

SITE CHARACTERIZATION WORK PLAN

for

**Former Courtyard
67 Howard Street
Albany, New York**

CHA Project Number: 18755

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TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SITE BACKGROUND	2
2.1	Site Description.....	2
2.2	Site History	2
2.3	Previous Investigations	3
3.0	SITE SETTING	6
3.1	Surface Features.....	6
3.2	Site Features.....	6
3.3	Site Geology.....	6
4.0	PROPOSED SITE INVESTIGATION SUMMARY	7
5.0	FIELD SAMPLING PLAN	8
5.1	Sampling Objectives	8
5.2	Sampling Procedures & Protocols	9
5.2.1	Boring Installation	9
5.2.2	Subsurface Soil Sample Collection	9
5.2.3	Monitoring Well Installation.....	10
5.2.4	Groundwater Sample Collection.....	11
5.2.5	Soil Vapor Sampling	13
5.3	Proposed Sampling and Analysis.....	14
5.4	Decontamination Procedure.....	19
5.4.1	Small Equipment	19
5.4.2	Large Equipment.....	19
5.5	Investigation Derived Waste.....	19
6.0	QUALITY ASSURANCE PROCEDURES	20
6.1	Quality Assurance Objectives.....	20
6.2	Sampling Procedures	20
6.3	Quality Assurance/Quality Control Samples	21
6.4	Analytical Methods and Reporting.....	21
6.5	Data Validation	22
7.0	HEALTH AND SAFETY PROTOCOL.....	22
7.1	General.....	22
7.2	Community Air Monitoring Plan.....	23
8.0	REPORTING	23
9.0	SCHEDULING	24

TABLES

Table 5-1:	Sampling Rationale	15
Table 6-1:	Container, Preservation, and Packaging Requirements	15
Table 9-1:	Project Schedule.....	24

LIST OF FIGURES

Figure 1:	Site Location Map
Figure 2:	Previous Soil Boring and Sample Locations
Figure 3:	Excavation Areas
Figure 4:	Proposed Soil Boring and Monitoring Well Locations

APPENDICES

Appendix A:	Previous Analytical Data
Appendix B:	Health and Safety Plan (HASP)
Appendix C:	Community Air Monitoring Plan (CAMP)

1.0 INTRODUCTION

The subject site consists of the northern portion of the 67 Howard Street parcel and a small portion of south end of the 140 State Street parcel. Prior to demolition of adjacent buildings, completed in 2009, the subject site was the southern portion of a courtyard created by adjacent buildings at 138 State Street, 140 State Street, 142 State Street, and 67 Howard Street.

In January of 2006, a Phase I Environmental Site Assessment (ESA) was performed which included the subject site. The Phase I ESA indicated that an underground storage tank (UST) was present in the northern portion of the former courtyard (140 State Street parcel) and that the 67 Howard Street parcel was used historically by Albany Chemical Laboratories, who used portions of the courtyard area for storage of chemicals. Based on these findings, the Phase I ESA indicated the need for further investigation.

Since that time, several investigations have been completed at the subject site which indicate that contamination including volatile organic compounds (VOCs) and mercury are present in site soils at levels which exceed New York State soil cleanup standards. As a result of a meeting held at the NYSDEC Region 4 Headquarters on March 17, 2010, it was determined that additional investigation and characterization would be performed to determine the full nature and extent of contamination at the subject site.

This Work Plan has been prepared to outline the procedures and protocols that will be utilized to conduct a site characterization (SC) that will provide the necessary field data to delineate the nature and extent of contamination at the subject site. This Work Plan was prepared to conform to the Draft DER-10 *Technical Guidance for Site Investigation and Remediation* issued by the Division of Environmental Remediation (November 2009).

The primary objectives of the SC include the following:

- Define the nature/extent of contamination;
- Identify potential source areas;
- Assess impacts; and,
- Provide additional data necessary for a remedial recommendation.

The data derived from the SC will facilitate an evaluation of the migration or possible future migration of identified contamination and provide the data necessary to develop recommendations for the Site.

To facilitate performance of the field investigation and site characterization activities in a manner consistent with NYSDEC protocols, this Work Plan includes the following sections:

- Section 2.0: Site Background
- Section 3.0: Site Setting
- Section 4.0: Proposed Site Investigation Summary
- Section 5.0: Field Sampling Plan
- Section 6.0: Quality Assurance Procedures

Section 7.0	Health and Safety Protocol
Section 8.0	Reporting
Section 7.0:	Schedule

2.0 SITE BACKGROUND

2.1 Site Description

The subject site consists of the northern portion of the 67 Howard Street parcel and a small portion of south end of the 140 State Street parcel in the City of Albany, Albany County, New York. A site location map has been included as Figure 1.

The subject site is located in an urban area near a mixed commercial area and residential neighborhood. The subject site consists of the southern portion of the former courtyard that was located between 140 State Street to the north and 67 Howard Street to the south. The courtyard was previously bound on all four sides by buildings; however, the building to the south, located at 67 Howard Street, was demolished to enable access to the courtyard prior to the commencement of the soil removal activities. In addition, the remaining buildings located to the southeast (136 & 138 State Street) have also been demolished to make way for future development.

A Phase I Environmental Site Assessment (ESA) was performed on the subject site in January 2006. The Phase I ESA indicated that the subject site had been used historically by Albany Chemical Laboratories, who used the former courtyard area to the north of the building for storage of chemicals. Several investigations have been completed involving the subject site. These investigations revealed the presence of contamination in both surface and subsurface soils. The previous investigations are discussed in detail in Section 2.3.

2.2 Site History

The 67 Howard Street portion of the subject site was at one time improved with a two-story wood and brick building which abutted the courtyard shared by 67 Howard Street and 140 State Street. The 140 State Street property was improved with a five-story brick building that was formerly known as the Berkshire Hotel. This structure also opened to the courtyard.

Based on a review of standard historical references such as aerial photographs, Sanborn Fire Insurance Maps, city directories, historical topographical maps, local governmental records, and/or previous environmental investigation reports, the general histories of the two properties are described as follows:

67 Howard Street

According to Sanborn Fire Insurance Maps, the 67 Howard Street property was improved with a shed that was associated with a dwelling at 140 State Street from at least 1892 to 1909. As early as 1934, the 67 Howard Street property is listed as having been a “Chemical Laboratory”. The 1950

map indicates that the Courtyard was being used for “Thinner storage yard in metal drums”. Beginning in 1989, the property at 67 Howard Street is listed as a vacant chemical laboratory.

According to city directories, the 67 Howard Street property was operated as “Albany Laboratories” from 1935 to 1985. Prior to that, it was operated as a dairy farm. The property has been vacant since 1985.

140 State Street

Sanborn Fire Insurance Maps dated 1892 and 1909 indicate that the 140 State Street property was a dwelling. Beginning with the 1934 and ending with the 1950 Sanborn Map, the property was used for “rooms”. The 1989 and later maps all show the property as a vacant hotel.

According to city directories, the 140 State Street property was used as doctor’s offices and apartments in 1914. Beginning around 1935 and until at least 1979, the building was used as a hotel (Berkshire Hotel). A jeweler also operated in the building in 1979 and 1985. The 1990 and 1995 directories indicate that the building was vacant at those times.

2.3 Previous Investigations

As previously indicated, several investigations and remedial activities have been conducted at the Site and include the following:

- Phase 1 ESA Report (January 27, 2006)
- Investigation Related to an Identified Underground Storage Tank and Historic Soil Contamination Located in the Courtyard behind 140 State Street (August 1, 2007)
- Additional Soil Sampling in the Courtyard Located between 67 Howard Street and 140 State Street (November 8, 2007)
- Tank Closure Report for the Underground Storage Tank (UST) Located at 140 State Street, Albany, New York (April 7, 2009)
- Soil Removal and Supplementary Subsurface Investigation Report, 140 State Street, Albany New York (April 23, 2009)

Following the findings of the Phase I Report, in June of 2007, CHA installed six (6) shallow (maximum depth of two (2) ft) borings at the Site using hand-auger methods due to the limited access into the courtyard at the time. No field evidence of contamination was observed. Three (3) shallow (< 2 ft) soil samples collected from the borings contained detectable levels of VOCs, semi-volatile organic compounds (SVOCs), and metals, with the concentrations of several parameters exceeding New York State Department of Environmental Conservation (NYSDEC) Title 6, Part 375 Unrestricted Use Soil Cleanup Objectives (SCOs). Based on the observations made during the investigation, it was suggested that the contamination in the courtyard was due to historic urban contamination and/or historic fill material, and that additional hand auger borings should be installed and sampled to better characterize the Site. A spill (#0704683) was reported to the NYSDEC on June 25, 2007. Removal of the UST was performed on October 21, 2008.

Additional sampling in the courtyard was completed in September 2007 to further delineate the horizontal and vertical limits of contaminated soil, and to determine the management practices necessary for any impacts to the soil during construction. Analytical results from soil samples collected during the investigation indicated that several SVOCs and metals were detected at concentrations exceeding Part 375 Unrestricted Use SCOs. The results also indicated that the surface samples (0 to 0.5 ft) were generally more contaminated than the deeper samples (1.5 to 2 ft), further suggesting that the Site contamination was shallow and due to historic urban contamination. It was recommended that the top 2 feet of soil be removed from the entire courtyard to reduce restrictions on future use of the Site was made.

Following the demolition of the building on 67 Howard Street, between September 15 and September 18, 2008, approximately two (2) ft of surface soil was removed from the entire courtyard area and stockpiled. Field screening of the stockpiled soils indicated that they had no odor and no visual evidence of contamination. Upon completion of the excavation, five confirmatory soil samples were collected from the excavation. The analytical results from these samples indicated that again several SVOCs and three metals were detected in concentrations in exceedance of Part 375 Unrestricted Use SCOs. Because of these results, it was determined that an additional one (1) foot of soil should be removed from the entire courtyard area. An additional one (1) foot of soil was removed October 20, 2008. Four confirmatory soil samples from the bottom of the excavation were collected for analysis on October 27, 2008. The analytical results for these samples again indicated that there was contamination remaining in the soils beneath the three (3) feet that had been excavated. Three of the four samples contained VOCs and mercury at concentrations above the Part 375 Unrestricted Use SCOs, and one sample contained SVOCs at concentrations above Part 375 Unrestricted Use SCOs.

Based on the results of the soil removal, an additional ten (10) soil borings were installed using standard Geoprobe® drilling techniques to further delineate the nature and extent of contamination. Boring locations are shown on Figure 2. The locations of these borings were based on the results from the previous soil sampling efforts and were advanced and sampled to a depth of four (4) ft bgs (seven (7) ft below the previous ground surface). Based on the previous results, five (5) of the borings installed in the northern portion of the Site were analyzed for mercury only, and the five (5) borings installed in the southern portion of the Site were analyzed for VOCs and SVOCs. Analytical results are included in Appendix A. Two of the borings contained mercury above Part 375 Unrestricted Use SCOs at shallow depths. Three (3) of the remaining five (5) borings sampled contained VOCs and SVOCs at concentrations in exceedance of Part 375 Unrestricted Use SCOs at various depths.

The analytical results from these borings suggested an area of shallow mercury contamination in the northern end of the courtyard and VOC and SVOC contamination at the southern end of the courtyard, possibly extending to depths greater than four (4) ft bgs. CHA recommended further investigation to define the vertical limits of contamination in the southern portion of the courtyard following the demolition of the buildings that bounded the Site to the east.

During November 2009, the foundation walls of the former building at 138 State Street which bordered the courtyard to the east were removed. Soils were field screened during trenching along the east side of the eastern foundation wall. The top eight (8) ft of soil in the trench was coarse silty

sand with gravel and brick fill overlying gray clay. Contamination with a slight odor and staining was observed at the base of the foundation, sitting on top of the gray clay with PID readings that ranged from approximately 30 to 147 ppm. This contamination was observed starting about 30 ft northeast of Howard Street, and continuing northeast for another 25 ft. Contaminated soils from the foundation removal were stockpiled and sampled for laboratory analysis. The results from this sample indicated that the soils excavated from the area had several parameters exceeding Part 375 Unrestricted Use SCOs but were generally lower in concentration than previous samples collected at the Site.

Excavation in the courtyard areas determined to be contaminated by mercury (northern area) and volatile organics (southern) commenced on February 10, 2010. An excavation of 14 ft x 21 ft x 3-5 ft deep was completed in the mercury contaminated area. Analytical results of clearance samples collected from each sidewall and the bottom of the excavation. The sample results indicated that all samples were below Part 375 SCOs except for the southern sidewall. The soils were observed to be approximately one (1) to 1.5 feet of loose fill associated with recent demolition, underlain by a geotextile fabric which was laid after previous soil removal activities in 2008. Beneath the geotextile was gray clay, except for the eastern edge of the excavation, where exposed fill associated with the former foundation builder's trench was observed. The excavated area is shown on Figure 3.

Following excavation of the mercury area, excavation began in the southern portion of the courtyard where VOC-impacted soils had been observed. Soils were similar to the northern excavation with gray clay overlain by a geotextile fabric and recent loose demolition debris. Starting at a depth of approximately four (4) ft below grade in the approximate location of Boring B-8, field screening indicated potential high levels of contamination. A significant odor was observed and PID readings were as high as 1123 ppm. Little staining was observed.

Excavation work continued, resulting in a final excavation of 31 ft x 20 ft x 10-11 ft deep. The soils below the geotextile consisted only of gray clay. The top approximately four feet of clay was hard, had some vertical fractures, and contained roots and small layers of silt and sand. This hard clay layer was underlain by a softer clay with no distinct layering. Some black staining was observed between these layers and within both the upper and lower clay units. The horizontal laminations and other layers that were still intact suggest that the clay is a native soil and not fill.

