

**1345 NEWBRIDGE ROAD
BAY SHORE, NEW YORK**

WELL DECOMMISSIONING WORK PLAN

PREPARED FOR:

**Francesca Nina Holdings LLC
1345 Newbridge Road
Bellmore, NY 11710**

PREPARED BY:



**P.W. Grosser Consulting
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Bohemia, NY 11716
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PWGC Project Number: FNH2501

SEPTEMBER 2025

**WELL DECOMMISSIONING WORK PLAN
1345 NEWBRIDGE ROAD
BAY SHORE, NEW YORK**

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1.0 INTRODUCTION

P.W. Grosser Consulting Engineer & Hydrogeologist, D.P.C. (PWGC) has prepared the following Well Decommissioning Work Plan in response to a letter received by Francesca Nina Holdings LLC via email dated July 25, 2025, from the New York State Department of Environmental Conservation (NYSDEC). The letter, (**Appendix A**), requested that three (3) paved-over monitoring wells at the NYSDEC State Superfund Site No. 152015, Chemical Pollution Control, located at 120 South 4th Street, Bay Shore NY, 11735, be located and properly decommissioned.

This work plan has been prepared in accordance with CP-43: Groundwater Monitoring Well Decommissioning Policy dated November 3, 2009 (**Appendix B**).

1.1 Site Location and Description

The Chemical Pollution Control Bay Shore Facility is located in the County of Suffolk, New York, and is identified as parcel # 0500-198.00-07.00-011.031 on the Suffolk County Tax Map, zoned as industrial and is currently vacant. The site is situated on an approximately 1.075-acre area bounded by commercial and industrial properties (**Figure 1**).

2.0 SCOPE OF WORK

2.1 Well Locating

The NYSDEC provided PWGC GPS coordinates of the three (3) wells to be decommissioned, which are MW-03R, MW-06, and MW-07. These are to be located at the coordinates described in Table 1 below using a GPS unit.

Table 1 – GPS Well Locations

Well ID	Latitude	Longitude
MW-03R	40.76196	-73.28987
MW-06	40.76201	-73.28941
MW-07	40.76219	-73.28940

Once the wells are located using a GPS unit, they are to be made accessible through light excavation using hand tools or a small excavator if necessary. Excavation will only be performed at the GPS locations of the wells and only to find the wells and make them accessible for decommissioning. The potential locations of these wells are shown in **Figure 2**.

2.2 Well Decommissioning

2.2.1 Well Descriptions

Historical construction details for the groundwater monitoring wells as listed on page 2-3 of the “Semiannual Groundwater Monitoring Program Report – April 2014 Sampling Event” prepared by Dvirka and Bartilucci Consulting Engineers, dated June 2014 (**Appendix C**), are included in Table 2 below.

Table 2 – Groundwater Monitoring Well Construction Details

Well ID	Well Diameter (inches)	Depth to Bottom (feet)	Screen Type	Screen Setting (feet below grade)
MW-03R	2	20	PVC	5-20
MW-06	4	22	PVC	7-22
MW-07	4	22	PVC	7-22

The depth to water in the wells during April 2014 in MW-03R, MW-06, and MW-07 were 11.85', 11.71', and 11.69' (**Appendix C**). The consistency in these depths and the undamaged nature of the wells indicate that the well seals were intact, at least before being paved over.

2.2.2 Subsurface Description

A description of the subsurface is taken from "Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Report and Focused Corrective Measures Study (CMS)" prepared by Dvirka and Bartilucci Consulting Engineers, dated June 2010 (**Appendix D**). Borings and test pits to 12' below grade show that the subsurface consists of sand; the site is likely underlain by approximately 350' of the Lloyd Sand (**Appendix D**). Thus, the wells do not penetrate any confining layers. The site was remediated through the excavation, removal, and proper disposal of 3,000 cubic yards of soil December 2012-July 2013 and through an in-situ chemical oxidation injection program during July 2013 (**Appendix C**). This resulted in remediation to the restricted-residential use soil cleanup objectives (RRUSCOs) in an area zoned for commercial and industrial use. As such, the subsurface may be considered minimally contaminated for selecting a well decommissioning method.

2.2.3 Method Selection

The well and subsurface descriptions were considered for the selection of a well decommissioning method. The factors are listed below.

1. The wells are only in overburden, consisting of unconsolidated sand (Lloyd Sand).
2. The subsurface is not contaminated over the RRUSCO level in an area with commercial and industrial use.
3. The wells do not pierce through a confining layer as they are constructed in unconsolidated sand.
4. The wells were last observed to be minimally broken with no indications of a broken seal before being paved over.
5. The wells are made of single-stem PVC and do not have telescoping diameters.

The above factors indicate that a grouting in-place method may be sufficient according to CP-43 (**Appendix B**). If these factors are found to be different once the wells are found, such as the well having a broken seal or the detection of grossly contaminated media, then PWGC will reassess methods with the subcontractor and the DEC as necessary before decommissioning.

2.2.4 Well Grouting In-Place

The wells are to be grouted in-place based on CP-43 guidance (**Appendix B**). The depths of the wells (**Table 1**) will be confirmed before grouting. Because the wells are in sand, a standard mixture of grout will be used, ideally equivalent to one 94-pound bag of type I Portland cement, 3.9 pounds powdered bentonite, and 7.8 gallons of potable water. Based on **Table 1**, the cumulative volume of all three wells to bottom should be 32 gallons. Since grouting-in place should be to the top 5' of the well borehole, about 25 gallons of grout should be required. To create 25 gallons of grout, the subcontractor will be required to bring at least three 94-pound bags of Type I Portland cement, 11.7 pounds of powdered bentonite, and 23.4 gallons of potable water, with some leftover materials expected. This mixture will be mixed in 5-gallon buckets, either manually or mechanically, until it is homogenized. This mixture will ideally be poured from bottom to top in the well using an at least 1-inch diameter tremie to avoid the grout mixing with water on its way to the bottom. Alternatively, bentonite chips may be poured into the wells to plug the screen and grout poured on top of the bentonite to plug the riser/borehole if a tremie is not available. The grout will be poured to the top of the well casing and allowed to settle before pouring more grout. This will be repeated until the grout no longer settles. If a protective casing is identified, grouting will occur before removing the protective casing unless the casing interferes with grouting. The casing would then be removed according to CP-43.

2.2.5 Backfilling and Site Restoration

Since the wells are paved over, it is likely that the area will be paved again after decommissioning. If that is the case, then the well boreholes will be further filled with grout to 1-2' below grade after settling, the casings cut to 1-2' below grade and then paved over later for restoration. If the wells are to remain in soil, then grouting will be to 5' below grade and the boreholes will be filled with clean topsoil.

2.3 Documentation

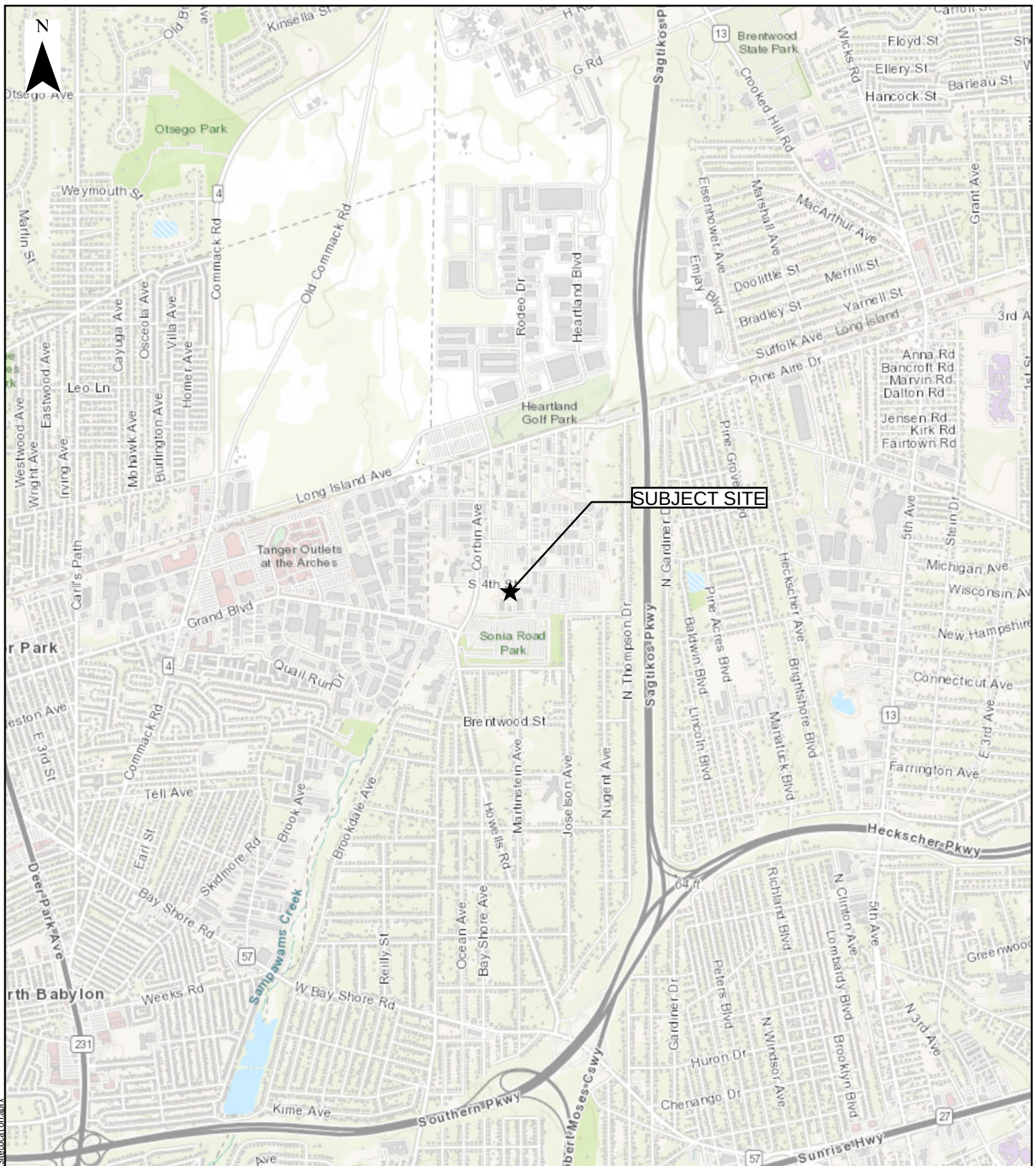
The decommissioning will be documented through photos and field notes, as needed. A form will be included for each well to document decommissioning. These forms will include facility information, well designation and information, well location, decommissioning procedures used, and the NYS Registered Water Well Driller subcontractor used. A report including an inventory of the three (3) wells, the well decommissioning procedure used in the field, and a photo log of the decommissioning will be sent to the property owner, the DEC, and other involved parties after well decommissioning. The GPS coordinates of the wells will be updated and included in the report if the well locations are found to differ from the GPS coordinates provided by the DEC.

2.4 Field Oversight

PWGC will conduct field oversight over the well decommissioning. This oversight will ensure that the right grout mixture is used and that the grout is homogenized before being poured into the wells using the correct methods. Also, if any alterations are needed in the decommissioning methods, this oversight will direct the subcontractor to implement a more appropriate decommissioning method.

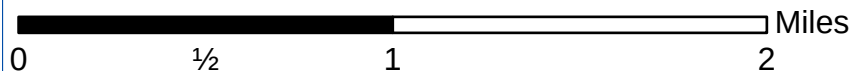
FIGURES





SITE LOCATION

120 South 4th Street
Bayshore, NY



Project:	FNH2501
Date:	2/24/2026
Designed by:	HS
Drawn by:	AM
Approved by:	HS
Figure No:	1



PWGC

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DRAWING PREPARED FOR:

REVISION	DATE	INITIAL	COMMENTS

DRAWING INFORMATION:

Project:	FNH2501	Designed by:	HS
Date:	2/24/2026	Drawn by:	KM
Scale:	AS SHOWN	Approved by:	HS

Monitoring Well Location Map

120 South 4th Street
Bay Shore, NY

FIGURE NO:

2

Site Boundary

Monitoring Well

Document Path: W:\Projects\E-L\FNH12501\MapFiles\SitePlan\SitePlan.aprx

APPENDIX A





VIA EMAIL ONLY

July 25, 2025

Frank Costanza
Francesca Nina Holdings LLC
1345 Newbridge Road
Bellmore, NY 11710

Re: Chemical Pollution Control, Site No. 152015
120 South 4th Street, Bay Shore NY, 11735

Dear Mr. Costanza:

This letter is in furtherance of New York State Department of Environmental Conservation's ("DEC") November 27, 2024 communication to you (via email) and thereafter multiple requests for a response to DEC's November 27, 2024 communication and submission of a required annual report in relation to the Chemical Pollution Control site (the "Site"). Upon information and belief relevant facts in this matter include:

- On November 27, 2024, the DEC Project Manager for the Site sent you an email, requiring that you use best efforts to find three paved over groundwater monitoring wells at the Site (the "paved over wells") to properly decommission them and provide DEC with a written summary of the efforts that you make to locate the paved over wells by December 27, 2024.
- On December 17, 2024, the DEC Project Manager for the Site sent you the coordinates and a well figure for the paved over wells.
- On January 2, 2025, the DEC Project Manager for the Site requested the status of your efforts to locate the paved over wells. On or about January 3, 2025, you responded that you were still looking for the paved over wells and trying to get a metal detector to aid in the search of the paved over wells.
- On January 29, 2025, the DEC Project Manager for the Site again reached out to you to obtain the status of your efforts to locate the paved over wells and the submission of the required annual inspection report in relation to the Site.
- On February 7, 2025, you informed the DEC Project manager for the Site that you were looking for the paved over wells but snow on the ground was making it difficult, that you were waiting for the ground to thaw.
- On March 17, 2025, the DEC Project Manager for the Site again requested the required annual inspection report for the Site. On or about March 26, 2025, you submitted the overdue annual inspection report.
- On April 3, 2025, the DEC Project Manager for the Site approved the overdue

annual inspection report and again asked about your efforts to locate the paved over wells.

- On April 17, 2025, the DEC Project Manager for the Site again asked for a status update on your attempts to locate the paved over wells.
- On May 6, 2025, the DEC Project Manager for the Site again requested a status update regarding your efforts to locate the paved over wells.
- Approximately six months after the DEC's December 27, 2024 deadline for you to submit a written summary of your efforts to locate the paved over wells, you have not provided the required information despite repeated DEC requests.

You are hereby cautioned regarding the prohibitions set forth in 6 NYCRR Part 375-1.11(b)(2)), which states that "[i]t is a violation to engage in any activity that will, or that is reasonably: (i) anticipated to, prevent or interfere significantly with any proposed, ongoing, or completed remedial program at any site; or (ii) foreseeable to, expose the public health or the environment to a significantly increased threat of harm or damage at any site."

You are hereby given until no later than Friday, August 15, 2025 to submit the requested written summary of your efforts to locate the paved over wells. If you have located the paved over wells you must also notify the DEC by August 15, 2025 and conduct the decommissioning of the paved over wells as required in DEC's November 27, 2024 letter. If you fail to comply with the August 15, 2025 deadline, DEC will consider additional enforcement action.

Nothing contained herein constitutes a waiver by the DEC or the State of New York of any rights held pursuant to any applicable state and/or federal law or the applicable Environmental Easement and DEC-approved Site Management Plan or a release for any party from any obligations held under those same laws or the applicable Environmental Easement and DEC-approved Site Management Plan.

Sincerely,



Alali Tamuno

Senior Attorney

Office of General Counsel

New York State Department of Environmental
Conservation

cc:

J. Dyber, DEC

J. Stefansky, DEC

APPENDIX B



CP-43:Groundwater Monitoring Well Decommissioning Policy

New York State Department of Environmental Conservation

DEC POLICY

Issuing Authority: Commissioner Alexander B. Grannis

Date Issued: November 3, 2009

Latest Date Revised:

I. Summary:

Groundwater monitoring wells provide essential access to the subsurface for scientific and engineering investigations (including monitoring wells installed for leak detection purposes). To a degree, every monitoring well is an environmental liability because of the potential to act as a conduit for pollution to reach the groundwater. To limit the environmental risk, a groundwater monitoring well must be properly decommissioned when its effective life has been reached. This document provides procedures to satisfactorily decommission groundwater monitoring wells in New York State. This policy also pertains to other temporary wells such as observation wells, test wells, de-watering wells and other small diameter, non-potable water wells. It does not pertain to water supply wells.

II. Policy:

Environmental monitoring wells should be decommissioned when:

1. they are no longer needed and re-use by another program is not an option; or
2. the well's integrity is suspect or compromised.

The method for decommissioning will be determined based upon well construction and environmental parameters. The method selected must be designed to protect groundwater and implemented according to current best engineering practices while following all applicable federal, state and local regulations. *Groundwater Monitoring Well Decommissioning Procedures* shall be maintained as an addendum to this policy.

This policy is applicable to all New York State Department of Environmental Conservation (DEC) programs that install, utilize and maintain monitoring wells for the study of groundwater, except monitoring wells for landfills regulated under 6 NYCRR Part 360 decommissioned in accordance with those regulations [see 6 NYCRR 360-2.11(a)(8)(vi)] and wells installed under the Oil, Gas and Solution Mining Law, Environmental Conservation Law Article 23. There is no specific time frame to dictate when to decommission a well; timing is dependent upon the use and condition of the well

and shall be determined on an individual basis. Best professional judgment must be exercised when using the decommissioning procedures. Outside of DEC use, this policy is mandatory when incorporated into the specifications of a state contract, an Order on Consent or a permit. In all other situations, it shall serve as guidance.

III. Purpose and Background:

This document establishes a monitoring well decommissioning policy and provides technical guidance. Synonyms for well decommissioning include “plugging,” “capping” and “abandoning. For consistency, only the term “decommissioning” is used within this document.

Unprotected, neglected and improperly abandoned monitoring wells are a serious environmental liability. They can function as a pollution conduit for surface contaminants to reach the subsurface and pollute our groundwater. They also can cause unwanted mixing of groundwater, which degrades the overall water quality within an aquifer. Improperly constructed, poorly maintained or damaged monitoring wells can yield anomalous poor data that can compromise the findings of an environmental investigation or remediation project. Unneeded or compromised monitoring wells should be properly decommissioned in order to prevent harm to our groundwater.

Since 1980, the DEC has installed, directed or overseen the installation of thousands of monitoring wells throughout New York for various state and federal programs, such as Superfund, solid waste, Resource Conservation and Recovery Act (RCRA), spill response, petroleum bulk storage and chemical bulk storage. This guidance addresses the environmental liability associated with this aging network of wells.

Within its boring zone, a successfully decommissioned well prevents the following:

1. Migration of existing or future contaminants into an aquifer or between aquifers;
2. Migration of existing or future contaminants within the vadose zone;
3. Potential for vertical or horizontal migration of fluids in the well or adjacent to the well; and
4. Any change in the aquifer yield and hydrostatic head, unless due to natural conditions.

Monitoring well construction in New York varies considerably with factors such as age of the well, local geology and either the presence or absence of contamination. The predominant type of monitoring well in New York is the shallow, watertable monitoring well constructed of polyvinyl chloride plastic (PVC). The best method for decommissioning should be selected to suit the conditions and circumstances. Each decommissioning situation is to be evaluated separately using this guidance before a method is chosen and implemented.

IV. Responsibility:

The Division of Environmental Remediation (DER) is responsible for updating this policy and the *Groundwater Monitoring Well Decommissioning Procedures* (addendum) in consultation with the Division of Solid and Hazardous Materials (DSHM) and the Division of Water (DOW). Compliance with the guidance does not relieve any party of the obligation to properly decommission a monitoring well. Oversight responsibility will be carried out by the DEC Regional Engineer.

V. Procedure:

Groundwater Monitoring Well Decommissioning Procedures, the addendum to this policy, provides guidance on proper decommissioning of monitoring wells in New York State.

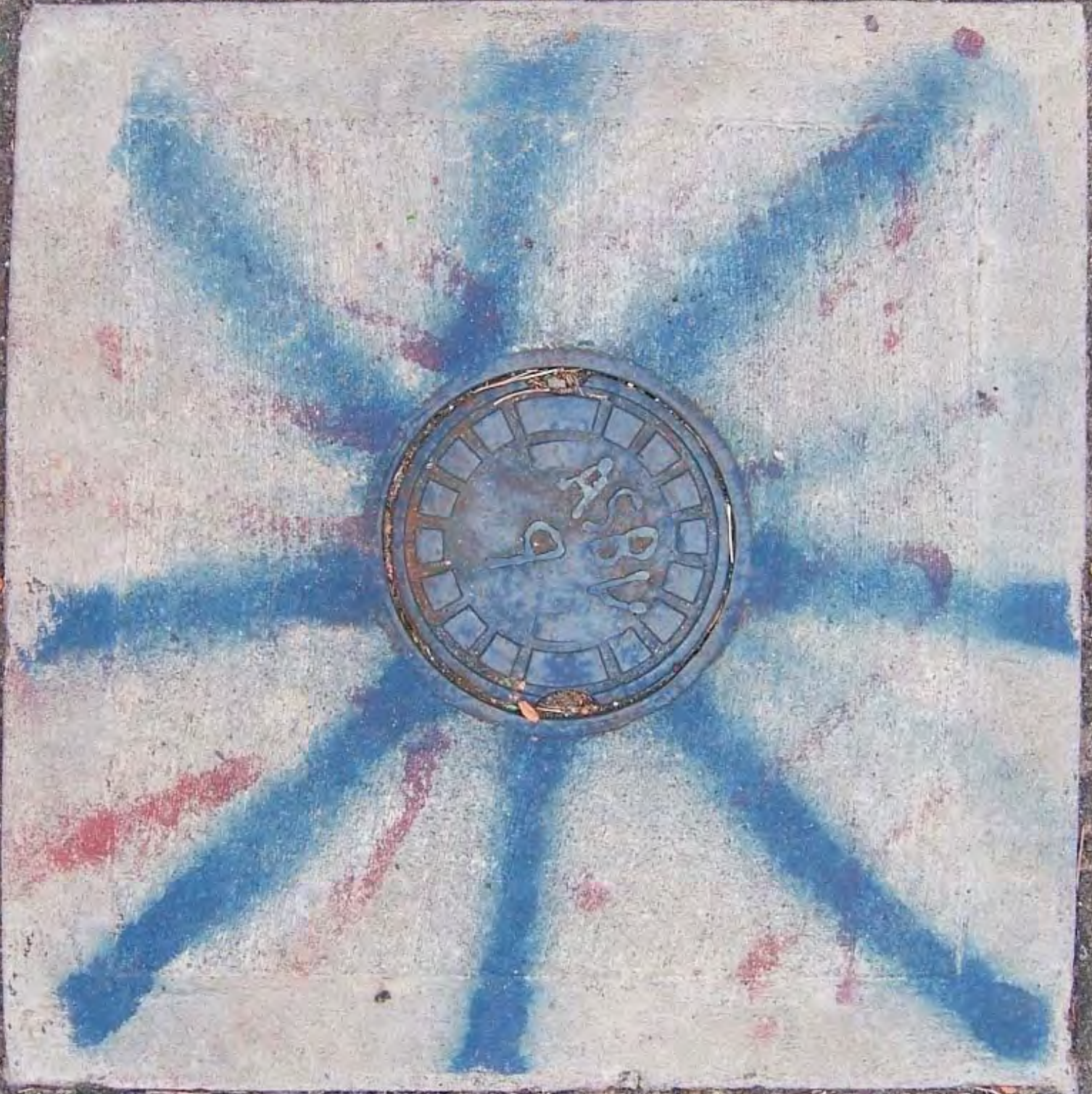
VI. Related References:

- Groundwater Monitoring Well Decommissioning Procedures, October 1986. Prepared by Malcolm Pirnie, Inc. for the New York State Department of Environmental Conservation, Division of Environmental Remediation.
- Standard Guide for the Decommissioning of Ground Water Wells, Vadose Zone Monitoring Devices, Boreholes, and Other Devices for Environmental Activities, ASTM D 5299-99. American Society for Testing and Materials (ASTM). Philadelphia. 2005.
- 6 NYCRR Part 360 Solid Waste Management Facilities, New York State Department of Environmental Conservation, Division of Solid and Hazardous Materials.
- Specifications for Abandoning Wells and Boreholes in Unconsolidated Materials, New York State Department of Environmental Conservation, Region 1 - Water Unit, undated.
- Handbook of Suggested Practices for the Design and Installation of Groundwater Monitoring Wells, EPA 600/4-89/034, United States Environmental Protection Agency (EPA).

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Final - August 2009

GROUNDWATER MONITORING WELL DECOMMISSIONING PROCEDURES



**New York State Department of Environmental Conservation
Division of Environmental Remediation**

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FIGURE 2 - DECOMMISSIONING PROCEDURE SELECTION

FIGURE 3 - WELL DECOMMISSIONING RECORD

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APPENDIX A - REPORTS

APPENDIX A1 - INSPECTOR'S DAILY REPORT

APPENDIX A2 - PROBLEM IDENTIFICATION REPORT

APPENDIX A3 - CORRECTIVE MEASURES REPORT

INTRODUCTION

This document, *Groundwater Monitoring Well Decommissioning Procedures*, is the addendum to CP-43, Groundwater Monitoring Well Decommissioning Policy, which provides acceptable procedures to be used as guidance when decommissioning monitoring wells in New York State. Please note that this document does not address some site-specific special situations that may be encountered in the field. Compliance with the procedures set forth in this document does not relieve any party of the obligation to properly decommission a monitoring well.

Unprotected, neglected and improperly abandoned monitoring wells are a serious environmental liability. They can function as a pollution conduit for surface contaminants to reach the subsurface and pollute our groundwater. They also can cause unwanted mixing of groundwater, which degrades the overall water quality within an aquifer. Improperly constructed, poorly maintained or damaged monitoring wells can yield anomalous poor data that can compromise the findings of an environmental investigation or remediation project. Unneeded or compromised monitoring wells should be properly decommissioned in order to prevent harm to our groundwater.

Previous versions of this guidance have been issued since 1995. Originally developed as a specification for well decommissioning at Love Canal, the procedures were rewritten to make them applicable across the state. From an engineering standpoint, the guidance has changed very little. Most situations do not require a complex procedure.

If you have any questions, please contact Will Welling at (518) 402-9814.

Sincerely,



Gerald J. Rider, Jr., P.E.
Chief, Remedial Section D
Remedial Bureau E
Division of Environmental Remediation

1.0 PREPARATION

If an unneeded monitoring well remains in good usable condition, an alternative to decommissioning might be the reuse by another agency program. DEC encourages reuse in situations where a well will continue to be used and cared for responsibly.

When reuse is not an option, the first step in the well decommissioning process is to review all pertinent well construction information. One must know the well depth and construction details. GPS coordinates and permanent labeling (if available) will be useful in confirming the well to be decommissioned. An inspection must be performed prior to decommissioning in order to verify the construction and condition of each well. Specific details and subsurface conditions form the basis for decisions throughout the decommissioning process.

Well Details

1. Is the well a single stem riser (all one diameter)?
2. Is the well a simple overburden well (no penetration into bedrock)?
3. Does the well riser consist of telescoping diameters of pipe which decrease with depth?
4. Is the well seal compromised (leaking, inadequate or damaged)?
5. If the well is PVC, is it 25 feet or shallower and not grouted into rock?
6. Can the riser be pulled and is removal of the well desired?
7. Is the well a bedrock well?
8. If the monitoring well is a bedrock well, does it have an open hole?
9. Is there a well assembly (riser and screen) installed within the bedrock hole?

Subsurface Conditions

10. Is the soil contaminated?
11. Does the well penetrate a confining layer?
12. If the well penetrates a confining layer, might overdrilling or casing pulling cause contamination to travel up or down through a break in the confining layer?
13. Does the screened interval cross multiple water-bearing zones?

For additional collection and verification of information, the "Monitoring Well Field Inspection Log" (Figure 1) can be used during a field inspection. After the well has been located and the information gathered, one is ready to select the decommissioning procedure in accordance with Section 2.

Special conditions, such as access problems, well extensions through capped and covered non-Part 360 landfills and seasonal weather patterns affecting construction, should be assessed in the planning stage. Decommissioning work requiring the use of heavy vehicular equipment on landfill caps should be scheduled during dry weather (if possible) so as to minimize damage to the cover. If work must be performed during the spring, winter or inclement weather, special measures to reduce ruts should be employed to maintain the integrity of a completed landfill cover system. As an example, placement of plywood under vehicular equipment can eliminate deep ruts that would require repair.

2.0 DECOMMISSIONING METHODS

The primary rationale for well decommissioning is to remove any potential groundwater pathway. A secondary rationale, often important to the property owner or owner of the well, is to physically remove the well. Removed well materials may be recycled and will not interfere with future construction excavation. The previous versions of these decommissioning procedures have stressed that physical removal of the well by pulling is preferable to leaving casing in the ground. Due to the added effort, expense and risk involved with pulling, the decision of whether to pull or not should be a separate consideration aside from selecting the sealing procedure.

One should select a decommissioning procedure that takes into account the geologic and hydrogeologic conditions at the well site; the presence or absence of contamination in the groundwater; and original well construction details. The selection process for well decommissioning procedures is provided by the flow chart, Figure 2. Answers to the questions

in the preceding section are the input for this flow chart. The four primary well decommissioning methods are:

1. Grouting in-place;
2. Perforating the casing followed by grouting in-place;
3. Grouting in-place followed by casing pulling;
4. Over-drilling and grouting with or without a temporary casing.

In a complex situation, one or more decommissioning procedures may be used for different intervals of the same well.

The remainder of Section 2 discusses the well decommissioning methods and the selection process. Refer to Figure 2 for a flow chart diagram of the complete procedure selection process. The DEC Project Manager has the discretion to deviate from the flow chart, (Figure 2), based on site conditions and professional judgment.

2.1 Grouting In-Place

Grouting in-place is the simplest and most frequently used well decommissioning method and grouting itself is the essential component of all the decommissioning methods. The grout seals the borehole and any portion of the monitoring well that may be left in the ground. Because dirt and foreign objects can fall into an open well, whenever possible a well should be sealed first with grout before attempting subsequent decommissioning steps.

For the purpose of these decommissioning procedures, the well seal is defined as the bentonite seal above the sand pack. Aside from obvious channeling by in-flowing surface water around the well, an indication of the well seal integrity may be obtained through review of the boring logs and/or a comparison of groundwater elevations if the well is part of a cluster. Any problems noted on the boring logs pertaining to the well seal, such as bridging of bentonite pellets or running sands, or disparities between field notes (if available) and the well log would indicate the potential for a poor (compromised) well seal.

If the well seal is not compromised and there is no confining layer present, a single-stem, 2-inch PVC, monitoring well can be satisfactorily decommissioned by grouting it in-place. If the seal is compromised, casing perforation may be called for as discussed in Section 2.2.

As discussed in Section 2.4 and its sub-sections, this method is specified for the bedrock portion of a well, and is used for decommissioning small diameter cased wells. Grouting in-place involves filling the casing with grout to a level of five feet below the land surface, cutting the well casing at the five-foot depth, and removing the top portion of the casing and associated well materials from the ground. The casing must be grouted according to the procedures in Section 6. In addition, the upper five feet of the borehole is filled to land surface and restored according to the procedures described in Section 7.

For open-hole bedrock wells, the procedure involves filling the opening with grout to the top of rock according to the procedures in Section 5. A thicker grout may be required to fill any bedrock voids. If excessive grout is being lost down-hole, consider grouting in stages to reduce the pressure caused by the height of the grout column.

The standard mix with the maximum amount of allowable water will be required to penetrate the well screen and sand pack when a well assembly has been installed within a bedrock hole. For an assembly such as this, the grout should be mixed thinly enough to penetrate the slots and sand pack. The grout mixes are discussed in Sections 6.1 and 6.2.

2.2 Casing Perforating/Grouting In-Place

Casing perforation followed by grouting in-place is the preferred method to use if there is poor documentation of the grouting of the well annulus, or the annulus was allowed to be back-filled with cuttings. The grout will squeeze through the perforations to seal any porous zones along the outside of the casing. The procedure involves puncturing, cutting or splitting the well casing and screen followed by grouting the well. A variety of commercial equipment is available for perforating casings and screens in wells with four-inch or larger inside diameters. Due to the diversity of applications, experienced contractors must recommend a specific technique based on site-specific conditions. A minimum of four rows of perforations several inches long around the circumference of the pipe and a minimum of five perforations per linear foot of casing or screen is recommended (American Society for Testing and Materials, Standard D 5299-99, 1999). After the perforating is complete, the borehole must be grouted according to the procedures in Section 6 and the upper five feet of borehole restored according to the procedures in Section 7.

2.3 Casing Pulling

Casing pulling should be used in cases where the materials of the well assembly are to be recycled, or the well assembly must be removed to clear the site for future excavation or re-development. Casing pulling is an acceptable method to use when no contamination is present; contamination is present but the well does not penetrate a confining layer; and when both contamination and a confining layer are present but the contamination cannot cross the confining layer. Additionally, the well construction materials and well depth must be such that pulling will not break the riser. When contamination is likely to cross the confining layer during pulling, a temporary casing can be used. See Section 2.4.

Casing pulling involves removing the well casing by lifting. Grout is to be added during pulling; the grout will fill the space once occupied by the material being withdrawn. An acceptable procedure to remove casing involves puncturing the bottom of the well or using a casing cutter to cut away the screen, grouting, using jacks to free casing from the hole, and lifting the casing out by using a drill rig, backhoe, crane, or other suitable equipment. Additional grout must be added to the casing as it is withdrawn. Grout mixing and placement procedures are provided in Section 6. In wells or well points in which the bottom cannot be punctured, the casing or screened interval will be perforated or cut away prior to being filled with grout. This procedure should be followed for wells installed in collapsible formations or for highly contaminated wells.

At sites in which well casings have been grouted into the top of bedrock, the casing pulling procedure should not be attempted unless the casing can be first cut or freed from the rock.

2.4 Over-Drilling

Over-drilling is the technique used to physically remove an entire monitoring well, its sand pack and the old grout column and fill. In situations where PVC screens and risers are expected to sever and removal of all well materials is required, over-drilling will be required. Over-drilling is called for when a riser can't be pulled and it penetrates a confining layer. Compared to the other procedures, over-drilling is the least common method of well decommissioning.

A "temporary casing" may be necessary when extraordinary conditions are present, such as a high concentration of mobile contaminants in the overburden, depth to water is shallow, there is poor construction documentation or shoddy construction practices. The approach involves installing a large diameter steel casing around the outside of the well followed by drilling / pulling / grouting within this casing. The casing is withdrawn at the end of pulling, grouting and (perhaps) drilling. If the confining layer is less than 5 feet thick, the casing should be installed to the top of the confining layer. Otherwise, it is installed to a depth of 2 feet below the top of the confining layer. After the outer casing has been set, the well can be removed and grouted through pulling if possible or removed and grouted by drilling inside the casing.

Over-drilling is used where casing pulling is determined to be unfeasible, or where installation of a temporary casing is necessary to prevent cross-contamination, such as when a confining layer is present and contamination in the deeper aquifer could migrate to the upper aquifer as the well is pulled. The over-drilling method should:

- Follow the original well bore;
- Create a borehole of the same or greater diameter than the original boring; and
- Remove all of the well construction materials.

In over-drilling the difficulty lies in keeping the augers centered on the old well as the bit is lowered; it will tend to wander off. As a precaution, the well column should be filled with grout before over-drilling. Then without allowing the grout to dry, the driller proceeds with over-drilling the well. Grouting first guarantees that if the drill wanders off the old well and the effort is less than 100% successful, the remaining well portion will at least have been grouted. There are many methods for over-drilling. Please note that the following methods are not suitable for all types of casing, and the advice of an experienced driller should be sought.

- Conventional augering (i.e., a hollow stem auger fitted with a pilot bit). The pilot bit will grind the well construction materials, which will be brought to the well surface by the auger.
- A conventional cable tool rig to advance "temporary" casing having a larger diameter than the original boring. The cable tool kit is advanced within the casing to grind the well construction materials and soils, which are periodically removed with large diameter bailer. This method is not applicable to bedrock wells.

- An over-reaming tool with a pilot bit nearly the same size as the inside diameter of the casing and a reaming bit slightly larger than the original borehole diameter. This method can be used for wells with steel casings.
- A hollow-stem auger with outward facing carbide cutting teeth having a diameter two to four inches larger than the casing.

Prior to over-drilling, the bottom of the well should be perforated or cut away, and the casing filled with grout as with casing removal by pulling.

In all cases above, over-drilling should advance beyond the original bore depth by a distance of half a foot to ensure complete removal of the construction materials. Oversight attention should be focused on the drill cuttings, looking for fragments of well materials. Absence of these indicators is a sign that the drill has wandered off the well. If wandering is suspected, having previously filled the well with grout, the remaining portion which cannot be over-drilled can be considered grouted in-place. When the over-drilling is complete, grout should be tremied within the annular space between the augers and well casings. The grout level in the borehole should be maintained as the drilling equipment and well materials are sequentially removed. As with all the other methods, the upper five feet of borehole should be restored according to the procedures in Section 7.

3.0 SELECTION PROCESS AND IMPLEMENTATION

The decommissioning procedure selection flow chart, Figure 2, is to be used to select decommissioning methods. The selection process first identifies the basic monitoring well type. There are only two types of monitoring wells described in this guidance, overburden wells and bedrock wells. Bedrock wells typically have an overburden portion which in the selection process is to be treated as an overburden well. Techniques are specified for wells based upon their type and the other physical conditions present. Decommissioning techniques called for by the selection process have their practical limits; construction details dictate when a well stem can be pulled without breaking and when it cannot be pulled. The DEC project manager has the discretion to deviate from the flow chart, (Figure 2), based on site conditions, budgetary concerns and professional judgment. The remainder of this section will discuss types of monitoring wells in various settings along with recommended decommissioning techniques.

3.1 Bedrock Wells

Referring to Figure 2 and Section 2.1, if the well extends into bedrock, the rock hole portion of the well is to be grouted in-place to the top of the rock. The grout mix, however, may vary according to the conditions. A thicker grout may be required to fill voids and a thinner grout may be necessary to penetrate well screen and sand pack. Refer to the grout mixture specifications given in Section 6.1 and 6.2.

Prior to grouting, the depth of the well will be measured to determine if any silt or debris has plugged the well. If plugging has occurred, all reasonable attempts to clear it should be made before grouting. The borehole will then be tremie grouted according to Section 6.4 from the bottom of the well to the top of bedrock to ensure a continuous grout column.

After the rock hole is grouted, the overburden portion of the well is decommissioned using appropriate techniques described below. If the bedrock extends to the ground surface, grouting can extend to the ground surface or to slightly below so that the site can be restored as appropriate in accordance with Section 7.

3.2 Uncontaminated Overburden Wells

For overburden wells and the overburden portion of bedrock wells, the first factor in determining the decommissioning method is whether the overburden portion of the well exhibits contamination, as determined through historical groundwater and/or soil sampling results. If the overburden is uncontaminated, the next criteria considers whether the well penetrates a confining layer. In the case that the overburden portion of the well does not penetrate a confining layer, the casing can either be tremie-grouted and pulled or tremie grouted and left in place. As a general rule, PVC wells greater than 25-feet deep should not be pulled unless site-specific conditions or other factors indicate that the well can be pulled without breaking. If the well cannot be pulled, the well should be grouted in-place as accordance with Sections 2.1 and 2.2.

If a non-telescoped overburden well penetrates a confining layer, the casing should be removed by pulling (if possible) in accordance with Section 2.3. If the casing cannot be removed by pulling, the well should be grouted in-place or where complete removal is required, removed by over-drilling. Over-drilling will be based upon the site-specific conditions and requirements. If pulling is attempted and fails (i.e., a portion of the riser breaks) the remaining portion of the well should be removed by using the conventional augering procedure identified in Section 2.4. Note that if the riser is broken during pulling, it is highly unlikely that the driller will be able to target it to over-drill it. This is the reason why all wells should be grouted first. In all cases, after the well construction materials have been removed to the extent possible, the borehole will be grouted in accordance with Section 6 and the upper five feet will be restored in accordance with Section 7.

3.3 Contaminated Overburden Monitoring Wells/Piezometers

Contamination in the overburden plays a role in the selection process. Any contamination present in the overburden must not be allowed to spread as a result of the decommissioning construction. For wells and piezometers suspected or known to be contaminated with light non-aqueous phase liquid (LNAPL) and/or dense non-aqueous phase liquid (DNAPL), often referred to as “product,” the decision to decommission the well should be reviewed. Such gross contamination is a special condition and requires design of the decommissioning procedure. If decommissioning is determined to be the proper course of action, measurement of the non-aqueous phase liquid volume will be determined and this liquid will be removed.

If an overburden well (or the overburden portion of a bedrock well) is contaminated with LNAPL, DNAPL and /or dissolved fractions as indicated by historical sampling results, one must evaluate the potential for contamination to cross an overburden confining layer (if one exists) during decommissioning. A rock or soil horizon of very low permeability is known as a confining layer. Contamination in the overburden lying above a confining layer is a significant condition to recognize. To prevent mobile contaminants from crossing a confining layer during pulling or over-drilling, a temporary casing should be installed to isolate the work zone. One should follow the procedure selection flow chart. Some contaminated conditions call for over-

drilling or a specially designed procedure.

A well in contaminated overburden may be grouted in-place as long as the grout fully seals the well and boring zone. If a well in contaminated overburden was constructed allowing formation collapse as annular backfill or if the well has a compromised well seal, one must either physically remove the well or thoroughly perforate the riser and grout it in-place.

If physical removal of the well is required and the overburden contaminants are likely to be dragged upward or downward during decommissioning, a temporary casing should be used to seal off the construction work zone. Casing pulling and overdrilling can be safely accomplished within the temporary casing. Section 2.4 discusses the temporary casing technique.

3.4 Telescoped Riser

If the riser is telescoped in one or more outer casings, the decommissioning approach depends upon the integrity of the well seal. If there is no evidence that the well seal integrity is compromised, the riser should be grouted in-place in accordance with Sections 2.1 or 2.2 and the upper 5 feet of the well surface should be restored in accordance with Section 7. If indications are that the well seal is not competent, it will be necessary to design and implement a special procedure to perforate and grout or remove the well construction materials. The presence and configuration of the outer casing(s) will be specific in the individual wells and will be a key factor in the decommissioning approach. The special procedure must mitigate the potential for cross-contamination during removal of the well construction materials.

4.0 LOCATING AND SETTING-UP ON THE WELL

Prior to mobilizing to decommission a monitoring well, one should notify the property owner and/or other interested parties including the governing regulatory agency. It is advisable that when at the well location, one should review the proposed well decommissioning procedure. Verify well locations and identification by their identifying markers and GPS coordinates. Lastly, verify the depth of each well with respect to depth recorded on the well construction log.

5.0 REMOVING THE PROTECTIVE CASING

Most monitoring wells installed in non-traffic locations are finished with an elevated, protective casing (guard pipe) and a concrete rain pad. Wells at gasoline stations, usually being in high-traffic areas, are typically finished with a flush-mount, curb box and protective 8" dia steel inspection plate rather than a stick-up riser. The curb box is usually easily removed from around the flush-mount well before pulling or over-drilling. In the case of stick-up wells, the riser pipe may be bonded to the guard pipe and rain pad. When the protective casing and concrete pad of a stick-up monitoring well are "yanked out," a PVC riser will typically break off at the bottom of the guard pipe several feet below grade. Once this happens, it may become impossible to center a drill rig upon the well. The riser may become splintered and structurally unstable for pulling. Unless grouted first, the well may fill with dirt. Before pulling a casing or over-drilling a well, a method must be devised for removing these protective surface pieces without jeopardizing the remaining decommissioning effort.

Generally, unless the protective casing is loose and can be safely lifted off by hand, *one*

should fill the monitoring well with grout before removing the outer protective casing. This will ensure that the well is properly sealed regardless of any problems later when removing the protective casing. Remove the protective casing or road box vault initially only if the stick-up or vault will interfere with subsequent down-hole work which must be done before grouting. This down-hole work may include puncturing, perforating or cutting the screen or riser. But as a general procedure don't remove the protective casing or road box until after initial grouting is complete.

The procedure for removing the protective casing of a well depends upon the decommissioning method specified for the monitoring well. The variety of protective casings available preclude developing a specific removal procedure but often one can simply break up the concrete seal surrounding the casing and jack or hoist the protective casing out of the ground. A check should be made during pulling to ensure that the inner well casing is not being hoisted with the protective casing. If this occurs, the well casing should be cut off after the base of the protective casing is lifted above the land surface. At well locations where the riser has been extended, the burial of a previous concrete pad may require the excavation of soil to the top of the concrete pad to remove the well.

Steel well casing should be removed approximately five feet below the land surface so as to be below the frost line and out of the way of any subsequent shallow digging. The upper five feet of casing and the protective casing can be removed in one operation if a casing cutter is used.

Waste handling and disposal must be consistent with the methods used for the other well materials unless an alternate disposal method can be employed (i.e., steam cleaning followed by disposal as non-hazardous waste).

6.0 SELECTING, MIXING, AND PLACING GROUT

This section gives recipes for the “standard grout mixture” and the thicker “special grout mixture.” Mixing and placing grout is also discussed in this section. The goal of well decommissioning is to eliminate the capability of water to travel up or down within the volume of the former well and its boring. Success depends upon the correct grout mixture and placement where it is needed. There are two types of grout mixes that may be used to seal monitoring wells: a standard mix and a special mix. Both mixes use Type 1 Portland cement and four percent bentonite by weight. However, the special mix uses a smaller volume of water and is used in situations where excessive loss of the standard grout mix is possible (e.g., highly-fractured bedrock or coarse gravels).

6.1 Standard Grout Mixture

For most boreholes, the following standard mixture will be used:

- One 94-pound bag Type I Portland cement;
- 3.9 pounds powdered bentonite; and
- 7.8 gallons potable water.

Slightly more water may be used in order to penetrate a sand pack when a well screen transects multiple flow zones. This mixture results in a grout with a bentonite content of four percent by weight and will be used in all cases except in boreholes where excessive use of grout is anticipated. In these cases a special thicker mixture will be used.

6.2 Special Mixture

In cases where excessive use of grout is anticipated, such as high permeability formations and highly fractured or cavernous bedrock formations, the following special mixture will be used:

- one 94-pound bag type I Portland cement;
- 3.9 pounds powdered bentonite;
- 1 pound calcium chloride; and
- 6.0-7.8 gallons potable water (depending on desired thickness).

The special mixture results in a grout with a bentonite content of four percent by dry weight. It is thicker than the standard mixture because it contains less water. This grout is expected to set faster than the Standard Grout Mixture due to the added calcium chloride. The least amount of water that can be added for the mixture to be readily pumpable is 6 gallons per 94-pound bag of cement.

6.3 Grout Mixing Procedure

To begin the grout-mixing procedure, calculate the volume of grout required to fill the borehole. If possible, the mixing basin should be large enough to hold all of the grout necessary for the borehole.

Mix grout until a smooth, homogeneous mixture is achieved. Grout can be mixed manually or with a mechanized mixer. Colloidal mixers should not be used as they tend to excessively decrease the thickness of the grout for the above recipes.

6.4 Grout Placement

This guidance requires that grout be placed in the well from the bottom to the top by means of a "tremie." A tremie is a pipe, a hose or a tube extending from the grout supply to the bottom of the well. The tremie delivers the grout all the way down through the water column without its being diluted and mixed with the water that may be present in the well. The tremie pipe or tube is withdrawn as (or after) the well is filled with grout.

Using the tremie, grout is placed in the borehole filling from the bottom to the top. Two-inch and larger wells should use tremie tubing of not less than 1-inch diameter. Smaller diameter wells will call for a smaller tremie pipe. Grout will then be pumped in until the grout appears at the land surface (when grouting open holes in bedrock, the grout level only needs to reach above the bedrock surface). Any groundwater displaced during grout placement, if known to be contaminated, will be contained for proper disposal.

At this time the rate of settling should be observed. If grouting the well in place, the well

casing remains in the hole. But if the decommissioning method has involved down-hole tools such as hollow-stem augers or temporary casing for overdrilling, these will be removed from the hole. As each section is removed, grout will be added to keep the level between 0 and 5 feet below grade. If the grout level drops below the land surface to an excessive degree, an alternate grouting method must be used. One possibility is to grout in stages; i.e., the first batch of grout is allowed to partially cure before a second batch of grout is added.

As previously described in Section 5.0, the outer protective casing "stick-up" should be removed only after a well has been properly filled with grout. This will ensure that the well is properly sealed regardless of any breakage which may occur when removing the stick-up. It is important to reiterate that when either casing pulling or over-drilling are required, due to the uncertainty of successfully pulling a well or over-boring a well, we insist that the driller tremie grout the well first. Then without allowing the grout to dry, the driller proceeds with pulling the casing or over-drilling the well.

Upon completion of grouting, ensure that the final grout level is approximately five feet below land surface. A ferrous metal marker will be embedded in the top of the grout to indicate the location of the former monitoring well. Lastly, a fabric "utility" marking should be placed one foot above the grout so an excavator can see it clearly.

7.0 BACKFILLING AND SITE RESTORATION

The uppermost five feet of the borehole at the land surface should be filled with material physically similar to the natural soils. The surface of the borehole should be restored to the condition of the area surrounding the borehole. For example, concrete or asphalt will be patched with concrete or asphalt of the same type and thickness, grassed areas will be seeded, and topsoil will be used in other areas. All solid waste materials generated during the decommissioning process must be disposed of properly.

8.0 DOCUMENTATION

A form which may be used in the field to record the decommissioning construction is included as Figure 3. Additional documentation may be required by a DEC project manager and samples are included in Appendix A. Programs within the DEC that maintain geographic data on monitoring wells strive to keep that data up to date. Owners of these data sets must be notified when a well is decommissioned. Historical groundwater quality data is linked to monitoring well locations so when a well is decommissioned, existing GIS data must be updated to reflect that fact but the coordinate location in the GIS database should not be eliminated. A metal detector may not be able to detect a deeply buried marker so if this locator is important for future utility runs or foundations, a map should be submitted to the property owner and the town engineer showing the decommissioned well locations. Global Positioning System (GPS) coordinates should be indicated on this map. Lastly, whatever documentation is produced should be provided to the property owner, the DEC, and all other parties involved.

9.0 FIELD OVERSIGHT

Over-drilling requires careful observation to detect whether the drill has wandered off the well. Grout preparation and tremie work should be carefully observed. The successful implementation of a decommissioning work plan depends upon proper direction, observation and oversight. Methods to be employed must be clearly worked through and all parties must understand what they have to do before going into the field. Flexibility is allowed where necessary but the work effort must be thorough and effective to protect our groundwater.

10.0 RELATED REFERENCES

- *Groundwater Monitoring Well Decommissioning Procedures*, October 1986. Prepared by Malcolm Pirnie, Inc., for the New York State Department of Environmental Conservation, Division of Environmental Remediation.
- American Society for Testing and Materials, A.S.T.M. D 5299-99, Standard Guide for the Decommissioning of Ground Water Wells, Vadose Zone Monitoring Devices, Boreholes, and Other Devices for Environmental Activities. A.S.T.M.. Philadelphia. 2005.
- New York State Department of Environmental Conservation, Division of Solid and Hazardous Materials, 6 NYCRR Part 360, Solid Waste Management Facilities.
- New York State Department of Environmental Conservation, Region I - Water Unit, Specifications for Abandoning Wells and Boreholes in Unconsolidated Materials, undated.
- United States Environmental Protection Agency, The Handbook of Suggested Practices for the Design and Installation of Groundwater Monitoring Wells, EPA 600/4-89/034.

FIGURES

FIGURE 1 - MONITORING WELL FIELD INSPECTION LOG

FIGURE 2 - DECOMMISSIONING PROCEDURE SELECTION

FIGURE 3 - WELL DECOMMISSIONING RECORD

APPENDICES

APPENDIX A - REPORTS

APPENDIX A1 - INSPECTOR'S DAILY REPORT

APPENDIX A2 - PROBLEM IDENTIFICATION REPORT

APPENDIX A3 - CORRECTIVE MEASURES REPORT

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FIGURE 1

MONITORING WELL FIELD INSPECTION LOG

FIGURE 1

SITE NAME:

MONITORING WELL FIELD INSPECTION LOG
NYSDEC WELL DECOMMISSIONING PROGRAM

SITE ID.: _____
INSPECTOR: _____
DATE/TIME: _____
WELL ID.: _____

	YES	NO
WELL VISIBLE? (If not, provide directions below)		
WELL I.D. VISIBLE?		
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....		

	YES	NO
WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:		
SURFACE SEAL PRESENT?		
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)		

HEADSPACE READING (ppm) AND INSTRUMENT USED.....
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)
PROTECTIVE CASING MATERIAL TYPE:
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		
LOCK FUNCTIONAL?		
DID YOU REPLACE THE LOCK?		
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		
WELL MEASURING POINT VISIBLE?		

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches):
WELL CASING MATERIAL:
PHYSICAL CONDITION OF VISIBLE WELL CASING:
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)
AND ASSESS THE TYPE OF RESTORATION REQUIRED.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT
(e.g. Gas station, salt pile, etc.):

REMARKS:

FIGURE 2

DECOMMISSIONING PROCEDURE SELECTION



NYSDEC Monitoring Well Decommissioning Procedure Selection

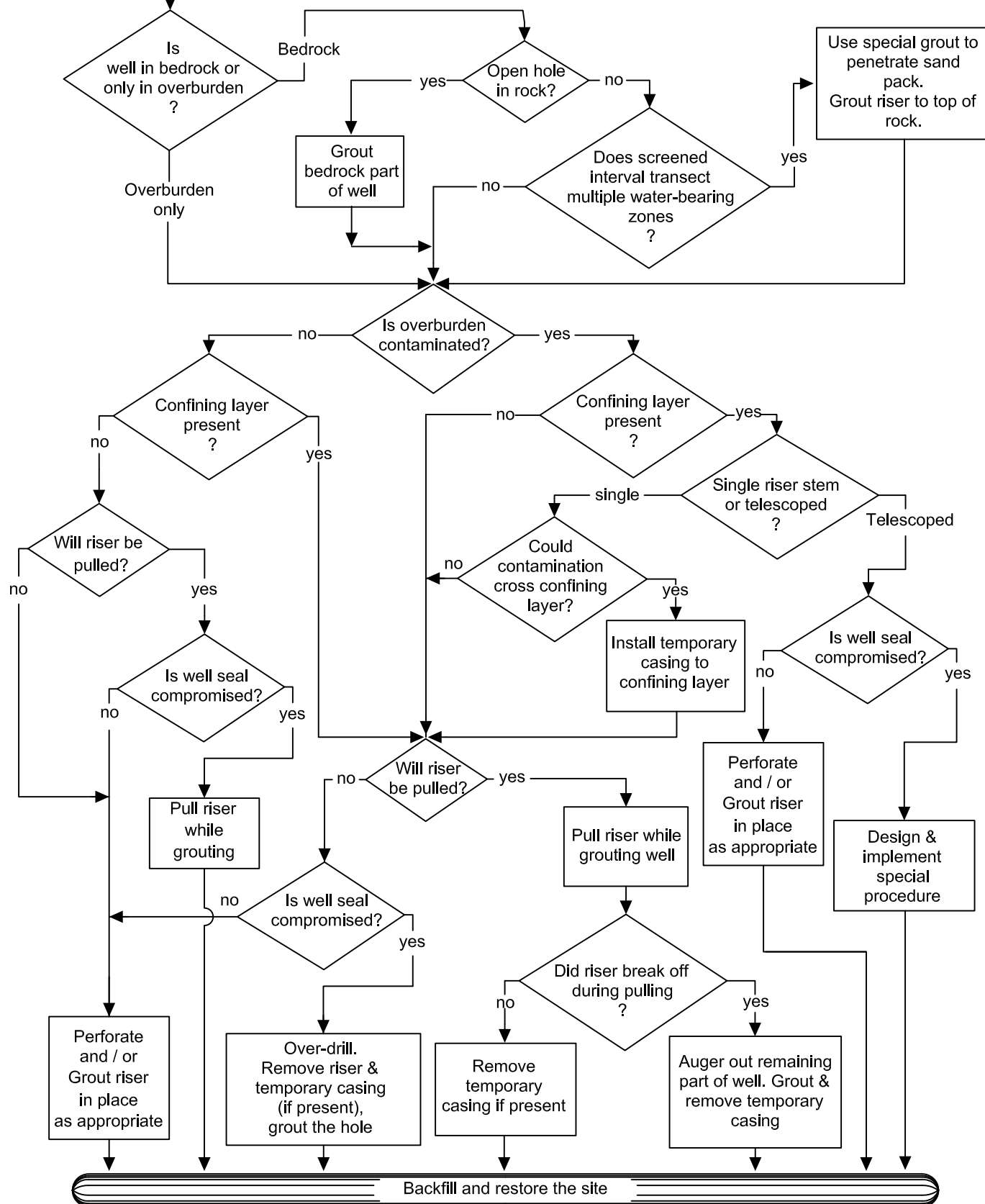


FIGURE 2

FIGURE 3

WELL DECOMMISSIONING RECORD

WELL DECOMMISSIONING RECORD

Site Name:	Well I.D.:
Site Location:	Driller:
Drilling Co.:	Inspector:
	Date:

DECOMMISSIONING DATA (Fill in all that apply)		WELL SCHEMATIC*		
<u>OVERDRILLING</u>		Depth (feet)		
Interval Drilled				
Drilling Method(s)				
Borehole Dia. (in.)				
Temporary Casing Installed? (y/n)				
Depth temporary casing installed				
Casing type/dia. (in.)				
Method of installing				
<u>CASING PULLING</u>				
Method employed				
Casing retrieved (feet)				
Casing type/dia. (in)				
<u>CASING PERFORATING</u>				
Equipment used				
Number of perforations/foot				
Size of perforations				
Interval perforated				
<u>GROUTING</u>				
Interval grouted (FBLS)				
# of batches prepared				
For each batch record:				
Quantity of water used (gal.)				
Quantity of cement used (lbs.)				
Cement type				
Quantity of bentonite used (lbs.)				
Quantity of calcium chloride used (lbs.)				
Volume of grout prepared (gal.)				
Volume of grout used (gal.)				

COMMENTS:

* Sketch in all relevant decommissioning data, including:
interval overdrilled, interval grouted, casing left in hole,
well stickup, etc.

APPENDIX A - REPORTS

APPENDIX A1 - INSPECTOR'S DAILY REPORT

APPENDIX A2 - PROBLEM IDENTIFICATION REPORT

APPENDIX A3 - CORRECTIVE MEASURES REPORT

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Inspector's Daily Report

CONTRACTOR:

ADDRESS:

TELEPHONE:

LOCATION

FROM

TO

WEATHER

TEMP

A.M.

P.M.

DATE

CONTRACTOR'S WORK FORCE AND EQUIPMENT											
DESCRIPTION	H	#	DESCRIPTION	H	#	DESCRIPTION	H	#	DESCRIPTION	H	#
Field Engineer						Equipment			Front Loader Ton		
Superintendent			Ironworker			Generators			Bulldozer		
						Welding Equip.					
Laborer Foreman			Carpenter								
Laborer									Backhoe		
Operating Engineer			Concrete Finisher								
Carpenter						Paving Equip. & Roller					
						Air compressor					

SEE REVERSE SIDE FOR SKETCH YES ☐ NO ☐

WORK PERFORMED:

PAY ITEMS

CONTRACT		STA		DESCRIPTION	QUANTITY	REMARKS
Number	ITEM	FROM	TO			

TEST PERFORMED:

PICTURES TAKEN:

QA PERSONNEL

SIGNATURE

VISITORS:

REPORT NUMBER

SHEET _____ Of _____

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PROBLEM IDENTIFICATION REPORT

Date _____

Project _____ Job Number _____

Contractor _____

Subject _____

Day

Su	M	T	W	Th	F	Sa

Sky/Precip.	Clear	Partly Cloudy	Cloudy	Rainy	Snow
TEMP.	<32F	32-40F	40-70F	70-80F	80-90F
WIND	No	Light	Strong		
HUMIDITY	Dry	Mod.	Humid		

PROBLEM DESCRIPTION Reference Daily Report Number 1: _____**PROBLEM LOCATION - REFERENCE TEST RESULTS AND LOCATION** (Note: Use sketches on back of form as appropriate):**PROBABLE CAUSES:** _____**SUGGESTED CORRECTIVE MEASURES:** _____**APPROVALS:****QA ENGINEER:** _____**PROJECT MANAGER:** _____

Distribution:

1. Project Manager
2. Field Office
3. File
4. Owner

QA Personnel
Signature: _____

MEETINGS HELD AND RESULTS

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on its right side, suggesting it's resting on a surface.

REMARKS

[illegible]

REFERENCES TO OTHER FORMS

SKETCHES

[illegible]

SAMPLE LOG

SAMPLE NUMBER

APPROXIMATE LOCATION OF STOCKPILE

NUMBER OF STOCKPILE

DATE OF COLLECTION

CLIMATIC CONDITIONS

FIELD OBSERVATION

CORRECTIVE MEASURES REPORT

Date _____

Project _____ Job Number _____

Contractor _____

Subject _____

Day

Su	M	T	W	Th	F	Sa

Sky/Precip.	Clear	Partly Cloudy	Cloudy	Rainy	Snow
TEMP.	<32F	32-40F	40-70F	70-80F	80-90F
WIND	No	Light	Strong		
HUMIDITY	Dry	Mod.	Humid		

CORRECTIVE MEASURES TAKEN (Reference Problem Identification Report No.): _____

RETESTING LOCATION: _____

SUGGESTED METHOD OF MINIMIZING RE-OCCURRENCE: _____

SUGGESTED CORRECTIVE MEASURES: _____

APPROVALS:

QA ENGINEER: _____

PROJECT MANAGER: _____

Distribution:

1. Project Manager
2. Field Office
3. File
4. Owner

QA Personnel

Signature: _____

APPENDIX C





PSC - Chemical Pollution Control, LLC of New York

Semiannual Groundwater Monitoring Program Report

April 2014 Sampling Event

Bay Shore Facility
(NYSDEC Permit No: 1-4728-00086/00002)



JUNE 2014



DVIRKA
AND
BARTILUCCI
CONSULTING ENGINEERS

A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.



June 18, 2014

ELECTRONIC SUBMISSION

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New York State Department of Environmental Conservation
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**Subject: PSC-Chemical Pollution Control, LLC of New York
Bay Shore, NY
EPA ID Number NYD082785429
NYSDEC Permit Number 1-4728-00086/00002**

Dear Mr. Momberger:

Enclosed, please find an electronic copy of the document entitled:

*Semiannual Groundwater Monitoring Program Report
April 2014 Sampling Event
For
PSC-Chemical Pollution Control, LLC of New York
Bay Shore, New York*

If you have any questions, please contact me at (425) 227-6170.

Sincerely,

Andy Maloy
Director, Environmental Liability Management

Enclosure

cc: B. Veith (D&B)

**SEMIANNUAL GROUNDWATER MONITORING PROGRAM REPORT
APRIL 2014 SAMPLING EVENT**

**PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
BAY SHORE, NEW YORK
NYSDEC PERMIT NO: 1-4728-00086/00002**

Prepared for:

**PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
BAY SHORE, NEW YORK**

Prepared by:

**DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
WOODBURY, NEW YORK**

JUNE 2014

**SEMIANNUAL GROUNDWATER MONITORING PROGRAM REPORT
APRIL 2014 SAMPLING EVENT
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
BAY SHORE, NEW YORK**

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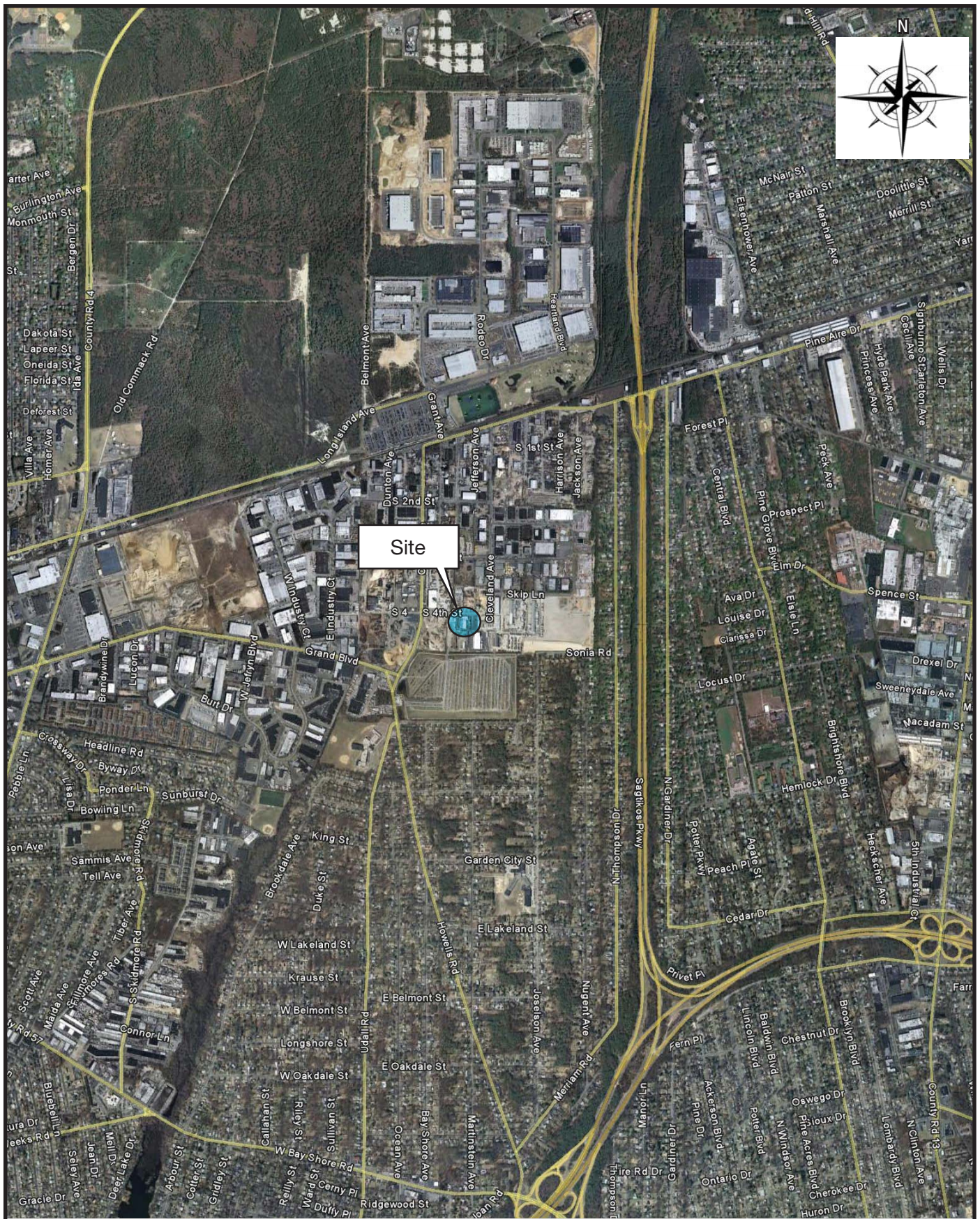
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1.0 INTRODUCTION

This report presents the groundwater sample results for the April 2014 Sampling Event conducted as part of the New York State Department of Environmental Conservation (NYSDEC) required Semiannual Groundwater Monitoring Program at the PSC - Chemical Pollution Control, LLC of New York (CPC) Bay Shore facility. The facility is located at 120 South Fourth Street in Bay Shore, Suffolk County, New York (see Figure 1-1).

The CPC Bay Shore facility is a commercial hazardous waste treatment, storage and disposal facility that accepted and managed a variety of hazardous and nonhazardous waste including acids, alkalis, flammables, cyanides, sulfides, oxidizers, toxic waste, oily waste, photochemical waste, laboratory packaged waste, universal waste and polychlorinated biphenyl (PCB) waste under its existing Part 360/373 Permit (NYSDEC Permit No. 1-4728-00086/00002). Module V (“General Groundwater Monitoring Condition”) of CPC’s Part 360/373 Permit, which became effective on June 22, 2010, requires CPC to prepare and implement a Groundwater Monitoring Plan (GWMP). CPC retained the services of Dvirka and Bartilucci Consulting Engineers (D&B) to perform the April 2014 Semiannual Groundwater Monitoring Program sampling event in accordance with the NYSDEC-approved GWMP dated January 2010.

It should be noted that CPC has closed all of the hazardous waste storage areas formerly located at the Bay Shore facility in accordance with the requirements of 6 NYCRR Part 373, and has demolished and removed the facility building and support structures. As required by the NYSDEC and the facility’s Part 373 Permit, CPC implemented a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) in August and September 2010, with supplemental soil sampling completed in October 2010. The existing on-site groundwater monitoring wells were sampled by D&B during performance of the RFI in August 2010 and the results of that sampling were presented in the RFI Report dated November 2010. The analytical results of the groundwater sampling completed by D&B during the RFI serve as a baseline for the Semiannual Groundwater Monitoring Program.



The Semiannual Groundwater Monitoring Program is being performed in order to monitor groundwater flow direction and quality emanating from the CPC Bay Shore facility. This Semiannual Groundwater Monitoring Program Report includes a discussion of the sample locations, sampling procedures, laboratory analyses, field and analytical results, data validation, groundwater level measurements and flow direction. In addition, this report includes a comparison of the analytical results of the Semiannual Groundwater Monitoring Program April 2014 Sampling Event to the applicable New York State groundwater quality standards and guidelines, as well as the results obtained during the previous sampling events.

It should be noted that, as part of the Interim Corrective Measures (ICM) program and subsurface RCRA closure program undertaken at the facility in December 2012 through July 2013, approximately 3,000 cubic yards of impacted soil were excavated and removed from the facility for proper off-site disposal. Included in this soil removal were areas of VOC impacted soil formerly located upgradient of existing monitoring wells MW-3R and MW-4R and former monitoring wells MW-03, MW-04 and MW-09.

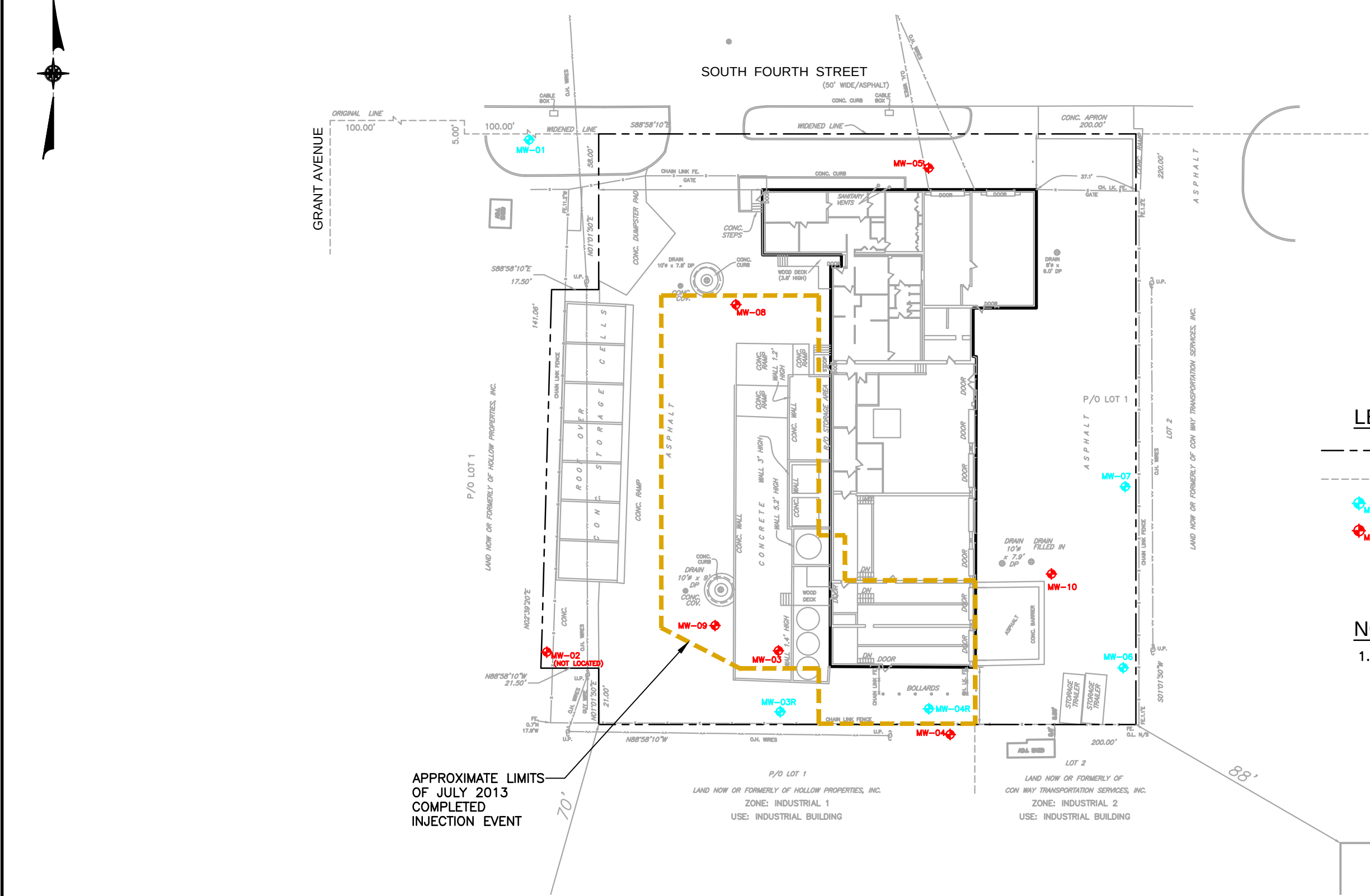
In July 2013, following the removal of impacted soil, an in-situ chemical oxidation (ISCO) injection program was performed at the facility to reduce the concentrations of certain chlorinated volatile organic compounds (VOCs) observed in groundwater during historical sampling events associated with the Semiannual Groundwater Monitoring Program. During the injection program, approximately 19,974 gallons of a 2% sodium permanganate solution were injected at 80 locations at targeted horizons of 10 to 14 feet and 16 to 20 feet below grade. The injection activities were performed in the 10,100-square-foot area to the west of the former building (see Figure 2-1 of this report).

2.0 SAMPLING LOCATIONS

Five monitoring wells were sampled at the CPC Bay Shore facility as part of the Semiannual Groundwater Monitoring Program April 2014 Sampling Event. These five wells are identified as monitoring wells MW-01, MW-03R, MW-04R, MW-06 and MW-07 as shown on Figure 2-1. Each monitoring well location indicated on Figure 2-1 includes a single monitoring well of varying depth and screened interval. Well construction information for each well sampled as part of this program is summarized in Table 2-1.

It should be noted that historically, 10 monitoring wells were located at the CPC Bay Shore facility (i.e., MW-01 through MW-10). As indicated in the RFI Report dated November 2010 (previously submitted to the NYSDEC), groundwater monitoring well MW-02 could not be located and is considered destroyed. As a result, nine monitoring wells were historically sampled as part of the Semiannual Groundwater Monitoring Program. However, as previously indicated, CPC has closed all of the hazardous waste storage areas formerly located at the facility in accordance with the requirements of 6 NYCRR Part 373, and has demolished and removed the former facility building and support structures. CPC is currently in the process of completing corrective action at the facility in accordance with the requirements of its Part 360/373 Permit and the NYSDEC-approved Interim Corrective Measures Work Plan dated January 2012 and has submitted an Interim Corrective Measures Final Report dated December 2013. In order to facilitate performance of the corrective action, below grade Resource Conservation and Recovery Act (RCRA) closure and facility demolition project, former monitoring wells MW-03, MW-04, MW-05, MW-08, MW-09 and MW-10 were decommissioned and removed on September 24 and 25, 2012 in accordance with the NYSDEC's CP-43 ("Groundwater Monitoring Well Decommissioning Policy"). In addition, two new downgradient wells (i.e., MW-03R and MW-04R) were installed on August 2, 2012 to replace decommissioned downgradient wells MW-03 and MW-04. The location of each well currently and formerly located at the facility is shown on Figure 2-1 and each well's construction information is summarized on Table 2-1.

F:\2786\2786-PL01-FIG 2-1.dwg, FIG 2-1, 6/17/2014 3:15:12 PM, kalesius



LEGEND:

- PROPERTY LINE
- ADJACENT LOT LINES
- MW-01 MONITORING WELL
- MW-10 DECOMMISSIONED MONITORING WELL

NOTE:

- ON-SITE BUILDING AND STRUCTURES HAVE BEEN DEMOLISHED AND REMOVED AS PART OF THE COMPLETED INTERIM CORRECTIVE MEASURES WORK PLAN, AND ARE ONLY SHOWN FOR REFERENCE.

Table 2-1

**PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
SEMIANNUAL GROUNDWATER MONITORING PROGRAM
SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS**

Well Designation	Date Completed	Well Diameter (inches)	Screen Type	Total Depth (feet below land surface)	Screen Setting (elevation relative to mean sea level)		Height of Measuring Point (feet relative to land surface)	Elevation of Measuring Point (feet above mean sea level)
					(feet below land surface)			
Existing Monitoring Wells:								
MW-01	May 1987	4	PVC ⁽¹⁾	18	8-18	52.19 - 42.19	-0.30	59.89
MW-03R	August 2012	2	PVC	20	5-20	56.95 - 41.95	-0.22	61.73
MW-04R	August 2012	2	PVC	20	5-20	56.83 - 41.83	-0.25	61.58
MW-06	November 1994	4	PVC ⁽¹⁾	22	7-22	54.97 - 39.97	-0.56	61.41
MW-07	November 1994	4	PVC ⁽¹⁾	22	7-22	54.84 - 39.84	-0.40	61.44
Historical Monitoring Wells:								
MW-03	May 1987	4	PVC ⁽¹⁾	18	8-18	54.10 - 44.10	-0.95	61.15
MW-04	May 1987	4	PVC ⁽¹⁾	18	8-18	53.52 - 43.52	-0.91	60.61
MW-05	May 1987	4	PVC ⁽¹⁾	18	8-18	53.58 - 42.58	-0.45	61.13
MW-08	April 1997	2	PVC	30	5-30	55.91 - 30.91	-0.05	60.86
MW-09	April 1997	2	PVC	30	5-30	56.01 - 31.01	-0.18	60.83
MW-10	April 1997	2	PVC	30	5-30	56.01 - 31.01	-0.17	60.84

Notes:

PVC: Polyvinyl chloride.

⁽¹⁾ Assumed based upon available information.

(Sources: Arcadis Current Conditions Report, November 22, 2006; PSC Environmental Services, LLC Groundwater Monitoring Plan, January 8, 2010; D&B RFI and Focused CMS, November 2010; D&B Well Construction Logs, August 2, 2012).

3.0 SAMPLING PROCEDURES AND ANALYSES

The sampling procedures utilized for the collection of the groundwater samples were implemented in accordance with the protocols described in the NYSDEC-approved Groundwater Monitoring Plan (GWMP) dated January 2010. Dedicated and disposable sampling equipment was used whenever possible in accordance with the GWMP. Field decontamination of the non-disposable equipment was performed between sampling locations. The following sections provide a brief discussion of the procedures used during groundwater level measurements, groundwater sampling and sample analysis.

3.1 Groundwater Level Measurement Procedures

Synoptic water level measurements were obtained from the monitoring wells to determine the volume of standing water in each well for purging purposes, as well as for determining groundwater elevations and flow direction. Groundwater level measurements were obtained from a surveyed measuring point on each well using an electronic water level indicator to an accuracy of 0.01 foot. Prior to measuring the water level, each well was allowed to vent to the atmosphere for approximately two minutes.

All monitoring wells were checked for the presence of light non-aqueous phase liquid (LNAPL) and dense non-aqueous phase liquid (DNAPL) using an oil/water interface probe. In addition, headspace readings were recorded in each well using a calibrated photoionization detector (PID). The Field Observation Logs presented in Appendix B-1 and Table 4-1 provide the headspace readings collected during the sampling program. A discussion of the groundwater level measurements, LNAPL/DNAPL results and groundwater flow direction is provided in Section 6.0 of this report.

In addition, prior to sampling each well, D&B performed a visual inspection to verify the physical condition of the well at the ground surface. The results of these inspections are documented on Well Condition Reports provided in Appendix B-3. The monitoring wells were determined to be suitable for sampling purposes.

3.2 Sampling Procedures

The monitoring wells were sampled via low-flow sampling techniques (500 ml/min or less) utilizing a low-flow bladder pump with disposable tubing to purge and sample each well. During the well purging process, field measurements of pH, temperature, specific conductivity, oxidation reduction potential (ORP), dissolved oxygen and turbidity were recorded using a calibrated Horiba U52 water quality meter with flow-through cell. Groundwater samples were collected in precleaned, laboratory-supplied sample containers after the field parameter values had stabilized as required by the GWMP. The sample containers were labeled and placed in a cooler with bagged ice sufficient to cool the samples to 4 degrees Celsius.

All decontamination water and purge water generated during the sampling activities were containerized in a DOT-approved 55-gallon drum and stored on-site prior to characterization and off-site disposal. The drum was sealed at the end of the workday and properly labeled for disposal. All non-dedicated sampling equipment (e.g., low-flow bladder pump) was properly decontaminated between sampling locations and all disposable sampling equipment was properly disposed following its one-time use.

All appropriate quality assurance/quality control (QA/QC) samples were collected in accordance with the GWMP, including one field blank, one matrix spike/matrix spike duplicate (MS/MSD), one blind duplicate and one trip blank.

The analytical results of the samples are provided in Appendix A and discussed in Section 4.0 of this report. Field forms for the April 2014 Sampling Event, including field observation logs and daily equipment calibration logs, are provided in Appendices B-1 and B-2, respectively, and Chain of Custody forms are provided in Appendix C.

3.3 Sample Analyses

In accordance with the GWMP, each groundwater sample was analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260, TCL semivolatile organic compounds (SVOCs) by USEPA Method 8270 and priority pollutant metals by USEPA Method 6010C/7470A. However, in order to support the groundwater remediation activities and consistent with the NYSDEC's approval of the January 2012 Interim Corrective Measures Work Plan, the list of metals utilized for the April 2014 Sampling Event was expanded to include Target Analyte List (TAL) metals. In addition, each groundwater sample was analyzed for alkalinity by USEPA Method SM 2320.

4.0 ANALYTICAL RESULTS

4.1 Field Parameters

Table 4-1 provides a summary of the final field parameter values and field data measured for the April 2014 Sampling Event.

4.2 Monitoring Wells

As indicated previously, existing monitoring wells MW-01, MW-03R, MW-04R, MW-06 and MW-07 were sampled during the April 2014 Sampling Event for laboratory analysis for TCL VOCs, TCL SVOCs, TAL metals and alkalinity.

The analytical results of the groundwater samples collected from the monitoring wells, compared to the previous sampling results and the NYSDEC's Class GA Groundwater Standards and Guidance Values, are provided in Appendix A. Figure 4-1 presents a groundwater sample location map overlain with a summary of the groundwater data for the wells where exceedances of the Class GA Groundwater Standards/Guidance Values were detected during the April 2014 Sampling Event. Provided below is a brief summary of the analytical results.

Volatile Organic Compounds

The results of the VOC analyses performed on the groundwater samples are presented in Appendix A-1. All of the VOCs analyzed for were either not detected or were detected at concentrations below their respective Class GA Groundwater Standard/Guidance Value, with the exception of the following chlorinated VOC (CVOC):

- Tetrachloroethene (PCE) was detected at a concentration of 6.5 ug/l in sample MW-03R which exceeds the Class GA Groundwater Standard of 5 ug/l.

Table 4-1

**PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
SEMIANNUAL GROUNDWATER MONITORING PROGRAM
APRIL 2014 SAMPLING EVENT
SUMMARY OF FINAL FIELD PARAMETER RESULTS AND FIELD DATA**

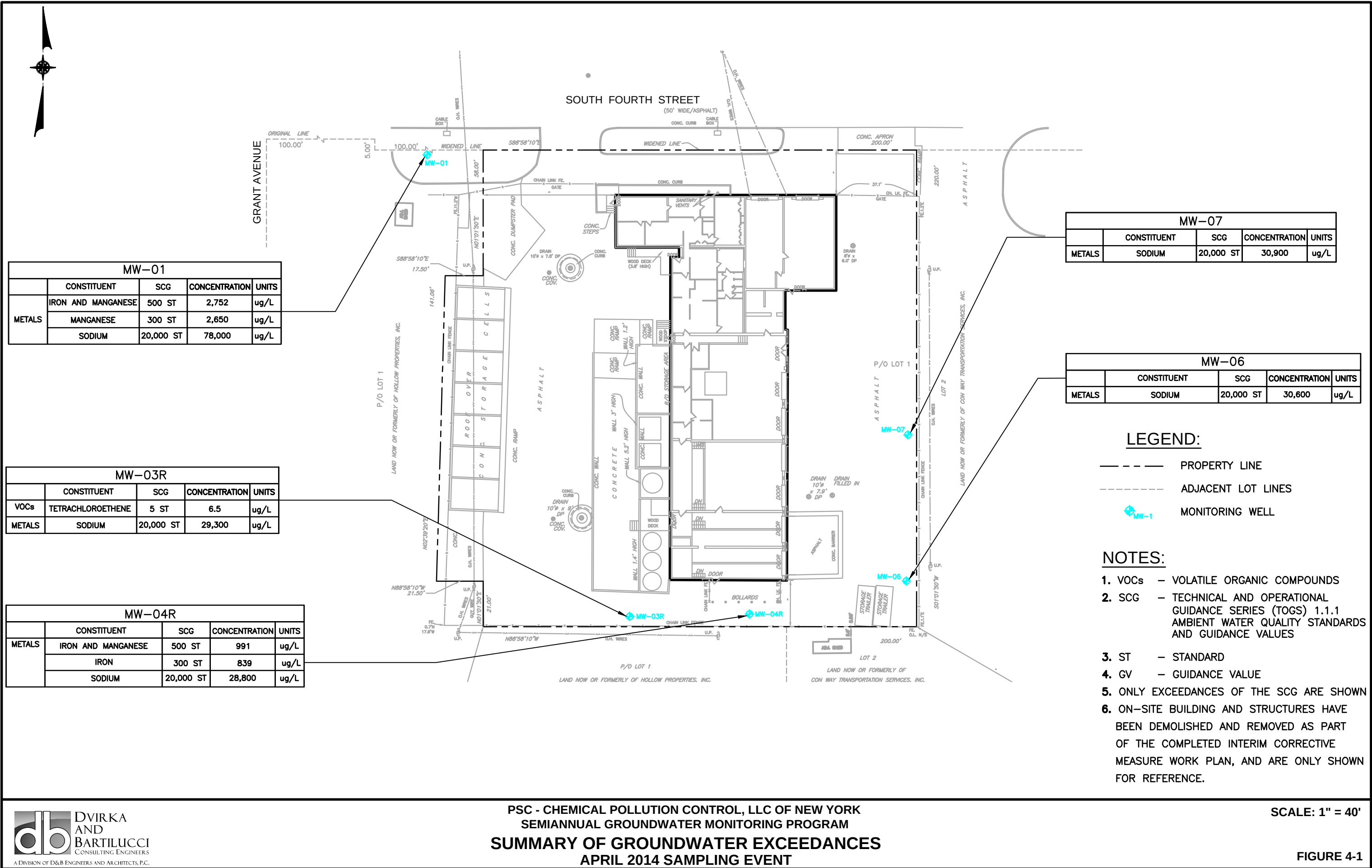
Monitoring Well	pH (Standard Units)	Temperature (°C)	Specific Conductance (ms/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/l)	PID Readings (ppm)	Purging Method	Groundwater Elevation April 22, 2014 (feet above msl)
MW-01	6.63	13.10	0.702	0	147	3.70	0.0	Low-flow bladder pump	50.23
MW-03R	6.48	11.24	0.424	0	178	3.55	0.0	Low-flow bladder pump	49.88
MW-04R	6.48	10.53	0.487	0	179	5.10	0.1	Low-flow bladder pump	49.78
MW-06	6.73	11.63	0.524	0	146	2.86	0.0	Low-flow bladder pump	49.70
MW-07	6.69	12.73	0.562	0	141	2.43	0.0	Low-flow bladder pump	49.75

Monitoring Well	Initial Depth to Water (in feet)	Depth of Well (in feet)	Well Diameter (inches)	Volume of Water Purged (gallons)	Date of Sampling	Time of Sampling	Sampler's Initials	Weather Condition
MW-01	9.66	17.00	4	4	April 22, 2014	3:35 p.m.	KR	Partly cloudy
MW-03R	11.85	20.10	2	3.2	April 22, 2014	8:45 a.m.	KR	Partly cloudy
MW-04R	11.80	20.10	2	3.3	April 22, 2014	10:35 a.m.	KR	Partly cloudy
MW-06	11.71	21.50	4	6.5	April 22, 2014	12:25 p.m.	KR	Partly cloudy
MW-07	11.69	21.40	4	6.5	April 22, 2014	2:05 p.m.	KR	Partly cloudy

°C: Degrees Celsius
DO: Dissolved oxygen
mg/l: Milligrams per liter
msl: Mean sea level
ms/cm: Millisiemens per centimeter

mV: Millivolt
NTU: Nephelometric Turbidity Unit
ORP: Oxidation Reduction Potential
PID: Photoionization detector
ppm: Parts per million

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As shown on Figure 4-1, well MW-03R is located along the southern, downgradient boundary of the facility.

The CVOC detected during the April 2014 Sampling Event was also detected during previous sampling events. Table 4-2 summarizes the total VOC concentrations for MW-03, MW-03R, MW-04, MW-04R, MW-06, MW-09 and MW-10, which are the seven monitoring wells located at the facility that have historically exhibited CVOC concentrations exceeding the Class GA Groundwater Standards since the August 2010 Sampling Event. As indicated in the table, the total VOCs concentration decreased significantly for MW-04R and MW-06, and remained fairly consistent for MW-03R, as compared to the results of the September 2013 Sampling Event.

Table 4-2
SUMMARY OF TOTAL VOCs

Monitoring Well	August 2010	April 2011	Sept. 2011	April 2012	Sept. 2012	April 2013	Sept. 2013	April 2014
MW-03	95.7	19	52.8	28.7	9.6	decom.	decom.	decom.
MW-03R	--	--	--	--	7.3	30.2	8.2	8.5
MW-04	646.4	104.5	284.8	22.1	98	decom.	decom.	decom.
MW-04R	--	--	--	--	180	106.5	50.01	3.3
MW-06	ND	3.9	7.9	2.9	5.9	9.21	22.9	ND
MW-09	68.5	26.8	41.8	6.1	6.2	decom.	decom.	decom.
MW-10	2.9	1.0	19.3	5.3	4.48	decom.	decom.	decom.

Notes:

Results are reported in ug/l.

-- : Well not sampled since it was not installed until August 2012.

decom.: Well decommissioned in late September 2012.

ND: Not detected.

Semivolatile Organic Compounds

The results of the SVOC analyses performed on the groundwater samples are presented in Appendix A-2. All of the SVOCs analyzed for were either not detected or were detected at concentrations below their respective Class GA Groundwater Standard/Guidance Value.

Target Analyte List Metals and Alkalinity

The results of the TAL metal and alkalinity analyses performed on the groundwater samples are presented in Appendix A-3. All of the metals analyzed for were either not detected or were detected at concentrations below their respective Class GA Groundwater Standard/Guidance Value with the exception of the following:

- Iron was detected at a concentration of 839 ug/l in monitoring well MW-04R which exceeds the Class GA Groundwater Standard of 300 ug/l.
- Manganese was detected at a concentration of 2,650 ug/l in monitoring well MW-01 which exceeds the Class GA Groundwater Standard of 300 ug/l.
- Sodium was detected at concentrations of 78,000 ug/l, 29,300 ug/l, 28,800 ug/l, 30,600 ug/l and 30,900 ug/l in monitoring wells MW-01, MW-03R, MW-04R, MW-06 and MW-07, respectively, which exceed the Class GA Groundwater Standard of 20,000 ug/l.
- Total iron and manganese was detected at concentrations of 2,752 ug/l and 991 ug/l, in monitoring wells MW-01 and MW-04R, respectively, which exceed the Class GA Groundwater Standard of 500 ug/l.

Alkalinity ranged in concentration from 130 mg/l in monitoring well MW-04R to a maximum of 160 mg/l in monitoring wells MW-03R and MW-07. There is no Class GA Groundwater Standard or Guidance Value for alkalinity.

5.0 DATA VALIDATION

Five groundwater samples, one blind duplicate, one matrix spike/matrix spike duplicate (MS/MSD) set, one field blank and one trip blank were collected as part of the April 2014 Sampling Event performed at the CPC Bay Shore facility. All samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), Target Analyte List (TAL) metals and alkalinity. Sample analysis was performed in accordance with SW-846 methods. The laboratory analyses were performed by Spectrum Analytical, Inc. of North Kingstown, Rhode Island, a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) laboratory, and reported in data package N0633.

The data package submitted by the analytical laboratory was validated in accordance with NYSDEC quality assurance/quality control (QA/QC) requirements, the contract requirements and the Groundwater Monitoring Plan dated January 2010. A copy of the Data Validation Checklist is provided in Appendix D. All samples were analyzed within the method specified holding times. The following requirements were outside limits and required qualification of the data:

- The percent differences (%Ds) for iodomethane was above QC limits in the continuing calibration associated with all samples except MW-01. Iodomethane was qualified as an estimated detection limit (UJ) in the associated samples.
- Di-n-butylphthalate was detected in the method blank and field blank. Di-n-butylphthalate was qualified as non-detect (UB) in samples MW-04R, MW-06, BLIND DUPLICATE and MW-07.
- Barium, calcium, cobalt, nickel, sodium, vanadium and zinc were detected in the field blank, preparation blank and/or initial calibration blank above the instrument detection limit. The following metals were qualified as non-detect (UB): cobalt and vanadium in samples MW-04R and MW-06, and nickel and zinc in all samples.

