Environmental Restoration Program
Sewall's Island Site (#E623021)
400 Pearl Street
City of Watertown
Jefferson County, New York

Work Plan

Interim Remedial Measures

Prepared For:

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1.0 Introduction

Lu Engineers has prepared this Interim Remedial Measures (IRM) Work Plan on behalf of the City of Watertown for submission to the New York State Department of Environmental Conservation (NYSDEC) Region 6 Division of Environmental Remediation in accordance with DER-10 "Technical Guidance for Site Investigation and Remediation," the NYSDEC "Municipal Assistance for Environmental Restoration Projects" Procedures Handbook, NYSDEC 6NYCRR Part 675 "Environmental Remediation Programs", and TAGM 4048 "Interim Remedial Measures-Procedures."

The City is currently working under a State Assistance Contract (SAC) from the NYSDEC to further characterize, and remediate the former Sewall's Island Site located in the City of Watertown. The City will use a portion of these funds to complete IRMs described in this Plan.

The work described herein is intended to address contaminated areas that have been identified to date as part of the Remedial Investigation (RI). The proposed IRM includes further delineation, removal and/or treatment of these identified areas. Figure 2 shows the Potential Areas of Concern and IRM activity areas. Along with geophysical investigations, additional soil sampling is proposed to further delineate the horizontal and vertical extent of contamination in the landfill area of the Site that has been impacted by drum disposal activities. Any hazardous soil identified as part of this investigation will be excavated and removed, as appropriate. The preliminary findings of the RI environmental reports are summarized below. Lu Engineers used this information to prepare this Work Plan.

1.1 Site Description

The Site is located at 400 Pearl Street in the City of Watertown, New York (Figure 1). The property consists of ten parcels covering approximately 25.46 acres and previously contained numerous buildings. All of the commercial buildings have been demolished and the majority of the construction demolition debris has been removed from the Site. Foundations, concrete slabs and two of the former dam structures remain on the property.

The relevant history of the Site has been detailed in the Remedial Investigation Work Plan (Lu Engineers - October 2007). Additional research into the long industrial history has been ongoing. It was recently discovered that the expansion of the factory to the south side of Pearl Street was initially used for munitions production during WWII. Further research on this subject is planned.

1.2 Previous Field Investigations

Since the early 2000s, the facility has undergone a series of environmental investigations. These investigations include:

- Phase I Environmental Site Assessment including subsurface sampling, GYMO, November, 2001.
- Phase I Environmental Site Assessment, Lu Engineers, March, 2007.

2.0 Summary of Environmental Conditions

2.1 Remedial Investigation

The RI began at the Site in September 2008 and was intended to identify the vertical and horizontal extent of contamination in order to develop remedial alternatives for the Site. The following tasks were completed during the RI:

- A geophysical survey to evaluate potential subsurface environmental concerns
- Forty-two surface soil samples across the Site
- Forty-eight test excavations
- Thirty-seven soil borings
- Installation and sampling of nine groundwater monitoring wells

Additional soil borings and test pits were planned for the Site in the landfill area. Due to the nature of the drums that were uncovered, further investigation work in this area was halted. Figures 3A and 3B show all of the RI soil sample locations. Figure 4 shows the groundwater well locations.

2.2 Preliminary RI Findings

The geophysical surveys indicated several anomalies, but none that indicate the presence of a tank. The Site is covered by a large number of scrap metal objects from building demolition and historical Site disposal. Many of the anomalies were attributed to these scrap metal pieces left onsite, either located at the surface or uncovered through test excavations.

The majority of the Sewall's Island Site includes varying depths of historical fill. Native soils were not identified at the Site. All subsurface investigation west of Pearl Street on the "triangle" portion of the property identified mainly building demolition debris that was apparently used to fill the basements of the previous buildings. Borings located in the central portion of this area were completed only one to two feet below ground surface (bgs) before bedrock was encountered. All subsurface investigation east of Pearl Street indicated the presence of building debris and foundry sand in the subsurface. Borings and test excavations located north of the former railroad bed and southeast of the railroad bed encountered bedrock at an average depth of 1-4 feet bgs. Borings and test excavations were advanced to greater depths around the perimeter of the Island indicating that more filling occurred in these areas.

Off-island subsurface investigations indicated the same lack of native soils. Only fill appeared to be present on top of bedrock.

The area located southwest of the railroad bed on the Island has been historically used as a landfill for the Bagley & Sewall operations. This area essentially covers the entire tax parcel 4-12-103.001 and is slightly larger than 2 acres in size. The majority of the

landfill is composed of foundry sand. This sand was used to create molds for casting metal parts. After the parts had cooled, the molds were broken away. The sand was reused until it was considered spent. Spent foundry sand was placed in the landfill area. The landfill area also contains coke, cinders and slag, as well as large pieces of the hardened impurities from the forging of molten metals at the Site. This area is shown on Figure 2 as Potential Area of Concern 1 (PAOC1).

Historically, foundries have utilized a variety of hazardous materials, including petroleum products, solvents, phenols, polychlorinated biphenyls (PCBs), and heavy metals such as mercury, arsenic, lead, and copper. Most of the landfill portion of the Site was created by filling the area at different points in the Site's history. The fill materials used at the Site appear mainly to be foundry sand and may have included coal, ash of unknown origin, demolition debris, and industrial wastes. These materials were commonly used as fill throughout the City in past decades. Site investigations found metals and polycyclic aromatic hydrocarbons (PAHs) contamination in most of the soil samples collected throughout the Site. Elevated concentrations of lead, mercury, copper and arsenic are consistent with historical Site uses. Volatile organic compounds (VOCs) and PCB contamination were found in relatively limited areas.

2.3 Contaminant Results Summary

Analytical data and applicable regulatory criteria are included in the attached Sample Result Tables.

The investigations in the landfill area identified fill materials up to 30 feet deep. Two waste drums were uncovered during this time. The drums were accidentally punctured during the test pit excavation and a portion of the materials were released. The drum contents were sampled and then over-packed for disposal. Soils affected as a result of the drum punctures were staged on poly sheeting, sampled and covered for disposal. The waste in Drum 1 was identified as a mixture of gasoline and lube oil and Drum 2 as mineral spirits. Drum 1 soils were found to contain hazardous waste concentrations of chromium and lead and TCE. Drum 2 soils were hazardous for chromium, lead, mercury, flashpoint and TCE. Further subsurface investigation of the landfill area was halted due to the discovery of the drums. The landfill and drum discovery area is one of the subjects of this IRM.

Groundwater monitoring wells installed and sampled at the Site detected only VOC contamination at two of the nine well locations. Chloroform was detected at MW-7, and six different VOCs at MW-2S. Other groundwater contaminants of concern were not identified above applicable standards. The VOC contamination detected at MW-2S is a result of a historical fuel oil spill. Evidence of this spill was also observed in the adjacent soil borings and test pit but the soil samples collected from this area did not exceed Soil Cleanup Objectives (SCOs). Evidence of the historic spill can also be observed by a visible sheen on groundwater seeping from the river bank at this location, as referenced on Figure 4. A nested well pair was installed at this location; MW 2S is a bedrock

interface well screened from 15 to 28 feet bgs, while MW-2D is a bedrock well screened from 32 to 47 feet bgs. MW-2D did not appear to be impacted by contamination present at MW-2S. VOC contamination in the shallow groundwater in the vicinity of MW-2S is one of the subjects of this IRM. Figure 5 depicts the contaminant concentrations for VOCs in groundwater.

Surface soil samples collected at the Site were taken from areas of the Site east of Pearl Street. Generally surface soils consist of fill; primarily spent foundry sand. There were no VOCs detected in surface soils. The main constituents of concern in surface soils were PCBs that were detected in an apparently small pocket at concentrations above SCOs. Detected metals include arsenic, cadmium, chromium, copper, mercury, nickel, and selenium. Semi-Volatile Organic Compounds (SVOCs) were also detected in surface soils, specifically polycyclic aromatic hydrocarbons (PAHs). Figures 6A, 6B and 6C show contaminant concentrations in surface soils.

Investigation of subsurface soils at the Site yielded no evidence of VOC contamination. As with surface soils, subsurface soils were also comprised of fill material; primarily spent foundry sand. Contaminants of concern included metals and SVOCs in subsurface soils. SVOCs present above SCOs were PAHs. The metals consisted of arsenic, barium, chromium, lead and mercury. The most prevalent of these metals was mercury with a relatively high concentration encountered at TP-26 of 714 ppm. There was a distinct layer of ash present in this test pit soil sample. The source of this ash is unknown, but it appeared to be present only in the area of TP-26. The area of TP-26 is one of the subjects of this IRM. Figures 7A and 7B depict contaminant results for subsurface soils.

2.4 Contamination Related to Coal and Combustion

Historically, the Site has been used for industrial purposes which included a rail line with multiple spurs from the late 1800s until the early-1990s. Photographs and maps from that time show a large coal platform located on the Site. Historical photographs and Sanborn maps from the Site have shown numerous rail spurs leading to the various factories on the Island and indicated a turnstile located near the central portion of the property.

Coal and coal by-products, including ash, contain many of the metals found during this investigation including arsenic, lead, mercury, cadmium, barium, chromium and PAH compounds.

The Site was used as a foundry which used coal and coke for the facility boilers and for the cupolas that were used for the smelting of the steel, iron and copper. The emissions from the burning of coal and from the forging of steel and iron may account for the widespread contamination of metals and PAH compounds.

The majority of the widespread contamination can be attributed to the railroad, the burning of fossil fuels and the smelting and casting of molten metals. This contamination is also located in subsurface soils due to the historic filling that occurred at the Site.

Many of the subsurface locations of samples were formerly ground surface soils prior to further filling and subject to contamination from the above processes.

2.5 Preliminary Areas of Concern

The findings of this investigation show that there are three areas of concern that require remedial measures. Analytical results from all soil samples taken were used to generate contaminant contours based on anticipated future use Soil Cleanup Objectives. These areas were further defined based on observations made in the field during Remedial Investigation Tasks in order to generate the IRM Work Plan Preliminary Areas of Concern Map, Figure 2 which depicts the following areas:

- **PAOC 1** – This area is located on the Island southwest of the rail bed, essentially the entire tax parcel 4-12-103.001, which is slightly larger than 2 acres in size. This area has been historically used as a landfill for the Bagley & Sewall operations. The majority of the landfill is composed of foundry sand. The landfill area also contains slag, and large pieces of the hardened impurities from the molten metals that were used at the Site. The discovery of drums containing hazardous waste prevented further investigation of this area. Further investigation first through geophysical methods followed by mechanical methods is planned for this area.
- **PAOC 2** – This area of the Site is located around the MW-2 well cluster and is the site of a historic fuel oil spill. Low level VOC contamination in groundwater was found here. The soils in the area have been sampled and have not exceeded SCOs. Further investigation and remediation is planned for this area to define the source area.
- **PAOC 3** – This area of the Site is located off the island to the north. Mercury was found at the location of TP-26, at a depth of 5 feet bgs, that was above applicable SCOs. This area will be further investigated and contaminated soils removed and disposed of.

The Contaminant Maps, used to define the areas of contamination, are included as Figures 5 through 7C. The maps were produced using all analytical soils data generated to date compared against the soil cleanup objectives from Part 375 for restricted residential property. Figures 6A and 6C used ArcGIS Spatial Analyst to generate contours using the Inverse Distance Weighted Interpolation method. Only those contaminants and areas that exceeded the cleanup objectives are depicted. The Tables attached to this report show all the analytical results generated from the Remedial Investigation compared to the Restricted Residential Soil Cleanup Objectives.

2.6 Conceptual Site Model

Contamination is related to many years of industrial operations that occurred on Sewall's Island. Known operations include: iron, steel, copper, brass and aluminum casting; pulp grinding; machining; painting; sanding; and paper milling. These operations included the use of fuels such as coal, coke and fuel oil to fire foundry furnaces and facility boilers. According to an environmental report dated November 2001, the facility used a variety of

chemicals including sodium hydroxide, various silicas, resins, paints, fuels, transformer fluids, waste oils and cleaning materials. This report also states that all documented chemicals on Site had been removed and properly disposed of.

Remedial investigation activities completed to date indicate that there are still chemical wastes present at the site. Due to the heterogeneity of the landfill area the compounds and volumes are unknown.

A conceptual site model for the project is outlined in the table below.

Media	Known or Suspected Source of Contamination	Type of Contamination (General)	Contaminants of Potential Concern (Specific)	Primary or Secondary Source Release Mechanism	Migration Pathways	Potential Receptors
Soil	1) Buried Drums 2) Fuel Oil Spill 3) Foundry sand 4) Slag, Ash and Cinders 5) Coke Storage 6) Railroad 7) Munitions production	SVOCs, Metals, PCBs, Petroleum	selenium, cadmium, arsenic, chromium, barium, lead, silver, xylenes, n-Butylbenzene, sec-Butylbenzene, Isopropylbenzene, 4-Isopropyl toluene, Napthalene, N-Propylbenzene, 1,2,4-Trimethylbenzene, Fluorene, Phenanthrene	Leaks, spills, dumping	Infiltration/ percolation	Human: direct contact if excavation occurs in contaminated areas
Groundwater	Contaminated Soil (secondary source)	Petroleum, VOCs, SVOCs, metals	Potentially same as soil contaminants	Infiltration /percolation from soils	Groundwater flow	Human or ecological receptors are not expected to be exposed
Air/Soil Vapor	Contaminated soil or groundwater	Petroleum, VOCs, SVOCs	Xylenes, n-Butylbenzene, sec-Butylbenzene, Isopropylbenzene, 4-Isopropyl toluene, Napthalene, N-Propylbenzene, 1,2,4-Trimethylbenzene, Fluorene, Phenanthrene	Volatilization of contaminated groundwater and/or soil	Migration into buildings	Human: Inhalation during investigation and cleanup
Building	Building materials	Asbestos	Asbestos	Disturbance of building materials	Dispersion by human activity	Human: direct contact with site workers /visitors, inhalation

A previous environmental investigation conducted in 2001 revealed the presence of volatile organic compounds (VOCs), petroleum, semi-volatile organic compounds (SVOCs) and several metals in the soils. Metals found in the soil samples were compared to the eastern coast and New York State average background levels. At the time the majority of the levels of metals fall within the parameters of the Eastern USA or New York background levels. The additional more recent soils sampling has found widespread low level metals and PAH contamination. There are many samples that exceed the new 6 NYCRR Part 375-6 recommended soil cleanup objectives.

A particular area of concern is the presence of foundry sand located on the east side of the Island, a waste product of past foundry operations which are found throughout the Site. These sands were mixed with resin to form molds in which to pour the molten metals to cast machinery. Once these machine pieces were cooled, the molds were broken away. These sands were used for molding until they were considered spent and then disposed of onsite. The main area for this disposal was the "landfill" area southwest of the rail bed (see Figure 2). Approximately 1 ton of foundry sand is required for each ton of iron or steel produced. Due to the extreme heat these foundry sands contain heavy metals and phenols that are absorbed into the sand during the casting process. Phenolic compounds, selenium, cadmium, arsenic, chromium, barium, lead and silver are all possible contaminants found in the sand. Initial sampling in 2001 concluded that the sand was not hazardous for toxicity characteristics based on TCLP analytical results. Slag, ash and cinder materials may also be a source of soil contamination.

There are two active petroleum spills located at the site. The spill was reported on November 19, 1998 and was located south of Pearl Street and southwest of the main building. The spill was given ID #9810485. The laboratory analysis performed identified the petroleum as #2 fuel oil. During the RI two drums of hazardous waste were uncovered and some of the contents spilled at the site. The contents were contained but a NYSDEC spill was called in to document the drum discovery. The spill was given ID # 0806564.

Small amounts of building materials remain on the Site. It is possible that some of these materials may be asbestos containing materials including the remains of two hydro-electric plants.

Groundwater well installation and sampling revealed some low level VOC contamination exceeding recommended groundwater cleanup standards in the area of the reported fuel soil spill.

The site is currently vacant and securely fenced. Exposure concerns at the Site are considered minimal at this time.

3.0 Field Activities/Scope of Work

3.1 Goal of the IRM

The goal of the planned IRM actions will be to address the landfill and drum discovery area including detection and removal of all hazardous materials present along with hazardous soils associated with the leaking solvent-containing drums. The IRM will also address low level VOC contamination in groundwater in the vicinity of MW-2S. Mercury contamination at TP-26 will also be further investigated and mitigated.

SVOC PAHs and metals contamination that were associated with past coal/coke burning operations and the metals smelting and forging are present on the majority of the Site. These contaminated soils are above unrestricted Soil Cleanup Objectives (SCOs) but will not be addressed as a subject of this IRM.

3.2 Site Preparation

The areas planned for IRM activities will require additional clearing and stormwater pollution prevention measures. The drum investigation area will be cleared of all large trees and brush and the debris will be chipped and left stockpiled onsite. The clearing will continue to the top of bank along the south fork of the river; silt fencing will then be installed along the top of bank. The Site will only be cleared and investigated to the top of bank. There will be no intrusive measures undertaken to explore the river banks.

3.3 PAOC 1 - Drum Investigation/Removal Area

Geophysical methods will be used to further investigate the landfill area. Once the area is cleared of brush, three different geophysical methods will be utilized. The area will be broken down into grids and scanned individually to obtain more specific responses. The EM-61 geophysical unit, the G-856 magnetometer and the EM-31 conductivity meter will all be employed. Using the three methods will provide ample information to locate subsurface anomalies that may indicate the presence of buried drums or other potentially significant materials.

Once the anomalies in each grid area are located, they will be further investigated using an excavator. Excavation will continue until a source for each anomaly is located. If buried drums are discovered, the remediation contractor will be prepared to over-pack each drum and stage any associated soils that exhibit signs of contamination. Drum waste and contaminated soils will be sampled and characterized for disposal. Each drum and associated soil that is uncovered will be further referenced by the grid area of the landfill from which it is uncovered.

Standards for removal and disposal of soils from the landfill will use waste characterization parameters including TCLP analysis for VOC's, SVOC's and metals

along with reactivity, corrosivity and ignitability. All hazardous waste will be removed and disposed of.

Additional samples in PAOC 1 will also be taken at the discretion of the field team leader in order to fill data gaps encountered during the initial investigation of the landfill area.

Once soils removal has taken place, the bottom and side walls of the excavated area will be sampled for closure. The heterogeneity of the materials within the landfill prevents attempts to quantify materials that may be encountered.

3.4 PAOC 2 – VOCs in Groundwater

Three additional groundwater monitoring wells will be installed in the area of PAOC 2. The wells will be bedrock/overburden interface, 4-inch diameter wells and will be installed using hollow steam auger techniques, and coring at least 5 feet into bedrock.

Field observations including PID readings and free phase oil will be used to define a potential source area. If during the course of the installation a source area of the contamination is defined, additional measures will be assessed to address the source area in order to make use of onsite labor and equipment at that time.

The wells will be sampled to determine the extent of the VOC contamination in groundwater. All Groundwater data will be compared to 6 NYCRR 703.5 standards and TOGS 1.1.1 Standards. Once sampling results are evaluated, two of the 4-inch wells can be utilized for remedial access to the affected area. Remedial options, such as in-situ chemical oxidation, vapor extraction and/or total fluids extraction will be considered and reviewed with project stakeholders. Two of the wells will remain for future groundwater sampling purposes.

3.5 PAOC 3 – Mercury in Soils

This area of mercury contamination will be excavated and disposed of as necessary. Further sampling will be conducted to determine the extent of the mercury contamination. Field test kits for the presence of mercury will be utilized as necessary. The samples will be sent for direct analysis of mercury in soils. The hazardous waste regulatory level for mercury when TCLP is performed is 0.2 ppm, using the 20 times rule for mercury a direct result of 4 ppm or higher will be considered hazardous. All soils that are hazardous for mercury will be removed from PAOC 3. It is estimated that 400 tons of Hg contaminated soil will require removal. Closure samples will be taken of the bottom of the excavation and all sidewalls.

3.6 Excavation Procedures

Lu Engineers will provide continuous perimeter and work zone air monitoring during all soil removal and staging activities using a MiniRAE 2000 PID to ensure that workers and the public are not exposed to elevated concentrations of volatile organic compounds

(VOCs). A TSI Dustrak Aerosol Monitor Model 8520 or equivalent will also be used continually during all intrusive work activities to measure airborne particulate levels. A site specific Community Air Monitoring Plan (CAMP) is included in Appendix B. To address potential fugitive dust, odors, and vapors, the contractor will have emergency controls (dust and vapor suppression equipment) available for use during excavation activities. The requirements and procedures for use of these controls are established in the CAMP.

During excavation, all applicable OSHA standards (1910 and 1926) will be strictly followed. The excavation contractor will be responsible for using safe excavation techniques (sloping, stepping, etc.) to complete the excavation.

Excavated soil/fill during this phase of the project will be staged to await waste characterization sampling for disposal purposes. Soil containing free liquids will not be removed from the Project Site. Due to the nature of the fill at the Site, it is not feasible to fully characterize an area for anticipated waste profiling. Excavated material that is staged on-site awaiting off-site disposal shall be properly secured and covered at the end of each workday.

Field screening with the PID and observations made during excavation activities will be used to isolate any VOC contamination boundaries. Once it has been determined through field observations that all impacted soil has been removed, confirmation soil samples will be collected from excavation sidewalls and floors to confirm removal of all contaminated areas. The confirmation soil samples will be sent to an accredited laboratory for analysis.

3.6.1 Erosion and Sediment Control

Erosion sediment control measures will be employed at the Site. These measures will be adequately maintained in accordance with the SWPPP for the Site. Stormwater pollution prevention measures were employed at the Site prior to the removal of building slabs. Silt fencing is installed along the shore. These measures will be periodically inspected and maintained.

3.6.2 Dewatering

It is considered unlikely that overburden groundwater will be encountered at the Site. If encountered, the excavation contractor shall minimize liquid wastes through proper use of erosion and sediment control measures to mitigate surface water runoff into the excavation area, and covering an open excavation area to minimize the generation of potentially VOC impacted precipitation, etc. Water that is generated during the excavation activities, dewatering activities, and decontamination activities shall be collected and containerized by the excavation contractor. The water will be sampled/characterized as necessary based on observations by Lu Engineers onsite representative. Temporary water storage capacity will be available if necessary.

3.6.3 Decontamination

As part of the excavation contractor's mobilization activities, a decontamination area for trucks, equipment, and personnel will be constructed on the building foundation pad. The decontamination area will serve to prevent tracking of contaminated residuals from the Project Site. The decontamination area is depicted in Figure 7.

To further eliminate the tracking of petroleum contaminated soils, the excavation contractor will follow designated truck routes to contain traffic within a limited area. If materials accumulate outside the excavation and staging areas, they will be addressed to the satisfaction of the Field Team Leader.

Upon completion of work activities, the contractor will remove the decontamination facilities and associated materials, decontamination fluids, equipment, etc. All decontamination wastes will be disposed of properly.

The excavator and associated equipment will be decontaminated as necessary using steam-cleaning methods at the designated location. All decontamination residues will be collected in a decontamination pad lined with 6-mil polyethylene sheeting. Clean soil and/or lumber will be used to prevent runoff and run-on. Prior to completion of the project, all decontamination wastes will be transferred into drums for appropriate staging and disposal by the City of Watertown.

3.7 Post-Excavation Confirmatory Sampling

Confirmatory sampling will take place in PAOC 3 and on an as needed basis in PAOC 1.

We propose to collect grab samples in order to represent discrete areas of the excavation. Therefore, if certain sample results are unfavorable, additional excavation activities can be limited to specific sections of the original excavation. Samples will be collected from the bottom of the excavation (unless bedrock in encountered) and all sidewalls.

Side wall samples will be collected every 30 feet from the top of the wall to the bottom and then composite to form one sample for laboratory analysis (18 to 20 samples). Composite samples will be collected with as little agitation to soils as possible to avoid volatilization. Samples from the bottom of the excavation will be taken in a grid pattern at intervals of approximately every 30 linear or 900 square feet of area. In addition, one grab sample will be collected from a discrete location based on visual and PID field screening.

All soil samples will be screened as previously described during excavation. The number and location of confirmatory samples will be taken as described above. Additional samples will be collected at the discretion of the Field Team Leader based on observations in the field. All samples selected for potential analysis will be containerized, labeled, and immediately stored on ice in a cooler in accordance with the site Quality Assurance Project Plan (QAPP).

Due to the extensive analytical information obtained from the Site, we propose a target analyte list for confirmatory sample analysis that includes only compounds detected to date. This analyte list will consist of TAL VOCs (USEPA Method 8260), semi-volatile organic compounds (USEPA Method 8270) and TAL metals (7000 series).

All samples will be obtained, handled and characterized in accordance with NYSDEC Analytical Services Protocol methods. Samples will be relinquished to Lu Engineers' contract accredited (NYSDOH ELAP CLP) and certified analytical laboratory. All chain of custody requirements will be strictly adhered to for designated analyses.

In the event that residual contamination exists that will not be removed, the area will be physically marked and located with a GPS unit. The location, depth and concentrations of residual contamination will be documented. Residual contamination will either be delineated at the time with excavation equipment or after the IRM with supplemental soil sampling.

Lu Engineers will also evaluate the use of field screening methods with respect to metals. If determined to be effective, such methods will be used to save time and analytical costs to the extent possible.

3.8 Off-Site Disposal of Contaminated Soils

The excavation contractor will be responsible for loading, transporting, and disposing of hazardous soils generated during the removal. Loaded roll-off containers will be lined and covered with a tarp prior to departing the Project Site and during precipitation events. Tarps will also be required if a loaded truck is to remain on-site overnight.

