C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

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March 7, 2025 (Revised April 22, 2025)

Mr. Matt Dunham
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
1130 North Westcott Road
Schenectady, NY 12306
Via Email: matthew.dunham@dec.ny.gov

RE: Geotechnical Drilling Work Plan (Revised)
Master Cleaners, 2312 - 2316 Western Avenue, Guilderland, NY
BCP Site ID No.: C401072
C.T. Male Project No.: 24.4563

Dear Mr. Dunham:

As part of the planned site redevelopment activities (Foundry Square) including design of new buildings, geotechnical drilling is required for slope stability analysis and foundation design. The geotechnical drilling is going to be performed by Core Down Drilling, LLC, the same drilling company scheduled to complete the environmental drilling scoped as part of the NYSDEC Approved Supplemental Remedial Investigation Work Plan (SRIWP). Only four (4) of the twelve (12) geotechnical borings fall within the NYSDEC Brownfield Cleanup Program (BCP) site boundaries, and as such the Department has requested a work plan for those additional four (4) geotechnical borings. Attached is a Proposed Test Boring Locations map for the Geotechnical Investigation where the environmental drilling locations (boing IDs NE-46 to NE-52) covered by the SRIWP have also been depicted for reference. There is also a blue line on the attached map surrounding the NYSDEC BCP site boundaries where the geotechnical borings depicted in green are outside the BCP boundaries.

This letter (i.e., work plan) is to confirm that the geotechnical drilling will be completed in accordance with the applicable portions of the SRIWP, as detailed below:

- The geotechnical drilling within the NYSDEC BCP site boundaries will be directed and managed by a NYS licensed Professional Geologist (P.G.).
- The C.T. Male observer will be present during both the geotechnical and environmental drilling tasks. The C.T. Male observer will use real-time GPS to confirm site boundaries of the BCP and will execute the applicable drilling and

sampling program to be followed at each boring based on their specific location as identified on the figure included within the Geotechnical Drilling Work Pan. Prior to drilling, each proposed boring location will be staked and labeled by C.T. Male. The geotechnical drilling within the NYSDEC BCP site boundaries will be full time observed by C.T. Male and recovered soil samples will be field screened in accordance with Section 3.2.3 of the SRIWP.

- The same drilling method identified in Section 3.2 of the SRIWP (Direct Push) will be used to complete the geotechnical and environmental drilling tasks. The geotechnical boreholes will be backfilled using a bentonite-grout mixture.
- Community air monitoring will be completed in accordance with Section 5.0 of the SRIWP. C.T. Male will provide a summary of the dust and VOC data, collected in accordance with the NYSDEC/NYSDOH-approved CAMP, to the NYSDEC and NYSDOH project managers on a daily basis within 24 hours throughout the fieldwork term of this investigation.
- One soil sample at each on-site geotechnical boring location will be collected for the following analyses: Target Compound List (TCL) volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and Target Analyte List (TAL) metals (including cyanide), per- and polyfluoroalkyl substances (PFAS) by USEPA Method 1633, and 1,4-Dioxane by Method 8270D SIM. The soils to be submitted for laboratory analysis will be selected based on highest VOC headspace readings and/or field evidence of contamination. The geotechnical samples selected for laboratory analysis and corresponding analytical results will be summarized in the SRI Report.
- Soils will be continuously screened at the on-site and off-site geotechnical borings (including B-with a PID by C.T. Male's on-site observer. Soils with elevated PID readings will be collected for laboratory analysis of VOCs by USEPA Method 8260. Soils will be selected for laboratory analysis based on highest PID/VOC headspace readings and/or field evidence of contamination. The geotechnical samples selected for laboratory analysis and corresponding analytical results will be summarized in the SRI Report.

  Excess soil cuttings that are generated from the geotechnical and environmental drilling tasks will be containerized in NYSDOT-approved new or reconditioned steel 55-gallon drums as investigation derived waste (IDW) for later disposal. The drummed IDW will be labeled with applicable details on an adhesive non-hazardous waste placard until analytical testing proves otherwise (i.e., hazardous). The drum(s) will be conspicuously staged until disposal. Once the

quantity of IDW is known and the disposal facility is identified, the IDW will undergo separate disposal characterization analyses.

- Decontamination procedures will be performed in accordance with Section 3.2.4 of the SRIWP.
- An exclusion zone will be created during drilling operations, by using orange cones, wooden stakes within the cones and caution tape or equal flagging affixed to the stakes, to encircle the drill rig and associated equipment, and decontamination activities.

Other related clarifications are as follows:

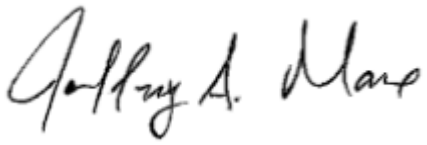
- Geotechnical borings located outside the NYSDEC BCP Site Boundaries, depicted in green on the attached map, will be completed during the same mobilization as the environmental borings, but will not be subject to this Geotechnical Drilling Work Plan.
- Environmental drilling locations NE-46, NE-49 and NE-50 have already had monitoring wells installed by a previous developer (i.e., believed to be installed by Northeastern Engineering Technologies PLLC). As such, select geotechnical borings will be advanced next to these environmental locations to obtain information on the soil types and organic vapors via field screening recovered soil samples with a Mini Rae 3000.
- The C.T. Male observer notified the driller that cones and flagging will be utilized during drilling to protect the existing monitoring wells installed at NE-46, NE-49, and NE-50. At the start of drilling, the driller and helper will be shown the location of property boundaries and specific locations of existing monitoring wells and proposed borings/monitoring wells. Wood stakes will also be strategically placed as reminders on where the BCP boundary is along the pathway to and from the drilling location.
- Environmental drilling location NE-52 was proposed by others in the SRIWP in a recessed area of the site where drilling equipment is unable to mobilize to because of steep terrain. As such, the location was adjusted to the top of the slope just west of the original proposed location under the SRIWP. The geotechnical boring (B-25-06) will be advanced near the proposed location for environmental boring NE-52 which will not be converted into a monitoring well upon completion of the boring (Figure 1).