One blind duplicate sample was collected from well MW-04R. In addition, one matrix spike/matrix spike duplicate set was collected from well MW-03R.

No other issues were found with the sample results and all results are deemed valid and usable for environmental assessment purposes as qualified above. Data Validation Forms completed for the April 2014 Sampling Event are provided in Appendix D.

6.0 GROUNDWATER LEVEL MEASUREMENTS AND FLOW DIRECTION

Groundwater level measurements were obtained by D&B on April 22, 2014 from the five monitoring wells located at the CPC Bay Shore facility. The results of these measurements are presented in Table 6-1. Neither light non-aqueous phase liquid (LNAPL) nor dense non-aqueous phase liquid (DNAPL) was detected or observed in any of the monitoring wells during this sampling event. The following section provides information on the groundwater contours derived from the groundwater level measurements.

6.1 Water Table Contours

A water table elevation contour map prepared from the measurements obtained on April 22, 2014 is presented as Figure 6-1. The wells utilized in the preparation of the contour map are screened at or near the water table in the Upper Glacial aquifer.

Based on a review of the groundwater level elevation data collected from the monitoring wells, the direction of the horizontal component of groundwater flow in the Upper Glacial aquifer is predominantly southeast, which is consistent with flow conditions previously mapped. In addition, the groundwater flow velocity was calculated utilizing Darcy's Law to be approximately 1.5 feet per day (see Table 6-2).

Table 6-1

**PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
SEMIANNUAL GROUNDWATER MONITORING PROGRAM
MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS
APRIL 22, 2014**

Well Designation	Measuring Point Elevation (feet above msl)	Depth to Water from Measuring Point (feet)	Groundwater Elevation (feet above msl)
MW-01	59.89	9.66	50.23
MW-03R	61.73	11.85	49.88
MW-04R	61.58	11.80	49.78
MW-06	61.41	11.71	49.70
MW-07	61.44	11.69	49.75

Note: LNAPL/DNAPL was not detected in any of the monitoring wells during the sampling event.

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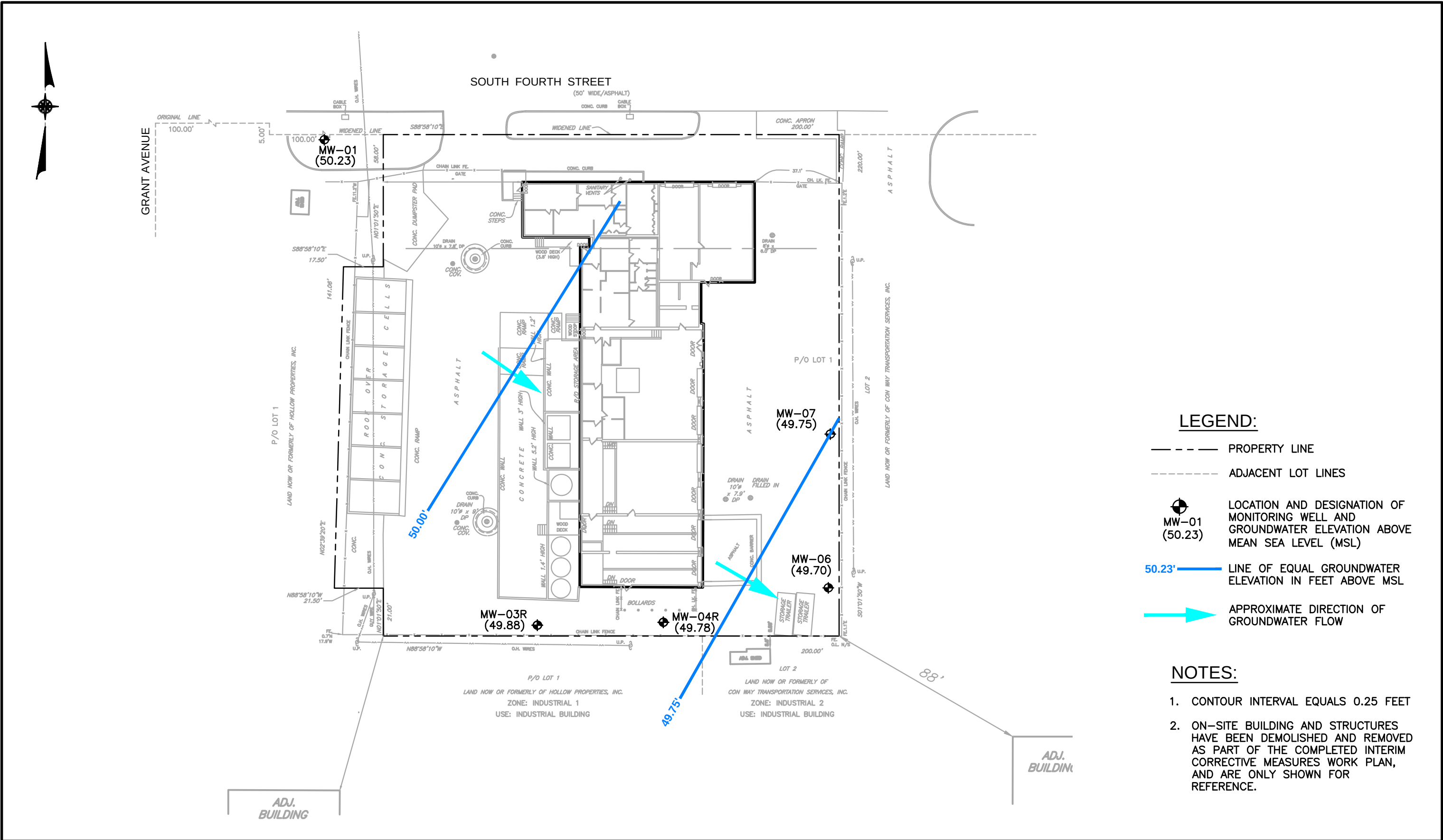


Table 6-2

**PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
SEMIANNUAL GROUNDWATER MONITORING PROGRAM
APRIL 2014 SAMPLING EVENT**

Calculation of Groundwater Flow Velocity

1. Darcy's Law:

$$V = Ki/n$$

Where:

V = calculated groundwater velocity

K = hydraulic conductivity

i = hydraulic gradient

n = effective porosity

K = 0.1 cm/sec (typical value for well sorted sands and glacial outwash)

n = 32 % (typical value for medium sands)

2. Hydraulic Gradient Calculation

To calculate hydraulic gradient, the change in water table elevation was determined using water level measurements taken from MW-1 and MW-4R:

MW-01 GW El = 50.23 feet above mean sea level (amsl)

MW-04R GW El = 49.78 feet amsl

Distance between MW-01 and MW-04R = 260 feet

$$i = 0.00173 \text{ ft/ft}$$

3. Groundwater Velocity Calculation:

$$V = Ki/n$$

$$V = \underline{1.5} \text{ ft/day}$$

7.0 CONCLUSIONS AND RECOMMENDATIONS

The following sections present the conclusions and recommendations of the Semiannual Groundwater Monitoring Program based on the April 2014 Sampling Event.

7.1 Conclusions

Groundwater Flow

Based on the groundwater elevation measurements obtained during the April 2014 Sampling Event and the water table elevation contour map prepared for the site, groundwater flow is predominantly in a southeasterly direction. These results are consistent with previous elevation measurements obtained and maps prepared for the site.

Monitoring Wells

Based on a comparison of the September 2013 and April 2014 sample results, total VOC concentrations detected during the April 2014 Sampling Event decreased in wells MW-04R (50.01 ug/l to 3.3 ug/l) and MW-06 (22.9 ug/l to non-detect). Total VOC concentrations for wells MW-01, MW-03R and MW-07 remained consistent between the September 2013 and April 2014 sample results. The total VOC concentrations for these wells in April 2014 were non-detect, 8.5 ug/l and 2.9 ug/l, respectively. Tetrachloroethene (PCE) detected in well MW-03R was the only VOC detected that exceeded its respective Class GA Groundwater Standard (6.5 ug/l versus 5 ug/l).

Iron, manganese, sodium and total iron and manganese were detected at concentrations above their respective Class GA Groundwater Standards in one or more of the five groundwater monitoring well samples, including the sample collected from MW-01 (upgradient well). Typically, these metals are naturally elevated in Long Island groundwater and have historically been observed in the facility's groundwater samples. In addition, these metals were not detected at concentrations above the Unrestricted Use Soil Cleanup Objectives (SCOs) in the soil samples

collected and analyzed during the completion of the RFI. Therefore, it appears that the concentrations of these metals in groundwater are not a result of these metals leaching from soil but rather a result of natural conditions.

Chromium and selenium have returned to their pre-injection concentrations in groundwater at the facility and were detected at concentrations below the Class GA Groundwater Standards. As suspected, these two metals were likely temporarily mobilized by the ISCO program and appear to have returned to their typical concentrations following the passage of sufficient time. In addition, sodium appears to have returned to its pre-injection concentrations as well.

Historically, groundwater in the vicinity of MW-4 and MW-4R has exhibited the highest concentrations of VOCs at the facility. It appears the removal of VOC-impacted soil formerly located hydraulically upgradient of this location coupled with the ISCO program has significantly reduced the VOC impact observed in this location. Total VOC concentrations in this area have been reduced by approximately 98% and all individual VOC concentrations are now below their respective Class GA Groundwater Standards. Based on the above, it appears that the remediation activities were successful in not only reducing soil concentrations, but also reducing the VOC impact to groundwater quality.

7.2 Recommendations

Based upon the results of the April 2014 Sampling Event, the monitoring frequency should remain semiannual. Groundwater monitoring should continue through the term of the facility's Part 373 Permit, which is set to expire in June 2015. If VOC concentrations in groundwater remain fairly consistent with the April 2014 Sampling Event, then the facility should be delisted from the New York Registry of Inactive Hazardous Waste Site and the corrective action requirements specified by the facility's Part 373 Permit should be determined to be satisfied.

APPENDIX A-1

MONITORING WELL SAMPLE RESULTS VOLATILE ORGANIC COMPOUNDS

Table A-1
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Volatile Organic Compounds

Sample ID	MW-01	MW-01	MW-01	MW-01	MW-01	MW-01	CONTRACT	NYSDEC CLASS GA
Date Collected	8/19/2010	4/26/2011	9/28/2011	4/12/2012	9/7/2012	4/5/2013	REQUIRED	GROUNDWATER
Dilution Factor	1	1	1	1	1	1	DETECTION	STANDARDS/
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	LIMIT	GUIDANCE VALUES
							(ug/l)	(ug/l)
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	5	5
1,1,1-Trichloroethane	U	U	U	U	U	U	5	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	5	5
1,1,2-Trichloroethane	U	U	U	U	U	U	5	1
1,1-Dichloroethane	U	U	U	U	U	U	5	5
1,1-Dichloroethene	U	U	U	U	U	U	5	5
1,1-Dichloropropene	U	U	U	U	U	U	5	5
1,2,3-Trichlorobenzene	U	U	U	U	U	U	5	5
1,2,3-Trichloropropane	U	U	U	U	U	U	5	0.04
1,2,4-Trichlorobenzene	U	U	U	UJ	U	UJ	5	5
1,2,4-Trimethylbenzene	U	U	U	UJ	U	U	5	5
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	5	0.04
1,2-Dibromoethane (Ethylene Dibromide)	U	U	U	UJ	U	UJ	5	0.0006
1,2-Dichlorobenzene	U	U	U	U	U	U	5	3
1,2-Dichloroethane	U	U	U	U	U	U	5	0.6
1,2-Dichloropropane	U	U	U	U	U	U	5	1
1,3,5-Trimethylbenzene (Mesitylene)	U	U	U	U	U	U	5	5
1,3-Dichlorobenzene	U	U	U	U	U	U	5	3
1,3-Dichloropropane	U	U	U	U	U	U	5	5
1,4-Dichlorobenzene	U	U	U	U	U	U	5	3
2,2-Dichloropropane	U	U	UJ	U	UJ	U	5	5
2-Chlorotoluene	U	U	U	U	U	U	5	50
2-Hexanone	U	U	U	U	U	U	5	50
4-Chlorotoluene	U	U	U	U	U	U	5	5
Acetone	U	U	U	U	U	U	5	50
Benzene	U	UJ	U	U	U	U	5	1
Bromobenzene	U	U	U	U	U	U	5	5
Bromochloromethane	U	U	U	U	U	U	5	5
Bromodichloromethane	U	U	U	U	U	U	5	50
Bromoform	U	U	U	U	U	U	5	50
Bromomethane	U	U	UJ	U	U	U	5	5
Carbon Disulfide	U	U	U	U	U	U	5	60
Carbon Tetrachloride	U	U	U	U	U	U	5	5
Chlorobenzene	U	U	U	U	U	U	5	5
Chloroethane	U	U	U	U	U	U	5	5
Chloroform	U	U	U	U	U	U	5	7
Chloromethane	U	U	U	U	U	U	5	5
cis-1,2-Dichloroethylene	U	U	U	U	U	U	5	5
cis-1,3-Dichloropropene	U	U	U	U	U	U	5	0.4
Cymene	U	U	U	U	U	U	5	5
Dibromochloromethane	U	U	U	U	U	U	5	50
Dibromomethane	U	U	U	U	U	UJ	5	5
Dichlorodifluoromethane	U	U	U	U	U	U	5	5
Ethylbenzene	U	U	U	U	U	U	5	5
Hexachlorobutadiene	U	U	U	U	U	U	5	0.5
Iodomethane (Methyl Iodide)	U	U	UJ	UJ	U	U	5	5
Isopropylbenzene (Cumene)	U	U	U	U	U	UJ	5	5
Methyl Ethyl Ketone (2-Butanone)	U	U	U	U	U	U	5	50
Methyl Isobutyl Ketone	U	U	U	U	U	U	5	--
Methylene Chloride	U	U	U	U	U	U	5	5
m&p-Xylene	U	U	U	U	U	U	5	5
Naphthalene	U	U	U	UJ	U	U	5	10
n-Butylbenzene	U	U	U	U	U	UJ	5	5
n-Propylbenzene	U	U	U	U	U	U	5	5
o-Xylene (1,2-Dimethylbenzene)	U	U	U	U	U	UJ	5	5
sec-Butylbenzene	U	U	U	U	U	U	5	5
Styrene	U	U	U	U	U	U	5	5
t-Butylbenzene	U	U	U	U	U	U	5	5
tert-Butyl Methyl Ether	U	U	U	U	U	U	5	10
Tetrachloroethylene (PCE)	U	U	U	U	U	U	5	5
Toluene	U	U	U	U	U	U	5	5
trans-1,2-Dichloroethene	U	U	U	U	U	U	5	5
trans-1,3-Dichloropropene	U	U	U	U	U	U	5	0.4
Trichloroethylene (TCE)	U	U	U	U	U	U	5	5
Trichlorofluoromethane	U	U	U	U	U	U	5	5
Vinyl Acetate	U	U	U	U	U	U	5	--
Vinyl Chloride	U	U	U	U	U	U	5	2
Xylenes, Total	U	U	U	U	U	UJ	5	5
Total Volatile Organic Compounds	0	0	0	0	0	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

D: Result taken from reanalysis at a secondary dilution.

UJ: Not detected, value estimated due to validation criteria.

Notes:

ug/l : Micrograms per liter

-- : Not established

Exceeds Class GA Groundwater Standard/

Guidance Value

Table A-1
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Volatile Organic Compounds

Sample ID	MW-01	MW-01	CONTRACT	NYSDEC CLASS GA
Date Collected	9/5/2013	4/22/2014	REQUIRED	GROUNDWATER
Dilution Factor	1	1	DETECTION	STANDARDS/
Units	ug/l	ug/l	LIMIT	GUIDANCE VALUES
			(ug/l)	(ug/l)
1,1,1,2-Tetrachloroethane	U	U	5	5
1,1,1-Trichloroethane	U	U	5	5
1,1,2,2-Tetrachloroethane	U	U	5	5
1,1,2-Trichloroethane	U	U	5	1
1,1-Dichloroethane	U	U	5	5
1,1-Dichloroethene	U	U	5	5
1,1-Dichloropropene	U	U	5	5
1,2,3-Trichlorobenzene	U	U	5	5
1,2,3-Trichloropropane	U	U	5	0.04
1,2,4-Trichlorobenzene	U	U	5	5
1,2,4-Trimethylbenzene	U	U	5	5
1,2-Dibromo-3-chloropropane	U	U	5	0.04
1,2-Dibromoethane (Ethylene Dibromide)	U	U	5	0.0006
1,2-Dichlorobenzene	U	U	5	3
1,2-Dichloroethane	U	U	5	0.6
1,2-Dichloropropane	U	U	5	1
1,3,5-Trimethylbenzene (Mesitylene)	U	U	5	5
1,3-Dichlorobenzene	U	U	5	3
1,3-Dichloropropane	U	U	5	5
1,4-Dichlorobenzene	U	U	5	3
2,2-Dichloropropane	U	U	5	5
2-Chlorotoluene	U	U	5	50
2-Hexanone	U	U	5	50
4-Chlorotoluene	U	U	5	5
Acetone	U	U	5	50
Benzene	U	U	5	1
Bromobenzene	U	U	5	5
Bromochloromethane	U	U	5	5
Bromodichloromethane	U	U	5	50
Bromoform	U	U	5	50
Bromomethane	U	U	5	5
Carbon Disulfide	U	U	5	60
Carbon Tetrachloride	U	U	5	5
Chlorobenzene	U	U	5	5
Chloroethane	U	U	5	5
Chloroform	U	U	5	7
Chloromethane	U	U	5	5
cis-1,2-Dichloroethylene	U	U	5	5
cis-1,3-Dichloropropene	U	U	5	0.4
Cymene	U	U	5	5
Dibromochloromethane	U	U	5	50
Dibromomethane	U	U	5	5
Dichlorodifluoromethane	U	U	5	5
Ethylbenzene	U	U	5	5
Hexachlorobutadiene	U	U	5	0.5
Iodomethane (Methyl Iodide)	U	U	5	5
Isopropylbenzene (Cumene)	U	U	5	5
Methyl Ethyl Ketone (2-Butanone)	U	U	5	50
Methyl Isobutyl Ketone	U	U	5	--
Methylene Chloride	U	U	5	5
m&p-Xylene	U	U	5	5
Naphthalene	U	U	5	10
n-Butylbenzene	U	U	5	5
n-Propylbenzene	U	U	5	5
o-Xylene (1,2-Dimethylbenzene)	U	U	5	5
sec-Butylbenzene	U	U	5	5
Styrene	U	U	5	5
t-Butylbenzene	U	U	5	5
tert-Butyl Methyl Ether	U	U	5	10
Tetrachloroethylene (PCE)	U	U	5	5
Toluene	U	U	5	5
trans-1,2-Dichloroethene	U	U	5	5
trans-1,3-Dichloropropene	U	U	5	0.4
Trichloroethylene (TCE)	1.4 J	U	5	5
Trichlorofluoromethane	U	U	5	5
Vinyl Acetate	U	U	5	--
Vinyl Chloride	U	U	5	2
Xylenes, Total	U	U	5	5
Total Volatile Organic Compounds	1.4	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

D: Result taken from reanalysis at a secondary dilution.

UJ: Not detected, value estimated due to validation criteria.

Notes:

ug/l : Micrograms per liter

-- : Not established

 : Exceeds Class GA Groundwater Standard/
Guidance Value

Table A-1
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Volatile Organic Compounds

Sample ID	MW-03	MW-03	MW-03	MW-03	MW-03	CONTRACT	NYSDEC CLASS GA
Date Collected	8/18/2010	4/25/2011	9/27/2011	4/13/2012	9/6/2012	REQUIRED	GROUNDWATER
Dilution Factor	1	1	1	1	1	DETECTION	STANDARDS/
Units	ug/l	ug/l	ug/l	ug/l	ug/l	LIMIT	GUIDANCE VALUES
						(ug/l)	(ug/l)
1,1,1,2-Tetrachloroethane	U	U	U	U	U	5	5
1,1,1-Trichloroethane	6.5	U	0.56 J	0.63 J	U	5	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	5	5
1,1,2-Trichloroethane	U	U	U	U	U	5	1
1,1-Dichloroethane	U	U	U	U	U	5	5
1,1-Dichloroethene	U	U	U	U	U	5	5
1,1-Dichloropropene	U	U	U	U	U	5	5
1,2,3-Trichlorobenzene	U	U	U	U	U	5	5
1,2,3-Trichloropropene	U	U	U	U	U	5	0.04
1,2,4-Trichlorobenzene	U	U	U	UJ	U	5	5
1,2,4-Trimethylbenzene	U	U	U	UJ	U	5	5
1,2-Dibromo-3-chloropropene	U	U	U	U	U	5	0.04
1,2-Dibromoethane (Ethylene Dibromide)	U	U	U	UJ	U	5	0.0006
1,2-Dichlorobenzene	U	U	U	U	U	5	3
1,2-Dichloroethane	U	U	U	U	U	5	0.6
1,2-Dichloropropene	U	U	U	U	U	5	1
1,3,5-Trimethylbenzene (Mesitylene)	U	U	U	U	U	5	5
1,3-Dichlorobenzene	U	U	U	U	U	5	3
1,3-Dichloropropene	U	U	U	U	U	5	5
1,4-Dichlorobenzene	U	U	U	U	U	5	3
2,2-Dichloropropene	U	U	UJ	U	UJ	5	5
2-Chlorotoluene	U	U	U	U	U	5	50
2-Hexanone	U	U	U	U	U	5	50
4-Chlorotoluene	U	U	U*	U	U	5	5
Acetone	U	U	U	U	U	5	50
Benzene	U	UJ	U	U	U	5	1
Bromobenzene	U	U	U	U	U	5	5
Bromochloromethane	U	U	U	U	U	5	5
Bromodichloromethane	U	U	U	U	U	5	50
Bromoform	U	U	U	U	U	5	50
Bromomethane	U	U	UJ	UJ	U	5	5
Carbon Disulfide	U	U	U	U	U	5	60
Carbon Tetrachloride	U	U	U	U	U	5	5
Chlorobenzene	U	U	U	U	U	5	5
Chloroethane	U	U	U	U	U	5	5
Chloroform	U	U	4.2 J	4.2 J	U	5	7
Chloromethane	U	U	U	U	U	5	5
cis-1,2-Dichloroethylene	25	1.1 J	8.1	3.9 J	1.4 J	5	5
cis-1,3-Dichloropropene	U	U	U	U	U	5	0.4
Cymene	U	U	U	U	U	5	5
Dibromochloromethane	U	U	U	U	U	5	50
Dibromomethane	U	U	U	U	U	5	5
Dichlorodifluoromethane	U	U	U	U	U	5	5
Ethylbenzene	U	U	U	U	U	5	5
Hexachlorobutadiene	U	U	U	U	U	5	0.5
Iodomethane (Methyl Iodide)	U	U	UJ	UJ	U	5	5
Isopropylbenzene (Cumene)	U	U	U	U	U	5	5
Methyl Ethyl Ketone (2-Butanone)	U	U	U	U	U	5	50
Methyl Isobutyl Ketone	U	U	U	U	U	5	--
Methylene Chloride	U	U	U	U	U	5	5
m&p-Xylene	U	U	U	U	U	5	5
Naphthalene	U	U	U	UJ	U	5	10
n-Butylbenzene	U	U	U	U	U	5	5
n-Propylbenzene	U	U	U	U	U	5	5
o-Xylene (1,2-Dimethylbenzene)	U	U	U	U	U	5	5
sec-Butylbenzene	U	U	U	U	U	5	5
Styrene	U	U	U	U	U	5	5
t-Butylbenzene	U	U	U	U	U	5	5
tert-Butyl Methyl Ether	U	U	U	U	U	5	10
Tetrachloroethylene (PCE)	4.2 J	11	18	5 J	U	5	5
Toluene	U	U	U	U	U	5	5
trans-1,2-Dichloroethene	U	U	U	U	U	5	5
trans-1,3-Dichloropropene	U	U	U	U	U	5	0.4
Trichloroethylene (TCE)	60	6.9	22	15	8.2	5	5
Trichlorofluoromethane	U	U	U	U	U	5	5
Vinyl Acetate	U	U	U	U	U	5	--
Vinyl Chloride	U	U	U	U	U	5	2
Xylenes, Total	U	U	U	U	U	5	5
Total Volatile Organic Compounds	95.7	19	52.86	28.73	9.6	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

D: Result taken from reanalysis at a secondary dilution.

UJ: Not detected, value estimated due to validation criteria.

Notes:

ug/l : Micrograms per liter

-- : Not established

Exceeds Class GA Groundwater Standard/

Guidance Value

Table A-1
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Volatile Organic Compounds

Sample ID	MW-03R	MW-03R	MW-03R	MW-03R	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS/ GUIDANCE VALUES (ug/l)
Date Collected	9/6/2012	4/4/2013	9/5/2013	04/22/14		
Dilution Factor	1	1	1	1		
Units	ug/l	ug/l	ug/l	ug/l		
1,1,1,2-Tetrachloroethane	U	U	U	U	5	5
1,1,1-Trichloroethane	U	U	U	U	5	5
1,1,2,2-Tetrachloroethane	U	U	U	U	5	5
1,1,2-Trichloroethane	U	U	U	U	5	1
1,1-Dichloroethane	U	U	U	U	5	5
1,1-Dichloroethene	U	U	U	U	5	5
1,1-Dichloropropene	U	U	U	U	5	5
1,2,3-Trichlorobenzene	U	U	U	U	5	5
1,2,3-Trichloropropane	U	U	U	U	5	0.04
1,2,4-Trichlorobenzene	U	UJ	U	U	5	5
1,2,4-Trimethylbenzene	U	U	U	U	5	5
1,2-Dibromo-3-chloropropane	U	U	U	U	5	0.04
1,2-Dibromoethane (Ethylene Dibromide)	U	UJ	U	U	5	0.0006
1,2-Dichlorobenzene	U	U	U	U	5	3
1,2-Dichloroethane	U	U	U	U	5	0.6
1,2-Dichloropropane	U	U	U	U	5	1
1,3,5-Trimethylbenzene (Mesitylene)	U	U	U	U	5	5
1,3-Dichlorobenzene	U	U	U	U	5	3
1,3-Dichloropropane	U	U	U	U	5	5
1,4-Dichlorobenzene	U	U	U	U	5	3
2,2-Dichloropropane	UJ	U	U	U	5	5
2-Chlorotoluene	U	U	U	U	5	50
2-Hexanone	U	U	U	U	5	50
4-Chlorotoluene	U	U	U	U	5	5
Acetone	U	U	U	U	5	50
Benzene	U	U	U	U	5	1
Bromobenzene	U	U	U	U	5	5
Bromochloromethane	U	U	U	U	5	5
Bromodichloromethane	U	U	U	U	5	50
Bromoform	U	U	U	U	5	50
Bromomethane	U	U	U	U	5	5
Carbon Disulfide	U	U	U	U	5	60
Carbon Tetrachloride	U	U	U	U	5	5
Chlorobenzene	U	U	U	U	5	5
Chloroethane	U	U	U	U	5	5
Chloroform	U	1.3 J	U	U	5	7
Chloromethane	U	U	U	U	5	5
cis-1,2-Dichloroethylene	1.2 J	1.9 J	1.0 J	U	5	5
cis-1,3-Dichloropropene	U	U	U	U	5	0.4
Cymene	U	U	U	U	5	5
Dibromochloromethane	U	U	U	U	5	50
Dibromomethane	U	UJ	U	U	5	5
Dichlorodifluoromethane	U	U	U	U	5	5
Ethylbenzene	U	U	U	U	5	5
Hexachlorobutadiene	U	U	U	U	5	0.5
Iodomethane (Methyl Iodide)	U	U	U	UJ	5	5
Isopropylbenzene (Cumene)	U	UJ	U	U	5	5
Methyl Ethyl Ketone (2-Butanone)	U	U	U	U	5	50
Methyl Isobutyl Ketone	U	U	U	U	5	--
Methylene Chloride	U	U	U	U	5	5
m&p-Xylene	U	U	U	U	5	5
Naphthalene	U	U	U	U	5	10
n-Butylbenzene	U	UJ	U	U	5	5
n-Propylbenzene	U	U	U	U	5	5
o-Xylene (1,2-Dimethylbenzene)	U	UJ	U	U	5	5
sec-Butylbenzene	U	U	U	U	5	5
Styrene	U	U	U	U	5	5
t-Butylbenzene	U	U	U	U	5	5
tert-Butyl Methyl Ether	U	U	U	U	5	10
Tetrachloroethylene (PCE)	U	15 J	1.6 J	6.5	5	5
Toluene	U	U	U	U	5	5
trans-1,2-Dichloroethene	U	U	U	U	5	5
trans-1,3-Dichloropropene	U	U	U	U	5	0.4
Trichloroethylene (TCE)	6.1	12	5.6	2 J	5	5
Trichlorofluoromethane	U	U	U	U	5	5
Vinyl Acetate	U	U	U	U	5	--
Vinyl Chloride	U	U	U	U	5	2
Xylenes, Total	U	UJ	U	U	5	5
Total Volatile Organic Compounds	7.3	30.2	8.2	8.5	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

D: Result taken from reanalysis at a secondary dilution.

UJ: Not detected, value estimated due to validation criteria.

Notes:

ug/l : Micrograms per liter

-- : Not established

 Exceeds Class GA Groundwater Standard/
Guidance Value

Table A-1
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Volatile Organic Compounds

Sample ID	MW-04	MW-04	MW-04	MW-04	MW-04	CONTRACT	NYSDEC CLASS GA
Date Collected	8/19/2010	4/26/2011	9/28/2011	4/13/2012	9/7/2012	REQUIRED	GROUNDWATER
Dilution Factor	1	1	1	1	1	DETECTION	STANDARDS/
Units	ug/l	ug/l	ug/l	ug/l	ug/l	LIMIT	GUIDANCE VALUES
						(ug/l)	(ug/l)
1,1,1,2-Tetrachloroethane	U	U	U	U	U	5	5
1,1,1-Trichloroethane	2.9 J	U	2.2 J	U	U	5	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	5	5
1,1,2-Trichloroethane	U	U	U	U	U	5	1
1,1-Dichloroethane	U	U	U	U	U	5	5
1,1-Dichloroethene	U	U	U	U	U	5	5
1,1-Dichloropropene	U	U	U	U	U	5	5
1,2,3-Trichlorobenzene	U	U	U	U	U	5	5
1,2,3-Trichloropropene	U	U	U	U	U	5	0.04
1,2,4-Trichlorobenzene	U	U	U	UJ	U	5	5
1,2,4-Trimethylbenzene	U	U	U	UJ	U	5	5
1,2-Dibromo-3-chloropropene	U	U	U	U	U	5	0.04
1,2-Dibromoethane (Ethylene Dibromide)	U	U	U	UJ	U	5	0.0006
1,2-Dichlorobenzene	U	U	U	U	U	5	3
1,2-Dichloroethane	U	U	U	U	U	5	0.6
1,2-Dichloropropene	U	U	U	U	U	5	1
1,3,5-Trimethylbenzene (Mesitylene)	U	U	U	U	U	5	5
1,3-Dichlorobenzene	U	U	U	U	U	5	3
1,3-Dichloropropene	U	U	U	U	U	5	5
1,4-Dichlorobenzene	U	U	U	U	U	5	3
2,2-Dichloropropene	U	U	UJ	U	UJ	5	5
2-Chlorotoluene	U	U	U	U	U	5	50
2-Hexanone	U	U	U	U	U	5	50
4-Chlorotoluene	U	U	U	U	U	5	5
Acetone	U	U	U	U	U	5	50
Benzene	U	UJ	U	U	U	5	1
Bromobenzene	U	U	U	U	U	5	5
Bromochloromethane	U	U	U	U	U	5	5
Bromodichloromethane	U	U	U	U	U	5	50
Bromoform	U	U	U	U	U	5	50
Bromomethane	U	U	UJ	UJ	U	5	5
Carbon Disulfide	U	U	U	U	U	5	60
Carbon Tetrachloride	U	U	U	U	U	5	5
Chlorobenzene	U	U	U	U	U	5	5
Chloroethane	U	U	U	U	U	5	5
Chloroform	U	U	0.65 J	0.6 J	U	5	7
Chloromethane	U	U	U	U	U	5	5
cis-1,2-Dichloroethylene	350 D	45	120	9.7	40	5	5
cis-1,3-Dichloropropene	U	U	U	U	U	5	0.4
Cymene	U	U	U	U	U	5	5
Dibromochloromethane	U	U	U	U	U	5	50
Dibromomethane	U	U	U	U	U	5	5
Dichlorodifluoromethane	U	U	U	U	U	5	5
Ethylbenzene	U	U	U	U	U	5	5
Hexachlorobutadiene	U	U	U	U	U	5	0.5
Iodomethane (Methyl Iodide)	U	U	UJ	UJ	U	5	5
Isopropylbenzene (Cumene)	U	U	U	U	U	5	5
Methyl Ethyl Ketone (2-Butanone)	U	U	U	U	U	5	50
Methyl Isobutyl Ketone	U	U	U	U	U	5	--
Methylene Chloride	U	U	U	U	U	5	5
m&p-Xylene	U	U	U	U	U	5	5
Naphthalene	U	U	U	UJ	U	5	10
n-Butylbenzene	U	U	U	U	U	5	5
n-Propylbenzene	U	U	U	U	U	5	5
o-Xylene (1,2-Dimethylbenzene)	U	U	U	U	U	5	5
sec-Butylbenzene	U	U	U	U	U	5	5
Styrene	U	U	U	U	U	5	5
t-Butylbenzene	U	U	U	U	U	5	5
tert-Butyl Methyl Ether	U	U	U	U	U	5	10
Tetrachloroethylene (PCE)	12	5.5	12	0.82 J	U	5	5
Toluene	U	U	U	U	U	5	5
trans-1,2-Dichloroethene	1.5 J	U	U	U	U	5	5
trans-1,3-Dichloropropene	U	U	U	U	U	5	0.4
Trichloroethylene (TCE)	280 D	54	150	11	58	5	5
Trichlorofluoromethane	U	U	U	U	U	5	5
Vinyl Acetate	U	U	U	U	U	5	--
Vinyl Chloride	U	U	U	U	U	5	2
Xylenes, Total	U	U	U	U	U	5	5
Total Volatile Organic Compounds	646.4	104.5	284.85	22.12	98	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

D: Result taken from reanalysis at a secondary dilution.

UJ: Not detected, value estimated due to validation criteria.

Notes:

ug/l : Micrograms per liter

-- : Not established

Exceeds Class GA Groundwater Standard/

Guidance Value

Table A-1
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Volatile Organic Compounds

Sample ID	MW-04R	MW-04R	MW-04R	MW-04R	CONTRACT	NYSDEC CLASS GA
Date Collected	9/5/2012	4/4/2013	9/5/2013	04/22/14	REQUIRED	GROUNDWATER
Dilution Factor	1	1	1	1	DETECTION	STANDARDS/
Units	ug/l	ug/l	ug/l	ug/l	LIMIT	GUIDANCE VALUES
					(ug/l)	(ug/l)
1,1,1,2-Tetrachloroethane	U	U	U	U	5	5
1,1,1-Trichloroethane	U	U	0.51 J	U	5	5
1,1,2,2-Tetrachloroethane	U	U	U	U	5	5
1,1,2-Trichloroethane	U	U	U	U	5	1
1,1-Dichloroethane	U	U	U	U	5	5
1,1-Dichloroethene	U	U	U	U	5	5
1,1-Dichloropropene	U	U	U	U	5	5
1,2,3-Trichlorobenzene	U	U	U	U	5	5
1,2,3-Trichloropropane	U	U	U	U	5	0.04
1,2,4-Trichlorobenzene	U	UJ	U	U	5	5
1,2,4-Trimethylbenzene	U	U	U	U	5	5
1,2-Dibromo-3-chloropropane	U	U	U	U	5	0.04
1,2-Dibromoethane (Ethylene Dibromide)	U	UJ	U	U	5	0.0006
1,2-Dichlorobenzene	U	U	U	U	5	3
1,2-Dichloroethane	U	U	U	U	5	0.6
1,2-Dichloropropane	U	U	U	U	5	1
1,3,5-Trimethylbenzene (Mesitylene)	U	U	U	U	5	5
1,3-Dichlorobenzene	U	U	U	U	5	3
1,3-Dichloropropane	U	U	U	U	5	5
1,4-Dichlorobenzene	U	U	U	U	5	3
2,2-Dichloropropane	UJ	U	U	U	5	5
2-Chlorotoluene	U	U	U	U	5	50
2-Hexanone	U	U	U	U	5	50
4-Chlorotoluene	U	U	U	U	5	5
Acetone	U	U	U	U	5	50
Benzene	U	U	U	U	5	1
Bromobenzene	U	U	U	U	5	5
Bromochloromethane	U	U	U	U	5	5
Bromodichloromethane	U	U	U	U	5	50
Bromoform	U	U	U	U	5	50
Bromomethane	U	U	U	U	5	5
Carbon Disulfide	U	U	U	U	5	60
Carbon Tetrachloride	U	U	U	U	5	5
Chlorobenzene	U	U	U	U	5	5
Chloroethane	U	U	U	U	5	5
Chloroform	5.6	1.8 J	1.0 J	U	5	7
Chloromethane	U	U	U	U	5	5
cis-1,2-Dichloroethylene	70	41	17	U	5	5
cis-1,3-Dichloropropene	U	U	U	U	5	0.4
Cymene	U	U	U	U	5	5
Dibromochloromethane	U	U	U	U	5	50
Dibromomethane	U	UJ	U	U	5	5
Dichlorodifluoromethane	U	U	U	U	5	5
Ethylbenzene	U	U	U	U	5	5
Hexachlorobutadiene	U	U	U	U	5	0.5
Iodomethane (Methyl Iodide)	U	U	U	UJ	5	5
Isopropylbenzene (Cumene)	U	UJ	U	U	5	5
Methyl Ethyl Ketone (2-Butanone)	U	U	U	U	5	50
Methyl Isobutyl Ketone	U	U	U	U	5	--
Methylene Chloride	U	U	U	U	5	5
m&p-Xylene	U	U	U	U	5	5
Naphthalene	U	U	U	U	5	10
n-Butylbenzene	U	UJ	U	U	5	5
n-Propylbenzene	U	U	U	U	5	5
o-Xylene (1,2-Dimethylbenzene)	U	UJ	U	U	5	5
sec-Butylbenzene	U	U	U	U	5	5
Styrene	U	U	U	U	5	5
t-Butylbenzene	U	U	U	U	5	5
tert-Butyl Methyl Ether	U	U	U	U	5	10
Tetrachloroethylene (PCE)	6.4	4.7 J	2.5 J	1.3 J	5	5
Toluene	U	U	U	U	5	5
trans-1,2-Dichloroethene	U	U	U	U	5	5
trans-1,3-Dichloropropene	U	U	U	U	5	0.4
Trichloroethylene (TCE)	98	59	29	2 J	5	5
Trichlorofluoromethane	U	U	U	U	5	5
Vinyl Acetate	U	U	U	U	5	--
Vinyl Chloride	U	U	U	U	5	2
Xylenes, Total	U	UJ	U	U	5	5
Total Volatile Organic Compounds	180	106.5	50.01	3.3	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit
D: Result taken from reanalysis at a secondary dilution.
UJ: Not detected, value estimated due to validation criteria.

Notes:

ug/l : Micrograms per liter
-- : Not established
Exceeds Class GA Groundwater Standard/
Guidance Value

Table A-1
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Volatile Organic Compounds

Sample ID	MW-05	MW-05	MW-05	MW-05	MW-05	CONTRACT	NYSDEC CLASS GA
Date Collected	8/19/2010	4/26/2011	9/28/2011	4/12/2012	9/5/2012	REQUIRED	GROUNDWATER
Dilution Factor	1	1	1	1	1	DETECTION	STANDARDS /
Units	ug/l	ug/l	ug/l	ug/l	ug/l	LIMIT	GUIDANCE VALUES
						(ug/l)	(ug/l)
1,1,1,2-Tetrachloroethane	U	U	U	U	U	5	5
1,1,1-Trichloroethane	U	U	U	U	U	5	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	5	5
1,1,2-Trichloroethane	U	U	U	U	U	5	1
1,1-Dichloroethane	U	U	U	U	U	5	5
1,1-Dichloroethene	U	U	U	U	U	5	5
1,1-Dichloropropene	U	U	U	U	U	5	5
1,2,3-Trichlorobenzene	U	U	U	U	U	5	5
1,2,3-Trichloropropene	U	U	U	U	U	5	0.04
1,2,4-Trichlorobenzene	U	U	U	UJ	U	5	5
1,2,4-Trimethylbenzene	U	U	U	UJ	U	5	5
1,2-Dibromo-3-chloropropene	U	U	U	U	U	5	0.04
1,2-Dibromoethane (Ethylene Dibromide)	U	U	U	UJ	U	5	0.0006
1,2-Dichlorobenzene	U	U	U	U	U	5	3
1,2-Dichloroethane	U	U	U	U	U	5	0.6
1,2-Dichloropropene	U	U	U	U	U	5	1
1,3,5-Trimethylbenzene (Mesitylene)	U	U	U	U	U	5	5
1,3-Dichlorobenzene	U	U	U	U	U	5	3
1,3-Dichloropropene	U	U	U	U	U	5	5
1,4-Dichlorobenzene	U	U	U	U	U	5	3
2,2-Dichloropropene	U	U	UJ	U	UJ	5	5
2-Chlorotoluene	U	U	U	U	U	5	50
2-Hexanone	U	U	U	U	U	5	50
4-Chlorotoluene	U	U	U	U	U	5	5
Acetone	U	U	U	U	U	5	50
Benzene	U	UJ	U	U	U	5	1
Bromobenzene	U	U	U	U	U	5	5
Bromochloromethane	U	U	U	U	U	5	5
Bromodichloromethane	U	U	U	U	U	5	50
Bromoform	U	U	U	U	U	5	50
Bromomethane	U	U	UJ	U	U	5	5
Carbon Disulfide	U	U	U	U	U	5	60
Carbon Tetrachloride	U	U	U	U	U	5	5
Chlorobenzene	U	U	U	U	U	5	5
Chloroethane	U	U	U	U	U	5	5
Chloroform	U	U	U	U	U	5	7
Chloromethane	U	U	U	U	U	5	5
cis-1,2-Dichloroethylene	U	U	U	U	U	5	5
cis-1,3-Dichloropropene	U	U	U	U	U	5	0.4
Cymene	U	U	U	U	U	5	5
Dibromochloromethane	U	U	U	U	U	5	50
Dibromomethane	U	U	U	U	U	5	5
Dichlorodifluoromethane	U	U	U	U	U	5	5
Ethylbenzene	U	U	U	U	U	5	5
Hexachlorobutadiene	U	U	U	U	U	5	0.5
Iodomethane (Methyl Iodide)	U	U	UJ	UJ	U	5	5
Isopropylbenzene (Cumene)	U	U	U	U	U	5	5
Methyl Ethyl Ketone (2-Butanone)	U	U	U	U	U	5	50
Methyl Isobutyl Ketone	U	U	U	U	U	5	--
Methylene Chloride	U	U	U	U	U	5	5
m&p-Xylene	U	U	U	U	U	5	5
Naphthalene	U	U	U	UJ	U	5	10
n-Butylbenzene	U	U	U	U	U	5	5
n-Propylbenzene	U	U	U	U	U	5	5
o-Xylene (1,2-Dimethylbenzene)	U	U	U	U	U	5	5
sec-Butylbenzene	U	U	U	U	U	5	5
Styrene	U	U	U	U	U	5	5
t-Butylbenzene	U	U	U	U	U	5	5
tert-Butyl Methyl Ether	U	U	U	U	U	5	10
Tetrachloroethylene (PCE)	U	U	U	U	U	5	5
Toluene	U	U	U	U	U	5	5
trans-1,2-Dichloroethene	U	U	U	U	U	5	5
trans-1,3-Dichloropropene	U	U	U	U	U	5	0.4
Trichloroethylene (TCE)	U	U	U	U	U	5	5
Trichlorofluoromethane	U	U	U	U	U	5	5
Vinyl Acetate	U	U	U	U	U	5	--
Vinyl Chloride	U	U	U	U	U	5	2
Xylenes, Total	U	U	U	U	U	5	5
Total Volatile Organic Compounds	0	0	0	0	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

D: Result taken from reanalysis at a secondary dilution.

UJ: Not detected, value estimated due to validation criteria.

Notes:

ug/l : Micrograms per liter

-- : Not established

☐ : Exceeds Class GA Groundwater Standard/

Guidance Value

Table A-1
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Volatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-06 8/18/2010 1 ug/l	MW-06 4/25/2011 1 ug/l	MW-06 9/27/2011 1 ug/l	MW-06 4/12/2012 1 ug/l	MW-06 9/5/2012 1 ug/l	MW-06 4/4/2013 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	5	5
1,1,1-Trichloroethane	U	U	U	U	U	U	5	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	5	5
1,1,2-Trichloroethane	U	U	U	U	U	U	5	1
1,1-Dichloroethane	U	U	U	U	U	U	5	5
1,1-Dichloroethene	U	UJ	U	U	U	U	5	5
1,1-Dichloropropene	U	U	U	U	U	U	5	5
1,2,3-Trichlorobenzene	U	U	U	U	U	U	5	5
1,2,3-Trichloropropane	U	U	U	U	U	U	5	0.04
1,2,4-Trichlorobenzene	U	U	U	UJ	U	UJ	5	5
1,2,4-Trimethylbenzene	U	U	U	UJ	U	U	5	5
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	5	0.04
1,2-Dibromoethane (Ethylene Dibromide)	U	U	U	UJ	U	UJ	5	0.0006
1,2-Dichlorobenzene	U	U	U	U	U	U	5	3
1,2-Dichloroethane	U	U	U	U	U	U	5	0.6
1,2-Dichloropropane	U	U	U	U	U	U	5	1
1,3,5-Trimethylbenzene (Mesitylene)	U	U	U	U	U	U	5	5
1,3-Dichlorobenzene	U	U	U	U	U	U	5	3
1,3-Dichloropropane	U	U	U	U	U	U	5	5
1,4-Dichlorobenzene	U	U	U	U	U	U	5	3
2,2-Dichloropropane	U	U	UJ	U	UJ	U	5	5
2-Chlorotoluene	U	U	U	U	U	U	5	50
2-Hexanone	U	U	U	U	U	U	5	50
4-Chlorotoluene	U	U	U	U	U	U	5	5
Acetone	U	U	U	U	U	U	5	50
Benzene	U	UJ	U	U	U	U	5	1
Bromobenzene	U	U	U	U	U	U	5	5
Bromochloromethane	U	U	U	U	U	U	5	5
Bromodichloromethane	U	U	U	U	U	U	5	50
Bromoform	U	U	U	U	U	U	5	50
Bromomethane	U	U	UJ	UJ	U	U	5	5
Carbon Disulfide	U	U	U	U*	U	U	5	60
Carbon Tetrachloride	U	U	U	U	U	U	5	5
Chlorobenzene	U	U	U	U	U	U	5	5
Chloroethane	U	U	U	U	U	U	5	5
Chloroform	U	U	U	U	U	U	5	7
Chloromethane	U	U	U	U	U	U	5	5
cis-1,2-Dichloroethylene	U	1.7 J	3.5 J	1.1 J	2.7 J	3.8 J	5	5
cis-1,3-Dichloropropene	U	U	U	U	U	U	5	0.4
Cymene	U	U	U	U	U	U	5	5
Dibromochloromethane	U	U	U	U	U	U	5	50
Dibromomethane	U	U	U	U	U	UJ	5	5
Dichlorodifluoromethane	U	U	U	U	U	U	5	5
Ethylbenzene	U	U	U	U	U	U	5	5
Hexachlorobutadiene	U	U	U	U	U	U	5	0.5
Iodomethane (Methyl Iodide)	U	U	UJ	UJ	U	U	5	5
Isopropylbenzene (Cumene)	U	U	U	U	U	UJ	5	5
Methyl Ethyl Ketone (2-Butanone)	U	U	U	U	U	U	5	50
Methyl Isobutyl Ketone	U	U	U	U	U	U	5	--
Methylene Chloride	U	U	U	U	U	U	5	5
m&p-Xylene	U	U	U	U	U	U	5	5
Naphthalene	U	U	U	UJ	U	U	5	10
n-Butylbenzene	U	U	U	U	U	UJ	5	5
n-Propylbenzene	U	U	U	U	U	U	5	5
o-Xylene (1,2-Dimethylbenzene)	U	U	U	U	U	UJ	5	5
sec-Butylbenzene	U	U	U	U	U	U	5	5
Styrene	U	U	U	U	U	U	5	5
t-Butylbenzene	U	U	U	U	U	U	5	5
tert-Butyl Methyl Ether	U	U	U	U	U	U	5	10
Tetrachloroethylene (PCE)	U	U	U	U	U	0.81 J	5	5
Toluene	U	U	U	U	U	U	5	5
trans-1,2-Dichloroethene	U	U	U	U	U	U	5	5
trans-1,3-Dichloropropene	U	U	U	U	U	U	5	0.4
Trichloroethylene (TCE)	U	2.2 J	4.4 J	1.8 J	3.2 J	4.6 J	5	5
Trichlorofluoromethane	U	U	U	U	U	U	5	5
Vinyl Acetate	U	U	U	U	U	U	5	--
Vinyl Chloride	U	U	U	U	U	U	5	2
Xylenes, Total	U	U	U	U	U	UJ	5	5
Total Volatile Organic Compounds	0	3.9	7.9	2.9	5.9	9.21	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

D: Result taken from reanalysis at a secondary dilution.

UJ: Not detected, value estimated due to validation criteria.

Notes:

ug/l : Micrograms per liter

-- : Not established

 Exceeds Class GA Groundwater Standard/
Guidance Value

Table A-1
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Volatile Organic Compounds

Sample ID	MW-06	MW-06	CONTRACT	NYSDEC CLASS GA
Date Collected	9/5/2013	4/22/2014	REQUIRED	GROUNDWATER
Dilution Factor	1	1	DETECTION	STANDARDS /
Units	ug/l	ug/l	LIMIT	GUIDANCE VALUES
			(ug/l)	(ug/l)
1,1,1,2-Tetrachloroethane	U	U	5	5
1,1,1-Trichloroethane	U	U	5	5
1,1,2,2-Tetrachloroethane	U	U	5	5
1,1,2-Trichloroethane	U	U	5	1
1,1-Dichloroethane	U	U	5	5
1,1-Dichloroethene	U	U	5	5
1,1-Dichloropropene	U	U	5	5
1,2,3-Trichlorobenzene	U	U	5	5
1,2,3-Trichloropropane	U	U	5	0.04
1,2,4-Trichlorobenzene	U	U	5	5
1,2,4-Trimethylbenzene	U	U	5	5
1,2-Dibromo-3-chloropropane	U	U	5	0.04
1,2-Dibromoethane (Ethylene Dibromide)	U	U	5	0.0006
1,2-Dichlorobenzene	U	U	5	3
1,2-Dichloroethane	U	U	5	0.6
1,2-Dichloropropane	U	U	5	1
1,3,5-Trimethylbenzene (Mesitylene)	U	U	5	5
1,3-Dichlorobenzene	U	U	5	3
1,3-Dichloropropane	U	U	5	5
1,4-Dichlorobenzene	U	U	5	3
2,2-Dichloropropane	U	U	5	5
2-Chlorotoluene	U	U	5	50
2-Hexanone	U	U	5	50
4-Chlorotoluene	U	U	5	5
Acetone	U	U	5	50
Benzene	U	U	5	1
Bromobenzene	U	U	5	5
Bromochloromethane	U	U	5	5
Bromodichloromethane	U	U	5	50
Bromoform	U	U	5	50
Bromomethane	U	U	5	5
Carbon Disulfide	U	U	5	60
Carbon Tetrachloride	U	U	5	5
Chlorobenzene	U	U	5	5
Chloroethane	U	U	5	5
Chloroform	U	U	5	7
Chloromethane	U	U	5	5
cis-1,2-Dichloroethylene	9.4	U	5	5
cis-1,3-Dichloropropene	U	U	5	0.4
Cymene	U	U	5	5
Dibromochloromethane	U	U	5	50
Dibromomethane	U	U	5	5
Dichlorodifluoromethane	U	U	5	5
Ethylbenzene	U	U	5	5
Hexachlorobutadiene	U	U	5	0.5
Iodomethane (Methyl Iodide)	U	UJ	5	5
Isopropylbenzene (Cumene)	U	U	5	5
Methyl Ethyl Ketone (2-Butanone)	U	U	5	50
Methyl Isobutyl Ketone	U	U	5	--
Methylene Chloride	U	U	5	5
m&p-Xylene	U	U	5	5
Naphthalene	U	U	5	10
n-Butylbenzene	U	U	5	5
n-Propylbenzene	U	U	5	5
o-Xylene (1,2-Dimethylbenzene)	U	U	5	5
sec-Butylbenzene	U	U	5	5
Styrene	U	U	5	5
t-Butylbenzene	U	U	5	5
tert-Butyl Methyl Ether	U	U	5	10
Tetrachloroethylene (PCE)	1.5 J	U	5	5
Toluene	U	U	5	5
trans-1,2-Dichloroethene	U	U	5	5
trans-1,3-Dichloropropene	U	U	5	0.4
Trichloroethylene (TCE)	12	U	5	5
Trichlorofluoromethane	U	U	5	5
Vinyl Acetate	U	U	5	--
Vinyl Chloride	U	U	5	2
Xylenes, Total	U	U	5	5
Total Volatile Organic Compounds	22.9	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

D: Result taken from reanalysis at a secondary dilution.

UJ: Not detected, value estimated due to validation criteria.

Notes:

ug/l : Micrograms per liter

-- : Not established

 Exceeds Class GA Groundwater Standard/
Guidance Value

Table A-1
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Volatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-07 8/18/2010 1 ug/l	MW-07 4/25/2011 1 ug/l	MW-07 9/27/2011 1 ug/l	MW-07 4/12/2012 1 ug/l	MW-07 9/5/2012 1 ug/l	MW-07 4/4/2013 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	5	5
1,1,1-Trichloroethane	U	U	U	U	U	U	5	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	5	5
1,1,2-Trichloroethane	U	U	U	U	U	U	5	1
1,1-Dichloroethane	U	U	U	U	U	U	5	5
1,1-Dichloroethene	U	UJ	U	U	U	U	5	5
1,1-Dichloropropene	U	U	U	U	U	U	5	5
1,2,3-Trichlorobenzene	U	U	U	U	U	U	5	5
1,2,3-Trichloropropene	U	U	U	U	U	U	5	0.04
1,2,4-Trichlorobenzene	U	U	U	UJ	U	UJ	5	5
1,2,4-Trimethylbenzene	U	U	U	UJ	U	U	5	5
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	5	0.04
1,2-Dibromoethane (Ethylene Dibromide)	U	U	U	UJ	U	UJ	5	0.0006
1,2-Dichlorobenzene	U	U	U	U	U	U	5	3
1,2-Dichloroethane	U	U	U	U	U	U	5	0.6
1,2-Dichloropropane	U	U	U	U	U	U	5	1
1,3,5-Trimethylbenzene (Mesitylene)	U	U	U	U	U	U	5	5
1,3-Dichlorobenzene	U	U	U	U	U	U	5	3
1,3-Dichloropropane	U	U	U	U	U	U	5	5
1,4-Dichlorobenzene	1.2 J	U	U	U	U	U	5	3
2,2-Dichloropropane	U	U	UJ	U	UJ	U	5	5
2-Chlorotoluene	U	U	U	U	U	U	5	50
2-Hexanone	U	U	U	U	U	U	5	50
4-Chlorotoluene	U	U	U	U	U	U	5	5
Acetone	U	U	U	U	U	U	5	50
Benzene	U	UJ	U	U	U	U	5	1
Bromobenzene	U	U	U	U	U	U	5	5
Bromochloromethane	U	U	U	U	U	U	5	5
Bromodichloromethane	U	U	U	U	U	U	5	50
Bromoform	U	U	U	U	U	U	5	50
Bromomethane	U	U	UJ	U	U	U	5	5
Carbon Disulfide	U	U	U	U	U	U	5	60
Carbon Tetrachloride	U	U	U	U	U	U	5	5
Chlorobenzene	U	U	U	U	U	U	5	5
Chloroethane	U	U	U	U	U	U	5	5
Chloroform	U	U	U	U	U	U	5	7
Chloromethane	U	U	U	U	U	U	5	5
cis-1,2-Dichloroethylene	U	U	U	U	U	U	5	5
cis-1,3-Dichloropropene	U	U	U	U	U	U	5	0.4
Cymene	U	U	U	U	U	U	5	5
Dibromochloromethane	U	U	U	U	U	U	5	50
Dibromomethane	U	U	U	U	U	UJ	5	5
Dichlorodifluoromethane	U	U	U	U	U	U	5	5
Ethylbenzene	U	U	U	U	U	U	5	5
Hexachlorobutadiene	U	U	U	U	U	U	5	0.5
Iodomethane (Methyl Iodide)	U	U	UJ	UJ	U	U	5	5
Isopropylbenzene (Cumene)	U	U	U	U	U	UJ	5	5
Methyl Ethyl Ketone (2-Butanone)	U	U	U	U	U	U	5	50
Methyl Isobutyl Ketone	U	U	U	U	U	U	5	--
Methylene Chloride	U	U	U	U	U	U	5	5
m&p-Xylene	U	U	U	U	U	U	5	5
Naphthalene	U	U	U	UJ	U	U	5	10
n-Butylbenzene	U	U	U	U	U	UJ	5	5
n-Propylbenzene	U	U	U	U	U	U	5	5
o-Xylene (1,2-Dimethylbenzene)	U	U	U	U	U	UJ	5	5
sec-Butylbenzene	U	U	U	U	U	U	5	5
Styrene	U	U	U	U	U	U	5	5
t-Butylbenzene	U	U	U	U	U	U	5	5
tert-Butyl Methyl Ether	U	U	U	U	U	U	5	10
Tetrachloroethylene (PCE)	U	U	U	U	U	1.1 J	5	5
Toluene	U	U	U	U	U	U	5	5
trans-1,2-Dichloroethene	U	U	U	U	U	U	5	5
trans-1,3-Dichloropropene	U	U	U	U	U	U	5	0.4
Trichloroethylene (TCE)	U	U	U	U	U	1.8 J	5	5
Trichlorofluoromethane	U	U	U	U	U	U	5	5
Vinyl Acetate	U	U	U	U	U	U	5	--
Vinyl Chloride	U	U	U	U	U	U	5	2
Xylenes, Total	U	U	U	U	U	UJ	5	5
Total Volatile Organic Compounds	1.2	0	0	0	0	2.9	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

D: Result taken from reanalysis at a secondary dilution.

UJ: Not detected, value estimated due to validation criteria.

Notes:

ug/l : Micrograms per liter

-- : Not established

 Exceeds Class GA Groundwater Standard/
Guidance Value

Table A-1
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Volatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-07 9/5/2013 1 ug/l	MW-07 4/22/2014 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,1,1,2-Tetrachloroethane	U	U	5	5
1,1,1-Trichloroethane	U	U	5	5
1,1,2,2-Tetrachloroethane	U	U	5	5
1,1,2-Trichloroethane	U	U	5	1
1,1-Dichloroethane	U	U	5	5
1,1-Dichloroethene	U	U	5	5
1,1-Dichloropropene	U	U	5	5
1,2,3-Trichlorobenzene	U	U	5	5
1,2,3-Trichloropropane	U	U	5	0.04
1,2,4-Trichlorobenzene	U	U	5	5
1,2,4-Trimethylbenzene	U	U	5	5
1,2-Dibromo-3-chloropropane	U	U	5	0.04
1,2-Dibromoethane (Ethylene Dibromide)	U	U	5	0.0006
1,2-Dichlorobenzene	U	U	5	3
1,2-Dichloroethane	U	U	5	0.6
1,2-Dichloropropane	U	U	5	1
1,3,5-Trimethylbenzene (Mesitylene)	U	U	5	5
1,3-Dichlorobenzene	U	U	5	3
1,3-Dichloropropane	U	U	5	5
1,4-Dichlorobenzene	U	U	5	3
2,2-Dichloropropane	U	U	5	5
2-Chlorotoluene	U	U	5	50
2-Hexanone	U	U	5	50
4-Chlorotoluene	U	U	5	5
Acetone	U	U	5	50
Benzene	U	U	5	1
Bromobenzene	U	U	5	5
Bromochloromethane	U	U	5	5
Bromodichloromethane	U	U	5	50
Bromoform	U	U	5	50
Bromomethane	U	U	5	5
Carbon Disulfide	U	U	5	60
Carbon Tetrachloride	U	U	5	5
Chlorobenzene	U	U	5	5
Chloroethane	U	U	5	5
Chloroform	U	U	5	7
Chloromethane	U	U	5	5
cis-1,2-Dichloroethylene	0.52 J	U	5	5
cis-1,3-Dichloropropene	U	U	5	0.4
Cymene	U	U	5	5
Dibromochloromethane	U	U	5	50
Dibromomethane	U	U	5	5
Dichlorodifluoromethane	U	U	5	5
Ethylbenzene	U	U	5	5
Hexachlorobutadiene	U	U	5	0.5
Iodomethane (Methyl Iodide)	U	UJ	5	5
Isopropylbenzene (Cumene)	U	U	5	5
Methyl Ethyl Ketone (2-Butanone)	U	U	5	50
Methyl Isobutyl Ketone	U	U	5	--
Methylene Chloride	U	U	5	5
m&p-Xylene	U	U	5	5
Naphthalene	U	U	5	10
n-Butylbenzene	U	U	5	5
n-Propylbenzene	U	U	5	5
o-Xylene (1,2-Dimethylbenzene)	U	U	5	5
sec-Butylbenzene	U	U	5	5
Styrene	U	U	5	5
t-Butylbenzene	U	U	5	5
tert-Butyl Methyl Ether	U	U	5	10
Tetrachloroethylene (PCE)	0.7 J	U	5	5
Toluene	U	U	5	5
trans-1,2-Dichloroethene	U	U	5	5
trans-1,3-Dichloropropene	U	U	5	0.4
Trichloroethylene (TCE)	2.5 J	U	5	5
Trichlorofluoromethane	U	4.7 J	5	5
Vinyl Acetate	U	U	5	--
Vinyl Chloride	U	U	5	2
Xylenes, Total	U	U	5	5
Total Volatile Organic Compounds	3.72	4.7	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

D: Result taken from reanalysis at a secondary dilution.

UJ: Not detected, value estimated due to validation criteria.

Notes:

ug/l : Micrograms per liter

-- : Not established

 : Exceeds Class GA Groundwater Standard/
Guidance Value

Table A-1
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Volatile Organic Compounds

Sample ID	MW-08	MW-08	MW-08	MW-08	MW-08	CONTRACT	NYSDEC CLASS GA
Date Collected	8/18/2010	4/26/2011	9/28/2011	4/13/2012	9/6/2012	REQUIRED	GROUNDWATER
Dilution Factor	1	1	1	1	1	DETECTION	STANDARDS /
Units	ug/l	ug/l	ug/l	ug/l	ug/l	LIMIT	GUIDANCE VALUES
						(ug/l)	(ug/l)
1,1,1,2-Tetrachloroethane	U	U	U	U	U	5	5
1,1,1-Trichloroethane	U	U	U	U	U	5	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	5	5
1,1,2-Trichloroethane	U	U	U	U	U	5	1
1,1-Dichloroethane	U	U	U	U	U	5	5
1,1-Dichloroethene	U	U	U	U	U	5	5
1,1-Dichloropropene	U	U	U	U	U	5	5
1,2,3-Trichlorobenzene	U	U	U	U	U	5	5
1,2,3-Trichloropropene	U	U	U	U	U	5	0.04
1,2,4-Trichlorobenzene	U	U	U	UJ	U	5	5
1,2,4-Trimethylbenzene	U	U	3 J	UJ	U	5	5
1,2-Dibromo-3-chloropropene	U	U	U	U	U	5	0.04
1,2-Dibromoethane (Ethylene Dibromide)	U	U	U	UJ	U	5	0.0006
1,2-Dichlorobenzene	U	U	U	U	U	5	3
1,2-Dichloroethane	U	U	U	U	U	5	0.6
1,2-Dichloropropene	U	U	U	U	U	5	1
1,3,5-Trimethylbenzene (Mesitylene)	U	U	1.1 J	U	U	5	5
1,3-Dichlorobenzene	U	U	U	U	U	5	3
1,3-Dichloropropene	U	U	U	U	U	5	5
1,4-Dichlorobenzene	U	U	U	U	U	5	3
2,2-Dichloropropene	U	U	UJ	U	UJ	5	5
2-Chlorotoluene	U	U	U	U	U	5	50
2-Hexanone	U	U	U	U	U	5	50
4-Chlorotoluene	U	U	U	U	U	5	5
Acetone	U	U	U	U	U	5	50
Benzene	U	UJ	U	U	U	5	1
Bromobenzene	U	U	U	U	U	5	5
Bromochloromethane	U	U	U	U	U	5	5
Bromodichloromethane	U	U	U	U	U	5	50
Bromoform	U	U	U	U	U	5	50
Bromomethane	U	U	UJ	UJ	U	5	5
Carbon Disulfide	U	U	U	U	U	5	60
Carbon Tetrachloride	U	U	U	U	U	5	5
Chlorobenzene	U	U	U	U	U	5	5
Chloroethane	U	U	U	U	U	5	5
Chloroform	U	U	U	U	U	5	7
Chloromethane	U	U	U	U	U	5	5
cis-1,2-Dichloroethylene	U	4.8 J	0.79 J	0.94 J	5.3	5	5
cis-1,3-Dichloropropene	U	U	U	U	U	5	0.4
Cymene	U	U	U	U	U	5	5
Dibromochloromethane	U	U	U	U	U	5	50
Dibromomethane	U	U	U	U	U	5	5
Dichlorodifluoromethane	U	U	U	U	U	5	5
Ethylbenzene	U	U	U	U	U	5	5
Hexachlorobutadiene	U	U	U	U	U	5	0.5
Iodomethane (Methyl Iodide)	U	U	UJ	UJ	U	5	5
Isopropylbenzene (Cumene)	U	U	U	U	U	5	5
Methyl Ethyl Ketone (2-Butanone)	U	U	U	U	U	5	50
Methyl Isobutyl Ketone	U	U	U	U	U	5	--
Methylene Chloride	U	U	U	U	U	5	5
m&p-Xylene	U	U	1.4 J	U	U	5	5
Naphthalene	U	U	0.98 J	UJ	U	5	10
n-Butylbenzene	U	U	0.67 J	U	U	5	5
n-Propylbenzene	U	U	U	U	U	5	5
o-Xylene (1,2-Dimethylbenzene)	U	U	U	U	U	5	5
sec-Butylbenzene	U	U	U	U	U	5	5
Styrene	U	U	U	U	U	5	5
t-Butylbenzene	U	U	U	U	U	5	5
tert-Butyl Methyl Ether	U	U	U	U	U	5	10
Tetrachloroethylene (PCE)	U	U	U	U	U	5	5
Toluene	U	U	U	U	U	5	5
trans-1,2-Dichloroethene	U	U	U	U	U	5	5
trans-1,3-Dichloropropene	U	U	U	U	U	5	0.4
Trichloroethylene (TCE)	1.1 J	6.7	0.93 J	1.2 J	6.2	5	5
Trichlorofluoromethane	U	U	U	U	U	5	5
Vinyl Acetate	U	U	U	U	U	5	--
Vinyl Chloride	U	U	U	U	U	5	2
Xylenes, Total	U	U	1.4 J	U	U	5	5
Total Volatile Organic Compounds	1.1	11.5	10.27	2.14	11.5	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

D: Result taken from reanalysis at a secondary dilution.

UJ: Not detected, value estimated due to validation criteria.

Notes:

ug/l : Micrograms per liter

-- : Not established

Exceeds Class GA Groundwater Standard/

Guidance Value

Table A-1
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Volatile Organic Compounds

Sample ID	MW-09	MW-09	MW-09	MW-09	MW-09	CONTRACT	NYSDEC CLASS GA
Date Collected	8/19/2010	4/25/2011	9/27/2011	4/13/2012	9/6/2012	REQUIRED	GROUNDWATER
Dilution Factor	1	1	1	1	1	DETECTION	STANDARDS /
Units	ug/l	ug/l	ug/l	ug/l	ug/l	LIMIT	GUIDANCE VALUES
						(ug/l)	(ug/l)
1,1,1,2-Tetrachloroethane	U	U	U	U	U	5	5
1,1,1-Trichloroethane	2.4 J	U	U	U	U	5	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	5	5
1,1,2-Trichloroethane	U	U	U	U	U	5	1
1,1-Dichloroethane	U	U	U	U	U	5	5
1,1-Dichloroethene	U	U	U	U	U	5	5
1,1-Dichloropropene	U	U	U	U	U	5	5
1,2,3-Trichlorobenzene	U	U	U	U	U	5	5
1,2,3-Trichloropropene	U	U	U	U	U	5	0.04
1,2,4-Trichlorobenzene	U	U	U	UJ	U	5	5
1,2,4-Trimethylbenzene	U	U	U	UJ	U	5	5
1,2-Dibromo-3-chloropropene	U	U	U	U	U	5	0.04
1,2-Dibromoethane (Ethylene Dibromide)	U	U	U	UJ	U	5	0.0006
1,2-Dichlorobenzene	U	U	U	U	U	5	3
1,2-Dichloroethane	U	U	U	U	U	5	0.6
1,2-Dichloropropene	U	U	U	U	U	5	1
1,3,5-Trimethylbenzene (Mesitylene)	U	U	U	U	U	5	5
1,3-Dichlorobenzene	U	U	U	U	U	5	3
1,3-Dichloropropene	U	U	U	U	U	5	5
1,4-Dichlorobenzene	U	U	U	U	U	5	3
2,2-Dichloropropene	U	U	UJ	U	UJ	5	5
2-Chlorotoluene	U	U	U	U	U	5	50
2-Hexanone	U	U	U	U	U	5	50
4-Chlorotoluene	U	U	U*	U	U	5	5
Acetone	U	U	U	U	U	5	50
Benzene	U	UJ	U	U	U	5	1
Bromobenzene	U	U	U	U	U	5	5
Bromochloromethane	U	U	U	U	U	5	5
Bromodichloromethane	U	U	U	U	U	5	50
Bromoform	U	U	U	U	U	5	50
Bromomethane	U	U	UJ	UJ	U	5	5
Carbon Disulfide	U	U	U	U	U	5	60
Carbon Tetrachloride	U	U	U	U	U	5	5
Chlorobenzene	U	U	U	U	U	5	5
Chloroethane	U	U	U	U	U	5	5
Chloroform	U	U	7	1.6 J	U	5	7
Chloromethane	U	U	U	U	U	5	5
cis-1,2-Dichloroethylene	13	3.7 J	3.8 J	0.68 J	1.2 J	5	5
cis-1,3-Dichloropropene	U	U	U	U	U	5	0.4
Cymene	U	U	U	U	U	5	5
Dibromochloromethane	U	U	U	U	U	5	50
Dibromomethane	U	U	U	U	U	5	5
Dichlorodifluoromethane	U	U	U	U	U	5	5
Ethylbenzene	U	U	U	U	U	5	5
Hexachlorobutadiene	U	U	U	U	U	5	0.5
Iodomethane (Methyl Iodide)	U	U	UJ	UJ	U	5	5
Isopropylbenzene (Cumene)	U	U	U	U	U	5	5
Methyl Ethyl Ketone (2-Butanone)	U	U	U	U	U	5	50
Methyl Isobutyl Ketone	U	U	U	U	U	5	--
Methylene Chloride	U	U	U	U	U	5	5
m&p-Xylene	U	U	U	U	U	5	5
Naphthalene	U	U	U	UJ	U	5	10
n-Butylbenzene	U	U	U	U	U	5	5
n-Propylbenzene	U	U	U	U	U	5	5
o-Xylene (1,2-Dimethylbenzene)	U	U	U	U	U	5	5
sec-Butylbenzene	U	U	U	U	U	5	5
Styrene	U	U	U	U	U	5	5
t-Butylbenzene	U	U	U	U	U	5	5
tert-Butyl Methyl Ether	U	U	U	U	U	5	10
Tetrachloroethylene (PCE)	8.1	7.1	10	0.89	U	5	5
Toluene	U	U	U	U	U	5	5
trans-1,2-Dichloroethene	U	U	U	U	U	5	5
trans-1,3-Dichloropropene	U	U	U	U	U	5	0.4
Trichloroethylene (TCE)	45	16	21	3	5 J	5	5
Trichlorofluoromethane	U	U	U	U	U	5	5
Vinyl Acetate	U	U	U	U	U	5	--
Vinyl Chloride	U	U	U	U	U	5	2
Xylenes, Total	U	U	U	U	U	5	5
Total Volatile Organic Compounds	68.5	26.8	41.8	6.17	6.2	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

D: Result taken from reanalysis at a secondary dilution.

UJ: Not detected, value estimated due to validation criteria.

Notes:

ug/l : Micrograms per liter

-- : Not established

 Exceeds Class GA Groundwater Standard/

Guidance Value

Table A-1
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Volatile Organic Compounds

Sample ID	MW-10	MW-10	MW-10	MW-10	MW-10	CONTRACT	NYSDEC CLASS GA
Date Collected	8/18/2010	4/26/2011	9/27/2011	4/12/2012	9/11/2012	REQUIRED	GROUNDWATER
Dilution Factor	1	1	1	1	1	DETECTION	STANDARDS /
Units	ug/l	ug/l	ug/l	ug/l	ug/l	LIMIT	GUIDANCE VALUES
						(ug/l)	(ug/l)
1,1,1,2-Tetrachloroethane	U	U	U	U	U	5	5
1,1,1-Trichloroethane	U	U	U	U	U	5	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	5	5
1,1,2-Trichloroethane	U	U	U	U	U	5	1
1,1-Dichloroethane	U	U	U	U	U	5	5
1,1-Dichloroethene	U	U	U	U	U	5	5
1,1-Dichloropropene	U	U	U	U	U	5	5
1,2,3-Trichlorobenzene	U	U	U	U	U	5	5
1,2,3-Trichloropropene	U	U	U	U	U	5	0.04
1,2,4-Trichlorobenzene	U	U	U	UJ	U	5	5
1,2,4-Trimethylbenzene	U	U	U	UJ	U	5	5
1,2-Dibromo-3-chloropropene	U	U	U	U	U	5	0.04
1,2-Dibromoethane (Ethylene Dibromide)	U	U	U	UJ	U	5	0.0006
1,2-Dichlorobenzene	U	U	U	U	U	5	3
1,2-Dichloroethane	U	U	U	U	U	5	0.6
1,2-Dichloropropene	U	U	U	U	U	5	1
1,3,5-Trimethylbenzene (Mesitylene)	U	U	U	U	U	5	5
1,3-Dichlorobenzene	U	U	U	U	U	5	3
1,3-Dichloropropene	U	U	U	U	U	5	5
1,4-Dichlorobenzene	U	U	U	U	U	5	3
2,2-Dichloropropene	U	U	UJ	U	U	5	5
2-Chlorotoluene	U	U	U	U	U	5	50
2-Hexanone	U	U	U	U	U	5	50
4-Chlorotoluene	U	U	U	U	U	5	5
Acetone	U	U	U	U	U	5	50
Benzene	U	UJ	U	U	U	5	1
Bromobenzene	U	U	U	U	U	5	5
Bromochloromethane	U	U	U	U	U	5	5
Bromodichloromethane	U	U	U	U	U	5	50
Bromoform	U	U	U	U	U	5	50
Bromomethane	U	U	UJ	UJ	U	5	5
Carbon Disulfide	U	U	U	U	U	5	60
Carbon Tetrachloride	U	U	U	U	U	5	5
Chlorobenzene	U	U	U	U	U	5	5
Chloroethane	U	U	U	U	U	5	5
Chloroform	U	U	U	U	U	5	7
Chloromethane	U	U	U	U	U	5	5
cis-1,2-Dichloroethylene	U	U	6.7	2.2 J	1.1 J	5	5
cis-1,3-Dichloropropene	U	U	U	U	U	5	0.4
Cymene	U	U	U	U	U	5	5
Dibromochloromethane	U	U	U	U	U	5	50
Dibromomethane	U	U	U	U	U	5	5
Dichlorodifluoromethane	U	U	U	U	U	5	5
Ethylbenzene	U	U	U	U	U	5	5
Hexachlorobutadiene	U	U	U	U	U	5	0.5
Iodomethane (Methyl Iodide)	U	U	UJ	UJ	U	5	5
Isopropylbenzene (Cumene)	U	U	U	U	U	5	5
Methyl Ethyl Ketone (2-Butanone)	U	U	U	U	U	5	50
Methyl Isobutyl Ketone	U	U	U	U	U	5	--
Methylene Chloride	U	U	U	U	U	5	5
m&p-Xylene	U	U	U	U	U	5	5
Naphthalene	U	U	U	UJ	U	5	10
n-Butylbenzene	U	U	U	U	U	5	5
n-Propylbenzene	U	U	U	U	U	5	5
o-Xylene (1,2-Dimethylbenzene)	U	U	U	U	U	5	5
sec-Butylbenzene	U	U	U	U	U	5	5
Styrene	U	U	U	U	U	5	5
t-Butylbenzene	U	U	U	U	U	5	5
tert-Butyl Methyl Ether	U	U	U	U	U	5	10
Tetrachloroethylene (PCE)	U	U	1.6 J	U	0.68 J	5	5
Toluene	U	U	U	U	U	5	5
trans-1,2-Dichloroethene	U	U	U	U	U	5	5
trans-1,3-Dichloropropene	U	U	U	U	U	5	0.4
Trichloroethylene (TCE)	2.9 J	1 J	11	3.1 J	2.7 J	5	5
Trichlorofluoromethane	U	U	U	U	U	5	5
Vinyl Acetate	U	U	U	U	U	5	--
Vinyl Chloride	U	U	U	U	U	5	2
Xylenes, Total	U	U	U	U	U	5	5
Total Volatile Organic Compounds	2.9	1	19.3	5.3	4.48	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

D: Result taken from reanalysis at a secondary dilution.

UJ: Not detected, value estimated due to validation criteria.

Notes:

ug/l : Micrograms per liter

-- : Not established

[] : Exceeds Class GA Groundwater Standard/

Guidance Value

APPENDIX A-2

MONITORING WELL SAMPLE RESULTS SEMIVOLATILE ORGANIC COMPOUNDS

Table A-2
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Semivolatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-01 8/19/2010 1 ug/l	MW-01 4/26/2011 1 ug/l	MW-01 9/28/2011 1 ug/l	MW-01 4/12/2012 1 ug/l	MW-01 9/7/2012 1 ug/l	MW-01 4/5/2013 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,2,4-Trichlorobenzene	U	U	U	U	U	U	10	5
1,2-Dichlorobenzene	U	U	U	U	U	U	10	3
1,3-Dichlorobenzene	U	U	U	U	U	U	10	3
1,4-Dichlorobenzene	U	U	U	U	U	U	10	3
2,4,5-Trichlorophenol	U	U	U	U	U	U	20	1
2,4,6-Trichlorophenol	U	U	U	U	U	U	10	1
2,4-Dichlorophenol	U	U	U	U	U	U	10	5
2,4-Dimethylphenol	U	U	U	U	U	U	10	50
2,4-Dinitrophenol	U	U	U	U	UJ	U	20	10
2,4-Dinitrotoluene	U	U	U	U	U	U	10	5
2,6-Dinitrotoluene	U	U	U	U	U	U	10	5
2-Chloronaphthalene	U	U	U	U	U	U	10	10
2-Chlorophenol	U	U	U	U	U	U	10	1
2-Methylnaphthalene	U	U	U	U	UJ	U	10	--
2-Methylphenol (o-Cresol)	U	U	U	U	U	U	10	1
2-Nitroaniline	U	U	U	U	U	U	20	5
2-Nitrophenol	U	U	U	U	U	U	10	1
3,3'-Dichlorobenzidine	U	U	U	U	U	U	10	5
3-Nitroaniline	U	U	U	U	U	U	20	5
4,6-Dinitro-2-methylphenol	U	UJ	U	U	UJ	U	20	1
4-Bromophenyl Phenyl Ether	U	U	U	U	U	U	10	--
4-Chloro-3-methylphenol	U	U	U	U	U	U	10	1
4-Chloroaniline	U	U	U	U	U	U	10	5
4-Chlorophenyl Phenyl Ether	U	U	U	U	U	U	10	--
4-Methylphenol (p-Cresol)	U	U	U	U	U	U	10	1
4-Nitroaniline	U	U	U	U	U	U	20	5
4-Nitrophenol	U	U	U	U	U	U	20	1
Acenaphthene	U	U	U	U	U	U	10	20
Acenaphthylene	U	U	U	U	U	U	10	--
Anthracene	U	U	U	U	U	U	10	50
Benzo(a)anthracene	U	U	U	U	U	U	10	0.002
Benzo(a)pyrene	U	U	U	U	U	U	10	--
Benzo(b)fluoranthene	U	U	U	U	U	U	10	0.002
Benzo(g,h,i)perylene	U	U	U	U	U	U	10	--
Benzo(k)fluoranthene	U	U	U	U	U	U	10	0.002
Benzyl Butyl Phthalate	U	U	U	U	U	U	10	50
bis(2-Chloroethoxy) Methane	U	U	U	U	U	U	10	5
bis(2-Chloroethyl) Ether	U	U	U	U	U	U	10	1
bis(2-Chloroisopropyl) Ether	U	U	U	U	U	U	10	--
bis(2-Ethylhexyl) Phthalate	U	U	U	U	U*	U	10	5
Carbazole	U	U	U	U	U	U	10	--
Chrysene	U	U	U	U	U	U	10	0.002
Dibenz(a,h)anthracene	U	U	U	U	U	U	10	--
Dibenzofuran	U	U	U	U	U	U	10	--
Diethyl Phthalate	U	U	U	U	U	U	10	50
Dimethyl Phthalate	U	U	U	U	U	U	10	50
Di-n-Butyl Phthalate	U	U	U	U	U*	U	10	50
Di-n-Octylphthalate	U	U	U	U	U	U	10	50
Fluoranthene	U	U	U	U	U	U	10	50
Fluorene	U	U	U	U	U	U	10	50
Hexachlorobenzene	U	U	U	U	U	U	10	0.04
Hexachlorobutadiene	U	U	U	U	U	U	10	0.5
Hexachlorocyclopentadiene	U	UJ	U	U	UJ	U	10	5
Hexachloroethane	U	U	U	U	U	U	10	5
Indeno(1,2,3-c,d)pyrene	U	U	U	U	U	U	10	0.002
Isophorone	U	U	U	U	U	U	10	50
Naphthalene	U	U	U	U	U	U	10	10
Nitrobenzene	U	U	U	U	UJ	U	10	0.4
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	10	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	20	50
Pentachlorophenol	U	U	U	U	UJ	U	10	1
Phenanthrene	U	U	U	U	U	U	10	50
Phenol	U	U	U	U*	U	U	10	1
Pyrene	U	U	U	U	U	U	10	50
Total Semivolatile Organic Compounds	0	0	0	0	0	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

UJ: Not detected, value estimated due to validation criteria

U*or UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l: Micrograms per liter

--: Not established

Table A-2
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Semivolatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-01 9/5/2013 1 ug/l	MW-01 4/22/2014 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,2,4-Trichlorobenzene	U	U	10	5
1,2-Dichlorobenzene	U	U	10	3
1,3-Dichlorobenzene	U	U	10	3
1,4-Dichlorobenzene	U	U	10	3
2,4,5-Trichlorophenol	U	U	20	1
2,4,6-Trichlorophenol	U	U	10	1
2,4-Dichlorophenol	U	U	10	5
2,4-Dimethylphenol	U	U	10	50
2,4-Dinitrophenol	U	U	20	10
2,4-Dinitrotoluene	U	U	10	5
2,6-Dinitrotoluene	U	U	10	5
2-Chloronaphthalene	U	U	10	10
2-Chlorophenol	U	U	10	1
2-Methylnaphthalene	U	U	10	--
2-Methylphenol (o-Cresol)	U	U	10	1
2-Nitroaniline	U	U	20	5
2-Nitrophenol	U	U	10	1
3,3'-Dichlorobenzidine	U	U	10	5
3-Nitroaniline	U	U	20	5
4,6-Dinitro-2-methylphenol	U	U	20	1
4-Bromophenyl Phenyl Ether	U	U	10	--
4-Chloro-3-methylphenol	U	U	10	1
4-Chloroaniline	U	U	10	5
4-Chlorophenyl Phenyl Ether	U	U	10	--
4-Methylphenol (p-Cresol)	U	U	10	1
4-Nitroaniline	U	U	20	5
4-Nitrophenol	U	U	20	1
Acenaphthene	U	U	10	20
Acenaphthylene	U	U	10	--
Anthracene	U	U	10	50
Benzo(a)anthracene	U	U	10	0.002
Benzo(a)pyrene	U	U	10	--
Benzo(b)fluoranthene	U	U	10	0.002
Benzo(g,h,i)perylene	U	U	10	--
Benzo(k)fluoranthene	U	U	10	0.002
Benzyl Butyl Phthalate	U	U	10	50
bis(2-Chloroethoxy) Methane	U	U	10	5
bis(2-Chloroethyl) Ether	U	U	10	1
bis(2-Chloroisopropyl) Ether	U	U	10	--
bis(2-Ethylhexyl) Phthalate	U	U	10	5
Carbazole	U	U	10	--
Chrysene	U	U	10	0.002
Dibenz(a,h)anthracene	U	U	10	--
Dibenzofuran	U	U	10	--
Diethyl Phthalate	U	U	10	50
Dimethyl Phthalate	U	U	10	50
Di-n-Butyl Phthalate	U	U	10	50
Di-n-Octylphthalate	U	U	10	50
Fluoranthene	U	U	10	50
Fluorene	U	U	10	50
Hexachlorobenzene	U	U	10	0.04
Hexachlorobutadiene	U	U	10	0.5
Hexachlorocyclopentadiene	U	U	10	5
Hexachloroethane	U	U	10	5
Indeno(1,2,3-c,d)pyrene	U	U	10	0.002
Isophorone	U	U	10	50
Naphthalene	U	U	10	10
Nitrobenzene	U	U	10	0.4
N-Nitroso-di-n-propylamine	U	U	10	--
N-Nitrosodiphenylamine	U	U	20	50
Pentachlorophenol	U	U	10	1
Phenanthrene	U	U	10	50
Phenol	U	U	10	1
Pyrene	U	U	10	50
Total Semivolatile Organic Compounds	0	0	--	--

Qualifiers:

Notes:

U: Not detected

ug/l: Micrograms per liter

J: Estimated value or limit

--: Not established

UJ: Not detected, value estimated due to validation criteria

U*or UB: Result qualified as non-detect based on validation criteria

2786/P/CPCGW2010-2014DataTables.xls

Table A-2
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Semivolatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-03 8/18/2010 1 ug/l	MW-03 4/25/2011 1 ug/l	MW-03 9/27/2011 1 ug/l	MW-03 4/13/2012 1 ug/l	MW-03 9/6/2012 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,2,4-Trichlorobenzene	U	U	U	U	U	10	5
1,2-Dichlorobenzene	U	U	U	U	U	10	3
1,3-Dichlorobenzene	U	U	U	U	U	10	3
1,4-Dichlorobenzene	U	U	U	U	U	10	3
2,4,5-Trichlorophenol	U	U	U	U	U	20	1
2,4,6-Trichlorophenol	U	U	U	U	U	10	1
2,4-Dichlorophenol	U	U	U	U	U	10	5
2,4-Dimethylphenol	U	U	U	U	U	10	50
2,4-Dinitrophenol	U	U	U	U	UJ	20	10
2,4-Dinitrotoluene	U	U	U	U	U	10	5
2,6-Dinitrotoluene	U	U	U	U	U	10	5
2-Chloronaphthalene	U	U	U	U	U	10	10
2-Chlorophenol	U	U	U	U	U	10	1
2-Methylnaphthalene	U	U	U	U	UJ	10	--
2-Methylphenol (o-Cresol)	U	U	U	U	U	10	1
2-Nitroaniline	U	U	U	U	U	20	5
2-Nitrophenol	U	U	U	U	U	10	1
3,3'-Dichlorobenzidine	U	U	UJ	U	U	10	5
3-Nitroaniline	U	U	U	U	U	20	5
4,6-Dinitro-2-methylphenol	U	UJ	U	U	UJ	20	1
4-Bromophenyl Phenyl Ether	U	U	U	U	U	10	--
4-Chloro-3-methylphenol	U	U	U	U	U	10	1
4-Chloroaniline	U	U	U	U	U	10	5
4-Chlorophenyl Phenyl Ether	U	U	U	U	U	10	--
4-Methylphenol (p-Cresol)	U	U	U	U	U	10	1
4-Nitroaniline	U	U	U	U	U	20	5
4-Nitrophenol	U	U	U	U	U	20	1
Acenaphthene	U	U	U	U	U	10	20
Acenaphthylene	U	U	U	U	U	10	--
Anthracene	U	U	U	U	U	10	50
Benzo(a)anthracene	U	U	UJ	U	U	10	0.002
Benzo(a)pyrene	U	U	UJ	U	U	10	--
Benzo(b)fluoranthene	U	U	UJ	U	U	10	0.002
Benzo(g,h,i)perylene	U	U	UJ	U	U	10	--
Benzo(k)fluoranthene	U	U	UJ	U	U	10	0.002
Benzyl Butyl Phthalate	U	U	UJ	U	U	10	50
bis(2-Chloroethoxy) Methane	U	U	U	U	U	10	5
bis(2-Chloroethyl) Ether	U	U	U	U	U	10	1
bis(2-Chloroisopropyl) Ether	U	U	U	U	U	10	--
bis(2-Ethylhexyl) Phthalate	U	U	UJ	U	U*	10	5
Carbazole	U	U	U	U	U	10	--
Chrysene	U	U	UJ	U	U	10	0.002
Dibenz(a,h)anthracene	U	U	UJ	U	U	10	--
Dibenzofuran	U	U	U	U	U	10	--
Diethyl Phthalate	U	U	U	U	U	10	50
Dimethyl Phthalate	U	U	U	U	U	10	50
Di-n-Butyl Phthalate	U	U	U	U	U*	10	50
Di-n-Octylphthalate	U	U	UJ	U	U	10	50
Fluoranthene	U	U	U	U	U	10	50
Fluorene	U	U	U	U	U	10	50
Hexachlorobenzene	U	U	U	U	U	10	0.04
Hexachlorobutadiene	U	U	U	U	U	10	0.5
Hexachlorocyclopentadiene	U	UJ	U	U	UJ	10	5
Hexachloroethane	U	U	U	U	U	10	5
Indeno(1,2,3-c,d)pyrene	U	U	UJ	U	U	10	0.002
Isophorone	U	U	U	U	U	10	50
Naphthalene	U	U	U	U	U	10	10
Nitrobenzene	U	U	U	U	UJ	10	0.4
N-Nitroso-di-n-propylamine	U	U	U	U	U	10	--
N-Nitrosodiphenylamine	U	U	U	U	U	20	50
Pentachlorophenol	U	U	U	U	UJ	10	1
Phenanthrene	U	U	U	U	U	10	50
Phenol	U	U	U	U*	U	10	1
Pyrene	U	U	U	U	U	10	50
Total Semivolatile Organic Compounds	0	0	0	0	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

UJ: Not detected, value estimated due to validation criteria

U* or UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l: Micrograms per liter

--: Not established

Table A-2
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Semivolatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-03R 9/6/2012 1 ug/l	MW-03R 4/4/2013 1 ug/l	MW-03R 9/5/2013 1 ug/l	MW-03R 4/22/2014 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,2,4-Trichlorobenzene	U	U	U	U	10	5
1,2-Dichlorobenzene	U	U	U	U	10	3
1,3-Dichlorobenzene	U	U	U	U	10	3
1,4-Dichlorobenzene	U	U	U	U	10	3
2,4,5-Trichlorophenol	U	U	U	U	20	1
2,4,6-Trichlorophenol	U	U	U	U	10	1
2,4-Dichlorophenol	U	U	U	U	10	5
2,4-Dimethylphenol	U	U	U	U	10	50
2,4-Dinitrophenol	UJ	U	U	U	20	10
2,4-Dinitrotoluene	U	U	U	U	10	5
2,6-Dinitrotoluene	U	U	U	U	10	5
2-Chloronaphthalene	U	U	U	U	10	10
2-Chlorophenol	U	U	U	U	10	1
2-Methylnaphthalene	UJ	U	U	U	10	--
2-Methylphenol (o-Cresol)	U	U	U	U	10	1
2-Nitroaniline	U	U	U	U	20	5
2-Nitrophenol	U	U	U	U	10	1
3,3'-Dichlorobenzidine	U	U	U	U	10	5
3-Nitroaniline	U	U	U	U	20	5
4,6-Dinitro-2-methylphenol	UJ	U	U	U	20	1
4-Bromophenyl Phenyl Ether	U	U	U	U	10	--
4-Chloro-3-methylphenol	U	U	U	U	10	1
4-Chloroaniline	U	U	U	U	10	5
4-Chlorophenyl Phenyl Ether	U	U	U	U	10	--
4-Methylphenol (p-Cresol)	U	U	U	U	10	1
4-Nitroaniline	U	U	U	U	20	5
4-Nitrophenol	U	U	U	U	20	1
Acenaphthene	U	U	U	U	10	20
Acenaphthylene	U	U	U	U	10	--
Anthracene	U	U	U	U	10	50
Benzo(a)anthracene	U	U	U	U	10	0.002
Benzo(a)pyrene	U	U	U	U	10	--
Benzo(b)fluoranthene	U	U	U	U	10	0.002
Benzo(g,h,i)perylene	U	U	U	U	10	--
Benzo(k)fluoranthene	U	U	U	U	10	0.002
Benzyl Butyl Phthalate	U	U	U	U	10	50
bis(2-Chloroethoxy) Methane	U	U	U	U	10	5
bis(2-Chloroethyl) Ether	U	U	U	U	10	1
bis(2-Chloroisopropyl) Ether	U	U	U	U	10	--
bis(2-Ethylhexyl) Phthalate	U*	U	U	U	10	5
Carbazole	U	U	U	U	10	--
Chrysene	U	U	U	U	10	0.002
Dibenz(a,h)anthracene	U	U	U	U	10	--
Dibenzofuran	U	U	U	U	10	--
Diethyl Phthalate	U	U	U	U	10	50
Dimethyl Phthalate	U	U	U	U	10	50
Di-n-Butyl Phthalate	U*	U	U	U	10	50
Di-n-Octylphthalate	U	U	U	U	10	50
Fluoranthene	U	U	U	U	10	50
Fluorene	U	U	U	U	10	50
Hexachlorobenzene	U	U	U	U	10	0.04
Hexachlorobutadiene	U	U	U	U	10	0.5
Hexachlorocyclopentadiene	UJ	U	U	U	10	5
Hexachloroethane	U	U	U	U	10	5
Indeno(1,2,3-c,d)pyrene	U	U	U	U	10	0.002
Isophorone	U	U	U	U	10	50
Naphthalene	U	U	U	U	10	10
Nitrobenzene	UJ	U	U	U	10	0.4
N-Nitroso-di-n-propylamine	U	U	U	U	10	--
N-Nitrosodiphenylamine	U	U	U	U	20	50
Pentachlorophenol	UJ	U	U	U	10	1
Phenanthrene	U	U	U	U	10	50
Phenol	U	U	U	U	10	1
Pyrene	U	U	U	U	10	50
Total Semivolatile Organic Compounds	0	0	0	0	--	--