Appropriate shipping documents will be prepared for each waste shipment, for execution by Lu Engineers. Copies of disposal documentation will be maintained by the Field Team Leader and will be available for on-site review. All documentation from the disposal facility for the weight of each shipment will be obtained by the excavation contractor. It is currently estimated that at least five weeks will be required for IRM activities.

3.9 Restoration

Crushed stone will be placed to create temporary road surfaces within the work area to facilitate movement of heavy equipment. Select fill will be used for backfilling of excavations. Compaction will be done using excavation and grading equipment, as necessary. Six inches of topsoil will be placed in excavated areas to complete backfilling.

Once all backfilling has been completed, the ground surface will then be graded level and raked free of cobbles. The affected area, approximately 2 acres in size, will be hydro-seeded. If time and budget allow in the final grading process a small area of the bank

near the rail trestle will also be graded to allow more established river access. If contaminated materials and/or drummed wastes are encountered in this area of the site, cleanup will be conducted in accordance with the procedures outlined in Section 3.3 of this Plan.

3.10 Additional Remedial Investigation Field Work

3.10.1 Ground Water Sampling

Once the landfill area is cleared of potential anomalies, one additional groundwater monitoring well will be installed in the central portion of this area. After soil removal is complete, post-excavation groundwater sampling will be conducted. Post-excavation sampling of groundwater in the excavated areas will be used to assess the effectiveness of the remedy. This well will be installed and developed immediately following final backfilling of the excavations.

A complete round of groundwater sampling will take place within two weeks of well installation. It is anticipated that this will be the final round of groundwater sampling. Analyses will be completed using Category B deliverables and the data will be collected and validated as outlined in the QAPP for the Site.

3.11 Anticipated Remedy

Due widespread presence of fill materials located at the site and the associated PAH and metals contamination it is proposed that clean cover and a soils management plan be considered as a future remedy for the site.

A Site Management Plan (SMP) would be prepared for submission to and approval by NYSDEC prior to construction. The SMP is designed to protect the public from exposure to hazardous materials as a result of future activities on the parcel and establish procedures for the following activities:

1. Erosion and dust control during construction;
2. Soil disturbance beyond that undertaken for the remediation activities (including notification to NYSDEC, restriction of access to site, and characterization and disposal of excavated material);
3. Groundwater dewatering and treatment;
4. Placement and maintenance of cover over the entire parcel (in the form of at least two feet of clean fill soil, building structures, and/or paving);
5. Management of new imported fill material;
6. Implementation of site-specific health and safety requirements during construction activities (including a Community Air Monitoring Plan);
7. Notification of NYSDEC prior to transferring ownership of the site; and

8. Submission of annual reports to NYSDEC certifying compliance with the SMP and describing in detail any soil or groundwater disturbance undertaken during the reporting period and the source of backfill.

Based on the additional characterization proposed herein, a remedial approach for the petroleum spill area will be presented to project stakeholders. This remedial approach will be proposed as an addendum to the current IRM Work Plan once review of applicable data has been completed. It is noted that the presence of the nearby bridge wingwall and steep river bank adjacent to this portion of the site would complicate the use of remedial excavation methods in this portion of the site. At the present time, Lu Engineers is evaluating various in-situ methods such as total fluids extraction and in-situ chemical oxidation.

4.0 Health and Safety Plans

Monitoring of the work area and screening of soil and groundwater will be conducted throughout the duration of field activities to assure the safety of on-site workers. A temporary job trailer will be placed onsite and will serve as the project command center. A copy of the Site-Specific Health and Safety Plan (HASP) is provided as Appendix A.

Air monitoring of the work areas will be conducted using the following (or equivalent) instrumentation:

- A PID equipped with a 10.2 eV lamp (or equivalent)
- An aerosol particulate meter
- An explosimeter

A Community Air Monitoring Plan (CAMP) for the Site work is attached as Appendix B.

Mercury vapor emissions are not anticipated. However, CAMP efforts will be augmented by continual monitoring with an Arizona Instruments, Incorporated Jerome® 431-X mercury vapor monitor or equivalent during all intrusive activities.

5.0 QA/QC

To ensure that suitable and verifiable data results are obtained from the information collected at the Site, quality assurance procedures are detailed in a Quality Assurance Project Plan (QAPP). The QAPP was developed as part of the RI Work Plan, Appendix C and further details the activities and how they are designed to achieve the data quality objectives.

All samples will be obtained, handled and characterized in accordance with NYSDEC Analytical Services Protocol (ASP) methods. Once obtained, samples will be immediately labeled and stored on ice in a cooler. Samples will be relinquished to Mitkem Laboratories, Inc., an accredited (NYSDEC ELAP CLP) and appropriately certified analytical laboratory. All chain of custody requirements will be strictly adhered to for designated analyses.

The NYSDEC Division of Environmental Remediation *Guidance for the Development of Quality Assurance Plans and Data Usability Summary Reports* will be followed. Lu Engineers' Quality Assurance Officer for this project will be Susan Hilton. Steve Campbell will be the Project Manager and Greg Andrus will be the Field Team Leader for this project. Category B deliverables will be required for all analytical reporting in order to provide the necessary documentation to be reviewed to evaluate the usability of the data and to provide calibration data needed to verify results, as necessary.

One duplicate sample will be obtained for each sample type for each week that sampling occurs. Also, one matrix spike (MS) and matrix spike duplicate (MSD) will be collected for samples of each media for each week that sampling occurs. Samples duplicated will be selected at the discretion of the Field Team Leader (geologist).

6.0 Project Organization

The personnel for this project are anticipated as follows:

Steve Campbell, CHMM	Project Director
Greg Andrus, CHMM	Project Manager
Susan Hilton, P.E.	Quality Assurance Officer
Eric Detweiler	Field Team Leader/Geologist
Laura Smith	Site Safety Officer/ Field Technician

Subcontractors

Mitkem Laboratories	Analytical Laboratory
Op-Tech Environmental	Environmental Waste Contractor
Hickory Hill Construction	Excavation Contractor
On-Site Technical Services	Data Validation (as necessary)

7.0 Report

Once the contract laboratory has provided all analytical data and information has been evaluated, Lu Engineers will develop a report on the completed interim remedial measures. The report will be prepared as indicated by the following outline:

1.0 Summary of Field Activities
2.0 Contamination Evaluation
- 2.1 Findings
- 2.2 Data Evaluation
- 2.3 Regulatory Review
- 2.4 Exposure Pathways

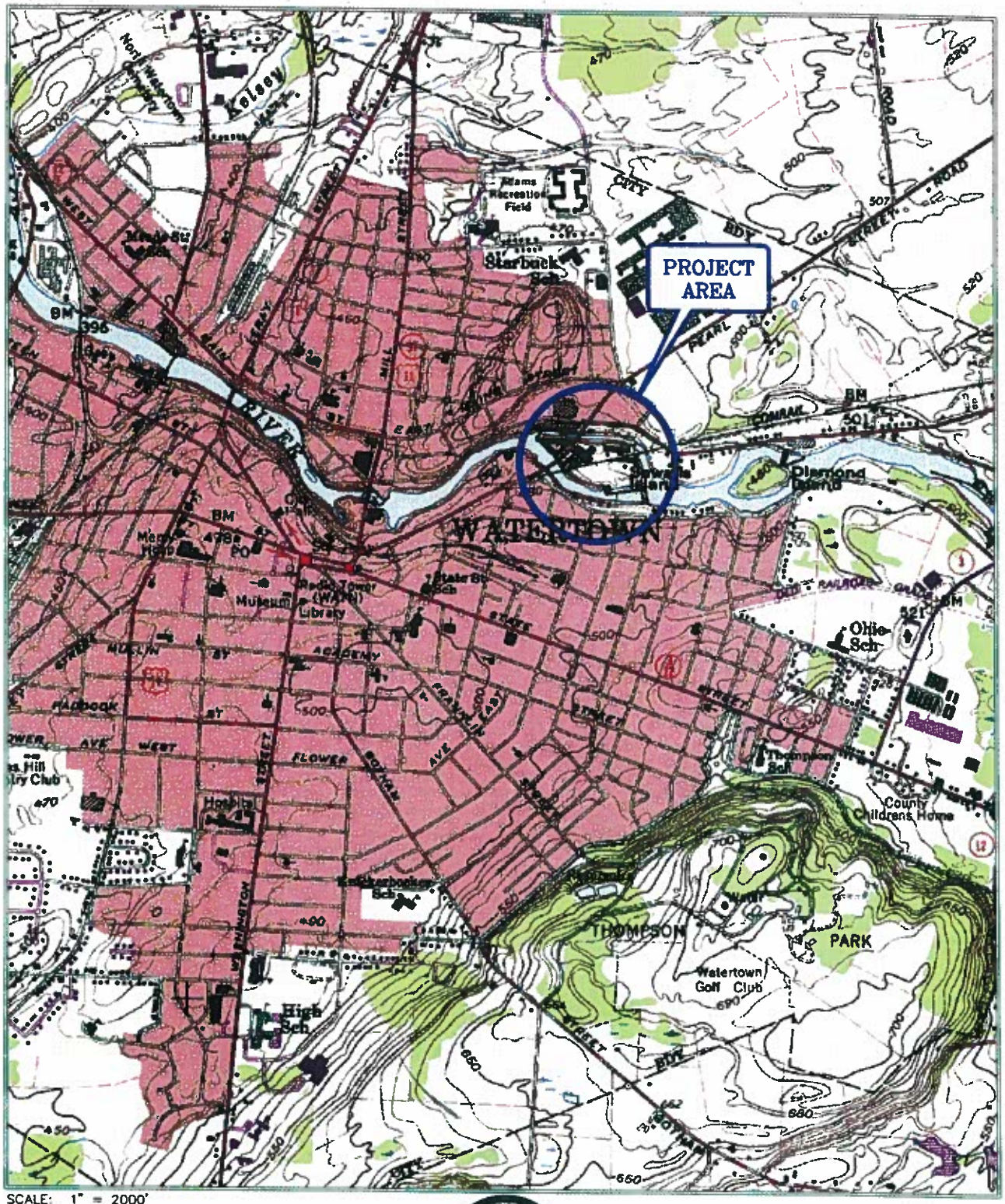
3.0 Conclusions and Recommendations

The report will carefully document all cleanup activities and analytical results and will be supplemented with photographic documentation.

8.0 Schedule

A detailed project schedule including all anticipated field work and report submissions is included in Appendix D. Field activities and laboratory analysis will require three

months to complete. Results from this IRM will be included with the final RI Report and submitted to the NYSDEC and the NYSDOH for review in the Winter of 2010.



LU ENGINEERS
Civil and Environmental

JOSEPH C. LU ENGINEERING AND LAND SURVEYING, P.C.
2230 PENFIELD ROAD PENFIELD, NEW YORK 14526
PHONE: 585.377.1450 FAX: 585.377.1266

FIGURE 1. SITE LOCATION MAP

SEWALL'S ISLAND PROJECT
CITY OF WATERTOWN
JEFFERSON COUNTY NEW YORK

DATE:	OCTOBER 2006
SCALE:	1:24,000
DRAWN BY:	DLS
MAP SOURCE:	WATERTOWN QUADRANGLE NEW YORK - JEFFERSON COUNTY 7.5 MINUTE SERIES (TOPOGRAPHIC) 1958; PHOTOREVISED 1982

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N

1 inch equals 150 feet

Figure 2
Potential Areas of Concern (PAOC)

Remedial Investigation

City of Watertown
Sewall's Island
Watertown, New York

IRM Site Plan -

Drawn By: CAC Revised By: JSB Date: July 23, 2009 J:\Projects\34200 Watertown\34202 Sewall's Island\Env\GIS\Maps

Lu Engineers

N

1 inch equals 150 feet

Figure 3A
Surface Soil - Sample Locations
Remedial Investigation

City of Watertown
Sewall's Island
Watertown, New York

THE CITY OF WATERTOWN NEW YORK

Lu Engineers

Drawn By: RF Revised: JSB Date: July 25, 2009 J:\Projects\34200 Watertown\34202 Sewall's Island\Env\GIS\Maps

N

1 inch equals 150 feet

Figure 3B
Subsurface Soil - Sample Locations
Remedial Investigation

City of Watertown
Sewall's Island
Watertown, New York

Lu Engineers

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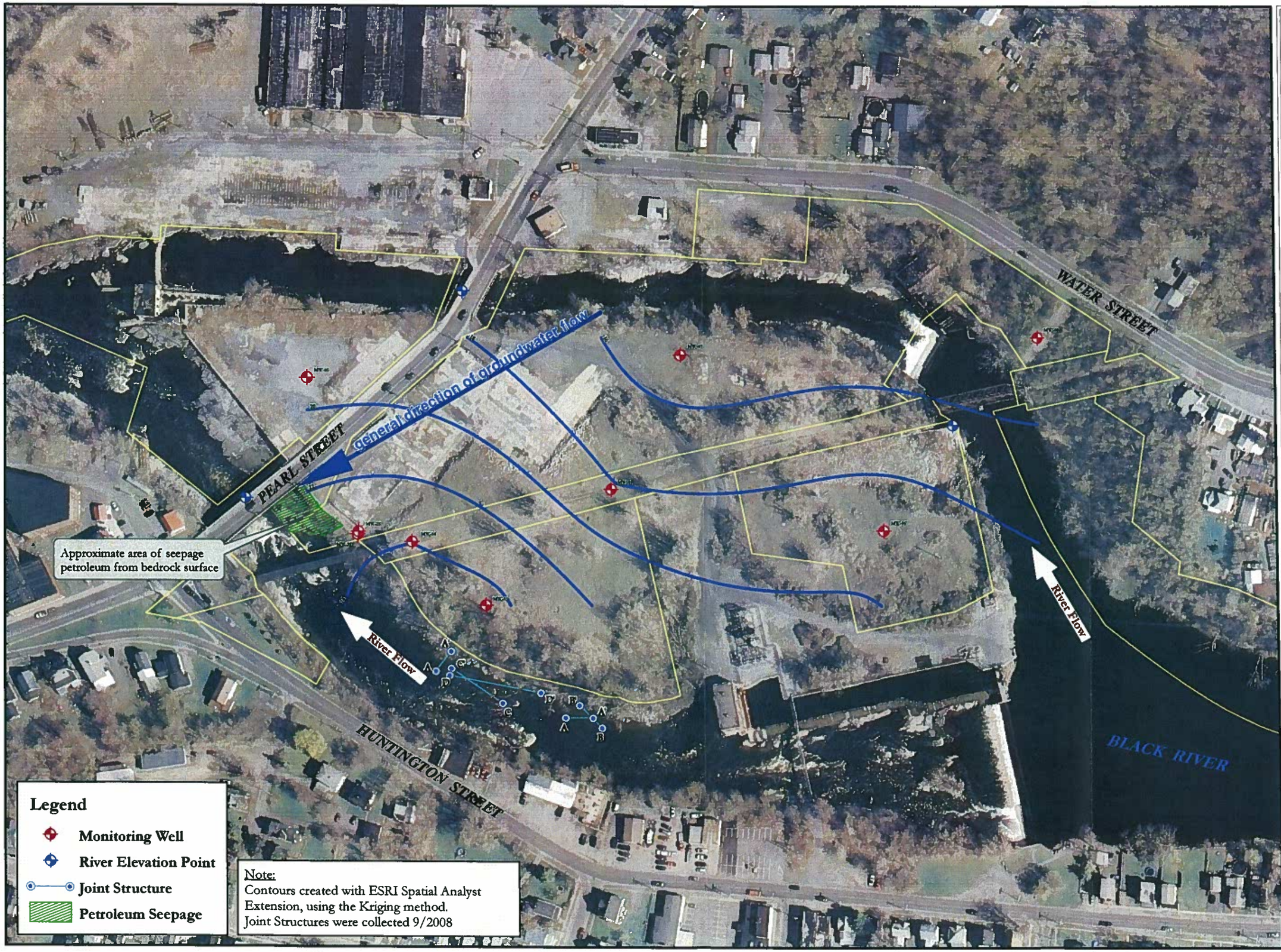


N

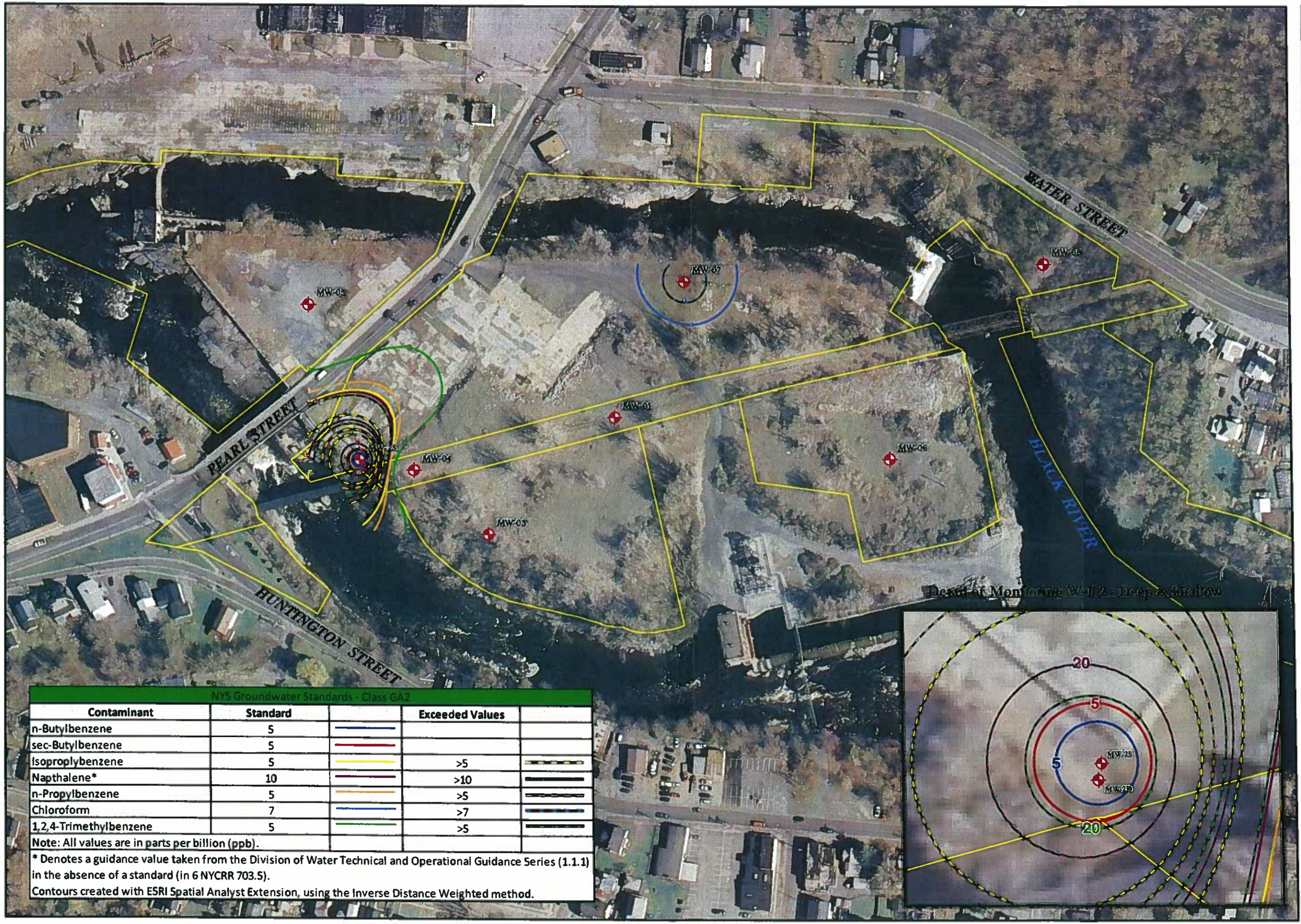
1 inch equals 150 feet

Figure 4
Groundwater Contour Map - March 2009
Remedial Investigation

City of Watertown
Sewall's Island
Watertown, New York

Drawn By: RF Revised: JSB Date: July 23, 2009 J:\Projects\54200 Watertown\54202 Sewall's Island\Env\GIS\Maps

Lu Engineers



NYS Groundwater Standards - Class GA2				
Contaminant	**Standard**		**Exceeded Values**	
n-Butylbenzene	5			
sec-Butylbenzene	5			
Isoproplybenzene	5		>5	
Napthalene*	10		>10	
n-Propylbenzene	5		>5	
Chloroform	7		>7	
1,2,4-Trimethylbenzene	5		>5	
Note: All values are in parts per billion (ppb).				

* Denotes a guidance value taken from the Division of Water Technical and Operational Guidance Series (1.1.1) in the absence of a standard (in 6 NYCRR 703.5).

Contours created with ESRI Spatial Analyst Extension, using the Inverse Distance Weighted method.

N

1 inch equals 150 feet

Figure 5

VOCs In Groundwater

Remedial Investigation

City of Watertown
Sewall's Island
Watertown, New York

Lu Engineers

Drawn By: RF Revised: JSB Date: July 23, 2009 J:\Projects\34200 Watertown\34202 Sewall's Island\Env\GIS\Maps

NYSDEC Soil Cleanup Objectives - Restricted Use				
Contaminant	Restricted Residential		Commercial	
Benzo(a)anthracene	1,000		5,600	
Benzo(a)pyrene	1,000		1,000	
Benzo(b)fluoranthene	1,000		1,000	
Benzo(k)fluoranthene	3,900		56,000	
Chrysene	3,900		56,000	
Dibenzo(a,h)anthracene	330		560	
Indeno(1,2,3-cd)pyrene	500		5,600	
Note: All SCOs are given in parts per billion (ppb).				

••••• Dotted lines where data is inferred

WATER STREET

PEARL STREET

HUNTINGTON STREET

BLACK RIVER

SS-01 SS-02 SS-03 SS-04 SS-05 SS-06 SS-07 SS-08 SS-09 SS-10 SS-11 SS-12 SS-13 SS-14 SS-15 SS-16 SS-17 SS-18 SS-19 SS-20 SS-21 SS-22 SS-23 SS-24 SS-25 SS-26 SS-27 SS-28 SS-29 SS-30 SS-31 SS-32 SS-33 SS-34 SS-35 SS-36 SS-37 SS-38 SS-39 SS-40 SS-41 SS-42 SS-43 SS-44 SS-45 SS-46 SS-47 SS-48 SS-49 SS-50 SS-51 SS-52 SS-53 SS-54 SS-55 SS-56 SS-57 SS-58

Note:
-NYSDEC Soil Clean-up Objectives for all SVOCs within the "Restricted Use" category equal 100 ppb. The SCO for all SVOCs within the "Restricted Residential" category equal 1000 ppb.
-Contours created with ESRI Spatial Analysist Extension, using the Inverse Distance Weighted method.

