DT CONSULTING SERVICES, INC.

BELLUCCI ENGINEERING, PLLC.

BROWNFIELD CLEANUP PROGRAM (BCP)

REMEDIAL INVESTIGATIVE WORK PLAN
FINAL

10-14 Tucker Drive
Town of Poughkeepsie
Dutchess County, New York

Site Number C314132

November 14, 2022

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Mr. Ryan Richard
New York State Department of Environmental Conservation
Division of Environmental Remediation
21 South Putt Corners Road
New Paltz, New York 12561

RE: REMEDIAL INVESTIGATIVE WORK PLAN (RIWP) - FINAL
Willow Brook Rentals LLC
10-14 Tucker Drive
Poughkeepsie, Dutchess County, New York
Site No.: C314132

Dear Mr. Richard:

DT Consulting Services, Inc. (DTCS) and Bellucci Engineering, PLLC are pleased to present this Remedial Investigative Work Plan (RIWP) for the above referenced property for your review and approval. I Daniel Bellucci certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10)." If you should have any questions or require additional information, please contact our office.

Respectfully submitted,

Daniel Bellucci, P.E.
License No. 099470
Bellucci Engineering, PLLC

Deborah Thompson, Senior Geologist
DT Consulting Services, Inc.

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1.0 INTRODUCTION AND PURPOSE

This Remedial Investigation Work Plan (RIWP) has been prepared to satisfy the investigation requirements of the New York State Department of Environmental Conservation (NYSDEC or "Department") Brownfield Cleanup Program (BCP). Willow brook Rentals LLC (hereinafter, BCP Applicant), owner of property located at 10-14 Tucker Drive, Town of Poughkeepsie, Dutchess County, New York (hereinafter, the Site or Subject Property) is in the process of applying for acceptance of the Site into the BCP Program. Upon acceptance into the BCP, an approved RIWP will be required prior to initiating remaining remedial investigation field activities

Prior investigation and mitigation activities have been conducted on the Site and the results of those investigations were submitted to the Department along with the BCP Application. The goals of this remedial investigation work is to a) determine current soil gas conditions beneath the Site structure and along the periphery of the property boundaries, b) document the composition and characteristics of surface and subsurface soils, c) document local groundwater quality conditions and direction of groundwater flow, and d) provide guidance on the selection and implementation of a Remedial Program for the Site.

This RIWP is designed to focus on and address specific areas at the Site to gain current subsurface quality data as well as to document the environmental conditions at portions of the Site not previously investigated. The Site is a former municipal landfill and bus maintenance/fueling garage. Three minor spills (Spill #s 0808935, 0907487 and 0904392) have been reported to NYSDEC at the Site based on releases of petroleum to the subsurface associated with the former bus garage. As more fully described in Sections 2 - 4 of this document, chlorinated solvents and petroleum related products have been detected in the subsurface of the property as a result of historic Site uses, including an historic landfill operated by the Town of Poughkeepsie under and near the Site (hereinafter Town landfill) and/or former bus repair/ fueling operations at the Site, all of which may have resulted in the release of hazardous and non-hazardous substances, including volatile organic compounds (VOCs). The past release of hazardous substances at the Site has resulted in:

- A potential threat to human health associated with potential exposure to the subsurface contaminated soils, soil vapor and groundwater.

- A potential environmental threat associated with potential impacts of contaminants to the subsurface soils and groundwater.

2.0 SITE INFORMATION

The proposed BCP Site includes an irregularly shaped 5.826 lot which is referenced under Section 6262, Block 3, Lot 162080 by the Town of Poughkeepsie. The Subject parcel is improved with a +/- 55,423 ft^2 two-story commercial warehouse/office building, asphalt parking areas and landscaped spaces. Approximately 50% of the building is warehouse storage space and the remaining 50% is vacant, unoccupied space. According to Town of Poughkeepsie Assessor records, the building was constructed in 1984. The Site is suspected to have been associated with a landfill as disturbed land was noted in at least 1970 and 1980 aerial photographs. Additionally, the portions of the building have historically been utilized for bus repair and fueling operations. According to documents reviewed and based upon prior site inspections, petroleum bulk storage (PBS) tanks including one, 10,000-gallon baffled diesel/gasoline aboveground storage tank (AST), several 275 – 300 gallon ASTs for motor oil and washer fluid as well as two, 1,000-gallon ASTs (fuel type not noted) have been utilized at the Site. There is no evidence of any underground storage tanks (USTs) existing at the Site and as of the date of this report, all ASTs appear to have been removed.

Historically, a total of three spills have been reported to New York State Department of Environmental Conservation (NYSDEC) for the Site. Spill #08-08935 was reported on November 7, 2008 based on the release of 5-gallons of diesel fuel to soil. According to the database, the spill was associated with the bus maintenance garage, and the cause of the release was unknown. The spill was closed by NYSDEC on November 7, 2008. Spill #09-07487 was reported on October 3, 2009 based on the release of 10-gallons of No. 2 fuel oil. The source of the spill was reported be a commercial vehicle. The spill was closed by NYSDEC on October 5, 2009. Spill # 09-04392 was reported on July 15, 2009 based on the release of an unknown quantity of diesel to soil. The source of the spill is unknown. The spill was closed by NYSDEC on December 31, 2009. In March 2017, DT Consulting Services, Inc. (DTCS) performed a Phase II Environmental Site Assessment on the Subject Property for then owner, 10 Tucker Drive, LLC. As a result of the investigation, Spill #16-10111 was generated for the Site based upon subsurface impacts to soil, groundwater and soil vapor (along with advective transport of vapor phase contaminants towards and into the Site structure – vapor intrusion). The spill remains open at this time.

The Site is bounded by commercial properties to the north, south and west, and wetlands to the east. Roadways adjoining the site include Tucker Drive to the west. Topography is generally level across most of the Site, with a slight decline to the east. A property location map, Site (base) plan and Area Wetland Map are presented as Figures 1, 2 and 2A, respectively. Potable water and wastewater disposal are reportedly provided by the Town of Poughkeepsie. No groundwater supply wells were observed by representatives of this office during site inspections and no groundwater supply wells are known to be present or used on adjoining or nearby properties.

ASTM Phase I and Phase II Environmental Site Assessments were conducted at the Site in July 2015 and March 2017, respectively. As a result of such prior investigation activities, the following areas of potential environmental concern and/or "recognized environmental conditions" (REC) were identified and are associated with the Subject Property:

- Groundwater contamination issues associated with the historic Town Landfill operated by the Town of Poughkeepsie under and near the Site and/or former bus repair/ fueling operations at the Site. [1]

- Soil vapor impacts, including petroleum and chlorinated VOCs associated with the historic Town landfill and/or former bus repair/ fueling operations, along with methane associated with the historic Town landfill;

- Indoor air impacts, including chlorinated VOCs (namely tetrachloroethylene and trichloroethylene) associated with the historic Town landfill and/or former bus repair/ fueling operations;

[1]Durham School Services operated a trucking/transportation company (mainly student transportation for the local school district) out of the facility until its departure in 2017. The bus repair/fueling operations noted as a REC for the Subject Property included the aboveground bulk storage of petroleum products (i.e., gasoline, diesel, motor oil and waste oil) which were utilized to operate and maintain the buses and transport vehicles. According to the NYSDEC database, bulk storage Site No. 3-602053 (which was historically assigned to the Site) is presently unregulated/closed.

3.0 OBJECTIVES

The purpose of the Remedial Investigation is to further define the nature and extent of on-Site contamination and develop sufficient data for the assessment, selection and design of a Remedial Action Work Plan. Based upon the results of previous investigations, subsurface impacts (attributed to the presence of a historic Town landfill, former bus repair and fueling operations) have been identified on Site. Furthermore, the concentrations of detected contaminants within the soil vapor and indoor air appear to warrant modification to the existing SSDS present at the Site. Anticipated Remedial Actions for the Site include, at minimum, diagnostic testing and modification of the existing Sub-slab Depressurization System (SSDS) as an Engineering Control to mitigate vapor intrusion into the Site building. Note that a SSDS had been installed as a precautionary measure during the construction of the Site structure in 1984 because the property was once known to be a part of the Town landfill.

Site investigation activities will consist of the following specific tasks:

- Document the presence or absence of targeted contaminants for the purpose of defining the nature and extent of subsurface impacts;
- Determine the direction of groundwater flow and document groundwater quality;
- Collection and analysis of specific media including soil gas, soil and groundwater;
- Identification of contaminants of concern; and
- Identification of specific environmental media, characterization of exposure settings, potential migration pathways and affected receptors.

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4.0 PREVIOUS INVESTIGATIONS AND EVALUATIONS

Two previous environmental investigations have been conducted on the Subject Property. Each of these investigations was performed to assess the environmental status of the Site by identifying existing or potential environmental conditions. The investigative and remedial activities conducted to date can be referenced in the Site Brownfield Cleanup Program (BCP) Application, June 9, 2021.

4.1 Phase 1 Environmental Assessment, July 9, 2015

LCS, Inc. (LCS) of Buffalo, New York performed a Phase I Environmental Assessment on the Subject Property dated July 9, 2015. Based on the findings of LCS's Phase I ESA, the following RECs associated with the Subject Property were identified:

- On-Site bus service and fueling since at least 1989. Surficial staining, typical of repair operations, was noted to the floor in the bus service area.

- Disturbed land was noted on-site in at least 1970 and 1980 (possibly associated with a landfill). According to an on-Site spill listing, the Subject Property was historically utilized as a landfill operated by the Town of Poughkeepsie.

The following controlled recognized environmental conditions (CRECs) associated with the Subject Property were identified:

- On-Site NY Spills (Spills #s 08-08935, 09-07487 and 09-04392) classified as "inactive." These spills have been addressed to the satisfaction of the NYSDEC.

- "Inactive" and "Closed" NY Spill sites on adjacent properties. These spills have been addressed to the satisfaction of the NYSDEC.

The following issues of potential environmental concern were identified:

- Four ASTs (one baffled) are registered to the Subject Property. One 300-gallon washer fluid AST, one 275-gallon waste motor oil AST, and one

baffled 10,000-gallon baffled diesel/gasoline AST were identified during the site inspection. No releases were noted in the area of those tanks.

- Two 1,000-gallon ASTs were removed from the Subject Property in 2009.
- Federal wetlands have been identified on eastern property boundary.
- Hazardous/regulated materials were noted stored in 55-gallon drums and smaller containers.
- A west adjacent property (7 Tucker Drive) was identified as a PBS facility.

4.2 Phase II Environmental Site Assessment, March 30, 2017

DTCS completed a Phase II Environmental Site Assessment at the Site in March 2017. The investigation included the performance of a Geophysical Investigation, collection of soil, groundwater and soil gas samples from the Site. The primary intent of the Geophysical Investigation was to determine if previously unknown USTs and if subsurface voids associated the historic landfill were present at the Site. The intent of the subsurface sampling was to identify and characterize any contamination that may exist in soil, groundwater and soil gas because of historical Site use as the Town landfill, bus repair and fueling operations.

4.2.1 Geophysical Investigation Findings

A paved area ranging from approximately 110-275' in width by 590' in length is found along the eastern side of the building and is accessed via Tucker Drive. As documented in LCS July 2015 Phase I ESA, the Subject Property is suspected to have been associated with a landfill as disturbed land was noted in at least 1970 and 1980 aerial photographs. In addition, LCS noted that an on-Site spill listing states the Subject Property was formerly utilized as a landfill. While performing the Geophysical Investigation, this area was scanned with GPR and other locating equipment for the presence of subsurface anomalies. As detected with GPR, certain portions of the eastern parking area were found to contain a subsurface void at a depth of approximately three feet below grade surface (bgs). DTCS theorized that the void could have been created by decaying organic material disposed of at the Town Landfill which had been previously been covered by three feet of fill material. In addition, several underground utilities were mapped

in this section of the Site, (mainly drainage conduits) on the day of the survey. DTCS cleared three soil boring locations within this paved area.

While performing the Geophysical Investigation, the area surrounding the existing 10,000-gallon baffled AST was scanned with GPR and other locating equipment for the presence of subsurface anomalies. Other than abandoned subsurface conduits, subsurface anomalies indicative of a UST were not identified.

4.2.2 Subsurface Investigation Activities

A total of six soil borings were advanced at the Site to depths ranging from 9 to 16 feet below grade. Two temporary PVC wells were installed in the boreholes and static water was measured at depths ranging from 12.00 to 12.80 feet bgs. Site soils are generally characterized as asphalt and gravel, underlain by sandy loam/mixed fill and silty clay. Void space, likely associated with the voids observed during the GPR survey, prevented collection of soil samples at several boring locations.

A total of four soil and two groundwater samples were collected from the Site for laboratory analysis for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) via EPA Methods 8260 and 8270, respectively.

Three soil gas samples were collected during the Phase II ESA field study as well. Based upon the suspect historical Site use as a landfill, two soil gas vapor probes were installed within the asphalt parking area and one probe was placed beneath the concrete slab of the Site structure for analysis. Soil vapor cores were extended to approximately two feet above the groundwater table during this investigation. The samples were collected for analysis employing 6-liter SUMMA canisters. The samples were submitted for laboratory analysis of VOCs by EPA Method TO-15 and methane.

4.2.3 Subsurface Investigation Findings

Soil Analytical Results

Based upon analytical testing, all targeted soil parameters were returned with minimal to non-detectable concentrations for VOCs and SVOCs. All reported parameters were below their respective regulatory standards as defined in NYSDEC Part 375-6.8(a) Unrestricted Use SCOs, December 14, 2006, with the exception of acetone in one sample. Acetone is a common laboratory derived

contaminant, and the detected concentration is unlikely associated with Site soils. The soil sampling results are summarized in Table 1 and boring locations are depicted on Figure 3.

Groundwater Analytical Results

Analysis of two temporary Site wells installed during this investigation revealed concentrations of laboratory detectable dissolved phase VOCs and SVOCs. When compared to guidance, eight VOCs and one SVOC were found to exceed their respective regulatory standard (Technical & Operations Guidance Series (TOGS) 1.1.1, June 1998). The groundwater sampling results are summarized in Table 2. Groundwater sample locations, along with exceedances of the Ambient Water Quality Standards (AWQS), are depicted on Figure 4.

Soil Vapor/ Gas Analytical Results

The results of soil vapor sampling indicate that twenty-seven VOCs are present within the three soil gas samples collected on-Site. The major on-Site vapor concentrations range from 0.38 microgram per cubic meter (µg/m³) to 260 µg/m³ in soil gas samples SG-1 - SG-3. The on-Site vapors in these samples are consistent with petroleum-based products and solvents typically found in dry cleaning chemicals and metal degreasing operations. Note that analysis for methane, ranged from 250,000 ppmv to 620,000 ppmv across the Site. The origin of the methane on-Site is theorized to originate from a natural byproduct of the decomposition of organic material. Studies have shown that landfill gas is composed of roughly 50 percent methane, 50 percent carbon dioxide (CO_2) and a small amount of non-methane organic compounds. As such, the identification of the Subject Property as a suspected landfill based upon 1970 and 1980 aerial photographs appears accurate. The soil gas sampling results are summarized in Table 3 of the Phase II report and soil vapor sample locations, along with elevated detections, are depicted on Figure 5.

4.2.4 Air Sampling Activities

Indoor Ambient Air Sampling

Upon receipt of soil, soil gas and groundwater analysis from the initial Phase II ESA field investigation, DTCS identified exceedances in soil gas and groundwater sample concentrations when compared to state guidelines. DTCS subsequently met with the NYSDEC to discuss the findings of the Phase II field

work and additional sampling requirements which were deemed necessary by the Department. Based upon the findings of the initial Phase II ESA field work, the NYSDEC requested an indoor air sampling program to be performed on-Site to quantify indoor air quality. To accommodate this request, DTCS placed eight 6-liter SUMMA canisters with flow controllers within accessible areas of the Site structure. The samples were submitted for laboratory analysis of VOCs by EPA Method TO-15 and methane.

4.2.5 Air Sampling Findings

Indoor Ambient Air Analytical Results

The results of indoor air sampling indicate that twenty-five VOCs are present within samples collected on-Site. The major on-Site indoor air concentrations range from 5.2 µg/m³ to 340 µg/m³ in indoor air samples denoted as IA-1 – IA-8. Similar to those compounds detected within soil gas laboratory reporting, targeted parameters which were found to exceed regulatory standards were consistent with chlorinated solvents typically found in dry cleaning and degreasing agents. Two compounds, namely Tetrachloroethylene and Trichloroethylene were found to exceed their respective standard as outlined in the NYS DOH Final Guidance on Soil Vapor Intrusion, October 2006 while analyzing indoor air. Note that analysis for methane, ranged from non-detect to 24 ppmv within the interior ambient air on-Site. The indoor air sampling results are summarized in Table 4. The indoor air sample locations, along with elevated detections, are depicted on Figure 6.

4.3 Data Assessment and Needs

Based upon the results of previous investigations, subsurface impacts (attributed to the historic landfill and bus repair/ fueling operations) have been identified on the Site. The nature and extent of soil and groundwater impacts have not been fully defined. Although existing soil and groundwater data can be utilized to assist in defining the principal contaminant source areas, additional investigative activities will need to be performed to define the extent of subsurface contamination while further delineating the source area(s). The existing active SSDS, installed during building construction as a protective measure against potential methane accumulation in the building, does not appear to be effective in mitigating migration of chlorinated VOCs from sub-slab soil gas to indoor air. Diagnostic testing and a building survey to identify potential preferential pathways should be performed to determine the existing system radius of influence and identify potential sources of indoor air impacts.

5.0 REMEDIAL INVESTIGATION APPROACH

The scope of the investigation program is directed at providing sufficient information that will complete data gaps in historical Site surveys. Ultimately, the goal of this RI is to verify current soil, soil gas and groundwater quality so that a remedial program can be selected and implemented. In addition, diagnostic testing is needed to evaluate the performance of the existing SSDS. The RI objectives and methods have been developed in accordance with the NYSDEC Brownfield Program Cleanup Guidance (NYSDEC May 2004), and relevant provisions of Department of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation May 2010. A Site and contaminant specific Health and Safety Plan or HASP and a Community Air Monitoring Plan or CAMP have been prepared for the Site and have been placed in Attachments A & B respectively. Each of these documents will be employed during all Site activities.

Although the scope of work as described herein provides specific locations for soil boring and soil gas installations, additional testing locations may be added or locations otherwise adjusted during the course of work, as warranted, to define the limits of impact. Figure 7 shows the proposed soil, soil gas, indoor air and groundwater sampling locations for this Site investigation work plan.

Infrastructure

Infrastructure including the presence of subsurface utility conduits suppling the Site with potable water, sewer, natural gas and storm sewer management are known to exist. Prior to initiating this RIWP a complete Geophysical Survey will be performed to identify the location and characteristics of all subsurface utilities. Most all utilities are known to enter the Site along the western quadrant of the facility; adjacent to Tucker Drive. As a majority of the investigation is located downgradient of said conduits and assumed groundwater flow direction, contaminant migration would likely be minimally impacted (with the exception of the storm sewer located in the eastern parking area). Upon completion of the RI, a discussion will be made as to whether infrastructure present on-Site has influenced the migration of subsurface contaminants.

