the Department provided *Offsite Soil Vapor Intrusion Investigation Report,* dated June 11, 2019, prepared by CDM Smith, PES understands the sub-slab air sample locations are permanent vapor points. Sample locations are as follows and presented on Figure 3:

- Sub-Slab (SS)-Soil Vapor (SV)-04 and Indoor Air (IA)-04
- SS-SV-05 and IA-05
- SS-SV-06 and IA-06
- SS-SV-07 and IA-07
- Ambient Outdoor Air (AA)-02
- Blind duplicate collected from one of the SS-SV locations

Following tracer gas seal testing these samples will be collected in laboratory supplied canisters equipped with 24-hour laboratory calibrated regulators. In keeping with the DOH Guidance PES will first complete an Indoor Air Quality Questionnaire and Building Inventory (Attachment C), followed by performance of the pre, during and post sample collection process steps. All information will be documented in a field book. Once sample collection is complete, PES will deliver the sample canisters to Eurofins Test America for analysis.

Reporting

Following the completion of soil/groundwater investigation and SVI activities PES will prepare a summary report, including text detailing the completed work, figures, tabulated analytical data including regulatory concentration comparison, boring logs, the SVI completed questionnaire and building inventory and a photolog. PES will submit the report within two weeks of receiving all laboratory data. Following the completion of field work PES will collect top of temporary well casing elevations prior to removing them and demobilizing the site.

All sample data collected as part of the soil, groundwater and SVI investigation will be validated by an independent third party subcontracted by PES. They will provide a Data Useability Summary Report (DUSR) and enter data in the Department's EQuIS data management platform.

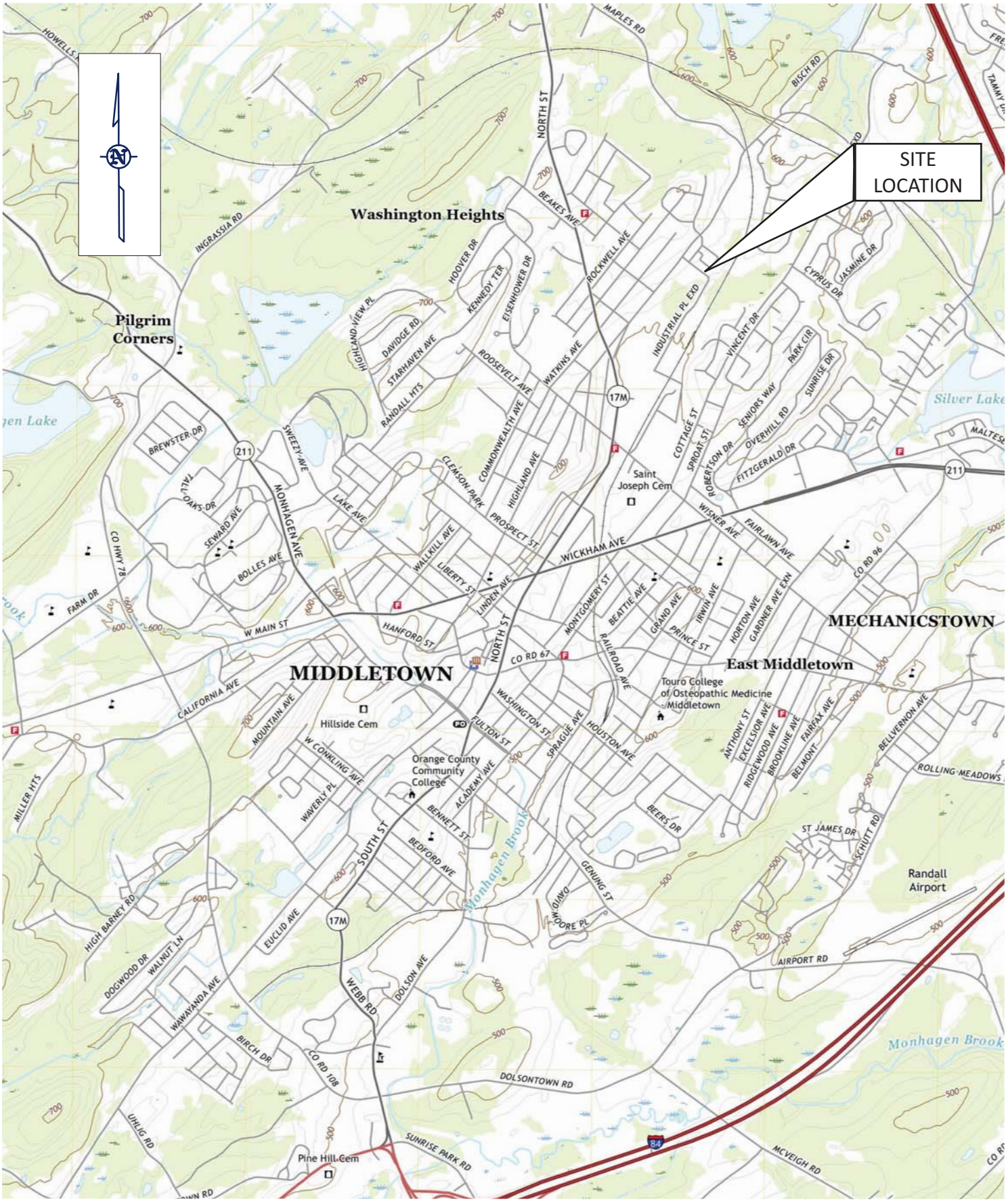
All work detailed above will be coordinated with Department access agreement property owners and their tenants, as necessary. Should you have any questions regarding the above report, please feel free to contact the undersigned at 518-885-4399.

Sincerely.
PRECISION ENVIRONMENTAL SERVICES, INC.

Brian Neumann
Project Manager

Attachments:
- Figures
- Soil Boring Log
- DOH Questionnaire

Figures



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Lubricant Packaging Co.
17 Industrial Place, Middletown, NY

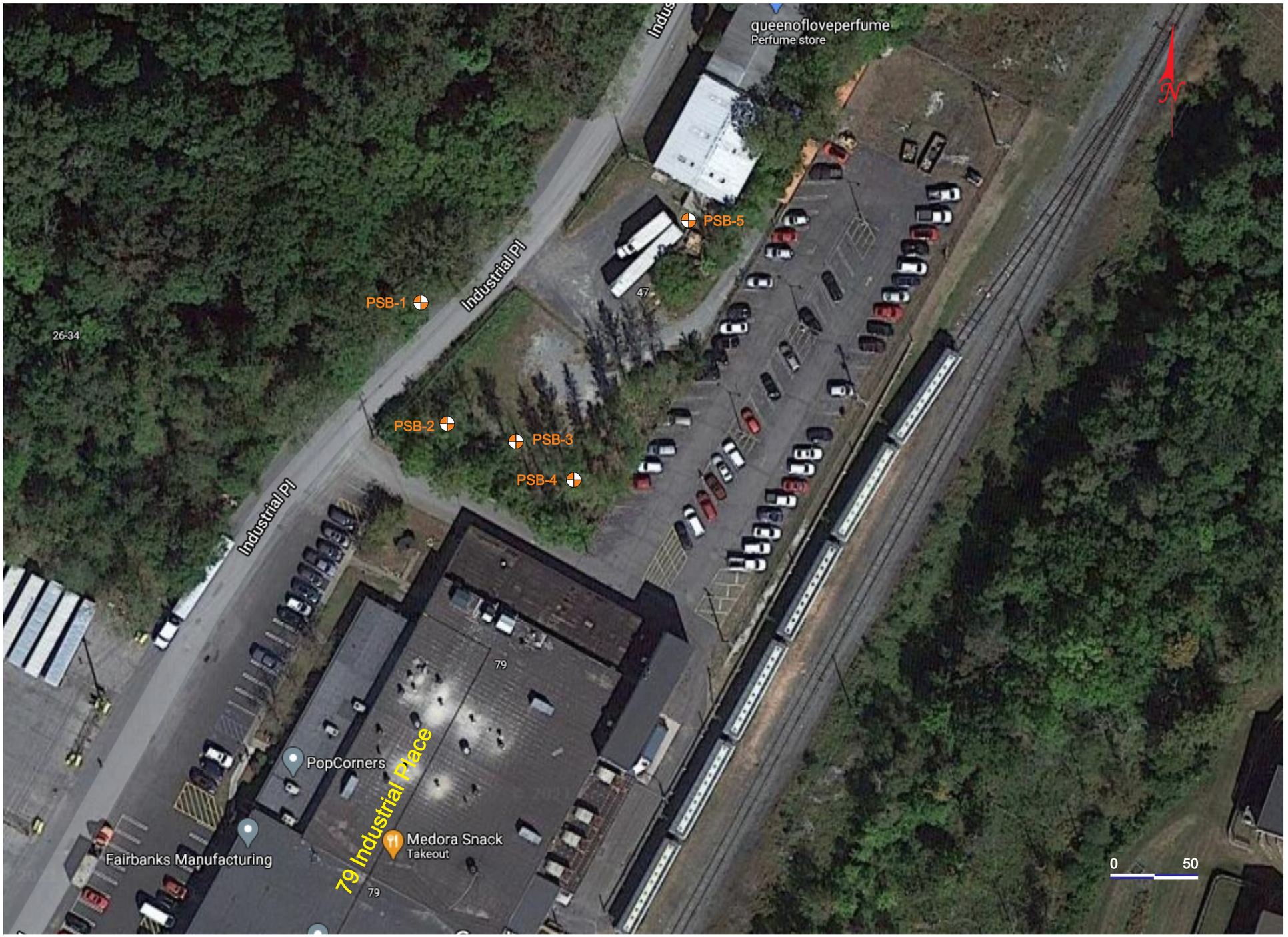
Date: Jan 2021

Map Courtesy of Google

SITE LOCATION MAP

NYSDEC Site #: 336034

Figure: 1



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PROPOSED SOIL BORING LOCATIONS

LUBRICANT PACKAGING COMPANY

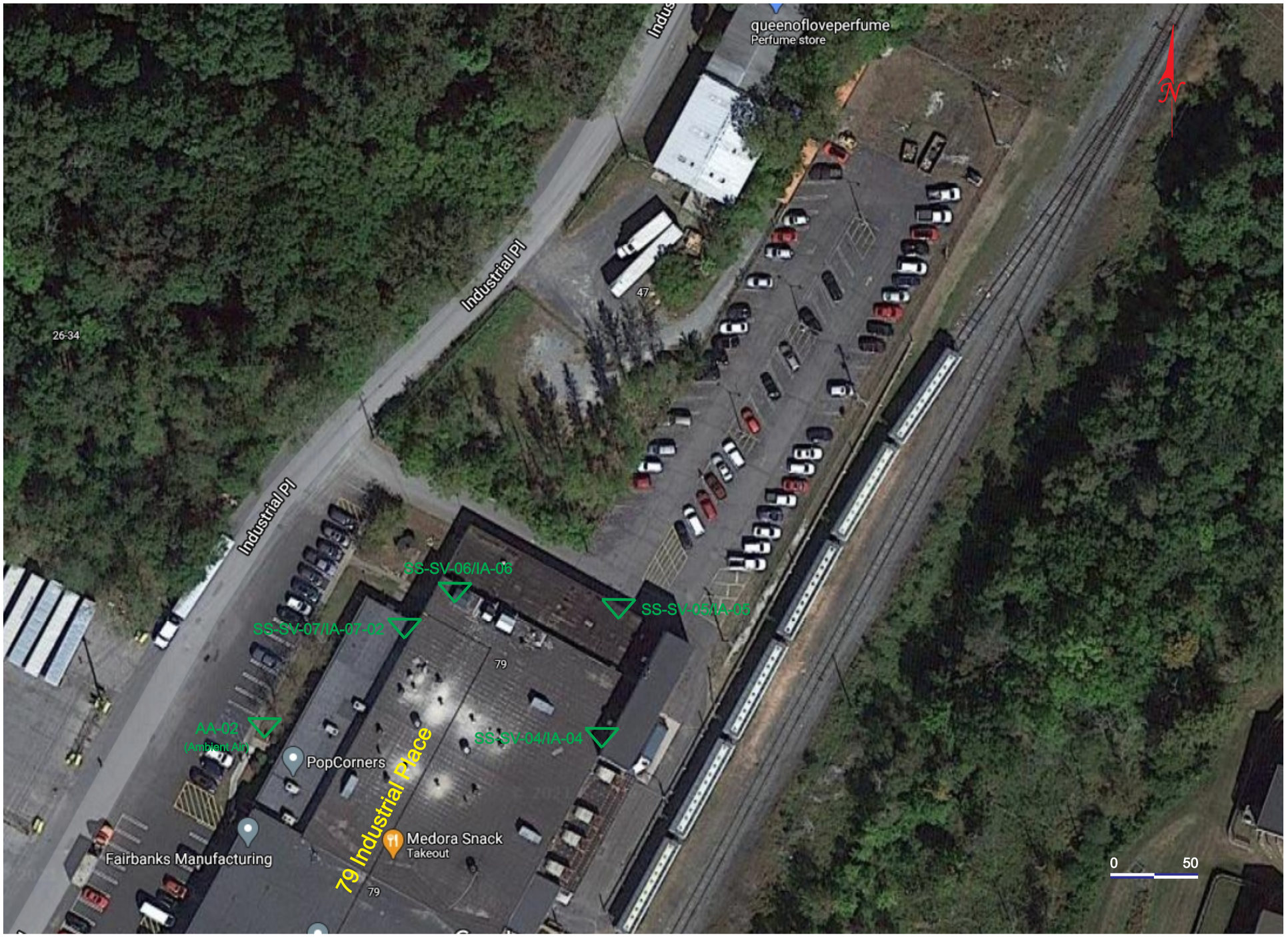
SITE #: 336034	
LOCATION: 17 INDUST. PLACE, MIDDLETOWN, NY	
DATE: 1.27.21	**REVISED BY: JJJ**
FIGURE: 2	**SCALE: AS SHOWN**