N

1 inch equals 150 feet

Figure 6A
Surface Soil Contaminant Contours - SVOCs
Remedial Investigation
City of Watertown
Sewall's Island
Watertown, New York

THE CITY OF WATERTOWN NEW YORK

Lu Engineers

Drawn By: RLF Revised By: CAC/JSB Date: July 25, 2009 J:\Projects\34200 Watertown\34202 Sewall's Island\Env\GIS\Maps

Typical Example

SAMPLE ID		
Contaminant	Restricted Residential	Result
Arsenic	16	33.8

All values of reported compounds are in parts per million (ppm)
All compounds shown are those that exceed Restricted Residential SCO

WATER STREET

SS-10		
Arsenic	16	17.3

SS-11		
Arsenic	16	33.8

SS-04		
Mercury	0.81	3.0

SS-33		
Arsenic	16	19.9

SS-23		
Lead	400	495E

SS-24		
Lead	400	413E

SS-09		
Lead	400	463E

PEARL STREET

SS-16		
Lead	400	989E

SS-20		
Cadmium	4.3	8.7E

SS-19		
Mercury	0.81	1.0

HUNTINGTON STREET

BLACK RIVER

Legend

- Surface Soil Sample

N

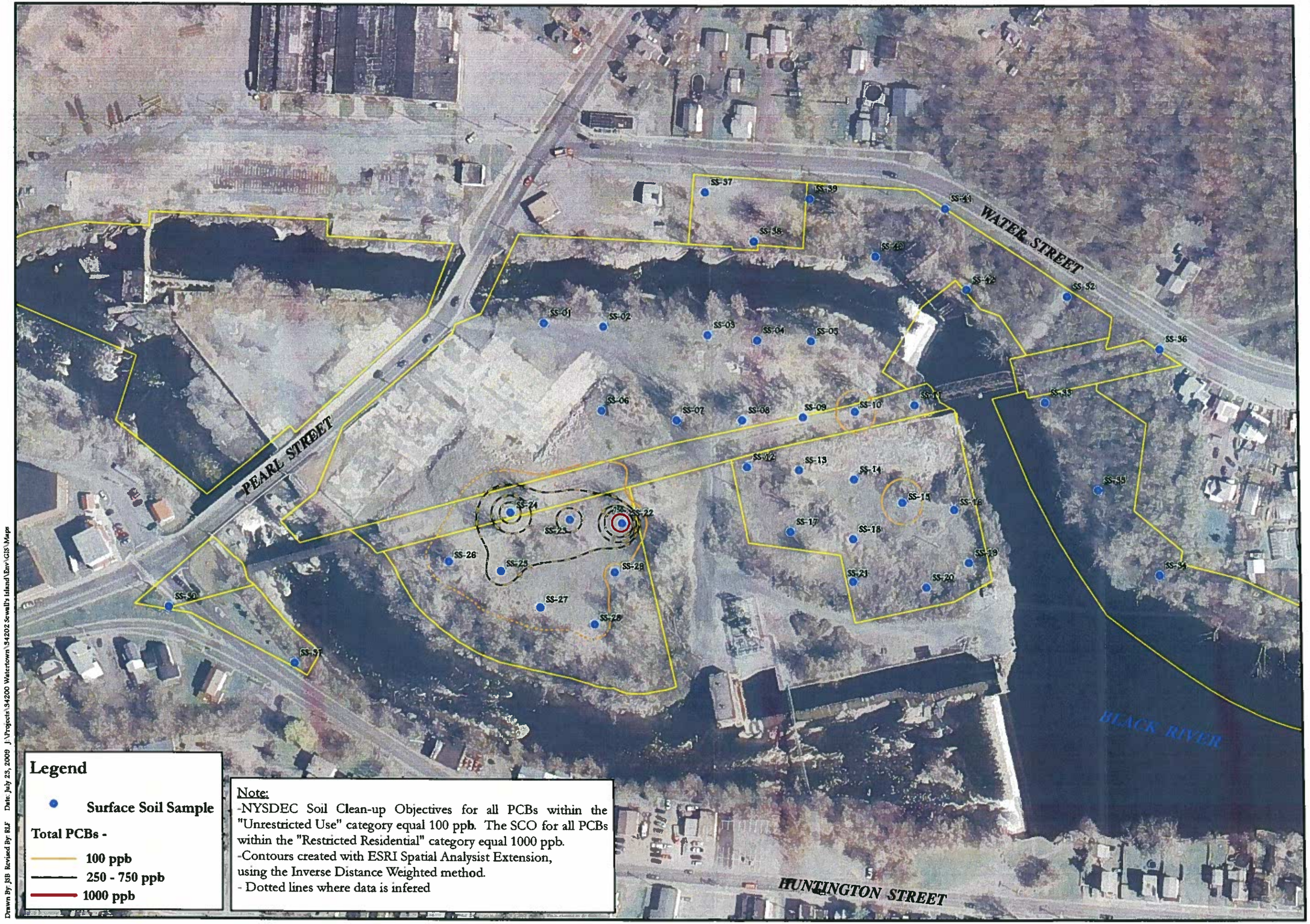
1 inch equals 150 feet

Figure 6B
Surface Soil Contaminant Contours - RCRA Metals
Remedial Investigation

City of Watertown
Sewall's Island
Watertown, New York

Lu Engineers

Drawn By: RF Revised:JSB Date: July 25, 2009 J:\Projects\34200 Watertown\34202 Sewall's Island\Env\GIS\Maps



N

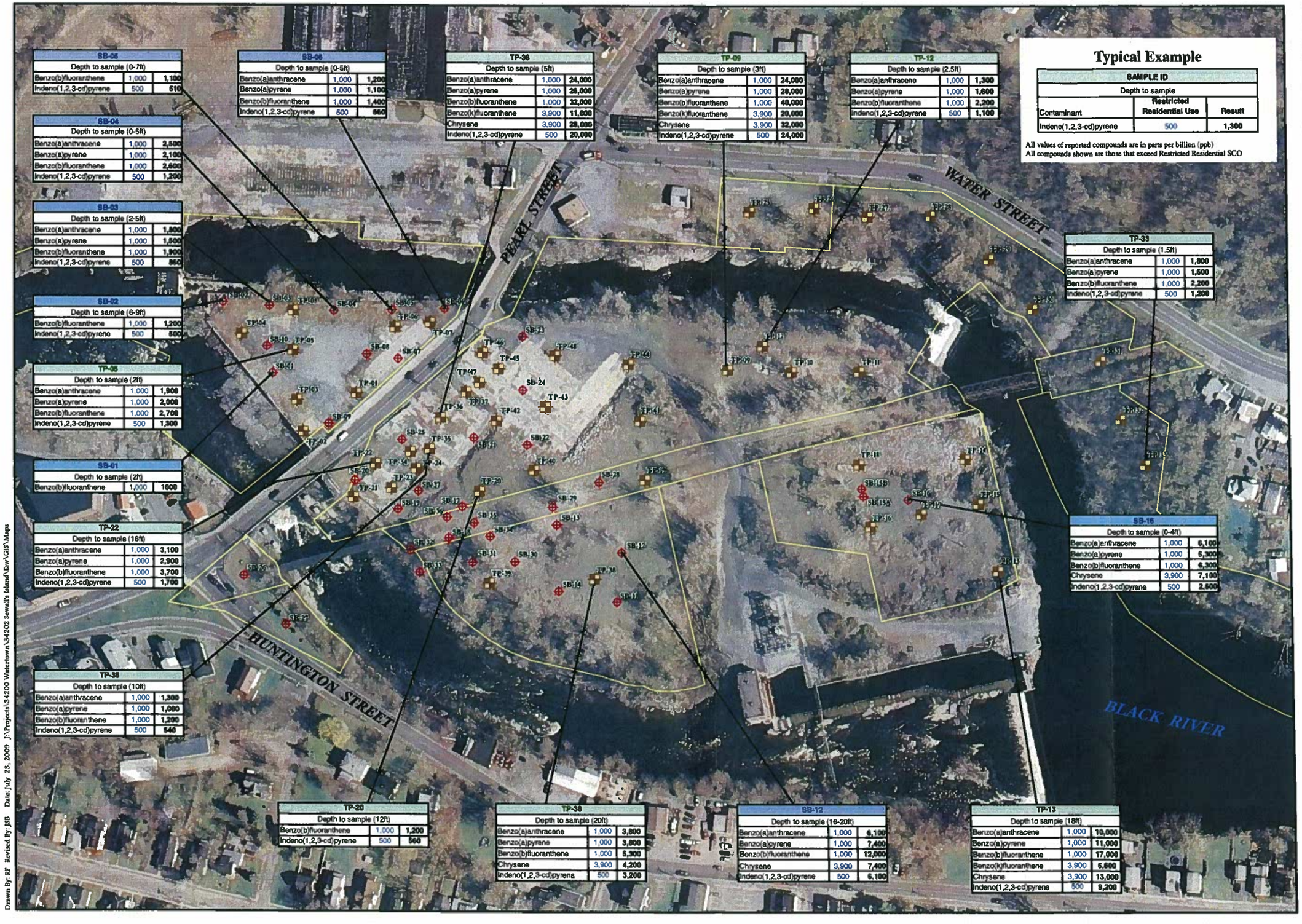
1 inch equals 150 feet

Figure 6C
Surface Soil Contaminant Contours - Total PCBs
Remedial Investigation

City of Watertown
Sewall's Island
Watertown, New York

Lu Engineers

Drawn By: JSB Revised By: RLF Date: July 23, 2009 J:\Projects\34200 Watertown\34202 Sewall's Island\Env\GIS\Maps



N

1 inch equals 150 feet

Figure 7A
Subsurface Soil Contaminants-SVOC's
Remedial Investigation

City of Watertown
Sewall's Island
Watertown, New York

Lu Engineers

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Drawn By: RF Revised By: CAC/JSB Date: July 21, 2009 J:\Projects\34200 Watertown\34202 Sewall's Island\Env\GIS\Maps

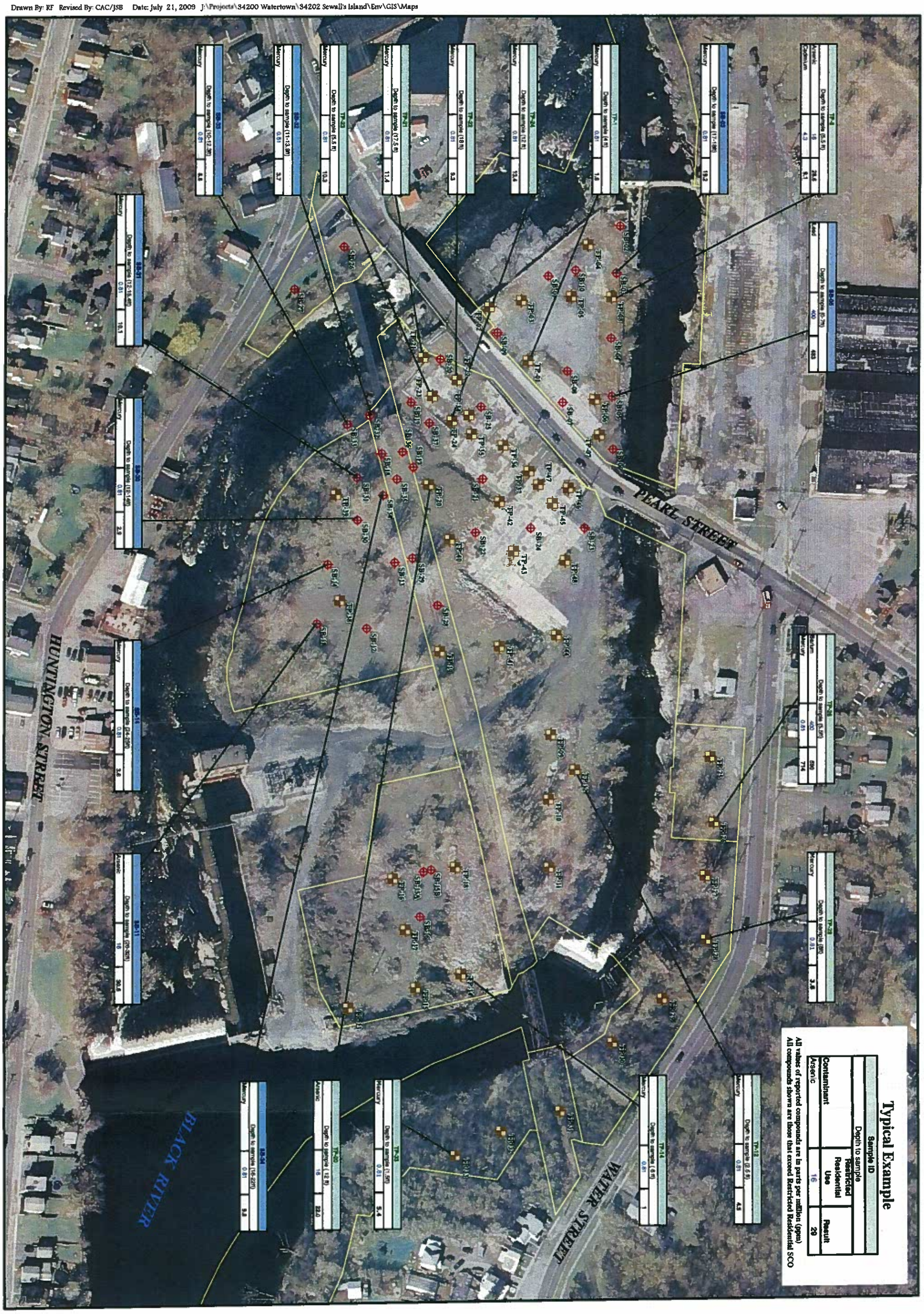

Figure 7B
Subsurface Soil Contaminants-RCRA Metals
Remedial Investigation

City of Watertown
Sewall's Island
Watertown, New York

1 inch equals 150 feet

N

Lu Engineers

Environmental Restoration Program - Sewall's Island Site (#E623021)
Data Flag/Qualifier Legend

J	For organics analysis, this flag indicates and estimated value due to either: • the compound was detected below the reporting limit, or • estimated concentration for tentatively identified compound
B	For organic analyses, this flag indicates the compound was also detected in the associated method blank. The B flag has an alternative meaning for inorganics analyses, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.
E	For organics analyses, this flag indicates the compound concentration exceeded the calibration range. The E flag has an alternative meaning for inorganics analyses, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
N	Used to flag results for volatile and semivolatile organics analysis tentatively identified compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
*****	For inorganics analysis the * flag indicates relative percent difference for duplicate analyses is outside of the control limit.

Environmental Restoration Program - Sewall's Island Site (#E623021)

Groundwater Sample Results

Polychlorinated biphenyls[1]	NYS Groundwater Standards - Class GA[2]	SI-MW1-01	SI-MW2S-01	SI-MW2D-01	SI-MW3-01	SI-MW4-01	SI-MW5-01	SI-MW6-01	SI-MW7-01	SI-MW8-01
Aroclor 1016	0.09*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	0.09*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	0.09*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1242	0.09*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	0.09*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1254	0.09*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	0.09*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs:	0.09	ND	ND	ND	ND	ND	ND	ND	ND	ND

Note: * Applies to the sum of these substances.

1 - All values presented in micrograms per liter (ug/l).
2 - 6 NYCRR Part 703.5

Environmental Restoration Program - Sewall's Island Site (#E623021)

Groundwater Sample Results

Metals[1]	NYS Groundwater Standards - Class GA[2]	SI-MW1-01	SI-MW2S-01	SI-MW2D-01	SI-MW3-01	SI-MW4-01	SI-MW5-01	SI-MW6-01	SI-MW7-01	SI-MW8-01
Aluminum	N/A	ND	5260	ND	ND	613	124	ND	4060	262
Antimony	3	ND	ND	ND	ND	ND	ND	ND	4.7	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	6.5	ND
Barium	1,000	68	143	202	67.7	95.9	36.2	156	29.8	115
Beryllium	3*	ND	0.39	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	N/A	184000	229000	104000	134000	146000	152000	86400	32300	399000
Chromium	50	ND	7.3	ND	ND	1.6	1.7	ND	13.3	4.9
Cobalt	N/A	1.5	4.5	ND	ND	3.4	1.3	ND	2.6	2.9
Copper	200	12.5	36	ND	137	18.1	5.8	ND	48	14.9
Iron	300	ND	14300	6800	198	5300	948	119	685	733
Lead	25	ND	22.3	ND	ND	9.7	ND	ND	2.3	ND
Magnesium	35,000*	14500	17900	17400	11800	18000	7220	8430	406	34400
Manganese	300	7.6	347	174	37.8	277	76.3	9.6	8.2	68.1
Mercury	0.7	ND	0.12	ND	ND	ND	ND	ND	0.086	ND
Nickel	100	2.6	6.2	ND	2.9	2.7	ND	1.6	19.3	2.4
Potassium	N/A	1200	16500	6420	4950	6900	5580	3800	24400	18000
Selenium	10	ND	ND	ND	ND	ND	ND	ND	6.8	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	12500	17300	33500	16700	58100	35700	5490	322000	202000
Thallium	0.5*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	N/A	ND	8.2	1.1	ND	1.8	ND	ND	43.2	1.7
Zinc	2,000*	13.7	57.4	12.8	196	25.9	22.2	26	23.6	26

Note: * Denotes a guidance value taken from the Division of Water Technical and Operational Guidance Series (1.1.1) in the absence of a standard (in 6 NYCRR 703.5).

1 - All values presented in micrograms per liter (ug/l).
2 - 6 NYCRR Part 703.5

Environmental Restoration Program - Sewall's Island Site (#E623021)
Groundwater Sample Results

Semi-Volitale Organic Compounds[1]	NYS Groundwater Standards - Class GA[2]	SI-MW1-01	SI-MW2S-01	SI-MW2D-01	SI-MW3-01	SI-MW4-01	SI-MW5-01	SI-MW6-01	SI-MW7-01	SI-MW8-01
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2'-Oxybis(1-Chloropropane)	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	1***	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	1***	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1***	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	1***	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	1***	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	10*	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	N/A	ND	87	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	1***	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	1***	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	1***	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	1***	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20*	ND	7.4	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.002*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND (0)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(ghi)perylene	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl) ether	t	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	5	ND	ND	4.1	ND	ND	ND	ND	2.7	ND
Butyl benzyl phthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	N/A	ND	1.4	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	N/A	ND	5.5	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50*	ND	10	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND

1 - All values presented in micrograms per liter (ug/l).
2 - 6 NYCRR Part 703.5

Environmental Restoration Program - Sewall's Island Site (#E623021)
Groundwater Sample Results

Semi-Volitale Organic Compounds[1]	NYS Groundwater Standards - Class GA[2]	SI-MW1-01	SI-MW2S-01	SI-MW2D-01	SI-MW3-01	SI-MW4-01	SI-MW5-01	SI-MW6-01	SI-MW7-01	SI-MW8-01
N-Nitroso-Di-n-propylamine	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-nitrosodiphenylamine	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1***	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50*	ND	5.7	ND	ND	ND	ND	ND	ND	ND
Phenol	1***	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorobenzenes (Total)	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND

Note:
* Denotes a guidance value taken from the Division of Water Technical and Operational Guidance Series (1.1.1) in the absence of a standard (in 6 NYCRR 703.5).
** The principal organic contaminant (POC) standard for groundwater of 5 ug/L applies to this substance.
*** Applies to the sum of these substances.

1 - All values presented in micrograms per liter (ug/l).
2 - 6 NYCRR Part 703.5

Environmental Restoration Program - Sewall's Island Site (#E623021)
Groundwater Sample Results

Volatile Organic Compounds[1]	NYS Groundwater Standards - Class GA[2]	SI-MW1-01	SI-MW2S-01	SI-MW2D-01	SI-MW3-01	SI-MW4-01	SI-MW5-01	SI-MW6-01	SI-MW7-01	SI-MW8-01
1,1,1,2-Tetrachloroethane	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5**	ND	ND	ND	2.7	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5**	ND	21	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene (Total)	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	N/A	ND	ND	ND	ND	ND	ND	ND	6.7	ND
2-Chlorotoluene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50*	ND	ND	ND	ND	ND	ND	ND	78	ND
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	1.6	ND	ND	6.3	ND	ND	ND	8.3	2.6
Chloromethane	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5**	ND	11	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5**	ND	5.1	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5**	ND	13	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10*	ND	22	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5**	ND	5.2	ND	ND	ND	ND	ND	ND	ND
Styrene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5**	ND	ND	ND	ND	ND	ND	ND	ND	ND

1 - All values presented in micrograms per liter (ug/l).
2 - 6 NYCRR Part 703.5

Environmental Restoration Program - Sewall's Island Site (#E623021)
Groundwater Sample Results

Volatile Organic Compounds[1]	NYS Groundwater Standards - Class GA[2]	SI-MW1-01	SI-MW2S-01	SI-MW2D-01	SI-MW3-01	SI-MW4-01	SI-MW5-01	SI-MW6-01	SI-MW7-01	SI-MW8-01
Vinyl acetate	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4***	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4***	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (Total)	5**	ND	ND	ND	ND	1.9	ND	ND	1.6	ND

Note:
* Denotes a guidance value taken from the Division of Water Technical and Operational Guidance Series (1.1.1) in the absence of a standard (in 6 NYCRR 703.5).
** The principal organic contaminant (POC) standard for groundwater of 5 ug/L applies to this substance.
*** Applies to the sum of these substances.

1 - All values presented in micrograms per liter (ug/l).
2 - 6 NYCRR Part 703.5

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Semi-Volitale Organic Compounds[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SS-01	SI-SS-02	SI-SS-03	SI-SS-04	SI-SS-05	SI-SS-06	SI-SS-07	SI-SS-08	SI-SS-09	SI-SS-10	SI-SS-11	SI-SS-12	SI-SS-13	SI-SS-14	SI-SS-15
1,2,4-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2'-oxybis(1-Chloropropane)	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	N/A	N/A	N/A	93 J	77 J	ND	ND	ND	150 J	73 J	ND	190 J	190 J	490 J	ND	ND	ND	ND
2-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20,000	100,000	500,000	ND	ND	ND	ND	ND	120 J	ND	ND	370 J	96 J	510 J	ND	190 J	830 J	ND
Acenaphthylene	100,000	100,000	500,000	ND	ND	ND	330 J	ND	1300	190 J	290 J	850	630	2300	ND	170 J	630 J	ND
Anthracene	100,000	100,000	500,000	200 J	190 J	ND	320 J	ND	1400	190 J	340 J	1400	640	2700	860 J	760	3000	ND
Benzo(a)anthracene	1,000	1,000	5,600	1000	1900	420	1100	420	3200	430	1500	3800	1800	9800	12000	2600	11000	660
Benzo(a)pyrene	1,000	1,000	1,000	1200	2500	570	1300	630	3500	620	1400	3600	1700	8800	12000	2200	7500	700
Benzo(b)fluoranthene	1,000	1,000	1,000	1800	4000	870	1800	1000	5300	1000	2100	5200	2600	13000	21000	3300	11000	710
Benzo(g,h,i)perylene	100,000	100,000	500,000	1200	2600	590	1000	680	3300	560	1000	3200	1200	5500	13000	1500	4200	640
Benzo(k)fluoranthene	800	3,900	1,000	720	1400	390	920	340 J	2700	500	970	2600	1300	5700	7800	1200	4600	260 J
Bis(2-chloroethoxy)methane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	N/A	N/A	N/A	120 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	660
Butylbenzylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	N/A	N/A	N/A	ND	110 J	ND	190 J	ND	320 J	ND	140 J	680	300 J	1700 J	470 J	580	2300	ND
Chrysene	1,000	3,900	56,000	1400	2500	610	1400	760	3900	680	1700	4300	2400	11000	14000	2800	11000	1100
Di-n-butylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190 J
Di-n-octylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	330	330	560	380 J	940	200 J	330 J	240 J	1300	220 J	350 J	1200	480	2200	4700	570	1400 J	250 J
Dibenzofuran	N/A	N/A	N/A	ND	ND	ND	ND	ND	110 J	ND	ND	350 J	160 J	910 J	ND	120 J	420 J	ND
Diethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100,000	100,000	500,000	1600	2200	630	2600	520	4600	500	2600	6100	3200	20000	13000	5400	21000	510
Fluorene	30,000	100,000	500,000	ND	ND	ND	ND	ND	130 J	ND	ND	430 J	120 J	980 J	ND	190 J	930 J	ND
Hexachlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	500	500	5,600	1000	2400	510	960	590	3200	530	980	3000	1200	5500	11000	1500	4100	370 J
Isophorone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	12,000	100,000	500,000	ND	79 J	ND	ND	ND	130 J	ND	ND	350 J	200 J	600 J	ND	170 J	620 J	ND
Nitrobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	800	6,700	6,700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100,000	100,000	500,000	700	830	310 J	1400	220 J	1300	200 J	1200	3900	1500	13000	4200	3000	12000	250 J
Phenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	130 J	ND	ND	ND	ND	ND	ND
Pyrene	100,000	100,000	500,000	1400	1900	530	2100	480	3900	560	2300	4900	2500	15000	11000	4000	16000	610

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Semi-Volitale Organic Compounds[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SS-16	SI-SS-17	SI-SS-18	SI-SS-19	SI-SS-20	SI-SS-21	SI-SS-22	SI-SS-22D	SI-SS-23	SI-SS-24	SI-SS-25	SI-SS-26	SI-SS-27	SI-SS-28	SI-SS-29
1,2,4-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2'-oxybis(1-Chloropropane)	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	N/A	N/A	N/A	ND	160 J	ND	ND	ND	190 J	240 J	270 J	ND	190 J	76 J	ND	ND	ND	81 J
2-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20,000	100,000	500,000	100 J	110 J	ND	ND	ND	ND	ND	240 J	240 J	ND	ND	230 J	ND	ND	ND
Acenaphthylene	100,000	100,000	500,000	ND	240 J	ND	ND	400 J	ND	310 J	340 J	200 J	2400	130 J	ND	ND	ND	110 J
Anthracene	100,000	100,000	500,000	230 J	340 J	ND	520 J	570 J	ND	480 J	820	560 J	2300	210 J	580 J	110 J	ND	180 J
Benzo(a)anthracene	1,000	1,000	5,600	**2900**	**2100**	ND	**8300**	**5100**	**5800**	**5400**	**6200**	**5000**	**4900**	**1400**	**4300**	530	550	**2000**
Benzo(a)pyrene	1,000	1,000	1,000	**3500**	**2600**	ND	**11000**	**5400**	**6800**	**7600**	**8400**	**7500**	**4600**	**1500**	**6200**	540	620	**2300**
Benzo(b)fluoranthene	1,000	1,000	1,000	**5500**	**3600**	ND	**18000**	**9500**	**7600**	**9900**	**12000**	**11000**	**6900**	**1100**	**9000**	720	860	**3000**
Benzo(g,h,i)perylene	100,000	100,000	500,000	3500	2600	ND	12000	5400	7100	7900	9000	8300	3700	1200	7300	430	540	2100
Benzo(k)fluoranthene	800	3,900	1,000	**2600**	**1600**	ND	**5100**	**3000**	**2500**	**5100**	**3700**	**3700**	**3300**	**960**	**4500**	270 J	360 J	**1000**
Bis(2-chloroethoxy)methane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	N/A	N/A	N/A	ND	ND	150 J	ND	ND	ND	ND	ND	ND	ND	190 J	ND	530	3700	ND
Butylbenzylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	N/A	N/A	N/A	160 J	150 J	ND	ND	440 J	ND	220 J	310 J	300 J	280 J	ND	250 J	ND	ND	ND
Chrysene	1,000	3,900	56,000	**3500**	**2500**	130 J	**10000**	**5900**	**9600**	**7200**	**8000**	**6400**	**5200**	**3000**	**4900**	830	900	**3400**
Di-n-butylphthalate	N/A	N/A	N/A	280 J	ND	ND	ND	880	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	330	330	560	**1200**	**970**	ND	**3900**	**2100**	**2800**	**2600**	**3500**	**3500**	**1400**	**630**	**2700**	200 J	230 J	**1000**
Dibenzofuran	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100,000	100,000	500,000	3300	2500	ND	9600	6900	2900	4800	6400	5200	5500	1000	4500	800	890	1500
Fluorene	30,000	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	210 J	ND	ND	ND	200 J	ND	ND	ND
Hexachlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	500	500	5,600	**3200**	**2300**	ND	**10000**	**4800**	**4400**	**6700**	**7200**	**7300**	**3500**	**800**	**7000**	350 J	440	**1600**
Isophorone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	12,000	100,000	500,000	ND	120 J	ND	ND	ND	210 J	170 J	220 J	ND	170 J	ND	ND	ND	ND	ND
Nitrobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	800	6,700	6,700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100,000	100,000	500,000	1200	1100	ND	3000	3400	1500	1400	2600	1900	890	840	2300	640	390 J	840
Phenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100,000	100,000	500,000	3000	2300	ND	8700	5500	4900	5100	6100	4800	5100	1200	3800	600	730	1500

