ecology and environment
engineering and geology, p.c.

July 10, 2025

Mr. Justin Starr
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233

Re: Subsurface Investigation Plan
NYSDEC Site No. 360059, Rose Cleaners
500 Lexington Avenue, Mount Kisco, NY

Dear Justin Starr,

Ecology and Environment Engineering and Geology, P.C. (E & E) has been contracted by the New York State Department of Environmental Conservation (NYSDEC) to conduct a remedial investigation (RI) at NYSDEC State Superfund Program (SSF) Site No. 360059, Rose Cleaners, located at 500 Lexington Avenue, Mount Kisco, New York (the Site). As a part of RI activities, E & E has prepared the following subsurface investigation plan for the drilling of soil borings, the installation of monitoring wells, and the collection of soil and groundwater samples for laboratory analysis. The objective of this phase of the investigation is to improve the resolution of the existing dataset and refine the horizontal and vertical extent of Site-related chlorinated volatile organic compounds (CVOCs), primarily tetrachloroethene (PCE). A site plan showing the Site and proposed drilling/monitoring well locations is attached as Figure 1.

Drilling, Monitoring Well Installation, and Soil Sampling

E & E will supervise the drilling of approximately 11 soil borings downgradient of the Site, and the installation of monitoring wells in each of the borings. The boring/well locations were selected to address data gaps within the current monitoring well network. All locations are based on environmental data collected by E & E between 2022 and 2025 (sampling of soil, groundwater, surface water, stream sediment, soil vapor, and indoor air); and E & E's review of the historical file of environmental activities conducted by others (prior to 2022). Groundwater has typically been encountered at approximately 5 ft bg in the areas where monitoring wells are proposed.

Six monitoring wells are proposed to be installed in the shallow overburden. These wells will be constructed with 10 feet of well screen crossing the water table with a total depth of approximately 15 ft bg. Nine deeper monitor wells are proposed to be installed with 5 feet of well screen set just above the change in geology at approximately 25 ft bg (sand/silt above compact till/weathered bedrock). The screened intervals may be adjusted based on subsurface geology, evidence of contamination, and/or initial findings.

A standby drilling subcontractor, LaBella Associates (LaBella), will be utilized to provide drilling services and monitoring well installation. The hollow-stem auger drilling method will be used. The subcontractor

will secure road-opening permits where necessary and contact Dig Safely New York prior to commencing any intrusive activities. The subcontractor will contact any additional utility providers in the work area that are not contacted by Dig Safely New York. The subcontractor will arrange for private utility locating services as needed, and soft-dig hand clearing may be utilized if necessary.

Continuous split-spoon soil sampling will be conducted at all proposed monitoring well locations. E & E will describe each sample collected on a geologic log and soil samples collected will be screened for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID). At least two soil samples will be selected at each boring location for laboratory analysis of VOCs by United States Environmental Protection Agency (USEPA) Method 8260. Additional samples may be collected based on field observations. A decontaminated stainless-steel mixing bowl and spoon may be used to homogenize soil as needed to meet laboratory sample volume requirements. All samples will be stored on ice in a cooler and will be transported under chain-of-custody documentation to Phoenix Environmental Laboratories, Inc. (Phoenix) of Manchester, Connecticut.

The monitoring wells will be constructed with 2-inch diameter PVC piping and 2-inch diameter, 10-slot well screen. The annular space around the well screen will be filled with No. 1 filter sand from the bottom of the well to 2 feet above the top of the well screen. A 2-foot thick bentonite seal will be installed on top of the filter sand, and the remaining annular space will be filled with concrete/bentonite grout. All monitoring wells will be secured with a water-tight j-plug and completed at grade with either an 8-inch diameter manhole encased in a concrete pad, or a 4-inch diameter steel casing stick-up.

Well Development

All newly installed wells will be developed by surging and pumping after completion of well construction. Development will continue until the turbidity of the recovered groundwater is less than 50 nephelometric turbidity units (NTU) or asymptotic conditions have been reached; not to exceed 10 total well volumes of purge water or 1 hour of active development time per well. Field parameters including pH, conductivity, and temperature will be measured during development activities.