LEGEND

PSB-1
Proposed Soil Boring (SB) Location

NOTES:

- BASE MAP COMPOSED FROM 2011 AERIAL IMAGERY PROVIDED COURTESY GOOGLE MAPS
- ALL LOCATIONS ARE APPROXIMATE



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SUB SLAB VAPOR INTRUSION SAMPLE LOCATIONS

LUBRICANT PACKAGING COMPANY

SITE #: 336034	
LOCATION: 17 INDUST. PLACE, MIDDLETOWN, NY	
DATE: 1.27.21	**REVISED BY: JJJ**
FIGURE: 3	**SCALE: AS SHOWN**

LEGEND

AA-02 ▽ Vapor Intrusion Sample Collection Location

NOTES:

- BASE MAP COMPOSED FROM 2011 AERIAL IMAGERY PROVIDED COURTESY GOOGLE MAPS
- ALL LOCATIONS ARE APPROXIMATE

Attachment A - Soil Boring Log

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DRILLING LOG

Well/ Boring No.:

Project:_____ Client:_____

Project No:_____ Location:_____

Driller:_____ Logged by:_____

Drilling Contractor: PES Drilling Method: GeoProbe/Direct Push

Date Drilled:_____ Date Developed:_____

TOC Elevation:_____ Total Depth of Hole:_____

Boring Diameter:_____ Screen Diameter:_____ Length:_____

Slot Size: _____ Riser Diameter:_____ Length:_____

Type:_____ Sand Pack:_____ Bentonite Seal:_____

Protective Casing:_____

Depth (ft.)	Well Construction	% Recovery	Sample Type/ #	PID (ppm)	Description / Soil Classification
0					
1			0-2’		
2					
3			2-4’		
4					
5			4-6’		
6					
7			6-8’		
8					
9			8-10’		
10					
11			10-12’		
12					
13			12-14’		
14					
15			14-16’		
16					
17			16-18’		
18					
19			18-20’		
20					
21			20-22’		
22					
23			22-24’		
24					
25			24-26’		
26					
27			26-28’		
28					
29			28-30’		
30					

CLAY

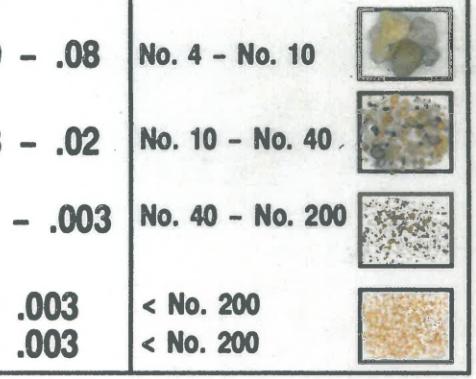
CLAY CONSISTENCY	THUMB PENETRATION	SPT, N BLOWS/FT.	Undrained Shear Strength (PSF) TORVANE	Unconfined Compressive Strength q_u Pocket Penetrometer
VERY SOFT	Easily penetrated several inches by thumb. Exudes between thumb and finger's when squeezed in hand.	< 2	250	500
SOFT	Easily penetrated one inch by thumb. Molded by light finger pressure.	2 - 4	250 - 500	500 - 1000
MEDIUM STIFF	Can be penetrated over 1/4 " by thumb with moderate effort. Molded by strong finger pressure.	4 - 8	500 - 1000	1000 - 2000
STIFF	Indented about 1/4" by thumb but penetrated only with great effort.	8 - 15	1000 - 2000	2000 - 4000
VERY STIFF	Readily indented by thumbnail.	15 - 30	2000 - 4000	4000 - 8000
HARD	Indented with difficulty by thumbnail.	> 30	> 4000	> 8000

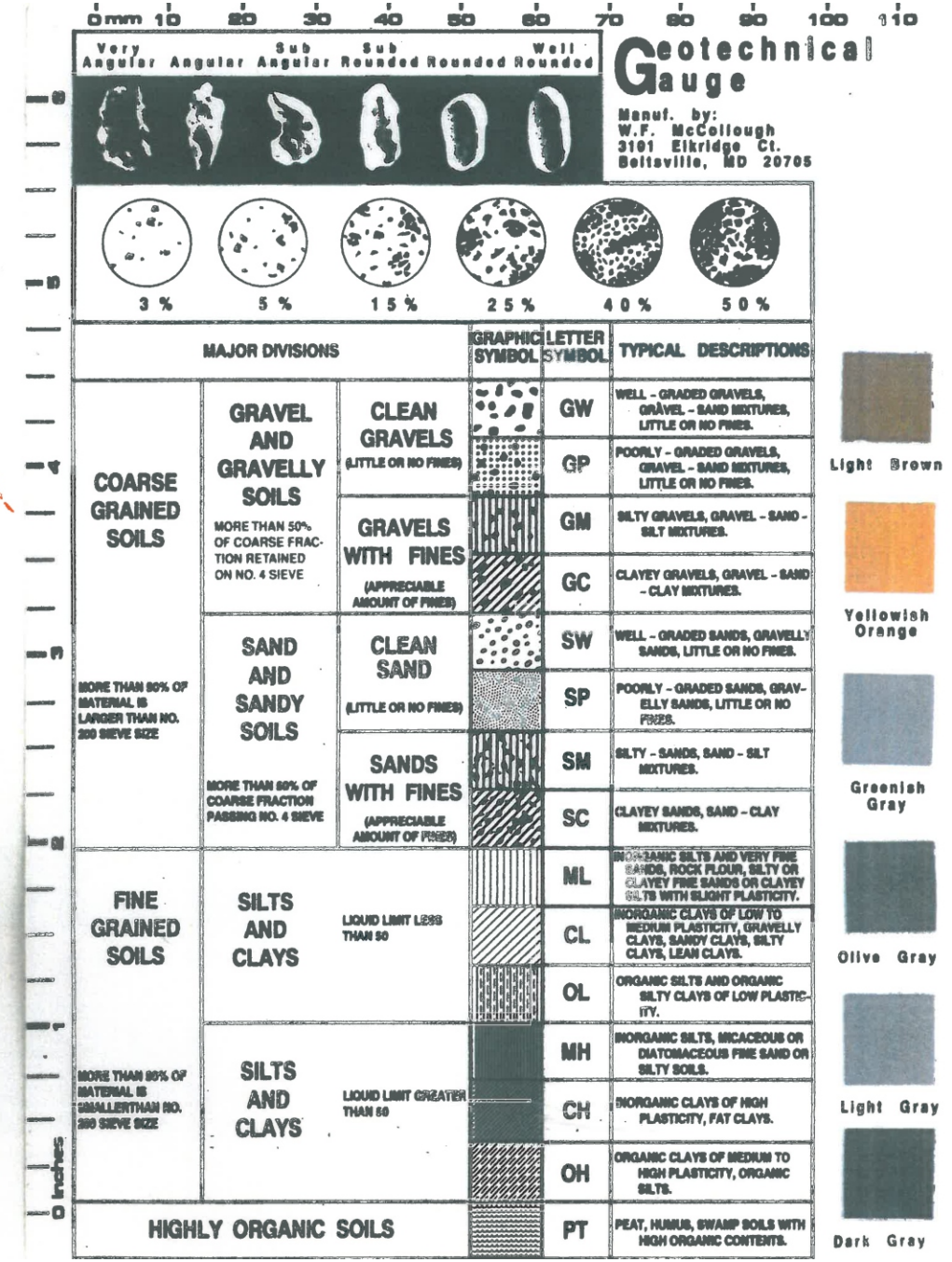
SAND

SOILTYPE	SPT, N Blows/ft.	Relative Density,%	FIELD TEST
VERY LOOSE SAND	4	0 - 15	Easily penetrated with 1/2" reinforcing rod pushed by hand.
LOOSE SAND	4 - 10	15 - 35	Easily penetrated with 1/2" reinforcing rod pushed by hand.
MEDIUM DENSE SAND	10 - 30	35 - 65	Penetrated a foot with 1/2" reinforcing rod driven with 5-lb hammer.
DENSE SAND	30 - 50	65 - 85	Penetrated a foot with 1/2" reinforcing rod driven with 5-lb hammer.
VERY DENSE SAND	50	85 - 100	Penetrated only a few inches with 1/2" reinforcing rod driven with 5-lb hammer.

Unified Soil Classification System (USCS)

	MILLIMETERS	INCHES	SIEVE SIZES
BOULDERS	> 300	> 11.8	-
COBBLES	75 - 300	2.9 - 11.8	-
GRAVEL:			
COARSE	75 - 19	2.9 - .75	-
FINE	19 - 4.8	.75 - .19	3/4" - No. 4
SAND:			
COARSE	4.8 - 2.0	.19 - .08	No. 4 - No. 10
MEDIUM	2.0 - .43	.08 - .02	No. 10 - No. 40
FINE	.43 - .08	.02 - .003	No. 40 - No. 200
FINES:			
SILTS	< .08	< .003	< No. 200
CLAYS	< .08	< .003	< No. 200





Attachment B – SVI SOP

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SOIL VAPOR INTRUSION STUDY STANDARD OPERATING PROCEDURES

Sub-Slab Vapor Sampling, Indoor Air Sampling, and Ambient Air Sampling

1.0 Sub-Slab Vapor Sampling and Analysis Using USEPA Method TO-15

I. Scope and Application

This document describes the procedures to install a sub-slab sampling port and collect sub-slab vapor samples for the analysis of volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method TO-15 (TO-15). The TO-15 method uses a 6-liter SUMMA® passivated stainless steel canister. An evacuated SUMMA canister (less than 28 inches of mercury [Hg]) will provide a recoverable whole-gas sample of approximately 5.5 liters when allowed to fill to a vacuum of 2 inches of Hg. The whole-air sample is then analyzed for VOCs using a quadrupole or ion-trap gas chromatograph/mass spectrometer (GS/MS) system to provide compound detection limits of 0.2 parts per billion volume (ppbv).

The following sections list the necessary equipment and detailed instructions for installing sub-slab vapor probes and collecting samples for VOC analysis.

II. Personnel Qualifications

PES field sampling personnel will have current health and safety training, including 40-hour HAZWOPER training, site-specific training, first-aid, and cardiopulmonary resuscitation (CPR), as needed. PES field sampling personnel will be well versed in the relevant standard operating procedures (SOPs) and possess the required skills and experience necessary to successfully complete the desired field work. PES personnel responsible for leading sub-slab vapor sample collection activities must have previous sub-slab vapor sampling experience.

III. Equipment List

The equipment typically required to install a temporary sub-slab vapor probe is presented below:

- Electric impact drill;
- 1/2-inch diameter (minimum) concrete drill bit for impact drill;
- 1/4-inch tubing (Teflon®, polyethylene, or similar);
- ppb RAE PID;
- Hydrated bentonite/beeswax/modelling clay; and

The equipment required for vapor sample collection is presented below:

- Stainless steel SUMMA® canisters (order at least one extra, if feasible);
- Flow controllers with in-line particulate filters and vacuum gauges; flow controllers are pre-calibrated to specified sample duration (e.g., 30 minutes, 8 hours, 24 hours) or flow rate (e.g., 200 milliliters per minute [mL/min]); confirm with the laboratory that the flow controller comes with an in-line particulate filter and pressure gauge (order at least one extra, if feasible);
- 1/4-inch ID tubing (Teflon®, polyethylene, or similar);
- Twist-to-lock/swagelock fittings;
- Stainless steel “T” fitting (if collecting duplicate [i.e., split] samples);
- Portable vacuum pump (hand pump or peristaltic pump) capable of producing very low flow rates (e.g., 100 to 200 mL/min);
- Tracer gas source (e.g., helium) and monitoring equipment;
- Tracer gas shroud equipment (e.g. plastic sheeting, plastic pail, rubber plugs)

- ppb RAE PID;
- Appropriate-sized open-end wrench (typically 9/16-inch);
- Chain-of-custody (COC) form;
- Sample collection log; and
- Field notebook.