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Semi-Volitale Organic Compounds[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SS-30	SI-SS-31	SI-SS-32	SI-SS-33	SI-SS-34	SI-SS-35	SI-SS-36	SI-SS-37	SI-SS-38	SI-SS-39	SI-SS-40	SI-SS-41	SI-SS-42	SI-TP-01 (4)	SI-TP-02 (15)
1,2,4-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2'-oxybis(1-Chloropropane)	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	310 J	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20,000	100,000	500,000	ND	ND	130 J	ND	ND	ND	150 J	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100,000	100,000	500,000	ND	220 J	520	150 J	ND	ND	2500	290 J	ND	140 J	110 J	250 J	ND	ND	ND
Anthracene	100,000	100,000	500,000	ND	210 J	590	ND	ND	ND	1700	160 J	ND	ND	ND	170 J	ND	ND	ND
Benzo(a)anthracene	1,000	1,000	5,600	170 J	610	**1500**	450 J	180 J	170 J	**2900**	370	160 J	260 J	300 J	480	160 J	ND	250 J
Benzo(a)pyrene	1,000	1,000	1,000	190 J	670	**1500**	510 J	170 J	180 J	**2900**	520	190 J	290 J	330 J	630	210 J	ND	240 J
Benzo(b)fluoranthene	1,000	1,000	1,000	270 J	990	**2100**	840	220 J	300 J	**4700**	770	270 J	420	500	900	330 J	ND	310 J
Benzo(g,h,i)perylene	100,000	100,000	500,000	160 J	530	1100	430 J	130 J	180 J	2300	560	150 J	280 J	270 J	540	190 J	ND	170 J
Benzo(k)fluoranthene	800	3,900	1,000	120 J	350 J	**880**	330 J	ND	ND	**2200**	230 J	ND	220 J	170 J	390	150 J	ND	150 J
Bis(2-chloroethoxy)methane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	N/A	N/A	N/A	ND	ND	230 J	ND	ND	ND	420 J	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	1,000	3,900	56,000	190 J	710	**1500**	630	210 J	230 J	**3500**	430	200 J	280 J	370 J	560	210 J	ND	300 J
Di-n-butylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	330	330	560	ND	180 J	320 J	ND	ND	ND	**910**	130 J	ND	ND	ND	180 J	ND	ND	ND
Dibenzofuran	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	230 J	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100,000	100,000	500,000	270 J	1100	2500	970	300 J	320 J	4800	530	290 J	390	480	750	240 J	ND	550
Fluorene	30,000	100,000	500,000	ND	ND	130 J	ND	ND	ND	190 J	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	500	500	5,600	140 J	480	**1000**	380 J	ND	150 J	**2300**	440	130 J	240 J	240 J	490	160 J	ND	140 J
Isophorone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	12,000	100,000	500,000	ND	ND	100 J	ND	ND	ND	330 J	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	800	6,700	6,700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100,000	100,000	500,000	ND	480	1200	490 J	150 J	200 J	1400	200 J	130 J	120 J	170 J	250 J	140 J	ND	380
Phenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100,000	100,000	500,000	220 J	890	2000	760	290 J	270 J	3900	470	260 J	350	430	670	210 J	ND	480

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Semi-Volitale Organic Compounds[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-TP-02A (1)	SI-TP-05 (2)	SI-TP-06 (5)	SI-TP-08 (5.5)	SI-TP-09 (3)	SI-TP-11 (2.5)	SI-TP-12 (2.5)	SI-TP-13 (18)	SI-TP-14 (34)	SI-TP-19 (9.5)	SI-TP-20 (12)	SI-TP-21 (17.5)	SI-TP-22 (16)	SI-TP-23 (5.5)	SI-TP-24 (12)	SI-TP-26 (5.5)
1,2,4-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2´-oxybis(1-Chloropropane)	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	N/A	N/A	N/A	95 J	ND	ND	ND	ND	ND	200 J	ND	250 J	ND	ND	780	1100	8800	ND	ND
2-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3´-Dichlorobenzidine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	100 J	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20,000	100,000	500,000	ND	ND	ND	ND	ND	ND	210 J	370 J	ND	ND	ND	2400	1000	690 J	ND	ND
Acenaphthylene	100,000	100,000	500,000	110 J	510	ND	ND	ND	ND	430	ND	ND	ND	ND	ND	660 J	ND	ND	ND
Anthracene	100,000	100,000	500,000	120 J	460	ND	210 J	1800 J	ND	520	2000	ND	ND	ND	1500	1100	280 J	ND	ND
Benzo(a)anthracene	1,000	1,000	5,600	390	**1900**	160 J	930	**24000**	ND	**1300**	**10000**	230 J	ND	790	620	**3100**	ND	110 J	ND
Benzo(a)pyrene	1,000	1,000	1,000	370	**2000**	180 J	840	**28000**	ND	**1600**	**11000**	210 J	ND	570	570	**2900**	ND	120 J	ND
Benzo(b)fluoranthene	1,000	1,000	1,000	490	**2700**	250 J	990	**40000**	ND	**2200**	**17000**	340 J	ND	**1200**	800	**3700**	270 J	150 J	ND
Benzo(g,h,i)perylene	100,000	100,000	500,000	270 J	1500	160 J	570	26000	ND	1200	10000	190 J	ND	630	340 J	1800	ND	ND	ND
Benzo(k)fluoranthene	800	3,900	1,000	220 J	**1000**	120 J	540	**20000**	ND	**1000**	**6600**	180 J	ND	500	320 J	**1500**	ND	ND	ND
Bis(2-chloroethoxy)methane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	N/A	N/A	N/A	ND	190 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	N/A	N/A	N/A	ND	250 J	ND	130 J	1600 J	ND	380	980 J	ND	ND	ND	ND	510 J	450 J	ND	ND
Chrysene	1,000	3,900	56,000	410	**2100**	200 J	980	**32000**	ND	**1800**	**13000**	300 J	ND	850	750	**2900**	230 J	140 J	ND
Di-n-butylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	330	330	560	ND	**380 J**	ND	170 J	**8900**	ND	320 J	**3500**	ND	ND	200 J	ND	**550 J**	ND	ND	ND
Dibenzofuran	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	210 J	440 J	ND	ND	ND	1700	800	650 J	ND	ND
Diethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100,000	100,000	500,000	790	4500	340 J	1600	31000	100 J	4300	17000	490	ND	1300	2400	7200	380 J	250 J	ND
Fluorene	30,000	100,000	500,000	ND	100 J	ND	93 J	ND	ND	270 J	640 J	ND	ND	ND	5000	2400	1800	ND	ND
Hexachlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	500	500	5,600	230 J	**1300**	130 J	480	**24000**	ND	**1100**	**9200**	170 J	ND	**560**	310 J	**1700**	ND	ND	ND
Isophorone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	12,000	100,000	500,000	ND	ND	ND	ND	ND	ND	170 J	ND	750	ND	ND	280 J	570 J	2100	ND	ND
Nitrobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	800	6,700	6,700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100,000	100,000	500,000	450	2100	210 J	1300	11000	ND	3500	9300	450	ND	350 J	890	6800	2600	ND	ND
Phenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100,000	100,000	500,000	660	3600	300 J	1600	25000	ND	3400	13000	340 J	ND	1000	1800	5700	450 J	200 J	ND

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

emi-Volitale Organic Compounds[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-TP-27 (9)	SI-TP-28 (8)	SI-TP-28-D (8)	SI-TP-29 (8)	SI-TP-31 (5.5)	SI-TP-33 (1.5)	SI-TP-35 (10)	SI-TP-36 (5)	SI-TP-36E (10)	SI-TP-38E (20)	SI-TP-38W (20)	SI-TP-39 (21)	SI-TP-41 (12)	SI-TP-42 (5)	SI-TP-45 (5)	SI-TP-47 (4)
1,2,4-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2'-oxybis(1-Chloropropane)	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	98 J	ND	170 J	220 J	ND	ND	ND	ND	ND	ND
2-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20,000	100,000	500,000	ND	ND	ND	ND	ND	ND	250 J	500 J	ND	95 J	130 J	ND	ND	ND	ND	ND
Acenaphthylene	100,000	100,000	500,000	ND	ND	ND	ND	ND	400 J	130 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
nthracene	100,000	100,000	500,000	ND	ND	ND	ND	ND	360 J	570	930 J	130 J	320 J	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	1,000	1,000	5,600	ND	300 J	420	ND	ND	**1800**	**1300**	**24000**	920	**3800**	480	230 J	ND	150 J	500	600
Benzo(a)pyrene	1,000	1,000	1,000	ND	290 J	390	ND	ND	**1600**	**1000**	**26000**	970	**3800**	690	250 J	ND	150 J	670	730
Benzo(b)fluoranthene	1,000	1,000	1,000	ND	420	540	ND	ND	**2200**	**1200**	**32000**	770	**5300**	700	450	ND	270 J	850	810
Benzo(g,h,i)perylene	100,000	100,000	500,000	ND	220 J	270 J	ND	ND	1300	570	24000	860	3700	650	270 J	ND	170 J	740	750
Benzo(k)fluoranthene	800	3,900	1,000	ND	170 J	230 J	ND	ND	**1200**	690	**11000**	240 J	**2200**	280 J	210 J	ND	ND	390	350 J
Bis(2-chloroethoxy)methane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	390 J	ND	ND	ND	ND	ND	ND	ND	ND	150 J	440
Butylbenzylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	N/A	N/A	N/A	ND	ND	ND	ND	ND	240 J	380	1500 J	ND	360 J	ND	ND	ND	ND	ND	ND
Chrysene	1,000	3,900	56,000	ND	350 J	500	ND	ND	**1800**	**1400**	**28000**	**1600**	**4200**	640	330 J	ND	220 J	980	**1100**
Di-n-butylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	330	330	560	ND	ND	ND	ND	ND	**430 J**	180 J	**9300**	320 J	**1500**	190 J	95 J	ND	ND	290 J	230 J
Dibenzofuran	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	260 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100,000	100,000	500,000	ND	600	970	130 J	ND	3500	3600	23000	610	4400	580	510	ND	280 J	390	370 J
Fluorene	30,000	100,000	500,000	ND	ND	ND	ND	ND	ND	280 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	500	500	5,600	ND	190 J	240 J	ND	ND	**1200**	**540**	**20000**	430	**3200**	490	240 J	ND	130 J	**550**	470
Isophorone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	12,000	100,000	500,000	ND	ND	ND	ND	ND	ND	160 J	ND	120 J	150 J	ND	ND	130 J	ND	ND	ND
Nitrobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	800	6,700	6,700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100,000	100,000	500,000	ND	270 J	480	ND	ND	1100	3600	5200	770	1800	370	400	ND	190 J	230 J	210 J
Phenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100,000	100,000	500,000	ND	480	790	110 J	ND	2600	2800	21000	930	3200	500	360 J	ND	200 J	350 J	480

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Semi-Volitale Organic Compounds[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-TP-48 (2)	SI-SB-01 (06)	SI-SB-02 (6-9)	SI-SB-03 (2-5)	SI-SB-04 (0-5)	SI-SB-05 (0-7)	SI-SB-06 (0-5)	SI-SB-08 (0.5-1)	SI-SB-09 (4-9)	SI-SB-10 (1-5)	SI-SB-11(26-32)	SI-SB-12 (16-20)	SI-SB-13 (17-19)	SI-SB-14 (24-25)
1,2,4-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2´-oxybis(1-Chloropropane)	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	N/A	N/A	N/A	ND	ND	ND	ND	160 J	ND	ND	ND	ND	ND	ND	ND	150 J	ND
2-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3´-Dichlorobenzidine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20,000	100,000	500,000	ND	ND	ND	120 J	710	100 J	200 J	ND	ND	ND	830	ND	330 J	ND
Acenaphthylene	100,000	100,000	500,000	ND	130 J	100 J	170 J	130 J	98 J	ND	ND	ND	ND	330 J	ND	ND	ND
Anthracene	100,000	100,000	500,000	ND	270 J	260 J	550	1400	400	500	ND	ND	ND	150 J	390 J	550	ND
Benzo(a)anthracene	1,000	1,000	5,600	ND	850	940	**1800**	**2500**	930	**1200**	ND	140 J	ND	ND	**6100**	720	230 J
Benzo(a)pyrene	1,000	1,000	1,000	ND	790	830	**1500**	**2100**	820	**1100**	ND	140 J	ND	ND	**7400**	640	260 J
Benzo(b)fluoranthene	1,000	1,000	1,000	ND	**1000**	**1200**	**1900**	**2600**	**1100**	**1400**	ND	210 J	ND	ND	**12000**	810	380 J
Benzo(g,h,i)perylene	100,000	100,000	500,000	ND	530	570	980	1300	570	750	ND	110 J	ND	ND	7100	390	270 J
Benzo(k)fluoranthene	800	3,900	1,000	ND	430	500	**1000**	**1400**	500	740	ND	ND	ND	ND	**3800**	320 J	140 J
Bis(2-chloroethoxy)methane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	N/A	N/A	N/A	200 J	220 J	330 J	ND	140 J	270 J	150 J	ND	620	ND	ND	ND	340 J	ND
Butylbenzylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	N/A	N/A	N/A	ND	ND	170 J	230 J	830	250 J	360 J	ND	ND	ND	ND	360 J	230 J	ND
Chrysene	1,000	3,900	56,000	ND	790	920	**1800**	**2300**	930	**1200**	ND	170 J	ND	ND	**7400**	710	260 J
Di-n-butylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	330	330	560	ND	130 J	150 J	260 J	**380 J**	160 J	200 J	ND	ND	ND	ND	**2800**	120 J	ND
Dibenzofuran	N/A	N/A	N/A	ND	ND	ND	ND	460	100 J	120 J	ND	ND	ND	180 J	ND	240 J	ND
Diethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100,000	100,000	500,000	ND	1600	1900	3700	5100	2200	2700	120 J	300 J	ND	190 J	6500	1700	410 J
Fluorene	30,000	100,000	500,000	ND	ND	ND	140 J	810	150 J	210 J	ND	ND	ND	740	ND	350 J	ND
Hexachlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	500	500	5,600	ND	460	**500**	**860**	**1200**	**510**	**660**	ND	ND	ND	ND	**6100**	340 J	220 J
Isophorone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	12,000	100,000	500,000	ND	ND	ND	ND	300 J	ND	77 J	ND	ND	ND	250 J	ND	490	ND
Nitrobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	800	6,700	6,700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100,000	100,000	500,000	ND	800	1200	2100	5000	1800	2100	ND	160 J	ND	2000	2200	2100	310 J
Phenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100,000	100,000	500,000	ND	1500	1500	3100	4100	1700	2200	110 J	260 J	ND	190 J	5500	1500	350 J

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Semi-Volitale Organic Compounds[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SB-16 (0-4)	SI-SB-17 (8-11.5)	SI-SB-18 (22.5-24.3)	SI-SB-19 (0-4)	SI-SB-19 (10-15)	SI-SB-20 (15-16.7)	SI-SB-25 (4-7.2)	SI-SB-26 (10-14)	SI-SB-29 (12-14.5)	SI-SB-30 (12-14)	SI-SB-31 (12-15.4)	SI-SB-32 (11-13.9)
1,2,4-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2'-oxybis(1-Chloropropane)	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	N/A	N/A	N/A	200 J	73 J	ND	130 J	17000	44000	ND	ND	ND	74 J	ND	140 J
2-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20,000	100,000	500,000	190 J	ND	ND	ND	1600 J	3300 J	ND	ND	ND	ND	ND	1200
Acenaphthylene	100,000	100,000	500,000	430 J	ND	ND	120 J	ND	ND	89 J	ND	ND	ND	ND	ND
Anthracene	100,000	100,000	500,000	1100	160 J	ND	120 J	730 J	ND	120 J	ND	ND	ND	ND	1300
Benzo(a)anthracene	1,000	1,000	5,600	**6100**	510	ND	570	480 J	ND	410	ND	ND	100 J	310 J	ND
Benzo(a)pyrene	1,000	1,000	1,000	**5300**	500	110 J	590	ND	ND	400	ND	ND	ND	280 J	ND
Benzo(b)fluoranthene	1,000	1,000	1,000	**6300**	740	150 J	910	670 J	ND	480	ND	ND	140 J	400 J	ND
Benzo(g,h,i)perylene	100,000	100,000	500,000	3500	370	100 J	460	ND	ND	260 J	ND	ND	ND	240 J	ND
Benzo(k)fluoranthene	800	3,900	1,000	**2700**	240 J	ND	290 J	ND	ND	220 J	ND	ND	ND	190 J	ND
Bis(2-chloroethoxy)methane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	1200 J	990	350 J	140 J	180 J	ND	ND
Butylbenzylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	N/A	N/A	N/A	280 J	110 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	1,000	3,900	56,000	**7100**	560	ND	660	580 J	ND	410	ND	ND	130 J	410 J	100 J
Di-n-butylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	330	330	560	**1300**	110 J	ND	130 J	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	N/A	N/A	N/A	190 J	ND	ND	ND	880 J	2000 J	ND	ND	ND	ND	ND	1100
Diethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100,000	100,000	500,000	9600	1100	ND	1200	1300 J	ND	980	ND	150 J	230 J	700	300 J
Fluorene	30,000	100,000	500,000	330 J	ND	ND	ND	2900	5600	ND	ND	ND	ND	ND	2700
Hexachlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	500	500	5,600	**2600**	320 J	ND	410	ND	ND	230 J	ND	ND	ND	200 J	ND
Isophorone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	12,000	100,000	500,000	ND	81 J	ND	ND	2200	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	800	6,700	6,700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100,000	100,000	500,000	4800	850	ND	640	5600	10000	660	ND	ND	230 J	330 J	860
Phenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100,000	100,000	500,000	7600	870	ND	950	1400 J	ND	820	ND	130 J	180 J	530	1200

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Semi-Volitale Organic Compounds[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SB-33 (10-12.3)	SI-SB-34 (16-22)	SI-SB-34-D	SI-SB-35 (18-20)	SI-SB-36 (18-20.9)	SI-SB-37 (14-15.5)	SI-WB1 (6-8.5)	SI-WB-03 (17-18)
1,2,4-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
2,2´-oxybis(1-Chloropropane)	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	130 J
2-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
3,3´-Dichlorobenzidine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20,000	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100,000	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	100,000	100,000	500,000	ND	ND	140 J	ND	ND	ND	ND	ND
Benzo(a)anthracene	1,000	1,000	5,600	110 J	130 J	280 J	ND	ND	ND	ND	460
Benzo(a)pyrene	1,000	1,000	1,000	130 J	150 J	210 J	ND	ND	ND	ND	690
Benzo(b)fluoranthene	1,000	1,000	1,000	200 J	220 J	280 J	ND	ND	ND	ND	1000
Benzo(g,h,i)perylene	100,000	100,000	500,000	130 J	140 J	130 J	ND	ND	ND	ND	780
Benzo(k)fluoranthene	800	3,900	1,000	ND	ND	160 J	ND	ND	ND	ND	400
Bis(2-chloroethoxy)methane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	N/A	N/A	N/A	400	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	1,000	3,900	56,000	160 J	220 J	280 J	ND	ND	ND	ND	570
Di-n-butylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	330	330	560	ND	ND	ND	ND	ND	ND	ND	230 J
Dibenzofuran	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100,000	100,000	500,000	290 J	200 J	560	ND	ND	ND	ND	660
Fluorene	30,000	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	500	500	5,600	110 J	120 J	120 J	ND	ND	ND	ND	650
Isophorone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	12,000	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	95 J
Nitrobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	800	6,700	6,700	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100,000	100,000	500,000	210 J	ND	480	ND	ND	ND	ND	410
Phenol	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100,000	100,000	500,000	220 J	170 J	410 J	ND	ND	ND	ND	560

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Metals[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SS-01	SI-SS-02	SI-SS-03	SI-SS-04	SI-SS-05	SI-SS-06	SI-SS-07	SI-SS-08	SI-SS-09	SI-SS-10	SI-SS-11	SI-SS-12	SI-SS-13	SI-SS-14
Aluminum	N/A	N/A	N/A	3330	3690	2880	5450	2670	2540	2750	4510	4450	3960	4110	3850	7790	2460
Antimony	N/A	N/A	N/A	0.33 BN	0.49 BN	0.23 BN	0.64 BN	0.31 BN	0.61 BN	0.65 BN	0.89 N	2.8 N	1.3 N	4.2 N	0.89 N	0.25 BN	2.8 N
Arsenic	13	16	16	3.1	4.5	2.5	6.3	2.9	10.2	6.5	13.9	12.1	17.3	33.8	4.1	3.5	3.4
Barium	350	400	400	34.1	35.9	27.0	49.5	22.2	48.6	37.0	62.8	78.1	68.7	95.2	45.4	88.0	43.6
Beryllium	7.2	72	590	0.19 BE	0.23 E	0.17 E	0.42 E	0.18 BE	0.31 E	0.23 E	0.65 E	0.37 E	0.52 E	0.56 E	0.21 E	0.39 E	0.18 E
Cadmium	2.5	4.3	9.3	0.30 E	0.71 E	0.24 E	0.37 E	0.45 E	0.26 E	0.38 E	0.70 E	1.1 E	0.48 E	0.70 E	0.55 E	0.26 E	1.2 E
Calcium	N/A	N/A	N/A	128000	49000	117000	82800	118000	3460	58600	9840	8340	8470	13700	10100	172000	148000
Chromium	1	110	400	10.4 *	10.9 *	6.7 *	9.1 *	8.4 *	8.3 *	12.7 *	11.3 *	16.4 *	10.9 *	18.4 *	12.6 *	9.4 *	13.6 *
Cobalt	N/A	N/A	N/A	3.8 E	3.6 E	1.6 BE	3.7 E	2.3 E	3.2 E	3.1 E	8.2 E	4.8 E	5.9 E	5.5 E	2.1 E	1.7 BE	1.8 E
Copper	50	270	270	45.5	126	27.5	46.5	46.7	51.3	90.2	80.5	78.1	131	148	86.7	30.3	104
Iron	N/A	N/A	N/A	17500	16600	14200	28800	17700	16600	19100	35600	27500	31900	38500	17000	8100	23900
Lead	63	400	1,000	53.0 E	126 E	39.8 E	147 E	50.2 E	92.8 E	82.4 E	230 E	463 E	172 E	211 E	119 E	44.7 E	130 E
Magnesium	N/A	N/A	N/A	3880 E	2060 E	7980 E	5270 E	6800 E	307 E	2190 E	1120 E	780 E	1210 E	1200 E	1080 E	4620 E	2940 E
Manganese	1600	2,000	10,000	315 E	258 E	229 E	306 E	291 E	284 E	290 E	311 E	309 E	238 E	258 E	276 E	377 E	209 E
Mercury	0.18	0.81	2.8	0.089	0.14	0.087	3.0	0.038	0.19	0.082	0.29	0.56	0.28	0.27	0.064	0.088	0.29
Nickel	30	310	310	12.7 *E	13.1 *E	7.4 *E	10.4 *E	10.9 *E	12.2 *E	14.3 *E	17.4 *E	14.4 *E	14.5 *E	17.4 *E	15.2 *E	5.8 *E	12.0 *E
Potassium	N/A	N/A	N/A	620	385	417	741	475	319	377	609	744	463	592	388	1170	429
Selenium	3.9	180	1,500	3.7	1.1	3.0	1.6	2.8	1.0 B	1.9	1.2	2.1	1.6	0.84 B	0.69 B	4.2	3.2
Silver	2	180	1,500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	N/A	N/A	N/A	91.5	83.8	133	198	83.6	66.8	87.7	43.1	59.0	61.2	68.6	53.7	420	82.0
Thallium	N/A	N/A	N/A	0.50 BN	0.31 BN	0.45 BN	0.31 BN	0.59 BN	ND	0.39 BN	0.29 BN	ND	0.37 BN	ND	ND	0.57 BN	0.54 BN
Vanadium	N/A	N/A	N/A	8.4	9.2	5.7	16.4	6.6	9.8	8.5	15.8	12.9	13.3	15.4	10.0	12.8	5.8
Zinc	109	10,000	10,000	65.5 E	137 E	46.5 E	79.3 E	140 E	58.2 E	72.8 E	137 E	202 E	91.8 E	161 E	114 E	45.9 E	283 E