Qualifiers:

Notes:

U: Not detected

ug/l: Micrograms per liter

J: Estimated value or limit

--: Not established

UJ: Not detected, value estimated due to validation criteria

U* or UB: Result qualified as non-detect based on validation criteria

2786/PCPCGW2010-2014DataTables.xls

Table A-2
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Semivolatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-04 8/19/2010 1 ug/l	MW-04 4/26/2011 1 ug/l	MW-04 9/28/2011 1 ug/l	MW-04 4/13/2012 1 ug/l	MW-04 9/7/2012 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,2,4-Trichlorobenzene	U	U	U	U	U	10	5
1,2-Dichlorobenzene	U	U	U	U	U	10	3
1,3-Dichlorobenzene	U	U	U	U	U	10	3
1,4-Dichlorobenzene	U	U	U	U	U	10	3
2,4,5-Trichlorophenol	U	U	U	U	U	20	1
2,4,6-Trichlorophenol	U	U	U	U	U	10	1
2,4-Dichlorophenol	U	U	U	U	U	10	5
2,4-Dimethylphenol	U	U	U	U	U	10	50
2,4-Dinitrophenol	U	U	U	U	UJ	20	10
2,4-Dinitrotoluene	U	U	U	U	U	10	5
2,6-Dinitrotoluene	U	U	U	U	U	10	5
2-Chloronaphthalene	U	U	U	U	U	10	10
2-Chlorophenol	U	U	U	U	U	10	1
2-Methylnaphthalene	U	U	U	U	UJ	10	--
2-Methylphenol (o-Cresol)	U	U	U	U	U	10	1
2-Nitroaniline	U	U	U	U	U	20	5
2-Nitrophenol	U	U	U	U	U	10	1
3,3'-Dichlorobenzidine	U	U	U	U	U	10	5
3-Nitroaniline	U	U	U	U	U	20	5
4,6-Dinitro-2-methylphenol	U	UJ	U	U	UJ	20	1
4-Bromophenyl Phenyl Ether	U	U	U	U	U	10	--
4-Chloro-3-methylphenol	U	U	U	U	U	10	1
4-Chloroaniline	U	U	U	U	U	10	5
4-Chlorophenyl Phenyl Ether	U	U	U	U	U	10	--
4-Methylphenol (p-Cresol)	U	U	U	U	U	10	1
4-Nitroaniline	U	U	U	U	U	20	5
4-Nitrophenol	U	U	U	U	U	20	1
Acenaphthene	U	U	U	U	U	10	20
Acenaphthylene	U	U	U	U	U	10	--
Anthracene	U	U	U	U	U	10	50
Benzo(a)anthracene	U	U	U	U	U	10	0.002
Benzo(a)pyrene	U	U	U	U	U	10	--
Benzo(b)fluoranthene	U	U	U	U	U	10	0.002
Benzo(g,h,i)perylene	U	U	U	U	U	10	--
Benzo(k)fluoranthene	U	U	U	U	U	10	0.002
Benzyl Butyl Phthalate	U	U	U	U	U	10	50
bis(2-Chloroethoxy) Methane	U	U	U	U	U	10	5
bis(2-Chloroethyl) Ether	U	U	U	U	U	10	1
bis(2-Chloroisopropyl) Ether	U	U	U	U	U	10	--
bis(2-Ethylhexyl) Phthalate	U	U	U	U	U*	10	5
Carbazole	U	U	U	U	U	10	--
Chrysene	U	U	U	U	U	10	0.002
Dibenz(a,h)anthracene	U	U	U	U	U	10	--
Dibenzofuran	U	U	U	U	U	10	--
Diethyl Phthalate	U	U	U	U	U	10	50
Dimethyl Phthalate	U	U	U	U	U	10	50
Di-n-Butyl Phthalate	U	U	U	U	U*	10	50
Di-n-Octylphthalate	U	U	U	U	U	10	50
Fluoranthene	U	U	U	U	U	10	50
Fluorene	U	U	U	U	U	10	50
Hexachlorobenzene	U	U	U	U	U	10	0.04
Hexachlorobutadiene	U	U	U	U	U	10	0.5
Hexachlorocyclopentadiene	U	UJ	U	U	UJ	10	5
Hexachloroethane	U	U	U	U	U	10	5
Indeno(1,2,3-c,d)pyrene	U	U	U	U	U	10	0.002
Isophorone	U	U	U	U	U	10	50
Naphthalene	U	U	U	U	U	10	10
Nitrobenzene	U	U	U	U	UJ	10	0.4
N-Nitroso-di-n-propylamine	U	U	U	U	U	10	--
N-Nitrosodiphenylamine	U	U	U	U	U	20	50
Pentachlorophenol	U	U	U	U	UJ	10	1
Phenanthrene	U	U	U	U	U	10	50
Phenol	U	U	U	U*	U	10	1
Pyrene	U	U	U	U	U	10	50
Total Semivolatile Organic Compounds	0	0	0	0	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

UJ: Not detected, value estimated due to validation criteria

U* or UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l: Micrograms per liter

--: Not established

Table A-2
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Semivolatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-04R 9/5/2012 1 ug/l	MW-04R 4/4/2013 1 ug/l	MW-04R 9/5/2013 1 ug/l	MW-04R 4/22/2014 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,2,4-Trichlorobenzene	U	U	U	U	10	5
1,2-Dichlorobenzene	U	U	U	U	10	3
1,3-Dichlorobenzene	U	U	U	U	10	3
1,4-Dichlorobenzene	U	U	U	U	10	3
2,4,5-Trichlorophenol	U	U	U	U	20	1
2,4,6-Trichlorophenol	U	U	U	U	10	1
2,4-Dichlorophenol	U	U	U	U	10	5
2,4-Dimethylphenol	U	U	U	U	10	50
2,4-Dinitrophenol	UJ	U	U	U	20	10
2,4-Dinitrotoluene	U	U	U	U	10	5
2,6-Dinitrotoluene	U	U	U	U	10	5
2-Chloronaphthalene	U	U	U	U	10	10
2-Chlorophenol	U	U	U	U	10	1
2-Methylnaphthalene	U	U	U	U	10	--
2-Methylphenol (o-Cresol)	U	U	U	U	10	1
2-Nitroaniline	U	U	U	U	20	5
2-Nitrophenol	U	U	U	U	10	1
3,3'-Dichlorobenzidine	U	U	U	U	10	5
3-Nitroaniline	U	U	U	U	20	5
4,6-Dinitro-2-methylphenol	UJ	U	U	U	20	1
4-Bromophenyl Phenyl Ether	U	U	U	U	10	--
4-Chloro-3-methylphenol	U	U	U	U	10	1
4-Chloroaniline	U	U	U	U	10	5
4-Chlorophenyl Phenyl Ether	U	U	U	U	10	--
4-Methylphenol (p-Cresol)	U	U	U	U	10	1
4-Nitroaniline	U	U	U	U	20	5
4-Nitrophenol	U	U	U	U	20	1
Acenaphthene	U	U	U	U	10	20
Acenaphthylene	U	U	U	U	10	--
Anthracene	U	U	U	U	10	50
Benzo(a)anthracene	U	U	U	U	10	0.002
Benzo(a)pyrene	U	U	U	U	10	--
Benzo(b)fluoranthene	U	U	U	U	10	0.002
Benzo(g,h,i)perylene	U	U	U	U	10	--
Benzo(k)fluoranthene	U	U	U	U	10	0.002
Benzyl Butyl Phthalate	U	U	U	U	10	50
bis(2-Chloroethoxy) Methane	U	U	U	U	10	5
bis(2-Chloroethyl) Ether	UJ	U	U	U	10	1
bis(2-Chloroisopropyl) Ether	U	U	U	U	10	--
bis(2-Ethylhexyl) Phthalate	U*	U	U	U	10	5
Carbazole	U	U	U	U	10	--
Chrysene	U	U	U	U	10	0.002
Dibenz(a,h)anthracene	U	U	U	U	10	--
Dibenzofuran	U	U	U	U	10	--
Diethyl Phthalate	U	U	U	U	10	50
Dimethyl Phthalate	U	U	U	U	10	50
Di-n-Butyl Phthalate	U	U	1.3 J	UB	10	50
Di-n-Octylphthalate	U	U	U	U	10	50
Fluoranthene	U	U	U	U	10	50
Fluorene	U	U	U	U	10	50
Hexachlorobenzene	U	U	U	U	10	0.04
Hexachlorobutadiene	U	U	U	U	10	0.5
Hexachlorocyclopentadiene	UJ	U	U	U	10	5
Hexachloroethane	U	U	U	U	10	5
Indeno(1,2,3-c,d)pyrene	U	U	U	U	10	0.002
Isophorone	U	U	U	U	10	50
Naphthalene	U	U	U	U	10	10
Nitrobenzene	U	U	U	U	10	0.4
N-Nitroso-di-n-propylamine	U	U	U	U	10	--
N-Nitrosodiphenylamine	U	U	U	U	20	50
Pentachlorophenol	UJ	U	U	U	10	1
Phenanthrene	U	U	U	U	10	50
Phenol	U	U	U	U	10	1
Pyrene	U	U	U	U	10	50
Total Semivolatile Organic Compounds	0	0	1.3	0	--	--

Qualifiers:

Notes:

U: Not detected

ug/l: Micrograms per liter

J: Estimated value or limit

--: Not established

UJ: Not detected, value estimated due to validation criteria

U* or UB: Result qualified as non-detect based on validation criteria

2786/P/PCPGW2010-2014DataTables.xls

Table A-2
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Semivolatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-05 8/19/2010 1 ug/l	MW-05 4/26/2011 1 ug/l	MW-05 9/28/2011 1 ug/l	MW-05 4/12/2012 1 ug/l	MW-05 9/5/2012 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,2,4-Trichlorobenzene	U	U	U	U	U	10	5
1,2-Dichlorobenzene	U	U	U	U	U	10	3
1,3-Dichlorobenzene	U	U	U	U	U	10	3
1,4-Dichlorobenzene	U	U	U	U	U	10	3
2,4,5-Trichlorophenol	U	U	U	U	U	20	1
2,4,6-Trichlorophenol	U	U	U	U	U	10	1
2,4-Dichlorophenol	U	U	U	U	U	10	5
2,4-Dimethylphenol	U	U	U	U	U	10	50
2,4-Dinitrophenol	U	U	U	U	UJ	20	10
2,4-Dinitrotoluene	U	U	U	U	U	10	5
2,6-Dinitrotoluene	U	U	U	U	U	10	5
2-Chloronaphthalene	U	U	U	U	U	10	10
2-Chlorophenol	U	U	U	U	U	10	1
2-Methylnaphthalene	U	U	U	U	U	10	--
2-Methylphenol (o-Cresol)	U	U	U	U	U	10	1
2-Nitroaniline	U	U	U	U	U	20	5
2-Nitrophenol	U	U	U	U	U	10	1
3,3'-Dichlorobenzidine	U	U	U	U	U	10	5
3-Nitroaniline	U	U	U	U	U	20	5
4,6-Dinitro-2-methylphenol	U	UJ	U	U	UJ	20	1
4-Bromophenyl Phenyl Ether	U	U	U	U	U	10	--
4-Chloro-3-methylphenol	U	U	U	U	U	10	1
4-Chloroaniline	U	U	U	U	U	10	5
4-Chlorophenyl Phenyl Ether	U	U	U	U	U	10	--
4-Methylphenol (p-Cresol)	U	U	U	U	U	10	1
4-Nitroaniline	U	U	U	U	U	20	5
4-Nitrophenol	U	U	U	U	U	20	1
Acenaphthene	U	U	U	U	U	10	20
Acenaphthylene	U	U	U	U	U	10	--
Anthracene	U	U	U	U	U	10	50
Benzo(a)anthracene	U	U	U	U	U	10	0.002
Benzo(a)pyrene	U	U	U	U	U	10	--
Benzo(b)fluoranthene	U	U	U	U	U	10	0.002
Benzo(g,h,i)perylene	U	U	U	U	U	10	--
Benzo(k)fluoranthene	U	U	U	U	U	10	0.002
Benzyl Butyl Phthalate	U	U	U	U	U	10	50
bis(2-Chloroethoxy) Methane	U	U	U	U	U	10	5
bis(2-Chloroethyl) Ether	U	U	U	U	UJ	10	1
bis(2-Chloroisopropyl) Ether	U	U	U	U	U	10	--
bis(2-Ethylhexyl) Phthalate	U	U	U	U	U	10	5
Carbazole	U	U	U	U	U	10	--
Chrysene	U	U	U	U	U	10	0.002
Dibenz(a,h)anthracene	U	U	U	U	U	10	--
Dibenzofuran	U	U	U	U	U	10	--
Diethyl Phthalate	U	U	U	U	U	10	50
Dimethyl Phthalate	U	U	U	U	U	10	50
Di-n-Butyl Phthalate	U	U	U	U	U	10	50
Di-n-Octylphthalate	U	U	U	U	U	10	50
Fluoranthene	U	U	U	U	U	10	50
Fluorene	U	U	U	U	U	10	50
Hexachlorobenzene	U	U	U	U	U	10	0.04
Hexachlorobutadiene	U	U	U	U	U	10	0.5
Hexachlorocyclopentadiene	U	UJ	U	U	UJ	10	5
Hexachloroethane	U	U	U	U	U	10	5
Indeno(1,2,3-c,d)pyrene	U	U	U	U	U	10	0.002
Isophorone	U	U	U	U	U	10	50
Naphthalene	U	U	U	U	U	10	10
Nitrobenzene	U	U	U	U	U	10	0.4
N-Nitroso-di-n-propylamine	U	U	U	U	U	10	--
N-Nitrosodiphenylamine	U	U	U	U	U	20	50
Pentachlorophenol	U	U	U	U	UJ	10	1
Phenanthrene	U	U	U	U	U	10	50
Phenol	U	U	U	U	U	10	1
Pyrene	U	U	U	U	U	10	50
Total Semivolatile Organic Compounds	0	0	0	0	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

UJ: Not detected, value estimated due to validation criteria

U* or UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l: Micrograms per liter

--: Not established

Table A-2
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Semivolatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-06 8/18/2010 1 ug/l	MW-06 4/25/2011 1 ug/l	MW-06 9/27/2011 1 ug/l	MW-06 4/12/2012 1 ug/l	MW-06 9/5/2012 1 ug/l	MW-06 4/4/2013 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,2,4-Trichlorobenzene	U	U	U	U	U	U	10	5
1,2-Dichlorobenzene	U	U	U	U	U	U	10	3
1,3-Dichlorobenzene	U	U	U	U	U	U	10	3
1,4-Dichlorobenzene	U	U	U	U	U	U	10	3
2,4,5-Trichlorophenol	U	U	U	U	U	U	20	1
2,4,6-Trichlorophenol	U	U	U	U	U	U	10	1
2,4-Dichlorophenol	U	U	U	U	U	U	10	5
2,4-Dimethylphenol	U	U	U	U	U	U	10	50
2,4-Dinitrophenol	U	U	U	U	UJ	U	20	10
2,4-Dinitrotoluene	U	U	U	U	U	U	10	5
2,6-Dinitrotoluene	U	U	U	U	U	U	10	5
2-Chloronaphthalene	U	U	U	U	U	U	10	10
2-Chlorophenol	U	U	U	U	U	U	10	1
2-Methylnaphthalene	U	U	U	U	U	U	10	--
2-Methylphenol (o-Cresol)	U	U	U	U	U	U	10	1
2-Nitroaniline	U	U	U	U	U	U	20	5
2-Nitrophenol	U	U	U	U	U	U	10	1
3,3'-Dichlorobenzidine	U	U	U	U	U	U	10	5
3-Nitroaniline	U	U	U	U	U	U	20	5
4,6-Dinitro-2-methylphenol	U	UJ	U	U	UJ	U	20	1
4-Bromophenyl Phenyl Ether	U	U	U	U	U	U	10	--
4-Chloro-3-methylphenol	U	U	U	U	U	U	10	1
4-Chloroaniline	U	U	U	U	U	U	10	5
4-Chlorophenyl Phenyl Ether	U	U	U	U	U	U	10	--
4-Methylphenol (p-Cresol)	U	U	U	U	U	U	10	1
4-Nitroaniline	U	U	U	U	U	U	20	5
4-Nitrophenol	U	U	U	U	U	U	20	1
Acenaphthene	U	U	U	U	U	U	10	20
Acenaphthylene	U	U	U	U	U	U	10	--
Anthracene	U	U	U	U	U	U	10	50
Benzo(a)anthracene	U	U	U	U	U	U	10	0.002
Benzo(a)pyrene	U	U	U	U	U	U	10	--
Benzo(b)fluoranthene	U	U	U	U	U	U	10	0.002
Benzo(g,h,i)perylene	U	U	U	U	U	U	10	--
Benzo(k)fluoranthene	U	U	U	U	U	U	10	0.002
Benzyl Butyl Phthalate	U	U	U	U	U	U	10	50
bis(2-Chloroethoxy) Methane	U	U	U	U	U	U	10	5
bis(2-Chloroethyl) Ether	U	U	U	U	UJ	U	10	1
bis(2-Chloroisopropyl) Ether	U	U	U	U	U	U	10	--
bis(2-Ethylhexyl) Phthalate	U	U	U	U	U*	U	10	5
Carbazole	U	U	U	U	U	U	10	--
Chrysene	U	U	U	U	U	U	10	0.002
Dibenz(a,h)anthracene	U	U	U	U	U	U	10	--
Dibenzofuran	U	U	U	U	U	U	10	--
Diethyl Phthalate	U	U	U	U	U	U	10	50
Dimethyl Phthalate	U	U	U	U	U	U	10	50
Di-n-Butyl Phthalate	U	U	U	U	U	U	10	50
Di-n-Octylphthalate	U	U	U	U	U	U	10	50
Fluoranthene	U	U	U	U	U	U	10	50
Fluorene	U	U	U	U	U	U	10	50
Hexachlorobenzene	U	U	U	U	U	U	10	0.04
Hexachlorobutadiene	U	U	U	U	U	U	10	0.5
Hexachlorocyclopentadiene	U	UJ	U	U	UJ	U	10	5
Hexachloroethane	U	U	U	U	U	U	10	5
Indeno(1,2,3-c,d)pyrene	U	U	U	U	U	U	10	0.002
Isophorone	U	U	U	U	U	U	10	50
Naphthalene	U	U	U	U	U	U	10	10
Nitrobenzene	U	U	U	U	U	U	10	0.4
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	10	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	20	50
Pentachlorophenol	U	U	U	U	UJ	U	10	1
Phenanthrene	U	U	U	U	U	U	10	50
Phenol	U	U	U	U	U	U	10	1
Pyrene	U	U	U	U	U	U	10	50
Total Semivolatile Organic Compounds	0	0	0	0	0	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

UJ: Not detected, value estimated due to validation criteria

U*or UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l: Micrograms per liter

--: Not established

Table A-2
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Semivolatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-06 9/5/2013 1 ug/l	MW-06 4/22/2014 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,2,4-Trichlorobenzene	U	U	10	5
1,2-Dichlorobenzene	U	U	10	3
1,3-Dichlorobenzene	U	U	10	3
1,4-Dichlorobenzene	U	U	10	3
2,4,5-Trichlorophenol	U	U	20	1
2,4,6-Trichlorophenol	U	U	10	1
2,4-Dichlorophenol	U	U	10	5
2,4-Dimethylphenol	U	U	10	50
2,4-Dinitrophenol	U	U	20	10
2,4-Dinitrotoluene	U	U	10	5
2,6-Dinitrotoluene	U	U	10	5
2-Chloronaphthalene	U	U	10	10
2-Chlorophenol	U	U	10	1
2-Methylnaphthalene	U	U	10	--
2-Methylphenol (o-Cresol)	U	U	10	1
2-Nitroaniline	U	U	20	5
2-Nitrophenol	U	U	10	1
3,3'-Dichlorobenzidine	U	U	10	5
3-Nitroaniline	U	U	20	5
4,6-Dinitro-2-methylphenol	U	U	20	1
4-Bromophenyl Phenyl Ether	U	U	10	--
4-Chloro-3-methylphenol	U	U	10	1
4-Chloroaniline	U	U	10	5
4-Chlorophenyl Phenyl Ether	U	U	10	--
4-Methylphenol (p-Cresol)	U	U	10	1
4-Nitroaniline	U	U	20	5
4-Nitrophenol	U	U	20	1
Acenaphthene	U	U	10	20
Acenaphthylene	U	U	10	--
Anthracene	U	U	10	50
Benzo(a)anthracene	U	U	10	0.002
Benzo(a)pyrene	U	U	10	--
Benzo(b)fluoranthene	U	U	10	0.002
Benzo(g,h,i)perylene	U	U	10	--
Benzo(k)fluoranthene	U	U	10	0.002
Benzyl Butyl Phthalate	U	U	10	50
bis(2-Chloroethoxy) Methane	U	U	10	5
bis(2-Chloroethyl) Ether	U	U	10	1
bis(2-Chloroisopropyl) Ether	U	U	10	--
bis(2-Ethylhexyl) Phthalate	U	U	10	5
Carbazole	U	U	10	--
Chrysene	U	U	10	0.002
Dibenz(a,h)anthracene	U	U	10	--
Dibenzofuran	U	U	10	--
Diethyl Phthalate	U	U	10	50
Dimethyl Phthalate	U	U	10	50
Di-n-Butyl Phthalate	1.1 J	UB	10	50
Di-n-Octylphthalate	U	U	10	50
Fluoranthene	U	U	10	50
Fluorene	U	U	10	50
Hexachlorobenzene	U	U	10	0.04
Hexachlorobutadiene	U	U	10	0.5
Hexachlorocyclopentadiene	U	U	10	5
Hexachloroethane	U	U	10	5
Indeno(1,2,3-c,d)pyrene	U	U	10	0.002
Isophorone	U	U	10	50
Naphthalene	U	U	10	10
Nitrobenzene	U	U	10	0.4
N-Nitroso-di-n-propylamine	U	U	10	--
N-Nitrosodiphenylamine	U	U	20	50
Pentachlorophenol	U	U	10	1
Phenanthrene	U	U	10	50
Phenol	U	U	10	1
Pyrene	U	U	10	50
Total Semivolatile Organic Compounds	1.1	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

UJ: Not detected, value estimated due to validation criteria

U*or UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l: Micrograms per liter

--: Not established

Table A-2
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Semivolatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-07 8/18/2010 1 ug/l	MW-07 4/25/2011 1 ug/l	MW-07 9/27/2011 1 ug/l	MW-07 4/12/2012 1 ug/l	MW-07 9/5/2012 1 ug/l	MW-07 4/4/2013 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,2,4-Trichlorobenzene	U	U	U	U	U	U	10	5
1,2-Dichlorobenzene	U	U	U	U	U	U	10	3
1,3-Dichlorobenzene	U	U	U	U	U	U	10	3
1,4-Dichlorobenzene	U	U	U	U	U	U	10	3
2,4,5-Trichlorophenol	U	U	U	U	U	U	20	1
2,4,6-Trichlorophenol	U	U	U	U	U	U	10	1
2,4-Dichlorophenol	U	U	U	U	U	U	10	5
2,4-Dimethylphenol	U	U	U	U	U	U	10	50
2,4-Dinitrophenol	U	U	U	U	UJ	U	20	10
2,4-Dinitrotoluene	U	U	U	U	U	U	10	5
2,6-Dinitrotoluene	U	U	U	U	U	U	10	5
2-Chloronaphthalene	U	U	U	U	U	U	10	10
2-Chlorophenol	U	U	U	U	U	U	10	1
2-Methylnaphthalene	U	U	U	U	U	U	10	--
2-Methylphenol (o-Cresol)	U	U	U	U	U	U	10	1
2-Nitroaniline	U	U	U	U	U	U	20	5
2-Nitrophenol	U	U	U	U	U	U	10	1
3,3'-Dichlorobenzidine	U	U	U	U	U	U	10	5
3-Nitroaniline	U	U	U	U	U	U	20	5
4,6-Dinitro-2-methylphenol	U	UJ	U	U	UJ	U	20	1
4-Bromophenyl Phenyl Ether	U	U	U	U	U	U	10	--
4-Chloro-3-methylphenol	U	U	U	U	U	U	10	1
4-Chloroaniline	U	U	U	U	U	U	10	5
4-Chlorophenyl Phenyl Ether	U	U	U	U	U	U	10	--
4-Methylphenol (p-Cresol)	U	U	U	U	U	U	10	1
4-Nitroaniline	U	U	U	U	U	U	20	5
4-Nitrophenol	U	U	U	U	U	U	20	1
Acenaphthene	U	U	U	U	U	U	10	20
Acenaphthylene	U	U	U	U	U	U	10	--
Anthracene	U	U	U	U	U	U	10	50
Benzo(a)anthracene	U	U	U	U	U	U	10	0.002
Benzo(a)pyrene	U	U	U	U	U	U	10	--
Benzo(b)fluoranthene	U	U	U	U	U	U	10	0.002
Benzo(g,h,i)perylene	U	U	U	U	U	U	10	--
Benzo(k)fluoranthene	U	U	U	U	U	U	10	0.002
Benzyl Butyl Phthalate	U	U	U	U	U	U	10	50
bis(2-Chloroethoxy) Methane	U	U	U	U	U	U	10	5
bis(2-Chloroethyl) Ether	U	U	U	U	U	U	10	1
bis(2-Chloroisopropyl) Ether	U	U	U	U	U	U	10	--
bis(2-Ethylhexyl) Phthalate	U	U	U	U	U	U	10	5
Carbazole	U	U	U	U	U	U	10	--
Chrysene	U	U	U	U	U	U	10	0.002
Dibenz(a,h)anthracene	U	U	U	U	U	U	10	--
Dibenzofuran	U	U	U	U	U	U	10	--
Diethyl Phthalate	U	U	U	U	U	U	10	50
Dimethyl Phthalate	U	U	U	U	U	U	10	50
Di-n-Butyl Phthalate	U	U	U	U	U*	U	10	50
Di-n-Octylphthalate	U	U	U	U	U	U	10	50
Fluoranthene	U	U	U	U	U	U	10	50
Fluorene	U	U	U	U	U	U	10	50
Hexachlorobenzene	U	U	U	U	U	U	10	0.04
Hexachlorobutadiene	U	U	U	U	U	U	10	0.5
Hexachlorocyclopentadiene	U	UJ	U	U	UJ	U	10	5
Hexachloroethane	U	U	U	U	U	U	10	5
Indeno(1,2,3-c,d)pyrene	U	U	U	U	U	U	10	0.002
Isophorone	U	U	U	U	U	U	10	50
Naphthalene	U	U	U	U	U	U	10	10
Nitrobenzene	U	U	U	U	U	U	10	0.4
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	10	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	20	50
Pentachlorophenol	U	U	U	U	UJ	U	10	1
Phenanthrene	U	U	U	U	U	U	10	50
Phenol	U	U	U	U	U	U	10	1
Pyrene	U	U	U	U	U	U	10	50
Total Semivolatile Organic Compounds	0	0	0	0	0	0	--	--

Qualifiers:

Notes:

U: Not detected

ug/l: Micrograms per liter

J: Estimated value or limit

--: Not established

UJ: Not detected, value estimated due to validation criteria

U* or UB: Result qualified as non-detect based on validation criteria

Table A-2
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Semivolatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-07 9/5/2013 1 ug/l	MW-07 4/22/2014 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,2,4-Trichlorobenzene	U	U	10	5
1,2-Dichlorobenzene	U	U	10	3
1,3-Dichlorobenzene	U	U	10	3
1,4-Dichlorobenzene	U	U	10	3
2,4,5-Trichlorophenol	U	U	20	1
2,4,6-Trichlorophenol	U	U	10	1
2,4-Dichlorophenol	U	U	10	5
2,4-Dimethylphenol	U	U	10	50
2,4-Dinitrophenol	U	U	20	10
2,4-Dinitrotoluene	U	U	10	5
2,6-Dinitrotoluene	U	U	10	5
2-Chloronaphthalene	U	U	10	10
2-Chlorophenol	U	U	10	1
2-Methylnaphthalene	U	U	10	--
2-Methylphenol (o-Cresol)	U	U	10	1
2-Nitroaniline	U	U	20	5
2-Nitrophenol	U	U	10	1
3,3'-Dichlorobenzidine	U	U	10	5
3-Nitroaniline	U	U	20	5
4,6-Dinitro-2-methylphenol	U	U	20	1
4-Bromophenyl Phenyl Ether	U	U	10	--
4-Chloro-3-methylphenol	U	U	10	1
4-Chloroaniline	U	U	10	5
4-Chlorophenyl Phenyl Ether	U	U	10	--
4-Methylphenol (p-Cresol)	U	U	10	1
4-Nitroaniline	U	U	20	5
4-Nitrophenol	U	U	20	1
Acenaphthene	U	U	10	20
Acenaphthylene	U	U	10	--
Anthracene	U	U	10	50
Benzo(a)anthracene	U	U	10	0.002
Benzo(a)pyrene	U	U	10	--
Benzo(b)fluoranthene	U	U	10	0.002
Benzo(g,h,i)perylene	U	U	10	--
Benzo(k)fluoranthene	U	U	10	0.002
Benzyl Butyl Phthalate	U	U	10	50
bis(2-Chloroethoxy) Methane	U	U	10	5
bis(2-Chloroethyl) Ether	U	U	10	1
bis(2-Chloroisopropyl) Ether	U	U	10	--
bis(2-Ethylhexyl) Phthalate	U	U	10	5
Carbazole	U	U	10	--
Chrysene	U	U	10	0.002
Dibenz(a,h)anthracene	U	U	10	--
Dibenzofuran	U	U	10	--
Diethyl Phthalate	U	U	10	50
Dimethyl Phthalate	U	U	10	50
Di-n-Butyl Phthalate	1.2 J	UB	10	50
Di-n-Octylphthalate	U	U	10	50
Fluoranthene	U	U	10	50
Fluorene	U	U	10	50
Hexachlorobenzene	U	U	10	0.04
Hexachlorobutadiene	U	U	10	0.5
Hexachlorocyclopentadiene	U	U	10	5
Hexachloroethane	U	U	10	5
Indeno(1,2,3-c,d)pyrene	U	U	10	0.002
Isophorone	U	U	10	50
Naphthalene	U	U	10	10
Nitrobenzene	U	U	10	0.4
N-Nitroso-di-n-propylamine	U	U	10	--
N-Nitrosodiphenylamine	U	U	20	50
Pentachlorophenol	U	U	10	1
Phenanthrene	U	U	10	50
Phenol	U	U	10	1
Pyrene	U	U	10	50
Total Semivolatile Organic Compounds	1.2	0	--	--

Qualifiers:

Notes:

U: Not detected

ug/l: Micrograms per liter

J: Estimated value or limit

--: Not established

UJ: Not detected, value estimated due to validation criteria

U*or UB: Result qualified as non-detect based on validation criteria

2786/P/PCPGW2010-2014DataTables.xls

Table A-2
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Semivolatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-08 8/18/2010 1 ug/l	MW-08 4/26/2011 1 ug/l	MW-08 9/28/2011 1 ug/l	MW-08 4/13/2012 1 ug/l	MW-08 9/6/2012 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,2,4-Trichlorobenzene	U	U	U	U	U	10	5
1,2-Dichlorobenzene	U	U	U	U	U	10	3
1,3-Dichlorobenzene	U	U	U	U	U	10	3
1,4-Dichlorobenzene	U	U	U	U	U	10	3
2,4,5-Trichlorophenol	U	U	U	U	U	20	1
2,4,6-Trichlorophenol	U	U	U	U	U	10	1
2,4-Dichlorophenol	U	U	U	U	U	10	5
2,4-Dimethylphenol	U	U	U	U	U	10	50
2,4-Dinitrophenol	U	U	U	U	UJ	20	10
2,4-Dinitrotoluene	U	U	U	U	U	10	5
2,6-Dinitrotoluene	U	U	U	U	U	10	5
2-Chloronaphthalene	U	U	U	U	U	10	10
2-Chlorophenol	U	U	U	U	U	10	1
2-Methylnaphthalene	U	U	U	U	UJ	10	--
2-Methylphenol (o-Cresol)	U	U	U	U	U	10	1
2-Nitroaniline	U	U	U	U	U	20	5
2-Nitrophenol	U	U	U	U	U	10	1
3,3'-Dichlorobenzidine	U	U	U	U	U	10	5
3-Nitroaniline	U	U	U	U	U	20	5
4,6-Dinitro-2-methylphenol	U	UJ	U	U	UJ	20	1
4-Bromophenyl Phenyl Ether	U	U	U	U	U	10	--
4-Chloro-3-methylphenol	U	U	U	U	U	10	1
4-Chloroaniline	U	U	U	U	U	10	5
4-Chlorophenyl Phenyl Ether	U	U	U	U	U	10	--
4-Methylphenol (p-Cresol)	U	U	U	U	U	10	1
4-Nitroaniline	U	U	U	U	U	20	5
4-Nitrophenol	U	U	U	U	U	20	1
Acenaphthene	U	U	U	U	U	10	20
Acenaphthylene	U	U	U	U	U	10	--
Anthracene	U	U	U	U	U	10	50
Benzo(a)anthracene	U	U	U	U	U	10	0.002
Benzo(a)pyrene	U	U	U	U	U	10	--
Benzo(b)fluoranthene	U	U	U	U	U	10	0.002
Benzo(g,h,i)perylene	U	U	U	U	U	10	--
Benzo(k)fluoranthene	U	U	U	U	U	10	0.002
Benzyl Butyl Phthalate	U	U	U	U	U	10	50
bis(2-Chloroethoxy) Methane	U	U	U	U	U	10	5
bis(2-Chloroethyl) Ether	U	U	U	U	U	10	1
bis(2-Chloroisopropyl) Ether	U	U	U	U	U	10	--
bis(2-Ethylhexyl) Phthalate	U	U	U	1.9	J	U*	5
Carbazole	U	U	U	U	U	10	--
Chrysene	U	U	U	U	U	10	0.002
Dibenz(a,h)anthracene	U	U	U	U	U	10	--
Dibenzofuran	U	U	U	U	U	10	--
Diethyl Phthalate	U	U	U	U	U	10	50
Dimethyl Phthalate	U	U	U	U	U	10	50
Di-n-Butyl Phthalate	U	U	U	U	U*	10	50
Di-n-Octylphthalate	U	U	U	U	U	10	50
Fluoranthene	U	U	U	U	U	10	50
Fluorene	U	U	U	U	U	10	50
Hexachlorobenzene	U	U	U	U	U	10	0.04
Hexachlorobutadiene	U	U	U	U	U	10	0.5
Hexachlorocyclopentadiene	U	UJ	U	U	UJ	10	5
Hexachloroethane	U	U	U	U	U	10	5
Indeno(1,2,3-c,d)pyrene	U	U	U	U	U	10	0.002
Isophorone	U	U	U	U	U	10	50
Naphthalene	U	U	U	U	U	10	10
Nitrobenzene	U	U	U	U	UJ	10	0.4
N-Nitroso-di-n-propylamine	U	U	U	U	U	10	--
N-Nitrosodiphenylamine	U	U	U	U	U	20	50
Pentachlorophenol	U	U	U	U	UJ	10	1
Phenanthrene	U	U	U	U	U	10	50
Phenol	U	U	U	U*	U	10	1
Pyrene	U	U	U	U	U	10	50
Total Semivolatile Organic Compounds	0	0	0	1.9	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

UJ: Not detected, value estimated due to validation criteria

U* or UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l: Micrograms per liter

--: Not established

Table A-2
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Semivolatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-09 8/19/2010 1 ug/l	MW-09 4/25/2011 1 ug/l	MW-09 9/27/2011 1 ug/l	MW-09 4/13/2012 1 ug/l	MW-09 9/6/2012 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,2,4-Trichlorobenzene	U	U	U	U	U	10	5
1,2-Dichlorobenzene	U	U	U	U	U	10	3
1,3-Dichlorobenzene	U	U	U	U	U	10	3
1,4-Dichlorobenzene	U	U	U	U	U	10	3
2,4,5-Trichlorophenol	U	U	U	U	U	20	1
2,4,6-Trichlorophenol	U	U	U	U	U	10	1
2,4-Dichlorophenol	U	U	U	U	U	10	5
2,4-Dimethylphenol	U	U	U	U	U	10	50
2,4-Dinitrophenol	U	U	U	U	UJ	20	10
2,4-Dinitrotoluene	U	U	U	U	U	10	5
2,6-Dinitrotoluene	U	U	U	U	U	10	5
2-Chloronaphthalene	U	U	U	U	U	10	10
2-Chlorophenol	U	U	U	U	U	10	1
2-Methylnaphthalene	U	U	U	U	UJ	10	--
2-Methylphenol (o-Cresol)	U	U	U	U	U	10	1
2-Nitroaniline	U	U	U	U	U	20	5
2-Nitrophenol	U	U	U	U	U	10	1
3,3'-Dichlorobenzidine	U	U	U	U	U	10	5
3-Nitroaniline	U	U	U	U	U	20	5
4,6-Dinitro-2-methylphenol	U	UJ	U	U	UJ	20	1
4-Bromophenyl Phenyl Ether	U	U	U	U	U	10	--
4-Chloro-3-methylphenol	U	U	U	U	U	10	1
4-Chloroaniline	U	U	U	U	U	10	5
4-Chlorophenyl Phenyl Ether	U	U	U	U	U	10	--
4-Methylphenol (p-Cresol)	U	U	U	U	U	10	1
4-Nitroaniline	U	U	U	U	U	20	5
4-Nitrophenol	U	U	U	U	U	20	1
Acenaphthene	U	U	U	U	U	10	20
Acenaphthylene	U	U	U	U	U	10	--
Anthracene	U	U	U	U	U	10	50
Benzo(a)anthracene	U	U	U	U	U	10	0.002
Benzo(a)pyrene	U	U	U	U	U	10	--
Benzo(b)fluoranthene	U	U	U	U	U	10	0.002
Benzo(g,h,i)perylene	U	U	U	U	U	10	--
Benzo(k)fluoranthene	U	U	U	U	U	10	0.002
Benzyl Butyl Phthalate	U	U	U	U	U	10	50
bis(2-Chloroethoxy) Methane	U	U	U	U	U	10	5
bis(2-Chloroethyl) Ether	U	U	U	U	U	10	1
bis(2-Chloroisopropyl) Ether	U	U	U	U	U	10	--
bis(2-Ethylhexyl) Phthalate	U	U	U	U	U*	10	5
Carbazole	U	U	U	U	U	10	--
Chrysene	U	U	U	U	U	10	0.002
Dibenz(a,h)anthracene	U	U	U	U	U	10	--
Dibenzofuran	U	U	U	U	U	10	--
Diethyl Phthalate	U	U	U	U	U	10	50
Dimethyl Phthalate	U	U	U	U	U	10	50
Di-n-Butyl Phthalate	U	U	U	U	U*	10	50
Di-n-Octylphthalate	U	U	U	U	U	10	50
Fluoranthene	U	U	U	U	U	10	50
Fluorene	U	U	U	U	U	10	50
Hexachlorobenzene	U	U	U	U	U	10	0.04
Hexachlorobutadiene	U	U	U	U	U	10	0.5
Hexachlorocyclopentadiene	U	UJ	U	U	UJ	10	5
Hexachloroethane	U	U	U	U	U	10	5
Indeno(1,2,3-c,d)pyrene	U	U	U	U	U	10	0.002
Isophorone	U	U	U	U	U	10	50
Naphthalene	U	U	U	U	U	10	10
Nitrobenzene	U	U	U	U	UJ	10	0.4
N-Nitroso-di-n-propylamine	U	U	U	U	U	10	--
N-Nitrosodiphenylamine	U	U	U	U	U	20	50
Pentachlorophenol	U	U	U	U	UJ	10	1
Phenanthrene	U	U	U	U	U	10	50
Phenol	U	U	U	U*	U	10	1
Pyrene	U	U	U	U	U	10	50
Total Semivolatile Organic Compounds	0	0	0	0	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

UJ: Not detected, value estimated due to validation criteria

U* or UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l: Micrograms per liter

--: Not established

Table A-2
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Semivolatile Organic Compounds

Sample ID Date Collected Dilution Factor Units	MW-10 8/18/2010 1 ug/l	MW-10 4/26/2011 1 ug/l	MW-10 9/27/2011 1 ug/l	MW-10 4/12/2012 1 ug/l	MW-10 9/11/2012 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
1,2,4-Trichlorobenzene	U	U	U	U	U	10	5
1,2-Dichlorobenzene	U	U	U	U	U	10	3
1,3-Dichlorobenzene	U	U	U	U	U	10	3
1,4-Dichlorobenzene	U	U	U	U	U	10	3
2,4,5-Trichlorophenol	U	U	U	U	U	20	1
2,4,6-Trichlorophenol	U	U	U	U	U	10	1
2,4-Dichlorophenol	U	U	U	U	U	10	5
2,4-Dimethylphenol	U	U	U	U	U	10	50
2,4-Dinitrophenol	U	U	U	U	U	20	10
2,4-Dinitrotoluene	U	U	U	U	U	10	5
2,6-Dinitrotoluene	U	U	U	U	U	10	5
2-Chloronaphthalene	U	U	U	U	U	10	10
2-Chlorophenol	U	U	U	U	U	10	1
2-Methylnaphthalene	U	U	U	U	U	10	--
2-Methylphenol (o-Cresol)	U	U	U	U	U	10	1
2-Nitroaniline	U	U	U	U	U	20	5
2-Nitrophenol	U	U	U	U	U	10	1
3,3'-Dichlorobenzidine	U	U	U	U	U	10	5
3-Nitroaniline	U	U	U	U	U	20	5
4,6-Dinitro-2-methylphenol	U	UJ	U	U	U	20	1
4-Bromophenyl Phenyl Ether	U	U	U	U	U	10	--
4-Chloro-3-methylphenol	U	U	U	U	U	10	1
4-Chloroaniline	U	U	U	U	U	10	5
4-Chlorophenyl Phenyl Ether	U	U	U	U	U	10	--
4-Methylphenol (p-Cresol)	U	U	U	U	U	10	1
4-Nitroaniline	U	U	U	U	U	20	5
4-Nitrophenol	U	U	U	U	U	20	1
Acenaphthene	U	U	U	U	U	10	20
Acenaphthylene	U	U	U	U	U	10	--
Anthracene	U	U	U	U	U	10	50
Benzo(a)anthracene	U	U	U	U	U	10	0.002
Benzo(a)pyrene	U	U	U	U	U	10	--
Benzo(b)fluoranthene	U	U	U	U	U	10	0.002
Benzo(g,h,i)perylene	U	U	U	U	U	10	--
Benzo(k)fluoranthene	U	U	U	U	U	10	0.002
Benzyl Butyl Phthalate	U	U	U	U	U	10	50
bis(2-Chloroethoxy) Methane	U	U	U	U	U	10	5
bis(2-Chloroethyl) Ether	U	U	U	U	U	10	1
bis(2-Chloroisopropyl) Ether	U	U	U	U	U	10	--
bis(2-Ethylhexyl) Phthalate	U	U	U	U	2.1 J	10	5
Carbazole	U	U	U	U	U	10	--
Chrysene	U	U	U	U	U	10	0.002
Dibenz(a,h)anthracene	U	U	U	U	U	10	--
Dibenzofuran	U	U	U	U	U	10	--
Diethyl Phthalate	U	U	U	U	U	10	50
Dimethyl Phthalate	U	U	U	U	U	10	50
Di-n-Butyl Phthalate	U	U	U	U	1.5 J	10	50
Di-n-Octylphthalate	U	U	U	U	U	10	50
Fluoranthene	U	U	U	U	U	10	50
Fluorene	U	U	U	U	U	10	50
Hexachlorobenzene	U	U	U	U	U	10	0.04
Hexachlorobutadiene	U	U	U	U	U	10	0.5
Hexachlorocyclopentadiene	U	UJ	U	U	U	10	5
Hexachloroethane	U	U	U	U	U	10	5
Indeno(1,2,3-c,d)pyrene	U	U	U	U	U	10	0.002
Isophorone	U	U	U	U	U	10	50
Naphthalene	U	U	U	U	U	10	10
Nitrobenzene	U	U	U	U	U	10	0.4
N-Nitroso-di-n-propylamine	U	U	U	U	U	10	--
N-Nitrosodiphenylamine	U	U	U	U	U	20	50
Pentachlorophenol	U	U	U	U	U	10	1
Phenanthrene	U	U	U	U	U	10	50
Phenol	U	U	U	U	U	10	1
Pyrene	U	U	U	U	U	10	50
Total Semivolatile Organic Compounds	0	0	0	0	3.6	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

UJ: Not detected, value estimated due to validation criteria

U* or UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l: Micrograms per liter

--: Not established

APPENDIX A-3

MONITORING WELL SAMPLE RESULTS TARGET ANALYTE LIST METALS AND ALKALINITY

Table A-3
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Metals and Alkalinity

Sample ID Date Collected Dilution Factor Units	MW-01 8/19/2010 1 ug/l	MW-01 4/26/2011 1 ug/l	MW-01 9/28/2011 1 ug/l	MW-01 4/12/2012 1 ug/l	MW-01 9/7/2012 1 ug/l	MW-01 4/5/2013 1 ug/l	MW-01 9/5/2013 1 ug/l	MW-01 4/22/2014 1 ug/l	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
Aluminum	U	--	U	U	U	U	U	U	200	--
Antimony	U	U	U	U	U	U	U	U	20	3 ST
Arsenic	U	U	U	U	7.4 B	U	U	U	20	25 ST
Barium	21.4 B	--	24.5 B	28.9 B	25.5 B	37.6 B	UB	25.2 B	200	1,000 ST
Beryllium	U	U	U	U	U	U	U	U	5	3 GV
Cadmium	U	U	U	U	U	U	U	U	5	5 ST
Calcium	15,900	--	31,700	30,200	52,600	51,100	41,800	46,000	800	--
Chromium, Total	U	2.1 B	U	1.4 B	1.9 B	2.8 B	3.4 B	1.0 B	20	50 ST
Cobalt	U	--	U	U	0.91 B	U	U	U	50	--
Copper	U	U	U	U	4.4 B	U	U	U	30	200 ST
Iron	U	U	UJ	77.3 B	U*	33.8 BJ	U	102 B	200	300 ST
Lead	U	U	U	U	U	U	U	U	10	25 ST
Magnesium	1,490	--	2,380	2,750	5,360	3,860	3,450	3,720	500	35,000 GV
Manganese	51.1	--	33.0 B	700	2,260	894	798	2,650	50	300 ST
Mercury	U	U	U	U	UB	U	U	U	0.20	0.7 ST
Nickel	U	U	U	U	0.87 B	1.3 B	U	U	50	100 ST
Potassium	28,800	--	20,000	16,000	15,000	20,800	19,600 J	9,430	100	--
Selenium	U	U	U	U	U	U	U	U	30	10 ST
Silver	U	U	U	U	U	U	U	U	30	50 ST
Sodium	25,900	--	28,000	34,700	29,500	60,200	27,300	78,000	100	20,000 ST
Thallium	U	U	U	U	U	U	U	U	20	0.5 GV
Vanadium	U	--	U	U	U	U	U	U	50	--
Zinc	11.0 B	U	U	U*	U	U	U	U	50	2,000 GV
Total Iron and Manganese	51.1	U	33	777.3	2,260	927.8	798	2,752	--	500 ST
Alkalinity, Total (as CaCO3) in mg/L	76	--	--	92	140	110	130	140	--	--

Qualifiers

U: Not detected

B: Detected between the Instrument Detection Limit (IDL)
and the Contract Required Detection Limit (CRDL)

UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l : Micrograms per liter

mg/l : Milligrams per liter

-- : Not analyzed or established

 : Exceeds Class GA Groundwater Standard (ST) or Guidance Value (GV)

Table A-3
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Metals and Alkalinity

Sample ID	MW-03	MW-03	MW-03	MW-03	MW-03	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
Date Collected	8/18/2010	4/25/2011	9/27/2011	4/13/2012	9/6/2012		
Dilution Factor	1	1	1	1	1		
Units	ug/l	ug/l	ug/l	ug/l	ug/l		
Aluminum	U	--	U	U	U	200	--
Antimony	U	U	U	U	U	20	3 ST
Arsenic	U	U	U	U	U	20	25 ST
Barium	822	--	174 B	215	85.6 B	200	1,000 ST
Beryllium	U	U	U	U	U	5	3 GV
Cadmium	U	U	U	U	U	5	5 ST
Calcium	53,000	--	31,100	39,400	24,400	800	--
Chromium, Total	3.4 B	66.5	34.4	14.1 B	14.1 B	20	50 ST
Cobalt	U	--	1.2 B	U	U	50	--
Copper	15.1 B	U	21.7 B	15.6 B	9.0 B	30	200 ST
Iron	U	36.4 B	1,290 J	320	U*	200	300 ST
Lead	U	U	U	U	U	10	25 ST
Magnesium	5,340	--	2,940	4,540	2,790	500	35,000 GV
Manganese	295	--	247	131	31.8 B	50	300 ST
Mercury	U	U	U	U	U*	0.20	0.7 ST
Nickel	8.6 B	U	12.3 B	6.7 B	4.0 B	50	100 ST
Potassium	8,520	--	5,260	9,870	4,730	100	--
Selenium	U	U	U	U	U	30	10 ST
Silver	U	U	U	U	U	30	50 ST
Sodium	25,900	--	10,500	42,200	15,100	100	20,000 ST
Thallium	U	U	U	U	U	20	0.5 GV
Vanadium	2.6 B		U	1.8 B	1.8 B	50	--
Zinc	20.0 B	U	U	UB	11.6 B	50	2,000 GV
Total Iron and Manganese	295	36.4	1,537	451	31.8	--	500 ST
Alkalinity, Total (as CaCO ₃) in mg/L	130	--	73	100	59	--	--

Qualifiers

U: Not detected

B: Detected between the Instrument Detection Limit (IDL)
and the Contract Required Detection Limit (CRDL)

UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l : Micrograms per liter

mg/l : Milligrams per liter

-- : Not analyzed or established

: Exceeds Class GA Groundwater Standard (ST) or Guidance Value (GV)

Table A-3
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Metals and Alkalinity

Sample ID	MW-03R	MW-03R	MW-03R	MW-03R				CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
Date Collected	9/6/2012	4/4/2013	9/5/2013	4/22/2014					
Dilution Factor	1	1	1	1					
Units	ug/l	ug/l	ug/l	ug/l					
Aluminum	U	1,080	391	U				200	--
Antimony	U	U	U	U				20	3 ST
Arsenic	U	U	U	U				20	25 ST
Barium	25.8 B	57.6 B	55.7 B	44.8 B				200	1,000 ST
Beryllium	U	U	U	U				5	3 GV
Cadmium	U	U	U	U				5	5 ST
Calcium	19,400	32,800	41,400	38,200				800	--
Chromium, Total	26.6	32.4	77.1	10.0 B				20	50 ST
Cobalt	U	1.1 B	U	U				50	--
Copper	U	9.9 B	13.3 B	U				30	200 ST
Iron	UB	2,070 J	558	154 B				200	300 ST
Lead	U	U	4.4 B	U				10	25 ST
Magnesium	1,710	3,490	3,680	3,510				500	35,000 GV
Manganese	U	33.1 B	15 B	22.5 B				50	300 ST
Mercury	UB	U	U	U				0.20	0.7 ST
Nickel	1.4 B	4.4 B	UB	UB				50	100 ST
Potassium	8,280	12,100	14,300 J	16,000				100	--
Selenium	U	U	U	U				30	10 ST
Silver	U	U	U	U				30	50 ST
Sodium	16,400	24,700	71,700	29,300				100	20,000 ST
Thallium	U	U	U	U				20	0.5 GV
Vanadium	U	2.3 B	1.9 B	U				50	--
Zinc	U	8.0 B	11.8 B	U				50	2,000 GV
Total Iron and Manganese	U	2,103.1	573	176.5				--	500 ST
Alkalinity, Total (as CaCO ₃) in mg/L	59	81	140	160				--	--

Qualifiers

U: Not detected

B: Detected between the Instrument Detection Limit (IDL)
and the Contract Required Detection Limit (CRDL)

UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l : Micrograms per liter

mg/l : Milligrams per liter

-- : Not analyzed or established

 : Exceeds Class GA Groundwater Standard (ST) or Guidance Value (GV)

Table A-3
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Metals and Alkalinity

Sample ID	MW-04	MW-04	MW-04	MW-04	MW-04	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
Date Collected	8/19/2010	4/26/2011	9/28/2011	4/13/2012	9/7/2012		
Dilution Factor	1	1	1	1	1		
Units	ug/l	ug/l	ug/l	ug/l	ug/l		
Aluminum	U	--	U	U	U	200	--
Antimony	U	U	U	U	U	20	3 ST
Arsenic	U	U	U	U	U	20	25 ST
Barium	12.3 B	--	23.6 B	23.9 B	18.8 B	200	1,000 ST
Beryllium	U	U	U	U	U	5	3 GV
Cadmium	U	U	U	U	U	5	5 ST
Calcium	45,700	--	46,600	30,600	40,300	800	--
Chromium, Total	27.3	4.2 B	U	5.3 B	5.7 B	20	50 ST
Cobalt	1.2 B	--	U	U	1.5 B	50	--
Copper	33.7	U	25.9 B	19.9 B	22.0 B	30	200 ST
Iron	U	90.1 B	UJ	90.3 B	U	200	300 ST
Lead	U	U	U	U	U	10	25 ST
Magnesium	3,720	--	3,810	2,570	3,630	500	35,000 GV
Manganese	U	--	U	10.2 B	U	50	300 ST
Mercury	U	U	U	U	UB	0.20	0.7 ST
Nickel	3.5 B	U	U	2.7 B	2.9 B	50	100 ST
Potassium	6,940	--	17,700	20,500	12,700	100	--
Selenium	U	U	U	U	U	30	10 ST
Silver	U	U	U	U	U	30	50 ST
Sodium	27,100	--	27,800	46,300	32,800	100	20,000 ST
Thallium	U	U	U	U	U	20	0.5 GV
Vanadium	U	--	U	U	U	50	--
Zinc	14.5 B	U	U	UB	30.9 B	50	2,000 GV
Total Iron and Manganese	U	90.1	U	100.5	U	--	500 ST
Alkalinity, Total (as CaCO ₃) in mg/L	130	--	95	100	96	--	--

Qualifiers

U: Not detected

B: Detected between the Instrument Detection Limit (IDL)
and the Contract Required Detection Limit (CRDL)

UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l : Micrograms per liter

mg/l : Milligrams per liter

-- : Not analyzed or established

☐ : Exceeds Class GA Groundwater Standard (ST) or Guidance Value (GV)

Table A-3
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Metals and Alkalinity

Sample ID	MW-04R	MW-04R	MW-04R	MW-04R				CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
Date Collected	9/5/2012	4/4/2013	9/5/2013	4/22/2014					
Dilution Factor	1	1	1	1					
Units	ug/l	ug/l	ug/l	ug/l					
Aluminum	U	486	157 B	278				200	--
Antimony	U	U	U	U				20	3 ST
Arsenic	6.6 B	4.3 B	U	U				20	25 ST
Barium	22.7 B	24.7 B	UB	23.7 B				200	1,000 ST
Beryllium	U	U	U	0.30 B				5	3 GV
Cadmium	U	U	U	U				5	5 ST
Calcium	45,500	40,700	34,400	50,900				800	--
Chromium, Total	4.6 B	4.1 B	2,720	32.0				20	50 ST
Cobalt	U	1.3 B	UB	UB				50	--
Copper	14.3 B	64.0	44.4	43.8				30	200 ST
Iron	91.5 B	999 J	309	839				200	300 ST
Lead	U	U	U	U				10	25 ST
Magnesium	3,670	3,610	2,870	4,520				500	35,000 GV
Manganese	U	41.6 B	55.3	152				50	300 ST
Mercury	UB	U	0.12 B	U				0.20	0.7 ST
Nickel	1.8 B	4.8 B	UB	UB				50	100 ST
Potassium	18,800	16,900	13,600 J	14,600				100	--
Selenium	U	U	U	U				30	10 ST
Silver	U	U	U	U				30	50 ST
Sodium	42,000	29,200	40,900	28,800				100	20,000 ST
Thallium	U	U	U	U				20	0.5 GV
Vanadium	U	U	3.6 B	UB				50	--
Zinc	10.2 B	11.0 B	12.9 B	U				50	2,000 GV
Total Iron and Manganese	91.5	1,040.6	364.3	991				--	500 ST
Alkalinity, Total (as CaCO3) in mg/L	110	85	100	130				--	--

Qualifiers

U: Not detected

B: Detected between the Instrument Detection Limit (IDL)
and the Contract Required Detection Limit (CRDL)

UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l : Micrograms per liter

mg/l : Milligrams per liter

-- : Not analyzed or established

: Exceeds Class GA Groundwater Standard (ST) or Guidance Value (GV)

Table A-3
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Metals and Alkalinity

Sample ID	MW-05	MW-05	MW-05	MW-05	MW-05	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
Date Collected	8/19/2010	4/26/2011	9/28/2011	4/12/2012	9/5/2012		
Dilution Factor	1	1	1	1	1		
Units	ug/l	ug/l	ug/l	ug/l	ug/l		
Aluminum	U	--	U	91.5 B	U	200	--
Antimony	U	U	U	U	U	20	3 ST
Arsenic	U	U	U	U	U	20	25 ST
Barium	17.1 B	--	20.9 B	34.0 B	22.6 B	200	1,000 ST
Beryllium	U	U	U	U	U	5	3 GV
Cadmium	U	U	U	U	U	5	5 ST
Calcium	45,400	--	46,700	47,100	45,900	800	--
Chromium, Total	U	U	U	U	2.5 B	20	50 ST
Cobalt	U	--	U	U	U	50	--
Copper	U	U	U	4.1 B	U	30	200 ST
Iron	U	U	U	U	U	200	300 ST
Lead	U	U	U	U	U	10	25 ST
Magnesium	3,740	--	3,610	3,390	3,530	500	35,000 GV
Manganese	522	--	149	549 J	128	50	300 ST
Mercury	U	U	U	U	U	0.20	0.7 ST
Nickel	U	U	U	1.0 B	U	50	100 ST
Potassium	11,300	--	16,500	34,100	22,600	100	--
Selenium	U	U	U	U	U	30	10 ST
Silver	U	U	U	U	U	30	50 ST
Sodium	15,600	--	21,800	29,300	17,000	100	20,000 ST
Thallium	U	U	U	U	U	20	0.5 GV
Vanadium	U	--	U	U	U	50	--
Zinc	11.9 B	U	U	UB	U	50	2,000 GV
Total Iron and Manganese	522	U	149	549	128	--	500 ST
Alkalinity, Total (as CaCO3) in mg/L	--	--	130	150	130	--	--

Qualifiers

U: Not detected

B: Detected between the Instrument Detection Limit (IDL)
and the Contract Required Detection Limit (CRDL)

UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l : Micrograms per liter

mg/l : Milligrams per liter

-- : Not analyzed or established

J : Exceeds Class GA Groundwater Standard (ST) or Guidance Value (GV)

Table A-3
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Metals and Alkalinity

Sample ID	MW-06	MW-06	MW-06	MW-06	MW-06	MW-06	MW-06	MW-06	CONTRACT	NYSDEC CLASS GA
Date Collected	8/18/2010	4/25/2011	9/27/2011	4/12/2012	9/5/2012	4/4/2013	9/5/2013	4/22/2014	REQUIRED	GROUNDWATER
Dilution Factor	1	1	1	1	1	1	1	1	DETECTION	STANDARDS /
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	LIMIT	GUIDANCE VALUES
									(ug/l)	(ug/l)
Aluminum	U	--	U	174 B	123 B	U	214	U	200	--
Antimony	U	U	U	U	U	U	U	U	20	3 ST
Arsenic	U	U	U	UB	U	U	U	U	20	25 ST
Barium	33.8 B	--	38.7 B	40.6 B	35.4 B	27.7 B	62.5 B	31.0 B	200	1,000 ST
Beryllium	U	U	U	U	U	U	U	U	5	3 GV
Cadmium	U	U	U	U	U	U	U	U	5	5 ST
Calcium	36,200	--	57,300	51,400	34,800	54,900	81,500	62,900	800	--
Chromium, Total	U	U	U	1.3 B	2.3 B	0.77 B	1.9 B	0.86 B	20	50 ST
Cobalt	U	--	1.4 B	0.72 B	UB	1.3 B	UB	UB	50	--
Copper	U	U	U	4.8 B	4.3 B	8.8 B	15.6 B	4.4 B	30	200 ST
Iron	73.4 B	119 B	UJ	519	247	584 J	615	198 B	200	300 ST
Lead	U	U	U	U	U	U	4.3 B	U	10	25 ST
Magnesium	2,610	--	4,290	4,220	2,540	5,570	7,280	6,780	500	35,000 GV
Manganese	U	--	24.0 B	13.5 B	10.6 B	U	22.9 B	11.2 B	50	300 ST
Mercury	U	U	U	0.074 B	UB	0.037 B	0.09 B	U	0.20	0.7 ST
Nickel	U	U	U	0.86 B	1.3 B	4.2 B	UB	UB	50	100 ST
Potassium	19,900	--	19,400	22,800	29,100	13,100	23,200 J	11,200	100	--
Selenium	U	U	U	U	U	U	U	U	30	10 ST
Silver	U	U	U	U	U	U	U	U	30	50 ST
Sodium	24,200	--	33,500	36,800	29,600	27,800	70,700	30,600	100	20,000 ST
Thallium	U	U	U	U	U	U	U	U	20	0.5 GV
Vanadium	5.2 B	--	4.8 B	8.4 B	8.0 B	4.0 B	9.7 B	UB	50	--
Zinc	12.5 B	U	U	U	11.5 B	U	9.2 B	U	50	2,000 GV
Total Iron and Manganese	73.4	119	24	532.5	257.6	584	637.9	209.2	--	500 ST
Alkalinity, Total (as CaCO3) in mg/L	120	--	130	150	120	91	150	150	--	--

Qualifiers

U: Not detected

B: Detected between the Instrument Detection Limit (IDL)
and the Contract Required Detection Limit (CRDL)

UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l : Micrograms per liter

mg/l : Milligrams per liter

-- : Not analyzed or established

 : Exceeds Class GA Groundwater Standard (ST) or Guidance Value (GV)

Table A-3
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Metals and Alkalinity

Sample ID	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	CONTRACT	NYSDEC CLASS GA
Date Collected	8/18/2010	4/25/2011	9/27/2011	4/12/2012	9/5/2012	4/4/2013	9/5/2013	4/22/2014	REQUIRED	GROUNDWATER
Dilution Factor	1	1	1	1	1	1	1	1	DETECTION	STANDARDS /
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	LIMIT	GUIDANCE VALUES
									(ug/l)	(ug/l)
Aluminum	U	--	U	U	U	1,050	115 B	U	200	--
Antimony	U	U	U	U	U	U	U	U	20	3 ST
Arsenic	U	U	U	U	4.5 B	4.8 B	U	U	20	25 ST
Barium	22.9 B	--	28.0 B	26.9 B	25.2 B	38.8 B	UB	37.7 B	200	1,000 ST
Beryllium	U	U	U	U	U	0.40 B	U	U	5	3 GV
Cadmium	U	U	U	U	U	U	U	U	5	5 ST
Calcium	37,700	--	49,100	44,100	51,100	49,600	74,900	58,900	800	--
Chromium, Total	U	2.7 B	U	U	U	2.4 B	30.4 B	U	20	50 ST
Cobalt	0.99 B	--	2.3 B	U	UB	4.9 B	UB	U	50	--
Copper	U	U	4.7 B	U	U	7.1 B	8.5 B	U	30	200 ST
Iron	33.5 B	1,190	UJ	93.6 B	59.3 B	1,100 J	351 J	104 B	200	300 ST
Lead	U	20.3	U	U	U	4.4 B	U	U	10	25 ST
Magnesium	4,320	--	4,650	3,240	3,310	5,550	6,900	4,660	500	35,000 GV
Manganese	930	--	666	357	134	413	397	130	50	300 ST
Mercury	U	U	U	U	UB	U	U	U	0.20	0.7 ST
Nickel	1.5 B	U	U	U	0.89 B	6.8 B	UB	UB	50	100 ST
Potassium	7,770	--	12,600	25,000	26,000	17,400	20,900 B	33,500	100	--
Selenium	U	U	U	U	U	14.0 B	12.3 B	U	30	10 ST
Silver	U	14.9 B	U	U	U	U	U	U	30	50 ST
Sodium	21,100	--	33,400	23,100	20,300	27,500	39,900	30,900	100	20,000 ST
Thallium	U	U	U	U	U	U	U	U	20	0.5 GV
Vanadium	U	--	U	U	U	5.5 B	U	U	50	--
Zinc	11.2 B	U	U	UB	19.1 B	11.7 B	5.9 B	U	50	2,000 GV
Total Iron and Manganese	963.5	1,190	666	450.6	193.3	1,513	748	234	--	500 ST
Alkalinity, Total (as CaCO3) in mg/L	--	--	130	140	150	98	150	160	--	--

Qualifiers

U: Not detected

B: Detected between the Instrument Detection Limit (IDL)
and the Contract Required Detection Limit (CRDL)

UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l : Micrograms per liter

mg/l : Milligrams per liter

-- : Not analyzed or established

 : Exceeds Class GA Groundwater Standard (ST) or Guidance Value (GV)

Table A-3
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Metals and Alkalinity

Sample ID	MW-08	MW-08	MW-08	MW-08	MW-08	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
Date Collected	8/18/2010	4/26/2011	9/28/2011	4/13/2012	9/6/2012		
Dilution Factor	1	1	1	1	1		
Units	ug/l	ug/l	ug/l	ug/l	ug/l		
Aluminum	183 B	--	475	1,550	100 B	200	--
Antimony	U	U	U	U	U	20	3 ST
Arsenic	U	U	U	UB	U	20	25 ST
Barium	214	--	135 B	95.3 B	49.1 B	200	1,000 ST
Beryllium	U	U	U	U	U	5	3 GV
Cadmium	U	U	U	U	U	5	5 ST
Calcium	25,100	--	38,500	33,100	23,600	800	--
Chromium, Total	1.3 B	3.0 B	U	8.2 B	2.5 B	20	50 ST
Cobalt	U	--	1.2 B	1.7 B	U	50	--
Copper	12.2 B	U	17.0 B	29.0 B	U	30	200 ST
Iron	330	668	1,480 J	2,550	238	200	300 ST
Lead	U	U	5.5 B	15.7	U	10	25 ST
Magnesium	2,830	--	3,430	3,930	2,300	500	35,000 GV
Manganese	93.1	--	93.4	35.3 B	11.5 B	50	300 ST
Mercury	U	0.077 B	0.51	0.31	UB	0.20	0.7 ST
Nickel	2.1 B	U	U	5.6 B	1.0 B	50	100 ST
Potassium	16,600	--	12,900	21,800	10,200	100	--
Selenium	U	U	U	U	U	30	10 ST
Silver	U	U	U	7.9 B	U	30	50 ST
Sodium	22,700	--	16,200	30,800	10,000	100	20,000 ST
Thallium	U	U	U	U	U	20	0.5 GV
Vanadium	1.9 B	--	3.2 B	7.4 B	2.0 B	50	--
Zinc	40.5 B	U	66.8	161	7.2 B	50	2,000 GV
Total Iron and Manganese	423.1	668	1,573.4	2,585.3	249.5	--	500 ST
Alkalinity, Total (as CaCO3) in mg/L	--	--	110	110	52	--	--

Qualifiers

U: Not detected

B: Detected between the Instrument Detection Limit (IDL)
and the Contract Required Detection Limit (CRDL)

UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l : Micrograms per liter

mg/l : Milligrams per liter

-- : Not analyzed or established

 : Exceeds Class GA Groundwater Standard (ST) or Guidance Value (GV)

Table A-3
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Metals and Alkalinity

Sample ID	MW-09	MW-09	MW-09	MW-09	MW-09	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
Date Collected	8/19/2010	4/25/2011	9/27/2011	4/13/2012	9/6/2012		
Dilution Factor	1	1	1	1	1		
Units	ug/l	ug/l	ug/l	ug/l	ug/l		
Aluminum	U	--	U	553	U	200	--
Antimony	U	U	U	U	U	20	3 ST
Arsenic	U	U	U	U	U	20	25 ST
Barium	36.7 B	--	29.8 B	35.5 B	28.6 B	200	1,000 ST
Beryllium	U	U	U	U	U	5	3 GV
Cadmium	U	U	U	U	U	5	5 ST
Calcium	44,400	--	31,800	31,500	12,400	800	--
Chromium, Total	10.7 B	5.6 B	U	6.8 B	11.8 B	20	50 ST
Cobalt	U	--	0.96 B	0.80 B	U	50	--
Copper	4.3 B	U	24.2 B	14.6 B	8.6 B	30	200 ST
Iron	32.3 B	54.2 B	UJ	852	UB	200	300 ST
Lead	U	U	U	6.2 B	U	10	25 ST
Magnesium	4,170	--	3,020	3,260	1,770	500	35,000 GV
Manganese	U	--	12.1 B	14.4 B	U	50	300 ST
Mercury	U	U	U	0.041 B	UB	0.20	0.7 ST
Nickel	5.5 B	U	12.7 B	14.6 B	6.2 B	50	100 ST
Potassium	11,100	--	11,900	13,600	4,550	100	--
Selenium	U	U	U	U	U	30	10 ST
Silver	U	U	U	U	U	30	50 ST
Sodium	34,200	--	34,300	46,400	6,940	100	20,000 ST
Thallium	U	U	U	U	U	20	0.5 GV
Vanadium	U	--	U	2.2 B	U	50	--
Zinc	19.7 B	U	U	34.3 B	7.2 B	50	2,000 GV
Total Iron and Manganese	32.3	54.2	12.1	866.4	U	--	500 ST
Alkalinity, Total (as CaCO3) in mg/L	--	--	--	100	36	--	--

Qualifiers

U: Not detected

B: Detected between the Instrument Detection Limit (IDL)
and the Contract Required Detection Limit (CRDL)

UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l : Micrograms per liter

mg/l : Milligrams per liter

-- : Not analyzed or established

☐ : Exceeds Class GA Groundwater Standard (ST) or Guidance Value (GV)

Table A-3
PSC - Chemical Pollution Control, LLC of New York
Semiannual Groundwater Monitoring Program
Groundwater Sample Results
Metals and Alkalinity

Sample ID	MW-10	MW-10	MW-10	MW-10	MW-10	CONTRACT REQUIRED DETECTION LIMIT (ug/l)	NYSDEC CLASS GA GROUNDWATER STANDARDS / GUIDANCE VALUES (ug/l)
Date Collected	8/18/2010	4/26/2011	9/27/2011	4/12/2012	9/11/2012		
Dilution Factor	1	1	1	1	1		
Units	ug/l	ug/l	ug/l	ug/l	ug/l		
Aluminum	U	--	U	333	U	200	--
Antimony	U	U	U	U	U	20	3 ST
Arsenic	U	U	U	U	U	20	25 ST
Barium	28.9 B	--	32.5 B	43.6 B	32.8 B	200	1,000 ST
Beryllium	U	U	U	U	U	5	3 GV
Cadmium	U	U	U	U	U	5	5 ST
Calcium	35,900	--	43,800	58,700	30,800	800	--
Chromium, Total	1.1 B	0.82 B	U	3.6 B	0.64 B	20	50 ST
Cobalt	U	--	1.4 B	1.0 B	U	50	--
Copper	U	U	U	5.7 B	U	30	200 ST
Iron	80.3 B	82.9 B	UJ	673	53.2 B	200	300 ST
Lead	U	U	U	4.7 B	U	10	25 ST
Magnesium	3,200	--	4,120	4,150	1,960	500	35,000 GV
Manganese	20.9 B	--	14.7 B	191	29.8 B	50	300 ST
Mercury	U	U	U	0.033 B	U	0.20	0.7 ST
Nickel	1.5 B	U	U	3.2 B	U	50	100 ST
Potassium	8,940	--	16,300	26,000	34,200	100	--
Selenium	U	U	U	U	U	30	10 ST
Silver	U	U	U	U	U	30	50 ST
Sodium	15,900	--	25,400	31,900	38,100	100	20,000 ST
Thallium	U	U	U	U	U	20	0.5 GV
Vanadium	U	--	1.5 B	2.7 B	2.1 B	50	--
Zinc	15.5 B	U	U	UB	UB	50	2,000 GV
Total Iron and Manganese	101.2	82.9	14.7	864	83	--	500 ST
Alkalinity, Total (as CaCO ₃) in mg/L	--	--	95	150	120	--	--

Qualifiers

U: Not detected

B: Detected between the Instrument Detection Limit (IDL)
and the Contract Required Detection Limit (CRDL)

UB: Result qualified as non-detect based on validation criteria

Notes:

ug/l : Micrograms per liter

mg/l : Milligrams per liter

-- : Not analyzed or established

: Exceeds Class GA Groundwater Standard (ST) or Guidance Value (GV)

APPENDIX B-1

FIELD FORMS FIELD OBSERVATION LOGS

FIELD OBSERVATION LOG GROUNDWATER SAMPLING RECORD

SITE PSC - Chemical Pollution Control, LLC of NY DATE April 22, 2014

SAMPLE ID: MW-01_4/22/14
WELL ID: MW-01
SAMPLERS: Keith Robins

Time On-site: 3:00 p.m. Time Off-site: 4:00 p.m.

Depth of well (from top of casing)..... 17.00 ft Time: _____
Initial static water level (from top of casing) 9.66 ft Time: _____

Purging Method

Airlift	_____	Centrifugal	_____
Bailer	_____	Pos. Disp.	_____
Submersible	_____	Disposable	<u>X</u>
Pump	_____	Bladder Pump	_____
		(Low Flow)	

Well Volume Calculation:

2 in. casing:	_____ ft. of water x 0.16 =	_____ gallons
3 in. casing:	_____ ft. of water x 0.36 =	_____ gallons
4 in. casing:	<u>7.34</u> ft. of water x 0.65 =	<u>4.77</u> gallons

volume of water removed: 4 gal. >3 volumes: yes _____ no X purged dry? yes _____ no X

Field Tests

Volume of Purge Water (in ml)	pH	Temp (°C)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.90	16.00	0.900	77	6.94	124
2,500 ml	6.76	14.09	0.764	26	4.17	144
5,000 ml	6.74	14.02	0.756	16	4.08	148
7,500 ml	6.70	13.40	0.749	9	4.06	148
10,000 ml	6.68	13.13	0.726	2	3.98	148
12,500 ml	6.65	13.18	0.699	0	3.74	150
15,000 ml	6.63	13.10	0.702	0	3.70	147

Sampling

Time of Sample Collection: 3:35 p.m.

Method:

_____ Stainless steel bailer	<u>X</u>	TCL VOCs	602 _____	503 _____	Other _____
_____ Teflon bailer	<u>X</u>	TCL SVOCs			
_____ Pos. Disp. Pump	<u>X</u>	Target Analyte List Metals			
_____ Disposable bailer	<u>X</u>	Alkalinity			
_____ Dedicated pump					
<u>X</u> Other: Disposable					
Bladder Pump					
(Low Flow)					

Observations

Weather/Temperature: Partly cloudy, mid 50s
Sample description: Clear, colorless, no odor

Free Product? yes	_____	no	<u>X</u>	describe	_____
Sheen? yes	_____	no	<u>X</u>	describe	_____
Odor? yes	_____	no	<u>X</u>	describe	_____

Comments:

Flow rate: 500 ml/min. Final DTW: 9.65'. Contained purge water in 55-gallon drum. PID= 0.0 ppm.

FIELD OBSERVATION LOG GROUNDWATER SAMPLING RECORD

SITE PSC - Chemical Pollution Control, LLC of NY DATE April 22, 2014

SAMPLE ID: MW-03R_4/22/14
WELL ID: MW-03R
SAMPLERS: Keith Robins

Time On-site: 8:00 a.m. Time Off-site: 9:15 a.m.

Depth of well (from top of casing)..... 20.10 ft Time: _____
Initial static water level (from top of casing) 11.85 ft Time: _____

Purging Method

Airlift	_____	Centrifugal	_____
Bailer	_____	Pos. Disp.	_____
Submersible	_____	Disposable	<u>X</u>
Pump	_____	Bladder Pump (Low Flow)	_____

Well Volume Calculation:

2 in. casing:	<u>8.25</u>	ft. of water x 0.16 =	<u>1.3</u>	gallons
3 in. casing:	_____	ft. of water x 0.36 =	_____	gallons
4 in. casing:	_____	ft. of water x 0.65 =	_____	gallons

volume of water removed: 3.2 gal. >3 volumes: yes _____ no X purged dry? yes _____ no X

Field Tests

Volume of Purge Water (in ml)	pH	Temp (°C)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	5.59	11.30	0.430	29.3	4.58	234
2,500 ml	6.02	11.31	0.413	12.8	4.08	210
5,000 ml	6.37	11.15	0.422	1.8	3.96	192
7,500 ml	6.45	11.03	0.426	0.0	3.85	187
10,000 ml	6.46	11.11	0.429	0.0	3.72	182
12,500 ml	6.48	11.24	0.424	0.0	3.55	178

Sampling

Time of Sample Collection: 8:45 a.m.

Method:

_____ Stainless steel bailer	<u>X</u>	TCL VOCs	<u>602</u>	<u>503</u>	Other _____
_____ Teflon bailer	<u>X</u>	TCL SVOCs			
_____ Pos. Disp. Pump	<u>X</u>	Target Analyte List Metals			
_____ Disposable bailer	<u>X</u>	Alkalinity			
_____ Dedicated pump					
<u>X</u> Other: Disposable Bladder Pump (Low Flow)					

Analyses:

Observations

Weather/Temperature: Partly cloudy skies, mid 50s
Sample description: clear

Free Product? yes	_____	no	<u>X</u>	describe	_____
Sheen? yes	_____	no	<u>X</u>	describe	_____
Odor? yes	_____	no	<u>X</u>	describe	_____

Comments:

Flow rate: 500 ml/min. Final DTW: 11.85'. Contained purge water in 55-gallon drum. PID= 0.0 ppm.
Collected MSW/MSD at well MW-03R.

FIELD OBSERVATION LOG GROUNDWATER SAMPLING RECORD

SITE PSC - Chemical Pollution Control, LLC of NY DATE April 22, 2014

SAMPLE ID: MW-04R_4/22/14
WELL ID: MW-04R
SAMPLERS: Keith Robins

Time On-site: 10:00 a.m. Time Off-site: 11:15 p.m.

Depth of well (from top of casing)..... 20.10 ft Time: _____
Initial static water level (from top of casing) 11.80 ft Time: _____

Purging Method

Airlift _____	Centrifugal _____	Well Volume Calculation: 2 in. casing: <u>8.3</u> ft. of water x 0.16 = <u>1.3</u> gallons 3 in. casing: _____ ft. of water x 0.36 = _____ gallons 4 in. casing: _____ ft. of water x 0.65 = _____ gallons
Bailer _____	Pos. Disp. _____	
Submersible _____	Disposable <u>X</u>	
Pump _____	Bladder Pump (Low Flow) _____	

volume of water removed: 3.3 gal. >3 volumes: yes _____ no X purged dry? yes _____ no X

Field Tests

Volume of Purge Water (in ml)	pH	Temp (°C)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.66	12.00	0.494	34.5	6.12	150
2,500 ml	6.61	11.16	0.481	18.7	5.00	163
5,000 ml	6.57	10.66	0.487	11.7	5.06	169
7,500 ml	6.55	10.65	0.485	0.0	5.04	172
10,000 ml	6.51	10.56	0.487	0.0	5.09	175
12,500 ml	6.48	10.53	0.487	0.0	5.10	179

Sampling

Time of Sample Collection: 10:35 a.m.

Method: _____ Analyses: _____

_____ Stainless steel bailer	<u>X</u> TCL VOCs	602 _____	503 _____	Other _____
_____ Teflon bailer	<u>X</u> TCL SVOCs			
_____ Pos. Disp. Pump	<u>X</u> Target Analyte List Metals			
_____ Disposable bailer	<u>X</u> Alkalinity			
_____ Dedicated pump				
<u>X</u> Other: Disposable Bladder Pump (Low Flow)				

Observations

Weather/Temperature: Partly cloudy skies, mid 50s
Sample description: clear

Free Product? yes _____	no <u>X</u>	describe _____
Sheen? yes _____	no <u>X</u>	describe _____
Odor? yes _____	no <u>X</u>	describe _____

Comments:

Flow rate: 500 ml/min. Final DTW: 11.80'. Contained purge water in 55-gallon drum. PID= 0.1 ppm.
Collected Blind Duplicate sample at MW-04R.

FIELD OBSERVATION LOG GROUNDWATER SAMPLING RECORD

SITE PSC - Chemical Pollution Control, LLC of NY DATE April 22, 2014

SAMPLE ID: MW-06_4/22/14
WELL ID: MW-06
SAMPLERS: Keith Robins

Time On-site: 11:15 a.m. Time Off-site: 12:45 p.m.

Depth of well (from top of casing)..... 21.50 ft Time: _____
Initial static water level (from top of casing) 11.71 ft Time: _____

Purging Method

Airlift	_____	Centrifugal	_____
Bailer	_____	Pos. Disp.	_____
Submersible	_____	Disposable	<u>X</u>
Pump	_____	Bladder Pump	_____
		(Low Flow)	

Well Volume Calculation:

2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 9.79 ft. of water x 0.65 = 6.3 gallons

volume of water removed: 6.5 gal. >3 volumes: yes _____ no X purged dry? yes _____ no X

Field Tests

Volume of Purge Water (in ml)	pH	Temp (°C)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.76	12.55	0.521	0.0	4.17	159
5,000 ml	6.71	11.90	0.520	0.0	3.23	162
10,000 ml	6.60	11.70	0.525	0.0	3.71	165
15,000 ml	6.55	11.62	0.524	0.0	3.35	166
17,500 ml	6.56	11.68	0.524	0.0	2.90	162
20,000 ml	6.70	11.69	0.525	0.0	2.87	151
22,500 ml	6.79	11.67	0.525	0.0	2.85	152
25,000 ml	6.73	11.63	0.524	0.0	2.86	146

Sampling

Time of Sample Collection: 12:25 p.m.

Method:

_____ Stainless steel bailer	<u>X</u>	TCL VOCs	602 _____	503 _____	Other _____
_____ Teflon bailer	<u>X</u>	TCL SVOCs			
_____ Pos. Disp. Pump	<u>X</u>	Target Analyte List Metals			
_____ Disposable bailer	<u>X</u>	Alkalinity			
_____ Dedicated pump					
<u>X</u> Other: Disposable					
Bladder Pump					
(Low Flow)					

Observations

Weather/Temperature: Partly cloudy skies, mid 50s
Sample description: Clear, colorless, no odor

Free Product? yes _____	no <u>X</u>	describe _____
Sheen? yes _____	no <u>X</u>	describe _____
Odor? yes _____	no <u>X</u>	describe _____

Comments:

Flow rate: 500 ml/min. Final DTW: 11.70'. Contained purge water in 55-gallon drum. PID= 0.0 ppm.

FIELD OBSERVATION LOG GROUNDWATER SAMPLING RECORD

SITE PSC - Chemical Pollution Control, LLC of NY DATE April 22, 2014

SAMPLE ID: MW-07_4/22/14
WELL ID: MW-07
SAMPLERS: Keith Robins

Time On-site: 1:00 p.m. Time Off-site: 2:15 p.m.

Depth of well (from top of casing)..... 21.40 ft Time: _____
Initial static water level (from top of casing) 11.69 ft Time: _____

Purging Method

Airlift	_____	Centrifugal	_____
Bailer	_____	Pos. Disp.	_____
Submersible	_____	Disposable	<u>X</u>
Pump	_____	Bladder Pump	_____
		(Low Flow)	_____

Well Volume Calculation:

2 in. casing:	_____	ft. of water x 0.16 =	_____	gallons
3 in. casing:	_____	ft. of water x 0.36 =	_____	gallons
4 in. casing:	<u>9.71</u>	ft. of water x 0.65 =	<u>6.3</u>	gallons

volume of water removed: 6.5 gal. >3 volumes: yes _____ no X purged dry? yes _____ no X

Field Tests

Volume of Purge Water (in ml)	pH	Temp (°C)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.83	13.93	0.569	0.0	4.97	138
5,000 ml	6.78	13.11	0.580	0.0	2.97	144
7,500 ml	6.68	12.81	0.582	0.0	2.84	144
10,000 ml	6.64	12.69	0.565	0.0	2.73	141
12,500 ml	6.64	12.62	0.570	0.0	2.96	146
15,000 ml	6.65	12.60	0.586	0.0	2.87	145
17,500 ml	6.63	12.60	0.574	0.0	2.45	144
20,000 ml	6.66	12.69	0.567	0.0	2.50	142
25,000 ml	6.69	12.73	0.562	0.0	2.43	141

Sampling

Time of Sample Collection: 2:05 p.m.

Method:

_____	Stainless steel bailer
_____	Teflon bailer
_____	Pos. Disp. Pump
_____	Disposable bailer
_____	Dedicated pump
<u>X</u>	Other: Disposable Bladder Pump (Low Flow)

Analyses:

<u>X</u>	TCL VOCs	602 _____	503 _____	Other _____
<u>X</u>	TCL SVOCs			
<u>X</u>	Target Analyte List Metals			
<u>X</u>	Alkalinity			

Observations

Weather/Temperature: Partly cloudy skies, 50s
Sample description: clear

Free Product? yes	_____	no	<u>X</u>	describe	_____
Sheen? yes	_____	no	<u>X</u>	describe	_____
Odor? yes	_____	no	<u>X</u>	describe	_____

Comments:

Flow rate: 500 ml/min. Final DTW: 11.69'. Contained purge water in 55-gallon drum. PID=0.0 ppm.

APPENDIX B-2

FIELD FORMS

DAILY EQUIPMENT CALIBRATION LOGS

DAILY EQUIPMENT CALIBRATION LOG

Date: April 22, 2014

Project Name: PSC - Chemical Pollution Control, LLC of New York

Project Number: 2786-P Calibrated by: K. Robins

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Horiba Water Meter U-52	Buffer 4.0 solution, Autocal	7:50 a.m.	Calibrated pH, temp., dissolved oxygen, turbidity, conductivity
RAE 2000 PID Meter	100 ppm Isobutylene gas	7:40 a.m.	Calibrated to 100 ppm and zero air

APPENDIX B-3

WELL CONDITION REPORTS

MONITORING WELL INSPECTION CHECKLIST

Well No. MW-01

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Surface Concrete Seal			
Intact	<u>X</u>	<u> </u>	<u> </u>
Cracked	<u> </u>	<u>X</u>	<u> </u>
Missing	<u> </u>	<u>X</u>	<u> </u>
2. Ponding of Water Around Concrete Seal	<u> </u>	<u>X</u>	<u> </u>
3. Protective Flush-Mounted Cover/Standpipe and Lock			
Flush-Mounted Cover - Intact	<u>X</u>	<u> </u>	<u> </u>
Standpipe - Intact	<u> </u>	<u> </u>	<u>N/A</u>
Lock - Intact	<u>X</u>	<u> </u>	<u> </u>
4. Well Casing Alignment (Straight)	<u>X</u>	<u> </u>	<u> </u>
5. Survey Measuring Point Clearly Marked	<u>X</u>	<u> </u>	<u> </u>
6. Well Clearly Labeled	<u> </u>	<u>X</u>	<u> </u>
7. Well is Protected	<u>X</u>	<u> </u>	<u> </u>

Comments: _____

Inspector Signature

Keith Robins

Date of Inspection

April 22, 2014



A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.

Well No. MW-03R

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Surface Concrete Seal			
Intact	<u>X</u>	<u> </u>	<u> </u>
Cracked	<u>X</u>	<u> </u>	<u>Corner of concrete pad cracked</u>
Missing	<u> </u>	<u>X</u>	<u> </u>
2. Ponding of Water Around Concrete Seal	<u> </u>	<u>X</u>	<u> </u>
3. Protective Flush-Mounted Cover/Standpipe and Lock			
Flush-Mounted Cover - Intact	<u>X</u>	<u> </u>	<u> </u>
Standpipe - Intact	<u> </u>	<u> </u>	<u>N/A</u>
Lock - Intact	<u>X</u>	<u> </u>	<u> </u>
4. Well Casing Alignment (Straight)	<u>X</u>	<u> </u>	<u> </u>
5. Survey Measuring Point Clearly Marked	<u>X</u>	<u> </u>	<u> </u>
6. Well Clearly Labeled	<u>X</u>	<u> </u>	<u> </u>
7. Well is Protected	<u>X</u>	<u> </u>	<u> </u>

Comments:

Inspector Signature

Keith Robbins

Date of Inspection

April 22, 2014

MONITORING WELL INSPECTION CHECKLIST

Well No. MW-04R

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Surface Concrete Seal			
Intact	<u>X</u>	<u> </u>	<u> </u>
Cracked	<u> </u>	<u>X</u>	<u> </u>
Missing	<u> </u>	<u>X</u>	<u> </u>
2. Ponding of Water Around Concrete Seal	<u> </u>	<u>X</u>	<u> </u>
3. Protective Flush-Mounted Cover/Standpipe and Lock			
Flush-Mounted Cover - Intact	<u>X</u>	<u> </u>	<u> </u>
Standpipe - Intact	<u> </u>	<u> </u>	<u>N/A</u>
Lock - Intact	<u>X</u>	<u> </u>	<u> </u>
4. Well Casing Alignment (Straight)	<u>X</u>	<u> </u>	<u> </u>
5. Survey Measuring Point Clearly Marked	<u>X</u>	<u> </u>	<u> </u>
6. Well Clearly Labeled	<u>X</u>	<u> </u>	<u> </u>
7. Well is Protected	<u>X</u>	<u> </u>	<u> </u>

Comments: _____

Inspector Signature

Keith Robin

Date of Inspection

April 22, 2014



Well No. MW-06

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Surface Concrete Seal			
Intact	<u>X</u>	<u> </u>	<u> </u>
Cracked	<u> </u>	<u>X</u>	<u> </u>
Missing	<u> </u>	<u>X</u>	<u> </u>
2. Ponding of Water Around Concrete Seal	<u> </u>	<u>X</u>	<u> </u>
3. Protective Flush-Mounted Cover/Standpipe and Lock			
Flush-Mounted Cover - Intact	<u>X</u>	<u> </u>	<u> </u>
Standpipe - Intact	<u> </u>	<u> </u>	<u>N/A</u>
Lock - Intact	<u>X</u>	<u> </u>	<u> </u>
4. Well Casing Alignment (Straight)	<u>X</u>	<u> </u>	<u> </u>
5. Survey Measuring Point Clearly Marked	<u>X</u>	<u> </u>	<u> </u>
6. Well Clearly Labeled	<u>X</u>	<u> </u>	<u> </u>
7. Well is Protected	<u>X</u>	<u> </u>	<u> </u>

Comments: _____

Inspector Signature Keith Coburn

Date of Inspection April 22, 2014



DVIRKA
AND
BARTILUCCI
CONSULTING ENGINEERS
A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.

