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August 4, 2006

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Project Manager MGP Remedial Section
New York State Department of Environmental Conservation
Division of Environmental Remedi ation
Bureau of Western Remedial Action, 11th Floor
625 Broadway
Albany, New York 12233-7010

Re: Greenpoint Energy Center
Northeast Corner
Site No. V-006312
Supplemental Site Investigation Report and Interim Remedial Measure Work Plan

Dear Mr. Omorogbe:

Enclosed please find one electronic copy and one bound copy of a report entitled, *"Supplemental Site Investigation Report and Interim Remedial Measure Work Plan."*

This report documents the completion of the Supplemental Site Investigation activities and details the proposed Interim Remedial Measure activities within the Northeast Corner of the Greenpoint Energy Center. Please note that this version of the report incorporates comments from the New York State Department of Environmental Conservation (NYSDEC) received on July 24, 2006. The schedule contained in Section 3.12 of the report has been updated to reflect the current anticipated construction schedule.

Please contact me at 718-403-3053 or Thomas Campbell at 516-545-2555 should you have any questions regarding this report.

Very truly yours,

For
Tracey Bell
Project Manager

Enclosure

cc: G. Laccetti, NYSDOH
R. Rusinko, NYSDEC- Tarrytown
L. Liebs, KeySpan (1 CD)
F. Murphy, KeySpan (1 CD)

bcc: T. Campbell, KeySpan
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GREENPOINT ENERGY CENTER

NORTHEAST CORNER

GREENPOINT, BROOKLYN, NEW YORK

Site No. V-006312

SUPPLEMENTAL

SITE INVESTIGATION REPORT

AND

INTERIM REMEDIAL MEASURE WORK PLAN

Prepared for:

KEYSPAN CORPORATION

One MetroTech Center
Brooklyn, New York, 11201-3850

August 4, 2006

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EXECUTIVE SUMMARY

This Supplemental Site Investigation Report (SSIR) and Supplemental Interim Remedial Action Work Plan (SIRMWP) documents both the completed supplemental soil investigation activities and the planned remedial actions that will be implemented within the Northeast Corner of the Greenpoint Energy Center located in the Greenpoint section of Brooklyn, New York (i.e., Northeast Corner). The location of the Greenpoint Energy Center is depicted on Figure 1 located in Appendix A. Both the completed Supplemental Site Investigation program and the planned Supplemental Interim Remedial Measure will be conducted in accordance with a Voluntary Agreement (No. V-006312) established for the Northeast Corner between KeySpan Corporation (KeySpan) and the New York State Department of Environmental Conservation (NYSDEC).

In order to facilitate planned construction excavation activities in the Northeast Corner, soil and groundwater investigations were undertaken in 2004 and 2005. Based on the results of those field programs, an Interim Remedial Measure (IRM) was implemented in May and June 2005 to address residual soil impacts in subsurface soils. The results of the completed investigation program and IRM are documented in the June 2006 Final IRM Completion Report submitted to the NYSDEC.

Subsequent to the completion of the June 2005 IRM, the development of additional construction details related to future construction activities in the Northeast Corner prompted the completion of a supplemental soil investigation. The purpose of the supplemental investigation was to characterize subsurface soil conditions within the construction excavation areas. An additional 28 soil borings and four test pits were installed during the supplemental investigation program. Figure 2 depicts the locations of these features. Soil sample analytical results revealed the presence of metals, semivolatile organic and volatile organic compounds (SVOCs and VOCs) at levels typical of industrial sites. Visual observations of soil indicated the presence of MGP tar related impacts in the soil. Both visual observations and analytical data indicate that impacted soils occurred principally within the surface (i.e., within the top seven feet) and are associated with surface fill previously deposited in the area. A summary of the soil observations and analytical results is presented in Sections 2.3 and displayed on Figure 2. Figure 2 also depicts the proposed soil excavation plan for construction excavation areas not addressed as part of the SIRM. Management of soils for these areas are addressed in a Soil Management Plan previously submitted to the NYSDEC.

In consideration of the planned construction excavation activities and the results of the supplemental soil investigation program, the following remedial measure is planned for the area:

- Excavation Areas 1A/1B/1C: Excavation and removal of soil and associated debris in Excavation Areas 1A/1B to a depth of seven feet below ground surface (bgs) and backfilling the excavation area with approved material. Excavation and removal of soil and associated debris to a depth of five feet bgs in Excavation Area 1C and backfilling the excavation with approved material.

- Excavation Area 2: Excavating and removal of soil and debris to a depth of five and one half feet bgs and backfilling the excavation with approved material.
- Excavation Area 3: Excavating seven feet bgs and backfilling with the excavated material which has been determined to be suitable for on-site reuse.
- Excavation Area 4: Excavating soil and debris to a depth of seven and one half feet bgs in five discrete areas and backfilling with approved material.

The planned IRM is depicted on Figure 3.

This Report is organized into five sections. Section 1.0, Introduction, provides an overview of the investigation area and describes the structure of the Report. Section 2.0, Supplemental Soil Investigation Program, summarizes the soil investigations conducted in 2006. Section 3.0, Remedial Action Approach, describes the activities to be undertaken to implement the Supplemental Interim Remedial Measure. Section 4.0, Institutional Controls and Engineering Controls, discusses the post-remedial institutional and engineering controls proposed for the remedial area. Finally, Section 5.0, OM&M Plan, presents the proposed outline for the Operations, Maintenance and Monitoring (OM&M) Plan.

1.0 INTRODUCTION

KeySpan Corporation (KeySpan) has initiated planning and design activities to support future construction activities within the Northeast Corner of the Greenpoint Energy Center, located in the Greenpoint Section of Brooklyn, New York (i.e., the "Northeast Corner"). Subsurface site work is anticipated to be undertaken to prepare the site for construction. KeySpan Corporation (KeySpan) has retained Paulus, Sokolowski and Sartor Engineering, PC (PS&S) to conduct a Supplemental Site Investigation (SSI) and Supplemental Interim Remedial Measure (SIRM) within the Northeast Corner in preparation for site construction. Both the SSI and the planned SIRM will be conducted pursuant to Voluntary Agreement Number V-006312 between the New York State Department of Environmental Conservation (NYSDEC) and KeySpan.

The SSI was completed in accordance with the Letter Work Plan submitted to the NYSDEC March 21, 2006. The SSI was intended to assess the presence/absence of environmental impacts in the soils underlying the planned areas for site construction and identified impacts to soil. Therefore, a SIRM is proposed to be implemented to address the identified environmental soil impacts.

Due to the need to support future site related construction activities, completion of the selected remedial action must occur on an expedited schedule. Accordingly, this Site Investigation Report/Supplemental Interim Remedial Measure Work Plan (SIR/SIRMWP) presents the results of the remedial soil investigation, identifies remedial goals and presents the planned remedial action.

1.1 Site Background

The Greenpoint Energy Center is located at the intersection of Vandervoot Avenue and Maspeth Avenue in the Greenpoint Section of Brooklyn, New York. The location of the site is depicted on Figure 1. The Site is bounded on the north by Lombardy Street, on the east by Newtown Creek, on the south by Maspeth Avenue and on the west by Vandervoot Avenue. The planned subsurface construction activities are located in the northeast corner of the Site in an area bound by Lombardy Street and Newtown Creek.

KeySpan has previously completed soil and groundwater remedial investigations in the Northeast Corner of the Greenpoint Energy Center and implemented an IRM to support future construction activities. The remedial investigation activities were conducted in March, November and December 2004 and January 2005. The remedial investigations were completed in accordance with the NYSDEC-approved October 2004 Final Revised Site Investigation Work Plan (Revised SIWP). The results of the remedial field program were presented in NYSDEC-approved March 2004 Preliminary Site Investigation Work Plan (Preliminary SIWP) for the Greenpoint Energy Center.

IRM activities were initiated in April 2005 and were completed in June 2005. The completed IRM effort included the following:

- Removal of approximately 9,900 tons of impacted soils and 408 tons of debris;
- Backfilling and compaction of excavation areas using certified clean coarse aggregate to pre-existing grades (i.e., environmental soil cap);
- Placement of a crushed stone cover consisting of 12-inches of ¾ inch stone located along the eastern portion of the remedial area;
- Re-construction of the pre-existing asphalt roadway using certified clean fill (i.e., road-base material) consisting of crushed ledge rock; and
- Installation of a protective stone cover over the eastern extent of the existing soil berm using 7-inch diameter rip-rap stone.

The IRM activities were completed in accordance with the NYSDEC approved March 2005 Interim Remedial Action Work Plan (IRAWP). A summary of both the remedial investigation work and IRM activities were presented in the June 2006 Final IRM Completion Report previously submitted to the NYSDEC.

1.2 Planned Site Construction Activities

Subsequent to completion of the June 2005 IRM, the development of additional construction details related to future construction activities in the Northeast Corner prompted the completion of a supplemental soil investigation. The additional subsurface construction activities will include soil excavation for the installation of utilities and foundations in the Northeast Corner. Ancillary site activities will include installation of augured piles and caps, site grading, construction of concrete sidewalks, installation of drywells and removal of sub-grade piping parallel to Lombardy Avenue.

The proposed construction activities will include soil excavation for the new foundations and utilities to depths ranging from three to seven and one half feet below grade surface (bgs) at the areas indicated on Figure 2. To support the new foundations and other structures approximately 160 driven piles and 25 augered piles will be installed. The pilings will be installed to approximately 40 feet bgs.

Four drywells will be installed adjacent to the existing Control House at the locations indicated on Figure 2. The drywells are anticipated to be a minimum of eight feet in diameter and six feet in depth. Five additional drywells will also be installed in the area previously investigated and remediated as part of the June 2005 IRM activities.

2.0 SUPPLEMENTAL SOIL INVESTIGATION PROGRAM

2.1 Overview of field program activities

To supplement the previous investigation and complete the characterization of subsurface soils in the proposed excavation areas, KeySpan installed a total of 28 additional soil borings. In addition, four test pits were completed in an area of suspected inactive subsurface piping to confirm their locations and to collect subsurface soil samples. A Community Air Monitoring Plan (CAMP) was implemented during the installation of the test pits. The locations of the borings and test pits are presented on Figure 2.

Descriptions of soil boring and test pit installations, sampling methods and procedures are discussed in Sections 2.1.1 and 2.1.2. Soil samples collected as part of the field investigation program were analyzed for various chemical constituents as presented in Section 2.1.7. Preliminary laboratory analytical data are presented in Tables 1 through 4 contained in Appendix B.

A general description of drilling and sampling methodologies and procedures are also presented in this Section. Additional detailed descriptions of methodologies and procedures were provided in the NYSDEC-approved October 2004 Revised SIWP for the Northeast Corner.

2.1.1 Soil Boring Installation

A total of 28 soil borings (GPE-27 through GPE-51, GPE-35N, GPE-35E and GPE-35W) were installed at the locations indicated on Figure 2. One soil boring (GPE-27 through GPE-30) was installed at each of the four proposed dry well locations. Soil borings GPE-27 through GPE-30 were advanced to a depth corresponding to approximately two feet below the encountered groundwater table (approximately 24 feet bgs). The remaining soil borings were installed within the proposed construction areas as indicated on Figure 2, and were advanced until at least 10 feet of "non-impacted" soil had been encountered based on field screening results.

In general, the first five feet of soil at each soil boring location was removed utilizing manual extraction methods consisting of electrically insulated shovels and hand tools to provide for utility clearance. Prior to commencement of excavation activities, and between each boring location, the excavating equipment was decontaminated using an alconox and water rinse.

The soil borings were completed using direct push (GeoProbe) technology. The Geoprobe unit was set up to drive a standard 2-inch diameter, 60-inch long sampler installed with a clear, dedicated acetate liner and advanced with a

hydraulic hammer. Continuous soil samples were collected at each soil boring location. Prior to commencement of GeoProbe activities, and between each soil boring location, the "down-hole" probing equipment was decontaminated using an alconox and water wash. The liquids generated from the decontamination processes were containerized on-site in 55-gallon drums for subsequent off-site disposal by KeySpan.

2.1.2 Soil Boring Sampling

The extracted soils were "field-screened" for volatile organics compounds utilizing a properly calibrated photo-ionization detector (PID) by holding the probe of the PID directly over the soils immediately after excavation, or over the acetate liner immediately after opening it. The recovered soils were examined to determine the apparent presence/absence of MGP related impacts, and logged using the Unified Soil Classification System (USCS). The soil boring and test pit logs are included in Appendix C.

In general, soil sampling for laboratory analysis was conducted at the following intervals: (1) the surficial interval (0.5 to 2.0 feet bgs); (2) the interval exhibiting the greatest indication of contamination, if encountered; (3) the clean zone either at the 10 foot interval or beneath the deepest interval of observed impacts, and (4) the interval two feet below either the proposed terminal depth of each excavation area or the groundwater encountered.

Soils samples selected for laboratory analysis from the five foot bgs hand excavated interval were collected by scooping the representative soil from the open borehole with a dedicated polystyrene spoon and placing the sample into laboratory-prepared, pre-cleaned sample containers. Soils samples were collected from the acetate liners by scooping the representative soil interval from the long axis of the liner with a dedicated polystyrene spoon. After collection, the sample jars were placed into an ice-packed cooler maintained at a temperature of approximately 4^{o}C, and transported to H2M Labs (H2M) of Melville, New York under proper chain-of-custody procedures. H2M complies with the New York State Department of Health (NYSDOH) Contract Laboratory Program (CLP).

Upon completion of the soil boring, recovered soils that did not exhibit field evidence of MGP related impacts (i.e., elevated PID readings, staining, or odors) were returned to the boring. Soils that exhibited field evidence of MGP related impacts were placed in 55-gallon drums for subsequent off-site disposal by KeySpan.

2.1.3 Test Pit Installation

A total of four preliminary test pits (GPETP-10 through GPETP-13) were installed to approximately 5 to 6 feet bgs utilizing vacuum extraction in order to locate and address several suspected inactive subsurface utilities, including an abandoned naphtha-containing pipe extending parallel to Lombardy Street, located along the northern property boundary. The vacuum extraction method allowed for removal of the surrounding soil without comprising the integrity of the anticipated subsurface utilities or safety of the personnel. Test pits GPETP-10, GPETP-12 and GPETP 13 were installed to approximately 5 feet bgs, and GPETP-11 was installed to approximately 6 feet bgs. The test pit installation locations are indicated on Figure 2, and the test pit logs are included as Appendix C.

2.1.4 Test Pit Sampling

The recovered soils were "field-screened" for volatile organics compounds (VOCs) utilizing the PID as described in Section 2.1.2, examined to determine the apparent presence/absence of MGP related impacts, and logged using the USCS.

One composite soil sample was collected for laboratory analysis from each of the test pits, for a total of four test pit samples (GPETP-10 through GPETP-13).

Soils samples selected for laboratory analysis from the test pits were collected by compositing the representative soil onto clean plastic sheeting using a dedicated polystyrene spoon, and transferring the soil samples into laboratory-prepared, pre-cleaned sample containers. The sample jars were placed into an ice-packed cooler maintained at a temperature of approximately 4^{o}C, transported and analyzed as described previously by H2M Labs under proper chain-of-custody procedures.

2.1.5 Community Air Monitoring Program

In accordance with NYSDEC and New York State Department of Health (NYSDOH), a CAMP was implemented at the site during the installation of the test pits. The requirements for the CAMP are included in the Site-Specific Health and Safety Plan presented in the October 2004 Final Revised SIWP. Four air monitoring stations were utilized at locations up and down-wind of each test pit location. VOCs and respirable particulates (PM-10) were monitored at the stations on a continuous basis. Each monitoring station contained a data logging PID and a data logging dust meter. In addition, a PID was used to monitor the breathing zone and to quantify any VOCs emanating from the open test pit or from soil removed.

All air monitoring instruments were calibrated on a daily basis prior to the start of field work. The calibration records were maintained in the project files. All data from the stationary air monitoring stations were electronically downloaded to the on-site computer at the conclusion of each work day. This information is also available in the project files. No exceedance of the prescribed 15-minute averages for VOC and particulate emissions were noted during the installation of the test pits.

2.1.6 Data Validation/Data Usability

Due to the anticipated expedited schedule for the planned site construction activities, the analytical data reported herein is based on preliminary data from H2M. Once finalized, all analytical data packages submitted by H2M Labs will be validated in accordance with the NYSDEC 10/95 Analytical Services Protocol (ASP) Quality Assurance/Quality Control (QA/QC) requirements. Data validation will be performed by a QA/QC officer, meeting the qualifications required by NYSDEC to perform data validation. The data packages will be reviewed for transcription errors, as well as compliance with analytical methods and QA/QC requirements.

2.1.7 Sample Analysis

The field program consisted of collecting samples from subsurface soil in accordance with the procedures set forth in the previously specified letter work plan. The soil samples were analyzed by H2M Labs in accordance with USEPA SW-846 methods stipulated in the Work Plan, as well as NYSDEC ASP QA/QC requirements.

Each of the soil samples were analyzed for Target Compound List volatile organic compounds (TCL VOCs); Target Compound List semi-volatile organic compounds (TCL SVOCs); Resource Conservation and Recovery Act metals (RCRA Metals); total cyanide; and polychlorinated biphenyls (PCBs). The analytical results of the subsurface soil samples are presented and discussed in Section 3.3.

2.1.8 Data Quality Objectives

The primary objective of this investigation was to obtain valid data to be used to determine the presence/absence of chemical constituents at the site.

To ensure data quality, several types of QC measures were implemented. QC samples were collected (field blanks, spikes and duplicates) at a rate of 1 per 20 soil samples. All samples for organic analyses were spiked with surrogate and/or

internal standard compounds in order to determine the integrity/reliability of the sample results.

To determine the comparability of the sample results, matrix spikes and matrix spike duplicates were analyzed for the organic parameters and spikes and duplicates were analyzed for inorganic parameters. In addition, the analytical methods also require that specific laboratory QA/QC measures be taken during analysis (i.e., calibrations, blanks, control samples, spiked blanks, etc.).

In order to determine the quality and usability of the sample results, once finalized, the laboratory data packages will be validated in accordance with NYSDEC 10/95 ASP QA/QC requirements. A validation report/summary sheet will be prepared for each sample delivery group (SDG) or data package. Copies of the reports will be maintained in the project files.

2.2 Site Geology

Regional geology in the area of the Site is reported to consist of fill material generally ranging in thickness from zero to several feet. The fill material generally consists of granular soils with varying amounts of miscellaneous debris. The fill material is underlain by a relatively narrow sequence of unconsolidated sediments of Quaternary age consisting of glacial moraine and glacial outwash sediments. These glacial sediments are further refined by four lithologic units: Glacial Till consisting of sand, gravel and cobbles varying in thickness from 10 to 20 feet; stratified sands and gravel varying in thickness from 100 to 200 feet; thinly-bedded clay and silt lenses (Gardiners Clay) varying in thickness from 10 to 100 feet but absent in most places; and, stratified sand and gravel Coastal Plain sediments varying in thickness from 30 to 60 feet. According to published literature, bedrock exists at approximately 50 to 150 feet below grade underlying the Coastal Plain sediment and consisting of massive to gneissic granitic rock.

Interpretation of geologic data collected during the field investigation program revealed a fill unit which was encountered throughout the investigation area. The fill unit consists of brown and gray to black sands, silts and gravels with varying amounts of concrete, red brick and coal tar fragments. The unit is continuous throughout the site and varies in thickness from approximately 4 to 16 feet. A layer of sands and organic silt (peat) ranging from 3 to 6 feet in thickness was encountered at the base of the fill.

Shallow unconfined water table conditions exist at the investigation area with an aquifer thickness of greater than 50 ft. The aquifer thickness is based on previous boring and monitoring well installations and a review of geologic literature of the general area. Newtown Creek is located at the eastern border of the investigation area and is tidally influenced. As described in the March 2005 IRAWP, previous groundwater monitoring events indicate no or negligible tidal influence of the groundwater beneath the area of

investigation. Groundwater elevations in the shallow and deep monitoring wells indicate a southwesterly groundwater flow direction. The water table was encountered in the four proposed dry well soil borings located within the investigation area at approximately 22 feet bgs. The water table was encountered in the soil boring installed within the previously excavated area (GPESB-37) at approximately 2.8 feet bgs.

2.3 Findings

The assessment of the presence of chemical constituents in site soil was conducted using physical descriptions of recovered sample media and analytical results. The findings are summarized below. The physical observations and analytical results for Total PAHs and Total VOCs are presented on Figure 2.

2.3.1 Visual Observations - Soil Borings

During the soil boring installations, the recovered soils were field screened using a PID, and inspected for visual and olfactory evidence to determine the apparent presence/absence of MGP-related impacts. The recovered soils were classified utilizing the USCS for soil descriptions and related MGP-impacts were described utilizing criteria established by KeySpan.

In general, only borings located in a limited portion the investigation area exhibited field evidence of MGP related materials, including naphthalene-like and MGP-like odors, the presence of coal tar fragments, and coating of soil grains and stained or saturated soils. The impacts were generally limited to the first few feet bgs, except boring GPE-35, where the impacts extended to approximately 7 feet bgs, and boring GPE-51, where the impacts extended to approximately 15 feet bgs. GPE-35 and GPE-51 were the only borings that exhibited MGP-related saturation of the soils, and GPE-51 was the only boring that contained solid tar at the 10 to 12 feet bgs interval. GPE-51 also contained petroleum-like odors in soils obtained below the water table (20 to 25 feet bgs).

2.3.2 Visual Observations – Test Pits

In general, there were no visual impacts or MGP-related odors observed within the soils removed from the GPETP-10 through GPETP-13. Conditions observed during the installation of the test pits are described below:

GPETP-10 – Test pit GPETP-10 was installed to approximately three feet in width, five feet in depth and 20 feet in length. A total of five subsurface utilities were encountered, including four steel pipes ranging in diameter from approximately two to 12 inches, and one PVC electrical conduit approximately three inches in diameter. The pipes were encountered at depths of approximately

three to five feet bgs. Upon completion, the perimeter of the test pit was temporarily barricaded with construction fencing.

GPETP-11 – Test pit GPETP-11 was installed to approximately two feet in width, six feet in depth, and 16 feet in length. One subsurface steel pipe approximately 2 inches in diameter was encountered at approximately five feet bgs. Upon completion, the perimeter of the test pit was temporarily barricaded with construction fencing.

GPETP-12 – Test pit GPETP-12 was installed to approximately two and one half feet in width, five feet in depth and 21 feet in length. A total of six subsurface utilities were encountered, including five steel pipes ranging in diameter from approximately 2 to 12 inches, and one PVC electrical conduit approximately 3 inches in diameter. The pipes were encountered from approximately three to five feet bgs. Upon completion, the open test pit was temporarily covered with plywood.

GPETP-13 – Test pit GPETP-13 was installed to approximately three feet in width, five feet in depth and 17 feet in length. A total of three subsurface utilities were encountered, consisting of three steel pipes ranging in diameter from approximately 2 to 12 inches. The pipes were encountered from approximately three feet to five feet bgs. Upon completion, the open test pit was temporarily covered with plywood.

Soil removed from the test pits was temporarily stockpiled on plastic sheeting in a pre-approved location and covered with plastic to prevent wind erosion and run-off due to rainwater. All of the subsurface utilities encountered during the test pit installations were left in place. For further information regarding the planned cleaning of the abandoned naphtha lines, refer to the attached Standard Operating Procedures (SOP) entitled “Identification and Cleaning of Buried Piping”, provided as Appendix D.

2.3.3 Discussion of Laboratory Analytical Results

All of the soil samples submitted for laboratory analyses were analyzed for TCL VOCs; TCL SVOCs; RCRA Metals; total cyanide; and PCBs.

The analytical results and the comparison to the Soil Cleanup Guidance values contained in the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 are presented in Tables 1 through 4. The data summary tables also present the sum total of all detected VOCs and benzene, toluene, ethylbenzene and xylenes (BTEX) compounds, as well as the sum total of all detected semi-volatile organic compounds (SVOCs), and polycyclic aromatic hydrocarbons

(PAHs). Concentrations of chemical constituents that exceed the SCGs are highlighted on the data tables. In the case of metals detected in soil, if a SCG was not assigned; the results were compared to typical metals concentrations observed within eastern United States soils.

BTEX compounds were the principal VOCs detected in samples, which are the most common VOCs associated with MGP-impacted materials. SVOCs were also detected at the site, with PAHs being the common subset of SVOCs in MGP-impacted materials. For purposes of this report, PAHs include the compounds listed below.

- Methylnaphthalene
- Benzo(b)fluoranthene
- Fluorene
- Acenaphthene
- Benzo(g,h,i)perylene
- Indeno(1,2,3-cd)pyrene
- Acenaphthylene
- Benzo(k)fluoranthene
- Naphthalene
- Anthracene
- Chrysene
- Phenanthrene
- Benzo(a)anthracene
- Dibenzo(a,h)anthracene
- Pyrene
- Benzo(a)pyrene
- Fluoranthene
- Dibenzofuran

Of these PAHs, the following constituents are considered carcinogenic PAHs by USEPA:

- Benzo(a)anthracene
- Dibenzo(a,h)anthracene
- Benzo(a)pyrene
- Benzo(k)fluoranthene
- Indeno(1,2,3-cd)pyrene
- Benzo(b)fluoranthene
- Chrysene

The analytical results of the 73 subsurface soil boring samples and four test pit samples for VOCs and SVOCs are summarized in Tables 1 and 2, respectively. The RCRA metals analytical results including total cyanide are summarized in Table 3; and the PCBs analytical results are summarized in Table 4.

2.3.4 Volatile Organic Compounds

Only two of the 77 total soil samples collected for laboratory analysis contained individual VOCs at concentrations exceeding their respective TAGM Soil Cleanup Guidance values (SCG). Both of these samples also contained total

VOCs above the SCG of 10 mg/kg. In GPESB-35 (5 to 7 feet bgs), the BTEX compounds were detected at levels above their individual SCGs. Concentration of 1,1,1-trichloroethane (1,1,1-TCA) were also detected in this sample at 0.81 milligrams per kilogram (mg/kg), slightly above the applicable SCG of 0.80 mg/kg. The GPESB-35 (5 to 7) sample contained a total VOC concentration of 80.54 mg/kg, exceeding the SCG of 10 mg/kg for total VOCs.

In boring GPESB-51 (10 to 12 feet bgs), benzene, toluene and total xylenes were detected above their individual SCGs. The GPESB-51 (10 to 12) sample contained a total VOC concentration of 37.23 mg/kg, exceeding the SCG of 10 mg/kg for total VOCs.

In the subsurface soil samples exhibiting detectable levels of VOCs, the BTEX compounds were predominant. Tetrachloroethene (TCE) was detected above its laboratory method detection limit (MDL) in one sample (GPESB-29 (24-26 feet bgs), but at a concentration of 0.22 mg/kg, well below its SCG of 1.4 mg/kg. Acetone was detected above its MDL in several of the samples, but at concentrations well below its SCG of 0.2 mg/kg. In addition, methylene chloride, a common laboratory contaminant, was detected in test pit sample GPETP-12 at a concentration of 0.059 mg/kg, below its SCG of 0.1 mg/kg.

The two samples with VOC exceedances of individual and total SCGs were collected from the only borings (GPESB-35 and GPESB-51) where field evidence of saturated or solid tar-impacted soils was encountered.

2.3.5 Semi-Volatile Organic Compounds

Individual SVOCs were detected above their SCGs in 28 of the 77 total soil samples collected. Those sample locations where soil samples were collected with SVOCs exceeding their SCGs were GPESB-27; GPESB-28; GPESB-29; GPESB-27; GPESB-30; GPESB-33; GPESB-34; GPESB-35; GPESB-36; GPESB-37; GPESB-38; GPESB-39; GPESB-41; GPESB-42; GPESB-51; GPETP-12 and GPETP-13. Based on the visual observations, combined with the laboratory analytical data, a majority of the highest detected SVOC-impacted soils generally were contained within the top 5 feet of soil.

Only four soil samples contained total PAHs exceeding the SCG of 500 mg/kg for total PAHs: GPESB-33 (2.5 to 4.5 feet bgs) at 6,600 mg/kg; GPESB-35 (5 to 7 feet bgs) at 10,511 mg/kg; and in GPESB-51 (5 to 7 feet bgs) at 913 mg/kg and GPESB-51 (10 to 12 feet bgs) at 7,700 mg/kg. Each of the samples with total SVOC SCG exceedances were collected from sample intervals where field evidence of tar–impacted soils was encountered.

2.3.6 RCRA Metals and Cyanide

The RCRA metals detected in subsurface soil samples were generally within or below the concentration ranges typical for background soil in the eastern United States, with the exception of arsenic in boring GPESB-37 samples that were collected below the groundwater table. Elevated concentrations of arsenic were detected in sample GPESB-37 (5 to 7 feet bgs) at 1,720 mg/kg and GPESB-37 (8 to 10 feet bgs) at 793 mg/kg.

The ranges of RCRA metal and total cyanide concentrations in the subsurface soil samples are summarized below, excluding the elevated arsenic concentrations in GPESB-37:

Constituents/(SCG)	Concentration Range	Sample Exhibiting Maximum Concentration
Arsenic (7.5 mg/kg)	ND to 36.5 mg/kg	GPESB-34 (0.5 to 2 feet bgs)
Barium (300 mg/kg)	ND to 411 mg/kg	GPESB-27 (0.5 to 2 feet bgs)
Cadmium (1 mg/kg)	ND to 2.3 mg/kg	GPESB-39 (8 to 10 feet bgs)
Chromium (10 mg/kg)	1.9 to 34.4 mg/kg	GPESB-38 (5 to 7 feet bgs)
Lead (300 mg/kg)	0.79 to 497 mg/kg	GPESB-38 (5 to 7 feet bgs)
Mercury (0.1 mg/kg)	ND to 4.2 mg/kg	GPESB-34 (0.5 to 2 feet bgs)
Selenium (2 mg/kg)	ND to 2.2 mg/kg	GPESB-27 (0.5 to 2 feet bgs)
Silver (No SCG)	ND to 3 mg/kg	GPESB-27 (0.5 to 2 feet bgs)
Total Cyanide (No SCG)	ND to 41 mg/kg	GPESB-37 (5 to 7 feet bgs)

2.3.7 Polychlorinated Biphenyls

None of the 73 samples analyzed exceeded the SCG of 1 mg/kg for PCBs in surficial soils, the most stringent SCG. The maximum PCB concentration detected was Aroclor 1242, which was detected in sample GPESB-34 (0.5 to 2 feet bgs) at 0.290 mg/kg.

2.4 Summary of Findings

This section summarizes the findings of the supplemental site investigation program with regard to the occurrence of chemical constituents physical impacts in soils within the Northeast Corner.

The findings are summarized as follows:

- In general, only the soils located in a limited portion the investigation area exhibited physical evidence of MGP-related materials. The impacts were generally limited to the first five feet bgs, except borings GPE-35 and GPE-51, where the visual impacts extended to 5 to 7 feet and 5 to 15 feet bgs, respectively.
- Petroleum-like odors were encountered in soils collected from below the water table only in boring GPESB-51, at the 20 to 25 feet bgs interval. No targeted compounds were detected above the SCG at this interval.
- The only individual and total VOCs SCG exceedances were collected from borings GPE-35 and GPE-51, the only areas where field evidence of saturated or solid tar-impacted soils was encountered.
- SVOCs were detected above their SCGs in 28 of the 77 total subsurface soil samples collected. Only four soil samples, obtained from three soil borings (GPESB-33, GPESB-35 and GPESB-51), contained total PAHs exceeding the SCG of 500 mg/kg. These samples with total PAH exceedances were collected in the same general area, the only area where visual evidence of tar-saturated and/or tar-coated soils was encountered during the investigation.
- The RCRA metals detected in subsurface soil samples were generally within or below the concentration ranges typical for background soil in the eastern United States, with the exception of arsenic collected from boring GPESB-37 soils located below the groundwater table. Arsenic was detected in sample GPESB-37 (5 to 7 feet bgs) at 1,720 mg/kg and in sample GPESB-37 (8 to 10 feet bgs) at 793 mg/kg.
- None of the 73 samples analyzed exceeded the SCG of 1 mg/kg for PCBs in surficial soils, the most stringent SCG. The maximum concentration of PCB was Aroclor 1242, detected at a concentration of 0.290 mg/kg.

2.5 Conclusions

- The majority of the observed MGP-related impacts were observed in the top seven feet of soil.
- The investigation results indicate non-point sources for the observed soil impacts within or beneath the investigation area are fill materials and do not appear to be related to any former activities in the study area.

- Soils exceeding the Total VOC and Total PAH SCGs are primarily limited to an area immediately east of the 2005 IRM area. This area is delineated to the north by boring GPESB-33, to the east by GPESB-35 and to the south by GPESB-51.
- Soils containing physical observations of MGP-related constituents are primarily limited to two discrete locations. The first area is delineated to the north by boring GPESB-33, to the west by boring GPESB-35W, to the east by GPESB-35E and to the south by GPESB-51. The second area is defined by GPESB-49 and GPESB-50.
- Soil analytical results and physical observations from the 2004/2005 site investigation program confirm the isolated nature of soil impacts within the Northeast Corner.

2.6 Recommendations

- Soils containing exceedances of the Total VOC and Total PAH SCGs or exhibiting observations of MGP-related constituents within the defined facility construction excavation areas will be excavated and managed for off-site disposal at a permitted disposal facility.
- Soils containing exceedances of individual TAGM 4046 constituents within the defined construction excavation areas may be re-used within the Northeast Corner provided they are placed a minimum of two feet bgs and covered with clean material or building/structure components to minimize potential exposure pathways.
- All other excavated soils (i.e. soils not meeting the criteria in the above two recommendations) within the defined construction excavation areas may be re-used within the Greenpoint Energy Center as un-impacted soils.
- Disposition of excavated soils in accordance with above recommendations is displayed on Figure 2.
- Removal and handling of soils from the defined construction excavation areas will be managed as a Supplemental Interim Remedial Measure (SIRM) in order to address soil impacts consistent with the schedule for facility construction activities.

3.0 REMEDIAL ACTION APPROACH

This section presents the remedial activities proposed to be implemented for a SIRM in the Northeast Corner. The projected schedule to conduct these remedial activities is included in Section 3.12. A Statement of Work has been prepared which contains the detailed requirements for the implementation of the SIRM.

The proposed remedial approach includes excavating impacted soils in four locations (i.e., Excavation Areas 1, 2, 3 and 4) to a depth corresponding to the proposed depth of construction excavation. Refer to Figure 3 for the location and depths of the four excavation areas. In addition, SIRM excavation work will include an allowance for an additional one foot of clean soil at the base and sides of the excavation areas. This buffer is intended to minimize potential exposure pathways to construction crews. All excavation areas will be backfilled with approved material to existing grades.

Remedial construction activities are as follows:

- Pre-Mobilization Activities
- Mobilization Activities
- Site Preparation Activities
- Decontamination Activities
- Excavation of soil from Excavation Areas 1 through 4
- Material Handling and Disposal Activities
- Site Restoration Activities
- Demobilization Activities

3.1 Pre-mobilization Activities

Prior to mobilization of equipment and personnel to the remediation area, the Greenpoint Energy Center personnel will field identify and mark any present and historic overhead/subsurface utilities (e.g., water, sewer, electric, gas, communications, data, etc.) or potential subsurface obstructions that may be present. The selected Contractor will coordinate with Greenpoint Energy Center personnel regarding all aspects of the proposed remedial work. The Contractor will obtain all necessary permits or authorizations for the implementation of the remedial work. In addition, the selected Contractor will provide all necessary submittals for review including but not limited to: proposed backfill material information (i.e. sieve analysis, clean source certification, etc.); proposed dust control measures; proposed shoring system design (if required); Material Safety Data Sheet (MSDS) information; power requirements, etc.

3.2 Mobilization

Mobilization activities will be performed to initiate the remedial on-site activities. All on-site personnel will have the requisite 1910.120 Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) Training as well as site-specific training prior to any intrusive activity. A Health and Safety Plan (HASP) which complies with the requirements of the OSHA HAZWOPER standard has been prepared for the planned remedial activities. A copy of the HASP is contained in Appendix E. The selected Contractor will have the option of adopting this HASP without change or adopting the HASP with amendments. Amendments prepared by the Contractor shall be at least as stringent as that which is contained in the HASP. All Contractor HASP amendments will be subject to review and approval.

Staging areas for materials, construction equipment and excavated material, decontamination areas, and support areas will be identified and approved by KeySpan prior to performing work. These areas will be selected based on ease of access and proximity to the major work areas and Greenpoint Energy Center traffic patterns. Equipment and materials for the remedial measures will be brought to the remedial area as required. All equipment will be inspected prior to utilization for the remedial work and checked periodically for performance and corrective repair. All equipment will be clean prior to arrival at remedial area.

3.3 Site Preparation

Preparation activities consist of tasks to be performed prior to the performance of the intrusive remedial work. These activities consist of relocating existing equipment and materials owned by KeySpan (if necessary), removal of roadway pavement, implementation of soil erosion and control measures, and construction or establishment of a decontamination pad for equipment and transport vehicles.

3.3.1 Soil Erosion and Sediment Control Measures

Prior to any intrusive activities, soil erosion and sediment control measures will be implemented as needed in accordance with the New York Guidelines for Urban Erosion and Sediment Control. These measures will consist of (at a minimum) silt fencing and/or hay bales that will be installed in appropriate locations in and around the remedial area to minimize surface soil in the excavation areas from potentially being transported, via wind and/or surface water, to areas outside of the limits of disturbance.

During construction, erosion and sediment control measures will be inspected and maintained on a daily basis. Accumulated sediment will be removed from the erosion and sediment controls as needed. Sediment that originates from the excavated area will be added to the stockpile for off-site disposal.

3.3.2 Decontamination Pad

The decontamination pad will be constructed to adequately facilitate decontamination of the Contractor's largest mobile equipment and to withstand the anticipated traffic loads throughout the duration of the project. The decontamination pad will either be a pre-fabricated stainless steel pad, a lined depressed area, or an area with a bermed perimeter. The decontamination pad will be lined with crushed stone and underlain by two plastic liners. The decontamination pad will be constructed to meet the following requirements:

- The area facilitating the decontamination pad will be modified as needed to accommodate the pad. The area shall be regraded, as required, upon completion of the work;
- The pad area shall be lined with two layers of 40 mil HDPE sheeting (thick enough to withstand daily use), woven geotextile and covered with crushed stone in a manner that allows rinseate water to freely drain and collect in a sump for removal and disposal;
- The pad area shall be graded for easy entrance and exit to vehicles and equipment;
- The pad shall be able to hold a minimum of four inches of standing water at the shallowest point within the containment. It shall be sized sufficiently to prevent splashing and spraying from decontamination activities from contacting the surrounding unprotected surfaces;
- The pad shall be kept empty and protected from rainwater when not in use; and
- The pad shall be maintained throughout the duration of the project.

3.4 Decontamination Activities

All personnel, tools, equipment, and vehicles coming in contact with contaminated soils, debris and/or wastewater will be decontaminated. A decontamination area for equipment and tools will be set up at a suitable location near the work area.

Decontamination of equipment and personnel will be conducted in temporary contamination reduction zones. The design of these zones will include heavy plastic sheeting and a staging area provided with bermed edges. Water collected in these zones during decontamination of personnel and equipment will be pumped into drums or tanks and transported to a properly licensed off-site facility for disposal.

3.5 Excavation Areas 1 through 4

The remedial work consists of removing soil and associated debris in Excavation Areas 1 through 4 to a depth of ranging from five to seven and one half feet bgs as depicted on Figure 3. The extent and depth of the excavation activities within Excavation Areas 1 through 4 are based on construction specifications and details associated with the planned construction activities described in Section 1.2. The construction activities will primarily consist of the installation of foundations and utilities with ancillary activities to include the installation of piles, drywells, and site grading. To supplement the previous investigation and complete the characterization of subsurface soils in Excavation Areas 1 through 4, KeySpan installed a total of 28 additional soil borings at the locations identified on Figure 2.

Figure 3 depicts the proposed supplemental IRM Excavation Areas and the investigation locations utilized to characterize the soils within these area. Soil borings GPESB-33, GPESB-35, GPESB-35E, GPESB-35N, GPESB-35W, GPESB-51 were used to characterize soils within Excavation Area 1; soil borings GPESB-49 and GPESB-50 were used to characterize soils within Excavation. Soils within Excavation Area 4 were characterized using results from the 2004/2005 soil investigation program.

Encountered debris will be segregated from excavated soils and prepared (i.e. decontamination, size reduction, etc.), as necessary, to meet the acceptance criteria of the approved disposal facility. Excavated materials will be direct-loaded onto transport vehicles or staged on-site in roll-offs for off-site disposal.

Excavation of soils from below the groundwater table may occur in Excavation Area 4 in order to accommodate the installation of subsurface features. Excavated saturated soils will be allowed to be gravity drained from the excavator bucket back into the excavation. The drained soils will then be placed in a lined roll-off container for amendment to meet the disposal facility's acceptance criteria. The excavations will be backfilled with two feet of ¾ inch crushed stone and finished to grade with clean fill material. Excess certified clean crushed stone from the June 2005 IRM will be utilized for the ¾ inch crushed stone base. Compaction of Excavation Area 4 is not required.

Excavation Areas 1B and 3 will be excavated to address several suspected inactive subsurface utilities, including a suspected naphtha-containing pipe believed to extend parallel to Lombardy Street, located along the northern boundary of the Northeast Corner. KeySpan will be cleaning the pipeline consistent with the Standard Operating Procedure entitled "Identification and Cleaning of Buried Piping" provided as Appendix D.

Engineered fill material will be used to fill each Excavation Area. Backfill material will be certified clean and come from a NYSDOT approved source. The material will consist of well-graded granular sand material with specified gradation or approved equivalent.

Backfill shall not contain clay, silt and/or organic material. This material shall be backfilled from the bottom of the excavation to the existing grade.

The fill material shall consist of certified clean coarse aggregate conforming to the following gradations:

Sieve Size	Percent Passing
1½ inch	100%
¾ inch	90% - 100%
No. 4	60% - 80%
No. 50	10% - 25%
No. 200	3% - 8%

All fill material delivered to the remedial area will be accompanied by documentation stating the fill is certified "clean" from a virgin source or a blend of soils originating from virgin sources not subject to manufacturing operations and free of contaminants as determined by analytical testing. One representative confirmatory sample will be collected from each off-site source of fill material at a rate of 1 per 1,000 cubic yards. The sample will be analyzed for total polycyclic aromatic hydrocarbons (PAHs), total volatile organic compounds (VOCs), RCRA Metals and Cyanide. At least ten percent of the samples from each off-site fill material source will also be analyzed for polychlorinated biphenyls (PCBs). The selected remedial contractor will provide the facility name, owner name and street address of the fill source(s) to KeySpan.

The proposed Excavation Areas will be capped with suitable material (i.e. crushed stone, building foundations etc.) once the construction activities at the Greenpoint Energy Center are completed. Should crushed stone be selected as the preferred capping material, excess certified clean crushed stone from the 2005 IRM will be utilized.

3.6 In-Situ Waste Classification

KeySpan conducted in-situ waste classification activities prior to initiating the 2005 IRM activities. The Contractor will use the analytical data from the 2005 IRM to prepare waste profiles for Clean Earth of Delaware (New Castle, DE). The Contractor may collect additional waste characterization samples from soils generated as part of this SIRM as necessary to meet disposal facility requirements.

3.7 Material Handling and Disposal

The material handling and disposal procedures for the excavated materials are described in further detail below.

3.7.1 Debris

The debris encountered on-site may include the excavated miscellaneous material from excavation operations. Debris will be evaluated and segregated with regard to its disposition. If the debris is constructed of material that is impervious to contamination infiltration (steel, glass, etc.), it will be power washed to remove gross contamination and then disposed of as general construction debris. Porous debris (brick, concrete, or wood) will be decontaminated to the extent feasible and will be disposed of as contaminated debris along with the excavated materials. All excavated non-heavily impacted debris (i.e. non-heavily impacted concrete or metallic debris) that meet applicable recycling criteria, will be transported to a properly licensed recycling facility.

3.7.2 Excavated Material Staging/Storage

All excavated materials will be direct loaded into waste containers (e.g., dump trailers, roll-off containers, etc.). Removed debris will be temporarily stockpiled on-site at locations agreed to by KeySpan so as to not impede the progress of the remedial work.

If material staging or storage becomes necessary for excavated materials prior to off-site transportation and disposal, temporary material staging area(s) for this will be set up in locations approved by KeySpan. Small quantities of waste may be stored and labeled in United States Department of Transportation (USDOT) Specification containers. Larger quantities shall be stockpiled on-site and covered with tarps or staged in approved covered roll-off containers. The roll-off containers will be the preferred method of storage, and will be utilized as practical. Impacted materials will be placed into covered roll-off containers or covered trucks prior to transport off site. The location for on-site storage will be agreed upon with KeySpan prior to storage.

3.7.3 Off-Site Transportation and Disposal

Bulk shipments (i.e., trucks or roll-off containers) of excavated material and large debris will take place, along with drums of personal protective equipment (PPE) and similar small debris type items, as necessary. Roll-off containers will be lined and covered as necessary. Only properly permitted vendors approved by KeySpan will be utilized for this project. Non-hazardous bills of lading or hazardous waste manifests will be completed and maintained for record keeping purposes. Prior to leaving the excavation areas, the transport vehicle will enter the decontamination pad and be decontaminated as required prior to either on-site storage or off-site transport for disposal

3.8 Dust and Odor Control

Construction activities will be performed so as to limit the potential for fugitive dust emission and odors. Dust and odor suppression measures will be readily available on-site and utilized, if necessary, during the remedial activities. The dust control measure will consist of water spray or equivalent and the odor suppression measure will consist of Biosolve® or equivalent. In the event that dust levels exceed the maximum allowed levels as specified in the HASP, construction activities will stop and dust control (i.e. water spray) measures will be applied. Water spray measures will be conducted using a water truck or by using existing on-site hydrants and hosing. Odor suppression measures will be applied on open excavations if unacceptable odor levels are identified as specified in the HASP. Perimeter air monitoring will take place in accordance with the HASP.