1 - All values presented in miligrams per kilogram (mg/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Metals[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SS-15	SI-SS-16	SI-SS-17	SI-SS-18	SI-SS-19	SI-SS-20	SI-SS-21	SI-SS-22	SI-SS-22D	SI-SS-23	SI-SS-24	SI-SS-25	SI-SS-26	SI-SS-27
Aluminum	N/A	N/A	N/A	2750	4330	5760	12700	4610	3300	4220	2770	2990	3040	3160	2900	3920	4570
Antimony	N/A	N/A	N/A	0.52 BN	0.72 N	2.2 N	ND	2.1 N	3.1 N	0.49 BN	1.9 N	1.6 N	2.8 N	4.0 N	0.53 BN	0.41 BN	1.6 N
Arsenic	13	16	16	2.1	6.0	9.3	2.9	5.7	9.4	5.0	5.3	6.5	5.0	6.5	4.3	3.8	3.3
Barium	350	400	400	26.3	43.4	82.8	110	48.7	203	67.1	64.8	53.5	54.7	58.2	43.0	33.4	61.1
Beryllium	7.2	72	590	0.17 E	0.22 E	0.39 E	0.73 E	0.25 E	0.15 BE	0.18 B	0.15 B	0.15 B	0.12 B	0.14 B	0.10 B	0.15 B	0.25 B
Cadmium	2.5	4.3	9.3	0.66 E	1.6 E	1.8 E	0.28 E	2.4 E	8.7 E	0.57	0.94	1.7	1.5	2.7	1.0	0.79	0.54
Calcium	N/A	N/A	N/A	109000	58500	36400	9070	16000	2150	3430	12600	18700	2910	4980	4870	3340	124000
Chromium	1	110	400	11.5 *	9.8 *	21.2 *	16.8 *	20.6 *	27.5 *	20.6	20.2	23.7	92.6	31.7	20.5	21.1	15.6
Cobalt	N/A	N/A	N/A	2.3 E	2.3 E	4.1 E	8.6 E	4.0 E	7.1 E	5.2 E	4.1 E	6.0 E	6.1 E	6.9 E	4.3 E	4.9 E	3.9 E
Copper	50	270	270	67.5	112	178	20.7	553	185	66.9 N	175 N	159 N	105 N	2650 N	79.7 N	96.5 N	58.2 N
Iron	N/A	N/A	N/A	15800	25400	38900	25300	54300	146000	20300	26700	37900	82300	35500	23000	50000	25600
Lead	63	400	1,000	102 E	989 E	341 E	16.1 E	128 E	289 E	73.3 E	228 E	235 E	495 E	413 E	139 E	77.3 E	71.1 E
Magnesium	N/A	N/A	N/A	4230 E	2940 E	1120 E	5750 E	1290 E	577 E	769	861	988	683	848	1140	401	4640
Manganese	1600	2,000	10,000	268 E	383 E	443 E	490 E	569 E	657 E	341	272	324	488	401	234	696	381
Mercury	0.18	0.81	2.8	0.089	0.11	0.34	0.061	1.0	0.23	0.10	0.16	0.13	0.15	0.42	0.17	0.082	0.20
Nickel	30	310	310	6.8 *E	11.4 *E	23.3 *E	16.0 *E	32.6 *E	55.7 *E	17.4	32.5	39.3	68.1	59.4	31.7	41.7	20.0
Potassium	N/A	N/A	N/A	460	451	411	2190	386	300	353	254	266	284	243	249	385	565
Selenium	3.9	180	1,500	2.8	1.7	ND	ND	ND	ND	1.3 B	1.2 B	ND	ND	1.1 B	0.46 B	ND	3.5
Silver	2	180	1,500	ND	ND	0.10 B	ND	ND	ND	ND	ND	ND	ND	0.70 B	ND	ND	ND
Sodium	N/A	N/A	N/A	69.8	68.7	65.3	167	63.1	50.5	69.2	42.4 B	64.0	42.9	34.1 B	24.4 B	40.4 B	102
Thallium	N/A	N/A	N/A	0.52 BN	0.30 BN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	N/A	N/A	N/A	5.5	10	13.5	25.8	12.6	8.1	7.4	8.0	9.6	8.6	10.5	9.2	8.8	7.7
Zinc	109	10,000	10,000	196 E	242 E	313 E	65.5 E	203 E	2120 E	101 E	150 E	518 E	173 E	386 E	165 E	93.4 E	92.4 E

1 - All values presented in miligrams per kilogram (mg/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Metals[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SS-28	SI-SS-29	SI-SS-30	SI-SS-31	SI-SS-32	SI-SS-33	SI-SS-34	SI-SS-35	SI-SS-36	SI-SS-37	SI-SS-38	SI-SS-39	SI-SS-40	SI-SS-41
Aluminum	N/A	N/A	N/A	4770	3410	8920	3010	9160	9090	6960	9340	5820	2350	8860	3100	3210	2330
Antimony	N/A	N/A	N/A	0.31 BN	0.59 BN	ND	0.13 BN	0.25 BN	1.9 N	0.13 BN	0.17 BN	0.74 BN	ND	0.10 BN	ND	0.090 BN	0.41 BN
Arsenic	13	16	16	4.6	5.7	2.3	11.5	6.8	19.9	3.0	8.5	12.8	1.5	4.5	1.9	2.4	3.4
Barium	350	400	400	97.7	90.2	62.0	29.4	73.8	88.0	43.2	60.9	51.9	21.1	90.3	62.9	22.9 E	21.8 E
Beryllium	7.2	72	590	0.24	0.16 B	0.51	0.18 B	0.78	0.89	0.47	0.55	0.37	0.11 B	0.42	0.15 B	0.27	0.18
Cadmium	2.5	4.3	9.3	0.39	0.71	0.28	0.32	1.1	2.2	0.45	0.75	0.58	0.13 B	0.30	0.16 B	0.21	0.36
Calcium	N/A	N/A	N/A	150000	65300	44400	126000	14100	56300	63100	22500	124000	196000	90000	194000	137000 *	139000 *
Chromium	1	110	400	20.3	50.8	9.9	5.4	12.8	14.0	8.2	8.4	10.9	5.6	11.4	4.3	4.7 E	5.4 E
Cobalt	N/A	N/A	N/A	3.9 E	5.5 E	3.9 E	2.3 E	5.3 E	4.5 E	4.4 E	4.3 E	3.6 E	1.3 BE	4.5 E	1.7 BE	2.0 E	1.5 BE
Copper	50	270	270	30.2 N	81.5 N	19.3 N	17.8 N	41.6 N	79.7 N	27.6 N	29.9 N	76.5 N	11.0 N	40.9 N	14.1 N	23.3	43.8
Iron	N/A	N/A	N/A	25400	43400	15300	6560	23700	28100	13000	47000	24700	5950	12900	6010	6830	15700
Lead	63	400	1,000	37.5 E	114 E	38.9 E	78.6 E	52.7 E	193 E	32.8 E	49.7 E	75.4 E	15.1 E	72.1 E	18.9 E	39.5 E	45.2 E
Magnesium	N/A	N/A	N/A	4800	4610	3000	5820	2430	1230	4460	6650	3380	3820	4350	6360	4120 E	2720 E
Manganese	1600	2,000	10,000	488	530	554	224	504	526	416	291	276	218	275	224	244 *E	237 *E
Mercury	0.18	0.81	2.8	0.11	0.14	0.088	0.18	0.20	0.35	0.16	0.14	0.29	0.062	0.14	0.018 B	0.085	0.12
Nickel	30	310	310	18.0	40.8	7.5	5.6	13.7	15.3	9.2	8.1	11.4	4.3	10.5	4.6	4.9 E	4.6 E
Potassium	N/A	N/A	N/A	730	411	895	635	1270	687	845	952	1140	513	1730	616	506	396
Selenium	3.9	180	1,500	3.8	1.4	1.5 B	3.8	1.1 B	4.9	2.6	2.1	3.8	5.1	3.3	5.5	3.1	2.6
Silver	2	180	1,500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	N/A	N/A	N/A	155	64.0	84.4	93.0	62.0	67.6 B	102	124	138	117	162	90.8	100 *	76.7 *
Thallium	N/A	N/A	N/A	0.55 B	ND	0.77 B	ND	ND	ND	ND	ND	ND	ND	ND	0.36 B	0.49 B	0.49 B
Vanadium	N/A	N/A	N/A	7.6	17.5	16.5	7.4	19.8	21.8	11.3	20.0	13.0	4.7	19.1	5.6	5.8 E	7.7 E
Zinc	109	10,000	10,000	69.2 E	71.2 E	64.6 E	67.2 E	312 E	543 E	116 E	156 E	106 E	27.2 E	130 E	31.9 E	47.8 E	57.9 E

1 - All values presented in miligrams per kilogram (mg/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Metals[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SS-42	SI-TP-01 (4)	SI-TP-02 (15)	SI-TP-02A (1)	SI-TP-05 (2)	SI-TP-06 (5)	SI-TP-08 (5.5)	SI-TP-09 (3)	SI-TP-11 (2.5)	SI-TP-12 (2.5)	SI-TP-13 (18)	SI-TP-14 (34)	SI-TP-19 (9.5)
Aluminum	N/A	N/A	N/A	3260	7920	6120	5770	4410	4140	3560	2880	5440	4120	5590	4540	13800
Antimony	N/A	N/A	N/A	1.7 N	1.5 N	0.72 BN	ND	1.3 N	1.3 N	13.0 N	0.38 BN	0.65 BN	0.77 BN	7.5 N	2.9 N	ND
Arsenic	13	16	16	4.1	3.4	4.3	5.3	9.6	9.7	28.6	2.2	3.4	14.2	3.9	8.4	6.2
Barium	350	400	400	33.6 E	41.5 E	31.0 E	85.2 E	37.6 E	88.0 E	18.8 E	13.5 E	27.0 E	65.4 E	58.2 E	140 E	79.4 E
Beryllium	7.2	72	590	0.22	0.51 E	0.31 E	0.27 E	0.26 BE	0.44 E	0.14 BE	0.11 BE	0.30 E	0.50 E	0.21 BE	0.51 E	1.4 E
Cadmium	2.5	4.3	9.3	0.52	0.54	0.23	0.26	0.27 B	0.29 B	9.1	0.077 B	0.13 B	0.27	0.50	1.4	0.72
Calcium	N/A	N/A	N/A	21900 *	17200	25900	33800	16900	127000	15300	12100	120000	31000	43300	34800	7210
Chromium	1	110	400	16.8 E	6.1 E	13.4 E	8.7 E	12.4 E	11.7 E	37.5 E	5.8 E	7.5 E	9.9 E	12.1 E	8.1 E	10.3 E
Cobalt	N/A	N/A	N/A	2.3 E	2.8 B	3.1	1.9 B	6.6	4.2	10.3	1.0 B	2.8	11.9	2.1 B	3.9	4.4
Copper	50	270	270	811	96.3 *	81.4 *	43.9 *	324 *	82.6 *	6320 *	31.1 *	37.4 *	69.0 *	153 *	98.3 *	8.9 *
Iron	N/A	N/A	N/A	21700	14400 E	31900 E	22900 E	76600 E	34000 E	364000 E	7730 E	19500 E	44900 E	20600 E	12900 E	22600 E
Lead	63	400	1,000	106 E	291 N*E	60.3 N*E	96.5 N*E	99.1 N*E	147 N*E	309 N*E	32.2 N*E	278 N*E	235 N*E	324 N*E	260 N*E	23.5 N*E
Magnesium	N/A	N/A	N/A	2060 E	1100 E	2020 E	2030 E	1000 E	5480 E	1290 E	912 E	5030 E	3310 E	2100 E	1950 E	1690 E
Manganese	1600	2,000	10,000	502 *E	164 E	642 E	544 E	846 E	364 E	1710 E	127 E	432 E	269 E	351 E	156 E	615 E
Mercury	0.18	0.81	2.8	0.067	1.6 *	0.18 *	0.12 *	0.047 *	0.17 *	0.17 *	0.032 *	0.095 *	4.5 *	0.32 *	1.0 *	0.075 *
Nickel	30	310	310	16.8 E	6.0 E	7.4 E	6.3 E	11.6 E	12.0 E	32.2 E	4.7 E	6.3 E	21.1 E	12.6 E	13.5 E	10.1 E
Potassium	N/A	N/A	N/A	334	609	765	637	372	671	249	241	593	369	508	503	610
Selenium	3.9	180	1,500	0.48 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	2	180	1,500	0.24 B	ND	ND	ND	ND	ND	0.51 B	ND	ND	ND	ND	ND	ND
Sodium	N/A	N/A	N/A	184 *	95.0	133	232	91.8	96.4	52.5	41.7 B	73.6	101	80.9	106	54.1 B
Thallium	N/A	N/A	N/A	ND	ND	0.86 B	0.69 B	ND	0.69 B	ND	ND	0.92	0.86 B	0.42 B	0.61 B	ND
Vanadium	N/A	N/A	N/A	9.4 E	13.1	23.6	15.9	29.5	12.5	77.9	6.4	12.6	18.9	16.8	10.2	19.1
Zinc	109	10,000	10,000	326 E	276 NE	82.8 NE	76.4 NE	167 NE	121 NE	474 NE	31.1 NE	50.2 NE	105 NE	227 NE	578 NE	189 NE

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2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Metals[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-TP-20 (12)	SI-TP-21 (17.5)	SI-TP-22 (18)	SI-TP-23 (5.5)	SI-TP-24 (12)	SI-TP-26 (5.5)	SI-TP-27 (9)	SI-TP-28 (8)	SI-TP-28-D (8)	SI-TP-29 (8)	SI-TP-31 (5.5)	SI-TP-33 (1.5)	SI-TP-35 (10)
Aluminum	N/A	N/A	N/A	6310	3430	5200	5590	7040	6220	13300	10700	10100	15000	16300	8080	5840
Antimony	N/A	N/A	N/A	4.4 N	0.17 BN	1.7 N	0.78 BN	0.44 BN	0.57 BN	0.27 BN	0.54 BN	0.43 BN	0.32 BN	0.16 BN	2.9 N	0.29 BN
Arsenic	13	16	16	22.0	4.9	4.5	9.9	3.1	10.1	2.6	6.6	7.2	3.6	3.4	13.7	4.7
Barium	350	400	400	56.6 E	33.8	38.4	60.7	35.7	590	85.0	107	114	108	80.7	104	24.6
Beryllium	7.2	72	590	0.37 E	0.21 B	0.37	0.41	0.37	0.58 E	0.95 E	0.87 E	0.79 E	1.2 E	1.2 E	0.60 E	0.36 E
Cadmium	2.5	4.3	9.3	0.55	ND	0.23 B	0.38	0.042 B	0.22 BE	0.21 BE	0.48 E	0.95 E	0.26 BE	0.64 E	2.9 E	0.22 BE
Calcium	N/A	N/A	N/A	14900	1980 *	41600 *	18300 *	4070 *	20800 *	6930 *	17400 *	20200 *	7750 *	39000 *	10200 *	12100 *
Chromium	1	110	400	12.2 E	10.8	9.5	13.2	8.6	29.5	14.7	22.7	20.8	18.8	15.0	18.2	10.2
Cobalt	N/A	N/A	N/A	6.5	3.4	3.7	3.8	5.8	6.4 E	7.1 E	5.8 E	5.6 E	8.8 E	5.5 E	7.6 E	3.8 E
Copper	50	270	270	190 *	57.8	141	116	57.9	167 N	12.5 N	84.7 N	120 N	21.5 N	12.5 N	95.3 N	27.6 N
Iron	N/A	N/A	N/A	51300 E	34300	21900	56000	21100	6380 *	23500 *	28100 *	56100 *	28500 *	23900 *	48700 *	23200 *
Lead	63	400	1,000	231 N*E	36.6 *	93.2 *	110 *	44.9 *	10100 E	11.8 E	175 E	200 E	15.1 E	14.8 E	275 E	29.0 E
Magnesium	N/A	N/A	N/A	2220 E	643	3270	1290	1450	681	3480	3490	3310	5020	3060	939	1500
Manganese	1600	2,000	10,000	560 E	345	260	662	329	211 E	388 E	447 E	445 E	489 E	408 E	348 E	212 E
Mercury	0.18	0.81	2.8	0.097 *	11.4	9.3	10.3	13.4	714 *	0.033 *	3.8 *	2.2 *	0.037 *	0.069 *	5.4 *	0.025 B*
Nickel	30	310	310	11.0 E	319	597	671	860	13.0 E	11.9 E	13.5 E	13.7 E	15.8 E	13.2 E	13.5 E	6.7 E
Potassium	N/A	N/A	N/A	754	ND	ND	ND	0.72 B	577	1360	1550	1430	1980	1310	650	690
Selenium	3.9	180	1,500	ND	ND	ND	ND	ND	1.5 B	2.1	2.4	3.5	2.9	1.3 B	5.7	2.6
Silver	2	180	1,500	ND	61.7	90.7	144	105	0.57 B	ND	ND	ND	ND	ND	0.89 B	ND
Sodium	N/A	N/A	N/A	116	0.83 B	0.59 B	0.52 B	0.73 B	345	161	183	171	234	110	83.9	119
Thallium	N/A	N/A	N/A	0.95	26.5	14.4	26.2	16.9	ND	ND	ND	ND	ND	ND	0.55 B	ND
Vanadium	N/A	N/A	N/A	21.9	47.7	113	133	71.2	22.8	25.0	24.2	21.4	30.3	24.6	14.4	19.6
Zinc	109	10,000	10,000	301 NE	ND	0.24	0.043	0.12	172 NE	44.6 NE	112 NE	115 NE	61.1 NE	137 NE	701 NE	30.1 NE

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Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Metals[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-TP-36 (5)	SI-TP-38E (10)	SI-TP-38E (20)	SI-TP-38W (20)	SI-TP-39 (21)	SI-TP-41 (12)	SI-TP-42 (5)	SI-TP-45 (5)	SI-TP-47 (4)	SI-TP-48 (2)	SI-SB-01 (06)	SI-SB-02 (6-9)	SI-SB-03 (2-5)
Aluminum	N/A	N/A	N/A	9050	5260	7750	6210	7340	1150	830	2770	1970	17700	4340 E	5830 E	7010 E
Antimony	N/A	N/A	N/A	0.36 BN	0.39 BN	0.75 BN	1.0 BN	0.77 BN	0.30 BN	0.20 BN	0.42 BN	0.15 BN	0.29 BN	ND	1.4 N	ND
Arsenic	13	16	16	3.2	3.1	2.9	5.4	3.8	3.6	0.90	2.9	2.6	2.3	2.2	12.1	3.4
Barium	350	400	400	43.3	42.4	45.7	33.5	37.8	7.6 B	10.5	26.2	35.6	50.2	37.7 E	67.3 E	72.8 E
Beryllium	7.2	72	590	0.33 E	0.22 E	0.52 E	0.44 E	0.46 E	0.080 BE	0.044 BE	0.21 BE	0.19 BE	0.78 E	0.31 E	0.54 E	0.52 E
Cadmium	2.5	4.3	9.3	1.1 E	0.41 E	0.37 E	0.74 E	0.44 E	0.11 BE	0.15 BE	0.43 E	0.56 E	0.59 E	0.11 B	2.0	0.20 B
Calcium	N/A	N/A	N/A	16300 *	9760 *	19000 *	4780 *	11100 *	1260 *	1270 *	20900 *	5160 *	5890 *	158000	24000	103000
Chromium	1	110	400	**41.8**	**18.7**	**21.8**	**65.5**	**10.8**	**9.7**	**4.2**	**25.7**	**16.9**	**8.7**	**6.5 E**	**32.2 E**	**10.3 E**
Cobalt	N/A	N/A	N/A	3.0 E	2.5 E	2.3 E	4.3 E	3.3 E	0.72 BE	0.45 BE	3.3 E	2.7 E	3.1 E	2.0 BN	6.7 N	4.2 N
Copper	50	270	270	30.6 N	**81.4 N**	**616 N**	**389 N**	**150 N**	16.4 N	14.5 N	**54.7 N**	45.7 N	8.1 N	17.8 E	**180 E**	15.7 E
Iron	N/A	N/A	N/A	14900 *	10100 *	18200 *	39000 *	22400 *	7290 *	5130 *	23900 *	12400 *	20800 *	8140 E	131000 E	12600 E
Lead	63	400	1,000	37.8 E	**116 E**	**103 E**	**212 E**	58.7 E	6.2 E	11.6 E	**99.7 E**	35.6 E	21.0 E	32.5 E	**167 E**	**220 E**
Magnesium	N/A	N/A	N/A	1740	1130	1600	917	2000	113	115	590	521	1200	5400 E	3370 E	6250 E
Manganese	1600	2,000	10,000	163 E	**1600 E**	766 E	700 E	507 E	236 E	68.1 E	1120 E	150 E	123 E	242 E	734 E	353 E
Mercury	0.18	0.81	2.8	**0.31 ***	0.029 B*	0.026 B*	0.091 *	**0.47 ***	0.0074 B*	0.022 B*	0.059 *	0.16 *	0.074 *	0.11	**0.79**	0.070
Nickel	30	310	310	17.9 E	13.0 E	14.9 E	15.3 E	17.4 E	7.2 E	4.6 E	**30.9 E**	20.8 E	8.0 E	5.4 NE	20.2 NE	10.1 NE
Potassium	N/A	N/A	N/A	890	448	694	643	854	106	92.4	304	273	315	639	731	1570
Selenium	3.9	180	1,500	2.0	1.6	2.0	**4.4**	2.6	1.3 B	0.98 B	2.7	2.0	2.3	1.4	ND	1.0 B
Silver	2	180	1,500	ND	ND	0.12 B	ND	ND	ND	1.5	0.21 B	**3.7**	ND	ND	ND	ND
Sodium	N/A	N/A	N/A	110	104	187	118	132	181	35.5 B	123	85.8	48.4 B	192	189	182
Thallium	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77 BN	ND	0.43 BN
Vanadium	N/A	N/A	N/A	12.4	7.4	14.4	27.4	16.1	4.0	2.3	10.4	5.3	18.4	10.1 E	52.2 E	14.6 E
Zinc	109	10,000	10,000	**160 NE**	80.7 NE	**174 NE**	**204 NE**	**167 NE**	21.5 NE	19.0 NE	81.7 NE	44.1 NE	**174 NE**	27.8 N*E	**141 N*E**	58.5 N*E

1 - All values presented in miligrams per kilogram (mg/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Metals[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SB-04 (0-5)	SI-SB-05 (0-7)	SI-SB-06 (0-5)	SI-SB-08 (0.5-1)	SI-SB-09 (4-9)	SI-SB-10 (1-5)	SI-SB-11(26-32)	SI-SB-12 (16-20)	SI-SB-13 (17-19)	SI-SB-14 (24-25)	SI-SB-16 (0-4)	SI-SB-17 (8-11.5)
Aluminum	N/A	N/A	N/A	10900 E	9750 E	8150 E	2510 E	3870 E	1350 E	7010 E	4290 E	1590 E	5640 E	2540 E	4680 E
Antimony	N/A	N/A	N/A	0.58 BN	ND	0.29 BN	0.28 BN	0.68 BN	1.5 N	1.8 N	0.57 BN	0.52 BN	0.66 BN	0.39 BN	0.93 BN
Arsenic	13	16	16	3.2	4.0	3.9	3.7	3.2	15.6	30.5	5.6	2.6	4.5	4.1	7.7
Barium	350	400	400	112 E	100 E	177 E	24.0 E	26.4 E	21.4 E	53.0 E	54.4 E	32.7 E	96.1 E	26.1 E	48.7 E
Beryllium	7.2	72	590	0.87 E	0.73 E	0.62 E	0.22 E	0.29 E	0.16 BE	1.4 E	0.30 E	0.16 BE	0.58 E	0.19 BE	0.40 E
Cadmium	2.5	4.3	9.3	0.25 B	0.23	0.35	0.19 B	0.20 B	3.7	1.3	0.76	0.086 B	0.70	0.33	0.67
Calcium	N/A	N/A	N/A	112000	47100	89700	105000	101000	60400	31500	22700	241000	9240	97300	117000
Chromium	1	110	400	14.1 E	13.8 E	15.9 E	7.2 E	6.3 E	31.0 E	25.9 E	18.2 E	4.0 E	16.6 E	14.1 E	10.6 E
Cobalt	N/A	N/A	N/A	6.5 N	5.8 N	4.7 N	1.9 BN	2.3 N	9.3 N	18.3 N	3.9 N	0.87 BN	7.0 N	3.7 N	3.5 N
Copper	50	270	270	36.1 E	21.1 E	33.2 E	52.9 E	36.1 E	56.8 E	1890 E	215 E	82.2 E	390 E	35.5 E	655 E
Iron	N/A	N/A	N/A	25800 E	21700 E	15500 E	21100 E	21400 E	224000 E	39000 E	45100 E	5190 E	17400 E	15400 E	39300 E
Lead	63	400	1,000	60.9 E	483 E	140 E	13.1 E	129 E	39.7 E	216 E	97.8 E	148 E	231 E	39.9 E	144 E
Magnesium	N/A	N/A	N/A	6300 E	5600 E	7340 E	3700 E	2280 E	820 E	1960 E	1150 E	2110 E	1920 E	1370 E	3210 E
Manganese	1600	2,000	10,000	648 E	410 E	408 E	304 E	228 E	923 E	146 E	649 E	114 E	252 E	219 E	453 E
Mercury	0.18	0.81	2.8	0.12	0.047	0.11	0.11	0.066	ND	0.70	0.072	0.22	3.6	0.10	0.064
Nickel	30	310	310	13.8 NE	12.2 NE	12.4 NE	5.3 NE	6.3 NE	20.8 NE	42.2 NE	21.5 NE	4.5 NE	17.9 NE	13.5 NE	9.7 NE
Potassium	N/A	N/A	N/A	1860	1840	1430	389	511	148	508	401	199	606	204	736
Selenium	3.9	180	1,500	1.2 B	ND	1.4 B	0.71 B	0.84 B	ND	8.3	ND	2.9	ND	0.87 B	ND
Silver	2	180	1,500	ND	ND	ND	ND	ND	ND	0.57 B	ND	ND	0.34 B	ND	ND
Sodium	N/A	N/A	N/A	271	280	212	77.2	105	39.1 B	103	97.0	70.4	54.3 B	71.4	171
Thallium	N/A	N/A	N/A	0.42 BN	ND	0.51 BN	0.31 BN	0.47 BN	ND	0.50 BN	ND	1.0 BN	ND	0.42 BN	ND
Vanadium	N/A	N/A	N/A	21.8 E	21.7 E	17.2 E	11.7 E	9.9 E	60.7 E	19.5 E	10.2 E	3.4 E	10.7 E	5.0 E	17.3 E
Zinc	109	10,000	10,000	67.0 N*E	75.8 N*E	153 N*E	42.1 N*E	33.2 N*E	19.8 N*E	1460 N*E	237 N*E	41.2 N*E	651 N*E	61.3 N*E	129 N*E