IV. Cautions

Sampling personnel should not handle hazardous substances (such as gasoline), permanent marking pens, wear/apply fragrances, or smoke cigarettes/cigars before and/or during the sampling event.

Care should also be taken to ensure that the flow controller is pre-calibrated to the proper sample collection time (confirm with laboratory). Sample integrity is maintained if the sampling event is shorter than the target duration, but sample integrity can be compromised if the event is extended to the point that the canister reaches atmospheric pressure.

Care must be taken to properly seal around the vapor probe at slab surface to prevent leakage of atmosphere into the soil vapor probe during purging and sampling. Temporary points are fit snug into the pre-drilled hole using Teflon® tape and a hydrated bentonite/beeswax/modelling clay seal at the surface.

V. Health and Safety Considerations

Field sampling equipment must be carefully handled to minimize the potential for injury and the spread of hazardous substances. For sub-slab vapor probe installation, drilling with an electric concrete impact drill should be done only by personnel with prior experience using such a piece of equipment.

VI. Procedures

Temporary Vapor Probe Installation

Temporary sub-slab soil vapor probes are installed using an electric drill and manual placement of tubing. The drill will be advanced to approximately 3 inches beneath the bottom of the slab. A 1/2-inch OD hole is installed through the slab. The tubing is then inserted into the hole. The tubing is purged prior to collection of a vapor sample. Probe locations are resealed after sampling is complete.

1. Remove, only to the extent necessary, any covering on top of the slab (e.g., carpet).

2. Drill a 1/2-inch diameter (minimum) hole through the concrete slab using the electric drill.

3. Advance the drill bit approximately 3 inches into the sub-slab material to create an open cavity.

4. Insert approximately 1/4-inch diameter tubing approximately 1.5 inches into the sub-slab material. Wrap the tubing with Teflon tape as necessary to create snug fit between tubing and concrete borehole. Do not advance the tubing further than 2-inches

below the slab. Leave approximately 2 feet of tubing exposed above the slab.

5. Prepare the surface seal and apply (hydrated bentonite/beeswax/modelling clay) at slab surface around the tubing.

Sub-Slab Vapor Sample Collection

Preparation of SUMMA®-Type Canister and Collection of Sample

1. Record the following information in the field notebook, if appropriate (contact the local airport or other suitable information source [e.g., site-specific measurements, weatherunderground.com] to obtain the information):

    a. wind speed and direction;
    b. ambient temperature;
    c. barometric pressure; and
    d. relative humidity.

2. At a minimum tracer gas samples should be collected from at least 10% of the sub-slab vapor probes to verify the surface seal integrity around the vapor probe. The tracer gas application is performed by installing a shroud above the probe and filling the airspace within the shroud with a tracer gas (typically helium). Additional information about tracer gas usage is included on Page 14.

    a. First prepare a 1' x 1' layer of 6-mil thick plastic sheeting with a perforation in the center to allow the vapor probe to pass through, reduce the drying rate of the probe surface seal.
    b. Place the plastic sheeting on the surface above the vapor probe exposing the center of the surface seal and probe through the perforation. Seal the plastic to the slab by installing a ring of hydrated bentonite/beeswax/modelling clay around, but not in contact with, the probe surface seal.
    c. Cut three holes in a 2.5 quart plastic pail. One to allow the 1/4-inch tubing through the bottom, one 3/8-inch diameter hole on the side near the bottom, and another 3/8-inch diameter hole on the opposite side from the other 3/8-inch hole but near the top of the pail.
    d. Turn the pail upside down above the vapor probe. Insert the vapor probe tubing through the hole in the bottom of the pail, slide the pail down the tubing, and cover the vapor probe with the pail creating a shroud. Seal the shroud to the plastic utilizing hydrated bentonite/beeswax/modelling clay.
    e. Enrich the atmosphere with the helium by introducing the gas through the upper hole in the side of the shroud being careful not to increase the pressure within the shroud.
    f. Utilize a helium detector to monitor the helium level within the lower hole in the side of the shroud. Introduce enough helium to enrich the atmosphere within the shroud to pure helium levels and document the concentration achieved.
    g. Seal the two holes on the sides of the shroud with 3/8-inch rubber plugs.

3. Verify the purge flow rate by connecting a portable vacuum pump to a 1L Tedlar bag and fill the bag with ambient air at a flow rate of 0.1 – 0.2 L/min. At these rates the bag should fill in 5-10 minutes. Once the flow rate is verified, connect the portable vacuum pump to the sample tubing. Purge 1 to 3 volumes (single purge volume = $Pi\ r^2 h$) of air from the vapor probe and sampling line to a 1L Tedlar bag using the portable pump. A single purge volume from a 24-inch segment of 1/4-inch tubing is equal to 0.02L. Measure and document VOC and tracer gas levels from the purged air with a PID and helium detector. Helium concentration within the purged air must be <10%, otherwise the

probe surface seal must be enhanced. Purge the excess from the tedlar bag at an outdoor upwind location.

4. Remove the brass plug from the SUMMA® canister and connect the flow controller with in-line particulate filter and vacuum gauge to the SUMMA® canister. Do not open the valve on the SUMMA® canister. Record in the field notebook and on the COC form the flow controller number with the appropriate SUMMA® canister number.

5. Connect the polyethylene sample collection tubing to the flow controller and the SUMMA® canister valve. Record in the field notebook the time sampling began and the canister pressure.

6. Connect the other end of the polyethylene tubing to the sub-slab sampling port.

7. Open the SUMMA® canister valves. Record in the field notebook the time sampling began and the canister pressure.

8. Step back and take a photograph of the SUMMA® canister and surrounding area.

Termination of Sample Collection

1. Arrive at the SUMMA® canister location at least 10 to 15 minutes prior to the end of the required sampling interval.

2. Record the final vacuum pressure. Stop collecting the sample by closing the SUMMA® canister valves. The canister should have a minimum amount of vacuum (approximately 2 inches of Hg or slightly greater).

3. Record the date and local time (24-hour basis) of valve closing in the field notebook, sample collection log, and COC form.

4. As done during the preparation in Steps 2 and 3, enrich the shroud (if one is present) with the tracer gas, purge the vapor probe to a Tedlar bag, and screen the purged air for the tracer gas to confirm the integrity of the probe surface seal was maintained. Document the helium concentration detected in the shroud and helium and VOC concentrations in the purged air.

5. Remove the particulate filter and flow controller from the SUMMA® canister, reinstall the brass plug on the canister fitting, and tighten with the appropriate wrench.

6. Package the canister and flow controller in the shipping container supplied by the laboratory for return shipment to the laboratory. The SUMMA® canister does not require preservation with ice or refrigeration during shipment.

7. Complete the appropriate forms and sample labels as directed by the laboratory (e.g., affix card with a string).

8. Complete the COC form and place the requisite copies in a shipping container. Close the shipping container and affix a custody seal to the container closure. Ship the container to the laboratory via overnight carrier (e.g., Federal Express) for analysis.

Vapor Monitoring Point Abandonment

Once the vapor samples have been collected, a temporary vapor monitoring point will be abandoned by removing the sampling materials and filling the resulting hole with concrete. Replace the surface covering (e.g., carpet) to the extent practicable.

VII. Waste Management

No specific waste management procedures are required.

VIII. Data Recording and Management

Measurements will be recorded in the field notebook at the time of measurement with notations of the project name, sample date, sample start and finish time, sample location (e.g., GPS coordinates, distance from permanent structure [e.g., two walls, corner of room]), canister serial number, flow controller serial number, initial vacuum reading, and final pressure reading. Field sampling logs and COC records will be transmitted to the Project Manager.

IX. Quality Assurance

Vapor sample analysis will be performed using USEPA TO-15 methodology. This method uses a quadrupole or ion-trap GC/MS with a capillary column to provide optimum detection limits. The GC/MS system requires a 1-liter gas sample (which can easily be recovered from a 6-liter canister) to provide a 0.2-ppbv detection limit. The 6-liter canister also provides several additional 1-liter samples in case subsequent re-analyses or dilutions are required. This system also offers the advantage of the GC/MS detector, which confirms the identity of detected compounds by evaluating their mass spectra in either the SCAN or SIM mode.

X. References

DiGiulio et. al. 2003. Draft Standard Operating Procedure (SOP) for Installation of Sub-Slab Vapor Probes and Sampling Using EPA TO-15 to Support Vapor Intrusion Investigations. http://www.cdphe.state.co.us/hm/indoorair.pdf (Attachment C).

New York State Department of Health (NYSDOH). 2006. "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" October 2006.

2.0 Indoor Air Sampling and Analysis Using USEPA Method TO-15

I. Scope and Application

This standard operating procedure (SOP) describes the procedures to collect indoor air samples for the analysis of volatile organic compounds (VOCs) using United States Environmental Protection Agency (USEPA) Method TO-15 (TO-15). The TO15 method uses a 6-liter SUMMA® passivated stainless-steel canister. An evacuated SUMMA® canister (<28 inches of mercury [Hg]) will provide a recoverable whole-gas sample of approximately 5.5 liters when allowed to fill to a vacuum of 2 inches of Hg. The whole-air sample is then analyzed for VOCs using a quadrupole or ion-trap gas chromatograph/mass spectrometer (GS/MS) system to provide compound detection limits of 0.2 parts per billion volume (ppbv).

The following sections list the necessary equipment and provide detailed instructions for placing the sampling device and collecting indoor air samples for VOC analysis.

II. Personnel Qualifications

PES field sampling personnel will have current health and safety training, including 40-hour HAZWOPER training, site-specific training, first aid, and cardiopulmonary resuscitation (CPR), as needed. PES field sampling personnel will be well versed in the relevant SOPs and possess the required skills and experience necessary to successfully complete the desired field work. PES personnel responsible for leading indoor air sample collection activities must have previous indoor air sampling experience.

III. Equipment List

The equipment required for indoor air sample collection is presented below:

- ppb RAE PID;
- 6-liter, stainless steel SUMMA® canisters (order at least one extra, if feasible);
- Flow controllers with in-line particulate filters and vacuum gauges (flow controllers are pre-calibrated by the laboratory to a specified sample duration [e.g., 8-hour, 24-hour]). Confirm with lab that flow controller comes with in-line particulate filter and pressure gauge (order an extra set for each extra SUMMA® canister, if feasible);
- Stainless steel “T” fitting (for connection to SUMMA® canisters and Teflon® tubing to collect split [i.e., duplicate] samples);
- Appropriate-sized open-end wrench (typically 9/16-inch);
- Chain-of-custody (COC) form;
- Building survey and product inventory form;
- Sample collection log;
- Field notebook;
- Camera;
- Lock and chain for unsecure locations; and
- Ladder, tripod, or similar to hold canister above the ground surface (optional).

IV. Cautions

Care must be taken to minimize the potential for introducing interferences during the sampling event. As such, care must be taken to keep the canister away from heavy pedestrian traffic areas (e.g., main entranceways, walkways). If the canister is not to be overseen for the entire sample duration, precautions should be taken to maintain the security of the sample (e.g., do not place in areas regularly accessed by the public, fasten the sampling device to a secure object using lock and chain, label the canister to indicate it is part of a scientific project, place the canister in secure housing that does not disrupt the integrity/validity of the sampling event). Sampling personnel should not handle hazardous substances (such as gasoline), permanent marking pens, wear/apply fragrances, or smoke cigarettes before and/or during the sampling event.

Care should also be taken to ensure that the flow controller is pre-calibrated to the proper sample collection time (confirm with laboratory). Sample integrity is maintained if the sampling event is shorter than the target duration, but sample integrity can be compromised if the event is extended to the point that the canister reaches atmospheric pressure.

V. Health and Safety Considerations

Field sampling equipment must be carefully handled to minimize the potential for injury and the spread of hazardous substances.

VI. Procedures

Initial Building Survey

1. Complete the appropriate building survey form and product inventory form (e.g., state-specific form).

2. Survey the area for the apparent presence of items or materials that may potentially produce or emit constituents of concern and interfere with analytical laboratory analysis of the collected sample. Record relevant information on survey form and document with photographs.

3. Using the PID, screen indoor air in the location intended for sampling and the vicinity of potential VOC sources to preliminarily assess for the potential gross presence of VOCs.