3.9 Site Restoration

Site restoration activities include the replacement of soil, pavements or gravel disturbed by the remedial activities. All excavated areas will be backfilled with granular material as approved by KeySpan to existing grade.

All backfill material delivered to the remedial area will be accompanied by documentation stating the fill is certified "clean" from a virgin source or a blend of soils originating from virgin sources not subject to manufacturing operations and free of contaminants as determined by analytical testing agreed to by KeySpan and the selected Contractor. The selected Contractor will provide the facility name, owner name and street address of the backfill source to KeySpan prior to on-site delivery.

With the exception of Excavation Area 4, backfill placed in excavation areas shall be placed in 6-inch thick lifts and compacted to a minimum of 95 percent of the modified proctor density (as determined by ASTM D1557) with vibratory equipment. Consistent with the planned construction activities, backfill material placed within Excavation Area 4 is not proposed to be compacted.

3.10 Demobilization

Once all site restoration activities are complete, remedial demobilization activities will take place. This includes removal of temporary facilities, including decontamination areas, removal of unused materials, removal of soil erosion and sediment control measures, and general housekeeping.

3.11 Remedial Completion Report

At the conclusion of the construction phase of the remedial activities, a Remedial Completion Report will be prepared by PS&S for submission to the NYSDEC. The report will discuss the remedial activities performed; present chronological summaries of work performed by the selected Contractor; present a list and quantity of materials and a summary of equipment utilized for the project; identify any deviations from this SIRM Work Plan; provide copies of all permits issued, analytical data generated and photo documentation of the field activities, provide any as-built drawings, and transport bills of lading and/or manifests generated. The selected Contractor will supply copies of the necessary documents to ensure proper preparation of this report. A PS&S Professional Engineer licensed in New York State will sign and seal the Remedial Completion Report.

3.12 Schedule

The proposed schedule to complete the SIRM activities is included below:

Permitting and Regulatory Approval	Before July 10, 2006
Mobilization and Site Preparation Activities	On or Before July 10, 2006
Excavation and Soil Management Activities	Beginning July 10, 2006
Site Restoration and Demobilization	Before September 1, 2006
Draft Remedial Completion Report	September 2006

4.0 INSTITUTIONAL CONTROLS AND ENGINEERING CONTROLS

Institutional controls and engineering controls (IC/EC) are used together at a site to ensure that measures taken to reduce contamination and potential human health risks remain in place. Institutional controls are implemented to ensure that engineering controls stay in place and in areas of no engineering controls, institutional controls ensure restriction of land use.

IC/EC will be implemented for use control areas post-remediation to sustain the completed remedial efforts over the long-term. Minimum long-term operation and maintenance activities are expected once IC/EC are in place. Since the use control areas will consist of certified clean backfill or building foundations, institutional controls will be implemented to maintain these materials during any future site related construction activities.

A Soil Management Plan (SMP) has been prepared and submitted to the NYSDEC. The SMP, which presents requirements for the management and disposition of excavated soils, will be adhered to during all intrusive work within the Northeast corner. Site use restrictions will be maintained with administrative orders and consent decrees. These will ensure that use control areas are not disturbed and minimal subsurface activity occurs at these portions of the property. These controls will keep the potential disturbance of subsurface soils to surface soil and ambient air (in the form of particulate matter) at a minimum. A HASP specifically addressing contaminated soils will be required for any construction or utility work within the use control areas. A deed notice that provides location and type of contamination information is recommended to satisfy the recommendation of an information device at the site.

With implementation, the IC/EC at the remedial areas are considered protective of human health and environmental risks by creating and maintaining a barrier to contaminated soils. As long as these IC/EC are maintained, exposure to these soils is not considered likely.

5.0 OPERATING, MAINTENACE & MONITORING PLAN

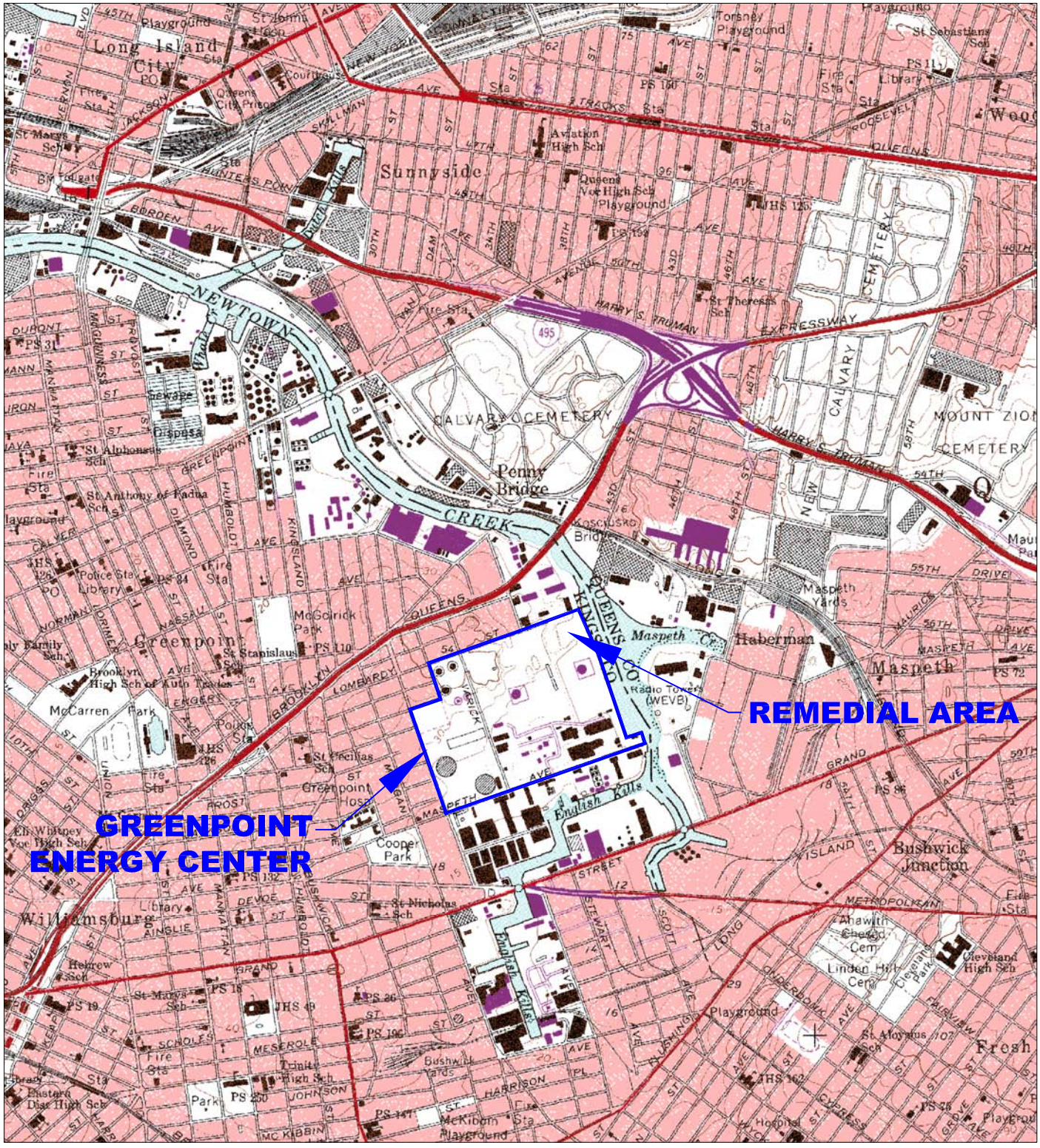
To ensure protectiveness of the selected remedial alternative, an Operations, Maintenance and Monitoring (OM&M) Plan will be prepared and implemented for the remedial area. The following presents an outline of the Draft OM&M Plan:

1.0 Introduction
2.0 Background
3.0 Scope of Work
4.0 Monitoring, Inspection and Maintenance
    4.1 Soil Erosion and Sediment Control Measures
    4.2 Groundwater Monitoring
    4.3 Visual Inspections
5.0 Contingency Plan
6.0 Recordkeeping
7.0 Reporting

The Final OM&M Plan will be implemented at the completion of SIRM.

APPENDIX A

Figures



GREENPOINT ENERGY CENTER LOCATION MAP

KEYSPAN CORPORATION
GREENPOINT ENERGY CENTER
REMEDIAL AREA
BROOKLYN, KINGS COUNTY, NEW YORK

Source: BROOKLYN, N.Y. U.S.G.S. TOPOGRAPHIC QUADRANGLE (1979)

Drn. By: DMM	Scale: 1"=2000'	Proj. No.: 2522.033.024
Chkd.. By: JWW	Date: August 2005	Fig. No.: FIGURE 1

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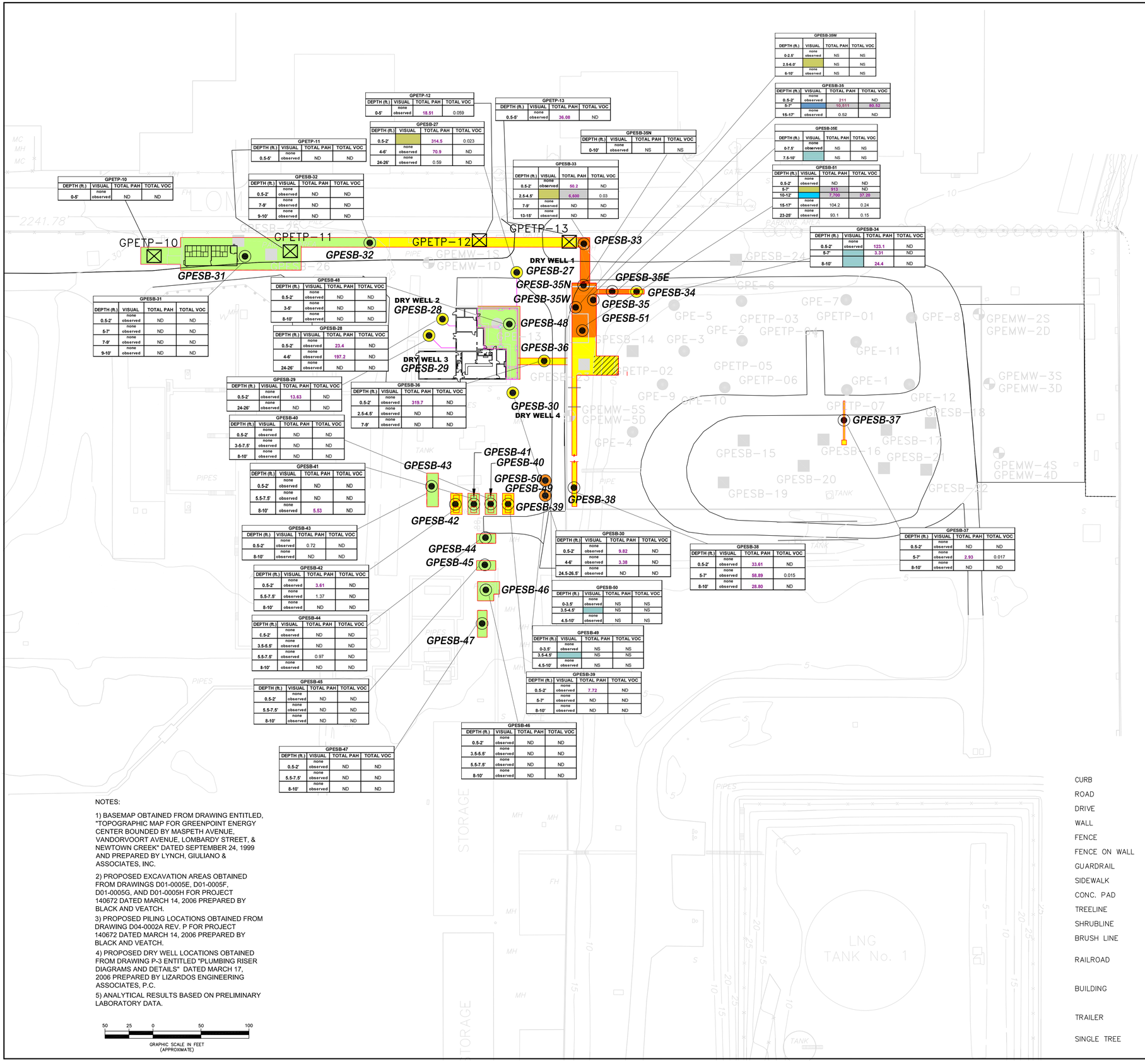
PROJECT: FILE NAME: S:\KeySpan Greenpoint\Remedial Action Completion Report\CADD\Figure 1 - Site Location Map.dwg LAST EDIT: 09/09/2005-02:55:51 PM



GPETP-12			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0-5'	none observed	18.51	0.059

GPETP-13			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-5'	none observed	36.08	ND

GPETP-11			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-5'	none observed	ND	ND

GPESB-27			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'		314.5	0.023
4-6'	none observed	70.9	ND
24-26'	none observed	0.59	ND

GPETP-10			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0-5'	none observed	ND	ND

GPESB-32			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	ND	ND
7-9'	none observed	ND	ND
9-10'	none observed	ND	ND

GPESB-33			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	50.2	ND
2.5-4.5'		6,600	0.03
7-9'	none observed	ND	ND
13-15'	none observed	ND	ND

GPESB-35N			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0-10'	none observed	NS	NS

GPESB-35W			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0-2.5'	none observed	NS	NS
2.5-6.0'		NS	NS
6-10'	none observed	NS	NS

GPESB-35			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	211	ND
5-7'		10,511	60.52
15-17'	none observed	0.52	ND

GPESB-35E			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0-7.5'	none observed	NS	NS
7.5-10'		NS	NS

GPESB-51			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	ND	ND
5-7'		913	ND
10-12'		7,700	37.20
15-17'	none observed	104.2	0.24
23-25'	none observed	93.1	0.15

GPESB-34			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	123.1	ND
5-7'		3.31	ND
8-10'		24.4	ND

GPESB-31			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	ND	ND
5-7'	none observed	ND	ND
7-9'	none observed	ND	ND
9-10'	none observed	ND	ND

GPESB-48			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	ND	ND
3-5'	none observed	ND	ND
8-10'	none observed	ND	ND

GPESB-28			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	23.4	ND
4-6'	none observed	197.2	ND
24-26'	none observed	ND	ND

GPESB-29			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	13.63	ND
24-26'	none observed	ND	ND

GPESB-36			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	319.7	ND
2.5-4.5'	none observed	ND	ND
7-9'	none observed	ND	ND

GPESB-40			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	ND	ND
3-5-7.5'	none observed	ND	ND
8-10'	none observed	ND	ND

GPESB-41			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	ND	ND
5.5-7.5'	none observed	ND	ND
8-10'	none observed	5.53	ND

GPESB-43			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	0.72	ND
8-10'	none observed	ND	ND

GPESB-42			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	3.61	ND
5.5-7.5'	none observed	1.37	ND
8-10'	none observed	ND	ND

GPESB-44			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	ND	ND
3.5-5.5'	none observed	ND	ND
5.5-7.5'	none observed	0.97	ND
8-10'	none observed	ND	ND

GPESB-45			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	ND	ND
5.5-7.5'	none observed	ND	ND
8-10'	none observed	ND	ND

GPESB-47			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	ND	ND
5.5-7.5'	none observed	ND	ND
8-10'	none observed	ND	ND

GPESB-46			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	ND	ND
3.5-5.5'	none observed	ND	ND
5.5-7.5'	none observed	ND	ND
8-10'	none observed	ND	ND

GPESB-30			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	9.82	ND
4-6'	none observed	3.38	ND
24.5-26.5'	none observed	ND	ND

GPESB-50			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0-3.5'	none observed	NS	NS
3.5-4.5'		NS	NS
4.5-10'	none observed	NS	NS

GPESB-49			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0-3.5'	none observed	NS	NS
3.5-4.5'		NS	NS
4.5-10'	none observed	NS	NS

GPESB-39			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	7.72	ND
5-7'	none observed	ND	ND
8-10'	none observed	ND	ND

GPESB-38			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	33.61	ND
5-7'	none observed	58.89	0.015
8-10'	none observed	28.80	ND

GPESB-37			
DEPTH (ft.)	VISUAL	TOTAL PAH	TOTAL VOC
0.5-2'	none observed	ND	ND
5-7'	none observed	2.93	0.017
8-10'	none observed	ND	ND

NOTES:

1) BASEMAP OBTAINED FROM DRAWING ENTITLED, "TOPOGRAPHIC MAP FOR GREENPOINT ENERGY CENTER BOUNDED BY MASPETH AVENUE, VANDORVOORT AVENUE, LOMBARDY STREET, & NEWTOWN CREEK" DATED SEPTEMBER 24, 1999 AND PREPARED BY LYNCH, GIULIANO & ASSOCIATES, INC.

2) PROPOSED EXCAVATION AREAS OBTAINED FROM DRAWINGS D01-0005E, D01-0005F, D01-0005G, AND D01-0005H FOR PROJECT 140672 DATED MARCH 14, 2006 PREPARED BY BLACK AND VEATCH.

3) PROPOSED PILING LOCATIONS OBTAINED FROM DRAWING D04-0002A REV. P FOR PROJECT 140672 DATED MARCH 14, 2006 PREPARED BY BLACK AND VEATCH.

4) PROPOSED DRY WELL LOCATIONS OBTAINED FROM DRAWING P-3 ENTITLED "PLUMBING RISER DIAGRAMS AND DETAILS" DATED MARCH 17, 2006 PREPARED BY LIZARDOS ENGINEERING ASSOCIATES, P.C.

5) ANALYTICAL RESULTS BASED ON PRELIMINARY LABORATORY DATA.

50 25 0 50 100

GRAPHIC SCALE IN FEET
(APPROXIMATE)

GENERAL LEGEND

CURB		FLAGPOLE	FP
ROAD		LIGHT POLE	
DRIVE		UTILITY POLE	
WALL		UTILITY POLE W/LIGHT	
FENCE		ANCHOR GUY	AG
FENCE ON WALL		TRAFFIC SIGNAL	
GUARDRAIL		TRAFFIC CONTROL BOX	TCB
SIDEWALK		MANHOLE	MH
CONC. PAD		FIRE HYDRANT	FH
TREELINE		VALVE	V
SHRUBLINE		METAL COVER	MC
BRUSH LINE		LAMP POST	LT
RAILROAD		POST	
		SIGN	S
BUILDING		CATCH BASIN	
		DOUBLE CATCH BASIN	
TRAILER		SINGLE SHRUB	
SINGLE TREE			

REVISIONS/ISSUES

NO.	DATE	DESCRIPTION
1	6-26-06	ADD ADDT'L RESULTS
2	7-05-06	ADDED ADDITIONAL HISTORICAL RESULTS

2006 SUPPLEMENTAL SOIL INVESTIGATION LEGEND

PROPOSED AREA OF EXCAVATION

GPESB-27 — SUPPLEMENTAL SOIL BORING AND SAMPLING LOCATION

GPETP-11 — TEST PIT LOCATION

2004 / 2005 SOIL AND GROUNDWATER INVESTIGATIONS

GPE-8 — PHASE 1 SOIL BORING (MARCH 2004)

GPESB-17 — PHASE II SOIL BORING (NOV. 2004-JAN 2005)

GPEMW-3S — MONITORING WELL (NOV. 2004 - JAN 2005)

GPETP-06 — TEST PIT (NOV. 2004 - JAN 2005)

FIELD OBSERVATIONS

TAR SATURATED

BLEBS, GLOBS, LENSES GRAIN-COATING, SHEENS

STAINED

SOLID TAR

GPESB-32 ← SAMPLE ID			
DEPTH (ft.)	VISUAL	TOTAL PAHs (ppm)	TOTAL VOCs (ppm)
12.5-13		2.3	ND
15.5-16		ND	ND

INDICATES ANALYTICAL RESULT

INDICATES FIELD OBSERVATION

SAMPLE DEPTH (BELOW GRADE SURFACE)

18.51 — VALUE INDICATES INDIVIDUAL CONSTITUENT TAGM EXCEEDANCE

913 — VALUE INDICATES TOTAL PAH (500 ppm) or VOC (10 ppm) EXCEEDANCE

ND - NOT DETECTED
NS - NOT SAMPLED

NOTE: TABLES IN BLACK ARE FROM THE 2006 SUPPLEMENTAL INVESTIGATION AND TABLES IN GREY ARE FROM THE 2004 / 2005 SOIL AND GROUNDWATER INVESTIGATIONS.

EXCAVATED SOIL REUSE PLAN

SOIL UNIMPACTED SOIL FOR REUSE ON-SITE *

REUSE 2 FEET BELOW GRADE SURFACE *

OFF-SITE DISPOSAL

SLOPE STABILIZING MATERIAL TO BE MANAGED FOR OFF-SITE DISPOSAL

* ASSUMES ABSENCE OF MGP-RELATED STAINING AND OR ODORS

PAULUS SOKOLOWSKI and SARTOR Engineering, PC
Engineers • Architects
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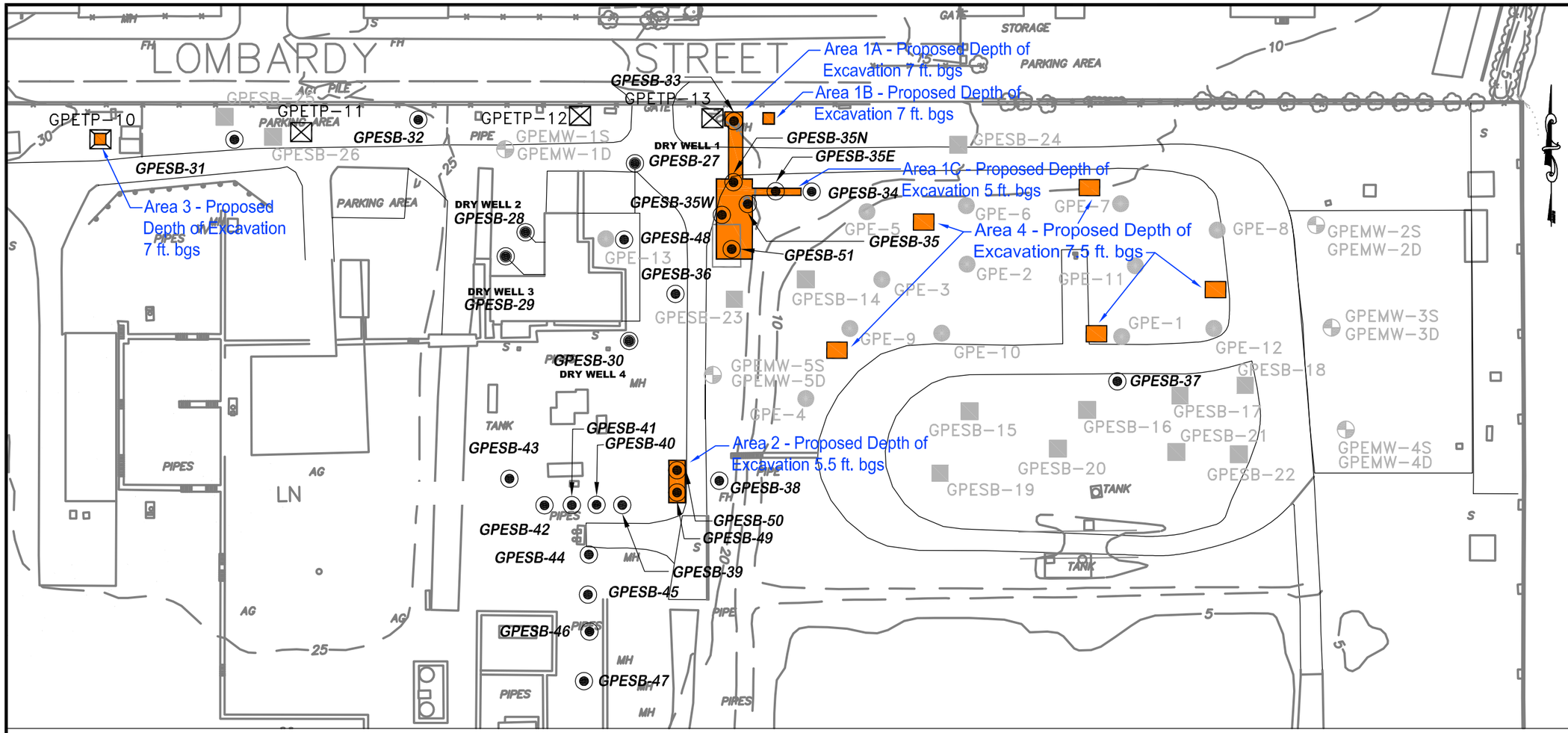
KEYSPAN CORPORATION
GREENPOINT ENERGY CENTER

BROOKLYN, NEW YORK

GREENPOINT ENERGY CENTER NORTHEAST CORNER SUPPLEMENTAL SOIL SAMPLING RESULTS AND SOIL EXCAVATION PLAN

DATE: JUNE 09, 2006	JOB NO.: 2522.033.024
SCALE: AS SHOWN	
DRAWN: RS	FIGURE NO.: 2
CHKD.: JWW	



NOTES:

1) BASEMAP OBTAINED FROM DRAWING ENTITLED, "TOPOGRAPHIC MAP FOR GREENPOINT ENERGY CENTER BOUNDED BY MASPETH AVENUE, VANDORVOORT AVENUE, LOMBARDY STREET, & NEWTOWN CREEK" DATED SEPTEMBER 24, 1999 AND PREPARED BY LYNCH, GIULIANO & ASSOCIATES, INC.
2) PROPOSED EXCAVATION AREAS OBTAINED FROM DRAWINGS D01-0005E, D01-0005F, D01-0005G, AND D01-0005H FOR PROJECT 140672 DATED MARCH 14, 2006 PREPARED BY BLACK AND VEATCH.
3) PROPOSED PILING LOCATIONS OBTAINED FROM DRAWING D04-0002A REV. P FOR PROJECT 140672 DATED MARCH 14, 2006 PREPARED BY BLACK AND VEATCH.
4) PROPOSED DRY WELL LOCATIONS OBTAINED FROM DRAWING P-3 ENTITLED "PLUMBING RISER DIAGRAMS AND DETAILS" DATED MARCH 17, 2006 PREPARED BY LIZARDOS ENGINEERING ASSOCIATES, P.C.
5) ANALYTICAL RESULTS BASED ON PRELIMINARY LABORATORY DATA.
6) AREA 4 EXCAVATIONS OBTAINED FROM UNDATED "GRADING AND DRAINAGE PLAN" PROVIDED BY KEYSPAN DURING A SITE VISIT ON JUNE 30, 2006.

GRAPHIC SCALE

0 40 80 160

(IN FEET)
1 inch = 80 ft.

GENERAL LEGEND

CURB		FLAGPOLE	FP
ROAD		LIGHT POLE	
DRIVE		UTILITY POLE	
WALL		UTILITY POLE W/LIGHT	
FENCE		ANCHOR GUY	AG
FENCE ON WALL		TRAFFIC SIGNAL	
GUARDRAIL		TRAFFIC CONTROL BOX	TCB
SIDEWALK		MANHOLE	MH
CONC. PAD		FIRE HYDRANT	FH
TREELINE		VALVE	V
SHRUBLINE		METAL COVER	MC
BRUSH LINE		LAMP POST	LT
RAILROAD		POST	
		SIGN	S
BUILDING		CATCH BASIN	
		DOUBLE CATCH BASIN	
TRAILER		SINGLE SHRUB	
SINGLE TREE		bgs – BELOW GRADE SURFACE	

REVISIONS/ISSUES

NO.	DATE	DESCRIPTION
1	06/28/06	Final Issued to KeySpan for SOW
2	08/04/06	Final Issued to NYSDEC

AREA OF SOIL EXCAVATION
PROPOSED DRY WELL LOCATION
GPESB-27 SUPPLEMENTAL SOIL BORING AND SAMPLING LOCATION
GPETP-11 TEST PIT LOCATION

2004 / 2005 SOIL AND GROUNDWATER INVESTIGATIONS

GPE-8 PHASE 1 SOIL BORING (MARCH 2004)
GPESB-17 PHASE II SOIL BORING (NOV. 2004-JAN 2005)
GPEMW-3S MONITORING WELL (NOV. 2004 - JAN 2005)
GPETP-06 TEST PIT (NOV. 2004 - JAN 2005)

PAULUS SOKOLOWSKI and SARTOR Engineering, PC
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PROJECT

KEYSPAN CORPORATION
GREENPOINT ENERGY CENTER

BROOKLYN, NEW YORK

SHEET TITLE

GREENPOINT ENERGY CENTER
NORTHEAST CORNER
SUPPLEMENTAL INTERIM REMEDIAL MEASURE EXCAVATION PLAN

DATE 08/04/06	JOB NO. 02522,033,024
SCALE 1"=80'	
DRAWN RS/JM	FIGURE NO. 3
CHKD. JW	

PROJECT: FILE NAME: P:\02522\033\N\Dwgs\Fig3_Supplemental_IRM_Excavation_Plan_080406_01.dwg LAST EDIT: 08/04/2006-01:14:07 PM

APPENDIX B

Soil Data Tables

TABLE 1
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL VOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-27(0.5-2)	GPESB-27(4-6)	GPESB-27(24-26)	GPESB-28(0.5-2)	GPESB-28(4-6)	GPESB-28(24-26)	GPESB-29 (0.5-2)	GPESB-29(24-26)	GPESB-30 (0.5-2)	NYSDEC SCGs (MG/KG)
Lab Sample ID No.	0605531-001	0605531-002	0605531-003	0605531-004	0605531-005	0605531-006	0605532-001	0605531-007	0605432-001	
Depth (feet bgs):	0.5-2	4-6	24-26	0.5-2	4-6	24-26	0.5 - 2	24-26	0.5-2	
Sample Date:	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/10/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Methylene Chloride	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.12	ND @ 0.012	ND @ 0.011	0.1
Acetone	0.023	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.12	ND @ 0.012	ND @ 0.011	0.2
Carbon Disulfide	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.12	ND @ 0.012	ND @ 0.011	2.7
2-Butanone	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.12	ND @ 0.012	ND @ 0.011	0.3
1,1,1-Trichloroethane	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.12	ND @ 0.012	ND @ 0.011	0.8
Benzene	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.12	ND @ 0.012	ND @ 0.011	0.06
Toluene	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.12	ND @ 0.012	ND @ 0.011	1.5
Ethylbenzene	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.12	ND @ 0.012	ND @ 0.011	5.5
Total Xylenes	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.12	ND @ 0.012	ND @ 0.011	1.2
Styrene	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.12	ND @ 0.012	ND @ 0.011	NSCG
Tetrachloroethene	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.12	0.22	ND @ 0.011	1.4
Total VOCs	0.023	ND	ND	ND	ND	ND	ND	0.22	ND	10
Total BTEX	ND	ND	ND	ND	ND	ND	ND	ND	ND	NSCG
TICs	ND	ND	ND	ND	ND	ND	ND	ND	ND	NSCG

NOTES:
All data based on preliminary laboratory results.
ND - Indicates Compound Was Not Detected At The Method Detection Limit.
NA - Indicates Sample Was Not Analyzed For That Parameter.
E - Indicates that Compound Exceeded Instrument Calibration
D - Indicates Sample Was Diluted.
J - Indicates That Compound Was Detected At A Concentration Below The Method Detection Limit.
B - Indicates Compound Was Also Reported In Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 1 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL VOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-30 (4-6)	GPESB-30 (24.5-26.5	GPESB-31(0.5-2)	GPESB-31(5-7)	GPESB-31(7-9)	GPESB-31(9-10)	GPESB-32(0.5-2)	GPESB-32(7-9)	GPESB-32(9-10)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No.	0605432-002	0605432-003	0605687-003	0605688-003	0605688-004	0605688-005	0605687-004	0605687-005	0605687-006	
Depth (feet bgs):	4-6	24.5-26.5	0.5-2	5-7	7-9	9-10	0.5-2	7-9	9-10	
Sample Date:	5/10/2006	5/10/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Methylene Chloride	ND @ 0.010	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	0.1
Acetone	ND @ 0.010	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	0.2
Carbon Disulfide	ND @ 0.010	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	2.7
2-Butanone	ND @ 0.010	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	0.3
1,1,1-Trichloroethane	ND @ 0.010	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	0.8
Benzene	ND @ 0.010	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	0.06
Toluene	ND @ 0.010	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	1.5
Ethylbenzene	ND @ 0.010	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	5.5
Total Xylenes	ND @ 0.010	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	1.2
Styrene	ND @ 0.010	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	NSCG
Tetrachloroethene	ND @ 0.010	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	1.4
Total VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	10
Total BTEX	ND	ND	ND	ND	ND	ND	ND	ND	ND	NSCG
TICs	ND	ND	ND	ND	ND	ND	ND	ND	ND	NSCG

NOTES:
All data based on preliminary laboratory results.
ND - Indicates Compound Was Not Detected At The Method Detection Limit.
NA - Indicates Sample Was Not Analyzed For That Parameter.
E - Indicates that Compound Exceeded Instrument Calibration
D - Indicates Sample Was Diluted.
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B - Indicates Compound Was Also Reported In Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 1 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL VOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-33(0.5-2)	GPESB-33(2.5-4.5)	GPESB-33(7-9)	GPESB-33(13-15)	GPESB-34 (0.5-2)	GPESB-34 (5-7)	GPESB-34(8-10)	GPESB-35(0.5-2)	GPESB-35(5-7)	NYSDEC SCGs (MG/KG)
Lab Sample ID No.	0605432-004	0605432-005	0605432-006	0605432-007	0605432-008	0605432-009	0605432-010	0605432-011	0605432-012	
Depth (feet bgs):	0.5-2	2.5-4.5	7-9	13-15	0.5 - 2	5-7	8-10	0.5-2	5-7	
Sample Date:	5/10/2006	5/10/2006	5/10/2006	5/10/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Methylene Chloride	ND @ 0.011	ND @ 0.012	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.013	0.1
Acetone	ND @ 0.011	0.03	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	0.014	0.2
Carbon Disulfide	ND @ 0.011	ND @ 0.012	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.013	2.7
2-Butanone	ND @ 0.011	ND @ 0.012	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.013	0.3
1,1,1-Trichloroethane	ND @ 0.011	ND @ 0.012	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	**0.81**	0.8
Benzene	ND @ 0.011	ND @ 0.012	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	**7.7 D**	0.06
Toluene	ND @ 0.011	ND @ 0.012	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	**19 D**	1.5
Ethylbenzene	ND @ 0.011	ND @ 0.012	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	**16 D**	5.5
Total Xylenes	ND @ 0.011	ND @ 0.012	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	**37 D**	1.2
Styrene	ND @ 0.011	ND @ 0.012	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 1.6	NSCG
Tetrachloroethene	ND @ 0.011	ND @ 0.012	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.013	1.4
Total VOCs	ND	0.03	ND	ND	ND	ND	ND	ND	**80.524**	10
Total BTEX	ND	ND	ND	ND	ND	ND	ND	ND	79.7	NSCG
TICs	ND	ND	ND	ND	ND	ND	ND	ND	NR	NSCG

NOTES:
All data based on preliminary laboratory results.
ND - Indicates Compound Was Not Detected At The Method Detection Limit.
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E - Indicates that Compound Exceeded Instrument Calibration
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X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 1 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL VOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-35(15-17)	GPESB-36 (0.5-2)	GPESB-36 (7-9)	GPESB-36 (9-10)	GPESB-37(0.5-2)	GPESB-37(5-7)	GPESB-37(8-10)	GPESB-38(0.5-2.0)	GPESB-38(5-7)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No.	0605432-013	0605434-001	0605434-002	0605434-003	0605434-004	0605434-005	0605434-006	0605432-014	0605432-015	
Depth (feet bgs):	15-17	0.5 - 2	7-9	9-10	0.5-2	5-7	8-10	0.5-2	5-7	
Sample Date:	5/9/2006	5/10/2006	5/10/2006	5/10/2006	5/9/006	5/9/006	5/9/006	5/9/2006	5/9/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Methylene Chloride	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.012	0.1
Acetone	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.010	0.017	0.015	ND @ 0.011	ND @ 0.012	0.2
Carbon Disulfide	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.012	2.7
2-Butanone	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.012	0.3
1,1,1-Trichloroethane	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.012	0.8
Benzene	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.012	0.06
Toluene	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.012	1.5
Ethylbenzene	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.012	5.5
Total Xylenes	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.012	1.2
Styrene	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.012	NSCG
Tetrachloroethene	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.012	1.4
Total VOCs	ND	ND	ND	ND	ND	0.017	0.015	ND	ND	10
Total BTEX	ND	ND	ND	ND	ND	ND	ND	ND	ND	NSCG
TICs	ND	ND	ND	ND	ND	ND	ND	ND	ND	NSCG

NOTES:
All data based on preliminary laboratory results.
ND - Indicates Compound Was Not Detected At The Method Detection Limit.
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NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 1 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL VOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-38(8-10)	GPESB-39(0.5-2)	GPESB-39(5-7)	GPESB-39(8-10)	GPESB-40(0.5-2)	GPESB-40(5.5-7.5)	GPESB-40(8-10)	GPESB-41(0.5-2)	GPESB-41(5.5-7.5)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No.	0605432-016	0605438-001	0605438-002	0605434-007	0605434-008	0605434-009	0605434-010	0605434-011	0605434-012	
Depth (feet bgs):	8-10	0.5-2	5-7	8-10	0.5-2	5.5-7.5	8-10	0.5-2	5.5-7.5	
Sample Date:	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Methylene Chloride	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.014	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	0.1
Acetone	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.014	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	0.2
Carbon Disulfide	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.014	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	2.7
2-Butanone	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.014	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	0.3
1,1,1-Trichloroethane	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.014	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	0.8
Benzene	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.014	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	0.06
Toluene	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.014	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	1.5
Ethylbenzene	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.014	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	5.5
Total Xylenes	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.014	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	1.2
Styrene	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.014	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	NSCG
Tetrachloroethene	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.014	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	ND @ 0.011	1.4
Total VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	10
Total BTEX	ND	ND	ND	ND	ND	ND	ND	ND	ND	NSCG
TICs	ND	ND	ND	ND	ND	ND	ND	ND	ND	NSCG

NOTES:
All data based on preliminary laboratory results.
ND - Indicates Compound Was Not Detected At The Method Detection Limit.
NA - Indicates Sample Was Not Analyzed For That Parameter.
E - Indicates that Compound Exceeded Instrument Calibration
D - Indicates Sample Was Diluted.
J - Indicates That Compound Was Detected At A Concentration Below The Method Detection Limit.
B - Indicates Compound Was Also Reported In Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 1 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL VOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-41(8-10)	GPESB-42(0.5-2)	GPESB-42(5.5-7.5)	GPESB-42(8-9.5)	GPESB-43(0.5-2)	GPESB-43(5.5-7.5)	GPESB-43(8-10)	GPESB-44(0.5-2)	GPESB-44(3.5-5.5)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No.	0605434-013	0605434-014	0605432-017	0605432-018	0605434-015	0605434-016	0605434-017	0605531-006	0605531-007	
Depth (feet bgs):	8-10	0.5-2	5.5-7.5	8-9.5	0.5-2	5.5-7.5	8-10	0.5-2	3.5-5.5	
Sample Date:	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/15/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Methylene Chloride	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.012	0.1
Acetone	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.012	0.2
Carbon Disulfide	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.012	2.7
2-Butanone	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.012	0.3
1,1,1-Trichloroethane	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.012	0.8
Benzene	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.012	0.06
Toluene	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.012	1.5
Ethylbenzene	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.012	5.5
Total Xylenes	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.012	1.2
Styrene	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.012	NSCG
Tetrachloroethene	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.012	1.4
Total VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	10
Total BTEX	ND	ND	ND	ND	ND	ND	ND	ND	ND	NSCG
TICs	ND	ND	ND	ND	ND	ND	ND	ND	ND	NSCG

NOTES:
All data based on preliminary laboratory results.
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NA - Indicates Sample Was Not Analyzed For That Parameter.
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N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 1 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL VOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-44(5.5-7.5)	GPESB-44(8-10)	GPESB-45(0.5-2)	GPESB-45(5.5-7.5)	GPESB-45(8-10)	GPESB-46(0.5-2)	GPESB-46(3.5-5.5)	GPESB-46(5.5-7.5)	GPESB-46(8-10)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No.	0605531-008	0605531-009	0605531-010	0605531-011	0605531-012	0605688-013	0605688-014	0605688-015	0605688-016	
Depth (feet bgs):	5.5-7.5	8-10	0.5-2	5.5-7.5	8-10	0.5-2	3.5-5.5	5.5-7.5	8-10	
Sample Date:	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Methylene Chloride	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	0.1
Acetone	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	0.2
Carbon Disulfide	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	2.7
2-Butanone	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	0.3
1,1,1-Trichloroethane	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	0.8
Benzene	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	0.06
Toluene	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	1.5
Ethylbenzene	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	5.5
Total Xylenes	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	1.2
Styrene	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	NSCG
Tetrachloroethene	ND @ 0.011	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.012	ND @ 0.012	ND @ 0.011	ND @ 0.011	ND @ 0.011	1.4
Total VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	10
Total BTEX	ND	ND	ND	ND	ND	ND	ND	ND	ND	NSCG
TICs	ND	ND	ND	ND	ND	ND	ND	ND	ND	NSCG

NOTES:
All data based on preliminary laboratory results.
ND - Indicates Compound Was Not Detected At The Method Detection Limit.
NA - Indicates Sample Was Not Analyzed For That Parameter.
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B - Indicates Compound Was Also Reported In Quality Assurance/Quality Control Blanks.
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X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 1 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL VOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-47(0.5-2)	GPESB-47(5.5-7.5)	GPESB-47(8-10)	GPESB-48(0.5-2)	GPESB-48(3-5)	GPESB-48(8-10)	GPESB-51(0.5-2)	GPESB-51(5-7)	GPESB-51(10-12)	NYSDEC SCGs (MG/KG)
Lab Sample ID No.	0605687-007	0605687-008	0605687-009	0605434-018	0605434-019	0605432-019	0605687-010	0605688-017	0605688-018	
Depth (feet bgs):	0.5-2	5.5-7.5	8-10	0.5-2	3-5	8-10	0.5-2	5-7	10-12	
Sample Date:	5/15/2006	5/15/2006	5/15/2006	5/10/2006	5/10/2006	5/10/2006	5/15/2006	5/17/2006	5/17/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Methylene Chloride	ND @ 0.012	ND @ 0.013	ND @ 0.012	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.024	0.1
Acetone	ND @ 0.012	ND @ 0.013	ND @ 0.012	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	0.026	0.2
Carbon Disulfide	ND @ 0.012	ND @ 0.013	ND @ 0.012	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.012	2.7
2-Butanone	ND @ 0.012	ND @ 0.013	ND @ 0.012	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.012	0.3
1,1,1-Trichloroethane	ND @ 0.012	ND @ 0.013	ND @ 0.012	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.012	0.8
Benzene	ND @ 0.012	ND @ 0.013	ND @ 0.012	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	**13 E**	0.06
Toluene	ND @ 0.012	ND @ 0.013	ND @ 0.012	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	**12 E**	1.5
Ethylbenzene	ND @ 0.012	ND @ 0.013	ND @ 0.012	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	4.2 E	5.5
Total Xylenes	ND @ 0.012	ND @ 0.013	ND @ 0.012	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	**8 E**	1.2
Styrene	ND @ 0.012	ND @ 0.013	ND @ 0.012	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.012	NSCG
Tetrachloroethene	ND @ 0.012	ND @ 0.013	ND @ 0.012	ND @ 0.010	ND @ 0.010	ND @ 0.011	ND @ 0.011	ND @ 0.012	ND @ 0.012	1.4
Total VOCs	ND	ND	ND	ND	ND	ND	ND	ND	**37.23**	10
Total BTEX	ND	ND	ND	ND	ND	ND	ND	ND	37.2	NSCG
TICs	ND	ND	ND	ND	ND	ND	ND	ND	NR	NSCG

NOTES:
All data based on preliminary laboratory results.
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J - Indicates That Compound Was Detected At A Concentration Below The Method Detection Limit.
B - Indicates Compound Was Also Reported In Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 1 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL VOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-51(15-17)	GPESB-51(23-25)	GPETP-10 (0-5)	GPETP-11 (0.5-5')	GPETP-12 (0-5')	GPETP-13 (0.5-5')	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No.	0605688-019	0605688-020	0605901-001	0605901-002	0605901-003	0605901-004	
Depth (feet bgs):	15-17	23-25	0-5	0.5 - 5	0 - 5	0.5 - 5	
Sample Date:	5/17/2006	5/17/2006	5/17/2006	5/23/2006	5/18/2006	5/22/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Methylene Chloride	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.011	0.059	ND @ 0.011	0.1
Acetone	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.012	ND @ 0.011	0.2
Carbon Disulfide	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.012	ND @ 0.011	2.7
2-Butanone	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.012	ND @ 0.011	0.3
1,1,1-Trichloroethane	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.012	ND @ 0.011	0.8
Benzene	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.012	ND @ 0.011	0.06
Toluene	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.012	ND @ 0.011	1.5
Ethylbenzene	0.19	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.012	ND @ 0.011	5.5
Total Xylenes	0.15	0.15	ND @ 0.012	ND @ 0.011	ND @ 0.012	ND @ 0.011	1.2
Styrene	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.012	ND @ 0.011	NSCG
Tetrachloroethene	ND @ 0.010	ND @ 0.011	ND @ 0.012	ND @ 0.011	ND @ 0.012	ND @ 0.011	1.4
Total VOCs	0.34	0.15	ND	ND	0.059	ND	10
Total BTEX	0.034	0.15	ND	ND	ND	ND	NSCG
TICs	ND	ND	ND	ND	ND	ND	NSCG