Based on the field screening, the southern end of the excavation appeared to be more heavily contaminated than the northern end, with PID readings in the upper four feet as high as 9,999 ppm (the upper limit of the PID). The excavation ceased after the Colonie Landfill, where the excavated soils were being disposed of, would no longer accept the soil due to the clay content, as they have difficulty handling and placing the clay. Furthermore, with input from NYSDEC, it was determined that due to the high PID readings, more information was needed in order to determine how to proceed. Clearance samples were collected from the northeastern and northwestern sidewalls of the excavation at depths of approximately 8 to 10 ft bgs. In addition, a sample for analysis using the Toxicity Characteristic Leaching Procedure (TCLP) was collected from the stockpiled soil for the purposes of waste characterization. The excavated area is shown on Figure 3.

All samples contained VOC parameters at concentrations in exceedance of Part 375 Unrestricted Use SCOs, although concentrations were generally lower than in samples previously collected during the

soil boring program. Furthermore, the TCLP sample indicated that some of the soils removed would need to be classified as hazardous waste due to the leachable levels of trichloroethene and tetrachloroethene detected.

Based on these results, some VOC and, to a lesser extent, mercury contamination remains at the site. The nature and extent of the contamination has not been sufficiently delineated. As a result, additional characterization is required in order to determine the nature and extent of contamination and to determine if a source area exists. Additional investigation will also provide information regarding whether additional remediation is required before development of the site can begin.

3.0 SITE SETTING

3.1 Surface Features

In general, the subject site has an elevation of approximately 102 feet above mean sea level (AMSL) based upon the USGS topographic mapping of the area. Topography on-site is relatively flat with a rather significant slope to the east towards the Hudson River. According to the Federal Emergency Management Agency, the Property is not located in an area of 100- or 500-year flooding.

3.2 Site Features

The subject site is a portion of the former courtyard area which was approximately 26 feet wide by 142 feet long. Currently, the subject site is vacant with no buildings remaining.

At the time the previous Phase I ESA site inspection was conducted, the property was improved with a two-story wood and brick building that had been used by Albany Chemical Laboratories. No hazardous substances were noted in the building at the time of the inspection.

3.3 Site Geology

The USDA Soil Survey for Albany County indicates that the soils of the subject site are classified as Urban Land. The Urban Land designation is assigned to areas where 85% or greater of the surfaces are covered by impervious materials. Surficial and bedrock geologic maps compiled by the USGS, Hudson Mohawk Sheets, indicate that the surficial soils of the subject site consist of lacustrine silt and clay which are underlain by bedrock of Normanskill Shale with minor mudstone and sandstone.

Based on topographic information and previous investigations, groundwater is estimated to be at a depth of greater than (15 to 20) feet bgs. The direction of groundwater flow beneath the subject site has not been physically verified; however, based on regional topography, local groundwater flow beneath the site is inferred to be in an east/southeasterly direction towards the Hudson River. Surface flow is also in an east/southeasterly direction towards the Hudson River with stormwater runoff directed in a southeasterly direction to storm drains along bordering streets.

NYSDEC and National Wetland Inventory mapping for the area of the subject site indicate that there are no State or Federal delineated wetlands located on or adjacent to the subject site.

4.0 PROPOSED SITE INVESTIGATION SUMMARY

To further investigate potential impacts identified during the previous subsurface investigation and remedial activities conducted at the site, CHA will install nine (9) borings to the top of the observed groundwater table using hollow stem auger (HSA) drilling techniques. Five (5) of the nine (9) borings will be converted to groundwater monitoring wells. If it is determined during the installation the borings/monitoring wells that the depth to groundwater is excessive for the purposes of this phase of the investigation, the feasibility and effectiveness of the remaining scheduled borings and monitoring wells and the required depths of these installations may be adjusted with the concurrence of NYSDEC. The proposed locations of the borings and monitoring wells are presented on Figure 4 and are summarized below.

- Boring B-17 will be the first boring installed at the site in order to determine the approximate depth of groundwater at the Site. Boring B-17 will be converted into monitoring well MW-5 to assist in establishing groundwater flow direction across the site and to serve as a downgradient groundwater monitoring point. This location was also selected to further define the downgradient limits of contamination.
- Boring B-11 will be installed just southeast of the footing for 142 State Street as an upgradient sampling point relative to on-site conditions. Additionally, boring B-11 will be converted into monitoring well MW-1 to assist in establishing groundwater flow direction across the site and to serve as an upgradient groundwater monitoring point.
- Borings B-12 and B-13 will be installed approximately 20 feet to the south and east of boring B-11, approximately centered between 142 State Street and the former 138 State Street, to evaluate potential impacts to soil from former operations occurring in this area that is associated with the former drum storage. In addition, the borings will be converted into monitoring wells MW-2 and MW-3. These wells will serve as source area monitoring points and assist in establishing groundwater flow direction across the site.
- Borings B-14 and B-15 will be installed to assist in delineating potential soil impacts from the former drum storage area. These locations are based on previous investigations which suggest they are located outside of the assumed source area.
- Boring B-16 will be installed just southeast of the footing for 138 State Street as a downgradient soil sampling point relative to source area conditions. Boring B-16 will extend at least to the depth of the former footer for the foundation associated with the building formerly located at 138 State Street. Additionally, B-16 will be converted into monitoring well MW-4 to assist in establishing groundwater flow direction across the site and to serve as a downgradient groundwater monitoring point.
- Borings B-18 and B-19 will be installed to assist in delineating potential soil impacts from the former drum storage area. These locations are located downgradient of the assumed source area.

The borings and monitoring wells will be placed to evaluate the subsurface conditions relative to the historic use of the site. Each boring will be advanced to the top of the observed groundwater table and up to two soil samples will be collected from each boring for laboratory analysis based on field screening of the soil samples. The samples will be collected from the depth at which the greatest contamination is observed and, if possible, the lower limit of contamination in the unsaturated zone. The subsurface soil samples will be analyzed for the presence of VOCs, SVOCs, and mercury. The soil samples will be analyzed on a total constituent basis.

In addition, a single groundwater sample will be collected from each monitoring well approximately one week after the installation and development of the wells. The groundwater samples will be analyzed for VOCs, SVOCs, and mercury. After collection of the groundwater samples, a topographic survey of the monitoring well network, based on an assumed benchmark, will be performed to facilitate the preparation of a groundwater contour map for the site.

Following the soil boring and monitoring well installation program, three (3) exterior soil vapor sampling points will be installed adjacent to 142 State Street to evaluate the potential for off-site soil vapor contamination. Samples will be collected from a depth that is comparable to the estimated depth of the foundation footings and will be analyzed for VOCs.

The laboratory analyses will be performed by a laboratory certified in accordance with the New York State Department of Health's (NYSDOH) Environmental Laboratory Approval Program (ELAP) to perform the requested analyses. The laboratory analyses will be performed in accordance with the most recent version of NYSDEC ASP with a Category B deliverable package. The laboratory analyses will be performed based upon a standard deliverable schedule in accordance with ASP requirements.

The proposed field sampling plan is described in detail in Section 5.0.

5.0 FIELD SAMPLING PLAN

The sampling objectives, procedures, and protocols associated with this project are presented below. Quality Assurance/Quality Control (QA/QC) issues are addressed in Section 6.0.

5.1 Sampling Objectives

The sampling to be performed on the subject site will entail subsurface soil, groundwater, and soil vapor sampling to characterize the subsurface conditions at the site relative to the identified areas of concern. The subject site was found to have residual VOC and mercury contamination pertaining to historic on-site uses of the property. Characterization of the soil, groundwater, and soil vapor at the site will allow for the confirmation of the presence of contamination, the identification of sources(s) of contamination, and the potential movement of contamination.

5.2 Sampling Procedures & Protocols

5.2.1 Boring Installation

As part of the investigation activities, CHA proposes to install nine (9) soil borings at representative locations across the site using standard hollow-stem auger (HSA) drilling techniques to delineate the extent of soil and groundwater impacts, if any. Proposed boring locations are presented on Figure 4.

These locations are approximate and actual locations may vary depending on field conditions. It is noted that the NYSDEC has indicated that a representative from the Division of Environmental Remediation will be present during all investigative activities at the Site. Any changes to this Work Plan will be addressed in the field and agreed upon by CHA, NYSDEC and the property owner.

The maximum depth of each boring is expected to be to the top of the observed groundwater table, except at those locations where monitoring wells are to be installed (see Section 5.2.3). The depth of each boring may vary depending upon the geologic conditions and degree of impact encountered at each location.

Soil samples will be collected continuously throughout the depth of each boring using a stainless steel split spoon sampling device and screened in the field for visual, olfactory, and photoionic evidence of contamination. Immediately upon opening the split spoon soil sampler, a photoionization detector (PID) will be used to obtain readings along the length of the soil sample. Soils will be logged in the field using a modified soil classification method. Field documentation will be made on CHA's standard test boring logs for each boring. It should be noted that no bedrock drilling or coring is proposed.

5.2.2 Subsurface Soil Sample Collection

Up to 18 subsurface soil samples, two from each proposed boring, will be collected for laboratory analysis. The samples selected for laboratory analysis will be collected from each borehole in accordance with the following protocols:

1. One sample will be collected from the unsaturated interval which indicates the highest potential for the presence of contamination as determined by the highest PID reading, and/or visual observation.
2. The second sample will be collected from either:
 - o The deepest unsaturated interval which indicates a potential for contamination; or,
 - o In the instance where elevated PID meter readings or visible contamination are not present, a sample from the interval immediately above the water table may be collected for laboratory analysis.

If contamination is not observed in the borehole, only one confirmatory soil sample will be collected from the interval immediately above the water table.

Soil samples will be collected from the middle of the core of the sample using a decontaminated stainless steel trowel/spoon or a disposable polyethylene sampling scoop. Soil samples designated for VOC analysis will be collected first. Following the collection of soil for volatile analyses, soil samples collected for all non-volatile chemical analyses will be thoroughly mixed before being placed in the appropriate sample containers. The samples will then be placed directly into the laboratory sample jars, allowing no headspace. The sample containers will be placed on ice and/or ice packs in laboratory-supplied rigid coolers after collection and labeling.

Each borehole that is not converted to a monitoring well will be tremie grouted from the bottom of the bore hole using a cement/bentonite mix. The entire length of the borehole will be grouted.

The soil and groundwater samples will be hand delivered or shipped via overnight courier following proper chain-of-custody protocols to a qualified laboratory certified by the New York State Department of Health's Environmental Laboratory Approval Program (ELAP). Each soil sample will be analyzed for the presence of VOCs via EPA Method 8260, SVOCs via EPA Method 8270, and mercury via EPA Method 7471. Result deliverables will be provided in ASP Category B format.

Before drilling at the initial location and after drilling at the last location, the drilling equipment and all sampling equipment will be cleaned in accordance with the protocols established in Section 5.4. Drill cuttings will be handled as described in Section 5.5. QA/QC samples will be collected in accordance with Section 6.0.

5.2.3 Monitoring Well Installation

Five (5) of the borings installed as part of the investigation will be converted to groundwater monitoring wells to confirm or deny the presence of groundwater impacts associated with historical use of the Site. The maximum depths of the proposed monitoring wells are not expected to exceed 10 feet into the groundwater table.

The monitoring wells will be constructed of 2-inch diameter Schedule 40 PVC riser, and will be installed in the previously installed soil borings as noted above. The wells will be completed with a 10-foot PVC 0.010-inch slot screen; attempts will be made to construct each well so that the screened interval will begin two to three feet above the water table and extend seven to eight feet into the water table. The annular space of the monitoring wells will be filled with a silica sand pack, approximately two feet of hydrated granular bentonite, and cement/bentonite grout to 0.5 feet below ground surface. The locations of the proposed monitoring wells are shown on Figure 3. The wells will be completed with a locking plug and protective steel riser or flush-mounted manhole-type road box.

After installation of the monitoring wells, the elevation of the top of the well casing will be surveyed by CHA field personnel for elevation, based on an assumed benchmark. The survey will be performed to correlate the groundwater elevation data with the existing wells and provide the necessary information to prepare a map illustrating the shallow groundwater contours and to identify the direction of groundwater flow at each location.

After a minimum of 24 hours after installation (to allow for grout curing), the monitoring wells will be developed such that the wells are in good hydraulic connection with the surrounding water bearing unit, and to ensure that they are suitable for obtaining representative groundwater samples with a minimum of turbidity (suspended fine-grained materials). During development, CHA will monitor field indicator parameters including pH, temperature, turbidity, and conductivity to develop a preliminary water quality database and to determine if any of the newly installed wells have been contaminated by grout placement.

5.2.4 Groundwater Sample Collection

Groundwater samples will be collected from each of the proposed monitoring wells. Samples will be analyzed for VOCs, SVOCs, and mercury. Sample container requirements and handling procedures are presented in Section 6.0. Sampling protocols are discussed below.

Water Level Measurements

Groundwater level measurements will be collected immediately prior to groundwater sampling. Groundwater elevation measurements will be used with well elevation data to determine direction of groundwater flow.

The water levels in the monitoring wells will be measured to the nearest 0.01-foot using a Solinst electronic water level meter and recorded prior to the collection of any samples. Using the well riser elevations and depth to groundwater measurements, CHA will record the water level elevations and construct a groundwater potentiometric surface map. The well depth and depth to water data will be used to calculate the volume of water in the well casing.

Well Purging

Groundwater samples will be collected from proposed monitoring wells MW-1 through MW-5. Groundwater samples will be collected within one week after the monitoring well installation activities are completed.