4. Record date, time, location, and PID readings in the field notebook.

5. Items or materials that contain constituents of concern and/or exhibit elevated PID readings shall be considered probable sources of VOCs. Removal of these items is dependent on NYS DOH direction.

6. Set a time with the owner or occupant to return for placement of SUMMA® canisters.

Preparation of SUMMA®-Type Canister and Collection of Sample

1. Record the following information in the field notebook (contact the local airport or other suitable information source [e.g., weatherunderground.com] to obtain the following information):

    a. ambient temperature;
    b. barometric pressure; and
    c. relative humidity.

2. Choose the sample location in accordance with the sampling plan. If a breathing zone sample is required, place the canister on a ladder, tripod, or other similar stand to locate the canister orifice 3 to 5 feet above ground or floor surface. If the canister will not be overseen for the entire sampling period, secure the canister as appropriate (e.g., lock and chain). Canister may be affixed to wall/ceiling support with nylon rope or placed on a stable surface. In general, areas near windows, doors, air supply vents, and/or other potential sources of "drafts" shall be avoided.

3. Record SUMMA® canister serial number and flow controller number in the field notebook and COC form. Assign sample identification on canister ID tag, and record in the field notebook, sample collection log, and COC form.

4. Remove the brass dust cap from the SUMMA® canister. Attach the flow controller with in-line particulate filter and vacuum gauge (leave swage-lock cap on the vacuum gauge during this procedure) to the SUMMA® canister with the appropriate-sized wrench. Tighten with fingers first, then gently with the wrench.

5. Open the SUMMA® canister valve to initiate sample collection. Record the date and local time (24-hour basis) of valve opening in the field notebook, sample collection log, and COC form. Collection of duplicate/split samples will include attaching a stainless steel "T" to split the indoor air stream to two SUMMA® canisters, one for the original investigative sample and one for the duplicate/split sample.

6. Record the initial vacuum pressure in the SUMMA® canister in the field notebook and COC form. If the initial vacuum pressure does not register less than -28 inches of Hg, then the SUMMA® canister is not appropriate for use and another canister should be used.

7. Step back and take a photograph of the SUMMA® canister and surrounding area.

Termination of Sample Collection

1. Arrive at the SUMMA® canister location at least 10 to 15 minutes prior to the end of the sampling interval (e.g., 8-hour).

2. Stop collecting the sample when the canister vacuum reaches approximately 2 inches of Hg (leaving some vacuum in the canister provides a way to verify if the canister leaks before it reaches the laboratory) or when the desired sample time has elapsed.

3. Record the final vacuum pressure. Stop collecting the sample by closing the SUMMA® canister valve. Record the date, local time (24-hour basis) of valve closing in the field notebook, sample collection log, and COC form.

4. Remove the particulate filter and flow controller from the SUMMA® canister, reinstall brass plug on canister fitting, and tighten with wrench.

5. Package the canister and flow controller in the shipping container supplied by the laboratory for return shipment to the laboratory. The SUMMA® canister does not require preservation with ice or refrigeration during shipment.

6. Complete the appropriate forms and sample labels as directed by the laboratory (e.g., affix card with string).

7. Complete COC form and place requisite copies in shipping container. Close shipping container and affix custody seal to container closure. Ship to laboratory via overnight carrier (e.g., Federal Express) for analysis.

VII. Waste Management

No specific waste management procedures are required.

VIII. Data Recording and Management

PID measurements taken during the initial building survey will be recorded in the field notebook, with notations of project name, sample date, sample time, and sample location (e.g., description and GPS coordinates if available). A building survey form and product inventory form will also be completed for each building within the facility being sampled during each sampling event.

Measurements will be recorded in the field notebook at the time of measurement, with notations of project name, sample date, sample start and finish times, sample location (e.g., description and GPS coordinates if available), canister serial number, flow controller number, initial vacuum reading, and final vacuum reading. Field notebooks and COC records will be transmitted to the Project Manager.

IX. Quality Assurance

Indoor air sample analysis will be performed using USEPA Method TO-15. This method uses a quadrupole or ion-trap GC/MS with a capillary column to provide optimum detection limits. The GC/MS system requires a 1-liter gas sample (which can easily be recovered from a 6-liter canister) to provide a reporting limit (RL) at or below 0.2 ppbv to enable the evaluation of the data against NYSDOH matrix values. The 6-liter canister also provides several additional 1-liter samples in case subsequent re-analyses or dilutions are required. This system also offers the advantage of the GC/MS detector, which confirms the identity of detected compounds by evaluating their mass spectra in either the SCAN or SIM mode.

3.0 Ambient Air Sampling and Analysis Using USEPA Method TO-15

I. Scope and Application

This standard operating procedure (SOP) describes the procedures to collect ambient air samples for the analysis of volatile organic compounds (VOCs) using United States Environmental Protection Agency (USEPA) Method TO-15 (TO-15). The TO-15 method uses a passivated stainless-steel canister to collect a whole-air sample that is then analyzed for VOCs using a quadrupole or ion-trap gas chromatograph/mass spectrometer (GS/MS).

The following sections list the necessary equipment and provide detailed instructions for placing the sampling device and collecting ambient air samples for VOC analysis.

II. Personnel Qualifications

PES field sampling personnel will have current health and safety training, including 40-hour HAZWOPER training, site-specific training, first aid, and cardiopulmonary resuscitation (CPR), as needed. PES field sampling personnel will be well versed in the relevant SOPs and possess the required skills and experience necessary to successfully complete the desired field work. PES personnel responsible for leading ambient air sample collection activities must have previous ambient air sampling experience.

III. Equipment List

The equipment required for ambient air sample collection is presented below:

- 6-liter, stainless steel SUMMA® canisters (order at least one extra, if feasible);
- Flow controllers with in-line particulate filters and vacuum gauges (flow controllers are pre-calibrated by the laboratory to a specified sample duration [e.g., 8-hour, 24-hour]). Confirm with lab that flow controller comes with in-line particulate filter and pressure gauge (order an extra set for each extra SUMMA® canister, if feasible);
- Appropriate-sized open-end wrench (typically 9/16-inch);
- Chain-of-custody (COC) form;
- Sample collection log;
- Field notebook;
- Camera;
- Lock and chain for unsecure locations; and
- Ladder or similar to hold canister above the ground surface (optional).

IV. Cautions

Care must be taken to minimize the potential for introducing interferences during the sampling event. As such, care must be taken to keep the canister away from heavy pedestrian traffic areas (e.g., main entranceways, walkways). If the canister is not to be overseen for the entire sample duration, precautions should be taken to maintain the security of the sample (e.g., do not place in areas regularly accessed by the public, fasten the sampling device to a secure object using lock

and chain, label the canister to indicate it is part of a scientific project, place the canister in secure housing that does not disrupt the integrity/validity of the sampling event). Sampling personnel should not handle hazardous substances (such as gasoline), permanent marking pens, wear/apply fragrances, or smoke cigarettes before and/or during the sampling event.

Care should also be taken to ensure that the flow controller is pre-calibrated to the proper sample collection time (confirm with laboratory). Sample integrity is maintained if the sampling event is shorter than the target duration, but sample integrity can be compromised if the event is extended to the point that the canister reaches atmospheric pressure.

V. Health and Safety Considerations

Field sampling equipment must be carefully handled to minimize the potential for injury and the spread of hazardous substances.

VI. Procedures

Preparation of SUMMA®-Type Canister and Collection of Sample

1. Record the following information in the field notebook (contact the local airport or other suitable information source [e.g., weatherunderground.com] to obtain the following information):

    a. ambient temperature;
    b. barometric pressure; and
    c. relative humidity.

2. Choose the sample location in accordance with the sampling plan. If a breathing zone sample is required, place the canister on a ladder, tripod, or other similar stand to locate the canister orifice 3 to 5 feet above ground or floor surface. If the canister will not be overseen for the entire sampling period, secure the canister as appropriate (e.g., lock and chain).

3. Record SUMMA® canister serial number and flow controller number in the field notebook and COC form. Assign sample identification on canister ID tag, and record in the field notebook, sample collection log, and COC form.

4. Remove the brass dust cap from the SUMMA® canister. Attach the flow controller with in-line particulate filter and vacuum gauge (leave swage-lock cap on the vacuum gauge during this procedure) to the SUMMA® canister with the appropriate-sized wrench. Tighten with fingers first, then gently with the wrench.

5. Open the SUMMA® canister valve to initiate sample collection. Record the date and local time (24-hour basis) of valve opening in the field notebook, sample collection log, and COC form.

6. Record the initial vacuum pressure in the SUMMA® canister in the field notebook and

COC form. If the initial vacuum pressure does not register less than -28 inches of Hg, then the SUMMA® canister is not appropriate for use and another canister should be used.

7. Step back and take a photograph of the SUMMA® canister and surrounding area.

Termination of Sample Collection

1. Arrive at the SUMMA® canister location at least 10 to 15 minutes prior to the end of the sampling interval (e.g., 8-hour).

2. Stop collecting the sample when the canister vacuum reaches approximately 2 inches of Hg (leaving some vacuum in the canister provides a way to verify if the canister leaks before it reaches the laboratory) or when the desired sample time has elapsed.

3. Record the final vacuum pressure. Stop collecting the sample by closing the SUMMA® canister valve. Record the date, local time (24-hour basis) of valve closing in the field notebook, sample collection log, and COC form.

4. Remove the particulate filter and flow controller from the SUMMA® canister, reinstall brass plug on canister fitting, and tighten with wrench.

5. Package the canister and flow controller in the shipping container supplied by the laboratory for return shipment to the laboratory. The SUMMA® canister does not require preservation with ice or refrigeration during shipment.

6. Complete the appropriate forms and sample labels as directed by the laboratory (e.g., affix card with string).

7. Complete COC form and place requisite copies in shipping container. Close shipping container and affix custody seal to container closure. Ship to laboratory via overnight carrier (e.g., Federal Express) for analysis.

VII. Waste Management

No specific waste management procedures are required.

VIII. Data Recording and Management

Measurements will be recorded in the field notebook at the time of measurement, with notations of project name, sample date, sample start and finish times, sample location (e.g., description and GPS coordinates if available), canister serial number, flow controller number, initial vacuum reading, and final vacuum reading. Field notebooks and COC records will be transmitted to the Project Manager.

IX. Quality Assurance

Ambient air sample analysis will be performed using USEPA Method TO-15. This method uses a quadrupole or ion-trap GC/MS with a capillary column to provide optimum detection limits. The GC/MS system requires a 1-liter gas sample (which can easily be recovered from a 6-liter canister) to provide a 0.2 ppbv detection limit. The 6-liter canister also provides several additional 1-liter samples in case subsequent re-analyses or dilutions are required. This system also offers the advantage of the GC/MS detector, which confirms the identity of detected compounds by evaluating their mass spectra in either the SCAN or SIM mode.

4.0 Standard Operating Procedure: Administering Tracer Gas

When collecting subsurface vapor samples as part of a vapor intrusion evaluation, a tracer gas serves as a quality assurance/quality control device to verify the integrity of the vapor probe seal. Without the use of a tracer, verification that a soil vapor sample has not been diluted by surface air is difficult.

Depending on the nature of the contaminants of concern, a number of different compounds can be used as a tracer. Typically, sulfur hexafluoride (SF6) or helium are used as tracers because they are readily available, have low toxicity, and can be monitored with portable measurement devices. Butane and propane (or other gases) could also be used as a tracer in some situations. Helium is the preferred tracer gas and will generally be used unless site conditions require use of an alternate tracer gas.

The protocol for using a tracer gas is straightforward: simply enrich the atmosphere in the immediate vicinity of the area where the probe intersects the surface with the tracer gas and measure a vapor sample from the probe for the presence of high concentrations (> 10%) of the tracer. A cardboard box, plastic pail, or plastic bag can serve to keep the tracer gas in contact with the probe during the testing.

There are two basic approaches to testing for the tracer gas:

1. Include the tracer gas in the list of target analytes reported by the laboratory; or

2. Use a portable monitoring device to analyze a sample of soil vapor for the tracer prior to and after sampling for the compounds of concern. (Note that tracer gas samples can be collected via syringe, Tedlar bag, etc. They need not be collected in SUMMA® canisters or minicans.)

The advantage of the second approach is that the real-time tracer sampling results can be used to confirm the integrity of the probe seals prior to formal sample collection.

Because minor leakage around the probe seal should not materially affect the usability of the soil vapor sampling results, the mere presence of the tracer gas in the sample should not be a cause for alarm. Consequently, portable field monitoring devices with detection limits in the low ppm range are more than adequate for screening samples for the tracer. If high concentrations (> 10%) of tracer gas are observed in a sample, the probe seal should be enhanced to reduce the infiltration of ambient air.