NOTES:
All data based on preliminary laboratory results.
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NA - Indicates Sample Was Not Analyzed For That Parameter.
E - Indicates that Compound Exceeded Instrument Calibration
D - Indicates Sample Was Diluted.
J - Indicates That Compound Was Detected At A Concentration Below The Method Detection Limit.
B - Indicates Compound Was Also Reported In Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 2
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-27(0.5-2)	GPESB-27(4-6)	GPESB-27(24-26)	GPESB-28(0.5-2)	GPESB-28(4-6)	GPESB-28(24-26)	GPESB-29(0.5-2)	GPESB-29(24-26)	
Lab Sample ID No	0605531-001	0605531-002	0605531-003	0605531-004	0605531-005	0605531-006	0605532-001	0605531-007	**NYSDEC SCGs (MG/KG)**
Depth (feet bgs):	0.5-2	4-6	24-26	0.5-2	4-6	24-26	0.5 - 2	24-26	
Sample Date:	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/11/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Phenol	ND @ 0.40	ND @ 0.36	ND @ 0.37	ND @ 0.41	ND @ 0.36	ND @ 0.37	ND @ 0.39	ND @ 0.38	0.03
2-Methylphenol	ND @ 0.40	ND @ 0.36	ND @ 0.37	ND @ 0.41	ND @ 0.36	ND @ 0.37	ND @ 0.39	ND @ 0.38	0.1
4-Methylphenol	ND @ 0.40	ND @ 0.36	ND @ 0.37	ND @ 0.41	ND @ 0.36	ND @ 0.37	ND @ 0.39	ND @ 0.38	0.9
2,4-Dimethylphenol	ND @ 0.40	ND @ 0.36	ND @ 0.37	ND @ 0.41	ND @ 0.36	ND @ 0.37	ND @ 0.39	ND @ 0.38	NSCG
Naphthalene	**20 D**	4.6	ND @ 0.37	ND @ 0.41	1.2	ND @ 0.37	ND @ 0.39	ND @ 0.38	13
2-Methylnaphthalene	ND @ 20	4.1	ND @ 0.37	ND @ 0.41	0.84	ND @ 0.37	ND @ 0.39	ND @ 0.38	36.4
2-Chloronaphthalene	ND @ 0.40	ND @ 0.36	ND @ 0.37	ND @ 0.41	ND @ 0.36	ND @ 0.37	ND @ 0.39	ND @ 0.38	NSCG
Acenaphthylene	ND @ 20	2.3 D	ND @ 0.37	ND @ 0.41	ND @ 0.36	ND @ 0.37	ND @ 0.39	ND @ 0.38	41
Acenaphthene	1.6	0.54	ND @ 0.37	ND @ 0.41	2.9	ND @ 0.37	ND @ 0.39	ND @ 0.38	50
Dibenzofuran	2.9	1.4	ND @ 0.37	ND @ 0.41	2.5	ND @ 0.37	ND @ 0.39	ND @ 0.38	6.2
Diethylphthalate	ND @ 0.40	0.71	0.59	0.82	0.58	0.59	0.75	0.56	7.1
Fluorene	ND @ 20	4.7	ND @ 0.37	ND @ 0.41	4.0	ND @ 0.37	ND @ 0.39	ND @ 0.38	50
N-Nitrosodiphenylamine	0.94	ND @ 0.36	ND @ 0.37	ND @ 0.41	ND @ 0.36	ND @ 0.37	ND @ 0.39	ND @ 0.38	NSCG
Phenanthrene	31 D	17 D	ND @ 0.37	2.5	44 D	ND @ 0.37	1.9	ND @ 0.38	50
Anthracene	ND @ 20	3.3 D	ND @ 0.37	0.57	11 D	ND @ 0.37	0.49	ND @ 0.38	50
Carbazole	2.8	0.81	ND @ 0.37	2.8	4.0	ND @ 0.37	ND @ 0.39	ND @ 0.38	50
Di-n-butylphthalate	ND @ 0.40	ND @ 0.36	ND @ 0.37	ND @ 0.41	ND @ 0.36	ND @ 0.37	ND @ 0.39	ND @ 0.38	8.1
Fluoranthene	**62 D**	8.8 D	ND @ 0.37	4.6	41 D	ND @ 0.37	2.9	ND @ 0.38	50
Pyrene	**75 D**	11 D	ND @ 0.37	4.8	33 D	ND @ 0.37	2.8	ND @ 0.38	50
Butyl benzyl phthalate	ND @ 0.40	ND @ 0.36	ND @ 0.37	ND @ 0.41	ND @ 0.36	0.45	ND @ 0.39	ND @ 0.38	50
Benzo(a)anthracene	**39 D**	**4.8 D**	ND @ 0.37	**2.7**	**16 D**	ND @ 0.37	**1.6**	ND @ 0.38	0.224
Chrysene	**42 D**	**5.4 D**	ND @ 0.37	**2.7**	**16 D**	ND @ 0.37	**1.5**	ND @ 0.38	0.4
Bis(2-ethylhexyl)phthalate	ND @ 0.40	ND @ 0.36	ND @ 0.37	ND @ 0.41	ND @ 0.36	ND @ 0.37	ND @ 0.39	ND @ 0.38	50
Benzo(b)fluoranthene	**35 D**	**3.8 D**	ND @ 0.37	**3.5**	**14 D**	ND @ 0.37	**1.9**	ND @ 0.38	1.1
Benzo(k)fluoranthene	ND @ 20	**1.9**	ND @ 0.37	**1.4**	**8.4 D**	ND @ 0.37	ND @ 0.39	ND @ 0.38	1.1
Benzo(a)pyrene	**38 D**	**4.2 D**	ND @ 0.37	**2.6**	**12 D**	ND @ 0.37	**1.6**	ND @ 0.38	0.061
Indeno(1,2,3-cd)pyrene	ND @ 20	0.94	ND @ 0.37	0.68	**3.4**	ND @ 0.37	0.54	ND @ 0.38	3.2
Dibenzo(a,h)anthracene	**4.2**	**0.38**	ND @ 0.37	ND @ 0.41	**1.3**	ND @ 0.37	ND @ 0.39	ND @ 0.38	0.014
Benzo(g,h,i)perylene	ND @ 20	0.67	ND @ 0.37	ND @ 0.41	2.5	ND @ 0.37	ND @ 0.39	ND @ 0.38	50
Total SVOCs	354.44 D	81.35 D	0.59	29.67	218.62 D	1.04	15.98	0.56	NSCG
Total PAHs	314.5 D	70.93 D	ND	23.35	197.2 D	ND	13.63	ND	500
Total CaPAHs	158.2 D	22.09 D	ND	13.58	73.6 D	ND	7.14	ND	NSCG

NOTES:

All data based on preliminary laboratory results

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B - Indicates Compound Was Also Reported In Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 2
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-30 (0.5-2)	GPESB-30(4-6)	GPESB-30(24.5-26.5	GPESB-31(0.5-2)	GPESB-31(5-7)	GPESB-31(7-9)	GPESB-31(9-10)	GPESB-32(0.5-2)	NYSDEC SCGs (MG/KG)
Lab Sample ID No	0605432-001	0605432-002	0605432-003	0605687-003	0605688-003	0605688-004	0605688-005	0605687-004	
Depth (feet bgs):	0.5 - 2	4-6	24.5-26.5	0.5-2	5-7	7-9	9-10	0.5-2	
Sample Date:	5/10/2006	5/10/2006	5/10/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Phenol	ND @ 0.36	ND @ 0.36	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	0.03
2-Methylphenol	ND @ 0.36	ND @ 0.36	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	0.1
4-Methylphenol	ND @ 0.36	ND @ 0.36	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	0.9
2,4-Dimethylphenol	ND @ 0.36	ND @ 0.36	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	NSCG
Naphthalene	ND @ 0.36	ND @ 0.36	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	13
2-Methylnaphthalene	ND @ 0.36	ND @ 0.36	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	36.4
2-Chloronaphthalene	ND @ 0.36	ND @ 0.36	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	NSCG
Acenaphthylene	ND @ 0.36	ND @ 0.36	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	41
Acenaphthene	ND @ 0.36	ND @ 0.36	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	50
Dibenzofuran	ND @ 0.36	ND @ 0.36	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	6.2
Diethylphthalate	ND @ 0.36	ND @ 0.36	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	7.1
Fluorene	ND @ 0.36	ND @ 0.36	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	50
N-Nitrosodiphenylamine	ND @ 0.36	ND @ 0.91	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	NSCG
Phenanthrene	0.98	0.57	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	50
Anthracene	ND @ 0.36	ND @ 0.39	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	50
Carbazole	ND @ 0.36	ND @ 0.39	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	50
Di-n-butylphthalate	ND @ 0.36	ND @ 0.39	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	8.1
Fluoranthene	1.8	0.76	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	50
Pyrene	2.1	0.75	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	50
Butyl benzyl phthalate	ND @ 0.36	ND @ 0.39	ND @ 0.37	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	50
Benzo(a)anthracene	**1.1**	**0.4**	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	0.224
Chrysene	**1.3**	**0.45**	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	0.4
Bis(2-ethylhexyl)phthalate	0.58	0.88	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	0.96	50
Benzo(b)fluoranthene	**1.5**	0.44	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	1.1
Benzo(k)fluoranthene	0.51	ND @ 0.34	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	1.1
Benzo(a)pyrene	**1.2**	**0.41**	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	0.061
Indeno(1,2,3-cd)pyrene	0.43	ND @ 0.34	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	3.2
Dibenzo(a,h)anthracene	ND @ 0.36	ND @ 0.34	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	0.014
Benzo(g,h,i)perylene	ND @ 0.36	ND @ 0.34	ND @ 0.40	ND @ 0.35	ND @ 0.37	ND @ 0.36	ND @ 0.35	ND @ 0.35	50
Total SVOCs	11.5	4.66	ND	ND	ND	ND	ND	0.96	NSCG
Total PAHs	9.82	3.38	ND	ND	ND	ND	ND	ND	500
Total CaPAHs	6.04	1.7	ND	ND	ND	ND	ND	ND	NSCG

NOTES:

All data based on preliminary laboratory results

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NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
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TABLE 2
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-32(7-9)	GPESB-32(9-10)	GPESB-33(0.5-2)	GPESB-33(2.5-4.5)	GPESB-33(7-9)	GPESB-33(13-15)	GPESB-34 (0.5-2)	GPESB-34 (5-7)	NYSDEC SCGs (MG/KG)
Lab Sample ID No	0605687-005	0605687-006	0605432-004	0605432-005	0605432-006	0605432-007	0605432-008	0605432-009	
Depth (feet bgs):	7-9	9-10	0.5-2	2.5-4.5	7-9	13-15	0.5 - 2	5-7	
Sample Date:	5/15/2006	5/15/2006	5/10/2006	5/10/2006	5/10/2006	5/10/2006	5/9/2006	5/9/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Phenol	ND @ 0.35	ND @ 0.36	ND @ 0.36	**4.8**	ND @ 0.34	ND @ 0.36	ND @ 0.36	ND @ 0.39	0.03
2-Methylphenol	ND @ 0.35	ND @ 0.36	ND @ 0.36	**1.2**	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 0.39	0.1
4-Methylphenol	ND @ 0.35	ND @ 0.36	ND @ 0.36	**5.6**	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 0.39	0.9
2,4-Dimethylphenol	ND @ 0.35	ND @ 0.36	ND @ 0.36	5.2	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 0.39	NSCG
Naphthalene	ND @ 0.35	ND @ 0.36	1.1	**1100 D**	ND @ 0.34	ND @ 0.36	1.8	ND @ 0.39	13
2-Methylnaphthalene	ND @ 0.35	ND @ 0.36	0.53	**210 D**	ND @ 0.34	ND @ 0.36	1.3	ND @ 0.39	36.4
2-Chloronaphthalene	ND @ 0.35	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 0.39	NSCG
Acenaphthylene	ND @ 0.35	ND @ 0.36	1.5	ND @ 190 D	ND @ 0.34	ND @ 0.36	2.1	ND @ 0.39	41
Acenaphthene	ND @ 0.35	ND @ 0.36	0.36	ND @ 190 D	ND @ 0.34	ND @ 0.36	1.1	ND @ 0.39	50
Dibenzofuran	ND @ 0.35	ND @ 0.36	0.7	**280 D**	ND @ 0.34	ND @ 0.36	0.57	ND @ 0.39	6.2
Diethylphthalate	ND @ 0.35	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 0.39	7.1
Fluorene	ND @ 0.35	ND @ 0.36	1.2	**420 D**	ND @ 0.34	ND @ 0.36	1.3	ND @ 0.39	50
N-Nitrosodiphenylamine	ND @ 0.35	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 0.39	NSCG
Phenanthrene	ND @ 0.35	ND @ 0.36	8.7 D	**1500 D**	ND @ 0.34	ND @ 0.36	15 D	1.2	50
Anthracene	ND @ 0.35	ND @ 0.36	1.5	**300 D**	ND @ 0.34	ND @ 0.36	2.8	ND @ 0.39	50
Carbazole	ND @ 0.35	ND @ 0.36	0.65	ND @ 0.38	ND @ 0.34	ND @ 0.36	0.84	ND @ 0.39	50
Di-n-butylphthalate	ND @ 0.35	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.34	ND @ 0.36	ND @ 0.37	0.48	8.1
Fluoranthene	ND @ 0.35	ND @ 0.36	9.8 D	**1000 D**	ND @ 0.34	ND @ 0.36	19 D	0.61	50
Pyrene	ND @ 0.35	ND @ 0.36	1.1 D	**760 D**	ND @ 0.34	ND @ 0.36	21 D	0.55	50
Butyl benzyl phthalate	ND @ 0.35	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.34	ND @ 0.36	0.55	ND @ 0.39	50
Benzo(a)anthracene	ND @ 0.35	ND @ 0.36	ND @ 0.36	**350 D**	ND @ 0.34	ND @ 0.36	**11 D**	ND @ 0.39	0.224
Chrysene	ND @ 0.35	ND @ 0.36	**5.2**	**330 D**	ND @ 0.34	ND @ 0.36	**12 D**	**0.46**	0.4
Bis(2-ethylhexyl)phthalate	ND @ 0.35	ND @ 0.36	0.64	ND @ 190 D	ND @ 0.34	ND @ 0.36	0.51	ND @ 0.39	50
Benzo(b)fluoranthene	ND @ 0.35	ND @ 0.36	**6.2 D**	**370 D**	ND @ 0.34	ND @ 0.36	**12 D**	0.49	1.1
Benzo(k)fluoranthene	ND @ 0.35	ND @ 0.36	**3.2**	**230 D**	ND @ 0.34	ND @ 0.36	5 D	ND @ 0.39	1.1
Benzo(a)pyrene	ND @ 0.35	ND @ 0.36	**5.9**	**310 D**	ND @ 0.34	ND @ 0.36	**10 D**	ND @ 0.39	0.061
Indeno(1,2,3-cd)pyrene	ND @ 0.35	ND @ 0.36	1.8	ND @ 190 D	ND @ 0.34	ND @ 0.36	**3.5**	ND @ 0.39	3.2
Dibenzo(a,h)anthracene	ND @ 0.35	ND @ 0.36	**0.74**	ND @ 190 D	ND @ 0.34	ND @ 0.36	**1.3**	ND @ 0.39	0.014
Benzo(g,h,i)perylene	ND @ 0.35	ND @ 0.36	1.2	ND @ 190 D	ND @ 0.34	ND @ 0.36	2.6	ND @ 0.39	50
Total SVOCs	ND	ND	52.02 D	7176.8 D	ND	ND	125.27	3.79	NSCG
Total PAHs	ND	ND	50.2 D	**6600 D**	ND	ND	123.07	3.31	500
Total CaPAHs	ND	ND	24.24 D	1590 D	ND	ND	57.4	0.95	NSCG

NOTES:

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TABLE 2
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-34(8-10)	GPESB-35(0.5-2)	GPESB-35(5-7)	GPESB-35(15-17)	GPESB-36(0.5-2)	GPESB-36(7-9)	GPESB-36(9-10)	GPESB-37(0.5-2)	NYSDEC SCGs (MG/KG)
Lab Sample ID No	0605432-010	0605432-011	0605432-012	0605432-013	0605434-001	0605434-002	0605434-003	0605434-004	
Depth (feet bgs):	8-10	0.5-2	5-7	15-17	0.5 - 2	7-9	9-10	0.5-2	
Sample Date:	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/10/2006	5/10/2006	5/10/2006	5/9/006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Phenol	ND @ 0.37	ND @ 0.36	ND @ 8.4	ND @ 0.34	ND @ 0.35	ND @ 0.38	ND @ 0.36	ND @ 0.34	0.03
2-Methylphenol	ND @ 0.37	ND @ 0.36	ND @ 8.4	ND @ 0.34	ND @ 0.35	ND @ 0.38	ND @ 0.36	ND @ 0.34	0.1
4-Methylphenol	ND @ 0.37	ND @ 0.36	ND @ 8.4	ND @ 0.34	ND @ 0.35	ND @ 0.38	ND @ 0.36	ND @ 0.34	0.9
2,4-Dimethylphenol	ND @ 0.37	ND @ 0.36	11	ND @ 0.34	ND @ 0.35	ND @ 0.38	ND @ 0.36	ND @ 0.34	NSCG
Naphthalene	ND @ 0.37	9.6 D	**3,700 D**	0.52	19 D	ND @ 0.38	ND @ 0.36	ND @ 0.34	13
2-Methylnaphthalene	ND @ 0.37	7.8 D	**2,400 D**	ND @ 0.34	5.1	ND @ 0.38	ND @ 0.36	ND @ 0.34	36.4
2-Chloronaphthalene	ND @ 0.37	ND @ 0.36	ND @ 8.4	ND @ 0.34	ND @ 0.35	ND @ 0.38	ND @ 0.36	ND @ 0.34	NSCG
Acenaphthylene	ND @ 0.37	5.4	ND @ 420	ND @ 0.34	9.5 D	ND @ 0.38	ND @ 0.36	ND @ 0.34	41
Acenaphthene	ND @ 0.37	1.6	**650 D**	ND @ 0.34	1.3	ND @ 0.38	ND @ 0.36	ND @ 0.34	50
Dibenzofuran	ND @ 0.37	1.2	**61**	ND @ 0.34	4.9	ND @ 0.38	ND @ 0.36	ND @ 0.34	6.2
Diethylphthalate	ND @ 0.37	ND @ 0.36	ND @ 8.4	ND @ 0.34	0.41	0.59	ND @ 0.36	ND @ 0.34	7.1
Fluorene	0.44	7.6 D	**820 D**	ND @ 0.34	11 D	ND @ 0.38	ND @ 0.36	ND @ 0.34	50
N-Nitrosodiphenylamine	ND @ 0.37	ND @ 0.36	35	ND @ 0.34	0.36	ND @ 0.38	ND @ 0.36	ND @ 0.34	NSCG
Phenanthrene	3.8	36 D	**2,300 D**	ND @ 0.34	47 D	ND @ 0.38	ND @ 0.36	ND @ 0.34	50
Anthracene	0.78	5.2	**540 D**	ND @ 0.34	13 D	ND @ 0.38	ND @ 0.36	ND @ 0.34	50
Carbazole	ND @ 0.37	0.88	45	ND @ 0.34	4.1	ND @ 0.38	ND @ 0.36	ND @ 0.34	50
Di-n-butylphthalate	ND @ 0.37	ND @ 0.36	ND @ 8.4	ND @ 0.34	ND @ 0.35	ND @ 0.38	ND @ 0.36	ND @ 0.34	8.1
Fluoranthene	3.9	28 D	**750 D**	ND @ 0.34	46 D	ND @ 0.38	ND @ 0.36	ND @ 0.34	50
Pyrene	3.8	40 D	**1,100 D**	ND @ 0.34	49 D	ND @ 0.38	ND @ 0.36	ND @ 0.34	50
Butyl benzyl phthalate	ND @ 0.37	ND @ 0.36	ND @ 8.4	ND @ 0.34	ND @ 0.35	ND @ 0.38	0.43	ND @ 0.34	50
Benzo(a)anthracene	**2.1**	**19 D**	**490 D**	ND @ 0.34	**27 D**	ND @ 0.38	ND @ 0.36	ND @ 0.34	0.224
Chrysene	**2.3**	**21 D**	**590 D**	ND @ 0.34	**27 D**	ND @ 0.38	ND @ 0.36	ND @ 0.34	0.4
Bis(2-ethylhexyl)phthalate	ND @ 0.37	0.62	ND @ 8.4	ND @ 0.34	ND @ 0.35	ND @ 0.38	ND @ 0.36	ND @ 0.34	50
Benzo(b)fluoranthene	**2.5**	**18 D**	ND @ 420	ND @ 0.34	**31 D**	ND @ 0.38	ND @ 0.36	ND @ 0.34	1.1
Benzo(k)fluoranthene	0.88	**9.4 D**	ND @ 420	ND @ 0.34	**18 D**	ND @ 0.38	ND @ 0.36	ND @ 0.34	1.1
Benzo(a)pyrene	**2**	**17 D**	ND @ 420	ND @ 0.34	**30 D**	ND @ 0.38	ND @ 0.36	ND @ 0.34	0.061
Indeno(1,2,3-cd)pyrene	0.88	**4.8**	ND @ 420	ND @ 0.34	**9.6 D**	ND @ 0.38	ND @ 0.36	ND @ 0.34	3.2
Dibenzo(a,h)anthracene	ND @ 0.37	**2.3**	ND @ 420	ND @ 0.34	**3.4**	ND @ 0.38	ND @ 0.36	ND @ 0.34	0.014
Benzo(g,h,i)perylene	0.72	3.9	ND @ 420	ND @ 0.34	ND @ 7.0	ND @ 0.38	ND @ 0.36	ND @ 0.34	50
Total SVOCs	24.1	239.3 D	13,492 D	0.52	356.67 D	0.59	0.43	ND	NSCG
Total PAHs	24.4	211 D	**10,511 D**	0.52	319.7 D	ND	ND	ND	500
Total CaPAHs	11.38	91.5 D	1,080 D	ND	146 D	ND	ND	ND	NSCG

NOTES:

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TABLE 2
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-37(5-7)	GPESB-37(8-10)	GPESB-38(0.5-2.0)	GPESB-38(5-7)	GPESB-38(8-10)	GPESB-39(0.5-2)	GPESB-39(5-7)	GPESB-39(8-10)	NYSDEC SCGs (MG/KG)
Lab Sample ID No	0605434-005	0605434-006	0605432-014	0605432-015	0605432-016	0605438-001	0605438-002	0605434-007	
Depth (feet bgs):	5-7	8-10	0.5-2	5-7	8-10	0.5-2	5-7	8-10	
Sample Date:	5/9/006	5/9/006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Phenol	ND @ 0.38	ND @ 0.40	ND @ 0.36	ND @ 0.39	ND @ 0.37	ND @ 0.36	ND @ 0.36	ND @ 0.48	0.03
2-Methylphenol	ND @ 0.38	ND @ 0.40	ND @ 0.36	ND @ 0.39	ND @ 0.37	ND @ 0.36	ND @ 0.36	ND @ 0.48	0.1
4-Methylphenol	ND @ 0.38	ND @ 0.40	ND @ 0.36	ND @ 0.39	ND @ 0.37	ND @ 0.36	ND @ 0.36	ND @ 0.48	0.9
2,4-Dimethylphenol	ND @ 0.38	ND @ 0.40	ND @ 0.36	ND @ 0.39	ND @ 0.37	ND @ 0.36	ND @ 0.36	ND @ 0.48	NSCG
Naphthalene	ND @ 0.38	ND @ 0.40	1.3	1.1	1.9	ND @ 0.36	ND @ 0.36	ND @ 0.48	13
2-Methylnaphthalene	ND @ 0.38	ND @ 0.40	0.72	0.5	0.83	ND @ 0.36	ND @ 0.36	ND @ 0.48	36.4
2-Chloronaphthalene	0.66	ND @ 0.40	ND @ 0.36	ND @ 0.39	ND @ 0.37	ND @ 0.36	ND @ 0.36	ND @ 0.48	NSCG
Acenaphthylene	ND @ 0.38	ND @ 0.40	1.2	ND @ 0.39	0.58	ND @ 0.36	ND @ 0.36	ND @ 0.48	41
Acenaphthene	ND @ 0.38	ND @ 0.40	ND @ 0.36	0.6	ND @ 0.37	ND @ 0.36	ND @ 0.36	ND @ 0.48	50
Dibenzofuran	ND @ 0.38	ND @ 0.40	ND @ 0.36	ND @ 0.39	ND @ 0.37	ND @ 0.36	ND @ 0.36	ND @ 0.48	6.2
Diethylphthalate	0.43	ND @ 0.40	ND @ 0.36	ND @ 0.39	ND @ 0.37	0.41	0.63	ND @ 0.48	7.1
Fluorene	ND @ 0.38	ND @ 0.40	ND @ 0.36	0.76	ND @ 0.37	ND @ 0.36	ND @ 0.36	ND @ 0.48	50
N-Nitrosodiphenylamine	ND @ 0.38	ND @ 0.40	ND @ 0.36	ND @ 0.39	ND @ 0.37	ND @ 0.36	ND @ 0.36	ND @ 0.48	NSCG
Phenanthrene	ND @ 0.38	ND @ 0.40	3.4	9.1 D	2.7	0.98	ND @ 0.36	ND @ 0.48	50
Anthracene	ND @ 0.38	ND @ 0.40	0.83	1.9	0.61	ND @ 0.36	ND @ 0.36	ND @ 0.48	50
Carbazole	ND @ 0.38	ND @ 0.40	ND @ 0.36	1.5	ND @ 0.37	ND @ 0.36	ND @ 0.36	ND @ 0.48	50
Di-n-butylphthalate	ND @ 0.38	ND @ 0.40	ND @ 0.36	ND @ 0.39	ND @ 0.37	ND @ 0.36	ND @ 0.36	ND @ 0.48	8.1
Fluoranthene	0.44	ND @ 0.40	4.7	11 D	3.9	1.6	ND @ 0.36	0.49	50
Pyrene	0.46	ND @ 0.40	7 D	9.4 D	5.2	1.5	ND @ 0.36	ND @ 0.48	50
Butyl benzyl phthalate	ND @ 0.38	ND @ 0.40	ND @ 0.36	ND @ 0.39	ND @ 0.37	ND @ 0.36	ND @ 0.36	ND @ 0.48	50
Benzo(a)anthracene	**0.43**	ND @ 0.40	**4.1 D**	**6.1**	**2.8**	**0.80**	ND @ 0.36	ND @ 0.48	0.224
Chrysene	**0.41**	ND @ 0.40	**4.4 D**	**6.0**	**2.9**	**0.98**	ND @ 0.36	ND @ 0.48	0.4
Bis(2-ethylhexyl)phthalate	ND @ 0.38	ND @ 0.40	ND @ 0.36	ND @ 0.39	ND @ 0.37	ND @ 0.36	ND @ 0.36	ND @ 0.48	50
Benzo(b)fluoranthene	0.77	ND @ 0.40	**5.2 D**	**7.1 D**	**4.1**	0.98	ND @ 0.36	ND @ 0.48	1.1
Benzo(k)fluoranthene	0.41	ND @ 0.40	**1.8**	**3.0 D**	**1.9**	0.48	ND @ 0.36	ND @ 0.48	1.1
Benzo(a)pyrene	**0.44**	ND @ 0.40	**4**	**5.4 D**	**2.9**	**0.83**	ND @ 0.36	ND @ 0.48	0.061
Indeno(1,2,3-cd)pyrene	ND @ 0.38	ND @ 0.40	1.3	1.9 D	1.0	0.37	ND @ 0.36	ND @ 0.48	3.2
Dibenzo(a,h)anthracene	ND @ 0.38	ND @ 0.40	**0.58**	**0.63**	**0.43**	ND @ 0.36	ND @ 0.36	ND @ 0.48	0.014
Benzo(g,h,i)perylene	ND @ 0.38	ND @ 0.40	0.9	1.0	0.68	ND @ 0.36	ND @ 0.36	ND @ 0.48	50
Total SVOCs	4.45	ND	41.43 D	66.99 D	32.43	8.93	0.63	0.49	NSCG
Total PAHs	2.93	ND	36.61 D	58.89 D	28.8	7.72	ND	ND	500
Total CaPAHs	2.46	ND	21.38 D	30.13 D	16.03	4.44	ND	ND	NSCG

NOTES:

All data based on preliminary laboratory results

ND - Indicates Compound Was Not Detected At The Method Detection Limit.
NA - Indicates Sample Was Not Analyzed For That Parameter.
E - Indicates that Compound Exceeded Instrument Calibration
D - Indicates Sample Was Diluted.
J - Indicates That Compound Was Detected At A Concentration Below The Method Detection Limit.
B - Indicates Compound Was Also Reported In Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 2
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-40(0.5-2)	GPESB-40(5.5-7.5)	GPESB-40(8-10)	GPESB-41(0.5-2)	GPESB-41(5.5-7.5)	GPESB-41(8-10)	GPESB-42(0.5-2)	GPESB-42(5.5-7.5)	NYSDEC SCGs (MG/KG)
Lab Sample ID No	0605434-008	0605434-009	0605434-010	0605434-011	0605434-012	0605434-013	0605434-014	0605432-017	
Depth (feet bgs):	0.5-2	5.5-7.5	8-10	0.5-2	5.5-7.5	8-10	0.5-2	5.5-7.5	
Sample Date:	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Phenol	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	0.03
2-Methylphenol	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	0.1
4-Methylphenol	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	0.9
2,4-Dimethylphenol	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	NSCG
Naphthalene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	0.52	ND @ 0.35	ND @ 0.34	13
2-Methylnaphthalene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	36.4
2-Chloronaphthalene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	NSCG
Acenaphthylene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	41
Acenaphthene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	50
Dibenzofuran	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	6.2
Diethylphthalate	ND @ 0.36	0.37	0.42	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	7.1
Fluorene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	50
N-Nitrosodiphenylamine	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	NSCG
Phenanthrene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	0.93	0.5	0.5	50
Anthracene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	50
Carbazole	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	50
Di-n-butylphthalate	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	8.1
Fluoranthene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	1.3	0.8	0.49	50
Pyrene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	1	0.78	0.38	50
Butyl benzyl phthalate	0.39	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	50
Benzo(a)anthracene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	**0.64**	**0.49**	ND @ 0.34	0.224
Chrysene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	**0.53**	**0.53**	ND @ 0.34	0.4
Bis(2-ethylhexyl)phthalate	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	50
Benzo(b)fluoranthene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	0.64	0.54	ND @ 0.34	1.1
Benzo(k)fluoranthene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	1.1
Benzo(a)pyrene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	**0.61**	**0.46**	ND @ 0.34	0.061
Indeno(1,2,3-cd)pyrene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	3.2
Dibenzo(a,h)anthracene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	0.014
Benzo(g,h,i)perylene	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.35	ND @ 0.34	ND @ 0.35	ND @ 0.35	ND @ 0.34	50
Total SVOCs	0.39	0.37	0.42	ND	ND	6.17	4.1	1.37	NSCG
Total PAHs	ND	ND	ND	ND	ND	5.53	3.61	1.37	500
Total CaPAHs	ND	ND	ND	ND	ND	2.42	2.02	ND	NSCG

NOTES:

All data based on preliminary laboratory results

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NA - Indicates Sample Was Not Analyzed For That Parameter.
E - Indicates that Compound Exceeded Instrument Calibration
D - Indicates Sample Was Diluted.
J - Indicates That Compound Was Detected At A Concentration Below The Method Detection Limit.
B - Indicates Compound Was Also Reported In Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 2
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-42(8-9.5)	GPESB-43(0.5-2)	GPESB-43(8-10)	GPESB-44(0.5-2)	GPESB-44(3.5-5.5)	GPESB-44(5.5-7.5)	GPESB-44(8-10)	GPESB-45(0.5-2)	
Lab Sample ID No	0605432-018	0605434-015	0605434-017	0605688-006	0605688-007	0605688-008	0605688-009	0605688-010	**NYSDEC SCGs (MG/KG)**
Depth (feet bgs):	8-9.5	0.5-2	8-10	0.5-2	3.5-5.5	5.5-7.5	8-10	0.5-2	
Sample Date:	5/9/2006	5/9/2006	5/9/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Phenol	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	0.03
2-Methylphenol	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	0.1
4-Methylphenol	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	0.9
2,4-Dimethylphenol	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	NSCG
Naphthalene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	13
2-Methylnaphthalene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	36.4
2-Chloronaphthalene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	NSCG
Acenaphthylene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	41
Acenaphthene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	50
Dibenzofuran	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	6.2
Diethylphthalate	ND @ 0.37	0.37	0.36	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	7.1
Fluorene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	50
N-Nitrosodiphenylamine	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	NSCG
Phenanthrene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	0.7	ND @ 0.34	ND @ 0.36	50
Anthracene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	50
Carbazole	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	50
Di-n-butylphthalate	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	8.1
Fluoranthene	ND @ 0.37	0.36	ND @ 0.34	ND @ 0.37	ND @ 0.40	0.38	ND @ 0.34	ND @ 0.36	50
Pyrene	ND @ 0.37	0.36	ND @ 0.34	ND @ 0.37	ND @ 0.40	0.59	ND @ 0.34	ND @ 0.36	50
Butyl benzyl phthalate	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	50
Benzo(a)anthracene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	0.224
Chrysene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	0.4
Bis(2-ethylhexyl)phthalate	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	50
Benzo(b)fluoranthene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	1.1
Benzo(k)fluoranthene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	1.1
Benzo(a)pyrene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	0.061
Indeno(1,2,3-cd)pyrene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	3.2
Dibenzo(a,h)anthracene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	0.014
Benzo(g,h,i)perylene	ND @ 0.37	ND @ 0.35	ND @ 0.34	ND @ 0.37	ND @ 0.40	ND @ 0.35	ND @ 0.34	ND @ 0.36	50
Total SVOCs	ND	1.09	0.36	ND	ND	1.67	ND	ND	NSCG
Total PAHs	ND	0.72	ND	ND	ND	0.97	ND	ND	500
Total CaPAHs	ND	ND	ND	ND	ND	ND	ND	ND	NSCG

NOTES:

All data based on preliminary laboratory results

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NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 2
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-45(5.5-7.5)	GPESB-45(8-10)	GPESB-46(0.5-2)	GPESB-46(3.5-5.5)	GPESB-46(5.5-7.5)	GPESB-46(8-10)	GPESB-47(0.5-2)	GPESB-47(5.5-7.5)	
Lab Sample ID No	0605688-011	0605688-012	0605688-013	0605688-014	0605688-015	0605688-016	0605687-007	0605687-008	**NYSDEC SCGs (MG/KG)**
Depth (feet bgs):	5.5-7.5	8-10	0.5-2	3.5-5.5	5.5-7.5	8-10	0.5-2	5.5-7.5	
Sample Date:	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Phenol	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	0.03
2-Methylphenol	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	0.1
4-Methylphenol	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	0.9
2,4-Dimethylphenol	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	NSCG
Naphthalene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	13
2-Methylnaphthalene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	36.4
2-Chloronaphthalene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	NSCG
Acenaphthylene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	41
Acenaphthene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	50
Dibenzofuran	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	6.2
Diethylphthalate	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	0.65	ND @ 0.38	ND @ 0.43	7.1
Fluorene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	50
N-Nitrosodiphenylamine	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	NSCG
Phenanthrene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	50
Anthracene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	50
Carbazole	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	50
Di-n-butylphthalate	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	8.1
Fluoranthene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	50
Pyrene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	50
Butyl benzyl phthalate	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	50
Benzo(a)anthracene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	0.224
Chrysene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	0.4
Bis(2-ethylhexyl)phthalate	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	50
Benzo(b)fluoranthene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	1.1
Benzo(k)fluoranthene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	1.1
Benzo(a)pyrene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	0.061
Indeno(1,2,3-cd)pyrene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	3.2
Dibenzo(a,h)anthracene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	0.014
Benzo(g,h,i)perylene	ND @ 0.38	ND @ 0.39	ND @ 0.38	ND @ 0.36	ND @ 0.36	ND @ 0.38	ND @ 0.38	ND @ 0.43	50
Total SVOCs	ND	ND	ND	ND	ND	0.65	ND	ND	NSCG
Total PAHs	ND	ND	ND	ND	ND	ND	ND	ND	500
Total CaPAHs	ND	ND	ND	ND	ND	ND	ND	ND	NSCG

NOTES:

All data based on preliminary laboratory results

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B - Indicates Compound Was Also Reported In Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 2
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-47(8-10)	GPESB-48(0.5-2)	GPESB-48(3-5)	GPESB-48(8-10)	GPESB-51(0.5-2)	GPESB-51(5-7)	GPESB-51(10-12)	GPESB-51(15-17)	NYSDEC SCGs (MG/KG)
Lab Sample ID No	0605687-009	0605434-018	0605434-019	0605432-019	0605687-010	0605688-017	0605688-018	0605688-019	
Depth (feet bgs):	8-10	0.5-2	0.5-2	8-10	0.5-2	5-7	10-12	10-12	
Sample Date:	5/15/2006	5/10/2006	5/10/2006	5/10/2006	5/15/2006	5/17/2006	5/17/2006	5/17/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Phenol	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 16	ND @ 370	ND @ 3.4	0.03
2-Methylphenol	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 0.36	ND @ 370	ND @ 3.4	0.1
4-Methylphenol	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 16	ND @ 370	ND @ 3.4	0.9
2,4-Dimethylphenol	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 16	ND @ 370	ND @ 3.4	NSCG
Naphthalene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	**45**	**3,200**	**38**	13
2-Methylnaphthalene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	**44**	**1,700**	11	36.4
2-Chloronaphthalene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 0.36	ND @ 370	ND @ 3.4	NSCG
Acenaphthylene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	40	**370**	ND @ 3.4	41
Acenaphthene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 0.36	ND @ 370	ND @ 3.4	50
Dibenzofuran	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 0.36	ND @ 370	ND @ 3.4	6.2
Diethylphthalate	ND @ 0.38	0.38	0.48	ND @ 0.36	ND @ 0.37	ND @ 0.36	ND @ 370	ND @ 3.4	7.1
Fluorene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	**58**	**760**	6.6	50
N-Nitrosodiphenylamine	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 0.36	ND @ 370	ND @ 3.4	NSCG
Phenanthrene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	**180**	**2,400**	29	50
Anthracene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	48	**480**	4.6	50
Carbazole	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 0.36	ND @ 370	ND @ 3.4	50
Di-n-butylphthalate	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 0.36	ND @ 370	ND @ 3.4	8.1
Fluoranthene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	**110**	**1,100**	13.0	50
Pyrene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	**160**	**1,300**	9.0	50
Butyl benzyl phthalate	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 0.36	ND @ 370	ND @ 3.4	50
Benzo(a)anthracene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	**80**	**530**	ND @ 3.4	0.224
Chrysene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	**83**	**530**	4.0	0.4
Bis(2-ethylhexyl)phthalate	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 16	ND @ 370	ND @ 3.4	50
Benzo(b)fluoranthene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	**50**	ND @ 370	ND @ 3.4	1.1
Benzo(k)fluoranthene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	**37**	ND @ 370	ND @ 3.4	1.1
Benzo(a)pyrene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	**62**	**440**	ND @ 3.4	0.061
Indeno(1,2,3-cd)pyrene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	**22**	ND @ 370	ND @ 3.4	3.2
Dibenzo(a,h)anthracene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	ND @ 0.36	ND @ 370	ND @ 3.4	0.014
Benzo(g,h,i)perylene	ND @ 0.38	ND @ 0.34	ND @ 0.34	ND @ 0.36	ND @ 0.37	18	ND @ 370	ND @ 3.4	50
Total SVOCs	ND	0.38	0.48	ND	ND	997	12,810	115.2	NSCG
Total PAHs	ND	ND	ND	ND	ND	**913**	**7,700**	104.2	500
Total CaPAHs	ND	ND	ND	ND	ND	334	1500	4.0	NSCG

NOTES:

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NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 2
GREENPOINT FORMER MGP SITE INVESTIGATION
TCL SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL
MAY 2006

Sample Number:	GPESB-51(25-35)	GPETP-10 (0-5')	GPETP-11 (0.5-5')	GPETP-12 (0-5')	GPETP-13 (0.5-5')	NYSDEC SCGs (MG/KG)
Lab Sample ID No	0605688-020	0605901-001	0605901-002	0605901-003	0605901-004	
Depth (feet bgs):	23-25	0 - 5	0.5 - 5	0 - 5	0.5 - 5	
Sample Date:	5/17/2006	5/17/2006	5/23/2006	5/18/2006	5/22/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Phenol	ND @ 3.7	ND @ 0.38	ND @ 0.35	ND @ 0.39	ND @ 0.36	0.03
2-Methylphenol	ND @ 3.7	ND @ 0.38	ND @ 0.35	ND @ 0.39	ND @ 0.36	0.1
4-Methylphenol	ND @ 3.7	ND @ 0.38	ND @ 0.35	ND @ 0.39	ND @ 0.36	0.9
2,4-Dimethylphenol	ND @ 3.7	ND @ 0.38	ND @ 0.35	ND @ 0.39	ND @ 0.36	NSCG
Naphthalene	4.3	ND @ 0.38	ND @ 0.35	ND @ 0.39	ND @ 0.36	13
2-Methylnaphthalene	ND @ 3.7	ND @ 0.38	ND @ 0.35	ND @ 0.39	ND @ 0.36	36.4
2-Chloronaphthalene	ND @ 3.7	ND @ 0.38	ND @ 0.35	ND @ 0.39	ND @ 0.36	NSCG
Acenaphthylene	ND @ 3.7	ND @ 0.38	ND @ 0.35	ND @ 0.39	1.2	41
Acenaphthene	5.1	ND @ 0.38	ND @ 0.35	ND @ 0.39	ND @ 0.36	50
Dibenzofuran	ND @ 3.7	ND @ 0.38	ND @ 0.35	ND @ 0.39	ND @ 0.36	6.2
Diethylphthalate	ND @ 3.7	ND @ 0.38	ND @ 0.35	ND @ 0.39	ND @ 0.36	7.1
Fluorene	8.6	ND @ 0.38	ND @ 0.35	ND @ 0.39	0.51	50
N-Nitrosodiphenylamine	ND @ 3.7	ND @ 0.38	ND @ 0.35	ND @ 0.39	ND @ 0.36	NSCG
Phenanthrene	44	ND @ 0.38	ND @ 0.35	2.7	2.7	50
Anthracene	6.5	ND @ 0.38	ND @ 0.35	0.64	0.66	50
Carbazole	ND @ 3.7	ND @ 0.38	ND @ 0.35	ND @ 0.39	ND @ 0.36	50
Di-n-butylphthalate	ND @ 3.7	ND @ 0.38	ND @ 0.35	ND @ 0.39	ND @ 0.36	8.1
Fluoranthene	12	ND @ 0.38	ND @ 0.35	3.6	4.3	50
Pyrene	8.8	ND @ 0.38	ND @ 0.35	3.2	8.7 D	50
Butyl benzyl phthalate	ND @ 3.7	ND @ 0.38	ND @ 0.35	ND @ 0.39	ND @ 0.36	50
Benzo(a)anthracene	ND @ 3.7	ND @ 0.38	ND @ 0.35	**1.8**	**3.6**	0.224
Chrysene	**3.8**	ND @ 0.38	ND @ 0.35	**1.7**	**3.2**	0.4
Bis(2-ethylhexyl)phthalate	ND @ 3.7	ND @ 0.38	ND @ 0.35	0.81	ND @ 0.36	50
Benzo(b)fluoranthene	ND @ 3.7	ND @ 0.38	ND @ 0.35	**1.8**	**3.5**	1.1
Benzo(k)fluoranthene	ND @ 3.7	ND @ 0.38	ND @ 0.35	0.87	**1.7**	1.1
Benzo(a)pyrene	ND @ 3.7	ND @ 0.38	ND @ 0.35	**1.6**	**4.0**	0.061
Indeno(1,2,3-cd)pyrene	ND @ 3.7	ND @ 0.38	ND @ 0.35	0.6	0.96	3.2
Dibenzo(a,h)anthracene	ND @ 3.7	ND @ 0.38	ND @ 0.35	ND @ 0.39	**0.42**	0.014
Benzo(g,h,i)perylene	ND @ 3.7	ND @ 0.38	ND @ 0.35	ND @ 0.39	0.63	50
Total SVOCs	93.1	ND	ND	19.32	36.08	NSCG
Total PAHs	93.1	ND	ND	18.51	36.08	500
Total CaPAHs	3.8	ND	ND	8.47	17.38	NSCG

NOTES:

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X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 3
GREENPOINT FORMER MGP SITE INVESTIGATION
RCRA METALS AND TOTAL CYANIDE IN SOIL
MAY 2006

Sample Number:	GPESB-27(0.5-2)	GPESB-27(4-6)	GPESB-27(24-26)	GPESB-28(0.5-2)	GPESB-28(4-6)	GPESB-28(24-26)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605531-001	0605531-002	0605531-003	0605531-004	0605531-005	0605531-006	
Depth(ft):	0.5-2	4-6	24-26	0.5-2	4-6	24-26	
Sample Date:	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/11/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Arsenic	**20.4**	3.0	0.77 B	6.5	5.8	0.47 B	7.5
Barium	**411**	65	21.4 B	84.7	93.8	20.9 B	300
Cadmium	**1.1**	0.21 B	ND @ 0.014	0.26 B	0.50 B	ND @ 0.014	1
Chromium	**25.1**	**20.1**	7.3	**16.7**	**13.0**	**11.1**	10
Total Cyanide	3.5	0.55	ND @ 0.56	ND @ 0.62	ND @ 0.54	ND @ 0.56	NSCG
Lead	412	33.2	1.3	125	258	1.5	NSCG
Mercury	**0.94**	ND @ 0.018	ND @ 0.019	**1.1**	**1.7**	ND @ 0.019	0.1
Selenium	**2.2**	ND @ 0.21	ND @ 0.21	ND @ 0.24	ND @ 0.21	ND @ 0.21	2
Silver	2.8	0.21 B	ND @ 0.050	0.25 B	0.37 B	0.055 B	NSCG

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NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 3 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
RCRA METALS AND TOTAL CYANIDE IN SOIL
MAY 2006

Sample Number:	GPESB-29 (0.5-2)	GPESB-29(24-26)	GPESB-30 (0.5-2)	GPESB-30 (4-6)	GPESB-30 (24.5-26.5	GPESB-31(0.5-2)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605532-001	0605531-007	0605432-001	0605432-002	0605432-003	0605687-003	
Depth(ft):	0.5 - 2	24-26	0.5-2	4-6	24.5-26.5	0.5-2	
Sample Date:	5/11/2006	5/11/2006	5/10/2006	5/10/2006	5/10/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Arsenic	**9.3**	0.37 B	6.4	1.7	ND @ 0.21	2	7.5
Barium	243	14.0 B	107	40.1	15.6 B	34.4	300
Cadmium	0.40 B	ND @ 0.014	0.37 B	0.13 B	ND @ 0.015	ND @ 0.013	1
Chromium	**20.6**	5.9	**15.2**	**15.1**	5.4	**11.2**	10
Total Cyanide	ND @ 0.56	ND @ 0.58	ND @ 0.55	ND @ 0.52	ND @ 0.60	ND @ 0.53	NSCG
Lead	308	0.91	141	22.1	0.79	9.4	NSCG
Mercury	**1.2**	ND @ 0.019	0.85	0.075	ND @ 0.020	0.028 B	0.1
Selenium	0.65	ND @ 0.22	ND @ 0.21	ND @ 0.20	ND @ 0.23	ND @ 0.20	2
Silver	1.3	0.052 B	0.26 B	0.13 B	0.078 B	0.075 B	NSCG

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TABLE 3 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
RCRA METALS AND TOTAL CYANIDE IN SOIL
MAY 2006

Sample Number:	GPESB-31(5-7)	GPESB-31(7-9)	GPESB-31(9-10)	GPESB-32(0.5-2)	GPESB-32(7-9)	GPESB-32(9-10)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605688-003	0605688-004	0605688-005	0605687-004	0605687-005	0605687-006	
Depth(ft):	5-7	7-9	9-10	0.5-2	7-9	9-10	
Sample Date:	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Arsenic	3.1	0.59 B	0.50 B	1.2	1.2	2.9	7.5
Barium	70.9	28.6	34.7	37.1	49.0	29.1	300
Cadmium	ND @ 0.014	ND @ 0.013	ND @ 0.013	ND @ 0.013	ND @ 0.013	0.024 B	1
Chromium	13.1	**10.4**	**11.0**	6.2	6.1	**11.0**	10
Total Cyanide	ND @ 0.56	ND @ 0.55	ND @ 0.54	ND @ 0.53	ND @ 0.53	ND @ 0.54	NSCG
Lead	5.4	1.8	2.4	2.4	2.1	28.9	NSCG
Mercury	ND @ 0.019	ND @ 0.018	ND @ 0.018	ND @ 0.018	ND @ 0.018	0.066	0.1
Selenium	ND @ 0.21	ND @ 0.21	ND @ 0.20	ND @ 0.20	ND @ 0.20	ND @ 0.21	2
Silver	0.082 B	ND @ 0.049	ND @ 0.048	0.057 B	0.048 B	0.087 P	NSCG

NOTES:

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NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 3 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
RCRA METALS AND TOTAL CYANIDE IN SOIL
MAY 2006

Sample Number:	GPESB-33(0.5-2)	GPESB-33(2.5-4.5)	GPESB-33(7-9)	GPESB-33(13-15)	GPESB-34 (0.5-2)	GPESB-34 (5-7)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605432-004	0605432-005	0605432-006	0605432-007	0605432-008	0605432-009	
Depth(ft):	0.5-2	2.5-4.5	7-9	13-15	0.5 - 2	5-7	
Sample Date:	5/10/2006	5/10/2006	5/10/2006	5/10/2006	5/9/2006	5/9/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Arsenic	**9.4**	**11.4**	0.30 B	0.55 B	**36.5**	4.9	7.5
Barium	117	173	24.0	32.3	279	119	300
Cadmium	**1.5**	0.19 B	ND @ 0.013	ND @ 0.013	**1.2**	ND @ 0.014	1
Chromium	**19.9**	**20.9**	7.1	**12.1**	**19.7**	1.9	10
Total Cyanide	ND @ 0.55	ND @ 0.58	ND @ 0.51	ND @ 0.55	7.8	2.9	NSCG
Lead	266	226	1.5	2.8	307	10.5	NSCG
Mercury	**0.8**	**0.9**	ND @ 0.017	ND @ 0.018	**4.2**	0.07	0.1
Selenium	ND @ 0.21	ND @ .22	ND @ 0.20	ND @ 0.21	0.42 B	1.1	2
Silver	0.56 B	0.20 B	ND @ 0.046	ND @ 0.049	0.50 B	0.087 B	NSCG

NOTES:

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TABLE 3 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
RCRA METALS AND TOTAL CYANIDE IN SOIL
MAY 2006

Sample Number:	GPESB-34(8-10)	GPESB-35(0.5-2)	GPESB-35(5-7)	GPESB-35(15-17)	GPESB-36 (0.5-2)	GPESB-36 (7-9)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605432-010	0605432-011	0605432-012	0605432-013	0605434-001	0605434-002	
Depth(ft):	8-10	0.5-2	5-7	15-17	0.5 - 2	7-9	
Sample Date:	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/10/2006	5/10/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Arsenic	**9.4**	**27.2**	1.1 B	0.38 B	**7.7**	3.0	7.5
Barium	129	**408**	38	52	176	45.8	300
Cadmium	0.24 B	**1.4**	ND @ 0.016	ND @ 0.013	0.59	ND @ 0.014	1
Chromium	8.9	**23**	2.4	13.4	**14.8**	**16.3**	10
Total Cyanide	14.9	2.4	11.9 B	ND @ 0.52	1.1	ND @ 0.57	NSCG
Lead	226	449	7.4	2.6	156	22.4	NSCG
Mercury	**1.8**	**3.8**	ND @ 0.021	ND @ 0.017	0.049	0.035 B	0.1
Selenium	0.49 B	0.7	0.29 B	ND @ 0.20	0.63	0.40 B	2
Silver	0.54 B	0.99 B	ND @ 0.057	ND @ 0.050	0.46 B	0.14 B	NSCG

NOTES:

All data based on preliminary laboratory results.