- C.T. Male's updated Health and Safety Plan is included as an attachment to this revised Geotechnical Drilling Work Plan.

Please review this information and advise if the Department approves the completion of the geotechnical drilling in conjunction with the SRIWP environmental drilling according to the guidelines detailed herein.

Respectfully submitted,

C.T. MALE ASSOCIATES



Jeffrey A. Marx, P.E.
Managing Environmental Engineer

Att

ec: Jacob Freund, The Markstone Group
Teri Bohl, Charles Bohl, Inc.
Gary Bowitch, Attorney at Law
Mark Williams, P.G., C.T. Male

October 2017
Revised April 2025

Appendix C
Health and Safety Plan
Master Cleaners Site (BCP#C401072)
2312-2316 Western Avenue
Guilderland
Albany County, New York

Prepared for:

Charles Bohl Incorporated
P.O. Box 59
Guilderland, NY, 12084

Prepared by:

C.T. MALE ASSOCIATES
50 Century Hill Drive
Latham, New York 12110
(518) 786-7400
FAX (518) 786-7299

C.T. Male Associates Project No: 16.6345

SITE SPECIFIC HEALTH AND SAFETY PLAN
MASTER CLEANERS SITE
2312-2316 WESTERN AVENUE
TOWN OF GUILDERLAND
ALBANY COUNTY, NEW YORK

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SITE SPECIFIC HEALTH AND SAFETY PLAN
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1.0 GENERAL

1.1 Overview

This Site-specific Health and Safety Plan (HASP) has been prepared for use during implementation of a Remedial Investigation (RI) at the Master Cleaners Site ("the Site") at 2312-2316 Western Avenue located in the Town of Guilderland, Albany County, New York. This HASP has been developed as an integral part of the RI Work Plan as prepared by C.T. Male Associates Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C. (C.T. Male).

A designated Health and Safety Officer (HSO) will be responsible for implementing this HASP during the completion of the field work. All persons or parties who enter the work area (support zone, decontamination zone or exclusion zone) must review, sign and comply with this HASP. A partial list of individuals authorized to enter the exclusion zone at the site is presented in Section 13.0 of this HASP. Others may be added to the list as needed. A copy of this HASP will be maintained at the Site throughout the duration of the project. A complete description of the Remedial Investigation work is presented in the RI Work Plan. A brief description of the proposed scope of work is outlined below:

Remedial Investigation:

- Collect and analyze select soil samples from designated surface sampling locations,
- Collect and analyze select subsurface soil samples from the borings,
- Install monitoring wells and collect groundwater samples,
- Completion of twelve (12) geotechnical borings,
- Surveying investigative locations, and
- Other unforeseen environmental conditions which may be encountered during investigative work.

1.2 Contact Names & Numbers

For this project, the following project contacts have been assigned.

NYSDEC CONTACTS:

PROJECT MANAGER

Matthew Dunham, P.E.
(518) 357-2396
NYSDEC Region 4 Office
1130 North Westcott Road
Schenectady, NY 12306-2014

TOWN OF GUILDERLAND CONTACTS:

CURRENT OWNER:

Charles Bohl Incorporated (518) 456-8353
P.O. Box 59
Guilderland, New York 12084

NYSDOH CONTACT:

TECHNICAL LEAD

Justin Deming
(518) 402-7860
Bureau of Environmental Exposure Investigation
Empire State Plaza, Corning Tower, Rm 1717
Albany, NY 12237

CONSULTANT CONTACTS:

CONSULTING ENGINEER:

C.T. Male Associates (518) 786-7400
50 Century Hill Drive
Latham, NY 12110

Dan Reilly, PE, Project Principal (518) 786-7625
Cell Phone: (518) 928-9792

Jeffrey A. Marx, PE, Project Manager/Engineer
(518)-786-7548
Cell Phone: (518) 461-2176

Jeffrey A. Marx, PE, Health & Safety Officer (HSO)
(518) 786-7548

Mark A. Williams, P.G., Managing Geologist
(518) 786-7463

Ryan Hubbard, P.G. , Geologist III
(518) 786-7448

EMERGENCY PHONE NUMBERS:

PERSONAL INJURY OR EMERGENCY:	St. Peter's Hospital 315 S. Manning Blvd Albany, NY 12208	(518) 525-1550
FIRE DEPARTMENT:	Emergency Town of Guilderland Fire Department 2303 Western Avenue Guilderland, NY 12084	911 (518) 456-5000
POLICE:	Emergency Town of Guilderland Police Department Guilderland Town Hall – Second Floor 5209 Western Turnpike, Guilderland, NY 12084	911 (518) 356-1501
NYS POLICE	Emergency NYS Troopers Willow Street PO Box 1309, Guilderland, NY 12084	911 (518) 456-4261
UPSTATE NEW YORK REGIONAL POISON CONTROL CENTER:	University Hospital Upstate Medical University SUNY Health Science Center 750 East Adams Street Syracuse, NY 13201	(800) 222-1222
NATIONAL RESPONSE CENTER:	c/o United States Coast Guard (G-OPF) 2100 2nd Street, Southwest - Room 2611 Washington, DC 20593-0001	(800) 424-8802
NYSDEC SPILL HOTLINE:		(800) 457-7362

2.0 HEALTH AND SAFETY PERSONNEL

The Health and Safety Officer (HSO) will be responsible for the implementation of the HASP and the delegation of health and safety duties. The HSO will coordinate the resolution of safety issues that arise during site work. When field operations require only Level D protection, it will not be necessary for the HSO to be present on-site at all times. When the HSO is not present on-site, a designee will be authorized to perform the duties of the HSO. The designee will be responsible for implementation of the HASP.

The HSO or designee has authority to stop work upon their determination of an eminent safety hazard, emergency situation or other potentially dangerous situations (e.g. weather conditions). Authorization to resume work will be issued by the HSO.

3.0 SITE LOCATION AND DESCRIPTION

The Master Cleaners site consists of one tax parcel located at 2312 - 2316 Western Avenue within the Town of Guilderland (Albany County, NY). This site is 3.43 acres in size and consists of two (2) lots (Section/Block/Lot 40.17-2-12 and 40.17-11.1). The site is accessed from Western Avenue and has a paved driveway on the west side of the property.