During the initial stages of a subsurface vapor sampling program, tracer gas samples will be collected at each of the sampling probe locations. When using permanent soil vapor probes as part of a long-term monitoring program, annual testing of the probe integrity is recommended.

Attachment C - Indoor Air Quality Questionnaire and Building Inventory

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name _____ Date/Time Prepared _____

Preparer's Affiliation _____ Phone No._____

Purpose of Investigation_____

1. OCCUPANT:

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors_____ Building age_____

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

_____

_____

_____

Airflow near source

_____

_____

_____

Outdoor air infiltration

_____

_____

_____

Infiltration into air ducts

_____

_____

_____

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: _____(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

_____

_____

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: _____

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

_____

_____

_____

_____

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	_____
1st Floor	_____
2nd Floor	_____
3rd Floor	_____
4th Floor	_____

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / N

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA Please specify_____

d. Has the building ever had a fire? Y / N When?_____

e. Is a kerosene or unvented gas space heater present? Y / N Where?_____

f. Is there a workshop or hobby/craft area? Y / N Where & Type? _____

g. Is there smoking in the building? Y / N How frequently? _____

h. Have cleaning products been used recently? Y / N When & Type? _____

i. Have cosmetic products been used recently? Y / N When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / N Where & When? _____

l. Have air fresheners been used recently? Y / N When & Type? _____

m. Is there a kitchen exhaust fan? Y / N If yes, where vented? _____

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? _____

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type? _____

Are there odors in the building? Y / N
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply:	Public Water	Drilled Well	Driven Well	Dug Well	Other: _____
Sewage Disposal:	Public Sewer	Septic Tank	Leach Field	Dry Well	Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

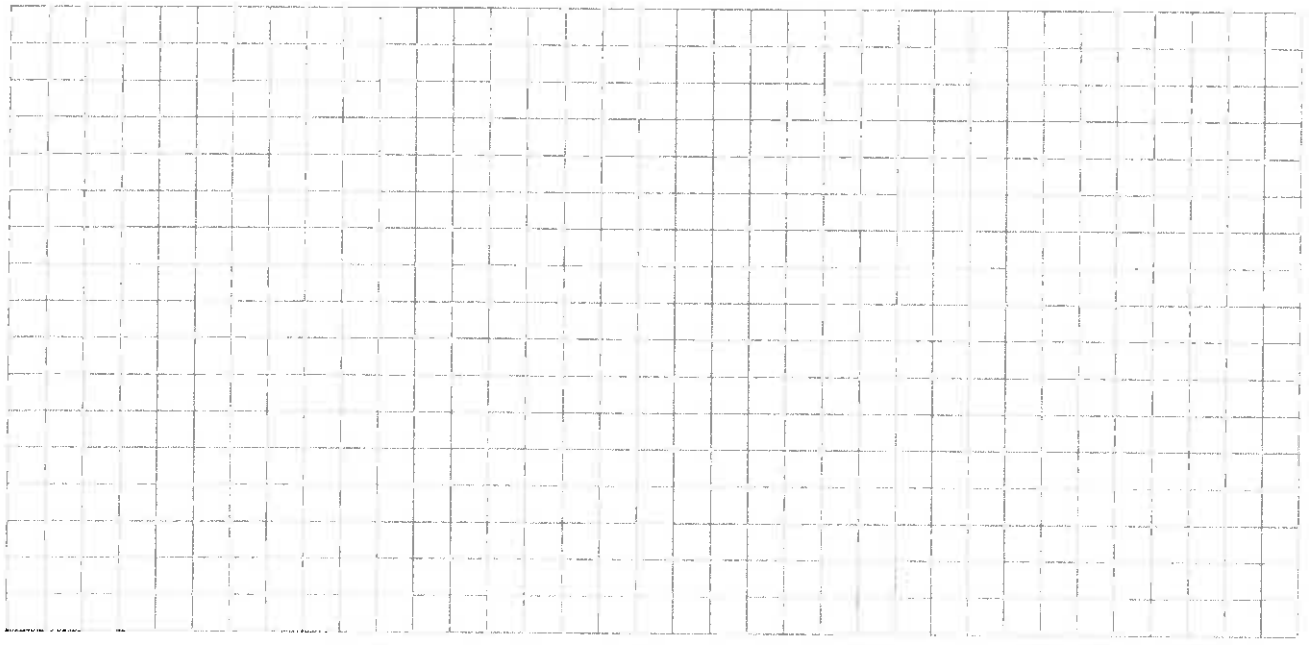
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

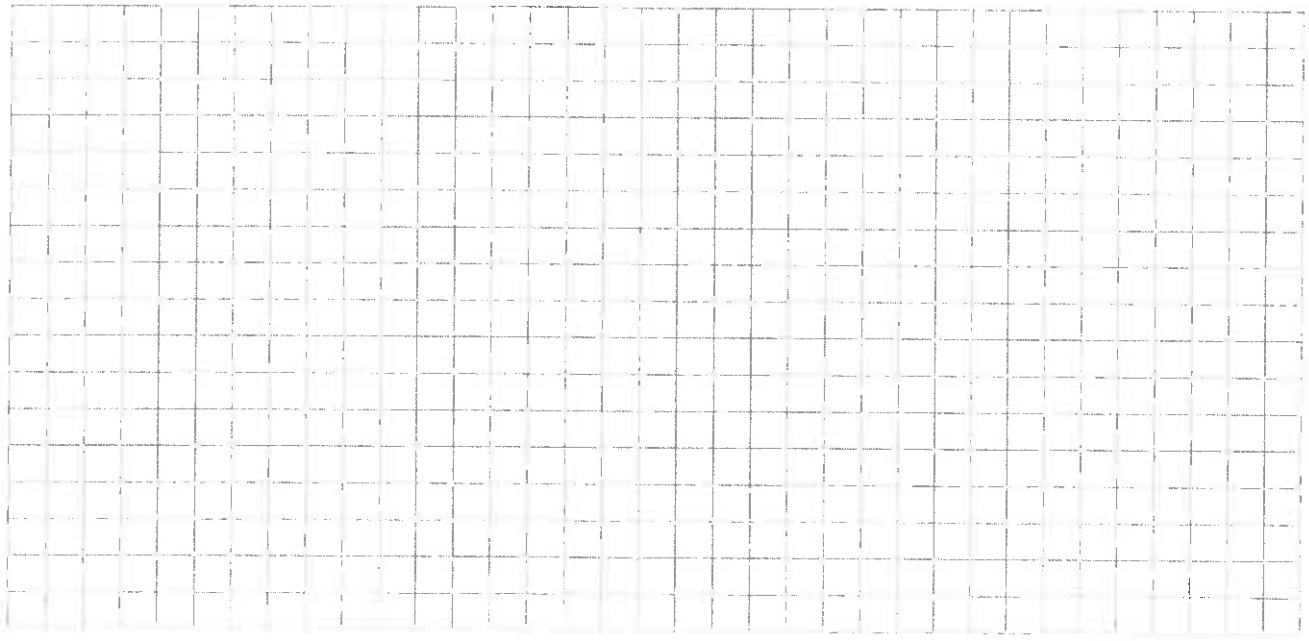
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



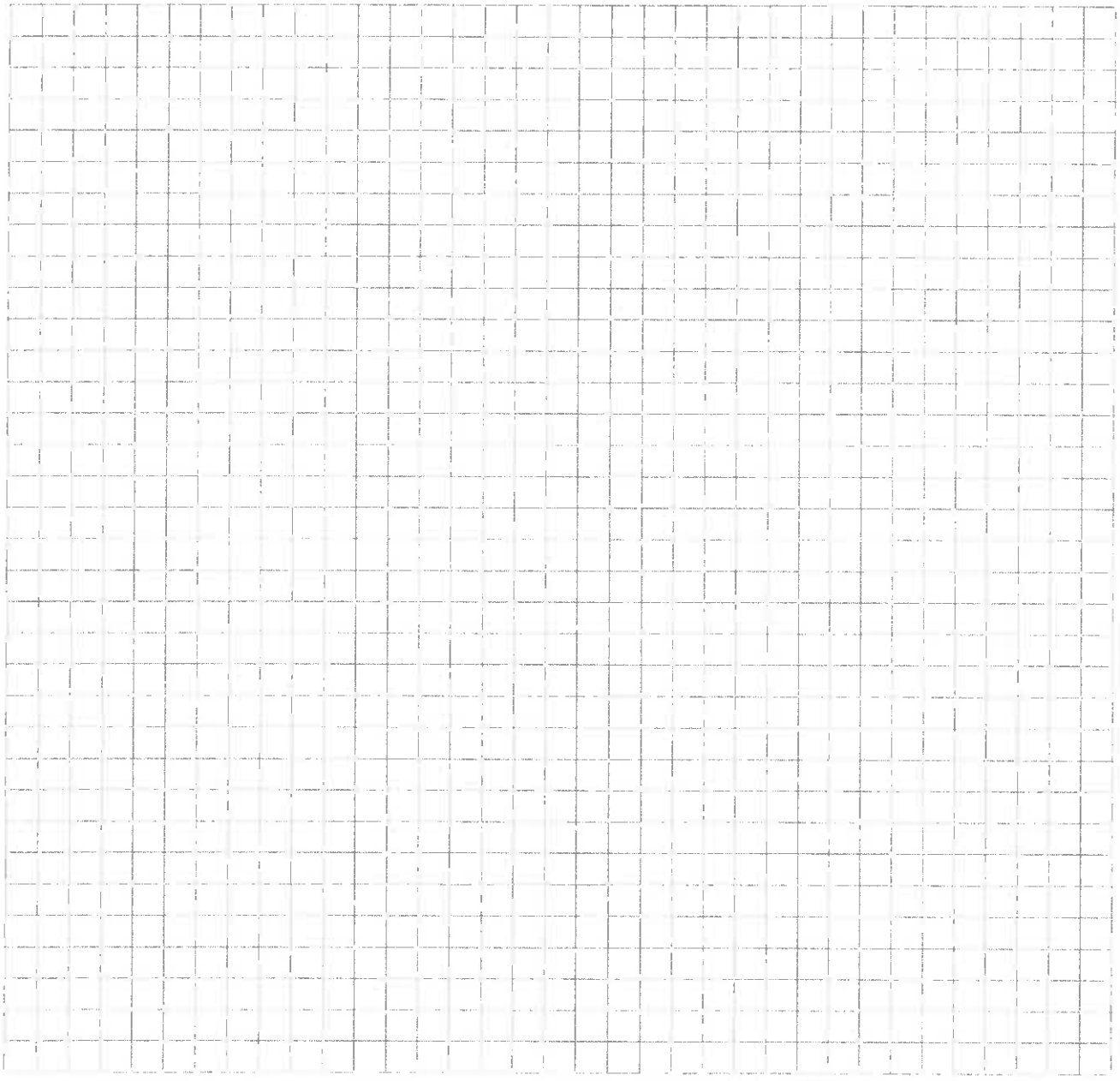
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y / N

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Site Specific Health and Safety Plan

Lubricant Packaging Co.
17 Industrial Place, Middletown, Orange County, NY

NYSDEC Site No.: 336034

January 2021

TABLE OF CONTENTS

SECTION 1

APPROVALS

By their signatures, the undersigned certify that this Site Specific Health and Safety Plan (HASP) for the Lubricant Packaging Co. project in Middletown, New York provides the necessary health and safety assessment for the activities that Precision Environmental Services (PES) plans to conduct at the Site.

1/26/21

John J. Johnson, President
Precision Environmental Services, Inc.

Date

1/26/21

Brian Neumann, Project Manager
Precision Environmental Services, Inc.

Date

SECTION 2

GENERAL PROJECT OVERVIEW

2.1 OBJECTIVE

This Project Specific Health and Safety Plan (HASP) has been prepared to act as the document covering the work of Precision Environmental Services (PES), its employees and subcontractors at the Lubricant Packaging Co. project site. PES employees and subcontractors will follow all the requirements of the HASP at all times while conducting activities at the Site.

This HASP has been prepared to provide details of the health and safety procedures, methods and requirements to be followed while completing PFAS sampling, evaluation and soil vapor intrusion (SVI) monitoring activities at the Site. Project activities planned to be conducted at the Site include the following tasks:

1. Coordinate the sampling with the property owners and Department contracted lab
2. Visit individual properties and sample
3. Perform third party data validation
4. Prepare letter report of findings and submit EDD

The objective of this plan is to provide a mechanism for establishing safe working conditions at the project site. The safety organization, procedures and protective equipment have been established based on an analysis of potential physical, chemical and biological hazards. Specific hazard control methodologies have been evaluated and selected to minimize the potential of accident or injury.