Groundwater Sampling

Groundwater samples will be collected at least one-week after well development from the approximately 11 newly installed wells (MW-34 through , the 22 wells installed by E & E during past rounds of drilling (MW-12 through MW-33), and five existing wells installed by others prior to 2016 (MW-2, BW-1, MW-E, MW-K, and IW-8). Sampling will include water level gauging and total depth measurements using an oil-water interface meter (capable of measurements to 0.01 foot) to determine if non-aqueous phase liquid (NAPL) is present.

Groundwater samples will be collected from each monitoring well using the USEPA low-flow purging and sampling technique. A peristaltic pump, flow-through cell, and dedicated high-density polyethylene (HDPE) tubing will be used at each location to complete the groundwater sampling. The HDPE tubing intake will be placed approximately 2 feet from the bottom of the each well during sampling and the water

sample will be collected upon stabilization of groundwater geochemical parameters in accordance with USEPA protocol.

All groundwater samples will be submitted for laboratory analysis of VOCs by USEPA Method 8260. All samples will be stored on ice in a cooler and will be transported under chain-of-custody documentation to Phoenix.

Quality Assurance/Quality Control

Sample Quality Assurance/Quality Control (QA/QC) will be performed in accordance with E & E's 2020 *Master Quality Assurance Project Plan for New York State Department of Environmental Conservation Projects, Contract No. D009807*. Field duplicate and matrix spike/matrix spike duplicate (MS/MSD) samples will be collected for both soil and groundwater. Trip blanks will be included in each cooler containing VOC samples for both soil and groundwater. A field blank, and rinse blank if needed, will be collected for analysis of PFAS using laboratory-supplied, analyte-free water.

Decontamination Procedures

All non-dedicated equipment and tools which are utilized during drilling, well installation, and soil and groundwater sampling will be decontaminated using a scrub brush and a solution of water and Alconox. Each item will then be rinsed with potable water, followed by a second rinse using laboratory-provided deionized (DI) water. Drilling equipment may be decontaminated by removing soil and washing using high pressure water or steam. Decontamination water will be placed in a Department of Transportation (DOT) compliant 55-gallon drum and handled as investigation derived waste (IDW); described in the following section.

Investigation Derived Waste

All IDW generated during drilling and sampling will be transferred to DOT compliant 55-gallon steel drums staged at the SSF site. All drums will be sealed and labeled, and all waste will be characterized and transported for off-site disposal in accordance with applicable requirements. IDW expected to be generated during the investigation activities includes drill cuttings, purge water from well development and groundwater sampling, decontamination waste-water, and expendable material such as personal protective equipment (PPE). Solid waste that does not exhibit evidence of contamination (e.g., no detectable odors, staining, or NAPL observed) such as PPE and sampling supplies will be disposed off-site as non-contaminated solid waste.

E & E will collect samples for waste characterization analysis as needed in accordance with disposal facility requirements. Laboratory analytical results and waste-specific information will be provided to the waste disposal subcontractor, Innovative Recycling Technologies, Inc. (IRT), for the development of a waste profile for transportation and disposal. The waste profile will list NYSDEC as the generator of the IDW.

Well Top of Casing Survey

A New York State licensed land surveyor, Popli Design Group (Popli) has been subcontracted to survey the monitoring well locations and elevations. The well locations will be surveyed to a minimum horizontal accuracy of ±0.5 foot, and vertical elevations will be provided in feet relative to the National American Vertical Datum of 1988 (NAVD88) to a minimum accuracy ±0.05 foot (reported to 0.01 foot).

Health and Safety

A copy of the site-specific HASP will be on-site during all field activities and reviewed/acknowledged by all field personnel. Level D PPE will be required for field personnel, including nitrile gloves, safety glasses, and safety vest. The work zone will be monitored for VOCs with a PID. Each drilling location will be clearly defined as a work zone using cones and caution tape.

A site-specific Community Health and Safety Plan (CHSP), which includes a Community Air Monitoring Plan (CAMP), will be implemented during all subsurface investigation activities. CAMP stations, each equipped with a PID and DustTrak, will be placed upwind and downwind of the work zone during drilling and soil disturbance activities to monitor for VOCs and particulates as specified in the CHSP/CAMP. The CAMP/CHSP are attached.

In the event free-phase PCE is encountered during the subsurface investigation activities, the NYSDEC project manager will be notified immediately, and actions will be taken to ensure protection of field personnel, the community, and the environment. E & E's *PCE Recovery Plan* dated September 28, 2023, will be used as site-specific guidance for continuing work. The HASP has also been updated (also dated September 28, 2003) to include protocols associated with handling free-phase PCE.