Prior to the collection of groundwater samples, groundwater level measurements will be measured to the nearest 0.01-foot using an electronic water level meter and recorded. Using the well riser elevations and depth to groundwater measurements, CHA will record the water level elevations and construct a groundwater potentiometric surface map. The well depth and depth to water data will be used to calculate the volume of water in the well casing. Water level measuring equipment that comes in contact with well water will be decontaminated to minimize the potential for cross-contamination.

Prior to sample collection, monitoring wells will be purged in accordance with the following protocol:

1. All personnel involved in well purging will wear a new pair of disposable latex gloves for each well.

2. Purging will be conducted using an adjustable rate peristaltic pump connected to dedicated polyethylene tubing. The tubing will slowly be lowered into the well to the mid-point of the well screen. The depth to which the tubing is lowered will be recorded.
3. The starting pumping rate for the well will be 200 to 500 milliliters per minute (ml/min). The water level will be monitored approximately every five minutes to ensure that a water level remains stabilized (drawdown of 0.3 ft or less).
4. Pumping rates will, if needed, be reduced to the minimum capabilities of the pump to ensure stabilization of the water level.
5. During purging of the well, field indicator parameters (turbidity, temperature, specific conductance, pH, Eh, and DO) will be monitored and recorded approximately every five minutes.
6. The well will be considered stabilized and ready for sample collection when the indicator parameters have stabilized for three consecutive readings as follows:
 - ~0.1 for pH
 - 23% for specific conductance (conductivity)
 - +10 mV for redox potential
 - +10% for DO and turbidity
 - Turbidity less than 50 NTUs

The tubing will not be removed from the well between purging and sampling.

7. All non-disposable water extraction equipment will be decontaminated with the protocols presented in the following section.
8. All purge water will be handled in accordance with Section 5.5.

Well Sampling

Once the well is considered stabilized, monitoring well sampling will be carried out according to the following protocol:

1. All personnel involved in well purging will wear a new pair of disposable latex gloves for each well.
2. Samples will be collected at a flow rate between 100 and 250 ml/min and such that drawdown of the water level within the well does not exceed the maximum allowable drawdown of 0.3 ft.
3. Monitoring wells will be sampled via dedicated polyethylene tubing.

4. Sufficient groundwater will be collected for chemical analysis. The order for sample collection is as follows:
 - VOCs
 - SVOCs
 - Mercury
5. Groundwater samples will be submitted for the analysis of the following: TCL VOCs via USEPA Method 8260, TCL SVOCs via USEPA Method 8270, and mercury via USEPA Methods 7470.
6. Calibration of all field instruments will be conducted in accordance with the manufacturer's instructions.
7. One blind duplicate sample (CHA-#) and additional sample volume for a matrix spike/matrix spike duplicate (MS/MSD) sample will be collected. Additional QA/QC samples include a trip blank. All QA/QC samples will be analyzed for the same parameters as the site-specific samples.

5.2.5 Soil Vapor Sampling

CHA will conduct a soil vapor investigation at the site, following the soil boring investigation. Three (3) temporary exterior soil vapor sampling points will be installed adjacent to the east/southeast foundation footing of 142 State Street to evaluate the potential for off-site soil vapor contamination. Proposed soil vapor sampling points are shown on Figure 4. Soil vapor samples will be collected in accordance with the NYSDOH Center for Environmental Health *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006).

Vapor implants will be installed using direct-push technology (DPT) by advancing a 2 ¼ -inch stainless-steel rod to a depth of approximately eight (8) feet below ground surface (bgs). This depth was selected based on the estimated depth of the adjacent building footings, to avoid dilution by entrained surface air, for greatest relevancy to potential vapor intrusion, and to avoid potential pore water interference.

A six-inch stainless steel screen will be fitted with ¼" inert tubing (polyethylene, Teflon, etc.) and placed in the borehole at depth. Porous, inert backfill material (e.g. glass beads, washed #1 crushed stone, etc.) will be placed such that it creates a one (1)-foot sampling interval from seven (7) to eight (8) feet below ground surface (bgs). The soil vapor probe will be sealed above the sampling zone with bentonite slurry for a minimum distance of three (3) feet. A tracer gas study will be completed to verify the integrity of the subsurface vapor probe seal prior to sampling.

After the tracer gas study is performed and before the samples are collected, one to three implant volumes (volume of the sample probe and tube) will be purged. A site-specific purge volume will be estimated based on the internal volume of tubing used and the annular space around the probe tip. This will ensure the samples collected are representative of the soil vapor conditions.

When the soil vapor samples are collected, the following local conditions will be documented:

1. Weather conditions (e.g. precipitation, barometric pressure, wind speed, wind direction and outdoor temperature) will be noted for the previous 24 to 48 hours. The weather conditions as reported by the National Weather Service at the Albany International Airport will be used.
2. Site conditions, such as precipitation, temperature, odors and activities within the sampling area will be documented.

Soil-gas samples will be collected by a qualified scientist/engineer using methods consistent with NYSDEC soil vapor sampling guidance. Soil gas samples will be collected between 7 and 8 feet bgs in six-liter Summa canisters that are individually certified clean by the laboratory. Sample flow rates will be controlled so that they do not exceed 0.2 liters per minute for both purging and sample collection to minimize outdoor air infiltration during sampling. During sampling, the sampling depth, purge volumes, volume of vapor extracted, canisters used, vacuum before and after collection, and other observations will be recorded.

After sample collection, canisters will be properly packed and shipped under chain-of-custody to a qualified laboratory certified by the New York State Department of Health's Environmental Laboratory Approval Program (ELAP) for analysis of VOCs via USEPA Method TO-15

Analytical quality assurance for soil vapor samples will include one trip blank and one duplicate sample. The duplicate sample will be collected simultaneously with the original sample using a stainless steel duplicate sampling tee. All QA/QC protocols are outlined and further discussed in Section 6.0.

5.3 Proposed Sampling and Analysis

Table 5-1 presents a summary of the proposed sampling and analysis plan. QA/QC samples will be collected according to Section 6.0. Proposed sample locations are presented on Figure 4.

Sampling Rationale

Proposed sample locations are depicted on Figure 4. The sample identifications, depths (if applicable), analytical parameters, and detailed sampling rationale are presented on Table 5-1.

Table 5-1: Sampling Rationale

Sample ID	Matrix	Sample Depth	Sample Location	Analytical Parameters	Rationale
*B-11a	Soil	Interval which indicates the highest potential for the presence of contamination	Southeast of footing associated with 142 State Street	TCL VOCs , TCL SVOCs, Mercury	B-11a is placed to minimize data gaps and provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the horizontal extent of contamination. Serves as an upgradient soil sample location.
B-11b	Soil	Lower limit of contamination or the interval directly above the saturated zone	Southeast of footing associated with 142 State Street	TCL VOCs , TCL SVOCs, Mercury	B-11b is placed to minimize data gaps and provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the vertical extent of contamination. Serves as an upgradient soil sample location.
*B-12a	Soil	Interval which indicates the highest potential for the presence of contamination	Southwestern end of former VOC excavation	TCL VOCs , TCL SVOCs, Mercury	B-12a is placed to minimize data gaps and provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the horizontal extent of contamination. Serves as a source area soil sample location.
B-12b	Soil	Lower limit of contamination or the interval directly above the saturated zone	Southwestern end of former VOC excavation	TCL VOCs , TCL SVOCs, Mercury	B-12b is placed to minimize data gaps and provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the vertical extent of contamination. Serves as a source area soil sample location.
*B-13a	Soil	Interval which indicates the highest potential for the presence of contamination	Northeastern end of former VOC excavation.	TCL VOCs , TCL SVOCs, Mercury	B-13a is placed to minimize data gaps and provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the horizontal extent of contamination. Serves as a source area soil sample location.

Sample ID	Matrix	Sample Depth	Sample Location	Analytical Parameters	Rationale
B-13b	Soil	Lower limit of contamination or the interval directly above the saturated zone	Northeastern end of former VOC excavation	TCL VOCs , TCL SVOCs, Mercury	B-13b is placed to minimize data gaps and provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the vertical extent of contamination. Serves as a source area soil sample location.
*B-14a	Soil	Interval which indicates the highest potential for the presence of contamination	Southwest of former VOC excavation	TCL VOCs , TCL SVOCs, Mercury	B-14a is placed to minimize data gaps and provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the horizontal extent of contamination. Serves to delineate the extent of contamination as well.
B-14b	Soil	Lower limit of contamination or the interval directly above the saturated zone	Southwest of former VOC excavation	TCL VOCs , TCL SVOCs, Mercury	B-14b is placed to minimize data gaps and provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the vertical extent of contamination. Serves to delineate the extent of contamination as well.
*B-15a	Soil	Interval which indicates the highest potential for the presence of contamination	Northeast of former VOC excavation	TCL VOCs , TCL SVOCs, Mercury	B-15a is placed to minimize data gaps and provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the horizontal extent of contamination. Serves to delineate the extent of contamination as well.
B-15b	Soil	Lower limit of contamination or the interval directly above the saturated zone	Northeast of former VOC excavation	TCL VOCs , TCL SVOCs, Mercury	B-15b is placed to minimize data gaps and provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the vertical extent of contamination. Serves to delineate the extent of contamination as well.
*B-16a	Soil	Interval which indicates the highest potential for the presence of contamination	Northeast of footing associated with western side of 138 State Street	TCL VOCs , TCL SVOCs, Mercury	B-16a is placed to minimize data gaps and provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the horizontal extent of contamination. Serves to delineate the extent of contamination as well.

Sample ID	Matrix	Sample Depth	Sample Location	Analytical Parameters	Rationale
B-16b	Soil	Lower limit of contamination or the interval directly above the saturated zone	Northeast of footing associated with western side of 138 State Street	TCL VOCs , TCL SVOCs, Mercury	B-16b is placed to minimize data gaps and provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the vertical extent of contamination. Serves to delineate the extent of contamination as well.
*B-17a	Soil	Interval which indicates the highest potential for the presence of contamination	Northeast of footing associated with eastern side of 138 State Street	TCL VOCs , TCL SVOCs, Mercury	B-17a is placed to minimize data gaps and provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the horizontal extent of contamination. Serves to delineate the extent of contamination as well.
B-17b	Soil	Lower limit of contamination or the interval directly above the saturated zone	Northeast of footing associated with eastern side of 138 State Street	TCL VOCs , TCL SVOCs, Mercury	B-17b is placed to minimize data gaps and provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the vertical extent of contamination. Serves to delineate the extent of contamination as well.
*B-18a	Soil	Interval which indicates the highest potential for the presence of contamination	East of footing associated with western side of 138 State Street	TCL VOCs , TCL SVOCs, Mercury	B-18a is placed to provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the horizontal extent of contamination.
B-18b	Soil	Lower limit of contamination or the interval directly above the saturated zone	East of footing associated with western side of 138 State Street	TCL VOCs , TCL SVOCs, Mercury	B-18b is placed to provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the vertical extent of contamination.
*B-19a	Soil	Interval which indicates the highest potential for the presence of contamination	East of footing associated with western side of 138 State Street	TCL VOCs , TCL SVOCs, Mercury	B-19a is placed to provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the horizontal extent of contamination.
B-19b	Soil	Lower limit of contamination or the interval directly above the saturated zone	East of footing associated with western side of 138 State Street	TCL VOCs , TCL SVOCs, Mercury	B-19b is placed to provide a thorough understanding of the subsurface conditions throughout the entire site and to establish the vertical extent of contamination.

Sample ID	Matrix	Sample Depth	Sample Location	Analytical Parameters	Rationale
MW-1	Groundwater	NA	B-11 converted to MW-1	TCL VOCs , TCL SVOCs, Mercury	MW-1 is installed to serve as an upgradient monitoring point.
MW-2	Groundwater	NA	B-12 converted to MW-2	TCL VOCs , TCL SVOCs, Mercury	MW-2 is installed to serve as a source area monitoring point.
MW-3	Groundwater	NA	B-13 converted to MW-3	TCL VOCs , TCL SVOCs, Mercury	MW-3 is installed to serve as a source area monitoring point.
MW-4	Groundwater	NA	B-16 converted to MW-4	TCL VOCs , TCL SVOCs, Mercury	MW-4 is installed to serve as a downgradient monitoring point and to help establish the limits of contamination.
MW-5	Groundwater	NA	B-17 converted to MW-5	TCL VOCs , TCL SVOCs, Mercury	MW-5 is installed to serve as an additional downgradient monitoring point (if necessary) and to help establish the limits of contamination.
SV-1	Soil Vapor	7 - 8 ft bgs	Adjacent to 142 State Street Building	VOCs	SV-1 will be located adjacent to the estimated footing depth of 142 State Street. The monitoring point serves to assess the presence of soil vapor impacts at the site, as well as determine the potential for off-site migration of any impacts.
SV-2	Soil Vapor	7 - 8 ft bgs	Adjacent to 142 State Street Building	VOCs	SV-2 will be located adjacent to the estimated footing depth of 142 State Street. The monitoring point serves to assess the presence of soil vapor impacts at the site, as well as determine the potential for off-site migration of any impacts.
SV-3	Soil Vapor	7 - 8 ft bgs	Adjacent to 142 State Street Building	VOCs	SV-3 will be located adjacent to the estimated footing depth of 142 State Street. The monitoring point serves to assess the presence of soil vapor impacts at the site, as well as determine the potential for off-site migration of any impacts.

* Sample will not be collected if no field evidence of contamination is observed.

5.4 Decontamination Procedure

5.4.1 Small Equipment

For soil and groundwater sampling, dedicated sampling equipment is preferred. However, if non-dedicated equipment is used (i.e. split spoon sampler), the required decontamination procedure for all manual sampling equipment used to collect samples for chemical analysis is:

1. Disassemble equipment, as required.
2. Remove gross contamination from the equipment by brushing and then rinsing with tap water.
3. Wash and scrub with low phosphate detergent;
4. Tap water rinse;
5. Rinse with 10 percent nitric acid (HNO_3) solution;
6. Distilled water rinse;
7. Acetone or Methanol rinse;
8. Thoroughly rinse with distilled water; and
9. Air dry.