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D - Indicates Sample Was Diluted.
J - Indicates That Compound Was Detected At A Concentration Below The Method Detection Limit.
B - Indicates Compound Was Also Reported In Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 3 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
RCRA METALS AND TOTAL CYANIDE IN SOIL
MAY 2006

Sample Number:	GPESB-36 (9-10)	GPESB-37(0.5-2)	GPESB-37(5-7)	GPESB-37(8-10)	GPESB-38(0.5-2.0)	GPESB-38(5-7)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605434-003	0605434-004	0605434-005	0605434-006	0605432-014	0605432-015	
Depth(ft):	9-10	0.5-2	5-7	8-10	0.5-2	5-7	
Sample Date:	5/10/2006	5/9/006	5/9/006	5/9/006	5/9/2006	5/9/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Arsenic	1.2	1.4	**1720**	**793**	**14.9**	**9.3**	7.5
Barium	34.2	6.9 B	34.5	37.4	267	280	300
Cadmium	ND @ 0.013	ND @ 0.012	ND @ 0.014	ND @ 0.015	**1.3**	2.2	1
Chromium	**11.2**	3.2	**21.7**	**16.7**	**19.5**	**34.4**	10
Total Cyanide	ND @ 0.54	ND @ 0.51	41	0.72	3.3	0.8	NSCG
Lead	3.4	1.8	61.3	11.3	290	497	NSCG
Mercury	0.034 B	ND @ 0.017	**0.27**	0.022 B	**1.4**	4.0	0.1
Selenium	ND @ 0.21	ND @ 0.19	ND @ 0.22	ND @ 0.23	0.45 B	ND @ 0.22	2
Silver	0.050 B	ND @ 0.046	0.075 B	ND @ 0.055	0.70 B	0.53 B	NSCG

NOTES:
All data based on preliminary laboratory results.
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NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 3 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
RCRA METALS AND TOTAL CYANIDE IN SOIL
MAY 2006

Sample Number:	GPESB-38(8-10)	GPESB-39(0.5-2)	GPESB-39(5-7)	GPESB-39(8-10)	GPESB-40(0.5-2)	GPESB-40(5.5-7.5)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605432-016	0605438-001	0605438-002	0605434-007	0605434-008	0605434-009	
Depth(ft):	8-10	0.5-2	5-7	8-10	0.5-2	5.5-7.5	
Sample Date:	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Arsenic	**28.9**	**8.6**	1.0 B	**22.0**	5.4	1.9	7.5
Barium	161	130	30.4	182	72.1	37.0	300
Cadmium	**1.4**	0.29 B	0.058 B	**2.3**	0.024 B	ND @ 0.013	1
Chromium	**28.8**	**13.5**	**11.7**	**24.9**	**22.6**	**18.5**	10
Total Cyanide	3.6	ND @ 0.54	ND @ 0.55	ND @ 0.72	ND @ 0.55	ND @ 0.55	NSCG
Lead	593	200	4.9	183	43.2	6.6	NSCG
Mercury	**1.5**	0.057	ND @ 0.018	**0.42**	**1.7**	0.042	0.1
Selenium	1.3	0.65	ND @ 0.21	0.42 B	ND @ 0.21	ND @ 0.21	2
Silver	0.73 B	0.32 B	ND @ 0.049	1.2 B	0.088 B	ND @ 0.049	NSCG

NOTES:
All data based on preliminary laboratory results.
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B - Indicates Compound Was Also Reported In Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 3 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
RCRA METALS AND TOTAL CYANIDE IN SOIL
MAY 2006

Sample Number:	GPESB-40(8-10)	GPESB-41(0.5-2)	GPESB-41(5.5-7.5)	GPESB-41(8-10)	GPESB-42(0.5-2)	GPESB-42(5.5-7.5)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605434-010	0605434-011	0605434-012	0605434-013	0605434-014	0605432-017	
Depth(ft):	8-10	0.5-2	5.5-7.5	8-10	0.5-2	5.5-7.5	
Sample Date:	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Arsenic	1.8	4.9	2.5	1.2	2.3	1.0 B	7.5
Barium	36.5	69.8	38.1	41.4	17.5 B	57.5	300
Cadmium	ND @ 0.014	0.12 B	ND @ 0.013	ND @ 0.013	0.040 B	ND @ 0.013	1
Chromium	**14.4**	**15.1**	**14**	**10.5**	7.4	**19.3**	10
Total Cyanide	ND @ 0.58	ND @ 0.53	ND @ 0.052	ND @ 0.053	ND @ 0.054	ND @ 0.52	NSCG
Lead	9.7	70.1	1.9	1.9	15.8	8.8	NSCG
Mercury	0.05	**0.32**	ND @ 0.017	ND @ 0.018	0.045	ND @ 0.017	0.1
Selenium	ND @ 0.22	ND @ 0.20	ND @ 0.20	ND @ 0.20	ND @ 0.20	ND @ 0.20	2
Silver	0.084 B	0.15 B	0.048 B	ND @ 0.047	0.067 B	0.056	NSCG

NOTES:

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N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 3 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
RCRA METALS AND TOTAL CYANIDE IN SOIL
MAY 2006

Sample Number:	GPESB-42(8-9.5)	GPESB-43(0.5-2)	GPESB-43(5.5-7.5)	GPESB-43(8-10)	GPESB-44(0.5-2)	GPESB-44(3.5-5.5)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605432-018	0605434-015	0605434-016	0605434-017	0605531-006	0605531-007	
Depth(ft):	8-9.5	0.5-2	5.5-7.5	8-10	0.5-2	3.5-5.5	
Sample Date:	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/15/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Arsenic	0.42 B	2.5	1.7	0.76 B	1.6	1.4	7.5
Barium	28.6	51.3	46.2	40.8	42.1	33.2	300
Cadmium	ND @ 0.014	ND @ 0.013	0.091 B	ND @ 0.013	ND @ 0.014	ND @ 0.015	1
Chromium	6.6	**14.9**	**14.4**	**12.3**	**11.4**	**13.9**	10
Total Cyanide	ND @ 0.056	ND @ 0.053	ND @ 0.051	ND @ 0.051	ND @ 0.056	ND @ 0.060	NSCG
Lead	2.2	25	23.4	1.0	16.1	3.3	NSCG
Mercury	ND @ 0.019	**0.17**	**0.11**	ND @ 0.017	0.061	ND @ 0.020	0.1
Selenium	ND @ 0.21	ND @ 0.20	ND @ 0.20	ND @ 0.20	ND @ 0.21	ND @ 0.23	2
Silver	ND @ 0.050	0.051 B	0.10 B	0.082 B	0.11 B	ND @ 0.054	NSCG

NOTES:

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X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 3 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
RCRA METALS AND TOTAL CYANIDE IN SOIL
MAY 2006

Sample Number:	GPESB-44(5.5-7.5)	GPESB-44(8-10)	GPESB-45(0.5-2)	GPESB-45(5.5-7.5)	GPESB-45(8-10)	GPESB-46(0.5-2)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605531-008	0605531-009	0605531-010	0605531-011	0605531-012	0605688-013	
Depth(ft):	5.5-7.5	8-10	0.5-2	5.5-7.5	8-10	0.5-2	
Sample Date:	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Arsenic	0.89 B	0.44 B	3	0.69 B	2.1	1.2	7.5
Barium	45.2	33.6	48.9	27.2	60.7	33.8	300
Cadmium	ND @ 0.013	ND @ 0.013	ND @ 0.013	ND @ 0.014	ND @ 0.015	ND @ 0.014	1
Chromium	**25.0**	**19.1**	**13.6**	11.3	20.3	11.5	10
Total Cyanide	ND @ 0.53	ND @ 0.52	ND @ 0.55	ND @ 0.58	ND @ 0.60	ND @ 0.58	NSCG
Lead	10.6	1.1	37.6	1.8	4.7	18.6	NSCG
Mercury	0.067	ND @ 0.017	0.059	ND @ 0.019	ND @ 0.020	0.056	0.1
Selenium	ND @ 0.20	ND @ 0.20	ND @ 0.21	ND @ 0.22	ND @ 0.23	ND @ 0.22	2
Silver	ND @ 0.069	ND @ 0.046	0.19 B	ND @ 0.052	ND @ 0.053	0.074 B	NSCG

NOTES:

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NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
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TABLE 3 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
RCRA METALS AND TOTAL CYANIDE IN SOIL
MAY 2006

Sample Number:	GPESB-46(3.5-5.5)	GPESB-46(5.5-7.5)	GPESB-46(8-10)	GPESB-47(0.5-2)	GPESB-47(5.5-7.5)	GPESB-47(8-10)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605688-014	0605688-015	0605688-016	0605687-007	0605687-008	0605687-009	
Depth(ft):	3.5-5.5	5.5-7.5	8-10	0.5-2	5.5-7.5	8-10	
Sample Date:	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Arsenic	0.45 B	0.72 B	0.73 B	0.79 B	1.2 B	0.95 B	7.5
Barium	44.4	23.8	23.6	25.5	33.2	30.6	300
Cadmium	ND @ 0.013	ND @ 0.013	ND @ 0.014	ND @ 0.014	0.019 B	ND @ 0.014	1
Chromium	14.5	8.6	8.4	7.5	10.5	9.4	10
Total Cyanide	ND @ 0.54	ND @ 0.55	ND @ 0.57	ND @ 0.58	ND @ 0.65	ND @ 0.58	NSCG
Lead	0.34	1.2	2.6	3.4	3.0	2.6	NSCG
Mercury	ND @ 0.023	ND @ 0.018	ND @ 0.019	ND @ 0.019	ND @ 0.022	ND @ 0.019	0.1
Selenium	ND @ 0.21	ND @ 0.22	ND @ 0.22	ND @ 0.22	ND @ 0.25	ND @ 0.22	2
Silver	0.079 B	0.059 B	0.051 B	ND @ 0.052	ND @ 0.058	ND @ 0.052	NSCG

NOTES:

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NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 3 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
RCRA METALS AND TOTAL CYANIDE IN SOIL
MAY 2006

Sample Number:	GPESB-48(0.5-2)	GPESB-48(3-5)	GPESB-48(8-10)	GPESB-51(0.5-2)	GPESB-51(5-7)	GPESB-51(10-12)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605434-018	0605434-019	0605432-019	0605687-010	0605688-017	0605688-018	
Depth(ft):	0.5-2	0.5-2	8-10	0.5-2	5-7	10-12	
Sample Date:	5/10/2006	5/10/2006	5/10/2006	5/15/2006	5/17/2006	5/17/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Arsenic	0.85 B	0.66 B	4.0	0.58 B	**25.7**	6.6	7.5
Barium	6.8 B	5.6 B	48.9	5.6 B	219	49.8	300
Cadmium	ND @ 0.012	ND @ 0.013	0.12 B	ND @ 0.014	**1.3**	0.23 B	1
Chromium	3.5	2.5	**11.7**	2.7	**20.2**	4.4	10
Total Cyanide	ND @ 0.51	ND @ 0.51	ND @ 0.55	ND @ 0.57	15.8	14.4	NSCG
Lead	2.2	1.9	16.6	2.9	402	53.7	NSCG
Mercury	ND @ 0.019	ND @ 0.017	0.09	ND @ 0.019	**1.1**	**0.13**	0.1
Selenium	ND @ 0.19	ND @ 0.20	ND @ 0.21	ND @ 0.22	0.47 B	1.2	2
Silver	ND @ 0.046	ND @ 0.046	0.074 B	ND @ 0.051	0.54 B	0.13 B	NSCG

NOTES:
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X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 3 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
RCRA METALS AND TOTAL CYANIDE IN SOIL
MAY 2006

Sample Number:	GPESB-51(15-17)	GPESB-51(25-35)	GPETP-10 (0-5')	GPETP-11 (0.5-5')	GPETP-12 (0-5')	GPETP-13 (0.5-5')	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605688-019	0605688-020	0605901-001	0605901-002	0605901-003	0605901-004	
Depth(ft):	10-12	23-25	0 - 5	0.5 - 5	0 - 5	0.5 - 5	
Sample Date:	5/17/2006	5/17/2006	5/17/2006	5/23/2006	5/18/2006	5/22/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Arsenic	0.38 B	1.8	7.2	1.3	4.1	5.4	7.5
Barium	20.3 B	28.4	24.2	25.7	33.1	84	300
Cadmium	ND @ 0.013	ND @ 0.013	ND @ 0.014	ND @ 0.013	0.58 B	0.36 B	1
Chromium	6.3	5.5	8.5	9.0	10.9	**19.6**	10
Total Cyanide	ND @ 0.53	ND @ 2.8	ND @ 0.58	ND @ 0.53	ND @ 0.59	ND @ 0.54	NSCG
Lead	1.3	1.7	24.4	21.8	66.5	125	NSCG
Mercury	ND @ 0.017	ND @ 0.019	0.043	0.032 B	**0.16**	**0.43**	0.1
Selenium	ND @ 0.20	ND @ 0.22	ND @ 0.22	ND @ 0.20	ND @ 0.22	0.38 B	2
Silver	0.079 B	ND @ 0.051	0.20 B	0.15 B	0.22 B	0.78 B	NSCG

NOTES:
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X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NSCG - Indicates No Soil Cleanup Guidance established.

TABLE 4
GREENPOINT FORMER MGP SITE INVESTIGATION
POLYCHLORINATED BIPHENYLS IN SOIL
MAY 2006

Sample Number:	GPESB-27(0.5-2)	GPESB-27(4-6)	GPESB-27(24-26)	GPESB-28(0.5-2)	GPESB-28(4-6)	GPESB-28(24-26)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605531-001B	0605531-002B	0605531-003B	0605531-004B	0605531-005B	0605531-006B	
Depth(ft):	0.5-2	4-6	24-26	0.5-2	4-6	24-26	
Sample Date:	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/11/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Aroclor 1016	ND @ 0.040	ND @ 0.036	ND @ 0.037	ND @ 0.041	ND @ 0.036	ND @ 0.037	
Aroclor 1221	ND @ 0.081	ND @ 0.074	ND @ 0.075	ND @ 0.083	ND @ 0.072	ND @ 0.075	
Aroclor 1232	ND @ 0.040	ND @ 0.036	ND @ 0.037	ND @ 0.041	ND @ 0.036	ND @ 0.037	
Aroclor 1242	0.04 P	ND @ 0.036	ND @ 0.037	ND @ 0.041	ND @ 0.036	ND @ 0.037	1/10
Aroclor 1248	ND @ 0.040	ND @ 0.036	ND @ 0.037	ND @ 0.041	ND @ 0.036	ND @ 0.037	
Aroclor 1254	0.059 P	ND @ 0.036	ND @ 0.037	ND @ 0.041	ND @ 0.036	ND @ 0.037	
Aroclor 1260	0.150	ND @ 0.036	ND @ 0.037	ND @ 0.041	ND @ 0.036	ND @ 0.037	

NOTES:

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D - Indicates Sample Was Diluted.
J - Indicates That Compound Was Detected At a Concentration Below The Method Detection Limit.
B - Indicates Compound Was Also Reported in Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NYSDEC SCG of 1/10 indicates 1 for surface soils and 10 for subsurface soils

TABLE 4 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
POLYCHLORINATED BIPHENYLS IN SOIL
MAY 2006

Sample Number:	GPESB-29 (0.5-2)	GPESB-29(24-26)	GPESB-30 (0.5-2)	GPESB-30 (4-6)	GPESB-30 (24.5-26.5	GPESB-31(0.5-2)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605532-001C	0605531-007B	0605432-001C	0605432-002C	0605432-003C	0605687-003B	
Depth(ft):	0.5 - 2	24-26	0.5-2	4-6	24.5-26.5	0.5-2	
Sample Date:	5/11/2006	5/11/2006	5/10/2006	5/10/2006	5/10/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Aroclor 1016	ND @ 0.039	ND @ 0.038	ND @ 0.036	ND @ 0.034	ND @ 0.040	ND @ 0.035	
Aroclor 1221	ND @ 0.080	ND @ 0.077	ND @ 0.073	ND @ 0.069	ND @ 0.081	ND @ 0.072	
Aroclor 1232	ND @ 0.039	ND @ 0.038	ND @ 0.036	ND @ 0.034	ND @ 0.040	ND @ 0.035	
Aroclor 1242	ND @ 0.039	ND @ 0.038	ND @ 0.036	ND @ 0.034	ND @ 0.040	ND @ 0.035	1/10
Aroclor 1248	ND @ 0.039	ND @ 0.038	ND @ 0.036	ND @ 0.034	ND @ 0.040	ND @ 0.035	
Aroclor 1254	ND @ 0.039	ND @ 0.038	ND @ 0.036	ND @ 0.034	ND @ 0.040	ND @ 0.035	
Aroclor 1260	ND @ 0.039	ND @ 0.038	ND @ 0.036	ND @ 0.034	ND @ 0.040	ND @ 0.035	

NOTES:
All data based on preliminary laboratory results
ND - Indicates Compound Was Not Detected At The Method Detection Limit.
NA - Indicates Sample Was Not Analyzed For That Parameter.
D - Indicates Sample Was Diluted.
J - Indicates That Compound Was Detected At a Concentration Below The Method Detection Limit.
B - Indicates Compound Was Also Reported in Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NYSDEC SCG of 1/10 indicates 1 for surface soils and 10 for subsurface soils

TABLE 4 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
POLYCHLORINATED BIPHENYLS IN SOIL
MAY 2006

Sample Number:	GPESB-31(5-7)	GPESB-31(7-9)	GPESB-31(9-10)	GPESB-32(0.5-2)	GPESB-32(7-9)	GPESB-32(9-10)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605688-003	0605688-004B	0605688-005B	0605687-004B	0605687-005B	0605687-006B	
Depth(ft):	5-7	7-9	9-10	0.5-2	7-9	9-10	
Sample Date:	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Aroclor 1016	ND @ 0.037	ND @ 0.036	ND @ 0.035	ND @ 0.035	ND @ 0.035	ND @ 0.036	1/10
Aroclor 1221	ND @ 0.075	ND @ 0.074	ND @ 0.072	ND @ 0.072	ND @ 0.070	ND @ 0.073	
Aroclor 1232	ND @ 0.037	ND @ 0.036	ND @ 0.035	ND @ 0.035	ND @ 0.035	ND @ 0.036	
Aroclor 1242	ND @ 0.037	ND @ 0.036	ND @ 0.035	ND @ 0.035	ND @ 0.035	ND @ 0.036	
Aroclor 1248	ND @ 0.037	ND @ 0.036	ND @ 0.035	ND @ 0.035	ND @ 0.035	ND @ 0.036	
Aroclor 1254	ND @ 0.037	ND @ 0.036	ND @ 0.035	ND @ 0.035	ND @ 0.035	ND @ 0.036	
Aroclor 1260	ND @ 0.037	ND @ 0.036	ND @ 0.035	0.019 J	ND @ 0.035	ND @ 0.036	

NOTES:
All data based on preliminary laboratory results
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J - Indicates That Compound Was Detected At a Concentration Below The Method Detection Limit.
B - Indicates Compound Was Also Reported in Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NYSDEC SCG of 1/10 indicates 1 for surface soils and 10 for subsurface soils

TABLE 4 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
POLYCHLORINATED BIPHENYLS IN SOIL
MAY 2006

Sample Number:	GPESB-33(0.5-2)	GPESB-33(2.5-4.5)	GPESB-33(7-9)	GPESB-33(13-15)	GPESB-34 (0.5-2)	GPESB-34 (5-7)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605432-004C	0605432-005C	0605432-006C	0605432-007C	0605432-008C	0605432-009C	
Depth(ft):	0.5-2	2.5-4.5	7-9	13-15	0.5 - 2	5-7	
Sample Date:	5/10/2006	5/10/2006	5/10/2006	5/10/2006	5/9/2006	5/9/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Aroclor 1016	ND @ 0.036	ND @ 0.038	ND @ 0.034	ND @ 0.036	ND @ 0.037	ND @ 0.039	1/10
Aroclor 1221	ND @ 0.074	ND @ 0.077	ND @ 0.069	ND @ 0.073	ND @ 0.074	ND @ 0.078	
Aroclor 1232	ND @ 0.036	ND @ 0.038	ND @ 0.034	ND @ 0.036	ND @ 0.037	ND @ 0.039	
Aroclor 1242	0.021 PJ	ND @ 0.038	ND @ 0.034	ND @ 0.036	0.290	ND @ 0.039	
Aroclor 1248	ND @ 0.036	ND @ 0.038	ND @ 0.034	ND @ 0.036	ND @ 0.037	ND @ 0.039	
Aroclor 1254	0.054	ND @ 0.038	ND @ 0.034	ND @ 0.036	ND @ 0.037	ND @ 0.039	
Aroclor 1260	0.042	ND @ 0.038	ND @ 0.034	0.042	ND @ 0.037	ND @ 0.039	

NOTES:
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J - Indicates That Compound Was Detected At a Concentration Below The Method Detection Limit.
B - Indicates Compound Was Also Reported in Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NYSDEC SCG of 1/10 indicates 1 for surface soils and 10 for subsurface soils

TABLE 4 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
POLYCHLORINATED BIPHENYLS IN SOIL
MAY 2006

Sample Number:	GPESB-34(8-10)	GPESB-35(0.5-2)	GPESB-35(5-7)	GPESB-35(15-17)	GPESB-36 (0.5-2)	GPESB-36 (7-9)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605432-010C	0605432-011C	0605432-012C	0605432-013C	0605434-001C	0605434-002C	
Depth(ft):	8-10	0.5-2	5-7	15-17	0.5 - 2	7-9	
Sample Date:	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/10/2006	5/10/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Aroclor 1016	ND @ 0.037	ND @ 0.036	ND @ 0.042	ND @ 0.034	ND @ 0.035	ND @ 0.038	1/10
Aroclor 1221	ND @ 0.074	ND @ 0.073	ND @ 0.085	ND @ 0.069	ND @ 0.071	ND @ 0.077	
Aroclor 1232	ND @ 0.037	ND @ 0.036	ND @ 0.042	ND @ 0.034	ND @ 0.035	ND @ 0.038	
Aroclor 1242	ND @ 0.037	0.025 J	ND @ 0.042	ND @ 0.034	0.038 P	ND @ 0.038	
Aroclor 1248	ND @ 0.037	ND @ 0.036	ND @ 0.042	ND @ 0.034	ND @ 0.035	ND @ 0.038	
Aroclor 1254	ND @ 0.037	0.024 J	ND @ 0.042	ND @ 0.034	0.036 P	ND @ 0.038	
Aroclor 1260	ND @ 0.037	0.035 J	ND @ 0.042	ND @ 0.034	0.035 P	ND @ 0.038	

NOTES:
All data based on preliminary laboratory results
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J - Indicates That Compound Was Detected At a Concentration Below The Method Detection Limit.
B - Indicates Compound Was Also Reported in Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NYSDEC SCG of 1/10 indicates 1 for surface soils and 10 for subsurface soils

TABLE 4 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
POLYCHLORINATED BIPHENYLS IN SOIL
MAY 2006

Sample Number:	GPESB-36 (9-10)	GPESB-37(0.5-2)	GPESB-37(5-7)	GPESB-37(8-10)	GPESB-38(0.5-2.0)	GPESB-38(5-7)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605434-003C	0605434-004C	0605434-005C	0605434-006C	0605432-014C	0605432-015C	
Depth(ft):	9-10	0.5-2	5-7	8-10	0.5-2	5-7	
Sample Date:	5/10/2006	5/9/006	5/9/006	5/9/006	5/9/2006	5/9/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Aroclor 1016	ND @ 0.036	ND @ 0.034	ND @ 0.038	ND @ 0.040	ND @ 0.036	ND @ 0.039	1/10
Aroclor 1221	ND @ 0.072	ND @ 0.068	ND @ 0.078	ND @ 0.082	ND @ 0.073	ND @ 0.078	
Aroclor 1232	ND @ 0.036	ND @ 0.034	ND @ 0.038	ND @ 0.040	ND @ 0.036	ND @ 0.039	
Aroclor 1242	ND @ 0.036	ND @ 0.034	ND @ 0.038	ND @ 0.040	0.039	ND @ 0.039	
Aroclor 1248	ND @ 0.036	ND @ 0.034	ND @ 0.038	ND @ 0.040	ND @ 0.036	ND @ 0.039	
Aroclor 1254	ND @ 0.036	ND @ 0.034	ND @ 0.038	ND @ 0.040	ND @ 0.036	ND @ 0.039	
Aroclor 1260	ND @ 0.036	ND @ 0.034	ND @ 0.038	ND @ 0.040	ND @ 0.036	ND @ 0.039	

NOTES:
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X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NYSDEC SCG of 1/10 indicates 1 for surface soils and 10 for subsurface soils

TABLE 4 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
POLYCHLORINATED BIPHENYLS IN SOIL
MAY 2006

Sample Number:	GPESB-38(8-10)	GPESB-39(0.5-2)	GPESB-39(5-7)	GPESB-39(8-10)	GPESB-40(0.5-2)	GPESB-40(5.5-7.5)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605432-016C	0605438-001C	0605438-002C	0605434-007C	0605434-008C	0605434-009C	
Depth(ft):	8-10	0.5-2	5-7	8-10	0.5-2	5.5-7.5	
Sample Date:	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Aroclor 1016	ND @ 0.037	ND @ 0.036	ND @ 0.036	ND @ 0.048	ND @ 0.036	ND @ 0.036	1/10
Aroclor 1221	ND @ 0.074	ND @ 0.072	ND @ 0.073	ND @ 0.097	ND @ 0.073	ND @ 0.073	
Aroclor 1232	ND @ 0.037	ND @ 0.036	ND @ 0.036	ND @ 0.048	ND @ 0.036	ND @ 0.036	
Aroclor 1242	ND @ 0.037	ND @ 0.036	ND @ 0.036	ND @ 0.048	ND @ 0.036	ND @ 0.036	
Aroclor 1248	ND @ 0.037	ND @ 0.036	ND @ 0.036	ND @ 0.048	ND @ 0.036	ND @ 0.036	
Aroclor 1254	ND @ 0.037	ND @ 0.036	ND @ 0.036	ND @ 0.048	ND @ 0.036	ND @ 0.036	
Aroclor 1260	ND @ 0.037	ND @ 0.036	ND @ 0.036	ND @ 0.048	0.068 P	ND @ 0.036	

NOTES:
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X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NYSDEC SCG of 1/10 indicates 1 for surface soils and 10 for subsurface soils

TABLE 4 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
POLYCHLORINATED BIPHENYLS IN SOIL
MAY 2006

Sample Number:	GPESB-40(8-10)	GPESB-41(0.5-2)	GPESB-41(5.5-7.5)	GPESB-41(8-10)	GPESB-42(0.5-2)	GPESB-42(5.5-7.5)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605434-010C	0605434-011C	0605434-012C	0605434-013C	0605434-014C	0605432-017C	
Depth(ft):	8-10	0.5-2	5.5-7.5	8-10	0.5-2	5.5-7.5	
Sample Date:	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Aroclor 1016	ND @ 0.038	ND @ 0.035	ND @ 0.034	ND @ 0.035	ND @ 0.035	ND @ 0.034	1/10
Aroclor 1221	ND @ 0.078	ND @ 0.071	ND @ 0.070	ND @ 0.070	ND @ 0.072	ND @ 0.070	
Aroclor 1232	ND @ 0.038	ND @ 0.035	ND @ 0.034	ND @ 0.035	ND @ 0.035	ND @ 0.034	
Aroclor 1242	ND @ 0.038	ND @ 0.035	ND @ 0.034	ND @ 0.035	ND @ 0.035	ND @ 0.034	
Aroclor 1248	ND @ 0.038	ND @ 0.035	ND @ 0.034	ND @ 0.035	ND @ 0.035	ND @ 0.034	
Aroclor 1254	ND @ 0.038	ND @ 0.035	ND @ 0.034	ND @ 0.035	ND @ 0.035	ND @ 0.034	
Aroclor 1260	ND @ 0.038	ND @ 0.035	ND @ 0.034	ND @ 0.035	ND @ 0.035	ND @ 0.034	

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X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NYSDEC SCG of 1/10 indicates 1 for surface soils and 10 for subsurface soils

TABLE 4 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
POLYCHLORINATED BIPHENYLS IN SOIL
MAY 2006

Sample Number:	GPESB-42(8-9.5)	GPESB-43(0.5-2)	GPESB-43(5.5-7.5)	GPESB-43(8-10)	GPESB-44(0.5-2)	GPESB-44(3.5-5.5)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605432-018C	0605434-015C	0605434-016C	0605434-017C	0605688-006B	0605688-007B	
Depth(ft):	8-9.5	0.5-2	5.5-7.5	8-10	0.5-2	3.5-5.5	
Sample Date:	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/15/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Aroclor 1016	ND @ 0.037	ND @ 0.035	ND @ 0.034	ND @ 0.034	ND @ 0.037	ND @ 0.040	1/10
Aroclor 1221	ND @ 0.075	ND @ 0.071	ND @ 0.068	ND @ 0.069	ND @ 0.075	ND @ 0.081	
Aroclor 1232	ND @ 0.037	ND @ 0.035	ND @ 0.034	ND @ 0.034	ND @ 0.037	ND @ 0.040	
Aroclor 1242	ND @ 0.037	ND @ 0.035	ND @ 0.034	ND @ 0.034	ND @ 0.037	ND @ 0.040	
Aroclor 1248	ND @ 0.037	ND @ 0.035	ND @ 0.034	ND @ 0.034	ND @ 0.037	ND @ 0.040	
Aroclor 1254	ND @ 0.037	ND @ 0.035	ND @ 0.034	ND @ 0.034	ND @ 0.037	ND @ 0.040	
Aroclor 1260	ND @ 0.037	ND @ 0.035	ND @ 0.034	ND @ 0.034	ND @ 0.037	ND @ 0.040	

NOTES:
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NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NYSDEC SCG of 1/10 indicates 1 for surface soils and 10 for subsurface soils

TABLE 4 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
POLYCHLORINATED BIPHENYLS IN SOIL
MAY 2006

Sample Number:	GPESB-44(5.5-7.5)	GPESB-44(8-10)	GPESB-45(0.5-2)	GPESB-45(5.5-7.5)	GPESB-45(8-10)	GPESB-46(0.5-2)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605688-008B	0605688-009B	0605688-010B	0605688-011B	0605688-012B	0605688-013B	
Depth(ft):	5.5-7.5	8-10	0.5-2	5.5-7.5	8-10	0.5-2	
Sample Date:	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Aroclor 1016	ND @ 0.035	ND @ 0.034	ND @ 0.036	ND @ 0.038	ND @ 0.039	ND @ 0.038	
Aroclor 1221	ND @ 0.071	ND @ 0.069	ND @ 0.073	ND @ 0.077	ND @ 0.080	ND @ 0.078	
Aroclor 1232	ND @ 0.035	ND @ 0.034	ND @ 0.036	ND @ 0.038	ND @ 0.039	ND @ 0.038	
Aroclor 1242	ND @ 0.035	ND @ 0.034	ND @ 0.036	ND @ 0.038	ND @ 0.039	ND @ 0.038	1/10
Aroclor 1248	ND @ 0.035	ND @ 0.034	ND @ 0.036	ND @ 0.038	ND @ 0.039	ND @ 0.038	
Aroclor 1254	ND @ 0.035	ND @ 0.034	ND @ 0.036	ND @ 0.038	ND @ 0.039	ND @ 0.038	
Aroclor 1260	ND @ 0.035	ND @ 0.034	ND @ 0.036	ND @ 0.038	ND @ 0.039	ND @ 0.038	

NOTES:
All data based on preliminary laboratory results
ND - Indicates Compound Was Not Detected At The Method Detection Limit.
NA - Indicates Sample Was Not Analyzed For That Parameter.
D - Indicates Sample Was Diluted.
J - Indicates That Compound Was Detected At a Concentration Below The Method Detection Limit.
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N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NYSDEC SCG of 1/10 indicates 1 for surface soils and 10 for subsurface soils

TABLE 4 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
POLYCHLORINATED BIPHENYLS IN SOIL
MAY 2006

Sample Number:	GPESB-46(3.5-5.5)	GPESB-46(5.5-7.5)	GPESB-46(8-10)	GPESB-47(0.5-2)	GPESB-47(5.5-7.5)	GPESB-47(8-10)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605688-014B	0605688-015B	0605688-016B	0605687-007B	0605687-008B	0605687-009B	
Depth(ft):	3.5-5.5	5.5-7.5	8-10	0.5-2	5.5-7.5	8-10	
Sample Date:	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	5/15/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Aroclor 1016	ND @ 0.036	ND @ 0.036	ND @ 0.038	ND @ 0.038	ND @ 0.043	ND @ 0.038	1/10
Aroclor 1221	ND @ 0.073	ND @ 0.073	ND @ 0.076	ND @ 0.077	ND @ 0.087	ND @ 0.078	
Aroclor 1232	ND @ 0.036	ND @ 0.036	ND @ 0.038	ND @ 0.038	ND @ 0.043	ND @ 0.038	
Aroclor 1242	ND @ 0.036	ND @ 0.036	ND @ 0.038	ND @ 0.038	ND @ 0.043	ND @ 0.038	
Aroclor 1248	ND @ 0.036	ND @ 0.036	ND @ 0.038	ND @ 0.038	ND @ 0.043	ND @ 0.038	
Aroclor 1254	ND @ 0.036	ND @ 0.036	ND @ 0.038	ND @ 0.038	ND @ 0.043	ND @ 0.038	
Aroclor 1260	ND @ 0.036	ND @ 0.036	ND @ 0.038	ND @ 0.038	ND @ 0.043	ND @ 0.038	

NOTES:
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ND - Indicates Compound Was Not Detected At The Method Detection Limit.
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J - Indicates That Compound Was Detected At a Concentration Below The Method Detection Limit.
B - Indicates Compound Was Also Reported in Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NYSDEC SCG of 1/10 indicates 1 for surface soils and 10 for subsurface soils

TABLE 4 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
POLYCHLORINATED BIPHENYLS IN SOIL
MAY 2006

Sample Number:	GPESB-48(0.5-2)	GPESB-48(3-5)	GPESB-48(8-10)	GPESB-51(0.5-2)	GPESB-51(5-7)	GPESB-51(10-12)	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605434-018C	0605434-019C	0605432-019C	0605687-010B	0605688-017B	0605688-018B	
Depth(ft):	0.5-2	0.5-2	8-10	0.5-2	5-7	10-12	
Sample Date:	5/10/2006	5/10/2006	5/15/2006	5/15/2006	5/17/2006	5/17/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Aroclor 1016	ND @ 0.034	ND @ 0.034	ND @ 0.036	ND @ 0.037	ND @ 0.039	ND @ 0.037	1/10
Aroclor 1221	ND @ 0.068	ND @ 0.069	ND @ 0.073	ND @ 0.076	ND @ 0.080	ND @ 0.075	
Aroclor 1232	ND @ 0.034	ND @ 0.034	ND @ 0.036	ND @ 0.037	ND @ 0.039	ND @ 0.037	
Aroclor 1242	ND @ 0.034	ND @ 0.034	ND @ 0.036	ND @ 0.037	ND @ 0.039	ND @ 0.037	
Aroclor 1248	ND @ 0.034	ND @ 0.034	ND @ 0.036	ND @ 0.037	ND @ 0.039	ND @ 0.037	
Aroclor 1254	ND @ 0.034	ND @ 0.034	ND @ 0.036	ND @ 0.037	ND @ 0.039	ND @ 0.037	
Aroclor 1260	ND @ 0.034	ND @ 0.034	ND @ 0.036	ND @ 0.037	ND @ 0.039	ND @ 0.037	

NOTES:
All data based on preliminary laboratory results
ND - Indicates Compound Was Not Detected At The Method Detection Limit.
NA - Indicates Sample Was Not Analyzed For That Parameter.
D - Indicates Sample Was Diluted.
J - Indicates That Compound Was Detected At a Concentration Below The Method Detection Limit.
B - Indicates Compound Was Also Reported in Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NYSDEC SCG of 1/10 indicates 1 for surface soils and 10 for subsurface soils

TABLE 4 (cont.)
GREENPOINT FORMER MGP SITE INVESTIGATION
POLYCHLORINATED BIPHENYLS IN SOIL
MAY 2006

Sample Number:	GPESB-51(15-17)	GPESB-51(23-25)	GPETP-10 (0-5')	GPETP-11 (0.5-5')	GPETP-12 (0-5')	GPETP-13 (0.5-5')	**NYSDEC SCGs (MG/KG)**
Lab Sample ID No:	0605688-019B	0605688-020B	0605901-001	0605901-002	0605901-003	0605901-004	
Depth(ft):	10-12	23-25	0 - 5	0.5 - 5	0 - 5	0.5 - 5	
Sample Date:	5/17/2006	5/17/2006	5/17/2006	5/23/2006	5/18/2006	5/22/2006	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Aroclor 1016	ND @ 0.034	ND @ 0.037	ND @ 0.038	ND @ 0.035	ND @ 0.039	ND @ 0.036	1/10
Aroclor 1221	ND @ 0.069	ND @ 0.076	ND @ 0.078	ND @ 0.071	ND @ 0.079	ND @ 0.073	
Aroclor 1232	ND @ 0.034	ND @ 0.037	ND @ 0.038	ND @ 0.035	ND @ 0.039	ND @ 0.036	
Aroclor 1242	ND @ 0.034	ND @ 0.037	ND @ 0.038	ND @ 0.035	ND @ 0.039	ND @ 0.036	
Aroclor 1248	ND @ 0.034	ND @ 0.037	ND @ 0.038	ND @ 0.035	ND @ 0.039	ND @ 0.036	
Aroclor 1254	ND @ 0.034	ND @ 0.037	ND @ 0.038	ND @ 0.035	ND @ 0.039	ND @ 0.036	
Aroclor 1260	ND @ 0.034	ND @ 0.037	ND @ 0.038	ND @ 0.035	0.020 J	ND @ 0.036	

NOTES:
All data based on preliminary laboratory results
ND - Indicates Compound Was Not Detected At The Method Detection Limit.
NA - Indicates Sample Was Not Analyzed For That Parameter.
D - Indicates Sample Was Diluted.
J - Indicates That Compound Was Detected At a Concentration Below The Method Detection Limit.
B - Indicates Compound Was Also Reported in Quality Assurance/Quality Control Blanks.
N - Indicates Presumptive Evidence Of A Compound For Tentatively Identified Compounds.
X - Indicates A Suspected Column Bleed.
NYSDEC SCGs Taken From The Most Current Edition Of TAGM #4046.
NYSDEC SCG of 1/10 indicates 1 for surface soils and 10 for subsurface soils

APPENDIX C

Soil Borings and Test Pit Logs

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-27

PROJECT NUMBER:	2522.033.024	WEATHER:	Cloudy. 55 deg. F
PROJECT NAME:	Supplemental Environmental Investigation Area	TOTAL DEPTH:	30'
LOCATION:	Brooklyn, New York	GROUND SURFACE ELEVATION:	
DRILLING CO:	Fenley & Nicol	DATE BEGUN:	May 12, 2006
DRILLING METHOD:	GeoProbe	DATE COMPLETED:	May 12, 2006
DRILLER / HELPER:	Charlie Guzzman/Mike Mede		
ENVIRONMENTAL SCIENTIST:	Brian D'Agostino		