The Master Cleaners site is connected to municipal drinking water and sewer. In addition, natural gas and electricity are both supplied to the site. The Site was previously the location of a dry-cleaning business.

The Site is bounded to the north by NY Route 20, beyond which lies the Guilderland Fire Department. To the west by Foundry Road, to the south by residential properties and to the east by a vacant lot. The northern portion of the Site consists of an abandoned former dry-cleaner building, a storage barn, vacant house, vacant apartment building and concrete slab/foundation of a former bus garage. The southern portion of the Site is wooded.

Overall, the site topography slopes gently to moderately from the north to the south. The Site is approximately 200 feet above mean sea level, near Western Avenue.

4.0 POTENTIAL SITE CONTAMINANTS

Potential site contaminants which may be encountered during the RI, as determined by the results of previous environmental investigations (summarized in the RI Work Plan), include chlorinated solvents. Specifically, perchloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethene, vinyl chloride and associated breakdown products, as they are typical of historical dry cleaner contamination. These contaminants may be present in the soil and groundwater.

4.1 Potential Exposure Pathways

Occupational exposure to chemical hazards associated with activities could potentially occur by dermal contact (skin contact), inhalation and an indirect route (incidental ingestion).

4.1.1 Dermal Contact

The primary route of potential exposure is dermal contact. Personnel walking or handling associated equipment may be exposed to chemical hazards by skin contact or adsorption. However, exposure is expected to be limited since workers will be required to wear appropriate personal protective equipment (PPE) (i.e., appropriate work gloves, shoes, clothing, and safety glasses).

4.1.2 Ingestion

Personnel handling of associated equipment, including project hazardous materials, could be exposed by incidental ingestion. Typically, this exposure occurs if proper PPE was not used, or personal hygiene was not practiced. Personal protection against exposure via ingestion can be accomplished by performance of proper decontamination procedures when exiting contaminated work areas as well as using the correct PPE.

4.1.3 Inhalation

Constituents that potentially pose an occupational concern to employees by the inhalation route are not expected for this scope of work. If a potential inhalation hazard is noted on-Site, workers will immediately stop work and take the appropriate steps to

notify C.T. Male PM or HSO. The work being conducted will be reevaluated to determine the potential exposure and further PPE that may be needed.

5.0 HAZARD ASSESSMENT

5.1 General

The hazard assessment, use of specific protective equipment, and monitoring associated with each field work task of the investigation to be conducted at the subject site are presented in following subsections.

For this project, C.T. Male will be subcontracting portions of the remedial investigation activities. Each subcontractor will be responsible for developing and implementing a site-specific health and safety plan for their activities, for the protection of their employees, and use of personal protective equipment. The subcontractor will also be responsible for developing and following their own Respiratory Protection Program, as applicable.

5.2 Surface Soil and Groundwater Sampling

Surface soil and groundwater sampling are planned for the site. The potential hazards to personnel during this work are dermal contact, and a low to moderate potential for vapor inhalation of potential site contaminants. Level D protection should be sufficient to protect against dermal contact during handling of soils and water. If organic vapors are present at the action levels described in Section 5, on the basis of organic vapor monitoring of the area during the work, it may be necessary to upgrade to Level C respiratory protection.

5.3 Subsurface Work

Subsurface investigation including the installation of soil test borings and monitoring wells. Drilling, monitoring well installation and other associated field work to be performed by subcontractors to C.T. Male will be observed by full-time, on-Site, C.T. Male staff. C.T. Male staff will be responsible for collecting soil/fill samples, classifying soil, field screening of soil/fill samples, recording and monitoring work on-site.

The potential hazards to personnel during this work are dermal contact and low to moderate potential for vapor inhalation of potential site contaminants. Level D protection should be sufficient to protect against dermal contact during handling of the subsurface soils and groundwater. If organic vapors are present at the action levels described in

Section 5, on the basis of organic vapor monitoring of the area during the work, it may be necessary to upgrade to Level C respiratory protection.

5.3.1 Geotechnical Drilling

As part of the planned site redevelopment activities (Foundry Square) including design of new buildings, geotechnical drilling is required for slope stability analysis and foundation design. The geotechnical drilling is anticipated to be performed by a subcontractor, as noted in the Geotechnical Drilling Work Plan for the Site. The potential hazards for this activity are expected to be the same as listed in the section above for subsurface work.

5.4 Surveying

Surveying of sampling and monitoring well locations including elevation survey is part of the work. Occupational exposure to chemical hazards associated with the typical survey work activities could potentially occur by dermal contact and incidental ingestion. Personnel on site will need to be in Level D (reflective safety vest, safety glasses, hard hat-if needed, safety shoes, protective clothing, and hearing protection-if needed), at a minimum, while on Site grounds. The potential hazards to personnel during this work are dermal contact. Level D protection should be sufficient to protect against dermal contact and incidental ingestion during survey activities.

5.5 Air Monitoring

During the completion of direct push borings, the ambient air in the work area will be monitored with a photoionization detector (PID) for total volatile organic compounds (MiniRAE 2000 or 3000) prior to the start of work and periodically as conditions warrant. If a concentration of 10 ppm (sustained for 5 minutes) of total volatile compounds is detected within the work area on the instrument, relative to an isobutylene standard (used to calibrate the instrument), work will cease immediately and the workers shall shut down equipment and leave the area immediately.

The level of personal protective equipment (PPE) protection will be evaluated prior to continuing work in an area where sustained readings are recorded. If a PPE upgrade to Level C is required, it will include: a half face air purifying respirator equipped with

combination organic vapor and particulate cartridges for 10-15 ppm exposure levels, prior to continuing work. For exposure levels encountered greater than 15 ppm to less than 50 ppm, work will cease immediately, and the situation will be evaluated by the project manager/engineer in conjunction with the health and safety officer prior to continuation of work. Table 5.5-1 summarizes the action levels relative to the required respiratory protection.

Table 5.5-1
C.T. Male Action Levels & Required Respiratory Protection

Action Level	Level of PPE	Type of Respiratory Protection
0-10 parts per million	Level D	No respiratory protection
10-15 parts per million	Level C	Negative pressure half-face respirator
15-50 parts per million	To be determined	Evaluate work procedures
Greater than 50	Cease Work	Evaluate work procedures

-Facial hair is not permitted while wearing respirators.

-Workers required to wear a respirator must have a minimum of OSHA 40 Hour training with current medical monitoring and fit test documentation.

5.6 Community Air Monitoring Plan

A site-specific Community Air Monitoring Plan (CAMP) will be followed for the project based on the New York State Department of Health Generic Community Air Monitoring Plan dated May 2010 (Appendix A).

A total of two (2) organic vapor and two (2) particulate (dust) monitors will be used for the CAMP. The locations of the environmental enclosures, each containing the two instruments, will be selected daily on the basis of the prevailing wind direction. The prevailing wind direction will be determined based on review of available weather data such as Weatherbug and/or temporary wind direction markers installed in the field such as a wooden stake and light/loose flagging. The location and wind direction shall be recorded daily in the field notes.

Each particulate monitor will be equipped with a telemetry unit capable of transmitting real-time particulate data to the field representative. The particulate monitoring instruments will be capable of displaying and transmitting the short-term exposure limit (STEL) or 15-minute averaging period, which will be compared to the NYSDOH Generic

Community Air Monitoring Plan action levels for particulates. The instruments are programmed to alarm at preset action levels.

5.7 Hazard Identification and Control

As per C.T. Male health and safety programs, all personnel on Site will need to be in Level D (reflective safety vest, safety glasses, hard hat-if needed, safety shoes, protective clothing, and hearing protection-if needed), at a minimum, while on-Site grounds. The potential hazards to personnel during this work are dermal contact. Level D protection should be enough to protect against dermal contact during survey activities.

If a level of safety is determined to be above Level D (e.g., Level C), then the Project Manager will need to approve the work commencing. If a level of safety is determined to be at Level A or B, C.T. Male will stop work and re-assess the situation.

Roadway Work

Work on the shoulder of the roadways and high traffic areas (i.e., parking lots), may subject personnel to vehicular traffic. Personnel will maintain high awareness of traffic conditions during work location mobilization and during subsequent activity. When feasible work will be conducted behind barriers such as work vehicles, cones, or signs and wear appropriate reflective vests. The type of vest may change based upon day or night conditions and traffic speeds.

Biological Hazards

During the Site walk through for the project task, the area will be screened for biological hazards. The most common hazards anticipated are discussed below.

Insects

Bees, wasps, yellow jackets, spiders, snakes, and mosquitoes may be a potential hazard on this project, especially so for those individuals sensitized to those bites or stings. Protection methods against insects may be employed, such as the use of protective clothing or insect repellents and training in recognition and identification of harmful insects.

Poisonous Plants

Personnel need to be aware of poisonous plants in the environment. These plants include, but not limited to, poison ivy, poison oak, and poison sumac which are identified by three leaves or five leaves emanating from a stem. The plants contain a resin that causes a delayed reaction on contact. Signs and symptoms are usually evident within 24 to 48 hours after exposure. These include burning, stinging, and blisters. Notify the Site-specific health and safety officer if these plants are observed. If exposure or contact occurs, wash the affected area, but do not spread the resin to unexposed areas.

The following table presents generalized hazards potentially involved with the tasks to be completed on this project. Table 5.7-1 identifies general procedures to follow to prevent or reduce accident, injury, or illness. Any worker on-site who identifies a potential hazard must report the condition to the HSO or designee, and initiate control of the hazardous condition.

Table 5.7-1
Potential Hazards and Control

Potential Hazard	Control
Vehicular Traffic	1. Wear Hi-Vis safety vest when vehicular hazards exist. 2. Use cones, flags, barricades, and caution tape to define work area. 3. Use vehicle to block work area. 4. Use vehicle caution lights in high traffic areas within the Site. 5. Contact local police for high traffic situations on public roadways.
Slip, Trip, and Fall Protection	1. Assess work area to determine if there is a potential for falling. Additional PPE can be utilized to reduce slip, trip, fall hazards. 2. Make sure the work area is neat, and tools are staged in one general area. 3. Wear steel-toe boots with adequate tread and always watch where the individual is walking. Carry flashlight when walking in poorly lighted areas.
Inclement Weather	1. Stop outdoor work during electrical storms and other extreme weather conditions such as extreme heat or cold temperatures. 2. If there is lightning or thunder, staff need to stop work for 30 minutes since the last occurrence and take cover in a safe location. Not in a field or under a tree. 3. Take cover indoors or in vehicle.

Table 5.7-1 Potential Hazards and Control	
Potential Hazard	**Control**
	4. Listen to local forecasts for warnings about specific weather hazards such as tornadoes, hurricanes, and flash floods.
Utility Lines Contact	1. Contactor to contact UDig to have utility lines marked prior to any underground excavation, trenching or drilling. UDig must be contacted at least 72 hours prior to work. 2. Conduct onsite utility mark out by a subcontractor, if needed. 3. Refer to Site drawings for utility locations. 4. Pre-clear the utility. Refer to the guidance on clearance from Dig Safely 411 or 811.
Noise	1. Wear hearing protection when equipment such as a drill rig, excavator, jackhammer, or other heavy equipment is operating on-site. 2. Wear hearing protection whenever you need to raise your voice above normal conversational speech due to a loud noise source; as this much noise indicates the need for protection. 3. Hearing protection is required when measured sound exceeds 85 decibels (dB) where employees stand or conduct work.
Electrical Shock	1. Maintain appropriate distance between heavy equipment and overhead utilities; 20-foot minimum clearance from power lines; and 10-foot minimum clearance from shielded power lines. 2. Contact local underground utility locating service prior to penetrating the ground surface.
Hand and Power Tools	1. Ensure cords to tools are not frayed and are properly grounded. 2. Ensure guards for power tools are in place (such as portable circular saw) as recommended by the manufacturer. 3. Tool cutting edges are kept in proper condition so the tool will operate properly. 4. Worn or bent tools are not to be used. Tool handles must be secure. 5. When not in use, tools are stored in a dry, secure location. 6. Ensure proper PPE use with hand and power tools. Cut or puncture resistant gloves, or work gloves to provide protection may be used. Check with SHO prior to use of the power tools. 7. If a generator is used with the power tools, ensure there is proper ventilation for the generator.
Physical Injury	

Table 5.7-1 Potential Hazards and Control	
Potential Hazard	**Control**
	1. Wear safety glasses, reflective Hi-vis safety vest and/or shirt always when on-site. Personnel to have hearing protection on them and in use when it is required. 2. Maintain visual contact with any equipment operators and wear hard hats and Hi-vis safety vest when heavy equipment is operating on-site. Be aware of other vehicle traffic while heavy machinery is operating on-site. 3. Avoid loose clothing, long hair, and jewelry when working around rotary equipment. 4. Keep hands and feet away from drilling augers, excavation equipment tracks/tires, and other on-site heavy equipment. 5. Test emergency shut-off switches on equipment prior to daily use. 6. Wear life preserver in boats. 7. Do not enter manholes or confined spaces. 8. Be aware of openings into manholes and keep area clear of trip hazards. 9. Be aware of outside terrain – steep slopes and slip, trip hazards while working. 10. Be aware of biological hazards on-site such as insects (bees, mosquitoes, and flies), ticks, spiders, and snakes. 11. Be aware of botanical hazards such as poison ivy, poison sumac, and giant hogweed.
Back Injury	1. Use a mechanical lifting device or a lifting aid where appropriate. 2. Ensure the route is free of obstructions. 3. Bend at the knees and use leg muscles when lifting. 4. Use the buddy system if lifting heavy or awkward objects. 5. Do not twist or jerk your body when lifting.
Heat Stress	1. Increase consumption of water and electrolytes while working. 2. Avoid excessive alcohol intake the night before working in heat stress situations. 3. Avoid excessive caffeine intake when working in heat stress situations. 4. Increase number of rest breaks as necessary, and rest in a shaded area. 5. Watch for signs and symptoms of heat exhaustion and fatigue. 6. Rest in cool, dry areas. 7. In the event of heat stress or heat stroke, bring the victim to a cool environment and call 911.
Cold Stress	1. Wear cotton, wool or synthetic (polypropylene) undergarments to

Table 5.7-1 Potential Hazards and Control	
Potential Hazard	**Control**
	absorb perspiration from the body. 2. Wear additional layers of light clothing as needed for warmth. The layering effect holds in air, trapping body heat, and some layers could be removed as the temperature rises during the day. 3. Pay close attention to body signals and feelings (hypothermia symptoms), especially to the extremities. Correct any problem indicators by breaking from the work activity and moving to a rest area to warm up and add additional clothing. 4. Increase water intake while working. 5. Avoid excessive alcohol intake the night before working in cold conditions. 6. Increase the number of rest breaks as necessary, and rest in a warm area. 7. In the event of hypothermia or frost bite, bring the victim to a warm environment and call 911.
Fire Control	1. Smoking is not allowed on-site. 2. Keep flammable liquids in closed containers. 3. Isolate flammable and combustible materials from ignition sources. 4. Keep fire extinguisher nearby and use only if deemed safe. 5. Inform HSO prior to a chemical being brought on-site. 6. Facility Hot Work permit may be required for certain tasks. "Hot work" means riveting, welding, flame cutting or other fire or spark-producing operation.
Media Sampling (water, soil, sediment, soil gas, etc.)	1. Wear appropriate PPE to avoid skin, eye, and inhalation contact with contaminated media. 2. Stand upwind to minimize possible inhalation exposure, especially when opening monitoring wells or closed containers/vessels. 3. Conduct air monitoring, whenever necessary, to determine the level of respiratory protection. 4. If necessary, employ engineering controls to assist in controlling chemical vapors. 5. When collecting samples on or near water bodies, wear a life jacket and employ the buddy system. 6. When collecting samples from water bodies, assess water conditions and the water current and ensure that the sampling vessel is stabilized, or the water is safe to enter.

Table 5.7-1 Potential Hazards and Control	
Potential Hazard	**Control**
Cleaning Equipment	1. Wear appropriate PPE to avoid skin and eye contact with Alconox or other cleaning materials. 2. Stand upwind to minimize possible inhalation exposure. 3. Properly dispose of spent chemical cleaning solutions and rinse accordingly.
Deer Ticks	1. Wear long pants and long-sleeved shirts. Pants could be tucked into the top of socks at boot level. Shirt tucked into pants. 2. Wear insect repellant clothing, if available, see HSO for appropriate clothing. 3. Use tick repellent, this will need to be cleared with HSO to ensure that new chemicals are not introduced to the Site. 4. Perform personal body checks for the presence of ticks, after field work is complete and before the personnel have left the Site. 5. Notify the Health and Safety Officer immediately if you have been bitten by a tick or discovered a tick on yourself.
Note: A first aid kit and fire extinguisher will be located in the C.T. Male company vehicle.	

Response actions to personal exposure from on-site contaminants include skin contact, eye contact, inhalation, ingestion, and puncture or laceration. The recommended response actions are presented in Section 11.0.

6.0 TRAINING

Site specific training of workers and personnel will be conducted and provided by the HSO or designee prior to project start and for new activities. The training will specifically address the activities, procedures, monitoring, and equipment for the site operations. It will include area and facility layout, hazards, emergency services (police, hospital, fire, etc.), and review of this HASP. Questions by workers, field personnel, etc. will be addressed at this time but employees are reminded to ask questions at any time throughout the project.

Workers and personnel conducting and/or supervising the project must have attended and successfully completed a 40 Hour Health and Safety Training Course for Hazardous Waste Operations, an annual 8 hour Refresher Course, and take part in an employer medical surveillance program in accordance with OSHA 29 CFR Part 1910.120 requirements, specifically, that the workers have had a medical physical within one (1) year prior to the date the work begins and that they are physically able to wear a respirator.

It is also recommended for workers to complete OSHA's 10-hour Construction Industry Outreach Training Program. The OSHA 10 Hour Construction Industry Outreach Training Program is intended to provide an entry level construction worker's general awareness on recognizing and preventing hazards on a construction site.

Documentation of training and medical surveillance will be submitted to the HSO or designee prior to the start of any on-site work. A copy of the training certificates shall be maintained by the OSHO and Human Resources Department at the C.T. Male Latham office.

Exceptions to the training requirements above will be considered on a specific case by case basis. For instance, a survey crew may not be required to have OSHA 40-hour training when the petroleum or chemical hazards are not present at the surface. In this instance, the Health and Safety Officer with provide environmental awareness training regarding the site conditions.

7.0 SITE ACCESS

The Remedial Investigation will generally be performed within the Site boundaries. Due to the site location, it is possible that the public or curious bystanders will be present at the time of the work. Therefore, the "work area" will be considered as a 30-foot radius around the work activity being performed. Only OSHA trained individuals which are qualified to do the work and have read and signed this Site specific HASP will be allowed within the 30 foot radius work zone. The work area will be secured with traffic cones, stakes and/or flagging to prevent unauthorized entry. The HSO or designee will be responsible for limiting access to unauthorized individuals.

During completion of the remedial investigation, the 30-foot circle around the immediate work area will be considered the Exclusion Zone (contaminated area where investigation is to be conducted). The Contamination Reduction Zone (decontamination area), and Support Zone (clean area, everywhere else) will be established outside the Exclusion Zone, as necessary. The exclusion, contamination reduction, and support zone during investigation/remediation work have been identified and designated as follows:

Exclusion Zone - The location of the exclusion zone will be determined in the field prior to the start of work and will vary depending on the work activities conducted. For the most part, the exclusion zone is anticipated to be a 30-foot radius around the work area. The outside exclusion zones may be delineated with cones and yellow caution tape or equal method, where applicable. Only authorized persons with proper training and protective gear will be allowed to enter the exclusion zone. If the exclusion zones, as previously explained, changes orientation during the completion of the work, the HASP will be amended in the field to reflect the change.

Contamination Reduction Zone – If applicable, this zone will generally be a 10'± x 10'± area, containing the decontamination materials. The location will be determined in the field prior to the start of work and will vary depending on the area(s) the work is being conducted. This zone is where decontamination of personnel and equipment will take place, as necessary, on the basis of the work being performed. It will be located upwind of the Exclusion Zone, if possible.

Support Zone - Area outside of contamination reduction zone and not including the exclusion zone. Unauthorized or untrained individuals must remain in this zone.

8.0 PERSONAL PROTECTION

8.1 Level of Protection

Based on evaluation of the potential hazards, the minimum level of protection to be worn by workers during implementation of the remedial investigation activities is defined as Level D protection and will be controlled by the HSO or designee.

The minimum level D protective equipment will consist of field clothes, rubber gloves (nitrile and/or PVC), hard hats, safety glasses, high-visibility vest, and safety boots (steel-toe required). As appropriate, this level of protection may be modified to include polylaminated Tyvek suits, coveralls, leg chaps, or face shield for additional protection. Half-face air purifying respirators should be readily available. Appropriate combination of organic vapor and particulate cartridge filters will be available at the site, to use, if necessary, with the air purifying respirators.

If required, level C protective equipment will consist of the items listed for Level D protection with the added protection of potentially full-face, air purifying (organic vapor and particulate) respirator, chemical resistant clothing, inner and outer chemically resistant gloves (i.e. solvent resistant nitrile, PVC/nitrile), and chemical resistant safety boots/shoes.

Level B is not anticipated, but if required, level B protective equipment will consist of the items listed for Level D protection except a self-contained breathing apparatus (SCBA) will be worn dependent on the level of contaminants present in the work zone, and polylaminated Tyvek suits will be required. When site conditions warrant the need for level B protective equipment, work will cease, and the project will be re-evaluated to determine the necessity for employing engineering controls to reduce or eliminate the potential contaminants of concern.

8.2 Safety Equipment

Basic emergency and first aid equipment will be available in an area within the Support Zone clearly marked and available or within C.T. Male's company vehicle. This shall include a first aid kit, fire extinguisher, supply of potable water, soap, and towels. The HSO or designee shall be equipped with a cellular phone in case of emergencies.

9.0 COMMUNICATIONS

There is no existing phone services associated with the subject site. The HSO or designee shall be equipped with a cellular phone in case of emergencies. The HSO or designee shall notify the C.T. Male project manager as soon as safely possible in the event of an accident, injury, or emergency action.

Hand signals for certain work tasks will be employed, as necessary, and the buddy system will be employed during drilling and sampling activities.

10.0 DECONTAMINATION PROCEDURES

10.1 Personnel Decontamination Procedures

Decontamination procedures will be carried out by all personnel leaving the Exclusion Zone (except under emergency evacuation). The amount of decontamination performed will be dependent on the level of personal protection currently being worn within the exclusion zone.

1. Do not remove respiratory protection until all steps have been completed.
2. Clean outer protective gloves and outer boots, if worn, with water (preferably with a pressurized washer) over designated wash tubs in the exclusion zone to remove the gross amount of contamination.
3. Deposit equipment used (tools, sampling devices, and containers) at designated drop stations - on plastic drop sheets or in plastic lined containers.
4. Rinse outer boots if worn and gloves with clean water in designated rinse tubs. Remove outer boots if worn and gloves and deposit in designated area to be determined in the field for use the next day or when necessary. If disposable outer boots are worn, remove and discard in designated container.
5. Remove hard hat & safety glasses, rinse with clean water as necessary and deposit in designated area for use the next day or when necessary.
6. Remove Tyvek suit, if worn, and discard in designated container. Remove the respirator at this time, if used; and wash and rinse with clean water. Organic vapor cartridges, when used, will be replaced daily. Used cartridges will be discarded in the designated waste container. Remove inner gloves and discard in designated container.

10.2 Equipment and Sample Containers Decontamination

All decontamination will be completed by personnel in protective gear appropriate for the level of protection determined by the site HSO or designee. Manual sampling equipment including trowels, hand augers and macro-core samplers, shovels and split-spoon samplers which come into contact with the site's soils, will be cleaned with a tap

water/non phosphate detergent wash and a tap water rinse. The sampling equipment will be washed after each sample is collected and the wash and rinse water will be containerized for proper disposal.

Drill rig equipment (i.e., core samples) which comes into contact with the site's soils will be decontaminated with a non-phosphate detergent/tap water wash and tap water rinse. The decontamination procedure will focus on portions of the equipment that has come into contact with the site's soils such as the core samplers drill rods. The cleaning will be performed at the completion of each boring location and the used cleaning liquids will be stored in labeled 55-gallon drums pending analytical results of the sampled soils and groundwater.

Exterior surfaces of sample containers will be wiped clean with paper towels or disposable wipes in the decontamination zone and transferred to a clean cooler for transportation or shipment to the analytical laboratory. Sample identities will be noted and checked off against the chain-of-custody record. The disposable wipes will be placed in the designated disposal container and disposed of as solid waste.

11.0 EMERGENCY RESPONSE PROCEDURES

THE PROJECT EMERGENCY COORDINATOR IS:

Site Health and Safety Officer (HSO) Jeffrey A. Marx, P.E.

The following standard emergency procedures will be used by on-site personnel. The Project Manager and HSO shall be notified of any on-site emergencies and be responsible for assuring that the appropriate procedures are followed.

11.1 Personal Injury

Emergency first aid shall be administered on-site as deemed necessary and only by a trained individual, if available at the site. If a trained individual is not available on-site, decontaminate, if feasible, and transport individual to nearest medical facility (St. Peter's Hospital). The HSO will supply medical data sheets to appropriate medical personnel and be responsible for completing the incident report. If the HSO is injured or controlling the emergency situation, the medical data sheets are available in Appendix B of this Health and Safety Plan.

11.2 Personal Exposure

The recommended response to worker exposure from contaminants on-site includes the following:

SKIN CONTACT: Use generous amounts of soap and water. Wash/rinse affected area thoroughly, then provide appropriate medical attention, as necessary.

EYE CONTACT: Wash eyes thoroughly with potable water supply provided on site. Eyes should be rinsed for at least 15 minutes subsequent to chemical contamination. Provide medical attention, as necessary.

INHALATION: Move worker to fresh air and outside of the work zone and/or, if necessary, decontaminate and transport to hospital (St. Peter's Hospital). If respirator use is implemented at the time of inhalation,

worker must not remove respirator until completely away from the work zone.

INGESTION: Decontaminate, if feasible, and transport to hospital (St. Peter's Hospital).

PUNCTURE WOUND OR
LACERATION: Provide first aid at the site and if wound needs medical attention, decontaminate, if feasible, and transport to hospital (St. Peter's Hospital).

If the affected worker is exposed to contaminants on-site and the injury or accident prevents decontamination of the individual, the emergency responders must be notified of this condition, and the exposure must be kept to a minimum.

11.3 Potential or Actual Fire or Explosion

Immediately evacuate the area in the event of potential or actual fire or explosion. Notify the local fire and police departments, and other appropriate emergency response groups, as listed in Section 1.2. Perform off-site decontamination and contain wastes for proper disposal. If a fire or explosion occurs, all on-site personnel must meet in the designated area of the site (established by the HSO or designee) for an accurate head count.

11.4 Equipment Failure

Should there be any equipment failure, breakdown, etc. the Project Manager and HSO shall be contacted immediately. The Project Manager or the HSO will make every effort to replace or repair the equipment in a timely manner.

11.5 Spill Response

The site HSO or designee shall initiate a corrective action program with the subcontractors in the event of an accidental release of hazardous material or suspected hazardous material. The HSO or designee will act as the Emergency Coordinator with the subcontractors for the purposes of spill prevention; identifying releases; implementing clean up measures; and notification of appropriate personnel.

The corrective action program will be implemented by the HSO and subcontractor to effectively control and minimize any impact accidental releases may have to the environment.

Effective control measures will include:

- Preliminary assessment of the release
- Control of the release source
- Containment of the released material
- Effective clean-up of the released material

Potential sources of accidental releases include: hydraulic oil spills or petroleum leaks from heavy equipment. The HSO/Emergency Coordinator in conjunction with the subcontractor shall respond to an accidental release in the following manner:

- Identify the character, source, amount, and area affected by the release.
- Have subcontractor take all reasonable steps to control the release.
- Notify the NYSDEC Spill Hotline at 1-800-457-7362. Notify NYSDEC Project Manager and Charles Bohl Incorporated (Property Owner).
- Contain the release with sorbent material which should include speedi-dri, spill socks and sorbent pads.
- Prevent the release from entering sensitive receptors (i.e., catch basins and surface water) using the specified sorbent material or sandbags.
- Coordinate cleanup of the release material.
- Oversee proper handling and storage of contaminated material for disposal.

At no time should personal health or safety be compromised or jeopardized in an attempt to control a release. All health and safety measures as outlined in this HASP should be adhered to.

12.0 ADDITIONAL WORK PRACTICES

Workers will be expected to adhere to the established safety practices. Work on the project will be conducted according to established protocol and guidelines for the safety and health of all involved. The following will be adhered to:

- Employ the buddy system when possible, and for those work tasks which require it. Establish and maintain communications.
- Minimize contact with potentially contaminated soil and water.
- Employ disposable items, when possible, to minimize risks during decontamination and possible cross-contamination during sample handling.
- Smoking, eating, or drinking after entering the work zone and before decontamination will not be allowed (to prevent oral ingestion of potential on-site contaminants).
- Avoid heat and other work stress related to wearing personal protective equipment. Take breaks as necessary and drink plenty of fluids to prevent dehydration.
- Withdrawal from a suspected or actual hazardous situation to reassess procedures is the preferred course of action.
- The removal of facial hair prior to working on-site will be required to allow for a proper respiratory face piece fit.
- The Project Manager, the HSO, and sampling personnel shall maintain records recording daily activities, meetings, facts, incidents, data, etc. relating to the project. These records will remain at the project site during the full duration of the project so that replacement personnel may add information while maintaining continuity. These daily records will become part of the permanent project file.

13.0 AUTHORIZATIONS

Personnel authorized to enter the exclusion zone at the Master Cleaners Site in the Town of Guilderland, Albany County, New York while operations are being conducted must be certified by the HSO. Authorization will involve completion of appropriate training courses and review and sign off of this HASP.

Personnel authorized to perform work on-site are as follows:

Company Representing	Name
C.T. Male	Jeffrey Marx, Dan Reilly, Jon Dippert, Dan Achtyl, Chris Ormsby, Ryan Hubbard, Nancy Garry, Mark Williams

14.0 FIELD TEAM REVIEW

Each field team member shall sign this section after site specific training is completed and before being permitted to work on-site.

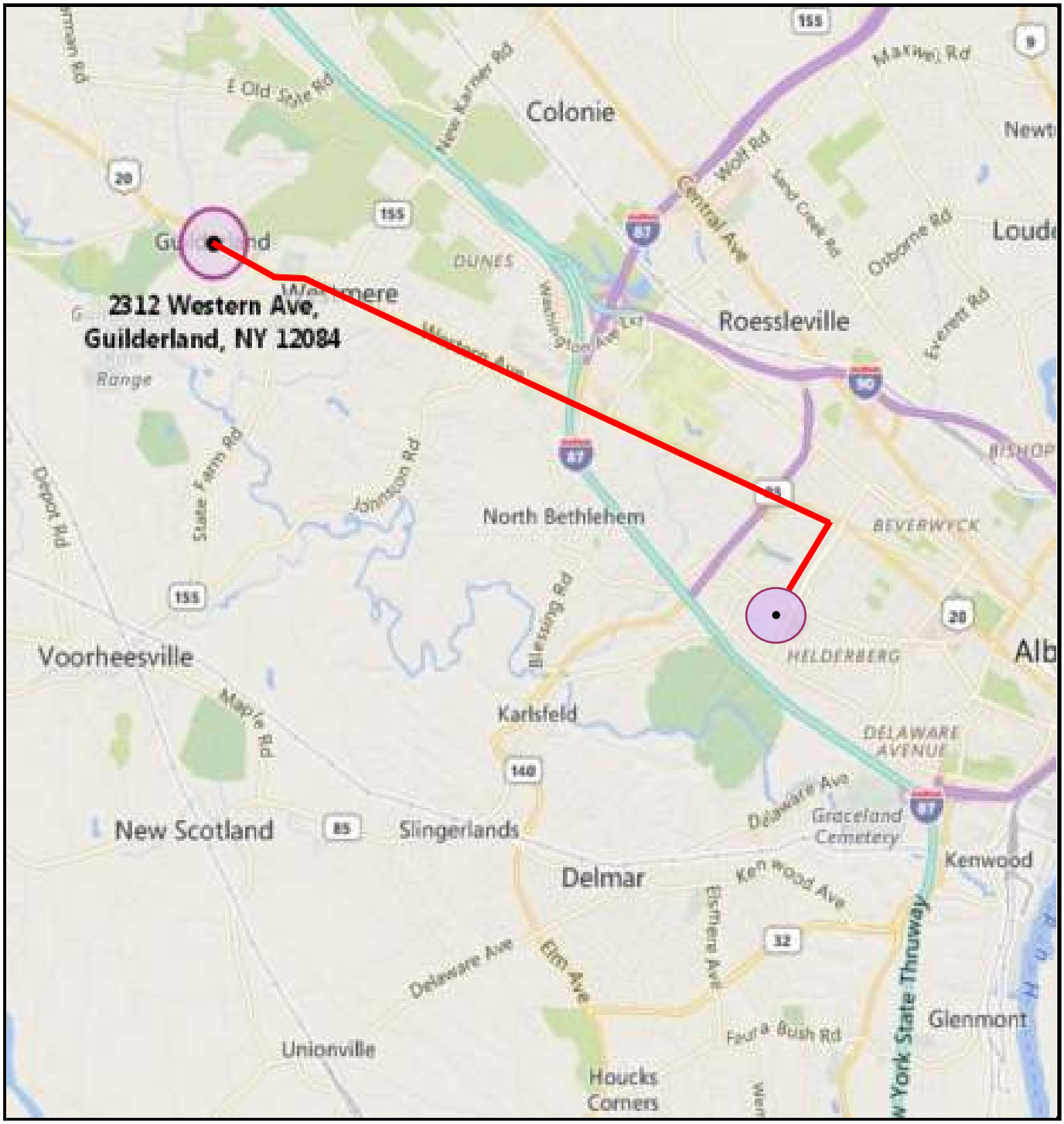
I have read and understood this Site-Specific Health and Safety Plan, and I will comply with the provisions contained therein.

PROJECT: Remedial Investigation of Former Master Cleaners Site
2312-2316 Western Avenue
Town of Guilderland
Albany County, New York

Name: Printed	Signature	Date

FIGURE 1

MAP SHOWING ROUTE TO ST. PETER'S HOSPITAL



MAP REFERENCE

Bing Maps

N

ARCHITECTURE &
BUILDING SYSTEMS
ENGINEERING
CIVIL ENGINEERING
ENVIRONMENTAL SERVICES
SURVEY & LAND
INFORMATIONAL SERVICES

C.T. MALE ASSOCIATES

50 CENTURY HILL DRIVE, LATHAM, NY 12110
PHONE (518) 786- 7400 FAX (518) 786-7299

Figure 1: Map Showing Route to St. Peters Hospital

315 South Manning Boulevard
Albany, New York

CITY OF ALBANY	ALBANY COUNTY, NY
SCALE: None	
DRAFTER: PAL	
PROJECT No. 16.6345	

APPENDIX A

COMMUNITY AIR MONITORING PLAN

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at 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 and 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.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

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

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing 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 or

overturning soil, 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, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

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 the 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.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should 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 must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is 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 mcg/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 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009