1 - All values presented in miligrams per kilogram (mg/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Metals[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SB-18 (22.5-24.3)	SI-SB-19 (0-4)	SI-SB-19 (10-15)	SI-SB-20 (15-16.7)	SI-SB-25 (4-7.2)	SI-SB-26 (10-14)	SI-SB-29 (12-14.5)	SI-SB-30 (12-14)	SI-SB-31 (12-15.4)	SI-SB-32 (11-13.9)
Aluminum	N/A	N/A	N/A	7560 E	7290	7600	3560	2600	15100	14800	6110	6740	3430
Antimony	N/A	N/A	N/A	ND	1.6 N	0.58 BN	4.6 N	ND	ND	ND	0.41 BN	0.62 BN	ND
Arsenic	13	16	16	2.2	9.4	3.3	13.2	1.4	4.3	3.3	3.5	5.7	2.0
Barium	350	400	400	61.4 E	87.4 E	45.5 E	25.0 E	15.3 E	74.4 E	105 E	23.8 E	62.6	16.7
Beryllium	7.2	72	590	0.62 E	0.44 E	0.46 E	0.24 BE	0.16 BE	1.4 E	0.82 E	0.30 E	0.61	0.26 B
Cadmium	2.5	4.3	9.3	0.19 B	0.50	0.15 B	1.0	0.033 B	0.41	0.11 B	0.23	0.20 B	0.048 B
Calcium	N/A	N/A	N/A	50900	22600	28500	9040	137000	16000	26300	2490	4470 *	169000 *
Chromium	1	110	400	8.7 E	19.4 E	9.5 E	13.2 E	4.6 E	11.9 E	17.8 E	11.5 E	8.8	3.9
Cobalt	N/A	N/A	N/A	6.5 N	4.0	4.2	6.7	1.6 B	5.4	7.5	2.8	4.1	1.1 B
Copper	50	270	270	19.1 E	186 *	36.0 *	836 *	25.9 *	8.8 *	21.0 *	97.8 *	841	40.4
Iron	N/A	N/A	N/A	17300 E	34800 E	13500 E	115000 E	8210 E	24000 E	27000 E	53000 E	19000	6820
Lead	63	400	1,000	7.8 E	250 N*E	60.4 N*E	144 N*E	12.2 N*E	20.1 N*E	15.3 N*E	54.8 N*E	91.3 *	13.6 *
Magnesium	N/A	N/A	N/A	4250 E	1390 E	2760 E	983 E	7510 E	2640 E	4810 E	1270 E	1640	2370
Manganese	1600	2,000	10,000	407 E	982 E	208 E	400 E	282 E	400 E	411 E	488 E	126	72.5
Mercury	0.18	0.81	2.8	ND	0.20 *	0.29 *	0.094 *	0.013 B*	0.13 *	0.018 B*	2.9 *	10.1	3.7
Nickel	30	310	310	9.7 NE	12.7 E	8.6 E	17.0 E	4.3 E	10.4 E	15.2 E	9.2 E	578	369
Potassium	N/A	N/A	N/A	789	696	872	376	516	689	1690	685	ND	ND
Selenium	3.9	180	1,500	0.75 B	ND	ND	ND	ND	ND	ND	ND	0.13 B	ND
Silver	2	180	1,500	ND	ND	ND	ND	ND	ND	ND	ND	99.2	69.3
Sodium	N/A	N/A	N/A	98.5	145	84.2	69.1	99.6	173	195	109	0.74 B	1.3
Thallium	N/A	N/A	N/A	ND	0.87 B	ND	ND	0.73 B	ND	0.72 B	ND	15.4	6.0
Vanadium	N/A	N/A	N/A	12.9 E	26.7	15.0	25.9	6.2	16.7	28.3	18.3	114	43.5
Zinc	109	10,000	10,000	81.0 N*E	198 NE	78.1 NE	363 NE	24.4 NE	92.5 NE	69.1 NE	84.7 NE	0.34	0.26

1 - All values presented in miligrams per kilogram (mg/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Metals[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SB-33 (10-12.3)	SI-SB-34 (16-22)	SI-SB-34-D	SI-SB-35 (18-20)	SI-SB-36 (18-20.9)	SI-SB-37 (14-15.5)	SI-WB1 (6-8.5)	SI-WB-03 (17-18)
Aluminum	N/A	N/A	N/A	5220	4550	5480	12700	12300	2540	17800	6500
Antimony	N/A	N/A	N/A	34.3 N	0.53 BN	0.56 BN	0.34 BN	0.13 BN	0.16 BN	0.36 BN	0.97
Arsenic	13	16	16	6.9	5.8	6.1	2.9	2.6	1.4	4.0	6.9
Barium	350	400	400	37.6	73.0	75.8	102 E	91.4	19.3	137 E	42.3
Beryllium	7.2	72	590	0.37	0.37	0.43	1.1 E	0.91 E	0.21 BE	1.6 E	0.55
Cadmium	2.5	4.3	9.3	0.23	0.22 B	0.20 B	0.22 B	0.18 BE	0.059 BE	0.38	0.74
Calcium	N/A	N/A	N/A	112000 *	60400 *	60200 *	26800 *	40200 *	121000 *	4850 *	4680
Chromium	1	110	400	6.7	10	10.4	16.6 E	16.0	2.7	21.6 E	14.2
Cobalt	N/A	N/A	N/A	2.8	4.0	4.8	7.1 E	6.1 E	1.5 BE	9.2 E	3.5
Copper	50	270	270	219	674	1250	17.8	16.1 N	34.6 N	23.4	156
Iron	N/A	N/A	N/A	21100	13000	12700	26700	24000 *	6230 *	36300	55500
Lead	63	400	1,000	313 *	130 *	154 *	6.2 E	5.8 E	25.6 E	8.5 E	124
Magnesium	N/A	N/A	N/A	2730	4050	4650	7650 E	7790	1240	5990 E	991
Manganese	1600	2,000	10,000	220	233	264	463 E	380 E	106 E	565 E	984
Mercury	0.18	0.81	2.8	8.6	9.8	10.1	0.012 B	0.015 B*	0.17 *	0.034 B	19.2
Nickel	30	310	310	458	806	972	15.0 E	13.1 E	3.5 E	19.4 E	679
Potassium	N/A	N/A	N/A	ND	ND	0.65 B	2530	1900	305	2420	2.8
Selenium	3.9	180	1,500	ND	ND	ND	3.0	2.2	ND	4.1	ND
Silver	2	180	1,500	113	102	97.0	ND	ND	ND	ND	128
Sodium	N/A	N/A	N/A	0.81	ND	ND	380	952	65.4	267	ND
Thallium	N/A	N/A	N/A	10.3	11.4	13.3	0.51 B	ND	ND	0.57 B	26.3
Vanadium	N/A	N/A	N/A	158	110	114	26.4 E	23.9	5.0	36.4 E	104
Zinc	109	10,000	10,000	ND	0.35	0.27	44.6 E	39.6 NE	24.4 NE	68.4 E	0.36

1 - All values presented in miligrams per kilogram (mg/Kg).
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3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Polychlorinated biphenyls[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SS-01	SI-SS-02	SI-SS-03	SI-SS-04	SI-SS-05	SI-SS-06	SI-SS-07	SI-SS-08	SI-SS-09	SI-SS-10	SI-SS-11
Aroclor-1016	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	170	ND
Aroclor-1254	100*	1000*	1000*	ND	47	ND	ND	ND	ND	ND	55	ND	ND	ND
Aroclor-1260	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs:	100	1,000	1,000	0	47	0	0	0	0	0	55	0	170	0

Note:
* Applies to the sum of these substances.

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Polychlorinated biphenyls[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SS-12	SI-SS-13	SI-SS-14	SI-SS-15	SI-SS-16	SI-SS-17	SI-SS-18	SI-SS-19	SI-SS-20	SI-SS-21	SI-SS-22
Aroclor-1016	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	340
Aroclor-1248	100*	1000*	1000*	ND	ND	40	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	100*	1000*	1000*	68	100	ND	180	ND	ND	ND	ND	ND	ND	740
Aroclor-1260	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	82 P	ND	ND
Total PCBs:	100	1,000	1,000	68	100	40	180	0	0	0	0	82	0	1080

Note:
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2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Polychlorinated biphenyls[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SS-22D	SI-SS-23	SI-SS-24	SI-SS-25	SI-SS-26	SI-SS-27	SI-SS-28	SI-SS-29	SI-SS-30	SI-SS-31	SI-SS-32
Aroclor-1016	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	100*	1000*	1000*	310	240	ND	ND	ND	ND	64	ND	ND	ND	ND
Aroclor-1248	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	100*	1000*	1000*	760	410	ND	320 P	240	140	62	70	ND	ND	ND
Aroclor-1260	100*	1000*	1000*	ND	ND	990	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs:	100	1,000	1,000	1070	650	990	320	240	140	126	70	0	0	0

Note:
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2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Polychlorinated biphenyls[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SS-33	SI-SS-34	SI-SS-35	SI-SS-36	SI-SS-37	SI-SS-38	SI-SS-39	SI-SS-40	SI-SS-41	SI-SS-42	SI-TP-01 (4)	SI-TP-02 (15)
Aroclor-1016	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	100*	1000*	1000*	ND	55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs:	100	1,000	1,000	0	55	0	0	0	0	0	0	0	0	ND	ND

Note:
* Applies to the sum of these substances.

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Polychlorinated biphenyls[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-TP-02A (1)	SI-TP-05 (2)	SI-TP-06 (5)	SI-TP-08 (5.5)	SI-TP-09 (3)	SI-TP-11 (2.5)	SI-TP-12 (2.5)	SI-TP-13 (18)	SI-TP-14 (34)	SI-TP-19 (9.5)	SI-TP-20 (12)
Aroclor-1016	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs:	100	1,000	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Note:
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1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Polychlorinated biphenyls[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-TP-21 (17.5)	SI-TP-22 (18)	SI-TP-23 (5.5)	SI-TP-24 (12)	SI-TP-26 (5.5)	SI-TP-27 (9)	SI-TP-28 (8)	SI-TP-28-D (8)	SI-TP-29 (8)	SI-TP-31 (5.5)	SI-TP-33 (1.5)
Aroclor-1016	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	180 P
Aroclor-1260	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs:	100	1,000	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	180

Note:

* Applies to the sum of these substances.

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Polychlorinated biphenyls[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-TP-35 (10)	SI-TP-36 (5)	SI-TP-38E (10)	SI-TP-38E (20)	SI-TP-38W (20)	SI-TP-39 (21)	SI-TP-41 (12)	SI-TP-42 (5)	SI-TP-45 (5)	SI-TP-47 (4)	SI-TP-48 (2)
Aroclor-1016	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	100 P	ND
Aroclor-1254	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	36	ND	ND
Total PCBs:	100	1,000	1,000	ND	ND	ND	ND	ND	ND	ND	ND	36	100	ND

Note:
* Applies to the sum of these substances.

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Polychlorinated biphenyls[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SB-01 (06)	SI-SB-02 (6-9)	SI-SB-03 (2-5)	SI-SB-04 (0-5)	SI-SB-05 (0-7)	SI-SB-06 (0-5)	SI-SB-08 (0.5-1)	SI-SB-09 (4-9)	SI-SB-10 (1-5)	SI-SB-11(26-32)
Aroclor-1016	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	100*	1000*	1000*	ND	47	ND	ND	88	83	ND	ND	ND	ND
Aroclor-1260	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs:	100	1,000	1,000	ND	47	ND	ND	88	83	ND	ND	ND	ND

Note:

* Applies to the sum of these substances.

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Polychlorinated biphenyls[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SB-12 (16-20)	SI-SB-13 (17-19)	SI-SB-14 (24-25)	SI-SB-16 (0-4)	SI-SB-17 (8-11.5)	SI-SB-18 (22.5-24.3)	SI-SB-19 (0-4)	SI-SB-19 (10-15)	SI-SB-20 (15-16.7)
Aroclor-1016	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	100*	1000*	1000*	ND	ND	64	ND	ND	ND	ND	ND	ND
Aroclor-1260	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs:	100	1,000	1,000	ND	ND	64	ND	ND	ND	ND	ND	ND

Note:
* Applies to the sum of these substances.

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Polychlorinated biphenyls[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SB-25 (4-7.2)	SI-SB-26 (10-14)	SI-SB-29 (12-14.5)	SI-SB-30 (12-14)	SI-SB-31 (12-15.4)	SI-SB-32 (11-13.9)	SI-SB-33 (10-12.3)	SI-SB-34 (16-22)	SI-SB-34-D
Aroclor-1016	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	100*	1000*	1000*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs:	100	1,000	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND

Note:
* Applies to the sum of these substances.

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Polychlorinated biphenyls[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SB-35 (18-20)	SI-SB-36 (18-20.9)	SI-SB-37 (14-15.5)	SI-WB1 (6-8.5)	SI-WB-03 (17-18)
Aroclor-1016	100*	1000*	1000*	ND	ND	ND	ND	ND
Aroclor-1221	100*	1000*	1000*	ND	ND	ND	ND	ND
Aroclor-1232	100*	1000*	1000*	ND	ND	ND	ND	ND
Aroclor-1242	100*	1000*	1000*	ND	ND	ND	ND	ND
Aroclor-1248	100*	1000*	1000*	ND	ND	ND	ND	ND
Aroclor-1254	100*	1000*	1000*	ND	ND	ND	ND	ND
Aroclor-1260	100*	1000*	1000*	ND	ND	ND	ND	ND
Total PCBs:	100	1,000	1,000	ND	ND	ND	ND	ND

Note:
* Applies to the sum of these substances.

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Volitale Organic Compounds[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SS-01	SI-SS-02	SI-SS-03	SI-SS-04	SI-SS-05	SI-SS-06	SI-SS-07	SI-SS-08	SI-SS-09	SI-SS-10	SI-SS-11	SI-SS-12	SI-SS-13	SI-SS-14	SI-SS-15	SI-SS-16	SI-SS-17	SI-SS-18	SI-SS-19
1,1,1,2-Tetrachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	680[1]	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	270	26,000	240,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3600	52,000	190,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9 J	ND
1,2-Dibromo-3-chloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1100	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	20	3,100	30,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	8400	52,000	190,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	2400	49,000	280,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1800	13,000	130,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	60	4,800	44,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	760	2,400	22,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1100	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	370	49,000	350,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	250	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1000	41,000	390,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	N/A	N/A	N/A	2.6 BJ	2.7 BJ	2.4 BJ	2.2 BJ	2.0 BJ	1.9 BJ	1.8 BJ	2.3 BJ	2.1 BJ	1.7 BJ	2.0 BJ	1.5 BJ	1.4 BJ	1.2 BJ	ND	ND	ND	ND	ND
Methyl tert-butyl ether	930	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	50	100,000	500,000	1.5 J	1.4 J	1.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	12000	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	3900	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	11000	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5900	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1300	19,000	150,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	700	100,000	500,000	ND	ND	2.2 J	ND	1.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	190	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	470	21,000	200,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	20	900	13,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (Total)	260	100,000	500,000	2.6 BJ	2.7 BJ	2.4 BJ	2.2 BJ	2.0 BJ	1.9 BJ	1.8 BJ	2.3 BJ	2.1 BJ	1.7 BJ	2.0 BJ	1.5 BJ	1.4 BJ	1.2 BJ	ND	ND	ND	ND	ND

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Volitale Organic Compounds[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SS-20	SI-SS-21	SI-SS-22	SI-SS-22D	SI-SS-23	SI-SS-24	SI-SS-25	SI-SS-26	SI-SS-27	SI-SS-28	SI-SS-29	SI-SS-30	SI-SS-31	SI-SS-32	SI-SS-33	SI-SS-34	SI-SS-35	SI-SS-36	SI-SS-37
1,1,1,2-Tetrachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	680[1]	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	270	26,000	240,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3600	52,000	190,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1100	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	20	3,100	30,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	8400	52,000	190,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	2400	49,000	280,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1800	13,000	130,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	60	4,800	44,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	760	2,400	22,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1100	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	370	49,000	350,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	250	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1000	41,000	390,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	930	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	50	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	12000	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	3900	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	11000	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5900	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1300	19,000	150,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	700	100,000	500,000	ND	ND	2.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6 J
trans-1,2-Dichloroethene	190	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	470	21,000	200,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	20	900	13,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (Total)	260	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Volitale Organic Compounds[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SS-38	SI-SS-39	SI-SS-40	SI-SS-41	SI-SS-42	SI-TP-01 (4)	SI-TP-02 (15)	SI-TP-02A (1)	SI-TP-05 (2)	SI-TP-06 (5)	SI-TP-08 (5.5)	SI-TP-09 (3)	SI-TP-11 (2.5)	SI-TP-12 (2.5)	SI-TP-13 (18)	SI-TP-14 (34)	SI-TP-19 (9.5)	SI-TP-20 (12)
1,1,1,2-Tetrachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	680[1]	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	270	26,000	240,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3600	52,000	190,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1100	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	20	3,100	30,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	8400	52,000	190,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.6	ND	ND
1,3-Dichlorobenzene	2400	49,000	280,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1800	13,000	130,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	60	4,800	44,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	760	2,400	22,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1100	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	370	49,000	350,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	250	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1000	41,000	390,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 J	ND	ND
Methyl tert-butyl ether	930	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	50	100,000	500,000	ND	ND	ND	ND	ND	3.5 J	19	7.2	3.9 J	3.8 J	17	15	3.4 J	15	16	19	3.2 J	26
n-Butylbenzene	12000	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	3900	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	11000	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5900	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1300	19,000	150,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	700	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9 J	ND	4.6 J	ND	2.4 J
trans-1,2-Dichloroethene	190	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	470	21,000	200,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	20	900	13,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (Total)	260	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 J	ND	ND

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

olitale Organic Compounds[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-TP-21 (17.5)	SI-TP-22 (18)	SI-TP-23 (5.5)	SI-TP-24 (12)	SI-TP-26 (5.5)	SI-TP-27 (9)	SI-TP-28 (8)	SI-TP-28-D (8)	SI-TP-29 (8)	SI-TP-31 (5.5)	SI-TP-33 (1.5)	SI-TP-35 (10)	SI-TP-36 (5)	SI-TP-38E (10)	SI-TP-38E (20)	SI-TP-38W (20)	SI-TP-39 (21)	SI-TP-41 (12)
1,1,1,2-Tetrachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	680[4]	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	270	26,000	240,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3600	52,000	190,000	ND	74	37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9 J	ND	ND	ND
1,2-Dibromo-3-chloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1100	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	20	3,100	30,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	8400	52,000	190,000	ND	ND	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26	ND	ND	ND
1,3-Dichlorobenzene	2400	49,000	280,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1800	13,000	130,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	N/A	N/A	N/A	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	N/A	N/A	N/A	ND	17 J	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50	100,000	500,000	71	29	66	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	60	4,800	44,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6 J	ND	ND	ND
Bromobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
`romoform	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
romomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	760	2,400	22,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1100	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	370	49,000	350,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	250	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1000	41,000	390,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	ND
Hexachlorobutadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	N/A	N/A	N/A	210	44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	N/A	N/A	N/A	ND	ND	4.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	ND	ND	ND
Methyl tert-butyl ether	930	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	50	100,000	500,000	ND	24 J	27	15	7.2	ND	2.2 J	3.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	12000	100,000	500,000	300	220	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	3.6 J	2.3 J	ND
n-Propylbenzene	3900	100,000	500,000	92	87	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.4	ND	ND	ND
Naphthalene	N/A	N/A	N/A	ND	ND	ND	ND	2.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6 J	ND	ND	ND
o-Xylene	N/A	N/A	N/A	ND	ND	2.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	37	ND	ND	ND
sec-Butylbenzene	11000	100,000	500,000	690	160	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5900	100,000	500,000	55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1300	19,000	150,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	700	100,000	500,000	ND	ND	4.5 J	ND	ND	ND	ND	ND	4.6 J	ND	ND	ND	ND	ND	54	ND	ND	ND
trans-1,2-Dichloroethene	190	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	5.3 J	ND	ND
trans-1,3-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	470	21,000	200,000	ND	ND	ND	ND	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	14	ND	ND	ND
Trichlorofluoromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	20	900	13,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
lene (Total)	260	100,000	500,000	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	42	ND	ND	ND

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Volitale Organic Compounds[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-TP-42 (5)	SI-TP-45 (5)	SI-TP-47 (4)	SI-TP-48 (2)	SI-SB-01 (06)	SI-SB-02 (6-9)	SI-SB-03 (2-5)	SI-SB-04 (0-5)	SI-SB-05 (0-7)	SI-SB-06 (0-5)	SI-SB-08 (0.5-1)	SI-SB-09 (4-9)	SI-SB-10 (1-5)	SI-SB-11(26-32)	SI-SB-12 (16-20)	SI-SB-13 (17-19)	SI-SB-14 (24-25)
1,1,1,2-Tetrachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	680[4]	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	270	26,000	240,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9
1,1-Dichloroethene	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3600	52,000	190,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1100	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	20	3,100	30,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	8400	52,000	190,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	2400	49,000	280,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1800	13,000	130,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7 J	ND
2-Chlorotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50	100,000	500,000	ND	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	11	34	20	ND	30	29
Benzene	60	4,800	44,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	760	2,400	22,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1100	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	370	49,000	350,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	250	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1000	41,000	390,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3 J	ND	ND	ND
m,p-Xylene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	930	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	50	100,000	500,000	10	7.1	5.3 J	3.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5 J	ND	ND
n-Butylbenzene	12000	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND	ND	ND
n-Propylbenzene	3900	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	N/A	N/A	ND	ND	ND	ND	2.2 J	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND	ND	ND
o-Xylene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	11000	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5900	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1300	19,000	150,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	700	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	190	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	470	21,000	200,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	20	900	13,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (Total)	260	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(e): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Volitale Organic Compounds[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SB-16 (0-4)	SI-SB-17 (8-11.5)	SI-SB-18 (22.5-24.3)	SI-SB-19 (0-4)	SI-SB-19 (10-15)	SI-SB-20 (15-16.7)	SI-SB-25 (4-7.2)	SI-SB-26 (10-14)	SI-SB-29 (12-14.5)	SI-SB-30 (12-14)	SI-SB-31 (12-15.4)	SI-SB-32 (11-13.9)	SI-SB-33 (10-12.3)	SI-SB-34 (18-22)
1,1,1,2-Tetrachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	680[1]	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	270	26,000	240,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	330	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3600	52,000	190,000	ND	ND	ND	ND	1200	670	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1100	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	20	3,100	30,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	8400	52,000	190,000	ND	ND	ND	ND	100	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	2400	49,000	280,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1800	13,000	130,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	N/A	N/A	N/A	ND	ND	ND	ND	76	ND	ND	ND	ND	ND	47	ND	ND	ND
2-Chlorotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	N/A	N/A	N/A	ND	ND	ND	ND	94	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50	100,000	500,000	ND	32	ND	ND	350	69	ND	ND	4.4 J	9.4	240	15 J	3.6 J	11
Benzene	60	4,800	44,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	N/A	N/A	N/A	ND	ND	ND	ND	ND	12 J	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	760	2,400	22,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1100	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	370	49,000	350,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	250	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1000	41,000	390,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	N/A	N/A	N/A	ND	10	ND	ND	94	430	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	N/A	N/A	N/A	ND	ND	ND	ND	36	16 J	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	930	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	50	100,000	500,000	3.2 J	ND	ND	2.4 J	17 J	17 J	4.6 J	17	4.3 J	12	43	20 J	25	36
n-Butylbenzene	12000	100,000	500,000	ND	ND	ND	ND	190	770	ND	ND	ND	ND	ND	100	ND	ND
n-Propylbenzene	3900	100,000	500,000	ND	ND	ND	ND	120	800	ND	ND	ND	ND	ND	9.0 J	ND	ND
Naphthalene	N/A	N/A	N/A	ND	ND	ND	ND	460	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	N/A	N/A	N/A	ND	ND	ND	ND	ND	11 J	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	11000	100,000	500,000	ND	ND	ND	ND	170	650	ND	ND	ND	ND	ND	39	ND	ND
Styrene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5900	100,000	500,000	ND	ND	ND	ND	12 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1300	19,000	150,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	700	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4 J	ND	ND	ND	ND
trans-1,2-Dichloroethene	190	100,000	500,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	470	21,000	200,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	20	900	13,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (Total)	260	100,000	500,000	ND	ND	ND	ND	36	26	ND	ND	ND	ND	ND	ND	ND	ND

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Environmental Restoration Program - Sewall's Island Site (#E623021)
Soil Sample Results

Volitale Organic Compounds[1]	Unrestricted Use[2]	Restricted-Residential[3]	Commercial[3]	SI-SB-34-D	SI-SB-35 (18-20)	SI-SB-36 (18-20.9)	SI-SB-37 (14-15.5)	SI-WB1 (6-8.5)	SI-WB-03 (17-18)
1,1,1,2-Tetrachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	680[1]	100,000	500,000	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	270	26,000	240,000	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	330	100,000	500,000	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3600	52,000	190,000	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1100	100,000	500,000	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	20	3,100	30,000	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	8400	52,000	190,000	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	2400	49,000	280,000	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1800	13,000	130,000	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
2-Butanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
2-Hexanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Acetone	50	100,000	500,000	ND	ND	ND	ND	ND	ND
Benzene	60	4,800	44,000	ND	ND	ND	ND	ND	ND
Bromobenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Bromochloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Bromodichloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Bromoform	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Bromomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Carbon disulfide	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	760	2,400	22,000	ND	ND	ND	ND	ND	ND
Chlorobenzene	1100	100,000	500,000	ND	ND	ND	ND	ND	ND
Chloroethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Chloroform	370	49,000	350,000	ND	ND	ND	ND	ND	ND
Chloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	250	100,000	500,000	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Dibromochloromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Dibromomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Ethylbenzene	1000	41,000	390,000	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Iodomethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Isopropylbenzene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
m,p-Xylene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	930	100,000	500,000	ND	ND	ND	ND	ND	ND
Methylene chloride	50	100,000	500,000	8.2	ND	ND	2.9 J	ND	4.8 J
n-Butylbenzene	12000	100,000	500,000	ND	ND	ND	ND	ND	ND
n-Propylbenzene	3900	100,000	500,000	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
o-Xylene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	11000	100,000	500,000	ND	ND	ND	ND	ND	ND
Styrene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5900	100,000	500,000	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1300	19,000	150,000	ND	ND	ND	ND	ND	ND
Toluene	700	100,000	500,000	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	190	100,000	500,000	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Trichloroethene	470	21,000	200,000	ND	12	ND	ND	5.7 J	2.4 J
Trichlorofluoromethane	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Vinyl acetate	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND
Vinyl chloride	20	900	13,000	ND	ND	ND	ND	ND	ND
Xylene (Total)	260	100,000	500,000	ND	ND	ND	ND	ND	ND

1 - All values presented in micrograms per kilogram (ug/Kg).
2 - 6 NYCRR Part 375-6.8 - Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives
3 - 6 NYCRR Part 375-6.8 - Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Appendix A – Site Specific Health & Safety Plan

Lu Engineers

Environmental Restoration Program
Sewalls Island Site (#E623021)
400 Pearl Street
City of Watertown
Jefferson County, New York

HEALTH AND SAFETY PLAN

Interim Remedial Measure

Prepared For:

City of Watertown
Suite 304, Municipal Building
245 Washington Street
Watertown, New York 13601

Prepared By:

Lu Engineers

2230 Penfield Road
Penfield, New York 14526

July 2009

Project No. 34202

Table of Contents

LU ENGINEERS
SITE SAFETY PLAN

A. General Information

Project Title: Sewall's Island Site
Interim Remedial Measure

Project No. 34202

Project Manager: Steven A Campbell, CHMM

Project Director: Harry Mangini, P.E.