MONITORING WELL INSPECTION CHECKLIST

Well No. MW-07

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Surface Concrete Seal			
Intact	<u>X</u>	<u> </u>	<u> </u>
Cracked	<u> </u>	<u>X</u>	<u> </u>
Missing	<u> </u>	<u>X</u>	<u> </u>
2. Ponding of Water Around Concrete Seal	<u> </u>	<u>X</u>	<u> </u>
3. Protective Flush-Mounted Cover/Standpipe and Lock			
Flush-Mounted Cover - Intact	<u>X</u>	<u> </u>	<u> </u>
Standpipe - Intact	<u> </u>	<u> </u>	<u>N/A</u>
Lock - Intact	<u>X</u>	<u> </u>	<u> </u>
4. Well Casing Alignment (Straight)	<u>X</u>	<u> </u>	<u> </u>
5. Survey Measuring Point Clearly Marked	<u>X</u>	<u> </u>	<u> </u>
6. Well Clearly Labeled	<u>X</u>	<u> </u>	<u> </u>
7. Well is Protected	<u>X</u>	<u> </u>	<u> </u>

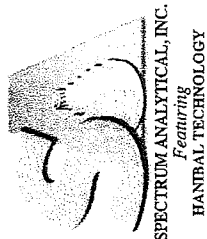
Comments:

Inspector Signature Keith Robins

Date of Inspection April 22, 2014

APPENDIX C

CHAIN OF CUSTODY FORM



N0633

CHAIN OF CUSTODY RECORD

11 Amgen Drive
Agawam, MA 01001
(413) 789-9018

8405 Benjamin Road, Ste A
Kingstown, RI 02852
(401) 732-3400

Special Handling:

TAT- Indicate Date Needed: 5/7/2014
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 60 days unless otherwise instructed.

Report To: Dr. K. + B. A. Lucci, Eng330 Cassways Park DriveWoodbury, MA 01797Telephone #: 516 364-9850Project Mgr. Mike HefgrenInvoice To: Dr. K. + B. A. Lucci, Eng330 Cassways Park DriveWoodbury, MA 01797P.O. No.: 2786-P

RQN:

Project No.: 2786-PSite Name: PSCLocation: Bayshore, Long Island State: NYSampler(s): Keith Robbins

1=Na₂SO₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8=NaHSO₄ 9=Deionized Water 10=H₂PO₄ 11=
12=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

List preservative code below:

TLC 100%
TLC 50%
TLC 25%
TLC 12.5%
TLC 6.25%
TLC 3.125%
TLC 1.5625%
TLC 0.78125%
TLC 0.390625%
TLC 0.1953125%
TLC 0.09765625%
TLC 0.048828125%
TLC 0.0244140625%
TLC 0.01220703125%
TLC 0.006103515625%
TLC 0.0030517578125%
TLC 0.00152587890625%
TLC 0.000762939453125%
TLC 0.0003814697265625%
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TLC 0.00000000000000000000000000000000000007346

APPENDIX D

DATA VALIDATION FORMS

DATA VALIDATION CHECKLIST

Project Name:	PSC - Chemical Pollution Control, LLC of New York Semiannual Groundwater Monitoring Program		
Project Number:	2786-P		
Sample Date(s):	April 22, 2014		
Sample Team:	Keith Robins		
Matrix/Number of Samples:	<u>Water/ 5</u> <u>Soil/ 0</u> <u>Field Duplicates/ 1</u> <u>Trip Blanks/ 1</u> <u>Field Blanks/ 1</u>		
Analyzing Laboratory:	Spectrum Analytical, Inc., North Kingston, RI		
Analyses:	<u>Volatile Organic Compounds (VOCs): by SW846 8260C</u> <u>Semivolatile Organic Compounds (SVOCs): by SW846 8270D</u> <u>Metals: Total by SW846 Method 6010C and mercury by SW-846 7470A</u> <u>Wet Chemistry: Alkalinity by Method SM 2320B</u>		
Laboratory Report No:	N0633	Date:	5/06/2014

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using guidance from the USEPA National Functional Guidelines of June 2008, or USEPA National Functional Guidelines of Inorganic Data Review, January 2010, method performance criteria, and Dvirka and Bartilucci Consulting Engineers', a Division of D&B Engineers and Architects, P.C., professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

**Custody Numbers: N0633
SAMPLE AND ANALYSIS LIST**

Sample ID	Lab ID	Sample Collection Date	Parent Sample	Analysis		
				VOC	SVOC	MET/WET
TRIP BLANK	N0633-01	4/22/14		X	--	--/--
MW-03R	N0633-02	4/22/14		X	X	X/X
MW-04R	N0633-03	4/22/14		X	X	X/X
MW-06	N0633-04	4/22/14		X	X	X/X
BLIND DUPLICATE	N0633-05	4/22/14	MW-04R	X	X	X/X
MW-07	N0633-06	4/22/14		X	X	X/X
MW-01	N0633-07	4/22/14		X	X	X/X
FIELD BLANK	N0633-08	4/22/14		X	X	X/X

ORGANIC ANALYSES VOCs

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks		X		X	
C. Field blanks		X		X	
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X		X	
6. Blank spike %R		X	X		
7. Surrogate spike recoveries		X	X		
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X	X		
11. Continuing calibration RRF's and %D's		X	X		
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD		X		X	
14. Tentatively Identified Compounds (TICs)					X

VOCs - volatile organic compounds
%R - percent recovery

%D - percent difference
%RSD - percent relative standard deviation

RRF - relative response factor
RPD - relative percent difference

Comments:

Performance was acceptable, with the following exceptions:

- 3,4&6. The %R was above the QC limits for iodomethane in the MS, MSD and blank spike samples. Iodomethane was not detected in any of the samples; therefore, qualification of the data was not required.
7. The surrogate %R was above limits for dibromofluoromethane in MW-07. No associated compounds were detected above the reporting limit in MW-07; therefore, qualification of the data was not required.
10. 1,2,3-Trichlorobenzene and naphthalene %RSDs were above the QC limits in the initial calibration. 1,2,3-Trichlorobenzene and naphthalene were not detected in the associated samples; therefore, qualification of the data was not required.
11. Iodomethane %D was above QC limits in the continuing calibration associated with all samples except MW-01. Iodomethane was not detected in the associated samples; therefore, the samples were qualified as an estimated detection limit (UJ) in all samples except MW-01.

ORGANIC ANALYSES SVOCs

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X	X		
B. Field blanks		X	X		
3. Matrix spike (MS) %R		X		X	
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Blank spike %R		X		X	
7. Surrogate spike recoveries		X	X		
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD		X		X	
14. Tentatively Identified Compounds (TICs)					X

SVOCs –semivolatile organic compounds %D - percent difference

%R - percent recovery

%RSD - percent relative standard deviation

RRF - relative response factor

RPD - relative percent difference

Comments:

Performance was acceptable, with the following exceptions:

- 2A&B. Di-n-butylphthalate was detected in the method blank and field blank. Di-n-butylphthalate was qualified as non-detect (UB) in samples MW-04R, MW-06, BLIND DUPLICATE and MW-07.
- 4&5. The %R was above the QC limits for 2,4,5-trichlorophenol, benzo(a)pyrene, dibenzofuran and hexachlorobenzene in the MS. The RPD was above the QC limits for 4-chloroaniline and 4-nitrophenol in the MS/MSD. The compounds were not detected in the samples; therefore, qualification of the data was not required.
- 7. The surrogate %R was below limits for terphenyl-d14 in MW-07 and BLIND DUPLICATE. Associated compounds were not detected in MW-07 and BLIND DUPLICATE; therefore, qualification of the data was not required.

INORGANIC ANALYSES METALS & WET CHEMISTRY

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X	X		
B. Field blanks		X	X		
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X		X	
9. Post digestive spike sample %R					X
10. Duplicate %RPD		X		X	
11. Serial dilution check %D		X		X	
12. Field duplicates RPD		X		X	

%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

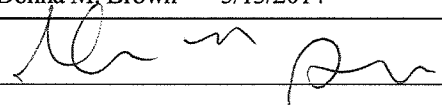
Performance was acceptable, with the following exception:

2A&B. Barium, calcium, cobalt, nickel, sodium, vanadium and zinc were detected in the field blank, preparation blank and/or initial calibration blank above the instrument detection limit. The following metals were qualified as non-detect (UB): cobalt and vanadium in samples MW-04R and MW-06, and nickel and zinc in all samples.

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers: N0633

Sample ID	Analyte(s)	Qualifier	Reason(s)
<u>VOCs</u>			
All samples except MW-01	Iodomethane	UJ	%D was above QC limits in the continuing calibration
<u>SVOCs</u>			
MW-04R, MW-06, BLIND DUPLICATE and MW-07	Di-n-butylphthalate	UB	Detected in the method blank and field blank
<u>Metals</u>			
MW-04R and MW-06	Cobalt and vanadium	UB	Detected in the field blank, preparation blank and/or initial calibration blank above the instrument detection limit
All samples	Nickel and zinc	UB	Detected in the field blank, preparation blank and/or initial calibration blank above the instrument detection limit

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 5/13/2014
VALIDATOR'S SIGNATURE:	

APPENDIX D





PSC - Chemical Pollution Control LLC of New York

Resource Conservation and
Recovery Act (RCRA)
Facility Investigation (RFI) Report
and
Focused Corrective Measures
Study (CMS)

Bay Shore Facility
(Site No. 1-52-015)



NOVEMBER 2010

db **Dvirka
and
Bartilucci**
CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

**RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)
FACILITY INVESTIGATION (RFI) REPORT
AND
FOCUSED CORRECTIVE MEASURES STUDY (CMS)**

**PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
BAY SHORE, NEW YORK**

(SITE NO. 1-52-015)

Prepared for:

**PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
BAY SHORE, NEW YORK**

Prepared by:

**DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
WOODBURY, NEW YORK**

NOVEMBER 2010

**RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)
FACILITY INVESTIGATION (RFI) REPORT
AND
FOCUSED CORRECTIVE MEASURES STUDY (CMS)
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
BAY SHORE, NEW YORK**

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1.0 INTRODUCTION

The purpose of this report is to document the results of the field activities, as well as the findings associated with a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) conducted at the PSC - Chemical Pollution Control, LLC of New York (CPC) Bay Shore facility located at 120 South Fourth Street in Bay Shore, Suffolk County, New York (see Figure 1 provided in Appendix A). CPC retained the services of Dvirka and Bartilucci Consulting Engineers (D&B) to oversee the field activities and perform the soil and groundwater sampling specified in the New York State Department of Environmental Conservation (NYSDEC) approved RFI Work Plan dated August 2010, which also served as the required Current Conditions Report. The field activities associated with this investigation were completed in August and September 2010, with a supplemental round of sampling completed in October 2010. All sampling and investigation activities were completed in accordance with the August 2010 NYSDEC-approved RFI Work Plan.

This RFI Report presents a summary of all data obtained during the investigation, including identification and location of contaminants of concern, and comparison of contaminant concentrations to applicable standards, criteria and guidance (SCGs). The report includes a description of the completed field investigation, a discussion of geology and hydrogeology (including a groundwater contour map) and a discussion of the findings of the investigation. The RFI Report also includes conclusions based on the findings of the investigation, and recommendations regarding corrective action of identified impacts (i.e., remediation). A Focused Corrective Measures Study (CMS) has also been incorporated into this RFI Report that evaluates and develops a corrective action remedy recommended for the site.

1.1 Project Background and Objectives

The CPC Bay Shore facility is a commercial hazardous waste treatment, storage and disposal facility that accepts and manages a variety of hazardous and nonhazardous waste including acids, alkalis, flammables, cyanides/sulfides, oxidizers, toxic waste, oily waste, photochemical waste, laboratory packaged waste, universal waste and polychlorinated biphenyl

(PCB) waste under its existing Part 373 Permit (NYSDEC Permit No. 1-4728-00086/00002). Waste is received from both industrial and commercial generators, as well as from households. Following on-site processing, all waste is transported to authorized off-site treatment and disposal facilities. The facility has operated continuously at this location since 1976.

The CPC facility is currently in the permitting and planning phases of a facility upgrade that includes properly closing all of its existing hazardous waste storage areas in accordance with the requirements of 6 NYCRR Part 373, demolishing and removing its existing facility building, and constructing a new improved facility that meets its current operational needs and ensures compliance with all applicable environmental regulations. In performing this RFI, CPC intends to satisfy the RFI requirements of its existing 6 NYCRR Part 373 Permit in support of the facility upgrade, identify any impacted soil located on-site requiring removal during the construction of the new building at the facility and identify any groundwater contamination that may need to be addressed. In addition, it is the overall intention of this program to obtain sufficient information to allow for the design and implementation of a remediation program at the facility to satisfy the corrective action requirements presented in Module II of the facility's existing Part 373 Permit and to allow the facility to be delisted from New York State's Registry of Inactive Hazardous Waste Disposal Sites (Site No. 1-52-015).

Therefore, the objectives of the RFI include:

- Evaluate soil and groundwater quality to determine if chemical constituents related to site operations are present in the subsurface and if any residual contamination has impacted groundwater quality;
- Evaluate potential migration pathways for any chemical constituents that may be related to site operations at the facility, if any are encountered;
- Characterize site-specific geology and hydrology; and
- Provide sufficient site-specific information to allow evaluation of potential remedial alternatives that may be implemented at the facility.

1.2 Site Description and Adjoining Properties

The CPC facility is located at 120 South Fourth Street in Bay Shore, New York in an urban portion of the Town of Islip, Suffolk County, New York, approximately 2,500 feet west of the Sagtikos State Parkway. The CPC facility occupies a parcel approximately 1 acre in size. Primary access to the site is from South Fourth Street, which borders the north side of the facility. A site location map is provided as Figure 1 in Appendix A.

The areas adjoining and surrounding the CPC facility consist of developed industrial properties. The CPC facility is bound by South Fourth Street to the north and by industrial properties to the east, south and west. The property immediately south of the CPC facility was formerly used by the Town of Islip as a landfill (Sonia Road Landfill) in the late 1960's. The former landfill itself is approximately 500 feet to the south of the CPC facility.

The CPC facility is a commercial hazardous waste treatment, storage and transfer facility and is a fully owned subsidiary of PSC, LLC. The CPC facility consists of a one-story masonry building and an asphalt-paved exterior area. The building contains office and maintenance areas and waste treatment and storage areas. Seven individually bermed drum storage areas, a diked drum storage area and six aboveground storage tanks are located adjacent to the building. The six storage tanks are located within three separate diked containment areas. The tanks are used to store and blend oil, non-halogenated solvents, ignitable hazardous waste, various organic wastewaters, and various acid and alkali mixtures. A site plan for the CPC Bay Shore facility is provided as Figure 2 in Appendix A.

The CPC facility receives and picks up hazardous waste and nonhazardous waste from a variety of waste generators and industries for shipment to off-site treatment and disposal facilities. This waste is transported to the facility in drum lots or as bulk loads primarily by CPC's transport vehicles and trained drivers. The CPC facility has a total of 12 container storage areas and six storage tanks. The facility accepts halogenated and non-halogenated hydrocarbons, organic waste waters, acids, caustics, ignitable hazardous waste, and listed hazardous waste for storage or consolidation in tanks. All waste is transported by CPC to authorized off-site

treatment and disposal facilities. Toxic, flammable, corrosive and other various household waste is accepted at the CPC facility from household waste generators. Lab-packed waste accepted at the CPC facility for storage may be repackaged without opening the individual inner containers. The CPC facility also treats photochemical waste fixer (e.g., spent silver bearing solution) on-site using automated electrolysis units and passive filter units to recover metallic silver. The CPC facility may occasionally store PCBs in containers at a volume less than 495 gallons for up to 10 days in compliance with 40 CFR Part 761 without a separate Toxic Substances Control Act (TSCA) facility storage permit. Specific storage requirements, procedures for consolidation in tanks and treatment processes are discussed in the facility's Part 373 Permit.

1.3 Site History

The storage and treatment of hazardous waste and nonhazardous waste began at the CPC facility in 1975 and has continued through the present. The history of the property is as follows:

- Prior to 1940 - Agricultural (unconfirmed);
- 1940 to 1960 - Hubbard Sand and Gravel (quarry);
- 1960 to 1965 - Bus company;
- 1965 to 1970 - Milk bottling and distribution (dairy company);
- 1970 to 1975 - Truck service company (tire company);
- 1975 to 1993 - Chemical Pollution Control, Inc. (CPC) (leased property);
- 1993 to 1995 - 21st Century Environmental Management, Inc. (leased property);
- 1995 to 1997 - 21st Century Environmental Management, Inc. (owned property); and
- 1997 to present - PSC, LLC (owned property).

The property is located in an area that was formerly the Hubbard Sand and Gravel quarry from the 1940's to the 1960's (Arcadis, 2006). The southern perimeter of the quarry was used by the Town of Islip as the Sonia Road Landfill in the late 1960's. The use of the property prior to the quarry is unknown, but it is assumed to have been used for agricultural purposes.

A bus company and a milk bottling and distribution company were located on the property in the 1960's. A truck tire sales and service company was located at the property in the 1970's. Information regarding historical waste disposal practices at the property prior to CPC operations is unknown. The building was vacant at the time CPC took over the lease in 1975. In 1993, 21st Century Environmental Management, Inc. (21 EMI) was formed and assumed control of CPC's operations. The property was purchased from the lessor, Hollow Properties, by 21 EMI in 1995. Due diligence or pre-acquisition assessment activities were not conducted for the property at the time of the 21 EMI purchase in 1995. PSC purchased the property from 21 EMI in 1997. XCG Consultants, Ltd. (XCG) conducted due diligence assessment activities for the property in 1997.

XCG reviewed aerial photographs of the property for the period from 1976 to 1984 and reported that the property and neighboring properties are clearly visible in both aerial photographs (XCG, 1997). XCG also reported that an area of excavation to the east of the property was visible in both aerial photographs. The Sonia Road Landfill to the south was also visible in both aerial photographs.

The building was constructed in the 1960's (XCG, 1997). According to XCG, the property was paved after the building was constructed and dry wells were installed at that time to provide drainage for the property. Otherwise, XCG indicated that there have been relatively few changes to the facility over the years. When CPC began operations, the truck maintenance pit in the garage was filled with concrete. In the early 1980's, concrete secondary containment areas were constructed in the drum storage and storage tank areas. A storage tank was removed from service and closed in 1996.

Two 275-gallon underground storage tanks (USTs) were formerly located at the CPC facility (XCG, 1997). Both of these tanks stored heating oil and were removed from service and closed by Hollow Properties in 1989. It is believed that the tanks were located on the north side of the building in the vicinity of existing monitoring well MW-5. Closure reports for the USTs

are not available. Likewise, documentation regarding the soil quality in the former UST locations or whether any soil was removed during the tank removal activities is not available.

1.4 Previous Investigations

A Current Conditions Report (CCR) was prepared by Arcadis G&M, Inc. for Chemical Pollution Control, Inc., dated November 22, 2006. The CCR summarizes all known relevant information regarding the CPC facility. The findings of D&B's review of this document were presented in the NYSDEC-approved RFI Work Plan dated August 2010. As described in the Work Plan, the following environmental investigations were previously completed at the CPC facility:

- Phase II Environmental Site Assessment – 1987
- Monitoring Well Installation and Groundwater Sampling – 1994 through 1995
- Phase II Environmental Site Assessment – 1997
- Quarterly Groundwater Monitoring – 2002
- Soil and Groundwater Investigation – 2007

A brief summary of the findings of these investigations with regard to soil and groundwater impacts is provided below.

Soil

The 1987 Phase II Environmental Site Assessment (ESA) involved collecting surface soil samples from five locations and subsurface soil samples from two soil borings. The surface soil samples were analyzed for volatile organic compounds (VOCs), inorganic compounds, phenols and PCBs, and the subsurface soil samples were analyzed for inorganic compounds and pesticides. All detected concentrations were below the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 Recommended Soil Cleanup Objectives (RSCOs).

The 1997 Phase II ESA involved the collection of soil samples from three 30-foot deep soil borings. The soil samples exhibiting the highest photoionization detector (PID) reading or evidence of visual impact were submitted to a laboratory and analyzed for VOCs. Trace concentrations of VOCs were detected in the soil samples below the NYSDEC TAGM 4046 RSCOs.

The Soil and Groundwater Investigation performed in August 2007 involved the collection of subsurface soil samples from four dry wells and six soil borings, with laboratory analysis for VOCs, semivolatile organic compounds (SVOCs), inorganic compounds, PCBs and pesticides. The results indicated VOC and SVOC compounds detected in the subsurface soil samples at concentrations below the NYSDEC's Part 375 Unrestricted Use Soil Cleanup Objectives (SCOs), which became effective December 14, 2006 and replaced the TAGM 4046 RSCOs. Chromium was detected at a maximum concentration of 180 mg/kg in subsurface soil sample SB-03 (1.5 to 3.5 feet), above the Unrestricted Use SCO of 30 mg/kg. In addition, silver was detected in SB-02 (5 to 7 feet) at a concentration of 3.4 mg/kg, which is above the Unrestricted Use SCO of 2 mg/kg. SB-02 and SB-03 are located in the central and southern portion of the truck load/unload area on the western side of the facility building, respectively.

One subsurface soil sample collected from a dry well, DW-04 (8 to 9 feet), exhibited concentrations of lead, silver, zinc and several pesticides above their respective Unrestricted Use SCOs. DW-04 is located on the east side of the facility building.

Groundwater

Between 1987 and 1997, 10 groundwater monitoring wells (MW-1 through MW-10) were installed at the CPC facility. The surveyed locations of these wells are shown on Figure 3, presented in Section 2.0. It should be noted that monitoring well MW-2 was apparently destroyed sometime prior to 2007. As discussed in Section 3.3 of this report, the groundwater flow direction is generally to the southeast.

At least 13 rounds of groundwater sampling were performed at the CPC facility from 1987 through 2007. At a minimum, these samples were analyzed for VOCs. However, some samples were also analyzed for SVOCs, inorganic compounds, pesticides and/or PCBs. The groundwater results indicated that chlorinated VOCs (CVOCs) are the class of compounds most frequently detected in on-site groundwater above NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Class GA Groundwater Standards and Guidance Values, including trichloroethene (TCE), cis-1,2-dichloroethene (1,2-DCE) and, to a lesser degree, tetrachloroethene (PCE) and 1,1,1-trichloroethane (1,1,1-TCA). Historically, these compounds have been most frequently detected, and detected at the highest concentrations, in monitoring wells MW-3, MW-4 and MW-6, located on the southern, downgradient side of the facility. Concentrations of these CVOCs have also been elevated in well MW-9, located in the vicinity of and to the west of MW-3.

With the exception of the sampling round conducted in 1987, CVOCs have generally not been detected in upgradient wells MW-1 and MW-5 during the historical monitoring period. The groundwater sample results from the 1987 sampling round indicated that upgradient monitoring well MW-5 exhibited CVOC concentrations similar to that of downgradient monitoring wells MW-3 and MW-4. However, only low-level concentrations were detected in upgradient monitoring well MW-1.

During the August 2007 sampling event, MW-4 exhibited the maximum concentrations of TCE (330 ug/l), 1,2-DCE (320 ug/l) and PCE (14 ug/l) detected at the facility. The Class GA Standard for these compounds is 5 ug/l. Unlike previous sampling rounds, in August 2007 PCE and 1,2-DCE were not detected in wells MW-3 and MW-6 above the Class GA Standards. However, TCE was detected at a concentration of 7 ug/l in these wells, and 6 ug/l in MW-9. 1,1,1-TCA was not detected above its Class GA Standard in any of the monitoring wells during the August 2007 sampling round.

Although lead and chromium have been occasionally detected above Class GA Standards in wells MW-2 and MW-3, these metals were not detected at elevated concentrations during the August 2007 sampling event. Iron and sodium were detected at concentrations above their

respective Class GA Standards of 300 and 20,000 ug/l at several wells during the August 2007 sampling event. The maximum concentration of iron was 1,100 ug/l (MW-6) and the maximum concentration of sodium was 27,000 ug/l (MW-9).

Light non-aqueous phase liquid (LNAPL) was observed in monitoring well MW-3 in May 2002 at a thickness of less than 0.5 inch. The LNAPL was very light brown to tan colored, had a low viscosity and a mild organic odor. The analytical results indicated that the LNAPL contained fairly high concentrations of total sulfur and total halogens, but very low concentrations of the chlorinated compounds present in the groundwater samples collected from the facility monitoring wells. Subsequent groundwater sampling events conducted during 2002 and in August 2007 did not detect any LNAPL in monitoring well MW-3.

1.5 Record Search

In order to help develop the scope of work for the RFI, D&B performed a review of federal, state and local records for the facility through a review of the regulatory listings compiled in a regulatory agency database report. The detailed findings of this review were presented in the NYSDEC-approved RFI Work Plan dated August 2010. In summary, the CPC facility was identified in 12 databases, including in the New York State Registry of Inactive Hazardous Waste Disposal Sites (SHWS). Based on documented spills and groundwater sampling, the CPC facility is listed as presenting a significant environmental threat due to groundwater contamination. The facility was also listed as a Large Quantity Generator of hazardous waste in 1986 and a non-generator in 1999 and 2006. Numerous Part 373 compliance violations were also listed during the period from 1984 to 2006.

The CPC facility was identified in the NYSDEC Spills database for a release of hazardous water-soluble oil from a 55-gallon drum into an on-site dry well located in the southeast portion of the facility in January 2006. The material was hazardous due to the presence of lead. The appropriate regulatory agencies were contacted to report the incident and NYSDEC Spill Number 05-12235 was assigned to the spill. The spill is listed as having been

closed on July 27, 2006. The subject property was also identified in the NYSDEC Spills database for a release of water and water-soluble oil to asphalt from a 55-gallon drum on June 19, 2007. The release was cleaned up using clean water and sorbent materials. The appropriate regulatory agencies were contacted to report the incident and NYSDEC Spill Number 07-50538 was assigned to the spill. The spill is listed as having been closed on April 15, 2009.

Thirty-three aboveground storage tanks (ASTs) were identified in the Suffolk County AST database for the facility. Based upon information presented in the 2008 Suffolk County Article 12 registration, 21 of the 33 ASTs are currently active. However, it should be noted that Suffolk County considers container storage areas to be ASTs. Of the 21 ASTs, 11 are designated as drum storage areas. The remaining 10 ASTs are actually tanks. The UST database identified two 4,000-gallon abandoned underground storage tanks (USTs) located at the facility.

D&B performed a Freedom of Information Act (FOIA) review at the Suffolk County Department of Health Services (SCDHS) that produced approximately 230 letters between SCDHS and CPC indicating various noncompliant situations and Notices of Violation. The correspondence primarily addresses contamination in the dry wells, leaking drums in the drum storage areas, a historical oil pit and leaking trucks in a truck storage area. The majority of the letters and violations are from the late 1970's through the early 1980's.

It should be noted that, based upon a review of available historical records, several facilities located upgradient of the CPC facility have had documented releases to the environment of the same CVOCs detected in groundwater at the CPC facility. These include the former Baron-Blakeslee facility located at 86 Cleveland Street, the Dial Ace Uniform Supply, Inc. facility located at 30 Dunton Avenue, the Commercial Envelope Manufacturing Co., Inc. facility located at 900 Grand Boulevard, the Southern Container Corporation located at 140 Industry Court and the Optica Manufacturing Corporation located at 210 South Fehr Way. These facilities may have contributed to the overall degradation of groundwater quality in the vicinity of the CPC facility. In addition, the presences of these upgradient sources may explain the concentrations of contaminants of concern detected in upgradient monitoring well MW-5 during the 1987 groundwater sampling event and could, at least in part, contribute to the concentrations detected on-site.

1.6 Areas of Potential Environmental Concern

Based on the environmental and operational background summarized above, six primary areas of concern (AOCs) were defined for the CPC facility in the August 2010 NYSDEC-approved RFI Work Plan. The RFI field program was developed to investigate the following AOCs: (1) historical operational areas; (2) existing operational areas; (3) on-site dry wells; (4) on-site groundwater; (5) subsurface anomalies identified during a previously completed geophysical survey (see Section 2.2), including historical USTs; and (6) historical “oil pit,” “drum storage area” and “tank truck parking area” identified during the FOIA review.

1.7 Report Organization

The remainder of this RFI Report is organized as follows:

- **Section 2.0 - Field Investigation Program:** Provides an overview of the field activities associated with the field program, as well as a discussion of any deviations from the NYSDEC-approved RFI Work Plan dated August 2010. In addition, data management and chemical data validation/usability are discussed.
- **Section 3.0 - Site Geology and Hydrogeology:** Presents a discussion of the geology and hydrogeology of the site and surrounding areas based on existing information and geologic data collected as part of the field program.
- **Section 4.0 - Findings:** Provides a discussion of the chemical compounds identified at each area of potential environmental concern.
- **Section 5.0 - Conclusions and Recommendations:** Provides conclusions based on the findings of the RFI, and recommendations regarding corrective action (i.e., remediation).
- **Section 6.0 - Focused Corrective Measures Study:** The Focused Corrective Measures Study develops and evaluates a corrective action remedy recommended for the site.
- **Section 7.0 - References**

2.0 FIELD INVESTIGATION PROGRAM

This section provides an overview of the field activities associated with the RFI performed at the CPC Bay Shore facility. The RFI was completed by D&B in August and September 2010 in accordance with the NYSDEC-approved RFI Work Plan dated August 2010. In order to meet the objectives presented in Section 1.1 and investigate the AOCs identified in Section 1.6, the following activities were undertaken:

- Base Map Development and Surveying;
- Underground Utility Clearance;
- Test Pit Excavation, Sampling and Analysis;
- Underground Storage Tank Removal;
- Soil Probes, Sampling and Analysis; and
- Groundwater Monitoring Well Sampling and Analysis.

Based on preliminary soil sample data collected during the RFI, additional soil probes, sampling and analysis were completed in October 2010 in order to further delineate the extent of soil contamination. Soil probes are discussed in Section 2.5. The findings of the investigation are discussed in Section 4.0.

The completed sample location map for the RFI depicting the surveyed locations of all samples is provided as Figure 3 in Appendix A. In addition, Table 1 presented in Appendix B provides a summary of the sampling program, including the identification of sample locations, soil probe and test pit completion depths, and sample analyses. As specified in the August 2010 NYSDEC-approved RFI Work Plan, current and historical operations conducted by CPC at the facility, as well as the historical investigation activities, were considered in determining the laboratory analyses performed during this RFI. The field investigation was focused on the AOCs previously identified in Section 1.6.

Due to site-specific factors, such as underground utilities and equipment access, slight modifications to the originally proposed sampling locations were necessary. However, all sample locations were completed within several feet of the locations proposed in the work plan. The deviations from the scope of work were discussed with and approved by CPC and on-site NYSDEC representatives prior to implementation.

2.1 Base Map Development and Surveying

The site plan presented as Figure 2 and developed as part of the previous work performed at the CPC facility was utilized as the base map for this investigation. Relevant features on the base map include structures, roads, utilities, dry wells and areas used during site operations (e.g., maintenance, waste treatment, storage areas, etc.).

Following completion of the investigation, the location and elevation of all sample points, including soil probes, test pit excavations and monitoring wells, were surveyed for placement on the base map. Figure 3 is a sample location map that depicts the surveyed location of all sample points. Two elevation measurements, i.e. the elevation on the rim of the flush-mounted manhole and the elevation of the top of the PVC well casing, were collected at each monitoring well location to assist in determining the shallow groundwater flow direction. All elevations were referenced to Town of Islip Datum (National Geodetic Vertical Datum).

2.2 Underground Utility Clearance

Prior to implementing any intrusive activities, utility clearance procedures were conducted. The procedures entailed utility markouts pursuant to Code 753, obtaining and reviewing available utility drawings, and a field reconnaissance to verify, to the maximum extent possible, the location of utilities relative to the proposed locations of all intrusive work.

Due to the underground utilities present at the site, a private utility markout service was obtained to identify and mark-out the dimensions, depth and locations of all the aboveground and underground utilities. The utility markouts were performed in March 2009 using a combination

of electromagnetic metal detectors, ground penetrating radar and radio frequency/pipe locating instruments. The identified underground utilities were marked on-site with spray paint and were later surveyed and plotted on the site plan (Figure 2).

In addition, a Code 753 utility markout was completed as per 16 NYCRR Part 753. Consistent with the One-Call (also called Dig Safe New York) criteria, a request was made at least 72 hours prior to initiating field work. Per Code 753 requirements, confirmations that the utilities were marked out were documented in the project file. All hardcopy confirmations were available in the field during all intrusive operations. If the utility markings became faint or obscure, they were refreshed as needed.

2.3 Test Pit Excavation, Sampling and Analysis

AARCO Environmental Services Corporation (AARCO) was retained to excavate a total of 4 test pits utilizing a backhoe at the CPC facility to determine the presence of suspected underground storage tanks (USTs). The surveyed locations of the completed test pits are depicted on Figure 3 and test pit logs are provided in Appendix C. As depicted on Figure 3, TP-1 was completed at the northern end of the facility, TP-2 and TP-3 were completed in the northeast corner of the facility, and TP-4 was completed at the southern end of the facility. It should be noted that test pits TP-2 and TP-3 were combined into one test pit due to their proximity. All test pits were logged and photographed.

The test pits were excavated to a depth necessary to determine if an UST or other subsurface structure was present in each location. Completed test pit depths are provided in Table 1. It should be noted that test pit TP-1 was terminated at a depth of 1.2 feet below grade where a cement cover for a leaching pool was encountered. This leaching pool was determined to be responsible for the anomaly detected during the geophysical survey. The remaining test pits were completed to depths between 9 and 10 feet below grade, at which elevation the water table was encountered. Soil from the test pits was described according to the Unified Soil Classification System (USCS). During the excavation activities, the test pit walls and floor were investigated for evidence of contamination such as odors, staining and/or sheens. In addition,

soil from the test pits was screened for VOCs using a photoionization detector (PID). All observations were recorded in the project field book.

Two single-walled steel USTs, each estimated at 4,000 gallons in capacity, were encountered in test pits TP-2 and TP-3. Each UST was removed for proper off-site management in accordance with NYSDEC and Suffolk County requirements as described in Section 2.4.

Despite the fact that contaminated soil was not identified (based on visual observations and field instrument measurements), soil samples were collected from each test pit excavation in accordance with the August 2010 NYSDEC-approved RFI Work Plan to verify the absence of soil contamination. In general, one soil sample was collected from each excavation floor, as well as one soil sample from each excavation sidewall utilizing the bucket of the backhoe. However, as summarized in Table 1, one composite soil sample was collected from test pit TP-1 representing the sidewalls of the excavation. This composite soil sample was collected as directed by the NYSDEC due to the shallow nature of the test pit and the presence of an active sanitary leaching pool, which was determined to be responsible for the geophysical anomaly. In addition, a sample was not collected from the western sidewall of TP-3 due to the presence of the partially abandoned UST (see Section 2.4 for additional information). The selected chemical analysis for the test pit subsurface soil samples is summarized in Table 1 and the chemical data are summarized in Appendix E in Tables E-5 through E-7. The quality of subsurface soil in the test pits is discussed in Section 4.1.

The test pits remained open for the time necessary for excavation, logging and photographing the subsurface conditions, collecting samples, and measuring the dimensions of the test pit excavation area. Since contaminant impact was not observed within each test pit, excavated soil was used to backfill each excavation following completion of each test pit and graded to match surrounding ground surface elevations. Additional clean fill was brought in from off-site for test pits TP-2 and TP-3 after UST removal (see Section 2.4). Each test pit was paved with asphalt to match pre-existing conditions. Prior to final restoration efforts, all test pits were marked for follow-up survey.

2.4 Underground Storage Tank Removal

This section provides a brief summary of the field activities associated with the removal of two underground storage tanks (USTs) from test pits TP-2 and TP-3. AARCO conducted the UST excavation, removal, backfilling and site restoration activities, with oversight provided by D&B. A backhoe, in conjunction with a small excavator, were utilized to break up the asphalt surface, excavate the test pits, remove the USTs from the ground and backfill the excavation.

As described earlier, two USTs estimated to be 4,000 gallons each were encountered during the excavation of test pits TP-2 and TP-3. Both USTs were located approximately 4 feet below grade and oriented in an east to west direction. The dimensions of both USTs were identical, measuring 24 feet in length and 5 feet 4 inches in diameter. Upon uncovering the surface of the USTs, any associated piping was disconnected and removed. The USTs were cut open using the bucket of the backhoe or a demolition saw.

At TP-3, the first UST encountered was found to be filled approximately one-third full with water and sand. A guzzler was used to remove the liquid and sand from within the UST for off-load into a 20-cubic-yard lined roll-off container that was staged near the excavation for subsequent proper off-site transportation and disposal. Liquid accumulating in the roll-off container was removed and transferred into plastic containers for subsequent proper off-site transportation and disposal.

The western end of the UST in TP-3 was located in close proximity to the northeast corner of the facility building. In consultation with on-site representatives from the NYSDEC and SCDHS, it was determined that a portion of the UST would be left in place to avoid compromising the integrity of the building foundation during removal. The UST was cut and the westernmost 6 feet left in place. Plywood sheeting was secured to the open end of the UST and a small opening was made in the top of the UST to facilitate filling the remaining UST volume with concrete. In agreement with the NYSDEC, the portion of the tank left in place will be excavated and removed during construction of the new facility building.

The UST in TP-4 was found to be filled approximately one-third full with oily water and sand. A guzzler was used to remove the liquid and sand from within the UST for off-load into a second 20-cubic-yard lined roll-off container and subsequent proper off-site transportation and disposal, with the liquids accumulating in the roll-off container removed and transferred into plastic containers for subsequent proper off-site transportation and disposal.

Following removal of the USTs, soil sampling was performed as described in the previous section of this report. According to AARCO, a combined total of approximately 800 gallons of liquid was removed from the USTs. Inspection of both 4,000-gallon USTs revealed them to be in fair condition, with some exterior corrosion and pitting. Holes were not identified in either UST and evidence of contamination was not observed in the soil surrounding and beneath the USTs.

The USTs were physically removed from the ground and properly disposed of off-site, with the exception of the portion of the first tank which was filled with concrete and left in place. A third 20-cubic-yard lined roll-off container was brought on-site and the contents of the first two roll-off containers were redistributed among the three containers, since the first two containers were too full for off-site transport. The three roll-off containers were transported off-site for proper disposal. A total of approximately 54.28 tons of soil was transported off-site for proper disposal. Waste transportation and disposal documentation for this excavated material is provided in Appendix F. Approximately 40 cubic yards of certified clean sand was used to backfill the excavation and compacted with the bucket of the excavator. Backfilling activities were completed in one-foot lifts starting at 10 feet below grade and continuing to 1 foot below grade. The remaining 1-foot depth was backfilled and compacted to grade with recycled concrete aggregate. Final restoration was completed by installing new asphalt over the entire excavation area.

2.5 Soil Probes, Sampling and Analysis

A total of 42 soil probes (B-1 through B-42) were advanced at the CPC facility in order to characterize subsurface soil conditions, obtain a better understanding of site stratigraphy and

collect subsurface soil samples for laboratory analysis. The surveyed locations of the completed soil probes are depicted on Figure 3 and boring logs are provided in Appendix D. The soil probes were completed using direct push drilling techniques (i.e., Geoprobe). Soil samples were collected continuously from ground surface to the probe termination depth utilizing a decontaminated macro-core soil sampler fitted with a disposable 4-foot acetate liner. All soil probes were advanced to the depth that groundwater was initially encountered, generally 9 to 11 feet below grade. However, since sampling was conducted utilizing 4-foot liners, each probe was completed to a total depth of 12 feet below grade. One probe, B-33, was advanced within a filled dry well and completed at a depth of 16 feet at the request of the NYSDEC in order to observe native soil beneath the filled dry well.

While advancing the probes, each recovered soil interval was inspected and characterized by a field geologist in accordance with the USCS. Any evidence of contamination, such as the presence of NAPL or obvious staining and odors, was documented. A PID was utilized to screen each sample for the presence of VOCs. All observations were recorded in the project field book. All recovered soil intervals from each probe were retained until the probe was completed to determine which samples to select for analysis.

As summarized in Table 1, a minimum of two soil samples were selected for chemical analysis from each soil probe. The first subsurface soil sample was selected from the two-foot depth interval exhibiting the highest PID reading and/or the most significant staining and/or odor. For delineation purposes, the second subsurface soil sample was selected from the next two-foot depth interval exhibiting no PID reading above background levels and no evidence of staining and/or odor. If evidence of impact was not observed, then two samples were selected for analysis as follows:

- The 0 to 2-foot depth interval was collected to characterize soil at and immediately beneath the surface.
- The two-foot depth interval representative of soil to remain in-place following the excavation required for construction of the new building was collected. For example, if four feet of soil needs to be excavated at a given location to construct the new building, then the 4 to 6-foot depth interval was selected for analysis.

For each probe, one sample was collected below the deepest interval sampled and sent to the laboratory and placed on-hold pending the results of the shallower samples. If the deeper of the two analyzed samples exhibited concentrations of contaminants above the Part 375 Unrestricted Use SCOs, then the deeper sample was taken off-hold and analyzed in order to vertically delineate the extent of contamination.

The selected chemical analysis for the subsurface soil samples collected from the soil probes is summarized on Table 1, and the chemical data are summarized in Appendix E on Tables E-1 through E-4. The analytical results of the subsurface soil samples is discussed in Section 4.2.

Any soil remaining following completion of the sampling activities at each probe was placed back into the probe hole from which it originated. Upon completion, all probes were backfilled with the remaining recovered soil and clean sand to grade, as necessary. If completed in asphalt or concrete, the borehole was patched with the appropriate material to match pre-existing conditions. All non-dedicated sampling equipment was decontaminated between sampling locations in accordance with the procedure contained in the RFI Work Plan and all disposal sampling equipment was properly disposed following its one-time use. The soil probe locations were marked for identification during the follow-up survey work.

2.6 Groundwater Monitoring Well Sampling and Analysis

A total of nine on-site existing groundwater monitoring wells were developed prior to sampling, including MW-1, and MW-3 through MW-10, at the initiation of the field activities. As indicated previously, MW-2 could not be located for sampling during the RFI. The surveyed locations of the monitoring wells are depicted on Figure 3. Prior to development, each well was checked for the presence of LNAPL and DNAPL using an oil/water interface probe. Evidence of LNAPL or DNAPL was not observed in any of the existing wells. Each monitoring well was developed by pumping and surging for a maximum of 2 hours, or until the turbidity of the groundwater achieved a reading of 50 NTUs (nephelometric turbidity units) or less. Well

development was supplemented by measurements of field parameters, including temperature, pH and specific conductance. Development continued until the field parameters stabilized for a minimum of three consecutive readings of 10 percent variability or less. All well development water was managed as investigation-derived waste (see Section 2.8). All non-disposable equipment used for the development of monitoring wells was decontaminated prior to use and between wells in accordance with the work plan, and all disposal equipment was properly disposed following its one-time use.

Groundwater elevations were measured manually just prior to groundwater sampling and subsequently on September 24 and October 22, 2010, which is greater than one week after development. A water table contour map for the facility was prepared based on the October 22 round of water levels and is presented and discussed in Section 3.3. That map has been used to interpret groundwater flow direction under static conditions.

As summarized on Table 1, groundwater samples were collected from existing on-site monitoring wells MW-1, and MW-3 through MW-10 during the RFI. Prior to sampling, each well was checked for the presence of LNAPL and DNAPL using an oil/water interface probe. LNAPL or DNAPL was not observed in any of the existing wells. The wells were then purged using a submersible bladder pump and low-flow purging techniques. Field parameters, including dissolved oxygen, pH, specific conductivity, turbidity, oxygen reduction potential and temperature, were monitored during the groundwater sampling events using appropriate water quality instruments. After the field parameters had stabilized or the maximum purge volume for low-flow sampling was reached, a groundwater sample was collected from each well and placed in the appropriate laboratory-supplied sample bottles. All samples were labeled and placed in a cooler with bagged ice sufficient to cool the samples to 4 degrees Celsius.

The chemical analysis of the groundwater samples collected from the existing monitoring wells is summarized on Table 1 and the chemical data are summarized in Appendix E on Tables E-8 through E-11. Groundwater quality is discussed in Section 4.3.

All decontamination water and purge water generated during the sampling activities were managed as investigation-derived waste (see Section 2.8). All non-dedicated sampling equipment (e.g., submersible pumps and oil/water interface probes) was decontaminated between sampling locations in accordance with the work plan, and all disposable sampling equipment was properly disposed following its one-time use.

2.7 Site Restoration

All soil probe and test pit excavation locations were restored to grade with the same material that was originally in place. If investigation activities were performed in asphalt or concrete, the areas were patched with the appropriate material to match pre-existing conditions.

2.8 Management of Investigative-Derived Waste

Soil recovered as a result of advancing soil probes that was not retained for chemical analysis was placed back in its respective probe hole after the probe was completed. With the exception of the material related to the UST removal (see Section 2.4), soil excavated from the test pits was backfilled into the excavation immediately following completion of each test pit.

All purge water and decontamination water was containerized in DOT-approved 55-gallon drums and stored on-site in an appropriate storage area prior to characterization and off-site disposal. The drums were sealed at the end of each workday and properly labeled for disposal.

2.9 Analytical and QA/QC Procedures

All samples were analyzed by Mitkem Laboratories of Warwick, Rhode Island, a division of Spectrum Analytical, Inc. (Mitkem), with the exception of BOD which was subcontracted to R.I. Analytical Laboratories (RIAL) of Warwick, Rhode Island. Both laboratories are New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified (see Section 2.10).

In accordance with the site-specific Quality Assurance Project Plan (QAPP), the Quality Assurance/Quality Control (QA/QC) samples collected as part of the RFI included matrix spike (MS) and matrix spike duplicate (MSD) samples, and trip blanks. The MS/MSD samples were collected at a frequency of one per 20 environmental samples for each sampled medium (soil and groundwater) per analytical parameter. Trip blanks were shipped to and from the field with the sample containers when VOC analyses were conducted on aqueous samples. Trip blanks consist of VOC vials filled at the laboratory with distilled/deionized water that remain unopened in the field and are analyzed for VOCs only to provide an indication of potential sample contamination due to sample transport, preservation, storage and/or preparation procedures, as well as atmospheric conditions during transportation and time on-site. In accordance with United States Environmental Protection Agency (USEPA) guidance, samples were picked up or shipped promptly to ensure that they were received at the laboratory no later than 48 hours after collection.

2.10 Data Usability Summary Report

A total of 96 subsurface soil probe samples, 15 test pit soil samples and 9 monitoring well groundwater samples were collected and analyzed as part of the RFI performed at the CPC Bay Shore facility. The RFI was completed in August and September 2010, with additional soil probes completed in October 2010. The subsurface soil samples collected from the soil probes were analyzed for one or more of the following: Target Compound List (TCL) VOCs, TCL SVOCs, TCL PCBs, TCL pesticides, Target Analyte List (TAL) metals and cyanide. All test pit soil samples were analyzed for TCL VOCs, TCL SVOCs and TAL metals. All groundwater samples were analyzed for TCL VOCs, TCL SVOCs, TAL metals and cyanide. In addition, four groundwater samples were also analyzed for natural attenuation parameters, which include alkalinity, biochemical oxygen demand (BOD), chloride, chemical oxygen demand (COD), ferrous iron, nitrate, sulfate, total organic carbon (TOC), dissolved iron, dissolved manganese, ethane, ethene and methane.

All laboratory analyses were performed by Mitkem, with the exception of BOD which was subcontracted to RIAL. The sample analyses were performed in accordance with USEPA SW-846 and NYSDEC July 2005 Analytical Services Protocol (ASP) methodologies. The data packages submitted by Mitkem have been reviewed by Mrs. Donna M. Brown, D&B's Quality Assurance/Quality Control (QA/QC) Officer. A copy of D&B's data validation forms are provided in Appendix G.

NYSDEC ASP Category B Deliverable data packages were received and reviewed for all sample delivery groups (SDGs) (i.e., SJ1622, SJ1654, SJ1664, SJ1677, SJ1690, SJ1692, SJ1714, SJ1722, SJ1936 and SJ1937) and are provided in Appendix H. The data packages have been reviewed for completeness and compliance with NYSDEC QA/QC requirements and a validation was conducted on the data packages. Any applicable qualification of the data was determined using the USEPA National Functional Guidelines of Organic Data Review, June 2008, or USEPA National Functional Guidelines of Inorganic Data Review, January 2010, method performance criteria, and the professional judgment of D&B's QA/QC officer. The findings of the validation process are presented below.

All samples were analyzed within the method-specified holding times. Initial and continuing calibrations, surrogate recoveries, laboratory control, spike, duplicate and serial dilution samples were within QC limits, except for the following:

- Several VOC samples required reanalysis at a secondary dilution due to compound concentration exceeding the instrument calibration range in the initial analysis. The results for the affected compounds were taken from the diluted run and qualified "D" on the data summary tables. One exception was cis-1,2-dichloroethene in soil sample B-19 (2-4); the result was reported from the initial undiluted analysis and therefore qualified as estimated ("EJ").
- Methylene chloride, acetone and chloroform were detected in several method blanks and the associated environmental samples. The sample concentrations that were less than the concentration in the associated blanks were qualified as non-detect ("U").
- The percent recovery (%R) for surrogate spike bromofluorobenzene was below the QC limit in the initial analysis of B-19 (2-4); however, the sample was reanalyzed at a secondary dilution and all surrogate recoveries were within limits. The results for the

compounds which were reported from the initial analysis have been qualified as estimated (“J/UJ”).

- Numerous VOCs, SVOCs and pesticides were qualified as estimated (“J/UJ”) in the associated samples due to matrix spike/matrix spike duplicate (MS/MSD) results. Based on a review of the results, it is D&B’s professional opinion that this qualification of the data does not affect the usability of the data and that the results can be utilized for environmental assessment purposes.
- VOCs and SVOCs that have percent differences (%Ds) above QC limits in the continuing calibration were qualified as estimated (“J/UJ”) in the associated samples. It should be noted that the majority of the VOC and SVOC compounds were not detected in the environmental samples and it is D&B’s professional opinion that this qualification of the data does not affect its usability and that the results can be utilized for environmental assessment purposes.
- The percent recoveries (%Rs) for 2,4-dinitrophenol and 4,6-dinitro-2-methylphenol were below the QC limits in the laboratory control sample (LCS) and were qualified as estimated (“UJ”) in soil sample B-33 (6-8) since these compounds were not detected in the sample.
- Pesticides with dual column confirmation percent differences (%Ds) above 25% were qualified as estimated (“J”) in the associated samples. As required, the results are qualified “P” by the laboratory with the lower concentration being reported. As a result, the results may be biased low.
- Numerous metals were detected in the preparation blanks associated with the environmental samples. Sample results, which were less than the concentrations detected in the preparation blanks, were qualified as non-detect (“U”) in the associated samples.
- The percent recoveries (%Rs) for numerous metals were below the QC limit of 75% in the spike sample. These metals were qualified as estimated (“J/UJ”) in the associated samples.
- The relative percent differences (RPDs) for numerous metals were above the QC limit of 20% for the laboratory duplicate. These metals were qualified as estimated (“J/UJ”) in the associated samples.
- The percent differences (%Ds) for numerous metals were above the QC limit in the serial dilution sample. These metals were qualified as estimated (“J/UJ”) in the associated samples.

Based on the findings of the data validation process, it is D&B's professional opinion that the qualification of the data described above does not affect its usability and that the results can be utilized for environmental assessment purposes.

3.0 SITE GEOLOGY AND HYDROGEOLOGY

The following section presents the findings, as well as a discussion and interpretation, of the geologic and hydrogeologic data collected during the RFI. Information utilized in support of this evaluation includes the following:

- Logs from completed test pits and soil probes;
- Hydraulic head measurements from groundwater monitoring wells; and
- Data on geology and hydrogeology summarized in the RFI Work Plan.

Sample locations referenced in this section are depicted on Figure 3. Test pit logs and boring logs for the RFI are included in Appendix C and Appendix D, respectively.

3.1 Topography, Surface Water and Drainage

As described in the RFI Work Plan, the CPC facility is located in a relatively flat area, with a general topographic gradient sloping to the southeast. Ground surface elevation is approximately 60 feet above mean sea level (msl). There are no surface water bodies located on or in the vicinity of the facility. Precipitation runs off paved surfaces to dry wells located on-site and percolates to the water table.

3.2 Geology

A general description of the geology of the area has been previously derived from Smolensky, et al., 1989, and summarized in the RFI Work Plan. As described in the RFI Work Plan, the CPC facility is estimated to be underlain by approximately 1,550 feet of Cretaceous and Pleistocene-aged unconsolidated deposits overlying southward-sloping bedrock. The unconsolidated deposits immediately overlying bedrock were deposited during the Cretaceous age and form, in ascending order, the Raritan and Magothy Formations.

The Raritan Formation consists of the Lloyd Sand and the Raritan Clay. The Lloyd Sand (also known as the Lloyd aquifer) is approximately 350 feet thick beneath the CPC facility and consists of fine to coarse sand, gravel, commonly with a clayey matrix, and lenses and layers of silty and solid clay. The Raritan confining unit consists of silty and solid clay, and lenses and layers of sand, with a thickness of approximately 150 feet. Because of low permeability, the Raritan Clay serves as a confining unit for the underlying Lloyd Sand.

The Magothy Formation (also known as the Magothy aquifer) is a deltaic deposit consisting of fine to medium sand, clayey in part, interbedded with lenses and layers of coarse sand, silt, and sandy and solid clay. Gravel is common in the basal zone of the Magothy Formation. The Magothy Formation, which is approximately 900 feet thick beneath the CPC facility, is unconformably overlain by the Gardiner's Clay (an upper Pleistocene interglacial unit) and by glacial deposits of Pleistocene age (the Upper Glacial aquifer). The overlying Gardiner's Clay, if present, is likely no more than approximately 10 to 20 feet thick and generally consists of clay, silt, and a few layers of sand and gravel.

The shallowest unconsolidated deposit beneath the CPC facility is the Upper Glacial aquifer, which consists primarily of glacial outwash deposits. In many areas of the CPC facility, thin recent fill deposits have replaced the Upper Glacial aquifer immediately below the ground surface. Depending on the presence of the underlying Gardiner's Clay and the thickness of any overlying recent fill deposits, the Upper Glacial aquifer may be as much as 150 feet thick at the CPC facility. Therefore, all test pits and soil probes were completed in the Upper Glacial aquifer and the fill deposits.

According to regional descriptions, the glacial deposits that form the Upper Glacial aquifer generally consist of fine to very coarse sand and pebble to boulder sized gravel. The logs for the soil probes and test pits generally corroborate this regional description. The glacial deposits are generally described as a tan to light brown sand, which can range from fine to coarse and is often mixed with significant amounts of gravel. This native soil is well sorted and contains very little to no silt or clay. The water table is located in the unconfined Upper Glacial aquifer.

Fill deposits are present across most of the facility, overlying the glacial deposits. These artificial deposits are usually described as a poorly sorted, brown to dark brown sand and gravel, occasionally containing some asphalt or concrete pieces. The fill is generally thin, exhibiting a thickness of 4 feet or less. However, the fill appears to be as much as 8 feet thick beneath the building at soil probes B-25 and B-26.

3.3 Hydrogeology

Based on a review of Smolensky, et al., 1989, the Upper Glacial aquifer is the uppermost water-bearing unit at the site. According to the NYSDEC, fresh groundwater at the site would be classified as GA (New York State Codes, Rules and Regulations, Title 6, Chapter X, Parts 700-705, effective March 1998). The best usage of GA water is as a source of potable water supply.

As discussed in Section 2.6, a round of water level measurements was collected on September 24, 2010 from all accessible monitoring wells, including MW-1, and MW-3 through MW-10. Due to an error in the survey of the measuring point elevation for MW-4, this well was resurveyed on October 22, 2010 and a second round of water level measurements was collected. The October 22, 2010 water level measurements, with calculated water elevations, are summarized on Table 2, provided in Appendix B. A water table contour map generated using these water level measurements is provided as Figure 4 in Appendix A.

Based on a review of Table 2 and historical data, depth to groundwater at the CPC facility is approximately 9 to 11 feet below ground surface (bgs). During the October 2010 measurement round, the groundwater elevation ranged 0.65 foot from a maximum of 51.45 feet above mean sea level (msl) at well MW-1, located off the northwest corner of the property, to a minimum of 50.80 feet above msl at well MW-6, located in the southeast corner of the property. Figure 4 indicates that shallow groundwater flows in a southeasterly direction toward the Great South Bay. Published data indicate that the horizontal hydraulic conductivity of the Upper

Glacial aquifer is relatively high at approximately 1,500 to 2,000 gpd/ft² (McClymonds and Franke, 1972).

4.0 FINDINGS

This section presents a detailed discussion of the results of the RFI specific to the presence or absence of contaminants in soil and groundwater. In order to present a logical discussion of the data generated as part of the RFI, the discussion has been organized into subsections for test pit subsurface soil (Section 4.1), subsurface soil from soil probes (Section 4.2) and groundwater (Section 4.3).

Figure 3 graphically presents the surveyed locations of all samples collected as part of this investigation. Appendix E provides data tables summarizing the chemical data for all soil and groundwater samples. The analytical results are compared to standards, criteria and guidance (SCGs), which will be used as screening values to determine the significance of the analytical results. In accordance with the RFI Work Plan, the SCGs selected for the soil analytical results are the NYSDEC's Part 375 Unrestricted Use and Commercial Use Soil Cleanup Objectives (SCOs). The SCGs selected for the groundwater analytical results are the NYSDEC's Technical and Operational Guidance Series (TOGS) 1.1.1 Class GA Groundwater Standards and Guidance Values, hereinafter referred to as Class GA Standards. Concentrations exceeding the SCGs are highlighted on the data tables.

Figure 5 presents a summary of the soil sample locations and soil data where exceedances of the Unrestricted Use SCOs were detected during the RFI. Figure 6 presents a summary of the groundwater sample locations and groundwater data where exceedances of the Class GA Standards were detected during the RFI. Figure 5 and Figure 6 are provided in Appendix A.

4.1 Subsurface Soil – Test Pits

As summarized in Table 1, a total of 15 subsurface soil samples were collected for chemical analysis from 4 test pits (TP-1 through TP-4). Test pit TP-1 was terminated at a depth of 1.2 feet below grade where a cement cover for a leaching pool was encountered. USTs were encountered in test pits TP-2 and TP-3. Each UST, estimated to be 4,000 gallons in capacity, was removed for proper off-site management in accordance with NYSDEC and Suffolk County

requirements as described in Section 2.4. As shown in Table 1, samples were generally collected from the sidewalls and bottoms of each test pit after reaching the termination depth and removing any USTs, if present. All test pit soil samples were analyzed for TCL VOCs, TCL SVOCs and TAL metals. The chemical data is presented in Tables E-5 through E-7 in Appendix E. It should be noted that evidence of contaminated soil was not identified in the test pits based on visual observations and field instrument measurements.

VOCs

VOCs were either not detected or were detected at concentrations below the Unrestricted Use SCOs in the test pit soil samples.

SVOCs

SVOCs were not detected in any of the test pit soil samples.

TAL Metals

Metals were either not detected or were detected at concentrations below the Unrestricted Use SCOs in the test pit soil samples.

4.2 Subsurface Soil – Soil Probes

As summarized in Table 1, a total of 96 subsurface soil samples were selected for chemical analysis from 42 soil probes (B-1 through B-42). It should be noted that soil probe B-33 was completed within a filled dry well located to the east of the facility building. All subsurface soil samples collected from the soil probes were analyzed for one or more of the following: TCL VOCs, TCL SVOCs, TCL PCBs, TCL pesticides, TAL metals and cyanide. The chemical data is presented in Tables E-1 through E-4 in Appendix E.

VOCs

As indicated on Figure 5, one or more VOCs were detected above the Unrestricted Use SCOs in the subsurface soil samples collected from six soil probes completed to the west of the facility building, including B-9, B-10, B-11, B-19, B-37 and B-41. Three CVOCs, including TCE, 1,2-DCE and PCE, exceeded their respective Unrestricted Use SCOs of 470 ug/kg, 250 ug/kg and 1,300 ug/kg, respectively, and were distributed as follows:

- TCE in B-10 (2 to 4 feet), B-11 (2 to 4 feet) and B-19 (0 to 2 feet)
- 1,2-DCE in B-9 (2 to 4 feet), B-19 (2 to 4 feet), B-37 (2 to 4 feet) and B-41 (2 to 4 feet)
- PCE in B-19 (0 to 2 feet)

Maximum concentrations of the three CVOCs were detected in three different soil samples, including TCE in B-11 (2 to 4 feet) at 12,000 ug/kg, 1,2-DCE in B-41 (2 to 4 feet) at 3,400 ug/kg and PCE in B-19 (0 to 2 feet) at 14,000 ug/kg. Additionally, the concentrations of other VOCs detected above the Unrestricted Use SCOs were distributed as follows:

- Toluene in B-19 (2 to 4 feet)
- Ethylbenzene in B-10 (0 to 2 feet) and B-19 (2 to 4 feet)
- Total xylene in B-10 (0 to 2 feet), B-19 (2 to 4 feet) and B-27 (4 to 6 feet)
- 1,2-Dichlorobenzene in B-10 (0 to 2 feet), B-10 (2 to 4 feet), B-19 (0 to 2 feet) and B-19 (2 to 4 feet)

The maximum toluene concentration of 5,500 ug/kg was detected in B-19 (2 to 4 feet). The maximum concentrations of ethylbenzene (16,000 ug/kg), total xylene (91,000 ug/kg) and 1,2-dichlorobenzene (46,000 ug/kg) were detected in B-10 (0 to 2 feet). It should be noted that acetone was detected slightly above its respective Unrestricted Use SCO in B-18 (2 to 4 feet) and B-27 (4 to 6 feet). However, acetone is a common laboratory contaminant.

As indicated on the boring logs provided in Appendix D, the observed depth of visual and olfactory evidence of contamination identified in soil probes B-10 and B-19 generally corresponds to the chemical results discussed above. Elevated PID readings were identified at a depth of 0 to 4 feet in B-10 and B-19, with a slight chemical odor also identified in B-10. As discussed above, elevated VOC concentrations were detected in B-10 and B-19 in the same depth interval, with the maximum ethylbenzene, total xylene and 1,2-dichlorobenzene concentrations detected in B-10, and the maximum PCE and toluene concentrations detected in B-19.

It should be noted that all detected VOC concentrations were well below their respective Commercial Use SCOs. In addition, deeper soil samples collected from these soil probes did not exhibit VOC concentrations above the Unrestricted Use SCOs.

SVOCs

SVOCs were detected at concentrations above the Unrestricted Use SCOs in two subsurface soil probe samples, including B-19 (0 to 2 feet) and B-33 (0 to 2 feet). Soil probe B-19 was completed in a storage area located adjacent to the west side of the facility building. Soil probe B-33 was completed through a filled dry well located on the east side of the facility building.

The only SVOC to exceed its Unrestricted Use SCO in the B-19 sample was phenol that was detected at a concentration of 1,300 ug/kg, which is above its Unrestricted Use SCO of 330 ug/kg. However, this phenol concentration is below the Commercial Use SCO and phenol was not detected in the deeper soil sample collected from B-19 at 2 to 4 feet.

In B-33 (0 to 2 feet), seven SVOCs, consisting of polycyclic aromatic hydrocarbons (PAHs), were detected at concentrations approximately 2 to 3 times greater than their respective Unrestricted Use SCOs, including benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene. In addition, the concentrations of benzo(a)pyrene and dibenzo(a,h)anthracene exceeded their

respective Commercial Use SCOs. Of the seven PAHs, benzo(b)fluoranthene was detected at the maximum concentration of 3,300 ug/kg. SVOCs were not detected in the deeper samples collected from B-33.

PCBs and Pesticides

PCBs were either not detected or were detected at concentrations below the Unrestricted Use SCOs in the subsurface soil probe samples.

Two pesticides, 4,4'-DDT and 4,4'-DDE, were detected slightly above their Unrestricted Use SCO of 3.3 ug/kg in the subsurface soil probe samples, including 4,4'-DDT in B-2 (0 to 2 feet), B-7 (2 to 4 feet) and B-33 (0 to 2 feet), and both pesticides in B-36 (0 to 2 feet) and B-36 (2 to 4 feet). The maximum 4,4'-DDT concentration of 17 ug/kg was detected in B-7 (2 to 4 feet), located on the western end of the facility in the storage cell SC-7. The maximum 4,4'-DDE concentration of 5.4 ug/kg was detected in B-36 (2 to 4 feet), located adjacent to storage cell SC-3. It should be noted that the detected pesticide concentrations were well below their respective Commercial Use SCOs. In addition, the deeper soil samples collected from these soil probes did not exhibit pesticide concentrations above the Unrestricted Use SCOs.

TAL Metals and Cyanide

Chromium was detected above its Unrestricted Use SCO of 30 mg/kg in all three soil samples collected from B-14 (0 to 2, 2 to 4 and 4 to 6 feet) and the soil samples collected from 0 to 2 feet in B-15, B-33 and B-42. Chromium concentrations in these samples ranged from 40 mg/kg to a maximum of 483 mg/kg detected in B-42 (0 to 2 feet), located in storage area FS-1 adjacent to the west side of the facility building. In addition to chromium, soil sample B-33 (0 to 2 feet) exhibited concentrations of cadmium, copper, lead, mercury, silver and zinc above their respective Unrestricted Use SCOs. The lead concentration of 641 mg/kg is approximately one order of magnitude greater than its Unrestricted Use SCO of 63 mg/kg. Soil probe B-33 was completed through a filled dry well located on the east side of the facility building. Other metal concentrations exceeding their respective Unrestricted Use SCOs include:

- Lead and zinc in B-8 (0 to 2 feet) at 107 mg/kg and 304 mg/kg, respectively. The Unrestricted Use SCO for zinc is 109 mg/kg.
- Silver in B-21 (0 to 2 feet) at 2.5 mg/kg and B-23 (0 to 2 feet) at 36.6 mg/kg, which are above its Unrestricted Use SCO of 2 mg/kg.

With the exception of chromium in B-14, the deeper soil samples collected from the soil probes discussed above did not exhibit metal concentrations above the Unrestricted Use SCOs. In addition, none of the detected metal concentrations exceeded the Commercial Use SCOs. Cyanide was not detected in any of the subsurface soil probe samples.

4.3 Groundwater

As summarized in Table 1, a total of nine on-site groundwater samples were collected for chemical analysis from groundwater monitoring wells MW-1, and MW-3 through MW-10. All of the groundwater samples were analyzed for TCL VOCs, TCL SVOCs, TAL metals and cyanide. The chemical data is presented in Tables E-8 through E-10 in Appendix E. In addition, four of the groundwater samples (MW-1, MW-3, MW-4 and MW-6) were also analyzed for natural attenuation parameters, including alkalinity, BOD, chloride, COD, ferrous iron, nitrate, sulfate, TOC, dissolved iron, dissolved manganese, ethane, ethene and methane. The natural attenuation parameter results are presented in Table E-11 in Appendix E.

VOCs

Six of the nine groundwater samples collected from the monitoring wells exhibited detectable concentrations of VOCs. The detected VOCs consisted almost entirely of four CVOCs, specifically TCE, 1,2-DCE and, to a lesser degree, PCE and 1,1,1-TCA. However, as depicted on Figure 6, only the samples collected from wells MW-3, MW-4 and MW-9 exhibited concentrations of these CVOCs above their respective Class GA Standards. These wells are located on the southern, downgradient side of the facility: MW-4 is located south of the facility building, and MW-3 and MW-9 are located to the west of the building.

Consistent with historical data, MW-4 exhibited the maximum concentrations of TCE (280 ug/l), 1,2-DCE (350 ug/l) and PCE (12 ug/l) at the facility. The Class GA Standard for each of these compounds is 5 ug/l. Concentrations of CVOCs detected above the Class GA Standards also included:

- TCE (60 ug/l), 1,2-DCE (25 ug/l) and 1,1,1-TCA (6.5 ug/l) in MW-3
- TCE (45 ug/l), 1,2-DCE (13 ug/l) and PCE (8.1 ug/l) in MW-9

The RFI groundwater results are generally consistent with historical data with regard to both the specific wells exhibiting elevated CVOc concentrations, and the type and concentration of the detected CVOcs (see Section 1.4).

SVOCs

SVOCs were not detected in any of the groundwater samples.

TAL Metals and Cyanide

Metals were not detected at concentrations exceeding their respective Class GA Standards in any of the nine monitoring well samples, with the exception of iron in one well (MW-8), manganese in two wells (MW-5 and MW-7) and sodium in seven wells (MW-1, MW-3, MW-4, and MW-6 through MW-9). Iron was detected at a concentration of 330 ug/l in well MW-8, slightly above its Class GA Standard of 300 ug/l. MW-8 is located on the northern half of the property, west of the facility building. Manganese was detected at a concentration of 522 ug/l in well MW-5 and 930 ug/l in well MW-7, which exceed its Class GA Standard of 300 ug/l. MW-5 is located north of the facility building and is considered upgradient of the facility. MW-7 is located along the eastern property line, east of the facility building. Sodium was detected at a maximum concentration of 34,200 ug/l in well MW-9, which exceeds its Class GA Standard of 20,000 ug/l. As mentioned above, most of the facility monitoring wells exhibited elevated sodium concentrations, including MW-1 which is considered an upgradient well.

Cyanide was not detected in any of the groundwater samples, with the exception of MW-9. However, the cyanide concentration detected in MW-9 was well below its Class GA Standard.

4.4 Evaluation of Natural Attenuation of the Volatile Organic Compounds in Groundwater

The majority of the VOCs detected in groundwater at the CPC facility consist of chlorinated VOCs (CVOCs). As a result, this section of the RFI Report has been prepared to evaluate whether natural attenuation of the chlorinated VOCs in groundwater at the CPC facility is currently occurring. Two separate methods are described below for determining whether natural attenuation is currently occurring. The first is an analysis of the distribution of chlorinated VOCs in the groundwater. The presence of significant concentrations of breakdown products in the groundwater versus parent compounds is a good indication that natural attenuation is taking place. The second is the groundwater results from four wells sampled as part of the RFI that were selected for analysis for natural attenuation parameters.

4.4.1 Breakdown of Ethenes

A review of the chlorinated VOCs detected in groundwater at the CPC facility reveals that the compounds comprise one general suite of parent and degradation (daughter) products, ethenes. 1,1,1-Trichloroethane was the only chlorinated VOC in the ethane suite detected in groundwater at the CPC facility, and was detected at relatively low concentrations in three monitoring wells, ranging from 2.4 to 6.5 ug/l. As a result, the ethene suite of chlorinated VOCs was determined to be the primary suite of chlorinated VOCs present in the groundwater at the CPC facility. The general degradation pathway for the ethene suite is as follows:



PCE: Tetrachloroethene

TCE: Trichloroethene

cis-1,2-DCE: cis-1,2-Dichloroethene
trans-1,2-DCE: trans-1,2-Dichloroethene
1,1-DCE: 1,1-Dichloroethene
VC: Vinyl Chloride

Based upon a review of the chlorinated VOCs present in the groundwater samples, and as presented in Section 4.3 of this RFI Report, the majority of the chlorinated VOCs present consist of TCE and cis-1,2-DCE, which is a breakdown product of TCE. Lower concentrations of PCE, which is the parent compound of TCE, and trans-1,2-DCE, which, like cis-1,2-DCE, is a breakdown product of TCE, were also detected. However, neither VC nor ethene were detected in any of the groundwater samples analyzed as part of this program. As a result, it is not known whether the presence of cis-1,2-DCE in the groundwater is due to the reductive dechlorination of PCE and TCE, or the result of the storage and handling of a combination of the various constituents in commercial form at the CPC facility. Therefore, it is not clear whether significant breakdown of the ethene suite is taking place.

4.4.2 Natural Attenuation Parameters

A recommended list of parameters to be monitored to evaluate natural attenuation (NA) was presented in the RFI Work Plan for the CPC site. These parameters were analyzed for in groundwater samples collected from MW-1 (upgradient), MW-3 (on-site), MW-4 (downgradient) and MW-6 (on-site/sidegradient). These parameters included laboratory analysis of ferrous iron, total organic carbon (TOC), alkalinity, chloride, nitrate, sulfate, biochemical oxygen demand (BOD), chemical oxygen demand (COD), dissolved iron, dissolved manganese, ethane, ethene and methane, and field measurements of pH, dissolved oxygen and oxidation/reduction potential (Eh).

Table E-11 in Appendix E presents the values of the NA monitoring parameters for the samples collected and analyzed as part of the RFI. This table also includes the total VOC concentrations detected in the wells sampled during the RFI.

According to the United States Environmental Protection Agency's (USEPA's) 1998 document entitled, "Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water," biodegradation of chlorinated VOCs is indicated by:

- Low dissolved oxygen concentrations/anaerobic conditions;
- Negative Eh readings, and low nitrate and sulfate concentrations indicating reducing conditions;
- Elevated concentrations of alkalinity, carbon dioxide and chloride, which are considered byproducts of biodegradation; and
- Total organic carbon concentrations greater than 20 mg/l to provide an energy source for microbes capable of biodegradation of chlorinated VOCs.

Since MW-1 is hydraulically upgradient of the CPC facility, it was selected to serve as a baseline for the evaluation of the NA parameters. Ferrous iron was not detected in any of the monitoring wells. Negative Eh values were not detected during the monitoring well sampling. These factors indicate that a reducing environment may not be present at the CPC site. The average sulfate concentration detected in the four wells was 25 mg/L and the average nitrate concentration detected in the four wells was 1.9 mg/L. These concentrations may compete with the reductive pathways which breakdown chlorinated VOCs.

Total organic carbon was not detected in any of the monitoring wells, except MW-3, where it was detected at a relatively low concentration of 2.7 mg/l. As a result, this potential energy source for biodegradation does not appear to be present.

Alkalinity was detected in all four monitoring wells. The concentrations detected in MW-3, MW-4 and MW-6 were higher than in MW-1. However, alkalinity is naturally occurring in aquifers and the detected levels are not significantly elevated. Chlorides were also detected in all four monitoring wells. However, the concentrations in MW-3, MW-4 and MW-6 were not significantly greater than MW-1. In addition, given the elevated sodium concentrations detected in groundwater, the presence of chlorides may be due to the relatively shallow depth to groundwater and use of road salt rather than any significant chlorinated VOC breakdown. Of the

other breakdown products, including ethane, ethene and methane, only methane was detected in MW-3 at 48 ug/l. These results indicate that significant breakdown of chlorinated VOCs may not be taking place.

Finally, all of the wells exhibited dissolved oxygen concentrations less than 1.0 mg/l, indicating that the groundwater in the vicinity of the CPC site is generally anaerobic, which would be favorable for reductive dechlorination of chlorinated VOCs. However, since anaerobic conditions are the only factor considered above that indicates favorable conditions for natural attenuation, it appears unlikely that significant biodegradation of chlorinated VOCs is currently taking place at the CPC facility.

5.0 CONCLUSIONS AND RECOMMENDATIONS

This section of the report presents the conclusions and recommendations with respect to the nature and extent of contamination observed at the CPC facility. The conclusions and recommendations are based on the comparison of the chemical constituents detected in soil and groundwater during the RFI to the SCGs defined in Section 4.0. Any recommended corrective action (i.e., remediation) will be integrated, as feasible, into the demolition and removal of the existing facility building, and the construction of the new facility building. It is anticipated that the continued use of the property will be as a commercial hazardous waste treatment, storage and disposal facility.

5.1 Conclusions

Test Pits and UST Removal

As discussed in Section 2.4, two 4,000-gallon USTs were properly removed from test pits TP-2 and TP-3 in accordance with NYSDEC and Suffolk County requirements. Inspection of both 4,000-gallon USTs revealed them to be in fair condition, with no obvious holes or leaks. Evidence of contaminated soil was not identified in any of the completed test pits based on visual observations and field instrument measurements. In addition, chemical analysis of soil left in place in each test pit did not indicate any concentrations of contaminants above the Unrestricted Use SCOs. Therefore, there is no evidence that the removed USTs had leaked or resulted in any soil contamination, or that any soil contamination exists at the other two test pits that did not contain USTs completed as part of the investigation. As discussed with the NYSDEC, the section of UST left in place and filled with concrete that is located too close to the facility building for removal at this time will be removed during facility demolition and reconstruction.

VOCs in Soil and Groundwater

As described in Section 4.2, the soil probe investigation completed during the RFI indicated the presence of VOCs in subsurface soil at concentrations above the Unrestricted Use

SCOs, but below Commercial Use SCOs. The VOC soil contamination was primarily detected in soil probes completed to the west of the facility building, specifically B-9, B-10, B-11, B-19, B-37 and B-41, from surface to a maximum depth of 4 feet below grade. The VOCs of concern include three CVOCs (i.e., TCE, 1,2-DCE and PCE), toluene, ethylbenzene, total xylene and 1,2-dichlorobenzene. CVOCs were found in all of the above-referenced soil probes while the other contaminants were found only in soil probes B-10 and B-19, at the same depths where elevated PID readings were recorded. The area of VOC-impacted soil is well delineated, with deeper soil samples in these probes and surrounding soil probes exhibiting VOC concentrations below the Unrestricted Use SCOs.

Groundwater sampling of nine existing monitoring wells located on the CPC facility indicated elevated concentrations of four CVOCs above their respective Class GA Standards in three wells, specifically MW-3, MW-4 and MW-9. The CVOCs detected above their respective Class GA Standards were TCE and 1,2-DCE in all three wells, PCE in MW-4 and MW-9, and 1,1,1-TCA in MW-3. MW-4 exhibited the maximum concentrations of TCE (280 ug/l), 1,2-DCE (350 ug/l) and PCE (12 ug/l) at the facility, all above their Class GA Standard of 5 ug/l. These are the same CVOCs detected above their respective Unrestricted Use SCOs in the subsurface soil samples. The other VOCs detected above the Unrestricted Use SCOs in soil were not detected in groundwater.

As described in Section 3.3, shallow groundwater flow at the CPC facility is to the southeast. With respect to the southeast groundwater flow direction, the three wells impacted by CVOCs are generally located downgradient of the soil probes exhibiting elevated concentrations of these same CVOCs. Furthermore, it appears that MW-4, which exhibited the highest concentrations of CVOCs, is located directly downgradient of the area of impacted soil. Therefore, it is likely that the source of the CVOCs detected in the groundwater at the facility is the CVOC-impacted shallow soil detected to the west of the facility building at a depth of 0 to 4 feet below grade.

It should be noted that, as described in Section 1.0, several potential upgradient sources of VOCs with documented releases are located in the vicinity of the CPC facility that may have contributed to the overall degradation of groundwater quality in the area.

Other Contaminants in Soil and Groundwater

A few SVOCs, pesticides and metals were detected at concentrations above their respective Unrestricted Use SCOs in the shallow soil samples collected from soil probes, including:

- Several PAHs, one pesticide (4,4'-DDT) and seven heavy metals (chromium, cadmium, copper, lead, mercury, silver and zinc) were detected above their respective Unrestricted Use SCOs in soil sample B-33 (0 to 2 feet). Soil probe B-33 was completed through a filled dry well located on the east side of the facility building and the elevated concentrations are likely related to the nature of the material utilized to fill the last two feet of the dry well. Soil samples collected deeper than 2 feet did not exhibit elevated concentrations of these contaminants.
- With the exception of B-33, pesticides exceeding the Unrestricted Use SCOs in shallow soil included 4,4'-DDT and 4,4'-DDE in B-36 (0 to 2 feet and 2 to 4 feet) and 4,4'-DDT in B-2 (0 to 2 feet) and B-7 (2 to 4 feet).
- With the exception of B-33, metals exceeding the Unrestricted Use SCOs in shallow soil included chromium, lead, silver and zinc. Chromium was detected above its Unrestricted Use SCO in all three soil samples collected from B-14.
- With the exception of chromium in B-14, the extent of shallow soil contamination is generally delineated with deeper soil samples and surrounding soil probes exhibiting contaminant concentrations below the Unrestricted Use SCOs.

Iron, manganese and sodium were detected above their respective Class GA Standards in one or more of the nine groundwater monitoring well samples, including samples collected from the upgradient wells. Typically, these metals are naturally elevated in Long Island groundwater. In addition, the metals detected above the Class GA Standards in groundwater are not the same as those detected above the Unrestricted Use SCOs in shallow soil. Therefore, there is no evidence that elevated metal concentrations in soil are impacting facility groundwater quality.

5.2 Recommendations

Based on the concentrations of specific contaminants in soil detected above the Unrestricted Use SCOs, the RFI has delineated areas of impacted shallow soil; most significantly an area of CVOC-impacted soil located to the west of the facility building. In addition, groundwater downgradient of the CVOC-impacted soil with respect to the direction of shallow groundwater flow exhibited CVOC concentrations above the Class GA Standards.

As a result, it is recommended that a Focused Corrective Measures Study (CMS) be prepared in accordance with the facility's existing Part 373 Permit to address the impacted soil and groundwater observed during the RFI. D&B has prepared a focused CMS for the facility and incorporated it into this RFI Report as Section 6.0. As described in Section 6.0, the focused CMS evaluates and develops a corrective action remedy to address the impacted soil and groundwater observed during the RFI, and recommends that the remedy be implemented during the planned facility reconstruction activities.

6.0 FOCUSED CORRECTIVE MEASURES STUDY

This section of the RFI Report presents a Focused Corrective Measures Study (CMS) prepared for the CPC Bay Shore facility as required by Appendix II-C of Module II of the facility's existing Part 373 Permit. The existing facility will be demolished in the near future and a new facility constructed. Due to the limited extent of contamination across the site as presented in the RFI completed for the site and discussed in the previous sections of this report, it was determined that excavation of impacted soil was the most practical and cost effective means for remediating impacted soil. This is due to the fact that the identified impacts were relatively shallow and the existing building would not affect the removal of impacted soil since the building will be demolished. As a result, this alternative coupled with in-situ chemical oxidation to address groundwater quality was the only remedy considered practical for the site. This "presumptive remedy" approach formed the basis of the Focused CMS prepared for the facility. It is the intent of the remedy presented in this Focused CMS to satisfy the existing corrective action requirements contained in Module II of the facility's Part 373 Permit and to allow the site to be delisted from the Registry of Inactive Hazardous Waste Disposal Sites (the site is currently designated as a Class 2 site).

6.1 Facility Description

A complete description of the site and adjoining properties is provided in Section 1.2 of this report, and a complete description of the site geology and hydrogeology is provided in Section 3.0 of this report.

6.2 Corrective Measure Summary

The following sections provide a description of the remedy selected for the site, as well as an evaluation of the suitability of the remedy for use at the site.

6.2.1 Corrective Measure Description and Rationale for Selection

As indicated above, the remedy selected for use at this site involves excavating impacted soil for off-site disposal and applying a chemical oxidant to address groundwater impacts. It should be noted that it is the intent of the chemical oxidant application to reduce chlorinated volatile organic compound (CVOC) concentrations through focused application of chemical oxidant followed by groundwater monitoring. The application of chemical oxidant could be accomplished through injection using direct push techniques, direct application into an excavation or some other technique. CPC has agreed to monitor groundwater quality semiannually at the Bay Shore facility for the effective period of its existing Part 373 Permit (expiration date June 21, 2015). As a result, the natural degradation of any residual CVOC concentrations remaining following the proposed chemical oxidant application will be monitored and additional activities may be explored if CVOC concentrations persist or increase significantly in the future.

Figure 7 provided in Appendix A of this report indicates the extent of soil to be removed as part of this remedy. Following removal of the impacted soil, endpoint soil samples will be collected at the frequency prescribed in the NYSDEC's DER-10 (Technical Guidance for Site Investigation and Remediation) to verify satisfactory removal of impacted soil. The soil samples will be analyzed for the constituents of concern within each area of excavation, as indicated on Figure 7. It should be noted that while the intent of the remedy is to remediate soil impacts to achieve the Part 375 Unrestricted Use Soil Cleanup Objectives, upon consultation with the NYSDEC, CPC may choose to use the Commercial Use Soil Cleanup Objectives based on the endpoint soil sample results. The Commercial Use Soil Cleanup Objectives are appropriate for the site since the property is used for commercial and industrial uses and there are no adjacent or surrounding residential properties.

As indicated on Figure 7, 11 areas at the facility have been identified for soil excavation. The depth and surface area of each excavation were determined based on the results of the RFI sampling. A basic summary of the proposed excavation areas is as follows:

Area ID	Approximate Surface Area (sq. ft.)	Approximate Depth (ft)	Constituent(s) of Concern
B-2 Area	100	2	4,4'-DDT
Area East of Storage Cells	2,044	4	cis-1,2-DCE, TCE, ethylbenzene, xylene, 1,2-dichlorobenzene, 4,4'-DDE, 4,4'-DDT
B-7 Area (SC-7)	330	2	4,4'-DDT
B-8 Area	100	2	Lead, zinc
B-15 Area	100	2	Chromium
B-19 Area (FS-1)	864	4	Various VOCs, phenol, chromium
B-14 Area (southwest dry well)	35	8	Chromium
B-21 Area (ST-3)	196	2	Silver
B-23 Area (ST-5, ST-6 and ST-7)	392	2	Silver
B-27 Area (WA-I)	100	6	Xylene
B-33 Area (southeast dry well)	79	8	Various SVOCs and metals, 4,4'-DDT

Based on the above, a total of approximately 585 cubic yards of soil will be excavated and transported off-site for proper management in accordance with all applicable federal, state and local regulations. The endpoint soil samples collected from each area will be analyzed for the constituent(s) of concern indicated above for each area to verify the adequate removal of impacted soil from each area. Prior to off-site transportation, the soil will be characterized for full RCRA characteristics including TCLP, as well as any other requirements of the selected disposal facility.

The chemical oxidant application activities will be focused in two primary areas of the facility where CVOCs were detected at significant concentrations in the soil samples collected during the RFI. These two areas include the excavation area immediately to the east of the storage cells on the west side of the facility and the excavation area in the vicinity of B-19 (FS-1). The application will be targeted within these areas, as well as immediately upgradient

and downgradient of these areas to the southern property boundary. At each application location, the chemical oxidant will be applied to target the shallow groundwater and the capillary fringe. The specific chemical oxidant to be utilized is currently being selected based on the appropriate performance characteristics for this specific project.

It should be noted that, in addition to the soil remediation specified above, in order to construct the building footings, load/unload area and install the drainage structures, a significant quantity of soil (approximately 5,000 cubic yards) will be excavated and removed from the site. As part of the specifications prepared to govern construction of the new building, the contractor will be prohibited from reusing any excavated soil and will have to properly characterize and dispose of any excavated material off-site in accordance with all applicable federal, state and local regulations. Likewise, in areas where soil or grass will be present at the new facility, soil will be removed in these areas to allow installation of an appropriate amount of topsoil and plantings. As a result, a minimum of approximately 1 foot of soil will be removed from the majority of the facility as part of the planned building construction activities; it should be noted that the extent of soil removal will be deeper in the area of the proposed building and drainage structures. A figure presenting the approximate depths of soil to be removed from the facility in order to construct the new facility building is presented as Figure 8 in Appendix A.

The following subsections present an evaluation of the remedy.

Long-Term Reliability and Effectiveness

It is the intended goal of the remedy to remove compound and constituent concentrations in soil to achieve the Unrestricted Use Soil Cleanup Objectives as presented in 6 NYCRR Part 375-6. While the site meets the definition of a commercial/industrial property allowing the Commercial Use Soil Cleanup Objectives to be used given that there are no adjoining or nearby residential properties, CPC has selected the Unrestricted Use Soil Cleanup Objectives as a goal of the remediation project. As a result, it is not anticipated that hazardous waste or hazardous constituents would remain at any concentration that is a concern to human health or the environment following remediation. Additionally, since the site will be primarily impervious

following construction of the new building (the site will be mostly covered by the building itself and associated parking areas), any residual concentrations will effectively be capped in place. With regard to groundwater, the remedy is intended to reduce CVOC concentrations through focused chemical oxidant application followed by groundwater monitoring. In accordance with its existing Part 373 Permit, CPC has agreed to conduct a semiannual groundwater monitoring program through the termination date of its existing permit (i.e., June 21, 2015) and will reevaluate the remedy in the future if CVOC concentrations persist or increase significantly.

Since it is the intended goal of the remedy to remove soil concentrations in excess of the Unrestricted Use Soil Cleanup Objectives, long-term management, operation and maintenance is not necessary for the remedy to satisfy its goal. The only additional requirement is to monitor groundwater quality by means of the groundwater monitoring program discussed above.

Since it is the intended goal of the remedy to remove soil concentrations in excess of the Unrestricted Use Soil Cleanup Objectives and given that the majority of the proposed facility will be impervious, human and environmental receptor exposure to the site contamination is unlikely. Since public and/or private water supply wells are not located within one mile downgradient of the site, human receptors would not be exposed to the constituent concentrations presently observed in groundwater, which will be addressed as part of the remedy. A surface water body, Sampawams Creek, is located approximately 0.75 miles southwest of the site. However, since this creek is located southwest of the site, it is not hydraulically downgradient of the site and does not appear to be affecting the groundwater flow direction in the vicinity of the site.

The remedy is reliable long-term since the soil contaminants and the apparent CVOC source areas will be removed preventing future impact to groundwater from the site. As a result, the groundwater quality is anticipated to improve in the future.

Since the remedy involves removal of impacted soil and chemical oxidant application, there is no need to replace the remedy in the future. Additionally, the chemical oxidant

application program is being viewed as a one-time application to reduce CVOC concentrations followed by groundwater monitoring.

Reduction of Toxicity, Mobility or Volume

As part of this remedy, impacted soil will be excavated from the site for proper off-site transportation and disposal which will reduce the volume of constituents of concern present in soil thereby preventing their mobility to groundwater. With regard to groundwater quality, the CVOCs detected in the groundwater will be treated with a chemical oxidant thereby destroying these compounds and reducing their toxicity and volume.

This remedy is irreversible in that the constituents present in the soil will be removed from the site to prevent future impact and the CVOCs currently present in groundwater will be destroyed.

As noted previously, it is the intent of this remedy to remove constituent of concern concentrations to below the Unrestricted Use Soil Cleanup Objectives. As a result, any residuals present on-site following the remediation should not have an adverse impact on human health or the environment. It is anticipated that residuals will be present in groundwater following the chemical oxidant application, and may initially “rebound” following the application. However, the residuals will be monitored during the semiannual groundwater monitoring program established for the site and corrective action will be evaluated if the CVOC concentrations persist or significantly increase in the future. Since there are no public or private drinking water supply wells located within one mile downgradient of the site, this remedy is protective of human health and will hasten the natural degradation of the constituents.

Short-Term Effectiveness

The soil excavation and chemical oxidant application activities will have an immediate effect on reducing any potential risks from the on-site contamination. However, it should be noted that since the site is fully paved and no public or private water supply wells are located

within one mile downgradient of the site, the site does not currently pose a significant risk to human health.

Workers could potentially come into contact with the impacted soil during the on-site excavation activities. Additionally, the neighboring community could potentially be exposed to dust from the excavation activities and transportation of the excavated soil to the off-site disposal facility. All on-site workers will be required to don the appropriate personal protective equipment (PPE) during the excavation activities, as required by the Occupational Safety and Health Administration (OSHA). In addition, a Community Air Monitoring Program (CAMP) will be implemented during the excavation activities and the excavations will be wet if dust concentrations exceed action levels. The wetting will be performed by misting the soil with potable water, while exercising care to avoid creating any runoff water that could mobilize contamination. With regard to the oxidant application activities, on-site workers who could potentially come into contact with the chemical oxidant itself will be required to don the appropriate PPE to ensure their protection. A Site-Specific Health and Safety Plan (HASP) will be prepared for the site to protect workers during the activities included in this remedy.

Full protection from the soil and groundwater impacts will be achieved once the impacted soil is removed from the site and the groundwater oxidant applications are complete. With respect to groundwater, it is common for contaminant concentrations in groundwater to initially “rebound” following chemical oxidant application as dissolved contaminants are destroyed and others begin to desorb from the soil particles. However, typically these concentrations will decrease over time. Following the application, groundwater will be monitored during the semiannual monitoring program and corrective action will be considered if the concentrations persist or increase significantly.

Implementability

Due to the location of the existing on-site structures, this corrective measure is typically difficult to implement without compromising the structural integrity of adjacent buildings, drainage structures and storage cells. However, since this corrective measure will be performed

immediately prior to or concurrently with the planned demolition of the on-site building and structures, the complications typically encountered with implementing this type of corrective measure are lessened. In addition, complications are further reduced by the lack of existing utilities in the area of remediation. As a result, the remedy is technically feasible since construction complications are reduced and the ability to appropriately monitor the effectiveness of the remedy are unhampered. Likewise, the degree of difficulty is relatively minor with this remedy.

The expected operational reliability of the remedy is sound. Source removal through the excavation of impacted soil coordinates best with the planned facility reconstruction activities for addressing the groundwater impacts detected on-site since a significant portion of the facility will have to be excavated to construct the proposed building and associated structures. Likewise, chemical oxidant application has a well established reputation for treating CVOC contamination in groundwater.

The Town of Islip requires a permit for the remedial excavation, an application for which will be included as part of the Building Permit for the proposed construction. Since soil will have to be excavated within the areas of remediation anyway in order to construct the proposed building and its related storm water drainage system, D&B does not foresee any additional difficulties in obtaining this permit relative to selecting this remedy over any other remedy. The only other approval necessary to perform this work is from the NYSDEC. Approval from the NYSDEC will be obtained prior to initiating this remedy through the NYSDEC's approval of this CMS.

All necessary equipment and specialty workers for implementing this remedy are readily available. The building construction contractor or a specialized remediation contractor will have the equipment and property trained and certified personnel necessary to implement this remedy and CPC will retain the services of an environmental consultant to ensure that the remediation activities are performed as outlined in this CMS.

CPC is in the waste transportation and disposal business. As a result, CPC is familiar with the appropriate permitted disposal facilities and can select the appropriate disposal location with the required available capacity to accept the soil excavated as part of this remedy.

Prior to implementation of this remedy, all hazardous waste storage units affected by this remedial alternative will be properly closed in accordance with the facility's existing closure plan included in its Part 373 Permit. In addition, all Underground Injection Control (UIC) structures will be properly closed in accordance with the United States Environmental Protection Agency's (USEPA's) UIC Closure Program, as well as any additional requirements of the Suffolk County Department of Health Services (SCDHS). All equipment utilized to implement the remedy will be properly decontaminated prior to arrival on-site and prior to removal from the site to prevent cross-contamination. All excavated soil will be properly characterized for off-site disposal in accordance with 6 NYCRR Part 371.

