DT CONSULTING SERVICES, INC.

REMEDIAL ALTERNATIVES ANALYSIS AND REMEDIAL WORK PLAN (RAA/RWP) FOR UTILITY PLATERS, INC. AND THE FORMER KINGSTON DIAGNOSTICS BUILDING SITES

BROWNFIELD CLEANUP PROGRAM (BCP)
SITE NUMBER C356035

08/12/2010

DT CONSULTING SERVICES, INC.

Utility Platers/Kingston Diagnostics

ULSTER COUNTY, NEW YORK

Remedial Alternatives Analysis and Remedial Work Plan

NYSDEC Site Number C356035

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I certify that this Remedial Alternatives Analysis and Remedial Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER10) and any DER approved modifications.

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1.0 INTRODUCTION AND PURPOSE

DT Consulting Services, Inc. (DTCS) has prepared this Remedial Alternatives Analysis and Remedial Work Plan (RAA/RWP) to summarize an analysis of potential remedial alternatives and present a work plan that describes the remaining proposed environmental response actions. These technical documents are a necessary component of the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP). The subject property, known as Utility Platers, Inc., located at 416 Washington Avenue in the City of Kingston, Ulster County, New York was accepted into the BCP Program (Site Number C356035) in March 2009. The contiguous property, formerly Kingston Diagnostics, was accepted into the BCP as an amendment to Site C356035 in November 2009. Both parcels are hereafter referred to as "the Site". The BCP is established in Article 27, Title 14 of the Environmental Conservation Law (ECL), and creates an opportunity for property owners to voluntarily investigate and remediate sites where historic contamination inhibits redevelopment. The property owner is a "Volunteer" under the program.

The history and environmental conditions at the site are described in the NYSDEC approved *Remedial Investigative Report* prepared by DT Consulting Services, Inc. (DTCS, February 2010). The information described in DTCS's Remedial Investigative Report and the contemplated commercial use of the Site was utilized to analyze applicable remedial alternatives and remedial action. All work was performed in general conformance with regulations specified in 6 NYCRR Part 375 (Environmental Remediation Programs) and applicable NYSDEC guidance documents (Division of Environmental Remediation [DER-10] and Draft Brownfield Cleanup Program Guide [BCP Guide].

Restricted Residential Soil Cleanup Objectives (SCOs) were selected as the applicable Site Standards, Criteria and Guidelines (SCGs) for soil cleanup. Contaminants of concern (COCs) at the Site are defined as the substances for which the concentrations in soil exceed the associated Restricted Residential SCO. Even though no potable use of groundwater is allowed in the City of Kingston, Class GA drinking water-based standards, as per State code, are the applicable SCG for groundwater. COCs in groundwater were selected based on exceedances of 6 NYCRR Part 703 Class GA Groundwater Standards, or NYSDEC Technical and Operational Guidance Series 1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations dated June 1998, revised June 2004 (GSGVs). According to the NYSDOH October 2006 Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, New York State currently does not have any standards, criteria or guidance values for concentrations of compounds in soil vapor. For comparison purposes, however, soil vapor analytical results for the Site were compared to the NYSDOH guidance criteria for sub-slab vapor, the U.S. EPA screening levels for soil vapor, and site-specific and reference background concentrations for outdoor air.

The purpose of the Remedial Alternatives Analysis is to develop and evaluate remedial action alternatives that would meet the development goals and the remedial goals for contaminated media, and to recommend remedial actions to be taken at the Site. The primary goal of the analysis is to identify a final remedial action that will be protective and feasible, and appropriately address identified site risks and development goals. This evaluation was focused on the known areas of concern for soil and groundwater on-site (i.e., those areas that could pose a potential unacceptable risk to future occupants of the property). Based on the anticipated future "Storefront Commercial" use of the property, DTCS has evaluated remedial options that could feasibly be implemented at the site and address the remaining zones of concern. To meet the objectives determined through the alternatives analysis, the Remedial Work Plan (RWP) presents an approach that addresses remaining contamination and residual groundwater impacts. An extensive source removal Interim Remedial Measure (IRM) has already been implemented at the Site based upon a NYSDEC approved work plan (see *Interim Remedial Measure*, DTCS, July 2009), and a sub-slab depressurization system, in accordance with NYS DOH Guidance, has already been installed under the commercial building.

2.0 SITE INFORMATION

Located on an irregularly shaped 1.02-acre commercial lot, the Utility Platers portion of the site was improved with a one-story (slab on grade) masonry block structure that was operated as a zinc and chromium plating facility until its closure in the latter half of 2005. According to City of Kingston Assessor records, the building had an area of 13,470-ft^2 and was constructed in 1955. The facility contained two single-bay service bays, operation area, an office section, storage areas, and restroom. Use of the property for commercial plating services reportedly dates back to the 1950s. The facility was historically registered with the New York State Department of Environmental Conservation (NYSDEC) Petroleum Bulk Storage (PBS) Program as PBS No. 3-028886 and maintained an air permit (3510800069) until the facility operation was decommissioned. The building on the property has been demolished and removed from the property.

The Utility Platers parcel was bordered to the north by the former vacant medical office formerly known as Kingston Diagnostics (0.71 acre lot) which was added to the BCP Site because of contamination found at that property. This medical office building has been demolished and removed from the Site. The Trailways Bus Terminal is located to the south, to the east is Esposito's Dry Cleaning, with Washington Avenue and a mixed use commercial structure located to the west. A property location map and a site (base) plan are presented as Figures 1 and 2, respectively. The site topography is generally level and at grade with Washington Avenue, while a moderate easterly slope is present within the eastern quadrant of the facility. According to City of Kingston Water Department and Public Works

Department representatives, the subject property is serviced by a municipal water supply and sanitary waste treatment service. No groundwater supply wells were observed during site inspections and no groundwater supply wells are known to be present or used on adjoining or nearby properties.

Several historical site assessments were conducted by various contractors on behalf of other prospective property purchasers since 2005. As a result of such prior investigation activities, the following areas of potential environmental concern and/or "recognized environmental conditions (REC)" were identified and associated with the subject property:

- Soil and groundwater contamination issues associated with historic site use as a plating and petroleum bulk storage facility dating back to the 1950s.

- Absence of underground storage tank closure documentation (i.e., UST closure reports, regulatory correspondence, contractor information) detailing tank conditions, property locations, and subsurface soil quality; and

- Existence of three inactive New York State Department of Environmental Conservation (NYSDEC) Spill Numbers (99-12006, 04-05895 and 05-01397) that were generated for the subject facility.

3.0 SITE ENVIRONMENTAL CONDITIONS

This section of the report summarizes known and suspected environmental conditions at the site. The findings of all previous environmental investigations are summarized in DTCS's NYSDEC approved *Remedial Investigative Report*, February 2010. As the source of historic contamination has been removed as part of the Interim Remedial Measure (implemented with NYS DEC approval and oversight), it was ultimately determined by the NYSDEC that the site did not represent a significant threat to human health or the environment. A full description of the activities performed during the IRM will be provided as part of the Final Engineering Report ("FER").

3.1 Nature and Extent of Soil Contamination

Volatile Organic Compounds

The historic on-site plating operations contaminated on-site soils with volatile organic compounds (VOCs). The principle contaminants are chlorinated organic compounds, including trichloroethene (TCE), and its degradation products dichloroethene (DCE) and vinyl chloride (VC). In addition, areas surrounding

suspect underground storage tanks (USTs) have been documented to contain petroleum impacted soil. The detected contamination was evident beneath the site structure and directly downgradient of Utility Platers.

Results – Remedial Investigation

Several VOCs were detected during the analysis of the soil samples during the Remedial Investigation (RI). TCE was detected in most all of the soil samples obtained from within the footprint of the historical Utility Platers site structure. The detected TCE concentration ranged from 6 µg/kg to 160,000 µg/kg. All but one reported soil sample concentration (SB-38) were below Part 375 Restricted Residential for TCE, which is 21,000 µg/kg. Soil boring SB-38, located adjacent to the former plating operations area, had a reported TCE concentration of 160,000 µg/kg, which is below the commercial soil cleanup objective (SCO). In addition to the chlorinated solvent TCE, laboratory analysis confirmed that the reductive dechlorination of the TCE compound is occurring, as confirmed by the presence of dichoroethene, DCE. DCE was encountered in all of the samples with elevated concentrations of TCE.

Laboratory reporting on soil samples collected from areas surrounding the suspect tank field(s) adjacent to the site structure revealed laboratory reportable concentrations of targeted VOCs, namely petroleum hydrocarbons such as 1,2,4-Trimethylbenzene, Xylene, Ethylbenzene, Butylbenzene, and Toluene. Although encountered, all targeted VOCs were below unrestricted residential use under applicable Part 375 SCOs.

Results – At Completion of IRMs

With the removal and off-site disposal of source materials, as implemented by performing several IRMs on the subject property, post excavation laboratory reporting on the soil samples obtained from within the excavation area indicated that residual soil impacts were minimal. The detected TCE concentration ranged from 4 µg/kg to 12,000 µg/kg. All reported TCE sample concentrations were below NYSDEC Subpart 375-6: Remedial Program Restricted Residential Soil Cleanup Objectives, December 2006. All other remaining laboratory detectable VOCs, were either below unrestricted or restricted residential use SCOs.