Please contact me at (212) 760-5635 with any questions or comments.

Sincerely,

Ecology and Environmental Engineering and Geology, P.C.

Dave Morelli, PG
Project Manager

Attachment: Site-Specific CHSP/CAMP

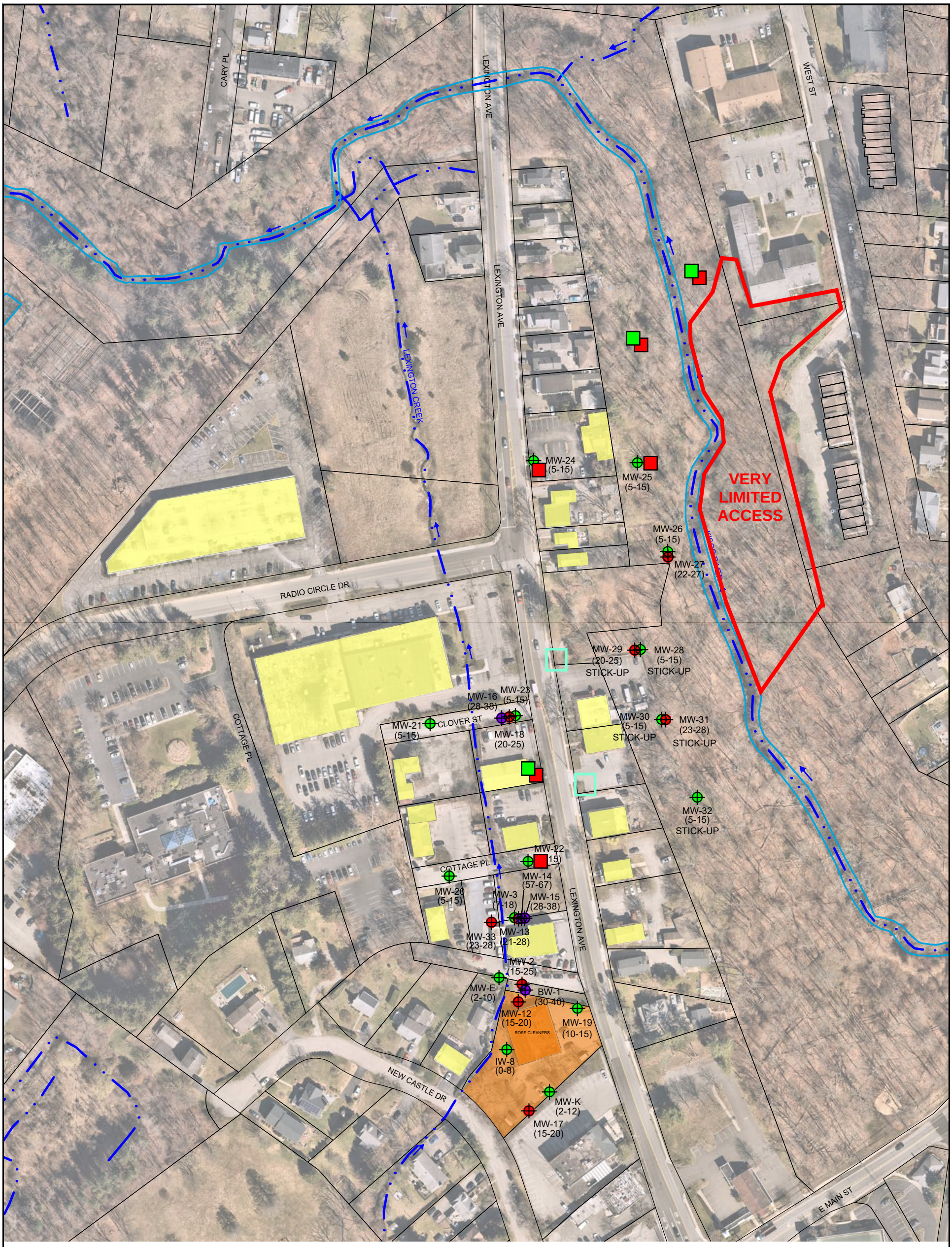
cc: A. Martin, NYSDOH
R. Watt, E & E

Table 1: Soil and Groundwater Sampling Protocol

Location ID	Approximate Number of Soil Samples*	Number of Groundwater Samples	Analyses	QC Sampling
MW-2	0	1	VOCs	--
BW-1	0	1	VOCs	--
MW-E	0	1	VOCs	--
MW-K	0	1	VOCs	--
IW-8	0	1	VOCs	--
MW-12	0	1	VOCs	--
MW-13	0	1	VOCs	--
MW-14	0	1	VOCs	--
MW-15	0	1	VOCs	--
MW-16	0	1	VOCs	--
MW-17	0	1	VOCs	--
MW-18	0	1	VOCs	--
MW-19	0	1	VOCs	--
MW-20	0	1	VOCs	--
MW-21	0	1	VOCs	--
MW-22	0	1	VOCs	--
MW-23	0	1	VOCs	--
MW-24	0	1	VOCs	--
MW-25	0	1	VOCs	--
MW-26	0	1	VOCs	--
MW-27	0	1	VOCs	--
MW-28	0	1	VOCs	--
MW-29	0	1	VOCs	--
MW-30	0	1	VOCs	--
MW-31	0	1	VOCs	--
MW-32	0	1	VOCs	--
MW-33	0	1	VOCs	--
MW-34	3	1	VOCs	--
MW-35	3	1	VOCs	--
MW-36	3	1	VOCs	FD groundwater
MW-37	3	1	VOCs	MS/MSD groundwater
MW-38	3	1	VOCs	FD and MS/MSD soil**
MW-39	3	1	VOCs	--
MW-40	3	1	VOCs	--
MW-41	3	1	VOCs	FD groundwater
MW-42	3	1	VOCs	MS/MSD groundwater
MW-43	3	1	VOCs	FD and MS/MSD soil**
MW-44	3	1	VOCs	--

*The number of soil samples collected will be based on field observations; anticpating two soil samples at each new boring.

**Field Duplicate and MS/MSD for soil samples to be collected from different depth intervals.



LEGEND

- PARCEL BOUNDARY
- STATE SUPERFUND PROGRAM SITE
- OFF-SITE STRUCTURE DESIGNATED FOR SOIL VAPOR INTRUSION SAMPLING
- EXISTING MONITOR WELL LOCATION
- MW-17 (15-20) — MONITORING WELL ID SCREENED INTERVAL
- MONITORING WELL LOCATION (TOTAL DEPTH APPROXIMATELY 15 FT BG)