This HASP discusses general safety hazards associated with specific activities outlined in the scope of work for this project. This plan also specifies minimum safety precautions for various field activities. Additional precautionary and preparatory measures are addressed to deal with the potential exposure to the Novel Corona Virus (COVID-19). All subcontractors involved in the specified activities must review and comply with these safety procedures as well as their own standard safe operating procedures, ensuring that the minimum requirements set forth in this HASP, 29 CFR 1910 and 29 CFR 1926 are met. All subcontractors are responsible for conducting operations in a safe and healthful manner in order to protect all site personnel.

2.2 PROJECT SITE BACKGROUND and HISTORY

Location: The site for the purpose of this project consists of properties located on Industrial Place, Middletown, Orange County, New York (see Figure 1). The properties are located in a commerical setting.

The Lubricant Packaging Co. site is a Class 2 Inactive Hazardous Waste Site. Historical poor house-keeping practices at the site resulted in spills and releases of 1,1,1-trichloroethene (1,1,1-TCE) and mineral spirits used during former degreasing and lubrication activities. Environmental investigations have been conducted at the site since 1994.

2.3 SITE CONTACT INFORMATION

Table 2.3 identifies the site personal and their contact information as well as the contact information for the most likely agencies or individuals that will be necessary in the event of an emergency. In the event of a site emergency, personnel are responsible for making the appropriate notifications and reporting to necessary agencies or individuals. Personnel are expected to determine which agency is to be contacted first, with 911 being the priority in a potentially life threatening situation, followed by reporting to the, Site Safety Officer, Site Supervisor, Project Manager and other personnel. Additional reporting requirements and notifications will be identified and appropriate follow-up will be directed by the Site Safety Officer.

TABLE 2.3
PROJECT CONTACT AND EMERGENCY PHONE NUMBERS

AGENCY	TELEPHONE NUMBERS
Police / Fire / Ambulance - Emergency	**911**
Fire Department – Non-Emergency	**914-234-3133**
State Police Department	**911**
Hospital: Northern Westchester Hospital	**914-666-1200**
National Response Center (Operated By USEPA and U.S.C.G.)	**800-424-8802**
NYSDEC Spill Hotline	**800-457-7362**
Poison Control Center	**800-222-1222**
Brian Neumann, PES	**518-528-1427**
John Johnson, PES	**518-365-0977**

SECTION 3

SITE ORGANIZATION AND RESPONSIBILITIES

3.1 OVERVIEW

All personnel will be responsible for continuous adherence to the procedures set forth in the HASP while performing activities at the Site. In no case may work be performed which conflicts with the intent of or the inherent safety and environmental cautions expressed in these procedures. If PES or subcontractor personnel are found violating safety and health procedures they will be subject to disciplinary action up to and including dismissal. Field sampling activities will be performed by a technician who will act as the Field Safety Officer and report to the PM.

3.2 PROJECT SAFETY AND HEALTH

Brian Neumann will assign a technician and/or geologist to perform sampling and they will act as the Field Safety Officer, while on site. Should more than one worker (i.e. PES staff and subcontractors, if needed) be present onsite each day a daily tailgate safety meeting will be performed. The tailgates will involve all workers and address daily scope of work and related hazards. Completed forms shall be returned to the Project Manager at the end of each day or field mobilization event.

3.3 PROJECT MANAGER

The project manager is ultimately responsible for implementation of the safety and health program. This includes communicating specific health and safety requirements to Site supervision regarding planned activities, unforeseen or changing conditions, and resolution of any questions regarding safety procedures or OSHA levels of protection to be used. Brian Neumann will be the project manager for this work.

SECTION 4

CHEMICAL, PHYSICAL, AND BIOLOGICAL HAZARDS

4.1 OVERVIEW

The purpose of this section is to identify the physical, chemical, and biological hazards associated with implementation of the activities at the site. Subsections will discuss each task or operation for the project in terms of the general hazards associated with it. If additional activities, beyond those identified, are conducted on-site by PES or its subcontractors, a supplemental health and safety task analysis will be performed specifically for those activities. The purpose of this information is to maintain an accident and injury free work site. This section will also outline the specific chemical contaminants of concern, as well as anticipated physical hazards that may be encountered at the site.

4.2 CHEMICAL HAZARDS

Historical monitoring and sampling data indicate that the potential for exposure from contaminates of concern are limited and not expected for the soil and SVI investigations.

4.2.1 CHEMICAL HAZARDS BROUGHT TO SITE

If chemicals are used on-site, workers must adhere to the Hazard Communication Standard (i.e., 29 CFR §1910.1200). The following procedures must be followed for all chemicals brought on-site.

- Labels on incoming primary chemical containers must not be defaced.
- Chemical containers must be stored in appropriate storage cabinets.
- Secondary containers and storage cabinets must be correctly and clearly labeled using the Global Harmonization System.
- Incompatible chemicals must not be stored together.
- A Safety Data Sheet for each chemical must be included in the onsite SDS book.
- Workers must receive training on the hazards of the chemicals included in SDS book.

4.3 PHYSICAL HAZARDS

The topics below identify the type of physical hazards, which may be present on the site during sampling activities. Actions to control these hazards are identified below and in Section 8, Safe Work Practices.

- **Slip, Trip, Fall—**These type hazards result from unleveled surfaces, slippery surfaces, and hard to see objects located across walking paths (i.e., rope, cords), and are responsible for a large number of work-related injuries. If identified, fall hazards will be marked and workers will be reminded of the uneven terrain during daily meetings.
- **Housekeeping and Sanitation—**In order to permit safe and efficient work conditions, all work areas shall be kept clean and free of debris to the greatest extent possible. Work will be planned to progress in an orderly manner with debris being cleared across the working area to create clear walking areas as debris is removed. All hand tools will be kept in storage until they will be needed for use.

- Potable water will be used for first aid, drinking, and personal hygiene purposes. Disposable drinking cups will be provided along with the water coolers. Community drinking cups will not be permitted.

- **Lighting Levels**—For work activities scheduled after dusk, poor lighting conditions may increase risk of injury. Low light levels may exist in confined spaces as well. Though not planned, if work is to be performed after dusk or before dawn, supplemental site and vehicle lighting will be used. No operations will be performed after these periods of the day without both supplemented and vehicle lighting systems.
- **Severe Weather**- Thunderstorms with lightning present a significant danger to personnel working outdoors during the spring and summer seasons. Work will be immediately stopped when lightning is within five miles of the site and overhead hazards are present. Precaution will taken if work is expected during snow storm periods.
- **Electrical—**Though minimal, electrical hazards may exist during sampling activities. Employees will be trained in and shall use Lockout/Tagout procedures as required. GFCI will be provided on outdoor temporary power.

4.4 BIOLOGICAL HAZARDS

Potential biological hazards include plants, ticks, snakes, ants and various stinging insects. Some of the most common biological hazards can be prevented or the effects reduced by over the counter medications. These medications, as recommended by local pharmacists, will be kept in supply in the office first aid kit. Workers who know they are sensitized to any biological hazard should not perform any task that would increase their risk for anaphylactic shock.

Table 4.4, Biological Hazards

Biological Hazard	Types/Description	Symptoms	Actions to Take
Poisonous Plants	Common poisonous plants include those from the poison ivy group, including poison oak and sumac. The most distinctive features of poison ivy and oak are that their leaves are composed of three leaflets	A severe rash characterized by redness, blisters, swelling, and intense burning and itching. The victim may also develop a headache, high fever and feel very ill. The rash appears within a few hours of contact, but may be delayed from 24 to 48 hours.	Remove all contaminated clothing and wash any exposed skin thoroughly with soap and water, followed by rubbing alcohol. Apply calamine lotion if rash is mild. Seek medical advice if a severe reaction occurs or if there is a known history of previous sensitivity.
Ticks	Wingless, bloodsucking insects. Certain types of ticks can carry diseases such as Rocky Mountain Spotted Fever and Lyme's Disease	Moderate to high fever, severe headache, fatigue, deep muscle pain, chills and rash.	Remove it by grasping the tick with a pair of tweezers as close to the skin as possible. Be careful not to leave any part of the tick attached. The skin area of the victim should be marked or circled to indicate where the bite occurred. The tick should be placed in a container or zip-lock bag and marked as to the date, time and body area from which it was removed. If you suspect that you have been bitten by a tick or you have symptoms of Lyme disease, notify the Health and Safety Officer or your physician.
Snakes Bites	Common venomous snakes include cobra, copperhead, coral, cottonmouth, rattlesnake. If you see a snake do not touch, tease, or go near it.	Two puncture wounds, difficulty breathing, blurred vision, Localized pain, swelling, convulsions, and nausea	Keep the victim warm and rested. Take them to the nearest hospital immediately (if possible, bring the snake). Do not give them anything to eat or drink. Do not use a tourniquet. Do not cut the bite or attempt to suck out the venom. Do not put ice on the site of the bite.
Insect Stings	Bees: wasps, hornets, bumblebees	Stings from insects are often painful, cause swelling and can be fatal if a severe allergic reaction such as anaphylactic shock occurs.	If a sting occurs, the stinger should be scraped out of the skin, opposite of the sting direction. The area should be washed with soap and water followed by an ice pack. If the victim has a history of allergic reaction, he should be taken to the nearest medical facility.
Mosquitos	Blood-sucking insect, Most common disease vector in the world: West Nile Virus, which could result in fatal illness called West Nile Encephalitis.	Red bumps, itching, swelling,	To avoid mosquito bites, apply insect repellent containing DEET (N,N-diethyl-meta-toluamide) when outdoors and wear long-sleeved clothes and long pants during peak mosquito feeding hours (dusk until dawn). Eliminating standing water sources around the jobsite will also prevent mosquitoes from nesting.

4.5 BLOODBORNE PATHOGENS

The majority of the occupational tasks on-site will not involve a significant risk of exposure to blood, blood components, or body fluids. The highest risk of acquiring any blood-borne pathogen for employees on-site will be following an injury. When administering first aid care, there are potential hazards associated with blood-borne pathogens that cause diseases such as Human Immunodeficiency Virus (HIV), Hepatitis B (HBV), Hepatitis A (HAV), Hepatitis C (HCV), or the Herpes Simplex Virus (HSV). An employee who has not received the appropriate certification should never execute first aid and/or CPR.

In order to minimize any potential pathogen exposure, all employees should use the hand washing facilities on a regular basis. Additionally, the following universal precautions should be followed to prevent further potential risk:

- Direct skin or mucous membrane contact with blood should be avoided.
- Open skin cuts or sores should be covered to prevent contamination from infectious agents.
- Body parts should be washed immediately after contact with blood or body fluids that might contain blood, even when gloves or other barriers have been used.
- Gloves and disposable materials used to clean spilled blood shall be properly disposed of in an approved hazardous waste container.
- First aid responders shall wear latex or thin mil nitrile gloves when performing any procedure risking contact with blood or body substances.
- Safety glasses will be worn to protect the eyes from splashing or atomization of body fluids.
- A CPR mask will be worn when performing CPR to avoid mouth-to-mouth contact.
- Work gloves will be worn to minimize the risk of injury to the hands and finger when working on all equipment with sharp or rough edges.
- Never pick up broken glass or possible contaminated material with your unprotected hands.

5.1 CHEMICAL HAZARDS

Chemical hazards associated with this project are minimal.

5.1.1 Health and Safety Mitigation Measures (PPE)

Employees will initially wear Level D protection:

- Type II hard hat that meets the ANSI/ISEA Z89.1-2009 standard.
- Safety glasses
- Steel-toe or composite safety boots
- High visibility vest
- Leather or similar type gloves
- Life vests and hip waders while in shallow water
- Only PFAS acceptable items will be worn and used during sampling

Workers will conduct a daily inspection of their PPE before donning. They will frequently check the integrity of their PPE by looking for any tears, rips or holes while they work. If any such flaws are noted, the damaged PPE will be removed and replaced.

6.1 TRAINING REQUIREMENTS

All PES personnel at the site will have HAZWOPER training relative to their job responsibilities or role at the jobsite. Such training will be provided prior to their being allowed to engage in site activities that could expose personnel to health and safety hazards. The Project Manager or designated alternate has the responsibility to ensure this training is provided—reflective of site conditions—and is updated as needed.

All personnel who will work on the site will be required to read this HASP. Prior to work on the site, each individual must read and sign a **Site Health and Safety Plan Acknowledgement Form** *(Appendix A)* indicating they have read and understand the requirements set forth in this HASP. Before the start of each day, a toolbox or tailgate safety talk will be conducted to address safety issues and concerns.

6.2 GENERAL MEDICAL PROGRAM

PES will maintain medical surveillance records for its employees and require lower-tier subcontractors to do likewise. These records will be available to the regulatory agencies upon request by appropriate officials following all rules prescribed under 29 CFR 1910.120. These records will be maintained for the duration of employment plus 30 years.