Semi-Volatile Organic Compounds

Results - Remedial Investigation

Ten semi-volatile compounds were detected among the thirteen soil samples analyzed during the RI. All of the detected SVOCs were polycyclic aromatic hydrocarbons (PAHs). The detected concentrations ranged from 75 µg/kg

(anthracene) to 530 µg/kg (fluoranthene), with all reported compounds falling below Part 375 unrestricted SCOs. All of the remaining samples were returned with non-detect sample concentrations from the laboratory.

Results – At Completion of IRMs

Residual SVOCs were encountered within two of the ten post excavation soil samples collected for analysis. All of the targeted compounds reported by the laboratory were below restricted residential use SCOs with the exception of Benzo(a)anthracene and Chrysene at concentrations of 1,400 and 1,600 µg/kg, respectively. Post excavation soil samples collected from within each of the three tank graves revealed SVOCs within unrestricted use SCOs for all compounds detected.

Priority Pollutant Metals

Results – Remedial Investigation

Metals were detected in all of the soil boring samples analyzed, owing to their natural presence in rock and soil minerals. Most all of the priority pollutant (PP) metals encountered during laboratory tested were below Part 375 commercial SCOs.

Most likely the result of commercial plating services being performed at the facility dating back to the 1950s, cadmium and chromium, two compounds known to be utilized frequently in the plating process, were found in almost all of the thirteen samples analyzed during this RI. Cyanide was encountered in a total of three of the thirteen soil samples analyzed during investigative procedures on-site. Detected concentrations ranged from 57 mg/kg to 410 mg/kg which is above the residential/commercial SCO of 27 mg/kg, but below the industrial SCO of 10,000 mg/kg.

The locations of the elevated cadmium, chromium and cyanide concentrations encompass the area beneath the former operations section of the Utility Platers facility.

Results – At Completion of IRMs

Laboratory detectable PP Metals were encountered in most of the samples submitted for analysis at the conclusion of the IRMs. Within the historical boundary of the Utility Platers parcel, soils with slightly elevated metal concentrations were encountered within soil points SB-8 (Cadmium 6.01 mg/Kg) and SB-10 (Chromium 173 mg/Kg/Nickel 477 mg/Kg); all other sampling points displayed compound concentrations below Restricted Residential SCOs. Only one compound, Cadmium, at a concentration of 30.2 mg/Kg, was found at slightly

elevated concentrations within the area formerly occupied by Kingston Diagnostics; all other reported PP Metals were below restricted residential SCOs. Within the UST excavation area most all targeted compounds were below cleanup objectives with the exception of Arsenic (16.4 mg/Kg) and Cadmium (4.8 mg/Kg) within the excavation of Tank #2 and Chromium within Tank #3 excavation at a concentration of 184 mg/Kg.

3.2 Nature and extent of groundwater contamination

3.2.1 Remedial Investigation Groundwater Quality

Groundwater samples were collected from five shallow overburden monitoring wells screened across the water table. The temporary wells were installed at depths between twenty and thirty feet below grade surface. A majority of the detected dissolved phase contamination was concentrated within or directly downgradient of the site structure utilized at Utility Platers. Temporary monitoring well (TMW-1), see Figure 3A for location, displayed the highest concentrations of dissolved phase contamination during the RI. As per agreement with the NYSDEC, DTCS will install and report on permanent groundwater monitoring wells prior to the submittal of the Final Engineering Report.

Volatile Organic Compounds

VOCs were detected in all of the groundwater samples collected. Thirteen compounds reported during laboratory analysis were above Class GA groundwater quality standards as denoted in NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1.

As documented in the RI, TCE, DCE and vinyl chloride were the VOCs detected the most frequently above standards in the overburden groundwater samples. Aside from TCE and the associated dechlorination components, there is relatively little indication of overburden groundwater impact with respect to VOCs. This finding confirms previous investigations that identified TCE and DCE as the principal contaminants of potential concern for groundwater on-site. The removal of source material beneath the site structure as well as surrounding monitoring well TMW-1 will serve to assist in the remediation of detected dissolved phase VOCs in the groundwater matrix. Contaminated materials were excavated and removed from these targeted locations between September 29 and October 7, 2009.

Semi-Volatile Organic Compounds

There were no reportable semi-volatile organic compounds detected in the groundwater samples submitted for analysis.

Priority Pollutant Metals

As metals are naturally occurring in the environment, the targeted PP metals were detected in each groundwater sample analyzed during the RI. On account of low groundwater recharge, only unfiltered samples were submitted for analysis. Most likely, the suspended solids collected while sampling these low production wells, played a role in the increased concentrations of the reported metals during analysis.

3.2.2 At Completion of IRMs Groundwater Quality

A total of five permanent groundwater monitoring wells were installed by DTCS between May 7 & 10, 2010 to replace the temporary wells installed at the facility, which were removed during site development procedures. The permanent wells were installed adjacent to the temporary wells; see Figure 3B for reference. Monitoring of all site wells was performed by DTCS on June 3, 2010. The highest concentration of the principal groundwater contaminants, including TCE and DCE, were encountered off the eastern side of the historical site structure (MW-1), in the direction of groundwater flow. Collected groundwater analytical data has shown that the combined action of source removal and natural attenuation has significantly reduced the concentrations of dissolved phase contaminants on-site. TCE, DCE and Vinyl Chloride have shown a decrease of over 90% from the historic high, pre-remediation levels in 2009. As such, the attenuation rate appears to have surpassed the dissolution rate so that the groundwater plume is expected to diminish over time.

Volatile Organic Compounds

VOCs were detected above Class GA groundwater quality standards (as denoted in NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1.) within monitoring well denoted as MW-1 only. The remainder of the groundwater monitoring points were returned with non-detect sample concentrations during the June 2010 sampling event. As documented in laboratory analysis, TCE, DCE and vinyl chloride were the VOCs detected in the most frequently above standards in the overburden groundwater samples. Aside from TCE and the associated dechlorination components, there is relatively little indication of overburden groundwater impact with respect to VOCs. This finding confirms previous investigations that identified TCE and DCE as the principal contaminants of potential concern for groundwater on-site.

Semi-Volatile Organic Compounds

There were no reportable semi-volatile organic compounds detected in the five groundwater samples submitted for analysis.

Priority Pollutant Metals

As metals are naturally occurring in the environment, the targeted PP metals were detected in each groundwater sample analyzed during this RI. On account of low groundwater recharge, only unfiltered samples were submitted for analysis. Most likely, the suspended solids or turbidity encountered while collecting samples from these low production wells, played a role in the increased concentrations of the reported metals during analysis.

4.0 Exposure Pathways

Considering the commercial redevelopment activities at the Site, remedial excavation work is anticipated on-site, and occupied buildings are located near the Site, the construction worker/trespasser, occupational worker and local business patron have been identified as potential human receptors. Exposures to the construction worker may occur during remediation activities, construction work and other activities that involve excavation at the Site. Exposures to occupational workers at future Site facilities could occur during normal business operation due to potential vapor intrusion into the site structure, by way of exposure to soil vapor or during any excavation activity that may take place on or around the Site. Exposure to business patrons of nearby properties could potentially occur during excavation work at the Site through dispersion of particulates and volatilization of contaminants. Potential routes of exposure include:

- Inhalation of vapors released from volatile substances present in subsurface soils (potential future occupational worker and construction worker/trespasser, and local patron during construction);
- Ingestion and dermal contact of substances in subsurface soils (potential future occupational worker and construction worker/trespasser); and
- Ingestion, inhalation and dermal contact with substances present in groundwater (potential future occupational worker and construction worker/trespasser);

Potential exposure during the remedial work has been and will be managed with a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) designed to protect Site workers and the public (see Appendix A and B respectively). Potential future exposure to residual contamination, if any, will be mitigated by way of institutional controls and a site management plan.

5.0 REMEDIAL ALTERNATIVES ANALYSIS

Remedial alternatives included in this RAA were developed based on the nature and extent of contamination, geotechnical and spatial considerations, potential redevelopment activities, and technological feasibility. As a result of these considerations, and in light of the implementation of the building demolition projects, the source removal IRM's, and the installation of a SSDS under the newly constructed commercial building, the potential remedial alternatives evaluated are focused on addressing remaining/residual areas of concern and future monitoring of groundwater.

5.1 Remedial Objectives

The overall remediation objectives are to meet standards, criteria, and guidance, and be protective of human health and the environment. The remedial goals for this Site are to:

- ✓ Remove, contain, or treat, to the extent practicable, potential on-site sources of contamination;
- ✓ Prevent, to the extent feasible, potential future off-site migration of on-site groundwater and/or soil vapor contamination;
- ✓ Eliminate, to the extent feasible, potential on-site environmental or public health exposures to on-site contamination that may remain in groundwater and/or soil vapor.

The evaluation of remedial alternatives in this RWP includes an evaluation of feasible actions aimed at meeting the above stated objectives. These alternatives have been further evaluated in more detail based upon the screening criteria set forth in 6 NYCRR Part 375. An alternatives analysis matrix is presented in Table 1, below.