- MONITORING WELL LOCATION (TOTAL DEPTH APPROXIMATELY 25 FT BG)
- MONITORING WELL LOCATION (SCREENED INTERVAL > 25 FT BG)
- PROPOSED MONITORING WELL LOCATION (TOTAL DEPTH APPROXIMATELY 15 FT BG)
- PROPOSED MONITORING WELL LOCATION (TOTAL DEPTH APPROXIMATELY 25 FT BG)
- POTENTIAL MONITORING WELL PAIR LOCATION; PENDING ACCESS

N

0 150

SCALE IN FEET

WSP USA Inc.
40 La Riviere Drive
Suite 320
Buffalo, New York 14202
(716) 853-1220

Drawn By:	RAC
Checked:	DM
Approved:	RW
DWG Date:	07/07/25

Rose Cleaners
NYSDEC Site No. 360059
500 Lexington Avenue
Mount Kisco, New York

PROPOSED MONITORING WELL LOCATIONS - JULY 2025

FIGURE 1

B

O:\DWG\NYS DEC\Rose Cleaners\2024\F3_Well2411-ColoredExp.dwg, B, 4/29/2025 11:34:07 AM

Community Health and Safety Plan
Rose Cleaners
NYSDEC Site No. 360059
Mount Kisco, New York

1.0 Community Air Monitoring Plan (CAMP)

This CAMP was prepared based on the New York State Department of Health (NYSDOH) Generic CAMP[1]. This plan requires real-time monitoring for volatile organic compounds (VOCs) and particulates at the downwind perimeter of each designated work area when certain activities are in progress at potentially contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences, businesses, and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

Reliance on the CAMP shall not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

A Special Requirements CAMP shall be implemented at the Site when ground intrusive or soil handling activity occurs within an occupied building or within 20 feet of a receptor (e.g., occupied buildings, bus stop, etc.). The standard CAMP is outlined in this Section and Sections 2 and 3 below. The additional requirements of a Special Requirements CAMP is outlined in Section 4.