Soil Sampling and Analysis

A direct-push drilling rig (Geoprobe) will be used to advance a minimum of seven soil borings (See Figure 7). The soil boring locations were selected to fill data gaps from the January/ March 2017 subsurface investigation where subsurface voids attributable to the historic landfill prohibited collection of samples beyond the shallow fill layer (i.e., SB-2 and SB-3). Boring logs from the January/ March 2017 subsurface investigation are included in Attachment C. Additionally, boring locations were selected to further investigate former on-Site bus repair and fueling operations. Upon retrieval from the four or five-foot sampler equipped with an acetate liner, the collected sample shall be placed in laboratory supplied glassware, labeled, and readied for transport to the laboratory for analysis. The sampling tubes and tools used to collect the soil samples will be decontaminated between each sampling location using a detergent wash and potable water rinse. Soil sampling will be conducted continuously from the surface to a maximum depth of approximately 25 feet below grade or to a depth sufficient to vertically delineate the extent of landfill materials and/or field evidence of contamination. Discrete sampling methods using macro core tooling will be employed to collect representative samples from beneath the landfill.

The reported depth to ground water ranges from approximately 12 - 13 feet below grade and presumably flows to the east towards Casper Creek. An on-Site Geologist will prepare geologic logs that will include the boring identification, depth interval, soil descriptions, moisture, and other notable features. Soil samples retrieved from each boring will be screened in approximate two-foot intervals for organic vapors using a field calibrated PID equipped with a 10.2 electron volt lamp. The PID probe will be inserted into the headspace of each sample bag and the maximum reading will be recorded. A total of one soil sample will be collected from zero to two feet below grade, one soil sample will be collected from the groundwater interface or locations that exhibit evidence of impact, and one soil sample from the native material beneath the landfill (a total of three samples per boring location). Samples will not be composite samples but will be discrete grab samples. With the exception of soil boring SB-5, all of the sampling locations are capped by an asphalt surface. As soil boring SB-5 does not have a cover, in addition to the soil collection frequency at described above, soil samples will be collected at depths of 0-2 inches for laboratory testing.

Selected samples will be submitted to a New York State Department of Health (NYSDOH)-approved laboratory for analysis of VOCs (USEPA Method 8260), SVOCs (USEPA Method 8270), Target analyte list (TAL) metals (USEPA

Various Methods), pesticides (USEPA Method 8081), polychlorinated biphenyls or PCBs (USEPA Method 8082), Per- And Polyfluoroalkyl Substances or PFAs (USEPA Method 1633), cyanide (USEPA Method 9014/9010C) and 1,4-dioxane (USEPA Method 8270 SIM). All analyses will be performed by NYSDEC Analytical Services Protocol (ASP) with Category B deliverables. Sample collection and analysis will be in accordance with the methods described in the Quality Assurance/Quality Control (QA/QC) Plan as described in Section 6 of this report. Field quality control measures including trip and field blanks will be collected and submitted to the chemical laboratory for analysis. These control measures are described in Section 6 of this report.

Ground Water Sampling and Analysis

Each of the seven soil borings will be converted to permanent 1-inch PVC monitoring wells. Each well will be constructed of one inch inside diameter (ID), schedule 40 PVC casing and 0.01 inch slotted PVC screen. The screened section of the well will extend a minimum of five feet above and five feet below the groundwater table, for a total of ten feet. To complete the groundwater well, a locking cap and a flush mounted four-inch manhole clearly marked "monitoring well" will be installed within a framed concrete pad. Monitoring wells will be developed following installation to remove fine material that may have settled in the well, remove any drilling fluids that were used during well installation, and to enhance the hydraulic communication with the surrounding formation. Monitoring wells will be allowed to set for at least two days following installation to allow the grout to cure before developing the well. Wells will be developed by surging and purging the entire screened interval at each location. The monitoring wells will be considered properly developed when a minimum of five well volumes of water have been removed or until a monitoring well has been pumped dry after surging.

All Site groundwater wells will be sampled using the USEPA Low Flow method. Sampling will be conducted using the following protocol:

- Basic climatological data (e.g., temperature, precipitation, etc.) and all field observations will be recorded in the field logbook. Groundwater sampling will begin at the potentially least contaminated well (as determined from well location and/or previous data) and proceed to the potentially most contaminated well. New nitrile gloves will be worn by the sampler at each well location.

- The protective casing on the well will be unlocked, the air in the well head will be screened with the PID, and the static water level (relative to the top of the casing) will be measured with a decontaminated water-level meter. Polyethylene tubing will be slowly lowered until reaching two to three feet off the bottom to prevent disturbance and re-suspension of any sediment present in the bottom of the well.

- Water level measurements will be recorded to the nearest 0.01 foot prior to ground water sampling. The well would then be pumped at a rate of 200 to 500 milliliters per minute, and the water level will be measured approximately every three to five minutes to ensure that stabilization (drawdown of 0.3' or less) is achieved.

- All groundwater samples will be collected in a manner consistent with NYSDEC sample collection protocols. Each groundwater sample will be placed into, appropriately labeled, containers provided by the laboratory. All samples will be maintained at appropriate cold temperatures.

- The protective cap on the well will be replaced and locked following sampling, and the field sampling crew will move to the next most contaminated well and the process will be repeated.

One round of groundwater samples will be collected from the monitoring wells and will be analyzed for VOCs (USEPA Method 8260), SVOCs (USEPA Method 8270), Target analyte list (TAL) metals (USEPA Various Methods), pesticides (USEPA Method 8081), polychlorinated biphenyls or PCBs (USEPA Method 8082), Per- And Polyfluoroalkyl Substances or PFAs (USEPA Method 1633), cyanide (USEPA Method SM 4500 CN C/E) and 1,4-dioxane (USEPA Method 8270 SIM). All analyses will be performed by NYSDEC Analytical Services Protocol (ASP) with Category B deliverables. Field quality control measures including trip and field blanks will be collected and submitted to the chemical laboratory for analysis. These control measures are described in Section 6 of this report. All well locations will be measured and plotted on a scaled base map.

Waste Handling

All investigation-derived waste (IDW) will be contained on-Site in a secure area for appropriate characterization and disposal by DTCS. Soil cuttings, personal protective equipment, and spent disposable sampling materials will be segregated by waste type and placed in DOT-approved 55-gallon steel drums. All

decontamination water, purged groundwater, and drilling water will be stored in 55-gallon drums as necessary. Field staff will maintain an inventory of all waste storage vessels. All storage vessels will be appropriately labeled with the contents, generator, location, and date.

Relative Groundwater Elevation Survey

A relative groundwater elevation survey will be conducted using the measured groundwater depths and surveyed top of casing elevations, compared to a relative arbitrary benchmark of 100 feet above mean seal level (amsl). The data will be used to establish the groundwater flow direction at the Site. A groundwater elevation contour map will be prepared for inclusion in the Remedial Investigation Report (RIR).

Soil Gas Sampling and Analysis

A total of seven soil gas sampling points will be installed along the property BCP boundaries in each cardinal direction (see Figure 7). The soil gas points will be installed by advancing 1.25-inch solid stem direct push sample rods to a depth of 5-feet below ground surface bgs. A dedicated soil vapor implant will be installed at the base of the borehole and connected to the surface with dedicated high density polyethylene tubing. The annulus around the vapor implant will be filled with No. 2 filter sand to approximately 3-feet bgs. The remaining annulus will be sealed with hydrated bentonite to the surface. Following installation, a MiniRae photoionization detector (which registers airflow below 0.2 liters per minute) will be attached to the high density polyethylene tubing and a minimum of three sample volumes will purged from each point. Total VOC readings will be recorded for each soil gas point and used as a basis for comparison with laboratory analytical data.

The soil gas sample will be collected for analysis in batch clean SUMMA canisters equipped with a laboratory calibrated flow control device to facilitate the collection of the samples for a 8-hour sample duration time; with a flow rate not to exceed 0.2 liters per minute. As a quality assurance/quality control measure, an inert tracer gas (helium) test will be completed before and after sampling to document that the soil vapor sampling points were properly sealed preventing subsurface infiltration of ambient air into the sample chain. Following sampling, the pressure of the SUMMA canister will be recorded, and each soil gas point will be removed from the ground, plugged with bentonite chips and sealed at the surface with concrete or asphalt, as appropriate. A sample log sheet will be maintained summarizing sample identification, date and time of sample

collection, sampling depth, identity of samplers, sampling methods and devices, soil vapor purge volumes, volume of the soil vapor extracted, vacuum of canisters before and after the samples are collected, and chain of custody protocols.

The soil gas samples will be submitted to a NYSDOH-approved laboratory for analysis of VOCs by EPA Method TO-15. Sample collection and analysis will be in accordance with the methods described in the Quality Assurance/Quality Control (QA/QC) Plan as described in Section 6 of this report. All laboratory reporting will be provided in an EQuIS-ready format.

Sub-Slab Soil Vapor Sampling and Analysis

A total of ten sub-slab soil vapor points will be placed throughout the Site structure (See Figure 7) for sampling and analysis. The soil vapor points will be installed by core drilling a small diameter hole (5/8") completely through the slab and installing a brass vapor pin equipped with an airtight silicon sleeve. The pins will be recessed beneath the slab and fitted with stainless steel flush-mount threaded covers set in 1.5-inch cavities.

Following installation, a MiniRae photoionization detector (which registers airflow below 0.2 liters per minute) will be attached to the vapor pin using high density polyethylene tubing and a minimum of three sample volumes will purged from each point. Total VOC readings will be recorded for each soil vapor point and used as a basis for comparison with laboratory analytical data.

The existing SSDS was installed to mitigate accumulation of methane within the building from the historic landfill. Accordingly, the soil vapor samples will be collected a minimum of four weeks after the existing SSDS is turned off.

The sub-slab soil vapor samples will be collected for analysis in batch clean SUMMA canisters equipped with a laboratory calibrated flow control device to facilitate the collection of the samples for a 8-hour sample duration time; with a flow rate not to exceed 0.2 liters per minute. As a quality assurance/quality control measure, an inert tracer gas (helium) test will be completed before and after sampling to document that the soil vapor sampling points were properly sealed preventing subsurface infiltration of ambient air into the sample chain. Following sampling, the pressure of the SUMMA canisters will be recorded. A sample log sheet will be maintained summarizing sample identification, date and time of sample collection, sampling depth, identity of samplers, sampling methods and devices, soil vapor purge volumes, volume of the soil vapor

extracted, vacuum of canisters before and after the samples are collected, and chain of custody protocols.

The soil vapor samples will be submitted to a NYSDOH-approved laboratory for analysis of VOCs by EPA Method TO-15 and methane. Sample collection and analysis will be in accordance with the methods described in the Quality Assurance/Quality Control (QA/QC) Plan as described in Section 6 of this report. All laboratory reporting will be provided in an EQuIS-ready format.

The sub-slab soil vapor sampling data will be summarized in the RIR.

Ambient Indoor and Outdoor Air Sampling and Analysis

A total of ten indoor and one outdoor ambient air sample locations are proposed for this remedial investigation. The indoor air samples will be co-located with the sub-slab soil vapor samples throughout the existing building (see Figure 7 for locations). The outdoor ambient air sample will be collected from and upwind location on the property. Prior to sample collection, a NYSDOH Building Inventory Questionnaire will be performed to determine potential sources of VOCs in indoor air. Each sample will be collected at a height of 3-5 feet from the ground within the approximate breathing zone. Parameters including indoor and outdoor air temperature, wind direction and relative humidity will be noted during the sampling event.

The air samples will be collected for analysis in batch clean SUMMA canisters equipped with a laboratory calibrated flow control device to facilitate the collection of the samples for an 8-hour sample duration time; with a flow rate not to exceed 0.2 liters per minute. Following sampling, the pressure of the SUMMA canisters will be recorded. A sample log sheet will be maintained summarizing sample identification, date and time of sample collection, sampling depth, identity of samplers, sampling methods and devices, vacuum of canisters before and after the samples are collected, and chain of custody protocols.

The air samples will be submitted to a NYSDOH-approved laboratory for analysis of VOCs by EPA Method TO-15 and methane. Sample collection and analysis will be in accordance with the methods described in the Quality Assurance/Quality Control (QA/QC) Plan as described in Section 6 of this report. All laboratory reporting will be provided in an EQuIS-ready format. All air sampling locations will be measured and plotted on a scaled base map.

The air sampling data will be summarized in the RIR.

Existing Sub-slab Depressurization System Pilot/ Diagnostic Testing

Diagnostic testing of the existing SSDS will be conducted in two phases. The first phase (herein Phase I) will be conducted to determine current performance of the existing SSDS. The second phase (herein Phase II) will be conducted after Phase I and will include targeted testing in locations where sub-slab vacuum is not demonstrated during Phase I. The data collected during each testing phase will be used to design system modifications to mitigate the vapor intrusion concern identified within the building during previous investigations. Both phases of diagnostic testing will be conducted after the collection of the above reference soil, groundwater, soil gas and indoor samples, which will be evaluated to direct diagnostic efforts.

Phase I Diagnostic Testing

The existing active SSDS will be evaluated to determine current system performance. The permanent sub-slab soil gas sampling points described above will be utilized during Phase I testing as vacuum monitoring points. Additional temporary vacuum or permanent monitoring points will be installed strategically during this phase as needed to determine vacuum field extension and to identify short circuiting of the vacuum radius of influence (ROI). Sub-slab vacuum readings will be collected in in-H_2O using an Infiltec® DM1 micromanometer.

According to information gathered to date, a total of seven vertical riser pipes connected to horizontal perforated pipes in gravel trenches are present beneath the slab. Each vertical riser pipe reportedly contains and inline powered blower/ fan. In order to collect data from each vertical riser pipe, a small hole (~5/16-inch) will be made in each riser near ground level (or above roofline if ground level not accessible). A pipe threading tool will be used to create threads in the PVC pipe for the purpose of installing airtight ball valves for data collection.

The installed ball valves/sampling ports will be utilized to measure a number of parameters to evaluate performance-related measurements. These parameters include, air velocity measured in feet per minute (FPM) and temperature (Degrees Fahrenheit), and will be measured using a Dwyer® Air Velocity Meter. The velocity will be converted to a flow rate in CFM. Extracted vapor vacuum readings will be collected in in-H_2O using a Dwyer Magnehelic® differential pressure gauge and converted to inches of mercury (in-Hg). Total VOC readings

will be collected using a MiniRae PID. In addition, effluent samples (seven total) will be collected from the sample port. The samples will be collected in batch clean SUMMA canisters and analyzed for cVOCs by EPA Method TO-15 and methane. The purpose of the effluent samples is to determine the current VOC and methane mass removal rate.

Phase II Diagnostic Testing

Based on the previous soil gas and indoor air sampling results obtained during the 2017 Phase II ESA, it is expected that the existing SSDS is not creating the proper ROI to mitigate vapor intrusion within the building. Accordingly, Phase II testing is anticipated to evaluate pressure field extension in areas where Phase 1 testing demonstrates the absence of sub-slab vacuum. The testing will include installation of extraction/pumping wells in locations where sub-slab vacuum was not identified during Phase I diagnostics. The new extraction/ pumping wells will be installed by core drilling a 3 and 5/8-inch diameter core through the existing concrete slab. Soils and/or subsurface aggregate will be removed from the extraction well and the cavity will be backfilled with 1 to 1.5-inch gravel. The soils will be placed in 55-gallon drums for off-Site disposal as IDW. The SSDS extraction/ pumping wells will be constructed with a 3-inch PVC coupling set and sealed in the cored hole and connected to 3-inch schedule 40 PVC riser pipe. The space between the cored slab and 3-inch PVC coupler will be sealed with RadonAway® Pro PGS joint sealant.

The pilot/ diagnostic testing will include pumping/ removing vapor from each of the extraction/ pumping wells in a series of tests. During each test, the sub-slab soil gas sample points will be utilized as vacuum monitoring points. Additional temporary vacuum or permanent monitoring points will be installed strategically during the pumping tests to determine vacuum field extension and to identify short circuiting of the vacuum ROI. A GBR 76SOE radial blower fan capable of creating a maximum vacuum of 16-in-H_2O and air flow of 155 CFM will be connected to each extraction pumping well to create the sub-slab vacuum. Extracted vapors will be routed through a 30-gallon carbon vessel to remove CVOCs or will be directly ventilated outside of the building. The extracted vapor effluent will be continually monitored with a MiniRae PID during testing to ensure no accumulation of detectable VOCs within the building.

During Phase II testing, velocity FPM, vacuum, temperature, and total VOCs will be measured. Total VOC readings pre- and post-carbon treatment will be collected. In addition, effluent samples (up to two total) will be collected from a

sample port, prior to carbon treatment. The samples will be collected in batch clean SUMMA canisters and analyzed for CVOCs by EPA Method TO-15 and methane. The purpose of the effluent samples is to determine the anticipated CVOC and methane mass removal rate and whether carbon treatment will be necessary for final system design. The data gathered during both Phases of pilot/ diagnostic testing will be evaluated by a NYS Professional Engineer to determine final system modifications. A summary of pilot/diagnostic testing data will be included in the RIR, and the proposed system modifications will be included in the Remedial Action Work Plan.

6.0 QUALITY ASSURANCE PROJECT PLAN

As stated previously, the goals of this RI Work Plan are to further characterize the nature and extent of contaminants in Site soil and groundwater and to further quantify and analyze sub-slab soil gas which appears to be impacting indoor air through vapor intrusion. Additionally, the RIWP will evaluate performance of the existing SSDS and provide diagnostic data to be used to design system modifications to address the suspected vapor intrusion concern in the building. Therefore, this Quality Assurance Project Plan (QAPP) has been developed to establish the procedures and protocols for collection and laboratory analysis of samples associated with the completion of the BCP RI element on-Site. Project management/organizational responsibilities will be performed under the direction of Deborah J. Thompson.

6.1 Quality Assurance/Quality Control (QA/QC) Objectives

The NYSDEC Analytical Services Protocol (ASP) provides levels of quality for laboratory testing as they apply to remedial investigation and construction activities. As such, the NYSDEC ASP will be followed during the course of Site investigation/remediation on the Subject Property. The overall data quality objectives of the project are:

- To ensure that samples collected are representative.
- To provide detection limits for the selected analytical methods, which are below the established cleanup objective or regulatory standards.

- To measure and document precision and accuracy using procedures established by the laboratories, NYSDOH Environmental Laboratory Approval Program (ELAP) and USEPA approved analytical methods.

- To ensure that a NYSDOH ELAP and NYSDOH ELAP CLP certified laboratory will conduct all soil vapor groundwater analyses.

6.2 Analytical Methods/Quality Assurance Summary

- *Matrix type*:

  Soil, soil vapor, indoor air and Groundwater

- *Number or frequency of samples to be collected per matrix:*

  Variable, pending field conditions.

- *Number of field and trip blanks per matrix:*

  Soil – 1, Groundwater – 1

- *Analytical parameters to be measured per matrix:*

  Volatile organic compounds (soil, soil vapor, indoor air and groundwater)
  Semi-volatiles, TAL Metals, PCBs and PFOAS (soil and groundwater)
  Methane (soil vapor and indoor air)

- *Analytical methods to be used per matrix*:

  EPA Method TO-15 (soil vapor and indoor air)
  EPA Test Methods 8260, 8270B/N, 6010/7470/7471, 8082, 1633, 9014/9010C, SM 4500 CN C/E and 8270 SIM (soil and groundwater).

- *The number/type of matrix spiked, duplicate and blank samples to be collected:*

  Dependent upon the total number of samples of each matrix to be analyzed but, there will be at least one split per matrix.

Sample Quantity/Analytical Methods/Quality Assurance Summary Table

Matrix Type	No. of Samples	No of FBs/ TBs	Analytical Parameters	Analytical Method	Duplicate Frequency	Sample Container & Preservation (Per Sample)	Hold Time
Soil	14	1	VOCs, SVOCs, TAL Metals, pesticides, PCBs, PFAs, cyanide and 1, 4-dioxane.	8260, 8270 6010/7471, 8080, 8082, 1633, 9014/9010C and 8270 SIM.	1	4 x 40ml/ DI, MeOH 4 x 4oz	7 days – 6 months. See chart below.
Soil Vapor	7	N/A	VOCs and methane	TO-15	1	1 x Summa	7 days – 6 months. See chart below.
Sub-slab Soil Vapor & Ambient Air Indoor Outdoor	10 10 1	N/A	VOCs and methane	TO-15	1	1 x Summa	7 days – 6 months. See chart below.
Groundwater	7	1	VOCs, SVOCs, TAL Metals, pesticides, PCBs, PFAs, cyanide and 1, 4-dioxane	8260, 8270 6010/7471, 8080, 8082, 1633, SM 4500 CN C/E and 8270 SIM.	1	3 x 40ml/Hcl 4 x 1L/None 1 x 250ml/HNO3	7 days – 6 months. See chart below.

6.3 Field Quality Control Samples

Field quality controls for laboratory confirmation samples include the collection and analysis of field duplicate and equipment rinsate samples. The frequency of collection for the specified QC field samples is as follows:

- ✓ A trip blank will be prepared before the sample bottles are sent by the laboratory. A trip blank will be included with each shipment of samples where sampling and analysis for VOC is planned (water matrix only).

- ✓ One field blank per day for PFA sampling.

- ✓ One field duplicate sample per 20 field samples. Duplicate samples will be collected by initially collecting twice as much material as is normally collected for a sample. After mixing, the material will be apportioned into two sets of containers.

- ✓ One equipment blank (rinsate) sample per 40 samples.

6.4 Field Sampling Procedures

Sampling/Analytical procedures are described in detail in the RI Work Plan as outlined above and will not be reiterated in this QAPP. The Work Plan also includes site maps and sampling diagrams as well as details for sampling implementation, decontamination, and waste management.

Sample Containerization

Analysis	Bottle Type	Preservative	Holding Time
Soil, Sediment, Solid Waste			
VOCs	40ml glass	DI MeOH	7 days (until extraction, 40 days extracted)
SVOCs	Wide mouth glass	None	7 days (until extraction, 40 days extracted)
Metals[1]	Wide mouth glass	None	6 months Cyanide: 12 days Mercury: 28 days
Pesticides	Wide mouth glass	None	7 days (until extraction, 40 days extracted)
PCBs	Wide mouth glass	None	7 days (until extraction, 40 days extracted)
PFAs	250ml PP[2]	None	14 days
Soil Gas/Sub-slab Soil Vapor/Ambient Air			
VOCs GC/MS (TO-15)	1L Summa Canister	None	7 days (until extraction, 40 days extracted)
Groundwater Samples			
VOCs	40 ml with septum cap	HCl	14 days
SVOCs	1 L glass	None	7 days (until extraction, 40 days extracted)
Metals [1]	1 L plastic	Nitric acid to pH <2	6 months Mercury, 26 days
Pesticides	Wide mouth glass	None	7 days (until extraction, 40 days extracted)
PCBs	Wide mouth glass	None	7 days (until extraction, 40 days extracted)
PFAs	125ml PP	None	14 days

As all bottles will contain the necessary preservatives as shown above, they need only be filled. Each VOC 40ml vial must be filled to the brim with no air bubbles. The other sample jars should be filled to within an inch from the top for liquids, and to the brim for soils and sediment. All samples will be preserved with ice during collection and shipment.

(1) Metals referred to the 24 metals and cyanide in the Target Analyte List, Methods 6010/7470/7471/9010.
(2) PP is Polypropylene

Sample Preservation

The samples collected for analysis will require preservation prior to shipment (as described above). Preservation of the sample ensures sample integrity and prevents or minimizes degradation or transformation of the constituents to be analyzed. Specific preservation requirements include proper handling, packaging in laboratory-supplied sample containers, and chilled to 4° Celsius (°C) for shipping to the contract analytical laboratory.

Documenting Field Samples

The DTCS Field Team will use field logbooks or specific field forms to record pertinent information regarding subsurface characteristics, field screening results, and confirmatory sampling activities. Field staff will record the project name and number, date, sampling personnel on site, other personnel present, weather conditions, and other relevant events to sampling activity in a chronological order. The field log book and/or analysis forms will be maintained in the project file.

6.5 Sample Custody

Chain-of-Custody Forms

Each sample will be recorded onto a chain-of-custody (COC) form. The form will include the project name and number, names of the field sampling personnel, the sample number, date and time the sample was collected, whether the sample is a composite or grab sample, sample location, number of containers per sample number, constituents to be analyzed, and pertinent comments. The form will document the date, time, and signature of person(s) relinquishing and receiving custody of the samples.

Sample Transportation to the Laboratory

Samples will be shipped for analysis to the laboratory either the day the samples are collected or within 24 hours following collection, except in the case of samples that are collected on Saturday. Samples will be transported by a laboratory supplied carrier service. If samples are collected on a Saturday, they will be stored by field personnel during the weekend and then readied for transport on Monday. The contract analytical laboratory will be required to perform the analyses on the samples within the allowable holding time proscribed for the analyses.

Laboratory Sample Custody

Upon arrival at the analytical laboratory, samples will be checked in by the sample custodian. The sample custodian will:

- Sign the COC form documenting receipt of the samples from the carrier;
- Verify that the number of samples received in the shipment agrees with the number listed on the COC form;
- Verify that the information on each bottle agrees with the information documented on the COC form; and
- Document on the COC form the integrity/condition (bottle intact, temperature, etc.) of all received samples.

In the event of any discrepancy or problems associated with the shipment of samples for chemical analysis, the analytical laboratory project manager will immediately notify the field personnel. A unique laboratory sample number will be assigned to each sample. Pertinent information from the COC form and/or sample label (e.g., sample identification, sampling location, sampling date and time, sample description, and requested analyses) together with the date of sample receipt will be entered into the analytical laboratory's data management system which will be used to record the status of samples, their storage locations, and the analytical results. The analytical laboratory will have in-house COC procedures to ensure proper security of all samples.

Laboratory Selection

The laboratory chosen for the project must be certified, and maintain certification, under the NYSDOH ELAP and NYSDOH ELAP CLP for analyses of solid and hazardous waste. DTCS has contracted with York Analytical Laboratories, Inc. located in Stratford, CT to perform laboratory services for this Work Plan.

6.6 Data Reduction, Verification and Reporting

Verification of data obtained from sampling will be performed by the Project Manager who will determine the validity of the data by comparing the actual procedures used for field measurements, sampling, and custody, as documented on forms and in the field log book, with those prescribed in the work plan and/or approved by the Project Manager.

6.7 Data Usability Summary Report

As part of this Remedial Investigation Work Plan, a Data Usability Summary Report or DUSR will be prepared to summarize the soil and groundwater sampling and analytical results for the Site. The primary objective of the DUSR is to determine whether the analytical data meets Site specific objectives for data quality and data use.

The DUSR will be prepared following the guidelines provided in Department of Environmental Remediation (DER)-10 *Technical Guidance for Site Investigation and Remediation*, Draft, December 2002, Guidance for the Development of Data Usability Summary Reports. The complete validated analytical results and Form 1s will be provided in the DUSR during reporting of the remedial investigation.

6.8 Electronic Data Deliverables

The RIR will be provided to NYSDEC and DOH as an electronic PDF report upon completion of the RI field investigation. All analytical data will be summarized in data tables compared to applicable regulatory standards, along with complete laboratory analytical reports. Scaled site plans will also be included in the RIR.

7.0 HUMAN HEALTH EXPOSURE ASSESSMENT

Site data will be evaluated to determine whether human receptors, both on and off Site are potentially exposed. The purpose of the exposure assessment will be to qualitatively determine the route, intensity, frequency and duration of actual or potential exposures of human to site-related chemicals. The assessment will also describe the nature and size of the population potentially exposed to the contaminants.

Laboratory analytical reporting on soil, groundwater, soil vapor and indoor air will be compared to applicable health-based screening criteria:

- **Soil**
  Soil analytical results will be compared to NYSDEC's Subpart 375-6: Remedial Program Unrestricted Soil Cleanup Objectives.

- **Groundwater**
  Groundwater analytical results will be compared to NYSDEC Guidance Values as referenced in Technical Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998 for class GA groundwater.

- **Soil Vapor & Indoor Air**
  The sub-slab soil vapor and indoor air sampling results will be compared to the compounds listed in the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion, dated October 2006 and the revised NYSDOH Decision Matrices dated May 2017. The methane concentrations will be compared to concentrations typically encountered in landfills.

The comparison of analytical result to the applicable screening values will be utilized to tentatively identify contaminants of potential concern.

8.0 FISH AND WILDLIFE EXPOSURE ASSESSMENT

A Fish and Wildlife Resource Evaluation (FWRIA) will be completed to provide an initial screening of potentially affected fish and wildlife resources in connection with the site. The first step of the FWRIA process, resource characterization, will be completed as part of the Site investigation scope. Resource characterization includes the following basic steps:

- Identify fish and wildlife resources for the area within a one-half mile radius of the site, based on NYSDEC records and knowledge of the site area.

- Identify contaminant migration patterns that may potentially expose fish and wildlife resource to site-related contaminants.

- Identify specific contaminants of ecological concern.

- Draw conclusions regarding potential adverse effects.

The findings of the initial FWRIA phase will be employed to determine whether it is likely that the commercial Site has a negative effect on local wildlife and related habitats.

9.0 REMEDIAL INVESTIGATION REPORT

Following the completion of the proposed sampling, analysis and data evaluation, a Remedial Investigation Report will be prepared that presents the findings of the investigation. The following information will be included in the RI Report.

1. A narrative discussion of methods and results. Work completed under the approved RI Work Plan will be described, including the methods employed for sample collection and laboratory analysis.

2. This final remedial investigation will further define the nature and extent of soil and groundwater contaminants. Sub-slab soil gas sampling will provide building-wide soil gas concentrations. Indoor air sampling will identify current exposures within the existing structure. Indoor air and soil vapor data will be compared to NYSDOH Vapor Intrusion Guidance Matrices. A comparison with the NYSDOH Vapor Intrusion Guidance Matrices, along with diagnostic data collected during both phases of SSDS testing, will be used to determine the appropriate modifications to the existing active SSDS. Soil and Groundwater sampling and analysis will provide current concentrations present in both media and will provide data on other potential contaminants of concern not previously investigated.

3. Hydrogeologic Data. Hydrogeologic factors and their influence on the migration and distribution of contaminants will be discussed. Supporting data including monitoring well construction logs, groundwater elevation data and maps displaying groundwater analytical results, with text boxes depicting contaminant concentrations at each monitoring point will be prepared for the inclusion in the final RI Report.

4. Standards and guidance that pertain to the sampled Site media will be identified and listed in summary tables along with the analytical results for each medium. Any exceedances encountered above regulatory standards will be indicated on the tables and discussed in the technical overview.

5. Human Health Exposure Assessment. An assessment of potential exposure scenarios will be presented in the context of the Site's existing and future contemplated use. Exposure scenarios will be addressed both on and off-Site in the assessment.

6. Fish and Wildlife Resources. Area fish and wildlife resources will be identified and the overall habitat value for the site will be discussed. The Site's effect on the overall habitat value for the area based on current conditions and the future anticipated use will be included the resource assessment.

7. Conclusions/Recommendations. The results of the final RI will be summarized in a written document which will identify source areas and potential exposure pathways in relation to human and environmental receptors. The RI Report will also evaluate appropriate remedial options based upon the RI results and provide specific details on diagnostic testing and system modifications for the existing SSDS present at the Site.

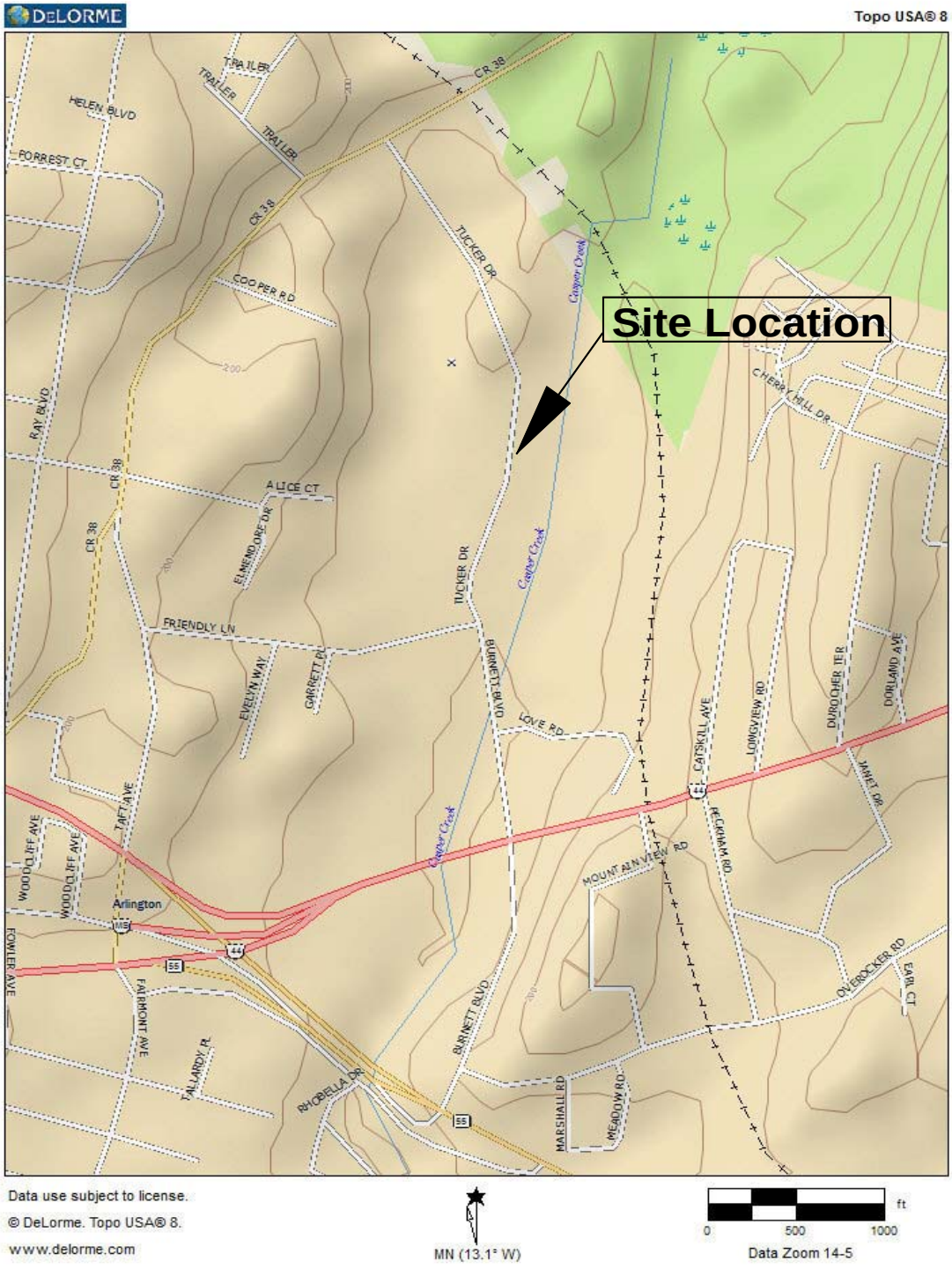
8. Supporting Information. To support the site data collected during the implementation of the RI Work Plan, the following items will be appended to the RI Report:

    - Site photographs;
    - Site maps, including text box figures depicting analytical results;
    - Laboratory analysis;
    - SSDS Diagnostic/ Pilot Testing Summary; and
    - SSDS Proposed System Modifications.

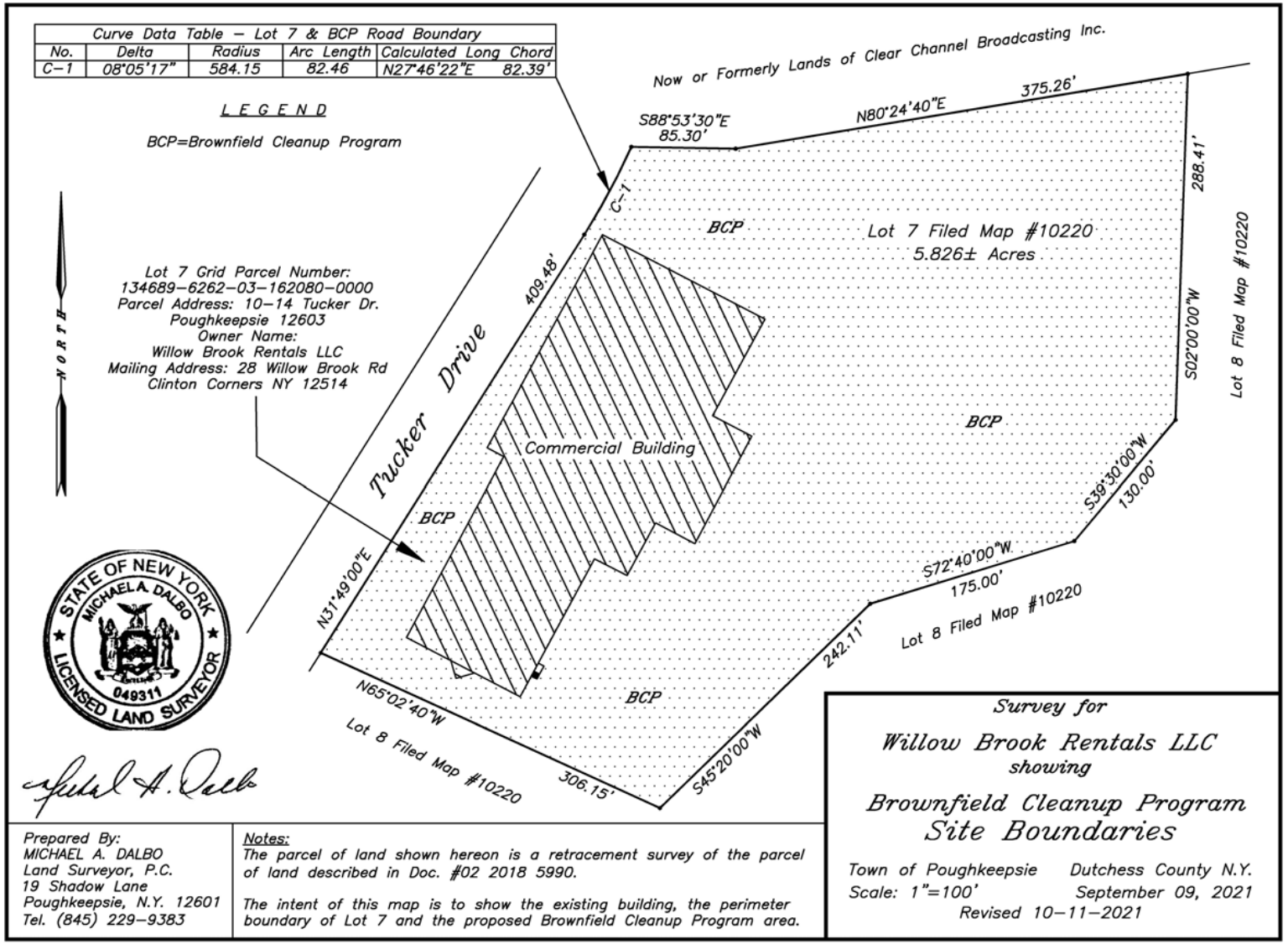
10.0 PROJECT SCHEDULE

The RI sampling and analysis program proposed herein will be implemented following NYSDEC and NYSDOH approval. RI field sampling work will be scheduled to begin within four weeks from approval date and/or after a minimum of four weeks of SSDS shut down. Specific public participation milestones are denoted in a separate Citizens Participation Plan. DTCS estimates that the field work will require one week to complete, and laboratory analysis within two weeks of the conclusion of field work on-Site. The RI Report and Remedial Action Work Plan will be submitted for NYSDEC and NYSDOH review and approval within three months of work plan approval.

FIGURES



Client: Willow Brook Rentals LLC			**Site Location Plan**
Site: 10-14 Tucker Drive, Poughkeepsie, New York			
Site #: C314132	**Drawn by:** DJT	**Scale:** Graphic	**Figure No:** 1



Copy of BCP Survey Map as Generated by Michael J Dalbo, Land Surveyor, P.C. , October 11, 2021

DT Consulting Services, Inc.
1291 Old Post Road
Ulster Park, New York 12487
(845) 658-3484

Client:	Willow Brook Rentals LLC			
Location:	10-14 Tucker Drive, Poughkeepsie, Dutchess County, New York			
Title:	Site (base) Map			
Scale: Graphic		Drawn By: O.T.	BCP Site No.: C314132	Fig.#: 2

Michael A. Dalbo

Land Surveyor, P.C.

19 Shadow Lane

Poughkeepsie, N.Y. 12601

Date: Sept. 10, 2021

Survey Description
for
Willow Brook Rentals LLC

Brownfield Cleanup Program
(BCP)

All that parcel of land situate in the Town of Poughkeepsie, County of Dutchess and State of New York being more particularly bounded and described as follows:

Beginning at a point on the easterly line of Tucker Drive, marking the southwesterly corner of the herein described parcel and the southwesterly corner of Lot 7, shown on a map entitled "Subdivision of Lands of Thomas R. Espie, Jr. and Betty Espie and Lot Line Revision WKIP Broadcasting Corporation", filed in the Office of the Dutchess County Clerk as map #10220; thence running along the easterly line of Tucker Drive, as set forth on filed map #10220, N31°49'00"E 409.48' to the beginning of a curve; thence along a curve to the left, having a long chord of N27°46'22"E 82.39' and a radius of 584.15', for a distance along the arc of 82.46' to the northwesterly corner of Lot 7, the southwest corner of the lands now or formerly of Clear Channel Broadcasting Inc. and the northwest corner of the herein described parcel; thence running into, across and through Lot 7, S54°00'00"E 134.00', S25°20'00"E 153.00', S27°40'00"W 175.00' and S56°02'20"W 222.57' to the southeast corner of the herein described parcel at a point on the southerly line of Lot 7 and the northerly line of Lot 8, shown on filed map #10220; thence running along the division line between Lot 7 and Lot 8, N65°02'40"W 179.00' to the point of beginning.

Containing 2.52 Acres of land more or less.

DT Consulting Services, Inc.
1291 Old Post Road
Lister Park, NY 12457

NOT TO SCALE

LEGEND

National Wetland Inventory-Mapped Federal Wetland

Parcel Boundary

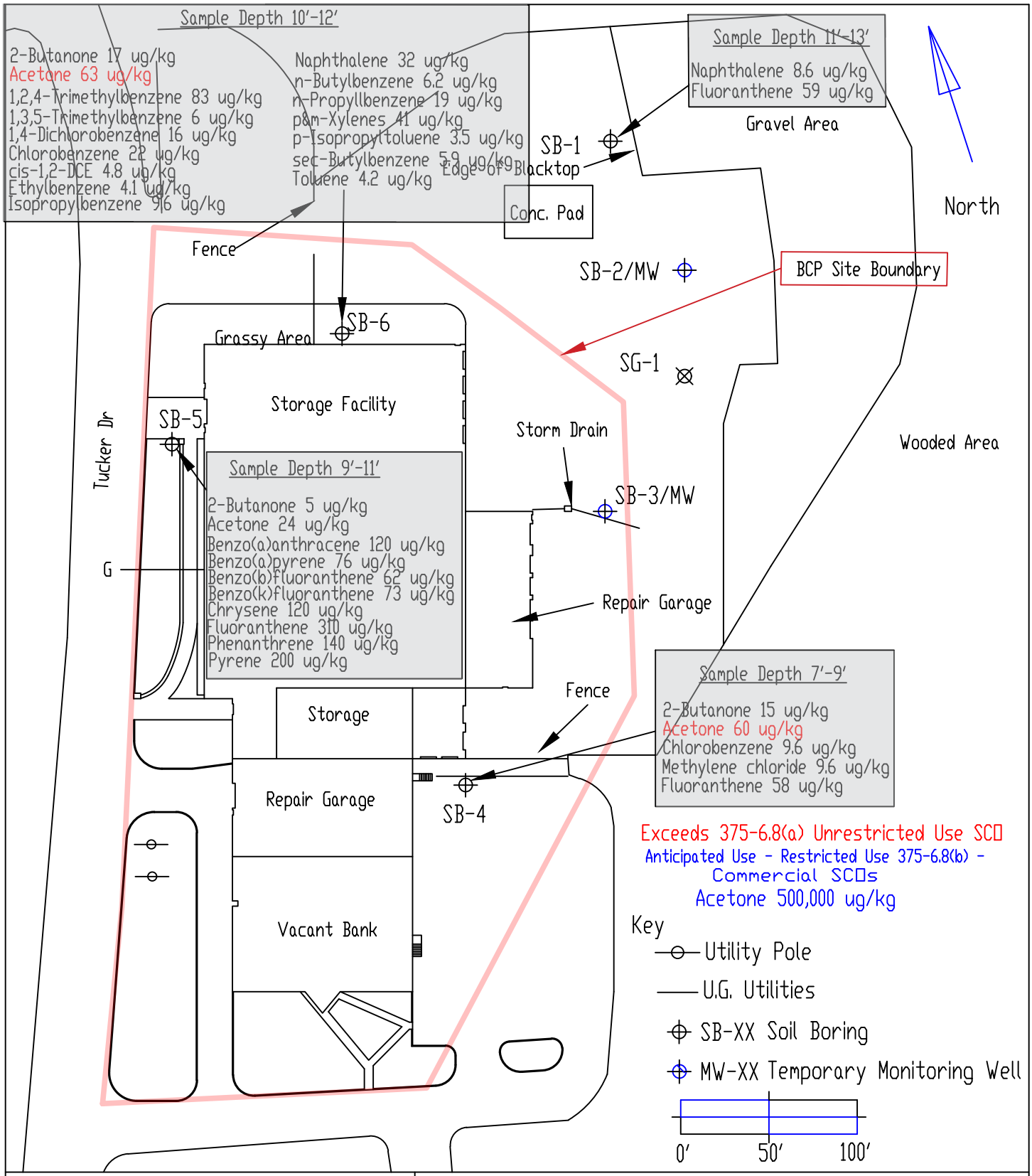
BCP Property Boundary

BCP Site No. : C314132

10-14 Tucker Drive
Poughkeepsie, Dutchess County, NY

Project Manager	Drafter	
DT	DB	

Figure 2A



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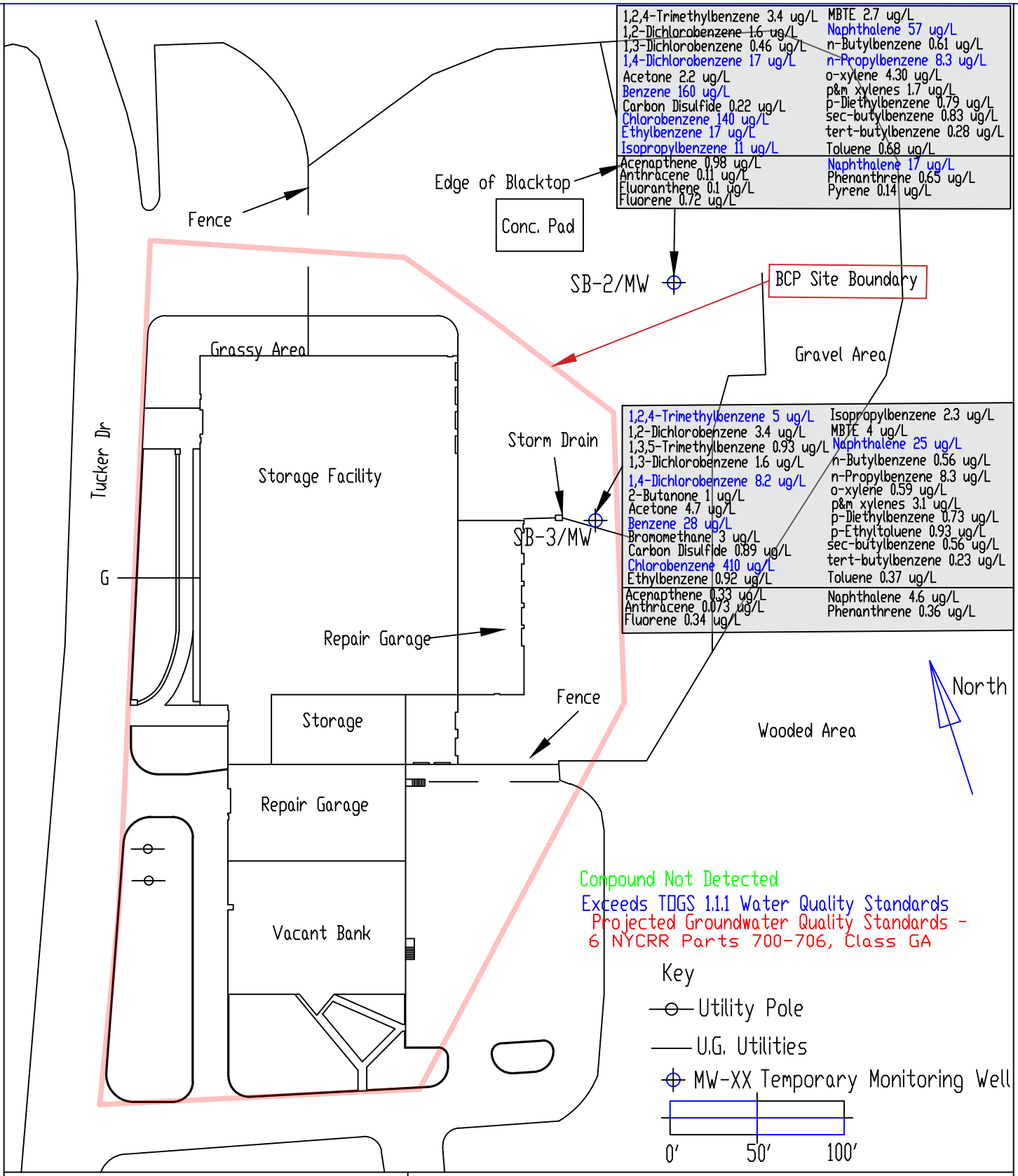
1291 Old Post Road
Ulster Park, New York 12487
(845) 658-3484

Client: Willow Brook Rentals, LLC

Location: 10-14 Tucker Drive, Poughkeepsie NY

Title: Soil Contaminant Concentration Map (01/2017)

Scale: Graphic	Drawn By: D.B.	Fig.# 3



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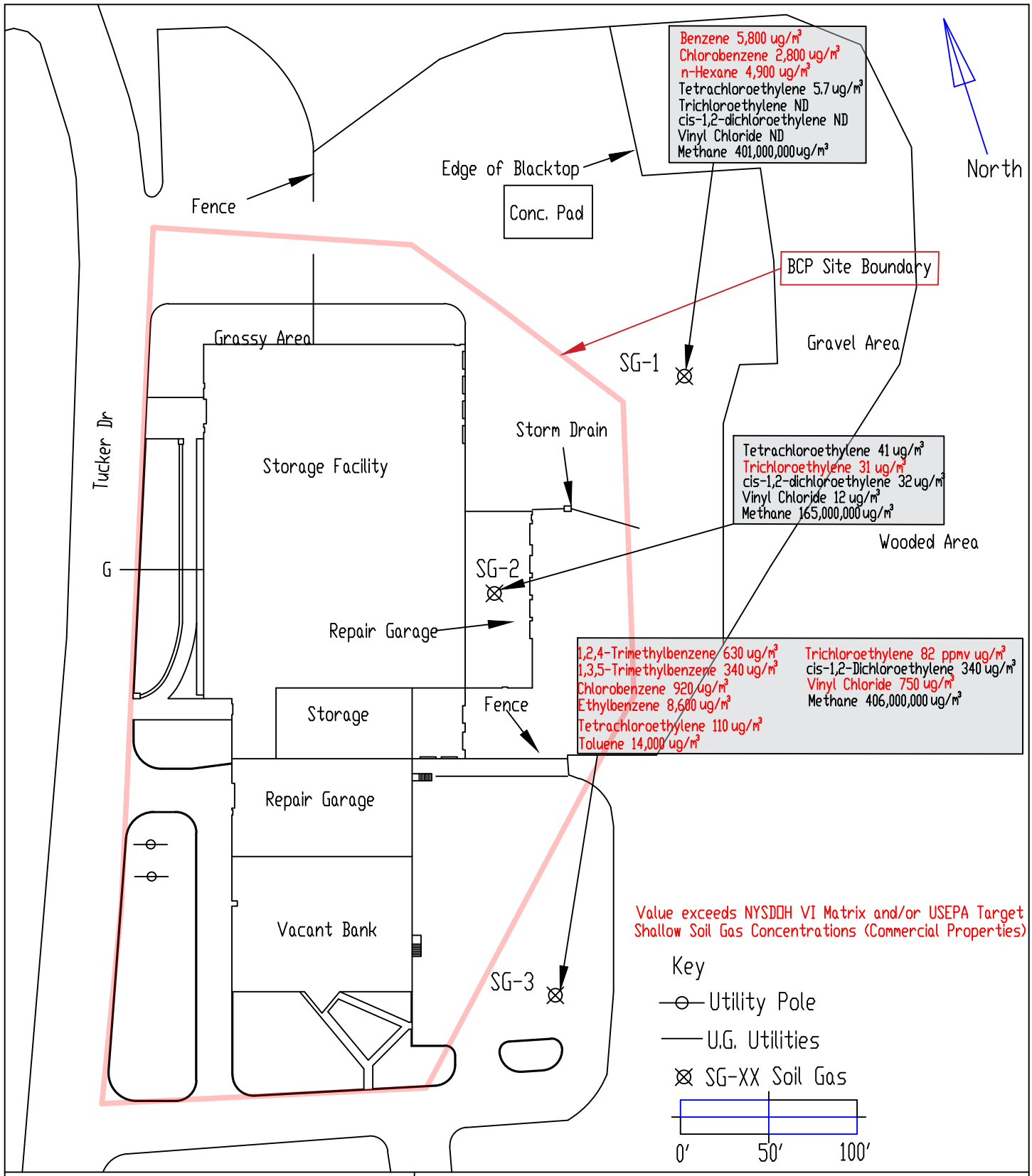
Ulster Park, New York 12487
(845) 658-3484

Client: Willow Brook Rentals, LLC:

Location: 10-14 Tucker Drive, Poughkeepsie NY

Title: Groundwater Contaminant Concentration Map (01/2017)

Scale: Graphic	Drawn By: D.B.	Fig.# 4



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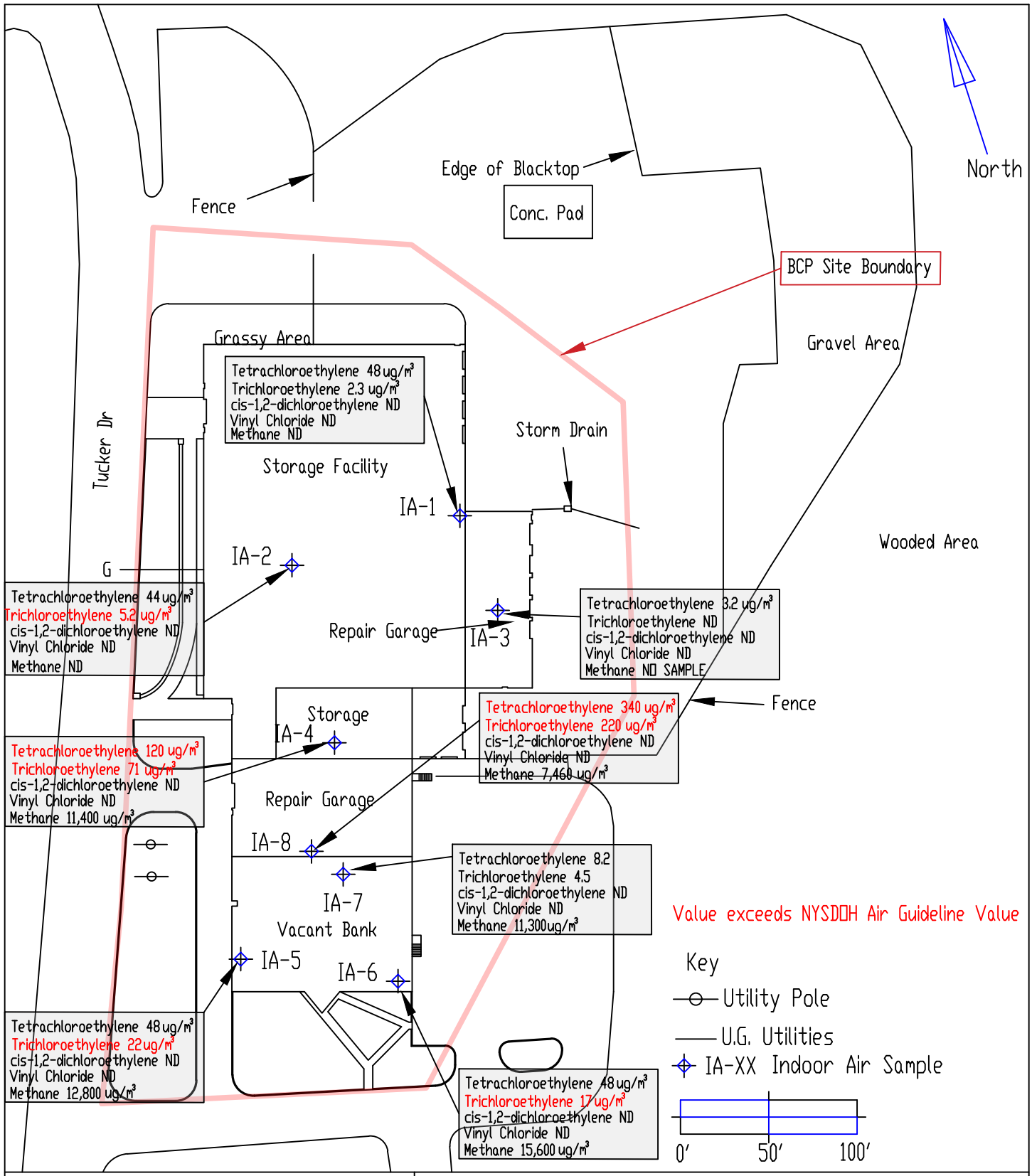
(845) 658-3484

Client: Willow Brook Rentals, LLC

Location 10-14 Tucker Drive, Poughkeepsie NY

Title: Soil Vapor Contaminant Concentration Map (01/2017)

Scale: Graphic	Drawn By: D.B.	Fig.# 5



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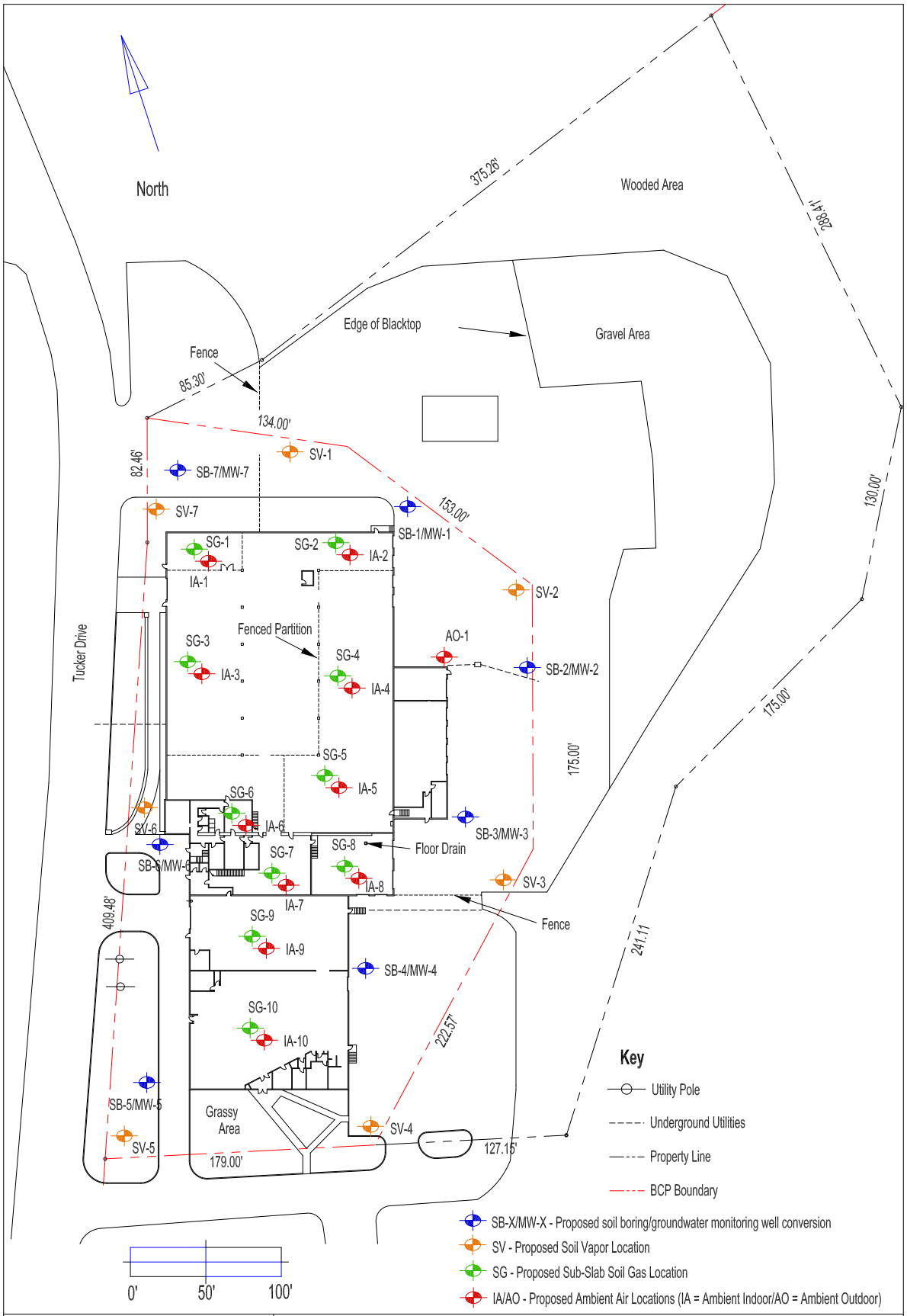
Client: Willow Brook Rentals, LLC

Location 10-14 Tucker Drive, Poughkeepsie NY

Title: Indoor Air Contaminant Concentration Map (03/2017)

Scale: Graphic	Drawn By: D.B.	Fig.# 6



DT Consulting Services, Inc.
1291 Old Post Road
Ulster Park, New York 12487
(845) 658-3484

Client:	Willow Brook Rentals LLC			
Location:	10-14 Tucker Drive, Poughkeepsie, Dutchess County, New York			
Title:	Site Map - Proposed RI Sampling Locations			
Scale: Graphic		Drawn By: O.T.	BCP Site No: C314132	Fig.#: 7

TABLES

Table 1:

Summary of Soil Laboratory Analysis Volatile Organic Compounds (VOCs)

Site: 10-14 Tucker Drive
Poughkeepsie, Dutchess County, New York

BCP NO. C314132

Sample Location		**SB-1**	**SB-2**	**SB-3**	**SB-4**	**SB-5**	**SB-6**
Sample Collection Depth (ft.)		**11 - 13-ft.**			**7 - 9-ft.**	**9 - 11-ft.**	**10 - 12-ft.**
Sample Number		**1**			**4**	**5**	**6**
Date Collected		1/26/2017			1/26/2017	1/26/2017	1/26/2017
Matrix		Soil			Soil	Soil	Soil
Analytical Method		8260			8260	8260	8260
	Soils						
Compound	**Guidance**	**Sample Con**	**Sample Con**	**Sample Con**	**Sample Con**	**Sample Con**	**Sample Con**
2-Butanone	NS				15	5J	17
Acetone	50				**60**	24	**63**
1,2,4-Trimethylbenzene	3,600	ND	*See Table 2		ND	ND	83
1,3,5-Trimethylbenzene	8,400	ND	SB-2/SB-3 Groundwater Sampling		ND	ND	6
1,4-Dichlorobenzene	1,800	ND			ND	ND	16
Benzene	60	ND			ND	ND	ND
Chlorobenzene	1,100	ND			9.6	ND	22
cis-1,2-Dichloroethylene	250	ND			ND	ND	4.8J
Ethylbenzene	1,000	ND			ND	ND	4.1J
Isopropylbenzene	2,300	ND			ND	ND	9.6
MTBE	930	ND			ND	ND	ND
Methylene chloride	50	ND			5.9J	ND	ND
Naphthalene	12,000	8.6J			ND	ND	32
n-Butylbenzene	12,000	ND			ND	ND	6.2
n-Propylbenzene	3,900	ND			ND	ND	19
o-Xylene	260	ND			ND	ND	ND
p-&m-Xylenes	260	ND			ND	ND	41
p-Isopropyltoluene	10,000	ND			ND	ND	3.5J
sec-Butylbenzene	11,000	ND			ND	ND	5.9
tert-Butylbenzene	5,900	ND			ND	ND	ND
Toluene	700	ND			ND	ND	4.2J

Notes:

1. Soil results are recorded in micrograms-per-kilogram (µg/Kg) or ppb.
2. ND = Undetected. J = Detected below reporting limit but greater than or equal to MDL; therefore, the result is an estimated concentration. NS = No standard.
3. The presented soil quality guidance values were adopted from the NYSDEC Part 375-6.8(a) Unrestricted Use SCOs, December 14, 2006.
4. Analytical measurements exceeding guidance values are in bold type and underlined as such **100**.

Table 1:

Summary of Soil/Groundwater Laboratory Analysis Semi-Volatile Organic Compounds (SVOCs)

Site: 10-14 Tucker Drive
Poughkeepsie, Dutchess County, New York

BCP NO. C314132

Sample Location		**SB-1**	**SB-2**	**SB-3**	**SB-4**	**SB-5**	**SB-6**
Sample Collection Depth (ft.)		**11 - 13-ft.**			**7 - 9-ft.**	**9 - 11-ft.**	**10 - 12-ft.**
Sample Number		**1**			**4**	**5**	**6**
Date Collected		1/26/2017			1/26/2017	1/26/2017	1/26/2017
Matrix		Soil			Soil	Soil	Soil
Analytical Method		8270 B/N			8270 B/N	8270 B/N	8270 B/N
	Soils						
Compound	**Guidance**	**Sample Con**	**Sample Con**	**Sample Con**	**Sample Con**	**Sample Con**	**Sample Con**
Acenaphthene	20,000	ND			ND	ND	ND
Acenaphthylene	100,000	ND			ND	ND	ND
Anthracene	100,000	ND	*See Table 2		ND	ND	ND
Benzo(a)anthracene	1,000	ND	SB-2/SB-3 Groundwater Sampling		ND	120	ND
Benzo(a)pyrene	1,000	ND			ND	76J	ND
Benzo(b)fluoranthene	1,000	ND			ND	62J	ND
Benzo(g,h,i)perylene	100,000	ND			ND	ND	ND
Benzo(k)fluoranthene	800	ND			ND	73J	ND
Chrysene	1,000	ND			ND	120	ND
Dibenz(a,h)anthracene	330	ND			ND	ND	ND
Fluoranthene	100,000	59J			58J	230	ND
Fluorene	30,000	ND			ND	ND	ND
Indeno(1,2,3-cd)pyrene	500	ND			ND	ND	ND
Naphthalene	12,000	ND			ND	ND	ND
Phenanthrene	100,000	ND			ND	140	ND
Pyrene	100,000	ND			65J	200	ND

Notes:

1. Soil results are recorded in micrograms-per-kilogram (µg/Kg) or ppb.
2. ND = Undetected. J = Detected below reporting limit but greater than or equal to MDL; therefore, the result is an estimated concentration. NS = No standard.
3. The presented soil quality guidance values were adopted from the NYSDEC Part 375-6.8(a) Unrestricted Use SCOs, December 14, 2006.
4. Analytical measurements exceeding guidance values are in bold type and underlined as such **100**.

TABLE 2

Groundwater Volatile Organic Compound Analysis vs. NYSDEC Guidance Values

Sampling Performed: January 26, 2017

Site:

10-14 Tucker Drive

Poughkeepsie, Dutchess County, New York

BCP Site No. C314132

Compound Units	Guidance Value ug/L		SB-2/GW ug/L	SB-3/GW ug/L		
1,1,1-Trichloroethane	5		ND	ND		
1,1,2,2-Tetrachloroethane	0.2		ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	5		ND	ND		
1,1,2-Trichloroethane	1		ND	ND		
1,1-Dichloroethane	5		ND	ND		
1,2,4-Trichlorobenzene	5		ND	ND		
1,2,4-Trimethylbenzene	5		3.4	5		
1,2-Dibromoethane	5		ND	ND		
1,2-Dichlorobenzene	5		1.6	3.4		
1,2-Dichloroethane	0.6		ND	ND		
1,2-Dichloropropane	5		ND	ND		
1,2-Dichlorotetrafluoroethane	NS		ND	ND		
1,3,5-Trimethylbenzene	5		ND	0.93		
1,3-Butadiene	NS		ND	ND		
1,3-Dichlorobenzene	5		0.46J	1.6		
1,4-Dichlorobenzene	5		17	8.2		
1,4-Dioxane	NS		ND	ND		
2-Butanone	NS		ND	1		
2-Hexanone	50		ND	ND		
4-Methyl-2-pentanone	NS		ND	ND		
Acetone	50		2.2	4.7		
Benzene	1		160	28		
Benzyl chloride	NS		ND	ND		
Bromodichloromethane	5		ND	ND		
Bromoform	50		ND	ND		
Bromomethane	5		ND	3		
Carbon Disulfide	NS		0.22J	0.89		
Carbon Tetrachloride	5		ND	ND		
Chlorobenzene	5		140	410		
Chloroethane	5		ND	ND		
Chloroform	7		ND	ND		
Chloromethane	NS		ND	ND		
cis-1,2-Dichloroethene	5		ND	ND		
cis-1,3-Dichloropropylene	5		ND	ND		
Cyclohexane	NS		ND	ND		
Dibromochloromethane	5		ND	ND		
Dichlorodifluoromethane	5		ND	ND		
Ethyl acetate	NS		ND	ND		
Ethyl Benzene	5		17	0.92		
Hexachlorobutadiene	0.5		ND	ND		
Isopropylbenzene	5		11	2.3		
MTBE	10		2.7	4		
Methylene chloride	5		ND	ND		
Naphthalene	10		57	25		
n-Butylbenzene	5		0.61	0.56		
n-Propylbenzene	5		8.3	2.1		
o-Xylene	5		4.3	0.59		
p-&m- Xylenes	5		1.7	3.1		
p-Diethylbenzene	NS		0.79	0.73		
p-Ethyltoluene	NS		ND	0.93		
sec-Butylbenzene	5		0.83	0.56		
Styrene	5		ND	ND		
tert-Butylbenzene	5		0.28J	0.23J		
Tetrachloroethene	5		ND	ND		
Toluene	5		0.68J	0.37J		
trans-1,2-Dichloroethene	5		ND	ND		
trans-1,3-Dichloropropylene	5		ND	ND		
Trichloroethene	5		ND	ND		
Trichlorofluoromethane	5		ND	ND		
Vinyl Chloride	2		ND	ND		

Notes:

1. All measurements recorded in parts per billion or ppb.
2. Samples analyzed in accordance with EPA Test Method 8260.
3. ND = Undetected (Detection limits may vary). NS = Not specified.
4. J = Detected below reporting limit but greater than or equal to MDL; therefore, the result is an estimated concentration.
5. The presented guidance values were adopted from NYSDEC Division of Water TOGS 1.1.1, June 1998.

TABLE 2

Groundwater Semi-Volatile Organic Compound Analysis vs. NYSDEC Guidance Values

Sampling Performed: January 26, 2017

Site:

10-14 Tucker Drive

Poughkeepsie, Dutchess County, New York

BCP No. C314132

Compound Units	**Guidance Value** (ug/L)			**SB-2/GW** (ug/L)	**SB-3/GW** (ug/L)		
Acenaphthlene	20			0.98	0.33		
Acenaphthylene	NS			ND	ND		
Anthracene	50			0.11	0.073		
Benzo(a)anthracene	0.002			ND	ND		
Benzo(a)pyrene	0.002			ND	ND		
Benzo(b)fluoranthene	0.002			ND	ND		
Benzo (g,h,i)perylene	NS			ND	ND		
Benzo(k)fluoranthene	0.002			ND	ND		
Chrysene	0.002			ND	ND		
Dibenzo(a,h)anthracene	NS			ND	ND		
Fluoranthene	50			0.1	ND		
Fluorene	50			0.72	0.34		
Indeno(1,2,3-cd)pyrene	0.002			ND	ND		
Naphthalene	10			**17**	4.6		
Phenanthrene	50			0.65	0.36		
Pyrene	50			0.14	ND		

Notes:

1. All measurements recorded in parts per billion or ppb.
2. Samples analyzed in accordance with EPA Test Method 8270 B/N; NYSDEC CP-51 compound list.
3. ND = Undetected (Detection limits may vary). NS = Not specified.
4. J = Detected below reporting limit but greater than or equal to MDL; therefore, the result is an estimated concentration.
5. The presented guidance values were adopted from NYSDEC Division of Water TOGS 1.1.1, June 1998.

TABLE 3:

SUMMARY OF TO-15 VOLATILES IN SOIL GAS SAMPLES

Address: 10-14 Tucker Drive, Poughkeepsie, Dutchess County, New York

BCP Site No. C314132

Sample ID: **Location:** **Depth (ft.):** **Date:** **Lab Sample ID:** **Units:**	**NYSDOH** **Air Guideline Values** µg/m³	**USEPA TARGET SHALLOW GAS CONCENTRATIONS(1)**	**Soil Gas SG-1** Soil Gas 10' bgs 1/26/2017 17A0930-01 µg/m³	**Soil Gas SG-2** Subslab 8" bgs 1/26/2017 17A0930-02 µg/m³	**Soil Gas SG-3** Soil Gas 7' bgs 1/26/2017 17A0930-03 µg/m³
Analysis: EPA Method TO-15 Volatiles in Air					
1,1,1-Trichloroethane	NS	22000	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	42	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	ND	ND	ND
1,1,2-Trichloroethane	NS	150	ND	ND	ND
1,1-Dichloroethane	NS	5000	ND	ND	ND
1,1-Dichloroethylene	NS	NS	ND	ND	ND
1,2,4-Trichlorobenzene	NS	2000	ND	ND	ND
1,2,4-Trimethylbenzene	NS	60	56	12	**630**
1,2-Dibromoethane	NS	2	ND	ND	ND
1,2-Dichlorobenzene	NS	2000	ND	ND	ND
1,2-Dichloroethane	NS	94	ND	ND	ND
1,2-Dichloropropane	NS	40	ND	ND	ND
1,2-Dichlorotetrafluoroethane	NS	NS	1200	910	5800
1,3,5-Trimethylbenzene	NS	60	44	ND	**340**
1,3-Butadiene	NS	8.7	ND	ND	ND
1,3-Dichlorobenzene	NS	1100	ND	ND	ND
1,4-Dichlorobenzene	NS	8000	ND	ND	110
1,4-Dioxane	NS	NS	ND	ND	ND
2-Butanone	NS	10000	42	6.9	110
2-Hexanone	NS	NS	ND	ND	ND
4-Methyl-2-pentanone	NS	800	ND	ND	ND
Acetone	NS	3500	110	73	80
Benzene	NS	310	**5800**	14	290
Benzyl chloride	NS	50	ND	ND	ND
Bromodichloromethane	NS	140	ND	ND	ND
Bromoform	NS	2200	ND	ND	ND
Bromomethane	NS	NS	ND	ND	ND
Carbon Disulfide	NS	7000	1300	5.2	190
Carbon Tetrachloride	NS	160	ND	ND	ND
Chlorobenzene	NS	600	**2800**	18	**920**
Chloroethane	NS	10000	ND	ND	ND
Chloroform	NS	110	ND	ND	ND
Chloromethane	NS	NS	ND	ND	ND
cis-1,2-Dichloroethylene	NS	350	ND	32	340
cis-1,3-Dichloropropylene	NS	200	ND	ND	ND
Cyclohexane	NS	NS	8100	150	95
Dibromochloromethane	NS	100	ND	ND	ND
Dichlorodifluoromethane	NS	2000	510	110	1900
Ethyl acetate	NS	32000	ND	ND	ND
Ethyl Benzene	NS	2200	260	ND	**8600**
Hexachlorobutadiene	NS	110	ND	ND	ND
Isopropanol	NS	NS	ND	ND	ND
MTBE	NS	30000	ND	21	ND
Methylene chloride	60	5200	ND	ND	ND
n-Heptane	NS	NS	6600	11	510
n-Hexane	NS	2000	**4900**	16	56
o-Xylene	NS	70000	38	8	4300
p-&m- Xylenes	NS	70000	230	15	22,000
p-Ethyltoluene	NS	NS	35	9.9	800
Propylene	NS	NS	ND	ND	4300
Styrene	NS	NS	ND	ND	ND
Tetrachloroethylene	100	810	5.7	41	**110**
Tetrahydrofuran	NS	NS	ND	ND	ND
Toluene	NS	4000	110	12	**14000**
trans-1,2-Dichloroethylene	NS	700	ND	ND	25
trans-1,3-Dichloropropylene	NS	200	ND	ND	ND
Trichloroethylene	5	220	ND	**31**	**82**
Trichlorofluoromethane	NS	7000	ND	ND	ND
Vinyl acetate	NS	200	ND	ND	ND
Vinyl Chloride	NS	280	ND	12	**750**
Methane	NS		401000000 ug/m³	165000000 ug/m³	406000000 ug/m³

Notes:

1. Those analytes which exeeded NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 are presented in bold type as such: **100**.
2. USEPA OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance) November 2002: Table 2A Target Shallow Soil Gas Concentration - Corresponding to Target Indoor Air Concentration Where the Soil Gas to Indoor Air Attenuation Factor = 0.1.
3. ND = Non-detect.
4. NS = No Standard.

TABLE 4:

SUMMARY OF TO-15 VOLATILES IN AIR SAMPLES

Address: 10-14 Tucker Drive, Poughkeepsie, Dutchess County, New York
NYSDEC Spill Number: 16-10111

BCP Site No. C314132

Sample ID:	**NYSDOH**	**Indoor Air - IA-1**	**Indoor Air - IA-2**	**Indoor Air - IA-3**	**Indoor Air - IA-4**	**Indoor Air - IA-5**	**Indoor Air - IA-6**	**Indoor Air - IA-7**	**Indoor Air - IA-8**
Location:	**Air Guideline**								
Depth (ft.):	**Values**	Ambient Air	Ambient Air	Ambient Air	Ambient Air	Ambient Air	Ambient Air	Ambient Air	Ambient Air
Date:		3/2 & 17/2017	3/2 & 17/2017	3/2/2017	3/2 & 17/2017	3/2 & 17/2017	3/2 & 17/2017	3/2 & 17/2017	3/2 & 17/2017
Lab Sample ID:		17C0468-01	17C0468-02	17C0468-03	17C0468-04	17C0468-05	17C0468-06	17C0468-07	17C0468-08
Units:	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
Analysis: EPA Method TO-15 Volatiles in Air									
1,1,1-Trichloroethane	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	ND	ND	ND	ND	ND	ND	1.1	ND
1,1,2-Trichloroethane	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	ND	ND	ND	ND	ND	ND	ND	26
1,2,4-Trimethylbenzene	NS	7	5.4	ND	17	3.8	6.5	5	ND
1,2-Dibromoethane	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorotetrafluoroethane	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	NS	3	1.9	ND	6.2	1.6	2.4	1.6	9.6
1,3-Butadiene	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	NS	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	NS	5.1	4.8	0.76	3.8	1.9	1.7	7.1	5.2
2-Hexanone	NS	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NS	ND	1.2	ND	2.7	0.63	ND	ND	3.2
Acetone	NS	37	30	6.7	40	14	12	42	46
Benzene	NS	3.3	2	0.34	3.2	1	0.87	2.2	4.6
Benzyl chloride	NS	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	NS	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	NS	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	NS	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NS	2	ND	ND	ND	ND	ND	ND	0.87
Carbon Tetrachloride	NS	1.7	0.38	0.41	0.44	0.39	0.41	0.87	0.38
Chlorobenzene	NS	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	NS	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	NS	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NS	1.7	ND	1.1	1.3	1.2	1.2	2.5	1.2
cis-1,2-Dichloroethylene	NS	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	NS	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NS	2.3	1.1	ND	2.5	0.53	0.41	1.2	3.4
Dibromochloromethane	NS	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	NS	3.3	2.5	2.4	2.4	2.4	2.3	4.4	2
Ethyl acetate	NS	ND	ND	ND	ND	ND	ND	18	ND
Ethyl Benzene	NS	4.3	4.7	0.52	4.2	1.5	1.1	3	7.6
Hexachlorobutadiene	NS	ND	ND	ND	ND	ND	ND	ND	ND
Isopropanol	NS	4.7	4.5	ND	1.9	ND	ND	2.4	2.4
MTBE	NS	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	60	4.7	6	0.86	2.1	2.6	1.1	ND	2.3
n-Heptane	NS	4.2	2.3	ND	6.2	1.8	1.4	2.1	13
n-Hexane	NS	6.7	4.5	ND	8.4	1.6	1.2	6.7	11
o-Xylene	NS	4	3.9	ND	6.2	2.1	1.8	3.8	12
p-&m- Xylenes	NS	12	12	1.5	17	6.5	5.8	12	35
p-Ethyltoluene	NS	6.9	6	ND	20	5.5	7.5	4.8	30
Propylene	NS	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	NS	1.8	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	100	48	44	3.2	**120**	48	48	8.2	**340**
Tetrahydrofuran	NS	2.9	ND	ND	ND	ND	ND	3.1	ND
Toluene	NS	43	39	1.5	57	22	20	25	140
trans-1,2-Dichloroethylene	NS	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	NS	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	5	2.3	**5.2**	ND	**71**	**22**	**17**	4.5	**220**
Trichlorofluoromethane	NS	3	1.3	1.3	1.3	1.3	1.3	3	1.1
Vinyl acetate	NS	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	NS	ND	ND	ND	ND	ND	ND	ND	ND
Methane	NS	ND	ND	MOS	11400	12800	15600	11300	7460

Notes:
1. Those analytes which exeeded NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 are presented in bold type as such: **100**.
2. USEPA OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance)
3. ND = Non-detect.
4. NS = No Standard.
5. MOS = Malfunction of Summa Canister. Sampling IA-3 could not be conducted for methane.

ATTACHMENTS

DT CONSULTING SERVICES, INC.

ATTACHMENT A

Environmental Services Health & Safety Plan Revised

Job Name: Willow Brook Rentals, LLC

1.0 INTRODUCTION

DT Consulting Services, Inc. (DTCS) has designed a safety and health program to provide its employees and subcontractors with the guidelines necessary to ensure their own safety and health as well as that of the surrounding community. The goal of this plan is to minimize the risk of injury during remedial investigation procedures including the advancement and sampling of soil cores, coring for soil gas sampling, along with the monitoring of groundwater wells.

2.0 ORGANIZATIONAL STRUCTURE

2.1 SAFETY AND HEALTH MANAGER

It is the responsibility of the safety and health manager to develop the comprehensive safety and health plan. The safety and health manager will be appraised of any changes in the comprehensive safety and health plan as well as all Site-specific procedural determinations. The safety and health manager for this project will be Ms. Deborah Thompson.

2.1.1 RESPONSIBILITIES

a) Initial Site evaluation
b) Hazard identification
c) Determination of appropriate protection levels
d) Conduct daily safety and health meetings
e) Supervision of Site sampling and monitoring
f) Supervision of decontamination procedures
g) Designate work zones to maintain Site integrity

3.0 PERSONAL PROTECTIVE EQUIPMENT

The proper personal protective equipment is chosen by the Site safety and health officer in consultation with the safety and health manager. The level of protection is dependent on the hazards that are likely to be encountered on-Site.

3.1 PROTECTION LEVELS

DTCS utilizes four levels of protection as set forth in the OSHA guidelines,

Appendix B of 1910.120.

3.1.1 Level A

Level A provides the greatest level of skin, respiratory, and eye protection with the following minimum equipment:

- Full face, self-contained breathing apparatus (SCBA) or supplied air with escape SCBA
- Fully encapsulated chemical resistant suit
- Chemical resistant boots
- Chemical resistant inner and outer gloves

3.1.2 Level B

Level B provides the greatest level of respiratory protection, but a lower level of skin protection than Level A with the following minimum equipment:

- Full face SCBA or supplied air with escape SCBA
- Chemical resistant clothing
- Chemical resistant inner and out gloves
- Chemical resistant boots

3.1.3 Level C

Level C provides the same level of skin protection as Level B, but a lower level of respiratory protection with the following minimum equipment:

- Full face piece air purifying respirator with appropriate cartridge. Cartridges are chosen based on knowledge of hazardous material
- Chemical resistant clothing
- Chemical resistant inner and outer gloves
- Chemical resistant boots

3.1.4 Level D

Level D provides the lowest level of skin protection and no respiratory protection with the following minimum equipment:

- Coveralls
- Safety boots
- Gloves
- Safety glasses or splash goggles

4.0 WORK ZONES

DTCS utilizes the standard three-zone approach to Site control. These zones are the exclusion zone, the contamination reduction zone and the support zone. Movement of personnel and equipment through these zones shall be strictly regulated in order to prevent contamination of clean environments and to protect workers in the support zone from possible exposure.

4.1 EXCLUSION ZONE

The exclusion zone is the area of highest contamination. All personnel entering this zone must wear the appropriate level of protection as prescribed in the Site specific safety plan. The outer boundary of the exclusion zone, referred to as the Hotline, shall be determined based upon such considerations as; extent of surface contamination, safe distance in the case of fire or explosion, physical area necessary for workers to conduct operations in a safe manner and safe distance in the event of vapor or gas emissions. Upon determination, the Hotline shall be visibly marked and secured to prevent accidental entry by unauthorized personnel.

4.2 CONTAMINATION REDUCTION ZONE

The Contamination Reduction Zone is the area between the exclusion zone and the support zone. Its purpose it to protect the clean environment from contamination as workers enter and exit the exclusion zone. The outer boundary of this zone is referred to as the Coldline and shall be clearly marked. Decontamination stations shall be set up in this zone in a line known as the contamination reduction corridor. All personnel exiting the exclusion zone must follow the steps as prescribed in the decontamination procedures prior to re-entering the support zone.

4.3 SUPPORT ZONE

The support zone is the area furthest away from the exclusion zone. It is considered a clean, non-contaminated area where workers need not wear any protective equipment. The command post, equipment trailer, first aid station and lavatory facilities are all located in this area. This area is not, however, open to traffic. Only authorized personnel may enter.

5.0 AIR MONITORING

As the Remedial Investigation Work Plan (RIWP) entails Site intrusive activities, a Site specific Community Air Monitoring Plan (CAMP) has been generated for the Subject Property and is included as an attachment to the RIWP. The overall objective of the CAMP is to establish requirements for protection measures for downwind receptors from potential airborne releases of constituents of concern during intrusive and/or potential dust generating Site activities. As laboratory analysis performed during a 2017 Phase II Environmental Site Assessment (ESA) has indicated that methane is also a constituent of concern, air monitoring for methane gas will also be conducted during RI field activities. Specifically, the following methane concentrations were reported in ambient indoor air while conducting the 2017 ESA:

Sample Location	**Methane Concentration** ($\mu g/m^3$)
Indoor Air - IA-4	17
Indoor Air - IA-5	20
Indoor Air - IA-6	24
Indoor Air - IA-7	17
Indoor Air - IA-8	11

As found during historical Site characterization efforts, explosive gas, including methane may be present in the subsurface pore spaces and therefore any ground intrusive activity will be monitored with a gas unit that measure the Lower Explosive Limit (LEL) in percent. While conducting the RI, methane levels will be monitoring continuously within the breathing space and above the monitoring location upon each extraction of sampling tooling. Procedures for monitoring for methane gas are proposed as follows:

AIR MONITORING METHODS, ACTION LEVELS, AND PROTECTIVE LEVELS FOR PERSONNEL

Hazard	Monitoring Unit	Action Level	Protective Levels/Action	Monitoring Schedule
Explosive Gas	Q-Rae 4-Gas Meter or Equivalent	<10% LEL	Level D – Continue Work	Continuous for ground intrusive activities.
		10 – 20% LEL	If building is occupied, stop work. If building is unoccupied, issue warning.	
		>20% LEL	Evacuate Area	

To mitigate the risk of producing an explosive environment all contractors will be required to store diesel fuel and gasoline in cans with self-closing lids and flash arrestors as the use of gasoline or diesel powered equipment increases the risk of fire and explosion hazards.

6.0 SITE COMMUNICATIONS

Various methods of communication will be employed based upon Site conditions and work zones. Regardless of method of communication, personnel working in the exclusion zone will remain within constant view of support crews.

DTCS has a network of devices to aid in communications. All or some of the following devices may be used depending upon job Site requirements; hand held radios, headset transistor walkie-talkies and cellular telephones.

The following hand signals shall be standardized for use in emergencies and in event of radio communication breakdown.

Hand gripping throat - out of air, can't breathe
Grip partner's wrist - leave area immediately
Hands on top of head - need assistance
Thumbs up - I am all right, okay
Thumbs down - no, negative

Horn blasts may be used to gain the immediate attention of crews to indicate that dangerous conditions exist.

7.0 EMERGENCY PROCEDURES

The following procedures shall be followed by all Site personnel in the event of an emergency. Any changes to this procedure shall be noted in the Site-specific plan. In all situations where there has been an evacuation of exclusion zone, reentry shall not be permitted until the following conditions have been met; the cause of the emergency has been determined and corrected, the Site hazards have been reassessed, the safety plan has been reviewed and all personnel have been apprised of any changes.

7.1 INJURY IN THE EXCLUSION ZONE

In the event of an injury in the exclusion zone, the emergency signal shall be sounded. All personnel in the exclusion zone will assemble at the contamination reduction corridor. First aid procedures will begin on-Site and if necessary, an ambulance will be called. No personnel will be allowed to re-enter the exclusion zone until the exact nature and cause of the injury has been determined.

7.2 INJURY IN THE SUPPORT ZONE

In the event of an injury in the support zone, on-Site first aid procedures will begin immediately and an ambulance called if necessary. The Site safety and health officer shall determine if the nature and cause of the injury or loss of the injured person will jeopardize the smooth running of the operations. If so, the emergency signal will be sounded and all personnel will follow the same procedure as outline above.

7.3 FIRE OR EXPLOSION

In the event of fire or explosion, the emergency signal shall be sounded and all personnel will assemble at the contamination reduction corridor. The fire department will be called and all personnel will be evacuated to a safe distance.

7.4 PROTECTIVE EQUIPMENT FAILURE

In the vent of protective equipment failure, the affected worker and his/her buddy will leave the exclusion zone immediately. In the event of any other equipment failure, the Site safety and health officer will determine if

this failure affects the operation. If so, the emergency signal will be sounded and all personnel will leave the exclusion zone until such time as it is deemed safe.

8.0 STANDARD SAFETY PRACTICES

The following guidelines will be followed by all personnel at all times; any changes must be approved by the safety and health manager.

- All employees will attend the daily safety meetings prior to Site entry.

- The buddy system will be utilized at all times.

- There will be no eating, drinking, smoking, or use of smoking material (i.e. matches) within the work area(s).

- Only authorized personnel will be allowed in designated work zones and will wear the proper personal protective clothing and equipment as prescribed in the Site safety plan.

- The Site safety and health officer will be appraised of any unusual circumstances immediately.

Such circumstances include but are not limited to the following; unusual odors, emissions, signs of chemical reaction, and discovery of conditions or substances not mentioned in the Site safety plan. The Site safety officer will then determine if these conditions warrant a shut down of operations.

9.0 DAILY SAFETY MEETINGS

Daily safety meetings will be conducted by the Site safety and health officer prior to commencement of work. All personnel, regardless of job classification are required to attend.

9.1 DISCUSSIONS

1. Overview of safety and health plan.

2. Detailed discussion of substances of concern with emphasis on exposure limits, exposure symptoms and exposure hazards.

3. Review of standard safety precautions and work practices.

4. Review of work plan.

5. Review of hand signals and emergency signals.

Personnel will sign a daily attendance sheet, which shall include an overview of the topics discussed.

10.0 SITE SPECIFIC PLAN

10.1 DETAILED SITE INFORMATION

- **Plan Date** TBA

- **Job Name** Willow Brook Rentals, LLC

- **Client** Willow Brook Rentals, LLC

- **Client Contact/Phone No.** Ted Finkelstein – (914) 980-6096

- **Site Address** Willow Brook Rentals, LLC
  10-12 Tucker Drive
  Poughkeepsie, New York 12603

- **Cross Street** Friendly Lane

- **Site Access** Direct

10.2 CONTAMINANTS ON SITE/ACTION LEVELS

The following substances are known or suspected to be on Site, primarily in Site wastes. The primary hazards of each are identified, associated primarily with direct skin contact and inhalation. These are as follows:

SUBSTANCE	PRIMARY HAZARDS
Volatile Organics	
Benzene Chlorobenzene Ethylbenzene Methane Toluene Trichloroethene (TCE) Trimethylbenzene Tetrachloroethene (PCE) Vinyl Chloride	Eye, skin and respiratory irritation. Nausea, vomiting, headache Asphyxia
Cis-1,2-Dichloroethylene	Skin irritation, gastrointestinal or respiratory tract irritation.

Action Levels – VOCs and Methane

Action levels shall be determined by continuous monitoring of work zone breathing space and above the sampling point during tooling extraction with a portable PID and LEL for VOCs and methane. Measurement of a sustained concentration above ambient (background) conditions shall initiate action. The following criteria shall be used to determine appropriate action:

VOCs

VOCs in Breathing Zone (sustained and above background)	Level of Respiratory Protection
0 – 5 ppm	Level D
5 – 200 ppm	Level C
200 – 1000 ppm	Level B - air line
1000+ ppm	Level B - SCBA

If the above criteria indicate the need to increase from Level D to a higher level of personal protection, all work in that particular Site area will be immediately suspended until the required protective equipment is make available, or until Level D conditions return.

Methane

Action Level	Protective Levels/Action	Monitoring Schedule
<10% LEL	Level D – Continue Work	Continuous for ground intrusive activities.
10 – 20% LEL	If building is occupied, stop work. If building is unoccupied, issue warning.	
>20% LEL	Evacuate Area	

10.3 EMERGENCY INFORMATION

10.3.1 EMERGENCY RESPONDERS

10.3.1.1 HOSPITAL

Name: Vassar Brothers Medical Center

Address & Telephone Number:
45 Reade Place, Poughkeepsie, NY 12601
(845) 454-8500

Distance from Site: 3.80 Miles

10.3.1.2 EMERGENCY TELEPHONE NUMBERS

Police	911 on Cellular Phone
Fire	911 on Cellular Phone
Ambulance	911 on Cellular Phone

10.3.1.3 REGULATORY AGENCIES

EPA Telephone Number 1-800-424-8802

NYSDEC Spills Hotline 1-800-457-7362

10.4 FIRST AID

First Aid available at the following stations:

First Aid Kit TRUCK
Emergency Eye Wash TRUCK & ON SITE

10.5 WORK ZONES

10.5.1 COMMAND POST

Command post will be mobile.

10.6 SITE COMMUNICATIONS

10.6.1 TELEPHONE

Command Post Telephone - Cellular Phone
Number (845)943-0159

10.6.2 HAND SIGNALS

See Section 6.0

10.7 ENVIRONMENTAL MONITORING

10.7.1 MONITORING EQUIPMENT

Field calibrated PID and LEL

10.8 PERSONAL PROTECTIVE EQUIPMENT

10.8.1 EXCLUSION ZONE, PROTECTION LEVEL

PROTECTIVE EQUIPMENT:	Level D
RESPIRATORY	None
HANDS	Nitrile or Leather
FEET	Steel Toed Boots
SUIT	None

10.8.2 CONTAMINATION REDUCTION CORRIDOR (DECON LINE)

PROTECTIVE EQUIPMENT:	Level D
RESPIRATORY	None
HANDS	Nitrile or Leather
FEET	Steel Toed
SUIT	None

10.9 DECONTAMINATION

10.9.1 DECONTAMINATION PROCEDURE

STATION 1 SOAPY WATER

STATION 2 WATER

11.0 KEY PERSONNEL

SAFETY AND HEALTH MANAGER / ON-SITE SUPERVISOR
Deborah J. Thompson

FOREMEN
TBA

FIELD PERSONNEL
Will Vary

12.0 WORK PLAN

12.1 JOB OBJECTIVE

The objective is to execute a Remedial Investigation Work Plan (RIWP) which includes soil, soil gas, ambient air and groundwater sampling to further characterize the extent of historical contamination identified on-Site under the BCP. Upon completion of field work, a Remedial Action Plan or RAP will be generated to address documented contamination.

ATTACHMENTS

DT CONSULTING SERVICES, INC.

ATTACHMENT A

Summary of Sector Specific Workplace Safety Standards to Address COVID-19

Standards that Apply to All Workers while performing Fieldwork or Remediation Activities

1. There will be zero tolerance for sick workers reporting to work. If you are sick, stay home! If you feel sick, go home! If you see someone sick, send them home!

2. Staff must self-screen for COVID symptoms prior to reporting to a construction/remediation site.
    a. Symptoms (per CDC on June 3, 2020) include:
        i. Fever or chills
        ii. Cough
        iii. Shortness of breath or difficulty breathing
        iv. Fatigue
        v. Muscle or body aches
        vi. Headache
        vii. New loss of taste or smell
        viii. Sore throat
        ix. Congestion or runny nose
        x. Nausea or vomiting
        xi. Diarrhea

3. Prior to starting a shift/arriving at the site, each employee will self-screen to ensure that they:

    a. Have no signs of a fever or a measured temperature above 100.3 degrees or greater, a cough or trouble breathing within the past 24 hours

    b. Have not had "close contact" with an individual diagnosed with COVID-19. “Close contact” means living in the same household as a person who has tested positive for COVID-19, caring for a person who has tested positive for COVID-19, being within 6 feet of a person who has tested positive for COVID-19 for about 15 minutes, or coming in direct contact with secretions (e.g., sharing utensils, being coughed on) from a person who has tested positive for COVID-19, while that person was symptomatic.

    c. Have not been asked to self-isolate or quarantine by their doctor or a local public health official.

    d. Employees exhibiting symptoms or unable to self-certify should leave the work site and seek medical attention and applicable testing by their health

care provider. They are not to return to the work site until cleared by a medical professional.

4. Document self-screening of DTCS staff in the daily field notes a brief documentation of COVID screening.

    a. For example: "*Employee Name* performed COVID self-screening in compliance with DTCS current employee guidance before arriving at the site.

5. Sub-contractors working directly with DTCS must provide their own COVID screening protocols ahead of arriving onsite or if screening protocols are not in place, any sub-contractors must self-screen and inform DTCS management of that screening prior to arriving on site.

    a. Document self-screening of sub-contractor in the daily field notes a brief documentation of COVID screening.
        i. For example: "*Sub-contractor Name* performed COVID self-screening before arriving at the site.

6. General Onsite Protocols:

    a. No handshaking

    b. It is recommended to wear a facemask when representing the company at all times on a "site". It is required to wear a facemask when:
        i. social distancing (6 feet) can-not be maintained
        ii. indoors
        iii. in a "public space"
        iv. working or interacting with the "public"
        v. indicated it is required by the client or a contractor

    c. Must implement social distancing by maintaining a minimum distance of 6-feet from other individuals

    d. Avoid face to face meetings – critical situations requiring in-person discussion must follow social distancing

    e. Conduct all meetings via conference calls, if possible. Do not convene meetings of more than 10 people. Recommend use of cell phones, texting, web meeting sites and conference calls for project discussion

    f. Cover coughing or sneezing with a tissue, then throw the tissue in the trash and wash hands, if no tissue is available then cough into your elbow

g. Avoid touching eyes, nose, and mouth with your hands

h. If you or a family member is feeli5ng ill, stay home!

DTCS Led Investigative/Remedial Activities

1. Assign a site-specific COVID-19 Officer (this person may also be the Health and Safety Officer)

2. PPE
    a. Hand sanitizer will be available onsite if soap/water/paper towels are not available.
        i. Frequent use of handwashing or alcohol-based hand sanitizers should be encouraged
    b. Gloves should be available and used at all times.
    c. Eye protection is recommended as applicable
    d. Facemasks
        i. Facemasks must be worn at all times during indoor activities by DTCS staff and subcontractors
        ii. Facemasks must be worn at all times by DTCS staff and subcontractors when social distancing cannot be ensured (less than 6' of distance)
        iii. Facemasks must be worn in "public places" per guidance from the New York State Department of Health; the project manager will determine ahead of time if a site is considered a "public place".
        iv. Facemasks must be available on the employee or subcontractor's person during all other site related activities but are not required to be worn if social distancing (6') is maintained, activities are outdoors, not located in a "public place" or as otherwise required by a contractor or client.
    e. Any trash generated during the day's site activities should be removed from the site by DTCS staff or disposed of in a trash receptacle designated as acceptable by the client.

3. "Social" Distancing
    a. All individual work crew meetings / tailgate talks should be held outside and follow social distancing

b. Recommend use of cell phones, texting, web meeting sites and conference calls for project discussion
c. In instances where it is possible, workers should maintain separation of 6 feet from each other per CDC guidelines
d. Multi person activities will be limited where feasible
e. In work conditions where required social distancing is impossible to achieve, employees shall be supplied PPE including, as appropriate, a standard face mask, gloves, and eye protection. Be sure to use your own water bottle, and do not share
f. Please maintain Social Distancing separation during breaks and lunch

Protocol if COVID Positive or COVID Symptoms are Discovered

1. DTCS shall direct workers with COVID-19 related symptoms to leave the site immediately and contact their healthcare provider. The local board of health will make appropriate notifications to those who had direct prolonged contact with the COVID-19 positive workers. DTCS shall work with the local board of health to identify any potential job site exposures, including:

    a. Other workers, vendors, inspectors, or visitors to the work site with close contact to the individual
    b. Work areas
    c. Work tools and equipment
    d. Common areas such as tables and sanitary facilities

2. Upon learning of an infection, DTCS staff and/or subcontractors must immediately notify the designated COVID-19 safety officer and the owner

    a. Keep all employee names confidential as required by law

3. After a worker with COVID-19 related symptoms has been asked to leave the job site, DTCS staff shall take immediate steps to sanitize any common areas and direct work places that may have been in close contact with the infected worker.

    a. Sanitation will be conducted with personnel, equipment, and material approved for COVID-19 sanitization.

    b. Identified areas should remain isolated from any other workers until sanitation process has been completed and area is deemed safe for use.

    c. Workers who leave during the work day due to COVID-19 symptoms and

develop COVID-19 as confirmed by laboratory testing or diagnosis by a healthcare provider shall not return to the site until either released from isolation by healthcare provider or public health official.

d. All impacted workers should follow CDC and DOH recommended steps concerning return to work. Workers who are considered close contacts to a COVID-19 case by public health authorities should not return for 14 days and are subject quarantine by public health.

e. Other employees may be sent home while a workspace is being cleaned but will return to work after cleaning unless advised otherwise by a health care provider

f. Other employees should be asked to contact their health provider if they have any questions

g. Remind other employees to continue to practice proper sanitation and monitor for flu like symptoms

DT CONSULTING SERVICES, INC.

ATTACHMENT B

SAFETY DATA SHEET

Methane

Section 1. Identification

GHS product identifier : Methane

Chemical name : methane

Other means of identification : Methane or natural gas; Marsh gas; Methyl hydride; CH4; Fire Damp;

Product type : Gas.

Product use : Synthetic/Analytical chemistry.

Synonym : Methane or natural gas; Marsh gas; Methyl hydride; CH4; Fire Damp;

SDS # : 001033

Supplier's details : Airgas USA, LLC and its affiliates
259 North Radnor-Chester Road
Suite 100
Radnor, PA 19087-5283
1-610-687-5253

24-hour telephone : 1-866-734-3438

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE GASES - Category 1
GASES UNDER PRESSURE - Compressed gas

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : Extremely flammable gas.
May form explosive mixtures with air.
Contains gas under pressure; may explode if heated.
May displace oxygen and cause rapid suffocation.

Precautionary statements

General : Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction. Approach suspected leak area with caution.

Prevention : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Response : Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.

Storage : Protect from sunlight. Store in a well-ventilated place.

Disposal : Not applicable.

Hazards not otherwise classified : In addition to any other important health or physical hazards, this product may displace oxygen and cause rapid suffocation.

Section 3. Composition/information on ingredients

Substance/mixture : Substance

Chemical name : methane

Other means of identification : Methane or natural gas; Marsh gas; Methyl hydride; CH4; Fire Damp;

Product code : 001033

CAS number/other identifiers

CAS number : 74-82-8

Ingredient name	%	CAS number
methane	100	74-82-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : As this product is a gas, refer to the inhalation section.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Contact with rapidly expanding gas may cause burns or frostbite.

Inhalation : No known significant effects or critical hazards.

Skin contact : Contact with rapidly expanding gas may cause burns or frostbite.

Frostbite : Try to warm up the frozen tissues and seek medical attention.

Ingestion : As this product is a gas, refer to the inhalation section.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Section 4. First aid measures

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.

Large spill : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.

Use only non-sparking tools. Avoid contact with eyes, skin and clothing. Empty containers retain product residue and can be hazardous. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Eliminate all ignition sources. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F). Keep container tightly closed and sealed until ready for use. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
methane	None.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Section 8. Exposure controls/personal protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Gas. [Compressed gas.]

Color : Colorless.

Odor : Odorless.

Odor threshold : Not available.

pH : Not available.

Melting point : -187.6°C (-305.7°F)

Boiling point : -161.48°C (-258.7°F)

Critical temperature : -82.45°C (-116.4°F)

Flash point : Closed cup: -104°C (-155.2°F)

Evaporation rate : Not available.

Flammability (solid, gas) : Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and oxidizing materials.

Lower and upper explosive (flammable) limits : Lower: 5%
Upper: 14%

Vapor pressure : Not available.

Vapor density : 0.6 (Air = 1)

Specific Volume (ft ^{3}/lb) : 23.6407

Gas Density (lb/ft ^{3}) : 0.0423 (25°C / 77 to °F)

Relative density : Not applicable.

Solubility : Not available.

Solubility in water : 0.02 g/l

Partition coefficient: n-octanol/water : 1.09

Auto-ignition temperature : 537°C (998.6°F)

Decomposition temperature : Not available.

Viscosity : Not applicable.

Flow time (ISO 2431) : Not available.

Molecular weight : 16.05 g/mole

Aerosol product

Heat of combustion : -50048542 J/kg

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials : Oxidizers

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Contact with rapidly expanding gas may cause burns or frostbite.

Inhalation : No known significant effects or critical hazards.

Section 11. Toxicological information

Skin contact : Contact with rapidly expanding gas may cause burns or frostbite.

Ingestion : As this product is a gas, refer to the inhalation section.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
methane	1.09	-	low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Section 12. Ecological information

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

	DOT	TDG	Mexico	IMDG	IATA
UN number	UN1971	UN1971	UN1971	UN1971	UN1971
UN proper shipping name	Methane, compressed	Methane, compressed or Methane or Natural gas, compressed (with high methane content)	Methane, compressed	Methane, compressed	Methane, compressed
Transport hazard class(es)	2.1 	2.1 	2.1 	2.1 	2.1 
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.

"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."

Additional information

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2).
Explosive Limit and Limited Quantity Index 0.125
ERAP Index 3000
Passenger Carrying Vessel Index Forbidden
Passenger Carrying Road or Rail Index Forbidden

IATA : **Quantity limitation** Passenger and Cargo Aircraft: Forbidden. Cargo Aircraft Only: 150 kg.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

Clean Air Act (CAA) 112 regulated flammable substances: methane

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Refer to Section 2: Hazards Identification of this SDS for classification of substance.

State regulations

Massachusetts : This material is listed.

New York : This material is not listed.

New Jersey : This material is listed.

Pennsylvania : This material is listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : This material is listed or exempted.

Canada : This material is listed or exempted.

China : This material is listed or exempted.

Europe : This material is listed or exempted.

Japan : **Japan inventory (ENCS)**: This material is listed or exempted.
Japan inventory (ISHL): Not determined.

New Zealand : This material is listed or exempted.

Philippines : This material is listed or exempted.

Republic of Korea : This material is listed or exempted.

Taiwan : This material is listed or exempted.

Section 15. Regulatory information

Thailand : Not determined.

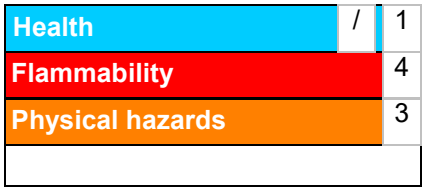
Turkey : This material is listed or exempted.

United States : This material is listed or exempted.

Viet Nam : Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas	Expert judgment According to package

History

Date of printing : 11/15/2020

Date of issue/Date of revision : 11/15/2020

Date of previous issue : 3/14/2019

Version : 1.08

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Section 16. Other information

References : Not available.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

DT CONSULTING SERVICES, INC.

ATTACHMENT B

Community Air Monitoring Plan

Job Name/Site Number: Willow Brook Rentals LLC/C314132

TABLE OF CONTENTS

1.0 INTRODUCTION

This Community Air Monitoring Plan (CAMP) has been prepared by DT Consulting Services, Inc. (DTCS) to support the implementation of field activities associated with the investigation and subsequent remedial measures at the Subject Property located at 10-14 Tucker Drive, Poughkeepsie, Dutchess County, New York. A Site Plan is provided as Figure 1. Details related to the investigative activities are presented in the Remedial Investigative Work Plan (RIWP), to which this CAMP is included as an attachment and as a supporting plan. This CAMP fulfills the routine monitoring requirements provided in the New York State Department of Environmental Conservation (NYSDEC) document entitled Division of Environmental Remediation *Technical Guidance for Site Investigation and Remediation* (DER-10) issued on May 3, 2010 (NYSDEC 2010). Appendix 1A of DER-10 (included in Attachment A) provides general guidance and protocols for the preparation and implementation of a CAMP. Appendix 1B of DER- 10 (included in Attachment A) supplements the contents of Appendix 1A of DER-10 and provides additional requirements for fugitive dust/particulate monitoring. This CAMP identifies the required air monitoring to protect the community during the implementation of proposed investigative activities.

1.1 CAMP Objectives

The overall objective of the CAMP is to establish requirements for protection measures for downwind receptors from potential airborne releases of constituents of concern during intrusive and/or potential dust generating Site activities. As summarized in the RIWP, laboratory analysis indicates that constituents of concern at the Site include volatile organic compounds (VOCs) and methane. This CAMP identifies potential air emissions, and describes air monitoring procedures, the monitoring schedule, data collection, and reporting requirements for the RI actions to be completed by DTCS. Note that monitoring for methane and steps to mitigate the risk of methane have been included in the Health and Safety Plan (HASP) generated for the Site. DTCS will implement this CAMP and will provide all labor, materials, and equipment necessary to implement the monitoring program specified in this CAMP, as well as any required contractor worker documentation and monitoring described in the HASP prepared for the implementation of the project.

1.2 Revisions to the CAMP

Any changes to the scope or procedures in this CAMP will be formally documented as a revision to this document. A revision number will be indicated on the front page of any revised document and will serve as a historical record of any and all revisions made to the document. For changes requiring immediate resolution during the implementation of this CAMP, approval will be secured from the NYSDEC and, if applicable, the Responsible Party.

1.3 Potential Air Emissions Related to Investigative Activities

Intrusive investigation activities have the potential to generate localized impacts to air quality. Investigative components that are considered intrusive for the purposes of this CAMP and that have the potential to generate air emissions are anticipated to include, but may not be limited to the following:

- ✓ Installation of soil borings or groundwater monitoring wells;
- ✓ Sampling of soils and groundwater; and
- ✓ Soil vapor/soil gas sampling.

2.0 COMMUNITY AIR MONITORING PLAN

Real-time air monitoring for VOCs and particulate levels will be performed at representative locations, upwind and downwind during Site investigative activities. Furthermore, continuous monitoring will be performed for all ground intrusive activities and during the handling of contaminated or potentially contaminated media. Ground intrusive activities include, but are not limited to, the installation and sampling of soil borings, monitoring wells and/or soil gas sampling. In addition, during work hours, hourly or more frequent monitoring for Site-related odors at the perimeter of the work area will be performed.

Periodic monitoring for VOCs will be performed during non-intrusive activities such as the collection of soil samples, the collection of groundwater samples from Site monitoring wells and/or soil gas sampling. Periodic monitoring during sample collection, for instance, will 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. Depending upon the proximity of potentially exposed individuals, continuous monitoring may be performed during

sampling activities. Exceedances of action levels observed during performance of the CAMP will be reported to the DEC Project Manager and included in the Daily Report.

2.1 Selection of Monitoring Locations

Upwind and downwind monitoring station locations for VOCs and PM_{10} will be determined daily based on data from published information (predictions of prevailing and predominant wind direction) for the Site and the nature and location of the anticipated construction activities.

An upwind location (station "UPW") for both VOCs and PM_{10} will be confirmed at the start of each workday, based upon the use of the meteorological data and the location of the proposed construction activities. A downwind location (station "DWN 1") (based upon prevalent wind direction) for both VOCs and PM_{10} will also be selected. Another downwind monitoring location (regardless of wind direction) will be used to monitor for both VOCs and PM_{10} at the closest sensitive receptor (i.e., nearest occupied building [NOB]), determined at the date of investigative activities**.** If wind directions shift radically during the workday and for an extended period such that the upwind direction and downwind locations no longer fall within acceptable guidelines (+-60 degrees compass change from the original wind direction), the monitoring stations will be relocated so that the upwind and downwind locations are maintained. Any changes will be documented in the CAMP reports.

2.2 VOC Monitoring

VOCs will be monitored continuously during the intrusive and/or potential dust-generating investigative activities with instrumentation equipped with electronic data-logging capabilities. A real-time VOC monitor (RAE MultiRae 3000 or equivalent) equipped with a Photoionization Detector (PID) will be used for monitoring. All 15-minute average concentrations, as well as any instantaneous readings taken to facilitate activity decisions, will be recorded, stored on-Site and summarized in a CAMP report.

2.3 Total Particulates Monitoring

Total particulates will also be monitored continuously during intrusive and/or potential dust- generating investigative activities using instrumentation equipped with electronic data-logging capabilities. The particulate monitoring equipment will also be equipped with an audible alarm to indicate exceedances of the action levels identified

below in Section 2.5. A TSI DustTrak II 8530 (or equivalent) will be used to conduct the real-time PM_{10} monitoring during the SC/IRM activities. All 15-minute average concentrations, as well as any instantaneous readings taken to facilitate activity decisions, will be recorded and summarized in a CAMP report. Fugitive dust migration will be visually assessed during all work activities, and reasonable dust suppression techniques will be used during any activity that may generate fugitive dust.

2.4 Periodic Monitoring for Odors

During work hours, hourly or more frequent walks around the perimeter of the work area will be performed to qualitatively monitor for the presence and intensity of Site-related odors. Perimeter checks will be performed more frequently, as necessary, depending on the nature and location of work being performed. If odors are noted at the perimeter of the work area, work will continue and odor, vapor, and dust controls will be employed to abate emissions. Additionally, construction techniques will be evaluated and modified, if necessary and appropriate, and more frequent checks of the perimeter of the work area will be performed. If odors persist at the perimeter of the work area at an unacceptable intensity, work will be stopped while activities are re-evaluated. The source or cause of the odors will be identified and additional odor, vapor, and dust controls will be employed. Work will resume provided that the controls are successful in mitigating the intensity of odors at the perimeter of the work area.

2.5 Action Levels

The action levels provided below are to be used to initiate corrective actions, if necessary, based upon the real-time monitoring. If the action levels are exceeded at the perimeter locations for VOCs or PM_{10}, work will be suspended and engineering controls will be implemented to bring concentrations back down to acceptable levels. Each piece of monitoring equipment will have alarm capabilities (audible and/or visual) to indicate exceedances of the action levels specified below. All readings will be recorded and available review.

Action Levels for Organic Vapors

If the ambient air concentration of total VOCs at the downwind perimeter of the work area, Exclusion Zone, or opposite the nearest occupied building exceeds 5 parts per million (ppm) above the background (upwind) concentration for the 15-minute average, work activities will be temporarily halted while

monitoring continues. If total VOC concentration readily decreases (through observation of instantaneous readings) below 5 ppm above the background concentration, work activities will resume with continued monitoring.

If the ambient air concentration of total VOCs at the downwind perimeter of the work area, Exclusion Zone, or opposite the nearest occupied building persists at levels in excess of 5 ppm but less than 25 ppm above the background (upwind) concentration: (1) work activities will be halted; (2) the source of the elevated total VOC concentration will be identified; (3) corrective actions will be implemented to reduce or abate the emissions; and (4) air monitoring will be continued. Once these activities have been implemented, work activities will resume provided the following two conditions are met:

- The 15-minute average VOC concentrations remain below 5 ppm above background (upwind); and

- The total VOC concentration 200 feet downwind of the work area/Exclusion Zone or half the distance to the nearest potential receptor or residential/commercial structure whichever is less but in no case less than 20 feet) is below 5 ppm over the background (upwind) concentration for the 15-minute average.

If the ambient air concentration of total VOCs at the downwind perimeter of the work area, Exclusion Zone, or opposite the nearest occupied building exceeds 25 ppm above the background (upwind) concentration, work activities will stop, and corrective actions will be implemented to reduce or abate the emissions. When work shutdown occurs, as directed by the Environmental Monitor, corrective actions will be implemented to ensure that vapor emission does not impact the nearest occupied structure at levels exceeding the action levels specified herein. If following work shutdown, or as the result of an emergency, VOC concentrations persist above 5 ppm above background (upwind) 200 feet downwind (or half the distance to the nearest occupied structure), then air quality must be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20-foot zone).

Action Levels for PM_{10}

If the ambient air concentration of PM_{10} at the downwind perimeter of the work area or nearest occupied building exceeds 100 micrograms per cubic

meter (µg/m³) above the background (upwind) concentration, or if airborne dust is observed leaving the work area, dust suppression techniques will be employed. Work will continue with dust suppression techniques provided the downwind PM_{10} concentration does not exceed 150 µg/m³ above the background (upwind) concentration. If, after implementation of dust suppression techniques, the downwind PM_{10} concentration is greater than 150 µg/m³ above the background (upwind) concentration, work will be stopped while activities are re-evaluated. Work will resume provided the dust suppression techniques and other controls are successful in: (1) reducing the downwind PM_{10} concentration to less than 150 µg/m³ above the background (upwind) concentration; and (2) preventing visible dust from leaving the work area.

2.6 Instrument Calibration

Calibration of the VOC and PM_{10}, instrumentation will be conducted in accordance with each of the equipment manufacturer's calibration and quality assurance requirements. The VOC and PM_{10} monitoring equipment will be calibrated or zeroed, respectively, daily (at a minimum), and such calibrations will be recorded in the field logbook.

3.0 MONITORING SCHEDULE/DATA COLLECTION/REPORTING

The following identifies the monitoring schedule and data collection/reporting requirements.

3.1 Monitoring Schedule

Community air monitoring will be conducted prior to initiating investigative activities to establish adequate baseline data and until such time that intrusive and/or potential dust generating activities are complete. The frequency of community air monitoring will be relative to the level of Site work activities being conducted and may be adjusted as the work proceeds and in consideration of the monitoring results. Air monitoring for VOCs and dust may be discontinued during periods of heavy precipitation that would otherwise result in unreliable data or damage to monitoring equipment.

3.2 Data Collection and Reporting

Community air monitoring data will be collected continuously from VOC and PM_{10}

monitors during all intrusive and/or potential dust-generating activities by the electronic data-logging systems, except as discussed above in Section 3.1. The data management software will be set up to continuously monitor instantaneous readings and record average concentrations (calculated for continuous 15-minute increments: i.e., 08:00 to 08:15, 08:15 to 08:30, etc.). Results of the perimeter/community air monitoring for total organic vapors and particulates (both instantaneous readings and 15- minute average concentrations) will be recorded by the monitoring instruments (data loggers).

The Environmental Monitor will prepare a CAMP reports that will include, but not be limited to, the following:

- A brief memorandum summarizing the air monitoring work activities and results for the monitoring period. A summary of the qualitative perimeter monitoring for the presence and intensity of Site-related odors will also be included. The memorandum will be supported by two attachments: (1) Attachment A showing air monitoring station daily locations; and (2) Attachment B presenting graphs of the 15-minute time-weighted average VOC and particulate concentrations recorded at each of the sampling stations (one graph for each station showing the results relative to action levels).

In the event that an exceedance of a community air monitoring action level (for either PM_{10} or VOCs), the Environmental Monitor will notify DEC (via telephone) as soon as possible (i.e., real time). Within 24 hours of the observed exceedance, the Environmental Monitor will send a follow-up e-mail to DEC's representative, and the Responsible Party summarizing the data, the cause of the exceedance, and any corrective measures implemented (or to be implemented) as a result of the exceedance. The information will also be documented in the CAMP report.

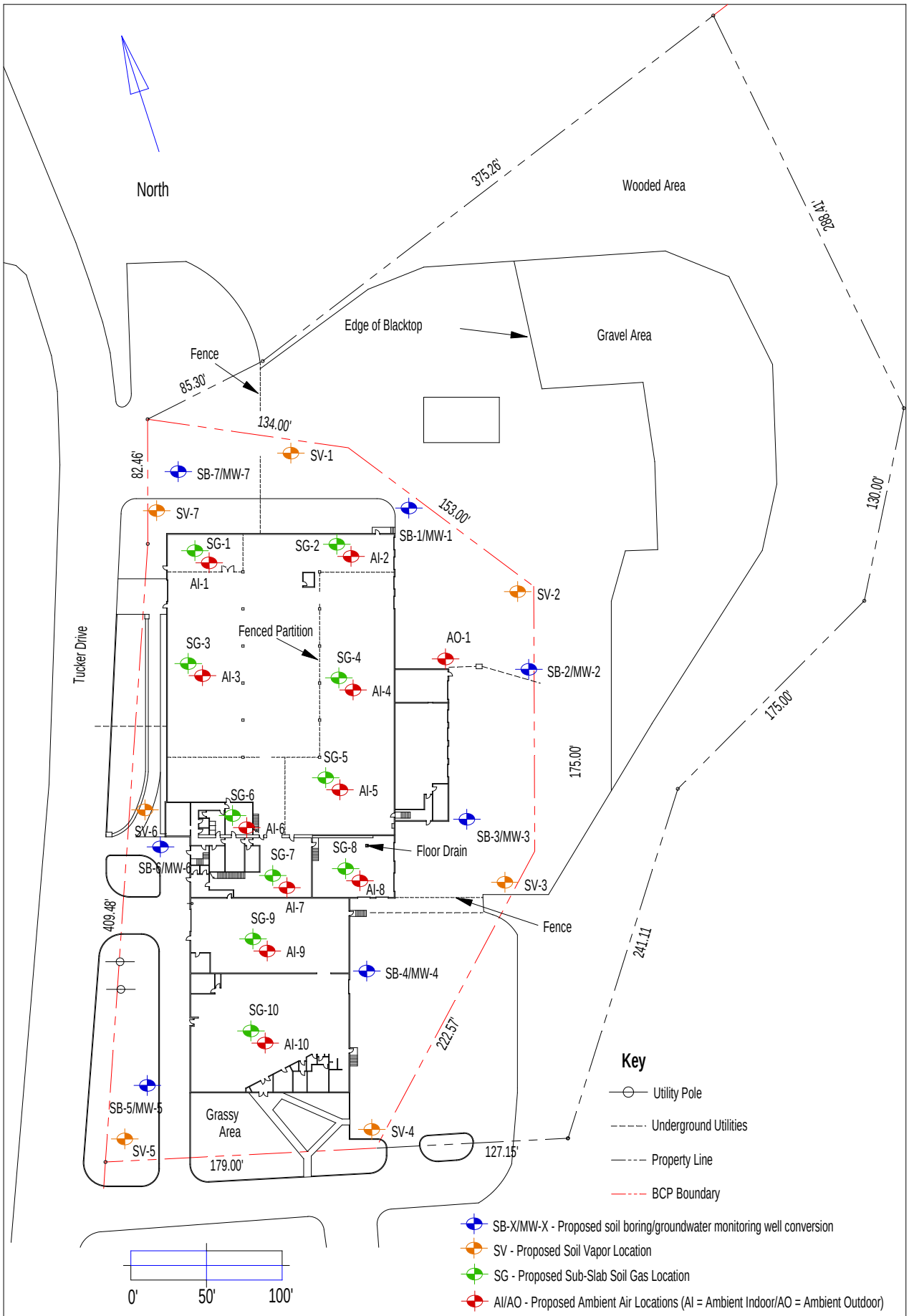
Odor complaints received from the public will be evaluated and verified based on the following:

- Date and time of complaint;
- Location and nature of work activities being performed at the Site;
- Location and nature of non-project-related work activities being performed in the surrounding community; and
- Prevailing wind direction and other local meteorological conditions.

Regardless of the outcome of this evaluation, all associated parties will be notified of odor complaints within 24 hours. In response to a verified odor complaint, perimeter monitoring will continue and additional odor, vapor, and dust controls will be employed to mitigate Site-related odor emissions. Construction techniques will also be evaluated and modified, if necessary and appropriate.

The time and outcome of each perimeter check will be documented in a daily odor monitoring log, specifically noting the presence or absence of Site-related odors and identifying the intensity and general location(s) along the perimeter of the work area where odors (if any) are noted. The time and outcome of any odor complaints from the public will also be documented in the daily odor monitoring log.

FIGURES



DT Consulting Services, Inc.
1291 Old Post Road
Ulster Park, New York 12487
(845) 658-3484

Client:	Willow Brook Rentals LLC
Location:	10-14 Tucker Drive, Poughkeepsie, Dutchess County, New York
Title:	Site Map - Proposed RI Sampling Locations

Scale:	Drawn By:	BCP Site No:	Fig.#:
Graphic	O.T.	C314132	1

ATTACHMENTS

DT CONSULTING SERVICES, INC.

ATTACHMENT A

NYSDEC DER-10 TECHNICAL GUIDANCE FOR SITE INVESTIGATION AND REMEDIATION (DER-10) MAY 3, 2010.

APPENDIX 1A OF DER-10

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

Overview

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

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

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

Community Air Monitoring Plan

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

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

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

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

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

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

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

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

Particulate Monitoring, Response Levels, and Actions

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

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

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

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

December 2009

APPENDIX 1B OF DER-10

Appendix 1B
Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50^{o} C (14 to 122^{o} F);
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

DT CONSULTING SERVICES, INC.

ATTACHMENT C

DT Consulting Services, Inc.
1291 Old Post Road
Ulster Park, New York 12487
(845) 658-3484

Soil Boring Log
SB-1

Hole No: SB-1

Sheet 1 of 1

Date Started: 1-26-17

Date Finished: 1-26-17

Client: Tompkins Mahopac Bank

Method of investigation: 2" Hollow Stem Samplers

Location: 10-14 Tucker Drive, Poughkeepsie, New York

Spill Number: 16-10111

P. Manager:

Deborah Thompson

Drilling Co: Core Down Drilling

Geologist: Deborah Thompson

Driller: A. Bellucci

D. Helper: O. Tanner

Drill Rig: Geoprobe

Weather:

Sunny

40° F @ 0800

Depth (ft.)	Sample No.	Sample Depth (ft.)	Blows per 6"	"N"	Recovery (in.)	Sample Description	Field Analytical Readings	Boring Details	Groundwater and Other Observations
		1				Brown/grey, sandy loam/mixed fill, damp, no	PID (ppm)		
		2				odors.			Sampled subsurface soils
		3				Minimal recovery.			(11-13' bgs, SB-1)
4					12"		0.0		
		5				Brown, mixed fill/crushed stone, damp no odors.			
		6				Minimal recovery.			Groundwater
		7							not encountered.
8					2"		0.0		
		9				Brown mixed fill, plastic, glass and wood, slight			
		10				odor.			
		11				Minimal recovery.			
12					2"		4.0		
		13				Brown, silt w/trace of clay/silty clay, damp, no			
		14				odors.			
		15							
16					32"		0.0		
		17							
		18							
		19							
20									

Sample Types:

S=Hollow Spoon: X

R= Rock Core: _____

N = ASTM D1586 BGS = Below Grade Surface

Backfill Well Key

Cement

Native Fill

Borehole

Bentonite

DT Consulting Services, Inc.
1291 Old Post Road
Ulster Park, New York 12487
(845) 658-8484

Soil Boring Log
SB-2

Hole No: SB-2/GW-2

Sheet 1 of 1

Date Started: 1-26-17

Date Finished: 1-26-17

Client: Tompkins Mahopac Bank

Method of investigation: 2" Hollow Stem Samplers

Location: 10-14 Tucker Drive, Poughkeepsie, New York

Spill Number: 16-10111

P. Manager:

Deborah Thompson

Drilling Co: Core Down Drilling

Geologist: Deborah Thompson

Driller: A. Bellucci

D. Helper: O. Tanner

Drill Rig: Geoprobe

Weather:

Sunny

40° F @ 0800

Depth (ft.)	Sample No.	Sample Depth (ft.)	Blows per 6"	"N"	Recovery (in.)	Sample Description	Field Analytical Readings	Boring Details	Groundwater and Other Observations
		1				Asphalt and gravel.	PID (ppm)		
		2				Brown/grey, sandy loam/mixed fill, damp, no			Subsurface Void. No
		3				odors.			soil recovery.
4					12"		0.0		
		5				No recovery			Set temporary
		6							groundwater well at 15.5'
		7							
8					0		0.0		DTW: 12.00
		9				No recovery			Grey, clear, slight
		10							odor and sheen.
		11							SB-2/GW-2
12					0		0.0		
		13							
		14							
		15							
16					0	No recovery			
		17							
		18							
		19							
20									

Sample Types:

S=Hollow Spoon: X

R= Rock Core: _____

N = ASTM D1586 BGS = Below Grade Surface

Backfill Well Key

Cement

Native Fill

Borehole

Bentonite

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Ulster Park, New York 12487
(845) 658-8484

Soil Boring Log
SB-3

Hole No: SB-3/GW-3

Sheet 1 of 1

Date Started: 1-26-17

Date Finished: 1-26-17

Client: Tompkins Mahopac Bank

Method of investigation: 2" Hollow Stem Samplers

Location: 10-14 Tucker Drive, Poughkeepsie, New York

Spill Number: 16-10111

P. Manager:

Deborah Thompson

Drilling Co: Core Down Drilling

Geologist: Deborah Thompson

Driller: A. Bellucci

D. Helper: O. Tanner

Drill Rig: Geoprobe

Weather:

Sunny

40° F @ 0800

Depth (ft.)	Sample No.	Sample Depth (ft.)	Blows per 6"	"N"	Recovery (in.)	Sample Description	Field Analytical Readings	Boring Details	Groundwater and Other Observations
		1				Asphalt and gravel.	PID (ppm)		
		2				Brown/grey, sandy loam/mixed fill, damp, no			Subsurface Void. No
		3				odors.			soil recovery.
4					12"		0.0		
		5				No recovery			Set temporary
		6							groundwater well at 15.5'
		7							
8					0		0.0		DTW: 12.80
		9				No recovery			Grey, clear, no
		10							odor and sheen.
		11							SB-3/GW-3
12					0		0.0		
		13							
		14							
		15							
16					0	No recovery			
		17							
		18							
		19							
20									

Sample Types:

S=Hollow Spoon: X

R= Rock Core: _____

N = ASTM D1586 BGS = Below Grade Surface

Backfill Well Key

Cement

Native Fill

Borehole

Bentonite

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Ulster Park, New York 12487
(845) 658-8484

Soil Boring Log
SB-4

Hole No: SB-4

Sheet 1 of 1

Date Started: 1-26-17

Date Finished: 1-26-17

Client: Tompkins Mahopac Bank

Method of investigation: 2" Hollow Stem Samplers

Location: 10-14 Tucker Drive, Poughkeepsie, New York

Spill Number: 16-10111

P. Manager:

Deborah Thompson

Drilling Co: Core Down Drilling

Geologist: Deborah Thompson

Driller: A. Bellucci

D. Helper: O. Tanner

Drill Rig: Geoprobe

Weather:

Sunny

40° F @ 0800

Depth (ft.)	Sample No.	Sample Depth (ft.)	Blows per 6"	"N"	Recovery (in.)	Sample Description	Field Analytical Readings	Boring Details	Groundwater and Other Observations
		1				Asphalt and gravel.	PID (ppm)		
		2				Brown/grey, sandy loam/mixed fill, damp, no			Sampled subsurface soils
		3				odors.			(7-9' bgs, SB-4)
4					28"		0.0		
		5				Grey, silty clay, damp, no odors.			
		6							Groundwater
		7							encountered at 9' bgs.
8					36"		0.0		No obvious impacts.
		9			2"	Refusal at 9' bgs.	0.0		
		10							
		11							
12									
		13							
		14							
		15							
16									
		17							
		18							
		19							
20									

Sample Types:

S=Hollow Spoon: X

R= Rock Core:

N = ASTM D1586 BGS = Below Grade Surface

Backfill Well Key

Cement

Native Fill

Borehole

Bentonite

DT Consulting Services, Inc.
1291 Old Post Road
Ulster Park, New York 12487
(845) 658-8484

Soil Boring Log
SB-5

Hole No: SB-5

Sheet 1 of 1

Date Started: 1-26-17

Date Finished: 1-26-17

Client: Tompkins Mahopac Bank

Method of investigation: 2" Hollow Stem Samplers

Location: 10-14 Tucker Drive, Poughkeepsie, New York

Spill Number: 16-10111

P. Manager:

Deborah Thompson

Drilling Co: Core Down Drilling

Geologist: Deborah Thompson

Driller: A. Bellucci

D. Helper: O. Tanner

Drill Rig: Geoprobe

Weather:

Sunny

40° F @ 0800

Depth (ft.)	Sample No.	Sample Depth (ft.)	Blows per 6"	"N"	Recovery (in.)	Sample Description	Field Analytical Readings	Boring Details	Groundwater and Other Observations
		1				Grey, sandy loam/mixed fill and gravel, damp	PID (ppm)		
		2				no odors.			Sampled subsurface soils
		3							(9-11' bgs, SB-5)
4					30"		0.0		
		5				Grey, sandy loam/mixed fill and gravel, damp			
		6				no odors.			Groundwater
		7							encountered at 9' bgs.
8					14"		0.0		No obvious impacts.
		9				Grey, sandy loam/mixed fill and gravel, damp			
		10				no odors.			
		11							
12					22"		0.0		
		13							
		14							
		15							
16									
		17							
		18							
		19							
20									

Sample Types:

S=Hollow Spoon: X

R= Rock Core: _____

N = ASTM D1586 BGS = Below Grade Surface

Backfill Well Key

Cement

Native Fill

Borehole

Bentonite

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Ulster Park, New York 12487
(845) 658-8484

Soil Boring Log
SB-6

Hole No: SB-6

Sheet 1 of 1

Date Started: 1-26-17

Date Finished: 1-26-17

Client: Tompkins Mahopac Bank

Method of investigation: 2" Hollow Stem Samplers

Location: 10-14 Tucker Drive, Poughkeepsie, New York

Spill Number: 16-10111

P. Manager:

Deborah Thompson

Drilling Co: Core Down Drilling

Geologist: Deborah Thompson

Driller: A. Bellucci

D. Helper: O. Tanner

Drill Rig: Geoprobe

Weather:

Sunny

40° F @ 0800

Depth (ft.)	Sample No.	Sample Depth (ft.)	Blows per 6"	"N"	Recovery (in.)	Sample Description	Field Analytical Readings	Boring Details	Groundwater and Other Observations
		1				Asphalt and gravel.	PID (ppm)		
		2				Brown/grey, sandy loam/mixed fill, damp, no			Sampled subsurface soils
		3				odors.			(10-12' bgs, SB-6)
4					37"		0.0		
		5				Brown/grey, sandy loam/mixed fill, damp, no			
		6				odors.			
		7							
8					36"		0.0		
		9				Brown/grey, sandy loam/mixed fill, damp, no			Groundwater
		10				odors.			not encountered.
		11							
12					48"		0.0		
		13							
		14							
		15							
16									
		17							
		18							
		19							
20									

Sample Types:

S=Hollow Spoon: X

R= Rock Core:

N = ASTM D1586 BGS = Below Grade Surface

Backfill Well Key


Cement


Native Fill


Borehole


Bentonite