Cost

The capital cost for soil excavation is not prohibitive since the areas of excavation are required to facilitate construction of the proposed building and installation of the drainage features for the new facility. Likewise, the chemical oxidant application cost is not prohibitive due to the size of the treatment area and given its anticipated benefit.

There are no operation and maintenance costs associated with this remedy since the soil excavation and chemical oxidant application activities are planned to be one-time events and remediation equipment will not be installed on the property. As discussed previously, if the groundwater CVOC concentrations persist or increase significantly in the future, then CPC will consider further corrective measures following complete evaluation of the data.

Since this remedy is planned as a one-time event, net present value and potential future corrective measure costs were not calculated. The costs associated with the semiannual groundwater monitoring program were not considered during the evaluation of this remedy since

the monitoring program and therefore, its cost, are required by the facility's existing Part 373 Permit.

6.2.2 Performance Exceptions

There should not be any performance exceptions relative to the soil excavation portion of the remedy since the area of proposed remediation is fully within existing property lines and the existing building and structures will be removed prior to initiating excavation. However, with regard to the groundwater oxidant application program, as the groundwater CVOCs begin to decline in concentration, there is a potential for the CVOC concentrations to initially "rebound" as CVOCs begin to desorb from the soil particles and enter the groundwater phase. However, in order to address this situation, the chemical oxidant utilized for the application will be selected based on its persistence in the groundwater to allow for the degradation of the CVOCs beyond the initial application. In this manner, any potential initial rebound or spiking will should be addressed by the remedy.

6.2.3 Preliminary Design and Rationale

The rationale for the preliminary design is based upon the findings of the RFI, which indicate a limited area of soil impact and relatively limited groundwater impact. Since the building currently present on the site will be demolished in order to construct the new facility, soil excavation was determined to be most effective to address soil impacts with chemical oxidant application to reduce CVOC concentrations observed in groundwater. The limits of soil excavation and the area and CVOC concentrations of the plume to be addressed by the chemical oxidant application are based on the soil and groundwater sampling results of the RFI. Further delineation prior to implementation of the remedy to refine the limits of remediation will not be performed. However, endpoint soil samples collected following soil removal will determine whether an adequate volume of soil has been removed to meet the goals of the remedy. Likewise, groundwater quality will be monitored through the effective date of the existing Part 373 Permit (expiration date June 21, 2015) to determine the effectiveness of the chemical oxidant application.

6.2.4 General Operation and Maintenance Requirements

As indicated previously, since the remedy is intended to be a one-time event and remediation equipment will not be installed on the property, there are no operating or maintenance requirements associated with the remedy. Since the groundwater monitoring program is already required by the Part 373 Permit, this monitoring is not a part of the remedy but the results of the monitoring will help determine the effectiveness of the remedy.

6.2.5 Long-Term Monitoring

There are no long-term monitoring activities associated with the soil removal since the goal of the remedy is to remove contaminant soil concentrations to less than the Unrestricted Use Soil Cleanup Objectives, as determined by the RFI sampling activities and the results of the endpoint soil samples to be collected following soil removal. As indicated previously, the groundwater monitoring program is required by the Part 373 Permit and therefore is not a part of the remedy, but the results of the monitoring will help determine the effectiveness of the remedy.

6.3 RFI Summary and Impact on Corrective Measure

The findings of the RFI are presented in Section 4.0 of this report, and the conclusions and recommendations of the RFI are presented in Section 5.0 of this report. The findings and conclusion of the RFI were instrumental and formed the basis for the development of the remedy presented in this CMS.

6.4 Design and Implementation Precautions

The following sections describe any potential design and/or implementation precautions that may arise and need to be addressed in order to realize the intended goals of the remedy.

6.4.1 Special Technical Problems

There are no anticipated special technical problems associated with this remedy.

6.4.2 Additional Engineering Data Required

Since the technologies presented as part of this remedy are well established as viable corrective measures for the contaminants and concentrations observed, it has been determined that pilot studies and/or other engineering data are not required in order to satisfactorily implement this remedy. The only additional data necessary are the results of the endpoint soil samples collected following removal of the impacted soil to verify whether satisfactory removal of the impacted soil has been achieved. This information will be gathered and evaluated during implementation of the remedy.

6.4.3 Permits and Regulatory Requirements

The Town of Islip will require a permit for the remedial excavation, which will be acquired as part of the Building Permit, in order to implement this remedy due to the fact that this remedial alternative will involve soil removal from the property. With regard to regulatory approval, the NYSDEC will have to provide approval of the proposed remedy, as well as the satisfactory implementation of the remedy upon completion. As a result, this Focused CMS has been prepared to obtain the NYSDEC's approval for the implementation of this proposed remedy. Once implementation is complete, CPC will prepare a report to document the satisfactory implementation of this remedy for NYSDEC approval and subsequent delisting of the property.

6.4.4 Access, Easements and Rights-of-Way

Since all of the work proposed under this remedy will be performed on the site, access, easements and/or rights-of-way will not be required in order to satisfactorily implement the remedy.

6.4.5 Health and Safety Requirements

Prior to initiating the remedy, a Site-Specific Health and Safety Plan (HASP) will be prepared by the selected construction contractor to address the activities to be undertaken during implementation of this remedy to ensure the protection of the site workers and the neighboring public. During implementation of the remedy, perimeter and work area air monitoring will be established to safeguard on-site workers and a Community Air Monitoring Program (CAMP) will be implemented to safeguard the surrounding neighborhood. On-site workers will be required to adhere to the requirements of the HASP, which will be prepared in accordance with the requirements of the Occupational Safety and Health Administration (OSHA).

6.4.5 Community Relations Activities

Copies of all relevant documents prepared for this project, including this RFI and Focused CMS Report, will be placed in the public repository previously established for this site. The public repository for the CPC Bay Shore facility is the Deer Park Public Library located at 44 Lake Avenue, Deer Park, New York.

6.5 Cost Estimate and Schedule

The following sections present an estimate of the capital cost, operation and maintenance cost and the schedule for implementation of the remedy.

6.5.1 Capital Cost Estimate

Based on the proposed areas of excavation denoted on Figure 7 in Appendix A and based on the anticipated area of application and volume of chemical oxidant required, the estimated capital cost to implement this remedy is approximately \$250,000. It should be noted that the disposal cost is based on the assumption that the soil will be managed as nonhazardous waste due

to the results of the RFI sampling; however, in reality, the soil will actually be managed as either hazardous or nonhazardous waste based on the waste characterization sampling results.

6.5.2 Operation and Maintenance Cost Estimate

As indicated previously, since the remedy is intended to be a one-time event and since remediation equipment will not be installed, there are no operation or maintenance costs associated with the remedy. Since the semiannual groundwater monitoring program is required by the facility's existing Part 373 Permit through the term of the Permit (expiration date June 21, 2015), the cost for the groundwater monitoring is not a part of this remedy.

While the semiannual monitoring program is not a part of this remedy, it should be noted that the cost for performing the monitoring is approximately \$35,000 per year.

6.5.3 Remedy Implementation Schedule

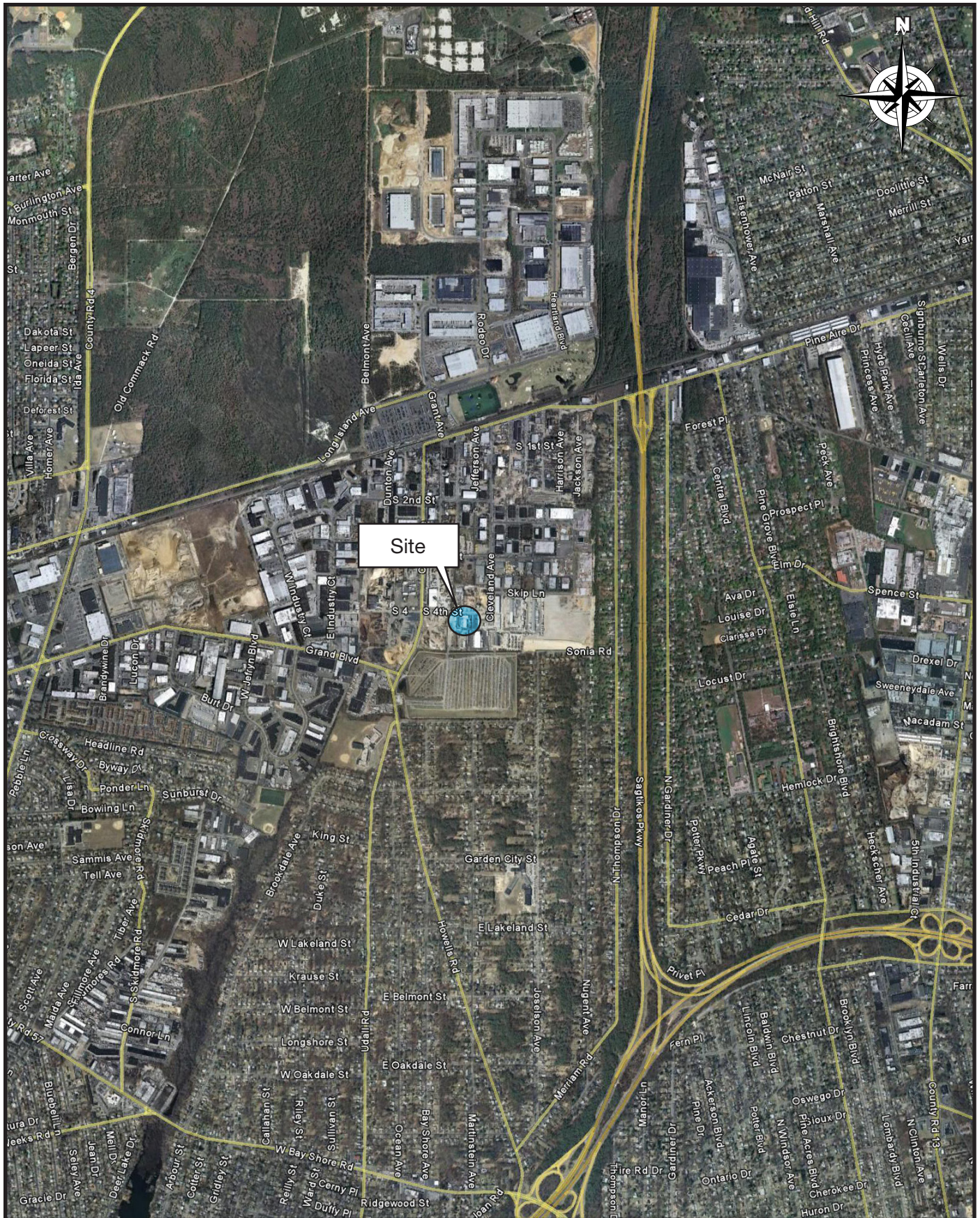
As indicated previously, the existing building and structures located at the facility will be demolished and removed to facilitate construction of the new facility building and structures. While the amount of time to implement the remedy is estimated to be a few weeks, the exact schedule for implementing the remedy has not been fully determined. It is currently anticipated that the groundwater oxidant application will be performed following completion of the soil removal activities. The soil removal activities are anticipated to initiate following completion of the RCRA closure of the existing hazardous waste storage units. However, the precise schedule for implementing the remedy cannot be determined prior to consultation with the NYSDEC to determine what aspects will be performed as part of the RCRA closure activities and which aspects will be performed as part of corrective action.

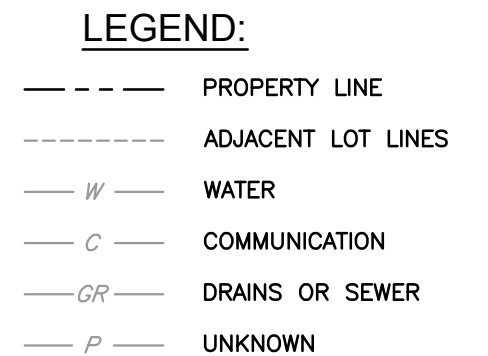
7.0 REFERENCES

- Arcadis G&M, Inc. 2006. Current Conditions Report – Chemical Pollution Control Facility, Bay Shore, New York. November 2006.
- EA Engineering, P.C. and Its Affiliate EA Science and Technology 2008. Summary Report for Chemical Pollution Control (CPC) Site, Soil and Groundwater Investigation (1-52-015), Bay Shore, New York. March 2008.
- McClymonds, N.E. and O.L. Franke. 1972. Water-Transmitting Properties of Aquifers on Long Island, New York. U.S. Geological Survey Professional Paper 627-E.
- Smolensky, D.A., Buxton, H.T., and Shernoff, P.K. 1989. Hydrologic Framework of Long Island, New York. U.S. Geological Survey Hydrologic Investigations Atlas HA-709.
- United States Environmental Protection Agency. 1998. Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater.
- XCG Consultants, Ltd. 1997. Pre-Acquisition Environmental Audit of 21st Century Environmental Management, Inc. June 6, 1997.

APPENDIX A

FIGURES





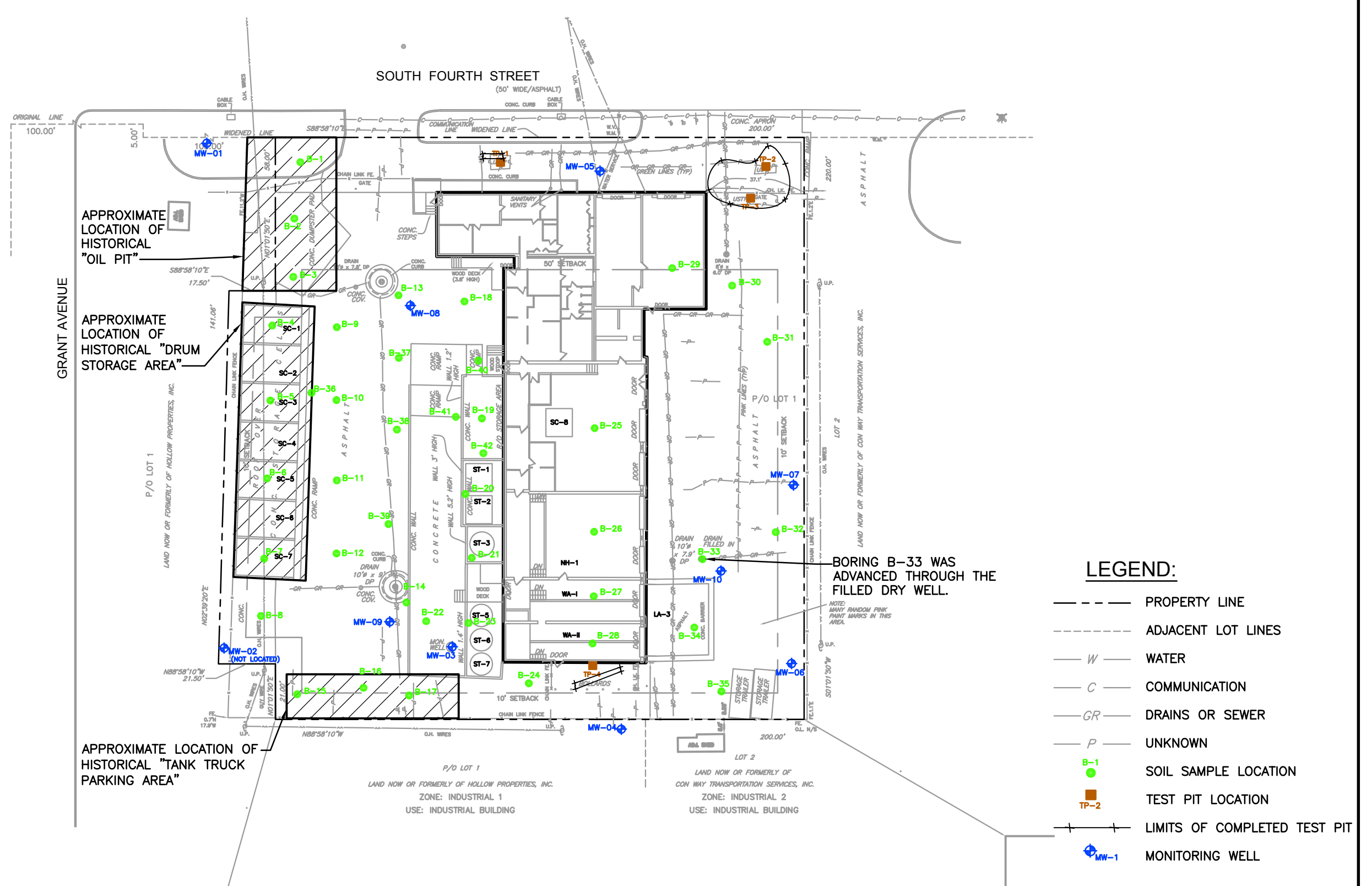
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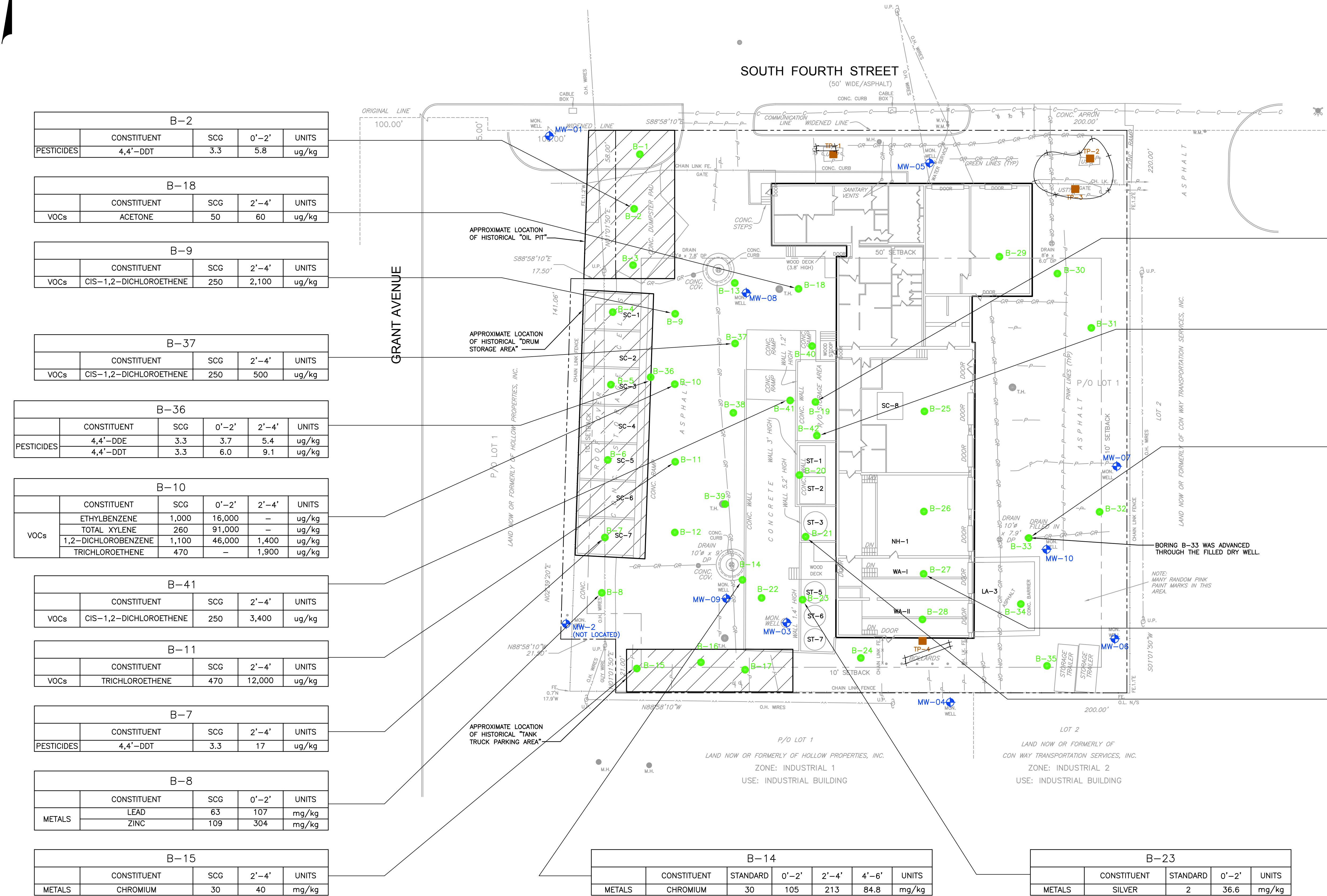
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SAMPLE LOCATION MAP

SCALE: 1" = 40'

FIGURE 3





- NOTES:
1. VOCs – VOLATILE ORGANIC COMPOUNDS
 2. SVOCs – SEMIVOLATILE ORGANIC COMPOUNDS
 3. SCG – NYSDEC PART 375 UNRESTRICTED USE SOIL CLEANUP OBJECTIVES (SCO)
 4. ONLY EXCEEDANCES OF THE SCG ARE SHOWN. DASH INDICATES NOT DETECTED OR DETECTED BELOW SCG.

B-2				
	CONSTITUENT	SCG	0'-2'	UNITS
PESTICIDES	4,4'-DDT	3.3	5.8	ug/kg

B-18				
	CONSTITUENT	SCG	2'-4'	UNITS
VOCs	ACETONE	50	60	ug/kg

B-9				
	CONSTITUENT	SCG	2'-4'	UNITS
VOCs	CIS-1,2-DICHLOROETHENE	250	2,100	ug/kg

B-37				
	CONSTITUENT	SCG	2'-4'	UNITS
VOCs	CIS-1,2-DICHLOROETHENE	250	500	ug/kg

B-36					
	CONSTITUENT	SCG	0'-2'	2'-4'	UNITS
PESTICIDES	4,4'-DDE	3.3	3.7	5.4	ug/kg
	4,4'-DDT	3.3	6.0	9.1	ug/kg

B-10					
	CONSTITUENT	SCG	0'-2'	2'-4'	UNITS
VOCs	ETHYLBENZENE	1,000	16,000	—	ug/kg
	TOTAL XYLENE	260	91,000	—	ug/kg
	1,2-DICHLOROBENZENE	1,100	46,000	1,400	ug/kg
	TRICHLOROETHENE	470	—	1,900	ug/kg

B-41				
	CONSTITUENT	SCG	2'-4'	UNITS
VOCs	CIS-1,2-DICHLOROETHENE	250	3,400	ug/kg

B-11				
	CONSTITUENT	SCG	2'-4'	UNITS
VOCs	TRICHLOROETHENE	470	12,000	ug/kg

B-7				
	CONSTITUENT	SCG	2'-4'	UNITS
PESTICIDES	4,4'-DDT	3.3	17	ug/kg

B-8				
	CONSTITUENT	SCG	0'-2'	UNITS
METALS	LEAD	63	107	mg/kg
	ZINC	109	304	mg/kg

B-15				
	CONSTITUENT	SCG	2'-4'	UNITS
METALS	CHROMIUM	30	40	mg/kg

B-19					
	CONSTITUENT	SCG	0'-2'	2'-4'	UNITS
VOCs	TRICHLOROETHENE	470	2,500	–	ug/kg
	TETRACHLOROETHENE	1,300	14,000	–	ug/kg
	1,2-DICHLOROBENZENE	1,100	10,000	23,000	ug/kg
	TOTAL XYLENE	260	–	37,000	ug/kg
	ETHYLBENZENE	1,000	–	10,000	ug/kg
	TOLUENE	700	–	5,500	ug/kg
SVOCs	CIS-1,2-DICHLOROETHENE	250	–	600	ug/kg
	PHENOL	330	1,300	–	ug/kg

B-42				
	CONSTITUENT	SCG	0'-2'	UNITS
METALS	CHROMIUM	30	483	mg/kg

B-33				
	CONSTITUENT	SCG	0'-2'	UNITS
SVOCs	BENZO(a)ANTHRACENE	1,000	2,900	ug/kg
	CHRYSENE	1,000	2,400	ug/kg
	BENZO(b)FLUORANTHENE	1,000	3,300	ug/kg
	BENZO(k)FLUORANTHENE	800	1,600	ug/kg
	BENZO(a)PYRENE	1,000	2,200	ug/kg
	INDENO(1,2,3-cd)PYRENE	500	1,400	ug/kg
PESTICIDES	DIBENZO(a,h)ANTHRACENE	330	620	ug/kg
	4,4'-DDT	3.3	9.1	ug/kg
	CADMIUM	2.5	4.6	mg/kg
	CHROMIUM	30	65.7	mg/kg
	COPPER	50	162	mg/kg
	LEAD	63	641	mg/kg
	MERCURY	0.18	0.3	mg/kg
	SILVER	2	6	mg/kg
METALS	ZINC	109	305	mg/kg

B-27				
	CONSTITUENT	SCG	4'-6'	UNITS
VOCs	ACETONE	50	54	ug/kg
	TOTAL XYLENE	260	310	ug/kg

B-21				
	CONSTITUENT	SCG	0'-2'	UNITS
METALS	SILVER	2	2.5	mg/kg

LEGEND

- PROPERTY LINE
- ADJACENT LOT LINES
- W WATER
- C COMMUNICATION
- GR DRAINS OR SEWER
- P UNKNOWN
- SOIL SAMPLE LOCATION
- TEST PIT LOCATION
- LIMITS OF COMPLETED TEST PIT
- MONITORING WELL

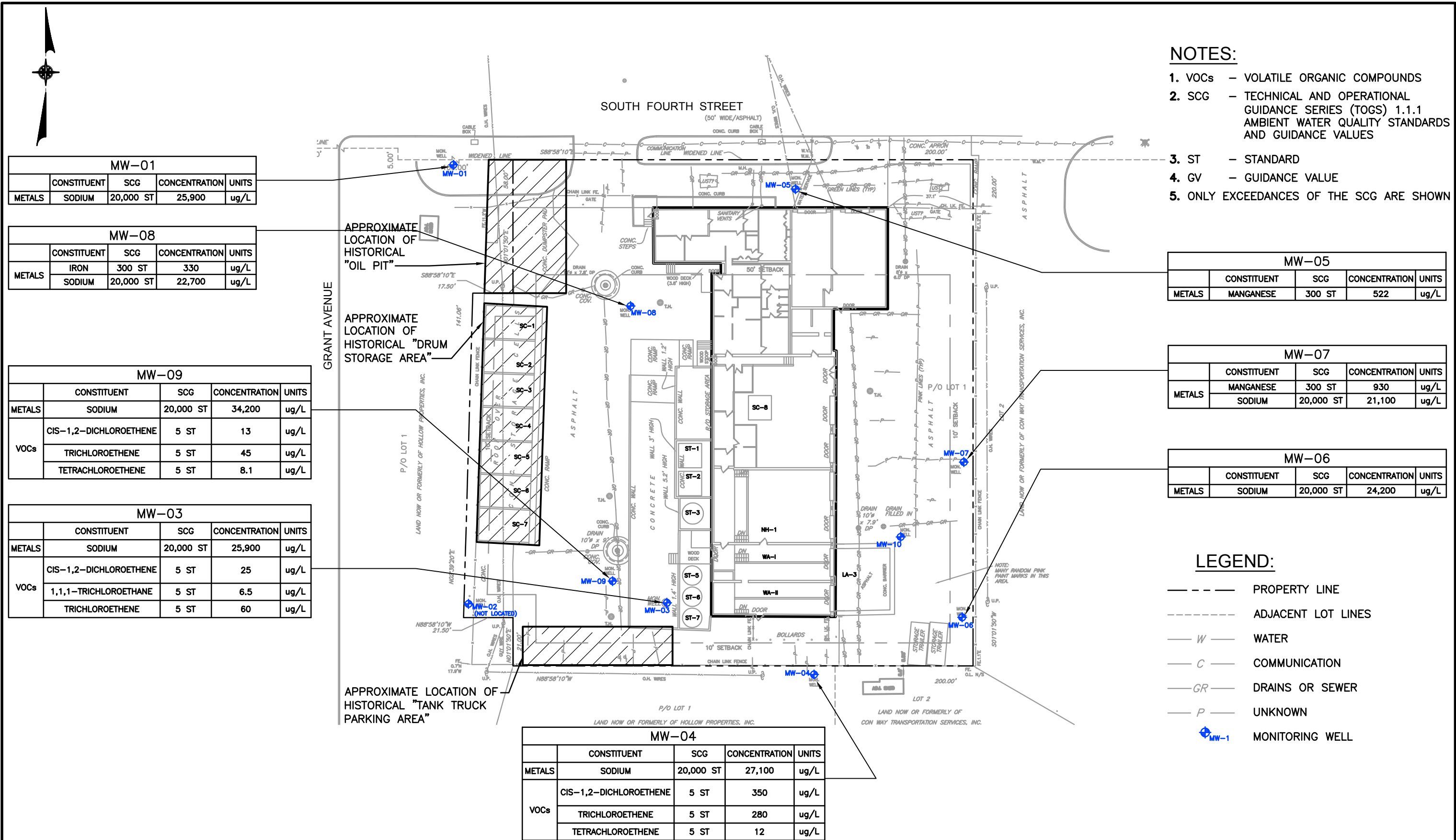
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION REPORT

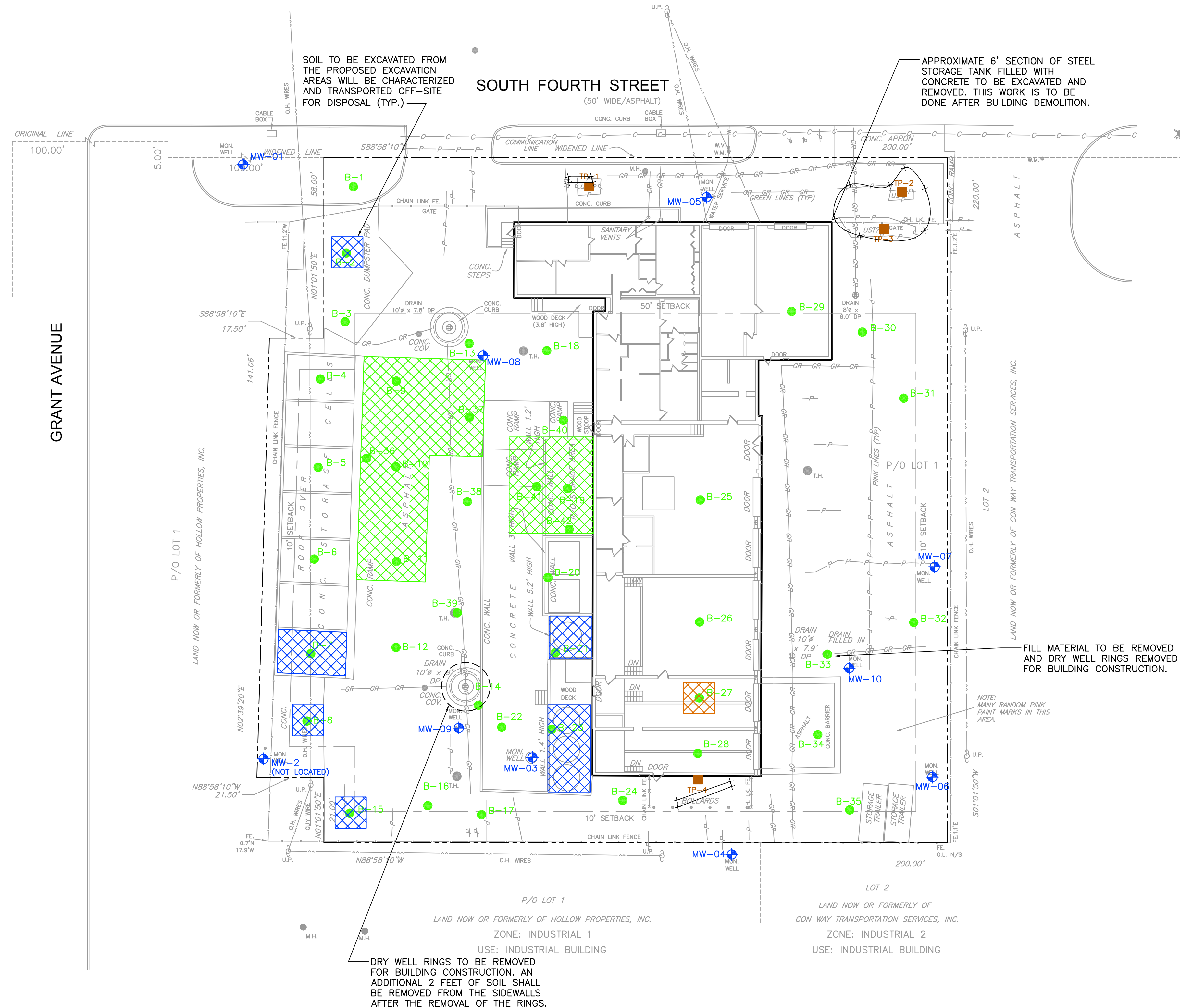
SUMMARY OF SOIL SAMPLE EXCEEDANCES

SCALE: 1"=20'

FIGURE 5

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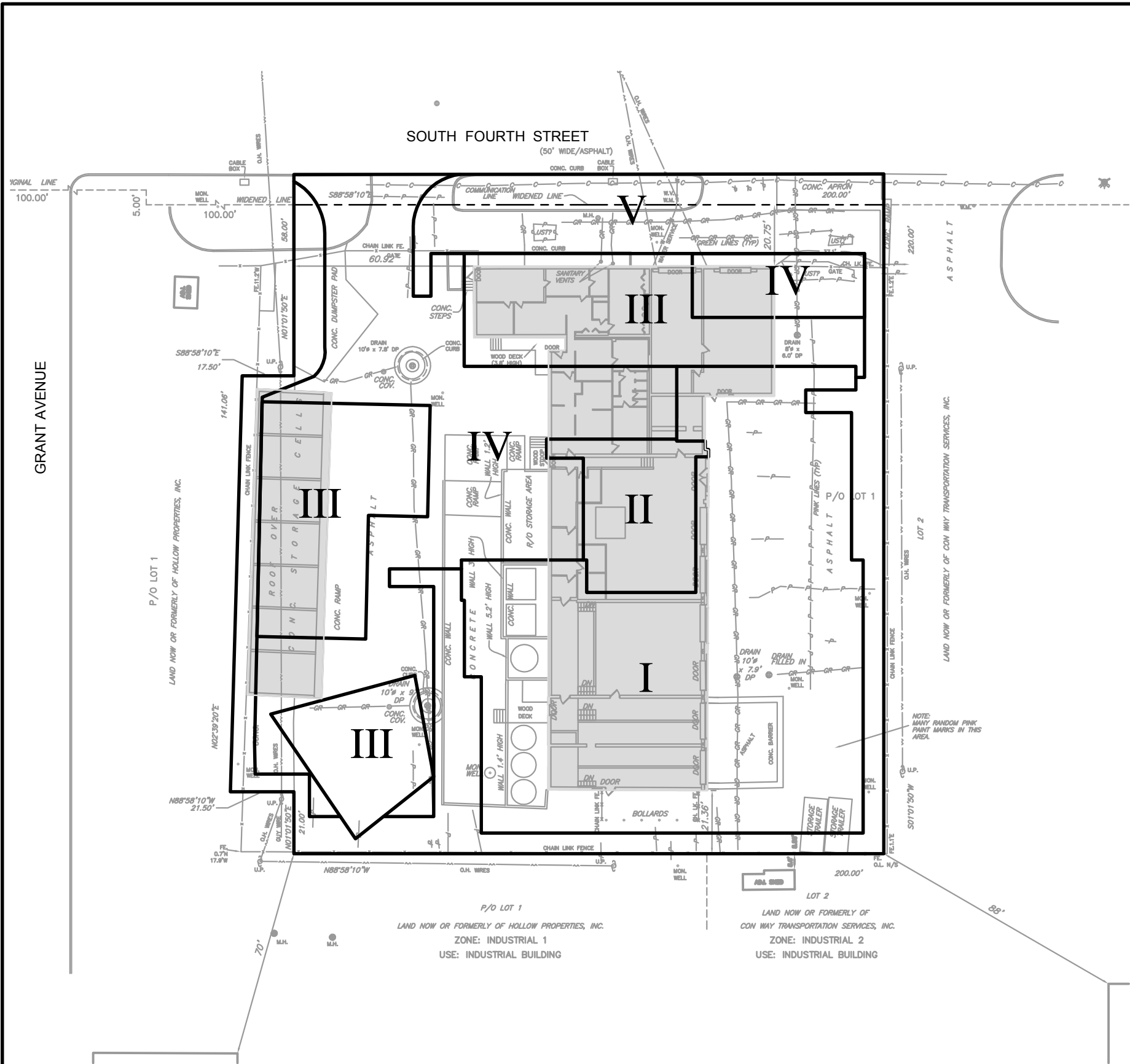




LEGEND

- PROPERTY LINE
- ADJACENT LOT LINES
- WATER
- COMMUNICATION
- DRAINS OR SEWER
- UNKNOWN
- SOIL SAMPLE LOCATION
- TEST PIT LOCATION
- LIMITS OF COMPLETED TEST PIT
- MONITORING WELL
- 0'-2' EXCAVATION
- 0'-4' EXCAVATION
- 0'-6' EXCAVATION

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NOTES:

1. EXCAVATION DEPTHS SHOWN ARE APPROXIMATE DEPTHS BELOW EXISTING GROUND SURFACE (BGS) THAT WILL BE REQUIRED FOR DEMOLITION AND RECONSTRUCTION OF THE FACILITY.
2. THE HORIZONTAL AND VERTICAL EXTENTS SHOWN ARE APPROXIMATE AND SUBJECT TO CHANGE BASED UPON FIELD CONDITIONS, CONTRACTOR'S DETAILED SURVEYS TO BE CONDUCTED IN SUPPORT OF CONSTRUCTION AND CONTRACTOR'S MEANS AND METHODS.
3. THIS PLAN IS FOR INFORMATIONAL PURPOSES ONLY, AND IS NOT TO BE CONSIDERED A DETAILED EXCAVATION PLAN TO BE UTILIZED FOR CONSTRUCTION.
4. THE CONTRACT DOCUMENTS REQUIRE ALL SOIL EXCAVATED AS PART OF THIS PROJECT TO BE TRANSPORTED OFF-SITE FOR DISPOSAL.

LEGEND:

- I EXCAVATION FOR BUILDING SLAB AND FOOTINGS:
RANGES FROM 2.5 TO 6.0 FEET BELOW GROUND SURFACE
- II EXCAVATION FOR LOADING DOCK SLAB AND FOOTINGS:
RANGES FROM 7.5 TO 8.0 FEET BELOW GROUND SURFACE
- III EXCAVATION FOR DRY WELLS AND SEPTIC SYSTEM:
7.5 FEET BELOW GROUND SURFACE
- IV EXCAVATION FOR ASPHALT PARKING LOT:
RANGES FROM 0.5 TO 2.5 FEET BELOW GROUND SURFACE
- V EXCAVATION FOR PLANTING AND SIDEWALK AREAS:
RANGES FROM 0.5 TO 1 FOOT BELOW GROUND SURFACE

APPENDIX B

TABLES

TABLE 1
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
BAY SHORE, NEW YORK
RFI REPORT
SUMMARY OF SAMPLING PROGRAM

Investigation Method/Technology	Sample Point ID	Completion Depth (feet below grade)	Sample Depth (feet below grade)	Installation or Sample Date	No. of Samples Selected for Analysis	Analysis							Sample Point Objectives/Comments
						TCL VOCs ¹	TCL SVOCs ²	TCL PCBs ³	TCL Pesticides ⁴	TAL Metals ⁵	Cyanide ⁶	Natural Attenuation Parameters ⁷	
Soil Probes	B-1	12	0-2'	8/26/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-2	12	0-2'	8/26/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-3	12	0-2'	8/26/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-4	12	0-2'	8/30/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-5	12	0-2'	8/30/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-6	12	0-2'	8/30/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-7	12	0-2'	8/30/2010	3	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)						x				Sample taken off-hold for analysis.
	B-8	12	0-2'	8/27/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-9	12	0-2'	8/26/2010	3	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)			x							Sample taken off-hold for analysis.

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Investigation Method/Technology	Sample Point ID	Completion Depth (feet below grade)	Sample Depth (feet below grade)	Installation or Sample Date	No. of Samples Selected for Analysis	Analysis							Sample Point Objectives/Comments
						TCL VOCs ¹	TCL SVOCs ²	TCL PCBs ³	TCL Pesticides ⁴	TAL Metals ⁵	Cyanide ⁶	Natural Attenuation Parameters ⁷	
Soil Probes (continued)	B-10	12	0-2'	8/30/2010	3	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)			x							Sample taken off-hold for analysis.
	B-11	12	0-2'	8/30/2010	3	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)			x							Sample taken off-hold for analysis.
	B-12	12	0-2'	8/27/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-13	12	0-2'	8/26/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-14	12	0-2'	8/27/2010	3	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)							x			Sample taken off-hold for analysis.
	B-15	12	0-2'	8/27/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-16	12	0-2'	8/27/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-17	12	0-2'	8/27/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-18	12	0-2'	8/26/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										

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Investigation Method/Technology	Sample Point ID	Completion Depth (feet below grade)	Sample Depth (feet below grade)	Installation or Sample Date	No. of Samples Selected for Analysis	Analysis							Sample Point Objectives/Comments
						TCL VOCs ¹	TCL SVOCs ²	TCL PCBs ³	TCL Pesticides ⁴	TAL Metals ⁵	Cyanide ⁶	Natural Attenuation Parameters ⁷	
Soil Probes (continued)	B-19	12	0-2'	8/30/2010	4	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)			x							Sample taken off-hold for analysis.
			8-10' (on hold)			x							Sample taken off-hold for analysis.
	B-20	12	0-2'	8/27/2010	2	x	x	x	x	x	x		
			4-6'			x	x	x	x	x	x		
			6-8' (on hold)										
	B-21	12	0-2'	8/30/2010	2	x	x	x	x	x	x		
			4-6'			x	x	x	x	x	x		
			6-8' (on hold)										
	B-22	12	0-2'	8/27/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-23	12	0-2'	8/27/2010	2	x	x	x	x	x	x		
			4-6'			x	x	x	x	x	x		
			6-8' (on hold)										
	B-24	12	0-2'	8/27/2010	2	x	x	x	x	x	x		
			5-7'			x	x	x	x	x	x		
			7-9' (on hold)										
	B-25	12	0-2'	8/25/2010	2	x	x	x	x	x	x		
			8-10'			x	x	x	x	x	x		
	B-26	12	0-2'	8/26/2010	2	x	x	x	x	x	x		
			4-6'			x	x	x	x	x	x		
			6-8' (on hold)										
	B-27	12	0-2'	8/26/2010	3	x	x	x	x	x	x		
			4-6'			x	x	x	x	x	x		
			6-8' (on hold)			x							Sample taken off-hold for analysis.

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SUMMARY OF SAMPLING PROGRAM

Investigation Method/Technology	Sample Point ID	Completion Depth (feet below grade)	Sample Depth (feet below grade)	Installation or Sample Date	No. of Samples Selected for Analysis	Analysis							Sample Point Objectives/Comments
						TCL VOCs ¹	TCL SVOCs ²	TCL PCBs ³	TCL Pesticides ⁴	TAL Metals ⁵	Cyanide ⁶	Natural Attenuation Parameters ⁷	
Soil Probes (continued)	B-28	12	0-2'	8/26/2010	2	x	x	x	x	x	x		
			4-6'			x	x	x	x	x	x		
			6-8' (on hold)										
	B-29	12	0-2'	8/25/2010	2	x	x	x	x	x	x		
			4-6'			x	x	x	x	x	x		
			6-8' (on hold)										
	B-30	12	0-2'	8/25/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-31	12	0-2'	8/25/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-32	12	0-2'	8/25/2010	2	x	x	x	x	x	x		
			4-6'			x	x	x	x	x	x		
			6-8' (on hold)										
	B-33	16	0-2'	8/25/2010	3	x	x	x	x	x	x		Completed through dry well on east side of facility building.
			4-6'			x	x	x	x	x	x		
			6-8' (on hold)			x	x	x	x	x	x		Sample taken off-hold for analysis.
	B-34	12	0-2'	8/25/2010	2	x	x	x	x	x	x		
			4-6'			x	x	x	x	x	x		
			6-8' (on hold)										
	B-35	12	0-2'	8/25/2010	2	x	x	x	x	x	x		
			4-6'			x	x	x	x	x	x		
			6-8' (on hold)										
	B-36	12	0-2'	10/5/2010	3	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)						x				Sample taken off-hold for analysis.

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Investigation Method/Technology	Sample Point ID	Completion Depth (feet below grade)	Sample Depth (feet below grade)	Installation or Sample Date	No. of Samples Selected for Analysis	Analysis							Sample Point Objectives/Comments
						TCL VOCs ¹	TCL SVOCs ²	TCL PCBs ³	TCL Pesticides ⁴	TAL Metals ⁵	Cyanide ⁶	Natural Attenuation Parameters ⁷	
Soil Probes (continued)	B-37	12	0-2'	10/5/2010	3	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)			x							Sample taken off-hold for analysis.
	B-38	12	0-2'	10/5/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-39	12	0-2'	10/5/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-40	12	0-2'	10/5/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
	B-41	12	0-2'	10/5/2010	3	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)			x							Sample taken off-hold for analysis.
	B-42	12	0-2'	10/5/2010	2	x	x	x	x	x	x		
			2-4'			x	x	x	x	x	x		
			4-6' (on hold)										
Test Pits	TP-1	1.2	1.2	8/30/2010	1	x	x			x			Encountered refusal at leaching pool cover.
	TP-2/3	10	9' (N, S, E sidewalls)	9/1/2010	6	x	x			x			Two 4,000-gallon USTs removed.
			9.5' (floor)		2	x	x			x			
			7' (W sidewall)		1	x	x			x			
	TP-4	9	8' (4 sidewalls)	8/30/2010	4	x	x			x			
			9' (floor)		1	x	x			x			

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						TCL VOCs ¹	TCL SVOCs ²	TCL PCBs ³	TCL Pesticides ⁴	TAL Metals ⁵	Cyanide ⁶	Natural Attenuation Parameters ⁷	
Groundwater Monitoring Wells	MW-1	17	Water Table	8/19/2010	1	x	x			x	x	x	
	MW-3	18	Water Table	8/18/2010	1	x	x			x	x	x	
	MW-4	16	Water Table	8/19/2010	1	x	x			x	x	x	
	MW-5	18	Water Table	8/19/2010	1	x	x			x	x		
	MW-6	24	Water Table	8/18/2010	1	x	x			x	x	x	
	MW-7	24	Water Table	8/18/2010	1	x	x			x	x		
	MW-8	30	Water Table	8/18/2010	1	x	x			x	x		
	MW-9	30	Water Table	8/19/2010	1	x	x			x	x		
	MW-10	30	Water Table	8/18/2010	1	x	x			x	x		

Notes:

X: Sample selected for analysis.

---: Sample not selected for analysis.

¹ Target Compound List Volatile Organic Compounds by EPA Method 8260

² Target Compound List Semivolatile Organic Compounds by EPA Method 8270

³ Target Compound List Polychlorinated Biphenyls by EPA Method 8082

⁴ Target Compound List Pesticides by EPA Method 8081

⁵ Target Analyte List Metals by EPA Method 6010/7471

⁶ Cyanide by EPA Method 9012.

⁷ Analyses include Ethane/Ethene by RSK 175, TOC by NYSDEC ASP Method 415.1, Nitrate, Sulfate, Chloride by NYSDEC ASP Method 300, Alkalinity by NYSDEC ASP Method 310.1, Ferrous Iron and Total Manganese by NYSDEC ASP Method 200.7-3500D, Dissolved Iron/Manganese, NYSDEC ASP Method 200.7, BOD by ST Method 5210, Methane by NYSDEC ASP Method 8015M, COD by NYSDEC ASP Method 410.4 and TOD by ASTM D6238-98.

TABLE 2

**PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
BAY SHORE, NEW YORK
RFI REPORT**

**WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
October 22, 2010**

Monitoring Well	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)
MW-1	59.89	8.44	51.45
MW-3	61.15	10.13	51.02
MW-4	60.61	9.79	50.82
MW-5	61.13	9.91	51.22
MW-6	61.41	10.61	50.80
MW-7	61.44	10.55	50.89
MW-8	60.86	9.59	51.27
MW-9	60.83	9.81	51.02
MW-10	60.84	9.99	50.85

Note: Elevations are recorded in feet above mean sea level (Town Datum).
Measuring Point for MW-4 was resurveyed on October 22, 2010 due to error in original survey

APPENDIX C

TEST PIT LOGS

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Test Pit No.: TP-1 Sheet <u>1</u> of <u>1</u> By: P. Barusich	
Drilling Contractor: AARCO Equipment: WB 156 Backhoe Date Started: 8/30/10				Geologist: P. Barusich Date Completed: 8/30/10		Test Pit Completion Depth: 1.2' Ground Surface Elevation: ---	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0 - 1.2'	---	---	---	0.0	0 - 3" Asphalt. 3" - 1.2' Brown to tan, fine to coarse SAND, trace silt, dry. Flat cement leaching pool cover encountered at 1.2' Test Pit Dimensions: 5'L x 5'W x 1.2'D.	SW	
Sample Notes: Soil sample was analyzed for TCL VOCs, TCL SVOCs and TAL metals.					NOTES: Composite sample collected from four sides of excavation. No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Test Pit No.: TP-2 and TP-3 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: AARCO Equipment: Backhoe WB 156 Date Started 9/1/10				Geologist: K. Robins Date Completed: 9/3/10		Test Pit Completion Depth: 10 feet Ground Surface Elevation: ---	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0 – 3'	---	---	---	0.0	0 – 4" Asphalt 4" – 3' Dark Brown SAND and Gravel, medium subrounded in size, dry to damp	SP	
3' -10'	---	----	---	0.0	3' – 10' Tan to light Brown medium to coarse SAND, some gravel, medium to fine subrounded in size, trace cobbles, well sorted. Water table encountered at approximately 9.5' to 10' Test Pit Size : 32' length by 24 ' width by 10' deep Dimension of each UST: 24' long by 5' 4" in diameter	SW	
Sample Notes: Soil samples were analyzed for TCL VOCs , TCL SVOCs and TAL Metals.					NOTES: Collected 2 samples from North, South and East sidewalls of the excavation at (9'), and 2 samples from bottom of excavation at (9.5'). 1 sample was collected from the western side wall at (7') No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Test Pit No.: TP-4 Sheet <u>1</u> of <u>1</u> By: P. Barusich	
Drilling Contractor: AARCO Equipment: WB 156 Backhoe Date Started: 8/30/10				Geologist: P. Barusich Date Completed: 8/30/10		Test Pit Completion Depth: 9' Ground Surface Elevation: ---	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0 - 3'	---	---	---	0.0	0 - 4" Asphalt. 4" - 3' Brown, fine to coarse SAND, some fine gravel, trace silt, dry.	SW	
3' - 9'	---	---	---	0.0	3' - 9' Tan, fine to medium SAND, trace silt, moist. Test Pit Dimensions: 10'L x 4'W x 9'D.	SW	
Sample Notes: Soil samples were analyzed for TCL, VOCs, TCL SVOCs and TAL metals.					NOTES: One sample collected from each of the 4 sidewalls at 8'. One sample collected from the excavation bottom at 9'. No odors and no staining were noted.		

APPENDIX D

BORING LOGS

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-1 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/26/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/26/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	48"	0.0	0-7" Topsoil, roots, grass, organics 7"-34" Light Gray-light Brown fine to medium SAND, some subrounded medium gravel, poorly sorted, dry, FILL 34"-48" Tan medium quartz SAND, some fine gravel, loose, dry	SP	
4'-8'	2	MC	33"	0.0	0-33" Brown-light Tan medium to coarse quartz SAND, some fine to medium gravel, dry, poorly sorted	SP	
8'-12'	3	MC	37"	0.0	0-37" Tan-light Brown medium to coarse SAND, well sorted, trace fine sand, trace fine subrounded gravel, wet at 9'	SW	
Sample Types: MC=Macro Core				NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.			

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-2 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/26/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/26/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	39"	0.0	0-39" Dark Brown medium to coarse SAND, trace asphalt chunk pieces at 30"-34", little fine gravel, damp	SP	
4'-8'	2	MC	30"	0.0	0-30" Brown coarse to medium quartz SAND, well sorted, some fine subrounded gravel, damp	SW	
8'-12'	3	MC	36"	0.0	0-36" Tan-light Brown fine quartz SAND, well sorted, trace gravel subrounded, wet at 9'	SW	
Sample Types: MC=Macro Core				NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted. MS/MSD collected at 0-2'.			

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-3 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/26/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/26/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	40"	0.0	0-6" Concrete 6"-20" Dark Brown fine to medium SAND, trace silt, damp, trace subrounded gravel, FILL 20"-26" Dark Gray medium sand, trace fine gravel, FILL 26"-40" Dark Brown fine to medium SAND, trace silt, some coarse subrounded quartz gravel, poorly sorted, damp, FILL	SP	
4'-8'	2	MC	31"	0.0	0-31" Tan medium quartz SAND, trace fine to coarse subrounded gravel, well sorted, damp	SW	
8'-12'	3	MC	22"	0.0	0-22" Tan-light Brown medium to coarse quartz SAND, well sorted, trace fine sand, trace fine gravel, wet at 10'-11'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-4 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/30/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/30/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	48"	0.0	0-6" Concrete 6"-43" Dark brown fine to medium SAND, some subangular/subrounded crushed gravel, poorly sorted, damp to dry 43"-48" Light brown SILT, well sorted, trace fine gravel, dry to damp	SP	
4'-8'	2	MC	31"	0.0	0-31" Tan medium to coarse SAND, some to little subrounded fine to medium gravel, well sorted, trace fine dark brown sand, dry to damp	SW	
8'-12'	3	MC	33"	0.0	0-33" Tan medium to coarse quartz SAND, some subrounded medium to fine gravel, trace fine sand, well sorted, wet at 9.5'	SW	
Sample Types: MC=Macro Core				NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.			

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-5 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/30/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/30/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	36"	0.0	0-6" Concrete 6"-36" Dark Brown to Brown medium to coarse SAND, some fine to medium subrounded gravel, poorly sorted, trace silt, dry to damp	SP	
4'-8'	2	MC	36"	2.0	0-36" Tan-light Brown medium to coarse quartz SAND, trace fine gravel, well sorted, dry to damp	SW	
8'-12'	3	MC	31"	0.0	0-31" Tan-light Brown medium to fine quartz SAND, trace coarse sand, little subrounded fine to medium gravel, well sorted, wet at 10'	SW	
Sample Types: MC=Macro Core				NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.			

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-6 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/30/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/30/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	38"	0.0	0-6" Concrete 6"-30" Dark Brown medium SAND, trace silt, trace coarse sand, trace fine gravel, poorly sorted, damp 30"-38" Tan medium to coarse quartz SAND, trace fine gravel, dry	SP	
4'-8'	2	MC	32"	0.0	0-32" Tan medium to fine quartz SAND, trace subrounded fine gravel, dry	SW	
8'-12'	3	MC	28"	0.0	0-28" Tan-light Brown fine to coarse quartz SAND, trace medium to fine subrounded gravel, wet at 9.5'-10'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-7 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/30/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/30/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	35"	0.0	0-6" Concrete 6"-35" Dark Brown medium to coarse SAND, some subangular gravel, trace asphalt, trace fine sand, trace silt, poorly sorted, FILL	SP	
4'-8'	2	MC	12"	0.0	0-12" Dark Brown medium to coarse SAND AND GRAVEL, poorly sorted, dry, FILL	SP	
8'-12'	3	MC	36"	0.0	0-36" Tan-light Brown medium to fine SAND, trace coarse sand, trace fine to medium gravel, wet at 9.5'-10'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted. MS/MSD collected at 0-2'.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-8 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/27/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/27/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	37"	0.0	0-3" Concrete 3"-27" Dark Brown fine to medium SAND, trace silt, some subangular coarse gravel, trace asphalt, trace stones, poorly sorted, dry, FILL 27"-37" Tan coarse to medium quartz SAND, some fine GRAVEL, loose poorly sorted, dry	SP	
4'-8'	2	MC	36"	0.0	0-36" Tan-light Brown medium to fine quartz SAND, trace fine subrounded gravel, damp to dry, well sorted	SW	
8'-12'	3	MC	46"	0.0	0-26" Light Brown fine to medium SAND, trace coarse gravel 26"-31" Dark Brown fine SAND, some silt 31"-46" Tan coarse to medium SAND, trace subrounded gravel, well sorted, wet at 10'	SW/ SM	
Sample Types: MC=Macro Core				NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.			

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-9 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/26/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/26/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	48"	0.0	0-2" Asphalt 2"-24" Dark Brown-Black fine to medium SAND, some gravel, trace coarse sand, poorly sorted, FILL 24"-48" Brown medium to coarse SAND, trace fine gravel, loose, dry	SP	
4'-8'	2	MC	31"	0.0	0-31" Tan fine to medium SAND, trace fine subrounded gravel, well sorted	SW	
8'-12'	3	MC	24"	0.0	0-24" Tan-light Brown medium quartz SAND, well sorted, trace fine sand, wet at 10.5' to 11'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-10 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/30/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/30/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	48"	200-1,500	0-2" Asphalt 2"-48" Brown-light Orange fine to medium SAND, trace silt, some fine to coarse subrounded gravel, poorly sorted, damp-dry, slight chemical odor noted, FILL	SP	
4'-8'	2	MC	24"	1	0-24" Tan fine to medium SAND, trace coarse sand, little subrounded gravel, dry	SW	
8'-12'	3	MC	26"	2	0-26" Tan fine to medium quartz SAND, well sorted, trace fine gravel, wet at 10'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold).		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-11 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/30/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/30/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	48"	0.0	0-4" Asphalt 4"-24" Brown fine to medium SAND, trace fine gravel, dry 24"-30" Dark Brown SILT, trace subrounded gravel 30"-48" Tan fine to coarse SAND, trace fine gravel, damp	SW	
4'-8'	2	MC	32"	0.0	0-32" Tan coarse to medium SAND, trace subrounded gravel, well sorted, trace fine sand, dry to damp	SW	
8'-12'	3	MC	24"	0.0	0-24" Tan fine to medium quartz SAND, trace fine gravel, trace coarse sand, well sorted, wet-saturated at 10'	SM	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-12 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/27/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/27/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	34"	0.0	0-4" Asphalt 4"-16" Brown-dark Brown fine to medium SAND, trace subrounded gravel, dry 16"-18" Brown SILT 18"-34" Tan-Brown fine to coarse SAND, trace fine gravel, crushed quartz gravel, stones	SP	
4'-8'	2	MC	34"	0.0	0-34" Tan medium to coarse SAND, some fine subrounded gravel, poorly sorted, dry	SP	
8'-12'	3	MC	32"	0.0	0-32" Tan medium to coarse quartz SAND, trace medium subrounded gravel, well sorted, wet at 9'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-13 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/26/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/26/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	38"	0.0	0-2" Asphalt 2"-28" Dark Gray to dark Brown medium SAND, trace silt, some subangular gravel, damp, FILL 28"-38" Tan-Brown coarse SAND and crushed stone AND GRAVEL, dry, FILL	SP	
4'-8'	2	MC	32"	0.0	0-32" Tan-light Brown fine to medium quartz SAND, trace fine subrounded gravel, well sorted, damp	SW	
8'-12'	3	MC	24"	0.0	0-24" Tan-light Brown medium to coarse quartz SAND, trace fine gravel, well sorted, wet at 10'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-14 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/27/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/27/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	28"	0.0	0-4" Asphalt 4"-28" Dark Brown fine to medium SAND, trace fine gravel, damp, FILL	SP	
4'-8'	2	MC	30"	0.0	0-30" Tan-light Brown fine-medium quartz SAND, well sorted, damp to moist	SW	
8'-12'	3	MC	21"	0.0	0-12" Gray-light Brown coarse to medium SAND, some subrounded gravel, loose 12"-21" Tan-light Gray fine to medium quartz SAND, well sorted, saturated-wet at 10'	SW	
Sample Types: MC=Macro Core				NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.			

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-15 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/27/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/27/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	40"	0.0	0-4" Asphalt 4"-30" Dark Brown fine to medium SAND, some fine gravel, broken crushed stone, trace silt, poorly sorted, FILL 30"-40" Tan-brown medium to coarse sand, trace fine gravel, loose, FILL	SP	
4'-8'	2	MC	29"	0.0	0-29" Tan-light Brown fine quartz SAND, well sorted, damp, trace quartz fine gravel	SW	
8'-12'	3	MC	28"	0.0	0-28" Tan fine SAND trace fine to medium quartz subrounded gravel, well sorted, wet at 10'	SW	
Sample Types: MC=Macro Core				NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.			

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-16 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/27/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/27/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	48"	0.0	0-4" Asphalt 4"-48" Dark Brown SAND, some subrounded fine gravel, compacted, trace silt, damp, poorly sorted, FILL	SP	
4'-8'	2	MC	32"	0.0	0-20" Brown coarse to medium quartz SAND, some coarse subrounded gravel, loose poorly sorted, dry, FILL 20"-32" Tan medium to coarse SAND, trace fine gravel, loose, dry, FILL	SP	
8'-12'	3	MC	31"	0.0	0-31" Tan-light brown medium to coarse quartz SAND, well sorted, little to trace fine subrounded gravel, wet-saturated at 10'	SW	
Sample Types: MC=Macro Core				NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.			

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-17 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/27/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/27/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	46"	0.0	0-4" Asphalt 4"-46" Dark brown medium to fine quartz SAND, some fine to coarse subangular gravel, trace Brown silt, poorly sorted, compacted, damp	SW	
4'-8'	2	MC	31"	0.0	0-12" Dark brown medium to coarse sand, trace fine gravel, damp 12"-31" Tan fine to medium quartz SAND, well sorted, trace subrounded gravel, damp	SW	
8'-12'	3	MC	28"	0.0	0-28" Tan fine to medium quartz SAND, well sorted, trace subrounded gravel, trace coarse sand, wet at 10'	SW	
Sample Types: MC=Macro Core				NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.			

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-18 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/26/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/26/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	46"	0.0	0-24" Dark Brown medium SAND, some gravel, trace silt, damp, FILL 24"-40" Brown-Orange coarse to medium SAND, trace gravel 40"-46" Tan medium SAND, dry	SP	
4'-8'	2	MC	34"	0.0	0-34" Tan medium to coarse quartz SAND, well sorted, trace fine gravel, damp	SW	
8'-12'	3	MC	24"	0.0	0-24" Tan coarse to medium quartz SAND, some fine to medium gravel, well sorted, saturated-wet at 10'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-19 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/30/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/30/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	48"	25-400	0-10" Concrete 10"-35" Dark Brown medium SAND, some silt, some fine to coarse gravel 35"-44" Tan-Orange medium to coarse SAND, coarse gravel 44"-48" Dark Brown SILT, fine gravel	SP	
4'-8'	2	MC	36"	5	0-36" Tan medium to coarse quartz SAND, some fine to coarse subrounded gravel, well sorted, dry	SW	
8'-12'	3	MC	36"	3	0-36" Tan medium to fine quartz SAND, trace fine subrounded gravel, well sorted, wet at 10.5'-11'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold), 8-10' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-20 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/27/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/27/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	48"	0.0	0-6" Concrete 6"-8" Asphalt and stones 8"-20" Dark Brown fine to medium SAND, trace silt, fine subangular gravel, compact, FILL 20"-45" Tan medium SAND, trace subangular gravel 45"-47" Dark Gray-brown SILT 47"-48" Brown coarse SAND, trace fine gravel	SP	
4'-8'	2	MC	46"	0.0	0-46" Tan coarse to fine quartz SAND, some fine to coarse gravel, crushed stone, dry	SP	
8'-12'	3	MC	24"	0.0	0-24" Tan-light Brown fine to medium quartz SAND, trace fine gravel, well sorted, wet at 10'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 4'-6', 6'-8' (on hold). No odors and no staining were noted. MS/MSD collected at 0-2'.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-21 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/30/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/30/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	40"	1	0-8" Concrete 8"-10" Stone and gravel 10"-40" Dark brown coarse to medium SAND, some fine to coarse gravel, poorly sorted, loose, FILL	SP	
4'-8'	2	MC	36"	0.0	0-36" Tan medium to fine SAND, trace fine gravel, trace coarse sand, well sorted	SW	
8'-12'	3	MC	36"	0.0	0-36" Tan fine to medium quartz SAND, trace crushed quartz white gravel, well sorted, wet at 10'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 4'-6', 6'-8' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-22 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/27/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/27/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	29"	0.0	0-6" Concrete 6-8" Brown SAND AND ASPHALT 8-29" Brown-Tan fine to medium SAND, trace little subrounded gravel, trace silt, damp-dry, FILL	SP	
4'-8'	2	MC	23"	0.0	0-23" Brown-light Tan medium to fine quartz SAND, trace fine subrounded gravel, well sorted, damp	SW	
8'-12'	3	MC	24"	0.0	0-24" Tan coarse to fine quartz SAND, some fine subrounded gravel, well sorted, wet at 10'-11'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-23 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/27/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/27/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	48"	0.0	0-16" Concrete 16"-31" Brown fine to medium SAND, trace fine gravel 31"-48" Dark Brown fine to medium SAND, trace silt, trace fine gravel	SW	
4'-8'	2	MC	36"	0.0	0-36" Tan-light Brown fine to medium quartz SAND, trace coarse sand, trace fine gravel, well sorted, damp	SW	
8'-12'	3	MC	33"	0.0	0-33" Tan fine to medium SAND, well sorted, trace fine quartz gravel, loose, wet at 10'	SP	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 4'-6', 6'-8' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-24 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/27/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/27/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	40"	0.0	0-3" Asphalt 3"-40" Brown-light Orange medium to fine SAND, trace subrounded gravel, damp-dry, FILL	SP	
4'-8'	2	MC	38"	0.0	0-38" Tan-light Brown medium to fine quartz SAND, well sorted, trace subrounded gravel, damp	SW	
8'-12'	3	MC	30"	0.0	0-30" Tan medium to fine quartz SAND, well sorted, trace fine subrounded gravel, wet at 10'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 5'-7', 7'-9' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-25 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/25/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/25/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	20"	0.0	0-8" Concrete 8"-20" Brown medium SAND, trace fine gravel, dry	SP	
4'-8'	2	MC	12"	0.0	0-12" Brown-Tan coarse to medium SAND, some subrounded gravel, poorly sorted, loose, damp, FILL	SP	
8'-12'	3	MC	35"	0.0	0-17" Brown fine to medium SAND, trace fine gravel, damp 17"-35" Tan-Buff fine SAND, trace fine gravel, saturated-wet at 10'	SW	
Sample Types: MC=Macro Core				NOTES: Samples collected at 0-2', 8'-10'. No odors and no staining were noted.			

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-26 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/26/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/26/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	45"	0.0	0-4" Concrete 4"-10" Stone, crushed rock, dry 10"-35" Dark Brown medium SAND, little-some subrounded gravel, dry 35"-37" Dark brown SILT 37"-45" Tan fine SAND, dry	SP	
4'-8'	2	MC	39"	0.0	0-39" Tan-Buff medium to coarse SAND, some fine to coarse gravel, dry, poorly sorted, FILL	SP	
8'-12'	3	MC	36"	0.0	0-36" Light Tan-Buff medium quartz well sorted SAND, trace fine subrounded gravel, wet at 10'	SW	
Sample Types: MC=Macro Core				NOTES: Samples collected at 0-2', 4'-6', 6'-8' (on hold). No odors and no staining were noted.			

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-27 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/26/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/26/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	24"	0.0	0-2" Concrete 2"-24" Brown-light Gray medium SAND, trace gray silt, fine subrounded gravel, damp to moist at tip	SW	
4'-8'	2	MC	24"	0.0	0-6" Dark Brown fine SAND 6"-24" Tan-Brown fine to medium SAND, trace fine gravel	SW	
8'-12'	3	MC	34"	0.0	0-34" Tan-light Brown fine SAND, trace fine subrounded gravel, well sorted, wet at 10'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 4'-6', 6'-8' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-28 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/26/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/26/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	38"	0.0	0-2" Concrete 2"-18" Dark Brown-light Black fine to medium sand, some gravel, crushed stone, poorly sorted, damp, FILL 18"-24" Dark Brown-Orange SILTY CLAY, moist-damp 24"-38" Tan-Brown fine SAND, well sorted, damp	SP/ SW	
4'-8'	2	MC	32"	0.0	0-32" Tan-light brown fine to medium SAND, trace little coarse sand, some fine subrounded gravel, dry to damp	SW	
8'-12'	3	MC	26"	0.0	0-26" Tan-light Brown medium quartz SAND, trace fine subrounded gravel, well sorted, wet at 10'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 4'-6', 6'-8' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-29 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/25/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/25/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	48"	1.5	0-6" Concrete	SM	
				0.0	8"-16" Dark Brown fine to medium SAND, trace fine gravel, damp 16"-46" Tan-light Brown medium to fine SAND, trace fine gravel, damp 46"-48" Dark brown fine SAND some SILT, compacted fine gravel, damp-dry		
4'-8'	2	MC	48"	0.0	0-24" Dark Brown light Orange medium to fine SAND, trace fine to medium subrounded gravel, damp, poorly sorted 24"-48" Light Tan-Buff medium to fine quartz SAND, some-little subangular gravel, well sorted		SP
8'-12'	3	MC	48"	0.0	0-20" Brown light Gray fine to medium SAND, trace silt, trace subrounded gravel, damp 20"-48" Tan-Brown fine to medium quartz SAND, well sorted, wet at 10'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 4'-6', 6'-8' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-30 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/25/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/25/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	38"	1.0	0-4" Asphalt 4"-6" Dark Brown fine to medium SAND, fine subrounded gravel, dry 6"-10" Tan fine SAND dry 10"-32" Dark Brown fine to medium SAND, trace fine gravel, damp 32"-38" Dark Brown SILT, compacted damp-dry	SW	
4'-8'	2	MC	47"	0.0	0-6" Dark Brown fine to medium SAND, trace fine gravel damp-dry 6"-47" Tan fine-medium quartz SAND, trace fine gravel well sorted, damp	SW	
8'-12'	3	MC	48"	0.0	0-6" Brown fine to medium SAND, trace gravel, damp 6"-12" Dark Brown fine to medium SAND, trace fine gravel 12"-48" Light Tan to light Gray fine to medium SAND, trace fine gravel Water table at 9' saturated wet	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-31 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/25/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/25/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	48"	0.0	0-36" Dark brown fine to medium SAND, trace silt, trace organic, trace fine subrounded gravel, damp-dry, FILL 36"-48" Tan light Brown fine to medium SAND, trace fine subrounded gravel, damp	SP	
4'-8'	2	MC	40"	0.0	0-40" Tan fine-medium quartz SAND, well sorted trace fine subrounded gravel, damp	SW	
8'-12'	3	MC	36"	0.0	0-12" Tan to light Brown fine to medium SAND, damp 12"-15" Dark Brown fine-medium SAND, trace fine gravel 15"-36" Tan-light Brown fine SAND, very moist-wet at tip	SW	
Sample Types: MC=Macro Core				NOTES: Samples collected at 0-2', 2'-4', 4'-6' (on hold). No odors and no staining were noted.			

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-32 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/25/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/25/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	41"	0.0	0-41" Brown medium to fine SAND, some quartz subrounded gravel, silt dark Brown/ dark Gray damp, poorly sorted, FILL	SP	
4'-8'	2	MC	42"	0.5	0-10" Dark Brown fine to medium SAND, trace fine gravel, damp 10"-42" Tan fine to medium SAND, some quartz subrounded gravel, well sorted, damp	SW	
8'-12'	3	MC	48"	0.0	0-48" Tan-light Brown fine-medium SAND, trace brown silt, trace fine subrounded quartz gravel, well sorted water table at 10'	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 4'-6', 6'-8' (on hold). No odors and no staining were noted.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-33 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/25/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/25/10		Boring Completion Depth: 16' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	35"	0.0	0-1" Concrete 1"-16" Dark Brown Gray-Black SILT, trace fine sand, trace fine gravel, very moist, FILL 16"-35" Tan-light Brown fine to medium SAND, trace quartz fine gravel, well sorted, damp	SP	
4'-8'	2	MC	37"	0.0	0-37" Brown-light Orange fine to medium SAND, well sorted, trace fine subrounded gravel, damp	SW	
8'-12'	3	MC	40"	0.2	0-17" Brown-light Tan fine SAND, some angular medium-large gravel, damp 17"-19" Dark Brown SILT, damp 19"-40" Tan fine SAND, saturated-wet, water table at 10'	SW	
12'-16'	4	MC	20"	0.0	0-20" Tan-light Tan fine quartz SAND, trace fine gravel, saturated-wet	SW	
Sample Types: MC=Macro Core				NOTES: Samples collected at 0-2', 4'-6', 6'-8' (on hold). No odors and no staining were noted.			

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-34 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/25/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/25/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	48"	0.0	0-12" Dark Black-Gray fine SAND AND SILT, compacted, some fine gravel-dry, FILL 12"-36" Dark Brown-Orange fine to coarse sand, some fine subrounded gravel, trace silt-damp 36"-48" Tan fine to medium quartz SAND, trace crushed quartz gravel, dry	SP	
4'-8'	2	MC	48"	0.0	0-17" Dark Brown-light Black medium quartz SAND, some subrounded gravel, poorly sorted, damp 17"-48" Tan fine to medium quartz SAND, trace coarse sand, trace coarse to fine gravel, well sorted-damp	SP/ SW	
8'-12'	3	MC	48"	0.0	0-24" Tan-Brown medium to fine SAND, trace fine gravel damp, wet at 10' 24"-48" Tan fine to medium SAND, trace fine gravel	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 4'-6', 6'-8' (on hold). No odors and no staining were noted. MS/MSD collected at 0-2'.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-35 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V. Drill Rig: Truck Mounted Geoprobe Date Started: 8/25/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 8/25/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	40"	0.0	0-20" Dark Brown-Orange SILT, some fine to medium sand, trace fine subrounded gravel, damp-dry, FILL 20"-30" Brown medium to fine sand, trace fine GRAVEL, damp 30"-32" Dark Brown SILT 32"-40" Tan-Brown SILT, medium to coarse sand, trace fine gravel, dry	SP	
4'-8'	2	MC	39"	0.5	0-12" Dark Brown-Brown medium SAND, trace fine gravel 12"-39" Light Tan coarse to medium SAND, some fine quartz gravel, dry	SW	
8'-12'	3	MC	48"	0.0	0-24" Tan-Brown coarse to medium SAND, some angular gravel, dry, poorly sorted. Water table at 10'. 24"-48" Tan-light Brown medium to coarse quartz SAND, well sorted, trace fine gravel, saturated-wet at 10'	SP/ SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 4'-6', 6'-8' (on hold). No odors and no staining were noted. Moved boring 1' to the east due to depression in asphalt as per NYSDEC request.		



Project No.: 2786-F
Project Name: CPC RCRA Facility Investigation

Boring No.: B-36
Sheet 1 **of** 1
By: K. Robins

Drilling Contractor: Clear Water Drilling
Driller: Kevin H
Drill Rig: Truck Mounted Geoprobe
Date Started: 10/5/10

Geologist: K. Robins
Drilling Method: Geoprobe
Drive Hammer Weight: NA
Date Completed: 10/5/10

Boring Completion Depth: 12'
Ground Surface Elevation: ---
Boring Diameter: 2"

Depth (ft.)	Soil Sample			Photo-ionization Detector (ppm)	Sample Description	USCS
	No.	Type	Rec. (inches)			
0-4'	1	MC	46	0.0	0" - 4" Asphalt	
				0.0	4" - 24" Dark Brown coarse to medium Sand, some crushed gravel	SP
				0.0	24" - 46" Dark Brown medium Sand, little fine gravel, poorly sorted, damp	SP
4' -8'	2	MC	46	0.0	0 - 46" Tan fine to medium Sand, well sorted, trace subrounded gravel, damp	SW
8' -12'	3	MC	36	0.0	0 - 36" Tan to light Brown medium to fine Sand, trace fine gravel, well sorted, wet at 10 feet	SW

Sample Types:
MC=Macro Core

NOTES:
 Samples collected at 0-2', 2-4', 4-6' (on hold). No odors and no staining. Collected MS/MSD at 0-2'.



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Project No.: 2786-F
Project Name: CPC RCRA Facility
Investigation

Boring No.: B-37
Sheet 1 **of** 1
By: K. Robins

Drilling Contractor: Clear Water Drilling
Driller: Kevin H
Drill Rig: Truck Mounted Geoprobe
Date Started: 10/5/10

Geologist: K. Robins
Drilling Method: Geoprobe
Drive Hammer Weight: NA
Date Completed: 10/5/10

Boring Completion Depth: 12'
Ground Surface Elevation: ---
Boring Diameter: 2"

Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS
	No.	Type	Rec. (inches)			
0-4'	1	MC	48	0.0	0" - 4" Asphalt	
				0.0	4" -16" Dark Brown medium Sand, trace fine gravel	SP
				0.0	16- 28" Dark Gray Silt, trace fine gravel, poorly sorted, damp	SM
				0.0	28" - 34" Dark Brown silty Sand, trace fine gravel	SM
				0.0	34" - 48" Tan coarse Sand, trace fine to medium gravel, poorly sorted, Fill	SP
4' -8'	2	MC	46	0.0	0 -46" Tan fine to medium Sand, well sorted, trace subrounded gravel, damp	SW
8' -12'	3	MC	24	0.0	0 -24" Tan to light Brown medium to fine Sand, trace fine gravel, well sorted, wet at 10 feet	SW

Sample Types:
MC=Macro Core

NOTES:
Samples collected at 0-2', 2-4', 4-6' (on hold). No odors and no staining.

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-38 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Kevin H Drill Rig: Truck Mounted Geoprobe Date Started: 10/5/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 10/5/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	42	0.0	0" - 4" Asphalt	SP GP	
				0.0	4" - 6" Stones		
				0.0	6" - 32" Brown to Tan medium Sand, some coarse to medium subrounded gravel, damp		
				0.0	32" - 42" Dark Brown Silt, trace fine sand, trace fine to medium gravel, damp		
				0.0			
4' -8'	2	MC	48	0.0	0 - 12" Dark Brown coarse to medium Sand, some fine gravel, poorly sorted, damp	SP	
				0.0	12" - 48" Tan medium Sand, trace coarse sand, trace fine gravel, well sorted, damp	SW	
8' -12'	3	MC	38	0.0	0 - 38" Tan to light Brown medium Sand, trace fine gravel, well sorted, wet at 10 feet	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 2-4', 4-6' (on hold). No odors and no staining.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-39 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Kevin H Drill Rig: Truck Mounted Geoprobe Date Started: 10/5/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 10/5/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	48	0.0	0" - 4" Asphalt and stones 4" - 18" Brown medium to coarse Sand, some gravel, damp 18" - 36" Brown to Dark Brown to light Black Silt, trace fine gravel, trace organics, compacted, moist, Fill 36" - 48" Tan coarse Sand and fine medium gravel, Poorly sorted, damp	SP SM SP	
4' -8'	2	MC	42	5	0 - 42" Tan medium to coarse Sand, some to little fine gravel, well sorted, damp	SW	
8' -12'	3	MC	30	2	0 - 30" Tan medium to fine Sand, trace fine gravel, Well sorted, wet at 10 feet	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 2-4', 4-6' (on hold). No odors and no staining.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-39 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Kevin H Drill Rig: Truck Mounted Geoprobe Date Started: 10/5/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 10/5/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	48	0.0	0" - 4" Asphalt and stones 4" - 18" Brown medium to coarse Sand, some gravel, damp 18" - 36" Brown to Dark Brown to light Black Silt, trace fine gravel, trace organics, compacted, moist, Fill 36" - 48" Tan coarse Sand and fine medium gravel, Poorly sorted, damp	SP SM SP	
4' -8'	2	MC	42	5	0 - 42" Tan medium to coarse Sand, some to little fine gravel, well sorted, damp	SW	
8' -12'	3	MC	30	2	0 - 30" Tan medium to fine Sand, trace fine gravel, Well sorted, wet at 10 feet	SW	
Sample Types: MC=Macro Core					NOTES: Samples collected at 0-2', 2-4', 4-6' (on hold). No odors and no staining.		

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-40 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V Drill Rig: Truck Mounted Geoprobe Date Started: 10/5/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 10/5/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS	
	No.	Type	Rec. (inches)				
0-4'	1	MC	40	0.0	0"- 6" Concrete		
				0.0	6" – 8" Black Sand and crushed asphalt	SP	
					8" – 15" Dark Brown fine to medium Sand, trace silt, Trace gravel	SP	
				0.0	15" – 30" Dark Gray to light Black Silt, some fine to Medium sand, trace subrounded gravel trace organics	SM	
				0.0	30"– 38" Dark Brown fine to medium Sand, some silt	SW	
				0.0	38" – 40" Tan fine Sand, damp	SW	
				0.0	0 –32" Tan to light Brown medium Sand, well sorted Trace subrounded gravel, damp	SW	
4' -8'	2	MC	32	0.0	0 –32" Tan to light Brown medium Sand, well sorted Trace subrounded gravel, damp	SW	
8' -12'	3	MC	24	0.0	0 –24" Tan medium Sand, some fine to medium gravel , well sorted, wet at 11 feet	SW	
Sample Types: MC=Macro Core				NOTES: Samples collected at 0-2', 2-4', 4-6' (on hold). No odors and no staining.			

 Dvirka and Bartilucci CONSULTING ENGINEERS				Project No.: 2786-F Project Name: CPC RCRA Facility Investigation		Boring No.: B-41 Sheet <u>1</u> of <u>1</u> By: K. Robins	
Drilling Contractor: Clear Water Drilling Driller: Dennis V Drill Rig: Truck Mounted Geoprobe Date Started: 10/5/10				Geologist: K. Robins Drilling Method: Geoprobe Drive Hammer Weight: NA Date Completed: 10/5/10		Boring Completion Depth: 12' Ground Surface Elevation: --- Boring Diameter: 2"	
Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description		USCS
	No.	Type	Rec. (inches)				
0-4'	1	MC	48	0.0	0"- 2"	Concrete	
				0.0	2" – 4"	Black Sand and stones	GP
					4" – 16"	Dark Brown medium fine Sand, some gravel, some silt, damp	SM
				0.0	16" – 32"	Dark Gray to Light Black Silt, trace coarse sand , fine to medium gravel, poorly sorted damp, Fill	SP
				0.0	32"– 48"	Dark Brown to Brown medium Sand, trace fine sand, trace silt, trace fine gravel, damp to moist	SP
4' -8'	2	MC	36	0.0	0 –36"	Tan fine to medium Sand, trace fine gravel well sorted, damp	SW
8' -12'	3	MC	36	0.0	0 –36"	Tan fine to medium Sand, well sorted, trace subrounded gravel, trace coarse sand, wet at 11 feet	SW
Sample Types: MC=Macro Core				NOTES: Samples collected at 0-2', 2-4', 4-6' (on hold). No odors and no staining.			