Location: Sewall's Island, 400 Pearl Street
City of Watertown, Jefferson County, New York

Prepared by: Rebecca May

Date Prepared: March 2009

Approved by: Greg Andrus

Date Approved: July 2009

Site Safety Officer Review: Eric Detweiler

Date Reviewed:

Scope/Objective of Work: The objective is to address six contaminated areas of concern delineated from the Remedial Investigation (RI). The scope of work includes the removal and disposal of soil in the identified areas of concern by excavation. Soil samples are also proposed to further delineate the horizontal and vertical extent of contamination. Any additional contamination will also be excavated and disposed of accordingly. Work tasks include the following:

Task 1: Utility Stakeout
Task 2: Geophysical Investigation
Task 3: Investigation of Anomalies/Excavation of Soils
Task 4: Consolidation and Disposal of Waste Drums
Task 5: Post-Excavation Confirmatory Sampling
Task 6: Off-Site Disposal of Contaminated Soils
Task 7: Restoration

Proposed Date of Field Activities: September 2009

Background Information: [X] Complete [ ]

Overall Chemical Hazard: [ ] Serious [X] Moderate [ ] Low [ ] Unknown

Overall Physical Hazard: [ ] Serious [ ] Moderate [X]Low [ ] Unknown

B. Site/Waste Characteristics

Waste Type(s):

[X] Liquid [X] Solid [ ] Sludge [ ] Gas/Vapor

Characteristic(s):

[X] Flammable/Ignitable [X] Volatile [ ] Corrosive [ ] Acutely Toxic

[ ] Explosive (moderate) [ ] Reactive [X] Carcinogen [ ] Radioactive

Other: _____

Physical Hazards:

[X] Overhead [X] Confined Space [X] Below Grade [X] Trip/Fall

[X] Puncture [ ] Burn [X] Cut [X] Splash

[X] Noise [X] Other: Heat Stress/Cold Stress

Site History
The island has a long history of industrial use; the earliest of which included paper mills and foundries. The use later expanded to a large foundry and machining factory that made paper production machinery.

Additional Site history has been detailed in the RI Work Plan (October 2007).

Locations of Chemicals/Wastes: Soil and/or groundwater.

Estimated Volume of Chemicals/Wastes: Unknown.

Site Currently in Operation: [ ] Yes [X] No [ ] Not Applicable

C. Hazard Evaluation

PHYSICAL HAZARD EVALUATION:		
TASK	**HAZARD(S)**	**HAZARD PREVENTION**
1-7	General physical hazards associated with drill rig and geoprobe operations (spinning, augers, overhead equipment, noise, and, drill rig movement).	Hard hats, eye protection, and steel-toed boots required at all times while working around drill rig. Hearing protection required during sampling (hammering). Keep safe distance from rig and all moving parts.
	Contact with or inhalation of contaminants, potentially in high concentration in sampling media and/or fire and explosion.	To minimize exposure to chemical contaminants, a thorough review of suspected contaminants should be completed and implementation of an adequate protection program. Underground vaults to be ventilated during inspections.
	Back strain and muscle fatigue due to lifting, shoveling and augering techniques.	Use proper lifting techniques to prevent back strain.
	Contact with or inhalation of decontamination solutions.	Material Safety Data Sheets for all decon solutions. First aid equipment available.
	Heat stress / cold stress exposure.	Implement heat stress management techniques such as shifting work hours, increasing fluid intake, and monitoring employees.
	Slip / tripping / overhead / fall.	Observe terrain and drilling equipment while walking to minimize slips and falls. Steel-toed boots provide additional support and stability. Use adequate lighting. Wear hard hat. Inspect all lifting equipment prior to use.
	Native wildlife presents the possibility of insect bites and associated diseases.	Avoid wildlife when possible.
	Sunburn.	Apply sunscreen, wear appropriate clothing.
	Utility Lines.	Identify location(s) prior to work, maintain 25 foot minimum distance to overhead utilities.
	Weather Extremes.	Establish site-specific contingencies for severe weather situations. Discontinue work in severe weather.

Physical Hazard Evaluation: Basic health and safety protection (steel-toed boots, work clothes, and safety glasses or goggles) will be worn by all personnel at all times. Personnel should be made aware of area flora (poison ivy) and fauna. Snakes and other endemic wildlife should be avoided at all times. Any encounters that result in bites or scratches should be reported to the Site Safety Officer immediately. All allergies should be reported to the Site Safety Officer prior to the start of the project.

D. Site Safety Work Plan

Site Control:

Perimeter Identified? [Y] **Site Secured?** [Y]

Work Areas Designated? [Y] **Zone(s) of contamination identified?** [Y]

Anticipated Level of Protection (cross-reference task numbers in Section C):

	A	B	C	D
Tasks 1-6	-	-	Available	X

All site work will be performed at Level D (steel-toed boots, work clothes, eye protection and hard hats) unless monitoring indicates otherwise.
See Appendices A, B and C for specific site safety requirements.

Air Monitoring:

Contaminant	Monitoring Device	Frequency
Organic Vapors	PID	Continuous
Ignition Sources	O_2/Explosimeter	Continuous
Particulate	MiniRam	Continuous

Work Zone Action Levels:

PID readings of **1 to 25 ppm** above background at breathing zone and sustained for 1 minute
ACTION: Halt work to let vapors dissipate, continuous air monitoring.

PID readings **25 to 50 ppm** above background at breathing zone and sustained for 1 minute
ACTION: Upgrade to Level C, continuous air monitoring.

PID readings > **50ppm** above background at breathing zone and sustained for 1 minute
ACTION: Stop work, evacuate work zone and evaluate with continuous air monitoring.

O_2 readings must remain between 19.5% and 22.0%. Explosivity must be above 10% LEL. The area must be evacuated and ignition sources eliminated if levels are not within their standard.

Particulates

MiniRam readings of **0-100 ug/m³**; Normal Operations, continue breathing zone monitoring.

MiniRam readings of **100 ug/m³ to 1 mg/m³;** manually record levels for 15 minute intervals

MiniRam readings of **> 1 mg/m³** or visible dust migrates from the work area; employ dust suppression measures, stop work activities that generate airborne particulates.

Decontamination Solutions and Procedures for Equipment, Sampling Gear, etc.

Disposable sampling equipment will be used where possible. If decon is necessary, distilled or deionized water and alconox will be used. A 10% nitric acid rinse will be added if metals sampling is to be conducted.

Personnel Decon Protocol

Soap, water and paper towels will be available for all personnel and will be used before eating, drinking or leaving the site. Personnel will shower upon return to home or hotel. Disposable PPE will be double bagged and disposed of in a sanitary waste dumpster.

Decon Solution Monitoring Procedures, if Applicable

Decon solution will be disposed of on-site with owner's permission.

Special Site Equipment, Facilities or Procedures
(Sanitary Facilities and Lighting Must Meet 29CFR 1910.120)

A portable toilet and potable water will be available on site.

Site Entry Procedures and Special Considerations

Level D will be used based on the results of previous investigations. Level C will be available, and used when indicated by sustained PID readings of 25 ppm or greater above ambient air.

Work Limitations (time of day, weather conditions, etc.) and Heat/Cold Stress Requirements

All work will be completed during daylights hours. Heavy equipment will not be used during electrical storms.

General Spill Control, if Applicable

Basic spill control materials will be available onsite for any vehicle or machinery spills.

Investigation Derived Material (i.e., Expendables, Decon Waste, Cuttings) Disposal

Any investigation derived wastes will be containerized and characterized for disposal.

Sampling Handling Procedures Including Protective Wear

At a minimum, Level D surgical gloves will be worn while handling samples during labeling, documentation and packaging.

E. Emergency Information

LOCAL RESOURCES

Ambulance:	911
Hospital Emergency Room:	Samaritan Medical Center 830 Washington Street Watertown, NY 13601 (315) 785-4000
Poison Control Center:	911
Police (include local, county sheriff, state):	911
Fire Department:	911
Airport:	Watertown International Airport Dexter, NY (315) 639-3809
Local Laboratory:	N/A
UPS/Federal Express:	N/A

SITE RESOURCES

Site Emergency Evaluation Alarm Method:	Sound Car Horn for 10 seconds
Water Supply Source:	TBD
Telephone Location, Number:	TBD
Cellular Phone, if Available:	TBD
Radio:	None available
Other:	TBD

EMERGENCY CONTACTS

1.	Fire/Police:	911
2.	Lu Engineers, Project Manager Steve Campbell	(585) 377-1450, Ext 223 (office)
3.	Lu Engineers, Safety Director: Eric Detweiler	(585) 377-1450, Ext. 227 (office)

EMERGENCY ROUTES

(Note: Field team must know route(s) prior to start of work.)

Directions from the site to the hospital (include map):

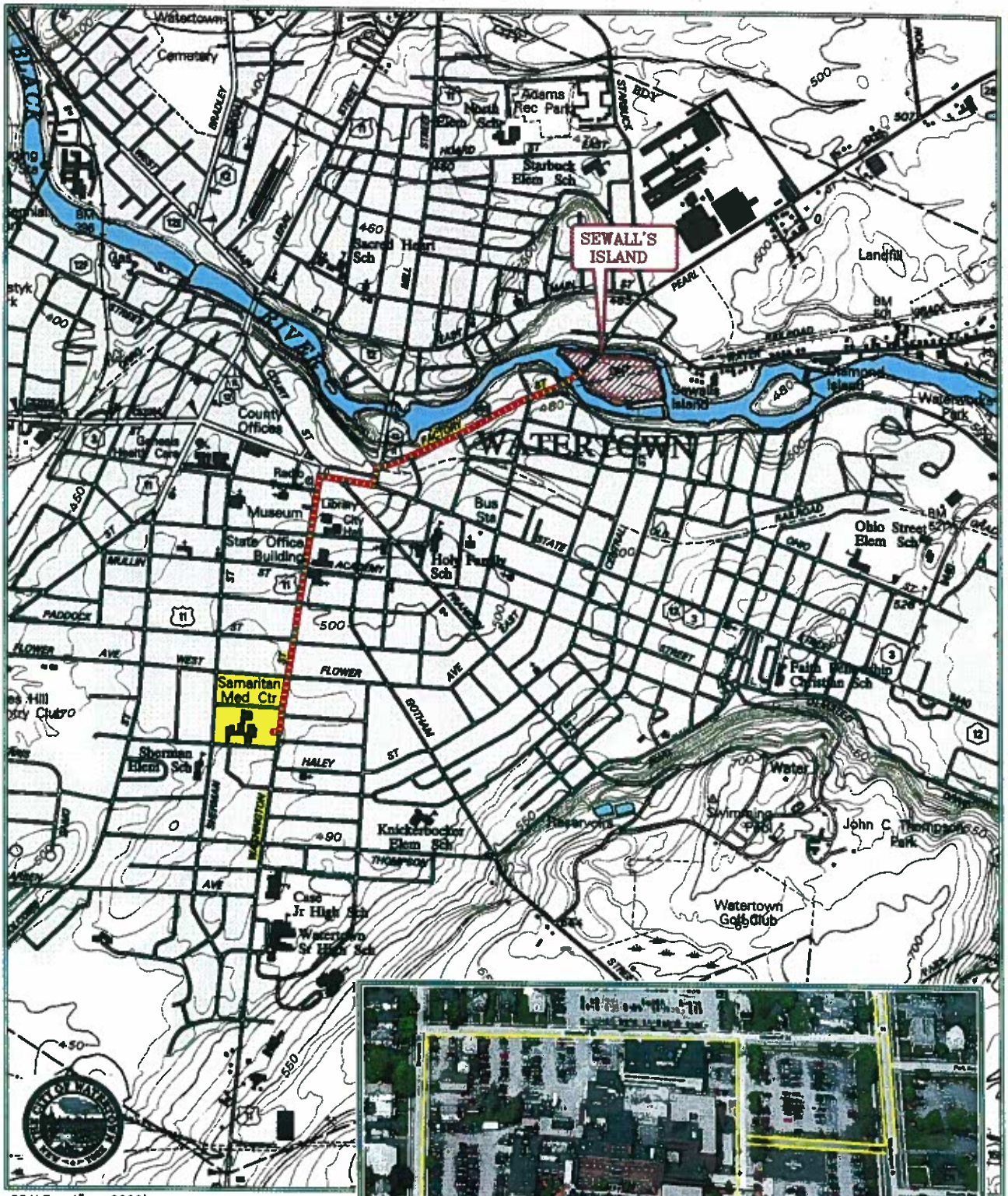
Head southwest on Pearl Street 0.6 miles,
Turn LEFT onto Mill Street and continue to follow US Route 11 and Washington Street 0.8 miles,
Turn RIGHT into the Samaritan Medical Center.

SEE ATTACHED MAP WITH DIRECTIONS

On-site Assembly Area: West side of Pearl Street

Off site Assembly Area: Corner of Pearl Street and Moulton Street

Emergency egress routes to get off-site: Pearl Street to north to Moulton Street



Lu Engineers

ROUTE TO HOSPITAL

SEWALL'S ISLAND (Factory Street) to
SAMARITAN MEDICAL CENTER
830 WASHINGTON ST. -- WATERTOWN, NY

DATE:	JULY 2009
SCALE:	1:24,000
DRAWN BY:	DLS

MAP SOURCE: NYS DOT RASTER QUADRANGLE WATERTOWN / JEFFERSON COUNTY
DOT EDITION DATE: 1996 / USGS CONTOUR DATA: 1959

J:\Projects\34200 Watertown\34202 Sewall's Island\Cadd\Hospital.dwg, 7/22/2009 5:08:00 PM, diane, AC2008

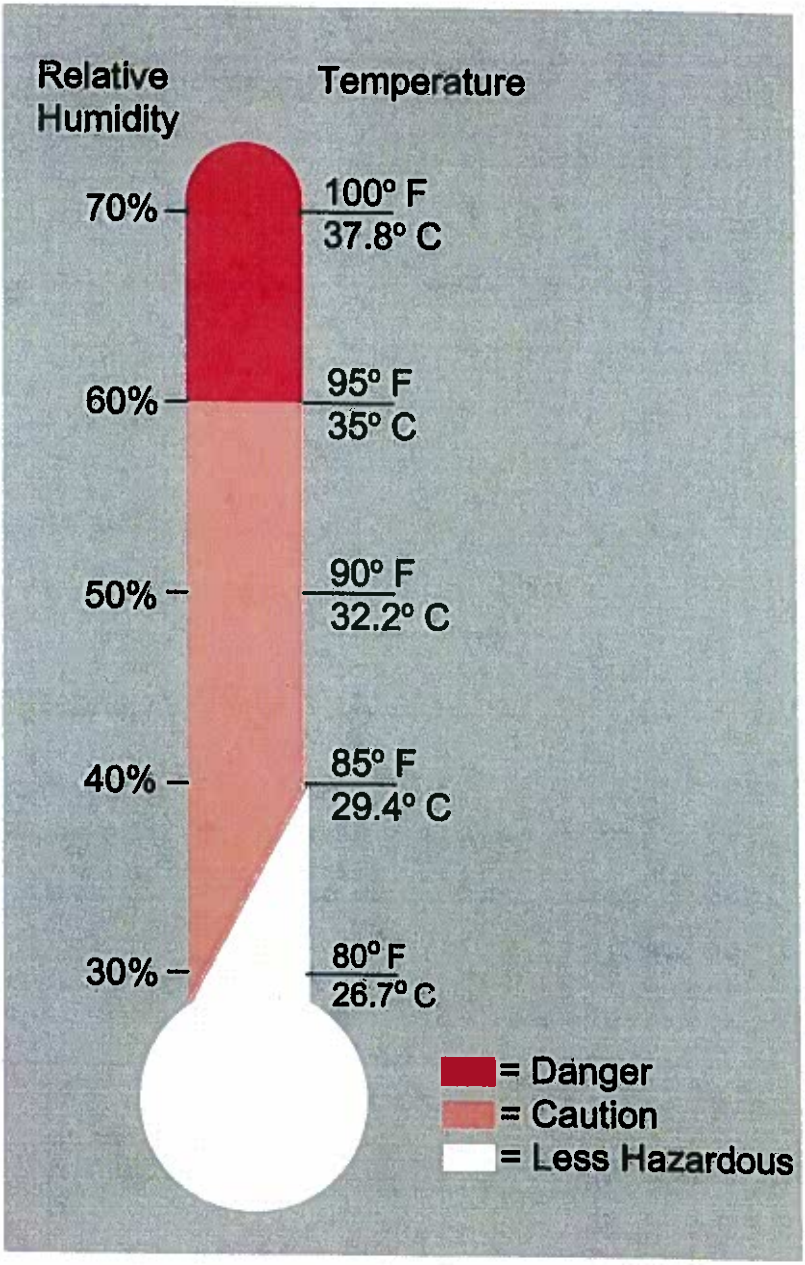
APPENDIX A

HEAT STRESS AND COLD EXPOSURE

THE HEAT EQUATION

HIGH TEMPERATURE + HIGH HUMIDITY + PHYSICAL WORK = HEAT ILLNESS

When the body is unable to cool itself through sweating, **serious** heat illnesses may occur. The most severe heat-induced illnesses are **heat exhaustion** and **heat stroke**. If actions are not taken to treat heat exhaustion, the illness could progress to heat stroke and possible **death**.



U.S. Department of Labor
Occupational Safety and Health Administration

OSHA 3154
1998

HEAT EXHAUSTION

What Happens to the Body:

HEADACHES, DIZZINESS/LIGHT HEADEDNESS, WEAKNESS, MOOD CHANGES (irritable, or confused/can't think straight), FEELING SICK TO YOUR STOMACH, VOMITING/THROWING UP, DECREASED and DARK COLORED URINE, FAINTING/PASSING OUT, and PALE CLAMMY SKIN.

What Should Be Done:

- Move the person to a cool shaded area to rest. Don't leave the person alone. If the person is dizzy or light headed, lay them on their back and raise their legs about 6-8 inches. If the person is sick to their stomach lay them on their side.
- Loosen and remove any heavy clothing.
- Have the person drink some cool water (a small cup every 15 minutes) if they are not feeling sick to their stomach.
- Try to cool the person by fanning them. Cool the skin with a cool spray mist of water or wet cloth.
- If the person does not feel better in a few minutes call for emergency help (Ambulance or Call 911).

(If heat exhaustion is not treated, the illness may advance to heat stroke.)

HEAT STROKE—A MEDICAL EMERGENCY

What Happens to the Body:

DRY PALE SKIN (no sweating), HOT RED SKIN (looks like a sunburn), MOOD CHANGES (irritable, confused/not making any sense), SEIZURES/FITS, and COLLAPSE/PASSED OUT (will not respond).

What Should Be Done:

- Call for emergency help (Ambulance or Call 911).
- Move the person to a cool shaded area. Don't leave the person alone. Lay them on their back and if the person is having seizures/fits remove any objects close to them so they won't strike against them. If the person is sick to their stomach lay them on their side.
- Remove any heavy and outer clothing.
- Have the person drink some cool water (a small cup every 15 minutes) if they are alert enough to drink anything and not feeling sick to their stomach.
- Try to cool the person by fanning them. Cool the skin with a cool spray mist of water, wet cloth, or wet sheet.
- If ice is available, place ice packs under the arm pits and groin area.

How to Protect Workers

- Learn the signs and symptoms of heat-induced illnesses and what to do to help the worker.
- Train the workforce about heat-induced illnesses.
- Perform the heaviest work in the coolest part of the day.
- Slowly build up tolerance to the heat and the work activity (usually takes up to 2 weeks).
- Use the buddy system (work in pairs).
- Drink plenty of cool water (one small cup every 15-20 minutes)
- Wear light, loose-fitting, breathable (like cotton) clothing.
- Take frequent short breaks in cool shaded areas (allow your body to cool down).
- Avoid eating large meals before working in hot environments.
- Avoid caffeine and alcoholic beverages (these beverages make the body lose water and increase the risk for heat illnesses).

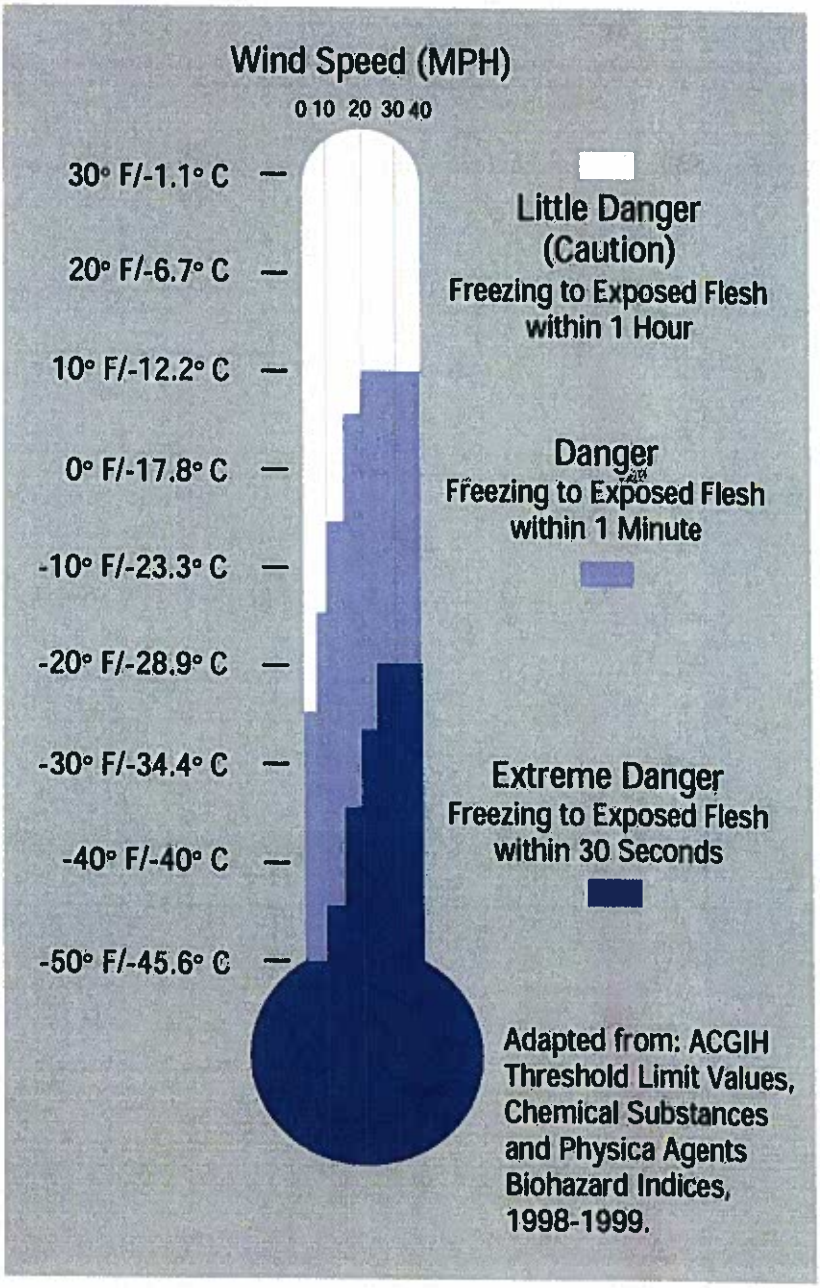
Workers Are at Increased Risk When

- They take certain medication (check with your doctor, nurse, or pharmacy and ask if any medicines you are taking affect you when working in hot environments).
- They have had a heat-induced illness in the past.
- They wear personal protective equipment (like respirators or suits).