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0	GPESB-27 (0.5'-2')	Hand auger	0.0	0		Asphalt and bluestone base material Brown fine to coarse SAND, some grey and brown medium to coarse gravel, dry	SP/SP		Slight naphthalene-like odor; Black stained; Tar-coated	
2			0.0	0						
			8.3	0						
			4.1	0						
			0.0	0						
			0.0	0						
			0.0	0						
4	GPESB-27 (4'-6')		0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
6		40	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
8			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10		50	0.0	0		Dark brown to brown fine to medium SAND, little brown fine gravel, dry				
			0.0	0						
			0.0	0						
			0.0	0						
12			0.0	0						
			0.0	0						
			0.0	0		Brown to light brown fine to medium SAND, little brown fine gravel, trace red brick fragments, dry				
			0.0	0						
14			0.0	0						
			0.0	0						
		22	0.0	0						
			0.0	0						
16			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
18			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
20		30	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
22			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0		Grey and brown fine to coarse SAND, little grey fine gravel, wet				
24	GPESB-27 (24'-26')		0.0	0	▽					
		12	0.0	0						
			0.0	0						
26			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
28			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
30			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-28

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy. 55 deg. F
TOTAL DEPTH: 30'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 11, 2006
DATE COMPLETED: May 11, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0	GPESB-28 (0.5'-2')	Hand auger	0.0	0		Asphalt and bluestone base material Dark brown to brown fine to coarse SAND, some grey and brown medium to coarse gravel, dry	SP/SP			
2			0.0	0						
4	GPESB-28 (4'-6')		0.0	0						
6		50	0.0	0		Brown fine to coarse SAND, little grey fine gravel, dry				
8			0.0	0						
10		42	0.0	0						
12			0.0	0						
14			0.0	0						
16		38	0.0	0						
18			0.0	0						
20		31	0.0	0						
22			0.0	0						
24	GPESB-28 (24'-26')	30	0.0	0		Grey fine to coarse GRAVEL, some brown fine to coarse sand, dry Grey and brown fine to coarse SAND, little grey fine gravel, wet	GP/SW			
26			0.0	0						
28			0.0	0						
30			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-29

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy. 55 deg. F
TOTAL DEPTH: 30'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 11, 2006
DATE COMPLETED: May 11, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0										
0–2	GPESB-29 (0.5'-2')	Hand auger	0.0	0		Asphalt and bluestone base material	ASPH			
			0.0	0		Dark brown to brown fine to coarse SAND, some grey and brown medium to coarse gravel, dry	SP			
			0.0	0						
			0.0	0						
2–4			0.0	0		Brown fine to medium SAND, little grey fine gravel, dry				
			0.0	0						
			0.0	0						
			0.0	0						
4–6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
6–8		40	0.0	0		Brown to light brown fine to medium SAND, trace grey fine gravel, trace red brick fragments, dry				
			0.0	0						
			0.0	0						
			0.0	0						
8–10			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10–12		51	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
12–14			0.0	0		Grey fine to coarse GRAVEL, some brown fine to coarse sand, dry	GP			
			0.0	0		Brown to light brown fine to medium SAND, trace fine gravel, dry	SP			
			0.0	0						
			0.0	0						
14–16			0.0	0						
			0.0	0						
		6	0.0	0						
			0.0	0						
16–18			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
18–20			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
20–22		11	0.0	0		Brown to dark brown fine to medium SAND, some grey fine gravel, wet				
			0.0	0						
			0.0	0						
			0.0	0						
22–24			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
24–26	GPESB-29 (24'-26')		0.0	0	▼					
			0.0	0						
		18	0.0	0		Grey and brown fine to coarse SAND, trace silt, wet				
			0.0	0						
26–28			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
28–30			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
30										

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-30

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy. mid-50's deg. F
TOTAL DEPTH: 30'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 10, 2006
DATE COMPLETED: May 10, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0	GPESB-30 (0.5'-2')	Hand auger	0.0	0		Bluestone base material Brown fine to medium SAND, some grey and brown fine to coarse gravel, dry	FILL SP			
2			0.0	0						
4	GPESB-30 (4'-6')	24	0.0	0						
6			0.0	0						
8			0.0	0						
10		30	0.0	0		Brown medium to coarse SAND, little grey fine gravel, dry				
12			0.0	0						
14			0.0	0						
16		30	0.0	0						
18			0.0	0		Grey and brown fine to coarse GRAVEL, some brown fine to coarse sand, dry	GP			
20		28	0.0	0		Light brown to brown fine to medium SAND, trace grey fine gravel, dry	SP			
22			0.0	0						
24	GPESB-30 (24.5'-26.5')	12	0.0	0	▽	Grey and brown fine to coarse SAND, trace silt, wet				
26			0.0	0						
28			0.0	0						
30			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-31

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy. mid-50's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 15, 2006
DATE COMPLETED: May 15, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0						Asphalt and bluestone base material	ASPH			
	GPESB-31 (0.5'-2')		0.0	0		Brown fine to coarse SAND, some grey fine gravel	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0		Brown to light brown fine to medium SAND, little grey fine gravel				
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
	GPESB-31 (5'-7')	40	0.0	0						
			0.0	0						
6			0.0	0						
			0.0	0						
	GPESB-31 (7'-9')		0.0	0						
			0.0	0		Brown fine to medium SAND, trace silt, dry				
8			0.0	0						
			0.0	0						
	GPESB-31 (9'-10')		0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-32

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy. mid-50's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 15, 2006
DATE COMPLETED: May 15, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0			0.0	0		Asphalt and bluestone base material	ASPH			
	GPESB-32 (0.5'-2')		0.0	0		Brown fine to coarse SAND, some grey fine gravel	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0		Brown to light brown fine to medium SAND, little grey fine gravel				
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
		42	0.0	0						
			0.0	0						
6			0.0	0						
			0.0	0						
	GPESB-32 (7'-9')		0.0	0						
			0.0	0		Brown fine to medium SAND, trace silt, dry				
8			0.0	0						
			0.0	0						
	GPESB-32 (9'-10')		0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-33

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy. mid-50's deg. F
TOTAL DEPTH: 15'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 10, 2006
DATE COMPLETED: May 10, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0			0.0	0		Bluestone base material	FILL			
	GPESB-33 (0.5'-2')		0.0	0		Grey fine to coarse GRAVEL, some brown fine to coarse sand	GP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
	GPESB-33 (2.5'-4.5')		0.0	0		Brown fine to coarse SAND, some grey fine to coarse gravel	SP		Slight Naphthalene-like odors, Black staining, Tar-coated	
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
		48	0.0	0						
			0.0	0						
6			0.0	0						
			0.0	0						
	GPESB-33 (7'-9')		0.0	0						
			0.0	0						
8			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10		40	0.0	0		Brown fine to medium SAND, some grey fine to coarse gravel, dry				
			0.0	0						
			0.0	0						
			0.0	0						
12			0.0	0						
			0.0	0						
	GPESB-33 (13'-15')		0.0	0						
			0.0	0						
14			0.0	0						
			0.0	0						
			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-34

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy. mid-50's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 8, 2006
DATE COMPLETED: May 8, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0						Bluestone base material	FILL			
	GPESB-34 (0.5'-2')		0.0	0		Brown fine to coarse SAND, some grey fine gravel, dry	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
	GPESB-34 (5'-7')	36	0.0	0						
			0.0	0						
6			0.0	0						
			0.0	0					Black staining	
			0.0	0						
			0.0	0						
8	GPESB-34 (8'-10')		0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-35

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Greenpoint Liquefaction Plant Replacement Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy. 55 deg. F
TOTAL DEPTH: 20'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 8, 2006
DATE COMPLETED: May 8, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0						Bluestone base material	FILL			
	GPESB-35 (0.5'-2')		0.0	0		Brown fine to coarse SAND, some grey fine to coarse gravel	SP			
			0.0	0						
			8.3	0						
2		Hand auger	4.1	0						
			0.0	0						
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
	GPESB-35 (5'-7')	50	38.5	0					Strong Naphthalene-like odor, Black stained, Tar-saturated	
			212	0						
6			287	0						
			112	0						
			11.3	0		Brown medium to coarse SAND, some brown fine gravel				
			0.0	0						
8			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10		24	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
12			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
14			0.0	0						
			0.0	0						
	GPESB-35 (15'-17')	32	0.0	0		Brown fine to coarse SAND, little brown fine gravel, dry				
			0.0	0						
16			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
18			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
20			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-35E

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Partly cloudy, low 60's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 17, 2006
DATE COMPLETED: May 17, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0			0.0	0		Bluestone base material	FILL			
			0.0	0		Brown fine to coarse SAND, some grey fine gravel, dry	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
		50	0.0	0						
			0.0	0						
6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0					Black staining	
8			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-35N

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Partly cloudy, low 60's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 17, 2006
DATE COMPLETED: May 17, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0			0.0	0		Bluestone base material	FILL			
			0.0	0		Brown fine to coarse SAND, some grey fine gravel, dry	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
		50	0.0	0						
			0.0	0						
6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
8			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-35W

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Partly cloudy, low 60's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 17, 2006
DATE COMPLETED: May 17, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0			0.0	0		Bluestone base material	FILL			
			0.0	0		Brown fine to coarse SAND, some grey fine gravel, dry	SP			
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0					Slight Naphthalene-like odor, Black staining, Tar-coated	
			0.0	0						
			0.0	0						
4			3.2	0						
			8.7	0						
		40	15.8	0						
			4.2	0						
6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
8			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-36

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy, mid-50's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 10, 2006
DATE COMPLETED: May 10, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0										
			0.0	0		Bluestone base material	FILL			
	GPESB-36 (0.5'-2')		0.0	0		Brown fine to coarse SAND, little grey fine gravel	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
		50	0.0	0						
			0.0	0						
6			0.0	0						
			0.0	0						
	GPESB-36 (7'-9')		0.0	0						
			0.0	0		Brown fine to coarse SAND, trace grey fine gravel				
8			0.0	0						
			0.0	0						
	GPESB-36 (9'-10')		0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-37

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy, mid-50's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 9, 2006
DATE COMPLETED: May 9, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0						Bluestone base material	FILL			
	GPESB-37 (0.5'-2')		0.0	0		Light brown to brown fine to coarse SAND, little grey gravel, wet	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
	GPESB-37 (5'-7')	50	0.0	0						
			0.0	0						
6			0.0	0						
			0.0	0						
			0.0	0		Red-brown fine GRAVEL, some fine brown sand, some red-brown silty clay, wet	GP			
			0.0	0		Greenish-brown fine SAND, some green-brown silty clay, wet	SC			
8	GPESB-37 (8'-10')		0.0	0						
			0.0	0						
			0.0	0						
			0.0	0		Greenish-brown fine SAND, some green-brown silty clay, pieces organic material, wet				
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-38

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nichol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy. mid-50's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 8, 2006
DATE COMPLETED: May 8, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0						Bluestone base material	FILL			
	GPESB-38 (0.5'-2')		0.0	0		Brown fine to coarse SAND, some grey fine gravel, dry	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
	GPESB-38 (5'-7')	40	0.0	0						
			0.0	0						
6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
8	GPESB-38 (8'-10')		0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-39

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy. mid-50's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 8, 2006
DATE COMPLETED: May 8, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0						Bluestone base material	FILL			
	GPESB-39 (0.5'-2')		0.0	0		Brown fine to coarse SAND, some grey fine to coarse gravel	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
		30	0.0	0		Brown fine to coarse SAND, little grey fine to coarse gravel, dry				
			0.0	0						
6			0.0	0						
			0.0	0						
	GPESB-39 (5'-7')		0.0	0						
			0.0	0						
8			0.0	0						
			0.0	0						
	GPESB-39 (8'-10')		0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-40

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy. mid-50's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 8, 2006
DATE COMPLETED: May 8, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0										
						Bluestone base material	FILL			
	GPESB-40 (0.5'-2')		0.0	0		Brown fine to coarse SAND, some grey fine to coarse gravel	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
		28	0.0	0						
	GPESB-40 (5.5'-7.5')		0.0	0						
6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
8	GPESB-40 (8'-10')		0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-41

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy. mid-50's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 8, 2006
DATE COMPLETED: May 8, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0			0.0	0		Asphalt and bluestone base material	FILL			
	GPESB-41 (0.5'-2')		0.0	0		Brown fine to coarse SAND, some grey fine to coarse gravel	SP			
			0.0	0						
			0.0	0		Brown and grey fine to coarse GRAVEL, some brown fine to coarse sand	GP			
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
		30	0.0	0		Brown fine to coarse SAND, little grey fine gravel	SP			
	GPESB-41 (5.5'-7.5')		0.0	0						
6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
8	GPESB-41 (8'-10')		0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-42

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy. mid-50's deg. F
TOTAL DEPTH: 9.5'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 8, 2006
DATE COMPLETED: May 8, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0						Bluestone base material	FILL			
	GPESB-42 (0.5'-2')		0.0	0		Brown fine to coarse SAND, some grey fine to coarse gravel	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0		Brown and grey fine to coarse GRAVEL, some brown fine to coarse sand, some grey cobbles	GP			
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
		24	0.0	0		Brown and grey fine to coarse GRAVEL, some brown fine to coarse sand, dry				
	GPESB-42 (5.5'-7.5')		0.0	0						
6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
8	GPESB-42 (8'-9.5')		0.0	0						
			0.0	0						
			0.0	0						
			0.0	0		Refusal				
10										

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-43

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Rainy, mid-50's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 9, 2006
DATE COMPLETED: May 9, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0			0.0	0		Bluestone base material	FILL			
	GPESB-43 (0.5'-2')		0.0	0		Brown to dark brown fine to coarse SAND, some grey fine to coarse gravel	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0		Brown and grey fine to coarse GRAVEL, some brown fine to coarse sand, some grey cobbles	GP			
			0.0	0						
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
		24	0.0	0		Brown and grey fine to coarse GRAVEL, some brown fine to coarse sand, dry				
	GPESB-43 (5.5'-7.5')		0.0	0						
6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
8	GPESB-43 (8'-10')		0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-44

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Rainy, mid-50's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 15, 2006
DATE COMPLETED: May 15, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0						Bluestone base material	FILL			
	GPESB-44 (0.5'-2')		0.0	0		Brown to dark brown fine to coarse SAND, some grey fine to coarse gravel, some grey cobbles	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
	GPESB-44 (3.5'-5.5')		0.0	0						
4			0.0	0		Brown fine to coarse SAND, little grey fine to coarse gravel, dry				
			0.0	0						
		30	0.0	0						
	GPESB-44 (5.5'-7.5')		0.0	0						
6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
8	GPESB-44 (8'-10')		0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-45

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Rainy, mid-50's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 15, 2006
DATE COMPLETED: May 15, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0						Bluestone base material	FILL			
	GPESB-45 (0.5'-2')		0.0	0		Brown fine to coarse SAND, some brown fine to coarse gravel, some grey cobbles	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0		Brown to dark brown fine to coarse SAND, dry				
4			0.0	0						
			0.0	0						
		46	0.0	0						
	GPESB-45 (5.5'-7.5')		0.0	0						
6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
8	GPESB-45 (8'-10')		0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-46

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Rainy, mid-50's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 15, 2006
DATE COMPLETED: May 15, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0										
						Bluestone base material	FILL			
	GPESB-46 (0.5'-2')		0.0	0		Brown fine to coarse SAND, some brown fine to coarse gravel	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
	GPESB-46 (3.5'-5.5')		0.0	0		Brown to dark brown fine to coarse SAND, trace grey fine gravel, dry				
4			0.0	0						
			0.0	0						
		42	0.0	0						
	GPESB-46 (5.5'-7.5')		0.0	0						
6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
8	GPESB-46 (8'-10')		0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-47

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Rainy, mid-50's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 15, 2006
DATE COMPLETED: May 15, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0			0.0	0		Bluestone base material	FILL			
	GPESB-47 (0.5'-2')		0.0	0		Brown fine to coarse SAND, some brown fine gravel	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
4			0.0	0		Brown fine to coarse SAND, little brown fine gravel				
			0.0	0						
		50	0.0	0						
	GPESB-47 (5.5'-7.5')		0.0	0						
6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0		Brown fine to medium SAND, trace brown silt				
8	GPESB-47 (8'-10')		0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-48

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Cloudy, mid-50's deg. F
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 10, 2006
DATE COMPLETED: May 10, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0			0.0	0		Bluestone base material	FILL			
	GPESB-48 (0.5'-2')		0.0	0		Light brown to brown fine to coarse SAND, some brown fine gravel	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
	GPESB-48 (3'-5')		0.0	0						
			0.0	0						
4			0.0	0		Light brown to brown fine to coarse SAND, some brown fine to coarse gravel				
			0.0	0						
		28	0.0	0						
			0.0	0						
6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
8	GPESB-48 (8'-10')		0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-49

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Overcast, heavy rain,mid-50's deg.
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 16, 2006
DATE COMPLETED: May 16, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0			0.0	0		Bluestone base material	FILL			
			0.0	0		Dark brown to brown fine to coarse SAND, little grey fine gravel	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0					Slight Naphthalene-like odor, Black staining	
4			8.7	0						
			2.3	0		Brown fine to coarse SAND, little grey fine gravel				
		36	0.0	0						
			0.0	0						
6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
8			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-50

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Overcast, heavy rain,mid-50's
TOTAL DEPTH: 10'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 16, 2006
DATE COMPLETED: May 16, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0			0.0	0		Bluestone base material	FILL			
			0.0	0		Dark brown to brown fine to coarse SAND, little grey fine gravel	SP			
			0.0	0						
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0					Slight Naphthalene-like odor, Black staining	
4			0.0	0						
			0.0	0		Brown fine to coarse SAND, little grey fine gravel				
		36	0.0	0						
			0.0	0						
6			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
8			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10			0.0	0						

Paulus, Sokolowski & Sartor	BORING LOG	BOREHOLE NUMBER - GPESB-51

PROJECT NUMBER: 2522.033.024
PROJECT NAME: Supplemental Environmental Investigation Area
LOCATION: Brooklyn, New York
DRILLING CO: Fenley & Nicol
DRILLING METHOD: GeoProbe
DRILLER / HELPER: Charlie Guzzman/Mike Mede
ENVIRONMENTAL SCIENTIST: Brian D'Agostino

WEATHER: Partly cloudy. low 60's deg. F
TOTAL DEPTH: 25'
GROUND SURFACE ELEVATION:
DATE BEGUN: May 17, 2006
DATE COMPLETED: May 17, 2006

DEPTH	SAMPLE NUMBER	RECOVERY (in)	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0						Bluestone base material				
	GPESB-51 (0.5'-2')		0.0	0		Brown to light brown fine to coarse SAND, little grey fine to coarse gravel	FILL			
			0.0	0			SP			
			0.0	0						
2		Hand auger	0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
4			0.0	0						
			0.0	0						
	GPESB-51 (5'-7')	30	0.0	0					Slight Naphthalene-like odor, Black stained, Tar-coated	
			5.5	0						
6			9.3	0						
			8.0	0						
			12.2	0						
			14.5	0						
8			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
10	GPESB-51 (10'-12')	24	0.0	0					Strong Naphthalene-like odor, Black stained, Solid tar from 10'-12'	
			25.6	0						
			88.7	0						
			22.1	0						
12			29.6	0						
			33.5	0						
			0.0	0						
			0.0	0						
14			0.0	0						
			0.0	0						
	GPESB-51 (15'-17')	24	0.0	0		Grey-brown fine to coarse SAND, trace silt, moist			Slight Petroleum-like odor	
			0.0	0						
16			0.0	0						
			0.0	0						
			0.0	0						
			0.0	0						
18			12.7	0						
			23.8	0						
			15.5	0						
			18.6	0						
20		30	0.0	0		Grey fine to coarse SAND, trace grey fine gravel, trace silt, wet			Moderate Petroleum-like odor	
			5.6	0						
			6.2	0						
			3.6	0						
22			2.7	0						
			3.5	0	▼					
	GPESB-51 (23'-25')		0.0	0						
			0.0	0						
24			0.0	0						
			0.0	0						
			0.0	0						

Paulus, Sokolowski & Sartor	**TEST PIT LOG**	TEST PIT NUMBER **GPETP-12**

PROJECT NUMBER: **2522.033.024**
PROJECT NAME: **Greenpoint Energy Center - Pipeline Test Pits**
LOCATION: **Brooklyn, New York**
EXCAVATION CO: **Fenley & Nicol**
EXCAVATION METHOD: **VacTruck**
OPERATOR: **Ashton A.**
ENVIRONMENTAL SCIENTIST: **J. Diamond**

WEATHER: **Sunny, 64 Degrees F**
TOTAL DEPTH: **5 feet**
GROUND SURFACE ELEVATION: **00'**
DATE BEGUN: **May 17, 2006**
DATE COMPLETED: **May 17, 2006**

DEPTH	SAMPLE NUMBER	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0					FILL, Grayish Black Silty Sand with Gravel	FILL			
		0.0			FILL, Dark Yellow Brown Clayey Sand with Gravel, Cobbles and Bricks				
2	GPETP-12 (0-5')	0.0							
					Pale to Dark Yellow Orange Fine-Coarse SAND	SP			
4		0.0			Brown Clayey SAND with Coarse and Fine Gravel	SC			
6									
8									
10									
12									
14									
16									
18									
20									

Paulus, Sokolowski & Sartor	**TEST PIT LOG**	TEST PIT NUMBER **GPETP-11**

PROJECT NUMBER: **2522.033.024**
PROJECT NAME: **Greenpoint Energy Center - Pipeline Test Pits**
LOCATION: **Brooklyn, New York**
EXCAVATION CO: **Fenley & Nicol**
EXCAVATION METHOD: **VacTruck**
OPERATOR: **Ashton A.**
ENVIRONMENTAL SCIENTIST: **J. Diamond**

WEATHER: **Sunny, 60 Degrees F**
TOTAL DEPTH: **6 feet**
GROUND SURFACE ELEVATION: **00'**
DATE BEGUN: **May 22, 2006**
DATE COMPLETED: **May 22, 2006**

DEPTH	SAMPLE NUMBER	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0					FILL, Asphalt and Crushed Stone	FILL			
					Yelowish Orange Fine-Coarse SAND with Fine to Coarse Gravel	GP			
2	GPETP-11 (0.5-5')				Moderate Brown Fine-Coarse SAND, some Clay with Coarse Gravel and Boulders	SC			
					Moderate Brown Medium-Fine Clayey SAND with Fine-Coarse Gravel, some Mica and Boulders				
4									
6									
8									
10									
12									
14									
16									
18									
20									

Paulus, Sokolowski & Sartor	**TEST PIT LOG**	TEST PIT NUMBER **GPETP-10**

PROJECT NUMBER: **2522.033.024**
PROJECT NAME: **Greenpoint Energy Center - Pipeline Test Pits**
LOCATION: **Brooklyn, New York**
EXCAVATION CO: **Fenley & Nicol**
EXCAVATION METHOD: **VacTruck**
OPERATOR: **Ashton A.**
ENVIRONMENTAL SCIENTIST: **J. Diamond**

WEATHER: **Sunny, 64 Degrees F**
TOTAL DEPTH: **5 feet**
GROUND SURFACE ELEVATION: **00'**
DATE BEGUN: **May 17, 2006**
DATE COMPLETED: **May 17, 2006**

DEPTH	SAMPLE NUMBER	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0					FILL, Crushed Bluestone to Brown Silty Sand	FILL			
		0.0			Grayish Black/Yellow Brown Fine-Medium Silty SAND with Fine-Coarse Gravel	SM			
2	GPETP-10 (0-5')	0.0			Pale Yellow Brown Fine SAND	SP			
4		0.0			Dark Yellowish Brown Coarse to Fine SAND				
6									
8									
10									
12									
14									
16									
18									
20									

Paulus, Sokolowski & Sartor	**TEST PIT LOG**	TEST PIT NUMBER **GPETP-13**

PROJECT NUMBER: **2522.033.024**
PROJECT NAME: **Greenpoint Energy Center - Pipeline Test Pits**
LOCATION: **Brooklyn, New York**
EXCAVATION CO: **Fenley & Nicol**
EXCAVATION METHOD: **VacTruck**
OPERATOR: **Ashton A.**
ENVIRONMENTAL SCIENTIST: **J. Diamond**

WEATHER: **Sunny, 60 Degrees F**
TOTAL DEPTH: **5 feet**
GROUND SURFACE ELEVATION: **00'**
DATE BEGUN: **May 22, 2006**
DATE COMPLETED: **May 22, 2006**

DEPTH	SAMPLE NUMBER	PID (ppm)	HCN (ppm)	WATER LEVEL	SOIL DESCRIPTION	USCS SYMBOL	LITHOLOGY	ENVIRONMENTAL DESCRIPTIONS	VISUAL OBSERVATIONS
0					FILL, Bluestone	FILL			
		0.0			FILL, Dark Gray Silty Sand with Coarse Gravel				
		0.0			FILL, Brown Clayey Sand with Coarse Gravel, Bricks and Cobbles				
		0.0							
2	GPETP-13 (0.5-5')	0.1			Moderate Brown Fine-Coarse Clayey SAND with Fine-Coarse Gravel	SC			
4									
6									
8									
10									
12									
14									
16									
18									
20									

APPENDIX D

Identification and Cleaning of Buried Piping SOP

KEYSPAN ENERGY

SOP GPLNG 1000 Rev 1
June 15, 2006

Title: Identification and Cleaning of Buried Piping

This SOP refers to the cleaning of five buried pipes and one plastic electrical conduit. These lines extend along the Lombardy Street property line from Varick Ave to Newtown Creek and are located on Block 2837 Lot 1 (Greenpoint Gas Property). The piping has been identified from original drawings as follows:

3" Plastic electrical conduit – not to be cleaned or disturbed
4" Propane Vent Line – currently in use for run off water drainage
6" Liquid Propane Line
10" P1001 Naptha product line – material to be determined on inspection (cast or steel)
12" Naptha product line – Material to be determined on inspection (case or steel)
2" Unidentified steel line

It is expected that the lines are no longer in use however there is uncertainty as to the present state of the piping. This SOP addresses the steps that are to be taken to ensure that the lines are properly cleaned and purged so that they can be removed as needed during site construction. Tapping of pipe can be accomplished either by welding on of Saver valves or by installing mechanical saddles and appropriate tapping equipment.

Under no circumstances are the lines to be drilled or tapped in such a way that the contents can escape to atmosphere without a means of shutting off the tap.

Steps:

1. Excavate two pits. Size to be determined by contractor for access to all piping. One pit is the "upstream" pit located west of the NYC Water supply pit and is approximately 425 feet north of the control building at N 2100 x W 1325. The second pit is designated as the "downstream" pit and is to be located between the double fences approximately 75 feet east of the control building at N 2100 x W 830. All excavated material to be retained on site for backfilling.
2. Avoid damage or disturbance of the 3" electrical conduit.
3. Prior to working in the pits, KeySpan personnel will check the 3" conduit for power and address as needed.
4. Install drip pans in both pits.
5. Tap each pipe in the "upstream" pit by welding saver valves or tapping saddles, treating the line as "live".
6. Sample each line in the in the upstream pit for liquids, flammable gas, odor, PCB's, and other hazardous materials.
7. Tap each pipe in the "downstream" pit.

8. If flammable gas or liquid is found, insert bags at both pit locations using taps and isolate the line for purging.
9. If no flammable gas or liquid is found in a line, the line may be cut and capped. A spool piece of approximately 3 ft. in length should be removed from each end so that cleaning can be performed if necessary.
10. Pipes will be "cold cut" using approved methods and not using a torch.
11. Caps at existing lines to remain are to be Dresser style mechanical fittings.
12. The center section of piping (between pits) is to be sealed with wood plugs which will be re-inserted as removals are performed each day.
13. Send samples to the KeySpan lab for analysis.
14. If necessary, purge the lines with nitrogen provided by KeySpan until the readings are 0% LEL. Samples to be taken using a portable gas detector by LNG Plant personnel.
15. If liquid is found, pump the free liquids out from the downstream pit using a vacuum truck for off site disposal.
16. Cleaning of the lines to be performed using a water jet and vacuum system. Lines that require cleaning must be cleaned throughout the entire length from the downstream pit. The upstream pipe must be sealed during this process.
17. Remaining cleaned pipe will be removed during excavation by others.

Health and Safety Precautions:

1. All personnel to be 40 hour certified HAZWOPER trained. Personnel must supply requisite medical surveillance documentation as per the requirements of 29 CFR 1910.120. Contractors shall provide evidence of the certifications/clearance to KeySpan Environmental Asset Management (EAM) or designee a minimum of 48 hours prior to starting work.
2. All trenches must be protected and dug according to OSHA guidelines.
3. Flammable gas readings should be taken using calibrated Bascom Turner Gas detectors capable of reading in an inert atmosphere such as Nitrogen or in air. Qualified personnel from the LNG plant shall be used to take readings.
4. Air monitoring and sampling of liquid/soil shall be conducted by KeySpan EAM or designee.
5. Soil handing shall be managed in accordance with the previously submitted Soil Management Plan dated May 2006 and Health and Safety Plan.
6. Excavation activities shall not start until EAM provides written approval.

ENVIRO JET TECHNOLOGIES

PIPELINE INSPECTION, CLEANING & DECONTAMINATION SERVICES

US EPA National Permit

- NATIONWIDE APPROVAL TO REMOVE PCBs FROM METALLIC PIPE & PIPING SYSTEMS
- PCB FREE PIPE ABANDONMENT & DISPOSAL
- CLEANED PIPE IS “NON-PCB” OR LESS THAN 10 UG / 100 CM^2 & 50 PPM
- CONFIRMATORY WIPE SAMPLING IS NOT REQUIRED
- PITS MAY BE BACKFILLED IMMEDIATELY
- ENVIRO CLEAN SOLUTION MAY BE RE-USED
- ELIMINATES LONG TERM LIABILITY

Enviro Clean Solution

- TERPENE HYDROCARBON BASED SOLUTION
- US EPA APPROVED UNDER THE MEGA RULE
- SUBPART “T” VALIDATION STUDY
- ABILITY TO BE FILTERED & RE-USED
- STORED IN POLY TANKS AT CLIENT LOCATION
- POST CLEANING ANALYSIS IS REQUIRED
- DILUTED 10 PARTS TO 1 WITH WATER

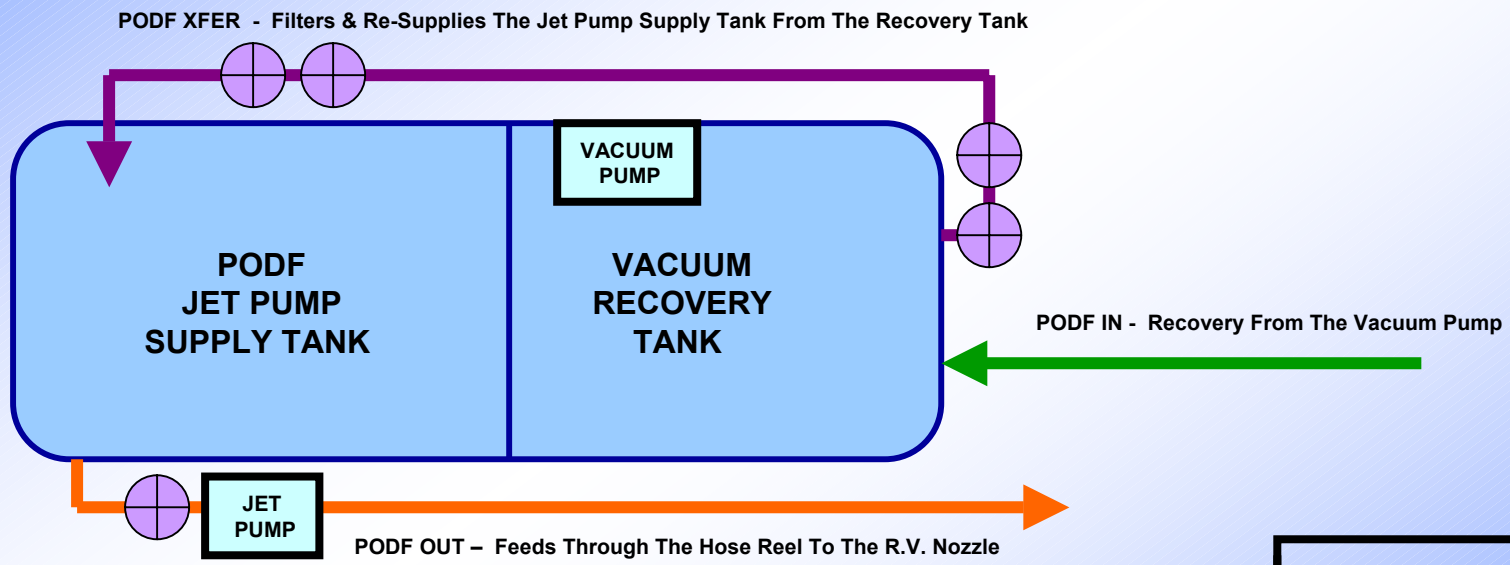
Spray Cleaning Process

- PRIMARY RESOURCE FOR LINE CLEANING
- PROPRIETARY DESIGN (PATENTS PENDING)
- DUAL PURPOSE JET & VAC UNIT
- CLEAN UP TO 500’ IN ONE DIRECTION
- JET PUMP OPERATES AT 2000 psi & 40 gpm
- VACUUM PULLS 27” Hg
- TWO SEGREGATED 1000 GAL TANKS
- FLUID TRANSFER BETWEEN TANKS
- MULTIPLE SEDIMENT FILTERS

PROCESS ENGINEERING SCHEMATIC
JET CLEANING PROCESS – PODF FLOW DIAGRAM

ENVIRO JET TECHNOLOGIES

TOP VIEW



ENGINEERING DATA	
Operating Pressure (Jet Pump)	2,000 psi
Nozzle Output - PODF Application	40 gpm
High Performance Vacuum Capacity	27" Hg
Liquid Storage Capacity (2 Tanks On Truck)	2,200 gals
Hydraulic Hose Reel Capacity	500 feet

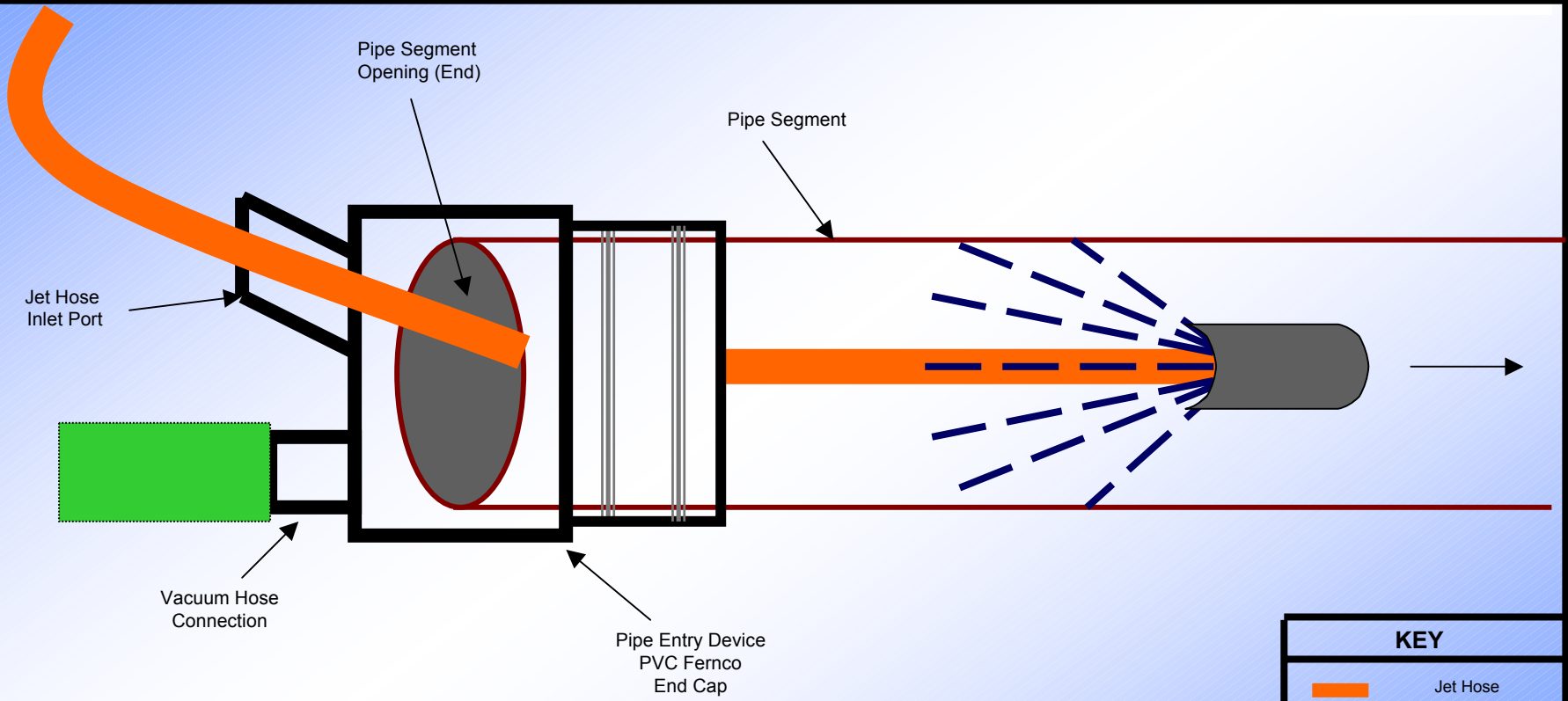
KEY

- PODF Discharge Stream
- PODF Recovery Stream
- PODF Transfer Stream
- Sediment Filters
- Jet Truck Tank Housing

PROCESS ENGINEERING SCHEMATIC

JET CLEANING PROCESS & PIPE ENTRY DEVICE
PVC END CAP WITH JET AND VACUUM CONNECTIONS

ENVIRO JET TECHNOLOGIES



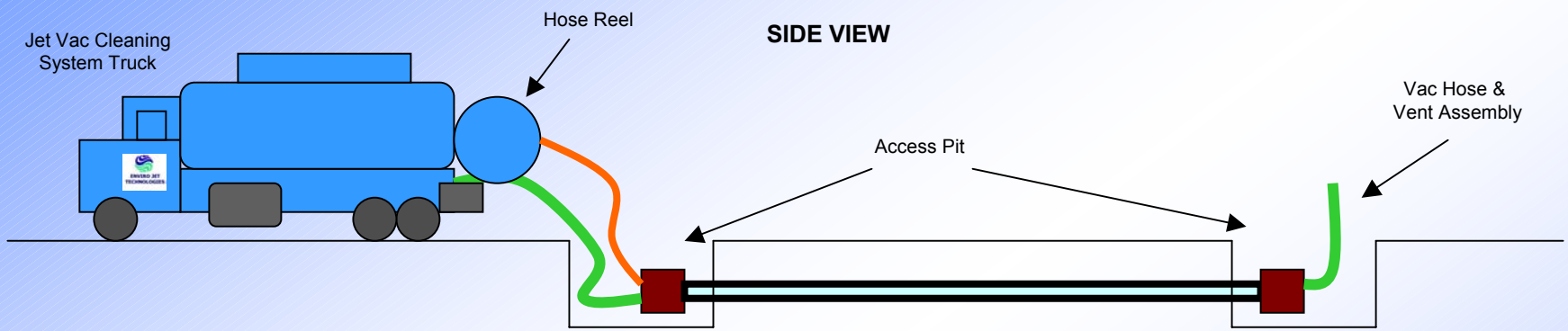
ENGINEERING DATA	
Operating Pressure (Jet Pump)	2,000 psi
Nozzle Output - PODF Application	40 gpm
High Performance Vacuum Capacity	27" Hg
Liquid Storage Capacity (2 Tanks On Truck)	2,200 gals
Hydraulic Hose Reel Capacity	500 feet

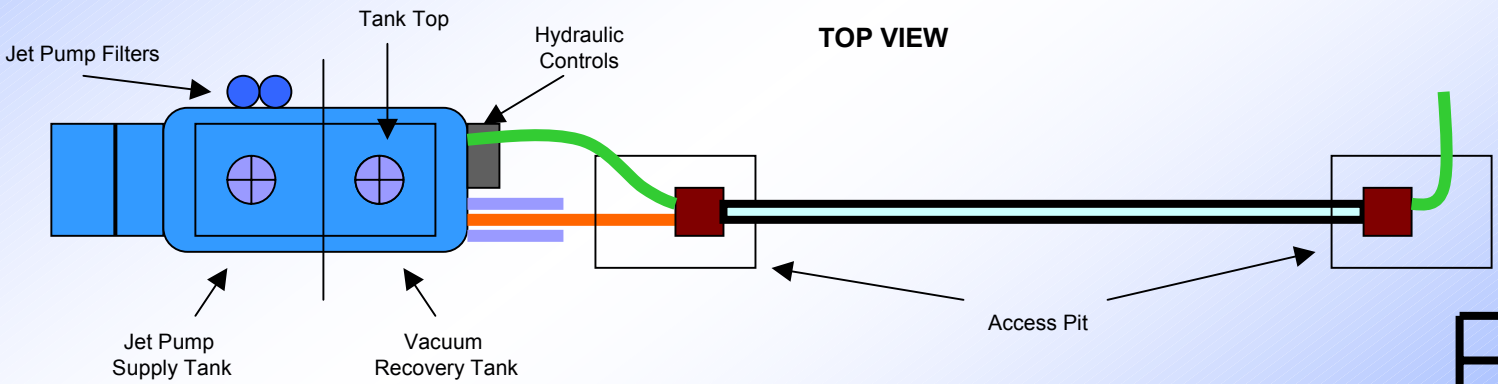
KEY

- Jet Hose
- Vacuum Hose
- Radial Vortex Nozzle
- PODF Spray
- Band Clamp

PROCESS ENGINEERING SCHEMATIC
SPRAY CLEANING SYSTEM & SITE SET UP

ENVIRO JET TECHNOLOGIES





KEY

- Jet Hose
- Vacuum Hose
- Pipe Entry Device (PED)
- Pipeline Segment

ENGINEERING DATA

Operating Pressure (Jet Pump)	2,000 psi
Nozzle Output - PODF Application	40 gpm
High Performance Vacuum Capacity	27" Hg
Liquid Storage Capacity (2 Tanks On Truck)	2,200 gals
Hydraulic Hose Reel Capacity	500 feet

JET – CLEANING TECHNOLOGY
PROCESS GUIDELINES & REQUIREMENTS

MEGA RULE GUIDELINES

- Contaminated Material Must Be Flushed 3 Times With An Approved PODF
- Enviro Clean Is An EPA Approved PODF (Performance Based Decontamination Fluid)
- Solution Application Must Be A Minimum Of 10% Of The Total Pipe Segment Volume
- Must Recover A Minimum Of 95% Of Applied Solution
- Not Responsible For Pipe Irregularities Including Holes, Unmarked Offsets Or Drops
- Recovered Solution Must Be Less Than 2ppm
- Must Document (Written & Visual) The Cleaning Process & Maintain Record For 5 Years

JET-CLEANING TECHNOLOGY

- Jet Pump Operates at 2,000 PSI & Drives Radial Vortex Cleaning Nozzle @ 40 GPM
- Unit Can Jet & Vacuum At The Same Time Using Separate & Independent Pumps
- Two 1100 Gallon Tanks Housed On Single Unit
- 500' Of Flexible ¾" Jet Hose Is Housed On Hydraulically Operated Reel
- Transfer Capability Allows For Continuous Operation With 1,000 Gallons Of Cleaning Fluid

OPERATIONAL PARAMETERS

- System Can Accommodate Pipe Size Of 4" through 36", Any Construction
- System Is Designed To Clean A Maximum Length Of 800 Linear Feet (400' In One Direction)
- Two Access Points Are Required On Each End Of The 800' Pipe Segment
- Typical Pit Construction Size Is 5' x 8' x 5', Sheeting Required Per DOT Guidelines
- System Cannot Accommodate Sharp Offsets, Drops, Drip Pots and Obstructions
- Pipe Ends Must Be Cut With A Straight Finish & All Wrappings/Coatings Need To Be Removed
- Minimum Clearance Requirements Include:
  - 4 Feet From Each Pipe End For Vacuum & Jet Hose
  - 2 Feet Underneath Each Pipe End For Spill Containment
  - 2 Feet Of Exposed Pipe, Free Of Coatings, On Each End To Attach PVC Fittings

SITE PREPARATION REQUIREMENTS (Client's Responsibility)

- Ensure Pipe Has Been Drained Of All Free Flowing Liquids
- Excavate & Prepare Proper Access Pits Following Standard DOT & OSHA Procedures
- Prepare Pipe Ends & Proper Clearance In Accordance With Operational Parameters
- Provide Traffic Safety, Including Road Cones, Tape, Flagmen etc.
- Block Off Space To Set Up Equipment (20'x10' Space In Front & Back Of Each Pit)
- Provide Advance Copies Of Engineering Drawings & Schematics Of Pipeline Segment(s)

EH&S GUIDELINES

- Copy Of Health & Safety Plan Will Be On-Site
- Tail Gate Safety Meeting Conducted On-Site Prior To Starting Work
- All Workers Will Be 40 OSHA HAZWOPER Trained
- Spill Containment Including Drip Pans & PVC Fittings Will Be Installed
- Workers In The Pit Will Be Dressed In PPE Level D (Tyvek, Hard Hat, Glasses, Gloves)
- Jet Hose Will Be Wiped Down & Decontaminated As It Is Retracted From The Pipe
- Water & Liquids Will Be Recovered Via Vacuum Pumps
- Decon Area Will Be Set Up Near Access Pit Entry/Exit Points
- Debris & Waste Will Be Bagged Or Drummed On-Site For Proper Disposal
- All Wipe & Liquid Samples Will Be Taken By Enviro Jet

APPENDIX E

Health and Safety Plan

CONFIDENTIAL

PROJECT HEALTH AND SAFETY PLAN

FOR THE

KeySpan Corporation
Greenpoint Energy Center
Remedial Action Implementation

Brooklyn, New York

February 2005

PAULUS, SOKOLOWSKI AND SARTOR ENGINEERING, PC (PS&SPC), PS&S SUBCONTRACTORS, AND THE KEYSPAN CORPORATION DO NOT GUARANTEE THE HEALTH OR SAFETY OF ANY PERSON ENTERING THE PROJECT AREA. DUE TO THE NATURE OF THIS PROJECT AND THE ACTIVITY OCCURRING THEREON, IT IS NOT POSSIBLE TO DISCOVER, EVALUATE, AND PROVIDE PROTECTION FOR ALL POSSIBLE HAZARDS WHICH MAY BE ENCOUNTERED. STRICT ADHERENCE TO THE HEALTH AND SAFETY GUIDELINES SET FORTH HEREIN WILL REDUCE, BUT NOT ELIMINATE, THE POTENTIAL FOR INJURY. THE HEALTH AND SAFETY GUIDELINES IN THIS PLAN WERE PREPARED FOR THIS PROJECT AND SHOULD NOT BE USED ON ANY OTHER PROJECT WITHOUT PRIOR RESEARCH AND EVALUATION BY TRAINED HEALTH AND SAFETY SPECIALISTS.