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Project No.: 2786-F
Project Name: CPC RCRA Facility
Investigation

Boring No.: B-42
Sheet 1 **of** 1
By: K. Robins

Drilling Contractor: Clear Water Drilling
Driller: Dennis V
Drill Rig: Truck Mounted Geoprobe
Date Started: 10/5/10

Geologist: K. Robins
Drilling Method: Geoprobe
Drive Hammer Weight: NA
Date Completed: 10/5/10

Boring Completion Depth: 12'
Ground Surface Elevation: ---
Boring Diameter: 2"

Depth (ft.)	Soil Sample			Photo- ionization Detector (ppm)	Sample Description	USCS
	No.	Type	Rec. (inches)			
0-4'	1	MC	36	0.0	0" – 9" Asphalt	
				0.0	9"–11" Black Silt, some stones	GM
					11"– 24" Dark Brown fine silty Sand, some crushed gravel	GM
				0.0		GM
					24"–34" Dark Gray to Black Silt, some fine to medium gravel	
				0.0		ML
					34" – 36" Dark Brown Silt, moist	
4' -8'	2	MC	42	0.0	0 –42" Tan to light Brown fine to medium Sand Trace gravel, well sorted, damp	SW
8' -12'	3	MC	18	0.0	0 – 18" Tan fine to medium Sand, trace fine to medium Gravel, well sorted, wet at 10.5 feet	SW

Sample Types:
MC=Macro Core

NOTES:
Samples collected at 0-2', 2-4', 4-6' (on hold). No odors and no
staining

APPENDIX E

CHEMICAL DATA TABLES

TABLE E-1
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-01 B-1 (0-2) 08/26/10 (ug/kg)	B-01 B-1 (2-4) 08/26/10 (ug/kg)	B-02 B-2 (0-2) 08/26/10 (ug/kg)	B-02 B-2 (2-4) 08/26/10 (ug/kg)	B-03 B-3 (0-2) 08/26/10 (ug/kg)	B-03 B-3 (2-4) 08/26/10 (ug/kg)	B-04 B-4 (0-2) 08/30/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	U	U	U	U	U	U	U	--	--
Chloromethane	U	U	U	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	U	U	U	20	13,000
Bromomethane	U	U	U	U	U	U	U	--	--
Chloroethane	U	U	U	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	U	U	U	330	500,000
Acetone	4.7 J	7.0 J	U	U	24	19	3.4 J	50	500,000
Carbon disulfide	U	U	U	U	U	U	U	--	--
Methylene chloride	U	U	U	U	U	U	U	50	500,000
trans-1,2-Dichloroethene	U	U	U	U	U	U	U	190	500,000
Methyltert-butylether	U	U	U	U	U	U	UJ	930	500,000
1,1-Dichloroethane	U	U	U	U	U	U	U	270	240,000
cis-1,2-Dichloroethene	U	U	U	U	U	U	U	250	500,000
2-Butanone (MEK)	U	U	U	U	U	U	U	120	500,000
Chloroform	U	U	U	U	U	U	U	370	350,000
1,1,1-Trichloroethane	U	U	U	U	U	U	3.3 J	680	500,000
Carbon tetrachloride	U	U	U	U	U	U	U	760	22,000
Benzene	U	U	U	U	U	U	U	60	44,000
1,2-Dichloroethane	U	U	U	U	U	U	U	20	30,000
Trichloroethene	UJ	UJ	4.4 J	2.7 J	UJ	1.3 J	18 J	470	200,000
1,2-Dichloropropane	U	U	U	U	U	U	U	--	--
Bromodichloromethane	U	U	U	U	U	U	U	--	--
cis-1,3-Dichloropropene	U	U	U	U	U	U	UJ	--	--
4-Methyl-2-pentanone	U	2.5 J	U	U	U	U	U	--	--
Toluene	U	U	U	U	U	U	5.5 J	700	500,000
trans-1,3-Dichloropropene	U	U	U	U	U	U	UJ	--	--
1,1,2-Trichloroethane	U	U	U	U	U	U	U	--	--
Tetrachloroethene	U	U	U	U	U	U	9.9	1,300	150,000
2-Hexanone	U	U	U	U	U	U	U	--	--
Dibromochloromethane	U	U	U	U	U	U	UJ	--	--
Ethylene dibromide (EDB)	U	U	U	U	U	U	UJ	--	--
Chlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,100	500,000
Ethylbenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,000	390,000
Total Xylene	UJ	UJ	UJ	UJ	UJ	UJ	2.5 J	260	500,000
Styrene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Bromoform	U	U	U	U	U	U	UJ	--	--
Isopropylbenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	UJ	--	--
1,3-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	2,400	280,000
1,4-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,800	130,000
1,2-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,100	500,000
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	UJ	--	--
1,2,4-Trichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
1,2,3-Trichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Total VOCs	4.7	9.5	4.4	2.7	24	20.3	42.6	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected in associated blank
D: Detected at secondary dilution
E: Exceeded calibration range

Notes:

ug/kg: Micrograms per kilograms
--: Not Established

Exceeds Unrestricted Use SCO

TABLE E-1
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-04 B-4 (2-4) 08/30/10 (ug/kg)	B-05 B-5 (0-2) 08/30/10 (ug/kg)	B-05 B-5 (2-4) 08/30/10 (ug/kg)	B-06 B-6 (0-2) 08/30/10 (ug/kg)	B-06 B-6 (2-4) 08/30/10 (ug/kg)	B-07 B-7 (0-2) 08/30/10 (ug/kg)	B-07 B-7 (2-4) 08/30/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	U	U	U	U	U	U	U	--	--
Chloromethane	U	U	U	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	U	U	U	20	13,000
Bromomethane	U	U	U	U	U	U	U	--	--
Chloroethane	U	U	U	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	U	U	U	330	500,000
Acetone	U	3.3 J	2.8 J	U	U	U	U	50	500,000
Carbon disulfide	U	U	U	U	U	U	U	--	--
Methylene chloride	U	U	U	U	U	U	U	50	500,000
trans-1,2-Dichloroethene	U	U	U	U	U	U	U	190	500,000
Methyltert-butylether	UJ	UJ	UJ	UJ	UJ	UJ	UJ	930	500,000
1,1-Dichloroethane	U	U	U	U	U	U	U	270	240,000
cis-1,2-Dichloroethene	1.1 J	6	1.7 J	2.6 J	6.2	U	U	250	500,000
2-Butanone (MEK)	U	U	U	U	U	U	U	120	500,000
Chloroform	U	U	U	U	U	U	U	370	350,000
1,1,1-Trichloroethane	1.4 J	1.1 J	U	U	U	U	U	680	500,000
Carbon tetrachloride	U	U	U	U	U	U	U	760	22,000
Benzene	U	U	U	U	U	U	U	60	44,000
1,2-Dichloroethane	U	U	U	U	U	U	U	20	30,000
Trichloroethene	7.2 J	86 J	23 J	75 J	110 J	13 J	2.4 J	470	200,000
1,2-Dichloropropane	U	U	U	U	U	U	U	--	--
Bromodichloromethane	U	U	U	U	U	U	U	--	--
cis-1,3-Dichloropropene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
4-Methyl-2-pentanone	1.3 J	1.2 J	U	U	U	U	U	--	--
Toluene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	700	500,000
trans-1,3-Dichloropropene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
1,1,2-Trichloroethane	U	U	U	U	U	U	U	--	--
Tetrachloroethene	2.2 J	14	4.3 J	14	15	9.1	1.4 J	1,300	150,000
2-Hexanone	U	U	U	U	U	U	U	--	--
Dibromochloromethane	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Ethylene dibromide (EDB)	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Chlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,100	500,000
Ethylbenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,000	390,000
Total Xylene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	260	500,000
Styrene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Bromoform	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Isopropylbenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
1,1,2,2-Tetrachloroethane	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
1,3-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	2,400	280,000
1,4-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,800	130,000
1,2-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,100	500,000
1,2-Dibromo-3-chloropropane	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
1,2,4-Trichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
1,2,3-Trichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Total VOCs	13.2	111.6	31.8	91.6	131.2	22.1	3.8	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected in associated blank
D: Detected at secondary dilution
E: Exceeded calibration range

Notes:

ug/kg: Micrograms per kilograms
--: Not Established

 Exceeds Unrestricted Use SCO

TABLE E-1
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-08 B-8 (0-2) 08/27/10 (ug/kg)	B-08 B-8 (2-4) 08/27/10 (ug/kg)	B-09 B-9 (0-2) 08/26/10 (ug/kg)	B-09 B-9 (2-4) 08/26/10 (ug/kg)	B-09 B-9 (4-6) 08/26/10 (ug/kg)	B-10 B-10 (0-2) 08/30/10 (ug/kg)	B-10 B-10 (2-4) 08/30/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	UJ	UJ	U	U	U	U	U	--	--
Chloromethane	U	U	U	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	U	U	U	20	13,000
Bromomethane	U	U	U	U	U	U	U	--	--
Chloroethane	U	U	U	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	U	U	U	330	500,000
Acetone	U	4.5 J	16 B	49 B	U	5.4 J	7	50	500,000
Carbon disulfide	U	U	U	U	U	U	U	--	--
Methylene chloride	6.1 J	U	U	U	U	U	U	50	500,000
trans-1,2-Dichloroethene	U	U	U	8.4	U	U	U	190	500,000
Methyltert-butylether	U	U	U	U	U	UJ	UJ	930	500,000
1,1-Dichloroethane	U	U	U	U	U	U	U	270	240,000
cis-1,2-Dichloroethene	U	U	15	2100 D	U	18	36	250	500,000
2-Butanone (MEK)	U	U	U	U	U	U	U	120	500,000
Chloroform	2.7 J	U	U	U	U	U	U	370	350,000
1,1,1-Trichloroethane	U	U	U	U	U	U	U	680	500,000
Carbon tetrachloride	U	U	U	U	U	U	U	760	22,000
Benzene	U	U	U	U	U	U	U	60	44,000
1,2-Dichloroethane	U	U	U	U	U	U	U	20	30,000
Trichloroethene	U	U	3.7 J	1.0 J	U	19 J	1900 DJ	470	200,000
1,2-Dichloropropane	U	U	U	U	U	U	U	--	--
Bromodichloromethane	U	U	U	U	U	U	U	--	--
cis-1,3-Dichloropropene	U	U	U	U	U	UJ	UJ	--	--
4-Methyl-2-pentanone	U	1.1 J	U	U	U	1.7 J	2.1 J	--	--
Toluene	U	U	U	U	U	1.3 J	UJ	700	500,000
trans-1,3-Dichloropropene	U	U	U	U	U	UJ	UJ	--	--
1,1,2-Trichloroethane	U	U	U	U	U	U	U	--	--
Tetrachloroethene	2.0 J	1.4 J	U	U	U	32	72	1,300	150,000
2-Hexanone	U	U	U	U	U	U	U	--	--
Dibromochloromethane	U	U	U	U	U	UJ	UJ	--	--
Ethylene dibromide (EDB)	U	U	U	U	U	UJ	UJ	--	--
Chlorobenzene	U	U	UJ	UJ	U	UJ	UJ	1,100	500,000
Ethylbenzene	U	U	UJ	UJ	U	16000 DJ	45 J	1,000	390,000
Total Xylene	UJ	1.2 J	UJ	UJ	1.3 J	91000 DJ	220 J	260	500,000
Styrene	UJ	UJ	UJ	UJ	U	UJ	UJ	--	--
Bromoform	U	U	U	U	U	UJ	UJ	--	--
Isopropylbenzene	U	U	UJ	UJ	U	4.8 J	UJ	--	--
1,1,2,2-Tetrachloroethane	U	U	U	U	U	UJ	UJ	--	--
1,3-Dichlorobenzene	UJ	UJ	UJ	UJ	U	UJ	UJ	2,400	280,000
1,4-Dichlorobenzene	UJ	UJ	UJ	UJ	U	7.7 J	4.4 J	1,800	130,000
1,2-Dichlorobenzene	UJ	UJ	UJ	UJ	U	46000 DJ	1400 DJ	1,100	500,000
1,2-Dibromo-3-chloropropane	U	U	U	U	U	UJ	UJ	--	--
1,2,4-Trichlorobenzene	UJ	UJ	UJ	UJ	U	UJ	UJ	--	--
1,2,3-Trichlorobenzene	UJ	UJ	UJ	UJ	U	UJ	UJ	--	--
Total VOCs	10.8	8.2	34.7	2,158.4	1.3	153,089.9	3,686.5	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected in associated blank
D: Detected at secondary dilutor
E: Exceeded calibration range

Notes:

ug/kg: Micrograms per kilograms
--: Not Established

 Exceeds Unrestricted Use SCO

TABLE E-1
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-10 B-10 (4-6) 08/30/10 (ug/kg)	B-11 B-11 (0-2) 08/30/10 (ug/kg)	B-11 B-11 (2-4) 08/30/10 (ug/kg)	B-11 B-11 (4-6) 08/30/10 (ug/kg)	B-12 B-12 (0-2) 08/27/10 (ug/kg)	B-12 B-12 (2-4) 08/27/10 (ug/kg)	B-13 B-13 (0-2) 08/26/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	U	U	U	U	UJ	UJ	U	--	--
Chloromethane	U	U	U	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	U	U	U	20	13,000
Bromomethane	U	U	U	U	U	U	U	--	--
Chloroethane	U	U	U	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	U	U	U	330	500,000
Acetone	U	U	10	U	U	U	12 B	50	500,000
Carbon disulfide	U	U	U	U	U	U	U	--	--
Methylene chloride	U	U	U	U	1.7 J	2.2 J	U	50	500,000
trans-1,2-Dichloroethene	U	U	3.9 J	U	U	U	U	190	500,000
Methyltert-butylether	U	UJ	UJ	U	U	U	U	930	500,000
1,1-Dichloroethane	U	U	1.1 J	U	U	U	U	270	240,000
cis-1,2-Dichloroethene	2.1 J	U	140	U	U	3.7 J	U	250	500,000
2-Butanone (MEK)	U	U	U	U	U	U	U	120	500,000
Chloroform	U	U	U	U	1.9 J	U	U	370	350,000
1,1,1-Trichloroethane	U	U	2.3 J	U	U	U	U	680	500,000
Carbon tetrachloride	U	U	U	U	U	U	U	760	22,000
Benzene	U	U	U	U	U	U	U	60	44,000
1,2-Dichloroethane	U	U	U	U	U	U	U	20	30,000
Trichloroethene	U	1.8 J	12000 DJ	U	2.2 J	54	1.3 J	470	200,000
1,2-Dichloropropane	U	U	U	U	U	U	U	--	--
Bromodichloromethane	U	U	U	U	U	U	U	--	--
cis-1,3-Dichloropropene	U	UJ	UJ	U	U	U	U	--	--
4-Methyl-2-pentanone	U	U	U	U	U	U	U	--	--
Toluene	U	UJ	UJ	U	U	U	U	700	500,000
trans-1,3-Dichloropropene	U	UJ	UJ	U	U	U	U	--	--
1,1,2-Trichloroethane	U	U	1.6 J	U	U	U	U	--	--
Tetrachloroethene	U	U	93	U	1.1 J	19	U	1,300	150,000
2-Hexanone	U	U	U	U	U	U	U	--	--
Dibromochloromethane	U	UJ	UJ	U	U	U	U	--	--
Ethylene dibromide (EDB)	U	UJ	UJ	U	U	U	U	--	--
Chlorobenzene	U	UJ	UJ	U	U	U	UJ	1,100	500,000
Ethylbenzene	U	UJ	2.8 J	U	U	U	UJ	1,000	390,000
Total Xylene	2.0 J	1.3 J	14 J	1.4 J	UJ	UJ	UJ	260	500,000
Styrene	U	UJ	UJ	U	UJ	UJ	UJ	--	--
Bromoform	U	UJ	UJ	U	U	U	U	--	--
Isopropylbenzene	U	UJ	UJ	U	U	U	UJ	--	--
1,1,2,2-Tetrachloroethane	U	UJ	UJ	U	U	U	U	--	--
1,3-Dichlorobenzene	U	UJ	UJ	U	UJ	UJ	UJ	2,400	280,000
1,4-Dichlorobenzene	U	UJ	UJ	U	UJ	UJ	UJ	1,800	130,000
1,2-Dichlorobenzene	U	UJ	1.4 J	U	UJ	UJ	UJ	1,100	500,000
1,2-Dibromo-3-chloropropane	U	UJ	UJ	U	U	U	U	--	--
1,2,4-Trichlorobenzene	U	UJ	UJ	U	UJ	UJ	UJ	--	--
1,2,3-Trichlorobenzene	U	UJ	UJ	U	UJ	UJ	UJ	--	--
Total VOCs	4.1	3.1	12,270.1	1.4	6.9	78.9	13.3	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected in associated blank
D: Detected at secondary dilutor
E: Exceeded calibration range

Notes:

ug/kg: Micrograms per kilograms
--: Not Established

12000 DJ Exceeds Unrestricted Use SCO

TABLE E-1
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-13 B-13 (2-4) 08/26/10 (ug/kg)	B-14 B-14 (0-2) 08/27/10 (ug/kg)	B-14 B-14 (2-4) 08/27/10 (ug/kg)	B-15 B-15 (0-2) 08/27/10 (ug/kg)	B-15 B-15 (2-4) 08/27/10 (ug/kg)	B-16 B-16 (0-2) 08/27/10 (ug/kg)	B-16 B-16 (2-4) 08/27/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	U	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Chloromethane	U	U	U	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	U	U	U	20	13,000
Bromomethane	U	U	U	U	U	U	U	--	--
Chloroethane	U	U	U	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	U	U	U	330	500,000
Acetone	19 B	U	8.9	U	U	U	25 B	50	500,000
Carbon disulfide	U	U	U	U	U	U	U	--	--
Methylene chloride	U	1.6 J	1.7 J	2.1 J	6.3 J	1.2 J U	11	50	500,000
trans-1,2-Dichloroethene	U	U	U	U	8.7	U	U	190	500,000
Methyltert-butylether	U	U	U	U	U	U	U	930	500,000
1,1-Dichloroethane	U	U	U	U	U	U	U	270	240,000
cis-1,2-Dichloroethene	1.6 J	U	U	2.2 J	75	U	U	250	500,000
2-Butanone (MEK)	U	U	U	U	8	U	U	120	500,000
Chloroform	U	U	U	1.8 J	2.4 J	1.2 J	2.1 J	370	350,000
1,1,1-Trichloroethane	U	U	U	U	U	U	U	680	500,000
Carbon tetrachloride	U	U	U	U	U	U	U	760	22,000
Benzene	U	U	U	U	U	U	U	60	44,000
1,2-Dichloroethane	U	U	U	U	U	U	U	20	30,000
Trichloroethene	15 J	U	U	7.2	47	U	1.9 J	470	200,000
1,2-Dichloropropane	U	U	U	U	U	U	U	--	--
Bromodichloromethane	U	U	U	U	U	U	U	--	--
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	--	--
4-Methyl-2-pentanone	U	U	1.8 J	U	U	U	U	--	--
Toluene	U	U	U	U	U	U	U	700	500,000
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	--	--
1,1,2-Trichloroethane	U	U	U	U	U	U	U	--	--
Tetrachloroethene	U	U	U	3.6 J	30	0.98 J	3.6 J	1,300	150,000
2-Hexanone	U	U	U	U	U	U	U	--	--
Dibromochloromethane	U	U	U	U	U	U	U	--	--
Ethylene dibromide (EDB)	U	U	U	U	U	U	U	--	--
Chlorobenzene	UJ	U	U	U	U	U	U	1,100	500,000
Ethylbenzene	UJ	U	U	U	U	U	U	1,000	390,000
Total Xylene	UJ	1.2 J	1.2 J	UJ	UJ	UJ	UJ	260	500,000
Styrene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Bromoform	U	U	U	U	U	U	U	--	--
Isopropylbenzene	UJ	U	U	U	U	U	U	--	--
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	U	--	--
1,3-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	2,400	280,000
1,4-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,800	130,000
1,2-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,100	500,000
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	U	--	--
1,2,4-Trichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
1,2,3-Trichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Total VOCs	35.6	2.8	13.6	16.9	177.4	2.18	43.6	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected in associated blank
D: Detected at secondary dilution
E: Exceeded calibration range

Notes:

ug/kg: Micrograms per kilograms
--: Not Established

Exceeds Unrestricted Use SCO

TABLE E-1
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-17 B-17 (0-2) 08/27/10 (ug/kg)	B-17 B-17 (2-4) 08/27/10 (ug/kg)	B-18 B-18 (0-2) 08/26/10 (ug/kg)	B-18 B-18 (2-4) 08/26/10 (ug/kg)	B-19 B-19 (0-2) 08/30/10 (ug/kg)	B-19 B-19 (2-4) 08/30/10 (ug/kg)	B-19 B-19 (4-6) 08/30/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	UJ	UJ	U	U	UJ	U	U	--	--
Chloromethane	U	U	U	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	U	U	U	20	13,000
Bromomethane	U	U	U	U	U	U	U	--	--
Chloroethane	U	U	U	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	U	U	U	330	500,000
Acetone	U	15 B	12 B	60 B	U	34	U	50	500,000
Carbon disulfide	U	U	U	U	U	U	U	--	--
Methylene chloride	2.8 J	5.4 J	U	U	1.6 J	1.3 J	U	50	500,000
trans-1,2-Dichloroethene	U	U	U	U	U	5.7	U	190	500,000
Methyltert-butylether	U	U	U	U	UJ	UJ	U	930	500,000
1,1-Dichloroethane	U	U	U	U	1.1 J	5.9	U	270	240,000
cis-1,2-Dichloroethene	U	U	1.0 J	U	130	600 EJ	U	250	500,000
2-Butanone (MEK)	U	U	U	8.3	13	57	U	120	500,000
Chloroform	U	U	U	U	U	U	U	370	350,000
1,1,1-Trichloroethane	U	U	U	U	37	25	U	680	500,000
Carbon tetrachloride	U	U	U	U	U	U	U	760	22,000
Benzene	U	U	U	U	U	U	U	60	44,000
1,2-Dichloroethane	U	U	U	U	U	U	U	20	30,000
Trichloroethene	U	U	UJ	1.3 J	2500 DJ	39 J	U	470	200,000
1,2-Dichloropropane	U	U	U	U	U	U	U	--	--
Bromodichloromethane	U	U	U	U	U	U	U	--	--
cis-1,3-Dichloropropene	U	U	U	U	UJ	UJ	U	--	--
4-Methyl-2-pentanone	U	U	U	U	U	4.4	U	--	--
Toluene	U	U	U	U	24 J	5500 DJ	U	700	500,000
trans-1,3-Dichloropropene	U	U	U	U	UJ	UJ	U	--	--
1,1,2-Trichloroethane	U	U	U	U	U	U	U	--	--
Tetrachloroethene	U	1.1 J	U	U	14000 D	90	U	1,300	150,000
2-Hexanone	U	U	U	U	U	U	U	--	--
Dibromochloromethane	U	U	U	U	UJ	UJ	U	--	--
Ethylene dibromide (EDB)	U	U	U	U	UJ	UJ	U	--	--
Chlorobenzene	U	U	UJ	UJ	UJ	18 J	U	1,100	500,000
Ethylbenzene	U	U	UJ	UJ	54 J	10000 DJ	U	1,000	390,000
Total Xylene	UJ	UJ	UJ	UJ	220 J	37000 DJ	1.8 J	260	500,000
Styrene	UJ	UJ	UJ	UJ	UJ	UJ	U	--	--
Bromoform	U	U	U	U	UJ	UJ	U	--	--
Isopropylbenzene	U	U	UJ	UJ	2.1 J	18 J	U	--	--
1,1,2,2-Tetrachloroethane	U	U	U	U	UJ	UJ	U	--	--
1,3-Dichlorobenzene	UJ	UJ	UJ	UJ	76 J	36 J	U	2,400	280,000
1,4-Dichlorobenzene	UJ	UJ	UJ	UJ	41 J	150 J	U	1,800	130,000
1,2-Dichlorobenzene	UJ	UJ	UJ	UJ	10000 DJ	23000 DJ	U	1,100	500,000
1,2-Dibromo-3-chloropropane	U	U	U	U	UJ	UJ	U	--	--
1,2,4-Trichlorobenzene	UJ	UJ	UJ	UJ	9.9 J	1.5 J	U	--	--
1,2,3-Trichlorobenzene	UJ	UJ	UJ	UJ	1.8 J	UJ	U	--	--
Total VOCs	2.8	21.5	13	69.6	27,111.5	76,585.8	1.8	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected in associated blank
D: Detected at secondary dilution
E: Exceeded calibration range

Notes:

ug/kg: Micrograms per kilograms
--: Not Established
 Exceeds Unrestricted Use SCO

TABLE E-1
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-19 B-19 (8-10) 08/30/10 (ug/kg)	B-20 B-20 (0-2) 08/27/10 (ug/kg)	B-20 B-20 (4-6) 08/27/10 (ug/kg)	B-21 B-21 (0-2) 08/30/10 (ug/kg)	B-21 B-21 (4-6) 08/30/10 (ug/kg)	B-22 B-22 (0-2) 08/27/10 (ug/kg)	B-22 B-22 (2-4) 08/27/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	U	UJ	U	U	U	UJ	UJ	--	--
Chloromethane	U	U	U	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	U	U	U	20	13,000
Bromomethane	U	U	U	U	U	U	U	--	--
Chloroethane	U	U	U	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	U	U	U	330	500,000
Acetone	U	10	5.7 J	U	U	U	6.3	50	500,000
Carbon disulfide	U	U	U	U	U	U	U	--	--
Methylene chloride	U	2.3 J	U	U	U	2.3 J	U	50	500,000
trans-1,2-Dichloroethene	U	U	U	U	U	U	U	190	500,000
Methyltert-butylether	U	U	U	UJ	UJ	U	U	930	500,000
1,1-Dichloroethane	U	U	U	U	U	U	U	270	240,000
cis-1,2-Dichloroethene	U	5	U	3.7 J	U	U	U	250	500,000
2-Butanone (MEK)	U	U	U	U	U	U	U	120	500,000
Chloroform	U	U	U	U	U	U	U	370	350,000
1,1,1-Trichloroethane	U	U	U	U	U	U	U	680	500,000
Carbon tetrachloride	U	U	U	U	U	U	U	760	22,000
Benzene	U	U	U	U	U	U	U	60	44,000
1,2-Dichloroethane	U	U	U	U	U	U	U	20	30,000
Trichloroethene	U	6.8	U	24 J	UJ	U	U	470	200,000
1,2-Dichloropropane	U	U	U	U	U	U	U	--	--
Bromodichloromethane	U	U	U	U	U	U	U	--	--
cis-1,3-Dichloropropene	U	U	U	UJ	UJ	U	U	--	--
4-Methyl-2-pentanone	U	1.1 J	U	U	U	2.2 J	U	--	--
Toluene	U	U	U	UJ	UJ	U	U	700	500,000
trans-1,3-Dichloropropene	U	U	U	UJ	UJ	U	U	--	--
1,1,2-Trichloroethane	U	U	U	U	U	U	U	--	--
Tetrachloroethene	U	4.6	U	37	U	U	U	1,300	150,000
2-Hexanone	U	U	U	U	U	U	U	--	--
Dibromochloromethane	U	U	U	UJ	UJ	U	U	--	--
Ethylene dibromide (EDB)	U	U	U	UJ	UJ	U	U	--	--
Chlorobenzene	U	U	U	UJ	UJ	U	U	1,100	500,000
Ethylbenzene	U	U	U	UJ	UJ	U	U	1,000	390,000
Total Xylene	2.2 J	UJ	UJ	1.5 J	UJ	UJ	UJ	260	500,000
Styrene	U	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Bromoform	U	U	U	UJ	UJ	U	U	--	--
Isopropylbenzene	U	U	U	UJ	UJ	U	U	--	--
1,1,1,2-Tetrachloroethane	U	U	U	UJ	UJ	U	U	--	--
1,3-Dichlorobenzene	U	UJ	UJ	UJ	UJ	UJ	UJ	2,400	280,000
1,4-Dichlorobenzene	U	UJ	UJ	UJ	UJ	UJ	UJ	1,800	130,000
1,2-Dichlorobenzene	U	UJ	UJ	UJ	UJ	UJ	UJ	1,100	500,000
1,2-Dibromo-3-chloropropane	U	U	U	UJ	UJ	U	U	--	--
1,2,4-Trichlorobenzene	U	UJ	UJ	UJ	UJ	UJ	UJ	--	--
1,2,3-Trichlorobenzene	U	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Total VOCs	2.2	29.8	5.7	66.2	0	4.5	6.3	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected in associated blank
D: Detected at secondary dilutor
E: Exceeded calibration range

Notes:

ug/kg: Micrograms per kilograms
--: Not Established

 Exceeds Unrestricted Use SCO

TABLE E-1
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-23 B-23 (0-2) 08/27/10 (ug/kg)	B-23 B-23 (4-6) 08/27/10 (ug/kg)	B-24 B-24 (0-2) 08/27/10 (ug/kg)	B-24 B-24 (5-7) 08/27/10 (ug/kg)	B-25 B-25 (0-2) 08/25/10 (ug/kg)	B-25 B-25 (8-10) 08/25/10 (ug/kg)	B-26 B-26 (0-2) 08/26/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	UJ	UJ	UJ	UJ	UJ	UJ	U	--	--
Chloromethane	U	U	U	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	U	U	U	20	13,000
Bromomethane	U	U	U	U	U	U	U	--	--
Chloroethane	U	U	U	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	U	U	U	330	500,000
Acetone	5.0 J	10	U	U	U	U	U	50	500,000
Carbon disulfide	U	U	U	U	U	U	U	--	--
Methylene chloride	U	U	3.5 J	U	U	U	U	50	500,000
trans-1,2-Dichloroethene	U	U	U	U	U	U	U	190	500,000
Methyltert-butylether	U	U	U	U	U	U	U	930	500,000
1,1-Dichloroethane	U	U	U	U	U	U	U	270	240,000
cis-1,2-Dichloroethene	U	U	U	U	U	U	U	250	500,000
2-Butanone (MEK)	U	U	U	U	U	U	U	120	500,000
Chloroform	U	U	U	U	U	U	U	370	350,000
1,1,1-Trichloroethane	U	U	U	U	U	U	U	680	500,000
Carbon tetrachloride	U	U	U	U	U	U	U	760	22,000
Benzene	U	U	U	U	U	U	U	60	44,000
1,2-Dichloroethane	U	U	U	U	U	U	U	20	30,000
Trichloroethene	U	U	U	U	2.4 J	U	9.8 J	470	200,000
1,2-Dichloropropane	U	U	U	U	U	U	U	--	--
Bromodichloromethane	U	U	U	U	U	U	U	--	--
cis-1,3-Dichloropropene	U	U	U	U	UJ	UJ	U	--	--
4-Methyl-2-pentanone	U	U	U	U	U	U	U	--	--
Toluene	U	U	U	U	U	U	U	700	500,000
trans-1,3-Dichloropropene	U	U	U	U	UJ	UJ	U	--	--
1,1,2-Trichloroethane	U	U	U	U	U	U	U	--	--
Tetrachloroethene	U	U	U	U	U	U	2.5 J	1,300	150,000
2-Hexanone	U	U	U	U	U	U	U	--	--
Dibromochloromethane	U	U	U	U	UJ	UJ	U	--	--
Ethylene dibromide (EDB)	U	U	U	U	UJ	UJ	U	--	--
Chlorobenzene	U	U	U	U	UJ	UJ	UJ	1,100	500,000
Ethylbenzene	U	U	U	U	UJ	UJ	UJ	1,000	390,000
Total Xylene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	260	500,000
Styrene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Bromoform	U	U	U	U	UJ	UJ	U	--	--
Isopropylbenzene	U	U	U	U	U	U	UJ	--	--
1,1,2,2-Tetrachloroethane	U	U	U	U	UJ	UJ	U	--	--
1,3-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	2,400	280,000
1,4-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,800	130,000
1,2-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,100	500,000
1,2-Dibromo-3-chloropropane	U	U	U	U	UJ	UJ	U	--	--
1,2,4-Trichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
1,2,3-Trichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Total VOCs	5	10	3.5	0	2.4	0	12.3	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected in associated blank
D: Detected at secondary dilutor
E: Exceeded calibration range

Notes:

ug/kg: Micrograms per kilograms
--: Not Established
 Exceeds Unrestricted Use SCO

TABLE E-1
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-26 B-26 (4-6) 08/26/10 (ug/kg)	B-27 B-27 (0-2) 08/26/10 (ug/kg)	B-27 B-27 (4-6) 08/26/10 (ug/kg)	B-27 B-27 (6-8) 08/26/10 (ug/kg)	B-28 B-28 (0-2) 08/26/10 (ug/kg)	B-28 B-28 (4-6) 08/26/10 (ug/kg)	B-29 B-29 (0-2) 08/25/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	U	U	U	U	U	U	UJ	--	--
Chloromethane	U	U	U	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	U	U	U	20	13,000
Bromomethane	U	U	U	U	U	U	U	--	--
Chloroethane	U	U	U	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	U	U	U	330	500,000
Acetone	U	13	54	U	15	5.0 J	5.1 J	50	500,000
Carbon disulfide	U	U	U	U	U	U	U	--	--
Methylene chloride	1.5 J	U	U	U	U	U	U	50	500,000
trans-1,2-Dichloroethene	U	U	U	U	U	U	U	190	500,000
Methyltert-butylether	U	U	U	U	U	U	U	930	500,000
1,1-Dichloroethane	U	U	U	U	U	U	U	270	240,000
cis-1,2-Dichloroethene	U	U	U	U	U	U	U	250	500,000
2-Butanone (MEK)	U	U	14	U	U	U	U	120	500,000
Chloroform	U	U	U	U	U	U	U	370	350,000
1,1,1-Trichloroethane	U	U	U	U	U	U	U	680	500,000
Carbon tetrachloride	U	U	U	U	U	U	U	760	22,000
Benzene	U	U	U	U	U	U	U	60	44,000
1,2-Dichloroethane	U	U	U	U	U	U	U	20	30,000
Trichloroethene	UJ	UJ	6.8 J	U	UJ	UJ	U	470	200,000
1,2-Dichloropropane	U	U	U	U	U	U	U	--	--
Bromodichloromethane	U	U	U	U	U	U	U	--	--
cis-1,3-Dichloropropene	U	U	U	U	U	U	UJ	--	--
4-Methyl-2-pentanone	U	U	U	U	U	U	U	--	--
Toluene	U	U	22	U	U	U	U	700	500,000
trans-1,3-Dichloropropene	U	U	U	U	U	U	UJ	--	--
1,1,2-Trichloroethane	U	U	U	U	U	U	U	--	--
Tetrachloroethene	U	U	25	U	U	U	16	1,300	150,000
2-Hexanone	U	U	U	U	U	U	U	--	--
Dibromochloromethane	U	U	U	U	U	U	UJ	--	--
Ethylene dibromide (EDB)	U	U	U	U	U	U	UJ	--	--
Chlorobenzene	UJ	UJ	UJ	U	UJ	UJ	UJ	1,100	500,000
Ethylbenzene	UJ	UJ	68 J	U	UJ	UJ	UJ	1,000	390,000
Total Xylene	UJ	UJ	310 J	1.9 J	UJ	UJ	UJ	260	500,000
Styrene	UJ	UJ	UJ	U	UJ	UJ	UJ	--	--
Bromoform	U	U	U	U	U	U	UJ	--	--
Isopropylbenzene	UJ	UJ	1.4 J	U	UJ	UJ	U	--	--
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	UJ	--	--
1,3-Dichlorobenzene	UJ	UJ	UJ	U	UJ	UJ	UJ	2,400	280,000
1,4-Dichlorobenzene	UJ	UJ	UJ	U	UJ	UJ	UJ	1,800	130,000
1,2-Dichlorobenzene	UJ	UJ	UJ	U	UJ	UJ	UJ	1,100	500,000
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	UJ	--	--
1,2,4-Trichlorobenzene	UJ	UJ	UJ	U	UJ	UJ	UJ	--	--
1,2,3-Trichlorobenzene	UJ	UJ	UJ	U	UJ	UJ	UJ	--	--
Total VOCs	1.5	13	501.2	1.9	15	5	21.1	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected in associated blank
D: Detected at secondary dilution
E: Exceeded calibration range

Notes:

ug/kg: Micrograms per kilograms
--: Not Established

 Exceeds Unrestricted Use SCO

TABLE E-1
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-29 B-29 (4-6) 08/25/10 (ug/kg)	B-30 B-30 (0-2) 08/25/10 (ug/kg)	B-30 B-30 (2-4) 08/25/10 (ug/kg)	B-31 B-31 (0-2) 08/25/10 (ug/kg)	B-31 B-31 (2-4) 08/25/10 (ug/kg)	B-32 B-32 (0-2) 08/25/10 (ug/kg)	B-32 B-32 (4-6) 08/25/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Chloromethane	U	U	U	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	U	U	U	20	13,000
Bromomethane	U	U	U	U	U	U	U	--	--
Chloroethane	U	U	U	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	U	U	U	330	500,000
Acetone	10 J	U	4.4 J	36 J	41 J	3.7 J	12 J	50	500,000
Carbon disulfide	U	U	U	U	U	U	U	--	--
Methylene chloride	U	U	U	U	U	U	U	50	500,000
trans-1,2-Dichloroethene	U	U	U	U	U	U	U	190	500,000
Methyltert-butylether	U	U	U	U	U	U	U	930	500,000
1,1-Dichloroethane	U	U	U	U	U	U	U	270	240,000
cis-1,2-Dichloroethene	U	U	U	U	U	U	U	250	500,000
2-Butanone (MEK)	U	U	U	5.2	8.1	U	1.8 J	120	500,000
Chloroform	U	U	U	U	U	U	U	370	350,000
1,1,1-Trichloroethane	U	U	U	U	U	U	U	680	500,000
Carbon tetrachloride	U	U	U	U	U	U	U	760	22,000
Benzene	U	U	U	U	U	U	U	60	44,000
1,2-Dichloroethane	U	U	U	U	U	U	U	20	30,000
Trichloroethene	U	U	U	U	U	U	U	470	200,000
1,2-Dichloropropane	U	U	U	U	U	U	U	--	--
Bromodichloromethane	U	U	U	U	U	U	U	--	--
cis-1,3-Dichloropropene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
4-Methyl-2-pentanone	U	2.0 J	1.7 J	U	2.7 J	U	U	--	--
Toluene	U	U	U	U	U	U	U	700	500,000
trans-1,3-Dichloropropene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
1,1,2-Trichloroethane	U	U	U	U	U	U	U	--	--
Tetrachloroethene	2.1 J	U	U	U	U	U	U	1,300	150,000
2-Hexanone	U	U	U	U	U	U	U	--	--
Dibromochloromethane	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Ethylene dibromide (EDB)	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Chlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,100	500,000
Ethylbenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,000	390,000
Total Xylene	1.2 J	UJ	UJ	UJ	UJ	UJ	UJ	260	500,000
Styrene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Bromoform	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Isopropylbenzene	U	U	U	U	U	U	U	--	--
1,1,1,2-Tetrachloroethane	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
1,3-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	2,400	280,000
1,4-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,800	130,000
1,2-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	1,100	500,000
1,2-Dibromo-3-chloropropane	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
1,2,4-Trichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
1,2,3-Trichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Total VOCs	13.3	2	6.1	41.2	51.8	3.7	12	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected in associated blank
D: Detected at secondary dilution
E: Exceeded calibration range

Notes:

ug/kg: Micrograms per kilograms
--: Not Established

Exceeds Unrestricted Use SCO

TABLE E-1
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-33 B-33 (0-2) 08/25/10 (ug/kg)	B-33 B-33 (4-6) 08/25/10 (ug/kg)	B-33 B-33 (6-8) 08/25/10 (ug/kg)	B-34 B-34 (0-2) 08/25/10 (ug/kg)	B-34 B-34 (4-6) 08/25/10 (ug/kg)	B-35 B-35 (0-2) 08/25/10 (ug/kg)	B-35 B-35 (4-6) 08/25/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	UJ	UJ	U	UJ	UJ	UJ	UJ	--	--
Chloromethane	U	U	U	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	U	U	U	20	13,000
Bromomethane	U	U	U	U	U	U	U	--	--
Chloroethane	U	U	U	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	U	U	U	330	500,000
Acetone	U	33 J	U	31 J	29 J	U	24 J	50	500,000
Carbon disulfide	U	U	U	U	U	U	U	--	--
Methylene chloride	U	U	U	U	U	U	U	50	500,000
trans-1,2-Dichloroethene	U	U	U	U	U	U	U	190	500,000
Methyltert-butylether	U	U	U	U	U	U	U	930	500,000
1,1-Dichloroethane	U	U	U	U	U	U	U	270	240,000
cis-1,2-Dichloroethene	U	U	U	U	U	U	U	250	500,000
2-Butanone (MEK)	U	U	U	5.3 J	6.3	U	U	120	500,000
Chloroform	U	U	1.2 J	U	U	U	U	370	350,000
1,1,1-Trichloroethane	U	U	U	U	U	U	U	680	500,000
Carbon tetrachloride	U	U	U	U	U	U	U	760	22,000
Benzene	U	U	U	U	U	U	U	60	44,000
1,2-Dichloroethane	U	U	U	U	U	U	U	20	30,000
Trichloroethene	U	U	U	U	U	U	U	470	200,000
1,2-Dichloropropane	U	U	U	U	U	U	U	--	--
Bromodichloromethane	U	U	U	U	U	U	U	--	--
cis-1,3-Dichloropropene	UJ	UJ	U	UJ	UJ	UJ	UJ	--	--
4-Methyl-2-pentanone	U	U	U	U	U	1.2 J	U	--	--
Toluene	U	U	U	U	U	U	U	700	500,000
trans-1,3-Dichloropropene	UJ	UJ	U	UJ	UJ	UJ	UJ	--	--
1,1,2-Trichloroethane	U	U	U	U	U	U	U	--	--
Tetrachloroethene	1.7 J	U	U	U	U	U	U	1,300	150,000
2-Hexanone	U	U	U	U	U	U	U	--	--
Dibromochloromethane	UJ	UJ	U	UJ	UJ	UJ	UJ	--	--
Ethylene dibromide (EDB)	UJ	UJ	U	UJ	UJ	UJ	UJ	--	--
Chlorobenzene	UJ	UJ	U	UJ	UJ	UJ	UJ	1,100	500,000
Ethylbenzene	UJ	UJ	U	UJ	UJ	UJ	UJ	1,000	390,000
Total Xylene	UJ	UJ	U	UJ	UJ	UJ	UJ	260	500,000
Styrene	UJ	UJ	U	UJ	UJ	UJ	UJ	--	--
Bromoform	UJ	UJ	U	UJ	UJ	UJ	UJ	--	--
Isopropylbenzene	U	U	U	U	U	U	U	--	--
1,1,1,2-Tetrachloroethane	UJ	UJ	U	UJ	UJ	UJ	UJ	--	--
1,3-Dichlorobenzene	UJ	UJ	U	UJ	UJ	UJ	UJ	2,400	280,000
1,4-Dichlorobenzene	UJ	UJ	U	UJ	UJ	UJ	UJ	1,800	130,000
1,2-Dichlorobenzene	UJ	UJ	U	UJ	UJ	UJ	UJ	1,100	500,000
1,2-Dibromo-3-chloropropane	UJ	UJ	U	UJ	UJ	UJ	UJ	--	--
1,2,4-Trichlorobenzene	UJ	UJ	U	UJ	UJ	UJ	UJ	--	--
1,2,3-Trichlorobenzene	UJ	UJ	U	UJ	UJ	UJ	UJ	--	--
Total VOCs	1.7	33	1.2	36.3	35.3	1.2	24	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected in associated blank
D: Detected at secondary dilution
E: Exceeded calibration range

Notes:

ug/kg: Micrograms per kilograms
--: Not Established

Exceeds Unrestricted Use SCO

TABLE E-1
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-36 B-36(0-2) 10/05/10 (ug/kg)	B-36 B-36(2-4) 10/05/10 (ug/kg)	B-37 B-37(0-2) 10/05/10 (ug/kg)	B-37 B-37(2-4) 10/05/10 (ug/kg)	B-37 B-37(4-6) 10/05/10 (ug/kg)	B-38 B-38(0-2) 10/05/10 (ug/kg)	B-38 B-38(2-4) 10/05/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	U	U	U	U	U	U	U	--	--
Chloromethane	U	U	U	U	U	U	U	--	--
Vinyl chloride	U	UJ	UJ	UJ	U	UJ	UJ	20	13,000
Bromomethane	U	U	U	U	U	U	U	--	--
Chloroethane	U	U	U	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	U	U	U	330	500,000
Acetone	U	U	6.7	8.2	U	2.6 J	U	50	500,000
Carbon disulfide	U	U	U	U	U	U	U	--	--
Methylene chloride	U	U	U	U	U	U	U	50	500,000
trans-1,2-Dichloroethene	U	U	1.1 J	3.4 J	U	U	U	190	500,000
Methyltert-butylether	UJ	UJ	UJ	UJ	U	UJ	UJ	930	500,000
1,1-Dichloroethane	UJ	UJ	UJ	UJ	U	UJ	UJ	270	240,000
cis-1,2-Dichloroethene	2.2 J	15	31	500 D	U	1.3 J	U	250	500,000
2-Butanone (MEK)	U	U	U	U	U	U	U	120	500,000
Chloroform	UJ	UJ	UJ	UJ	U	UJ	UJ	370	350,000
1,1,1-Trichloroethane	UJ	UJ	UJ	UJ	U	UJ	UJ	680	500,000
Carbon tetrachloride	U	UJ	UJ	UJ	U	UJ	UJ	760	22,000
Benzene	U	U	U	U	U	U	U	60	44,000
1,2-Dichloroethane	UJ	UJ	UJ	UJ	U	UJ	UJ	20	30,000
Trichloroethene	21 J	170 J	1.3 J	120 J	U	2.7 J	3.0 J	470	200,000
1,2-Dichloropropane	U	U	U	U	U	U	U	--	--
Bromodichloromethane	UJ	UJ	UJ	UJ	U	UJ	UJ	--	--
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	--	--
4-Methyl-2-pentanone	U	U	U	U	U	U	U	--	--
Toluene	U	U	U	U	U	U	U	700	500,000
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	--	--
1,1,2-Trichloroethane	U	U	U	U	U	U	U	--	--
Tetrachloroethene	15 J	29 J	UJ	12 J	U	1.1 J	UJ	1,300	150,000
2-Hexanone	U	U	U	U	U	U	U	--	--
Dibromochloromethane	U	U	U	U	U	U	U	--	--
Ethylene dibromide (EDB)	U	U	U	U	U	U	U	--	--
Chlorobenzene	UJ	UJ	UJ	UJ	U	UJ	UJ	1,100	500,000
Ethylbenzene	UJ	UJ	UJ	0.94 J	U	UJ	UJ	1,000	390,000
Total Xylene	UJ	UJ	UJ	UJ	U	UJ	UJ	260	500,000
Styrene	UJ	UJ	UJ	UJ	U	UJ	UJ	--	--
Bromoform	U	U	U	U	U	U	U	--	--
Isopropylbenzene	UJ	UJ	UJ	UJ	U	UJ	UJ	--	--
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	--	--
1,3-Dichlorobenzene	UJ	UJ	UJ	UJ	U	UJ	UJ	2,400	280,000
1,4-Dichlorobenzene	UJ	UJ	UJ	UJ	U	UJ	UJ	1,800	130,000
1,2-Dichlorobenzene	UJ	1.8 J	UJ	UJ	U	UJ	UJ	1,100	500,000
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	U	--	--
1,2,4-Trichlorobenzene	UJ	UJ	UJ	UJ	U	UJ	UJ	--	--
1,2,3-Trichlorobenzene	UJ	UJ	UJ	UJ	U	UJ	UJ	--	--
Total VOCs	38.2	215.8	40.1	644.54	0	7.7	3	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected in associated blank
D: Detected at secondary dilution
E: Exceeded calibration range

Notes:

ug/kg: Micrograms per kilograms
--: Not Established

500 D Exceeds Unrestricted Use SCO

TABLE E-1
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-39 B-39(0-2) 10/05/10 (ug/kg)	B-39 B-39(2-4) 10/05/10 (ug/kg)	B-40 B-40(0-2) 10/05/10 (ug/kg)	B-40 B-40(2-4) 10/05/10 (ug/kg)	B-41 B-41(0-2) 10/05/10 (ug/kg)	B-41 B-41(2-4) 10/05/10 (ug/kg)	B-41 B-41(4-6) 10/05/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	U	U	U	U	U	U	U	--	--
Chloromethane	U	U	U	U	U	U	U	--	--
Vinyl chloride	UJ	UJ	UJ	U	U	U	U	20	13,000
Bromomethane	U	U	U	U	U	U	U	--	--
Chloroethane	U	U	U	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	U	U	U	330	500,000
Acetone	U	4.5 J	2.7 J	32	U	36	U	50	500,000
Carbon disulfide	U	U	U	U	U	U	U	--	--
Methylene chloride	U	U	U	U	U	U	U	50	500,000
trans-1,2-Dichloroethene	U	U	U	U	U	11	U	190	500,000
Methyltert-butylether	UJ	UJ	UJ	UJ	UJ	UJ	U	930	500,000
1,1-Dichloroethane	UJ	UJ	UJ	UJ	UJ	UJ	U	270	240,000
cis-1,2-Dichloroethene	U	13	4.0 J	41	12	3400 D	U	250	500,000
2-Butanone (MEK)	U	U	U	U	U	U	U	120	500,000
Chloroform	UJ	UJ	UJ	UJ	UJ	UJ	U	370	350,000
1,1,1-Trichloroethane	UJ	UJ	UJ	UJ	UJ	UJ	U	680	500,000
Carbon tetrachloride	UJ	UJ	UJ	U	U	U	U	760	22,000
Benzene	U	U	U	U	U	U	U	60	44,000
1,2-Dichloroethane	UJ	UJ	UJ	UJ	UJ	UJ	U	20	30,000
Trichloroethene	2.6 J	160 J	8.8 J	1.9 J	8.0 J	11 J	U	470	200,000
1,2-Dichloropropane	U	U	U	U	U	U	U	--	--
Bromodichloromethane	UJ	UJ	UJ	UJ	UJ	UJ	U	--	--
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	--	--
4-Methyl-2-pentanone	U	U	U	U	U	U	U	--	--
Toluene	U	U	U	U	U	2.9 J	U	700	500,000
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	--	--
1,1,2-Trichloroethane	U	U	U	U	U	U	U	--	--
Tetrachloroethene	1.2 J	11 J	4.9 J	UJ	20 J	5.3 J	U	1,300	150,000
2-Hexanone	U	U	U	U	U	U	U	--	--
Dibromochloromethane	U	U	U	U	U	U	U	--	--
Ethylene dibromide (EDB)	U	U	U	U	U	U	U	--	--
Chlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	U	1,100	500,000
Ethylbenzene	UJ	UJ	UJ	UJ	UJ	UJ	U	1,000	390,000
Total Xylene	UJ	UJ	UJ	UJ	UJ	UJ	U	260	500,000
Styrene	UJ	UJ	UJ	UJ	UJ	UJ	U	--	--
Bromoform	U	U	U	U	U	U	U	--	--
Isopropylbenzene	UJ	UJ	UJ	UJ	UJ	UJ	U	--	--
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	--	--
1,3-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	U	2,400	280,000
1,4-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	U	1,800	130,000
1,2-Dichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	U	1,100	500,000
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	U	--	--
1,2,4-Trichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	U	--	--
1,2,3-Trichlorobenzene	UJ	UJ	UJ	UJ	UJ	UJ	U	--	--
Total VOCs	3.8	188.5	20.4	74.9	40	3466.2	0	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected in associated blank
D: Detected at secondary dilution
E: Exceeded calibration range

Notes:

ug/kg: Micrograms per kilograms
--: Not Established

3400 D Exceeds Unrestricted Use SCO

TABLE E-1
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-42 B-42(0-2) 10/05/10 (ug/kg)	B-42 B-42(2-4) 10/05/10 (ug/kg)						Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	U	U						--	--
Chloromethane	U	U						--	--
Vinyl chloride	UJ	UJ						20	13,000
Bromomethane	U	U						--	--
Chloroethane	U	U						--	--
Trichlorofluoromethane	U	U						--	--
1,1-Dichloroethene	U	U						330	500,000
Acetone	4.3 J	34						50	500,000
Carbon disulfide	U	U						--	--
Methylene chloride	U	U						50	500,000
trans-1,2-Dichloroethene	U	3.2 J						190	500,000
Methyltert-butylether	UJ	UJ						930	500,000
1,1-Dichloroethane	UJ	UJ						270	240,000
cis-1,2-Dichloroethene	18	110						250	500,000
2-Butanone (MEK)	U	U						120	500,000
Chloroform	UJ	UJ						370	350,000
1,1,1-Trichloroethane	1.0 J	UJ						680	500,000
Carbon tetrachloride	UJ	UJ						760	22,000
Benzene	U	U						60	44,000
1,2-Dichloroethane	UJ	UJ						20	30,000
Trichloroethene	33 J	6.9 J						470	200,000
1,2-Dichloropropane	U	U						--	--
Bromodichloromethane	UJ	UJ						--	--
cis-1,3-Dichloropropene	U	U						--	--
4-Methyl-2-pentanone	U	U						--	--
Toluene	U	U						700	500,000
trans-1,3-Dichloropropene	U	U						--	--
1,1,2-Trichloroethane	U	U						--	--
Tetrachloroethene	38 J	2.8 J						1,300	150,000
2-Hexanone	U	U						--	--
Dibromochloromethane	U	U						--	--
Ethylene dibromide (EDB)	U	U						--	--
Chlorobenzene	UJ	UJ						1,100	500,000
Ethylbenzene	UJ	UJ						1,000	390,000
Total Xylene	UJ	UJ						260	500,000
Styrene	UJ	UJ						--	--
Bromoform	U	U						--	--
Isopropylbenzene	UJ	UJ						--	--
1,1,1,2-Tetrachloroethane	U	U						--	--
1,3-Dichlorobenzene	UJ	UJ						2,400	280,000
1,4-Dichlorobenzene	UJ	UJ						1,800	130,000
1,2-Dichlorobenzene	UJ	UJ						1,100	500,000
1,2-Dibromo-3-chloropropane	U	U						--	--
1,2,4-Trichlorobenzene	UJ	UJ						--	--
1,2,3-Trichlorobenzene	UJ	UJ						--	--
Total VOCs	94.3	156.9						--	--

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected in associated blank
D: Detected at secondary dilution
E: Exceeded calibration range

Notes:

ug/kg: Micrograms per kilograms
--: Not Established

 Exceeds Unrestricted Use SCO

TABLE E-2
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-01 B-1 (0-2) 08/26/10 (ug/kg)	B-01 B-1 (2-4) 08/26/10 (ug/kg)	B-02 B-2 (0-2) 08/26/10 (ug/kg)	B-02 B-2 (2-4) 08/26/10 (ug/kg)	B-03 B-3 (0-2) 08/26/10 (ug/kg)	B-03 B-3 (2-4) 08/26/10 (ug/kg)	B-04 B-4 (0-2) 08/30/10 (ug/kg)	B-04 B-4 (2-4) 08/30/10 (ug/kg)	Part 375 Unrestricted Use SCO's (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Phenol	U	U	U	U	U	U	U	U	330	500,000
Bis(2-chloroethyl)ether	U	U	U	U	U	U	U	U	--	--
2-Chlorophenol	U	U	U	U	U	U	U	U	--	--
2-Methylphenol	U	U	U	U	U	U	U	U	330	500,000
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U	U	U	--	--
3+4-Methylphenols	U	U	U	U	U	U	U	U	330	500,000
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	--	--
Hexachloroethane	U	U	U	U	U	U	U	U	--	--
Nitrobenzene	U	U	U	U	U	U	U	U	--	--
Isophorone	U	U	U	U	U	U	U	U	--	--
2-Nitrophenol	U	U	U	U	U	U	U	U	--	--
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	--	--
Bis(2-chloroethoxy)methane	U	U	U	U	U	U	U	U	--	--
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	--	--
Naphthalene	U	U	U	U	U	U	U	U	12,000	500,000
4-Chloroaniline	U	U	U	U	U	U	U	U	--	--
Hexachlorobutadiene	U	U	U	U	U	U	U	U	--	--
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	--	--
2-Methylnaphthalene	U	U	U	U	U	U	U	U	--	--
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	--	--
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2-Chloronaphthalene	U	U	U	U	U	U	U	U	--	--
2-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Dimethyl phthalate	U	U	U	U	U	U	U	U	--	--
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Acenaphthylene	U	U	U	U	U	U	U	U	100,000	500,000
3-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Acenaphthene	U	U	U	U	U	U	U	U	20,000	500,000
2,4-Dinitrophenol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
4-Nitrophenol	U	U	U	UJ	UJ	UJ	U	U	--	--
Dibenzofuran	U	U	U	U	U	U	U	U	7,000	350,000
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Diethyl phthalate	U	U	U	U	U	U	U	U	--	--
Fluorene	U	U	U	U	U	U	U	U	30,000	500,000
4-Chlorophenylphenyl ether	U	U	U	U	U	U	U	U	--	--
4-Nitroaniline	U	U	U	U	U	U	U	U	--	--
4,6-Dinitro-o-cresol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	--	--
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	--	--
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	6,000
Pentachlorophenol	U	U	U	U	U	U	U	U	800	6,700
Phenanthrene	47 J	U	U	U	U	U	U	U	100,000	500,000
Anthracene	U	U	U	U	U	U	U	U	100,000	500,000
Carbazole	U	U	U	U	U	U	U	U	--	--
Di-n-butyl phthalate	U	U	U	U	U	U	U	U	--	--
Fluoranthene	130 J	U	U	U	U	U	U	U	100,000	500,000
Pyrene	120 J	U	U	U	U	U	U	U	100,000	500,000
Butyl benzyl phthalate	U	U	U	U	U	U	U	U	--	--
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	--	--
Benzo(a)anthracene	79 J	U	U	U	U	U	U	U	1,000	5,600
Chrysene	87 J	U	U	U	U	U	U	U	1,000	56,000
Bis(2-ethylhexyl)phthalate (BEHP)	U	U	U	U	U	U	U	U	--	--
Di-n-octyl phthalate	U	U	U	U	U	U	U	U	--	--
Benzo(b)fluoranthene	100 J	U	U	U	U	U	U	U	1,000	5,600
Benzo(k)fluoranthene	59 J	U	U	U	U	U	U	U	800	56,000
Benzo(a)pyrene	82 J	U	U	U	U	U	U	U	1,000	1,000
Indeno(1,2,3-cd)pyrene	47 J	U	U	U	U	U	U	U	500	5,600
Dibenzo(a,h)anthracene	U	U	U	U	U	U	U	U	330	560
Benzo(ghi)perylene	51 J	U	U	U	U	U	U	U	100,000	500,000
Total SVOCs	802	0	0	0	0	0	0	0	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms

--: Not Established

 Exceeds Commercial Use SCO

 Exceeds Unrestricted Use SCO

TABLE E-2
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-05 B-5 (0-2) 08/30/10 (ug/kg)	B-05 B-5 (2-4) 08/30/10 (ug/kg)	B-06 B-6 (0-2) 08/30/10 (ug/kg)	B-06 B-6 (2-4) 08/30/10 (ug/kg)	B-07 B-7 (0-2) 08/30/10 (ug/kg)	B-07 B-7 (2-4) 08/30/10 (ug/kg)	B-08 B-8 (0-2) 08/27/10 (ug/kg)	B-08 B-8 (2-4) 08/27/10 (ug/kg)	Part 375 Unrestricted Use SCO's (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Phenol	U	U	U	U	U	U	U	U	330	500,000
Bis(2-chloroethyl)ether	U	U	U	U	U	U	U	U	--	--
2-Chlorophenol	U	U	U	U	U	U	U	U	--	--
2-Methylphenol	U	U	U	U	U	U	U	U	330	500,000
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U	U	U	--	--
3+4-Methylphenols	U	U	U	U	U	U	U	U	330	500,000
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	--	--
Hexachloroethane	U	U	U	U	U	U	U	U	--	--
Nitrobenzene	U	U	U	U	U	U	U	U	--	--
Isophorone	U	U	U	U	U	U	U	U	--	--
2-Nitrophenol	U	U	U	U	U	U	U	U	--	--
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	--	--
Bis(2-chloroethoxy)methane	U	U	U	U	U	U	U	U	--	--
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	--	--
Naphthalene	U	U	U	U	U	U	U	U	12,000	500,000
4-Chloroaniline	U	U	U	U	U	U	U	U	--	--
Hexachlorobutadiene	U	U	U	U	U	U	U	U	--	--
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	--	--
2-Methylnaphthalene	U	U	U	U	U	U	U	U	--	--
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	--	--
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2-Chloronaphthalene	U	U	U	U	U	U	U	U	--	--
2-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Dimethyl phthalate	U	U	U	U	U	U	U	U	--	--
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Acenaphthylene	U	U	U	U	U	U	U	U	100,000	500,000
3-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Acenaphthene	U	U	U	U	U	U	U	U	20,000	500,000
2,4-Dinitrophenol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
4-Nitrophenol	U	U	U	U	U	U	U	U	--	--
Dibenzofuran	U	U	U	U	U	U	U	U	7,000	350,000
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Diethyl phthalate	U	U	U	U	U	U	U	U	--	--
Fluorene	U	U	U	U	U	U	U	U	30,000	500,000
4-Chlorophenylphenyl ether	U	U	U	U	U	U	U	U	--	--
4-Nitroaniline	U	U	U	U	U	U	U	U	--	--
4,6-Dinitro-o-cresol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	--	--
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	--	--
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	6,000
Pentachlorophenol	U	U	U	U	U	U	U	U	800	6,700
Phenanthrene	U	U	U	U	U	U	U	U	100,000	500,000
Anthracene	U	U	U	U	U	U	U	U	100,000	500,000
Carbazole	U	U	U	U	U	U	U	U	--	--
Di-n-butyl phthalate	U	U	U	220 J	U	U	U	U	--	--
Fluoranthene	U	U	U	U	U	U	88 J	U	100,000	500,000
Pyrene	U	U	U	U	U	U	66 J	U	100,000	500,000
Butyl benzyl phthalate	U	U	U	U	U	U	U	U	--	--
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	--	--
Benzo(a)anthracene	U	U	U	U	U	U	39 J	U	1,000	5,600
Chrysene	U	U	U	U	U	U	45 J	U	1,000	56,000
Bis(2-ethylhexyl)phthalate (BEHP)	U	U	U	U	U	U	110 J	U	--	--
Di-n-octyl phthalate	U	U	U	U	U	U	U	U	--	--
Benzo(b)fluoranthene	U	U	U	U	U	U	60 J	U	1,000	5,600
Benzo(k)fluoranthene	U	U	U	U	U	U	36 J	U	800	56,000
Benzo(a)pyrene	U	U	U	U	U	U	45 J	U	1,000	1,000
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	U	U	500	5,600
Dibenzo(a,h)anthracene	U	U	U	U	U	U	U	U	330	560
Benzo(ghi)perylene	U	U	U	U	U	U	41 J	U	100,000	500,000
Total SVOCs	0	0	0	220	0	0	530	0	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms

--: Not Established

 Exceeds Commercial Use SCO

 Exceeds Unrestricted Use SCO

TABLE E-2
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-09 B-9 (0-2) 08/26/10 (ug/kg)	B-09 B-9 (2-4) 08/26/10 (ug/kg)	B-10 B-10 (0-2) 08/30/10 (ug/kg)	B-10 B-10 (2-4) 08/30/10 (ug/kg)	B-11 B-11 (0-2) 08/30/10 (ug/kg)	B-11 B-11 (2-4) 08/30/10 (ug/kg)	B-12 B-12 (0-2) 08/27/10 (ug/kg)	B-12 B-12 (2-4) 08/27/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Phenol	U	U	U	U	U	U	U	U	330	500,000
Bis(2-chloroethyl)ether	U	U	U	U	U	U	U	U	--	--
2-Chlorophenol	U	U	U	U	U	U	U	U	--	--
2-Methylphenol	U	U	U	U	U	U	U	U	330	500,000
2,2-oxyblis (1-chloropropane)	U	U	U	U	U	U	U	U	--	--
3+4-Methylphenols	U	U	U	U	U	U	U	U	330	500,000
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	--	--
Hexachloroethane	U	U	U	U	U	U	U	U	--	--
Nitrobenzene	U	U	U	U	U	U	U	U	--	--
Isophorone	U	U	U	U	U	U	U	U	--	--
2-Nitrophenol	U	U	U	U	U	U	U	U	--	--
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	--	--
Bis(2-chloroethoxy)methane	U	U	U	U	U	U	U	U	--	--
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	--	--
Naphthalene	U	U	350 J	U	U	U	U	U	12,000	500,000
4-Chloroaniline	U	U	U	U	U	U	U	U	--	--
Hexachlorobutadiene	U	U	U	U	U	U	U	U	--	--
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	--	--
2-Methylnaphthalene	U	U	U	U	U	U	U	U	--	--
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	--	--
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2-Chloronaphthalene	U	U	U	U	U	U	U	U	--	--
2-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Dimethyl phthalate	U	U	U	U	U	U	U	U	--	--
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Acenaphthylene	U	U	U	U	U	U	U	U	100,000	500,000
3-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Acenaphthene	U	U	U	U	U	U	U	U	20,000	500,000
2,4-Dinitrophenol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
4-Nitrophenol	U	U	U	U	U	U	U	U	--	--
Dibenzofuran	U	U	U	U	U	U	U	U	7,000	350,000
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Diethyl phthalate	U	U	U	U	U	U	U	U	--	--
Fluorene	U	U	U	U	U	U	U	U	30,000	500,000
4-Chlorophenylphenyl ether	U	U	U	U	U	U	U	U	--	--
4-Nitroaniline	U	U	U	U	U	U	U	U	--	--
4,6-Dinitro-o-cresol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	--	--
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	--	--
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	6,000
Pentachlorophenol	U	U	U	U	U	U	U	U	800	6,700
Phenanthrene	U	U	U	U	U	U	U	U	100,000	500,000
Anthracene	U	U	U	U	U	U	U	U	100,000	500,000
Carbazole	U	U	U	U	U	U	U	U	--	--
Di-n-butyl phthalate	U	U	U	U	U	U	U	U	--	--
Fluoranthene	U	U	U	U	U	U	U	U	100,000	500,000
Pyrene	U	U	U	U	U	U	U	U	100,000	500,000
Butyl benzyl phthalate	U	U	U	U	U	U	U	U	--	--
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	--	--
Benzo(a)anthracene	U	U	U	U	U	U	U	U	1,000	5,600
Chrysene	U	U	U	U	U	U	U	U	1,000	56,000
Bis(2-ethylhexyl)phthalate (BEHP)	U	U	U	U	U	U	U	U	--	--
Di-n-octyl phthalate	U	U	U	U	U	U	U	U	--	--
Benzo(b)fluoranthene	U	U	U	U	U	U	U	U	1,000	5,600
Benzo(k)fluoranthene	U	U	U	U	U	U	U	U	800	56,000
Benzo(a)pyrene	U	U	U	U	U	U	U	U	1,000	1,000
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	U	U	500	5,600
Dibenzo(a,h)anthracene	U	U	U	U	U	U	U	U	330	560
Benzo(ghi)perylene	UJ	UJ	U	U	U	U	U	U	100,000	500,000
Total SVOCs	0	0	350	0	0	0	0	0	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms

--: Not Established

 Exceeds Commercial Use SCO

 Exceeds Unrestricted Use SCO

TABLE E-2
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-13 B-13 (0-2) 08/26/10 (ug/kg)	B-13 B-13 (2-4) 08/26/10 (ug/kg)	B-14 B-14 (0-2) 08/27/10 (ug/kg)	B-14 B-14 (2-4) 08/27/10 (ug/kg)	B-15 B-15 (0-2) 08/27/10 (ug/kg)	B-15 B-15 (2-4) 08/27/10 (ug/kg)	B-16 B-16 (0-2) 08/27/10 (ug/kg)	B-16 B-16 (2-4) 08/27/10 (ug/kg)	Part 375 Unrestricted Use SCO's (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Phenol	U	U	U	U	U	U	U	U	330	500,000
Bis(2-chloroethyl)ether	U	U	U	U	U	U	U	U	--	--
2-Chlorophenol	U	U	U	U	U	U	U	U	--	--
2-Methylphenol	U	U	U	U	U	U	U	U	330	500,000
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U	U	U	--	--
3+4-Methylphenols	U	U	U	U	U	U	U	U	330	500,000
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	--	--
Hexachloroethane	U	U	U	U	U	U	U	U	--	--
Nitrobenzene	U	U	U	U	U	U	U	U	--	--
Isophorone	U	U	U	U	U	U	U	U	--	--
2-Nitrophenol	U	U	U	U	U	U	U	U	--	--
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	--	--
Bis(2-chloroethoxy)methane	U	U	U	U	U	U	U	U	--	--
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	--	--
Naphthalene	U	U	U	U	U	U	U	U	12,000	500,000
4-Chloroaniline	U	U	U	U	U	U	U	U	--	--
Hexachlorobutadiene	U	U	U	U	U	U	U	U	--	--
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	--	--
2-Methylnaphthalene	U	U	U	U	U	U	U	U	--	--
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	--	--
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2-Chloronaphthalene	U	U	U	U	U	U	U	U	--	--
2-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Dimethyl phthalate	U	U	U	U	U	U	U	U	--	--
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Acenaphthylene	U	U	U	U	U	U	U	U	100,000	500,000
3-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Acenaphthene	U	U	U	U	U	U	U	U	20,000	500,000
2,4-Dinitrophenol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
4-Nitrophenol	UJ	UJ	U	U	U	U	U	U	--	--
Dibenzofuran	U	U	U	U	U	U	U	U	7,000	350,000
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Diethyl phthalate	U	U	U	U	U	U	U	U	--	--
Fluorene	U	U	U	U	U	U	U	U	30,000	500,000
4-Chlorophenylphenyl ether	U	U	U	U	U	U	U	U	--	--
4-Nitroaniline	U	U	U	U	U	U	U	U	--	--
4,6-Dinitro-o-cresol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	--	--
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	--	--
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	6,000
Pentachlorophenol	U	U	U	U	U	U	U	U	800	6,700
Phenanthrene	U	U	U	U	U	U	U	U	100,000	500,000
Anthracene	U	U	U	U	U	U	U	U	100,000	500,000
Carbazole	U	U	U	U	U	U	U	U	--	--
Di-n-butyl phthalate	U	U	U	U	U	U	U	U	--	--
Fluoranthene	U	U	U	U	U	U	U	U	100,000	500,000
Pyrene	U	U	U	U	U	U	U	U	100,000	500,000
Butyl benzyl phthalate	U	U	U	U	U	U	U	U	--	--
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	--	--
Benzo(a)anthracene	U	U	U	U	U	U	U	U	1,000	5,600
Chrysene	U	U	U	U	U	U	U	U	1,000	56,000
Bis(2-ethylhexyl)phthalate (BEHP)	U	U	U	U	U	U	U	U	--	--
Di-n-octyl phthalate	U	U	U	U	U	U	U	U	--	--
Benzo(b)fluoranthene	U	U	U	U	U	U	U	U	1,000	5,600
Benzo(k)fluoranthene	U	U	U	U	U	U	U	U	800	56,000
Benzo(a)pyrene	U	U	U	U	U	U	U	U	1,000	1,000
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	U	U	500	5,600
Dibenzo(a,h)anthracene	U	U	U	U	U	U	U	U	330	560
Benzo(ghi)perylene	U	U	U	U	U	U	U	U	100,000	500,000
Total SVOCs	0	0	0	0	0	0	0	0	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms
--: Not Established
 Exceeds Commercial Use SCO
 Exceeds Unrestricted Use SCO

TABLE E-2
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-17 B-17 (0-2) 08/27/10 (ug/kg)	B-17 B-17 (2-4) 08/27/10 (ug/kg)	B-18 B-18 (0-2) 08/26/10 (ug/kg)	B-18 B-18 (2-4) 08/26/10 (ug/kg)	B-19 B-19 (0-2) 08/30/10 (ug/kg)	B-19 B-19 (2-4) 08/30/10 (ug/kg)	B-20 B-20 (0-2) 08/27/10 (ug/kg)	B-20 B-20 (4-6) 08/27/10 (ug/kg)	Part 375 Unrestricted Use SCO's (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Phenol	U	U	U	U	1300	U	U	U	330	500,000
Bis(2-chloroethyl)ether	U	U	U	U	U	U	U	U	--	--
2-Chlorophenol	U	U	U	U	U	U	U	U	--	--
2-Methylphenol	U	U	U	U	100 J	U	U	U	330	500,000
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U	U	U	--	--
3+4-Methylphenols	U	U	U	U	310 J	48 J	U	U	330	500,000
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	--	--
Hexachloroethane	U	U	U	U	U	U	U	U	--	--
Nitrobenzene	U	U	U	U	U	U	U	U	--	--
Isophorone	U	U	U	U	U	U	U	U	--	--
2-Nitrophenol	U	U	U	U	U	U	U	U	--	--
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	--	--
Bis(2-chloroethoxy)methane	U	U	U	U	U	U	U	U	--	--
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	--	--
Naphthalene	U	U	U	U	400	180 J	U	U	12,000	500,000
4-Chloroaniline	U	U	U	U	U	U	U	U	--	--
Hexachlorobutadiene	U	U	U	U	U	U	U	U	--	--
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	--	--
2-Methylnaphthalene	U	U	U	U	77 J	U	U	U	--	--
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	--	--
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2-Chloronaphthalene	U	U	U	U	U	U	U	U	--	--
2-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Dimethyl phthalate	U	U	U	U	U	U	U	U	--	--
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Acenaphthylene	U	U	U	U	U	U	U	U	100,000	500,000
3-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Acenaphthene	U	U	U	U	U	U	U	U	20,000	500,000
2,4-Dinitrophenol	U	U	U	U	U	U	U	U	--	--
4-Nitrophenol	U	U	U	U	U	U	U	U	--	--
Dibenzofuran	U	U	U	U	U	U	U	U	7,000	350,000
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Diethyl phthalate	U	U	U	U	320 J	630	U	U	--	--
Fluorene	U	U	U	U	U	U	U	U	30,000	500,000
4-Chlorophenylphenyl ether	U	U	U	U	U	U	U	U	--	--
4-Nitroaniline	U	U	U	U	U	U	U	U	--	--
4,6-Dinitro-o-cresol	U	U	U	U	U	U	U	U	--	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	--	--
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	--	--
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	6,000
Pentachlorophenol	U	U	U	U	U	U	U	U	800	6,700
Phenanthrene	U	U	U	U	U	U	U	U	100,000	500,000
Anthracene	U	U	U	U	U	U	U	U	100,000	500,000
Carbazole	U	U	U	U	U	U	U	U	--	--
Di-n-butyl phthalate	U	U	U	U	120 J	U	U	83 J	--	--
Fluoranthene	U	U	U	U	U	U	U	U	100,000	500,000
Pyrene	U	U	U	U	U	U	U	U	100,000	500,000
Butyl benzyl phthalate	U	U	U	U	41 J	U	U	U	--	--
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	--	--
Benzo(a)anthracene	U	U	U	U	U	U	U	U	1,000	5,600
Chrysene	U	U	U	U	U	U	U	U	1,000	56,000
Bis(2-ethylhexyl)phthalate (BEHP)	U	U	U	U	880	U	U	U	--	--
Di-n-octyl phthalate	U	U	U	U	110 J	U	U	U	--	--
Benzo(b)fluoranthene	U	U	U	U	U	U	U	U	1,000	5,600
Benzo(k)fluoranthene	U	U	U	U	U	U	U	U	800	56,000
Benzo(a)pyrene	U	U	U	U	U	U	U	U	1,000	1,000
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	U	U	500	5,600
Dibenzo(a,h)anthracene	U	U	U	U	U	U	U	U	330	560
Benzo(ghi)perylene	U	U	U	U	U	U	U	U	100,000	500,000
Total SVOCs	0	0	0	0	3,658	858	0	83	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms
--: Not Established
Exceeds Commercial Use SCO
Exceeds Unrestricted Use SCO

TABLE E-2
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-21 B-21 (0-2) 08/30/10 (ug/kg)	B-21 B-21 (4-6) 08/30/10 (ug/kg)	B-22 B-22 (0-2) 08/27/10 (ug/kg)	B-22 B-22 (2-4) 08/27/10 (ug/kg)	B-23 B-23 (0-2) 08/27/10 (ug/kg)	B-23 B-23 (4-6) 08/27/10 (ug/kg)	B-24 B-24 (0-2) 08/27/10 (ug/kg)	B-24 B-24 (5-7) 08/27/10 (ug/kg)	Part 375 Unrestricted Use SCO's (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Phenol	U	U	U	U	U	U	U	U	330	500,000
Bis(2-chloroethyl)ether	U	U	U	U	U	U	U	U	--	--
2-Chlorophenol	U	U	U	U	U	U	U	U	--	--
2-Methylphenol	U	U	U	U	U	U	U	U	330	500,000
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U	U	U	--	--
3+4-Methylphenols	U	U	U	U	U	U	U	U	330	500,000
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	--	--
Hexachloroethane	U	U	U	U	U	U	U	U	--	--
Nitrobenzene	U	U	U	U	U	U	U	U	--	--
Isophorone	U	U	U	U	U	U	U	U	--	--
2-Nitrophenol	U	U	U	U	U	U	U	U	--	--
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	--	--
Bis(2-chloroethoxy)methane	U	U	U	U	U	U	U	U	--	--
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	--	--
Naphthalene	U	U	U	U	U	U	U	U	12,000	500,000
4-Chloroaniline	U	U	U	U	U	U	U	U	--	--
Hexachlorobutadiene	U	U	U	U	U	U	U	U	--	--
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	--	--
2-Methylnaphthalene	U	U	U	U	U	U	U	U	--	--
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	--	--
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2-Chloronaphthalene	U	U	U	U	U	U	U	U	--	--
2-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Dimethyl phthalate	U	U	U	U	U	U	U	U	--	--
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Acenaphthylene	U	U	U	U	U	U	U	U	100,000	500,000
3-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Acenaphthene	U	U	U	U	U	U	U	U	20,000	500,000
2,4-Dinitrophenol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
4-Nitrophenol	U	U	U	U	U	U	U	U	--	--
Dibenzofuran	U	U	U	U	U	U	U	U	7,000	350,000
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Diethyl phthalate	U	U	U	U	U	U	U	U	--	--
Fluorene	U	U	U	U	U	U	U	U	30,000	500,000
4-Chlorophenylphenyl ether	U	U	U	U	U	U	U	U	--	--
4-Nitroaniline	U	U	U	U	U	U	U	U	--	--
4,6-Dinitro-o-cresol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	--	--
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	--	--
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	6,000
Pentachlorophenol	U	U	U	U	U	U	U	U	800	6,700
Phenanthrene	U	U	U	U	U	U	U	U	100,000	500,000
Anthracene	U	U	U	U	U	U	U	U	100,000	500,000
Carbazole	U	U	U	U	U	U	U	U	--	--
Di-n-butyl phthalate	U	U	U	U	U	U	U	U	--	--
Fluoranthene	U	U	U	U	U	U	U	U	100,000	500,000
Pyrene	U	U	U	U	U	U	U	U	100,000	500,000
Butyl benzyl phthalate	U	U	U	U	U	U	U	U	--	--
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	--	--
Benzo(a)anthracene	U	U	U	U	U	U	U	U	1,000	5,600
Chrysene	U	U	U	U	U	U	U	U	1,000	56,000
Bis(2-ethylhexyl)phthalate (BEHP)	U	U	U	U	U	U	U	U	--	--
Di-n-octyl phthalate	U	U	U	U	U	U	U	U	--	--
Benzo(b)fluoranthene	U	U	U	U	U	U	U	U	1,000	5,600
Benzo(k)fluoranthene	U	U	U	U	U	U	U	U	800	56,000
Benzo(a)pyrene	U	U	U	U	U	U	U	U	1,000	1,000
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	U	U	500	5,600
Dibenzo(a,h)anthracene	U	U	U	U	U	U	U	U	330	560
Benzo(ghi)perylene	U	U	U	U	U	U	U	U	100,000	500,000
Total SVOCs	0	0	0	0	0	0	0	0	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms
--: Not Established
 Exceeds Commercial Use SCO
 Exceeds Unrestricted Use SCO

TABLE E-2
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-25 B-25 (0-2) 08/25/10 (ug/kg)	B-25 B-25 (8-10) 08/25/10 (ug/kg)	B-26 B-26 (0-2) 08/26/10 (ug/kg)	B-26 B-26 (4-6) 08/26/10 (ug/kg)	B-27 B-27 (0-2) 08/26/10 (ug/kg)	B-27 B-27 (4-6) 08/26/10 (ug/kg)	B-28 B-28 (0-2) 08/26/10 (ug/kg)	B-28 B-28 (4-6) 08/26/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Phenol	U	U	U	U	U	U	U	U	330	500,000
Bis(2-chloroethyl)ether	U	U	U	U	U	U	U	U	--	--
2-Chlorophenol	U	U	U	U	U	U	U	U	--	--
2-Methylphenol	U	U	U	U	U	U	U	U	330	500,000
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U	U	U	--	--
3+4-Methylphenols	U	U	U	U	U	U	U	U	330	500,000
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	--	--
Hexachloroethane	U	U	U	U	U	U	U	U	--	--
Nitrobenzene	U	U	U	U	U	U	U	U	--	--
Isophorone	U	U	U	U	U	U	U	U	--	--
2-Nitrophenol	U	U	U	U	U	U	U	U	--	--
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	--	--
Bis(2-chloroethoxy)methane	U	U	U	U	U	U	U	U	--	--
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	--	--
Naphthalene	U	U	U	U	U	U	U	U	12,000	500,000
4-Chloroaniline	U	U	U	U	U	U	U	U	--	--
Hexachlorobutadiene	U	U	U	U	U	U	U	U	--	--
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	--	--
2-Methylnaphthalene	U	U	U	U	U	72 J	U	U	--	--
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	--	--
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2-Chloronaphthalene	U	U	U	U	U	U	U	U	--	--
2-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Dimethyl phthalate	U	U	U	U	U	U	U	U	--	--
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Acenaphthylene	U	U	U	U	U	U	U	U	100,000	500,000
3-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Acenaphthene	U	U	U	U	U	U	U	U	20,000	500,000
2,4-Dinitrophenol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
4-Nitrophenol	U	U	U	U	U	U	U	U	--	--
Dibenzofuran	U	U	U	U	U	U	U	U	7,000	350,000
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Diethyl phthalate	U	U	U	U	U	U	U	U	--	--
Fluorene	U	U	U	U	U	U	U	U	30,000	500,000
4-Chlorophenylphenyl ether	U	U	U	U	U	U	U	U	--	--
4-Nitroaniline	U	U	U	U	U	U	U	U	--	--
4,6-Dinitro-o-cresol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	--	--
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	--	--
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	6,000
Pentachlorophenol	U	U	U	U	U	U	U	U	800	6,700
Phenanthrene	U	U	U	U	U	59 J	U	U	100,000	500,000
Anthracene	U	U	U	U	U	U	U	U	100,000	500,000
Carbazole	U	U	U	U	U	U	U	U	--	--
Di-n-butyl phthalate	U	U	U	U	U	250 J	U	U	--	--
Fluoranthene	U	U	U	U	U	U	U	U	100,000	500,000
Pyrene	U	U	U	U	U	U	U	U	100,000	500,000
Butyl benzyl phthalate	U	U	U	U	U	100 J	U	U	--	--
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	--	--
Benzo(a)anthracene	U	U	U	U	U	U	U	U	1,000	5,600
Chrysene	U	U	U	U	U	U	U	U	1,000	56,000
Bis(2-ethylhexyl)phthalate (BEHP)	U	U	U	U	U	U	U	U	--	--
Di-n-octyl phthalate	U	U	U	U	U	U	U	U	--	--
Benzo(b)fluoranthene	U	U	U	U	U	U	U	U	1,000	5,600
Benzo(k)fluoranthene	U	U	U	U	U	U	U	U	800	56,000
Benzo(a)pyrene	U	U	U	U	U	U	U	U	1,000	1,000
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	U	U	500	5,600
Dibenzo(a,h)anthracene	U	U	U	U	U	U	U	U	330	560
Benzo(ghi)perylene	U	U	U	U	U	U	U	U	100,000	500,000
Total SVOCs	0	0	0	0	0	481	0	0	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms
--: Not Established
Exceeds Commercial Use SCO
Exceeds Unrestricted Use SCO

TABLE E-2
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-29 B-29 (0-2) 08/25/10 (ug/kg)	B-29 B-29 (4-6) 08/25/10 (ug/kg)	B-30 B-30 (0-2) 08/25/10 (ug/kg)	B-30 B-30 (2-4) 08/25/10 (ug/kg)	B-31 B-31 (0-2) 08/25/10 (ug/kg)	B-31 B-31 (2-4) 08/25/10 (ug/kg)	B-32 B-32 (0-2) 08/25/10 (ug/kg)	B-32 B-32 (4-6) 08/25/10 (ug/kg)	Part 375 Unrestricted Use SCO's (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Phenol	U	U	U	U	U	U	U	U	330	500,000
Bis(2-chloroethyl)ether	U	U	U	U	U	U	U	U	--	--
2-Chlorophenol	U	U	U	U	U	U	U	U	--	--
2-Methylphenol	U	U	U	U	U	U	U	U	330	500,000
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U	U	U	--	--
3+4-Methylphenols	U	U	U	U	U	U	U	U	330	500,000
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	--	--
Hexachloroethane	U	U	U	U	U	U	U	U	--	--
Nitrobenzene	U	U	U	U	U	U	U	U	--	--
Isophorone	U	U	U	U	U	U	U	U	--	--
2-Nitrophenol	U	U	U	U	U	U	U	U	--	--
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	--	--
Bis(2-chloroethoxy)methane	U	U	U	U	U	U	U	U	--	--
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	--	--
Naphthalene	U	U	U	U	U	U	U	U	12,000	500,000
4-Chloroaniline	U	U	U	U	U	U	U	U	--	--
Hexachlorobutadiene	U	U	U	U	U	U	U	U	--	--
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	--	--
2-Methylnaphthalene	U	U	U	U	U	U	U	U	--	--
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	--	--
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2-Chloronaphthalene	U	U	U	U	U	U	U	U	--	--
2-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Dimethyl phthalate	U	U	U	U	U	U	U	U	--	--
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Acenaphthylene	U	U	U	U	U	U	U	U	100,000	500,000
3-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Acenaphthene	U	U	U	U	U	U	U	U	20,000	500,000
2,4-Dinitrophenol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
4-Nitrophenol	U	U	U	U	U	U	U	U	--	--
Dibenzofuran	U	U	U	U	U	U	U	U	7,000	350,000
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Diethyl phthalate	U	U	U	U	U	U	U	U	--	--
Fluorene	U	U	U	U	U	U	U	U	30,000	500,000
4-Chlorophenylphenyl ether	U	U	U	U	U	U	U	U	--	--
4-Nitroaniline	U	U	U	U	U	U	U	U	--	--
4,6-Dinitro-o-cresol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	--	--
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	--	--
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	6,000
Pentachlorophenol	U	U	U	U	U	U	U	U	800	6,700
Phenanthrene	U	U	U	U	U	U	U	U	100,000	500,000
Anthracene	U	U	U	U	U	U	U	U	100,000	500,000
Carbazole	U	U	U	U	U	U	U	U	--	--
Di-n-butyl phthalate	U	U	U	U	U	U	U	U	--	--
Fluoranthene	U	U	U	U	U	U	U	U	100,000	500,000
Pyrene	U	36 J	U	U	U	U	U	U	100,000	500,000
Butyl benzyl phthalate	U	U	U	U	U	U	U	U	--	--
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	--	--
Benzo(a)anthracene	U	U	U	U	U	U	U	U	1,000	5,600
Chrysene	U	42 J	U	U	U	U	U	U	1,000	56,000
Bis(2-ethylhexyl)phthalate (BEHP)	U	150 J	U	U	U	U	U	U	--	--
Di-n-octyl phthalate	U	U	U	U	U	U	U	U	--	--
Benzo(b)fluoranthene	U	U	U	U	U	U	U	U	1,000	5,600
Benzo(k)fluoranthene	U	U	U	UJ	UJ	UJ	U	UJ	800	56,000
Benzo(a)pyrene	U	U	U	U	U	U	U	U	1,000	1,000
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	U	U	500	5,600
Dibenzo(a,h)anthracene	U	U	U	U	U	U	U	U	330	560
Benzo(ghi)perylene	U	U	U	U	U	U	U	U	100,000	500,000
Total SVOCs	0	228	0	0	0	0	0	0	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms
--: Not Established
 Exceeds Commercial Use SCO
 Exceeds Unrestricted Use SCO

TABLE E-2
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-33 B-33 (0-2) 08/25/10 (ug/kg)	B-33 B-33 (4-6) 08/25/10 (ug/kg)	B-33 B-33 (6-8) 08/25/10 (ug/kg)	B-34 B-34 (0-2) 08/25/10 (ug/kg)	B-34 B-34 (4-6) 08/25/10 (ug/kg)	B-35 B-35 (0-2) 08/25/10 (ug/kg)	B-35 B-35 (4-6) 08/25/10 (ug/kg)	B-36 B-36(0-2) 10/05/10 (ug/kg)	Part 375 Unrestricted Use SCO's (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Phenol	U	U	U	U	U	U	U	U	330	500,000
Bis(2-chloroethyl)ether	U	U	U	U	U	U	U	U	--	--
2-Chlorophenol	U	U	U	U	U	U	U	U	--	--
2-Methylphenol	U	U	U	U	U	U	U	U	330	500,000
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U	U	U	--	--
3+4-Methylphenols	U	U	U	U	U	U	U	U	330	500,000
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	--	--
Hexachloroethane	U	U	U	U	U	U	U	U	--	--
Nitrobenzene	U	U	U	U	U	U	U	U	--	--
Isophorone	U	U	U	U	U	U	U	U	--	--
2-Nitrophenol	U	U	U	U	U	U	U	U	--	--
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	--	--
Bis(2-chloroethoxy)methane	U	U	U	U	U	U	U	U	--	--
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	--	--
Naphthalene	U	U	U	U	U	U	U	U	12,000	500,000
4-Chloroaniline	U	U	U	U	U	U	U	U	--	--
Hexachlorobutadiene	U	U	U	U	U	U	U	U	--	--
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	--	--
2-Methylnaphthalene	U	U	U	U	U	U	U	U	--	--
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	--	--
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2-Chloronaphthalene	U	U	U	U	U	U	U	U	--	--
2-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Dimethyl phthalate	130 J	U	U	U	U	U	U	U	--	--
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Acenaphthylene	U	U	U	U	U	U	U	U	100,000	500,000
3-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Acenaphthene	U	U	U	U	U	U	U	U	20,000	500,000
2,4-Dinitrophenol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	U	--	--
4-Nitrophenol	U	U	U	U	U	U	U	U	--	--
Dibenzofuran	U	U	U	U	U	U	U	U	7,000	350,000
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Diethyl phthalate	U	U	U	U	U	U	U	U	--	--
Fluorene	U	U	U	U	U	U	U	U	30,000	500,000
4-Chlorophenylphenyl ether	U	U	U	U	U	U	U	U	--	--
4-Nitroaniline	U	U	U	U	U	U	U	U	--	--
4,6-Dinitro-o-cresol	UJ	UJ	UJ	UJ	UJ	UJ	UJ	U	--	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	--	--
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	--	--
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	6,000
Pentachlorophenol	U	U	U	U	U	U	U	U	800	6,700
Phenanthrene	520	U	U	U	U	U	U	U	100,000	500,000
Anthracene	210 J	U	U	U	U	U	U	U	100,000	500,000
Carbazole	81 J	U	U	U	U	U	U	U	--	--
Di-n-butyl phthalate	1400	U	U	U	U	U	U	U	--	--
Fluoranthene	3000	U	U	U	U	U	U	U	100,000	500,000
Pyrene	3400	U	U	U	U	U	U	U	100,000	500,000
Butyl benzyl phthalate	2700	U	U	U	U	U	U	U	--	--
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	--	--
Benzo(a)anthracene	2900	U	U	U	U	U	U	U	1,000	5,600
Chrysene	2400	U	U	U	U	U	U	U	1,000	56,000
Bis(2-ethylhexyl)phthalate (BEHP)	2200	U	U	U	160 J	U	U	U	--	--
Di-n-octyl phthalate	U	U	U	U	U	U	U	U	--	--
Benzo(b)fluoranthene	3300	U	U	U	U	U	U	U	1,000	5,600
Benzo(k)fluoranthene	1600	U	U	U	U	U	U	U	800	56,000
Benzo(a)pyrene	2200	U	U	U	U	U	U	U	1,000	1,000
Indeno(1,2,3-cd)pyrene	1400	U	U	U	U	U	U	U	500	5,600
Dibenzo(a,h)anthracene	620	U	U	U	U	U	U	U	330	560
Benzo(ghi)perylene	1400	U	U	U	U	U	U	U	100,000	500,000
Total SVOCs	29,461	0	0	0	160	0	0	0	--	--

Qualifiers:

U: Not detected
J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms
--: Not Established
Exceeds Commercial Use SCO
Exceeds Unrestricted Use SCO

TABLE E-2
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected Units	B-36 B-36(2-4) 10/05/10 (ug/kg)	B-37 B-37(0-2) 10/05/10 (ug/kg)	B-37 B-37(2-4) 10/05/10 (ug/kg)	B-38 B-38(0-2) 10/05/10 (ug/kg)	B-38 B-38(2-4) 10/05/10 (ug/kg)	B-39 B-39(0-2) 10/05/10 (ug/kg)	B-39 B-39(2-4) 10/05/10 (ug/kg)	B-40 B-40(0-2) 10/05/10 (ug/kg)	Part 375 Unrestricted Use SCO's (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Phenol	U	U	U	U	U	U	U	U	330	500,000
Bis(2-chloroethyl)ether	U	U	U	U	U	U	U	U	--	--
2-Chlorophenol	U	U	U	U	U	U	U	U	--	--
2-Methylphenol	U	U	U	U	U	U	U	U	330	500,000
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U	U	U	--	--
3+4-Methylphenols	U	U	U	U	U	U	U	U	330	500,000
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	--	--
Hexachloroethane	U	U	U	U	U	U	U	U	--	--
Nitrobenzene	U	U	U	U	U	U	U	U	--	--
Isophorone	U	U	U	U	U	U	U	U	--	--
2-Nitrophenol	U	U	U	U	U	U	U	U	--	--
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	--	--
Bis(2-chloroethoxy)methane	U	U	U	U	U	U	U	U	--	--
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	--	--
Naphthalene	U	U	U	U	U	U	U	U	12,000	500,000
4-Chloroaniline	U	U	U	U	U	U	U	U	--	--
Hexachlorobutadiene	U	U	U	U	U	U	U	U	--	--
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	--	--
2-Methylnaphthalene	U	U	U	U	U	U	U	U	--	--
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	--	--
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	--	--
2-Chloronaphthalene	U	U	U	U	U	U	U	U	--	--
2-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Dimethyl phthalate	U	U	U	U	U	U	U	U	--	--
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Acenaphthylene	U	U	U	U	U	U	U	U	100,000	500,000
3-Nitroaniline	U	U	U	U	U	U	U	U	--	--
Acenaphthene	U	U	U	U	U	U	U	U	20,000	500,000
2,4-Dinitrophenol	U	U	U	U	U	U	U	U	--	--
4-Nitrophenol	U	U	U	U	U	U	U	U	--	--
Dibenzofuran	U	U	U	U	U	U	U	U	7,000	350,000
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	--	--
Diethyl phthalate	U	U	U	U	U	U	U	U	--	--
Fluorene	U	U	U	U	U	U	U	U	30,000	500,000
4-Chlorophenylphenyl ether	U	U	U	U	U	U	U	U	--	--
4-Nitroaniline	U	U	U	U	U	U	U	U	--	--
4,6-Dinitro-o-cresol	U	U	U	U	U	U	U	U	--	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	--	--
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	--	--
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	6,000
Pentachlorophenol	U	U	U	U	U	U	U	U	800	6,700
Phenanthrene	U	U	U	U	U	U	U	U	100,000	500,000
Anthracene	U	U	U	U	U	U	U	U	100,000	500,000
Carbazole	U	U	U	U	U	U	U	U	--	--
Di-n-butyl phthalate	U	U	U	U	U	U	U	U	--	--
Fluoranthene	U	U	U	U	U	U	U	U	100,000	500,000
Pyrene	U	U	U	U	U	U	U	U	100,000	500,000
Butyl benzyl phthalate	U	U	U	U	U	U	U	U	--	--
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	--	--
Benzo(a)anthracene	U	U	U	U	U	U	U	U	1,000	5,600
Chrysene	U	U	U	U	U	U	U	U	1,000	56,000
Bis(2-ethylhexyl)phthalate (BEHP)	U	U	U	U	U	U	U	U	--	--
Di-n-octyl phthalate	U	U	U	U	U	U	U	U	--	--
Benzo(b)fluoranthene	U	U	U	U	U	U	U	U	1,000	5,600
Benzo(k)fluoranthene	U	U	U	U	U	U	U	U	800	56,000
Benzo(a)pyrene	U	U	U	U	U	U	U	U	1,000	1,000
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	U	U	500	5,600
Dibenzo(a,h)anthracene	U	U	U	U	U	U	U	U	330	560
Benzo(ghi)perylene	U	U	U	U	U	U	U	U	100,000	500,000
Total SVOCs	0	0	0	0	0	0	0	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms

--: Not Established

Exceeds Commercial Use SCO

Exceeds Unrestricted Use SCO

TABLE E-2
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Soil Boring ID Sample ID Date Collected	B-40 B-40(2-4) 10/05/10 (ug/kg)	B-41 B-41(0-2) 10/05/10 (ug/kg)	B-41 B-41(2-4) 10/05/10 (ug/kg)	B-42 B-42(0-2) 10/05/10 (ug/kg)	B-42 B-42(2-4) 10/05/10 (ug/kg)				Part 375 Unrestricted Use SCO's (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Phenol	U	U	U	U	U				330	500,000
Bis(2-chloroethyl)ether	U	U	U	U	U				--	--
2-Chlorophenol	U	U	U	U	U				--	--
2-Methylphenol	U	U	U	U	U				330	500,000
2,2-oxybis (1-chloropropane)	U	U	U	U	U				--	--
3+4-Methylphenols	U	U	U	U	U				330	500,000
N-Nitroso-di-n-propylamine	U	U	U	U	U				--	--
Hexachloroethane	U	U	U	U	U				--	--
Nitrobenzene	U	U	U	U	U				--	--
Isophorone	U	U	U	U	U				--	--
2-Nitrophenol	U	U	U	U	U				--	--
2,4-Dimethylphenol	U	U	U	U	U				--	--
Bis(2-chloroethoxy)methane	U	U	U	U	U				--	--
2,4-Dichlorophenol	U	U	U	U	U				--	--
Naphthalene	U	U	U	U	U				12,000	500,000
4-Chloroaniline	U	U	U	U	U				--	--
Hexachlorobutadiene	U	U	U	U	U				--	--
4-Chloro-3-methylphenol	U	U	U	U	U				--	--
2-Methylnaphthalene	U	U	U	U	U				--	--
Hexachlorocyclopentadiene	U	U	U	U	U				--	--
2,4,6-Trichlorophenol	U	U	U	U	U				--	--
2,4,5-Trichlorophenol	U	U	U	U	U				--	--
2-Chloronaphthalene	U	U	U	U	U				--	--
2-Nitroaniline	U	U	U	U	U				--	--
Dimethyl phthalate	U	U	U	U	U				--	--
2,6-Dinitrotoluene	U	U	U	U	U				--	--
Acenaphthylene	U	U	U	U	U				100,000	500,000
3-Nitroaniline	U	U	U	U	U				--	--
Acenaphthene	U	U	U	U	U				20,000	500,000
2,4-Dinitrophenol	U	U	U	U	U				--	--
4-Nitrophenol	U	U	U	U	U				--	--
Dibenzofuran	U	U	U	U	U				7,000	350,000
2,4-Dinitrotoluene	U	U	U	U	U				--	--
Diethyl phthalate	U	U	U	U	U				--	--
Fluorene	U	U	U	U	U				30,000	500,000
4-Chlorophenylphenyl ether	U	U	U	U	U				--	--
4-Nitroaniline	U	U	U	U	U				--	--
4,6-Dinitro-o-cresol	U	U	U	U	U				--	--
N-Nitrosodiphenylamine	U	U	U	U	U				--	--
4-Bromophenyl-phenylether	U	U	U	U	U				--	--
Hexachlorobenzene	U	U	U	U	U				330	6,000
Pentachlorophenol	U	U	U	U	U				800	6,700
Phenanthrene	U	U	U	U	U				100,000	500,000
Anthracene	U	U	U	U	U				100,000	500,000
Carbazole	U	U	U	U	U				--	--
Di-n-butyl phthalate	U	U	U	U	U				--	--
Fluoranthene	U	U	U	U	U				100,000	500,000
Pyrene	U	U	U	U	U				100,000	500,000
Butyl benzyl phthalate	U	U	U	U	U				--	--
3,3-Dichlorobenzidine	U	U	U	U	U				--	--
Benzo(a)anthracene	U	U	U	U	U				1,000	5,600
Chrysene	U	U	U	U	U				1,000	56,000
Bis(2-ethylhexyl)phthalate (BEHP)	U	U	U	U	U				--	--
Di-n-octyl phthalate	U	U	U	U	U				--	--
Benzo(b)fluoranthene	U	U	U	U	U				1,000	5,600
Benzo(k)fluoranthene	U	U	U	U	U				800	56,000
Benzo(a)pyrene	U	U	U	U	U				1,000	1,000
Indeno(1,2,3-cd)pyrene	U	U	U	U	U				500	5,600
Dibenzo(a,h)anthracene	U	U	U	U	U				330	560
Benzo(ghi)perylene	U	U	U	U	U				100,000	500,000
Total SVOCs	0	0	0	0	0				--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms

--: Not Established

Exceeds Commercial Use SCO

Exceeds Unrestricted Use SCO

TABLE E-3
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
PESTICIDES AND PCBs

Soil Boring ID Sample ID Date Collected Units	B-01 B-1 (0-2) 08/26/10 (ug/kg)	B-01 B-1 (2-4) 08/26/10 (ug/kg)	B-02 B-2 (0-2) 08/26/10 (ug/kg)	B-02 B-2 (2-4) 08/26/10 (ug/kg)	B-03 B-3 (0-2) 08/26/10 (ug/kg)	B-03 B-3 (2-4) 08/26/10 (ug/kg)	B-04 B-4 (0-2) 08/30/10 (ug/kg)	B-04 B-4 (2-4) 08/30/10 (ug/kg)	B-05 B-5 (0-2) 08/30/10 (ug/kg)	B-05 B-5 (2-4) 08/30/10 (ug/kg)	B-06 B-6 (0-2) 08/30/10 (ug/kg)	B-06 B-6 (2-4) 08/30/10 (ug/kg)	B-07 B-7 (0-2) 08/30/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
<u>Pesticides</u>															
alpha-BHC	U	U	U	U	U	U	U	U	U	U	U	U	U	20	3,400
beta-BHC	U	U	U	U	U	U	U	U	U	U	U	U	U	36	3,000
delta-BHC	U	U	U	U	U	U	U	U	U	U	U	U	U	40	500,000
Lindane	U	U	U	U	U	U	U	U	U	U	U	U	U	100	9,200
Heptachlor	U	U	U	U	U	U	U	U	U	U	U	U	U	42	15,000
Aldrin	U	U	U	U	U	U	U	U	U	U	U	U	U	5	680
Heptachlor epoxide	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endosulfan I	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
Dieldrin	U	U	U	U	U	U	U	U	U	U	U	U	U	5	1,400
4,4'-DDE	U	U	U	U	U	U	U	U	U	U	U	U	U	3.3	62,000
Endrin	U	U	U	U	U	U	U	U	U	U	U	U	U	14	89,000
Endosulfan II	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
4,4'-DDD	U	U	U	U	U	U	U	U	U	U	U	U	U	3.3	92,000
Endosulfan sulfate	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
4,4'-DDT	U	U	5.8 J	U	U	U	U	U	U	U	U	U	U	3.3	47,000
Methoxychlor	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endrin ketone	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endrin aldehyde	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
alpha-Chlordane	U	U	U	U	U	U	U	U	U	U	U	U	4.9 J	94	24,000
gamma-Chlordane	U	U	U	U	U	U	U	U	U	U	U	U	4.3 J	94	24,000
Toxaphene	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
<u>PCBs</u>															
Aroclor 1016	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1221	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1232	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1242	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1248	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1254	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1260	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Total PCBs	0	0	0	0	0	0	0	0	0	0	0	0	0	100	1,000