THE COLD STRESS EQUATION

LOW TEMPERATURE + WIND SPEED + WETNESS = INJURIES & ILLNESS

When the body is unable to warm itself, serious cold-related illnesses and injuries may occur, and permanent tissue damage and death may result. **Hypothermia** can occur when *land temperatures* are **above** freezing or *water temperatures* are below 98.6°F/ 37°C. Cold-related illnesses can slowly overcome a person who has been chilled by low temperatures, brisk winds, or wet clothing.



U.S. Department of Labor
Occupational Safety and Health Administration

OSHA 3156
1998

FROST BITE

What Happens to the Body:

FREEZING IN DEEP LAYERS OF SKIN AND TISSUE; PALE, WAXY-WHITE SKIN COLOR; SKIN BECOMES HARD and NUMB; USUALLY AFFECTS THE FINGERS, HANDS, TOES, FEET, EARS, and NOSE.

What Should Be Done: (land temperatures)

- Move the person to a warm dry area. Don't leave the person alone.
- Remove any wet or tight clothing that may cut off blood flow to the affected area.
- **DO NOT** rub the affected area, because rubbing causes damage to the skin and tissue.
- **Gently** place the affected area in a warm (105°F) water bath and monitor the water temperature to **slowly** warm the tissue. Don't pour warm water directly on the affected area because it will warm the tissue too fast causing tissue damage. Warming takes about 25-40 minutes.
- After the affected area has been warmed, it may become puffy and blister. The affected area may have a burning feeling or numbness. When normal feeling, movement, and skin color have returned, the affected area should be dried and wrapped to keep it warm. **Note:** If there is a chance the affected area may get cold again, do not warm the skin. If the skin is warmed and then becomes cold again, it will cause severe tissue damage.
- Seek medical attention as soon as possible.

HYPOTHERMIA - (Medical Emergency)

What Happens to the Body:

NORMAL BODY TEMPERATURE (98.6° F/37°C) DROPS TO OR BELOW 95°F (35° C); FATIGUE OR DROWSINESS; UNCONTROLLED SHIVERING; COOL BLUISH SKIN; SLURRED SPEECH; CLUMSY MOVEMENTS; IRRITABLE, IRRATIONAL OR CONFUSED BEHAVIOR.

What Should Be Done: (land temperatures)

- Call for emergency help (i.e., Ambulance or Call 911).
- Move the person to a warm, dry area. Don't leave the person alone. Remove any wet clothing and replace with warm, dry clothing or wrap the person in blankets.
- Have the person drink warm, sweet drinks (sugar water or sports-type drinks) if they are alert. **Avoid drinks with caffeine** (coffee, tea, or hot chocolate) or alcohol.
- Have the person move their arms and legs to create muscle heat. If they are unable to do this, place warm bottles or hot packs in the arm pits, groin, neck, and head areas. **DO NOT** rub the person's body or place them in warm water bath. This may stop their heart.

What Should Be Done: (water temperatures)

- Call for emergency help (Ambulance or Call 911). Body heat is lost up to 25 times faster in water.
- **DO NOT** remove any clothing. Button, buckle, zip, and tighten any collars, cuffs, shoes, and hoods because the layer of trapped water closest to the body provides a layer of insulation that slows the loss of heat. Keep the head out of the water and put on a hat or hood.
- Get out of the water as quickly as possible or climb on anything floating. **DO NOT** attempt to swim unless a floating object or another person can be reached because swimming or other physical activity uses the body's heat and reduces survival time by about 50 percent.
- If getting out of the water is not possible, wait quietly and conserve body heat by folding arms across the chest, keeping thighs together, bending knees, and crossing ankles. If another person is in the water, huddle together with chests held closely.

How to Protect Workers

- Recognize the environmental and workplace conditions that lead to potential cold-induced illnesses and injuries.
- Learn the signs and symptoms of cold-induced illnesses/injuries and what to do to help the worker.
- Train the workforce about cold-induced illnesses and injuries.
- Select proper clothing for cold, wet, and windy conditions. Layer clothing to adjust to changing environmental temperatures. Wear a hat and gloves, in addition to underwear that will keep water away from the skin (polypropylene).
- Take frequent short breaks in warm dry shelters to allow the body to warm up.
- Perform work during the warmest part of the day.
- Avoid exhaustion or fatigue because energy is needed to keep muscles warm.
- Use the buddy system (work in pairs).
- Drink warm, sweet beverages (sugar water, sports-type drinks). Avoid drinks with caffeine (coffee, tea, or hot chocolate) or alcohol.
- Eat warm, high-calorie foods like hot pasta dishes.

Workers Are at Increased Risk When...

- They have predisposing health conditions such as cardiovascular disease, diabetes, and hypertension.
- They take certain medication (check with your doctor, nurse, or pharmacy and ask if any medicines you are taking affect you while working in cold environments).
- They are in poor physical condition, have a poor diet, or are older.

APPENDIX B

ADDITIONAL POTENTIAL PHYSICAL AND CHEMICAL HAZARDS

ADDITIONAL POTENTIAL PHYSICAL AND CHEMICAL HAZARDS	
POTENTIAL PHYSICAL HAZARDS	**CONTROL METHODS**
Overhead Hazards/Falling Objects	Overhead hazards will be identified prior to each task (i.e., inspecting drill rig mast, building structure). Hard hats will be required for each task that poses an overhead hazard.
Contact with Utilities (Tasks 2 and 3)	Prior to initiating site activities, all utilities will be located by the appropriate utility company and will be marked and/or barricaded to minimize the potential of accidental contact. A minimum distance of 25 feet between the derrick and overhead power lines must be maintained at all times.
Noise Exposure	Areas of potentially high sound pressure levels (>85 dBA) will be restricted to authorized personnel only. Engineering controls will be used to the extent possible. Hearing protection will be made available to all workers on site. Exposure to time-weighted average levels in excess of 85 dBA is not anticipated.
POTENTIAL CHEMICAL HAZARDS	**GENERAL CONTROL METHODS**
Contaminant Inhalation	Direct reading instruments will be used to monitor airborne contaminants. Established Lu Engineers' action levels will limit exposure to safe levels. Respiratory protection will be used as appropriate.
Contaminant Ingestion	Standard safety procedures such as restricting eating, drinking, and smoking to the support zone and utilizing proper personal decontamination procedures will minimize ingestion as a potential route of exposure.
Dermal Contaminant Contact	The proper selection and use of personal protective clothing and decontamination procedures will minimize dermal contaminant contact.
Potential contact with lower concentration waste and naturally occurring contaminants (i.e., methane)	Dermal contact with contaminants will be minimized by proper use of the following PPE: • Tyvex coveralls • Neoprene gloves • Booties (latex) or over-boots.

APPENDIX C

HAZARD EVALUATION SHEETS / MSDS

CHEMICAL HAZARD EVALUATION

Task Number	Compound	Exposure Limits (TWA)			Dermal Hazard (Y/N)	Route(s) of Exposure	Acute Symptoms	Odor Threshold/ Description	PID	
		PEL	REL	TLV					Corr. Factor	Ioniz. Poten. (eV)
1-6	Acetone	1000 ppm	250 ppm	500 ppm	Y	Inh, Ing, Con	Irritation to eyes, nose, or throat, skin, skin burns, loss of coordination and equilibrium	Sharp penetrating odor, mint like	1.1	9.69
1-6	Aluminum (metal)	15 mg/m^3	---	10 mg/m^3	Y	Inh, Con	Irritant to eyes, skin and respiratory system	Silvery-white, malleable, ductile, odorless metal	---	---
1-6	Antimony	---	---	---	Y	Inh, Abs, Con	Liquid may cause burns to eyes and skin	Clear, colorless odorless solution	---	---
1-6	Arsenic*	0.010 mg/m^3	---	0.01 mg/m^3	Y	Inh, Ing, Abs, Con	Coughing, irritation to eyes, nose, throat, respiratory tract, inflammation of mucous membranes, dyspnea (labored breathing), cyanosis, and rales (rattle breathing), vomiting, bloody diarrhea, cold clammy skin, low blood pressure, weakness, headache cramps, convulsions, coma, redness, burns to skin	Odorless/silver gray or tin white brittle (metal, inorganic), also can be in solution (clear & odorless)	---	---
1-6	Aroclor 1242 (PCB)*	1 mg/m^3	0.001 mg/m^3	1 mg/m^3	Y	Inh, Ing, Con	Irritant, high levels can cause narcosis	---/ Butter-like	---	---
1-6	Aroclor (1248) PCB*	N/A			Y	Abs, Inh, Ing	Irritant, Central Nervous System depression, hypoglycemia and narcosis	Clear, colorless/ penetrating sweet odor	---	---
1-6	Aroclor 1254 (PCB)*	0.5 ^{sk} mg/m^3	0.001 mg/m^3	0.5 ^{sk} mg/m^3	Y	Abs, Inh, Ing	Irritation to eyes and skin; dermatitis, liver damage	---/ Butter-like	---	---
1-6	Aroclor 1260 (PCB)*	0.5 ^{sk} mg/m^3	---	0.5 ^{sk} mg/m^3	Y	Abs, Inh, Ing	Irritation to eyes and skin; dermatitis, liver damage	---	---	---

CHEMICAL HAZARD EVALUATION

Task Number	Compound	Exposure Limits (TWA)			Dermal Hazard (Y/N)	Route(s) of Exposure	Acute Symptoms	Odor Threshold/ Description	PID	
		PEL	REL	TLV					Corr. Factor	Ioniz. Poten. (eV)
1-6	Barium	0.5 mg/m^3	---	0.5 mg/m^3	N	Inh, Ing, Con	Irritation to eyes, nose, throat, or skin; stomach pains, slow pulse, irregular heart beat	Odorless	---	---
1-6	Benz(a)anthracene	N/A	N/A	N/A	Y	Inh,Ing, Con, Abs	Irritation to eyes, skin, digestive tract, respiratory tract (prevent contact to skin and eyes)	Yellow to green	---	---
1-6	Benzo(b)fluoranthene*	0.2 mg/m^3	0.1 mg/m^3	A2	Y	Inh, Ing, Con	No signs or symptoms of acute exposure to benzo(b)fluoranthene have been reported in humans	Colorless	---	---
1-6	Benzo(k)fluoranthene*	N/A	N/A	N/A	Y	Inh, Abs, Ing, Con	Irritation to eyes, skin upper respiratory tract, and digestive tract. Could cause lung damage. Fatal if absorbed through skin, swallowed or inhaled.	Yellow solid,odorless	---	---
1-6	Benzo (a) pyrene*	0.2 mg/m^3	---	A2	Y	Ing, Inh, Abs, Con	Irritation to eyes, skin, lungs harmful if swallowed (all hazards and toxic properties not fully known)	Yellow green powder		
1-6	Cadmium*	0.005 mg/m^3	LFC	0.01 mg/m^3	N	Inh, Ing, Con	Irritation to eyes, nose, throat, cough, tight chest/pain, dyspnea, pulmonary edema, sweating, chills, slow pulse, muscle aches, weakness, death	Silvery/white (blue tinged) lustrous solid, odorless	---	N/A
1-6	Chromium (metal)	1.0 mg/m^3 (per 6/97 NIOSH pocket guide)	---	0.5 mg/m^3(per 6/97 NIOSH pocket guide	N	Inh, Ing, Con	Irritation to eyes, skin and respiratory tract (lungs), ulceration of skin and mucous membranes, rash, electrolyte disturbances	Blue-white to steel gray lustrous brittle hard, odorless solid	---	N/A
1-6	Chrysene* Polynuclear Aromatics)	0.2 mg/m^3	---	0.2 mg/m^3	Y	Inh, Ing, Con	Irritation to eyes, skin, GI with nausea; vomiting, diarrhea, respiratory irritation	Very light beige solid	---	---

CHEMICAL HAZARD EVALUATION

Task Number	Compound	Exposure Limits (TWA)			Dermal Hazard (Y/N)	Route(s) of Exposure	Acute Symptoms	Odor Threshold/ Description	PID	
		PEL	REL	TLV					Corr. Factor	Ioniz. Poten. (eV)
1-6	Copper	1 mg/m^3 Fume, dusts & mists, solid	---		Y	Inh, Ing, Con	Irritation to upper respiratory tract, cold like symptoms, cough, fumes may cause metal fume fever, metallic taste in mouth, nausea, hair & skin discoloration, dermatitis, keratinization of hands & soles of feet, damage vision and cause blindness.	(Dusts/mists/metal) reddish, lustrous, odorless solid, (fume) fine black particulate in air, odorless	---	N/A
1-6	Hydrochloric Acid*	7.0 mg/m^3		7.5 mg/m^3	Y	Inh, Ing, Abs, Con	Irritation to eyes, skin, mucous membrane, delayed pulmonary edema, conjunctivitis, and photosensitization	Colorless gas or colorless fuming liquid	---	---
1-6	Indeno(1,2,3-cd)pyrene	0.2 mg/m^3	0.1 mg/m^3	0.1 mg/m^3	Y	Inh, Ing	N/A	Yellow Crystals	---	---
1-6	Iron (metal)	---	---	---	N	Inh	Benign pneumoconiosis (lung disease caused by long continued exposure to inhalation of metal/mineral dusts)	Gray crystalline powder or chips, odorless	---	---
1-6	Lead	0.05 mg/m^3	0.05 mg/m^3	0.05 mg/m^3	Y	Inh, Ing, Con	Poison, abdominal pain, spasms, nausea, vomiting, headache, irritation to eyes; skin, weakness, metallic taste, anorexia/loss of appetite, insomnia, facial pallor, colic, anemia, tremor, "lead line" in gums, constipation, abdominal pain, paralysis in wrists and ankles, encephalopathy (inflammation of brain)	Odorless	---	---
1-6	Manganese	5 mg/m^3	---	---	Y	Inh, Con, Ing	Nausea, vomiting, metal fume fever, bronchitis, cramps, coughing, headache,	Lustrous, brittle, silvery solid, odorless	---	-- -

CHEMICAL HAZARD EVALUATION

Task Number	Compound	Exposure Limits (TWA) PEL	REL	TLV	Dermal Hazard (Y/N)	Route(s) of Exposure	Acute Symptoms	Odor Threshold/ Description	PID Corr. Factor	PID Ioniz. Poten. (eV)
1-6	Mercury	0.1 ^{sk} mg/m^3 ceiling	0.1 mg/m^3 ceiling 0.05 mg/m^3 ceiling	0.025 ^{sk} mg/m^3	Y	Inh, Abs, Ing, Con	Severe respiratory tract damage, sore throat, coughing, pain, tightness in chest, breathing difficulties, headache, muscle weakness, anorexia, GI disturbances, ringing in ear, liver changes fever, bronchitis, pneumonitis, burning in mouth, abdominal pain, vomiting, corrosive ulceration, bloody diarrhea, weak & rapid pulse, paleness, exhaustion, tremors, collapse, thirst, burns and irritates skin, eyes, blurred vision, pain in eyes	Silver-white, heavy, odorless liquid metal	---	N/A
1-6	Nickel*	1 mg/m^3	1 mg/m^3	0.05 mg/m^3	Y	Inh, Ing, Con	Irritation to eyes, nose, throat, mucous membranes of upper respiratory tract, skin, metallic taste, tightness in chest, nausea, vomiting, fever, loss of coordination, giddiness, headache, skin sensitization (dermatitis)	Lustrous silvery odorless solid	---	N/A
1-6	Nitric Acid	2ppm / 5 mg/m^3		2ppm / 5 mg/m^3	Y	Inh, Ing, Con	Irritation to eyes, skin, and mucous membrane; delayed pulmonary edema; pneumontis; bronchitis; dental erosion	Strong odor Acrid	---	---
1-6	Selenium	0.2 mg/m^3	---	0.2 mg/m^3	Y	Inh, Ing, Con	Severe irritation to respiratory system, mouth, throat, eyes, skin, itching pain, redness to skin, coughing, labored breathing, nausea, dermatitis	Crystalline amorphous red to gray solid, odorless	---	N/A

CHEMICAL HAZARD EVALUATION

Task Number	Compound	Exposure Limits (TWA)			Dermal Hazard (Y/N)	Route(s) of Exposure	Acute Symptoms	Odor Threshold/ Description	PID	
		PEL	REL	TLV					Corr. Factor	Ioniz. Poten. (eV)
1-6	Silver	0.01 mg/m^3	---	0.1 mg/m^3	Y	Inh, Ing, Con	Blue gray eyes, irritation to nasal septum, throat, skin, ulcerations to skin, GI disturbances	White to gray lustrous/ metallic solid, odorless	---	---
1-6	Sodium	None established	---	None established	Y	Ing, Con	Can react with moisture to create sodium hydroxide and burn tissue	White to gray metallic, odorless solid	---	---

KEY:
PEL = Permissible Exposure Limit
REL = Recommended Exposure Limit
--- = Information not available
TLV = Threshold Limit Value(ACGIH)

Inh = Inhalation
Ing = Ingestion
mg/m^3 = Milligrams per cubic meter
* = Chemical is a known or suspected carcinogen

Abs = Skin Absorption
Con = Skin and/or eye Contact
ppm = Parts per million

APPENDIX D

EQUIPMENT CHECKLIST

EQUIPMENT CHECKLIST

PROTECTIVE GEAR			
LEVEL A	**N/A**	**LEVEL B**	**N/A**
SCBA		SCBA	
SPARE AIR TANKS		SPARE AIR TANKS	
ENCAPSULATING SUITE (Type)		PROTECTIVE COVERALL (Type)	
SURGICAL GLOVES		RAIN SUIT	
NEOPRENE SAFETY BOOTS		BUTYL APRON	
BOOTIES		SURGICAL GLOVES	
GLOVES (Type)		GLOVES (Type)	
OUTER WORK GLOVES		OUTER WORK GLOVES	
HARD HAT		NEOPRENE SAFETY BOOTS	
CASCADE SYSTEM		BOOTIES	
5-MINUTE COOLING VEST		HARD HAT WITH FACE SHIELD	
		CASCADE SYSTEM	
		MANIFOLD SYSTEM	
LEVEL C		**LEVEL D**	
ULTRA-TWIN RESPIRATOR	X	ULTRA-TWIN RESPIRATOR (available)	X
POWER AIR PURIFYING RESPIRATOR		CARTRIDGES (Type GMC-H)(available)	X
CARTRIDGES (Type GMC-H)	X	5-MINUTE ESCAPE MASK (available)	
5-MINUTE ESCAPE MASK		PROTECTIVE COVERALL (Type Tyvek/Saranax)	X
PROTECTIVE COVERALL (Type Tyvek/Saranax)	X	RAIN SUIT (available)	X
RAIN SUIT		NEOPRENE SAFETY BOOTS	
BUTYL APRON		BOOTIES (available)	X
SURGICAL GLOVES	X	NITRILE	
GLOVES (Type: Nitrite/Neoprene)	X	HARD HAT WITH FACE SHIELD (available)	X
OUTER WORK GLOVES		SAFETY GLASSES	X
NEOPRENE SAFETY BOOTS		GLOVES (Type: Surgical)	X
HARD HAT WITH FACE SHIELD	X	WORK GLOVES (Type: Neoprene/Nitrile)(available)	X
BOOTIES	X	SAFETY BOOTS	X
HARD HAT		BLAZE ORANGE VEST	X

EQUIPMENT CHECKLIST

INSTRUMENTATION	NO.	FIRST AID EQUIPMENT	NO.
OVA	X	FIRST AID KIT	X
THERMAL DESORBER		OXYGEN ADMINISTRATOR	
O_2/EXPLOSIMETER W/CAL.KIT (Drilling)	X	STRETCHER	
PHOTOVAC TIP		PORTABLE EYE WASH	
HNu (Probe 10.2)		BLOOD PRESSURE MONITOR	
MAGNETOMETER		FIRE EXTINGUISHER	X
PIPE LOCATOR			
WEATHER STATION		**DECON EQUIPMENT**	
DRAEGER PUMP, TUBES ( )		WASH TUBS	
BRUNTON COMPASS		BUCKETS	X
MONITOX CYANIDE		SCRUB BRUSHES	X
HEAT STRESS MONITOR		PRESSURIZED SPRAYER	
NOISE EQUIPMENT		DETERGENT (Type: Alconox) = TSP	X
PERSONAL SAMPLING PUMPS		SOLVENT (HEXANE)	
MINI-RAM (Particulates) (Drilling)	X	PLASTIC SHEETING	
		TARPS AND POLES	
		TRASH BAGS	X
RADIATION EQUIPMENT		TRASH CANS	
DOCUMENTATION FORMS		MASKING TAPE	
PORTABLE RATEMETER		DUCT TAPE	X
SCALER/RATEMETER		PAPER TOWELS	X
NaI Probe		FACE MASK	
ZnS Probe		FACE MASK SANITIZER	
GM Pancake Probe		FOLDING CHAIRS	
GM Side Window Probe		STEP LADDERS	
MICRO R METER		DISTILLED WATER	X
ION CHAMBER			
ALERT DOSIMETER			
MINI-RAD			

EQUIPMENT LIST

SAMPLING EQUIPMENT	NO.	MISCELLANEOUS (cont.)	NO.
4-OZ BOTTLES	X	BUNG WRENCH	
1 LITER AMBER BOTTLES	X	SOIL AUGER	
VOA BOTTLES	X	PICK	
SOIL SAMPLING (CORING) TOOL		SHOVEL	X
SOIL VAPOR PROBE		CATALYTIC HEATER	
THIEVING RODS WITH BULBS		PROPANE GAS	
SPOONS	X	BANNER TAPE	X
GENERAL TOOL KIT	X	SURVEYING METER STICK	X
FILTER PAPER		CHAINING PINS AND RING	
PERSONAL SAMPLING PUMP SUPPLIES		TABLES	
4-OZ JARS		WEATHER RADIO	
		BINOCULARS	
VAN EQUIPMENT		MEGAPHONE	
TOOL KIT		PORTABLE RADIOS (4)	
HYDRAULIC JACK		CELL PHONE	X
LUG WRENCH		CAMERA	X
TOW CHAIN			
VAN CHECK OUT			
GAS		**SHIPPING EQUIPMENT**	
OIL		COOLERS	X
ANTIFREEZE		PAINT CANS WITH LIDS, 7 CMIPS EACH	
BATTERY		VERMICULITE	X
WINDSHIELD WASH		SHIPPING LABELS	X
TIRE PRESSURE		DOT LABELS: "DANGER", "UP";	
		"INSIDE CONTAINER COMPLIES...";	
MISCELLANEOUS		"HAZARD GROUP"	
PITCHER PUMP		STRAPPING TAPE	X
SURVEYOR'S TAPE	X	BOTTLE LABELS	X
100 FIBERGLASS TAPE	X	BAGGIES	X
300 NYLON ROPE		CUSTODY SEALS	X
NYLON STRING		CHAIN-OF-CUSTODY FORMS	X
SURVEYING FLAGS	X	FEDERAL EXPRESS FORMS	X
FILM	X	CLEAR PACKING TAPE	X
WHEEL BARROW			

Appendix B – Community Air Monitoring Plan

Lu Engineers

New York State Department of Health
Generic Community Air Monitoring Plan

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

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

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

Community Air Monitoring Plan

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

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

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

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

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

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

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

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

Particulate Monitoring, Response Levels, and Actions

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

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m$_3$) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m$_3$ above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m$_3$ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m$_3$ of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.

Source: DRAFT DER-10 Technical Guidance for Site Investigation and Remediation, December 2002- Appendix 1A

Appendix C – Estimated Schedule

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Interim Remedial Measures Work Plan Schedule

Sewall's Island Site

BROWNFIELDS ASSESSMENT	2009						2010					
Task/Milestone	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Community Involvement												
Newsletter			■			■			■			■
Document Repository		■										
Work Plan Preparation												
Draft Workplan	■											
Agency Review		■										
Agency Approval			■									
Public Comment		■										
Interim Remedial Measures												
Mobilization			■									
Excavation of Soils				■								
Confirmation sampling				■								
Sampling analytical results					■							
Interim Remedial Measures Report						■	■					
Agency Review and Approval								■				
Management & Deliverables												
Quarterly Reports	■			■			■			■		
Generic QA/QC												
Draft RI/AA Report									■	■		
Final Report											■	
NYSDEC Certificate of Completion											■	■