All decontaminated equipment will be placed on polyethylene sheeting or aluminum foil in order to avoid contacting a contaminated surface prior to use. Field personnel will use a new pair of outer gloves before handling sample equipment after it is cleaned. During periods of transportation and non-use, all decontaminated sampling equipment will be wrapped in aluminum foil.

5.4.2 Large Equipment

A temporary equipment decontamination pad will be constructed for hollow stem augers as well as the drill rig, which will be decontaminated before leaving the Site. Augers and the drill rig will be decontaminated by first removing gross contamination from the equipment by brushing or wiping. All equipment will then be thoroughly washed using a high-pressure steam cleaner.

The water generated from decontaminating equipment will be collected by placing 10-mil polyethylene sheeting over an approximately twenty-foot by twenty-foot area with raised sides and one low spot to direct the water to one corner of the pad. The collected water will be pumped into steel drums and managed as investigation derived waste in accordance with Section 5.5. It is anticipated that the decontamination pad will be located in the footprint of the former building located at 67 Howard Street.

5.5 Investigation Derived Waste

Investigation Derived Waste (IDW) generated during the investigation will include soil cuttings, samples not submitted for analysis, purge water, and decontamination water, as well as empty soil jars, personal protective equipment (PPE) and other project-related waste.

Drill cuttings and purge/development water will be placed in 55-gallon DOT-approved drums and stored on-site for future disposal/treatment in accordance with DER-10.

All gloves, PPE, sampling materials, and other project-related wastes will be collected daily and disposed of as solid waste.

6.0 QUALITY ASSURANCE PROCEDURES

6.1 Quality Assurance Objectives

The overall quality assurance objective is to develop and implement procedures for sample preparation and handling, sample chain-of-custody, laboratory analyses and reporting to ensure the accuracy and integrity of the data generated during the investigation. Specific procedures to be followed for during implementation of this Work Plan are presented in Sections 4.0 through 8.0.

6.2 Sampling Procedures

The procedures for collecting samples and for performing all related field activities are described in detail in Section 5.0. Sample preservation methods and maximum sample holding times are summarized below for groundwater, soil and soil vapor samples.

Table 6-1: Container, Preservation, and Packaging Requirements

Analysis	Recommended Volume and Container	Preservation	Max. Holding Times	Shipping Means	Packaging
Soil Samples					
VOCs + 10 TICs via EPA 8260	4 oz glass wide	Cool to 4°C	14 days from sample collection	Hand Delivery/ FedEx Priority	Cooler with ice and Bubble Pack
SVOCs + 20 TICS via EPA 8270	8 oz glass wide	Cool to 4°C	14 days from sample collection/ 40 days from extraction	Hand Delivery/ FedEx Priority	Cooler with ice and Bubble Pack
Mercury via EPA 7471A	4 oz glass wide	Cool to 4°C	6 months from collection to analysis	Hand Delivery/ FedEx Priority	Cooler with ice and Bubble Pack
Groundwater Samples					
VOCs + 10 TICs via EPA 8260	2-40ml VOAs	Cool to 4°C HCl to pH<2	14 days from sample collection	Hand Delivery/ FedEx Priority	Cooler with ice and Bubble Pack
SVOCs + 20 TICS via EPA 8270	2-1 liter glass amber	Cool to 4°C	7 days from sample collection/ 40 days from extraction	Hand Delivery/ FedEx Priority	Cooler with ice and Bubble Pack
Mercury via EPA 7470A	1- 250mL plastic	Cool to 4°C HNO3 to pH<2	6 months from collection to analysis	Hand Delivery/ FedEx Priority	Cooler with ice and Bubble Pack

Soil Vapor Samples					
VOCs via EPA TO-15	Summa Canister	N/A	14 days from sample collection	Hand Delivery/ FedEx Priority	Cooler with Bubble Pack

A Chain-of-Custody will be maintained to document the transfer of all samples. Each sample container will be properly sealed. Sample container labels will include sample number, place of collection and date and time of collection. Sample containers will be shipped to the Contract Laboratory at 4°C (±2°C) in sealed coolers.

6.3 Quality Assurance/Quality Control Samples

To assess the quality of data resulting from the field sampling program, field duplicate samples, equipment blank samples, samples for laboratory matrix spike/matrix spike duplicate (MS/MSD) analyses, and trip blank samples will be collected (where appropriate) and submitted to the contract laboratory.

For all field samples collected, field duplicate samples will be submitted at a frequency of one per 10 investigative samples (minimum of one per sampling event). Field duplicate samples for subsurface soil matrices will be collected and analyzed as a check on the aggregate analytical and sampling protocol precision. Field duplicate samples for groundwater matrices will be collected and analyzed as a check on the analytical and sampling protocol precision.

Equipment blank samples will be collected at a frequency of one per sampling event. Equipment blanks will be analyzed to check procedural contamination and/or ambient conditions and/or sample container contamination at the Site that may cause sample contamination.

MS/MSD samples will be analyzed at a frequency of one per 20 investigative samples. Matrix spike and matrix spike duplicate samples will be analyzed as a check on the analytical method's accuracy and precision.

Trip blanks will be submitted with each cooler containing aqueous samples to be analyzed for VOCs. Trip blank samples (for VOC determinations only) will be shipped by the laboratory to the Site and back to the laboratory without opening in the field. The trip blank will provide a measure of potential cross-contamination of samples resulting from shipment, handling and/or ambient conditions at the Site.

Analytical quality assurance for soil vapor samples will include one trip blank and one duplicate sample. The trip blank will be prepared using laboratory grade ultra pure air and analyzed for the target compounds. The duplicate sample will be collected simultaneously with the original sample using a stainless steel duplicate sampling tee.

6.4 Analytical Methods and Reporting

Groundwater and subsurface soil samples will be analyzed for VOCs + 10 TICs via EPA Method 8260, SVOCs + 20 TICs via EPA Method 8270, and mercury via EPA Method 7470A/7471A.

All QA/QC samples will be analyzed for the same parameters as the site-specific samples.

All reporting and deliverables will be in accordance with the NYSDEC September 1989 ASP (12/91 Revision), Category B. All reports will be received by CHA within 20 business days of the last day of sampling. The laboratory will also be required to provide the data in an electronic data deliverable (Equis format).

6.5 Data Validation

A qualified third party will conduct an independent evaluation of data reduction and reporting by the laboratory. The data validation will be performed in accordance with the following documents: "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", EPA 540/R-94-012, February 1994; and "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", EPA 540/R-013, February 1994. Data analyzed using methods not covered in these documents will be validated using the general principles used in these documents.

7.0 HEALTH AND SAFETY PROTOCOL

7.1 General

The assignments associated with this project require CHA employees to perform tasks where personal safety could be compromised due to chemical, physical, and biological hazards. While conducting fieldwork, CHA employees may be exposed to chemical contaminants including a wide variety of organic compounds and metals. Additionally, CHA employees may be exposed to physical hazards, including but not limited to, heavy machinery, excavations, and trip/fall hazards.

A Site Health & Safety Plan (HASP) (Appendix B) has been prepared for the use of CHA and their employees. Properly trained and experienced CHA subcontractors may also use the HASP as a guideline document. The requirements and guidelines in the HASP are based on a review of available information and an evaluation of potential on-site hazards from previous studies and information available to date.

This HASP will be discussed with site personnel and will be available on-site for review while work is underway. All personnel conducting site activities must be familiar with the procedures, requirements and provision of this plan, and in the event of conflicting plans/requirements, personnel must implement those safety practices which afford the highest level of protection. CHA's Field Team Leader will also serve as CHA's Health and Safety Coordinator and is responsible for implementation of this HASP into daily site activities. A copy of the Site Health and Safety Plan is included in Appendix B.

7.2 Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) has been developed to provide a measure of protection for the downwind community from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The CAMP is included in Appendix C.

8.0 REPORTING

A Site Characterization Report (SC Report) will be prepared summarizing the information generated during implementation of this Work Plan. The report will be prepared in accordance with Draft DER-10 Technical Guidance for Site Investigation and Remediation.

The report will also include the following information and data pertaining to the Site:

- Field logs, including but not limited to: boring logs, monitoring well installation logs, soil vapor logs, groundwater sampling logs.
- Analytical data tables presenting the analytical results for the soil, groundwater, and soil vapor samples including comparisons to appropriate standards, criteria, and guidance (e.g., 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives and NYSDEC Groundwater Standards). New York State currently does not publish any standards, criteria, or guidance values for concentrations of volatile chemicals in subsurface vapors.
- Groundwater piezometric surface map.
- Figures showing the extent of contamination in soil, groundwater and soil vapor (if present).
- A narrative that summarizes the results of the investigation including a discussion of the physical and analytical results.

9.0 SCHEDULE

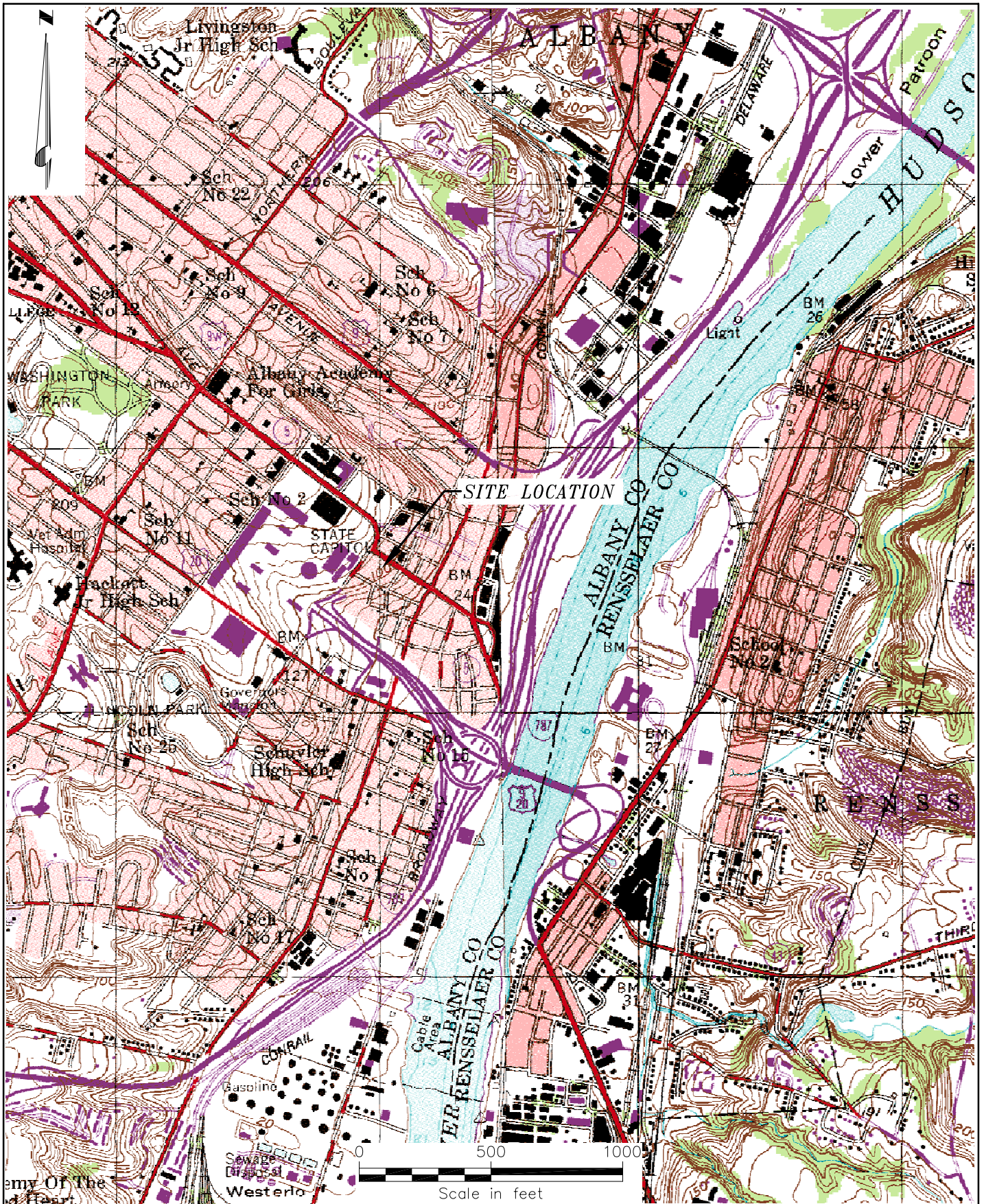
The following schedule has been developed assuming NYSDEC's final approval of the Site Characterization Work Plan is received by May 5, 2010.

Table 9-1: Project Schedule

Task	Start Date	Completion Date	Notes
Subsurface Investigation Work Plan	March 19, 2010	April 5, 2010	
NYSDEC Approval of Work Plan	April 23, 2010	May 5, 2010	
Field Investigation	May 17, 2010	June 2, 2010	
Analytical Results	June 2, 2010	June 30, 2010	
Prepare SC Report	June 7, 2010	Week of July 5th	
Submit Draft SC Report to NYSDEC		July 14, 2010	
Submit Final SC Report to NYSDEC		Within 5 days of receipt of Draft Comments from NYSDEC	

The schedule provided above is based upon assumed durations of field investigation activities and may be extended or abbreviated based upon actual conditions encountered.