Qualifiers:

U: Not detected
J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms
--: Not established
NA: Not analyzed

5.8 J Exceeds Unrestricted Use SCO

TABLE E-3
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
PESTICIDES AND PCBs

Soil Boring ID Sample ID Date Collected Units	B-07 B-7 (2-4) 08/30/10 (ug/kg)	B-07 B-7 (4-6) 08/30/10 (ug/kg)	B-08 B-8 (0-2) 08/27/10 (ug/kg)	B-08 B-8 (2-4) 08/27/10 (ug/kg)	B-09 B-9 (0-2) 08/26/10 (ug/kg)	B-09 B-9 (2-4) 08/26/10 (ug/kg)	B-10 B-10 (0-2) 08/30/10 (ug/kg)	B-10 B-10 (2-4) 08/30/10 (ug/kg)	B-11 B-11 (0-2) 08/30/10 (ug/kg)	B-11 B-11 (2-4) 08/30/10 (ug/kg)	B-12 B-12 (0-2) 08/27/10 (ug/kg)	B-12 B-12 (2-4) 08/27/10 (ug/kg)	B-13 B-13 (0-2) 08/26/10 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
<u>Pesticides</u>															
alpha-BHC	U	U	U	U	U	U	U	U	U	U	U	U	U	20	3,400
beta-BHC	U	U	U	U	U	U	U	2.5 J	U	U	U	U	U	36	3,000
delta-BHC	U	U	U	U	U	U	U	U	U	U	U	U	U	40	500,000
Lindane	U	U	U	U	U	U	U	U	U	U	U	U	U	100	9,200
Heptachlor	U	U	U	U	U	U	U	U	U	U	U	U	U	42	15,000
Aldrin	U	U	U	U	U	U	U	U	U	U	U	U	U	5	680
Heptachlor epoxide	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endosulfan I	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
Dieldrin	U	U	U	U	U	U	U	U	U	U	U	U	U	5	1,400
4,4'-DDE	U	U	U	U	U	U	U	U	U	U	U	U	U	3.3	62,000
Endrin	U	U	U	U	U	U	U	U	U	U	U	U	U	14	89,000
Endosulfan II	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
4,4'-DDD	U	U	U	U	U	U	U	U	U	U	U	U	U	3.3	92,000
Endosulfan sulfate	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
4,4'-DDT	17 J	U	U	U	U	U	U	U	U	U	U	U	U	3.3	47,000
Methoxychlor	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endrin ketone	4.5	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endrin aldehyde	8.1 J	U	U	U	U	U	U	U	U	U	U	U	U	--	--
alpha-Chlordane	U	U	11 J	U	U	U	U	U	U	U	U	U	U	94	24,000
gamma-Chlordane	U	U	7.6 J	U	U	U	U	U	U	U	U	U	U	94	24,000
Toxaphene	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
<u>PCBs</u>															
Aroclor 1016	U	NA	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1221	U	NA	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1232	U	NA	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1242	U	NA	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1248	U	NA	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1254	U	NA	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1260	U	NA	50	U	U	U	U	U	U	U	U	U	U	100	1,000
Total PCBs	0	NA	50	0	0	0	0	0	0	0	0	0	0	100	1,000

Qualifiers:

U: Not detected
J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms
--: Not established
NA: Not analyzed

17 J Exceeds Unrestricted Use SCO

TABLE E-3
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
PESTICIDES AND PCBs

Soil Boring ID	B-13	B-14	B-14	B-15	B-15	B-16	B-16	B-17	B-17	B-18	B-18	B-19	B-19	Part 375	Part 375
Sample ID	B-13 (2-4)	B-14 (0-2)	B-14 (2-4)	B-15 (0-2)	B-15 (2-4)	B-16 (0-2)	B-16 (2-4)	B-17 (0-2)	B-17 (2-4)	B-18 (0-2)	B-18 (2-4)	B-19 (0-2)	B-19 (2-4)	Unrestricted	Commercial
Date Collected	08/26/10	08/27/10	08/27/10	08/27/10	08/27/10	08/27/10	08/27/10	08/27/10	08/27/10	08/26/10	08/26/10	08/30/10	08/30/10	Use SCOs	Use SCO's
Units	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
<u>Pesticides</u>															
alpha-BHC	U	U	U	U	U	U	U	U	U	U	U	U	U	20	3,400
beta-BHC	U	U	U	U	U	U	U	U	U	U	U	U	21 J	36	3,000
delta-BHC	U	U	U	U	U	U	U	U	U	U	U	3.6	5.5	40	500,000
Lindane	U	U	U	U	U	U	U	U	U	U	U	U	U	100	9,200
Heptachlor	U	U	U	U	U	U	U	U	U	U	U	U	3.4 J	42	15,000
Aldrin	U	U	U	U	U	U	U	U	U	U	U	U	U	5	680
Heptachlor epoxide	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endosulfan I	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
Dieldrin	U	U	U	U	U	U	U	U	U	U	U	U	U	5	1,400
4,4'-DDE	U	U	U	U	U	U	U	U	U	U	U	U	U	3.3	62,000
Endrin	U	U	U	U	U	U	U	U	U	U	U	U	U	14	89,000
Endosulfan II	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
4,4'-DDD	U	U	U	U	U	U	U	U	U	U	U	U	U	3.3	92,000
Endosulfan sulfate	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
4,4'-DDT	U	U	U	U	U	U	U	U	U	U	U	U	U	3.3	47,000
Methoxychlor	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endrin ketone	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endrin aldehyde	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
alpha-Chlordane	U	U	U	U	U	U	U	U	U	U	U	U	U	94	24,000
gamma-Chlordane	U	U	U	U	U	U	U	U	U	U	U	U	U	94	24,000
Toxaphene	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
<u>PCBs</u>															
Aroclor 1016	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1221	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1232	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1242	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1248	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1254	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1260	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Total PCBs	0	0	0	0	0	0	0	0	0	0	0	0	0	100	1,000

Qualifiers:

U: Not detected
J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms
--: Not established
NA: Not analyzed

Exceeds Unrestricted Use SCO

TABLE E-3
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
PESTICIDES AND PCBs

Soil Boring ID	B-20	B-20	B-21	B-21	B-22	B-22	B-23	B-23	B-24	B-24	B-25	B-25	B-26	Part 375	Part 375
Sample ID	B-20 (0-2)	B-20 (4-6)	B-21 (0-2)	B-21 (4-6)	B-22 (0-2)	B-22 (2-4)	B-23 (0-2)	B-23 (4-6)	B-24 (0-2)	B-24 (5-7)	B-25 (0-2)	B-25 (8-10)	B-26 (0-2)	Unrestricted	Commercial
Date Collected	08/27/10	08/27/10	08/30/10	08/30/10	08/27/10	08/27/10	08/27/10	08/27/10	08/27/10	08/27/10	08/25/10	08/25/10	08/26/10	Use SCO's	Use SCO's
Units	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
<u>Pesticides</u>															
alpha-BHC	U	U	U	U	U	U	U	U	U	U	U	U	U	20	3,400
beta-BHC	U	U	U	U	U	U	U	U	U	U	U	U	U	36	3,000
delta-BHC	U	U	U	U	U	U	U	U	U	U	U	U	U	40	500,000
Lindane	U	U	U	U	U	U	U	U	U	U	U	U	U	100	9,200
Heptachlor	U	U	U	U	U	U	U	U	U	U	U	U	U	42	15,000
Aldrin	U	U	U	U	U	U	U	U	U	U	U	U	U	5	680
Heptachlor epoxide	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endosulfan I	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
Dieldrin	U	U	0.45 J	U	U	U	U	U	U	U	U	U	U	5	1,400
4,4'-DDE	U	U	U	U	U	U	U	U	U	U	U	U	U	3.3	62,000
Endrin	U	U	U	U	U	U	U	U	U	U	U	U	U	14	89,000
Endosulfan II	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
4,4'-DDD	U	U	U	U	U	U	U	U	U	U	U	U	U	3.3	92,000
Endosulfan sulfate	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
4,4'-DDT	U	U	U	U	U	U	U	U	U	U	U	U	U	3.3	47,000
Methoxychlor	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endrin ketone	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endrin aldehyde	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
alpha-Chlordane	U	U	19 J	U	U	U	U	U	U	U	U	U	U	94	24,000
gamma-Chlordane	U	U	15 J	U	U	U	U	U	U	U	U	U	U	94	24,000
Toxaphene	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
<u>PCBs</u>															
Aroclor 1016	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1221	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1232	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1242	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1248	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1254	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1260	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Total PCBs	0	0	0	0	0	0	0	0	0	0	0	0	0	100	1,000

Qualifiers:

U: Not detected
J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms
--: Not established
NA: Not analyzed

Exceeds Unrestricted Use SCO

TABLE E-3
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
PESTICIDES AND PCBs

Soil Boring ID Sample ID Date Collected Units	B-26 B-26 (4-6) 08/26/10 (ug/kg)	B-27 B-27 (0-2) 08/26/10 (ug/kg)	B-27 B-27 (4-6) 08/26/10 (ug/kg)	B-28 B-28 (0-2) 08/26/10 (ug/kg)	B-28 B-28 (4-6) 08/26/10 (ug/kg)	B-29 B-29 (0-2) 08/25/10 (ug/kg)	B-29 B-29 (4-6) 08/25/10 (ug/kg)	B-30 B-30 (0-2) 08/25/10 (ug/kg)	B-30 B-30 (2-4) 08/25/10 (ug/kg)	B-31 B-31 (0-2) 08/25/10 (ug/kg)	B-31 B-31 (2-4) 08/25/10 (ug/kg)	B-32 B-32 (0-2) 08/25/10 (ug/kg)	B-32 B-32 (4-6) 08/25/10 (ug/kg)	Part 375 Unrestricted Use SCO's (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
<u>Pesticides</u>															
alpha-BHC	U	U	U	U	U	U	U	U	U	U	U	U	U	20	3,400
beta-BHC	U	U	U	U	U	U	U	U	2.1 J	U	14 J	U	U	36	3,000
delta-BHC	U	U	U	U	U	U	U	U	U	U	U	U	U	40	500,000
Lindane	U	U	U	U	U	U	U	U	U	U	U	U	U	100	9,200
Heptachlor	U	U	U	U	U	U	U	U	U	U	U	U	U	42	15,000
Aldrin	U	U	U	U	U	U	U	U	U	U	U	U	U	5	680
Heptachlor epoxide	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endosulfan I	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
Dieldrin	U	U	U	U	U	U	U	U	U	U	U	U	U	5	1,400
4,4'-DDE	U	U	U	U	U	U	U	U	U	U	U	U	U	3.3	62,000
Endrin	U	U	U	U	U	U	U	U	U	U	U	U	U	14	89,000
Endosulfan II	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
4,4'-DDD	U	U	U	U	U	U	U	U	U	U	U	U	U	3.3	92,000
Endosulfan sulfate	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
4,4'-DDT	U	U	U	U	U	U	U	U	U	U	U	U	U	3.3	47,000
Methoxychlor	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endrin ketone	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endrin aldehyde	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
alpha-Chlordane	U	U	U	U	U	U	U	U	U	U	U	U	U	94	24,000
gamma-Chlordane	U	U	U	U	U	U	U	U	U	U	U	U	U	94	24,000
Toxaphene	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
<u>PCBs</u>															
Aroclor 1016	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1221	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1232	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1242	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1248	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1254	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Aroclor 1260	U	U	U	U	U	U	U	U	U	U	U	U	U	100	1,000
Total PCBs	0	0	0	0	0	0	0	0	0	0	0	0	0	100	1,000

Qualifiers:

U: Not detected

J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms

--: Not established

NA: Not analyzed

 Exceeds Unrestricted Use SCO

TABLE E-3
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
PESTICIDES AND PCBs

Soil Boring ID Sample ID Date Collected Units	B-33 B-33 (0-2) 08/25/10 (ug/kg)	B-33 B-33 (4-6) 08/25/10 (ug/kg)	B-33 B-33 (6-8) 08/25/10 (ug/kg)	B-34 B-34 (0-2) 08/25/10 (ug/kg)	B-34 B-34 (4-6) 08/25/10 (ug/kg)	B-35 B-35 (0-2) 08/25/10 (ug/kg)	B-35 B-35 (4-6) 08/25/10 (ug/kg)	B-36 B-36(0-2) 10/05/10 (ug/kg)	B-36 B-36(2-4) 10/05/10 (ug/kg)	B-36 B-36(4-6) 10/05/10 (ug/kg)	B-37 B-37(0-2) 10/05/10 (ug/kg)	B-37 B-37(2-4) 10/05/10 (ug/kg)	B-38 B-38(0-2) 10/05/10 (ug/kg)	Part 375 Unrestricted Use SCO's (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
<u>Pesticides</u>															
alpha-BHC	U	U	U	U	U	U	U	U	U	U	U	U	U	20	3,400
beta-BHC	U	U	U	U	U	U	U	U	U	U	U	U	U	36	3,000
delta-BHC	U	U	U	U	U	U	U	U	U	U	U	U	U	40	500,000
Lindane	U	U	U	U	1.8 J	U	U	U	U	U	U	U	U	100	9,200
Heptachlor	U	U	U	2.2 J	U	U	U	U	U	U	U	U	U	42	15,000
Aldrin	U	U	U	U	U	U	U	U	U	U	U	U	U	5	680
Heptachlor epoxide	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endosulfan I	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
Dieldrin	U	U	U	U	U	U	U	U	U	U	U	U	U	5	1,400
4,4'-DDE	U	U	U	U	U	U	U	3.7	5.4	U	U	U	U	3.3	62,000
Endrin	U	U	U	U	U	U	U	U	U	U	U	U	U	14	89,000
Endosulfan II	U	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
4,4'-DDD	U	U	U	U	U	U	U	U	U	U	U	U	U	3.3	92,000
Endosulfan sulfate	7.0 J	U	U	U	U	U	U	U	U	U	U	U	U	2,400	200,000
4,4'-DDT	9.1 J	U	U	U	U	U	U	6.0 J	9.1 J	U	U	U	U	3.3	47,000
Methoxychlor	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endrin ketone	9.5 J	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Endrin aldehyde	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
alpha-Chlordane	21 J	U	U	U	U	U	U	U	U	U	U	U	U	94	24,000
gamma-Chlordane	23 J	U	U	U	U	U	U	U	U	U	U	U	U	94	24,000
Toxaphene	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
<u>PCBs</u>															
Aroclor 1016	U	U	U	U	U	U	U	U	U	NA	U	U	U	100	1,000
Aroclor 1221	U	U	U	U	U	U	U	U	U	NA	U	U	U	100	1,000
Aroclor 1232	U	U	U	U	U	U	U	U	U	NA	U	U	U	100	1,000
Aroclor 1242	U	U	U	U	U	U	U	U	U	NA	U	U	U	100	1,000
Aroclor 1248	U	U	U	U	U	U	U	U	U	NA	U	U	U	100	1,000
Aroclor 1254	U	U	U	U	U	U	U	U	U	NA	U	U	U	100	1,000
Aroclor 1260	92	U	U	U	U	U	U	U	U	NA	U	U	U	100	1,000
Total PCBs	92	0	0	0	0	0	0	0	0	NA	0	0	0	100	1,000

Qualifiers:

U: Not detected

J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms

--: Not established

NA: Not analyzed

 Exceeds Unrestricted Use SCO

TABLE E-3
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
PESTICIDES AND PCBs

Soil Boring ID Sample ID Date Collected Units	B-38 B-38(2-4) 10/05/10 (ug/kg)	B-39 B-39(0-2) 10/05/10 (ug/kg)	B-39 B-39(2-4) 10/05/10 (ug/kg)	B-40 B-40(0-2) 10/05/10 (ug/kg)	B-40 B-40(2-4) 10/05/10 (ug/kg)	B-41 B-41(0-2) 10/05/10 (ug/kg)	B-41 B-41(2-4) 10/05/10 (ug/kg)	B-42 B-42(0-2) 10/05/10 (ug/kg)	B-42 B-42(2-4) 10/05/10 (ug/kg)					Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
<u>Pesticides</u>															
alpha-BHC	U	U	U	U	U	U	U	U	U					20	3,400
beta-BHC	U	U	U	U	U	U	U	U	U					36	3,000
delta-BHC	U	U	U	U	U	U	U	U	U					40	500,000
Lindane	U	U	U	U	U	U	U	U	U					100	9,200
Heptachlor	U	U	U	U	U	U	U	U	U					42	15,000
Aldrin	U	U	U	U	U	U	U	U	U					5	680
Heptachlor epoxide	U	U	U	U	U	U	U	U	U					--	--
Endosulfan I	U	U	U	U	U	U	U	U	U					2,400	200,000
Dieldrin	U	U	U	U	U	U	U	U	U					5	1,400
4,4'-DDE	U	U	U	U	U	U	U	U	U					3.3	62,000
Endrin	U	U	U	U	U	U	U	U	U					14	89,000
Endosulfan II	U	U	U	U	U	U	U	U	U					2,400	200,000
4,4'-DDD	U	U	U	U	U	U	U	U	U					3.3	92,000
Endosulfan sulfate	U	U	U	U	U	U	U	U	U					2,400	200,000
4,4'-DDT	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ					3.3	47,000
Methoxychlor	U	U	U	U	U	U	U	U	U					--	--
Endrin ketone	U	U	U	U	U	U	U	U	U					--	--
Endrin aldehyde	U	U	U	U	U	U	U	U	U					--	--
alpha-Chlordane	U	U	U	U	U	U	U	U	U					94	24,000
gamma-Chlordane	U	U	U	U	U	U	U	U	U					94	24,000
Toxaphene	U	U	U	U	U	U	U	U	U					--	--
<u>PCBs</u>															
Aroclor 1016	U	U	U	U	U	U	U	U	U					100	1,000
Aroclor 1221	U	U	U	U	U	U	U	U	U					100	1,000
Aroclor 1232	U	U	U	U	U	U	U	U	U					100	1,000
Aroclor 1242	U	U	U	U	U	U	U	U	U					100	1,000
Aroclor 1248	U	U	U	U	U	U	U	U	U					100	1,000
Aroclor 1254	U	U	U	U	U	U	U	U	U					100	1,000
Aroclor 1260	U	U	U	U	U	U	U	U	U					100	1,000
Total PCBs	0	0	0	0	0	0	0	0	0					100	1,000

Qualifiers:

U: Not detected
J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms
--: Not established
NA: Not analyzed

 Exceeds Unrestricted Use SCO

TABLE E-4
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
METALS AND CYANIDE

Soil Boring ID Sample ID Date Collected Units	B-01 B-1 (0-2) 08/26/10 (mg/kg)	B-01 B-1 (2-4) 08/26/10 (mg/kg)	B-02 B-2 (0-2) 08/26/10 (mg/kg)	B-02 B-2 (2-4) 08/26/10 (mg/kg)	B-03 B-3 (0-2) 08/26/10 (mg/kg)	B-03 B-3 (2-4) 08/26/10 (mg/kg)	B-04 B-4 (0-2) 08/30/10 (mg/kg)	B-04 B-4 (2-4) 08/30/10 (mg/kg)	B-05 B-5 (0-2) 08/30/10 (mg/kg)	B-05 B-5 (2-4) 08/30/10 (mg/kg)	B-06 B-6 (0-2) 08/30/10 (mg/kg)	B-06 B-6 (2-4) 08/30/10 (mg/kg)	Part 375 Unrestricted Use SCOs (mg/kg)	Part 375 Commercial Use SCO's (mg/kg)
Aluminum	3130	3400	3210	6090	7270	3020	7690 J	5770 J	4520 J	7190 J	3590 J	1340 J	--	--
Antimony	UJ	0.55 BJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	0.39 BJ	--	--
Arsenic	6	9.3	1.3	2.5	4.6	1.3	3	2.1	1.6	2.5	1.5	1.5	13	16
Barium	111	9.2	12.9	16.7	11.4	7.7 B	17.6 J	11.5 J	9.9 J	14.2 J	8.6 BJ	2.9 BJ	350	400
Beryllium	0.13 B	0.16 B	0.12 B	0.22 B	0.24	0.11 B	0.23 B	0.19	0.13 B	0.19 B	0.12 B	0.17 B	7.2	590
Cadmium	0.54	0.15 B	0.045 B	0.066 B	0.12 B	0.022 B	U	U	U	U	U	U	2.5	9.3
Calcium	20200 J	38800 J	1030 J	1950 J	241 J	191 J	1220 J	335 J	2840 J	1640 J	523 J	46.4 J	--	--
Chromium	5.8	4.5	4.5	7	7.7	6.2	8.6 J	6.4 J	5.1 J	9.1 J	4.5 J	5.4 J	30	1,500
Cobalt	1.6 B	1.5 B	1.6 B	3.7	5.9	1.4 B	4.0 J	2.3 J	1.8 BJ	2.1 BJ	1.5 BJ	2.1 J	--	--
Copper	11.9	16.3	3.2	4.7	4.8	2.5	4.7 J	3.3 J	3.2 J	4.3 J	2.9 J	3.2 J	50	270
Iron	4280	4330	4230	9480	11500	4200	9330 J	6670 J	5310 J	8100 J	4650 J	5060 J	--	--
Lead	22.5	26.2	4.1	6.6	6.3	3.3	7.8 J	3.9 J	4.1 J	7.6 J	6.8 J	1.7 J	63	1,000
Magnesium	1330 J	2220 J	771 J	1010 J	1210 J	421 J	1020 J	861 J	644 J	881 J	522 J	151 J	--	--
Manganese	72.2	70.9	61.1	283	147	99.6	127 J	69.7 J	59.5 J	77.8 J	73.6 J	118 J	1,600	10,000
Mercury	0.024 B	U	0.0055 B	0.0032 B	0.013 B	0.0033 B	0.0048 B	U	U	U	0.0040 B	U	0.18	2.8
Nickel	4.1 J	3.7 J	2.5 J	4.2 J	5.3 J	2.3 BJ	5.2 J	4.2 J	3.1 J	4.8 J	2.8 J	1.7 BJ	30	310
Potassium	166	122	177	342	328	171	361 J	262 J	443 J	549 J	271 J	77.3 J	--	--
Selenium	U	U	U	U	0.55 B	U	U	0.51 B	0.62 B	1.0 B	U	U	3.9	1,500
Silver	U	U	U	U	U	U	U	U	U	U	U	U	2	1,500
Sodium	29.0 B	29.1 B	16.5 B	27.3 B	17.6 B	26.3 B	63.2	24.5 B	48.6	104	47.7	9.2 B	--	--
Thallium	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Vanadium	9.1	10.5	7.3	11.2	12.4	6	14.2	10.1	8.2	13.6	7.3	5.7	--	--
Zinc	44.6	54.8	8.4	12.2	12.9	6.2	74.3 J	12.1 J	8.7 J	12.6 J	23.4 J	8.9 J	109	10,000
Cyanide	U	U	U	U	U	U	UJ	UJ	UJ	UJ	UJ	UJ	27	27

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected between the IDL and CRDL

Notes:

mg/kg: Milligrams per kilograms
--: Not established
NA: Not analyzed
 Exceeds Unrestricted Use SCO
IDL: Instrument detection limit
CRDL: Contract required detection limit

TABLE E-4
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
METALS AND CYANIDE

Soil Boring ID Sample ID Date Collected Units	B-07 B-7 (0-2) 08/30/10 (mg/kg)	B-07 B-7 (2-4) 08/30/10 (mg/kg)	B-08 B-8 (0-2) 08/27/10 (mg/kg)	B-08 B-8 (2-4) 08/27/10 (mg/kg)	B-09 B-9 (0-2) 08/26/10 (mg/kg)	B-09 B-9 (2-4) 08/26/10 (mg/kg)	B-10 B-10 (0-2) 08/30/10 (mg/kg)	B-10 B-10 (2-4) 08/30/10 (mg/kg)	B-11 B-11 (0-2) 08/30/10 (mg/kg)	B-11 B-11 (2-4) 08/30/10 (mg/kg)	B-12 B-12 (0-2) 08/27/10 (mg/kg)	B-12 B-12 (2-4) 08/27/10 (mg/kg)	Part 375 Unrestricted Use SCOs (mg/kg)	Part 375 Commercial Use SCO's (mg/kg)
Aluminum	7800 J	4900 J	4670	3130	5540	3120	6040 J	4690 J	2210 J	1610 J	1230	1100	--	--
Antimony	UJ	UJ	0.26 BJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Arsenic	3.4	1.8	3.3	1.3	2.1	1.2	2.1	1.9	0.94	0.73 B	0.67 B	0.65 B	13	16
Barium	25.0 J	9.4 J	15.5 J	6.3 J	12.2	8.3 B	12.7 J	11.1 J	5.7 BJ	3.4 BJ	4.3 BJ	2.8 BJ	350	400
Beryllium	0.2	0.13 B	0.16	0.11 B	0.18 B	0.13 B	0.2	0.18 B	0.10 B	0.059 B	0.067 B	0.047 B	7.2	590
Cadmium	0.089 B	U	0.44	0.028 B	0.064 B	0.018 B	0.46	U	U	U	0.014 B	U	2.5	9.3
Calcium	13800 J	349 J	1370 J	318 J	426 J	553 J	607 J	4570 J	116 J	56.9 J	214 J	29.0 BJ	--	--
Chromium	21.2 J	5.5 J	14.5	4	6.5	3.9	7.6 J	6.2 J	3.1 J	3.2 J	3.4	2.3	30	1,500
Cobalt	2.3 J	1.6 BJ	2.1 J	1.4 J	2.9	1.1 B	2.5 J	2.1 BJ	1.3 BJ	0.69 BJ	0.84 BJ	0.58 BJ	--	--
Copper	33.8 J	2.7 J	16.5 J	2.1 J	3.9	2.4	3.7 J	8.2 J	2.1 J	1.5 J	1.7 J	2.3 J	50	270
Iron	8550 J	5730 J	6680 J	3870 J	7580	3660	7510 J	6320 J	3240 J	2840 J	2220 J	2460 J	--	--
Lead	42.0 J	5.5 J	107	2.7	4.6	3.6	3.8 J	6.0 J	1.9 J	1.4 J	1.2	1.1	63	1,000
Magnesium	2600 J	613 J	1020 J	434 J	840 J	364 J	1090 J	715 J	366 J	212 J	246 J	171 J	--	--
Manganese	91.3 J	62.5 J	84.7 J	50.1 J	199	35.6	58.7 J	87.9 J	62.3 J	34.2 J	49.9 J	28.1 J	1,600	10,000
Mercury	0.039 B	0.0064 B	0.017 B	U	0.015 B	0.0028 B	0.024 B	0.010 B	U	U	U	U	0.18	2.8
Nickel	12.3 J	3.6 J	6.9	2.3	3.9 J	1.8 BJ	4.1 J	4.0 J	1.8 J	1.3 BJ	1.5 B	1.0 B	30	310
Potassium	538 J	227 J	214	144	232	138	215 J	189 J	129 J	75.0 J	98.5	80.6	--	--
Selenium	0.51 B	0.62 B	0.54 B	0.51 B	0.52 B	U	0.62 B	U	U	U	U	U	3.9	1,500
Silver	U	U	U	U	U	U	U	U	U	U	U	U	2	1,500
Sodium	106	32.2 B	16.5 B	9.3 B	28.8 B	17.0 B	35.4	31.6 B	31.2	11.5 B	8.5 B	17.7 B	--	--
Thallium	U	0.21 B	U	U	U	U	U	U	U	U	U	U	--	--
Vanadium	15.9	9.3	12.9	6	10.1	5.8	11.7	8.5	4.6	3.5	3.1	2.9	--	--
Zinc	68.5 J	9.3 J	304 J	5.7 J	10.2	5.5	10.0 J	20.7 J	4.4 J	3.3 J	3.0 J	2.6 J	109	10,000
Cyanide	UJ	UJ	U	U	U	U	UJ	UJ	UJ	UJ	U	U	27	27

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected between the IDL and CRDL

Notes:

mg/kg: Milligrams per kilograms
--: Not established
NA: Not analyzed
Exceeds Unrestricted Use SCO
IDL: Instrument detection limit
CRDL: Contract required detection limit

TABLE E-4
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
METALS AND CYANIDE

Soil Boring ID	B-13	B-13	B-14	B-14	B-14	B-15	B-15	B-16	B-16	B-17	B-17	B-18	Part 375	Part 375
Sample ID	B-13 (0-2)	B-13 (2-4)	B-14 (0-2)	B-14 (2-4)	B-14 (4-6)	B-15 (0-2)	B-15 (2-4)	B-16 (0-2)	B-16 (2-4)	B-17 (0-2)	B-17 (2-4)	B-18 (0-2)	Unrestricted	Commercial
Date Collected	08/26/10	08/26/10	08/27/10	08/27/10	08/27/10	08/27/10	08/27/10	08/27/10	08/27/10	08/27/10	08/27/10	08/26/10	Use SCO's	Use SCO's
Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aluminum	6370	5120	2530	3270	1010	4820	4540	6260	5550	5980	8620	7540	--	--
Antimony	UJ	UJ	UJ	0.42 BJ	U	UJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Arsenic	2.2	1.8	1.2	1.7	1.3	1.8	1.8	2.1	2.2	2.3	3.1	2.5	13	16
Barium	13.7	12.4	5.7 BJ	22.9 J	10.4	9.4 J	9.7 J	13.3 J	11.4 J	12.8 J	16.6 J	16.5	350	400
Beryllium	0.23 B	0.16 B	0.13 B	0.17 B	0.10 B	0.15 B	0.15 B	0.2	0.17	0.21	0.29	0.22 B	7.2	590
Cadmium	0.056 B	0.045 B	0.078 B	0.13 B	0.10 B	0.053 B	0.044 B	0.052 B	0.060 B	0.068 B	0.076 B	0.077 B	2.5	9.3
Calcium	1120 J	495 J	142 J	210 J	126	160 J	118 J	538 J	272 J	166 J	198 J	504 J	--	--
Chromium	7	5.4	105	213	84.8	40	5.9	6.9	5.9	6.7	9.8	7.9	30	1,500
Cobalt	2.7	2.4	1.7 BJ	1.2 BJ	0.70 B	2.1 J	1.8 BJ	3.2 J	2.2 J	2.8 J	3.7 J	3	--	--
Copper	4.2	3.4	15.5 J	19.2 J	11	7.2 J	3.4 J	4.0 J	3.4 J	3.8 J	4.6 J	4.5	50	270
Iron	8640	5910	4410 J	3340 J	3090	5950 J	5730 J	6860 J	6560 J	7540 J	9900 J	8260	--	--
Lead	5.2	4.2	2.6	6.6	9.8	3.7	4.8	4.6	6	4.5	5.7	7.6	63	1,000
Magnesium	1410 J	828 J	369 J	592 J	245	718 J	623 J	1100 J	670 J	921 J	1210 J	1080 J	--	--
Manganese	118	58.9	76.8 J	26.8 J	20.3	35.7 J	65.7 J	61.3 J	101 J	49.6 J	240 J	126	1,600	10,000
Mercury	0.011 B	0.0091 B	0.018 B	0.0057 B	0.013 B	0.0093 B	U	0.0072 B	0.0071 B	0.0049 B	0.014 B	0.023 B	0.18	2.8
Nickel	4.1 J	3.2 J	4.4	5.4	2.1	3.4	3.2	4.5	3.4	4	5.7	4.8 J	30	310
Potassium	289	321	168	251	111	192	181	282	213	248	320	310	--	--
Selenium	U	0.49 B	U	U	U	0.61 B	0.53 B	0.52 B	0.67 B	0.70 B	0.63 B	U	3.9	1,500
Silver	U	U	0.57 B	1.3	U	U	U	U	U	U	U	U	2	1,500
Sodium	32.1 B	33.2 B	9.8 B	13.2 B	U	10.7 B	10.4 B	18.6 B	21.7 B	15.3 B	19.9 B	23.1 B	--	--
Thallium	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Vanadium	11.8	9.3	6.1	7.4	4.8	8.4	9.2	11.1	10.1	11	14.6	13.6	--	--
Zinc	11.2	9.9	6.6 J	17.6 J	7.7	9.4 J	8.8 J	11.3 J	9.7 J	10 J	13.7 J	13.1	109	10,000
Cyanide	U	U	U	U	NA	U	U	U	U	U	U	U	27	27

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected between the IDL and CRDL

Notes:

mg/kg: Milligrams per kilograms
--: Not established
NA: Not analyzed
 Exceeds Unrestricted Use SCO
IDL: Instrument detection limit
CRDL: Contract required detection limit

TABLE E-4
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
METALS AND CYANIDE

Soil Boring ID Sample ID Date Collected Units	B-18 B-18 (2-4) 08/26/10 (mg/kg)	B-19 B-19 (0-2) 08/30/10 (mg/kg)	B-19 B-19 (2-4) 08/30/10 (mg/kg)	B-20 B-20 (0-2) 08/27/10 (mg/kg)	B-20 B-20 (4-6) 08/27/10 (mg/kg)	B-21 B-21 (0-2) 08/30/10 (mg/kg)	B-21 B-21 (4-6) 08/30/10 (mg/kg)	B-22 B-22 (0-2) 08/27/10 (mg/kg)	B-22 B-22 (2-4) 08/27/10 (mg/kg)	B-23 B-23 (0-2) 08/27/10 (mg/kg)	B-23 B-23 (4-6) 08/27/10 (mg/kg)	B-24 B-24 (0-2) 08/27/10 (mg/kg)	Part 375 Unrestricted Use SCOs (mg/kg)	Part 375 Commercial Use SCO's (mg/kg)
Aluminum	4440	3890 J	4820 J	6330	205	5460 J	209 J	9200	2090	2080	629	6920	--	--
Antimony	UJ	UJ	UJ	UJ	UJ	0.36 BJ	UJ	UJ	UJ	UJ	UJ	UJ	--	--
Arsenic	1.6	1.7	1.7	2.3	0.30 B	2	U	1.5	0.88	4.7	0.54 B	2.6	13	16
Barium	12.4	10.0 J	13.7 J	12.8 J	0.95 BJ	12.3 J	1.2 BJ	38.7 J	5.4 BJ	8.8 J	2.5 BJ	14.1 J	350	400
Beryllium	0.16 B	0.16 B	0.17	0.18	0.019 B	0.17	0.014 B	0.23	0.11 B	0.11 B	0.035 B	0.28	7.2	590
Cadmium	0.068 B	U	U	0.099 B	U	U	U	0.079 B	0.032 B	0.14 B	U	0.065 B	2.5	9.3
Calcium	1410 J	934 J	2200 J	574 J	15.1 BJ	695 J	11.0 BJ	1350 J	138 J	209 J	131 J	257 J	--	--
Chromium	6.4	6.3 J	6.0 J	7	1.3	13.0 J	1.4 J	22.4	25.4	5.9	3	7.5	30	1,500
Cobalt	2.2	2.1 BJ	1.9 J	2.6 J	0.29 BJ	1.5 BJ	0.65 BJ	3.1 J	1.5 BJ	0.93 BJ	0.54 BJ	3.4 J	--	--
Copper	4	3.6 J	5.9 J	5.0 J	1.1 J	8.7 J	0.67 BJ	6.2 J	3.1 J	5.2 J	2.2 J	4.8 J	50	270
Iron	6220	5540 J	5960 J	8160 J	913 J	6820 J	554 J	8620 J	4280 J	4200 J	1600 J	9300 J	--	--
Lead	6.2	3.9 J	6.4 J	5.6	0.49	7.5 J	0.95 J	2.5	1.6	3.5	0.88	4.1	63	1,000
Magnesium	744 J	973 J	953 J	966 J	39.6 J	999 J	40.9 J	2500 J	523 J	309 J	207 J	1150 J	--	--
Manganese	137	48.5 J	137 J	57.9 J	9.5 J	44.0 J	9.0 J	105 J	78.4 J	28.6 J	22.6 J	97.9 J	1,600	10,000
Mercury	0.0047 B	U	U	0.0030 B	U	U	U	U	U	0.017 B	0.021 B	0.0062 B	0.18	2.8
Nickel	3.5 J	3.8 J	3.3 J	4.8	0.47 B	14.3 J	0.32 BJ	7.6	3.9	4.2	0.89 B	4.9	30	310
Potassium	198	264 J	224 J	350	24.1 B	350 J	34.1 BJ	863	155	158	69.3	373	--	--
Selenium	0.56 B	U	0.49 B	0.70 B	U	0.48 B	U	0.66 B	U	U	U	0.74 B	3.9	1,500
Silver	U	U	U	U	U	2.5	U	U	U	36.6	1.6	U	2	1,500
Sodium	22.0 B	67.8	55.5	21.3 B	3.4 B	21.9 B	4.4 B	120	12.2 B	11.2 B	7.4 B	17.7 B	--	--
Thallium	U	U	0.14 B	U	U	U	U	U	U	U	U	0.22 B	--	--
Vanadium	11.9	10.1	8.8	12.1	1.9	10.7	0.94 B	14.6	6.9	6	2.6	12.3	--	--
Zinc	9.9	8.3 J	12.6 J	11.3 J	0.96 BJ	22.5 J	0.78 BJ	15.4 J	5.4 J	9.4 J	2.7 J	11.9 J	109	10,000
Cyanide	U	UJ	UJ	U	U	UJ	UJ	U	U	U	U	U	27	27

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected between the IDL and CRDL

Notes:

mg/kg: Milligrams per kilograms
--: Not established
NA: Not analyzed
Exceeds Unrestricted Use SCO
IDL: Instrument detection limit
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TABLE E-4
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
METALS AND CYANIDE

Soil Boring ID	B-24	B-25	B-25	B-26	B-26	B-27	B-27	B-28	B-28	B-29	B-29	B-30	Part 375	Part 375
Sample ID	B-24 (5-7)	B-25 (0-2)	B-25 (8-10)	B-26 (0-2)	B-26 (4-6)	B-27 (0-2)	B-27 (4-6)	B-28 (0-2)	B-28 (4-6)	B-29 (0-2)	B-29 (4-6)	B-30 (0-2)	Unrestricted	Commercial
Date Collected	08/27/10	08/25/10	08/25/10	08/26/10	08/26/10	08/26/10	08/26/10	08/26/10	08/26/10	08/25/10	08/25/10	08/25/10	Use SCO's	Use SCO's
Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aluminum	386	1480 J	1260 J	4710	131	3280	507	4780	315	7510 J	2290 J	2310 J	--	--
Antimony	UJ	UJ	UJ	UJ	UJ	0.44 BJ	UJ	0.28 BJ	UJ	UJ	UJ	UJ	--	--
Arsenic	0.34 B	0.72 B	1.2	2.1	U	10.9	0.64 B	1.6	0.32 B	2.7	1.2	1.2	13	16
Barium	1.4 BJ	4.4 BJ	3.7 BJ	11.9	1.2 B	13	8.2 B	10.3	2.2 B	16.0 J	6.3 BJ	9.0 J	350	400
Beryllium	0.043 B	0.073 B	0.14 B	0.18 B	0.015 B	0.24 B	0.056 B	0.17 B	0.041 B	0.28	0.11 B	0.12 B	7.2	590
Cadmium	U	U	0.051 B	0.063 B	U	0.26 B	0.41	0.046 B	U	U	U	0.018 B	2.5	9.3
Calcium	15.6 BJ	257 J	468 J	2070 J	47.3 J	37500 J	349 J	261 J	1590 J	1470 J	355 J	196 J	--	--
Chromium	0.88	2.9 J	2.7 J	6	0.37 B	15.9	8.7	6.1	2	8.4 J	10.3 J	4.1 J	30	1,500
Cobalt	0.67 BJ	0.77 BJ	1.1 BJ	2.6	0.26 B	1.4 B	0.34 B	2.4	0.50 B	3.3 J	1.2 BJ	1.5 BJ	--	--
Copper	1.4 J	2	2.9	4	0.47 B	23	4.1	3	1	5	2.8	4.4	50	270
Iron	2480 J	2180 J	4590 J	6530	660	6030	1570	5570	1150	9040 J	5600 J	3740 J	--	--
Lead	0.57	2.3	3.9	5.6	0.4	19.7	29.2	3.7	0.59	6.4	2.3	8.4	63	1,000
Magnesium	86.3 J	233 J	202 J	699 J	21.1 J	1250 J	100 J	724 J	1030 J	1610 J	414 J	337 J	--	--
Manganese	34.4 J	48.1 J	77.2 J	77.1	20.5	66	9.7	56.8	29.5	97.1 J	58.8 J	61.3 J	1,600	10,000
Mercury	U	U	U	0.010 B	U	0.023 B	0.0076 B	0.0064 B	U	U	U	U	0.18	2.8
Nickel	0.69 B	1.3 BJ	1.5 BJ	3.3 J	0.23 BJ	3.5 J	1.1 BJ	3.3 J	0.59 BJ	5.1 J	2.3 BJ	2.2 J	30	310
Potassium	50.4	106 J	88.9 J	262	16.7 B	506	69	210	37.3	372 J	151 J	129 J	--	--
Selenium	U	U	U	0.47 B	U	U	U	0.48 B	U	0.93 B	U	U	3.9	1,500
Silver	U	U	U	U	U	U	U	U	U	U	U	U	2	1,500
Sodium	3.3 B	36.1 B	14.8 B	25.8 B	3.4 B	159	26.9 B	14.9 B	4.5 B	79.9	21.8 B	14.6 B	--	--
Thallium	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Vanadium	1.3 B	3.1 J	4.2 J	9.4	0.46 B	10.1	2.6	8.5	1.6	13.5 J	5.8 J	5.2 J	--	--
Zinc	2.6 J	3.8 J	6.8 J	9.6	0.72 B	38.4	17.4	8.3	1.3 B	13.6 J	4.9 J	10.7 J	109	10,000
Cyanide	U	U	U	U	U	U	U	U	U	U	U	U	27	27

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected between the IDL and CRDL

Notes:

mg/kg: Milligrams per kilograms
--: Not established
NA: Not analyzed
 Exceeds Unrestricted Use SCO
IDL: Instrument detection limit
CRDL: Contract required detection limit

TABLE E-4
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
METALS AND CYANIDE

Soil Boring ID	B-30	B-31	B-31	B-32	B-32	B-33	B-33	B-33	B-34	B-34	B-35	B-35	Part 375	Part 375
Sample ID	B-30 (2-4)	B-31 (0-2)	B-31 (2-4)	B-32 (0-2)	B-32 (4-6)	B-33 (0-2)	B-33 (4-6)	B-33 (6-8)	B-34 (0-2)	B-34 (4-6)	B-35 (0-2)	B-35 (4-6)	Unrestricted	Commercial
Date Collected	08/25/10	08/25/10	08/25/10	08/25/10	08/25/10	08/25/10	08/25/10	08/25/10	08/25/10	08/25/10	08/25/10	08/25/10	Use SCO's	Use SCO's
Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aluminum	2900 J	7720 J	3510 J	8800 J	2470 J	3630 J	717 J	495	5990 J	3850 J	5560 J	4910 J	--	--
Antimony	UJ	UJ	UJ	UJ	UJ	0.89 J	UJ	U	UJ	UJ	UJ	UJ	--	--
Arsenic	1.7	2.5	1.5	2.4	0.99	4.3	0.63	0.53 B	2.3	1.6	2	1.8	13	16
Barium	6.5 BJ	15.6 J	8.2 J	15.6 J	5.9 J	106 J	4.4 BJ	2.6 B	12.8 J	10.1 J	11.3 J	11.4 J	350	400
Beryllium	0.10 B	0.25	0.14	0.31	0.10 B	0.28	0.071 B	0.047 B	0.22	0.16 B	0.21	0.19 B	7.2	590
Cadmium	U	0.012 B	U	0.018 B	U	4.6	0.031 B	U	0.014 B	U	U	U	2.5	9.3
Calcium	407 J	419 J	284 J	291 J	702 J	5000 J	84.6 J	35.3	420 J	5790 J	325 J	228 J	--	--
Chromium	5.6 J	8.4 J	4.9 J	10 J	8.6 J	65.7 J	7.6 J	5.6	7.8 J	17.5 J	6.4 J	16.7 J	30	1,500
Cobalt	1.1 BJ	3.1 J	1.6 J	5.1 J	1.4 J	3.4 J	0.84 BJ	0.54 B	3.0 J	2.0 BJ	3.1 J	2.8 J	--	--
Copper	2.3	4.3	2.6	4.9	2.2	162	2.5	1.7	4.3	4.8	3.7	4.6	50	270
Iron	4010 J	8600 J	5080 J	8560 J	3510 J	9550 J	2320 J	1510	7500 J	5870 J	6960 J	7090 J	--	--
Lead	3.6	6.1	3.4	5.5	1.9	641	4.5	0.82	6.4	3.9	4.6	5.5	63	1,000
Magnesium	371 J	1150 J	449 J	1270 J	695 J	3440 J	134 J	91.8	865 J	3890 J	855 J	751 J	--	--
Manganese	37.3 J	81.5 J	61.6 J	111 J	48.8 J	72.2 J	62.3 J	30.6	73.2 J	78.2 J	67.9 J	99.4 J	1,600	10,000
Mercury	U	U	U	U	U	0.3	U	U	U	U	U	U	0.18	2.8
Nickel	2.1 J	5.0 J	2.4 J	5.8 J	2.1 J	19.8 J	1.5 J	1.0 B	4.5 J	3.8 J	3.8 J	4.2 J	30	310
Potassium	128 J	280 J	162 J	291 J	119 J	263 J	77.3 J	71	262 J	238 J	227 J	241 J	--	--
Selenium	0.58 B	0.63 B	0.39 B	0.68 B	U	0.58 B	U	U	0.47 B	0.80 B	0.50 B	U	3.9	1,500
Silver	U	U	U	U	U	6	U	U	U	U	U	U	2	1,500
Sodium	14.6 B	25.4 B	17.6 B	32.0 B	13.5 B	53.2	10.9 B	U	31.1 B	33.9 B	32.1 B	33.2 B	--	--
Thallium	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Vanadium	5.5 J	13.5 J	8.0 J	14.8 J	4.8 J	17.1 J	2.9 J	2	11.1 J	8.3 J	9.9 J	9.5 J	--	--
Zinc	5.9 J	13.3 J	5.9 J	13.5 J	4.4 J	305 J	4.2 J	1.8 B	11.2 J	8.4 J	10.0 J	9.5 J	109	10,000
Cyanide	U	U	U	U	U	U	U	U	U	U	U	U	27	27

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected between the IDL and CRDL

Notes:

mg/kg: Milligrams per kilograms
--: Not established
NA: Not analyzed
 Exceeds Unrestricted Use SCO
IDL: Instrument detection limit
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TABLE E-4
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
METALS AND CYANIDE

Soil Boring ID Sample ID Date Collected Units	B-36 B-36(0-2) 10/05/10 (mg/kg)	B-36 B-36(2-4) 10/05/10 (mg/kg)	B-37 B-37(0-2) 10/05/10 (mg/kg)	B-37 B-37(2-4) 10/05/10 (mg/kg)	B-38 B-38(0-2) 10/05/10 (mg/kg)	B-38 B-38(2-4) 10/05/10 (mg/kg)	B-39 B-39(0-2) 10/05/10 (mg/kg)	B-39 B-39(2-4) 10/05/10 (mg/kg)	B-40 B-40(0-2) 10/05/10 (mg/kg)	B-40 B-40(2-4) 10/05/10 (mg/kg)	B-41 B-41(0-2) 10/05/10 (mg/kg)	B-41 B-41(2-4) 10/05/10 (mg/kg)	Part 375 Unrestricted Use SCOs (mg/kg)	Part 375 Commercial Use SCO's (mg/kg)
Aluminum	437	1950	3830	1760	3590	6310	5450	7200	5130	2200	3310	5050	--	--
Antimony	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Arsenic	U	0.78 B	1.3	1	1.4	2.4	1.9	2.7	5.2	0.82 B	1.1	1.8	13	16
Barium	1.7 B	6.0 B	10.3	5.2 B	15.6	23.4	14.5	14.8	11.6	6.3 B	7.5	13.3	350	400
Beryllium	0.059 B	0.094 B	0.17	0.093 B	0.23	0.25	0.21 B	0.17 B	0.21 B	0.085 B	0.12 B	0.18 B	7.2	590
Cadmium	U	0.022 B	0.037 B	0.027 B	0.042 B	0.13 B	0.11 B	0.056 B	0.083 B	0.025 B	0.031 B	0.059 B	2.5	9.3
Calcium	81	818	606	243	913	6410	432	476	2870	534	1260	1480	--	--
Chromium	1.7	2.9	4.8	6.3	5.4	9	6.4	7.5	17.4	3.3	3.9	6.9	30	1,500
Cobalt	0.67 B	1.2 B	2.7	1.2 B	3.6	3.2	2.9	2.1 B	3.2	1.3 B	1.9	2.6	--	--
Copper	U	U	3.3	U	4.7	9	4.9	3.1	5.4	U	U	4.4	50	270
Iron	1450 J	2610 J	5100 J	3640 J	6000 J	7910 J	6550 J	7830 J	8820 J	3970 J	3590 J	6890 J	--	--
Lead	0.59	2.7	3.1	1.8	2.8	18.9	8.7	6.9	4.5	4.4	3.3	6.9	63	1,000
Magnesium	132 J	320 J	758 J	345 J	1310 J	912 J	861 J	586 J	2070 J	342 J	1040 J	715 J	--	--
Manganese	40.9 J	37.5 J	105 J	74.5 J	162 J	157 J	77.1 J	48.8 J	76.8 J	101 J	36.7 J	147 J	1,600	10,000
Mercury	0.0093 B	U	0.0069 B	U	U	0.0042 B	0.0033 B	0.022 B	0.012 B	U	0.028 B	0.0097 B	0.18	2.8
Nickel	0.90 B	1.6 B	3.2	2.0 B	5.4	5.1	4	2.8	4.3	1.5 B	2.3	3.3	30	310
Potassium	45	133	245	98	368	373	224	196	320	114	194	240	--	--
Selenium	U	U	U	U	U	U	U	0.69 B	1.1 B	U	U	U	3.9	1,500
Silver	U	U	U	U	U	U	U	U	U	U	U	U	2	1,500
Sodium	U	26.4 B	U	U	39.2	46.6	45.3 B	33.0 B	100	28.7 B	U	36.7 B	--	--
Thallium	U	U	U	U	U	U	U	U	U	U	U	U	--	--
Vanadium	1.7 B	4.2	7.5	4.1	8.5	12.7	12.5	13.6	13.2	4.8	7	10.3	--	--
Zinc	U	4.9	8.3	4.2	10.9	19.6	14.5	10	10.5	5.3	6.3	11	109	10,000
Cyanide	U	U	U	U	U	U	U	U	U	U	U	U	27	27

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected between the IDL and CRDL

Notes:

mg/kg: Milligrams per kilograms
--: Not established
NA: Not analyzed
 Exceeds Unrestricted Use SCO
IDL: Instrument detection limit
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TABLE E-4
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
SUBSURFACE SOIL BORING SAMPLE RESULTS
METALS AND CYANIDE

Soil Boring ID Sample ID Date Collected Units	B-42 B-42(0-2) 10/05/10 (mg/kg)	B-42 B-42(2-4) 10/05/10 (mg/kg)											Part 375 Unrestricted Use SCOs (mg/kg)	Part 375 Commercial Use SCO's (mg/kg)
Aluminum	5350	6420											--	--
Antimony	U	U											--	--
Arsenic	U	1.4											13	16
Barium	13.7	14.2											350	400
Beryllium	0.20 B	0.21 B											7.2	590
Cadmium	0.12 B	0.084 B											2.5	9.3
Calcium	1230	5460											--	--
Chromium	483	8.4											30	1,500
Cobalt	3.6	3.3											--	--
Copper	4.1	4.8											50	270
Iron	6700 J	10100 J											--	--
Lead	5.5	5.9											63	1,000
Magnesium	1150 J	1020 J											--	--
Manganese	80.1 J	132 J											1,600	10,000
Mercury	0.017 B	0.019 B											0.18	2.8
Nickel	4	3.7											30	310
Potassium	320	277											--	--
Selenium	U	0.95 B											3.9	1,500
Silver	U	U											2	1,500
Sodium	24.2 B	29.0 B											--	--
Thallium	U	U											--	--
Vanadium	11.3	12.1											--	--
Zinc	14	11.7											109	10,000
Cyanide	U	U											27	27

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected between the IDL and CRDL

Notes:

mg/kg: Milligrams per kilograms
--: Not established
NA: Not analyzed
Exceeds Unrestricted Use SCO
IDL: Instrument detection limit
CRDL: Contract required detection limit

TABLE E-5
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
TEST PIT SOIL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Location ID Sample ID Date Collected Units	TP-1 COMP TP-1 (COMPOSITE) 8/30/2010 (ug/kg)	TP-2 BOT TP-4 BOTTOM (9.5') 9/3/2010 (ug/kg)	TP-2 EAST TP-4 EAST (9') 9/3/2010 (ug/kg)	TP-2 NORTH TP-4 NORTH (9') 9/3/2010 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	U	U	U	U	--	--
Chloromethane	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	20	13,000
Bromomethane	U	U	U	U	--	--
Chloroethane	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	330	500,000
Acetone	U	U	U	U	50	500,000
Carbon disulfide	U	U	U	U	--	--
Methylene chloride	U	U	U	U	50	500,000
trans-1,2-Dichloroethene	U	U	U	U	190	500,000
Methyltert-butylether	U	U	U	U	930	500,000
1,1-Dichloroethane	U	U	U	U	270	240,000
cis-1,2-Dichloroethene	U	U	U	U	250	500,000
2-Butanone (MEK)	U	U	U	U	120	500,000
Chloroform	U	U	U	U	370	350,000
1,1,1-Trichloroethane	U	U	U	U	680	500,000
Carbon tetrachloride	U	U	U	U	760	22,000
Benzene	U	UJ	UJ	UJ	60	44,000
1,2-Dichloroethane	U	U	U	U	20	30,000
Trichloroethene	U	U	U	U	470	200,000
1,2-Dichloropropane	U	U	U	U	--	--
Bromodichloromethane	U	U	U	U	--	--
cis-1,3-Dichloropropene	U	U	U	U	--	--
4-Methyl-2-pentanone	U	2.6 J	U	U	--	--
Toluene	U	U	U	U	700	500,000
trans-1,3-Dichloropropene	U	U	U	U	--	--
1,1,2-Trichloroethane	U	U	U	U	--	--
Tetrachloroethene	U	U	U	U	1,300	150,000
2-Hexanone	U	U	U	U	--	--
Dibromochloromethane	U	U	U	U	--	--
Ethylene dibromide (EDB)	U	U	U	U	--	--
Chlorobenzene	U	U	U	U	1,100	500,000
Ethylbenzene	U	U	U	U	1,000	390,000
Total Xylene	1.4 J	U	U	U	260	500,000
Styrene	U	U	U	U	--	--
Bromoform	U	U	U	U	--	--
Isopropylbenzene	U	U	U	U	--	--
1,1,2,2-Tetrachloroethane	U	U	U	U	--	--
1,3-Dichlorobenzene	U	U	U	U	2,400	280,000
1,4-Dichlorobenzene	U	U	U	U	1,800	130,000
1,2-Dichlorobenzene	U	U	U	U	1,100	500,000
1,2-Dibromo-3-chloropropane	U	U	U	U	--	--
1,2,4-Trichlorobenzene	U	U	U	U	--	--
1,2,3-Trichlorobenzene	U	U	U	U	--	--
Total VOCs	1.4	2.6	0	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms

--: Not available

TABLE E-5
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
TEST PIT SOIL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Location ID Sample ID Date Collected Units	TP-2 NORTH A TP-4 NORTH A (9') 9/3/2010 (ug/kg)	TP-2 WEST TP-4 WEST (7') 9/3/2010 (ug/kg)	TP-3 BOT TP-3 BOTTOM (9.5') 9/3/2010 (ug/kg)	TP-3 EAST TP-3 EAST (9') 9/3/2010 (ug/kg)	Part 375 Unrestricted Use SCO's (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	U	U	U	U	--	--
Chloromethane	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	20	13,000
Bromomethane	U	U	U	U	--	--
Chloroethane	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	330	500,000
Acetone	U	U	U	U	50	500,000
Carbon disulfide	U	U	U	U	--	--
Methylene chloride	U	U	U	U	50	500,000
trans-1,2-Dichloroethene	U	U	U	U	190	500,000
Methyltert-butylether	U	U	U	U	930	500,000
1,1-Dichloroethane	U	U	U	U	270	240,000
cis-1,2-Dichloroethene	U	U	U	U	250	500,000
2-Butanone (MEK)	U	U	U	U	120	500,000
Chloroform	U	U	U	U	370	350,000
1,1,1-Trichloroethane	U	U	U	U	680	500,000
Carbon tetrachloride	U	U	U	U	760	22,000
Benzene	UJ	UJ	UJ	UJ	60	44,000
1,2-Dichloroethane	U	U	U	U	20	30,000
Trichloroethene	U	U	U	U	470	200,000
1,2-Dichloropropane	U	U	U	U	--	--
Bromodichloromethane	U	U	U	U	--	--
cis-1,3-Dichloropropene	U	U	U	U	--	--
4-Methyl-2-pentanone	U	U	U	U	--	--
Toluene	U	U	U	U	700	500,000
trans-1,3-Dichloropropene	U	U	U	U	--	--
1,1,2-Trichloroethane	U	U	U	U	--	--
Tetrachloroethene	U	U	U	U	1,300	150,000
2-Hexanone	U	U	U	U	--	--
Dibromochloromethane	U	U	U	U	--	--
Ethylene dibromide (EDB)	U	U	U	U	--	--
Chlorobenzene	U	U	U	U	1,100	500,000
Ethylbenzene	U	U	U	U	1,000	390,000
Total Xylene	U	0.92 J	U	U	260	500,000
Styrene	U	U	U	U	--	--
Bromoform	U	U	U	U	--	--
Isopropylbenzene	U	U	U	U	--	--
1,1,1,2-Tetrachloroethane	U	U	U	U	--	--
1,3-Dichlorobenzene	U	U	U	U	2,400	280,000
1,4-Dichlorobenzene	U	U	U	U	1,800	130,000
1,2-Dichlorobenzene	U	U	U	U	1,100	500,000
1,2-Dibromo-3-chloropropane	U	U	U	U	--	--
1,2,4-Trichlorobenzene	U	U	U	U	--	--
1,2,3-Trichlorobenzene	U	U	U	U	--	--
Total VOCs	0	0.92	0	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms

--: Not available

TABLE E-5
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
TEST PIT SOIL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Location ID Sample ID Date Collected Units	TP-3 SOUTH TP-3 SOUTH (9') 9/3/2010 (ug/kg)	TP-3 SOUTH A TP-3 SOUTH A (9') 9/3/2010 (ug/kg)	TP-4 BOT TP-4 BOTTOM (9') 8/30/2010 (ug/kg)	TP-4 EAST TP-4 EAST (8') 8/30/2010 (ug/kg)	Part 375 Unrestricted Use SCO's (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	U	U	U	U	--	--
Chloromethane	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	20	13,000
Bromomethane	U	U	U	U	--	--
Chloroethane	U	U	U	U	--	--
Trichlorofluoromethane	U	U	U	U	--	--
1,1-Dichloroethene	U	U	U	U	330	500,000
Acetone	U	U	U	U	50	500,000
Carbon disulfide	U	U	U	U	--	--
Methylene chloride	U	U	U	U	50	500,000
trans-1,2-Dichloroethene	U	U	U	U	190	500,000
Methyltert-butylether	U	U	U	U	930	500,000
1,1-Dichloroethane	U	U	U	U	270	240,000
cis-1,2-Dichloroethene	U	U	U	U	250	500,000
2-Butanone (MEK)	U	U	U	U	120	500,000
Chloroform	U	U	U	U	370	350,000
1,1,1-Trichloroethane	U	U	U	U	680	500,000
Carbon tetrachloride	U	U	U	U	760	22,000
Benzene	UJ	UJ	U	U	60	44,000
1,2-Dichloroethane	U	U	U	U	20	30,000
Trichloroethene	U	U	U	U	470	200,000
1,2-Dichloropropane	U	U	U	U	--	--
Bromodichloromethane	U	U	U	U	--	--
cis-1,3-Dichloropropene	U	U	U	U	--	--
4-Methyl-2-pentanone	U	U	U	U	--	--
Toluene	U	U	U	U	700	500,000
trans-1,3-Dichloropropene	U	U	U	U	--	--
1,1,2-Trichloroethane	U	U	U	U	--	--
Tetrachloroethene	U	U	U	U	1,300	150,000
2-Hexanone	U	U	U	U	--	--
Dibromochloromethane	U	U	U	U	--	--
Ethylene dibromide (EDB)	U	U	U	U	--	--
Chlorobenzene	U	U	U	U	1,100	500,000
Ethylbenzene	U	U	U	U	1,000	390,000
Total Xylene	0.98 J	1.2 J	1.7 J	U	260	500,000
Styrene	U	U	U	U	--	--
Bromoform	U	U	U	U	--	--
Isopropylbenzene	U	U	U	U	--	--
1,1,2,2-Tetrachloroethane	U	U	U	U	--	--
1,3-Dichlorobenzene	U	U	U	U	2,400	280,000
1,4-Dichlorobenzene	U	U	U	U	1,800	130,000
1,2-Dichlorobenzene	U	U	U	U	1,100	500,000
1,2-Dibromo-3-chloropropane	U	U	U	U	--	--
1,2,4-Trichlorobenzene	U	U	U	U	--	--
1,2,3-Trichlorobenzene	U	U	U	U	--	--
Total VOCs	0.98	1.2	1.7	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms

--: Not available

TABLE E-5
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
TEST PIT SOIL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Location ID Sample ID Date Collected Units	TP-4 NORTH TP-4 NORTH (8') 8/30/2010 (ug/kg)	TP-4 SOUTH TP-4 SOUTH (8') 8/30/2010 (ug/kg)	TP-4 WEST TP-4 WEST (8') 8/30/2010 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Dichlorodifluoromethane	U	U	U	--	--
Chloromethane	U	U	U	--	--
Vinyl chloride	U	U	U	20	13,000
Bromomethane	U	U	U	--	--
Chloroethane	U	U	U	--	--
Trichlorofluoromethane	U	U	U	--	--
1,1-Dichloroethene	U	U	U	330	500,000
Acetone	U	U	U	50	500,000
Carbon disulfide	U	U	U	--	--
Methylene chloride	U	U	U	50	500,000
trans-1,2-Dichloroethene	U	U	U	190	500,000
Methyltert-butylether	U	U	U	930	500,000
1,1-Dichloroethane	U	U	U	270	240,000
cis-1,2-Dichloroethene	U	U	U	250	500,000
2-Butanone (MEK)	U	U	U	120	500,000
Chloroform	U	U	U	370	350,000
1,1,1-Trichloroethane	U	U	U	680	500,000
Carbon tetrachloride	U	U	U	760	22,000
Benzene	U	U	U	60	44,000
1,2-Dichloroethane	U	U	U	20	30,000
Trichloroethene	U	U	U	470	200,000
1,2-Dichloropropane	U	U	U	--	--
Bromodichloromethane	U	U	U	--	--
cis-1,3-Dichloropropene	U	U	U	--	--
4-Methyl-2-pentanone	U	U	U	--	--
Toluene	U	U	U	700	500,000
trans-1,3-Dichloropropene	U	U	U	--	--
1,1,2-Trichloroethane	U	U	U	--	--
Tetrachloroethene	U	U	U	1,300	150,000
2-Hexanone	U	U	U	--	--
Dibromochloromethane	U	U	U	--	--
Ethylene dibromide (EDB)	U	U	U	--	--
Chlorobenzene	U	U	U	1,100	500,000
Ethylbenzene	U	U	U	1,000	390,000
Total Xylene	1.4 J	U	U	260	500,000
Styrene	U	U	U	--	--
Bromoform	U	U	U	--	--
Isopropylbenzene	U	U	U	--	--
1,1,2,2-Tetrachloroethane	U	U	U	--	--
1,3-Dichlorobenzene	U	U	U	2,400	280,000
1,4-Dichlorobenzene	U	U	U	1,800	130,000
1,2-Dichlorobenzene	U	U	U	1,100	500,000
1,2-Dibromo-3-chloropropane	U	U	U	--	--
1,2,4-Trichlorobenzene	U	U	U	--	--
1,2,3-Trichlorobenzene	U	U	U	--	--
Total VOCs	1.4	0	0	--	--

Qualifiers:

U: Not detected

J: Estimated value or limit

Notes:

ug/kg: Micrograms per kilograms

--: Not available

TABLE E-6
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
TEST PIT SOIL SAMPLE RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Location ID Sample ID Date Collected Units	TP-1 COMP TP-1 (COMPOSITE) 8/30/2010 (ug/kg)	TP-2 BOT TP-4 BOTTOM (9.5') 9/3/2010 (ug/kg)	TP-2 EAST TP-4 EAST (9') 9/3/2010 (ug/kg)	TP-2 NORTH TP-4 NORTH (9') 9/3/2010 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Phenol	U	U	U	U	330	500,000
Bis(2-chloroethyl)ether	U	U	U	U	--	--
2-Chlorophenol	U	U	U	U	--	--
2-Methylphenol	U	U	U	U	330	500,000
2,2-oxyblis (1-chloropropane)	U	U	U	U	--	--
3+4-Methylphenols	U	U	U	U	330	500,000
N-Nitroso-di-n-propylamine	U	U	U	U	--	--
Hexachloroethane	U	U	U	U	--	--
Nitrobenzene	U	U	U	U	--	--
Isophorone	U	U	U	U	--	--
2-Nitrophenol	U	U	U	U	--	--
2,4-Dimethylphenol	U	U	U	U	--	--
Bis(2-chloroethoxy)methane	U	U	U	U	--	--
2,4-Dichlorophenol	U	U	U	U	--	--
Naphthalene	U	U	U	U	12,000	500,000
4-Chloroaniline	U	U	U	U	--	--
Hexachlorobutadiene	U	U	U	U	--	--
4-Chloro-3-methylphenol	U	U	U	U	--	--
2-Methylnaphthalene	U	U	U	U	--	--
Hexachlorocyclopentadiene	U	U	U	U	--	--
2,4,6-Trichlorophenol	U	U	U	U	--	--
2,4,5-Trichlorophenol	U	U	U	U	--	--
2-Chloronaphthalene	U	U	U	U	--	--
2-Nitroaniline	U	U	U	U	--	--
Dimethyl phthalate	U	U	U	U	--	--
2,6-Dinitrotoluene	U	U	U	U	--	--
Acenaphthylene	U	U	U	U	100,000	500,000
3-Nitroaniline	U	U	U	U	--	--
Acenaphthene	U	U	U	U	20,000	500,000
2,4-Dinitrophenol	U	U	U	U	--	--
4-Nitrophenol	U	U	U	U	--	--
Dibenzofuran	U	U	U	U	7,000	350,000
2,4-Dinitrotoluene	U	U	U	U	--	--
Diethyl phthalate	U	U	U	U	--	--
Fluorene	U	U	U	U	30,000	500,000
4-Chlorophenylphenyl ether	U	U	U	U	--	--
4-Nitroaniline	U	U	U	U	--	--
4,6-Dinitro-o-cresol	U	U	U	U	--	--
N-Nitrosodiphenylamine	U	U	U	U	--	--
4-Bromophenyl-phenylether	U	U	U	U	--	--
Hexachlorobenzene	U	U	U	U	330	6,000
Pentachlorophenol	U	U	U	U	800	6,700
Phenanthrene	U	U	U	U	100,000	500,000
Anthracene	U	U	U	U	100,000	500,000
Carbazole	U	U	U	U	--	--
Di-n-butyl phthalate	U	U	U	U	--	--
Fluoranthene	U	U	U	U	100,000	500,000
Pyrene	U	U	U	U	100,000	500,000
Butyl benzyl phthalate	U	U	U	U	--	--
3,3-Dichlorobenzidine	U	U	U	U	--	--
Benzo(a)anthracene	U	U	U	U	1,000	5,600
Chrysene	U	U	U	U	1,000	56,000
Bis(2-ethylhexyl)phthalate (BEHP)	U	U	U	U	--	--
Di-n-octyl phthalate	U	U	U	U	--	--
Benzo(b)fluoranthene	U	U	U	U	1,000	5,600
Benzo(k)fluoranthene	U	U	U	U	800	56,000
Benzo(a)pyrene	U	U	U	U	1,000	1,000
Indeno(1,2,3-cd)pyrene	U	U	U	U	500	5,600
Dibenzo(a,h)anthracene	U	U	U	U	330	560
Benzo(ghi)perylene	U	U	U	U	100,000	500,000
Total SVOCs	0	0	0	0	--	--

Qualifiers:

U: Not detected

J: Estimated limit

Notes:

ug/kg: Micrograms per kilograms

--: Not available

TABLE E-6
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
TEST PIT SOIL SAMPLE RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Location ID Sample ID Date Collected Units	TP-2 NORTH A TP-4 NORTH A (9') 9/3/2010 (ug/kg)	TP-2 WEST TP-4 WEST (7') 9/3/2010 (ug/kg)	TP-3 BOT TP-3 BOTTOM (9.5') 9/3/2010 (ug/kg)	TP-3 EAST TP-3 EAST (9') 9/3/2010 (ug/kg)	Part 375 Unrestricted Use SCO's (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Phenol	U	U	U	U	330	500,000
Bis(2-chloroethyl)ether	U	U	U	U	--	--
2-Chlorophenol	U	U	U	U	--	--
2-Methylphenol	U	U	U	U	330	500,000
2,2-oxybis (1-chloropropane)	U	U	U	U	--	--
3+4-Methylphenols	U	U	U	U	330	500,000
N-Nitroso-di-n-propylamine	U	U	U	U	--	--
Hexachloroethane	U	U	U	U	--	--
Nitrobenzene	U	U	U	U	--	--
Isophorone	U	U	U	U	--	--
2-Nitrophenol	U	U	U	U	--	--
2,4-Dimethylphenol	U	U	U	U	--	--
Bis(2-chloroethoxy)methane	U	U	U	U	--	--
2,4-Dichlorophenol	U	U	U	U	--	--
Naphthalene	U	U	U	U	12,000	500,000
4-Chloroaniline	U	U	U	U	--	--
Hexachlorobutadiene	U	U	U	U	--	--
4-Chloro-3-methylphenol	U	U	U	U	--	--
2-Methylnaphthalene	U	U	U	U	--	--
Hexachlorocyclopentadiene	U	U	U	U	--	--
2,4,6-Trichlorophenol	U	U	U	U	--	--
2,4,5-Trichlorophenol	U	U	U	U	--	--
2-Chloronaphthalene	U	U	U	U	--	--
2-Nitroaniline	U	U	U	U	--	--
Dimethyl phthalate	U	U	U	U	--	--
2,6-Dinitrotoluene	U	U	U	U	--	--
Acenaphthylene	U	U	U	U	100,000	500,000
3-Nitroaniline	U	U	U	U	--	--
Acenaphthene	U	U	U	U	20,000	500,000
2,4-Dinitrophenol	U	U	U	U	--	--
4-Nitrophenol	U	U	U	U	--	--
Dibenzofuran	U	U	U	U	7,000	350,000
2,4-Dinitrotoluene	U	U	U	U	--	--
Diethyl phthalate	U	U	U	U	--	--
Fluorene	U	U	U	U	30,000	500,000
4-Chlorophenylphenyl ether	U	U	U	U	--	--
4-Nitroaniline	U	U	U	U	--	--
4,6-Dinitro-o-cresol	U	U	U	U	--	--
N-Nitrosodiphenylamine	U	U	U	U	--	--
4-Bromophenyl-phenylether	U	U	U	U	--	--
Hexachlorobenzene	U	U	U	U	330	6,000
Pentachlorophenol	U	U	U	U	800	6,700
Phenanthrene	U	U	U	U	100,000	500,000
Anthracene	U	U	U	U	100,000	500,000
Carbazole	U	U	U	U	--	--
Di-n-butyl phthalate	U	U	U	U	--	--
Fluoranthene	U	U	U	U	100,000	500,000
Pyrene	U	U	U	U	100,000	500,000
Butyl benzyl phthalate	U	U	U	U	--	--
3,3-Dichlorobenzidine	U	U	U	U	--	--
Benzo(a)anthracene	U	U	U	U	1,000	5,600
Chrysene	U	U	U	U	1,000	56,000
Bis(2-ethylhexyl)phthalate (BEHF)	U	U	U	U	--	--
Di-n-octyl phthalate	U	U	U	U	--	--
Benzo(b)fluoranthene	U	U	U	U	1,000	5,600
Benzo(k)fluoranthene	U	U	U	U	800	56,000
Benzo(a)pyrene	U	U	U	U	1,000	1,000
Indeno(1,2,3-cd)pyrene	U	U	U	U	500	5,600
Dibenzo(a,h)anthracene	U	U	U	U	330	560
Benzo(ghi)perylene	U	U	U	U	100,000	500,000
Total SVOCs	0	0	0	0	--	--

Qualifiers:

U: Not detected
J: Estimated limit

Notes:

ug/kg: Micrograms per kilograms
--: Not available

TABLE E-6
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
TEST PIT SOIL SAMPLE RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Location ID Sample ID Date Collected Units	TP-3 SOUTH TP-3 SOUTH (9') 9/3/2010 (ug/kg)	TP-3 SOUTH A TP-3 SOUTH A (9') 9/3/2010 (ug/kg)	TP-4 BOT TP-4 BOTTOM (9') 8/30/2010 (ug/kg)	TP-4 EAST TP-4 EAST (8') 8/30/2010 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Phenol	U	U	U	U	330	500,000
Bis(2-chloroethyl)ether	U	U	U	U	--	--
2-Chlorophenol	U	U	U	U	--	--
2-Methylphenol	U	U	U	U	330	500,000
2,2-oxybis (1-chloropropane)	U	U	U	U	--	--
3+4-Methylphenols	U	U	U	U	330	500,000
N-Nitroso-di-n-propylamine	U	U	U	U	--	--
Hexachloroethane	U	U	U	U	--	--
Nitrobenzene	U	U	U	U	--	--
Isophorone	U	U	U	U	--	--
2-Nitrophenol	U	U	U	U	--	--
2,4-Dimethylphenol	U	U	U	U	--	--
Bis(2-chloroethoxy)methane	U	U	U	U	--	--
2,4-Dichlorophenol	U	U	U	U	--	--
Naphthalene	U	U	U	U	12,000	500,000
4-Chloroaniline	U	U	U	U	--	--
Hexachlorobutadiene	U	U	U	U	--	--
4-Chloro-3-methylphenol	U	U	U	U	--	--
2-Methylnaphthalene	U	U	U	U	--	--
Hexachlorocyclopentadiene	U	U	U	U	--	--
2,4,6-Trichlorophenol	U	U	U	U	--	--
2,4,5-Trichlorophenol	U	U	U	U	--	--
2-Chloronaphthalene	U	U	U	U	--	--
2-Nitroaniline	U	U	U	U	--	--
Dimethyl phthalate	U	U	U	U	--	--
2,6-Dinitrotoluene	U	U	U	U	--	--
Acenaphthylene	U	U	U	U	100,000	500,000
3-Nitroaniline	U	U	U	U	--	--
Acenaphthene	U	U	U	U	20,000	500,000
2,4-Dinitrophenol	U	U	U	U	--	--
4-Nitrophenol	U	U	U	U	--	--
Dibenzofuran	U	U	U	U	7,000	350,000
2,4-Dinitrotoluene	U	U	U	U	--	--
Diethyl phthalate	U	U	U	U	--	--
Fluorene	U	U	U	U	30,000	500,000
4-Chlorophenylphenyl ether	U	U	U	U	--	--
4-Nitroaniline	U	U	U	U	--	--
4,6-Dinitro-o-cresol	U	U	U	U	--	--
N-Nitrosodiphenylamine	U	U	U	U	--	--
4-Bromophenyl-phenylether	U	U	U	U	--	--
Hexachlorobenzene	U	U	U	U	330	6,000
Pentachlorophenol	U	U	U	U	800	6,700
Phenanthrene	U	U	U	U	100,000	500,000
Anthracene	U	U	U	U	100,000	500,000
Carbazole	U	U	U	U	--	--
Di-n-butyl phthalate	U	U	U	U	--	--
Fluoranthene	U	U	U	U	100,000	500,000
Pyrene	U	U	U	U	100,000	500,000
Butyl benzyl phthalate	U	U	U	U	--	--
3,3-Dichlorobenzidine	U	U	U	U	--	--
Benzo(a)anthracene	U	U	U	U	1,000	5,600
Chrysene	U	U	U	U	1,000	56,000
Bis(2-ethylhexyl)phthalate (BEHF)	U	U	U	U	--	--
Di-n-octyl phthalate	U	U	U	U	--	--
Benzo(b)fluoranthene	U	U	U	U	1,000	5,600
Benzo(k)fluoranthene	U	U	U	U	800	56,000
Benzo(a)pyrene	U	U	U	U	1,000	1,000
Indeno(1,2,3-cd)pyrene	U	U	U	U	500	5,600
Dibenzo(a,h)anthracene	U	U	U	U	330	560
Benzo(ghi)perylene	U	U	U	U	100,000	500,000
Total SVOCs	0	0	0	0	--	--

Qualifiers:

U: Not detected
J: Estimated limit

Notes:

ug/kg: Micrograms per kilograms
--: Not available

TABLE E-6
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
TEST PIT SOIL SAMPLE RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Location ID Sample ID Date Collected Units	TP-4 NORTH TP-4 NORTH (8') 8/30/2010 (ug/kg)	TP-4 SOUTH TP-4 SOUTH (8') 8/30/2010 (ug/kg)	TP-4 WEST TP-4 WEST (8') 8/30/2010 (ug/kg)	Part 375 Unrestricted Use SCOs (ug/kg)	Part 375 Commercial Use SCO's (ug/kg)
Phenol	U	U	U	330	500,000
Bis(2-chloroethyl)ether	U	U	U	--	--
2-Chlorophenol	U	U	U	--	--
2-Methylphenol	U	U	U	330	500,000
2,2-oxyblis (1-chloropropane)	U	U	U	--	--
3+4-Methylphenols	U	U	U	330	500,000
N-Nitroso-di-n-propylamine	U	U	U	--	--
Hexachloroethane	U	U	U	--	--
Nitrobenzene	U	U	U	--	--
Isophorone	U	U	U	--	--
2-Nitrophenol	U	U	U	--	--
2,4-Dimethylphenol	U	U	U	--	--
Bis(2-chloroethoxy)methane	U	U	U	--	--
2,4-Dichlorophenol	U	U	U	--	--
Naphthalene	U	U	U	12,000	500,000
4-Chloroaniline	U	U	U	--	--
Hexachlorobutadiene	U	U	U	--	--
4-Chloro-3-methylphenol	U	U	U	--	--
2-Methylnaphthalene	UJ	UJ	UJ	--	--
Hexachlorocyclopentadiene	U	U	U	--	--
2,4,6-Trichlorophenol	U	U	U	--	--
2,4,5-Trichlorophenol	U	U	U	--	--
2-Chloronaphthalene	U	U	U	--	--
2-Nitroaniline	U	U	U	--	--
Dimethyl phthalate	U	U	U	--	--
2,6-Dinitrotoluene	U	U	U	--	--
Acenaphthylene	U	U	U	100,000	500,000
3-Nitroaniline	U	U	U	--	--
Acenaphthene	U	U	U	20,000	500,000
2,4-Dinitrophenol	U	U	U	--	--
4-Nitrophenol	U	U	U	--	--
Dibenzofuran	U	U	U	7,000	350,000
2,4-Dinitrotoluene	U	U	U	--	--
Diethyl phthalate	U	U	U	--	--
Fluorene	U	U	U	30,000	500,000
4-Chlorophenylphenyl ether	U	U	U	--	--
4-Nitroaniline	U	U	U	--	--
4,6-Dinitro-o-cresol	U	U	U	--	--
N-Nitrosodiphenylamine	U	U	U	--	--
4-Bromophenyl-phenylether	U	U	U	--	--
Hexachlorobenzene	U	U	U	330	6,000
Pentachlorophenol	U	U	U	800	6,700
Phenanthrene	U	U	U	100,000	500,000
Anthracene	U	U	U	100,000	500,000
Carbazole	U	U	U	--	--
Di-n-butyl phthalate	U	U	U	--	--
Fluoranthene	U	U	U	100,000	500,000
Pyrene	U	U	U	100,000	500,000
Butyl benzyl phthalate	U	U	U	--	--
3,3-Dichlorobenzidine	U	U	U	--	--
Benzo(a)anthracene	U	U	U	1,000	5,600
Chrysene	U	U	U	1,000	56,000
Bis(2-ethylhexyl)phthalate (BEHP)	U	U	U	--	--
Di-n-octyl phthalate	U	U	U	--	--
Benzo(b)fluoranthene	U	U	U	1,000	5,600
Benzo(k)fluoranthene	U	U	U	800	56,000
Benzo(a)pyrene	U	U	U	1,000	1,000
Indeno(1,2,3-cd)pyrene	U	U	U	500	5,600
Dibenzo(a,h)anthracene	U	U	U	330	560
Benzo(ghi)perylene	U	U	U	100,000	500,000
Total SVOCs	0	0	0	--	--

Qualifiers:

U: Not detected

J: Estimated limit

Notes:

ug/kg: Micrograms per kilograms

--: Not available

TABLE E-7
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
TEST PIT SOIL SAMPLE RESULTS
METALS

Location ID Sample ID Date Collected Units	TP-1 COMP TP-1 (COMPOSITE) 8/30/2010 (mg/kg)	TP-2 BOT TP-4 BOTTOM (9.5') 9/3/2010 (mg/kg)	TP-2 EAST TP-4 EAST (9') 9/3/2010 (mg/kg)	TP-2 NORTH TP-4 NORTH (9') 9/3/2010 (mg/kg)	TP-2 NORTH A TP-4 NORTH A (9') 9/3/2010 (mg/kg)	TP-2 WEST TP-4 WEST (7') 9/3/2010 (mg/kg)	TP-3 BOT TP-3 BOTTOM (9.5') 9/3/2010 (mg/kg)	Part 375 Unrestricted Use SCOs (mg/kg)	Part 375 Commercial Use SCO's (mg/kg)
Aluminum	1300	658 J	904 J	792 J	854 J	3290 J	622 J	--	--
Antimony	U	U	U	U	U	U	U	--	--
Arsenic	0.92	0.65 B	0.91	0.68	0.86	1.6	0.51 B	13	16
Barium	6.1	1.8 B	3.6 B	2.9 B	2.9 B	9.5	1.6 B	350	400
Beryllium	0.086 B	0.080 B	0.060 B	0.060 B	0.078 B	0.12 B	0.054 B	7.2	590
Cadmium	U	U	U	U	U	0.064 B	U	2.5	9.3
Calcium	501	60.2	50.4	47.4	45.5	1510	47.3	--	--
Chromium	2.3	2.2 J	3.3 J	1.6 J	2.2 J	5.5 J	1.8 J	30	1,500
Cobalt	0.77 B	0.67 B	0.94 B	0.87 B	1.0 B	1.8	0.41 B	--	--
Copper	1.6	1.7	3.1	1.9	1.7	4.5	1.6	50	270
Iron	2530	2280 J	2230 J	2070 J	2630 J	5460 J	1570 J	--	--
Lead	1.4	1.3 J	1.2 J	0.79 J	1.1 J	6.6 J	1.1 J	63	1,000
Magnesium	245	85.1	169	174	153	1170	108	--	--
Manganese	40.7	26.1 J	52.2 J	51.8 J	63.9 J	68.3 J	9.3 J	1,600	10,000
Mercury	U	0.0066 B	0.0021 B	U	U	0.011 B	U	0.18	2.8
Nickel	1.3 B	1.2 B	1.3 B	1.2 B	1.5 B	3.2	0.92 B	30	310
Potassium	125	51	83.1	82.6	72.3	152	48.2	--	--
Selenium	0.40 B	U	U	0.44 B	U	U	U	3.9	1,500
Silver	U	U	U	U	U	U	U	2	1,500
Sodium	9.3 B	U	U	U	U	U	U	--	--
Thallium	U	U	U	U	U	U	U	--	--
Vanadium	3.4	3.1	4	2.4	2.6	8	2.1	--	--
Zinc	2.9	2.7	3	3.1	3.3	18	2.3	109	10,000

Qualifiers:

U: Not detected

J: Estimated value or limit

B: Detected between the IDL and CRDL

Notes:

mg/kg: Milligrams per kilograms

IDL: Instrument detection limit

CRDL: Contract required detection limit

--: Not available

TABLE E-7
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
TEST PIT SOIL SAMPLE RESULTS
METALS

Location ID Sample ID Date Collected Units	TP-3 EAST TP-3 EAST (9') 9/3/2010 (mg/kg)	TP-3 SOUTH TP-3 SOUTH (9') 9/3/2010 (mg/kg)	TP-3 SOUTH A TP-3 SOUTH A (9') 9/3/2010 (mg/kg)	TP-4 BOT TP-4 BOTTOM (9') 8/30/2010 (mg/kg)	TP-4 EAST TP-4 EAST (8') 8/30/2010 (mg/kg)	TP-4 NORTH TP-4 NORTH (8') 8/30/2010 (mg/kg)	TP-4 SOUTH TP-4 SOUTH (8') 8/30/2010 (mg/kg)	TP-4 WEST TP-4 WEST (8') 8/30/2010 (mg/kg)	Part 375 Unrestricted Use SCOs (mg/kg)	Part 375 Commercial Use SCO's (mg/kg)
Aluminum	640 J	755 J	996 J	471	411	651	458	292	--	--
Antimony	U	U	U	U	U	U	U	U	--	--
Arsenic	0.50 B	0.65 B	0.73 B	0.59 B	0.35 B	0.37 B	0.50 B	0.33 B	13	16
Barium	2.4 B	2.8 B	5.9 B	1.4 B	1.3 B	2.0 B	1.4 B	0.95 B	350	400
Beryllium	0.045 B	0.059 B	0.073 B	0.046 B	0.039 B	0.046 B	0.042 B	0.028 B	7.2	590
Cadmium	U	U	U	U	U	U	U	U	2.5	9.3
Calcium	40.6 B	45.8	62.4	9.5 B	8.8 B	13.4 B	12.4 B	8.8 B	--	--
Chromium	2.0 J	1.6 J	1.8 J	1.5	1.2	1.6	0.95	1.1	30	1,500
Cobalt	0.42 B	0.54 B	0.89 B	0.44 B	0.45 B	0.37 B	0.42 B	0.35 B	--	--
Copper	2	1.6	1.8	1.0 B	0.94 B	1.4	1.3	0.84 B	50	270
Iron	1280 J	1630 J	1850 J	1560	1210	1200	1270	959	--	--
Lead	1.2 J	1.4 J	1.1 J	0.63	0.53	0.66	0.51	0.51	63	1,000
Magnesium	146	123	169	86.8	62.6	100	74.4	46.8	--	--
Manganese	12.3 J	19.3 J	84.1 J	34.4	35.9	30.3	31.3	22.2	1,600	10,000
Mercury	U	0.0022 B	U	U	U	U	U	U	0.18	2.8
Nickel	1.1 B	0.99 B	1.4 B	0.72 B	0.57 B	0.91 B	0.65 B	0.39 B	30	310
Potassium	106	70.7	89.2	53.1	42.2	60.4	41.6	33.3	--	--
Selenium	U	U	U	U	U	U	U	U	3.9	1,500
Silver	U	U	U	U	U	U	U	U	2	1,500
Sodium	U	U	U	3.3 B	2.3 B	4.2 B	3.0 B	2.4 B	--	--
Thallium	U	U	U	U	U	U	U	U	--	--
Vanadium	2.8	2.4	2.4	2.0 B	1.6 B	2.0 B	1.6 B	1.5 B	--	--
Zinc	5.6	2.2	3.6	1.7 B	1.3 B	2.1 B	1.4 B	0.93 B	109	10,000

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected between the IDL and CRD

Notes:

mg/kg: Milligrams per kilograms
IDL: Instrument detection limit
CRDL: Contract required detection limit
--: Not available

TABLE E-8
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
GROUNDWATER RESULTS
VOLATILE ORGANIC COMPOUNDS

Well ID Sample ID Date Collected Units	MW-01 MW-01 08/19/10 (ug/l)	MW-03 MW-03 08/18/10 (ug/l)	MW-04 MW-04 08/19/10 (ug/l)	MW-05 MW-05 08/19/10 (ug/l)	MW-06 MW-06 08/18/10 (ug/l)	MW-07 MW-07 08/18/10 (ug/l)	MW-08 MW-08 08/18/10 (ug/l)	MW-09 MW-09 08/19/10 (ug/l)	MW-10 MW-10 08/18/10 (ug/l)	NYSDEC TOGS 1.1.1 CLASS GA GROUNDWATER STANDARDS/ GUIDANCE VALUES (ug/l)
Dichlorodifluoromethane	U	U	U	U	U	U	U	U	U	5
Chloromethane	U	U	U	U	U	U	U	U	U	5
Vinyl chloride	U	U	U	U	U	U	U	U	U	2
Bromomethane	U	U	U	U	U	U	U	U	U	5
Chloroethane	U	U	U	U	U	U	U	U	U	5
Trichlorofluoromethane	U	U	U	U	U	U	U	U	U	5
1,1-Dichloroethene	U	U	U	U	U	U	U	U	U	5
Acetone	U	U	U	U	U	U	U	U	U	50
Carbon disulfide	U	U	U	U	U	U	U	U	U	60
Methylene chloride	U	U	U	U	U	U	U	U	U	5
trans-1,2-Dichloroethene	U	U	1.5 J	U	U	U	U	U	U	5
Methyl tert-butyl ether	U	U	U	U	U	U	U	U	U	10
1,1-Dichloroethane	U	U	U	U	U	U	U	U	U	5
cis-1,2-Dichloroethene	U	25	350 D	U	U	U	U	13	U	5
2-Butanone	U	U	U	U	U	U	U	U	U	50
Chlorobromomethane	U	U	U	U	U	U	U	U	U	5
Chloroform	U	U	U	U	U	U	U	U	U	7
1,1,1-Trichloroethane	U	6.5	2.9 J	U	U	U	U	2.4 J	U	5
Carbon tetrachloride	U	U	U	U	U	U	U	U	U	5
Benzene	U	U	U	U	U	U	U	U	U	1
1,2-Dichloroethane	U	U	U	U	U	U	U	U	U	0.6
Trichloroethene	U	60	280 D	U	U	U	1.1 J	45	2.9 J	5
1,2-Dichloropropane	U	U	U	U	U	U	U	U	U	1
Bromodichloromethane	U	U	U	U	U	U	U	U	U	50
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	U	U	0.4
4-Methyl-2-pentanone	U	U	U	U	U	U	U	U	U	--
Toluene	U	U	U	U	U	U	U	U	U	5
t-1,3-Dichloropropene	U	U	U	U	U	U	U	U	U	0.4
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U	U	1
Tetrachloroethene	U	4.2 J	12	U	U	U	U	8.1	U	5
2-Hexanone	U	U	U	U	U	U	U	U	U	50
Dibromochloromethane	U	U	U	U	U	U	U	U	U	50
1,2-Dibromoethane	U	U	U	U	U	U	U	U	U	0.0006
Chlorobenzene	U	U	U	U	U	U	U	U	U	5
Ethyl benzene	U	U	U	U	U	U	U	U	U	5
Xylene (total)	U	U	U	U	U	U	U	U	U	5
Styrene	U	U	U	U	U	U	U	U	U	5
Bromoform	U	U	U	U	U	U	U	U	U	50
Isopropylbenzene	U	U	U	U	U	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U	U	5
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	U	3
1,4-Dichlorobenzene	U	U	U	U	U	1.2 J	U	U	U	3
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	U	3
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	U	U	U	0.04
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	U	5
1,2,3-Trichlorobenzene	U	U	U	U	U	U	U	U	U	5
Total VOCs	0	95.7	646.4	0	0	1.2	1.1	68.5	2.9	--

Qualifiers:

U: Not detected
J: Estimated value or limit
D: Detected at secondary dilution

Notes:

ug/l: Micrograms per liter
--: Not established

 Exceeds NYSDEC Class GA Groundwater Standard/Guidance Value

TABLE E-9
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
GROUNDWATER RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS

Well ID Sample ID Date Collected Units	MW-01 MW-01 08/19/10 (ug/l)	MW-03 MW-03 08/18/10 (ug/l)	MW-04 MW-04 08/19/10 (ug/l)	MW-05 MW-05 08/19/10 (ug/l)	MW-06 MW-06 08/18/10 (ug/l)	MW-07 MW-07 08/18/10 (ug/l)	MW-08 MW-08 08/18/10 (ug/l)	MW-09 MW-09 08/19/10 (ug/l)	MW-10 MW-10 08/18/10 (ug/l)	NYSDEC TOGS 1.1.1 CLASS GA GROUNDWATER STANDARDS/ GUIDANCE VALUES (ug/l)
Phenol	U	U	U	U	U	U	U	U	U	1
Bis(2-chloroethyl)ether	U	U	U	U	U	U	U	U	U	1
2-Chlorophenol	U	U	U	U	U	U	U	U	U	1
2-Methylphenol	U	U	U	U	U	U	U	U	U	1
Bis(2-chloro-1-methylethyl)ether	U	U	U	U	U	U	U	U	U	--
p-Cresol	U	U	U	U	U	U	U	U	U	1
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	U	--
Hexachloroethane	U	U	U	U	U	U	U	U	U	5
Nitrobenzene	U	U	U	U	U	U	U	U	U	0.4
Isophorone	U	U	U	U	U	U	U	U	U	50
2-Nitrophenol	U	U	U	U	U	U	U	U	U	1
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	U	50
Bis(2-chloroethoxy)methane	U	U	U	U	U	U	U	U	U	5
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	U	5
Naphthalene	U	U	U	U	U	U	U	U	U	10
4-Chloroaniline	U	U	U	U	U	U	U	U	U	5
Hexachlorobutadiene	U	U	U	U	U	U	U	U	U	0.5
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	U	1
2-Methylnaphthalene	U	U	U	U	U	U	U	U	U	--
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	U	5
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	U	1
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	U	1
2-Chloronaphthalene	U	U	U	U	U	U	U	U	U	10
2-Nitroaniline	U	U	U	U	U	U	U	U	U	5
Dimethylphthalate	U	U	U	U	U	U	U	U	U	50
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	U	5
Acenaphthylene	U	U	U	U	U	U	U	U	U	--
3-Nitroaniline	U	U	U	U	U	U	U	U	U	5
Acenaphthene	U	U	U	U	U	U	U	U	U	20
2,4-Dinitrophenol	U	U	U	U	U	U	U	U	U	10
4-Nitrophenol	U	U	U	U	U	U	U	U	U	1
Dibenzofuran	U	U	U	U	U	U	U	U	U	--
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	U	5
Diethylphthalate	U	U	U	U	U	U	U	U	U	50
Fluorene	U	U	U	U	U	U	U	U	U	50
4-Chlorophenylphenyl ether	U	U	U	U	U	U	U	U	U	--
4-Nitroaniline	U	U	U	U	U	U	U	U	U	5
4,6-Dinitro-2-methylphenol	U	U	U	U	U	U	U	U	U	--
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	U	50
1-Bromo-4-phenoxybenzene	U	U	U	U	U	U	U	U	U	--
Hexachlorobenzene	U	U	U	U	U	U	U	U	U	0.04
Pentachlorophenol	U	U	U	U	U	U	U	U	U	1
Phenanthrene	U	U	U	U	U	U	U	U	U	50
Anthracene	U	U	U	U	U	U	U	U	U	50
Carbazole	U	U	U	U	U	U	U	U	U	--
Di-n-butylphthalate	U	U	U	U	U	U	U	U	U	50
Fluoranthene	U	U	U	U	U	U	U	U	U	50
Pyrene	U	U	U	U	U	U	U	U	U	50
Butylbenzylphthalate	U	U	U	U	U	U	U	U	U	50
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	U	5
Benzo(a)anthracene	U	U	U	U	U	U	U	U	U	0.002
Chrysene	U	U	U	U	U	U	U	U	U	0.002
Bis(2-ethylhexyl)phthalate	U	U	U	U	U	U	U	U	U	5
Di-n-octyl phthalate	U	U	U	U	U	U	U	U	U	50
Benzo(b)fluoranthene	U	U	U	U	U	U	U	U	U	0.002
Benzo(k)fluoranthene	U	U	U	U	U	U	U	U	U	0.002
Benzo(a)pyrene	U	U	U	U	U	U	U	U	U	0
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	U	U	U	0.002
Dibenz(a,h)anthracene	U	U	U	U	U	U	U	U	U	--
Benzo(g,h,i)perylene	U	U	U	U	U	U	U	U	U	--
Total SVOCs	0	0	0	0	0	0	0	0	0	--

Qualifiers:
U: Not detected

Notes:
ug/l: Micrograms per liter
--: Not available

TABLE E-10
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
GROUNDWATER RESULTS
METALS AND CYANIDE

Well ID Sample ID Date Collected Units	MW-01 MW-01 8/19/2010 (ug/l)	MW-03 MW-03 8/18/2010 (ug/l)	MW-04 MW-04 8/19/2010 (ug/l)	MW-05 MW-05 8/19/2010 (ug/l)	MW-06 MW-06 8/18/2010 (ug/l)	MW-07 MW-07 8/18/2010 (ug/l)	MW-08 MW-08 8/18/2010 (ug/l)	MW-09 MW-09 8/19/2010 (ug/l)	MW-10 MW-10 8/18/2010 (ug/l)	NYSDEC TOGS 1.1.1 CLASS GA GROUNDWATER STANDARDS/ GUIDANCE VALUES (ug/l)
Aluminum	U	U	U	U	U	U	183 B	U	U	--
Antimony	U	U	U	U	U	U	U	U	U	3
Arsenic	U	U	U	U	U	U	U	U	U	25
Barium	21.4 B	822	12.3 B	17.1 B	33.8 B	22.9 B	214	36.7 B	28.9 B	1000
Beryllium	U	U	U	U	U	U	U	U	U	3
Cadmium	U	U	U	U	U	U	U	U	U	5
Calcium	15900	53000	45700	45400	36200	37700	25100	44400	35900	--
Chromium	U	3.4 B	27.3	U	U	U	1.3 B	10.7 B	1.1 B	50
Cobalt	U	U	1.2 B	U	U	0.99 B	U	U	U	--
Copper	U	15.1 B	33.7	U	U	U	12.2 B	4.3 B	U	200
Iron	U	U	U	U	73.4 B	33.5 B	330	32.3 B	80.3 B	300
Lead	U	U	U	U	U	U	U	U	U	25
Magnesium	1490	5340	3720	3740	2610	4320	2830	4170	3200	35000
Manganese	51.1	295	U	522	U	930	93.1	U	20.9 B	300
Mercury	U	U	U	U	U	U	U	U	U	0.7
Nickel	U	8.6 B	3.5 B	U	U	1.5 B	2.1 B	5.5 B	1.5 B	100
Potassium	28800	8520	6940	11300	19900	7770	16600	11100	8940	--
Selenium	U	U	U	U	U	U	U	U	U	10
Silver	U	U	U	U	U	U	U	U	U	50
Sodium	25900	25900	27100	15600	24200	21100	22700	34200	15900	20000
Thallium	U	U	U	U	U	U	U	U	U	0.5
Vanadium	U	2.6 B	U	U	5.2 B	U	1.9 B	U	U	--
Zinc	11.0 B	20.0 B	14.5 B	11.9 B	12.5 B	11.2 B	40.5 B	19.7 B	15.5 B	2000
Cyanide	U	U	U	U	U	U	U	8.7 B	U	200

Qualifiers:

U: Not detected
J: Estimated value or limit
B: Detected between the IDL and CRDL

Notes:

ug/l: Micrograms per liter
IDL: Instrument detection limit
CRDL: Contract required detection limit
--: Not established
Exceeds NYSDEC Class GA Groundwater Standard/Guidance Value

Table E-11
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
RCRA FACILITY INVESTIGATION
GROUNDWATER RESULTS
NATURAL ATTENUATION PARAMETER MONITORING RESULTS

Sample Identification	MW-01	MW-03	MW-04	MW-06
Depth to Water, ft	7.5	9.14	9.53	9.6
Date of Collection	8/19/2010	8/18/2010	8/19/2010	8/18/2010
<i>Laboratory Results</i>				
Ferrous Iron, mg/L	U	U	U	U
Total Organic Carbon, mg/L	U	2.7 J	U	U
Alkalinity, Total (as CaCO ₃), mg/L	76	130	130	120
Chloride, mg/L	25	47	24	30
Nitrate (as N), mg/L	1.6	1.5	3.7	0.97
Sulfate, mg/L	16	24	40	20
BOD, mg/L	7.2	6.6	U	U
COD, mg/L	U	U	U	U
Dissolved Iron, ug/L	40.3 B	U	U	U
Dissolved Manganese, ug/L	29.6 B	266	U	U
Ethane, ug/L	U	U	U	U
Ethene, ug/L	U	U	U	U
Methane, ug/L	U	48	U	U
<i>Field Measurements</i>				
pH, millivolts	6.43	6.73	6.18	6.74
Dissolved Oxygen, mg/l	0.0	0.0	0.87	0.13
Eh, mV	164	156	197	130
Total VOC, ug/L	0	95.7	646.4	0

Notes:

TVOC: Total volatile organic compounds

U: Compound analyzed but not detected

APPENDIX F

UST WASTE DISPOSAL DOCUMENTATION



Manifest # 439032

GLOBAL JOB NUMBER: _____

FACILITY APPROVAL NUMBER: 103071606**Please Check One:**

- ☒ Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909
- ☐ Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220
- ☐ Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633
- ☐ Other _____
- ☐ Clean Earth of Philadelphia
3201 S. 81st Street
Philadelphia, PA 19153
Ph: 215-724-5520
- ☐ Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004
- ☐ Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>P.S.C.</u> <u>1204 1/2 street</u> <u>PA 15106, D.V. 11706</u>	GROSS WEIGHT: ☐ Tons ☐ Yards
GENERATOR'S PHONE: _____	TARE WEIGHT: ☐ Tons ☐ Yards
	NET WEIGHT: ☐ Tons ☐ Yards

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Job # 10-117960
100/1422 pet. soil. Imported soil
Lio 12 D.V. 11481-PA

GENERATOR'S CERTIFICATION - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: Fred Miranda Title: Facility mg.
Signature: Fred Miranda Date and Time: 9/23/10

TRANSPORTER

Company: AMCO Environmental Phone Number: 631-586-5900
Address: 50 Green Lane, Easton, NJ Truck # and License Plate: H 1-124 11581-PA
Driver: WILLIAM CAMPAS SW Haulers Permit #: D.V. 1-A-1727
(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: William Campas Date and Time: 9-23-10

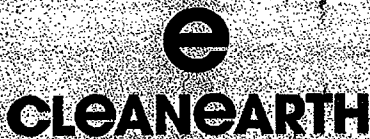
DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: William Campas Date and Time: 9-23-10

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: (Signature) Date and Time: 9/23/10



Manifest # 39048

GLOBAL JOB NUMBER: 1164417

FACILITY APPROVAL NUMBER: 103071606

Please Check One:

- ☐ Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909
- ☐ Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220
- ☐ Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633
- ☐ Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520
- ☐ Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004
- ☐ Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700
- ☐ Other _____

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: C.P.C. 120 SOUTH 4TH STREET PHILADELPHIA, PA 19106	GROSS WEIGHT: ☐ Tons ☐ Yards
GENERATOR'S PHONE: 631-586-0332	TARE WEIGHT: ☐ Tons ☐ Yards
	NET WEIGHT: ☐ Tons ☐ Yards

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

WON / H-22 petrot Impact Soil

Job # 10-117980
R/O # 202647
LIC # NJ 11581-PA

GENERATOR'S CERTIFICATION - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: Fred Munk Title: Facility Manager
Signature: Fred Munk Date and Time: 9/22/10

TRANSPORTER

Company: APOD Environmental Phone Number: 631-586-5900
Address: 50 Glenview Blvd, Suite 100, NJ Truck # and License Plate: NJ 1-11581-AB
Driver: WILLIAM CAMPOS SW Haulers Permit #: NJ 1-1-027
(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 9-22-10

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: 9-23-10

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: 9/23/10



Manifest # 439047

GLOBAL JOB NUMBER: _____

FACILITY APPROVAL NUMBER: 103071606

Please Check One:☒ Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909☐ Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220☐ Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633☐ Other

_____☐ Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520☐ Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004☐ Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700**Non-Hazardous Material Manifest**

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: P.S.C. 120 4th Street Rye Brook, NY 11706	GROSS WEIGHT: ☐ Tons ☐ Yards
GENERATOR'S PHONE:	TARE WEIGHT: ☐ Tons ☐ Yards
	NET WEIGHT: ☐ Tons ☐ Yards

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Job # 10-17960 DOU/H222 petro. Impacted Soil L/O # 4413 LPC # N.Y. - 11581-1B

GENERATOR'S CERTIFICATION - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: Gary Scoppio Title: CM
Signature: Gary Scoppio Date and Time: 9/23/10

TRANSPORTER

Company: ALDO ENVIRONMENTAL Phone Number: 631-586-5900
Address: 50 GELA AVE LINDEN HILLS, NY Truck # and License Plate: 11-N.Y.-11581-1B
Driver: WILFREDO CAMPOS SW Haulers Permit #: N.Y. - 1-A - 1727
(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 9-23-10

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: 9-24-10

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: 9/24/10

Clean Earth of Carteret, Inc.
P.O. Box 95000-3765
Philadelphia, PA 19195-0001
Ph: 215-734-1400
Fax: 215-734-1423



Faster, smarter, greener solutions.