Volatile Organic Compound Monitoring Plan
Periodic monitoring for VOCs will be required during <u>non-intrusive</u> activities such the collection of groundwater samples from monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals and anticipated contaminant concentrations, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at contaminated wells along busy urban streets adjacent to a residence/business.

For <u>intrusive</u> activities such as drilling and direct push sampling, not located within 20 feet of potentially exposed populations or occupied structures, VOCs must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) at intervals of no

[1] New York State Department of Environmental Conservation (NYSDEC). 2010. DER-10, Technical Guidance for Site Investigation and Remediation, May 2010. Appendix 1A, Community Air Monitoring Plan (CAMP).

more than 15 minutes. Upwind concentrations shall be measured at the start of each workday and periodically thereafter to establish background conditions. VOC monitoring shall be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. For example, for total organic vapor concentrations, a photo-ionization detector (PID) shall be used. The equipment shall be calibrated at least daily.

VOC Response Levels:

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds **5 parts per million (ppm)** above background for a 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with **continued** monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of **5 ppm** over background but less than **25 ppm**, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below **5 ppm** over background for the 15-minute average.

3. If the organic vapor level is **above 25 ppm** at the perimeter of the work area, activities must be shutdown and mitigative measures implemented before work can continue.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations shall be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring shall be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment shall be equipped with an audible alarm or be continuously visually monitored to indicate exceedance of the action level. In addition, fugitive dust migration shall be visually assessed during all work activities.

Particulate Response Levels:

1. If the downwind PM-10 particulate level is **100 micrograms per cubic meter** ($\mu g/m^3$) greater than background (upwind perimeter) for a 15-minute period or if airborne dust is visually observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed **150 $\mu g/m^3$** above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than **150 $\mu g/m^3$** above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume if dust suppression measures and other

controls are successful in reducing the downwind PM-10 particulate concentration to within 150 μg/m^3 of the upwind level and in preventing visible dust migration.

2.0 Public Safety

Intrusive activities such as drilling and direct push sampling within the community will require the development of an exclusion zone at the perimeter of the work zone. The exclusion zone is meant to prevent pedestrians from entering the work zone and potentially being exposed to contaminants or physical safety hazards associated with the equipment used. The exclusion zone will be marked using caution tape and/or cones or similar high visibility barriers. When working on or immediately adjacent to a public road, the regulations listed in the NYS Manual of Uniform Traffic Control Devices (Title 17b, NYCRR) will be implemented. This includes the correct formation and placement of cones and "Road Work Ahead" signs to divert and warn oncoming traffic. Depending on the type of work and length of time needed, traffic controllers and observers may be required.

3.0 Responsibility

It shall be the responsibility of the Site Safety Officer to conduct monitoring at the downwind perimeter of the work zone as defined above and record all relevant data in the health and safety field notebook, which will be available for State (NYSDEC and NYSDOH) personnel to review. The Site Safety Officer shall also be responsible for visually monitoring the work zone for potential safety hazards and to prevent public intrusion in the work zone.

4.0 Special Requirements CAMP

In addition to the standard CAMP requirements per above the Special Requirements CAMP requires the following:

Special Requirements for Work within 20 Feet of Potentially Exposed Individuals or Structures

When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring should occur within the occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate pre-determined response levels (response actions should also be pre-determined). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.

If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 µg/m^3, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m3 or less at the monitoring point.

Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each site.

Special Requirements for Indoor Work with Co-Located Residences or Facilities

Unless a self-contained, negative-pressure enclosure with proper emission controls will encompass the work area, all individuals not directly involved with the planned work must be absent from the room in which the work will occur. Monitoring requirements shall be as stated above under “Special Requirements for Work Within 20 feet of Potentially Exposed Individuals or Structures” except that in this instance “nearby/occupied structures” would be adjacent occupied rooms. Additionally, the location of all exhaust vents in the room and their discharge points, as well as potential vapor pathways (openings, conduits, etc.) relative to adjoining rooms, should be understood and the monitoring locations established accordingly. In these situations, it is strongly recommended that exhaust fans or other engineering controls be used to create negative air pressure within the work area during remedial activities. Additionally, it is strongly recommended that the planned work be implemented during hours (e.g. weekends or evenings) when building occupancy is at a minimum.