FIGURES



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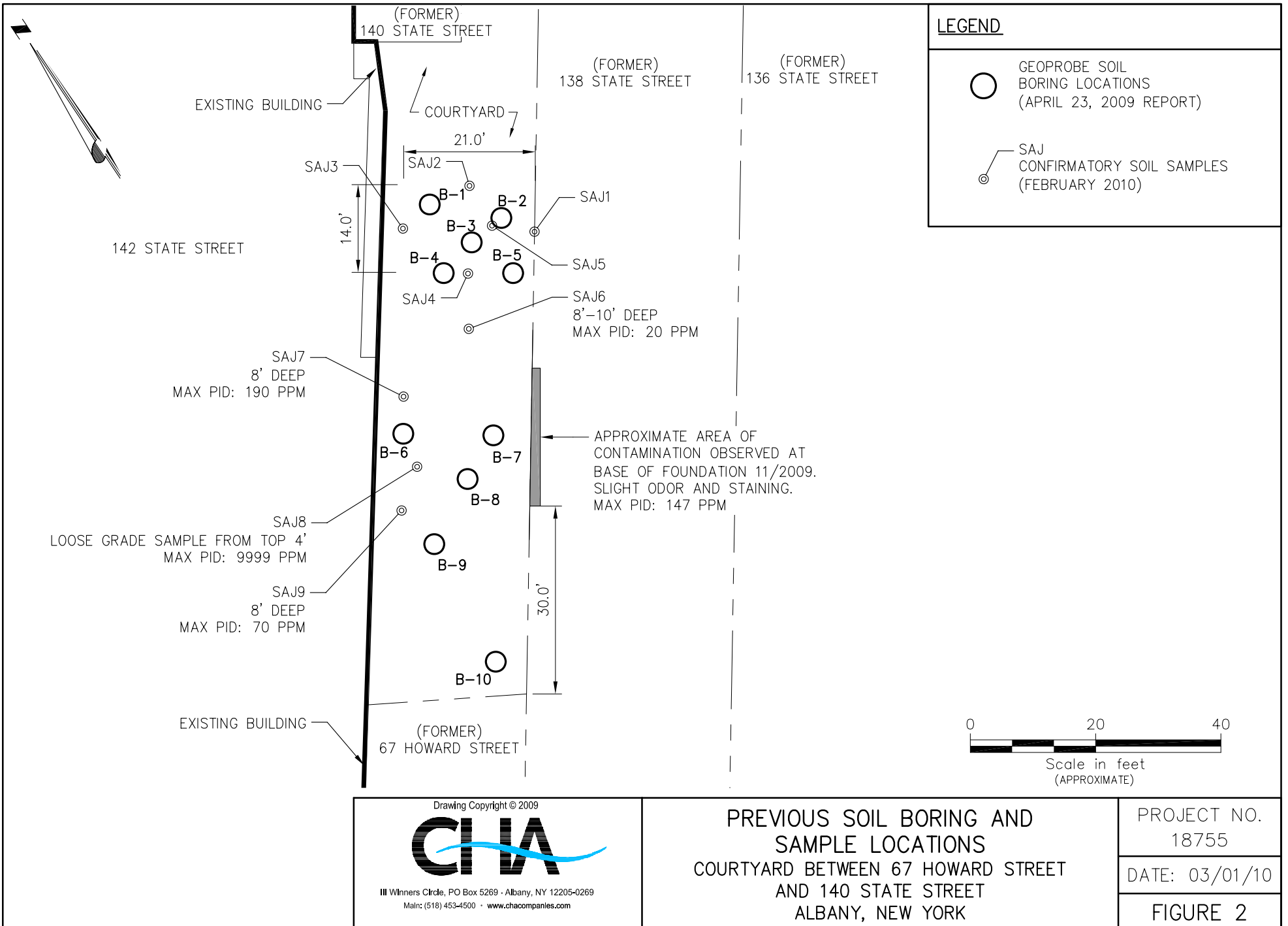
SITE LOCATION MAP

COURTYARD BETWEEN 67 HOWARD STREET
 AND 140 STATE STREET
 ALBANY, NEW YORK

PROJECT NO.
 18755

DATE: 03/29/10

FIGURE 1



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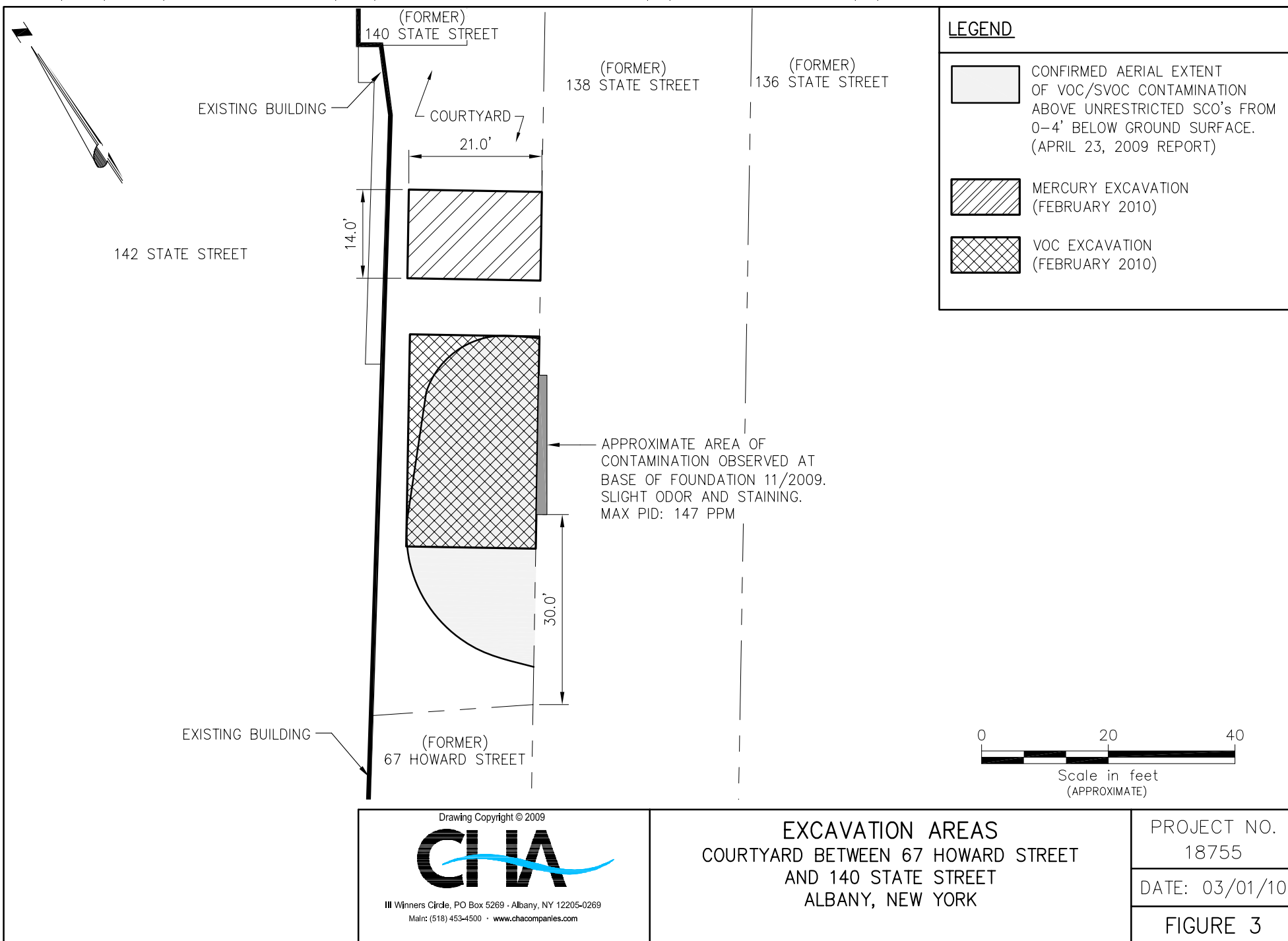
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**PREVIOUS SOIL BORING AND
SAMPLE LOCATIONS**
COURTYARD BETWEEN 67 HOWARD STREET
AND 140 STATE STREET
ALBANY, NEW YORK

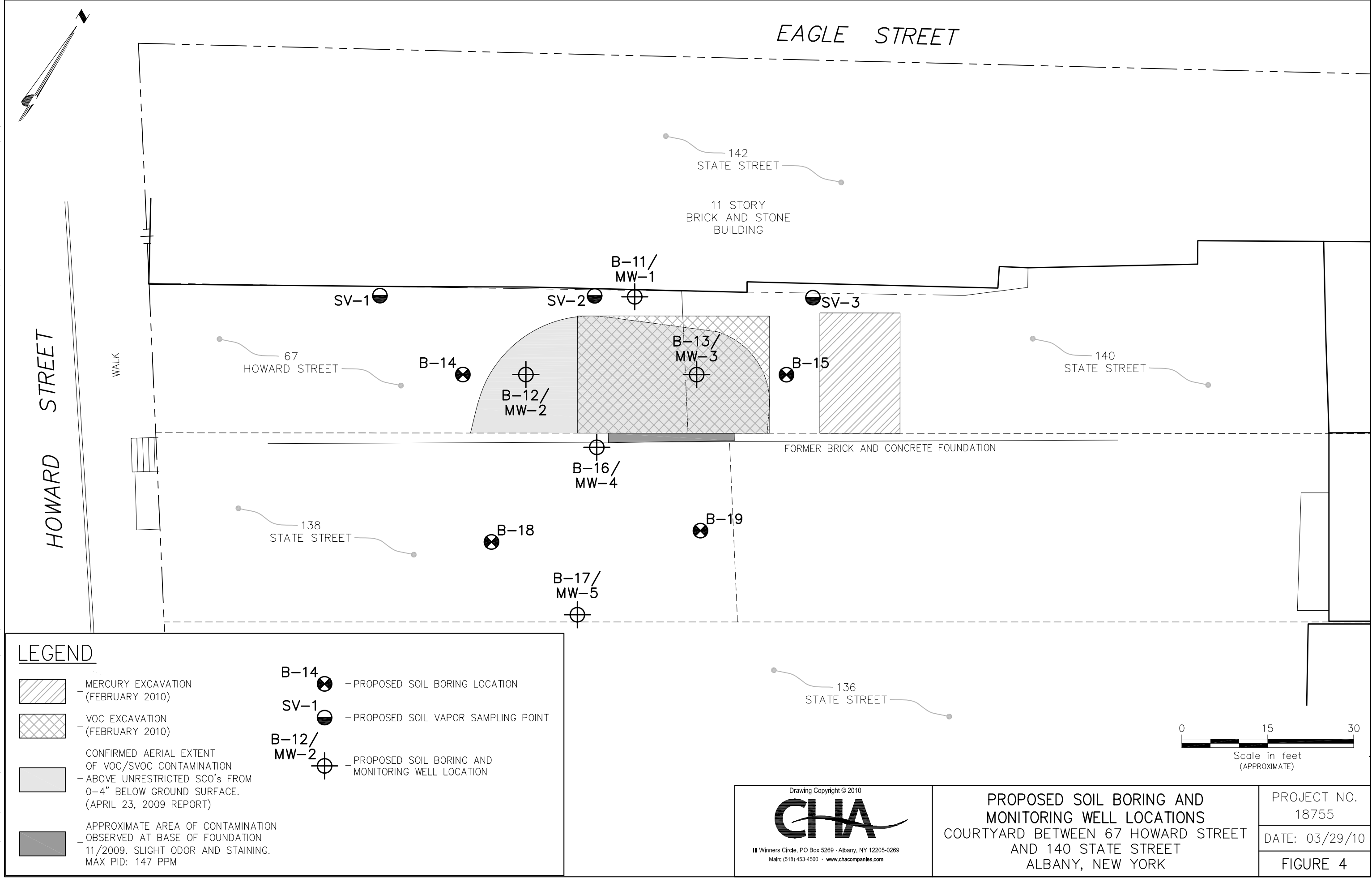
PROJECT NO.
18755

DATE: 03/01/10

FIGURE 2



File: M:\18755\REPORTS\SUBSURFACE INVESTIGATION\ACAD\FIGURE 4_PROPOSED SOIL BORING AND MONITORING WELL LOCATIONS.DWG Saved: 4/20/2010 9:42:13 AM Plotted: 4/20/2010 9:42:50 AM User: Newell, S



APPENDIX A

Previous Analytical Data

ANALYTICAL RESULTS
SUBSURFACE BORING DATA

67 Howard Street/140 State Street
Albany, NY

<i>Sampling Location</i>	B-01 A (0-6)	B-01 B (1.6-2)	B-02 A (0-6)	B-02 B (1.6-2)	B-03 A (0-6)	B-03 B (1.6-2)	B-04 A (0-6)	B-04 B (1.6-2)	B-05 A (0-6)
<i>Sample Identification</i>	B-01	B-01	B-02	B-02	B-03	B-03	B-04	B-04	B-05
<i>Sample Date</i>	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008
<i>Sample Start Depth (ft)</i>	0	1.6	1.6	1.6	0	1.6	0	1.6	0
<i>Sample End Depth (ft)</i>	0.5	2	2	2	0.5	2	0.5	2	0.5