Invoice

Invoice Number:
307017080
Invoice Date:
09/28/10
Order Number

Page:
1

Sold To:
PSC CHEMICAL POLLUTION CONTR
120 S 4TH STREET
BAY SHORE, NY 11706

Site Address:
Chemical Pollution Control LL
631-586-0333
120 South 4th street
Bay Shore, NY 11706
Gary Scoppio

Customer No.	Customer PO	Payment Terms
PSC210		Credit Card
Sales Rep ID	Shipping Method	Payment Due
DAWN PIKE		10/08/10

Job No.	Description	Scale Date:	Ticket No.	Manifest No.	Quantity	Unit	Unit Price	Total Price
116447	Soil Treatment Type II	09/24/10	307000137742	439047	18.32	Tons	34.00	622.88

901.102.981.530.2.7080

Amount Subject to Sales Tax 0.00	Amount Exempt from Sales Tax 622.88	Total Quantity: 18.32	Subtotal: Invoice Discount: Tax:	622.88 0.00 0.00
			Total:	622.88

Clean Earth of Carteret, Inc.
P.O. Box 95000-3755
Philadelphia, PA 19195-0001
Ph: 215-734-1400
Fax: 215-734-1423



Faster, smarter, greener solutions.

Invoice

Invoice Number:
307017064
Invoice Date:
09/24/10
Order Number

Page:
1

Sold To:
PSC CHEMICAL POLLUTION CONTR
120 S 4TH STREET
BAY SHORE, NY 11706

Site Address:
Chemical Pollution Control LL
631-586-0333
120 South 4th street
Bay Shore, NY 11706
Gary Scoppio

Customer No.	Customer PO	Payment Terms
PSC210		Credit Card
Sales Rep ID	Shipping Method	Payment Due
DAWN PIKE		10/04/10

Job No.	Description	Scale Date:	Ticket No.	Manifest No.	Quantity	Unit	Unit Price	Total Price
116447	Soil Treatment Type II	09/23/10	307000137546	439048	15.87	Tons	34.00	539.58
116447	Soil Treatment Type II	09/23/10	307000137684	439032	19.09	Tons	34.00	649.06

901,102.98 / 5302.7080

Amount Subject to Sales Tax 0.00	Amount Exempt from Sales Tax 1,188.64	Total Quantity: 34.96	Subtotal: Invoice Discount: Tax:	1,188.64 0.00 0.00
			Total:	1,188.64

APPENDIX G

DATA VALIDATION FORMS

DATA VALIDATION CHECKLIST

Project Name:	PSC	
Project Number:	2786-F	
Sample Date(s):	August 18 and 19, 2010	
Sample Team:	Paul Barusich	
Matrix/Number of Samples:	<u>Water/ 9</u> <u>Soil/ 0</u> <u>Field Duplicates/ 0</u> <u>Trip Blanks / 2</u> <u>Field Blanks/ 0</u>	
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI and R.I. Analytical Laboratories, Warwick, RI	
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> by SW846 8260 and dissolved gases by GC-FID (RSK-175) <u>Semi-Volatile Organic Compounds (SVOCs):</u> by SW846 8270 <u>Metals:</u> Total and dissolved by SW846 Method 6010, cyanide by SW-846 9012 and mercury by SW-846 7470 <u>General Chemistry:</u> <u>General Chemistry:</u> Chloride, Nitrate, and Sulfate (USEPA 300.0), Alkalinity (SM2320), Ferrous Iron (SM3500D), Chemical Oxygen Demand (COD) (SM 5220D), Total Organic Carbon (SM 5310B) and analyzed by R.I. Analytical Laboratories for Biochemical Oxygen Demand (BOD) (SM5210B)	
Laboratory Report No:	SJ1622	Date:9/9/2010

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using guidance from the USEPA National Functional Guidelines of June 2008, or USEPA National Functional Guidelines of Inorganic Data Review, January 2010, method performance criteria, and Dvirka and Bartilucci

Pages

Consulting Engineers, a Division of William F. Cosulich Associates, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

Custody Numbers: SJ1622
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	RSK-175	SVOC	MET	MISC
TB081810	SJ1622-01	Trip blank	08/18/10		X				
MW-08	SJ1622-02	Water	08/18/10		X		X	X	
MW-07	SJ1622-03	Water	08/18/10		X		X	X	
MW-10	SJ1622-04	Water	08/18/10		X		X	X	
MW-06	SJ1622-05	Water	08/18/10		X	X	X	X	X
MW-03	SJ1622-06	Water	08/18/10		X	X	X	X	X
TB081910	SJ1622-07	Trip blank	08/19/10		X				
MW-05	SJ1622-08	Water	08/19/10		X		X	X	
MW-09	SJ1622-09	Water	08/19/10		X		X	X	
MW-04	SJ1622-10	Water	08/19/10		X	X	X	X	X
MW-01	SJ1622-11	Water	08/19/10		X	X	X	X	X

ORGANIC ANALYSES

VOCS & RSK-175

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X	X		
B. Trip blanks		X	X		
C. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X		X	
5. MS/MSD precision (RPD)		X		X	
6. Blank spike %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

VOCs - volatile organic compounds
%R - percent recovery

%D - percent difference
%RSD - percent relative standard deviation

RRF - relative response factor
RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

2. Methylene chloride was detected in TB081810 and chloroform was detected in a method blank. Neither compound was detected in the associated samples and therefore did not impact the usability of the reported sample results.
3. 4-Methyl-2-pentanone and 2-hexanone had %Rs above the QC in the MS. The compounds were not detected in the associated samples and therefore did not impact the usability of the reported sample results.
12. Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
MW-04	Cis-1,2-dichloroethene	380 E	350 D	350 D
	Trichloroethene	310 E	280 D	280 D

ORGANIC ANALYSES

SVOCs

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R		X		X	
4. Matrix spike duplicate (MSD) %R		X		X	
5. MS/MSD precision (RPD)		X		X	
6. Blank spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

SVOCs –semi- volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exception:

6. 2,4-Dimethylphenol had %R above the QC in the laboratory spike. It was not detected in the associated samples and therefore did not impact the usability of the reported sample results.

INORGANIC ANALYSES METALS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X		X	
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X		X	
9. Post digestive spike sample %R					X
10. Duplicate %RPD		X		X	
11. Serial dilution check %D		X		X	
12. Total verse dissolved results		X		X	
13. Field duplicates RPD					X

%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable.

INORGANIC ANALYSES GENERAL CHEMISTRY

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Laboratory blanks		X		X	
B. Field blanks					X
3. Continuing calibration verification %R					
4. Laboratory spike %R		X		X	
5. Laboratory duplicate RPD		X		X	
6. Matrix spike and matrix spike duplicate %R		X		X	
7. Field duplicates RPD					X

%R percent recovery

RPD - relative percent difference

%D – percent difference

RSD - relative standard deviation

Comments:

Performance was acceptable.

**DATA VALIDATION AND
QUALIFICATION SUMMARY**

Laboratory Numbers: SJ1622

Sample ID	Analyte(s)	Qualifier	Reason(s)
<u>VOCs & RSK-175</u>			
MW-04	Cis-1,2-dichloroethene and trichloroethene	D	Report secondary dilution
<u>SVOCs</u>			
Qualification of the data was not necessary.			
<u>Metals</u>			
Qualification of the data was not necessary.			
<u>General Chemistry</u>			
Qualification of the data was not necessary.			

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 09/22/2010
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECKLIST

Project Name:	PSC	
Project Number:	2786-F	
Sample Date(s):	August 25, 2010	
Sample Team:	Keith Robins	
Matrix/Number of Samples:	<u>Water/ 0</u> <u>Soil/ 16</u> <u>Field Duplicates/ 0</u> <u>Trip Blanks / 0</u> <u>Field Blanks/ 0</u>	
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI	
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> by SW846 8260 <u>Semi-Volatile Organic Compounds (SVOCs):</u> by SW846 8270 <u>Polychlorinated biphenyl (PCBs)</u> by USEPA SW846 Method 8082 <u>Pesticides</u> by USEPA SW846 Method 8081A <u>Metals:</u> Total by SW846 Method 6010, cyanide by SW-846 9012 and mercury by SW-846 7471	
Laboratory Report No:	SJ1654	Date:9/15/2010

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using guidance from the USEPA National Functional Guidelines of June 2008, or USEPA National Functional Guidelines of Inorganic Data Review, January 2010, method performance criteria, and Dvirka and Bartilucci Consulting Engineers, a Division of William F. Cosulich Associates, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

Custody Numbers: SJ1654
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis			
					VOC	SVOC	PCB& Pest.	MET
B-30 (0-2)	SJ1654-01	Soil	08/25/10		X	X	X	X
B-30 (2-4)	SJ1654-02	Soil	08/25/10		X	X	X	X
B-31 (0-2)	SJ1654-03	Soil	08/25/10		X	X	X	X
B-31 (2-4)	SJ1654-04	Soil	08/25/10		X	X	X	X
B-32 (0-2)	SJ1654-05	Soil	08/25/10		X	X	X	X
B-32 (4-6)	SJ1654-06	Soil	08/25/10		X	X	X	X
B-33 (0-2)	SJ1654-07	Soil	08/25/10		X	X	X	X
B-33 (4-6)	SJ1654-08	Soil	08/25/10		X	X	X	X
B-34 (0-2)	SJ1654-09	Soil	08/25/10		X	X	X	X
B-34 (4-6)	SJ1654-10	Soil	08/25/10		X	X	X	X
B-35 (0-2)	SJ1654-11	Soil	08/25/10		X	X	X	X
B-35 (4-6)	SJ1654-12	Soil	08/25/10		X	X	X	X
B-29 (0-2)	SJ1654-13	Soil	08/25/10		X	X	X	X
B-29 (4-6)	SJ1654-14	Soil	08/25/10		X	X	X	X
B-25 (0-2)	SJ1654-15	Soil	08/25/10		X	X	X	X
B-25 (8-10)	SJ1654-16	Soil	08/25/10		X	X	X	X

ORGANIC ANALYSES

VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X	X		
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Blank spike %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X	X		
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

VOCs - volatile organic compounds
%R - percent recovery

%D - percent difference
%RSD - percent relative standard deviation

RRF - relative response factor
RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 2A. Methylene chloride was detected in the method blank below contract required quantitation limit (CRQL) and also found in associated samples at less than the CRQL. Methylene chloride was qualified as non-detect (U) in B-30(0-2).
- 3-5. Acetone had %R above the QC in the MSD and RPD above the QC limits, it was the only compound with a RPD above the QC limits that was detected in the associated sample. Acetone was qualified as estimated (J) in B-30(2-4), B-31(0-2), B-31(2-4), B-32(0-2), B-32(4-6), B-33(4-6), B-34(0-2), B-34(4-6), B-35(4-6), B-29(0-2) and B-29(4-6). Numerous compounds had %R below the QC in the MS and/or MSD. The following compounds were qualified as estimated (J/UJ) in all samples: dibromomethane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, 1,3-dichloropropane, dibromochloromethane, 1,2-dibromoethane, chlorobenzene, 1,1,1,2-tetrachloroethane, ethylbenzene, m,p-xylene, o-xylene, total xylene, styrene, bromoform, 1,1,2,2-tetrachloroethane, bromobenzene, 2-chlorotoluene, 4-chlorotoluene, 1,2,4-trimethylbenzene, 4-isopropyltoluene, 1,3-dichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, 1,2,3-trichlorobenzene and naphthalene.
11. Dichlorodifluoromethane %D was above QC limits in the continuing calibration associated with all samples. It was not detected and qualified as estimated (UJ) in all samples.

ORGANIC ANALYSES

SVOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X		X	
6. Blank spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X	X		
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

SVOCs – semi-volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 3-4. 2,4-Dimethylphenol had %R above the QC in the MS and MSD. It was not detected in the associated samples and therefore did not impact the usability of the reported sample results. 2,4-Dinitrophenol and 4,6-dinitro-2-methylphenol had %R below the QC in the MS and MSD and was qualified as estimated (UJ) in all samples.
- 6. 2,4-Dimethylphenol and hexachlorocyclopentadiene had %Rs above the QC in the laboratory spike. It was not detected in the associated samples and therefore did not impact the usability of the reported sample results.
- 11. Benzo(k)fluoranthene %D was above QC limits in the continuing calibration associated with B-30(2-4), B-31(0-2), B-31(2-4) and B-32(4-6). It was not detected and qualified as estimated (UJ) in the associated samples.

ORGANIC ANALYSES

PCBs and Pesticides

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Laboratory Control Sample %R		X		X	
7. Surrogate spike recoveries		X	X		
8. GC Surrogate retention time summary		X		X	
9. Initial calibration %RSD's		X		X	
10. Continuing calibration %D's		X		X	
11. Transcriptions – quant report vs. Form I		X		X	
12. Field duplicates RPD					X

PCBs – Polychlorinated Biphenyls

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 3-5. Numerous pesticides %Rs were above QC limit in the MS/MSD. Beta-BHC, delta-BHC, gamma-BHC, endosulfan I, dieldrin, 4,4'-DDE, endosulfan II, 4,4'-DDD and 4,4'-DDE RPDs were above QC limits. The following pesticides were qualified as estimated (J): gamma-BHC (Lindane) in B-34 (4-6); beta-BHC in B-30 (2-4) and B-31 (2-4); 4,4'-DDT in B-33 (0-2); alpha-chlordane in B-33 (0-2); and gamma-Chlordane in B-33 (0-2).
7. One surrogate was above QC criteria for pesticides in B-33(0-2) and B-29(4-6) and one PCB surrogate in B-30(2-4). Pesticides detected in B-33(0-2) were qualified as estimated (J). No pesticides were detected in B-29(4-6) and no PCBs were detected in B-30(2-4) therefore the surrogate results did not impact the usability of the reported sample results.
11. Numerous pesticides had dual column confirmation with %Ds above 25% and were qualified by the laboratory with a "P". All "P" qualified results were qualified as estimated (J).

INORGANIC ANALYSES METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X	X		
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X	X		
9. Post digestive spike sample %R		X		X	
10. Duplicate %RPD		X	X		
11. Serial dilution check %D		X	X		
12. Total verse dissolved results					X
13. Field duplicates RPD					X

%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 2A. Aluminum, beryllium, iron, magnesium, silver and zinc were detected in the preparation blank below contract required quantitation limit (CRQL) and also found in associated samples at less than the CRQL. The following metals were qualified as non-detect (U): mercury in B-32 (4-6), B-29 (4-6), B-30 (2-4), B-31 (2-4), B-35 (4-6), B-31 (0-2), B-32 (0-2), B-34 (0-2), B-29 (0-2), B-34 (4-6) and B-35 (0-2) and silver in B-34 (4-6).
8. The %R was below the QC limit of 75 % in the spike sample for antimony associated with all samples. Antimony was qualified as estimated (J/UJ) in all samples.
10. The calcium and magnesium RPDs were above the QC limit of 20% for the laboratory duplicate associated with all samples. The above metals were detected and qualified as estimated (J) in all samples.
11. Aluminum, barium, calcium, chromium, cobalt, iron, magnesium, manganese, nickel, potassium, vanadium and zinc %Ds were above the QC limit of 10% for the serial dilution check sample associated with all samples. The above metals were qualified as estimated (J/UJ) in all samples.

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers: SJ1654

Sample ID	Analyte(s)	Qualifier	Reason(s)
<u>VOCs</u>			
B-30(0-2)	Methylene chloride	U	Detected in the method blank
B-30(2-4), B-31(0-2), B-31(2-4), B-32(0-2), B-32(4-6), B-33(4-6), B-34(0-2), B-34(4-6), B-35(4-6), B-29(0-2) and B-29(4-6)	Acetone	J	%R above the QC in the MSD and RPD above the QC limits
All samples	Dibromomethane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, 1,3-dichloropropane, dibromochloromethane, 1,2-dibromoethane, chlorobenzene, 1,1,1,2-tetrachloroethane, ethylbenzene, m,p-xylene, o-xylene, total xylene, styrene, bromoform, 1,1,2,2-tetrachloroethane, bromobenzene, 2-chlorotoluene, 4-chlorotoluene, 1,2,4-trimethylbenzene, 4-isopropyltoluene, 1,3-dichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, 1,2,3-trichlorobenzene and naphthalene	J/UJ	%R below the QC in the MS and/or MSD
All samples	Dichlorodifluoromethane	J/UJ	%D was above QC limits in the continuing calibration
<u>SVOCs</u>			
All samples	2,4-Dinitrophenol and 4,6-dinitro-2-methylphenol	UJ	%R below the QC in the MS and MSD
B-30(2-4), B-31(0-2), B-31(2-4) and B-32(4-6)	Benzo(k)fluoranthene	UJ	%D was above QC limits in the continuing calibration
<u>PCBs and Pesticides</u>			
B-34 (4-6)	gamma-BHC (Lindane)	J	%Rs were above QC limit in the MS/MSD and/or RPDs were above QC limits
B-30 (2-4) and B-31 (2-4)	beta-BHC	J	%Rs were above QC limit in the MS/MSD and/or RPDs were above QC limits

Sample ID	Analyte(s)	Qualifier	Reason(s)
B-33 (0-2)	4,4'-DDT, endosulfan sulfate, endrin ketone, alpha- and gamma-Chlordane	J	%Rs were above QC limit in the MS/MSD and/or RPDs were above QC limits and surrogate above QC criteria
All samples	All detects with "P" qualifier	J	Duel column confirmation with %Ds above 25%
<u>Metals</u>			
B-32 (4-6), B-29 (4-6), B-30 (2-4), B-31 (2-4), B-35 (4-6), B-31 (0-2), B-32 (0-2), B-34 (0-2), B-29 (0-2), B-34 (4-6) and B-35 (0-2)	Mercury	U	Detected in the preparation blank
B-34 (4-6).	Silver	U	Detected in the preparation blank
All samples	Antimony	J/UJ	The %R was below the QC limit of 75 % in the spike sample
All samples	Calcium and magnesium	J/UJ	RPDs were above the QC limit of 20% for the laboratory duplicate
All samples	Aluminum, barium, calcium, chromium, cobalt, iron, magnesium, manganese, nickel, potassium, vanadium and zinc	J/UJ	The %Ds were above the QC limit in the serial dilution sample

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 09/20/2010
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECKLIST

Project Name:	PSC	
Project Number:	2786-F	
Sample Date(s):	August 26, 2010	
Sample Team:	Keith Robins	
Matrix/Number of Samples:	<u>Water/ 0</u> <u>Soil/ 18</u> <u>Field Duplicates/ 0</u> <u>Trip Blanks / 0</u> <u>Field Blanks/ 0</u>	
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI	
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> by SW846 8260 <u>Semi-Volatile Organic Compounds (SVOCs):</u> by SW846 8270 <u>Polychlorinated biphenyl (PCBs)</u> by USEPA SW846 Method 8082 <u>Pesticides</u> by USEPA SW846 Method 8081A <u>Metals:</u> Total by SW846 Method 6010, cyanide by SW-846 9012 and mercury by SW-846 7471	
Laboratory Report No:	SJ1664	Date:9/17/2010

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using guidance from the USEPA National Functional Guidelines of June 2008, or USEPA National Functional Guidelines of Inorganic Data Review, January 2010, method performance criteria, and Dvirka and Bartilucci Consulting Engineers, a Division of William F. Cosulich Associates, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

Custody Numbers: SJ1664
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis			
					VOC	SVOC	PCB& Pest.	MET
B-26 (0-2)	SJ1664-01	Soil	08/26/10		X	X	X	X
B-26 (4-6)	SJ1664-02	Soil	08/26/10		X	X	X	X
B-27 (0-2)	SJ1664-03	Soil	08/26/10		X	X	X	X
B-27 (4-6)	SJ1664-04	Soil	08/26/10		X	X	X	X
B-28 (0-2)	SJ1664-05	Soil	08/26/10		X	X	X	X
B-28 (4-6)	SJ1664-06	Soil	08/26/10		X	X	X	X
B-1 (0-2)	SJ1664-07	Soil	08/26/10		X	X	X	X
B-1 (2-4)	SJ1664-08	Soil	08/26/10		X	X	X	X
B-2 (0-2)	SJ1664-09	Soil	08/26/10		X	X	X	X
B-2 (2-4)	SJ1664-10	Soil	08/26/10		X	X	X	X
B-3 (0-2)	SJ1664-11	Soil	08/26/10		X	X	X	X
B-3 (2-4)	SJ1664-12	Soil	08/26/10		X	X	X	X
B-13 (0-2)	SJ1664-13	Soil	08/26/10		X	X	X	X
B-13 (2-4)	SJ1664-14	Soil	08/26/10		X	X	X	X
B-18 (0-2)	SJ1664-15	Soil	08/26/10		X	X	X	X
B-18 (2-4)	SJ1664-16	Soil	08/26/10		X	X	X	X
B-9 (0-2)	SJ1664-17	Soil	08/26/10		X	X	X	X
B-9 (2-4)	SJ1664-18	Soil	08/26/10		X	X	X	X

ORGANIC ANALYSES

VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X	X		
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X		X	
6. Blank spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X	X		
11. Continuing calibration RRF's and %D's		X	X		
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

VOCs - volatile organic compounds
%R - percent recovery

%D - percent difference
%RSD - percent relative standard deviation

RRF - relative response factor
RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 2A. Chloroform was detected in a method blank but not in the associated samples. Acetone was detected in a method blank above contract required quantitation limit (CRQL) and also found in associated samples at more than two times the blank result and therefore did not impact the usability of the reported sample.
- 3&4. Numerous compounds had %R below the QC in the MS and/or MSD. The following compounds were qualified as estimated (J/UJ) in all samples: 1,1-dichloropropene, trichloroethene, chlorobenzene, 1,1,1,2-tetrachloroethane, ethylbenzene, m,p-xylene, o-xylene, total xylene, styrene, isopropylbenzene, bromobenzene, n-propylbenzene, 2-chlorotoluene, 1,3,5-trimethylbenzene, 4-chlorotoluene, tert-butylbenzene, 1,2,4-trimethylbenzene, sec-butylbenzene, 4-isopropyltoluene, 1,3-dichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, n-butylbenzene, 1,2,4-trichlorobenzene, hexachlorobutadiene and 1,2,3-trichlorobenzene.
6. The %Rs were above QC limits in the laboratory spike sample for chloroform, 1,2-dichloropropane and trans-1,3-dichloropropene associated with B-9(2-4) dilution. They were not detected in the sample and therefore did not impact the usability of the reported sample.
10. Bromomethane %RSD was above QC limits in a initial calibration and not detected in the associated samples and therefore did not impact the usability of the reported samples.

11. Dichlorodifluoromethane and bromomethane %D were above QC limits in the continuing calibration associated with B-9(2-4) dilution. These compounds were not reported from the dilution and therefore did not impact the usability of the reported sample.
12. Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
B-9(2-4)	Cis-1,2-dichloroethene	250 E	2100	2100 D

ORGANIC ANALYSES

SVOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Blank spike %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X	X		
11. Continuing calibration RRF's and %D's		X	X		
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

SVOCs – semi-volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 3-5. 2,4-Dinitrophenol and 4,6-dinitro-2-methylphenol had %R below the QC in the MS and MSD and/or RPD and was qualified as estimated (UJ) in all samples.
- 10. 2,4-Dimethylphenol %RSD was above QC limits in a initial calibration and not detected in the associated samples and therefore did not impact the usability of the reported samples.
- 11. 4-Nitrophenol %D was above QC limits in the continuing calibration associated with B-2(2-4), B-3(0-2), B-3(2-4), B-13(0-2) and B-13(2-4). 2-Methylnaphthalene and 4-nitrophenol %Ds were above QC limits in the continuing calibration associated with B-18(0-2). 2,4-Dinitrophenol and benzo(g,h,i)perylene %Ds were above QC limits in the continuing calibration associated with B-18(2-4), B-9(0-2) and B-9(2-4). They were qualified as estimated (J/UJ) in the associated samples.

ORGANIC ANALYSES

PCBs and Pesticides

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Laboratory Control Sample %R		X		X	
7. Surrogate spike recoveries		X		X	
8. GC Surrogate retention time summary		X		X	
9. Initial calibration %RSD's		X		X	
10. Continuing calibration %D's		X		X	
11. Transcriptions – quant report vs. Form I		X		X	
12. Field duplicates RPD					X

PCBs – Polychlorinated Biphenyls

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 3-5. Numerous pesticides %Rs were below QC limit in the MS/MSD and RPDs were above QC limits. They were not detected in the associated samples and therefore did not impact the usability of the reported samples except for 4,4'-DDT in B-2 (0-2) which was qualified as estimated (J).
- 11. 4,4'-DDT in B-2 (0-2) had dual column confirmation with %D above 25% and was qualified by the laboratory with a "P". The "P" qualified result was qualified as estimated (J).

INORGANIC ANALYSES METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X	X		
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X	X		
9. Post digestive spike sample %R		X		X	
10. Duplicate %RPD		X	X		
11. Serial dilution check %D		X	X		
12. Total verse dissolved results					X
13. Field duplicates RPD					X

%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 2A. Aluminum, magnesium and silver were detected in the preparation blank below contract required quantitation limit (CRQL) and also found in associated samples at less than the CRQL. Silver was qualified as non-detect (U) in B-27 (0-2) and B-1 (0-2).
- 8. The %R was below the QC limit of 75 % in the spike sample for antimony associated with all samples. Antimony was qualified as estimated (J/UJ) in all samples.
- 10. The calcium and magnesium RPDs were above the QC limit of 20% for the laboratory duplicate associated with all samples. The above metals were qualified as estimated (J/UJ) in all samples.
- 11. Nickel %D was above the QC limit of 10% for the serial dilution check sample associated with all samples. The above metals were qualified as estimated (J/UJ) in all samples.

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers: SJ1664

Sample ID	Analyte(s)	Qualifier	Reason(s)
<u>VOCs</u>			
All samples	1,1-Dichloropropene, trichloroethene, chlorobenzene, 1,1,1,2-tetrachloroethane, ethylbenzene, m,p-xylene, o-xylene, total xylene, styrene, isopropylbenzene, bromobenzene, n-propylbenzene, 2-chlorotoluene, 1,3,5-trimethylbenzene, 4-chlorotoluene, tert-butylbenzene, 1,2,4-trimethylbenzene, sec-butylbenzene, 4-isopropyltoluene, 1,3-dichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, n-butylbenzene, 1,2,4-trichlorobenzene, hexachlorobutadiene and 1,2,3-trichlorobenzene	J/UJ	%R below the QC in the MS and/or MSD
B-9(2-4)	Cis-1,2-dichloroethene	D	Report secondary dilution
<u>SVOCs</u>			
All samples	2,4-Dinitrophenol and 4,6-dinitro-2-methylphenol	UJ	%R below the QC in the MS and MSD and/or RPD
B-2(2-4), B-3(0-2), B-3(2-4), B-13(0-2) and B-13(2-4)	4-Nitrophenol	J/UJ	%D was above QC limits in the continuing calibration
B-18(0-2)	2-Methylnaphthalene and 4-nitrophenol	J/UJ	%D was above QC limits in the continuing calibration
B-18(2-4), B-9(0-2) and B-9(2-4)	2,4-Dinitrophenol and benzo(g,h,i)perylene	J/UJ	%D was above QC limits in the continuing calibration
<u>PCBs and Pesticides</u>			
B-2 (0-2)	4,4'-DDT with "P" qualifier	J	%Rs were above QC limit in the MS/MSD and/or RPDs were above QC limits and duel column confirmation with %Ds above 25%
<u>Metals</u>			
B-27 (0-2) and B-1 (0-2)	Silver	U	Detected in the preparation blank

Sample ID	Analyte(s)	Qualifier	Reason(s)
All samples	Antimony	J/UJ	The %R was below the QC limit of 75 % in the spike sample
All samples	Calcium and magnesium	J/UJ	RPDs were above the QC limit of 20% for the laboratory duplicate
All samples	Nickel	J/UJ	The %D was above the QC limit in the serial dilution sample

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 09/21/2010
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECKLIST

Project Name:	PSC		
Project Number:	2786-F		
Sample Date(s):	August 27, 2010		
Sample Team:	Keith Robins		
Matrix/Number of Samples:	<u>Water/ 0</u> <u>Soil/ 20</u> <u>Field Duplicates/ 0</u> <u>Trip Blanks / 0</u> <u>Field Blanks/ 0</u>		
Analyzing Laboratory:	Mitekem Laboratories, Warwick, RI		
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> by SW846 8260 <u>Semi-Volatile Organic Compounds (SVOCs):</u> by SW846 8270 <u>Polychlorinated biphenyl (PCBs)</u> by USEPA SW846 Method 8082 <u>Pesticides</u> by USEPA SW846 Method 8081A <u>Metals:</u> Total by SW846 Method 6010, cyanide by SW-846 9012 and mercury by SW-846 7471		
Laboratory Report No:	SJ1677	Date:	9/20/2010

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using guidance from the USEPA National Functional Guidelines of June 2008, or USEPA National Functional Guidelines of Inorganic Data Review, January 2010, method performance criteria, and Dvirka and Bartilucci Consulting Engineers, a Division of William F. Cosulich Associates, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

Custody Numbers: SJ1677
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis			
					VOC	SVOC	PCB& Pest.	MET
B-24 (0-2)	SJ1677-01	Soil	08/27/10		X	X	X	X
B-24 (5-7)	SJ1677-02	Soil	08/27/10		X	X	X	X
B-17 (0-2)	SJ1677-03	Soil	08/27/10		X	X	X	X
B-17 (2-4)	SJ1677-04	Soil	08/27/10		X	X	X	X
B-16 (0-2)	SJ1677-05	Soil	08/27/10		X	X	X	X
B-16 (2-4)	SJ1677-06	Soil	08/27/10		X	X	X	X
B-12 (0-2)	SJ1677-07	Soil	08/27/10		X	X	X	X
B-15 (0-2)	SJ1677-08	Soil	08/27/10		X	X	X	X
B-15 (2-4)	SJ1677-09	Soil	08/27/10		X	X	X	X
B-8 (0-2)	SJ1677-10	Soil	08/27/10		X	X	X	X
B-8 (2-4)	SJ1677-11	Soil	08/27/10		X	X	X	X
B-14 (0-2)	SJ1677-12	Soil	08/27/10		X	X	X	X
B-14 (2-4)	SJ1677-13	Soil	08/27/10		X	X	X	X
B-23 (0-2)	SJ1677-14	Soil	08/27/10		X	X	X	X
B-23 (4-6)	SJ1677-15	Soil	08/27/10		X	X	X	X
B-22 (0-2)	SJ1677-16	Soil	08/27/10		X	X	X	X
B-22 (2-4)	SJ1677-17	Soil	08/27/10		X	X	X	X
B-20 (0-2)	SJ1677-18	Soil	08/27/10		X	X	X	X
B-20 (4-6)	SJ1677-19	Soil	08/27/10		X	X	X	X
B-12 (2-4)	SJ1677-20	Soil	08/27/10		X	X	X	X

ORGANIC ANALYSES

VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X	X		
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Blank spike %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X	X		
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

VOCs - volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 2A. Acetone was detected in a method blank above the contract required quantitation limit (CRQL) and also found in associated samples less than two times the blank result. Acetone was qualified as non-detect (U) in B-24(0-2), B-17(0-2), B-16(0-2), B-12(0-2), B-15(0-2) and B-15(2-4).

Chloroform was detected in a method blank below the CRQL and also in associated samples less than the CRQL. Chloroform was qualified as non-detect (U) in B-8(2-4), B-14(0-2), B-14(2-4), B-23(0-2) and B-23(4-6), B-22(0-2), B-22(2-4), B-20(0-2), B-20(4-6) and B-12(2-4).

- 3-5. The RPD for acetone was above QC limits in the MS/MSD and the %R for cis-1,2-dichloroethene was above QC limits. They were not detected and therefore did not impact the usability of the reported sample.

The %R was below the QC in the MS and/or MSD for total xylene, styrene, bromobenzene, 2-chlorotoluene, 4-chlorotoluene, 4-isopropyltoluene, 1,3-dichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene and 1,2,3-trichlorobenzene and were qualified as estimated (J/UJ) in all samples.

11. Dichlorodifluoromethane %D was above QC limits in the continuing calibration associated with all samples except for B-20(4-6). Dichlorodifluoromethane was not detected and qualified as estimated (UJ) in associated samples.

ORGANIC ANALYSES

SVOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X		X	
6. Blank spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X	X		
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

SVOCs – semi-volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 3-4. 2,4-Dimethylphenol had %R above the QC in the MS and MSD. It was not detected and therefore did not impact the usability of the reported sample.

2,4-Dinitrophenol and 4,6-dinitro-2-methylphenol had %R below the QC in the MS and MSD and was qualified as estimated (UJ) in all samples.

6. The %Rs were above QC limits in the laboratory spike sample for 2,4-dimethylphenol and hexachlorocyclopentadiene associated with all samples. They were not detected in the sample and therefore did not impact the usability of the reported sample.
10. 2,4-Dimethylphenol %RSD was above QC limits in a initial calibration and not detected in the associated samples and therefore did not impact the usability of the reported samples.

ORGANIC ANALYSES

PCBs and Pesticides

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Laboratory Control Sample %R		X		X	
7. Surrogate spike recoveries		X		X	
8. GC Surrogate retention time summary		X		X	
9. Initial calibration %RSD's		X		X	
10. Continuing calibration %D's		X		X	
11. Transcriptions – quant report vs. Form I		X		X	
12. Field duplicates RPD					X

PCBs – Polychlorinated Biphenyls

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 3-5. Numerous pesticides %Rs were below QC limit in the MS and/or MSD and endosulfan sulfate RPD was above QC limit in one run. They were not detected in the associated samples and therefore did not impact the usability of the reported samples except for alpha-chlordane and gamma-chlordane in B-8 (0-2) which was qualified as estimated (J).
11. Alpha-chlordane in B-8 (0-2) had dual column confirmation with %D above 25% and was qualified by the laboratory with a “P”. The “P” qualified result was qualified as estimated (J).

INORGANIC ANALYSES METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X	X		
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X	X		
9. Post digestive spike sample %R		X		X	
10. Duplicate %RPD		X	X		
11. Serial dilution check %D		X	X		
12. Total verse dissolved results					X
13. Field duplicates RPD					X

%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 2A. Aluminum, iron and magnesium were detected in the preparation blank above the CRQL. The metals were detected above the CRQL in the associated samples and therefore did not impact the usability of the reported sample.
- 8. The %R was below the QC limit of 75 % in the spike sample for antimony associated with all samples. Antimony was qualified as estimated (J/UJ) in all samples.
- 10. The calcium, copper, iron, manganese and magnesium RPDs were above the QC limit of 20% for the laboratory duplicate associated with all samples. The above metals were qualified as estimated (J/UJ) in all samples.
- 11. Barium, calcium, cobalt, iron and zinc %Ds were above the QC limit of 10% for the serial dilution check sample associated with all samples. The above metals were qualified as estimated (J/UJ) in all samples.

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers: SJ1677

Sample ID	Analyte(s)	Qualifier	Reason(s)
<u>VOCs</u>			
B-24(0-2), B-17(0-2), B-16(0-2), B-12(0-2), B-15(0-2) and B-15(2-4)	Acetone	U	Detected in the method blank
B-8(2-4), B-14(0-2), B-14(2-4), B-23(0-2) and B-23(4-6), B-22(0-2), B-22(2-4), B-20(0-2), B-20(4-6) and B-12(2-4)	Chloroform	U	Detected in the method blank
All samples	Total xylene, styrene, bromobenzene, 2-chlorotoluene, 4-chlorotoluene, 4-isopropyltoluene, 1,3-dichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene and 1,2,3-trichlorobenzene	J/UJ	%R below the QC in the MS and/or MSD
All samples except for B-20(4-6)	Dichlorodifluoromethane	D	%D was above QC limits in the continuing calibration
<u>SVOCs</u>			
All samples	2,4-Dinitrophenol and 4,6-dinitro-2-methylphenol	UJ	%R below the QC in the MS and MSD and/or RPD
<u>PCBs and Pesticides</u>			
B-8 (0-2)	Alpha-chlordane with "P" qualifier and gamma-chlordane	J	%Rs were below QC limit in the MS/MSD and/or RPDs were above QC limits and/or dual column confirmation with %Ds above 25%
<u>Metals</u>			
All samples	Antimony	J/UJ	The %R was below the QC limit of 75 % in the spike sample
All samples	Calcium, copper, iron, manganese and magnesium	J/UJ	RPDs were above the QC limit of 20% for the laboratory duplicate
All samples	Barium, calcium, cobalt, iron and zinc	J/UJ	The %Ds were above the QC limit in the serial dilution sample

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 09/27/2010
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECKLIST

Project Name:	PSC	
Project Number:	2786-F	
Sample Date(s):	August 30, 2010	
Sample Team:	Keith Robins	
Matrix/Number of Samples:	<u>Water/ 0</u> <u>Soil/ 16</u> <u>Field Duplicates/ 0</u> <u>Trip Blanks / 0</u> <u>Field Blanks/ 0</u>	
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI	
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> by SW846 8260 <u>Semi-Volatile Organic Compounds (SVOCs):</u> by SW846 8270 <u>Polychlorinated biphenyl (PCBs)</u> by USEPA SW846 Method 8082 <u>Pesticides</u> by USEPA SW846 Method 8081A <u>Metals:</u> Total by SW846 Method 6010, cyanide by SW-846 9012 and mercury by SW-846 7471	
Laboratory Report No:	SJ1690	Date:9/21/2010

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using guidance from the USEPA National Functional Guidelines of June 2008, or USEPA National Functional Guidelines of Inorganic Data Review, January 2010, method performance criteria, and Dvirka and Bartilucci Consulting Engineers, a Division of William F. Cosulich Associates, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

Custody Numbers: SJ1690
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis			
					VOC	SVOC	PCB& Pest.	MET
B-19 (0-2)	SJ1690-01	Soil	08/30/10		X	X	X	X
B-19 (2-4)	SJ1690-02	Soil	08/30/10		X	X	X	X
B-10 (0-2)	SJ1690-03	Soil	08/30/10		X	X	X	X
B-10 (2-4)	SJ1690-04	Soil	08/30/10		X	X	X	X
B-11 (0-2)	SJ1690-05	Soil	08/30/10		X	X	X	X
B-11 (2-4)	SJ1690-06	Soil	08/30/10		X	X	X	X
B-21 (0-2)	SJ1690-07	Soil	08/30/10		X	X	X	X
B-21 (4-6)	SJ1690-08	Soil	08/30/10		X	X	X	X
B-4 (0-2)	SJ1690-09	Soil	08/30/10		X	X	X	X
B-4 (2-4)	SJ1690-10	Soil	08/30/10		X	X	X	X
B-5 (0-2)	SJ1690-11	Soil	08/30/10		X	X	X	X
B-5 (2-4)	SJ1690-12	Soil	08/30/10		X	X	X	X
B-6 (0-2)	SJ1690-13	Soil	08/30/10		X	X	X	X
B-6 (2-4)	SJ1690-14	Soil	08/30/10		X	X	X	X
B-7 (0-2)	SJ1690-15	Soil	08/30/10		X	X	X	X
B-7 (2-4)	SJ1690-16	Soil	08/30/10		X	X	X	X

ORGANIC ANALYSES

VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X	X		
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Blank spike %R		X	X		
7. Surrogate spike recoveries		X	X		
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X	X		
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

VOCs - volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 2A. Naphthalene was detected in a method blank above the contract required quantitation limit (CRQL) and was not detected in the associated samples.

Chloroform was detected in a method blank below the CRQL and also in associated samples less than the CRQL. Chloroform was qualified as non-detect (U) in B-19(0-2), B-19(2-4), B-11(2-4), B-21(4-6), B-5(0-2), B-5(2-4), and B-7(2-4).

- 3-5. The RPD for 1,2,3-trichloropropane was above QC limits in the MS/MSD. It was not detected and therefore did not impact the usability of the reported sample.

The %R was below the QC in the MS and/or MSD for methyl tert-butyl ether, vinyl acetate, trichloroethene, cis-1,3-dichloropropene, trans-1,3-dichloropropene, 1,3-dichloropropane, toluene, dibromochloromethane, 1,2-dibromoethane, chlorobenzene, 1,1,1,2-tetrachloroethane, ethylbenzene, m,p-xylene, o-xylene, total xylene, styrene, bromoform, isopropylbenzene, 1,1,2,2-tetrachloroethane, bromobenzene, 1,2,3-trichloropropane, n-propylbenzene, 2-chlorotoluene, 1,3,5-trimethylbenzene, 4-chlorotoluene, tert-butylbenzene, 1,2,4-trimethylbenzene, sec-butylbenzene, 4-isopropyltoluene, 1,3-dichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, n-butylbenzene, 1,2,4-trichlorobenzene, 1,2-dibromo-3-chloropropane, hexachlorobutadiene, 1,2,3-trichlorobenzene and naphthalene were qualified as estimated (J/UJ) in all samples.

6. Iodomethane %R was below QC limits in the laboratory control sample associated with the secondary dilution analysis. The result for iodomethane was reported from the original analysis and therefore did not impact the usability of the reported sample.
7. The surrogate spike bromofluorobenzene %R was below QC limit for B-19(2-4) but was within QC limits for the dilution run for B-19(2-4). The following compounds were qualified as estimated (J/UJ) in B-19(2-4): 1,1,2,2-tetrachloroethane, bromobenzene, 1,2,3-trichloropropane, n-propylbenzene, 2-chlorotoluene, 1,3,5-trimethylbenzene, 4-chlorotoluene, tert-butylbenzene, sec-butylbenzene, 4-isopropyltoluene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, n-butylbenzene, 1,2,4-trichlorobenzene, 1,2-dibromo-3-chloropropane, hexachlorobutadiene, 1,2,3-trichlorobenzene and naphthalene.
11. Dichlorodifluoromethane %D was above QC limits in the continuing calibration associated with B-19(0-2) and B-19(2-4). Dichlorodifluoromethane was not detected and qualified as estimated (UJ) in B-19(0-2) and B-19(2-4).
12. Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
B-10(2-4)	Trichloroethene	260 E	1900	1900 D
	1,2-Dichlorobenzene	580 E	1400	1400 D
B-10(0-4)	Ethylbenzene	310 E	16000	16000 D
	m,p-Xylene	1100 E	72000	72000 D
	o-Xylene	440 E	20000	20000 D
	Total xylene	1600 E	91000	91000 D
	1,2-Dichlorobenzene	1200 E	46000	46000 D
B-19(0-2)	Trichloroethene	570 E	2500	2500 D
	Tetrachloroethene	1500 E	14000	14000 D
	1,2-Dichlorobenzene	310 E	10000	10000 D
B-19(2-4)	Cis-1,2-dichloroethene	600 E	2600 U	600 EJ
	Toluene	700 E	5500	5500 D
	Ethylbenzene	1500 E	10000	10000 D
	m,p-Xylene	1900 E	30000	30000 D
	o-Xylene	690 E	6600	6600 D
	Total xylene	2600 E	37000	37000 D
	1,2,4-Trimethylbenzene	240 E	3100	3100 D
	1,2-Dichlorobenzene	1300 E	23000	23000 D
B-11(2-4)	Trichloroethene	1300 E	12000	12000 D

ORGANIC ANALYSES

SVOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Blank spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X	X		
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

SVOCs – semi-volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 3-5. 2,4-Dimethylphenol and 2-methylnaphthalene had %R above the QC in the MS and MSD. They were not detected in the sample and therefore did not impact the usability of the reported sample.

2,4-Dinitrophenol and 4,6-dinitro-2-methylphenol had RPD above QC limits and %R below the QC in the MS and/or MSD and were qualified as estimated (UJ) in all samples.

6. The %Rs were above QC limits in the laboratory spike sample for 2,4-dimethylphenol and hexachlorocyclopentadiene associated with all samples. They were not detected in the sample and therefore did not impact the usability of the reported sample.
11. 2-Methylnaphthalate %D was above QC limits in the continuing calibration associated with B-19(0-2) and B-19(2-4). 2-Methylnaphthalate was not detected and qualified as estimated (UJ) in B-19(0-2) and B-19(2-4).
12. Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
B-10(0-2)	1,2-Dichlorobenzene	14000 E	22000 D	22000 D

ORGANIC ANALYSES

PCBs and Pesticides

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Laboratory Control Sample %R		X		X	
7. Surrogate spike recoveries		X	X		
8. GC Surrogate retention time summary		X		X	
9. Initial calibration %RSD's		X		X	
10. Continuing calibration %D's		X		X	
11. Transcriptions – quant report vs. Form I		X		X	
12. Field duplicates RPD					X

PCBs – Polychlorinated Biphenyls

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 3-5. Numerous pesticides %Rs were outside QC limit in the MS and/or MSD and RPDs were above QC limit. Alpha-chlordane and gamma-chlordane were detected in B-7(0-2) and B-21(0-2) and were qualified as estimated (J). Endosulfan sulfate, 4,4'-DDT and endrin aldehyde were detected in B-7(2-4) and were qualified as estimated (J). Beta-BHC was detected in B-19(2-4) and was qualified as estimated (J). No other pesticides were detected associated with the pesticides outside QC limits and therefore did not impact the usability of the remaining reported samples.
7. One surrogate in both runs was slightly below laboratory QC criteria but within regulation QC limits for pesticides in B-4(2-4) and therefore did not impact the usability of the reported sample. One surrogate in one run was slightly below laboratory QC criteria for PCBs in nine samples. One surrogate in both runs was slightly below laboratory QC criteria for PCB in B-19(0-2). One surrogate in both runs was outside laboratory QC criteria for PCB in B-10(2-4). The PCB surrogates were within regulation QC limits for PCBs and therefore did not impact the usability of the reported samples.
11. Numerous pesticides had dual column confirmation with %D above 25% and were qualified by the laboratory with a "P". The "P" qualified results were qualified as estimated (J).

INORGANIC ANALYSES METALS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X	X		
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X	X		
9. Post digestive spike sample %R		X		X	
10. Duplicate %RPD		X	X		
11. Serial dilution check %D		X	X		
12. Total verse dissolved results					X
13. Field duplicates RPD					X

%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 2A. Aluminum, iron and magnesium were detected in the preparation blank above the contract required quantitation limit (CRQL). The above metals were not detected in the associated samples below the CRDL and therefore did not impact the usability of the remaining reported samples.
8. The %Rs were below the QC limit of 75 % in the spike sample for antimony, copper, lead and cyanide associated with all samples. Antimony copper, lead and cyanide were qualified as estimated (J/UJ) in all samples.
10. The aluminum, calcium, chromium, copper, lead, magnesium, manganese, nickel and potassium RPDs were above the QC limit of 20% for the laboratory duplicate associated with all samples. The above metals were qualified as estimated (J/UJ) in all samples.
11. Aluminum, barium, cobalt, iron, lead, magnesium, manganese, nickel and zinc %Ds were above the QC limit of 10% for the serial dilution check sample associated with all samples. The above metals were qualified as estimated (J/UJ) in all samples.

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers: SJ1690

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
B-19(0-2), B-19(2-4), B-11(2-4), B-21(4-6), B-5(0-2), B-5(2-4), and B-7(2-4)	Chloroform	U	Detected in the method blank
All samples	Methyl tert-butyl ether, vinyl acetate, trichloroethene, cis-1,3-dichloropropene, trans-1,3-dichloropropene, 1,3-dichloropropane, toluene, dibromochloromethane, 1,2-dibromoethane, chlorobenzene, 1,1,1,2-tetrachloroethane, ethylbenzene, m,p-xylene, o-xylene, total xylene, styrene, bromoform, isopropylbenzene, 1,1,2,2-tetrachloroethane, bromobenzene, 1,2,3-trichloropropane, n-propylbenzene, 2-chlorotoluene, 1,3,5-trimethylbenzene, 4-chlorotoluene, tert-butylbenzene, 1,2,4-trimethylbenzene, sec-butylbenzene, 4-isopropyltoluene, 1,3-dichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, n-butylbenzene, 1,2,4-trichlorobenzene, 1,2-dibromo-3-chloropropane, hexachlorobutadiene, 1,2,3-trichlorobenzene and naphthalene	J/UJ	%R below the QC in the MS and/or MSD
B-19(2-4)	1,1,2,2-Tetrachloroethane, bromobenzene, 1,2,3-trichloropropane, n-propylbenzene, 2-chlorotoluene, 1,3,5-trimethylbenzene, 4-chlorotoluene, tert-butylbenzene, sec-butylbenzene, 4-isopropyltoluene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, n-butylbenzene, 1,2,4-trichlorobenzene, 1,2-dibromo-3-chloropropane, hexachlorobutadiene, 1,2,3-trichlorobenzene and naphthalene	J/UJ	The surrogate spike bromofluorobenzene %R was below QC limit
B-19(0-2) and B-19(2-4)	Dichlorodifluoromethane	UJ	%D was above QC limits in the continuing calibration
B-10(2-4), B-10(2-4), B-19(0-2) and B-11(2-4)	Numerous results with "E"	D	Report secondary dilution
B-19(2-4)	Numerous results with "E" except cis-1,2-dichloroethene which was "E" qualified reported	EJ	Report secondary dilution
SVOCs			

Sample ID	Analyte(s)	Qualifier	Reason(s)
All samples	2,4-Dinitrophenol and 4,6-dinitro-2-methylphenol	UJ	%R below the QC in the MS and MSD and/or RPD above QC limits
B-19(0-2) and B-19(2-4)	2-Methylnaphthalene	J/UJ	%D was above QC limits in the continuing calibration
B-10(0-2)	1,2-Dichlorobenzene	D	Report secondary dilution
<u>PCBs and Pesticides</u>			
B-7(0-2) and B-21(0-2)	Alpha-chlordane and gamma-chlordane	J	%Rs were outside QC limit in the MS and/or MSD and RPDs were above QC limit
B-7(2-4)	Endosulfan sulfate, 4,4'-DDT and endrin aldehyde	J	%Rs were outside QC limit in the MS and/or MSD and RPDs were above QC limit
B-19(2-4)	Beta-BHC	J	%Rs were outside QC limit in the MS and/or MSD and RPDs were above QC limit
Numerous samples	"P" qualifier pesticides	J	Duel column confirmation with %Ds above 25%
<u>Metals</u>			
All samples	Antimony copper, lead and cyanide	J/UJ	The %Rs were below the QC limit of 75 % in the spike sample
All samples	Aluminum, calcium, chromium, copper, lead, magnesium, manganese, nickel and potassium	J/UJ	RPDs were above the QC limit of 20% for the laboratory duplicate
All samples	Aluminum, barium, cobalt, iron, lead, magnesium, manganese, nickel and zinc	J/UJ	The %Ds were above the QC limit in the serial dilution sample

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 09/28/2010
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECKLIST

Project Name:	PSC	
Project Number:	2786-F	
Sample Date(s):	August 30, 2010	
Sample Team:	Keith Robins	
Matrix/Number of Samples:	<u>Water/ 0</u> <u>Soil/ 6</u> <u>Field Duplicates/ 0</u> <u>Trip Blanks / 0</u> <u>Field Blanks/ 0</u>	
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI	
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> by SW846 8260 <u>Semi-Volatile Organic Compounds (SVOCs):</u> by SW846 8270 <u>Metals:</u> Total by SW846 Method 6010and mercury by SW-846 7471	
Laboratory Report No:	SJ1692	Date:9/21/2010

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using guidance from the USEPA National Functional Guidelines of June 2008, or USEPA National Functional Guidelines of Inorganic Data Review, January 2010, method performance criteria, and Dvirka and Bartilucci Consulting Engineers, a Division of William F. Cosulich Associates, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

Custody Numbers: SJ1692
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis			
					VOC	SVOC	PCB& Pest.	MET
TP-1 (COMPOSITE)	SJ1692-01	Soil	08/30/10		X	X		X
TP-4 (BOTTOM)	SJ1692-02	Soil	08/30/10		X	X		X
TP-4 (NORTH)	SJ1692-03	Soil	08/30/10		X	X		X
TP-4 (EAST)	SJ1692-04	Soil	08/30/10		X	X		X
TP-4 (SOUTH)	SJ1692-05	Soil	08/30/10		X	X		X
TP-4 (WEST)	SJ1692-06	Soil	08/30/10		X	X		X

ORGANIC ANALYSES

VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X	X		
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R					X
4. Matrix spike duplicate (MSD) %R					X
5. MS/MSD precision (RPD)					X
6. Blank spike %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's					X
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

VOCs - volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exception:

- 2A. Naphthalene was detected in a method blank below the contract required quantitation limit (CRQL) and was not detected in the associated samples.

ORGANIC ANALYSES

SVOCs

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R					X
4. Matrix spike duplicate (MSD) %R					X
5. MS/MSD precision (RPD)					X
6. Blank spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X	X		
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

SVOCs –semi- volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

6. The %Rs were above QC limits in the laboratory spike sample for 2-methylnaphthalene and hexachlorocyclopentadiene associated with all samples. They were not detected in the sample and therefore did not impact the usability of the reported sample.
11. 2-Methylnaphthalate %D was above QC limits in the continuing calibration associated with all samples. 2-Methylnaphthalate was not detected and qualified as estimated (UJ) in all samples.

INORGANIC ANALYSES METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X	X		
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R					X
9. Post digestive spike sample %R					X
10. Duplicate %RPD					X
11. Serial dilution check %D					X
12. Total verse dissolved results					X
13. Field duplicates RPD					X

%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable with the following exception:

- 2A. Mercury was detected in the preparation blank below the contract required quantitation limit (CRQL). Mercury was detected below the CRDL and qualified as non-detect (U) in TP-1 (COMPOSITE) and TP-4 (SOUTH).

**DATA VALIDATION AND
QUALIFICATION SUMMARY****Laboratory Numbers: SJ1692**

Sample ID	Analyte(s)	Qualifier	Reason(s)
<u>VOCs</u>			
No qualification of the data was necessary.			
<u>SVOCs</u>			
All samples	2-Methylnaphthalene	J/UJ	%D was above QC limits in the continuing calibration
<u>Metals</u>			
TP-1 (COMPOSITE) and TP-4 (SOUTH)	Mercury	U	Detected in blank

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 10/6/2010
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECKLIST

Project Name:	PSC		
Project Number:	2786-F		
Sample Date(s):	August 25 to 30, 2010		
Sample Team:	Keith Robins		
Matrix/Number of Samples:	<u>Water/ 0</u> <u>Soil/ 9</u> <u>Field Duplicates/ 0</u> <u>Trip Blanks / 0</u> <u>Field Blanks/ 0</u>		
Analyzing Laboratory:	Mitekem Laboratories, Warwick, RI		
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> by SW846 8260 <u>Semi-Volatile Organic Compounds (SVOCs):</u> by SW846 8270 <u>Polychlorinated biphenyl (PCBs)</u> by USEPA SW846 Method 8082 <u>Pesticides</u> by USEPA SW846 Method 8081A <u>Metals:</u> Total by SW846 Method 6010, cyanide by SW-846 9012 and mercury by SW-846 7471		
Laboratory Report No:	SJ1714	Date:	9/26/2010

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using guidance from the USEPA National Functional Guidelines of June 2008, or USEPA National Functional Guidelines of Inorganic Data Review, January 2010, method performance criteria, and Dvirka and Bartilucci Consulting Engineers, a Division of William F. Cosulich Associates, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

Custody Numbers: SJ1714
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis			
					VOC	SVOC	PCB/ Pest.	MET
B-33 (6-8)	SJ1714-01	Soil	08/25/10		X	X	X/X	X
B-27 (6-8)	SJ1714-02	Soil	08/26/10		X			
B-9 (4-6)	SJ1714-03	Soil	08/26/10		X			
B-14 (4-6)	SJ1714-04	Soil	08/27/10					X
B-19 (4-6)	SJ1714-05	Soil	08/30/10		X			
B-19 (8-10)	SJ1714-06	Soil	08/30/10		X			
B-10 (4-6)	SJ1714-07	Soil	08/30/10		X			
B-11 (4-6)	SJ1714-08	Soil	08/30/10		X			
B-7 (4-6)	SJ1714-09	Soil	08/30/10				--/X	

ORGANIC ANALYSES

VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X	X		
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R					X
4. Matrix spike duplicate (MSD) %R					X
5. MS/MSD precision (RPD)					X
6. Blank spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

VOCs - volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 2A. Naphthalene was detected in a method blank below the contract required quantitation limit (CRQL) and was not detected in the associated samples.
6. Vinyl chloride %R was above QC limits in the laboratory control sample associated with B-19(4-6), B-19(8-10), B-10(4-6) and B-11(4-6). Vinyl chloride was not detected in the associated samples and therefore did not impact the usability of the reported sample.

ORGANIC ANALYSES

SVOCs

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R					X
4. Matrix spike duplicate (MSD) %R					X
5. MS/MSD precision (RPD)					X
6. Blank spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

SVOCs –semi- volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exception:

- The %Rs were below QC limits in the laboratory spike sample for 2,4-dinitrophenol and 4,6-dinitro-2-methylphenol associated with B-33(6-8). They were not detected in the sample and were qualified as estimated (UJ) in B-33(6-8).

ORGANIC ANALYSES
PCBs and Pesticides

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R					X
4. Matrix spike duplicate (MSD) %R					X
5. MS/MSD precision (RPD)					X
6. Laboratory Control Sample %R		X		X	
7. Surrogate spike recoveries		X		X	
8. GC Surrogate retention time summary		X		X	
9. Initial calibration %RSD's		X		X	
10. Continuing calibration %D's		X		X	
11. Transcriptions – quant report vs. Form I		X		X	
12. Field duplicates RPD					X

PCBs – Polychlorinated Biphenyls

%R - percent recovery

%D - percent difference

%RSD - percent relative standard deviation

RRF - relative response factor

RPD - relative percent difference

Comments:

Performance was acceptable.

INORGANIC ANALYSES METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X	X		
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R					X
9. Post digestive spike sample %R					X
10. Duplicate %RPD					X
11. Serial dilution check %D					X
12. Total verse dissolved results					X
13. Field duplicates RPD					X

%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable with the following exception:

- 2A. Aluminum, antimony, chromium, iron, sodium, silver, and magnesium were detected in the preparation blank below the contract required quantitation limit (CRQL). The following metals were detected in the associated samples below the CRDL and qualified as non-detect (U): sodium in B-33(6-8) and B-14(4-6); and silver in B-14(4-6).

**DATA VALIDATION AND
QUALIFICATION SUMMARY**

Laboratory Numbers: SJ1714

Sample ID	Analyte(s)	Qualifier	Reason(s)
<u>VOCs</u>			
No qualification of the data was necessary.			
<u>SVOCs</u>			
B-33(6-8)	2,4-Dinitrophenol and 4,6-dinitro-2-methylphenol	UJ	%R below the QC in the LCS
<u>PCBs and Pesticides</u>			
No qualification of the data was necessary.			
<u>Metals</u>			
B-33(6-8) and B-14(4-6)	Sodium	U	Detected in blank
B-14(4-6)	Silver	U	Detected in blank

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 10/6/2010
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECKLIST

Project Name:	PSC	
Project Number:	2786-F	
Sample Date(s):	September 3, 2010	
Sample Team:	Keith Robins	
Matrix/Number of Samples:	<u>Water/ 0</u> <u>Soil/ 9</u> <u>Field Duplicates/ 0</u> <u>Trip Blanks / 0</u> <u>Field Blanks/ 0</u>	
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI	
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> by SW846 8260 <u>Semi-Volatile Organic Compounds (SVOCs):</u> by SW846 8270 <u>Metals:</u> Total by SW846 Method 6010 and mercury by SW-846 7471	
Laboratory Report No:	SJ1722	Date:9/29/2010

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using guidance from the USEPA National Functional Guidelines of June 2008, or USEPA National Functional Guidelines of Inorganic Data Review, January 2010, method performance criteria, and Dvirka and Bartilucci Consulting Engineers, a Division of William F. Cosulich Associates, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

Custody Numbers: SJ1722
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Matrix	Sample Collection Date	Corrected Sample ID	Analysis			
					VOC	SVOC	PCB& Pest.	MET
TP-3 SOUTH A(9')	SJ1722-01	Soil	09/3/10		X	X		X
TP-3 SOUTH (9')	SJ1722-02	Soil	09/3/10		X	X		X
TP-3 EAST (9')	SJ1722-03	Soil	09/3/10		X	X		X
TP-4 WEST (7')	SJ1722-04	Soil	09/3/10	TP-2 WEST (7')	X	X		X
TP-3 BOTTOM(9.5)	SJ1722-05	Soil	09/3/10		X	X		X
TP-4 BOTTOM(9.5)	SJ1722-06	Soil	09/3/10	TP-2 BOTTOM(9.5)	X	X		X
TP-4 EAST (9')	SJ1722-07	Soil	09/3/10	TP-2 EAST (9')	X	X		X
TP-4 NORTH (9')	SJ1722-08	Soil	09/3/10	TP-2 NORTH (9')	X	X		X
TP-4 NORTH A (9')	SJ1722-09	Soil	09/3/10	TP-2 NORTH A (9')	X	X		X

ORGANIC ANALYSES

VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R		X		X	
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X		X	
6. Blank spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

VOCs - volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

4. The %R was below the QC in the MSD for benzene and above QC limits for 1,2,3-trichlorobenzene and hexachlorobutadiene. The compounds were not detected in the samples, however, benzene was qualified as estimated (UJ) in all samples.
6. Vinyl chloride %R was above QC limits in the laboratory control sample associated with all samples. Vinyl chloride was not detected in the associated samples and therefore did not impact the usability of the reported sample.

ORGANIC ANALYSES

SVOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Blank spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

SVOCs – semi-volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 3-5. 2,4-Dimethylphenol and hexachlorocyclopentadiene had %R above the QC in the MS and MSD. They were not detected in the sample and therefore did not impact the usability of the reported sample.

4-Chloroaniline had RPD above QC limits for the MS/MSD. It was not detected and therefore did not impact the usability of the reported sample.

6. The %Rs were above QC limits in the laboratory spike sample for 2,4-dimethylphenol and hexachlorocyclopentadiene associated with all samples. They were not detected in the sample and therefore did not impact the usability of the reported sample.

INORGANIC ANALYSES METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X	X		
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X		X	
9. Post digestive spike sample %R					X
10. Duplicate %RPD		X	X		
11. Serial dilution check %D		X		X	
12. Total verse dissolved results					X
13. Field duplicates RPD					X

%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 2A. Aluminum, antimony, chromium, iron, sodium, silver, and magnesium were detected in the preparation blank below the contract required quantitation limit (CRQL). The following metals were detected in the associated samples below the CRDL and qualified as non-detect (U): sodium in TP-3 BOTTOM(9.5), TP-3 EAST(9'), TP-3 SOUTH(9'), TP-3 SOUTH A(9'), TP-2 BOTTOM(9.5), TP-2 EAST(9'), TP-2 NORTH(9'), TP-2 WEST(7') and TP-2 NORTH A(9'); antimony in TP-3 EAST(9'), TP-3 SOUTH(9'), TP-2 BOTTOM(9.5), TP-2 EAST(9'), TP-2 NORTH(9') and TP-2 NORTH A(9'); and silver in TP-2 WEST(7').
10. The aluminum, chromium, iron, lead and manganese RPDs were above the QC limit of 20% for the laboratory duplicate associated with all samples. The above metals were qualified as estimated (J) in all samples.

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers: SJ1722

Sample ID	Analyte(s)	Qualifier	Reason(s)
<u>VOCs</u>			
All samples	Benzene	J/UJ	%R below the QC in the MSD
<u>SVOCs</u>			
No qualification of the data was necessary.			
<u>Metals</u>			
TP-3 BOTTOM(9.5), TP-3 EAST(9'), TP-3 SOUTH(9'), TP-3 SOUTH A(9'), TP-2 BOTTOM(9.5), TP-2 EAST(9') , TP-2 NORTH(9'), TP-2 WEST(7') and TP-2 NORTH A(9')	Sodium	U	Detected in blanks
TP-3 EAST(9'), TP-3 SOUTH(9'), TP-2 BOTTOM(9.5), TP-2 EAST(9'), TP-2 NORTH(9') and TP-2 NORTH A(9')	Antimony	U	Detected in blanks
TP-2 WEST(7')	Silver	U	Detected in blanks
All samples	Aluminum, chromium, iron, lead and manganese	J	RPDs were above the QC limit of 20% for the laboratory duplicate

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 10/6/2010
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECKLIST

Project Name:	PSC	
Project Number:	2786-F	
Sample Date(s):	September 3, 2010	
Sample Team:	Keith Robins	
Matrix/Number of Samples:	<u>Water/ 0</u> <u>Soil/ 9</u> <u>Field Duplicates/ 0</u> <u>Trip Blanks / 0</u> <u>Field Blanks/ 0</u>	
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI	
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> by SW846 8260 <u>Semi-Volatile Organic Compounds (SVOCs):</u> by SW846 8270 <u>Metals:</u> Total by SW846 Method 6010 and mercury by SW-846 7471	
Laboratory Report No:	SJ1722	Date:9/29/2010

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using guidance from the USEPA National Functional Guidelines of June 2008, or USEPA National Functional Guidelines of Inorganic Data Review, January 2010, method performance criteria, and Dvirka and Bartilucci Consulting Engineers, a Division of William F. Cosulich Associates, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

Custody Numbers: SJ1722
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Matrix	Sample Collection Date	Corrected Sample ID	Analysis			
					VOC	SVOC	PCB& Pest.	MET
TP-3 SOUTH A(9')	SJ1722-01	Soil	09/3/10		X	X		X
TP-3 SOUTH (9')	SJ1722-02	Soil	09/3/10		X	X		X
TP-3 EAST (9')	SJ1722-03	Soil	09/3/10		X	X		X
TP-4 WEST (7')	SJ1722-04	Soil	09/3/10	TP-2 WEST (7')	X	X		X
TP-3 BOTTOM(9.5)	SJ1722-05	Soil	09/3/10		X	X		X
TP-4 BOTTOM(9.5)	SJ1722-06	Soil	09/3/10	TP-2 BOTTOM(9.5)	X	X		X
TP-4 EAST (9')	SJ1722-07	Soil	09/3/10	TP-2 EAST (9')	X	X		X
TP-4 NORTH (9')	SJ1722-08	Soil	09/3/10	TP-2 NORTH (9')	X	X		X
TP-4 NORTH A (9')	SJ1722-09	Soil	09/3/10	TP-2 NORTH A (9')	X	X		X

ORGANIC ANALYSES

VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R		X		X	
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X		X	
6. Blank spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

VOCs - volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

4. The %R was below the QC in the MSD for benzene and above QC limits for 1,2,3-trichlorobenzene and hexachlorobutadiene. The compounds were not detected in the samples, however, benzene was qualified as estimated (UJ) in all samples.
6. Vinyl chloride %R was above QC limits in the laboratory control sample associated with all samples. Vinyl chloride was not detected in the associated samples and therefore did not impact the usability of the reported sample.

ORGANIC ANALYSES

SVOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Blank spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

SVOCs – semi-volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 3-5. 2,4-Dimethylphenol and hexachlorocyclopentadiene had %R above the QC in the MS and MSD. They were not detected in the sample and therefore did not impact the usability of the reported sample.

4-Chloroaniline had RPD above QC limits for the MS/MSD. It was not detected and therefore did not impact the usability of the reported sample.

6. The %Rs were above QC limits in the laboratory spike sample for 2,4-dimethylphenol and hexachlorocyclopentadiene associated with all samples. They were not detected in the sample and therefore did not impact the usability of the reported sample.

INORGANIC ANALYSES METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X	X		
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X		X	
9. Post digestive spike sample %R					X
10. Duplicate %RPD		X	X		
11. Serial dilution check %D		X		X	
12. Total verse dissolved results					X
13. Field duplicates RPD					X

%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 2A. Aluminum, antimony, chromium, iron, sodium, silver, and magnesium were detected in the preparation blank below the contract required quantitation limit (CRQL). The following metals were detected in the associated samples below the CRDL and qualified as non-detect (U): sodium in TP-3 BOTTOM(9.5), TP-3 EAST(9'), TP-3 SOUTH(9'), TP-3 SOUTH A(9'), TP-2 BOTTOM(9.5), TP-2 EAST(9'), TP-2 NORTH(9'), TP-2 WEST(7') and TP-2 NORTH A(9'); antimony in TP-3 EAST(9'), TP-3 SOUTH(9'), TP-2 BOTTOM(9.5), TP-2 EAST(9'), TP-2 NORTH(9') and TP-2 NORTH A(9'); and silver in TP-2 WEST(7').
10. The aluminum, chromium, iron, lead and manganese RPDs were above the QC limit of 20% for the laboratory duplicate associated with all samples. The above metals were qualified as estimated (J) in all samples.

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers: SJ1722

Sample ID	Analyte(s)	Qualifier	Reason(s)
<u>VOCs</u>			
All samples	Benzene	J/UJ	%R below the QC in the MSD
<u>SVOCs</u>			
No qualification of the data was necessary.			
<u>Metals</u>			
TP-3 BOTTOM(9.5), TP-3 EAST(9'), TP-3 SOUTH(9'), TP-3 SOUTH A(9'), TP-2 BOTTOM(9.5), TP-2 EAST(9') , TP-2 NORTH(9'), TP-2 WEST(7') and TP-2 NORTH A(9')	Sodium	U	Detected in blanks
TP-3 EAST(9'), TP-3 SOUTH(9'), TP-2 BOTTOM(9.5), TP-2 EAST(9'), TP-2 NORTH(9') and TP-2 NORTH A(9')	Antimony	U	Detected in blanks
TP-2 WEST(7')	Silver	U	Detected in blanks
All samples	Aluminum, chromium, iron, lead and manganese	J	RPDs were above the QC limit of 20% for the laboratory duplicate

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 10/6/2010
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECKLIST

Project Name:	PSC
Project Number:	2786-F
Sample Date(s):	October 5, 2010
Sample Team:	Keith Robins
Matrix/Number of Samples:	<u>Water/ 0</u> <u>Soil/ 14</u> <u>Field Duplicates/ 0</u> <u>Trip Blanks / 0</u> <u>Field Blanks/ 0</u>
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> by SW846 8260 <u>Semi-Volatile Organic Compounds (SVOCs):</u> by SW846 8270 <u>Polychlorinated biphenyl (PCBs)</u> by USEPA SW846 Method 8082 <u>Pesticides</u> by USEPA SW846 Method 8081A <u>Metals:</u> Total by SW846 Method 6010, cyanide by SW-846 9012 and mercury by SW-846 7471
Laboratory Report No:	SJ1936
	Date:10/20/2010

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using guidance from the USEPA National Functional Guidelines of June 2008, or USEPA National Functional Guidelines of Inorganic Data Review, January 2010, method performance criteria, and Dvirka and Bartilucci Consulting Engineers, a Division of William F. Cosulich Associates, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

Custody Numbers: SJ1936
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis			
					VOC	SVOC	PCB& Pest.	MET
B-39 (0-2)	SJ1936-01	Soil	10/5/10		X	X	X	X
B-39 (2-4)	SJ1936-02	Soil	10/5/10		X	X	X	X
B-38 (0-2)	SJ1936-03	Soil	10/5/10		X	X	X	X
B-38 (2-4)	SJ1936-04	Soil	10/5/10		X	X	X	X
B-37 (0-2)	SJ1936-05	Soil	10/5/10		X	X	X	X
B-37 (2-4)	SJ1936-06	Soil	10/5/10		X	X	X	X
B-36 (0-2)	SJ1936-07	Soil	10/5/10		X	X	X	X
B-36 (2-4)	SJ1936-08	Soil	10/5/10		X	X	X	X
B-42 (0-2)	SJ1936-09	Soil	10/5/10		X	X	X	X
B-42 (2-4)	SJ1936-10	Soil	10/5/10		X	X	X	X
B-40 (0-2)	SJ1936-11	Soil	10/5/10		X	X	X	X
B-40 (2-4)	SJ1936-12	Soil	10/5/10		X	X	X	X
B-41 (0-2)	SJ1936-13	Soil	10/5/10		X	X	X	X
B-41 (2-4)	SJ1936-14	Soil	10/5/10		X	X	X	X

ORGANIC ANALYSES

VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X	X		
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X		X	
5. MS/MSD precision (RPD)		X	X		
6. Blank spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X	X		
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

VOCs - volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

2A. Methylene chloride was detected in a method blank below the contract required quantitation limit (CRQL) and was not detected in the associated samples therefore did not impact the usability of the reported samples.

3&5. The RPDs for fifteen compounds were above QC limits in the MS/MSD. 1,1,1-Trichloroethane was detected in B-42(0-2) below the CRDL and no other compounds were detected. Qualification of the samples was not necessary.

The %R was below the QC in the MS for methyl tert-butyl ether, vinyl acetate, 1,1-dichloroethane, tetrachloroethene, chloroform, 1,2-dichloroethane, 1,1,1-trichloroethane, dibromomethane, bromodichloromethane, trichloroethene, 1,3-dichloropropane, chlorobenzene, 1,1,1,2-tetrachloroethane, ethylbenzene, m,p-xylene, o-xylene, total xylene, styrene, isopropylbenzene, bromobenzene, 1,2,3-trichloropropane, 2-chlorotoluene, 1,3,5-trimethylbenzene, 4-chlorotoluene, tert-butylbenzene, 1,2,4-trimethylbenzene, 4-isopropyltoluene, 1,3-dichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, n-butylbenzene, 1,2,4-trichlorobenzene and 1,2,3-trichlorobenzene were qualified as estimated (J/UJ) in all samples.

6. 1,2,3-Trichlorobenzene, 1,2,4-trichlorobenzene and naphthalene %R were above QC limits in the laboratory control sample associated with B-39(0-2), B-39(2-4), B-38(0-2), B-38(2-4), B-37(0-2), B-37(2-4), B-36(2-4), B-42(0-2), B-42(2-4) and B-40(0-2). The above compounds were not detected in the associated samples therefore did not impact the usability of the reported samples.

11. Vinyl chloride, iodomethane and carbon tetrachloride %Ds were above QC limits in the continuing calibration associated with B-39(0-2), B-39(2-4), B-38(0-2), B-38(2-4), B-37(0-2), B-37(2-4), B-36(2-4), B-42(0-2), B-42(2-4) and B-40(0-2). 1,2,3-Trichlorobenzene %D was above QC limits in the continuing calibration associated with B-36(0-2), B-40(2-4), B-41(0-2) and B-41(2-4). The above compounds were qualified as estimated (J/UJ) in the associated samples.
12. Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
B-37(2-4)	Cis-1,2-dichloroethene	210 E	500	500 D
B-41(2-4)	Cis-1,2-dichloroethene	360E	3400	3400 D

ORGANIC ANALYSES

SVOCs

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R		X		X	
4. Matrix spike duplicate (MSD) %R		X		X	
5. MS/MSD precision (RPD)		X		X	
6. Blank spike %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

SVOCs –semi- volatile organic compounds

%R - percent recovery

%D - percent difference

%RSD - percent relative standard deviation

RRF - relative response factor

RPD - relative percent difference

Comments:

Performance was acceptable.

ORGANIC ANALYSES

PCBs and Pesticides

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X		X	
6. Laboratory Control Sample %R		X		X	
7. Surrogate spike recoveries		X	X		
8. GC Surrogate retention time summary		X		X	
9. Initial calibration %RSD's		X		X	
10. Continuing calibration %D's		X		X	
11. Transcriptions – quant report vs. Form I		X		X	
12. Field duplicates RPD					X

PCBs – Polychlorinated Biphenyls
 %R - percent recovery

%D - percent difference
 %RSD - percent relative standard deviation

RRF - relative response factor
 RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 3&4. 4,4'-DDT %R was below QC limit in the MSD and gamma-chlordane %R was above QC limit in the MS. 4,4'-DDT was qualified as estimated (J/UJ) in all samples. Gamma-chlordane was not detected in the samples and therefore did not impact the usability of samples.
7. One surrogate in one run was slightly below laboratory QC criteria but within regulation QC limits for pesticides in B-36(0-2) and B-41(0-2) and therefore did not impact the usability of the reported sample.

INORGANIC ANALYSES METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X	X		
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X		X	
9. Post digestive spike sample %R					X
10. Duplicate %RPD		X	X		
11. Serial dilution check %D		X		X	
12. Total verse dissolved results					X
13. Field duplicates RPD					X

%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable with the following exceptions:

- 2A. Barium, beryllium, chromium, copper, nickel, sodium and zinc were detected in the preparation blank above the contract required quantitation limit (CRQL). The following metals were detected in the associated samples below the CRDL and less than 10 times the blank and were qualified as non-detect(U): copper in B-37(2-4), B-36(0-2), B-36(2-4), B-40(2-4) and B-41-(0-2); sodium in B-37(0-2), B-37(2-4), B-36(0-2) and B-41-(0-2); and zinc in B-36(0-2).
10. The iron, magnesium and manganese RPDs were above the QC limit of 20% for the laboratory duplicate associated with all samples. The above metals were qualified as estimated (J/UJ) in all samples.

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers: SJ1936

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
B-19(0-2), B-19(2-4), B-11(2-4), B-21(4-6), B-5(0-2), B-5(2-4), and B-7(2-4)	Chloroform	U	Detected in the method blank
All samples	Methyl tert-butyl ether, vinyl acetate, 1,1-dichloroethane, tetrachloroethene, chloroform, 1,2-dichloroethane, 1,1,1-trichloroethane, dibromomethane, bromodichloromethane, trichloroethene, 1,3-dichloropropane, chlorobenzene, 1,1,1,2-tetrachloroethane, ethylbenzene, m,p-xylene, o-xylene, total xylene, styrene, isopropylbenzene, bromobenzene, 1,2,3-trichloropropane, 2-chlorotoluene, 1,3,5-trimethylbenzene, 4-chlorotoluene, tert-butylbenzene, 1,2,4-trimethylbenzene, 4-isopropyltoluene, 1,3-dichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, n-butylbenzene, 1,2,4-trichlorobenzene and 1,2,3-trichlorobenzene	J/UJ	%R below the QC in the MS and/or MSD
B-39(0-2), B-39(2-4), B-38(0-2), B-38(2-4), B-37(0-2), B-37(2-4), B-36(2-4), B-42(0-2), B-42(2-4) and B-40(0-2)	Vinyl chloride, iodomethane and carbon tetrachloride	J/UJ	%D was above QC limits in the continuing calibration
B-36(0-2), B-40(2-4), B-41(0-2) and B-41(2-4)	1,2,3-Trichlorobenzene	J/UJ	%D was above QC limits in the continuing calibration
B-37(2-4) and B-41(2-4)	Cis-1,2-dichloroethene	D	Report secondary dilution
SVOCs			
No qualification of the data was necessary.			
PCBs and Pesticides			
All samples	4,4'-DDT	J/UJ	%R was below QC limit in the MSD
Metals			
B-37(2-4), B-36(0-2), B-36(2-4), B-40(2-4) and B-41-(0-2)	Copper	U	Detected in preparation blank
B-37(0-2), B-37(2-4), B-36(0-2) and B-41-(0-2)	Sodium	U	Detected in preparation blank

Sample ID	Analyte(s)	Qualifier	Reason(s)
B-36(0-2)	Zinc	U	Detected in preparation blank
All samples	Iron, magnesium and manganese	J/UJ	RPDs were above the QC limit of 20% for the laboratory duplicate

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 10/26/2010
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECKLIST

Project Name:	PSC	
Project Number:	2786-F	
Sample Date(s):	October 5, 2010	
Sample Team:	Keith Robins	
Matrix/Number of Samples:	<u>Water/ 0</u> <u>Soil/ 3</u> <u>Field Duplicates/ 0</u> <u>Trip Blanks / 0</u> <u>Field Blanks/ 0</u>	
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI	
Analyses:	<u>Volatile Organic Compounds (VOCs): by SW846 8260</u> <u>Pesticides by USEPA SW846 Method 8081A</u>	
Laboratory Report No:	SJ1937	Date:10/22/2010

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using guidance from the USEPA National Functional Guidelines of June 2008, or USEPA National Functional Guidelines of Inorganic Data Review, January 2010, method performance criteria, and Dvirka and Bartilucci Consulting Engineers, a Division of William F. Cosulich Associates, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

Custody Numbers: SJ1937
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis			
					VOC	SVOC	Pest.	MET
B-37 (4-6)	SJ1937-03	Soil	10/5/10		X			
B-36 (4-6)	SJ1937-04	Soil	10/5/10				X	
B-41 (4-6)	SJ1937-07	Soil	10/5/10		X			

ORGANIC ANALYSES

VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X	X		
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R					X
4. Matrix spike duplicate (MSD) %R					X
5. MS/MSD precision (RPD)					X
6. Blank spike %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD					X
14. Tentatively Identified Compounds (TICs)					X

VOCs - volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exception:

- 2A. Methylene chloride was detected in a method blank below the contract required quantitation limit (CRQL) and was not detected in the associated samples therefore did not impact the usability of the reported samples.

ORGANIC ANALYSES

Pesticides

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Matrix spike (MS) %R					X
4. Matrix spike duplicate (MSD) %R					X
5. MS/MSD precision (RPD)					X
6. Laboratory Control Sample %R		X	X		
7. Surrogate spike recoveries		X		X	
8. GC Surrogate retention time summary		X		X	
9. Initial calibration %RSD's		X		X	
10. Continuing calibration %D's		X		X	
11. Transcriptions – quant report vs. Form I		X		X	
12. Field duplicates RPD					X

PCBs – Polychlorinated Biphenyls

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exception:

- Gamma-chlordane %R was above QC limit in the Laboratory Control Sample. Gamma-chlordane was not detected in the sample and therefore did not impact the usability of the sample.

**DATA VALIDATION AND
QUALIFICATION SUMMARY**

Laboratory Numbers: SJ1937

Sample ID	Analyte(s)	Qualifier	Reason(s)
<u>VOCs</u>			
No qualification of the data was necessary.			
<u>Pesticides</u>			
No qualification of the data was necessary.			

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 10/26/2010
VALIDATION PERFORMED BY SIGNATURE:	

APPENDIX H

CATEGORY B DELIVERABLES (ON COMPACT DISC)