CONFIDENTIAL

PROJECT HEALTH AND SAFETY PLAN

FOR THE

KeySpan Corporation
Greenpoint Energy Center
Remedial Action Implementation

Brooklyn, New York

February 2005

PAULUS, SOKOLOWSKI AND SARTOR ENGINEERING, PC (PS&SPC), PS&S SUBCONTRACTORS, AND THE KEYSPAN CORPORATION DO NOT GUARANTEE THE HEALTH OR SAFETY OF ANY PERSON ENTERING THE PROJECT AREA. DUE TO THE NATURE OF THIS PROJECT AND THE ACTIVITY OCCURRING THEREON, IT IS NOT POSSIBLE TO DISCOVER, EVALUATE, AND PROVIDE PROTECTION FOR ALL POSSIBLE HAZARDS WHICH MAY BE ENCOUNTERED. STRICT ADHERENCE TO THE HEALTH AND SAFETY GUIDELINES SET FORTH HEREIN WILL REDUCE, BUT NOT ELIMINATE, THE POTENTIAL FOR INJURY. THE HEALTH AND SAFETY GUIDELINES IN THIS PLAN WERE PREPARED FOR THIS PROJECT AND SHOULD NOT BE USED ON ANY OTHER PROJECT WITHOUT PRIOR RESEARCH AND EVALUATION BY TRAINED HEALTH AND SAFETY SPECIALISTS.

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EMERGENCY CONTACTS

In the event of any situation or unplanned occurrence requiring assistance, the appropriate contact(s) should be made from the list below. For emergency situations, contact should first be made with the Site Manager (SM) who will notify emergency personnel who will in turn contact the appropriate response teams. This emergency contact list must be in an easily accessible location in the project area.

Contingency Contacts	**Phone Number**
Police/Fire	911
Poison Control Center:	(800) 343-2722
NYSDEC Spill Hotline:	(800) 457-7362
CHEMTREC	(800) 424-9300
Consolidated Edison Co. (electric service)	(800) 752-6633
Water/Sewer	(212) 639-9675
Gas Operations (KeySpan)	(718)-643-4050
Medical Emergency	
Woodhull Medical Center	(718) 963-8000
Ambulance	911

ROUTE TO HOSPITAL:

The directions to the hospital and a route map from the project area may be found in Appendix E. Travel time from the project area is approximately 6 minutes.

Emergency Contacts

PS&S Project Manager Joseph Walsh	(732) 584-0227 (office) (732) 221-3157 (cell)
KeySpan Project Manager Tracey Bell	(718) 403-3053
KeySpan Field Manager Thomas Campbell	(516) 545-2555
LNG Plant Manager Greg Schneller	(718) 963-5463

1.0 INTRODUCTION

1.1 Purpose and Requirements

This Health and Safety Plan (HASP) addresses the health and safety practices that will be employed by all project workers participating in the remedial action implementation to be conducted in the northeast corner of the KeySpan Corporation (KeySpan) Greenpoint Energy Center located in Greenpoint, Brooklyn, New York.

The HASP takes into account hazards generally inherent to the project and presents requirements to be followed by all project personnel in order to avoid and, if necessary, protect against health and/or safety hazards. Activities performed under this HASP will comply with applicable parts of OSHA Regulations, primarily 29 CFR Parts 1910 and 1926. Modifications to the HASP may be made with the approval of the Project Manager (PM) using the Field Change Request Form found in Appendix A. This plan assigns responsibilities, establishes standard operating procedures, and provides for contingencies that may arise while operations are being conducted at hazardous waste sites.

The provisions of this Plan are mandatory for all on-site project personnel and all project personnel shall abide by this plan. Personnel who engage in project activities must be familiar with this plan and comply with its requirements. All project personnel must sign off on the Plan Acceptance Form (Appendix A) prior to beginning work in the project area.

1.2 Site Description

The Greenpoint Energy Facility is located at 287 Maspeth Avenue, Brooklyn, New York. The Facility is identified on the New York State Department of Environmental Conservation's (NYSDEC) list of known Manufactured Gas Plant (MGP) sites. Based on historical maps, the structures related to the former MGP plant were known to occupy a majority of the current Greenpoint Energy Facility, with the exception of the current LNG Plant area. A small oil unloading pump house at the intersection of Lombardy Street and the Newtown Creek is the only structure noted on the maps in the LNG area. Other uses of this area are not known.

Major structures associated with the former MGP gas works included condensers, a generator house, purifier boxes, oil tanks, tar tanks, scrubbers, separators, ovens and holders. The area proposed for investigation has no known historical significance for the gas works plant except for the previously mentioned oil unloading pump house in the northeast corner of the Facility. The remedial measure is located in the extreme northeastern portion of the Greenpoint Energy Facility in an area bounded by Lombardy Street and Newtown Creek.

1.3 Scope of Work

The remedial action tasks covered by this HASP include:

- *Excavation Areas A & B-* Removal of soil and associated debris in Excavation Areas A and B to a depth of approximately 3 feet below ground surface. The extent and depth of excavation activities within Excavation Areas A and B was determined based on existing soil boring observations and data collected from the Remedial Area. Debris encountered will be segregated from excavated soils and prepared (i.e., decontaminated, reduced in size, etc.), as necessary, to meet the acceptance criteria of the approved disposal facility. The excavation areas will be backfilled with approved clean material.

- *Excavation Area C-* This area will be excavated to a depth of two 2 feet bgs and backfilled to the existing grade with approved clean material and a two (2) foot thick cap will be constructed over the area.

- *Excavation Area D-* A portion of the existing asphalt paved roadway that currently bisects the Remedial Area will be demolished and removed. In addition, the area encompassed by the existing asphalt paved roadway will be excavated to a depth of one (1) foot bgs. This area will then be backfilled to the existing grade and a one (1) foot thick cap will be installed over the area.

- *Excavation Area E-* A one (1) foot thick cap will be constructed in Area E that will be constructed by excavating one foot below ground surface (bgs) and backfilling the excavations to the existing grade with approved clean material. Debris encountered will be segregated from excavated soils and prepared (i.e. decontaminated, reduced in size, etc.), as necessary, to meet the acceptance criteria of the approved disposal facility.

- *Crushed Stone Cap Area-* A one (1) foot thick crushed stone cap will be constructed above grade in the northeastern corner of the Greenpoint Energy Center adjacent to Newtown Creek. This crushed stone cap will be constructed on the existing grade. No excavation will be conducted to construct the crushed stone cap.

1.4 Project Team Organization

This section specifies the PS&S Project Organization.

1.4.1 Project Manager (PM)

The PM responsibilities include:

- Ensuring the development and implementation of the HASP;
- Ensuring that the SM is informed of project changes which require modifications to the HASP; and
- Responsibility for overall project health and safety.

1.4.2 Site Manager (SM)

The SM responsibilities include:

- Ensuring that all project personnel comply with the HASP;
- Ensuring that Contractor field work is scheduled with adequate personnel and equipment resources to complete the job safely;
- Ensuring that adequate telephone communication between field crews and emergency response personnel is maintained;
- Enforcing project health and safety rules;
- Conducting Environmental Health and Safety (EHS) activities specified and assigned in the project HASP;
- Identifying operational changes which require modifications to the project HASP;
- Ensuring that plan modifications are documented and are approved by the PM;
- Ensuring that proper personal protective equipment is utilized by field teams;
- Monitoring Contractor compliance with this HASP;
- Notifying PM of all accidents/incidents;
- Assessing upgrade or downgrade of personal protective equipment (PPE) based on field conditions and/or real-time monitoring results;
- Ensuring that monitoring instruments are calibrated; and
- Maintaining health and safety field log books.

1.4.3 Project Personnel

The Project Personnel responsibilities include:

- Reporting any unsafe or potentially hazardous conditions to the SM;
- Maintaining knowledge of the information, instructions, and emergency response actions contained in this HASP; and
- Complying with requirements set forth in this HASP, including any revisions.

2.0 RISK ANALYSIS

2.1 Chemical Hazards

The characteristics of compounds within the Remedial Area are discussed below for informational purposes. Adherence to the safety and health guidelines in this HASP should reduce the potential for exposure to the compounds discussed below. Compounds that may potentially be encountered while conducting field tasks at the project area include metals, polyaromatic hydrocarbons in the form of coal tar pitch volatiles (CTPVs), benzene, toluene, ethyl benzene, xylene and phenols. Table 2-1 contains basic chemical data for these contaminants of concern.

Polyaromatic hydrocarbons (PAHs) potentially present in the project area may occur in the form of coal tar/pitch volatiles and naphthalene. These compounds generally have a depressant effect on the Central Nervous System (CNS), may cause chronic liver and kidney damage, and some are suspected human carcinogens. Acute exposure may include headache, dizziness, nausea, skin, and eye irritation.

Repeated exposure to CTPVs has been associated with an increased risk of developing bronchitis as well as cancer of the lungs, skin, bladder and kidneys. Although the causative agent or agents responsible for the increased cancer risk are not known, numerous PAHs, such as benzo(a)pyrene, have been implicated. In addition to the cancer risk, CTPVs can cause contact dermatitis and ultraviolet light (as in sunlight) sensitivity.

Volatile organic compounds (VOCs), consisting primarily of benzene, toluene, ethyl benzene and xylene (BTEX) may be present in the project area as by-products of gas production. These compounds generally have a depressant effect on the central nervous system, may cause chronic liver and kidney damage and some are suspected human carcinogens. Acute exposure symptoms may include headaches, dizziness, nausea and skin and eye irritation. The primary routes of exposure are inhalation, ingestion and skin adsorption. Symptoms of exposure include dermatitis and bronchitis.

Symptoms of acute exposure to benzene include irritation to eyes, skin, nose and respiratory system, giddiness, headache and nausea. Symptoms of chronic exposure include bone marrow depression and leukemia. Benzene is a known human carcinogen. Symptoms of acute exposure to toluene include irritation to the eyes and nose, fatigue, weakness, confusion, dizziness, headache and dermatitis. Symptoms of chronic exposure include liver and kidney damage. Symptoms of acute exposure to ethyl benzene include eye, skin and mucous membrane irritation, headache, dermatitis and narcosis. Symptoms of acute exposure to xylene include irritation of the eyes, skin, nose and throat, dizziness, drowsiness, lack of coordination, nausea and vomiting. Symptoms of acute exposure to xylene include irritation to the eyes, skin, nose and throat, dizziness, drowsiness, lack of coordination, nausea and vomiting. Symptoms of chronic exposure include liver and kidney damage.

Surface soils within the Remedial Area contain elevated levels of arsenic. The primary routes of this exposure for this compound are inhalation and ingestion. Acute exposure to arsenic may

cause dermatitis, gastrointestinal (GI) disturbances and respiratory irritation. Chronic exposure to arsenic has resulted in lung cancer in humans.

Phenols are predominantly an exposure hazard via skin contact and through inhalation of particulate matter containing phenols. Acute exposure symptoms may include irritation of the eyes, nose and throat as well as skin rash/burns.

LNG is typically contains greater than 95% methane. Methane is a simple asphyxiant that acts to displace oxygen in the environment. The most significant hazard is inhalation of oxygen deficient atmospheres. Symptoms of oxygen deficiency include respiratory difficulty, headache, dizziness and nausea.

In addition to the chemical hazards existing in the project area, additional chemical hazards may be present due to materials being brought to the project area, such as acids/organic compounds and decontamination fluids. Prior to working with these materials, Material Safety Data Sheets (MSDS) should be reviewed by all potentially affected personnel.

2.2 Physical Hazards

Safety hazards for the different phases of the project are discussed below.

2.2.1 Temperature Extremes

Project activities may take place during time periods where exposure to temperature extremes could occur. In order to minimize exposure to temperature extremes, project personnel shall be familiar with the health effects of exposure to temperature extremes and the control measures that can minimize exposure.

2.2.2 Noise

Noise is a potential hazard associated with the operation of heavy equipment, power tools, pumps and generators. Excessive noise can destroy the ability to hear, and also put stress on other parts of the body. There is no cure for the health effects of excessive noise, so prevention is the only way to avoid health damage. Studies have indicated that high levels of noise will increase the release of adrenaline, resulting in increased heart rate, blood pressure, and respiration levels. Muscles are also found to tense in response to noise. High levels of noise may also interfere with job performance and have been blamed for excessive fatigue at the end of the workday. Accident rates are higher in workplaces that have higher noise levels.

2.2.3 Heavy Equipment Operations

Heavy equipment will be used to both excavate soils and to conduct backfilling operations. Working with or near heavy equipment poses many potential hazards and can result in serious physical injuries. Examples of potential hazards include: electrocution, fire/explosion, and being pinched, caught, crushed, or struck by equipment.

2.2.4 Hand and Power Tool Usage

In order to complete the various tasks for the project, hand and power tools may be utilized. The use of hand and power tools can present a variety of hazards, including physical harm from being struck by flying objects, being cut or struck by the tool, fire, and electrocution.

2.2.5 Fire and Explosion

The use of heavy equipment, diesel generators and motors, steam cleaners and tools that are gasoline powered, all present the possibility of fire and explosion hazards. Prior to the start of any work, all underground utilities and piping that may pose a potential hazard will be identified. In the event a pipe or line is struck, work will stop and the emergency response plan will be implemented. Additionally, diesel fuel and gasoline shall be stored in metal cans with self-closing lids and flash arrestors.

2.2.6 Slips, Trips, and Falls

Working in and around the Remedial Area may pose slip, trip and fall hazards due to potentially slippery surfaces on elevated equipment and uneven terrain. Fall hazards are also anticipated to be present during soil excavation work. Additionally, fall hazards may be present during work adjacent to the existing soil berm. Potential adverse health effects include injuries from a fall to the ground and becoming seriously injured.

2.2.7 Manual Lifting

Manual lifting of heavy objects will be required for several tasks. Proper lifting techniques should be used to prevent back injuries and strains. Back injuries are a serious concern as they are the most common workplace injury, often resulting in lost or restricted work time, and long treatment and recovery periods.

2.2.8 Steam, Heat and Splashing

Exposure to steam/heat/splashing hazards can occur during steam cleaning operations. Exposure to steam/heat/splashing can include scalding/burns, eye injury, and puncture wounds.

2.2.9 Smoking Policy

Under no circumstances will eating, drinking, smoking, or the use of smokeless tobacco or gum be permitted inside an established Exclusion Zone (EZ).

TABLE 2-1
CHEMICAL DATA

COMPOUND	CAS#	ACGIH TLV	OSHA PEL	ROUTE OF EXPOSURE	SYMPTOMS OF EXPOSURE	TARGET ORGANS	PHYSICAL DATA
Benzene	71-43-2	0.5 ppm, (Skin) 2.5 ppm STEL	1.0 ppm, (Skin) 5 ppm STEL	Inhalation Ingestion Absorption Skin Contact	Irritates eyes, skin, nose, resp. syst.; giddiness; headache, nausea, staggered gait; fatigue, anorexia, lassitude; dermatitis; bone marrow	Eyes, skin, blood, CNS, bone marrow, respiratory system	Liquid with an aromatic odor VP= 75 mm IP= 9.24eV
Coal tar pitch volatiles (CTPV)	65996-93-2	0.2 mg/m3	0.2 mg/m3	Inhalation Skin contact	Irritant to eyes, swelling, acne contact dermatitis, chronic bronchitis	Respiratory, CNS, liver, kidneys, skin, bladder	Colorless/ pale green, solid, faint aromatic odor
Ethyl benzene	100-41-4	100 ppm	100 ppm	Inhalation Skin Contact Ingestion	Irritates eyes, skin, mucous membranes; headache; dermatitis; narcosis, coma.	Eyes, skin, resp. system, CNS	VP= 7 mm, aromatic odor, IP= 8.76 eV
Phenol	108-95-2	5 ppm (Skin)	5 ppm (Skin)	Inhalation Absorption Ingestion Skin Contact	Irritates eyes, nose, throat; anorexia; weakness, muscle ache; dark urine; cyanosis; liver & kidney damage; skin burns, dermatitis; convulsions.	Eyes, skin, respiratory system, liver, kidneys	Crystalline solid with a sweet, acrid odor. VP= 0.4 mm IP= 8.50 eV
Toluene	108-88-3	50 ppm (skin)	200 ppm 300 ppm (C) 500 ppm (10 min max peak)	Inhalation Absorption Ingestion Skin Contact	Irritates eyes and nose, fatigue, weakness, confusion, euphoria, dizziness; headache, dilated pupils, lacrimation, nervousness, muscular fatigue, insomnia, paresthesia, dermatitis, liver and kidney damage	Liver, eyes kidneys, resp syst. skin, CNS	Colorless liquid with a sweet, pungent, benzene-like odor. VP= 21 mm IP= 8.82eV
Xylene	1330-20-7	100 ppm, 150 ppm (STEL)	100 ppm	Inhalation Absorption Ingestion Skin Contact	Irritates eyes, nose, throat, and skin; dizziness, drowsiness, staggered gait, nausea, anorexia, vomiting, abdominal pain, dermatitis	Eyes, skin, resp. system, GI tract, CNS, blood, liver, kidneys	Colorless liquid with an aromatic odor VP = 79 mm IP= 8.56 eV
Naphthalene	91-20-3	10 ppm	10 ppm	Inhalation Ingestion Skin contact	Irritates the eyes, headache, nausea, fatigue; renal shutdown, optical neuritis	Eyes, skin, blood, liver, CNS, kidneys	VP: 0.08 IP: 8.12 eV Mothball odor
Hydrogen cyanide	74-90-8	4.7 ppm (5 mg/m^3) STEL [skin]	10 ppm (11 mg/m^3) [skin]	Inhalation Ingestion Absorption Skin/Eye Contact	Asphyxia; weakness, headache, confusion; nausea, vomiting; increased rate and depth of respiration or respiration slow and gasping; thyroid, blood changes	CNS, CVS, thyroid, blood	Colorless or pale-blue liquid or gas (above 78°F) with a bitter, almond-like odor. VP: 630 mmHg IP: 13.60 eV
Methane	74-82-8	1000 ppm[1]	NA	Inhalation	Respiratory difficulty, headache, dizziness and nausea	Respiratory system, CNS	Odorless, colorless gas Simple asphyxiant; displaces oxygen.

[1] TWA for Aliphatic hydrocarbon gases.

COMPOUND	CAS#	ACGIH TLV	OSHA PEL	ROUTE OF EXPOSURE	SYMPTOMS OF EXPOSURE	TARGET ORGANS	PHYSICAL DATA
Arsenic	7440-38-2	0.01 mg/m^3	0.01 mg/m^3	Inhalation Skin Absorption Ingestion Skin Contact	Ulceration of nasal septum, derm, GI disturbances, peripheral neuropathy, resp irrt, hyperpig of skin, potential carcinogen	Liver, kidneys, skin, lungs, lymphatic system	Metal: Silver-gray or tin-white, brittle, odorless solid FP: NA IP: NA LEL: NA UEL: NA VP: 0 mm
Hydrogen sulfide	7783-06-4	10 ppm TWA, 15 ppm STEL	20 ppm C, 50 ppm [10-min. Maximum peak]	Inhalation Skin/Eye Contact	Irritation eyes, respiratory system; apnea, coma, convulsions; conjunctivitis, eye pain, lacrimation (discharge of tears), photophobia (abnormal visual intolerance to light), corneal vesiculation; dizziness, headache, fatigue, irritability, insomnia; gastrointestinal disturbance; liquid: frostbite	Eyes, respiratory system, CNS	Colorless gas with a strong odor of rotten eggs. VP: 17.6 atm IP: 10.46 eV

Abbreviations

C = ceiling limit, not to be exceeded
CNS = Central Nervous System
CVS= Cardiovascular System
eV = electron volt
FP = Flash point
IP = Ionization Potential
mm = millimeter
ppm = parts per million
Skin = significant route of exposure
STEL = Short-term exposure limit (15 minutes)
TWA = Time-weighted average (8 hours)
VP = vapor pressure approximately 68° F in mm Hg (mercury)

2.3 Biological Hazards

During the course of the project, there is a potential for workers to come into contact with biological hazards such as animals, insects and plants.

2.3.1 Animals

During project operations, animals such as dogs, cats, mice and snakes may be encountered. Workers shall use discretion and avoid all contact with animals. If these animals present a problem, efforts will be made to remove these animals from the project area by contacting a licensed pest control technician.

2.3.2 Insects

Insects, such as mosquitoes, ticks, bees and wasps may be present during certain times of the year. If applicable, workers will be encouraged to wear repellents when working in areas where insects are expected to be present. If insects are prevalent, efforts will be made to remove them from the project area by contacting a licensed pest control technician.

2.3.2.1 Lyme Disease

Lyme disease is caused by infection from a deer tick that carries a spirochete, a spiral-shaped bacterium. During the painless tick bite, the spirochete may be transmitted into the bloodstream, which could lead to the worker contracting Lyme disease.

Lyme disease may cause a variety of medical conditions including arthritis, which can be treated successfully if the symptoms are recognized early and medical attention is received. Treatment with antibodies has been successful in preventing more serious symptoms from developing. Early signs may include a flu-like illness, an expanding skin rash and joint pain. Joint or muscle pain may be an early sign of Lyme disease. These aches and pains may be easy to confuse with the pain that comes with other types of arthritis. However, unlike many other types of arthritis, this pain seems to move or travel from joint to joint. If left untreated, Lyme disease can cause serious nerve or heart problems as well as a disabling type of arthritis.

Symptoms can include a stiff neck, chills, fever, sore throat, headache, fatigue and joint pain. This flu-like illness is out of season, commonly happening between May and October when ticks are most active. A large expanding skin rash usually develops around the area of the bite. More than one rash may occur. The rash may feel hot to the touch and may be painful. Rashes vary in size, shape, and color, but often look like a red ring with a clear center. The outer edges expand in size. It may be easy to miss the rash and the connection between the rash and a tick bite. The rash develops from three days to as long as a month after the tick bites. Almost one third of those with Lyme disease never get the rash.

Lyme disease can affect the nervous system. Symptoms include stiff neck, severe headache, and fatigue usually linked to meningitis. Symptoms may also include pain and drooping of the muscles on the face, called Bell's Palsy. Lyme disease may also mimic symptoms of multiple sclerosis or other types of paralysis.

The disease can also cause serious but reversible heart problems, such as irregular heartbeat. Finally, Lyme disease can result in a disabling, chronic type of arthritis that most often affects the knees. Treatment is more difficult and less successful in later stages. Often, the effects of Lyme disease may be confused with other medical problems.

It is recommended that personnel check themselves when in areas that could harbor deer ticks, wear light color clothing and visually check themselves and their project personnel when coming from wooded or vegetated areas. If a tick is found biting an individual, the PM should be contacted immediately. The tick can be removed by pulling gently at the head of the tick with tweezers. The affected area should then be disinfected with an antiseptic wipe. The employee will be offered the option for medical treatment by a physician, which typically involves prophylactic antibiotics. If personnel feel sick or have signs similar to those above, they should notify the PM immediately.

2.3.2.2 West Nile Virus

West Nile Virus (WNV) is a mosquito-borne infection that can cause encephalitis. Since the initial outbreak in 1999, the virus has spread rapidly throughout New York State. There are about 65 different species of mosquitoes in New York State, but only a small percentage have been associated with WNV. Most mosquitoes are not infected and the chance of infection from a mosquito bite is very small. All residents of areas where virus activity has been identified are at risk of getting WNV, but those at highest risk for becoming seriously ill from WNV are people over 50 years old.

The following precautions will be used to help reduce the risk of mosquito bites:

- Reduce mosquito-breeding areas by making sure that wheelbarrows, buckets, and other containers are turned upside down when not being used so that they do not collect standing water.

- Wear shoes, long pants with bottoms tucked into boots or socks, and a long-sleeved shirt when outdoors for long periods of time, or when many mosquitoes are most active (between dusk and dawn).

- Use mosquito repellent according to label directions when outdoors for long periods of time and when mosquitoes are most active.

2.3.3 Plants

Plants such as poison ivy, poison oak, and poison sumac may be prevalent in remote locations of the Facility. Poison ivy can be found as vines on tree trunks or as upright bushes. Poison ivy consists of three leaflets with notched edges. Two leaflets form a pair on opposite sides of the stalk, and the third leaflet stands by itself at the tip. Poison ivy is red in the early spring and turns shiny green later in the spring. Poison sumac can be present in the form of a flat-topped shrub or tree. It has fern-like leaves, which are velvety dark green on top and pale underneath. The branches of immature trees have a velvety "down". Poison sumac has white, "hairy" berry clusters. Poison oak can be present as a sparingly branched shrub. Poison oak is similar to poison ivy in that it has the same leaflet configuration; however, the leaves have slightly deeper notches.

Contact with poison ivy, sumac, or oak may lead to a skin rash, characterized by reddened, itchy, blistering skin which needs first aid treatment. If you believe you have contacted one of these plants, immediately wash the contacted skin thoroughly with soap and water, taking care not to touch sensitive areas such as the face or eyes.

Employees may wear personal protection equipment (PPE) in order to reduce the potential for exposure. Pre-exposure topical lotions may be applied prophylactically.

3.0 PERSONNEL PROTECTION AND MONITORING

3.1 Medical Surveillance

All project personnel performing field work where potential exposure to contaminants exists in the project area are required to have passed a complete medical surveillance examination in accordance with 29 CFR 1910.120(f). The SM will confirm a physician's medical release for work before an employee can work in the EZ. The examination will be taken annually at a minimum and upon termination of project work if the last examination was not taken within the previous six months. Additional medical testing may be required by the PM in consultation with the SM if an over-exposure or accident occurs, if an employee exhibits symptoms of exposure, or if other site conditions warrant further medical surveillance. Copies of all training certifications and medical surveillance examination information will be kept onsite.

3.2 Personal Protective Equipment (PPE)

The PPE specified in Table 3-1 represents a hazard analysis for PPE selection. Specific information on the selection rationale for each activity can be found under Section 2.0. For activities not covered by Table 3-1, the SM will conduct the hazard assessment and select the proper PPE in consultation with the PM. A written justification for major downgrades will be provided to the PM for approval on a field change request form.

3.2.1 PPE Abbreviations

HEAD PROTECTION HH = Hard Hat HEARING PROTECTION EP = Ear Plugs EM = Ear Muffs	EYE/FACE PROTECTION APR = Full Face Air Purifying Respirator MFS = Mesh Face Shield PFS = Plastic Face Shield SG = ANSI approved Safety Glasses with side shields	FOOT PROTECTION Neo = Neoprene OB = Overboot Poly = Polyethylene coated boot Rub = Rubber slush boots STB = Leather, Steel Toe Work Boots
HAND PROTECTION Cot = Cotton But = Butyl LWG = Leather Work Gloves Neo = Neoprene Nit = Nitrile Sur = Surgical	BODY PROTECTION Cot Cov = Cotton Coveralls Poly = Polyethylene coated tyvek coveralls Saran = Saranex coated tyvek coveralls Tyvek = Uncoated paper tyvek coveralls WC = Work Clothing	RESPIRATORY PROTECTION Level D = No respiratory protection required Level C = Full face air purifying respirator with OV/HEPA cartridges Level B = Full face air supplied respirator with escape bottle

TABLE 3-1
PERSONAL PROTECTIVE EQUIPMENT SELECTION

TASK	HEAD	EYE/FACE	FEET	HANDS	BODY	HEARING	RESPIRATOR
Mobilization/Demobilization							
Mobilization/ demobilization of equipment and supplies	HH	SG	STB	LWG as needed	WC	EP as needed	Level D
Establishment of project security, work zones and staging area	HH	SG	STB	LWG as needed	WC	EP as needed	Level D
Pre-Construction Activities							
Locate all active utility lines in the project area	HH	SG	STB	LWG as needed	WC	EP as needed	Level D
Construction Activities							
Utility Connections	HH	SG	STB	LWG as needed	WC	EP as needed	Level D
Excavate overburden material	HH	SG, APR as needed	STB, OB	Nit, Sur, LWG	WC, tyvek or Poly as needed	EP as needed	Level D initially, Level C as needed
Segregate overburden material	HH	SG, APR as needed	STB, OB	Nit, Sur, LWG	WC, tyvek or Poly as needed	EP as needed	Level D initially, Level C as needed
Backfill excavation/Placement of Soil/stone Cover	HH	SG	STB, OB	LWG as needed	WC, tyvek or Poly as needed	EP as needed	Level D
Site Restoration	HH	SG	STB	LWG as needed	WC	EP as needed	Level D
Heavy equipment decontamination	HH	SG, PFS	STB, OB	Nit, Sur	WC, Poly	EP as needed	Level D

3.2.2 OSHA Requirements for PPE

All PPE used during the course of this field investigation must meet the following OSHA standards:

Type of Protection	Regulation	
Eye and Face	29 CFR 1910.133	ANSI Z87.1-1968
Respiratory	29 CFR 1910.134	ANSI Z88.1-1980
Head	29 CFR 1910.135	ANSI Z89.1-1969
Foot	29 CFR 1910.136	ANSI Z41.1-1967
Hand	29 CFR 1910.138	
Hearing	29 CFR 1910.95	
Protective Clothing	29 CFR 1910.132	

Both the respirator and cartridges specified for use in Level C protection must be fit-tested prior to use in accordance with OSHA regulations (29 CFR 1910.134). Air purifying respirators cannot be worn under the following conditions:

- Oxygen deficiency;
- IDLH concentrations;
- High relative humidity; and
- If contaminant levels exceed designated use concentrations.

3.2.3 Respirator Cartridge Change-Out Schedule

A respirator cartridge change-out schedule has been developed in order to comply with 29 CFR 1910.134. The respirator cartridge change-out schedule for this project is as follows:

- Cartridges shall be removed and disposed of at the end of each shift, when cartridges become wet or experience breakthrough, whichever occurs first.
- If the humidity exceeds 85%, then cartridges shall be removed and disposed of after 4 hours of use.

Respirators shall not be stored at the end of the shift with contaminated cartridges left on. Cartridges shall not be worn on the second day, no matter how short of time period they were used the day before.
The schedule was developed based on the following scientific information and assumptions:

- Analytical data that is available regarding site contaminants;
- Using the Rule of Thumb provided by the AIHA;
- All of the chemicals have boiling points greater than 70° C

- Total airborne concentration of contaminants is anticipated to be less than 200 ppm;
- The humidity is expected to be less than 85%; and
- Desorption of the contaminants (including those with poor warning properties) after partial use of the chemical cartridge can occur after a short period (hours) without use (e g, overnight) and result in a non-use exposure.

The following is a partial list of factors that may affect the usable cartridge service life and/or the degree of respiratory protection attainable under actual workplace conditions. These factors have been considered when developing the cartridge change-out schedule:

- Type of contaminant(s)
- Contaminant concentration
- Relative humidity
- Breathing rate
- Temperature
- Breathing rate
- Mixtures of contaminants
- Accuracy in the determination of the conditions
- Variation of contaminant concentrations in the workplace. Consideration should be given to the quality of the estimate of the workplace concentration.
- Storage conditions between multiple uses of the same respirator cartridges.
- Age of the cartridge
- Condition of the cartridge and respirator
- Respirator fit and cartridge selection
- Respirator assembly, operation, and maintenance
- User training, experience and medical fitness
- Warning properties of the contaminant

3.3 Monitoring Requirements

3.3.1 Work Zone Air Monitoring

The following monitoring instruments will be available for use during field operation as necessary:

- Photoionization Detector (PID), Photovac Microtip with 10.6 eV probe or equivalent or Flame Ionization Detector (FID), Foxboro OVA model 128 or equivalent;
- Colorimetric detector tube for Benzene and Hydrogen Cyanide;
- Dust Meter, MIE Miniram model PDM-3 or equivalent; and
- Combustible Gas Indicator (CGI), Oxygen (O_2), H_2S meter, Carbon Monoxide (CO) meter, MSA model 361 or equivalent.

All air monitoring equipment will be calibrated and maintained in accordance with Appendix D. During excavation operations, organic vapor concentrations shall be measured continuously. During any other activities that may generate organic vapors, monitoring shall be conducted at least once every thirty minutes. Organic vapor concentrations shall be measured upwind of the project area to determine background concentrations at least twice a day (i.e., once in the morning and once in the afternoon).

Colorimetric detector tubes will be used to determine the potential presence of benzene and hydrogen cyanide when action levels found in Table 3-2 have been exceeded.

A dust meter will be used to measure airborne particulate matter during intrusive activities. Monitoring will be continuous and readings will be averaged over a 15-minute period for comparison with the action levels.

A CGI/O_2 meter shall be used to monitor for combustible gases and oxygen content within the borehole/test pit and surrounding areas and elsewhere as necessary.

The National Institute for Occupational Safety and Health (NIOSH) concerning the action levels for work has established guidelines in a potentially explosive environment. These guidelines are based on the Lower Explosive Limit (LEL) and are as follows:

10% LEL- Limit all activities to those which do not generate sparks.
20% LEL- Cease all activities in order to allow time for the combustible gases to vent.

3.3.2 Community Air Monitoring Plan

A community Air Monitoring Plan (CAMP) for the project site is described in Appendix F.

TABLE 3-2
REAL TIME AIR MONITORING ACTION LEVELS

AIR MONITORING INSTRUMENT	MONITORING LOCATION	ACTION LEVEL	ACTION(S)	REASON
PID/FID	Breathing Zone*	> 0.5 ppm	Use detector tube for benzene and hydrogen cyanide	1/2 of PEL for benzene
PID/FID	Breathing Zone*	0 - 25 ppm, w/ no benzene present	No respiratory protection is required	
	Breathing Zone	> 0.5 ppm - 10 ppm w/ benzene present (Draeger tubes) **or** > 25-100 ppm* w/ no benzene present	Don Level C respiratory protection	Maximum allowable concentration for full-face respirator is 10 ppm without quantitative fit test
		>10 ppm- w/benzene present **or** >100 ppm- w/ no benzene present	Stop work; withdraw from work area; notify PM	Air-supplied respiratory protection required
Oxygen meter	Breathing Zone*	< 19.5%	Stop work; withdraw from work area; notify PM.	Low oxygen
		> 22%	Stop work; withdraw from work area; notify PM.	Oxygen enriched atmosphere; explosion hazard
CGI	Excavation	< 10 % LEL	Investigate possible causes; allow excavation to ventilate; use caution during procedures.	Increasing potential for ignition of vapors
		> 10% LEL	Stop work; allow excavation/borehole to ventilate to < 10% LEL; if no decrease to < 10% LEL, withdraw from work area; notify PM.	Potential for ignition of vapors
Dust Meter	Breathing Zone*	> 150 ug/m^3	Implement work practices to reduce/minimize airborne dust generation, e.g., spray/misting of soil with water	Potential inhalation source for airborne contaminants adhering to dust
		> Background + 100 ug/m^3	Upgrade to Level C PPE; implement additional dust suppression	NYSDEC requirement
H_2S	Breathing Zone*	> 5 ppm – 10 ppm **	No respiratory protection required	
		> 10 ppm **	Leave area and continue monitoring	
HCN	Breathing Zone*	< 2.5 mg/m^3	Level D	Cyanide tube
		≥ 2.5 mg/m^3	Stop work; consult PM	

* Non-transient (sustained reading for greater than 1 minute)

** 5-minute average

4.0 WORK ZONES AND DECONTAMINATION

4.1 Site Work Zones

To reduce the spread of hazardous materials by workers from the contaminated areas to the clean areas, work zones will be delineated within the project area and the flow of personnel between the zones will be controlled. The establishment of the work zones will help ensure that personnel are properly protected against the hazards present where they are working, work activities and contamination are confined to the appropriate areas, and personnel can be located and evacuated in an emergency.

4.1.1 Exclusion Zone (EZ)

An EZ will be established for all intrusive activities and unprotected onlookers should be located 50 feet upwind of intrusive activities. In the event that volatile organics exceed action levels in the breathing zone as discussed in Section 3, all personnel within the EZ must don Level C protection. An EZ will also be established during any activity when Level C protection is established as a result of conditions discussed in Section 3.

All personnel within the EZ will be required to use the specified level of protection. No eating, drinking, or smoking will be allowed in the EZ or Decontamination Zone (DZ).

4.1.2 Decontamination Zone (DZ)

If appropriate, a DZ will be established between the EZ and the Support Zone (SZ), and will include decontamination of equipment and personnel as discussed below. Personnel and equipment in the EZ must pass through this zone before entering the SZ. This zone should always be located upwind of the EZ.

4.1.3 Support Zone (SZ)

The SZ will include the remaining areas of the job site. Break areas, operational direction and support facilities (including supplies, equipment storage and maintenance areas) will be located in this area. No equipment or personnel will be permitted to enter the SZ from the EZ without passing through the personnel or equipment DZ. Eating, smoking, and drinking will be allowed only in the SZ.

4.2 Decontamination

4.2.1 Decontamination of Personnel

Consideration will be given to prevailing wind directions so that, if possible, the decontamination line, the SZ, and contamination reduction zone exit is upwind from the EZ and the first decontamination station in the DZ. Decontamination will be performed by removing all PPE used in EZ and placing in drums/trash cans at the

Contaminant Reduction Zone (CRZ). Moist, disposable wipes shall be available for wiping hands and face. Limited personnel decontamination facilities will be established for all activities that have the potential for spreading contamination. The stations may include plastic sheeting, garbage bags, decontamination tubs, brushes and Alconox-type soap. Due to the level of contaminants expected, any water used in decontamination procedures will be containerized on-site and sampled before disposal. The decontamination steps for each type of PPE are presented in the table below.

Overboots and/or gloves - no respiratory protection	Chemical protective clothing/Air purifying respiratory	Chemical protective clothing/SCBA
1. Equipment drop	1. Equipment drop	1. Equipment drop
2. Overboot and glove removal.	2. Outer boot and glove wash	2. Outer boot and glove wash
3. Hand/face wash	3. Outer boot and glove rinse	3. Outer boot and glove rinse
	4. Outer boot and glove removal	4. Outer boot and glove removal
	5. Coverall removal/disposal	5. SCBA removal
	6. Respirator removal	6. Coveralls removal
	7. Inner glove removal/disposal	7. Inner glove removal/disposal
	8. Hand/face wash	8. Hand/face wash

4.2.2 Decontamination of Equipment

Equipment will be decontaminated as follows:

- Heavy equipment will be decontaminated using high-pressure steam or water to remove gross contamination, and
- Surface equipment, such as field meters and surveying instruments, will be either steam cleaned or cleaned with a detergent wash and wiped with a clean, damp cloth.

5.0 SAFETY CONSIDERATIONS

5.1 General Health and Safety Work Rules

A list of work rules and general safe work practices is included in Appendix C. These rules shall be communicated to employees and posted if a temporary facility is available (such as a construction trailer).

5.2 High Loss Potential Hazards

Activities to be conducted in the project area may involve operations that have the potential for a serious injury to occur include the following:

- Lockout/Tagout/Energized Electrical Lines and Equipment;
- Heavy Equipment Operation;
- Excavation; and
- Confined Space Entry.

5.2.1 Lockout-Tagout

All field personnel will assume that any electrical equipment encountered are energized until the equipment has been designated as de-energized by a KeySpan representative. If the equipment cannot de-energized, work will stop and the SM will consult with the PM. KeySpan will be notified prior to working adjacent to this equipment and the Contractor will verify that the equipment is energized or de-energized in the vicinity of the excavation location. All power lines which have been indicated by KeySpan to be de-energized must be locked out such that the lines cannot be energized when personnel are working near them. The lines shall not be unlocked and re-energized until Project Personnel notify KeySpan that they have completed work in the area and that all personnel are clear of the area. KeySpan representatives will thoroughly familiarize Project Personnel with project-specific lockout/tagout procedures during the project orientation.

5.2.2 Heavy Equipment Operation

Heavy equipment will be operated under the following conditions:

- The operation of heavy equipment will be limited to authorized personnel specifically trained in its operation. The subcontractor project supervisors must provide this information to the SM.
- The operator will use the safety devices provided with the equipment, including seat belts. Backup warning indicates and horns will be operable at all times.
- While in operation, all personnel not directly required in the area will keep a safe distance from the equipment.

- Personnel directly involved in activity will avoid moving in the path of operating equipment or any portion thereof. Areas blinded from the operator's vision will be avoided. Spotters will be used when personnel may be in areas where the operator's view is obstructed.
- Additional riders will not be allowed on equipment unless it is specifically designed for that purpose.

5.2.3 Excavation

The safety requirements for each excavation must be determined by a competent person, provided by the contractor responsible for excavation work is capable of identifying existing and predictable hazards and work conditions that are unsanitary, hazardous, or dangerous to employees. The competent person must also have the authorization to take prompt corrective measures to eliminate unsatisfactory conditions.

The following are general requirements for work activities in and around excavations:

- Prior to initiation of any excavation activity, the location of underground installations will be determined. The New York State one-call center will be contacted by the excavation subcontractor a minimum of 72 hours prior to excavation activities.
- All excavations will be inspected daily by the competent person prior to commencement of work activities. Evidence of cave-ins, slides, sloughing, or surface cracks or excavations will be cause for work to cease until necessary precautions are taken to safeguard employees.
- Excavated and other materials or equipment that could fall or roll into the excavation shall be placed at least 3 feet from the edge of the excavation.
- Consistent with the OSHA requirements at 29 CFR 1926.652, the design of all sheeting, shoring and excavation bracing will be signed and sealed by a Professional Engineer (P.E.) licensed in the State of New York. The Professional Engineer shall be retained by the subcontractor responsible for the excavation work.

5.2.4 Confined Space Entry

Any excavations deeper than 5 feet bgs have the potential to be classified as Permit Required Confined Spaces. Any trenches deeper than 5 feet will be monitored for oxygen content, combustible gases, and toxic gases/vapors if entry is required. All trenches which contain hazardous atmospheres at concentrations above the action levels found in Table 3-2 will be classified as Permit Required Confined Spaces. It is not anticipated that confined space entry or hot work will be performed as part of this project. If these work tasks are required to be performed, however, the construction subcontractor performing the work will provide the appropriate written procedures and competent personnel.

6.0 ACCIDENT PREVENTION AND CONTINGENCY PLAN

6.1 Accident Prevention

All field personnel will receive health and safety training prior to the initiation of any project activities. All personnel should be constantly alert for indicators of potentially hazardous situations and for signs and symptoms in themselves and others that warn of hazardous conditions and exposures. Rapid recognition of dangerous situations can avert an emergency. Before daily work assignments, regular meetings should be held. Discussion should include:

- Tasks to be performed;
- Time constraints (e.g., rest breaks, cartridge changes);
- Hazards that may be encountered, including their effects, how to recognize and monitor symptoms, concentration limits, or other danger signals; and
- Emergency procedures.

A copy of the project Work Rules may be found in Appendix C and shall be posted in a conspicuous location.

6.2 Contingency Plan

This section establishes procedures and provides information for use during a project emergency. Emergencies happen unexpectedly and quickly, and require an immediate response; therefore, contingency planning and advanced training of staff is essential.

6.2.1 Responsibilities

6.2.1.1 Project Manager (PM)

The PM oversees and approves the Emergency Response/Contingency Plan. The PM acts as a liaison to applicable regulatory agencies.

6.2.1.2 Emergency Coordinator (EC)

The Emergency Coordinator (EC) is also the SM. The EC shall locate emergency phone numbers and identify hospital routes prior to beginning work. The EC shall make necessary arrangements to be prepared for any emergencies that could occur. The EC shall also coordinate with KeySpan management to ensure that the procedures contained herein do not conflict with the Facility's emergency program.

The EC shall implement the Emergency Response/Contingency Plan whenever conditions in the project area warrant such action. The coordinator will be responsible for prior coordination of the emergency treatment, emergency transport of project personnel as necessary, and notification of emergency response units and the appropriate management staff.

The EC is responsible for seeing that all personnel are evacuated safely and that machinery and processes are shut down or stabilized in the event of a stop work order or evacuation. The EC is required to immediately notify the PM of any fatalities or catastrophes.

6.2.1.3 Project Personnel

Project personnel are responsible for knowing the Emergency Response/Contingency Plan (ERCP) and the procedures contained herein. Personnel are expected to notify the EC of impending or actual emergencies, and to cooperate fully once the ERCP is enacted. All information obtained about an emergency shall be immediately communicated to the EC.

6.2.1.4 Communications

A variety of communication systems may be utilized during emergency situations and are discussed in the following sections.

6.2.1.5 Telephone Communications

The primary form of communication during an emergency between project personnel and outside emergency response groups will be telephone communications. The location of a project cell phone or the nearest telephone shall be determined and all project personnel shall be made aware of its location and use prior to the start of project operations.