TABLE 1: Summary of Alternative Technologies Subject to Screening

Evaluated Method, Technology, or Approach	Assessment Criteria								
	Overall protection of human health and the environment	*Compliance with standards, Criteria, and Guidance Values*	*Short-term effectiveness*	*Long-term effectiveness and permanence*	*Reduction of toxicity, mobility, and volume*	*Feasibility*	*Community Acceptance*	*Cost*	*Land-use*
Alternative 1: Track 1: Unrestricted Use Alternative (i.e., further excavation)	Protective of human health and the environment	Complies with the requirement to remove contaminated material from the Site. Complies with "Unrestricted Use" SCO	Effective in the short term due to full source removal	Effective in the long term due to full source removal	Removal of all impacted soil on- site would effectively address toxicity, mobility and volume with maximum certainty	Difficult to implement	Likely to be accepted	High	Anticipated land use is restricted residential.
Alternative 2: Track 4: Restricted Residential Use (i.e., soil cover installation, installation of a SSDS and site management).	Protective of human health and the environment	Does not totally comply with standards	Somewhat effective in the short term due to soil excavation	Effective in the long term due to soil excavation. Low level impacts remaining on-site following remedial action would be mitigated through site management plan	Removal of significantly impacted on-site would likely address most toxicity, mobility and volume	Relatively simple to implement. Management could be difficult during construction	Maybe acceptable	Moderate	Anticipated land use is restricted residential. Institutional Controls which are not already in place, will be required.

5.2 NYS Review Criteria

Potential technologies and specific Site remedial alternatives are analyzed relative to criteria developed by the NYSDEC. This section discusses each of these criteria, with particular concern for their relevance to this Site. The following review criteria have been developed to address the technical and policy considerations that are used in the selecting the preferred remedial alternative.

1. **Overall Protection of Human Health and the Environment**
   The community's post-remedial exposure to affected materials is evaluated including air, soil vapor, groundwater, soils, sediments, surface waters, and wildlife vectors.

2. **Compliance with Standards, Criteria and Guidance Values (SCGs)**
   Detected contaminants of concern are compared to relevant Federal, State or Local regulatory standards. SCGs included in this RAA/RWP are derived from NYSDEC Remedial Program Soil Cleanup Objectives for Unrestricted and Restricted Residential Use, as provided in 6 NYCRR Subpart 375, Table 375-6.8(a) and Table 375-6.8(b), and (as warranted) on NYSDEC Technical and Administrative Guidance Memorandum #4046 (TAGM 4046), including subsequent NYSDEC memoranda.

3. **Short-term Effectiveness**
   Short-term effectiveness is measured relative to the level of protection afforded to the community during remediation activities. In addition, other impacts to the environment are assessed, as well as the time necessary to implement alternatives.

4. **Long-Term Effectiveness and Permanence**
   Long-term effectiveness and permanence of the remedial action is assessed. Generally, a time frame of thirty years is used for purposes of comparison and analysis; however, the ultimate objective is to promote a remedial alternative that is effective for the time period that this Site is used for restricted residential development. In addition, residual risks are evaluated, and the adequacy and reliability of proposed controls are assessed as they relate to the proposed remedy and the surrounding community.

5. **Reduction of Toxicity, Mobility, and Volume**
   The reduction of several factors of concern is assessed including toxicity, mobility and volume of the identified contaminants of concern. The anticipated reduction in volume, and the post-remedial mobility and toxicity of remaining Site contaminants, is assessed.

6. **Feasibility**
The suitability of each alternative is analyzed in relation to Site-specific conditions, as well as how reasonable is its implementation. As part of this assessment, the availability of services and materials, and the alternative's cost-effectiveness is considered.

7. **Community Acceptance**
The people most directly impacted by the final selection of a Site remedy are the inhabitants of the local community. The concerns of the community are assessed in conjunction with the first six criteria. Community acceptance is evaluated following the public comment period.

8. **Costs**
Consideration is given to the costs associated with each potential remedial alternative. A cost for each alternative is formulated based on reasonably foreseeable expenses (both initial and long term costs).

9. **Land Use**
The anticipated land use at the Site is restricted residential (which would also allow commercial usage) via an environmental easement. The land use criterion evaluates the reasonable anticipated future use of the Site and its surroundings when unrestricted levels would not be achieved, including applicable zoning laws and maps.

5.3 Description of Remedial Alternatives

5.3.1 Alternative 1: Track 1 – Unrestricted Use

This alternative would meet Track 1 criteria under the BCP with no restrictions on development.

Description

The Full Source Removal – Unrestricted Use Alternative would involve:

- Site Clearing and Demolition
- Petroleum Bulk Storage Tank Removal/Closure
- Removal of all soils from the Utility Platers/Kingston Diagnostics property that contains contaminant concentrations above NYSDEC Remedial Program (Part 375) "unrestricted use" Soil Cleanup Objectives (SCO) along with confirmatory soil sampling.

Site Clearing and Demolition

All petroleum bulk storage tanks will be excavated, cleaned and properly disposed of. A sweep of the buildings to remove residual hazardous materials and any asbestos-containing materials will be properly identified and removed. The structures will be demolished.

Prior to demolition, a Health and Safety Plan (HASP) will be prepared for the selected alternative that provides comprehensive and appropriate protections for all on-Site personnel and surrounding populations. The HASP will detail known and possible areas of concern. The HASP will include safety and monitoring plans that conform to the standards and requirements of applicable agencies, including the NYSDOL and the OSHA.

Soil Removal Activities

All site soils exceeding the Unrestricted Use SCOs will be excavated and removed. It is anticipated that over 5,000 cubic yards of soil would require removal in order to meet Track 1 levels. Material would be excavated until all VOCs, metals and petroleum contaminated Site soils are removed and clean end points are encountered and confirmed by laboratory analysis. All soils removed as a regulated waste would need to be replaced with certified clean fill. Personnel performing soil excavation and sampling will be properly trained in accordance with OSHA and NYSDOL requirements. Site personnel will be informed of Site-specific concerns and properly instructed with regard to pertinent details.

Implementation Schedule

It is estimated that the time necessary to design and conduct demolition and soil removal would be six months. This schedule assumes no seasonal constraints.

Criteria Assessment

Overall Protection of Human Health and the Environment: This alternative is effective for protecting human health and the environment.

Compliance with Standards, Criteria and Guidance Values: This alternative removes all known sources of contamination and associated soil containing contaminant concentrations above SCGs from the Site. Post remedial conditions would meet or exceed clean up requirements.

Short Term Effectiveness: The Full Source Removal is considered to be effective in protecting human health and the environment in the short term. This alternative would involve the removal off all on-Site contaminated soils, and would eliminate exposure to site contaminants. The implementation of appropriate measures during building demolition and/or on-Site soil disturbance activities is likely to effectively prevent the release of significant contaminants into the environment. This alternative also provides short-term effectiveness in protecting the surrounding community by decreasing the risk of contact with site contaminants. The implementation of a site specific HASP will serve to minimize potential short-term impacts to the surrounding community from increased vehicle traffic and noise.

Long Term Effectiveness: The Full Source Removal would remove the on-Site sources of contamination and remove future concerns with regard to potential Recess Long-term impacts to the surrounding community will be positive as future threats to human health and the environment will be eliminated.

Reduction of Toxicity, Mobility, and Volume
The Full Source Removal would remove all on-Site sources of contamination.

Feasibility: Achieving unrestricted SCOs may be difficult because the whole Site is comprised of fill of unknown origin. Excavated soils and imported clean fill will be transported via trucks, resulting in logistical concerns for traffic, noise, and dust. Short term impacts, such as noise, truck traffic, diesel emissions, and replacement land consumption could be significant.

Community Acceptance: Community would likely accept the Full Source Removal Alternative as it would be effective in protecting human health and the environment in both the short and long term.

Costs: The costs associated with the Full Source Removal Alternative would be costs resulting from the demolition of on-Site Structures, removal of all contaminated soils, and replacement of excavated soil with clean fill. Total costs for Full Source Removal - Unrestricted Use Alternative is estimated at no less than $1,000,000.

Land Use: This alternative provides improvement in Site and local area land use by transforming the Site from an abandoned industrial property to an appealing commercial property. This improvement is consistent with the planned land use of the Site and adjacent and surrounding land uses.

5.3.2 Alternative 2: Track 4 - Restricted Residential Use

This alternative would meet Track 4 restricted residential criteria under the Brownfields Cleanup Program.

Description

Site Specific Use Based Cleanup – Restricted Residential Alternative includes:

- Site Clearing and Demolition;
- Petroleum Bulk Storage Tank Removal/Closure;
- Soil Removal and Confirmatory Soil Sampling;
- Site cover installation;
- Installation of a sub-slab depressurization system; and
- Implementation of a Site Management Plan to ensure the long-term effectiveness of these response actions, including the maintenance of engineering controls, provisions for groundwater monitoring, periodic inspections and contingency plans for soil management.

Site Clearing and Demolition

All petroleum bulk storage tanks will be excavated, cleaned and properly disposed of. A sweep of the buildings to remove residual hazardous materials and any asbestos-containing materials will be properly identified and removed. The structures will be demolished.

Prior to demolition, a Health and Safety Plan (HASP) will be prepared for the selected alternative that provides comprehensive and appropriate protections for all on-Site personnel and surrounding populations. The HASP will detail known and possible areas of concern. The HASP will include safety and monitoring plans that conform to the standards and requirements of applicable agencies, including the NYSDOL and the OSHA.

Soil Removal Activities

Under the site specific use based clean-up, Site soils slated for removal were source areas previously identified during investigative procedures that displayed exceedances in SCOs. It is anticipated that over 2,500 cubic yards of soil would require removal in order to meet Track 4 levels. Soils at locations where sample data indicate isolated exceedances will not be removed. All soils removed as a

regulated waste would need to be replaced with the same volume of clean fill. Personnel performing soil excavation and sampling will be properly trained in accordance with OSHA and NYSDOL requirements. Site personnel will be informed of Site-specific concerns and properly instructed with regard to pertinent details.

Site Cover Installation

At the completion of site remediation, a soil cover will be installed at the Site. Said cover will consist of a 24-inch soil barrier, asphalt and/or concrete of sufficient thickness. Where historical grades change due to site construction, the 24-inch soil barrier layer may be substituted by asphalt or concrete of sufficient thickness and/or on-site buildings.

Sub slab Depressurization System

During the construction of the on-Site buildings, a Sub slab Depressurization System (SSDS) will be installed to mitigate any potential vapor intrusion.

Site Management Plan

The Site Management Plan (SMP) will consist of a groundwater monitoring plan and soil management plan detailing activities necessary for any soils excavated in the future. Furthermore, the SMP will contain a description of activities necessary to maintain and operate the SSDS.

Implementation Schedule

It is estimated that the time necessary to design and conduct demolition and soil removal would be three months. This schedule assumes no seasonal constraints.

Criteria Assessment

Overall Protection of Human Health and the Environment: This alternative is effective for protecting human health and the environment. Exposure to materials remaining on-site subsequent to excavation and containing contaminant concentrations above Track 4 guidance will be prevented by a two foot barrier layer of clean fill. No significant impacts are therefore likely from low-level contamination remaining beneath the barrier layer.

Compliance with Standards, Criteria and Guidance Values: This alternative removes known sources of contamination (grossly impacted soils) and associated significantly contaminated soil from the Site. Post remedial conditions would meet or exceed clean up requirements for Restricted Residential Use sites.

Short Term Effectiveness: Partial Source Removal is considered to be effective in protecting human health and the environment in the short term. This alternative would involve the removal off most on-Site contaminated soils, and would thereby eliminate exposure to site contaminants. The implementation of appropriate measures during building demolition and/or on-Site soil disturbance activities is likely to effectively prevent the release of significant contaminants into the environment. This alternative also provides short-term effectiveness in protecting the surrounding community by decreasing the risk of contact with site contaminants. The implementation of a site specific HASP will serve to minimize potential short-term impacts to the surrounding community from increased vehicle traffic and noise.

Long Term Effectiveness: Partial Source Removal would remove the significant sources of contamination and substationally remove future concerns with regard to potential RECs. Land use will be limited to "Restricted Residential" and will include the implementation of institutional and engineering controls. Long-term impacts to the surrounding community will be positive as future threats to human health and the environment will be substantially eliminated.

Reduction of Toxicity, Mobility, and Volume: Partial Source Removal Alternative would remove significant sources of on-Site contamination and thus reduce the potential mobility.

Feasibility: The Site Specific Use Based Cleanup – Restricted Residential Use Alternative is considered relatively simple to implement. Most all components of the alternative can be implemented during the construction phase of the project.

Community Acceptance: Community would likely accept Partial Source Removal as it would be assist in protecting human health and the environment in both the short and long term.

Costs: The costs associated with Partial Source Removal Alternative would be costs resulting from the demolition of on-Site Structures, removal of bulk contaminated soils, and replacement of excavated soil with clean fill. Total costs are estimated at between $400,000 and $600,000.

Land Use: This alternative provides improvement in Site and local area land use by transforming the Site from an abandoned industrial property to an appealing commercial property. This improvement is consistent with the planned land use of the Site and adjacent and surrounding land uses.

5.4 Recommended Cleanup Alternative

Alternative 1 or Full Source Removal would likely have a favorable outcome; however, such broad scale excavation may be impossible to implement, would take significantly longer, and would involve a large volume of truck traffic to and from the Site. In addition, there are very high costs associated with this alternative. Alternative 2 would also have a favorable outcome and would provide for the use and redevelopment of the site consistent with applicable zoning.

The recommended remedial alternative for this Site is Site Specific Based Cleanup or Track 4 – Restricted Residential. Based on available environmental data, the previously implemented IRM has led to the removal of most of the on-Site contamination. Thus the proposed remedy would include the installation of a demarcation barrier, site cover, installation and maintenance of a monitoring well network, groundwater contingency plan, installation of a SSDS, and imposition of institutional controls (i.e.; environmental easement).

6.0 REMEDIAL WORK PLAN

6.1 Purpose and Content of Report

In accordance with the May 2010 Draft DER-10 Technical Guidance for Site Investigation and Remediation published by the New York State Department of Environmental Conservation and the May 2004 Draft Brownfield Cleanup Program Guidelines, this RWP has been generated for the former Utility Platers and Kingston Diagnostic facilities. The proposed remedial action was consistent with the preferred Remedial Alternative as selected in Section 5, above. The components of the remedy set forth in the remedial work plan are provided in Section 6.2 Overview of Proposed Remedial Action below.

A Site Remediation Map (Figure 4), depicting relevant Site features and areas of impacted soil excavation, is attached for your review. The RWP presented herein has been developed to detail design components and technician specifications to execute the preferred Remedial Alternative. All proposed work has been and will be conducted according to a Site specific Health and Safety Plan (HASP), which is a component of the RWP.

6.2 Overview of Proposed Remedial Action

The proposed remedial actions will consist of, and incorporates, the following:

- Construction of a cover system across the site to prevent exposure to remaining contamination. The cover system will consist of at least two feet of clean soil or newly constructed paving or concrete surfaces.

- Installation of sub-slab depressurization systems in all buildings constructed at the site to address potential volatile organic vapor concerns that remain on-site.

- Groundwater monitoring will be conducted to ensure the contaminant levels in groundwater continue to decline as a result of the source removal completed in 2009.

- Implementation of a contingency plan that allows for further groundwater remediation via application of HRC or other similar technology (e.g., in-situ chemical oxidation), in the event that volatile organics and /or their breakdown compounds remain consistently above groundwater standards or have not become asymptotic (i.e., the concentrations of volatile organics remain at their lowest without further reduction in concentration) at an acceptable level over an extended period.

- Prevent exposure to residual contamination by placing a restriction on groundwater use at the site.

- Restrict usage of the site to restricted residential (which would also allow commercial usage) via an environmental easement.

Following remediation, the site will be subject to a Site Management Plan, which will provide for the operation and maintenance of remedial systems at the site and require periodic certification that all institutional controls (e.g., environmental easement) and all engineering controls (e.g., the site cover system, sub-slab depressurization system) remain in place and effective.

6.3 Site Preparation Services

This section of the Remedial Work Plan provides details on activities and services that must be initiated and/or completed prior to the implementation of Site remediation services.

6.3.1 Agency Notification

The NYSDEC will be notified in writing at least five business days prior to the initiation of any on-Site work and during the course of field work. Changes to fieldwork scheduling will be provided via facsimile transmission and/or email. All applicable local agencies will also be notified prior to the initiation of Site

work. NYSDEC will have the opportunity to participate in all remediation project status meetings (adequate notice of these meetings will be provided). Prior to the implementation of any remedial tasks, a request for a complete utility mark out will be submitted, as required. Confirmation of underground utility locations will be secured, and a field check for the utility mark out will be conducted prior to the initiation of field work.

7.0 PROPOSED REMEDIAL ACTION

This section of the RWP provides detailed information on the remedial tasks that will be conducted at the subject property. During the course of all remedial activities, appropriate measures will be implemented to ensure that contaminated soil is minimally disturbed.

7.1 Excavation Backfill/Installation of Cover Layer

With NYSDEC concurrence that the excavation implemented as an IRM was complete, a demarcation layer was installed and the excavation area was backfilled with clean imported fill material which met restricted residential SCOs. Backfill material was placed into the excavation and compacted with a roller in 2-foot lifts to match the existing grade of the site and minimize settling. Select fill for the remedial excavation(s) met with 6 NYCRR 375-6.7(d) recommended cleanup levels or applicable BCP Soil Objectives, as appropriate. Where historical grades change due to site construction, the 24-inch soil barrier layer may be substituted by asphalt or concrete of sufficient thickness and/or on-site buildings. The determination to utilize substitute materials will be made based upon design considerations but will not be considered acceptable until written approval from the NYSDEC is received.

7.2 Installation of Sub-Slab Depressurization System

Interim remedial activities have resulted in the removal of all significant sources that could cause volatile organic vapors. As a supplemental preventative measure, a Sub-Slab Depressurization System (SSDS) was installed beneath the proposed on-site structure. When the SSDS controls are fully implemented, test data will be provided to the NYSDEC to verify the effectiveness of the unit. The SSDS will continue to operate and be maintained as an engineering control until such a time that the NYSDEC/NYSDOH approves terminating its operation.

7.3 Site Management

As the remedy results in residual contamination remaining in the subsurface, a Site Management Plan is required. Included in the SMP is an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site. The requirements for the operation, maintenance, and certification of engineering controls will also be described in a Site Management Plan that will be incorporated into the site Environmental Easement (EE) as required under the BCP. The SMP will also include a description of procedures to complete the post-implementation groundwater monitoring for ISCO effectiveness, and related reporting requirements to NYSDEC. The SMP will state that additional remedial measures and/or controls may be implemented in the future, if it is determined that the remedial goals established for this project are not met by the remedial actions and engineering controls under this RWP. The EE will require the on-going annual certification, unless otherwise provided in writing by the NYSDEC, of the engineering controls effectiveness. The annual certification will be signed by a qualified environmental professional as approved by the NYSDEC.

7.3.1 Institutional Controls

As required under the BCA for Track 4 cleanups, institutional controls will be implemented through recording of the Environmental Easement. Institutional controls will include:

- Restricting the use of the site to restricted residential unless prior approval is received from the NYSDEC and NYSDOH; and
- Prohibiting the use of site groundwater without proper treatment and approval by the NYSDEC.

7.3.2 Engineering Controls

Engineering controls to be incorporated into the Site Management Plan for the Site include:

- Site Cover;
- Demarcation Barrier;
- A Groundwater Contingency Plan; and
- Installation of an SSDS for buildings constructed on-Site.

8.0 FINAL ENGINEERING REPORT

At the completion of all services specified in the RWP, a Final Engineering Report will be prepared. The report will include:

- A Site or area planimetric map showing all remediated source areas (e.g., lateral limits of excavations), and significant site features.
- Tabular summaries of unit quantities including: volume of soil/fill excavated; disposition of excavated soil/fill; and volume/type/source of backfill.
- Number of USTs removed and scrap receipts
- Documentation on the disposition of impacted media removed from the Site.
- Post-treatment sample locations and results
- Copies of daily inspection reports and, if applicable, problem identification and corrective measure reports.
- Photo documentation of remedial activities.
- Text describing the remedial activities performed; a description of any deviations from the Work Plan and associated corrective measures taken; and other pertinent information necessary to document that the Site activities were carried out in accordance with this Work Plan. In addition, the report will include those items required pursuant to NYSDEC's internal FER checklist.

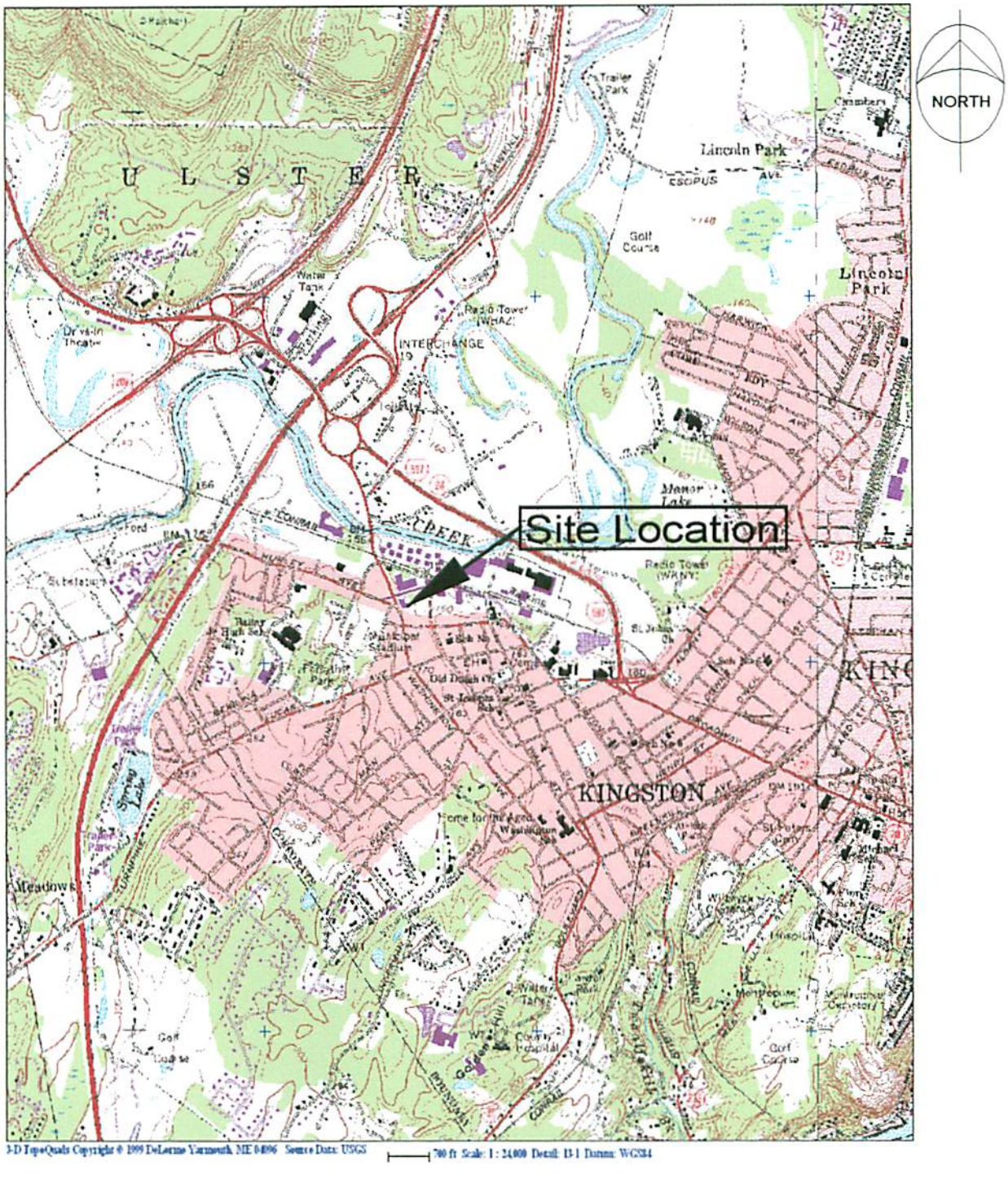
9.0 PROJECT SCHEDULE

Table 2, below, represents a conceptual schedule for implementing the actions detailed in this RWP.

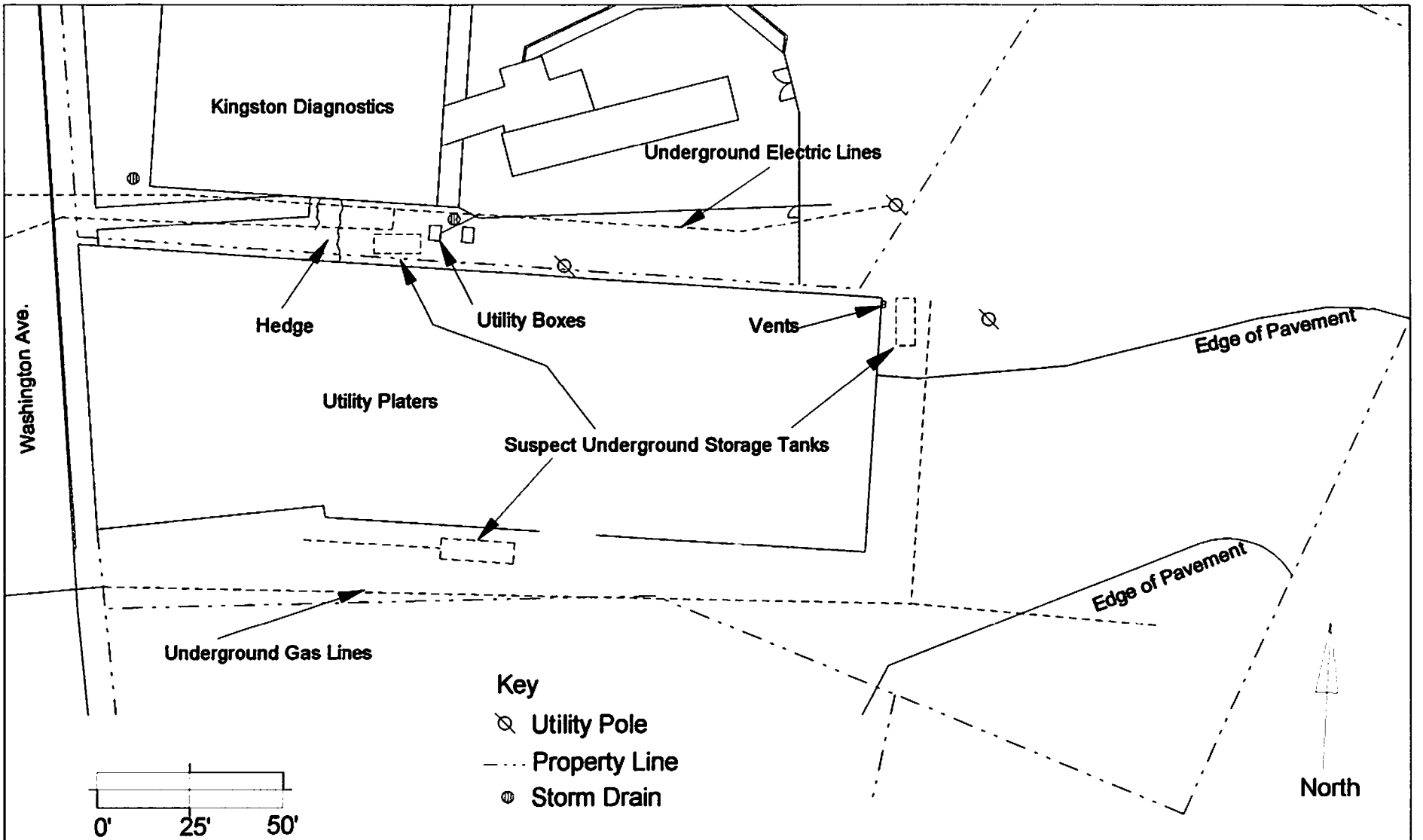
Table 2: Projected Schedule

Months	Action	Deliverables	Status
0 - 1	Site Demolition	Weekly status memos.	Completed September 2009
1 – 4	Soil Excavation/Removal	Weekly status memos on remedial actions (includes laboratory summary reports).	Completed October – November 2009
4 – 10	Barrier Layer Installation, SSDS Installation and Building Construction	Monthly progress reports as necessary.	Completed January – March 2010 Building construction completed June 2010
	Groundwater Well Installation and Monitoring		Completed May - June 2010
10 – 18	Project Closure/COC	Final Engineering Report with SMP and Environmental Easement.	To be completed