6.2.1 Exposure/Injury Medical Emergency

As a follow-up to an injury or illness, or as a result of potential exposure to either a chemical or physical hazard, all employees are entitled and required to seek appropriate medical attention. The Project Manager or designated alternate must be apprised of the need for seeking such medical attention and assist in determining the immediacy of the situation.

7.1 SITE CONTROL

Site control, when warranted, will minimize the potential contamination of workers and observers, protect the public from potential on-site hazards, and prevent vandalism of equipment and materials. Site control measures also enhance response in an emergency. Should contamination be found the site field operations can be divided into work zones. Contamination in the work area is not expected given the past results associated with this site.

SECTION 8

SAFE WORK PRACTICES

8.1 GENERAL

To maintain strong safety awareness and enforce safe procedures at the site, a list of standing orders has been developed stating the practices that must always be followed on-site. The list of standing orders is as follows:

1. No smoking, eating, or gum chewing will be permitted in the work area;
2. Fieldwork will only be conducted during daylight hours unless adequate artificial lighting is provided;
3. All personnel are required to read the HASP, and sign all appropriate forms prior to initiating work;
4. Walkways will be kept clear of equipment, sampling materials, and other obstructions.

8.2 ELECTRICAL SAFETY

Working with electrical systems presents safety hazards. Lack of basic electrical safety and sound wiring practices can result in fatalities due to electric shock.

- Three-wire (grounded) systems with ground fault circuit interrupters (GFCI) will be used on all temporary 110-volt electrical systems (extension cords, etc.).
- Wiring and grounding of all new facilities will be in accordance with the latest edition of the NEC.
- Wiring will be performed by a qualified electrician.
- No work will be performed on energized electrical systems capable of delivering current greater than 0.005 amps.
- Any wiring required will be protected from the elements while in use.
- High-voltage overhead lines will be identified to all equipment operators and safe clear distances (10 foot minimum) will be maintained at all times.

8.3 CONFINED SPACE ENTRY

Workplaces that are not intended for human occupancy are defined as confined spaces. Limited openings hinder proper ventilation, escape, and rescue; therefore, creating a potentially life threatening situation for a worker.

Confined space entry is not anticipated on this project and will not be undertaken without prior approval from the Project Manager. Any confined space entry will be governed by the OSHA regulation, 29 CFR 1910.146, and will be conducted in accordance with the company's **Confined Space Entry Procedures**.

8.4 SLIPS, TRIPS, AND FALLS

Slips, trips, and falls can easily occur in any work setting. Walkways to and from sampling locations will be established and maintained as level and free of obstructions as possible. In most cases workers will be inside private residences and should remain very conscious of others moving about in the space.

SECTION 9

DECONTAMINATION PROTOCOLS

9.1 GENERAL

Decontamination is the process of removing or neutralizing contaminants that have accumulated on personnel, personal protective equipment, and equipment. Decontamination activities are critical to health and safety at hazardous waste sites. Decontamination protects workers from hazardous substances that may contaminate and eventually permeate the protective clothing, respiratory equipment, tools, vehicles, and other equipment used on-site; it protects all site personnel by minimizing the transfer of harmful materials into clean areas, and it protects the community by preventing uncontrolled transportation of contaminants from the site or within private residences in the case of this project work scope.

9.2 PREVENTION OF CONTAMINATION

The first step in decontamination is to establish decontamination procedures that minimize contact with waste and thus the potential for spreading contaminants. PES will:

Personnel—

- Stress work practices that minimize contact with hazardous substances (e.g., do not walk through areas of obvious contamination; do not directly touch potentially hazardous substances).
- Use remote sampling, handling, and container-opening techniques.
- Protect monitoring and sampling instruments by bagging. Make openings in the bags for sample ports and sensors that must contact site materials.
- Wear disposable outer garments and use disposable equipment where appropriate.

Prior to each use, the PPE will be inspected to ensure that it contains no cuts or punctures that could expose workers to contaminants. Similarly, any injuries to the skin surface, such as cuts and scratches, may enhance the potential for chemicals or infectious agents that directly contact the worker's skin to penetrate the body. Care will be taken to protect these areas. Workers with large areas of damaged skin will not be allowed to work on-site until the skin heals.

9.3 TYPES OF CONTAMINATION

Contaminants can be located on the surface of personal protective equipment and/or adsorbed into the PPE material. Surface contaminants may be easy to detect and remove; however, contaminants that have permeated a material are difficult or impossible to detect and subsequently remove. If contaminants that have permeated a material are not removed by decontamination, they may continue to permeate to the inner surface of the material where they can cause an unexpected exposure.

Five factors, which may affect the extent of permeation, are listed below:

- **Contact Time.** The longer a contaminant is in contact with an object, the greater the probability and extent of permeation. For this reason, minimizing contact time is one of the most important objectives of a decontamination program.
  When working with VOCs, respiratory contact time can be reduced by avoiding the vapors from the contaminated soils. Employees can reduce dermal contact time by using the correct PPE to avoid direct contact with hazardous materials. Employees can reduce their overall contact time by washing their exposed body parts, with soap and water, on a regular basis.

- **Concentration.** Molecules flow from areas of high concentration to areas of low concentration. As concentrations of waste increases, the potential for permeation of personal protective clothing increases. Because of this, workers will be instructed to change their outer layer of work clothing if it becomes heavily soiled.
- **Temperature.** An increase in temperature generally increases the permeation rate of contaminants. For example, VOCs have the ability to produce vapors, which can become an inhalation hazard. As the ambient temperature increases, the concentration of hazardous vapors may become sufficient to implement or increase the level of respiratory protection. The decision to increase respiratory protection will be based upon the results of the real-time air monitoring performed in the workers breathing zones.
- **Size of Contaminant Molecules and Pore Space.** Permeation increases as the contaminant molecule becomes smaller and as the pore space of the material to be permeated increases. Tyvek® coveralls should keep the majority of contaminated soils from contacting the employee's skin. However, workers will be required to tape all PPE junction points to further decrease the opportunity of contact with contaminated soils. Coveralls and other PPE should be checked regularly to ensure there are no tears, rips and holes, which might allow the invasion of contaminated soils to the skin surface.
- **Physical State of Wastes.** As a rule, gases, vapors, and low-viscosity liquids tend to permeate more readily than high-viscosity liquids or solids. The contaminated material on the site is primarily capable of producing hazardous vapors, which may create an inhalation hazard. Because of this, the handling of soils will be minimized to reduce vapor generation. Also, stockpiles of contaminated material will be covered to reduce vapors in the work area.

9.4 PERSONAL HYGIENE AND DECONTAMINATION PROCEDURES

9.4.1 Decontamination Procedures

Should tasks arise that require protective clothing and respiratory protection, a decontamination area will be provided for PES employees who work in the area designated. Employees will be required to don the PPE before entering and doff the PPE when leaving. All personnel and equipment leaving the site will be thoroughly decontaminated.

10.1 COVID-19 AWARENESS AND PREPAREDNESS

The objective is to minimize transmission and subsequent infections of Novel Coronavirus Disease 2019 (COVID-19). COVID-19 typically causes respiratory illness in people. Best practice measures initiated by the Center for Disease Control, State Health Department and local government will minimize worker transmission and infection potential with other workers and the general public. Controlling the dispersal of airborne infectious agents is critical to achieving this objective. Refer to attached NYSDEC Covid-19 Risk Management, Section 01 35 33 1 for further details.

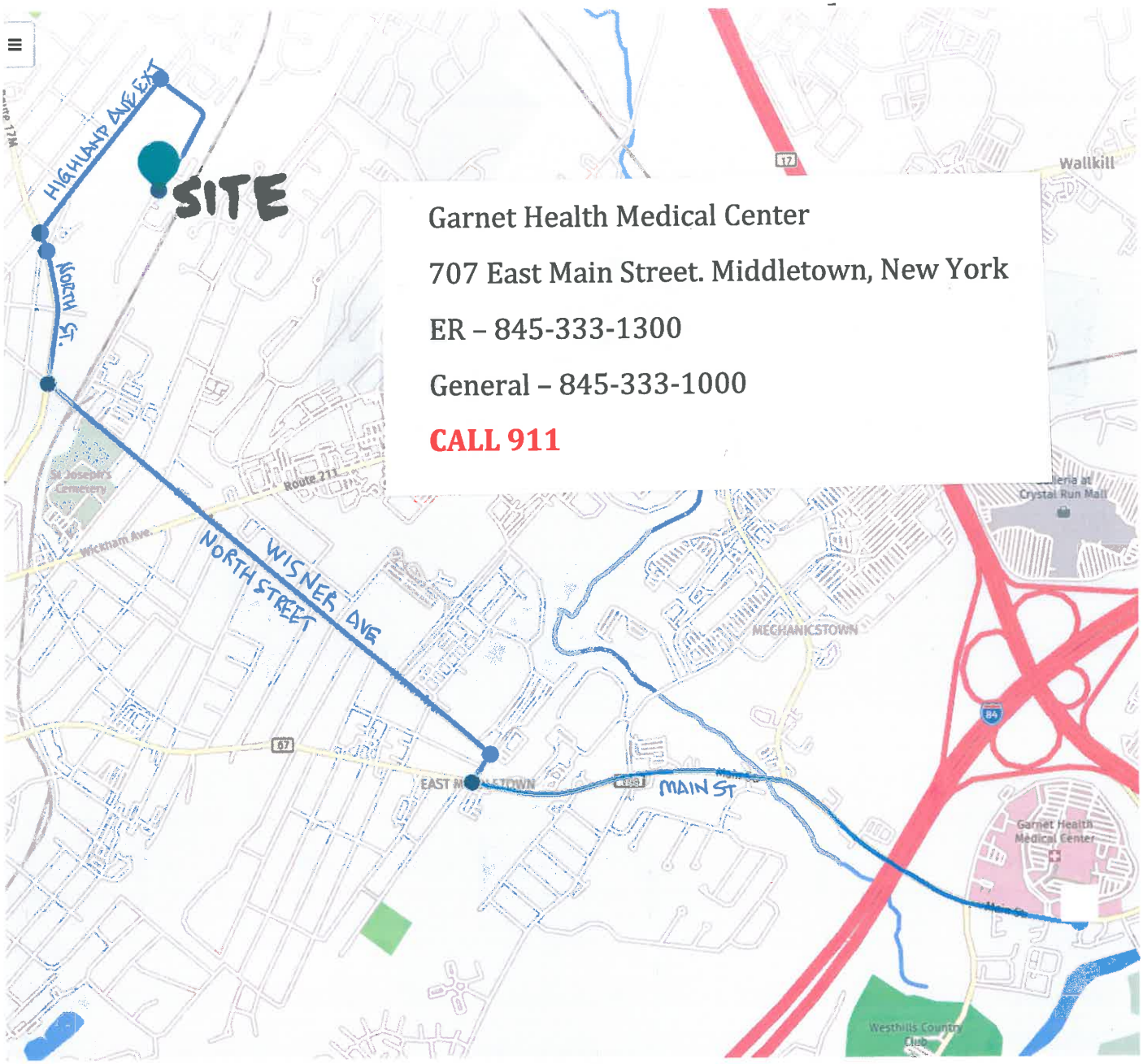
In addition to NYSDEC Section 01 35 33 1 procedure PES will administer daily temperature readings during pre-work tailgate safety meetings or solitary PES technician visits to sample private drinking water wells. PES workers will also complete the attached daily acknowledgement form, demonstrating they do not meet the criteria for possible Covid-19 infection. Should the criteria be met, especially elevated fever (100.4 F and above), that employee will remove themself from the site. PES workers will maintain good hygiene as directed by the procedure.

SECTION 11

HOSPITAL ROUTE

11.1 HOSPITAL DIRECTIONS

In the event of an emergency or an incident that occurs, injured employees will be taken to the nearest hospital. Please consult the PES Master Health and Safety Plan for proper procedures to follow when handling employee injuries. A map, including written directions is provided below showing the route from the general site area to the nearest hospital. When in doubt or unable to get yourself to the hospital dial 911.



SITE SAFETY PLAN ACKNOWLEDGEMENT FORM

I hereby acknowledge that I have been informed and understand and will abide by the programs and procedures set forth in the Site Health & Safety Plan.

PRINTED NAME	SIGNATURE	REPRESENTING/CO.	DATE

Attachment – COVID-19 Awareness and Preparedness

SECTION 01 35 33 – COVID-19 RISK MANAGEMENT

PART 1 – GENERAL

1.1 SUMMARY

A. This Section includes requirements for managing and minimizing the potential for transmission of the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) virus, which causes the Novel Coronavirus Disease 2019 (COVID-19). COVID-19 typically causes respiratory illness in people.

B. Transmission: SARS-CoV-2 is currently known to spread via respiratory droplets produced when a person infected with the virus coughs or sneezes, the same way flu and other respiratory illnesses spread. SARS-CoV-2 can also be transmitted if people touch surfaces and objects with the virus on it.

C. Symptoms: COVID-19 can cause mild to severe respiratory illness with symptoms of fever, cough, and difficulty breathing. Preliminary information suggests older adults and people with underlying health conditions or compromised immune systems may be at higher risk of severe illness from this virus. Center for Disease Control (CDC) believes that symptoms of COVID-19 begin between 2 and 14 days after exposure.

D. Best Practices to Prevent Infection: Currently the best way identified to prevent infection is to minimize the potential of exposure to SARS-CoV-2. CDC recommends everyday actions to help prevent the spread of any respiratory viruses

- Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, use an alcohol-based hand sanitizer, containing at least 60% alcohol.
- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Avoid close contact with people who are sick.
- Stay home when you are sick.
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash can and wash hands or use hand sanitizer.
- Clean and disinfect frequently touched objects and surfaces.
- Wear face masks
- Safe social distancing (e.g., maintain a distance of 6 feet between people, limited group meetings)

1.2 OBJECTIVE

A. The objective of this specification is to minimize transmission and subsequent infections of COVID-19 in project staff that may arise as a result of exposure to SARS-CoV-2 released into the environment during construction and renovation activities. Controlling the dispersal of airborne infectious agents is critical to achieving this objective.

1.3 PERFORMANCE REQUIREMENTS AND RESPONSIBILITIES

A. The intent of this Section is to document and formalize the Contractor's requirements for minimizing the risk of transmission of COVID-19 among site workers, project staff, and

the surrounding community during construction per the latest recommendations of federal, state and local health agencies. This includes developing a COVID-19 Management Plan, establishing procedures for conducting onsite work activities to prevent virus transmission, monitoring staff health, and reporting requirements.

B. The Contractor is expected to communicate the requirements described in this section to all site workers, subcontractors, and visitors to the site daily, during daily Health and Safety meetings as well as through site postings (see attachment).

C. Contractors and their subcontractors are required at all times to guard the safety and health of all persons on and in the vicinity of the work site.

D. Contractors and their subcontractors are required to comply with all applicable rules, regulations, codes, and bulletins of the New York State Department of Labor and the standards imposed under the Federal Occupational Safety and Health Act of 1970, as amended ("OSHA").

E. Contractors and their subcontractors must comply with all City or State of New York safety requirements for projects within the City or State of New York constructed in accordance with the applicable building code.

F. Contractors and their subcontractors shall stay current and immediately implement the most up-to-date government issued practices to protect the safety and health of your employees, clients, and the general public.

1.4 RELATED SECTIONS

A. Section <INSERT APPLICABLE REFERENCE>, Contractor’s Health and Safety Plan

1.5 REFERENCES

A. Occupational Safety and Health Administration (OSHA) Guidance on Preparing Workplaces for COVID-19

B. New York State Department of Health

C. Centers for Disease Control and Prevention (CDC)

D. National Institute for Occupational Safety and Health (NIOSH)

E. Health Insurance Portability and Accountability Act (HIPAA)

1.6 SUBMITTALS

A. The Contractor shall prepare a COVID-19 Management Plan which can be a Supplement, or Addendum, to the Contractor’ Health and Safety Plan

B. The CONTRACTOR shall develop a one-page summary of site-specific practices for COVID-19 management and clearly display on site. Operating hours, delivery times, and extra considerations for works involving a high volume of personnel or potential for interaction with community members could also be included in the summary.

C. The Contractor's Daily Field Report shall include a Daily Health Checklist, with the following questions at a minimum:

DAILY HEALTH CHECKLIST

Is social distancing being practiced?	Yes ☐	No ☐
Is the tail gate safety meeting held outdoors?	Yes ☐	No ☐
Are remote/call-in job meetings being held in lieu of meeting in person where possible?	Yes ☐	No ☐
Were personal protective gloves, masks, and eye protection being used?	Yes ☐	No ☐
Are sanitizing wipes, wash stations or spray available?	Yes ☐	No ☐
Have any workers/visitors been excluded based on close contact with individuals diagnosed with COVID-19, have recently traveled to restricted areas or countries, or are symptomatic (fever, chills, cough/shortness of breath)?	Yes ☐	No ☐
Comments:		

1.7 COVID-19 MANAGEMENT PLAN

A. At a minimum, the COVID-19 Management Plan shall include:
   1. Identification of potential exposure pathways and exposure risks associated with work tasks, e.g. activity hazard analysis (AHA).
   2. Identification of local health department contact information and COVID-19 testing sites and procedures.
   3. Detailed written description of the onsite personnel protection measures that will be utilized and a detailed explanation of how they will be implemented, monitored, and communicated.
   4. Detailed written description of measures that will be taken to prevent transmission to or from the surrounding community and how they will be implemented and communicated.
   5. Procedures to be followed in the event a site worker is diagnosed with or is suspected of having COVID-19, including identification of all personnel potentially exposed and isolation requirements.
   6. Daily cleaning schedules and disinfection procedures per the most recent CDC guidelines.
   7. Cleaning and disinfection procedures in the event there is/are suspected COVID-19 case(s) among site personnel.
   8. Site access controls and entry/exit procedures.
   9. Plan view of points of egress and delivery locations.

B. The COVID-19 Management Plan must be updated following any issued change(s) in federal, state, or local health agency guidance.

1.8 PRECONSTRUCTION CONFERENCE

A. Pre-Construction Conference shall include a review of methods and procedures related to COVID-19 risk management including, but not limited to the following:
   1. Review of COVID-19 Management Plan

2. Review infection control procedures
3. Review staff monitoring and reporting requirements.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION

3.1 RISK IDENTIFICATION

A. COVID-19 is a new disease; scientists and health agencies are continuously learning about how it spreads. The Contractor shall adjust site policies based on the most up to date government issued guidance regarding transmission.

B. Contractor shall confirm staff that have worked in locations where quarantine orders are in place, have met the minimum quarantine guidance and do not have symptoms prior to mobilizing to site.

C. Contractor shall monitor staff daily, including checking, and documenting, temperature with no contact infrared thermometer, to confirm onsite staff do not exhibit COVID-19 symptoms. Contractor shall provide daily reports of those tests upon NYSDEC's request.

3.2 RISK MINIMIZATION

A. Engineering Controls
1. Increasing ventilation rates of interior workspaces.
2. Access controls, including fences and locking gates.
3. Maintain 6 feet distances, using distance markers where appropriate in the field.

B. Administrative Controls
1. Continuous and effective communication of administrative controls/requirements to all site personnel and visitors, through the posting of site signage, preparation and distribution of site plans, presented during site meetings, and verbal warnings if necessary.
2. Require that all employees exhibiting any COVID-19 symptom do not enter the site and provide sick leave policies to support this requirement.
3. To minimize face-to-face interaction, the Site's Health & Safety Officer's (or other designated employee) phone number shall be prominently posted and disseminated to project staff to be called for the purpose of site sign in and sign out by all visitors to the site upon arrival and exit. The designated employee will receive entry and exit calls each day and will fill out the site entry/exit log for each site visitor to reduce traffic in site trailer and/or the number of individuals contacting the site access tracking log.
4. Staffing: only those employees necessary to complete critical path task(s) shall be present on-site at any given time. Work shall be scheduled to minimize the density of personnel in any given area at any given time.
5. Working Remotely; employees shall be encouraged to complete work remotely if possible.
6. Face-to-face meetings shall be replaced with video or phone conferences when practicable.

7. Social distancing shall be exercised for face-to-face meetings e.g. daily Health and Safety tailgate meeting. In addition, the Contractor shall plan to have multiple meetings (if necessary) to keep the number of participants to a threshold that allows for the practice of social distancing protocol. The Health and Safety officer will keep a record of all present for each meeting on the Health and Safety log.
8. Quarantine staff that have been in contact with a anyone that tested positive and notify NYSDEC immediately.

C. Safe Work Practices
1. The Contractor shall employ social distancing protocol for all onsite activities when able.
2. The Contractor provide PPE and adequate hand washing stations and hand sanitizer (containing a minimum of 60% alcohol) to allow site personnel and visitors to practice good personal hygiene.
3. The Contractor shall provide tissues, paper towels, no-touch trash cans, and disinfectants to maintain site cleanliness.
4. Sharing of tools and heavy equipment shall be limited to the extent practicable; handles of shared tools and equipment shall be sanitized regularly.

D. Personal Protective Equipment
1. Employees shall be provided disposable personal protective equipment (PPE), including gloves, goggles, face shields, face masks, and respiratory protection, as appropriate based on work environment and current recommendations by OSHA and CDC.
2. All PPE must be selected based on hazard to the worker, properly fitted and periodically refitted, consistently and properly worn when required, regularly inspected, maintained, and replaced, as necessary, and properly removed, cleaned, and stored or disposed of, to avoid contamination of self, others, or the environment.
3. PPE worn to prevent transmission of COVID-19 is not to be confused with PPE for protection against site contaminants.
4. PPE must be worn, removed, and disposed of correctly in order to remain effective.
    a. Face masks should fit snugly but comfortable against the side of the face and over the nose and be secured with ties or ear loops; cloth masks must include multiple layers of fabric, allow for breathing without restriction, and be able to be laundered and machine dried without damage.
    b. Face masks should be worn consistently and removed without touching eyes, nose, and mouth. An individual should wash their hands after handling a used face mask.
    c. Cloth face coverings should be sterilized by machine washing between use; disposable face masks shall be disposed of properly after using.
    d. Gloves are only effective if changed and disposed of frequently, to avoid cross-contamination.

3.3 NOTIFICATION OF POTENTIAL OR CONFIRMED INFECTION

A. The Contractor shall notify the Department immediately upon identification of a suspected or confirmed infection of COVID-19. This notification shall comply with HIPAA regulations.

B. The Contractor shall remove an individual suspected to have COVID-19 from the site immediately (to the individuals' hotel or local place of residence if transport home is not immediately feasible), as well as those who have worked in close contact with that individual for extended periods of time (an hour at a time or more) over the previous week. The individual with suspected infection shall contact their health care provider and/or follow local health department testing procedures and protocol.

C. While in the process of removing an employee exhibiting symptoms, steps should be taken to isolate the individual, place a surgical mask on the individual and inform the local health department and the NYSDEC.

D. In the event the individual with suspected infection cannot get home right away, they shall isolate in their hotel room (notifying hotel management of their symptoms), contact their health care provider, and/or follow local health department testing procedures and protocol.

E. In the absence of local health department information, the individual may call the New York State Hotline at 1-888-364-3065.

F. The Contractor shall maintain communication with potentially infected individual(s) and notify the Engineer upon receipt of COVID-19 test results.

G. Positively infected individuals may return to work at the site after 72 hours of being symptom-free and 7 days of isolation after the first symptoms appeared, or in accordance with the current federal, state, and local guidelines

H. OSHA recordkeeping requirements at 29 CFR Part 1904 mandate covered employers record certain work-related injuries and illnesses on their OSHA 300 log. COVID-19 can be a recordable illness if a worker is infected as a result of performing their work-related duties. However, employers are only responsible for recording cases of COVID-19 if all the following are met:

1. The case is a confirmed case of COVID-19 (see CDC information on persons under investigation and presumptive positive and laboratory-confirmed cases of COVID-19).

2. The case is work-related, as defined by 29 CFR 1904.5; and

3. The case involves one or more of the general recording criteria set forth in 29 CFR 1904.7 (e.g. medical treatment beyond first-aid, days away from work).

END OF SECTION

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NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Entry/Exit Log with COVID-19 Acknowledgement

Project Name: _____

Project #: _____

New York State Department of Environmental Conservation's (DEC) objective is to provide a safe and healthy workplace. In response to COVID-19, DEC is prohibiting access to our work areas by those who pose an elevated risk of spreading COVID-19. By completing this site Entry/Exit log, you acknowledge your understanding of this policy and confirm that your health and travel history is NOT in one of the prohibited access groups listed below, and to the best of your knowledge, you do not pose an elevated risk of transmitting COVID-19 to others. Please leave the site immediately and follow recommendations from public health agencies and your healthcare provider if you fall into one of the prohibited access groups listed below:

- You are experiencing flu-like symptoms including but not limited to fever, chills, cough, sore throat, diarrhea, vomiting, runny/stuffy nose, muscle or body aches, headaches, fatigue.
- You have traveled to CDC-restricted destinations in the last 2 weeks ;

  for which public health agencies have prohibited travel.
- You had direct contact with a person diagnosed with COVID-19 or suspected of having COVID-19 during the last 2 weeks.

Name	Initials	Affiliation	Date	Time In	Time Out