6.2.1.6 Air Horns

With the consent of Facility personnel, air horns may be used to alert project personnel of emergencies. The following signals will be used:

- *Two short blasts*- shut down equipment, clear radio channels, await instructions
- *Three short blasts*- injured employee, first-aid providers respond
- *One continuous blast*- area evacuation

Air horns should be placed at the support area and with each field team. The procedure to activate the air horns consists of depressing the air horn button or switch while pointing it in the direction of the area to be signaled. Air horns should be tested at least monthly to ensure that they are working properly.

6.2.1.7 Hand Signals

Field teams along with the project personnel system shall learn hand signals during site-specific training and know them before operations commence. Typical hand signals are as follows:

SIGNAL	MEANING
Hand gripping throat	Out of air, can't breathe
Grip partner's wrist or place both hands around partner's waist	Leave the area immediately, no debate
Hands on top of head	Need assistance
Thumbs up	Okay, I'm all right, I understand
Thumbs down	No, negative, I don't understand

6.2.1.8 Emergency Equipment

The following emergency equipment shall be available in the field:

- 5-pound ABC fire extinguisher;
- Industrial size first aid kit; and
- Portable eyewash with 15-minute flushing capability or equivalent potable water source.

6.2.1.9 Evacuation

Under certain circumstances, it may become necessary for all personnel to leave the project area for a time period. Such circumstances may include violent storms, explosion or fire. When it is determined that an evacuation is warranted, the ECshall issue an evacuation command. At this time, all project personnel shall terminate current operations in an orderly fashion as is practicable, perform decontamination procedures (if possible), and proceed to the pre-determined assembly location.

6.2.2 Potential Emergency Situations and Procedures

6.2.2.1 Potential or Actual Fire or Explosion

In the event of a fire or explosion, Project Personnel shall:

- Immediately stop work;
- Decontaminate (if possible); and
- Immediately evacuate the area and proceed to the pre-determined assembly point.

The EC shall immediately notify the facility liaison (if applicable) and other appropriate emergency response groups if an actual fire or explosion has taken place.

6.2.2.2 Personnel Injury

In the event of a personnel injury, Project Personnel shall:

- Apply first aid as appropriate;
- Decontaminate the victim to the greatest extent possible;
- Transport the victim to the SZ (if the victim is unable to walk); and
- Inform the PM of the accident/incident.

The EC shall contact emergency medical services. The ambulance/rescue squad shall be contacted for transportation to the hospital as necessary in an emergency situation. However, since some situations may require transport of an injured party by other means, a hospital route shall be developed by the EC prior to the startup of operations. A hospital route map for the project will be posted in the field team vehicle. Only in **non-emergency** situations shall an injured person be transported to the hospital by means other than an ambulance.

6.2.2.3 Overt Personnel Exposure

Situations may arise when personnel are overtly exposed to chemical hazards via inhalation, skin contact or ingestion. In the event of an overt personnel exposure:

Project Personnel shall follow these procedures:

For Skin Contact

- Use copious amounts of soap and water;
- Wash/rinse affected area thoroughly; and
- Apply appropriate first aid.

For Eye Contact

- Begin using emergency eyewash;
- Call for a vehicle to transport the victim; and
- Transport immediately to SZ, **do not** decontaminate.

For Inhalation

- Move to fresh air.

For Ingestion

- Determine, if possible, what chemical was ingested;
- Contact the poison control center;
- Follow poison control center guidelines; and
- Decontaminate and transport to emergency medical facility.

For a Puncture Wound or Laceration

- Apply appropriate first aid; and
- If necessary, decontaminate and transport to emergency medical facility.

The EC shall:

- Contact outside emergency services immediately for eye contact and ingestion; and
- Contact the poison control center regarding ingestion as soon as possible.

6.2.2.4 Adverse Weather Conditions

Project activities will be limited to daylight hours unless adequate lighting is provided. All project activities will be limited to acceptable weather conditions. Inclement working conditions include heavy rain or snow, fog, high winds, and lightning. Observe daily weather reports and evacuate, if necessary, in case of inclement weather conditions.

In the event of adverse weather conditions, the Project area Manager or designee will determine if work can continue without jeopardizing the health and safety of the workers. Some of the items to be considered prior to determining if work should continue are:

- Potential for heat stress and heat-related injuries;
- Potential for cold stress and cold-related injuries;
- Treacherous weather-related working conditions;
- Limited visibility; and
- Potential for electrical storms.

The SM will monitor weather service advisories to determine when other adverse weather conditions may develop. These conditions may include tornadoes, electrical storms, thunderstorms, hurricanes, and snowstorms. When it is indicated that the safety of personnel within the project area may be at risk, the SM shall make a determination whether or not to continue work.

6.2.3 Restoration and Salvage

After an emergency, prompt restoration of fire protection equipment, medical supplies, and other equipment will reduce the possibility of further losses. Some of the items that may need to be refilled or replaced are:

- Fire extinguishers;
- Medical supplies; and
- Eyewash containers.

6.2.4 Accident/Incident Reporting

As soon as first aid and/or emergency response needs have been met, the following parties are to be contacted by telephone:

1. Program Manager; Bruce McClellan - 732-584-0685
2. Project Manager; Joseph Walsh - 732-584-0227

For reporting purposes, the term accident refers to fatalities, all injuries (even first aid cases only), spills or exposure to hazardous materials (radioactive materials, toxic materials, explosive or flammable materials), fire, explosion, or property damage.

7.0 TRAINING

The SM will obtain copies of all project personnel's training certifications and medical surveillance examination information, which will be kept onsite throughout the duration of the project.

7.1 General Health and Safety Training

Pursuant to 29 CFR 1910.120, hazardous waste site workers shall, at the time of job assignment, have received a minimum of 40 hours of initial health and safety training for hazardous waste site operations unless otherwise noted in the above reference. At a minimum, the training shall have consisted of instruction in the topics outlined in the standard. Personnel who have not met the requirements for initial training shall not be allowed to work in any project activities in which they may be exposed to hazards (chemical or physical).

7.1.1 3-Day Supervised on the Job Training

In addition to the required initial hazardous waste operations training, each employee shall have received three days of directly supervised on-the-job training. This training will address the duties the employees are expected to perform.

7.2 Annual 8-Hour Refresher Training

Annual 8-hour refresher training will be required of all hazardous waste site field personnel in order to maintain their qualifications for fieldwork. The training will cover a review of 29 CFR 1910.120 requirements.

7.3 Supervisory Training

Contractor supervisor personnel shall have completed an additional eight hours of specialized training in accordance with 29 CFR 1910.120.

7.4 Site-Specific Training

The SM will be responsible for developing a site-specific occupational hazard training program and providing training to all personnel that are to work at the site. Prior to commencement of field activities, all field personnel assigned to the project will have completed training that will specifically address the activities, procedures, monitoring, and equipment used in the project operations. This training will also allow field workers to clarify anything they do not understand and to reinforce their responsibilities regarding safety and operations for their particular activity. At a minimum, this training shall consist of the following topics:

- Names of personnel responsible for project safety and health;
- Safety, health, and other hazards at the project;
- Proper use of personal protective equipment;
- Work practices by which the employee can minimize risk from hazards;
- Safe use of engineering controls and equipment in the project area;
- Acute effects of compounds at the project area; and
- Decontamination procedures.

7.5 On-Site Safety Briefings

Project personnel and visitors will be given on-site health and safety briefings on a daily basis by the SM to assist project personnel in safely conducting their work activities. The briefings will include information on new operations to be conducted, changes in work practices or changes in the project's environmental conditions, as well as periodic reinforcement of previously discussed topics. The briefings will also provide a forum to facilitate conformance with safety requirements and to identify performance deficiencies related to safety during daily activities or as a result of safety inspections. The meetings will also be an opportunity to periodically update the crews on monitoring results. Prior to starting any new activity, a training session using the Activity Hazard Analyses will be held for crewmembers involved in the activity.

APPENDIX A

Health and Safety Forms

FORMS FOR HEALTH AND SAFETY-RELATED ACTIVITIES

Field Team Review /Site-Specific Health and Safety Training Form

Signed by all project personnel to indicate that they will comply with and understand the provisions of the HASP.

Field Change Request Form

Used for documenting changes to the HASP. See attached forms.

PPE Selection Form

To be completed for PPE hazard assessment and selection for additional tasks not covered by the HASP.

FIELD CHANGE REQUEST FORM

PROJECT: _____

CHANGE NUMBER: _____

PROJECT LOCATION: _____

DESCRIPTION OF CHANGE: _____

_____

_____

REASON FOR CHANGE: _____

_____

_____

RECOMMENDED DISPOSITION: _____

_____

_____

PROJECT MANAGER:

_____ _____

Signature Date

HASP FIELD CHANGE

Field Change Number: _____ Date Effective: _____

Pen and Ink changes to be made in the HASP to alert the reader of this change:

Reason for the change to be incorporated into the HASP:

TEXT OF CHANGE TO BE INCORPORATED:

FIELD CHANGE RECORDS

Record of Field Changes:

Initial for attaching any Field changes to this HASP. Enter the Field Change Number and Date Issued. File the completed field changes to this HASP at the end as attachments. Make PEN and INK changes in the text to alert the reader to the changes that are required in the Field Change.

FIELD CHANGE NUMBER	DATE ENTERED	SYNOPSIS OF CHANGE	INITIAL

This form serves as documentation that field personnel have read, or have been informed of, and understand the provisions of the HASP. It is maintained in the project area by the SM as a project record.

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

I have read, or have been informed of, the Health and Safety Plan and understand the information presented. I will comply with the provisions contained therein.

Name (Print and Sign)	Date

AIR MONITORING:
Real Time

Major Activity	Location(s)	Worker Occupation	FID/PID Range	CGI/O2 Range	PDM Range	Other

PERSONAL AIR MONITORING

Analyte	Activity Monitored	Occupation	Location	Result	Type of Sample*

SUBCONTRACTORS ON SITE

Company Name	Task or Function	Return to Site Next Week (Y/N)

Site Manager - Signature **Date**

PERSONAL PROTECTIVE EQUIPMENT SELECTION

TASK	HEAD	EYE/FACE	FEET	HANDS	BODY	HEARING	RESPIRATOR

APPENDIX B

Medical Data Sheets

NIOSH Pocket Guide to Chemical Hazards

<<Benzene>>	CAS 71-43-2
C_6H_6	**RTECS** CY1400000
Synonyms & Trade Names Benzol, Phenyl hydride	**DOT ID & Guide** 1114 130

Exposure Limits	NIOSH REL: Ca TWA 0.1 ppm ST 1 ppm See Appendix A
	OSHA PEL: [1910.1028] TWA 1 ppm ST 5 ppm See Appendix F

IDLH Ca [500 ppm]	**Conversion** 1 ppm = 3.19 mg/m^3

Physical Description
Colorless to light-yellow liquid with an aromatic odor. [Note: A solid below 42°F.]

MW: 78.1	BP: 176°F	FRZ: 42°F	Sol: 0.07%
VP: 75 mmHg	IP: 9.24 eV		Sp.Gr: 0.88
Fl.P: 12°F	UEL: 7.8%	LEL: 1.2%	

Class IB Flammable Liquid: Fl.P. below 73°F and BP at or above 100°F.

Incompatibilities & Reactivities
Strong oxidizers, many fluorides & perchlorates, nitric acid

Measurement Methods
NIOSH 1500, 1501, 3700, 3800; OSHA 12

Personal Protection & Sanitation
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet (flammable)
Change: No recommendation
Provide: Eyewash, Quick drench

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Soap wash immediately
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations NIOSH
At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode/(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape: (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister/Any appropriate escape-type, self-contained breathing apparatus

Exposure Routes inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms Irritation eyes, skin, nose, respiratory system; dizziness; headache, nausea, staggered gait; anorexia, lassitude (weakness, exhaustion); dermatitis; bone marrow depression; [potential occupational carcinogen]

Target Organs Eyes, skin, respiratory system, blood, central nervous system, bone marrow
Cancer Site [leukemia]
See also: INTRODUCTION

dtSearch 6.22 (6366)

NIOSH Pocket Guide to Chemical Hazards

Ethyl <<benzene>>	**CAS** 100-41-4
$CH_3CH_2C_6H_5$	**RTECS** DA0700000
Synonyms & Trade Names Ethylbenzol, Phenylethane	**DOT ID & Guide** 1175 129

Exposure Limits	NIOSH REL: TWA 100 ppm (435 mg/m^3) ST 125 ppm (545 mg/m^3)
	OSHA PEL†: TWA 100 ppm (435 mg/m^3)
IDLH 800 ppm [10%LEL]	**Conversion** 1 ppm = 4.34 mg/m^3

Physical Description
Colorless liquid with an aromatic odor.

MW: 106.2	BP: 277°F	FRZ: -139°F	Sol: 0.01%
VP: 7 mmHg	IP: 8.76 eV		Sp.Gr: 0.87
Fl.P: 55°F	UEL: 6.7%	LEL: 0.8%	

Class IB Flammable Liquid: Fl.P. below 73°F and BP at or above 100°F.

Incompatibilities & Reactivities
Strong oxidizers

Measurement Methods
NIOSH 1501; OSHA 7, 1002

Personal Protection & Sanitation
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet (flammable)
Change: No recommendation

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Water flush promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations NIOSH/OSHA
Up to 800 ppm: (APF = 10) Any chemical cartridge respirator with organic vapor cartridge(s)*/(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister/(APF = 25) Any powered, air-purifying respirator with organic vapor cartridge(s)*/(APF = 10) Any supplied-air respirator*/(APF = 50) Any self-contained breathing apparatus with a full facepiece
Emergency or planned entry into unknown concentrations or IDLH conditions: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode/(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape: (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister/Any appropriate escape-type, self-contained breathing apparatus

Exposure Routes inhalation, ingestion, skin and/or eye contact
Symptoms Irritation eyes, skin, mucous membrane; headache; dermatitis; narcosis, coma
Target Organs Eyes, skin, respiratory system, central nervous system
See also: INTRODUCTION

dtSearch 6.22 (6366)

NIOSH Pocket Guide to Chemical Hazards

Toluene	**CAS** 108-88-3
$C_6H_5CH_3$	**RTECS** XS5250000
Synonyms & Trade Names Methyl <<benzene>>, Methyl benzol, Phenyl methane, Toluol	**DOT ID & Guide** 1294 130

Exposure Limits	NIOSH REL: TWA 100 ppm (375 mg/m^3) ST 150 ppm (560 mg/m^3)
	OSHA PEL†: TWA 200 ppm C 300 ppm 500 ppm (10-minute maximum peak)

IDLH 500 ppm	**Conversion** 1 ppm = 3.77 mg/m^3

Physical Description
Colorless liquid with a sweet, pungent, <<benzene>>-like odor.

MW: 92.1	BP: 232°F	FRZ: -139°F	Sol(74°F): 0.07%
VP: 21 mmHg	IP: 8.82 eV		Sp.Gr: 0.87
Fl.P: 40°F	UEL: 7.1%	LEL: 1.1%	

Class IB Flammable Liquid: Fl.P. below 73°F and BP at or above 100°F.

Incompatibilities & Reactivities
Strong oxidizers

Measurement Methods
NIOSH 1500, 1501, 3800, 4000; OSHA 111

Personal Protection & Sanitation
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet (flammable)
Change: No recommendation

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Soap wash promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations NIOSH
Up to 500 ppm: (APF = 10) Any chemical cartridge respirator with organic vapor cartridge(s)*/(APF = 25) Any powered, air-purifying respirator with organic vapor cartridge(s)*/(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister/(APF = 10) Any supplied-air respirator*/(APF = 50) Any self-contained breathing apparatus with a full facepiece
Emergency or planned entry into unknown concentrations or IDLH conditions: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode/(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape: (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister/Any appropriate escape-type, self-contained breathing apparatus

Exposure Routes inhalation, skin absorption, ingestion, skin and/or eye contact
Symptoms Irritation eyes, nose; lassitude (weakness, exhaustion), confusion, euphoria, dizziness, headache; dilated pupils, lacrimation (discharge of tears); anxiety, muscle fatigue, insomnia; paresthesia; dermatitis; liver, kidney damage
Target Organs Eyes, skin, respiratory system, central nervous system, liver, kidneys
See also: INTRODUCTION

NIOSH Pocket Guide to Chemical Hazards

m-<<Xylene>>	CAS 108-38-3
$C_6H_4(CH_3)_2$	RTECS ZE2275000
Synonyms & Trade Names 1,3-Dimethylbenzene; meta-<<Xylene>>; m-Xylol	**DOT ID & Guide** 1307 130

Exposure Limits	NIOSH REL: TWA 100 ppm (435 mg/m^3) ST 150 ppm (655 mg/m^3)
	OSHA PEL†: TWA 100 ppm (435 mg/m^3)

IDLH 900 ppm	**Conversion** 1 ppm = 4.34 mg/m^3

Physical Description
Colorless liquid with an aromatic odor.

MW: 106.2	BP: 282°F	FRZ: -54°F	Sol: Slight
VP: 9 mmHg	IP: 8.56 eV		Sp.Gr: 0.86
Fl.P: 82°F	UEL: 7.0%	LEL: 1.1%	

Class IC Flammable Liquid: Fl.P. at or above 73°F and below 100°F.

Incompatibilities & Reactivities
Strong oxidizers, strong acids

Measurement Methods
NIOSH 1501, 3800; OSHA 1002

Personal Protection & Sanitation
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet (flammable)
Change: No recommendation

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Soap wash promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations NIOSH/OSHA
Up to 900 ppm: (APF = 10) Any chemical cartridge respirator with organic vapor cartridge(s)*/(APF = 25) Any powered, air-purifying respirator with organic vapor cartridge(s)*/(APF = 10) Any supplied-air respirator*/(APF = 50) Any self-contained breathing apparatus with a full facepiece
Emergency or planned entry into unknown concentrations or IDLH conditions: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode/(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape: (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister/Any appropriate escape-type, self-contained breathing apparatus

Exposure Routes inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms Irritation eyes, skin, nose, throat; dizziness, excitement, drowsiness, incoordination,

staggering gait; corneal vacuolization; anorexia, nausea, vomiting, abdominal pain; dermatitis
Target Organs Eyes, skin, respiratory system, central nervous system, gastrointestinal tract, blood, liver, kidneys
See also: INTRODUCTION

/MSDS/NIOSH/NPG/NPGD0668.HTM (3 hits)

NIOSH Pocket Guide to Chemical Hazards

o-<<Xylene>>	CAS 95-47-6
$C_6H_4(CH_3)_2$	**RTECS** ZE2450000
Synonyms & Trade Names 1,2-Dimethylbenzene; ortho-<<Xylene>>; o-Xylol	**DOT ID & Guide** 1307 130

Exposure Limits	NIOSH REL: TWA 100 ppm (435 mg/m^3) ST 150 ppm (655 mg/m^3)
	OSHA PEL†: TWA 100 ppm (435 mg/m^3)

IDLH 900 ppm	**Conversion** 1 ppm = 4.34 mg/m^3

Physical Description
Colorless liquid with an aromatic odor.

MW: 106.2	BP: 292°F	FRZ: -13°F	Sol: 0.02%
VP: 7 mmHg	IP: 8.56 eV		Sp.Gr: 0.88
Fl.P: 90°F	UEL: 6.7%	LEL: 0.9%	

Class IC Flammable Liquid: Fl.P. at or above 73°F and below 100°F.

Incompatibilities & Reactivities
Strong oxidizers, strong acids

Measurement Methods
NIOSH 1501, 3800; OSHA 1002

Personal Protection & Sanitation
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet (flammable)
Change: No recommendation

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Soap wash promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations NIOSH/OSHA
Up to 900 ppm: (APF = 10) Any chemical cartridge respirator with organic vapor cartridge(s)*/(APF = 25) Any powered, air-purifying respirator with organic vapor cartridge(s)*/(APF = 10) Any supplied-air respirator*/(APF = 50) Any self-contained breathing apparatus with a full facepiece
Emergency or planned entry into unknown concentrations or IDLH conditions: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode/(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape: (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister/Any appropriate escape-type, self-contained breathing apparatus

Exposure Routes inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms Irritation eyes, skin, nose, throat; dizziness, excitement, drowsiness, incoordination,

staggering gait; corneal vacuolization; anorexia, nausea, vomiting, abdominal pain; dermatitis
Target Organs Eyes, skin, respiratory system, central nervous system, gastrointestinal tract, blood, liver, kidneys
See also: INTRODUCTION

NIOSH Pocket Guide to Chemical Hazards

p-<<Xylene>>	CAS 106-42-3
$C_6H_4(CH_3)_2$	RTECS ZE2625000
Synonyms & Trade Names 1,4-Dimethylbenzene; para-<<Xylene>>; p-Xylol	**DOT ID & Guide** 1307 130

Exposure Limits	NIOSH REL: TWA 100 ppm (435 mg/m^3) ST 150 ppm (655 mg/m^3)
	OSHA PEL†: TWA 100 ppm (435 mg/m^3)
IDLH 900 ppm	**Conversion** 1 ppm = 4.41 mg/m^3

Physical Description
Colorless liquid with an aromatic odor. [Note: A solid below 56°F.]

MW: 106.2	BP: 281°F	FRZ: 56°F	Sol: 0.02%
VP: 9 mmHg	IP: 8.44 eV		Sp.Gr: 0.86
Fl.P: 81°F	UEL: 7.0%	LEL: 1.1%	

Class IC Flammable Liquid: Fl.P. at or above 73°F and below 100°F.

Incompatibilities & Reactivities
Strong oxidizers, strong acids

Measurement Methods
NIOSH 1501, 3800; OSHA 1002

Personal Protection & Sanitation
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet (flammable)
Change: No recommendation

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Soap wash promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations NIOSH/OSHA
Up to 900 ppm: (APF = 10) Any chemical cartridge respirator with organic vapor cartridge(s)*/(APF = 25) Any powered, air-purifying respirator with organic vapor cartridge(s)*/(APF = 10) Any supplied-air respirator*/(APF = 50) Any self-contained breathing apparatus with a full facepiece
Emergency or planned entry into unknown concentrations or IDLH conditions: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode/(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape: (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister/Any appropriate escape-type, self-contained breathing apparatus

Exposure Routes inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms Irritation eyes, skin, nose, throat; dizziness, excitement, drowsiness, incoordination,

staggering gait; corneal vacuolization; anorexia, nausea, vomiting, abdominal pain; dermatitis

Target Organs Eyes, skin, respiratory system, central nervous system, gastrointestinal tract, blood, liver, kidneys

See also: INTRODUCTION

NIOSH Pocket Guide to Chemical Hazards

<<Coal>> <<tar>> pitch volatiles	CAS 65996-93-2
	RTECS GF8655000
Synonyms & Trade Names Synonyms vary depending upon the specific compound (e.g., pyrene, phenanthrene, acridine, chrysene, anthracene & benzo(a)pyrene). [Note: NIOSH considers <<coal>> <<tar>>, <<coal>> <<tar>> pitch, and creosote to be <<coal>> <<tar>> products.]	**DOT ID & Guide**

Exposure Limits	NIOSH REL: Ca TWA 0.1 mg/m^3 (cyclohexane-extractable fraction) See Appendix A See Appendix C
	OSHA PEL: TWA 0.2 mg/m^3 (benzene-soluble fraction) [1910.1002] See Appendix C

IDLH Ca [80 mg/m^3]	**Conversion**

Physical Description
Black or dark-brown amorphous residue.

Properties vary depending upon the specific compound.			

Combustible Solids

Incompatibilities & Reactivities
Strong oxidizers

Measurement Methods
OSHA 58

Personal Protection & Sanitation Skin: Prevent skin contact Eyes: Prevent eye contact Wash skin: Daily Remove: No recommendation Change: Daily	**First Aid** (See procedures) Eye: Irrigate immediately Skin: Soap wash immediately Breathing: Respiratory support Swallow: Medical attention immediately

Respirator Recommendations NIOSH
At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode/(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape: (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister having a high-efficiency particulate filter/Any appropriate

escape-type, self-contained breathing apparatus
Exposure Routes inhalation, skin and/or eye contact
Symptoms Dermatitis, bronchitis, [potential occupational carcinogen]
Target Organs respiratory system, skin, bladder, kidneys **Cancer Site** [lung, kidney & skin cancer]
See also: INTRODUCTION

/MSDS/NIOSH/NPG/NPGD0439.HTM (2 hits)

NIOSH Pocket Guide to Chemical Hazards

<<Naphthalene>>	CAS 91-20-3
$C_{10}H_8$	RTECS QJ0525000
Synonyms & Trade Names Naphthalin, Tar camphor, White tar	**DOT ID & Guide** 1334 133 (crude or refined) 2304 133 (molten)

Exposure Limits	NIOSH REL: TWA 10 ppm (50 mg/m^3) ST 15 ppm (75 mg/m^3)
	OSHA PEL†: TWA 10 ppm (50 mg/m^3)
IDLH 250 ppm	**Conversion** 1 ppm = 5.24 mg/m^3

Physical Description
Colorless to brown solid with an odor of mothballs. [Note: Shipped as a molten solid.]

MW: 128.2	BP: 424°F	MLT: 176°F	Sol: 0.003%
VP: 0.08 mmHg	IP: 8.12 eV		Sp.Gr: 1.15
Fl.P: 174°F	UEL: 5.9%	LEL: 0.9%	

Combustible Solid, but will take some effort to ignite.

Incompatibilities & Reactivities
Strong oxidizers, chromic anhydride

Measurement Methods
NIOSH 1501; OSHA 35

Personal Protection & Sanitation
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet or contaminated
Change: Daily

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Molten flush immediately/solid-liquid soap wash promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations NIOSH/OSHA
Up to 100 ppm: (APF = 10) Any chemical cartridge respirator with organic vapor cartridge(s) in combination with a dust and mist filter*/(APF = 10) Any supplied-air respirator*
Up to 250 ppm: (APF = 25) Any supplied-air respirator operated in a continuous-flow mode*/(APF = 50) Any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s) in combination with a high-efficiency particulate filter/(APF = 25) Any powered, air-purifying respirator with organic vapor cartridge(s) in combination with a dust and mist filter*/(APF = 50) Any self-contained breathing apparatus with a full facepiece/(APF = 50) Any supplied-air respirator with a full facepiece
Emergency or planned entry into unknown concentrations or IDLH conditions: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode/(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary

self-contained positive-pressure breathing apparatus Escape: (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister having a high-efficiency particulate filter/Any appropriate escape-type, self-contained breathing apparatus
Exposure Routes inhalation, skin absorption, ingestion, skin and/or eye contact
Symptoms Irritation eyes; headache, confusion, excitement, malaise (vague feeling of discomfort); nausea, vomiting, abdominal pain; irritation bladder; profuse sweating; jaundice; hematuria (blood in the urine), renal shutdown; dermatitis, optical neuritis, corneal damage
Target Organs Eyes, skin, blood, liver, kidneys, central nervous system
See also: INTRODUCTION

NIOSH Pocket Guide to Chemical Hazards

<<Nitric>> <<acid>>	CAS 7697-37-2
HNO_3	**RTECS** QU5775000
Synonyms & Trade Names Aqua fortis, Engravers <<acid>>, Hydrogen nitrate, Red fuming <<nitric>> <<acid>> (RFNA), White fuming <<nitric>> <<acid>> (WFNA)	**DOT ID & Guide** 1760 154 (</=40% <<acid>>) 2031 157 (>40% <<acid>>) 2032 157 (fuming)

Exposure Limits	NIOSH REL: TWA 2 ppm (5 mg/m^3) ST 4 ppm (10 mg/m^3)
	OSHA PEL†: TWA 2 ppm (5 mg/m^3)
IDLH 25 ppm	**Conversion** 1 ppm = 2.58 mg/m^3

Physical Description
Colorless, yellow, or red, fuming liquid with an acrid, suffocating odor. [Note: Often used in an aqueous solution. Fuming <<nitric>> <<acid>> is concentrated <<nitric>> <<acid>> that contains dissolved nitrogen dioxide.]

MW: 63.0	BP: 181°F	FRZ: -44°F	Sol: Miscible
VP: 48 mmHg	IP: 11.95 eV		Sp.Gr(77°F): 1.50
Fl.P: NA	UEL: NA	LEL: NA	

Noncombustible Liquid, but increases the flammability of combustible materials.

Incompatibilities & Reactivities
Combustible materials, metallic powders, hydrogen sulfide, carbides, alcohols [Note: Reacts with water to produce heat. Corrosive to metals.]

Measurement Methods
NIOSH 7903; OSHA ID165SG

Personal Protection & Sanitation	**First Aid** (See procedures)
Skin: Prevent skin contact Eyes: Prevent eye contact Wash skin: When contaminated Remove: When wet or contaminated Change: No recommendation Provide: Eyewash (pH<2.5), Quick drench (pH<2.5)	Eye: Irrigate immediately Skin: Water flush immediately Breathing: Respiratory support Swallow: Medical attention immediately

Respirator Recommendations NIOSH/OSHA
Up to 25 ppm: (APF = 25) Any supplied-air respirator operated in a continuous-flow mode*/(APF = 50) Any chemical cartridge respirator with a full facepiece and cartridge(s) providing protection against the compound of concern[d]/(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern[d]/(APF = 50) Any self-contained breathing apparatus with a full facepiece/(APF = 50) Any

supplied-air respirator with a full facepiece
Emergency or planned entry into unknown concentrations or IDLH conditions: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode/(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape: (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern[b]/Any appropriate escape-type, self-contained breathing apparatus

Exposure Routes inhalation, ingestion, skin and/or eye contact

Symptoms Irritation eyes, skin, mucous membrane; delayed pulmonary edema, pneumonitis, bronchitis; dental erosion

Target Organs Eyes, skin, respiratory system, teeth

See also: INTRODUCTION

NIOSH Pocket Guide to Chemical Hazards

<<Phenol>>	CAS 108-95-2
C_6H_5OH	RTECS SJ3325000
Synonyms & Trade Names Carbolic acid, Hydroxybenzene, Monohydroxybenzene, Phenyl alcohol, Phenyl hydroxide	**DOT ID & Guide** 1671 153 (solid) 2312 153 (molten) 2821 153 (solution)

Exposure Limits	NIOSH REL: TWA 5 ppm (19 mg/m^3) C 15.6 ppm (60 mg/m^3) [15-minute] [skin]
	OSHA PEL: TWA 5 ppm (19 mg/m^3) [skin]

IDLH 250 ppm	**Conversion** 1 ppm = 3.85 mg/m^3

Physical Description
Colorless to light-pink, crystalline solid with a sweet, acrid odor. [Note: <<Phenol>> liquefies by mixing with about 8% water.]

MW: 94.1	BP: 359°F	MLT: 109°F	Sol(77°F): 9%
VP: 0.4 mmHg	IP: 8.50 eV		Sp.Gr: 1.06
Fl.P: 175°F	UEL: 8.6%	LEL: 1.8%	

Combustible Solid

Incompatibilities & Reactivities
Strong oxidizers, calcium hypochlorite, aluminum chloride, acids

Measurement Methods
NIOSH 2546; OSHA 32

Personal Protection & Sanitation Skin: Prevent skin contact Eyes: Prevent eye contact Wash skin: When contaminated Remove: When wet or contaminated Change: Daily Provide: Eyewash, Quick drench	**First Aid** (See procedures) Eye: Irrigate immediately Skin: Soap wash immediately Breathing: Respiratory support Swallow: Medical attention immediately

Respirator Recommendations NIOSH/OSHA
Up to 50 ppm: (APF = 10) Any chemical cartridge respirator with organic vapor cartridge(s) in combination with a dust and mist filter/(APF = 10) Any supplied-air respirator
Up to 125 ppm: (APF = 25) Any supplied-air respirator operated in a continuous-flow mode/(APF = 25) Any powered, air-purifying respirator with organic vapor cartridge(s) in combination with a dust and mist filter
Up to 250 ppm: (APF = 50) Any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s) in combination with a high-efficiency particulate filter/(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister having a high-efficiency particulate filter/(APF = 50) Any powered, air-purifying respirator with a tight-fitting facepiece and organic vapor cartridge(s) in combination with a high-efficiency particulate

filter/(APF = 50) Any self-contained breathing apparatus with a full facepiece/(APF = 50) Any supplied-air respirator with a full facepiece
Emergency or planned entry into unknown concentrations or IDLH conditions: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode/(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape: (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister having a high-efficiency particulate filter/Any appropriate escape-type, self-contained breathing apparatus

Exposure Routes inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms Irritation eyes, nose, throat; anorexia, weight loss; lassitude (weakness, exhaustion), muscle ache, pain; dark urine; cyanosis; liver, kidney damage; skin burns; dermatitis; ochronosis; tremor, convulsions, twitching

Target Organs Eyes, skin, respiratory system, liver, kidneys

See also: INTRODUCTION

/MSDS/NIOSH/NPG/NPGD0333.HTM (4 hits)

NIOSH Pocket Guide to Chemical Hazards

<<Hydrogen>> <<cyanide>>	CAS 74-90-8
HCN	**RTECS** MW6825000
Synonyms & Trade Names Formonitrile, Hydrocyanic acid, Prussic acid	**DOT ID & Guide** 1051 117 (>20% solution) 1051 117 (anhydrous) 1613 154 (</=20% solution)

Exposure Limits	NIOSH REL: ST 4.7 ppm (5 mg/m^3) [skin]
	OSHA PEL†: TWA 10 ppm (11 mg/m^3) [skin]

IDLH 50 ppm	**Conversion** 1 ppm = 1.10 mg/m^3

Physical Description
Colorless or pale-blue liquid or gas (above 78°F) with a bitter, almond-like odor. [Note: Often used as a 96% solution in water.]

MW: 27.0	BP: 78°F (96%)	FRZ: 7°F (96%)	Sol: Miscible
VP: 630 mmHg	IP: 13.60 eV		Sp.Gr: 0.69
Fl.P: 0°F (96%)	UEL: 40.0%	LEL: 5.6%	

Class IA Flammable Liquid Flammable Gas

Incompatibilities & Reactivities
Amines, oxidizers, acids, sodium hydroxide, calcium hydroxide, sodium carbonate, caustics, ammonia [Note: Can polymerize at 122-140°F.]

Measurement Methods
NIOSH 6010

Personal Protection & Sanitation
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet (flammable)
Change: No recommendation
Provide: Eyewash, Quick drench

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Water flush immediately
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations NIOSH
Up to 47 ppm: (APF = 10) Any supplied-air respirator
Up to 50 ppm: (APF = 25) Any supplied-air respirator operated in a continuous-flow mode/(APF = 50) Any self-contained breathing apparatus with a full facepiece/(APF = 50) Any supplied-air respirator with a full facepiece
Emergency or planned entry into unknown concentrations or IDLH conditions: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode/(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary

self-contained positive-pressure breathing apparatus Escape: (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern/Any appropriate escape-type, self-contained breathing apparatus
Exposure Routes inhalation, skin absorption, ingestion, skin and/or eye contact
Symptoms Asphyxia; lassitude (weakness, exhaustion), headache, confusion; nausea, vomiting; increased rate and depth of respiration or respiration slow and gasping; thyroid, blood changes
Target Organs central nervous system, cardiovascular system, thyroid, blood
See also: INTRODUCTION

NIOSH Pocket Guide to Chemical Hazards

<<Hydrogen>> <<sulfide>>	CAS 7783-06-4
H_2S	RTECS MX1225000
Synonyms & Trade Names Hydrosulfuric acid, Sewer gas, Sulfuretted <<hydrogen>>	**DOT ID & Guide** 1053 117

Exposure Limits	NIOSH REL: C 10 ppm (15 mg/m^3) [10-minute]
	OSHA PEL†: C 20 ppm 50 ppm [10-minute maximum peak]
IDLH 100 ppm	**Conversion** 1 ppm = 1.40 mg/m^3

Physical Description
Colorless gas with a strong odor of rotten eggs. [Note: Sense of smell becomes rapidly fatigued & can NOT be relied upon to warn of the continuous presence of H_2S. Shipped as a liquefied compressed gas.]

MW: 34.1	BP: -77°F	FRZ: -122°F	Sol: 0.4%
VP: 17.6 atm	IP: 10.46 eV	RGasD: 1.19	
Fl.P: NA (Gas)	UEL: 44.0%	LEL: 4.0%	

Flammable Gas

Incompatibilities & Reactivities
Strong oxidizers, strong nitric acid, metals

Measurement Methods
NIOSH 6013; OSHA ID141

Personal Protection & Sanitation
Skin: Frostbite
Eyes: Frostbite
Wash skin: No recommendation
Remove: When wet (flammable)
Change: No recommendation
Provide: Frostbite

First Aid (See procedures)
Eye: Frostbite
Skin: Frostbite
Breathing: Respiratory support

Respirator Recommendations NIOSH
Up to 100 ppm: (APF = 25) Any powered, air-purifying respirator with cartridge(s) providing protection against the compound of concern/(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern/(APF = 10) Any supplied-air respirator*/(APF = 50) Any self-contained breathing apparatus with a full facepiece
Emergency or planned entry into unknown concentrations or IDLH conditions: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode/(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape: (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or

back-mounted canister providing protection against the compound of concern/Any appropriate escape-type, self-contained breathing apparatus
Exposure Routes inhalation, skin and/or eye contact
Symptoms Irritation eyes, respiratory system; apnea, coma, convulsions; conjunctivitis, eye pain, lacrimation (discharge of tears), photophobia (abnormal visual intolerance to light), corneal vesiculation; dizziness, headache, lassitude (weakness, exhaustion), irritability, insomnia; gastrointestinal disturbance; liquid: frostbite
Target Organs Eyes, respiratory system, central nervous system
See also: INTRODUCTION

MATERIAL SAFETY DATA SHEET: SIMPLE GREEN®

I. PRODUCT & COMPANY INFORMATION

PRODUCT NAME: **SIMPLE GREEN® CLEANER / DEGREASER / DEODORIZER**

COMPANY NAME: **SUNSHINE MAKERS, INC.**
15922 Pacific Coast Highway
Huntington Harbour, CA 92649 USA
Telephone: 800-228-0709 • 562-795-6000
Fax: 562-592-3034
Website: www.simplegreen.com

Version No. 1007
Issue Date: January, 2002

For 24-hour emergency, call Chem-Tel, Inc.: 800-255-3924

USE OF PRODUCT: An all purpose cleaner and degreaser used undiluted or diluted in water for direct, spray, and dip tank procedures.

II. INGREDIENT INFORMATION

The only ingredient of Simple Green® with established exposure limits is undiluted 2-butoxyethanol (<6%) (Butyl Cellosolve; CAS No. 111-76-2): the OSHA PEL and ACGIH TLV is 25 ppm (skin). Note, however, that Butyl Cellosolve is only one of the raw material ingredients that undergo processing and dilution during the manufacture of Simple Green®. Upon completion of the manufacturing process, Simple Green® does not possess the occupational health risks associated with exposure to undiluted Butyl Cellosolve. Verification of this is contained in the independent test results detailed under "Toxicological Information" on Page 3 of this MSDS.

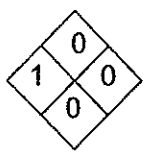
The Butyl Cellosolve in Simple Green® is part of a chemical category (glycol ethers) regulated by the Emergency Planning and Community Right-to-Know Act (SARA, Title III, section 313); therefore, a reporting requirement exists. Based upon chemical analysis, Simple Green® contains no known EPA priority pollutants, heavy metals, or chemicals listed under RCRA, CERCLA, or CWA. Analysis by TCLP (Toxicity Characteristic Leaching Procedure) according to RCRA revealed no toxic organic or inorganic constituents.

All components of Simple Green® are listed on the TSCA Chemical Substance Inventory.

III. HAZARDS IDENTIFICATION

UN Number: Not required
Dangerous Goods Class: Nonhazardous

Hazard Rating (NFPA/HMIS)
Health = 1* Reactivity = 0
Fire = 0 Special = 0



Rating Scale
0 = minimal 1 = slight
2 = moderate 3 = serious
4 = severe

*Mild eye irritant, non-mutagenic and non-carcinogenic. **None of the ingredients in Simple Green® are regulated or listed as potential cancer agents by Federal OSHA, NTP, or IARC.**

IV. FIRST AID MEASURES

SYMPTOMS OF OVEREXPOSURE AND FIRST AID TREATMENT

Eye contact: Reddening may develop. Immediately rinse the eye with large quantities of cool water; continue 10-15 minutes or until the material has been removed; be sure to remove contact lenses, if present, and to lift upper and lower lids during rinsing. Get medical attention if irritation persists.

Skin contact: Minimal effects, if any; rinse skin with water, rinse shoes and launder clothing before reuse. Reversible reddening may occur in some dermal-sensitive users; thoroughly rinse area and get medical attention if reaction persists.

Swallowing: Essentially non-toxic. Give several glasses of water to dilute; do not induce vomiting. If stomach upset occurs, consult physician.

Inhalation: Non-toxic. Exposures to concentrate-mist may cause mild irritation of nasal passages or throat; remove to fresh air. Get medical attention if irritation persists.

V. FIRE FIGHTING MEASURES

Simple Green® is stable, not flammable, and will not burn.

Flash Point/Auto-Ignition:	Not flammable.
Flammability Limits:	Not flammable.
Extinguishing Media:	Not flammable/nonexplosive. No special procedures required.
Special Fire Fighting Procedures:	None required.

VI. ACCIDENTAL RELEASE MEASURES

Recover usable material by convenient method; residual may be removed by wipe or wet mop. If necessary, unrecoverable material may be washed to drain with large quantities of water.

VII. HANDLING, STORAGE & TRANSPORT INFORMATION

No special precautions are required. **This product is non-hazardous for storage and transport according to the U.S. Department of Transportation Regulations.** Simple Green® requires no special labeling or placarding to meet U.S. Department of Transportation requirements.

UN Number: Not required Dangerous Goods Class: Non-hazardous

VIII. EXPOSURE CONTROLS

Exposure Limits: The Simple Green® formulation presents no health hazards to the user when used according to label directions for its intended purposes. Mild skin and eye irritation is possible (please see Eye contact and Skin contact in Section IV.).

Ventilation: No special ventilation is required during use.

Human Health Effects or Risks from Exposure: Adverse effects on human health are not expected from Simple Green®, based upon twenty years of use without reported adverse health incidence in diverse population groups, including extensive use by inmates of U.S. Federal prisons in cleaning operations.

Simple Green® is a mild eye irritant; mucous membranes may become irritated by concentrate-mist.

Simple Green® is not likely to irritate the skin in the majority of users. Repeated daily application to the skin without rinsing, or continuous contact of Simple Green® on the skin may lead to temporary, but reversible, irritation.

Medical Conditions Aggravated by Exposure: No aggravation of existing medical conditions is expected; dermal sensitive users may react to dermal contact by Simple Green®.

IX. PERSONAL PROTECTION

Precautionary Measures:	No special requirements under normal use conditions.
Eye Protection:	**Caution, including reasonable eye protection, should always be used to avoid eye contact where splashing may occur.**
Skin Protection:	No special precautions required; rinse completely from skin after contact.
Respiratory Protection:	No special precautions required.
Work and Hygienic Practices:	No special requirements. Wash or rinse hands before touching eyes or contact lenses.

X. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/odor: Translucent green liquid with characteristic sassafras odor.
Specific Gravity: 1.0257
pH of concentrate: 9.5
Evaporation: >1 (butyl acetate = 1)
Boiling Point: 110 °C (231 °F)
Freezing Point: -9 °C (16 °F) If product freezes, it will reconstitute without loss of efficacy when brought back to room temperature and agitated.
Vapor Pressure: 17 mm Hg @ 20 °C; 22 mm Hg @ 25 °C
Vapor Density: 1.3 (air = 1)
Density: 8.5 lbs./gallon
VOC Composite Partial Pressure: 0.006 mm Hg @ 20 °C
Volatile Organic Compounds (VOCs): 7.96 g/L per ASTM Method 3960-90. Per California AQMD's VOC test method, product must be diluted at least 2 parts of water to 1 part Simple Green® in order to meet SCAQMD Rule 1171 & Rule 1122 and BAAQMD Regulation 8-16 VOC requirements for solvent cleaning operations.
Water Solubility: Completely soluble in water. The higher salt concentrations in marine ecosystems will lead to complexes with Simple Green® that may become visible at ratios above one part Simple Green® to 99 parts seawater.
Ash Content: At 600 °F: 1.86% by weight.
Nutrient Content: Nitrogen: <1.0% by weight (fusion and qualitative test for ammonia).
Phosphorus: 0.3% by formula.
Sulfur: 0.6% by weight (barium chloride precipitation method).

Detection: Simple Green® has a characteristic sassafras odor that is not indicative of any hazardous situation.

XI. STABILITY AND REACTIVITY INFORMATION

Nonreactive. Simple Green® is stable, even under fire conditions, and will not react with water or oxidizers. Hazardous polymerization will not occur.

XII. TOXICOLOGICAL INFORMATION

Nonhuman Toxicity

Acute Mortality Studies:
Oral LD_{50} (rat): >5.0 g/kg body weight // Dermal LD_{50} (rabbit): >2.0 g/kg body weight

Dermal Irritation: Only mild, but reversible, irritation was found in a standard 72-hr test on rabbits. A value of 0.2 (non-irritating) was found on a scale of 8.

Eye Irritation: With or without rinsing with water, the irritation scores in rabbits at 24 hours did not exceed 15 (mild irritant) on a scale of 110.

Subchronic dermal effects: No adverse effects, except reversible dermal irritation, were found in rabbits exposed to Simple Green® (up to 2.0 g/kg/day for 13 weeks) applied to the skin of 25 males and 25 females. Only female body weight gain was affected. Detailed microscopic examination of all major tissues showed no adverse changes.

Fertility Assessment by Continuous Breeding: The Simple Green® formulation had no adverse effect on fertility and reproduction in CD-1 mice with continuous administration for 18 weeks, and had no adverse effect on the reproductive performance of their offspring.