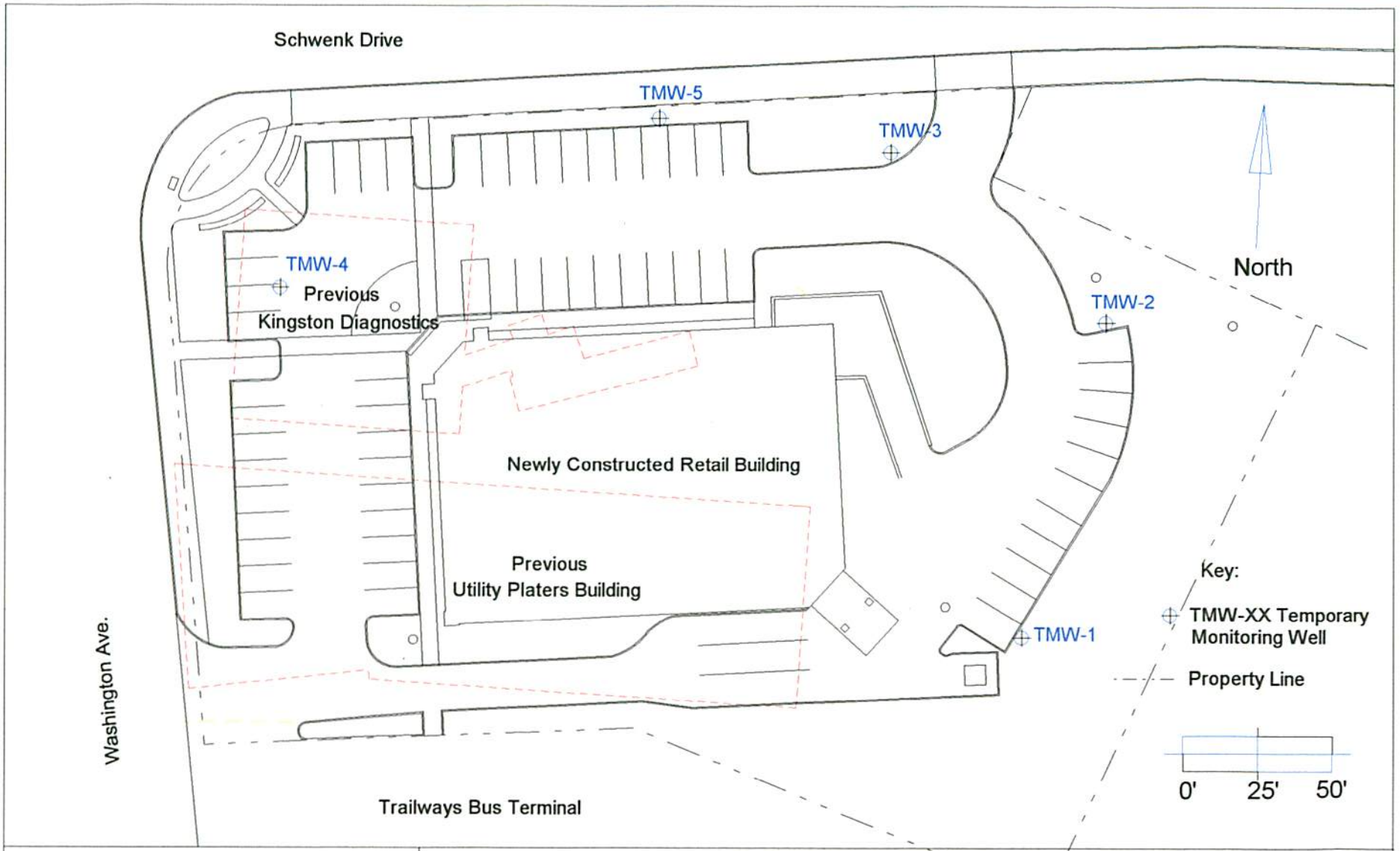
FIGURES



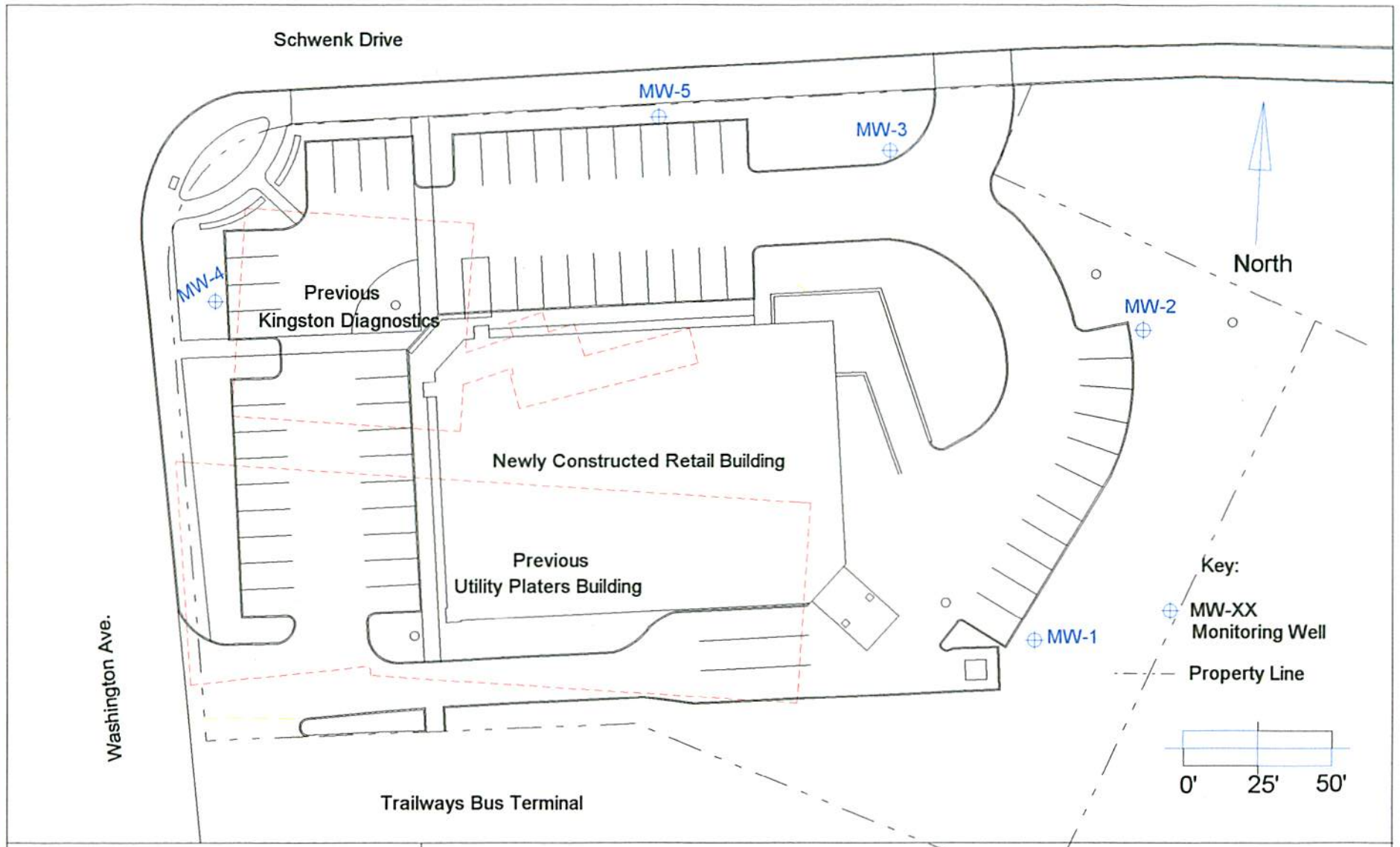
Client: Northeast Retail Leasing & Management, Company, LLC			**Site Location Plan**
Site: Utility Platers, Inc./Kingston Diagnostics			
Site No.: C356035	**Drawn by:** DJT	**Scale:** 1 : 24,000	**Figure No:** 1



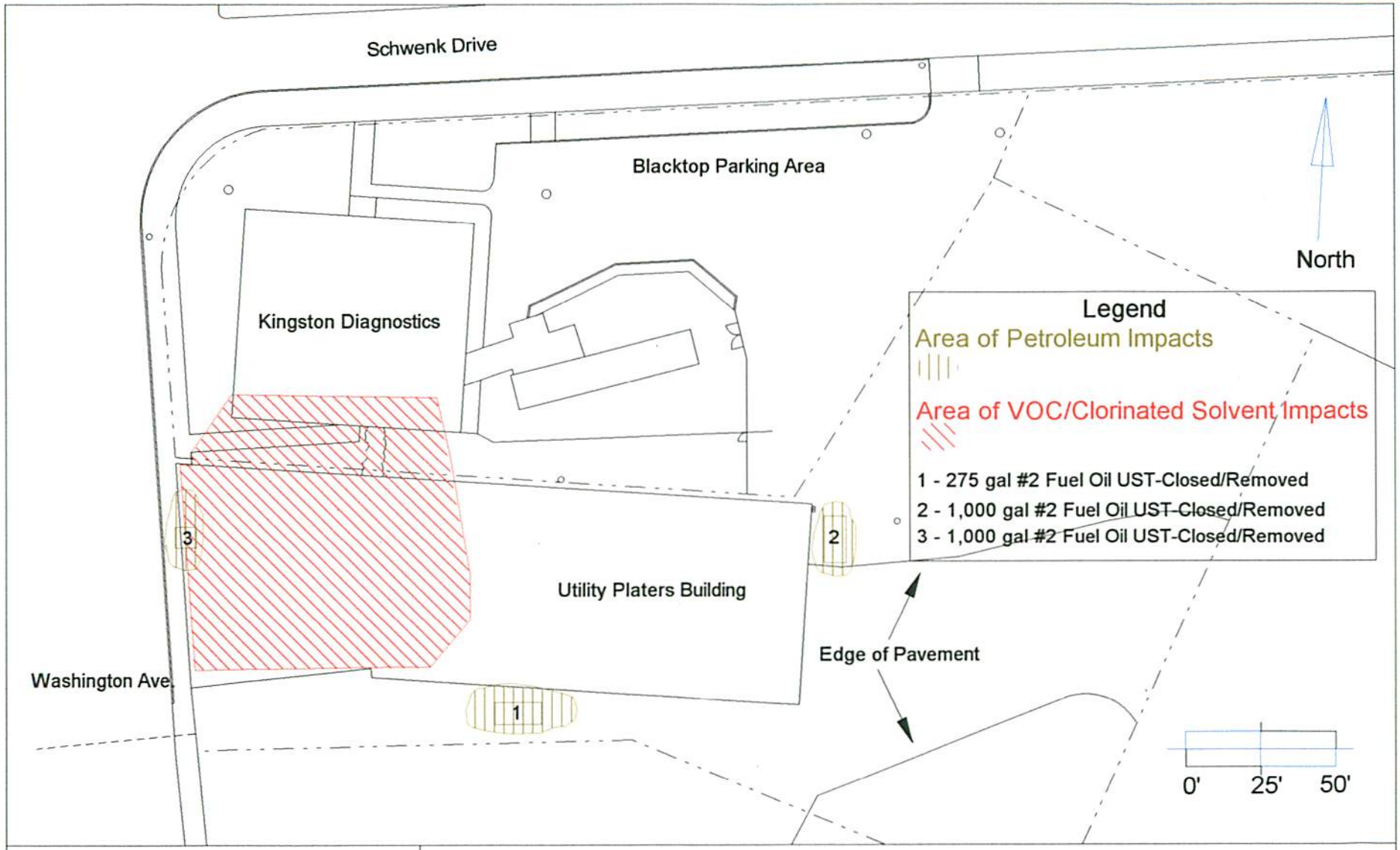
DT Consulting Services, Inc. 1291 Old Post Road Ulster Park, New York 12487 (845) 658-3484	Client: Northeast Retail Leasing & Management Company, LLC		
	Location: Utility Platers, Inc./Kingston Diagnostics, Kingston, New York		
	Title: Site (base) Map		
	Scale: Graphic	Drawn By: O.T.	Site No: C356035	Fig.#: 2



DT Consulting Services, Inc. 1291 Old Post Road Ulster Park, New York 12487 (845) 658-3484	Client: Northeast Retail Leasing & Management Company, LLC			
	Location: Utility Platers/Kingston Diagnostics, Kingston, Ulster County, New York			
	Title: Temporary Groundwater Monitoring Location Map			
	Scale: Graphic	Drawn By: O.T.	Site No: C356035	Fig.#: 3A



DT Consulting Services, Inc. 1291 Old Post Road Ulster Park, New York 12487 (845) 658-3484	Client: Northeast Retail Leasing & Management Company, LLC			
	Location: Utility Platers/Kingston Diagnostics, Kingston, Ulster County, New York			
	Title: Permanent Groundwater Monitoring Well Network			
	Scale: Graphic	Drawn By: O.T.	Site No: C356035	Fig.#: 3B



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

Client:	Northeast Retail Leasing & Management Company, LLC
Location:	Utility Platers/Kingston Diagnostics, Kingston, Ulster County, New York
Title:	Site Remediation Map

Scale: Graphic	Drawn By: OT	Site No: C356035	Fig.#: 4

ATTACHMENTS

ATTACHMENT A

Environmental Services Health & Safety Plan

Job Name: Utility Platers, Inc./Kingston Diagnostics BCP

Site Number: C356035

1.0 INTRODUCTION

DT Consulting Services, Inc. (DTCS) has designed a safety and health program to provide its employees 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 action procedures including the demolition of site structures, excavation and disposal of contaminated materials and the installation of a sub-slab depressurization system beneath the proposed on-site structure.

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 apprised 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 site remedial work entails intrusive activities, a specific Community Air Monitoring Plan has been generated for the Site. Refer to Attachment B for details.

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** Utility Platers, Inc./Kingston Diagnostics BCP
- **Client** Northeast Retail Leasing & Management Company, LLC
- **Client Contact/Phone Number** Dan Plotkin – (860)683-9000
- **Site Address** Utility Platers, Inc./Kingston Diagnostics
  Washington Avenue & Schwenk Drive
  Kingston, New York 12401
- **Cross Street** North Front Street & Schwenk Drive
- **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.

SUBSTANCE	PRIMARY HAZARDS
Volatile Organics	
Tichloroethene	Eye & skin irritation, nausea, vomiting, headache
1,1 Dichloroethane	Skin irrit., liver, kidney, lung damage
1,2 Dichloroethene	Eye irrit., respiratory irrit., central nervous system
Vinal chloride	Eye irrit., sore throat, dizziness, headache, nausea
Metals	
Beryllium	Cough, weakness, eye irrit.
Chromium	Eye and skin irrit., lungs
Copper	Skin irrit, nausea, vomiting
Lead	Abdominal pain, nausea, vomiting, headache
Nickel	Dermatitis, allergic asthma
Zinc	Eye & skin irrit., nausea, muscle aches, chills, throat irrit.

Action Levels

Action levels shall be determined by monitoring of work zone breathing space with a portable Photoionization detector (PID) or comparable instrument. Measurement of a sustained concentration above ambient (background) conditions shall initiate action. The following criteria shall be used to determine appropriate action:

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.

10.3 EMERGENCY INFORMATION

10.3.1 EMERGENCY RESPONDERS

10.3.1.1 HOSPITAL

Name: Kingston Hospital

Address & Telephone Number:
396 Broadway, Kingston, NY 12401
(845) 331-3131

Distance from Site: 1.69 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

Refer to Community Air Monitoring Plan

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 the preferred Remedial Alternative which calls for building demolition, UST decommissioning, the removal of significantly contaminated soil during construction activities, and the installation of a Sub-Slab Depressurization System beneath the proposed site structure. Upon completion of field work, a Final Engineering Report will be prepared to document site remedial activities.

ATTACHMENT B

DT CONSULTING SERVICES, INC.

COMMUNITY AIR MONITORING PLAN (CAMP)
FOR
UTILITY PLATERS, INC. AND
THE FORMER KINGSTON DIAGNOSTICS BUILDING SITES

BROWNFIELD CLEANUP PROGRAM (BCP)
SITE NUMBER C356035

August 2010

1.0 INTRODUCTION

The objective of this Community Air Monitoring Plan (CAMP) is to monitor air quality during site remedial procedures within designated work areas. This technical document is a necessary component of the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP). The subject property, known as Utility Platers, Inc., located at 416 Washington Avenue in the City of Kingston, Ulster County, New York was accepted into the BCP Program (Site Number C356035) in February, 2009. The contiguous property, formerly Kingston Diagnostics, was accepted into the BCP as an amendment to Site C356035 in November 2009. Both parcels are hereafter referred to as "the Site".

Execution of the CAMP will provide real time data for the documentation of volatile organic compounds (VOC's) and fine particulates (i.e. dust) at select locations surrounding the active remedial locale. By continuously monitoring air quality during intrusive site activities (and periodically for non-intrusive activities), the CAMP ensures a level of protection to the downwind community from airborne contaminant releases. All work will be performed in accordance to methods or their equivalents as contained in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation DER-10 – *Technical Guidance for Site Investigation and Remediation, Appendix 1A.*

As documented within the Remedial Investigative Work Plan/Interim Remedial Measures and Remedial Work Plan generated for the facility, investigation and remedial actions have been and will be concentrated within and down-gradient of the Utility Platers site structure. These sections of the Site have been identified as source zones as they were utilized for daily plating operations, petroleum bulk storage (PBS) and are areas of documented surface spills. The following CAMP will provide air monitoring procedures to be employed during investigative and remedial efforts across the Site. If deemed necessary, revisions to the CAMP will be made pending investigative/remedial efforts and the nature of contamination in a specific area of the Site. In addition to analysis and sampling methodologies to be utilized on the subject parcel, common-sense measures to maintain minimal VOC, dust and/or odor levels will also be employed around the work areas to the extent practical.

1.1 Site Location and Description

This CAMP provides site specific information on the air monitoring plan utilized during remedial procedures at the Utility Platers, Inc./Kingston Diagnostic facility located at the intersection of Washington Avenue and Schwenk Drive, Kingston, Ulster County, New York. The irregularly shaped 1.02-acre property historically

occupied by Utility Platers was improved with a one-story (slab on grade) masonry block structure that was operated as a zinc and chromium plating facility until its closure in the latter half of 2005. Use of the property for commercial plating services reportedly dates back to the 1950's. The facility was historically registered with the New York State Department of Environmental Conservation (NYSDEC) Petroleum Bulk Storage (PBS) Program as PBS No. 3-028886 and maintained an air permit (3510800069) until the facility operation was decommissioned. The building on the property has been demolished and removed from the property as part of an Interim Remedial Measure (IRM).

The Utility Platers parcel was bordered to the north by the former vacant medical office formerly known as Kingston Diagnostics which was added to the BCP Site because of contamination found at that property. This medical office building has been demolished and removed from the Site as part of an IRM. The site is bordered to the north by a presently vacant medical office, a bus terminal is located to the south, to the east by a dry cleaning establishment, while Washington Avenue and a mixed use commercial structure is present to the west. The site topography is generally level and at grade with Washington Avenue, while a moderate easterly slope is present within the eastern quadrant of the facility. According to City of Kingston Water Department and Public Works Department representatives, the subject property is being provided with a municipal water supply and sanitary waste treatment service.

2.0 AIR MONITORING PROCEDURES

2.1 Ground Intrusive – Continuous Monitoring

While performing ground intrusive remedial efforts on the subject property such as soil excavation, continuous monitoring will be performed and recorded for State (DEC and DOH) personnel review. Both VOC and particulate monitoring will be performed at appropriate intervals at an upwind locale and downwind of the exclusion zone.

2.1.1 VOC Monitoring, Response Levels, and Actions

Contaminants known to be present within the immediate work area or exclusion zone include volatile and semi-volatile organic compound and heavy metals or specifically, Trichloroethene (TCE), Dichoroethene, DCE and Vinyl Chloride (VC); Chromium, Nickel, Lead, Silver and Petroleum Hydrocarbons. Thus, the appropriate equipment to be employed for monitoring VOC levels would include the use of a photoionization detector or PID. As most petroleum products contain volatile organic compounds, PID screening can indicate the presence of volatile

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- If VOC's 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 will be halted, the source of vapors identified, corrective action taken to abate emissions, and monitoring continued. After these steps, work activities would resume provided that the total VOC level 200 feet downwind of the exclusion zone or half of 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.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, all activities will be shut down and appropriate actions taken.

The NYSDEC was notified as promptly as reasonably possible of any exceedance of a target air quality level and was notified promptly of any corrective actions taken in connection with such an exceedance. No exceedances were documented during remedial procedures at the Site. As stated previously, all recordings were maintained in a field log and are available for review by State agencies when requested.

2.1.2 Particulate Monitoring, Response Levels, and Actions

Temporary particulate monitoring stations were maintained during remedial procedures conducted at the Site for the purpose of continuously measuring particulate matter (PM) at upwind locations and downwind of the exclusion zone. Specific recording equipment utilized to perform PM included the use of real time area aerosol monitors, like the DataRAM or equivalent equipped with a PM-10 inlet head to measure particulate matter less than 10 micrometers in size. In addition to particulate detection, the monitoring equipment was integrating over a 15 minute (or less) period for comparison to the targeted airborne particulate action level. If the action level was exceeded during monitoring procedures, an audible alarm activated to notify the technician of an exceedance. Pursuant to NYSDEC DER-10 guidance, the following particulate response levels will be utilized while performing remediation on the subject property:

- 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 (such as lightly misting the excavation surface) would be employed. Work will continue with dust suppression techniques provided that downwind PM-10 particulate concentrations do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work will be stopped and a re-evaluation of activities initiated. Work will resume provided that dust suppression measures or 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.

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2.2 Non Intrusive – Periodic Monitoring

Non intrusive activities performed in relation to the Utility Platers, Inc./Kingston Diagnostic facility would most typically include collection of soil or sediment samples and/or groundwater sampling from existing monitoring wells at locations within the property boundaries. Periodic monitoring could be performed during these events if deemed necessary by the NYSDEC or NYSDOH, although noticeable VOC vapors have not been detected during any non intrusive field activity as conducted by DT Consulting Services, Inc. (DTCS) personnel to date.

Monitoring protocol to be executed during non intrusive site activities would include the use of a PID to record VOC concentrations during sample collection at the following intervals:

- Upon arrival at the sampling location.
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DT CONSULTING SERVICES, INC.

COMMUNITY AIR MONITORING PLAN (CAMP) FOR UTILITY PLATERS, INC. AND THE FORMER KINGSTON DIAGNOSTICS BUILDING SITES

BROWNFIELD CLEANUP PROGRAM (BCP)
SITE NUMBER C356035

August 2010

1.0 INTRODUCTION

The objective of this Community Air Monitoring Plan (CAMP) is to monitor air quality during site remedial procedures within designated work areas. This technical document is a necessary component of the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP). The subject property, known as Utility Platers, Inc., located at 416 Washington Avenue in the City of Kingston, Ulster County, New York was accepted into the BCP Program (Site Number C356035) in February, 2009. The contiguous property, formerly Kingston Diagnostics, was accepted into the BCP as an amendment to Site C356035 in November 2009. Both parcels are hereafter referred to as "the Site".

Execution of the CAMP will provide real time data for the documentation of volatile organic compounds (VOC's) and fine particulates (i.e. dust) at select locations surrounding the active remedial locale. By continuously monitoring air quality during intrusive site activities (and periodically for non-intrusive activities), the CAMP ensures a level of protection to the downwind community from airborne contaminant releases. All work will be performed in accordance to methods or their equivalents as contained in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation DER-10 – *Technical Guidance for Site Investigation and Remediation, Appendix 1A.*

As documented within the Remedial Investigative Work Plan/Interim Remedial Measures and Remedial Work Plan generated for the facility, investigation and remedial actions have been and will be concentrated within and down-gradient of the Utility Platers site structure. These sections of the Site have been identified as source zones as they were utilized for daily plating operations, petroleum bulk storage (PBS) and are areas of documented surface spills. The following CAMP will provide air monitoring procedures to be employed during investigative and remedial efforts across the Site. If deemed necessary, revisions to the CAMP will be made pending investigative/remedial efforts and the nature of contamination in a specific area of the Site. In addition to analysis and sampling methodologies to be utilized on the subject parcel, common-sense measures to maintain minimal VOC, dust and/or odor levels will also be employed around the work areas to the extent practical.

1.1 Site Location and Description

This CAMP provides site specific information on the air monitoring plan utilized during remedial procedures at the Utility Platers, Inc./Kingston Diagnostic facility located at the intersection of Washington Avenue and Schwenk Drive, Kingston, Ulster County, New York. The irregularly shaped 1.02-acre property historically

occupied by Utility Platers was improved with a one-story (slab on grade) masonry block structure that was operated as a zinc and chromium plating facility until its closure in the latter half of 2005. Use of the property for commercial plating services reportedly dates back to the 1950's. The facility was historically registered with the New York State Department of Environmental Conservation (NYSDEC) Petroleum Bulk Storage (PBS) Program as PBS No. 3-028886 and maintained an air permit (3510800069) until the facility operation was decommissioned. The building on the property has been demolished and removed from the property as part of an Interim Remedial Measure (IRM).

The Utility Platers parcel was bordered to the north by the former vacant medical office formerly known as Kingston Diagnostics which was added to the BCP Site because of contamination found at that property. This medical office building has been demolished and removed from the Site as part of an IRM. The site is bordered to the north by a presently vacant medical office, a bus terminal is located to the south, to the east by a dry cleaning establishment, while Washington Avenue and a mixed use commercial structure is present to the west. The site topography is generally level and at grade with Washington Avenue, while a moderate easterly slope is present within the eastern quadrant of the facility. According to City of Kingston Water Department and Public Works Department representatives, the subject property is being provided with a municipal water supply and sanitary waste treatment service.

2.0 AIR MONITORING PROCEDURES

2.1 Ground Intrusive – Continuous Monitoring

While performing ground intrusive remedial efforts on the subject property such as soil excavation, continuous monitoring will be performed and recorded for State (DEC and DOH) personnel review. Both VOC and particulate monitoring will be performed at appropriate intervals at an upwind locale and downwind of the exclusion zone.

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