<i>PARAMETER</i>	<i>UNITS</i>	<i>Part 375 6.8(b) Soil Cleanup Objectives for Unrestricted Use</i>								
VOCs										
1,1,1-Trichloroethane	mg/kg	0.68	NR	NR	NR	NR	NR	NR	NR	NR
1,1,2,2-Tetrachloroethane	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
1,1,2-Trichloroethane	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethane	mg/kg	0.27	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethene	mg/kg	0.33	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichloroethane	mg/kg	0.02	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichloropropane	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
2-Butanone	mg/kg	0.12	NR	NR	NR	NR	NR	NR	NR	NR
2-Hexanone	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
4-Methyl-2-Pentanone	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
Acetone	mg/kg	0.05	NR	NR	NR	NR	NR	NR	NR	NR
Benzene	mg/kg	0.06	NR	NR	NR	NR	NR	NR	NR	NR
Bromodichloromethane	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
Bromoform	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
Bromomethane	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
Carbon Disulfide	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
Carbon Tetrachloride	mg/kg	0.76	NR	NR	NR	NR	NR	NR	NR	NR
Chlorobenzene	mg/kg	1.1	NR	NR	NR	NR	NR	NR	NR	NR
Chloroethane	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
Chloroform	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
Chloromethane	mg/kg	0.37	NR	NR	NR	NR	NR	NR	NR	NR
Cis-1,2-Dichloroethene	mg/kg	0.25	NR	NR	NR	NR	NR	NR	NR	NR
Cis-1,3-Dichloropropene	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
Dichlorobromomethane	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
Ethylbenzene	mg/kg	1	NR	NR	NR	NR	NR	NR	NR	NR
Methylene Chloride	mg/kg	0.05	NR	NR	NR	NR	NR	NR	NR	NR
Styrene	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
Tetrachloroethene	mg/kg	1.3	NR	NR	NR	NR	NR	NR	NR	NR
Toluene	mg/kg	0.7	NR	NR	NR	NR	NR	NR	NR	NR
Trans-1,2-Dichloroethene	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
Trans-1,3-Dichloropropene	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR
Trichloroethylene	mg/kg	0.47	NR	NR	NR	NR	NR	NR	NR	NR
Vinyl Chloride	mg/kg	0.02	NR	NR	NR	NR	NR	NR	NR	NR
Xylenes, Total	mg/kg	0.26	NR	NR	NR	NR	NR	NR	NR	NR

NOTES:
U - The compound was not detected at the indicated concentration.
J - Data indicates the presence of a compound that meets the
identification criteria. The result is less than the quantitation limit but
greater than zero. The concentration given is an approximate value
M - Manual integrated compound.
NA - Guidance value not available
NR - Not analyzed
H - The samples were not analyzed within holding time
BOLD values are detected compounds

ANALYTICAL RESULTS
SUBSURFACE BORING DATA

67 Howard Street/140 State Street
Albany, NY

			Sampling Location	B-01 A (0-6)	B-01 B (1.6-2)	B-02 A (0-6)	B-02 B (1.6-2)	B-03 A (0-6)	B-03 B (1.6-2)	B-04 A (0-6)	B-04 B (1.6-2)	B-05 A (0-6)
			Sample Identification	B-01	B-01	B-02	B-02	B-03	B-03	B-04	B-04	B-05
			Sample Date	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008
			Sample Start Depth (ft)	0	1.6	1.6	1.6	0	1.6	0	1.6	0
			Sample End Depth (ft)	0.5	2	2	2	0.5	2	0.5	2	0.5
			Part 375 6.8(b) Soil Cleanup Objectives for Unrestricted Use									
PARAMETER	UNITS											
SVOCs												
1,2,4-Trichlorobenzene	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichlorobenzene	mg/kg	1.1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,3-Dichlorobenzene	mg/kg	2.4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,4-Dichlorobenzene	mg/kg	1.8	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2,2'-oxybis[1-chloropropane]	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2,4- Dichlorophenol	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2,4,5-Trichlorophenol	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2,4,6-Trichlorophenol	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2,4-Dimethylphenol	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2,4-Dinitrophenol	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2,4-Dinitrotoluene	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2,6-Dinitrotoluene	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2-Chloronaphthalene	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2-Chlorophenol	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2-Methylnaphthalene	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2-Methylphenol	mg/kg	0.33	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2-Nitroaniline	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2-Nitrophenol	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
3,3` -Dichlorobenzidine	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
3-Nitroaniline	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
4,6-Dinitro-2-Methylphenol	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
4-Bromophenyl Phenyl Ether	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
4-Chloro-3-Methylphenol	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
4-Chloroaniline	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
4-Chlorophenyl Phenylether	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
4-Methylphenol	mg/kg	0.33	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
4-Nitroaniline	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
4-Nitrophenol	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Acenaphthene	mg/kg	20	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Acenaphthylene	mg/kg	100	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Anthracene	mg/kg	100	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Benzo(A)Anthracene	mg/kg	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Benzo(A)Pyrene	mg/kg	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Benzo(B)Fluoranthene	mg/kg	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Benzo(G,H,I)Perylene	mg/kg	100	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Benzo(K)Fluoranthene	mg/kg	0.8	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Benzyl Alcohol	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Bis(2-Chloroethoxy) Methane	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Bis(2-Chloroethyl) Ether	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Bis(2-Ethylhexyl) Phthalate	mg/kg	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

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M - Manual integrated compound.
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BOLD values are detected compounds

ANALYTICAL RESULTS
SUBSURFACE BORING DATA

67 Howard Street/140 State Street
Albany, NY

			Sampling Location	B-01 A (0-6)	B-01 B (1.6-2)	B-02 A (0-6)	B-02 B (1.6-2)	B-03 A (0-6)	B-03 B (1.6-2)	B-04 A (0-6)	B-04 B (1.6-2)	B-05 A (0-6)
			Sample Identification	B-01	B-01	B-02	B-02	B-03	B-03	B-04	B-04	B-05
			Sample Date	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008
			Sample Start Depth (ft)	0	1.6	1.6	1.6	0	1.6	0	1.6	0
			Sample End Depth (ft)	0.5	2	2	2	0.5	2	0.5	2	0.5
			Part 375 6.8(b) Soil									
			Cleanup Objectives									
PARAMETER	UNITS		for Unrestricted Use									
SVOCs Continued												
Butyl Benzyl Phthalate	mg/kg	NA		NR	NR	NR	NR	NR	NR	NR	NR	NR
Carbazole	mg/kg	NA		NR	NR	NR	NR	NR	NR	NR	NR	NR
Chrysene	mg/kg	1		NR	NR	NR	NR	NR	NR	NR	NR	NR
Dibenzo(A,H)Anthracene	mg/kg	0.33		NR	NR	NR	NR	NR	NR	NR	NR	NR
Dibenzofuran	mg/kg	7		NR	NR	NR	NR	NR	NR	NR	NR	NR
Diethylphthalate	mg/kg	NA		NR	NR	NR	NR	NR	NR	NR	NR	NR
Dimethylphthalate	mg/kg	NA		NR	NR	NR	NR	NR	NR	NR	NR	NR
Di-N-Butylphthalate	mg/kg	NA		NR	NR	NR	NR	NR	NR	NR	NR	NR
Di-N-Octyl Phthalate	mg/kg	NA		NR	NR	NR	NR	NR	NR	NR	NR	NR
Fluoranthene	mg/kg	100		NR	NR	NR	NR	NR	NR	NR	NR	NR
Fluorene	mg/kg	30		NR	NR	NR	NR	NR	NR	NR	NR	NR
Hexachlorobenzene	mg/kg	NA		NR	NR	NR	NR	NR	NR	NR	NR	NR
Hexachlorobutadiene	mg/kg	NA		NR	NR	NR	NR	NR	NR	NR	NR	NR
Hexachlorocyclopentadiene	mg/kg	NA		NR	NR	NR	NR	NR	NR	NR	NR	NR
Hexachloroethane	mg/kg	NA		NR	NR	NR	NR	NR	NR	NR	NR	NR
Indeno(1,2,3-Cd)Pyrene	mg/kg	0.5		NR	NR	NR	NR	NR	NR	NR	NR	NR
Isophorone	mg/kg	NA		NR	NR	NR	NR	NR	NR	NR	NR	NR
Naphthalene	mg/kg	12		NR	NR	NR	NR	NR	NR	NR	NR	NR
Nitrobenzene	mg/kg	NA		NR	NR	NR	NR	NR	NR	NR	NR	NR
N-Nitroso-Di-N-Propylamine	mg/kg	NA		NR	NR	NR	NR	NR	NR	NR	NR	NR
N-Nitrosodiphenylamine	mg/kg	NA		NR	NR	NR	NR	NR	NR	NR	NR	NR
Pentachlorophenol	mg/kg	0.8		NR	NR	NR	NR	NR	NR	NR	NR	NR
Phenanthrene	mg/kg	100		NR	NR	NR	NR	NR	NR	NR	NR	NR
Phenol	mg/kg	0.33		NR	NR	NR	NR	NR	NR	NR	NR	NR
Pyrene	mg/kg	100		NR	NR	NR	NR	NR	NR	NR	NR	NR
Metals												
Arsenic	mg/kg	13		NR	NR	NR	NR	NR	NR	NR	NR	NR
Barium	mg/kg	350		NR	NR	NR	NR	NR	NR	NR	NR	NR
Cadmium	mg/kg	2.5		NR	NR	NR	NR	NR	NR	NR	NR	NR
Chromium	mg/kg	30		NR	NR	NR	NR	NR	NR	NR	NR	NR
Lead	mg/kg	63		NR	NR	NR	NR	NR	NR	NR	NR	NR
Selenium	mg/kg	3.9		NR	NR	NR	NR	NR	NR	NR	NR	NR
Silver	mg/kg	2		NR	NR	NR	NR	NR	NR	NR	NR	NR
Mercury	mg/kg	0.18		2.0	7.1	0.37	6.8	33.5	0.027 J	0.050 J	0.038 J	0.15

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67 Howard Street/140 State Street
Albany, NY

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ANALYTICAL RESULTS
SUBSURFACE BORING DATA

67 Howard Street/140 State Street
Albany, NY

		<i>Sampling Location</i>	B-05 B (1.6-2)	B-06 A (0-6)	B-06 B (1.6-2)	B-07 A (0-6)	B-07 B (1.6-2)	B-07 C	B-08 A (0-6)	B-08 B (1.6-2)	B-08 C
		<i>Sample Identification</i>	B-05	B-06	B-06	B-07	B-07	B-07	B-08	B-08	B-08
		<i>Sample Date</i>	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008
		<i>Sample Start Depth (ft)</i>	1.6	0	1.6	0	1.6	3.5	0	1.6	3.5
		<i>Sample End Depth (ft)</i>	2	0.5	2	0.5	2	4	0.5	2	4
		<i>Part 375 6.8(b) Soil</i>									
		<i>Cleanup Objectives</i>									
		<i>for Unrestricted Use</i>									
<i>PARAMETER</i>	<i>UNITS</i>										
<i>SVOCs</i>											
1,2,4-Trichlorobenzene	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	0.130 J	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
1,2-Dichlorobenzene	mg/kg	1.1	NR	< 0.370 U	NR	1.700	3.200	3.200	1.100	36.000	56.000
1,3-Dichlorobenzene	mg/kg	2.4	NR	< 0.370 U	NR	< 0.350 U	0.120 J	< 0.360 U	0.400	< 3.500 U	< 3.500 U
1,4-Dichlorobenzene	mg/kg	1.8	NR	< 0.370 U	NR	< 0.350 U	0.860	0.570	0.560	4.700	6.900
2,2'-oxybis[1-chloropropane]	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
2,4- Dichlorophenol	mg/kg	NA	NR	< 2.300 U	NR	< 2.200 U	< 2.500 U	< 0.360 U	< 2.200 U	< 22.000 U	< 22.000 U
2,4,5-Trichlorophenol	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
2,4,6-Trichlorophenol	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
2,4-Dimethylphenol	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
2,4-Dinitrophenol	mg/kg	NA	NR	< 2.300 U*	NR	< 2.200 U*	< 2.500 U*	< 2.200 U*	< 2.200 U*	< 22.000 U*	< 22.000 U*
2,4-Dinitrotoluene	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
2,6-Dinitrotoluene	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
2-Chloronaphthalene	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
2-Chlorophenol	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
2-Methylnaphthalene	mg/kg	NA	NR	< 0.370 U	NR	6.100	0.300 J	< 0.360 U	0.540	1.800 J	4.000
2-Methylphenol	mg/kg	0.33	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	1.200 J
2-Nitroaniline	mg/kg	NA	NR	< 2.300 U	NR	< 2.200 U	< 2.500 U	< 2.200 U	< 2.200 U	< 22.000 U	< 22.000 U
2-Nitrophenol	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
3,3'-Dichlorobenzidine	mg/kg	NA	NR	< 0.910 U	NR	< 0.880 U	< 0.980 U	< 0.880 U	< 0.880 U	< 8.700 U	< 8.600 U
3-Nitroaniline	mg/kg	NA	NR	< 2.300 U	NR	< 2.200 U	< 2.500 U	< 2.200 U	< 2.200 U	< 22.000 U	< 22.000 U
4,6-Dinitro-2-Methylphenol	mg/kg	NA	NR	< 2.300 U	NR	< 2.200 U	< 2.500 U	< 2.200 U	< 2.200 U	< 22.000 U	< 22.000 U
4-Bromophenyl Phenyl Ether	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
4-Chloro-3-Methylphenol	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
4-Chloroaniline	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
4-Chlorophenyl Phenylether	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
4-Methylphenol	mg/kg	0.33	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	1.300 J
4-Nitroaniline	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
4-Nitrophenol	mg/kg	NA	NR	< 2.300 U	NR	< 2.200 U	< 2.500 U	< 2.200 U	< 2.200 U	< 22.000 U	< 22.000 U
Acenaphthene	mg/kg	20	NR	< 0.370 U	NR	0.100 J	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
Acenaphthylene	mg/kg	100	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
Anthracene	mg/kg	100	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
Benzo(A)Anthracene	mg/kg	1	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
Benzo(A)Pyrene	mg/kg	1	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
Benzo(B)Fluoranthene	mg/kg	1	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
Benzo(G,H,I)Perylene	mg/kg	100	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
Benzo(K)Fluoranthene	mg/kg	0.8	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
Benzyl Alcohol	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
Bis(2-Chloroethoxy) Methane	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
Bis(2-Chloroethyl) Ether	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U
Bis(2-Ethylhexyl) Phthalate	mg/kg	NA	NR	< 0.370 U	NR	< 0.350 U	< 0.400 U	< 0.360 U	< 0.350 U	< 3.500 U	< 3.500 U

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67 Howard Street/140 State Street
Albany, NY

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- M - Manual integrated compound.
- NA - Guidance value not available
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BOLD values are detected compounds

ANALYTICAL RESULTS
SUBSURFACE BORING DATA

67 Howard Street/140 State Street
Albany, NY

Sampling Location	B-09 A (0-6)	B-09 B (1.6-2)	B-09 C	B-10 A (0-6)	B-10 B (1.6-2)
Sample Identification	B-09	B-09	B-09	B-10	B-10
Sample Date	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008
Sample Start Depth (ft)	0	1.6	3.5	0	1.6
Sample End Depth (ft)	0.5	2	4	0.5	2

**Part 375 6.8(b) Soil
Cleanup Objectives
for Unrestricted Use**

PARAMETER	UNITS						
VOCs							
1,1,1-Trichloroethane	mg/kg	0.68	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
1,1,2,2-Tetrachloroethane	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
1,1,2-Trichloroethane	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
1,1-Dichloroethane	mg/kg	0.27	< 0.650 U	< 3.300 U	< 2.700 UH	0.014	NR
1,1-Dichloroethene	mg/kg	0.33	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
1,2-Dichloroethane	mg/kg	0.02	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
1,2-Dichloropropane	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
2-Butanone	mg/kg	0.12	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.014 U	NR
2-Hexanone	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.014 U	NR
4-Methyl-2-Pentanone	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
Acetone	mg/kg	0.05	< 1.600 U	< 8.300 U	< 6.800 UH	< 0.028 U	NR
Benzene	mg/kg	0.06	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
Bromodichloromethane	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
Bromoform	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
Bromomethane	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
Carbon Disulfide	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
Carbon Tetrachloride	mg/kg	0.76	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
Chlorobenzene	mg/kg	1.1	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
Chloroethane	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
Chloroform	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	0.017	NR
Chloromethane	mg/kg	0.37	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U*	NR
Cis-1,2-Dichloroethene	mg/kg	0.25	0.710	2.800 J	2.500 JH	0.110	NR
Cis-1,3-Dichloropropene	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
Dichlorobromomethane	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
Ethylbenzene	mg/kg	1	< 0.650 U	0.440 J	0.770 JH	< 0.0070 U	NR
Methylene Chloride	mg/kg	0.05	0.160 JB	1.500 JB	< 2.700 UH	0.0035 J	NR
Styrene	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
Tetrachloroethene	mg/kg	1.3	11.000	4.700	65.000 H	0.076	NR
Toluene	mg/kg	0.7	< 0.650 U	< 3.300 U	11.000 H	< 0.0070 U	NR
Trans-1,2-Dichloroethene	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	0.014	NR
Trans-1,3-Dichloropropene	mg/kg	NA	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
Trichloroethylene	mg/kg	0.47	10.000	48.000	0.960 JH	0.150	NR
Vinyl Chloride	mg/kg	0.02	< 0.650 U	< 3.300 U	< 2.700 UH	< 0.0070 U	NR
Xylenes, Total	mg/kg	0.26	0.490 J	1.700 J	6.700 H	< 0.0070 U	NR

NOTES:
U - The compound was not detected at the indicated concentration.
J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value
M - Manual integrated compound.
NA - Guidance value not available
NR - Not analyzed
H - The samples were not analyzed within holding time
BOLD values are detected compounds

ANALYTICAL RESULTS
SUBSURFACE BORING DATA

67 Howard Street/140 State Street
Albany, NY

<i>Sampling Location</i>	B-09 A (0-6)	B-09 B (1.6-2)	B-09 C	B-10 A (0-6)	B-10 B (1.6-2)
<i>Sample Identification</i>	B-09	B-09	B-09	B-10	B-10
<i>Sample Date</i>	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008
<i>Sample Start Depth (ft)</i>	0	1.6	3.5	0	1.6
<i>Sample End Depth (ft)</i>	0.5	2	4	0.5	2

*Part 375 6.8(b) Soil
Cleanup Objectives
for Unrestricted Use*

<i>PARAMETER</i>	<i>UNITS</i>						
<i>SVOCs</i>							
1,2,4-Trichlorobenzene	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
1,2-Dichlorobenzene	mg/kg	1.1	0.770	0.290 J	0.210 J	< 0.380 U	NR
1,3-Dichlorobenzene	mg/kg	2.4	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
1,4-Dichlorobenzene	mg/kg	1.8	0.240 J	< 0.360 U	< 0.360 U	< 0.380 U	NR
2,2'-oxybis[1-chloropropane]	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
2,4- Dichlorophenol	mg/kg	NA	< 2.200 U	< 2.300 U	< 2.200 U	< 2.400 U	NR
2,4,5-Trichlorophenol	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
2,4,6-Trichlorophenol	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
2,4-Dimethylphenol	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
2,4-Dinitrophenol	mg/kg	NA	< 2.200 U*	< 2.300 U*	< 2.200 U*	< 2.400 U*	NR
2,4-Dinitrotoluene	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
2,6-Dinitrotoluene	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
2-Chloronaphthalene	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
2-Chlorophenol	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
2-Methylnaphthalene	mg/kg	NA	< 0.350 U	< 0.360 U	0.170 J	< 0.380 U	NR
2-Methylphenol	mg/kg	0.33	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
2-Nitroaniline	mg/kg	NA	< 2.200 U	< 2.300 U	< 2.200 U	< 2.400 U	NR
2-Nitrophenol	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
3,3' -Dichlorobenzidine	mg/kg	NA	< 0.860 U	< 0.890 U	< 0.890 U	< 0.930 U	NR
3-Nitroaniline	mg/kg	NA	< 2.200 U	< 2.300 U	< 2.200 U	< 2.400 U	NR
4,6-Dinitro-2-Methylphenol	mg/kg	NA	< 2.200 U	< 2.300 U	< 2.200 U	< 2.400 U	NR
4-Bromophenyl Phenyl Ether	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
4-Chloro-3-Methylphenol	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
4-Chloroaniline	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
4-Chlorophenyl Phenylether	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
4-Methylphenol	mg/kg	0.33	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
4-Nitroaniline	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
4-Nitrophenol	mg/kg	NA	< 2.200 U	< 2.300 U	< 2.200 U	< 2.400 U	NR
Acenaphthene	mg/kg	20	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Acenaphthylene	mg/kg	100	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Anthracene	mg/kg	100	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Benzo(A)Anthracene	mg/kg	1	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Benzo(A)Pyrene	mg/kg	1	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Benzo(B)Fluoranthene	mg/kg	1	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Benzo(G,H,I)Perylene	mg/kg	100	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Benzo(K)Fluoranthene	mg/kg	0.8	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Benzyl Alcohol	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Bis(2-Chloroethoxy) Methane	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Bis(2-Chloroethyl) Ether	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Bis(2-Ethylhexyl) Phthalate	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR

NOTES:
U - The compound was not detected at the indicated concentration.
J - Data indicates the presence of a compound that meets the
identification criteria. The result is less than the quantitation limit but
greater than zero. The concentration given is an approximate value
M - Manual integrated compound.
NA - Guidance value not available
NR - Not analyzed
H - The samples were not analyzed within holding time
BOLD values are detected compounds

ANALYTICAL RESULTS
SUBSURFACE BORING DATA

67 Howard Street/140 State Street
Albany, NY

Sampling Location	B-09 A (0-6)	B-09 B (1.6-2)	B-09 C	B-10 A (0-6)	B-10 B (1.6-2)
Sample Identification	B-09	B-09	B-09	B-10	B-10
Sample Date	12/17/2008	12/17/2008	12/17/2008	12/17/2008	12/17/2008
Sample Start Depth (ft)	0	1.6	3.5	0	1.6
Sample End Depth (ft)	0.5	2	4	0.5	2

**Part 375 6.8(b) Soil
Cleanup Objectives
for Unrestricted Use**

PARAMETER	UNITS						
SVOCs Continued							
Butyl Benzyl Phthalate	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Carbazole	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Chrysene	mg/kg	1	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Dibenzo(A,H)Anthracene	mg/kg	0.33	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Dibenzofuran	mg/kg	7	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Diethylphthalate	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Dimethylphthalate	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Di-N-Butylphthalate	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Di-N-Octyl Phthalate	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Fluoranthene	mg/kg	100	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Fluorene	mg/kg	30	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Hexachlorobenzene	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Hexachlorobutadiene	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Hexachlorocyclopentadiene	mg/kg	NA	< 0.860 U	< 0.890 U	< 0.890 U	< 0.930 U	NR
Hexachloroethane	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Indeno(1,2,3-Cd)Pyrene	mg/kg	0.5	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Isophorone	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Naphthalene	mg/kg	12	< 0.350 U	< 0.360 U	0.084 J	< 0.380 U	NR
Nitrobenzene	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
N-Nitroso-Di-N-Propylamine	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
N-Nitrosodiphenylamine	mg/kg	NA	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Pentachlorophenol	mg/kg	0.8	< 2.200 U	< 2.300 U	< 2.200 U	< 2.400 U	NR
Phenanthrene	mg/kg	100	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Phenol	mg/kg	0.33	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Pyrene	mg/kg	100	< 0.350 U	< 0.360 U	< 0.360 U	< 0.380 U	NR
Metals							
Arsenic	mg/kg	13	NR	NR	NR	NR	NR
Barium	mg/kg	350	NR	NR	NR	NR	NR
Cadmium	mg/kg	2.5	NR	NR	NR	NR	NR
Chromium	mg/kg	30	NR	NR	NR	NR	NR
Lead	mg/kg	63	NR	NR	NR	NR	NR
Selenium	mg/kg	3.9	NR	NR	NR	NR	NR
Silver	mg/kg	2	NR	NR	NR	NR	NR
Mercury	mg/kg	0.18	0.027 J	0.027 J	NR	0.036 J	0.027 J

NOTES:
U - The compound was not detected at the indicated concentration.
J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value
M - Manual integrated compound.
NA - Guidance value not available
NR - Not analyzed
H - The samples were not analyzed within holding time
BOLD values are detected compounds

Soil Sample Analytical Results: Volatiles Detections Summary
67 Howard Street Courtyard
Albany, New York

	Sample ID: Sampling Date: Sample type: Approx Depth		SAJ-06 2/11/2010 endwall 8' bgs	SAJ-07 2/11/2010 sidewall 10' bgs	SAJ-08 2/11/2010 grab- TCLP 11' bgs	SAJ-09 2/11/2010 sidewall 8' bgs
	PID (ppm): Part 375 Unrestricted Use SCOs	PID (ppm): Part 375 6.8(b) Commercial Use SCOs	10-20	147-190	600-9999	70
Parameter- Volatiles						
1,1,1-Trichloroethane	0.68	500 ^b	2	ND	ND	ND
1,1-Dichloroethane	0.27	240	0.46	0.12 J	ND	ND
1,1-Dichloroethene	0.33	500 ^b	0.23	ND	ND	ND
1,2,4-Trichlorobenzene	NA	NA	ND	ND	0.12 J	ND
1,2-Dichlorobenzene	1.1	500 ^b	ND	4.5	8.9	1.6
1,2-Dichloroethane	0.02	500 ^{b*}	0.079 J	ND	ND	ND
1,3-Dichlorobenzene	2.4	280	ND	0.091 J	0.17	ND
1,4-Dichlorobenzene	1.8	130	ND	0.46	1.1	ND
2-Butanone	0.12	500 ^b	0.23 J,B	0.25 J,B	1.5 B	0.42 J,B
Acetone	0.05	500 ^b	ND	ND	22	ND
Benzene	0.06	44	0.076	0.68	0.86	6
Chloroform	0.37	350	0.21	ND	ND	ND
cis-1,2-Dichloroethene	0.25	500 ^b	7.8	40 D	3.4	4.8
Cyclohexane	NA	NA	ND	0.087 J	0.55	0.3
Ethyl Benzene	1	390	ND	2	7.2	0.62
Isopropylbenzene	NA	NA	ND	ND	1.3	0.076 J
Total Xylenes	0.26	500 ^b	ND	9.9	87 D	4.6
Methylcyclohexane	NA	NA	ND	ND	1.2	0.5
Methylene Chloride	0.05	500 ^b	0.08 J	0.078 J	0.093 J	ND
Tetrachloroethene	1.3	150	1.2	140 D	140 D	88 D
Toluene	0.7	500 ^b	ND	21 D	83 D	26 D
trans-1,2-Dichloroethene	0.19	500 ^b	ND	0.089 J	ND	ND
Trichloroethene	0.47	200	17 D ¹	8.4	49 D	16 D

Notes:

1) All units are in mg/kg (ppm)

2) 6 NYCRR Part 375: Environmental Remediation Programs. Unrestricted Use Soil Cleanup Objectives [Table 375-6.8(a)]

- b = The SCOs for commercial use were capped at maximum value to 500,000 ppb. See TSD Section 9.3.

- A **BOLD** value indicates the parameter exceeds 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

3) U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL.

D - The reported value is from a secondary analysis with a dilution factor of 20.0. The original analysis exceeded the calibration range.

D¹ - The reported value is from a secondary analysis with a dilution factor of 2.0. The original analysis exceeded the calibration range.

Soil Sample Analytical Results: Mercury
67 Howard Street Courtyard
Albany, New York

	<i>Sample ID:</i> <i>Sampling Date:</i> <i>Sample type:</i>		<i>SAJ-01</i> 2/11/2010 endwall	<i>SAJ-02</i> 2/11/2010 sidewall	<i>SAJ-03</i> 2/11/2010 grab- TCLP	<i>SAJ-04</i> 2/11/2010 sidewall	<i>SAJ-05</i> 2/11/2010 sidewall
<i>Parameter- Mercury</i>	<i>Part 375</i> <i>Unrestricted</i> <i>Use SCOs</i>	<i>Part 375 6.8(b)</i> <i>Commercial Use</i> <i>SCOs</i>					
Mercury	0.18	2.8	0.128	0.02 0	0.024	5.13	0.084

Notes:

Residential & Restricted Residential is 0.81 ppm

- 1) All units are in mg/kg (ppm)
- 2) 6 NYCRR Part 375: Environmental Remediation Programs. Unrestricted Use Soil Cleanup Objectives [Table 375-6.8(a)]

- A **BOLD** value indicates the parameter exceeds 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

APPENDIX B

Health and Safety Plan



SITE HEALTH AND SAFETY PLAN

PROJECT INFORMATION

Project Name: Courtyard Site Characterization	CHA Project No. 18755
Project Start Date: 5/14/10 Completion Date: 6/11/10	Weather: Springtime
Project Location: Courtyard of 67 Howard Street and 140 State Street in Albany, NY	Project Task: Site Characterization

Description of Work: Installation of several soil borings/monitoring wells, sampling of monitoring wells, and soil vapor sampling.

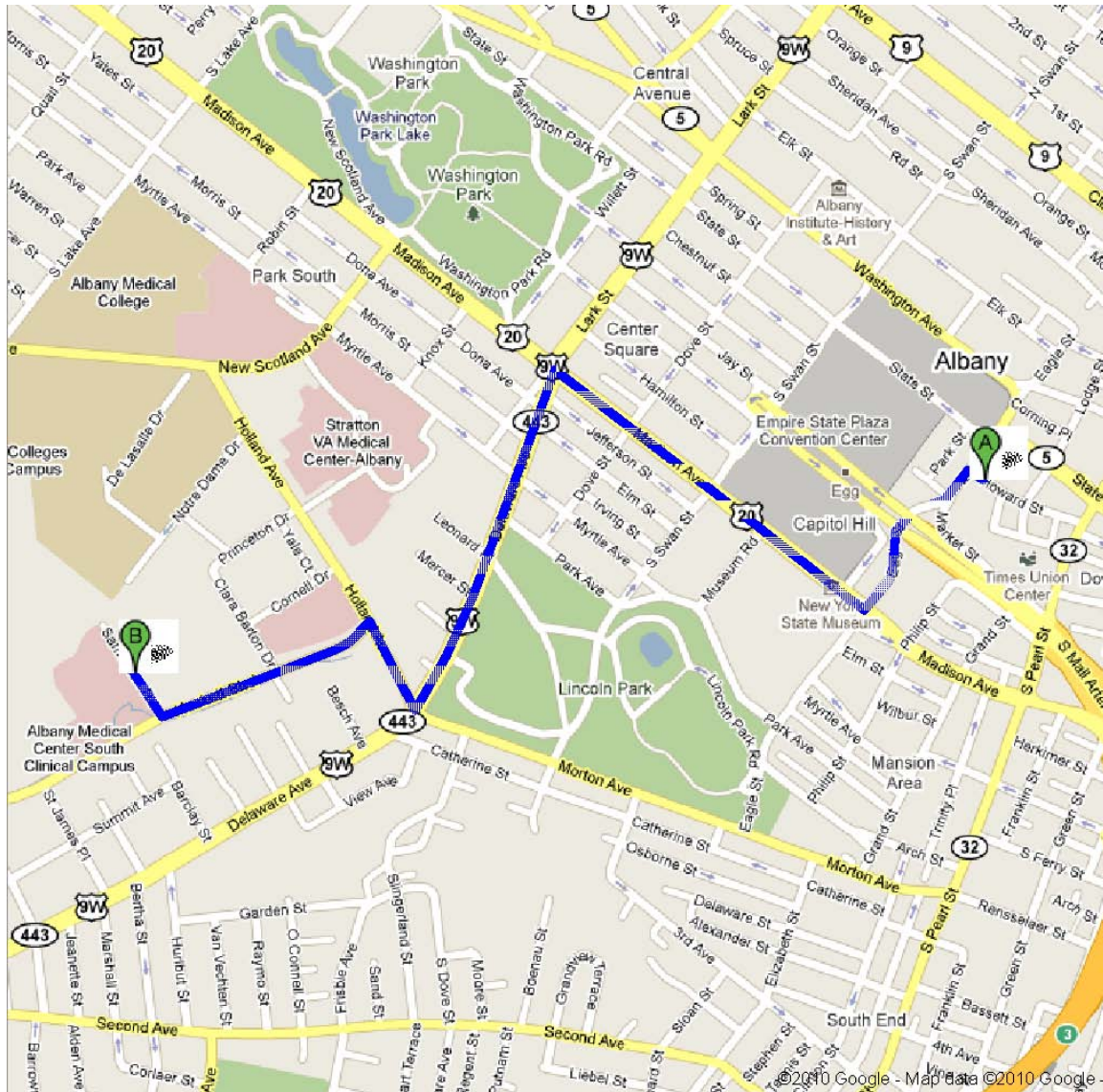
Key Personnel:	Seth Fowler	TBD	TBD
Responsibilities:	<i>Project Manager</i>	<i>Field Team Leader</i>	<i>Site Safety Officer</i>

Description of Hazards: Physical hazards associated with soil boring/monitoring well installation, groundwater sampling, and soil vapor sampling

TASK HAZARDS				TASK SAFETY MEASURES & PPE	
Eye	Chemical Exposure	Yes ☒	No ☐	☒ Safety Glasses	
	High Heat/Cold	Yes ☐	No ☒	☐ Safety Goggles	
	Dust/Flying Debris	Yes ☒	No ☐	☐ Face Shield	
	Impact	Yes ☐	No ☒	☐ Shaded Lenses	
	Light/Radiation	Yes ☐	No ☒		
Head	Impact	Yes ☒	No ☐	☒ Hard Hat: ☒ Orange or ☒ White or ☒ Blue	
	Electrical Shock	Yes ☐	No ☒	☐ Reflector Tape (Required for night operations)	
	Lack of Visibility	Yes ☐	No ☒		
Foot	Chemical Exposure	Yes ☐	No ☒	☒ Work Boots	☒ Steel Toed Boots
	High Heat/Cold	Yes ☐	No ☒	☐ Ankle Protection	☐ I/75 C/75 (Impact/Compression)
	Impact/Compression	Yes ☒	No ☐	☐ Rubber Boots	☐ Cd Type 1 or 2 (Conductive)
	Slips/Trips	Yes ☒	No ☐	☐ Insulated Boots	☐ PR (Puncture Resistant)
	Puncture	Yes ☐	No ☒	☐ Non-slip Soles	☐ Mt/70 or 50 or 30 (Metatarsal)
	Slippery/Wet Surface	Yes ☐	No ☒	☐ Chemical resistant	☐ EH (Electrical Hazard)
	Explosive/Flammable Atmospheres	Yes ☐	No ☒	☐ SD Type I or II (Static Dissipative)	
	Electrical	Yes ☐	No ☒		
Hand	Chemical Exposure	Yes ☒	No ☐	☐ Work Gloves	☐ Rubber Gloves
	High Heat or Cold	Yes ☐	No ☒	☐ Leather Gloves	☐ Nitrile Gloves
	Cuts/Abrasion	Yes ☐	No ☒	☒ Latex Gloves	☐ Insulated Gloves
	Puncture	Yes ☐	No ☒	☐ Vinyl Gloves	☐ Metal Mesh Gloves
	Electrical Shock	Yes ☐	No ☒	☐ Neoprene Gloves	
	Bloodborne Pathogen	Yes ☐	No ☒	☐ Butyl Gloves	
Body/Torso	Chemical Exposure	Yes ☐	No ☒	☐ Tyvek Suits: ☐ White or ☐ Yellow	
	Extreme Heat/Cold	Yes ☐	No ☒	☐ UV Protection	☐ First Aid Kit
	Abrasion	Yes ☐	No ☒	☐ Coveralls	☐ Traffic Cones
	Impact	Yes ☐	No ☒	☐ Reflective Vest	☐ Signage
	Electrical Arc	Yes ☐	No ☒	☐ Insect Repellent	☐ 2- Way Radios
	Biological Hazards	Yes ☐	No ☒	☐ Tick Removal Kit	☐ Flashlight
Fall	Fall Hazard	Yes ☐	No ☒	☐ Harness	☐ Fall Protection Lanyard
Noise	Noise Hazard	Yes ☒	No ☐	☒ Ear Plugs	☐ Ear Muffs
Respiratory	Chemical Exposure	Yes ☐	No ☒	☐ Respirator: ☐ ½ Face or ☐ Full Face	
	Confined Spaces	Yes ☐	No ☒	☐ Cartridge: ☐ P or ☐ OV or ☐ C	
	Particulate Exposure	Yes ☐	No ☒		
	Welding Hazard	Yes ☐	No ☒		

SITE CONTROL			
Site Control/Site Security¹: Fencing around project site by Client/Property Owner		M & PT: ☐ Y ☐ N <i>If yes, sketch information on separate sheet</i>	
Confined Space Entry: ☐ Y ☒ N <i>If Yes, Attach Permit</i>			
Decontamination: ☒ Y ☐ N <i>If Yes, Describe Procedures</i>		See Section 5.4 of Work Plan	
Site Monitoring²: ☒ Y ☐ N <i>If Yes, Describe</i>		See Appendix B (Community Air Monitoring Plan)	
CONTINGENCY PLAN			
Emergency Contacts:		Police: 911 Ambulance: 911 Fire: 911 Hospital: 518-262-1200 Client Contact: Michael Arcangel Client Phone #: 518- 862-9133 CHA PM Phone #: 518-453-4547 Poison Control: 800-336-6997	
Route to Hospital:		See Attached	
Communication:		☒ Cell Phone ☐ Nearest Pay Phone ☐ Pager	
COMMENTS:			
PLAN SIGN-OFF			
Name:	Name:	Name:	Name:
X:	X:	X:	X:
Date:	Date:	Date:	Date:
Name:	Name:	Name:	Name:
X:	X:	X:	X:
Date:	Date:	Date:	Date:
SAFETY TRAINING/MEDICAL MONITORING			
Type:	Type:	Type:	Type:
Date:	Date:	Date:	Date:
Type:	Type:	Type:	Type:
Date:	Date:	Date:	Date:

MAP TO ALBANY MEDICAL CENTER



DRIVING DIRECTIONS



67 Howard St, Albany, NY 12207

Distance

1. Head **northwest** on **Howard St** toward **Eagle St**
go 131 ft
total 131 ft
2. Turn **left** at **Eagle St**
About 1 min
go 0.3 mi
total 0.3 mi
3. Take the 2nd **right** onto **Madison Ave**
About 1 min
go 0.5 mi
total 0.8 mi
4. Turn **left** at **Delaware Ave**
About 2 mins
go 0.5 mi
total 1.3 mi
5. Turn **right** at **Holland Ave**
go 0.1 mi
total 1.5 mi
6. Take the 1st **left** onto **Hackett Blvd**
About 1 min
go 0.3 mi
total 1.8 mi
7. Take the 2nd **right** onto **Samaritan Rd**
Destination will be on the left
go 381 ft
total 1.9 mi



Albany Medical Center - South Clinical Campus
25 Hackett Boulevard, Albany, NY 12208 - (518) 262-1200

APPENDIX C

Community Air Monitoring Plan

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

Air Monitoring Equipment

The following environmental monitoring instruments shall be used on site at the specified intervals.

Photoionization Detector (PID): A PID with a 10.6 eV lamp shall be used during soil boring activities and/or as ordered by CHA personnel. At a minimum, the PID should be utilized at the start of all intrusive activities, whenever obvious contamination is noted, and at least every 30 minutes through the duration of the intrusive activities. PID measurements shall be taken in the breathing zone of on-site personnel, in low areas where flammable vapor may accumulate, in the headspace of soil samples, downwind of intrusive activities, and around the perimeter of Site, as appropriate. The PID shall be calibrated daily following manufacturers recommendations. Calibration data shall be recorded in daily logs by the contractor.

Dust: Due to the nature of the material observed at the site during previous investigations (moist to wet clay) and the limited disturbance created during the boring and sampling activities, fugitive dust is not expected to be problematic and will not be monitoring using any instrumentation. However, dust will be visually monitored.

Air Monitoring Plan

An action level is a point at which increased protection is required due to the concentration of contaminants in the work area or other environmental conditions. Each action level is determined by the concentration level (above background level) and the ability of the personal protective equipment to protect against that specific contaminant. The action levels are based on concentrations in the breathing zone.

Should action levels be reached, work operations shall cease until further evaluation is performed and safe levels are prevalent. If ambient levels are measured which exceed the action levels in areas accessible to the public or unprotected personnel, necessary site control measures (barricades, warning signs, and mitigative actions, etc.) must be implemented before commencing activities at

the specific work site. If through engineering controls and monitoring, safe levels (below action levels) cannot be achieved, an upgrade in personal protection equipment shall be mandated by the task HSC, or operations shall cease in that portion of the site. The action level at the Site is as follows:

Volatile Organic Compounds (VOCs) (PID monitor) = consistent readings of >5ppm sustained for 5 minutes

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, 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.

Community Air Monitoring Requirements

Volatile organic compounds (VOCs) will be monitored at the downwind perimeter of the immediate work area either continuously or periodically as discussed previously. Upwind concentrations shall be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment as discussed previously.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 ppm above background for the 15-minute average, work activities will 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 are less than 25 ppm, work activities will 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 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 DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded

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