XIII. BIODEGRADABILITY AND ENVIRONMENTAL TOXICITY INFORMATION

Biodegradability:
Simple Green® is readily decomposed by naturally occurring microorganisms. The biological oxygen demand (BOD), as a percentage of the chemical oxygen demand (COD), after 4, 7, and 11 days was 56%, 60%, and 70%, respectively. Per OECD Closed Bottle Test, Simple Green® meets OECD and EPA recommendations for ready biodegradability.
In a standard biodegradation test with soils from three different countries, Butyl Cellosolve reached 50% degradation in 6 to 23 days, depending upon soil type, and exceeded the rate of degradation for glucose which was used as a control for comparison.

Environmental Toxicity Information:
Simple Green® is considered practically non-toxic per EPA's aquatic toxicity scale. Simple Green® is non-lethal to any of the marine and estuarine test animals listed in the following table at concentrations below 200 mg/L (0.02%). This table shows the Simple Green® concentrations that are likely to be lethal to 50% of the exposed organisms.

	LC_{50} in mg/L (ppm)	
	48-hour	96-hour
Marine Fish:		
Mud minnow *(Fundulus heteroclitus)*	1690	1574
Whitebait *(Galaxias maculatus)*	210	210
Marine/Estuarine Invertebrates:		
Brine Shrimp *(Artemia salina)*	610	399
Grass Shrimp *(Palaemonetes pugio)*	270	220
Green-lipped Mussel *(Perna canaliculus)*	220	220
Mud Snail *(Potamopyrgus estuarinus)*	410	350

XIV. DISPOSAL CONSIDERATIONS

Simple Green® is fully water soluble and biodegradable and will not harm sewage-treatment microorganisms if disposal by sewer or drain is necessary. Dispose of in accordance with all applicable local, state, and federal laws.

XV. OTHER INFORMATION

Containers: Simple Green® residues can be completely removed by rinsing with water; the container may be recycled or applied to other uses.

Electrical Wiring Compatibility: Polyimide insulated wiring is not affected by exposure to Simple Green®. After immersion in Simple Green® for 14 days at 74°F, the 61 cm piece of polyimide insulated wire passed a one minute dielectric proof test at 2500 volts (ASTM D-149).

Contact Point: Sunshine Makers, Inc., Research and Development Division: 562-795-6000.

***** NOTICE *****

All information appearing herein is based upon data obtained by the manufacturer and recognized technical sources. Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of this information, Sunshine Makers, Inc. or its distributors extends no warranties, makes no representations and assumes no responsibility as to the suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SPI Supplies Division
Structure Probe, Inc.
P.O. Box 656 West Chester, PA 19381-0656 USA
Phone: *1-(610)-436-5400* ***Fax:*** *1-(610)-436-5755*
E-mail: *spi3spi@2spi.com*
WWW: http://www.2spi.com
Manufacturer's CAGE: 1P573

Material Safety Data Sheet

SPI #01200-AB and #01200A-AB <<Alconox>>® Powdered Detergent

Section 1: Identification

Date Effective..... May 25, 2000
(most recent revision)

Chemical Name/Synonyms... On Label: <<Alconox>>®

Chemical Family..... Anionic powdered detergent

Emergencies
Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...
Worldwide phone: 1-(703)-527-3887
Worldwide FAX: 1-(703)-741-6090
Toll-free phone: 1-(800)-242-9300 USA only

Product or Trade Name.... SPI #01200-AB and #01200A-AB
<<Alconox>>® Powdered Detergent

CAS #..... Not applicable

Chemical Formula..... Not applicable

Section 2 Composition

Component Name	CAS #	OSHA	OSHA	ACGIH	ACGIH

No hazardous ingredients in <<Alconox>> Powdered Detergent as defined by the OSHA Standard and Hazardous Substance List 29 CFR 1910 Subpart Z.

NFPA Rating: Not known

Section 3: Hazard Identification

Routes of entry
Inhalation? Yes
Skin? No
Ingestion? Yes

Health Hazards (Acute and chronic):
Inhalation of powder may prove locally irritating to mucous membranes. Ingestion may cause discomfort and/or diarrhea. Eye contact may prove irritating.

Carcinogenicity:
NTP? No
IARC Monographs? No
OSHA Regulated? No

Section 4: First Aid Measures

Signs and Symptoms of Exposure:
Exposure may irritate mucous membranes. May cause sneezing.

Medical conditions generally aggrivated by exposure:
Not established. Unnecessary exposure to this product or any industrial chemical should be avoided. Respiratory conditions may be aggrivated by powder if air borne.

Emergency and First Aid Procedures:

Eyes: Immediately flush eyes with copious amounts of water for minimum 15 minutes. Call physician.

Skin: Flush with plenty of water.

Ingestion: Drink large quantities of water or milk. Do not induce vomiting. If vomiting occurs re-administer fluids. See a physician for discomfort.

Section 5: Fire Fighting Measures

NFPA Rating: Not known

Extinguishing Media

Suitable/Not suitable:

SMALL FIRE: Use DRY chemical powder, water, foam, carbon dioxide

LARGE FIRE: Use extinguishing media suitable for the

surrounding materials.

Special firefighting procedures:
Self-contained positive pressure breathing apparatus and protective clothing should be worn when fighting fires involving chemicals.

Unusual Fire/Explosion Hazards: None

Hazardous thermal decomposition products: None known.

Protection of fire fighters: No special measures are required.

Flammable Limits:
LEL: No data
UEL: No data

Section 6: Accidental Release Measures

Personal precautions: No special precautions

Environmental Precautions and Clean Up Methods:
Material foams profusely. Recover as much as possible and flush remainder to sewer. Material is biodegradable.

Section 7: Handling and Storage

Material should be stored in a dry area to prevent caking.

Section 8: Exposure Controls and Personal Protection

Engineering controls: Normal ventilation is normally required when handling or using this product. Avoid conditions that could produce dusting.

Personal Protective Equipment

Respiratory system: Dust mask recommended but not required.

Skin and body: Laboratory coat recommended but not required.

Hands: Impervious gloves recommended

Eyes: Goggles are recommended, especially when handling solutions irrespective of what they might be.

Other: Wash hands before eating, drinking, or smoking.

Section 9: Physical and Chemical Properties

Physical State and Appearance: White powder interspersed with cream colored flakes.

Odor: None

Boiling Point: Not applicable

Melting Point: Not applicable

Density (water = 1): Not applicable

Solubility: Appreciable, to 10% at ambient conditions.

Octanol/water partition coefficient: Not available

pH: Not known

Flash Point: None

Flammability: Non-flammable

Autoignition temperature: Not applicable

Section 10: Stability and Reactivity

Chemical Stability: The product is stable

Hazardous polymerization: Will not occur

Conditions to Avoid: None

Hazardous Products of Deposition: May release CO_2 on burning.

Reactions with Air and Water:
Does not react with air, water or other common materials.

Section 11: Toxicological Information

Summary: Not considered to be toxic to humans or animals.

Skin Effects: Can be locally irritating

Eye Irritation: Can be irritating to the eyes

Inhalation: Dust can be irritating to mucous membranes

Sensitization: Not known

Chronic toxicity: There is no known effect from the chronic exposure to this product.

Section 12: Ecological Information

Exotoxicity: Not know but it is expected to be low because the material is biodegradable.

Environmental Fate: It is biodegradable.

Bioaccumulation: Not expected to occur (because the material is biodegradable).

Section 13: Disposal Considerations

This material is NOT classified as a hazardous material by RCRA. Use only licensed transporters and permitted disposal facilities and conform to all laws.

Recycle to process, if possible.

Germany water class: VCI WGK: No products were found.

Methods of disposal; waste of residues; contaminated packaging:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

Proper Shipping Name: Non-Regulated, No dangerous cargo

DOT Hazard Class: Non-Regulated, No dangerous cargo

UN/NA ID: Non-Regulated, No dangerous cargo

Packing Group: Not Applicable

Labels: Not Regulated

Marine Pollutant: No

NAER Guidebook: Not Regulated

DOT Status: Not Regulated

Land-Road/Railway:

ADR/RID Class: No dangerous cargo

Sea:

IMDG Class: No dangerous cargo

Air:

IATA-DGR Class: No dangerous cargo

Section 15: Regulatory Information

TSCA: All components of this product are listed on the TSCA 8(b) inventory. If identified components of this product are listed under the TSCA 12(b) Export Notification Rule, they will be listed below.

TSCA 12(b) Component Listed under TSCA Section

SARA Title 3: Section 313 Information/Emissions Reporting **(40 CFR 372):**

Component Reporting Threshold

SARA-Section 311/312:

No components present in this product are subject to the reporting requirements of this statute.

CERCLA Hazardous Substances and their Reportable Quantities:

Component Reportable Quantity

EU Regulations: Risk Phrases: This product is not classified according to the EU regulations.

Safety Phrases: Not applicable

Contains: Not applicable

California Prop. 65:
Proposition 65 requires manufacturers or distributors of consumer products into the State of California to provide a warning statement if the product contains ingredients for which the State has found to cause cancer, birth defects or other reproductive harm. If this product contains an ingredient listed by the State of California to cause cancer or reproductive toxicity, it will be listed below:

None found

Section 16: Other Information

Disclaimer of Liability:

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.

****

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ONLINE To Ask a Question or Make a Comment

ONLINE To Place an Order or Request a Quote

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- SPI Supplies Home Page

FRIDAY JUNE 08, 2001

Worldwide Distributors, Representatives, and Agents

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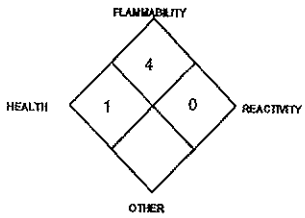
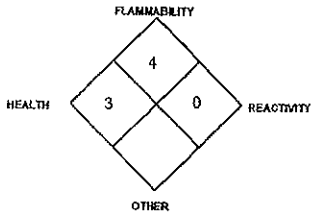
METHANE GAS

NFPA RATING



LIQUID METHANE

NFPA RATING



MATERIAL SAFETY DATA SHEET

Prepared to U.S. OSHA, CMA, ANSI and Canadian WHMIS Standards

PART I *What is the material and what do I need to know in an emergency?*

1. PRODUCT IDENTIFICATION

CHEMICAL NAME; CLASS: **METHANE - CH_4, Gaseous**
METHANE - CH_4, Liquefied (Cryogenic)
Document Number: 001033

PRODUCT USE: Fuel and for general analytic/synthetic chemical uses.

SUPPLIER/MANUFACTURER'S NAME: AIRGAS INC.
ADDRESS: 259 N. Radnor-Chester Road
Suite 100
Radnor, PA 19087-5283

BUSINESS PHONE: 1-610-687-5253
EMERGENCY PHONE: 1-800-949-7937
International: 423-479-0293

DATE OF PREPARATION: May 12, 1996
REVISION DATE: January 3, 2001

2. COMPOSITION and INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS #	mole %	EXPOSURE LIMITS IN AIR					
			ACGIH		OSHA			
			TLV ppm	STEL ppm	PEL ppm	STEL ppm	IDLH ppm	OTHER
Methane	74-82-8	> 99%	There are no specific exposure limits for Methane. Methane is a simple asphyxiant (SA). Oxygen levels should be maintained above 19.5%.					
Maximum Impurities		< 1%	None of the trace impurities in this product contribute significantly to the hazards associated with the product. All hazard information pertinent to this product has been provided in this Material Safety Data Sheet, per the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and State equivalent standards.					

NE = Not Established C = Ceiling Limit See Section 16 for Definitions of Terms Used

NOTE: All WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-1993 format.

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: Methane is an odorless, colorless gas, or a colorless, odorless liquid in its cryogenic form. Both the liquid and the gas pose a serious fire hazard when accidentally released. The liquid will rapidly boil to the gas at standard temperatures and pressures. As a gas, it will act as a simple asphyxiant and present a significant health hazard by displacing the oxygen in the atmosphere. The gas is lighter than air and may spread long distances. Distant ignition and flashback are possible. The liquefied gas can cause frostbite to any contaminated tissue. Flame or high temperature impinging on a localized area of the cylinder of Methane can cause the cylinder to rupture without activating the cylinder's relief devices. Provide adequate fire protection during emergency response situations. Allow the released gas to dissipate in the atmosphere.

SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE: The most significant route of overexposure for this gas is by inhalation. The following paragraphs describe symptoms of exposure by route of exposure.

INHALATION: High concentrations of this gas can cause an oxygen-deficient environment. Individuals breathing such an atmosphere may experience symptoms which include headaches, ringing in ears, dizziness, drowsiness, unconsciousness, nausea, vomiting, and depression of all the senses. Under some circumstances of overexposure, death may occur. The effects associated with various levels of oxygen are as follows:

CONCENTRATION	SYMPTOMS OF EXPOSURE
12-16% Oxygen:	Breathing and pulse rate increased, muscular coordination slightly disturbed.
10-14% Oxygen:	Emotional upset, abnormal fatigue, disturbed respiration.
6-10% Oxygen:	Nausea and vomiting, collapse or loss of consciousness.
Below 6%:	Convulsive movements, possible respiratory collapse, and death.

OTHER POTENTIAL HEALTH EFFECTS: Contact with cryogenic liquid or rapidly expanding gases (which are released under high pressure) may cause frostbite. Symptoms of frostbite include change in skin color to white or grayish-yellow. The pain after contact with the liquid can quickly subside.

HAZARDOUS MATERIAL INFORMATION SYSTEM

HEALTH	(BLUE)	1
FLAMMABILITY	(RED)	4
REACTIVITY	(YELLOW)	0
PROTECTIVE EQUIPMENT		B

EYES	RESPIRATORY	HANDS	BODY
	See Section 8		See Section 8

For routine industrial applications

See Section 16 for Definition of Ratings

HEALTH EFFECTS OR RISKS FROM EXPOSURE: An Explanation in **Lay Terms**. Overexposure to Methane may cause the following health effects:

ACUTE: The most significant hazard associated with this gas is inhalation of oxygen-deficient atmospheres. Symptoms of oxygen deficiency include respiratory difficulty, headache, dizziness, and nausea. At high concentrations, unconsciousness or death may occur. Contact with cryogenic liquid or rapidly expanding gases may cause frostbite.

CHRONIC: There are currently no known adverse health effects associated with chronic exposure to Methane.

TARGET ORGANS: Respiratory system.

PART II *What should I do if a hazardous situation occurs?*

4. FIRST-AID MEASURES

RESCUERS SHOULD NOT ATTEMPT TO RETRIEVE VICTIMS OF EXPOSURE TO METHANE WITHOUT ADEQUATE PERSONAL PROTECTIVE EQUIPMENT. At a minimum, Self-Contained Breathing Apparatus and Fire-Retardant Personal Protective equipment should be worn. Adequate fire protection must be provided during rescue situations.

4. FIRST-AID MEASURES (Continued)

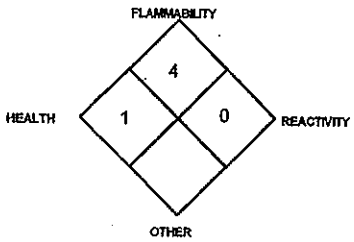
Remove victim(s) to fresh air as quickly as possible. Trained personnel should administer supplemental oxygen and/or cardio-pulmonary resuscitation, if necessary. Only trained personnel should administer supplemental oxygen.

In case of frostbite, place the frostbitten part in warm water. DO NOT USE HOT WATER. If warm water is not available, or is impractical to use, wrap the affected parts gently in blankets. Alternatively, if the fingers or hands are frostbitten, place the affected area in the armpit, Encourage victim to gently exercise the affected part while being warmed. Seek immediate medical attention. Victim(s) must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take copy of label and MSDS to physician or other health professional with victim(s).

5. FIRE-FIGHTING MEASURES

METHANE GAS

NFPA RATING



FLASH POINT (Closed Cup):
-187°C (-306°F)

AUTOIGNITION TEMPERATURE:
537°C (999°F)

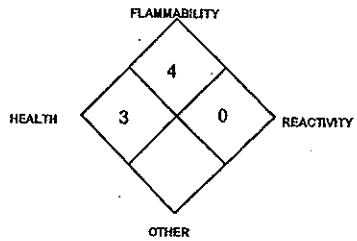
FLAMMABLE LIMITS (in air by volume, %):

Lower (LEL): 5.0%
Upper (UEL): 15.0%

See Section 16 for Definition of Ratings

LIQUID METHANE

NFPA RATING



FIRE EXTINGUISHING MATERIALS: Extinguish fires of this gas by shutting off the source of the gas. Use water spray to cool fire-exposed containers, structures, and equipment.

UNUSUAL FIRE AND EXPLOSION HAZARDS: When involved in a fire, this gas will ignite and produce toxic gases including carbon monoxide and carbon dioxide. An extreme explosion hazard exists in areas in which the gas has been released, but the material has not yet ignited.

DANGER! Fires impinging (direct flame) on the outside surface of unprotected pressure storage vessels of Methane can be very dangerous and lead to container failure. The resulting fire and explosion can result in severe equipment damage and personnel injury or death over a large area around the vessel. For massive fires in large areas, use unmanned hose holder or monitor nozzles; if this is not possible, withdraw from area and allow fire to burn.

RESPONSE TO FIRE INVOLVING CRYOGEN: Cryogenic liquids can be particularly dangerous during fires because of their potential to rapidly freeze water. Careless use of water may cause heavy icing. Furthermore, relatively warm water greatly increases the evaporation rate of Methane. If large concentrations of Methane gas are present, the water vapor in the surrounding air will condense, creating a dense fog that may make it difficult to find fire exits or equipment. Liquid Methane, when exposed to the atmosphere, will produce a cloud of ice/fog in the air upon its release. A flammable mixture will exist within the vapor cloud and it is advisable that personnel keep well outside the area of visible moisture.

Explosion Sensitivity to Mechanical Impact: Not sensitive.
Explosion Sensitivity to Static Discharge: Static discharge may cause Methane to ignite explosively.

SPECIAL FIRE-FIGHTING PROCEDURES: Structural fire-fighters must wear Self-Contained Breathing Apparatus and full protective equipment. The best fire-fighting technique may be simply to let the burning gas escape from the pressurized cylinder, tank car, or pipeline. Stop the leak before extinguishing fire. If the fire is extinguished before the leak is sealed, the still-leaking gas could explosively re-ignite without warning and cause extensive damage, injury, or fatality. In this case, increase ventilation (in enclosed areas) to prevent flammable or explosive mixture formation. For large releases, consider evacuation. Refer to the North American Emergency Response Guidebook for additional information.

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a release, clear the affected area, protect people, and respond with trained personnel. Adequate fire protection must be provided. Minimum Personal Protective Equipment should be **Level B: fire-retardant protective clothing, gloves resistant to tears, and Self-Contained Breathing Apparatus.**

Use only non-sparking tools and equipment. Locate and seal the source of the leaking gas. Protect personnel attempting the shut-off with water-spray. Allow the gas, which is lighter than air, to dissipate. Liquid Methane, when exposed to the atmosphere, will produce a cloud of ice/fog in the air upon its release. A flammable mixture will exist within the vapor cloud, and it is advisable that personnel keep well outside the area of visible moisture. If cryogenic liquid is released, keep area clear and allow the liquid to evaporate. The gas that is then formed should be allowed to dissipate.

Monitor the surrounding area for combustible gas levels and oxygen. The atmosphere must have at least 19.5 percent oxygen before personnel can be allowed in the area without Self-Contained Breathing Apparatus. Combustible gas concentration must be below 10% of the LEL (LEL = 5.0%) prior to entry. Attempt to close the main source valve prior to entering the area. If this does not stop the release (or if it is not possible to reach the valve), allow the gas to release in-place or remove it to a safe area and allow the gas to be released there.

RESPONSE TO CRYOGENIC RELEASE: Clear the affected area and allow the liquid to evaporate and the gas to dissipate. After the gas is formed, follow the instructions provided in the previous paragraphs. If the area must be entered by emergency personnel, SCBA, Kevlar gloves, and appropriate foot and leg protection must be worn.

THIS IS AN EXTREMELY FLAMMABLE GAS. Protection of all personnel and the area must be maintained.

PART III *How can I prevent hazardous situations from occurring?*

7. HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting Methane IN YOU. Do not eat or drink while handling chemicals. Be aware of any signs of dizziness or fatigue; exposures to fatal concentrations of Methane could occur without any significant warning symptoms.

STORAGE AND HANDLING PRACTICES: Cylinders should be stored in dry, well-ventilated areas away from sources of heat. Compressed gases can present significant safety hazards. Store containers away from heavily trafficked areas and emergency exits. Post "No Smoking or Open Flames" signs in storage or use areas.

SPECIAL PRECAUTIONS FOR HANDLING GAS CYLINDERS: Protect cylinders against physical damage. Store in cool, dry, well-ventilated area, away from sources of heat, ignition and direct sunlight. Do not allow area where cylinders are stored to exceed 52°C (125°F). Isolate from oxidizers such as oxygen, chlorine, or fluorine. Use a check valve or trap in the discharge line to prevent hazardous backflow. Post "No Smoking or Open Flame" signs in storage and use areas. Cylinders should be stored upright and be firmly secured to prevent falling or being knocked over. Cylinders can be stored in the open, but in such cases, should be protected against extremes of weather and from the dampness of the ground to prevent rusting. Never tamper with pressure relief devices in valves and cylinders. Electrical equipment should be non-sparking or explosion proof. The following rules are applicable to work situations in which cylinders are being used:

Before Use: Move cylinders with a suitable hand truck. Do not drag, slide, or roll cylinders. Do not drop cylinders or permit them to strike each other. Secure cylinders firmly. Leave the valve protection cap, if provided, in place until cylinder is ready for use.

During Use: Use designated CGA fittings and other support equipment. Do not use adapters. Do not heat cylinder by any means to increase the discharge rate of the product from the cylinder. Use check valve or trap in discharge line to prevent hazardous backflow into the cylinder. Do not use oils or grease on gas-handling fittings or equipment.

After Use: Close main cylinder valve. Replace valve protection cap, if provided. Mark empty cylinders "EMPTY".

NOTE: Use only DOT or ASME code containers. Earth-ground and bond all lines and equipment associated with Methane. Close valve after each use and when empty. Cylinders must not be recharged except by or with the consent of owner. For additional information refer to the Compressed Gas Association Pamphlet P-1, *Safe Handling of Compressed Gases in Containers*. Additionally, refer to CGA Bulletin SB-2 "*Oxygen Deficient Atmospheres*".

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Follow practices indicated in Section 6 (Accidental Release Measures). Make certain that application equipment is locked and tagged-out safely. Purge gas handling equipment with inert gas (e.g., nitrogen) before attempting repairs.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation. Local exhaust ventilation is preferred, because it prevents Methane dispersion into the work place by eliminating it at its source. If appropriate, install automatic monitoring equipment to detect the presence of potentially explosive air-gas mixtures and the level of oxygen. Monitoring devices should be installed near the ceiling.

RESPIRATORY PROTECTION: Maintain oxygen levels above 19.5% in the workplace. Use supplied air respiratory protection if oxygen levels are below 19.5% or during emergency response to a release of Methane. If respiratory protection is required, follow the requirements of the Federal OSHA Respiratory Protection Standard (29 CFR 1910.134) or equivalent State standards.

EYE PROTECTION: Splash goggles or safety glasses, for protection from rapidly expanding gases and splashes of liquid Methane.

HAND PROTECTION: Wear gloves resistant to tears when handling cylinders of Methane. Use low-temperature protective gloves when working with containers of liquid Methane.

BODY PROTECTION: Use body protection appropriate for task. Transfer of large quantities under pressure may require protective equipment appropriate to protect employees from splashes of liquefied product, as well as fire retardant items.

9. PHYSICAL and CHEMICAL PROPERTIES

VAPOR DENSITY: 0.6784 kg/m^3 (0.042 35 lb/ft^3)
SPECIFIC GRAVITY (air = 1): 0.555
SOLUBILITY IN WATER: Very slight.
EXPANSION RATIO: 626 (cryogenic liquid)
ODOR THRESHOLD: Not applicable. Odorless.
COEFFICIENT WATER/OIL DISTRIBUTION: Not applicable.
SPECIFIC VOLUME: 23.7
FREEZING POINT: -182.2°C (-296°F)
BOILING POINT @ 1 atm: -161°C (-258.7°F)
EVAPORATION RATE (n-BuAc): Not applicable.
VAPOR PRESSURE (psia): Not applicable.
pH: Not applicable.

APPEARANCE AND COLOR: Colorless, odorless gas, or colorless, odorless, cryogenic liquid.
HOW TO DETECT THIS SUBSTANCE (warning properties): There are no distinct warning properties. In terms of leak detection, fittings and joints can be painted with a soap solution to detect leaks, which will be indicated by a bubble formation.
NOTE: This gas is lighter than air and must not be allowed to accumulate in elevated locations.

10. STABILITY and REACTIVITY

STABILITY: Stable.

DECOMPOSITION PRODUCTS: When ignited in the presence of oxygen, this gas will burn to produce carbon monoxide, carbon dioxide.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Strong oxidizers (e.g., chlorine, bromine pentafluoride, oxygen, oxygen difluoride, and nitrogen trifluoride).

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Contact with incompatible materials and exposure to heat, sparks, and other sources of ignition. Cylinders exposed to high temperatures or direct flame can rupture or burst.

PART IV *Is there any other useful information about this material?*

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA: There are no specific toxicology data for Methane. Methane is a simple asphyxiant, which acts to displace oxygen in the environment.

SUSPECTED CANCER AGENT: Methane is not found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, CAL/OSHA, and therefore, is neither considered to be nor suspected to be a cancer-causing agent by these agencies.

IRRITANCY OF PRODUCT: Methane is not irritating; however, contact with rapidly expanding gases can cause frostbite to exposed tissue.

SENSITIZATION TO THE PRODUCT: Methane does not cause sensitization with prolonged or repeated contact.

11. TOXICOLOGICAL INFORMATION (Continued)

REPRODUCTIVE TOXICITY INFORMATION: Listed below is information concerning the effects of Methane on the human reproductive system.

Mutagenicity: No mutagenicity effects have been described for Methane.
Embryotoxicity: No embryotoxic effects have been described for Methane.
Teratogenicity: No teratogenicity effects have been described for Methane.
Reproductive Toxicity: No reproductive toxicity effects have been described for Methane.

A mutagen is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines. An embryotoxin is a chemical which causes damage to a developing embryo (i.e., within the first eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A teratogen is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A reproductive toxin is any substance which interferes in any way with the reproductive process.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Acute or chronic respiratory conditions may be aggravated by overexposure to the components of Methane.

RECOMMENDATIONS TO PHYSICIANS: Administer oxygen if necessary. Treat symptoms and eliminate exposure.

BIOLOGICAL EXPOSURE INDICES (BEIs): Currently, Biological Exposure Indices (BEIs) are not applicable for Methane.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL STABILITY: Methane occurs naturally in the atmosphere. This gas will be dissipated rapidly in well-ventilated areas.
EFFECT OF MATERIAL ON PLANTS or ANIMALS: Any adverse effect on animals would be related to oxygen-deficient environments. No adverse effect is anticipated to occur to plant-life, except for frost produced in the presence of rapidly expanding gases.
EFFECT OF CHEMICAL ON AQUATIC LIFE: No evidence is currently available on the effects of Methane on aquatic life.

13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Product removed from the cylinder must be disposed of in accordance with appropriate Federal, State, and local regulations. Return cylinders with residual product to Airgas. Do not dispose locally.

14. TRANSPORTATION INFORMATION

THIS MATERIAL IS HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.

For Methane Gas:

PROPER SHIPPING NAME:	Methane, compressed
HAZARD CLASS NUMBER and DESCRIPTION:	2.1 (Flammable Gas)
UN IDENTIFICATION NUMBER:	UN 1971
PACKING GROUP:	Not Applicable
DOT LABEL(S) REQUIRED:	Flammable Gas

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2000): 115

For Liquefied Methane:

PROPER SHIPPING NAME:	Methane, refrigerated liquid
HAZARD CLASS NUMBER and DESCRIPTION:	2.1 (Flammable Gas)
UN IDENTIFICATION NUMBER:	UN 1972
PACKING GROUP:	Not Applicable
DOT LABEL(S) REQUIRED:	Flammable Gas

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2000): 115

MARINE POLLUTANT: Methane is not classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B).

15. REGULATORY INFORMATION

U.S. SARA REPORTING REQUIREMENTS: Methane is not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA THRESHOLD PLANNING QUANTITY: Not applicable.

U.S. CERCLA REPORTABLE QUANTITY (RQ): Not applicable.

CANADIAN DSL/NDSL INVENTORY STATUS: Methane is on the DSL Inventory.

U.S. TSCA INVENTORY STATUS: Methane is listed on the TSCA Inventory.

OTHER U.S. FEDERAL REGULATIONS: Methane is subject to the reporting requirements of Section 112(r) of the Clean Air Act. The Threshold Quantity for this gas is 10,000 lb. Depending on specific operations involving the use of Isobutylene, the regulations of the Process Safety Management of Highly Hazardous Chemicals may be applicable (29 CFR 1910.119). Under this regulation Methane is not listed in Appendix A; however, any process that involves a flammable gas on-site, in one location, in quantities of 10,000 lb (4,553 kg) or greater is covered under this regulation unless it is used as a fuel.

U.S. STATE REGULATORY INFORMATION: Methane is covered under specific State regulations, as denoted below:

Alaska - Designated Toxic and Hazardous Substances: Methane.
California - Permissible Exposure Limits for Chemical Contaminants: Methane.
Florida - Substance List: No.
Illinois - Toxic Substance List: Methane.
Kansas - Section 302/313 List: No.
Massachusetts - Substance List: Methane.
Michigan - Critical Materials Register: No.
Minnesota - List of Hazardous Substances: Methane.
Missouri - Employer Information/Toxic Substance List: Methane.
New Jersey - Right to Know Hazardous Substance List: Methane.
North Dakota - List of Hazardous Chemicals, Reportable Quantities: No.
Pennsylvania - Hazardous Substance List: Methane.
Rhode Island - Hazardous Substance List: Methane.
Texas - Hazardous Substance List: No.
West Virginia - Hazardous Substance List: No.
Wisconsin - Toxic and Hazardous Substances: No.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): Methane is not on the California Proposition 65 lists.

LABELING:

DANGER:

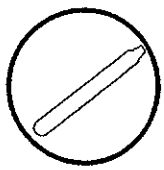
FLAMMABLE HIGH PRESSURE GAS.
CAN FORM EXPLOSIVE MIXTURES WITH AIR.

Keep away from heat, flames, and sparks.
Store and use width adequate ventilation.
Use equipment rated for cylinder pressure.
Close valve after each use and when empty.
Use in accordance with the Material Safety Data Sheet.

DO NOT REMOVE THIS PRODUCT LABEL

CANADIAN WHMIS SYMBOLS:

Class A: Compressed Gas
Class B1: Flammable Gas



16. OTHER INFORMATION

PREPARED BY: **Airgas - SAFECOR**

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. AIRGAS, Inc. assumes no responsibility for injury to the vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, AIRGAS, Inc. assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.

DEFINITIONS OF TERMS

A large number of abbreviations and acronyms appear on a MSDS. Some of these which are commonly used include the following:

CAS #: This is the Chemical Abstract Service Number which uniquely identifies each constituent. It is used for computer-related searching.

EXPOSURE LIMITS IN AIR:
ACGIH - American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits. **TLV** - Threshold Limit Value - an airborne concentration of a substance which represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour Time Weighted Average **(TWA)**, the 15-minute Short Term Exposure Limit, and the instantaneous Ceiling Level **(C)**. Skin absorption effects must also be considered.
OSHA - U.S. Occupational Safety and Health Administration. **PEL** - Permissible Exposure Limit - This exposure value means exactly the same as a **TLV**, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminants Rule (Federal Register: 58: 35338-35351 and 58: 40191). Both the current PELs and the vacated PELs are indicated. The phrase, "Vacated 1989 PEL," is placed next to the PEL which was vacated by Court Order.
IDLH - Immediately Dangerous to Life and Health - This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury. **The DFG - MAK** is the Republic of Germany's Maximum Exposure Level, similar to the U.S. PEL. **NIOSH** is the National Institute of Occupational Safety and Health, which is the research arm of the U.S. Occupational Safety and Health Administration (**OSHA**). NIOSH issues exposure guidelines called Recommended Exposure Levels (**RELs**). When no exposure guidelines are established, an entry of **NE** is made for reference.

HAZARD RATINGS:
HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: Health Hazard: **0** (minimal acute or chronic exposure hazard); **1** (slight acute or chronic exposure hazard); **2** (moderate acute or significant chronic exposure hazard); **3** (severe acute exposure hazard; onetime overexposure can result in permanent injury and may be fatal); **4** (extreme acute exposure hazard; onetime overexposure can be fatal). Flammability Hazard: **0** (minimal hazard); **1** (materials that require substantial pre-heating before burning); **2** (combustible liquid or solids; liquids with a flash point of 38-93°C [100-200°F]); **3** (Class IB and IC flammable liquids with flash points below 38°C [100°F]); **4** (Class IA flammable liquids with flash points below 23°C [73°F] and boiling points below 38°C [100°F]. Reactivity Hazard: **0** (normally stable); **1** (material that can become unstable at elevated temperatures or which can react slightly with water); **2** (materials that are unstable but do not detonate or which can react violently with water); **3** (materials that can detonate when initiated or which can react explosively with water); **4** (materials that can detonate at normal temperatures or pressures).
NATIONAL FIRE PROTECTION ASSOCIATION: Health Hazard: **0** (material that on exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials); **1** (materials that on exposure under fire conditions could cause irritation or minor residual injury); **2** (materials that on intense or continued exposure under fire conditions could cause temporary incapacitation or possible residual injury); **3** (materials that can on short exposure could cause serious temporary or residual injury); **4** (materials that under very short exposure causes death or major residual injury).

NATIONAL FIRE PROTECTION ASSOCIATION (Continued): Flammability Hazard and Reactivity Hazard: Refer to definitions for "Hazardous Materials Identification System".

FLAMMABILITY LIMITS IN AIR:
Much of the information related to fire and explosion is derived from the National Fire Protection Association (**NFPA**). Flash Point - Minimum temperature at which a liquid gives off sufficient vapors to form an ignitable mixture with air. Autoignition Temperature: The minimum temperature required to initiate combustion in air with no other source of ignition. LEL - the lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source. UEL - the highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

TOXICOLOGICAL INFORMATION:
Possible health hazards as derived from human data, animal studies, or from the results of studies with similar compounds are presented. Definitions of some terms used in this section are: LD_{50} - Lethal Dose (solids & liquids) which kills 50% of the exposed animals; LC_{50} - Lethal Concentration (gases) which kills 50% of the exposed animals; **ppm** concentration expressed in parts of material per million parts of air or water; **mg/m^3** concentration expressed in weight of substance per volume of air; **mg/kg** quantity of material, by weight, administered to a test subject, based on their body weight in kg. Data from several sources are used to evaluate the cancer-causing potential of the material. The sources are: **IARC** - the International Agency for Research on Cancer; **NTP** - the National Toxicology Program, **RTECS** - the Registry of Toxic Effects of Chemical Substances, **OSHA** and **CAL/OSHA**. IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with rankings from 1 to 4. Subrankings (2A, 2B, etc.) are also used. Other measures of toxicity include **TDLo**, the lowest dose to cause a symptom and **TCLo** the lowest concentration to cause a symptom; **TDo**, **LDLo**, and **LDo**, or **TC**, **TCo**, **LCLo**, and **LCo**, the lowest dose (or concentration) to cause lethal or toxic effects. **BEI** - Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV. Ecological information: **EC** is the effect concentration in water.

REGULATORY INFORMATION:
This section explains the impact of various laws and regulations on the material. **EPA** is the U.S. Environmental Protection Agency. **WHMIS** is the Canadian Workplace Hazardous Materials Information System. **DOT** and **TC** are the U.S. Department of Transportation and the Transport Canada, respectively. Superfund Amendments and Reauthorization Act **(SARA)**; the Canadian Domestic/Non-Domestic Substances List **(DSL/NDSL)**; the U.S. Toxic Substance Control Act **(TSCA)**; Marine Pollutant status according to the **DOT**; the Comprehensive Environmental Response, Compensation, and Liability Act **(CERCLA or Superfund)**; and various state regulations.

APPENDIX C

Work Rules

GENERAL HEALTH AND SAFETY WORK RULES

1. All project personnel must attend each day's Daily Briefing.
2. All project personnel shall wear the personal protective equipment specified by the HASP(s). This includes hard hats and safety glasses, which must be worn at all times in active work areas.
3. Facial hair (beards, long sideburns or mustaches) which may interfere with a satisfactory fit of a respirator mask is not allowed on any person who may be required to wear a respirator.
4. All personnel must sign the project log and the EZ log when in use.
5. Personnel must follow proper decontamination procedures including, if required, showering at the end of the work shift.
6. Eating, drinking, chewing tobacco or gum, smoking and any other practice that may increase the possibility of hand-to-mouth contact is prohibited in the EZ or the contamination reduction zone. (Exceptions may be permitted by the SM to allow fluid intake during heat stress conditions.)
7. All lighters, matches, cigarettes and other forms of tobacco are prohibited in the EZ.
8. All signs and demarcations shall be followed. Such signs and demarcation shall not be removed, except as authorized by the SM.
9. No one shall enter a permit-required confined space without a permit. Confined space entry permits shall be implemented as issued.
10. All personnel must follow Hot Work Permits as issued.
11. All personnel must use the Site personnel System in the EZ.
12. All personnel must follow the work-rest regimens and other practices required by the heat stress program.
13. All personnel must follow lockout/tagout procedures when working on equipment involving moving parts or hazardous energy sources.
14. No person shall operate equipment unless trained and authorized.
15. No one may enter an excavation greater than four feet deep unless authorized by the Competent Person. Excavations must be sloped or shored properly. Safe means of access and egress from excavations must be maintained.
16. Ladders and scaffolds shall be solidly constructed, in good working condition, and inspected prior to use. No one may use defective ladders or scaffolds.
17. Fall protection or fall arrest systems must be in place when working at elevations greater than six feet for temporary working surfaces and four feet for fixed platforms.
18. The Supervisor must select safety belts, harnesses and lanyards. The user must inspect the equipment prior to use. Only properly functioning personal fall protection equipment shall be used. Personal fall protection that has been shock loaded must be discarded.
19. Hand and portable power tools must be inspected prior to use. Defective tools and equipment shall not be used.
20. Ground fault interrupters shall be used for cord and plug equipment used outdoors or in damp locations. Electrical cords shall be kept out walkways and puddles unless protected and rated for the service.
21. Improper use, mishandling, or tampering with health and safety equipment and samples is prohibited.

HEALTH AND SAFETY WORK RULES

22. Horseplay of any kind is prohibited.
23. Possession or use of alcoholic beverages, controlled substances, or firearms on any site is strictly forbidden.
24. All incidents, no matter how minor, must be reported immediately to the SM/PM.
25. All personnel shall be familiar with the Site Emergency Response Plan.

The above Health and Safety Rules are not all inclusive and it is your responsibility to comply with all regulations set forth by OSHA, the project HASP, KeySpan Energy, the Site Manager and the Project Manager.

APPENDIX D

Air Monitoring Equipment Calibration and Maintenance

AIR MONITORING EQUIPMENT CALIBRATION AND MAINTENANCE

All monitoring instruments must be calibrated and maintained periodically. The operator must understand the limitations and possible sources of errors for each instrument. It is important that the operator ensures that the instrument responds properly to the substances it was designed to monitor. Portable air quality monitoring equipment that measures total ionizables present, such as the Photovac Micro-TIP HL-2000, must be calibrated at least twice each day, before and after each shift. Combustible gas/oxygen/%LEL meters such as the MSA Model 360 must be calibrated at least twice each day, before and after each shift. Real time aerosol monitors, such as the MINI-RAM, must be zeroed at the beginning of each sampling period. The specific instructions for calibration and maintenance provided for each instrument should be followed.

APPENDIX E

Hospital Route and Directions

KEYSPAN GREENPOINT TO WOODHULL MEDICAL CTR.

MAPQUEST.

Send To Printer Back To Directions

Start: 287 Maspeth Ave
Brooklyn, NY
11211-1703 US

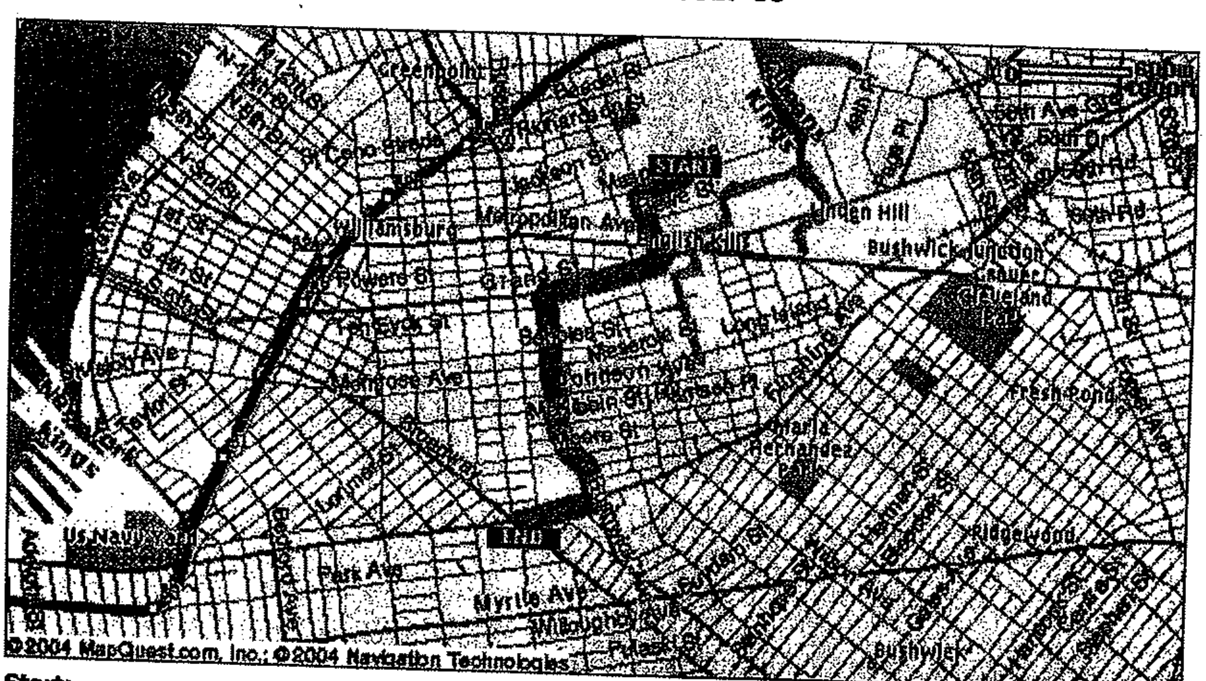
End: 760 Broadway
Brooklyn, NY
11206-5317 US

Distance: 1.88 miles

Total Estimated Time: 6 minutes

Directions

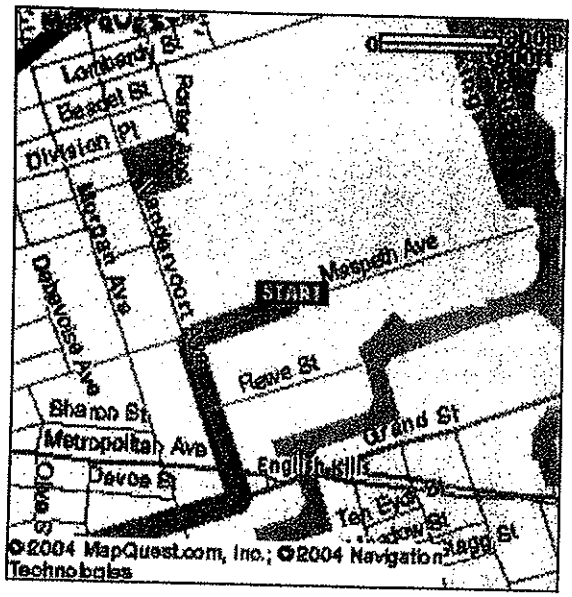
		Distance
START	**1.** Start out going West on MASPETH AVE toward VANDERVOORT AVE.	0.1 miles
	2. Turn LEFT onto VANDERVOORT AVE.	0.2 miles
	3. Turn RIGHT onto GRAND ST.	0.4 miles
	4. Turn LEFT onto BUSHWICK AVE.	0.7 miles
	5. Turn RIGHT onto FLUSHING AVE.	0.2 miles
	6. Turn SHARP LEFT onto BROADWAY.	<0.1 miles
END	**End at 760 Broadway, Brooklyn, NY 11206-5317 US**	



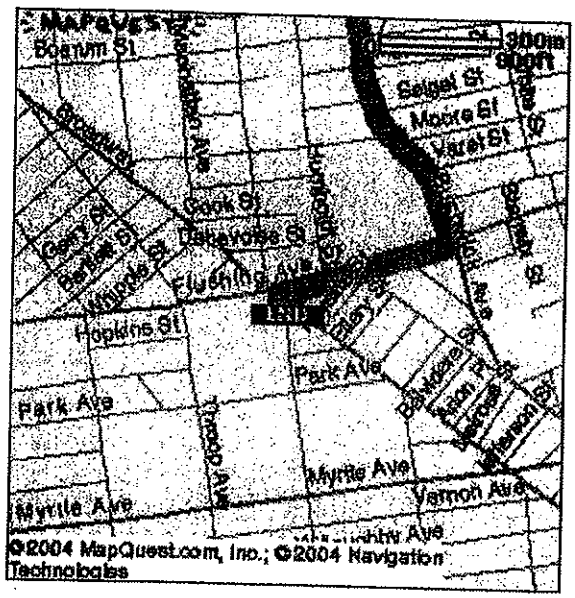
Start:
287 Maspeth Ave

End:
760 Broadway

Brooklyn, NY
11211-1703 US



Brooklyn, NY
11206-5317 US



Notes: