

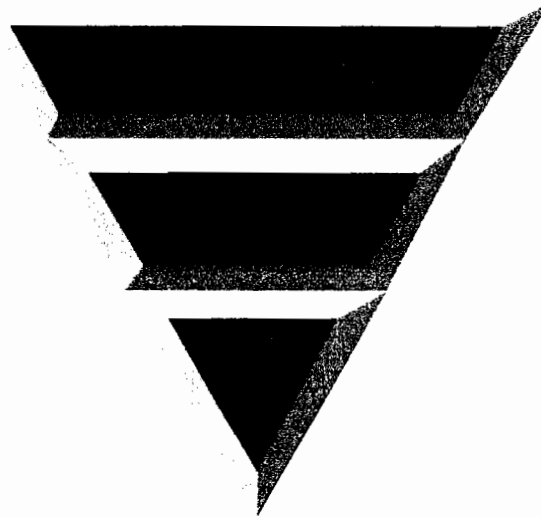
# REMEDIAL WORK PLAN

FOR THE

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
VOLUNTARY CLEANUP PROGRAM**

AT

**101,105, 107 WEST STREET  
BROOKLYN, NEW YORK**



**PREPARED FOR:**

**LAUREL HILL REALTY CORPORATION  
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NEW HYDE PARK, NEW YORK**

**PREPARED BY:**

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**JULY 1999**

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# REMEDIAL WORK PLAN

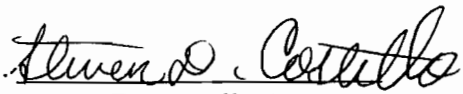
for the

## New York State Department of Environmental Conservation Voluntary Cleanup Program

at

101-105 West Street  
Brooklyn, New York

Professional Engineer Certification

  
Steven D. Costello, P.E.



## 1.0 INTRODUCTION

In accordance with the New York State Department of Environmental Conservation's Voluntary Cleanup Program (NYSDEC-VCP), Environmental Concepts, Inc. (ECI) conducted site investigative activities at the Laurel Hill Realty Corporation property located at 101,105,107 WestStreet in Brooklyn, New York. The purpose of the investigative activities was to determine and appropriately address the remedial needs of the site. In March of 1999, ECI performed eleven (11) soil borings in order to delineate the horizontal and vertical extent of the previously identified petroleum and metal impact to the subsurface soils at the site. In addition, three (3) monitoring wells were installed in order to determine the presence and relative concentrations of petroleum hydrocarbons and metals in the groundwater beneath the site. The investigative work plan was based upon the findings of previous site assessment work performed by ECI and by American Environmental Corp., (AEAC) of Farmingdale, New York.

On February 18, 1999, on behalf of the Laurel Hill Realty Corporation, ECI made application to the NYSDEC Voluntary Cleanup Program. Review of past and present site environmental conditions and regulatory requirements was performed by ECI to ensure that the necessary information was obtained and available for determining and developing a Remedial Workplan for the site. The aforementioned subsurface investigatory work was completed, and the results incorporated into a comprehensive Voluntary Cleanup Assessment (see Sections 7.0 and 8.0 of this report).

The following report summarizes the findings of the Voluntary Cleanup Assessment performed for the 101,105,107 WestStreet site. Information concerning current site subsurface conditions and past and present site environmental regulatory history and requirements is included, along with the work plan for attaining NYSDEC regulatory Closure at the site under the NYSDEC Voluntary Cleanup Program. The report references two previous site assessment reports: *Phase I Site Assessment for 101,105,107*

*WestStreet, Brooklyn, NY* prepared by ECI and dated March 14, 1997, and the June 11, 1997 AEAC letter to Mr. Grant Pudalov detailing subsurface investigative activities performed at the site on May 21, 1997, by AEAC. Pertinent supporting documentation, including site figures, laboratory analytical tables and reports, subsurface logs, and previous studies are included as appendices to this report.

## 2.0 SITE DESCRIPTION

### *Site Layout and Vicinity Characteristics*

The subject site is located at the southwest corner of the intersection of West Street with Kent Street in Brooklyn, New York. According to the ECI *Phase I Site Assessment*, the Brooklyn Tax Office lists the site as Lots 57 and 58 in Section 9 of Block 2556 and the address as 101,105,107 WestStreet in the Greenpoint section of Brooklyn, New York. The site is located on the US Geological Survey (USGS) Brooklyn, NY Topographic Quadrangle Map at 73°57'30" West Longitude and 40°43'45" North Latitude. The site is located in an area currently zoned M3-1 Heavy Manufacturing. The Site Location and Topographic Map is included as Figure 1 in Appendix A.

A single building is located on the site. The building is constructed of a steel frame and steel siding and is located on the northern half of the site. The floor is concrete and contains no floor drains. The building is not heated, contains no insulation, boilers, or furnaces. The roof is open except for the remains of the old roof, around the perimeter of the building, which is constructed of steel and tar paper. The building is used to store equipment, sand, gravel, and other construction-related materials. Electrical utilities are underground along West Street, and electricity is supplied to the building from the electrical manhole located beneath the southwest corner of the West Street/Kent Street intersection. Overhead telephone and municipal water and sewer service the property from West Street.

The southern half of the property is surrounded by an eight (8) foot fence with razor wire at the top which serves as the storage yard for Safeway Construction Enterprises, Inc. The southeast corner of the property is covered by a concrete pad. The outdoor yard is primarily used for the storage of steel road plates and construction materials.

The current site layout is shown in Figure 2 of Appendix A. Further detailed information concerning site and vicinity characteristics and site structures, roads, and other improvements is provided in Sections 2.2 and 2.3 of the *ECI Phase I Site Assessment*. Photographic documentation is presented in Appendix B of the *ECI Phase I Site Assessment*.

The site is surrounded by warehouses to the north, east, and west. Stores and apartments border the site to the south. A zoning divide runs the length of West Street, from Dupont Street south to Quay Street. Properties, including this site, located to the west of the West Street divide are zoned M3-1 Heavy Manufacturing, while properties to the east of the West Street divide are zoned M1-1 Light Manufacturing. Nearby areas of public concern, including hospitals, schools, and parks, are illustrated on the Site Location Map in Figure 1 of Appendix A. The two nearest schools, St. Alphonsus school on Java Street and St Anthony of Padua School on Leonard Street are located approximately 0.35 miles from the site. The two nearest parks, McGorick Park and McCarren Park, are located approximately 1.0 mile and 0.75 miles from the site, respectively. The two nearest churches, on Kent Street and Noble Street, are located approximately 0.20 miles from the site. The nearest hospital, Greenpoint Hospital, is located approximately 1.4 miles from the site. A playground is located on Noble Street and is approximately 0.25 miles from the site. All of these sites are generally in the apparent up gradient groundwater gradient direction from the site.

### *Site Subsurface Conditions*

Current site subsurface conditions, including soil types, depth to groundwater measurements, and groundwater flow direction were determined from the subsurface investigatory activities performed by ECI on March 2 and 3, 1999 (see Section 7.0 and 8.0 of this report). As part of this investigation, a total of eleven (11) soil borings and three (3) monitoring wells were installed at the site. Soil boring and monitoring well locations are illustrated in Figure 2 of Appendix A.

ECI's knowledge of the subsurface conditions at the site is based on the information gathered from the soil borings. Dark to medium brown, dry to moist, medium to coarse sand and gravel were encountered in soil borings to a maximum depth of approximately six feet (6') below grade. At depths below six feet (6'), soil types were predominately medium brown, moist to saturated, fine and medium sands. Some silt was encountered at depths below four feet (4') in SB-7. Soil types were characterized to a maximum depth of twelve feet (12') below grade. Detailed soil boring logs including complete sample descriptions can be found in Appendix B.

Three (3) of the eleven (11) soil borings were completed as groundwater monitoring wells. Maximum depths of the monitoring wells varied from 17 feet below grade in MW-1 and MW-3 to 20 feet below grade in MW-2. Depths to groundwater ranged from 8.64 feet below grade in MW-2 to a maximum of 9.39 feet below grade in MW-1. The general groundwater flow direction for this site is predominantly in a northwesterly direction. A groundwater gradient contour map is included as Figure 3 in Appendix A.

Previous site subsurface investigations at the site have included a local test pit excavation performed by ECI in March of 1997 and five (5) soil borings installed by AEAC in May of 1997. Both the test pit and five (5) soil borings were located within the southern half of the property. A detailed description of the test pit excavation and soil sampling procedures and analytical results is presented in Section 5.0 of the ECI *Phase I Site*

*Assessment.* A summary of the AEAC subsurface activities is presented in the June 11, 1997 AEAC letter to Mr. Grant Pudalov. The test pit location is illustrated in Figure 2 of Appendix A.

### 3.0 SITE HISTORY

The site located at 101,105,107 West Street is currently owned by the Laurel Hill Realty Corporation of New Hyde Park, New York. The current operator of the site is Safeway Construction Enterprises, Inc., of Brooklyn, New York, which has occupied the site since 1994. Previous use and ownership of the site was reported in Sections 2.5, 2.6, and 2.7 of the *ECI Phase I Site Assessment*. Site history information for the *ECI Phase I Site Assessment* was obtained from Environmental Risk Information and Imaging Services (ERIIS), which performed a search of federal and state environmental databases for information regarding the property. The ERIIS report is included in Appendix C of the *ECI Phase I Site Assessment*.

ERIIS records date back to an 1887 map which indicates the property was used for lumber storage and stables. A 1905 map indicates that an office, lumber storage area, and a tool house were located on the site where the present storage building is located. The 1916 map indicates the property was undeveloped with the exception of two smelters and a lumber shed. The property, according to the 1916 map, extended from West Street to the East River. A 1922 map indicates that the property extended half the block from West Street to the East River and included several buildings on what are currently different lots. The 1928 map indicates that there were two buildings located on the site but their uses are not indicated. However, the 1942 map indicates the two buildings were present and both were being used as private garages. A 1951 map indicates a warehouse was located on the property in the location of the current building. Also, a building was present on the concrete slab currently located in the southeast corner of the property and was used for paper storage.



Ownership for the property was found at the Brooklyn Records Office, at which records were provided dating back to 1912. The following list presents the ownership of the property:

<u>Grantee</u>	<u>Grantor</u>	<u>Date</u>
Oak Cal Realty Corp.	Perlen Ale	6/20/1958
Perlen Ale	Eberhard Faber Pencil Co.	6/03/1957
Eberhard Faber Pencil Co.	Tenth & 23rd Street Ferry Co.	8/14/1924
	Joseph J. O'Donohue, Jr.	
Tenth & 23rd Ferry Co.	Seymour L. Husted	5/26/1912
	Brooklyn NY Ferry Co.	

Previous and current uses of the surrounding properties are documented in Section 2.8 of the ECI *Phase I Site Assessment* and are as follows. The properties located to the north, east, and west of the site are currently occupied by warehouses. The properties to the south of the site are occupied by stores and apartments. The property to the north of the site has been a warehouse since 1947. The 1942 fire insurance map indicates the property was used for lumber storage and an office. The 1928 and 1922 fire insurance maps indicate a warehouse was located on the property to the north of 101,105,107 West Street at that time. The 1951 and all previous maps indicate a lumber yard, shed, and office were located on the property. The property to the east was undeveloped prior to 1928 and since that time it has been used as warehouses. The properties to the south of the site have been occupied by stores and apartments dating back to at least 1887. The property to the west of the site was occupied by a warehouse since at least 1928. Prior to then it was undeveloped with lumber storage, a shed, and a smelter for a brief period of time.

As part of the current site assessment, a Comprehensive Facility Profile of the 101,105,107 West Street site was obtained from Vista Information Solutions, Inc. The site-specific search was performed in order to identify:

- Records of existing or potential contamination,
- Records indicating hazardous materials or environmental permits present, and
- Records of environmental compliance.

This record search included numerous US EPA databases and New York State agency databases. Details of this database review are included in Appendix F. Interviews with current owners and operators and the results of the records search listed above indicate that there are no current environmental permits, hazardous materials, or previously identified contamination at this site. No spills or other releases of chemicals at the site were indicated by the results of the ERIIS database search reported in the *ECI Phase I Site Assessment*, as well. Additional information regarding the previous operational and environmental uses and conditions of the site are reported in Section 4.0 of this report.

Materials are currently stored at the site for a small concrete batch plant system. A review of the Material Safety Data Sheets for these materials (see Appendix G) do not indicate the storage of any hazardous materials.

#### **4.0 REGULATORY HISTORY**

A facility profile database search and an interview with the current site owner was performed to identify any Federal, State, or Local permits or approvals obtained by the current or former site operators regarding the storage, treatment, or disposal of waste.

The records search conducted by Vista Information Solutions, Inc., was tailored to Federal and State databases which contain information concerning a facility's environmental compliance status. The Comprehensive Facility Profile report (included in Appendix F) contains detail-level information concerning permits, violations, and the compliance status for the facility. The report was created based upon a search for facility

An untitled second investigation for lead was conducted by American Environmental Assessment Corp. (AEAC) of Farmingdale, New York. The investigation was conducted on May 21, 1997, and a total of 10 soil samples were collected and analyzed. Beatrix Packmohr, an AEAC hydrogeologist and senior project manager, drafted a letter report on June 11, 1997 detailing their findings. The purpose of the AEAC investigation was to determine the horizontal and vertical extent of lead contaminated soil in order to determine removal and disposal criteria for the impacted soils. Based upon the laboratory findings, AEAC suggested the main lead contamination was concentrated in the first two feet below grade and identified two main areas (“hot spots”) of soil that had been lead impacted to approximately four feet below grade. AEAC recommended further investigation of the site including additional soil borings and the installation of monitoring wells for groundwater analysis.

The ECI *Phase I Site Assessment* and AEAC letter report are included as Appendix E to this report.

## **6.0 DESCRIPTION OF INTENDED SITE USE**

The site located at 101,105,107 West Street is currently owned by Laurel Hill Realty Corporation of New Hyde Park, New York, and operated by Safeway Construction Enterprises, Inc., of Brooklyn, New York. Presently, the site is used for storage of various construction materials including steel road plates, sand, gravel, concrete batch materials, and other miscellaneous construction supplies. There are no permits needed to carry out the current use of the site. The site’s intended use is for the storage of equipment and material, such as dump trucks, backhoes, road plates, lumber, rebar, and gravel, and, in the future, for any uses permitted under New York City and New York State Laws.

## **7.0 DETAILED SITE ASSESSMENT AND CHARACTERIZATION**

On March 2 and 3, 1999, Environmental Concepts, Inc., (ECI) installed soil borings and monitoring wells at the property located at 101,105,107 WestStreet in order to appropriately characterize the site with regards to the presence and extent of on-site subsurface contamination. A total of eleven (11) soil borings and three (3) monitoring wells were installed to delineate the horizontal and vertical extent of the petroleum and metal impact to the soil and groundwater beneath the site. Soil and groundwater samples were obtained and submitted to York Analytical Laboratories, Inc., of Stamford, Connecticut, for analysis. Results of the investigation were used to determine the remedial needs of the site and propose recommendations for addressing those needs to the New York State Department of Environmental Conservation (NYSDEC), in accordance with the NYSDEC Voluntary Cleanup Program. On behalf of the Laurel Hill Realty Corporation, ECI made application to the NYSDEC Voluntary Cleanup Program on February 18, 1999, for approval of a voluntary investigatory and remedial agreement concerning the 101,105,107 WestStreet property. Upon approval and subsequent completion of the remedial workplan, environmental closure of the site can be achieved in accordance with the NYSDEC Voluntary Cleanup Program .

The March 1999 ECI subsurface investigation methods and results regarding the subject site are summarized below. In addition, findings from the March 1997 test pit excavation performed at the site by ECI have also been included. Pertinent supporting documentation, such as location maps, subsurface logs, tables, and laboratory analytical reports with chains-of-custody, are included in appendices to this report.

### **7.1 SUBSURFACE INVESTIGATION METHODS**

ECI performed soil borings both inside and outside the structure located at 101,105,107 WestStreet to determine the presence and relative concentrations of volatile organic compounds (VOC's), semi-volatile organic compounds (SVOC's), and various metal

compounds in the subsurface. On March 2, 1999, a total of three (3) external soil borings and three (3) internal soil borings, identified as SB-1 through SB-6, were performed using a truck-mounted Mobile B-61 drill rig outfitted with 4.25" inside diameter augers. Soil samples were collected during each soil boring using a two-inch (2") outside diameter, 24-inch long split spoon soil sampler in accordance with ASTM-D-1586 (ASTM, 1983). The number of blows required to drive the split-spoon sampler 24-inches with a 140 pound weight falling freely from 30-inches (Standard Penetration Test) was recorded as a measure of formation material density. Soil penetration depths ranged from approximately ten feet (10') below the ground surface for soil borings SB-5 and SB-6 to approximately twenty feet (20') below the ground surface for soil boring SB-3. Geologic descriptions of the samples were completed immediately in the field and a geologic log was prepared in accordance with the Modified Burmister soil classification system. The locations of the soil borings are shown in Figure 2 of Appendix A and the Subsurface Logs are included in Appendix B.

Three (3) of the six (6) soil borings were completed as groundwater monitoring wells. After the borings were advanced to the appropriate depth, 2-inch outside diameter (O.D.) monitoring wells were installed. The wells are constructed of 0.020-inch slotted, 2-inch O.D., flush threaded PVC from depth to approximately two feet (2') above the water table. The remainder of the well is constructed of 2-inch O.D., PVC casing to just below the ground surface. Each well was then backfilled with a silica sand pack, and a 1-foot minimum bentonite seal was placed above the sandpack. All three (3) of the monitoring wells were finished at the ground surface with a flush mounted road box labeled "Monitoring Well" and enclosed with concrete. Each well was immediately developed using a Honda WB15 water pump until the purge water attained visual clarity. Soil borings SB-2, SB-3, and SB-4 were completed as monitoring wells MW-1, MW-2, and MW-3, respectively. Well construction details for each monitoring well are illustrated on the Subsurface Logs in Appendix B.

On March 3, 1999, ECI performed one (1) internal soil boring and four (4) external soil borings at 101,105,107 WestStreet. A total of five (5) soil borings, identified as SE-7 through SB-11, were performed using a trailer-mounted hydraulic direct push drill rig outfitted with 24" long, Large Bore® soil samplers. All five (5) soil borings were advanced to approximately ten feet (10') below ground surface. Soil samples were collected nearly continuously at each boring location and described in the field using the Modified Burmister soil classification system. The locations of the soil borings are shown in Figure 2 of Appendix A, and the Subsurface Logs are included in Appendix B.

Each of the soil samples collected from the eleven (11) soil borings was transferred directly into a laboratory-cleaned eight ounce (8 oz.) glass jar for subsequent field and laboratory analysis. The sample was then screened for the presence of gross volatile organic compounds (VOC's) to provide real-time quantitative results. A Thermo-Environmental Organic Vapor Meter (OVM) Model 580B photo-ionization detector (PID), outfitted with a 10.6 eV lamp, was used to screen the soils. The VOC concentration in each headspace was measured and recorded in a field notebook. The OVM screening results are listed on the Subsurface Logs in Appendix B.

For all of the soil borings, soil samples were selected based upon the field screening results using the OVM 580B PID, the depth each boring achieved prior to refusal, prior knowledge of contaminated areas, as well as visual and/or olfactory signs of contamination. Each of the selected soil samples was placed in a cooler on ice, chilled to 4° Centigrade, and delivered to York Analytical Laboratories, Inc., a State of New York Department of Health certified analytical laboratory, for analysis. Each sample was analyzed for the presence of volatile organic compounds by EPA method 8021, semi-volatile organic compounds (polynuclear aromatic hydrocarbons) by EPA method 8270, and the RCRA 8 metals plus copper, nickel, zinc, and iron by EPA method 6010/7000 Series. Two samples from soil boring SB-2 were analyzed for PCBs in accordance with EPA Method 8080.

Based upon the analytical results of the soil sampling, additional soil samples were submitted to York Analytical Laboratories, Inc., on March 24 and April 12, 1999 for select analyses. On March 24, 1999, samples were submitted to York Analytical Laboratories, Inc., and selectively analyzed for mercury, lead, zinc, copper, and nickel by EPA method 6010/7000 Series. Additionally, one (1) soil sample was analyzed for cyanide by Standard Method 412B. In order to determine potential groundwater impact, four (4) additional soil samples were collected on April 12, 1999 from within the areas exhibiting the highest contaminant concentrations, as indicated by the analytical results of the March 1999 sampling event. Soil samples were taken using a 24" long, Large Bore® soil sampler manually driven using a 20-pound sledge hammer and submitted for select laboratory analyses by the toxicity characteristic leaching procedure (TCLP). Additionally, one soil sample was submitted for analysis of pesticides in accordance with EPA Method 8080.

On March 16, 1999, ECI collected groundwater samples from each of the three (3) monitoring wells on site. Prior to sampling, each monitoring well was gauged for the presence of phase-separated petroleum hydrocarbons (PSPH) and depth to groundwater using a Solinist® oil/water interface probe. Since no PSPH was detected on the water table surface in each of the monitoring wells, each well was subsequently evacuated of three (3) to five (5) well volumes using virgin disposable bailers and until temperature, pH, and specific conductance readings were within ten percent. Groundwater samples were then collected from each of three (3) monitoring wells, preserved according to EPA protocols, and submitted to York Analytical Laboratories, Inc., for volatile organic compound analysis by EPA method 8021, semi-volatile organic compound (polynuclear aromatic hydrocarbons) analysis by EPA method 8270, and metal analysis by EPA method 6010/200 Series.

## 7.2 SUBSURFACE INVESTIGATION RESULTS

### 7.21 SOIL SAMPLING ANALYTICAL RESULTS

ECI's knowledge of the subsurface conditions at the site is based on the information gathered from the soil borings. In general, the subsurface soils at the site consist of dark to medium brown, dry to moist, medium to coarse sand and gravel from grade to approximately six feet (6') below grade. Medium brown, moist to saturated, fine and medium sand was encountered at depths between six feet (6') and twelve feet (12') below grade. Some silt was encountered at depths below four feet (4') in SB-7. Soil sample descriptions for each of the soil borings are detailed in the Subsurface Logs of Appendix B.

Field screening of the soil samples was performed using an OVM Model 580 PID. Headspace readings were 0 parts per million (ppm) for almost all soil samples. Detectable VOC concentrations of 1 ppm were from soil samples SB-2(S-1), SB-3(S-2), and SB-10(S-1). Detailed headspace readings are presented on the Subsurface Logs in Appendix B.

On March 4, 1999, soil samples from the subsurface site investigation were delivered to York Analytical Laboratories, Inc., and analyzed for the presence of volatile organic compounds by EPA method 8021, semi-volatile organic compounds (polynuclear aromatic hydrocarbons) by EPA method 8270, and the RCRA 8 metals plus copper, nickel, zinc, and iron by EPA method 6010/7000 Series. In addition, soil samples SB-2(S-2) and SB-2(S-6) were also tested for the presence of polychlorinated biphenyls by EPA method 8080. The laboratory analytical results are presented in Table 1 of Appendix C. The laboratory analytical reports are included in Appendix D.



At NYDEC's request two surface soil samples were obtained on June 17, 1999 and submitted to the laboratory of analysis of PAHs by EPA Method 8270 and for Priority Pollutant Metals via EPA Method SW846. The results are included in Appendix D.

*Volatile Organic Compounds (VOC's)*

No detectable VOC concentrations were reported for any of the nine (9) soil samples.

*Semi-volatile Organic Compounds (SVOC's)*

No detectable concentrations of SVOC's were found in seven (7) of the nine (9) soil samples. SVOC's were detected in soil samples SB-3(S-2) and SB-11(S-2), with several of the concentrations above the Recommended Soil Cleanup Objectives listed in the NYSDEC Division of Hazardous Waste Remediation Technical and Administrative Guidance Memorandum (TAGM 4046) on Determination of Soil Cleanup Objectives and Cleanup Levels (January 1994). Chrysene and benzo[a]pyrene in the SB-3(S-2) soil sample and benzo[a]anthracene, benzo[b]fluoranthene, benzo[k]fluoranthene, and benzo[a]pyrene in the SB-11(S-2) soil sample were detected at concentrations above the Recommended Soil Cleanup Objectives listed in the NYSDEC TAGM 4046.

*Polychlorinated Biphenyls (PCB's)*

No detectable PCB concentrations were reported for either of the two (2) soil samples submitted for PCB analysis.

*Metals*

A number of metals were detected in each of the nine (9) soil samples submitted for analysis. Several metals in soil samples SB-3(S-2) and SB-11(S-2) were at concentrations exceeding the Recommended Soil Cleanup Objectives listed in the NYSDEC TAGM 4046. The Recommended Soil Cleanup Objectives considers site background concentrations for eleven (11) of the twelve (12) metals analyzed for in the soil samples. Therefore, the Eastern USA Background concentrations for heavy metals,

listed in the NYSDEC TAGM 4046, were used as the site background concentrations against which the detected metal concentrations in the nine (9) soil samples were compared. A summary of the results of the metal analyses is presented below:

- *Arsenic* Concentrations ranged from nondetect in three (3) of the nine (9) soil samples to a maximum of 9.3 ppm in SB-3(S-2). All results were below the Eastern US soil background level of 12 ppm
- *Barium* Concentrations were detected in all nine (9) soil samples and ranged from 23.3 ppm in SB-2(S-6) to 406 ppm in SB-3(S-2). All results were below the Eastern US background soil level of 600 ppm.
- *Chromium* Concentrations were detected in all nine (9) soil samples and ranged from 9.53 ppm in SB-2(S-2) to 38 ppm in SB-3(S-2). All results were below the Eastern US background soil level of 40 ppm.
- *Cadmium* Concentrations were detected in two (2) of the nine (9) soil samples and were above the Eastern USA Background concentration of 1 ppm; the cadmium concentration was 2.15 ppm in SB-3(S-2) and 2.12 ppm in SB-11(S-2).
- *Lead* Concentrations was detected in all nine (9) soil samples and ranged from 4.24 ppm in SB-4(S-2) to 882 ppm in SB-3(S-2); the lead concentration in SB-3(S-2) of 882 ppm exceeded the Eastern USA Background concentration of 500 ppm, the maximum average background concentration for lead in industrial areas.
- *Mercury* Concentrations were nondetect in five (5) of the nine (9) samples; detectable concentrations ranged from 0.33 ppm in SB-11(S-2) to 3.45 ppm in SB-3(S-2) and were above the Recommended Soil Cleanup Objective of 0.1 ppm.
- *Selenium* Concentrations were nondetect in all of the nine (9) soil samples.

- *Silver* Concentrations were nondetect in all of the nine (9) soil samples.
- *Copper* Concentrations were detected in all nine (9) soil samples and ranged from 8.24 ppm in SB-2(S-6) to 240 ppm in SB-3(S-2); the copper concentrations of 72.9 ppm in SB-11(S-2) and 240 ppm in SB-3(S-2) were above the Eastern USA Background concentration of 50 ppm.
- *Nickel* Concentrations were detected in all nine (9) soil samples and ranged from 12.3 ppm in SB-2(S-2) to 33.1 ppm in SB-3(S-2); nickel concentrations ranging from 25.9 ppm in SB-11(S-2) to 33.1 ppm in SB-3(S-2) were above the Eastern USA Background concentration of 25 ppm.
- *Zinc* Concentrations were detected in all nine (9) soil samples and ranged from 24.1 ppm in SB-2(S-6) to a maximum of 682 ppm in SB-3(S-2); zinc concentrations of 367 ppm in SB-11(S-2) and 682 ppm in SB-3(S-2) were above the Eastern USA Background concentration of 50 ppm.
- *Iron* Concentrations were detected in all nine (9) soil samples and ranged from 10,700 ppm in SB-2(S-2) to a maximum of 29,300 ppm in SB-3(S-2). These concentrations are below the Eastern US background soil levels of 550,000 ppm.

Based upon the analytical results of the nine (9) soil samples, twenty-four (24) additional soil samples were submitted from the March 2 and 3 sampling event for selective metals analyses. On March 24, 1999, samples were submitted to York Analytical Laboratories, Inc., and selectively analyzed for mercury, lead, zinc, copper, and nickel by EPA method 6010/7000 Series. Additionally, one (1) soil sample, SB-3(S-2), was analyzed for cyanide by Standard Method 412B. Of the twenty-four (24) samples, eight (8) soil samples contained metal concentrations above the Eastern USA Background concentrations and therefore above the Recommended Soil Cleanup Objectives. These

eight (8) samples were collected from soil borings SB-1, SB-7, SB-9, SB-10, and SB-11. The laboratory analytical results are presented in Table 2 of Appendix C. The laboratory analytical reports are included in Appendix D. A summary of the results of the metal analyses is presented below:

- *Lead* Concentrations were detected in all seventeen (17) of the soil samples analyzed for lead and ranged from 1.42 ppm in SB-9(S-3) to 626 ppm in SB-7(S-1). The lead concentration of 626 ppm in SB-7(S-1) exceeded the Eastern USA Background concentration of 500 ppm, the maximum average background concentration for lead in industrial areas.
- *Mercury* Concentrations were detected in five (5) of the sixteen (16) soil samples analyzed for mercury and ranged from 0.46 ppm in SB-1(S-1) to 1.68 ppm in SB-10(S-1). All detectable mercury concentrations were above the Recommended Soil Cleanup Objective of 0.1 ppm.
- *Copper* Concentrations were detected in all five (5) of the soil samples analyzed for copper and ranged from 13.7 ppm in SB-11(S-3) to 169 ppm in SB-1(S-1). Copper concentrations of 50.2 ppm in SB-1(S-2), 62.7 ppm in SB-11(S-1), and 169 ppm in SB-1(S-1) exceeded the Eastern USA Background concentration of 50 ppm.
- *Nickel* Concentrations were detected in all seven (7) of the soil samples analyzed for nickel and ranged from 6.15 ppm in SB-1(S-3) to 24.7 ppm in SB-1(S-1). All concentrations were below the Eastern USA background concentrations of 25 ppm.
- *Zinc* Concentrations were detected in all seven (7) of the soil samples analyzed for zinc and ranged from 30.8 ppm in SB-3(S-1) to 437 ppm in SB-1(S-1). Zinc concentrations ranging from 66.6 ppm in SB-1(S-3) to 437 ppm in SB-1(S-1) were above the Eastern USA

Background concentration of 50 ppm.

- *Cyanide* Concentrations were nondetect in the SB-3(S-2) sample.

To aid in determining the horizontal and vertical extent of the metal impact to the subsurface, the results of the mercury, lead, zinc, copper, nickel, and cadmium analyses for all soil samples submitted are listed alongside the respective soil borings in Figures 4-9 of Appendix A.

#### *TCLP Metals and Pesticides*

On April 12, 1999, ECI collected four (4) additional soil samples from within the areas exhibiting the highest contaminant concentrations as indicated by the analytical results of the March 1999 sampling event. The purpose of the additional soil samples was to determine the potential for hazardous soil at the site via select laboratory analysis by the toxicity characteristic leaching procedure (TCLP). The additional soil samples were taken using a 24" long, Large Bore<sup>®</sup> soil sampler driven alongside the corresponding locations and depths of the previous soil samples SB-3(S-2), SB-6(S-2), SB-7(S-1), and SB-11(S-2). The four (4) additional soil samples were labeled SB-3B(S-2), SB-6B(S-2), SB-7B(S-1), and SB-11B(S-2), respectively. SB-3B(S-2) was analyzed for TCLP Cadmium, TCLP Lead, and TCLP Mercury by EPA method 1311; SB-6B(S-2) was analyzed for the presence of TCLP Mercury by EPA method 1311; SB-7B(S-1) was analyzed for TCLP Lead by EPA method 1311; and SB-11B(S-2) was analyzed for TCLP Cadmium and TCLP Pesticides by EPA method 8080. The laboratory analytical results are presented in Table 3 of Appendix C. The laboratory analytical reports are included in Appendix D.

The results of the TCLP analyses indicated lead concentrations of 0.215 ppm and 0.136 ppm in SB-3B(S-2) and SB-7B(S-1), respectively. No detectable TCLP concentrations of

mercury, cadmium, or pesticides were reported for the respective TCLP analyses and soil samples.

## 7.22 GROUNDWATER SAMPLING ANALYTICAL RESULTS

Groundwater samples were collected from each of the three (3) monitoring wells on March 16, 1999 and analyzed for the presence of VOC's by EPA method 8021, SVOC's by EPA method 8270, and the RCRA 8 metals plus copper, nickel, zinc, and iron. The laboratory analytical results are presented in Table 4 of Appendix C. The laboratory analytical reports are included in Appendix D.

### *Volatile Organic Compounds (VOC's)*

Methyl-tert-butyl ether (MTBE) was detected in the MW-1, MW-2, and MW-3 groundwater samples at concentrations of 10 parts per billion (ppb), 1 ppb, and 2 ppb, respectively. No other detectable VOC's were reported for any of the three (3) groundwater samples.

### *Semi-volatile Organic Compounds (SVOC's)*

No detectable concentrations of SVOC's were found in the groundwater samples collected from each of the three (3) monitoring wells.

### *Metals*

Four (4) separate metals were detected in the groundwater samples collected from the three (3) wells. Barium, copper, and iron were detected in each sample. Barium concentrations ranged from 61 ppb in the MW-1 sample to 167 ppb in the MW-3 sample. Copper concentrations ranged from 6 ppb in the MW-2 sample to 8 ppb in the MW-3 sample. Concentrations of barium and copper detected in the groundwater were below the Class GA groundwater criteria listed in the NYSDEC TOGS 1.1.1. Iron

concentrations of 351 ppb in the MW-1 sample, 366 ppb in the MW-2 sample, and 989 ppb in the MW-3 sample were in exceedence of the Class GA groundwater criteria of 300 ppb listed in the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998). Zinc was detected in the MW-3 groundwater sample at a concentration of 5 ppb. Concentrations of zinc and copper detected in the groundwater were below the Class GA groundwater criteria listed in the NYSDEC TOGS 1.1.1. Silver, arsenic, cadmium, chromium, mercury, lead, selenium, and nickel analyses were non-detect for the groundwater samples collected from each of the three (3) monitoring wells.

### **7.3 SUBSURFACE INVESTIGATION SUMMARY**

On March 2 and 3, 1999, ECI conducted a subsurface investigation at the 101,105,107 WestStreet site. As part of this investigation, eleven (11) soil borings were advanced to depths ranging from approximately ten feet (10') below grade to a maximum depth of twenty feet (20') below grade. Samples were submitted to York Analytical Laboratories, Inc., a State of New York Department of Health certified analytical laboratory, for analysis. Nine (9) soil samples were submitted and analyzed for VOC's, SVOC's, and the RCRA 8 metals plus copper, nickel, zinc, and iron. Two (2) of the samples were also analyzed for PCB's.

The laboratory analytical results indicated that VOC's and PCB's were not detected in the soil samples. SVOC's were detected in the SB-3(S-2) and SB-11(S-2) soil samples at concentrations above the Recommended Soil Cleanup Objectives listed in the NYSDEC Division of Hazardous Waste Remediation Technical and Administrative Guidance Memorandum (TAGM 4046) on Determination of Soil Cleanup Objectives and Cleanup Levels (January 1994). Several metals were detected in the soil samples, with concentrations in five (5) of the nine (9) soil samples above the Eastern USA Background

concentrations used as the site background concentrations for the Recommended Soil Cleanup Objectives. Additional soil samples were submitted to York Analytical Laboratories, Inc., on March 24, 1999 and analyzed for select metals based upon the previous laboratory results. These samples also contained concentrations of a number of metals, specifically copper, mercury, zinc, and lead, exceeding the Eastern USA Background concentrations and therefore Recommended Soil Cleanup Objectives. In order to determine potential for hazardous soils, TCLP analyses for lead, mercury, cadmium, and pesticides were performed selectively on four (4) soil samples obtained on April 12, 1999. Of the two (2) samples that were submitted for TCLP lead analysis, both returned with detectable concentrations of lead which were below the NYCRR Part 371 Hazardous levels for lead (5.0 mg/L). No other TCLP parameters were detected.

Three (3) groundwater monitoring wells were installed on site and groundwater samples were collected on March 16, 1999. The groundwater samples were submitted to York Analytical Laboratories, Inc., for analysis of VOC's, SVOC's, and the RCRA 8 metals plus copper, nickel, zinc, and iron. Low concentrations of MTBE were detected in the groundwater samples from each of the three (3) monitoring wells. No standard is listed for MTBE in the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998). No other VOC's and no SVOC's were detected in the groundwater samples. Barium and copper in each of the groundwater samples and zinc in the groundwater sample from MW-3 were detected at concentrations below the Class GA groundwater criteria listed in the NYSDEC TOGS 1.1.1. Iron was detected in the groundwater samples in excess of the Class GA groundwater criteria listed in the NYSDEC TOGS 1.1.1.



## 8.0 WORK PLAN RECOMMENDATIONS

In March of 1999, Environmental Concepts, Inc. (ECI) performed a subsurface investigation at 101,105,107 West Street in Brooklyn, New York, consisting of eleven (11) soil borings and the installation of three (3) monitoring wells. The subsurface investigation was conducted as per the recommendation of the Phase I site assessment performed by ECI in March of 1997, which included the excavation and sampling of one (1) test pit in the southern portion of the site.

The site is a small area (approximately 8600 Sq. Ft.) located in a commercial section (zoned M3-1, heavy manufacturing) of Brooklyn, NY. Approximately half of the area is covered by an old warehouse building with a concrete slab at the ground surface. Within the exterior site area there is also a small slab at the surface outside of the warehouse building. The commercial area is serviced by city water and is not located in close proximity to schools (see Figure 1).

In general, the site exhibits no signs of gross contamination, but has some local areas of impacted soil as indicated by laboratory analytical results from the March 1997 test pit excavation and the March 1999 soil borings. Analytical results of groundwater sampled from the three (3) on-site monitoring wells indicate no detectable impact to the groundwater. There are, however, concentrations of iron in the groundwater which are slightly above the NYS Ambient Water Quality Standards.

Based on the site investigation performed by ECI in March of 1997 and 1999, Laurel Hill Realty Corporation and ECI request that the New York State Department of Environmental Conservation consider the following recommendations and actions as acceptable for closure at the site. ECI recommends that the soils in the area outside of the building be excavated to remove petroleum and metal impacted soils. Within the

building area, the ground surface is covered with a concrete slab. No excavations within the building structure are recommended. All excavated soils will be properly disposed of at a permitted facility. The proposed extent of excavation, together with the appropriate analytical results, is indicated on Figures 4 through 9 in Appendix A.

#### HYDROCARBON IMPACT TO THE SUBSURFACE

A total of eleven (11) soil samples, collected from ground surface to twelve feet (12') below grade, were analyzed for volatile and semi-volatile organic compounds. The results indicate a local hydrocarbon impact to the subsurface in the areas of test pit 1 and soil borings SB-3 and SB-11, from which soil samples collected from depths ranging from ground surface to four feet (4') below grade were found to contain concentrations of semi-volatile compounds in excess of the Recommended Soil Cleanup Objectives. Excavation of the impacted soils to within the Recommended Soil Cleanup Objectives is recommended in conjunction with excavation efforts pertaining to the metal impact to the subsurface as detailed below.

#### METAL IMPACT TO THE SUBSURFACE

Of the several metals analyzed for and detected in the soil samples collected during subsurface investigation of the site, six (6) of the metals were detected at concentrations indicating an impact to subsurface soils (see Figures 4-9 of Appendix A). Based upon concentration depths and locations of these metals, ECI recommends local excavation of soils located in the southern portion of the site and at depths ranging from ground surface to approximately four feet (4') below grade. The excavation limits will be guided by the Recommended Soil Cleanup Objectives listed in the NYSDEC TAGM 4046. The Eastern USA Background concentrations will be used as the site background concentrations for the Recommended Soil Cleanup Objectives. The relative impact of each of the six (6) metals of concern are addressed below.

- *Mercury*

A total of twenty-seven (27) total mass mercury analyses were performed on soil samples collected at depths ranging from ground surface to twelve feet (12') below grade (see Figure 4 in Appendix A).

In the warehouse area, which has a concrete floor slab, concentrations of mercury were detected in three (3) of the fourteen (14) soil samples collected from depths ranging from two feet (2') to six feet (6') below grade. The detectable concentrations ranged from 1.11 ppm to 2.73 ppm and were above the Eastern USA Background concentration of 0.2 ppm and the Recommended Soil Cleanup Objective of 0.1 ppm. Mercury was also detected in soil samples obtained from a previous test pit at a concentration of 1.27 ppm at the zero (0) to two (2) foot depth and at concentrations of 0.75 ppm at the two (2) to five and one half (5.5) foot depth.

In the area outside of the warehouse, concentrations of mercury were detected in eight (8) of the soil samples at depths ranging from ground surface to four feet (4') below grade. The detectable concentrations ranged from 0.33 ppm to 3.45 ppm, which exceed the Eastern USA Background concentration of 0.2 ppm and the Recommended Soil Cleanup Objective of 0.1 ppm.

In addition, two (2) TCLP mercury analyses were performed on soil samples collected from two to four feet (2'-4') below grade in the areas of soil borings SB-3 and SB-6, which exhibited the highest total mass mercury analytical results. The results of the TCLP mercury analyses were nondetect and indicate that the site is not hazardous for mercury.

No detectable concentrations of mercury were found in the groundwater samples collected from the three (3) monitoring wells.

It is not recommended that further investigation or excavation be performed in the warehouse building area beneath the concrete floor slab. It is recommended that local areas of soil, which are located outside of the warehouse building and exhibit total mass analysis mercury results greater than 0.1 ppm, be excavated and properly disposed for closure at the site. The approximate area of proposed excavation is illustrated in Figure 4 of Appendix A.

- *Lead*

The site is, in general, below the Eastern USA Background concentration of 500 ppm for lead in an industrial area. Of a total of twenty-nine (29) total mass lead analyses performed of soil samples obtained from the site, only three (3) isolated soil samples (SB-3:S2, SB-7:S1, and test pit 1:S1) had lead concentrations which exceeded 500 ppm (see Figure 5 of Appendix A). The three (3) soil samples were taken from depths ranging from ground surface to four feet (4') below grade; lead concentrations detected in the remaining soil samples collected from depths of four feet (4') to twelve feet (12') below grade ranged from 1.42 ppm to 16.5 ppm, well below the Recommended Soil Cleanup Objective for lead. In the areas of the site not covered by a concrete slab, only the local area of test pit 1 exhibited a lead analysis result (1,930 ppm) which exceeded the Recommended Soil Cleanup Objective for lead. Also, a previous investigation by American Environmental Assessment Corporation indicated that one sample at the zero (0) to two (2) foot depth in the vicinity of the test pit exhibited concentrations of lead (955 ppm) which exceed the Recommended Soil Cleanup Objective for lead. These two specific areas will be excavated during the excavation process. It is not recommended that the single lead impacted area under the building slab be excavated. No further investigation or excavation for lead impacted soil at the site is recommended for closure of the site.

In addition, two (2) TCLP lead analyses were performed on soil samples, collected from ground surface to two feet (2') below grade in the area of soil boring SB-3 and from two to four feet (2'-4') below grade in the area of SB-7, which exhibited the highest total mass mercury analytical results. The results of the TCLP lead analyses (0.215 ppm and 0.136 ppm) were well below the hazardous lead level of 5 ppm.

No detectable concentrations of lead were found in the groundwater samples collected from the three (3) monitoring wells.

- *Zinc*

A total of eighteen (18) total mass Zinc analyses were performed of soil samples collected at depths ranging from ground surface to twelve feet (12') below grade (see Figure 6 in Appendix A). Of these analyses, eight (8) soil samples were found to have concentrations of zinc above the Eastern USA background concentration of 50 ppm. Zinc concentrations ranging from 119 ppm to 1490 ppm were found in seven (7) of the soil samples collected from ground surface to a depth of four feet (4') below grade, and a zinc concentration of 66.6 ppm was found in one (1) soil sample from a depth of four to six feet (4'-6'). Zinc was also detected in a soil sample obtained from a previous test pit at a concentration of 345 ppm at the two (2) to five and one half (5.5) foot depth. Zinc impacted soils will be excavated during excavation for removal of impacted soils. No further investigation or excavation for zinc is recommended for closure at the site.

Zinc is not currently listed as a hazardous waste in 6 NYCRR Part 371.

The results for zinc analyses of groundwater samples from the three (3) monitoring wells was nondetect for groundwater samples from two (2) of the wells and 5 ppb for the other well. These results are below the New York State Ambient Water Quality Standards for zinc of 2,000 ppb.

- *Copper*

A total of sixteen (16) total mass copper analyses were performed for soil samples collected at depths ranging from ground surface to twelve feet (12') below grade (see Figure 7 in Appendix A). Of these analyses, only seven (7) analyses had results (50.2 ppm to 649 ppm) which were above the Eastern USA Background concentration of 50 ppm and were from soil samples collected from ground surface to four feet (4') below grade. Copper was also detected in a soil sample obtained from a previous test pit at a concentration of 92.9 ppm at the two (2) to five and one half (5.5) foot depth. All local soils which exhibit copper concentrations above 50 ppm will be removed during excavation of the impacted soils. No further investigation or excavation is recommended for copper for closure at this site.

Copper is currently not listed as a hazardous waste in 6 NYCRR Part 371.

Concentrations of copper in the groundwater samples collected from the three (3) monitoring wells ranged from 6 ppb to 8 ppb and were below the New York State Ambient Water Quality Standards for copper of 200 ppb.

- *Nickel*

A total of eighteen (18) total mass nickel analyses were performed for soil samples collected from depths ranging from ground surface to twelve feet (12') below grade (see Figure 8 of Appendix A). Of these analyses, only four (4) analyses had test results (25.9 ppm to 33.1 ppm) which were above the Eastern

USA Background concentration for nickel of 25 ppm. All local soils which exhibit nickel concentrations above 25 ppm (with the exception of one area at ten (10) to twelve (12) feet below the ground surface, where one soil sample exhibited a concentration of 28.7 ppm) will be removed during excavation of impacted surface soils. No further investigation or excavation is recommended for nickel for closure at this site.

Nickel is currently not listed as a hazardous waste in 6 NYCRR Part 371.

No detectable concentrations of nickel were found in the groundwater samples collected from the three (3) monitoring wells.

- *Cadmium*

A total of eleven (11) total mass cadmium analyses were performed for soil samples collected from depths from ground surface to four feet (4') below grade and from eight to twelve feet (8'-12') below grade (see Figure 9 of Appendix A). Cadmium was detected in only four (4) of the eleven (11) soil samples at concentrations (2.12 ppm to 12.5 ppm) which were above the Eastern USA Background concentration of 1 ppm. Detectable concentrations of cadmium were detected in the soil samples collected from ground surface to four feet (4') below grade. Cadmium was also detected in a soil sample obtained from a previous test pit at a concentration of 2.34 ppm at the two (2) to five and one half (5.5) foot depth. All surface soils which exhibit cadmium concentrations above 1 ppm will be removed during excavation of impacted surface soils. No further investigations or excavation is recommended for cadmium at this site for closure.

In addition, two (2) TCLP cadmium analyses were performed on soil samples collected from two to four feet (2'-4') below grade in the areas of soil borings SB-3 and SB-11, which exhibited total mass mercury analytical results above the

Eastern USA Background concentration of 1 ppm. The results of the TCLP cadmium analyses were nondetect and indicate that the site is not hazardous for cadmium.

No detectable concentrations of cadmium were found in the groundwater samples collected from the three (3) monitoring wells.

#### GROUNDWATER

The analytical results from analyses performed on groundwater samples obtained from three (3) monitoring wells indicate that the groundwater is not impacted by hydrocarbons or metals, with the exception of iron which has a concentration (351 ppb to 989 ppb) in the groundwater that is slightly higher than the NYS Ambient Water Quality Standard for iron of 300 ppb. Results of selective TCLP metal analyses also indicate no impact to groundwater quality in the areas of significant metal impact to subsurface soils. Therefore, no further investigation or remediation of the groundwater is recommended for closure at this site.

#### RECOMMENDED REMEDIAL WORK PLAN

Remedial excavations will be performed in the area outside of the building, which has a concrete floor slab. The approximate excavation area is shown on Figures 4 through 9 in Appendix A. No excavations are recommended in the area within the building. No additional investigatory soil borings or soil laboratory analyses are recommended except those required for classification by the soil disposal facility. All excavated soils will be transported to and disposed of at a permitted facility. During excavation, real-time monitoring for volatile compounds and particulate levels at the perimeter of the work area will be performed in accordance with the Health & Safety Plan, included in Appendix H. Excavations



will be backfilled with clean soil. Prior to backfilling, Safeway Construction Enterprises will provide a certification that the soil is clean.

Subsequent to the excavation and prior to backfilling, confirmatory composite soil samples will be obtained from the excavation. One composite soil sample will be obtained from the bottom of the excavation and one composite soil sample from each side wall of the excavation. A minimum of three grab samples will be obtained to comprise each composite sample. For confirmatory purposes, the results of the analyses will be compared to the Soil Cleanup Objectives from TAGM 4046. The Eastern USA Background levels (as listed in Table 1 of Appendix C) will be used where the TAGM 4046 the Soil Cleanup Objectives allow soil background levels. When the laboratory analytical results of the composite samples are equal to or below the Soil Cleanup Objectives, the excavation will then be backfilled with clean borrowed material. The following

confirmatory laboratory analyses will be performed on the composite samples:  
Semivolatile organic compounds via EPA Method 8270, Volatile organic compounds via EPA 8021, and RCRA 8 metals via EPA Series 200.

OK -  
STAR S  
p. 15

We asked for

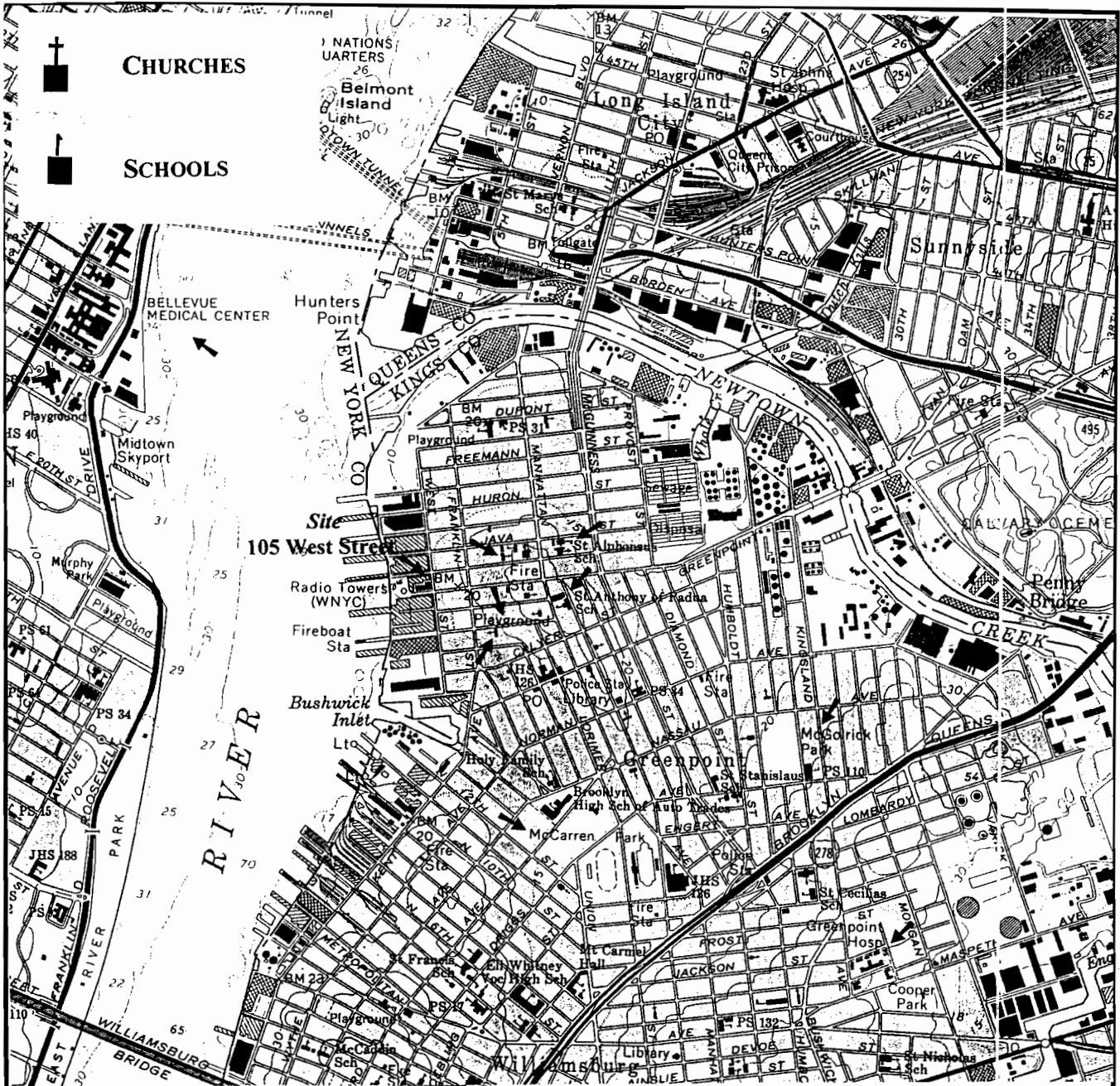
OK



1 composite

⊗ Minimum 4 grab samples from the bottom & the sides walls in case that imported soil → more they have ~ 250 cu yd stars for ↗

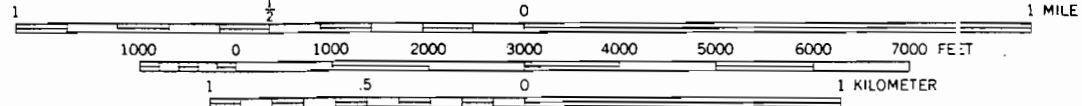
# **APPENDIX A**

## **FIGURES**



 CHURCHES  
 SCHOOLS

SCALE 1:24 000



MN  
 GN  
 12°  
 213 MILS  
 0°42'  
 12 MILS

UTM GRID AND 1979 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

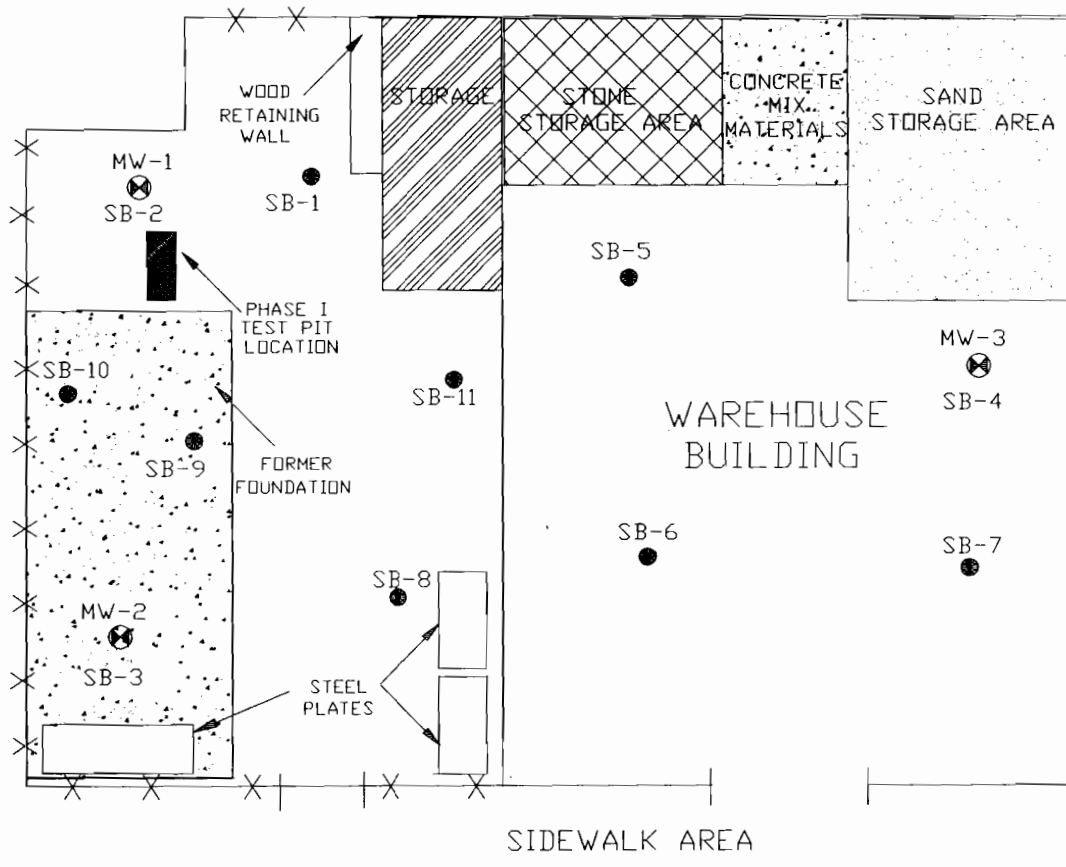
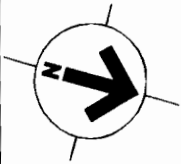
CONTOUR INTERVAL 10 FEET  
 NATIONAL GEODETIC VERTICAL DATUM OF 1929  
 DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOW WATER  
 THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE  
 SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER  
 THE MEAN RANGE OF TIDE IS APPROXIMATELY 4.2 FEET IN THE EAST RIVER  
 AND 5.2 FEET IN JAMAICA BAY



**Environmental Concepts, Inc.**

Laurel Hill Realty Corporation  
 Brooklyn, New York

**Figure 1 - Site Location and  
 Topographic Map**



KENT STREET

WEST STREET

BM-1

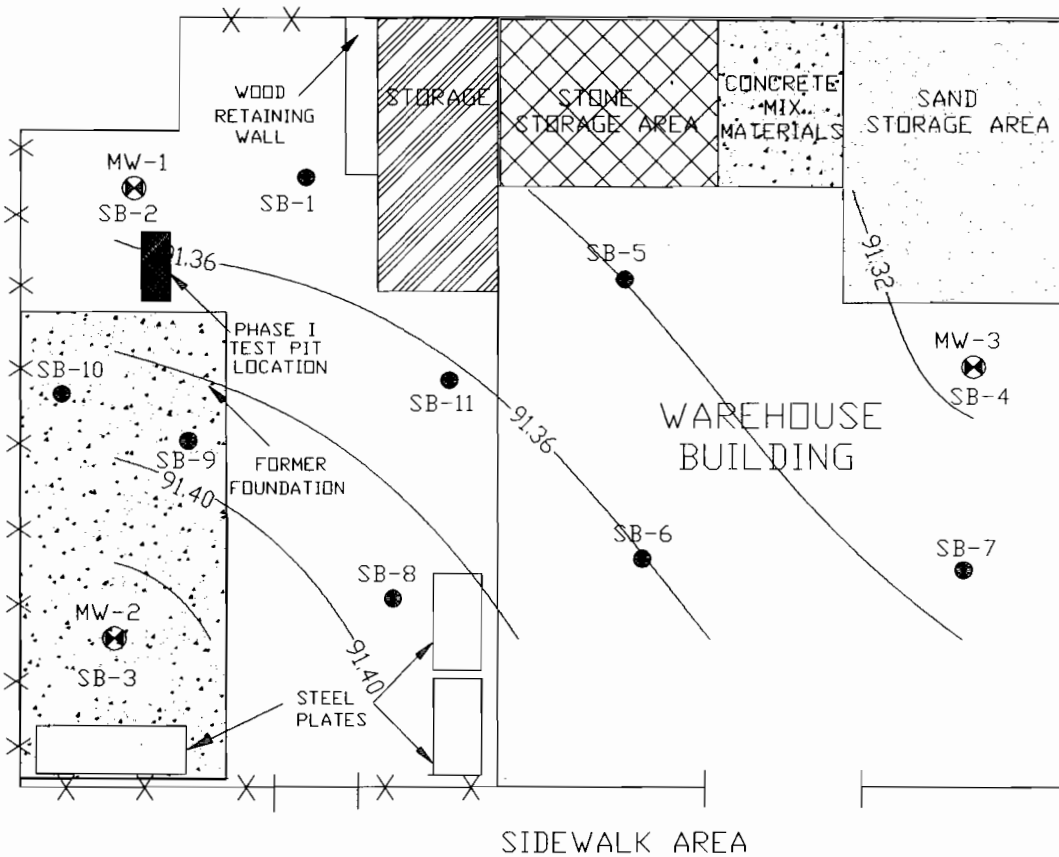
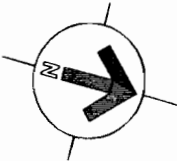
BM-2

SCALE: 1" = 20'

<b>TITLE</b> SOIL BORING AND MONITORING WELL LOCATION MAP			<b>PROJECT</b> SAFEWAY CONSTRUCTION 105 WEST STREET BROOKLYN, NEW YORK		
<b>REVISIONS</b>			<b>DRAWING PREPARED BY</b> ENVIRONMENTAL CONCEPTS, INC. 142 FERRY ROAD SUITE 5 OLD SAYBROOK, CONNECTICUT		
mark	date	description	<b>CLIENT</b> LAUREL HILL REALTY		<b>date</b> 3/11/99 <b>scale</b> AS NOTED
					<b>drawn by</b> TH <b>approved by</b>  <b>figure number</b> 2
			<b>filename</b> C:\DRAWINGS\TCH\SAFEWSB		

**LEGEND**

- SOIL BORING
- ⊗ MONITORING WELL
- SURVEY BENCH MARK
- ▨ CONCRETE SURFACE
- X-X FENCE



BM-1

BM-2

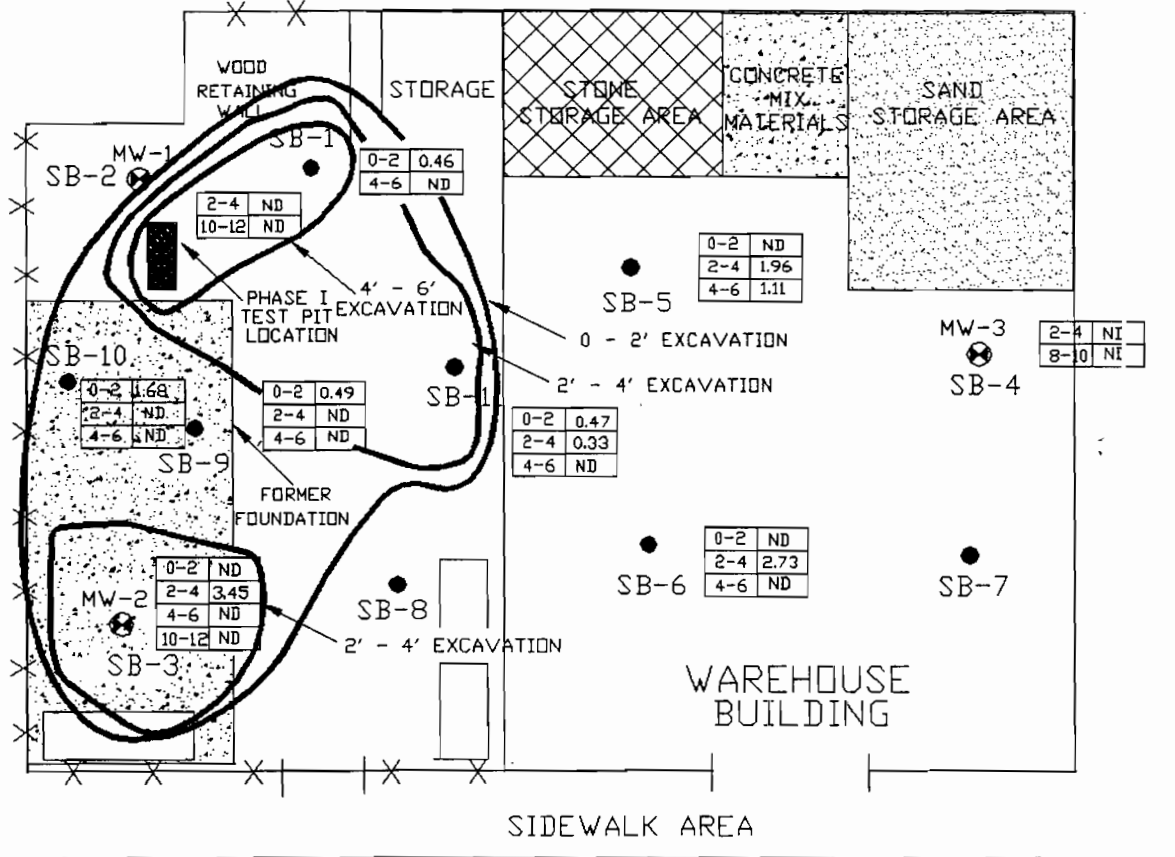
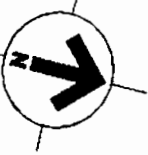
SCALE: 1" = 20'

TITLE GROUNDWATER CONTOUR MAP			PROJECT SAFEBAY CONSTRUCTION 105 WEST STREET BROOKLYN, NEW YORK		
REVISIONS			DRAWING PREPARED BY ENVIRONMENTAL CONCEPTS, INC. 142 FERRY ROAD SUITE 5 OLD SAYBROOK, CONNECTICUT		
mark	date	description	CLIENT LAUREL HILL REALTY		date 3/24/99
					scale AS NOTED
					drawn by TH
					approved by JB
					figure number 3
filename C:\DRAWINGS\TCH\SAFEV.GW					

LEGEND

- SOIL BORING
- ⊗ MONITORING WELL
- SURVEY BENCH MARK
- ▨ CONCRETE SURFACE
- X-X FENCE
- GROUNDWATER CONTOUR  
3/23/99

MERCURY TOTAL MASS ANALYSIS RESULTS (PPM)



KENT STREET

2.  $3.5 \times 20 = 70' : 3 = 23 \text{ yd}$   $V_I = 160 \text{ cu yd}$  I  
 $1.5 \times 20 = 30' : 3 = 10 \text{ yd}$   $V_{II} = 80 \text{ cu yd}$  II  
 I depth 2' = 0.67 yd WEST STREET  $V_{III} = 12 \text{ cu yd}$  III  
 II depth 2' = 0.67 yd  $L = 3" = 60 : 3 = 20 \text{ yd}$   
 $W = 1" = 20' : 3 = 6 \text{ yd}$   
 III depth 2' = 0.67  $BM-2$   
 $L = 1" = 20' : 3 = 6 \text{ yd}$   
 $W = 0.5 = 10' = 3 \text{ yd}$

SCALE: 1" = 20'

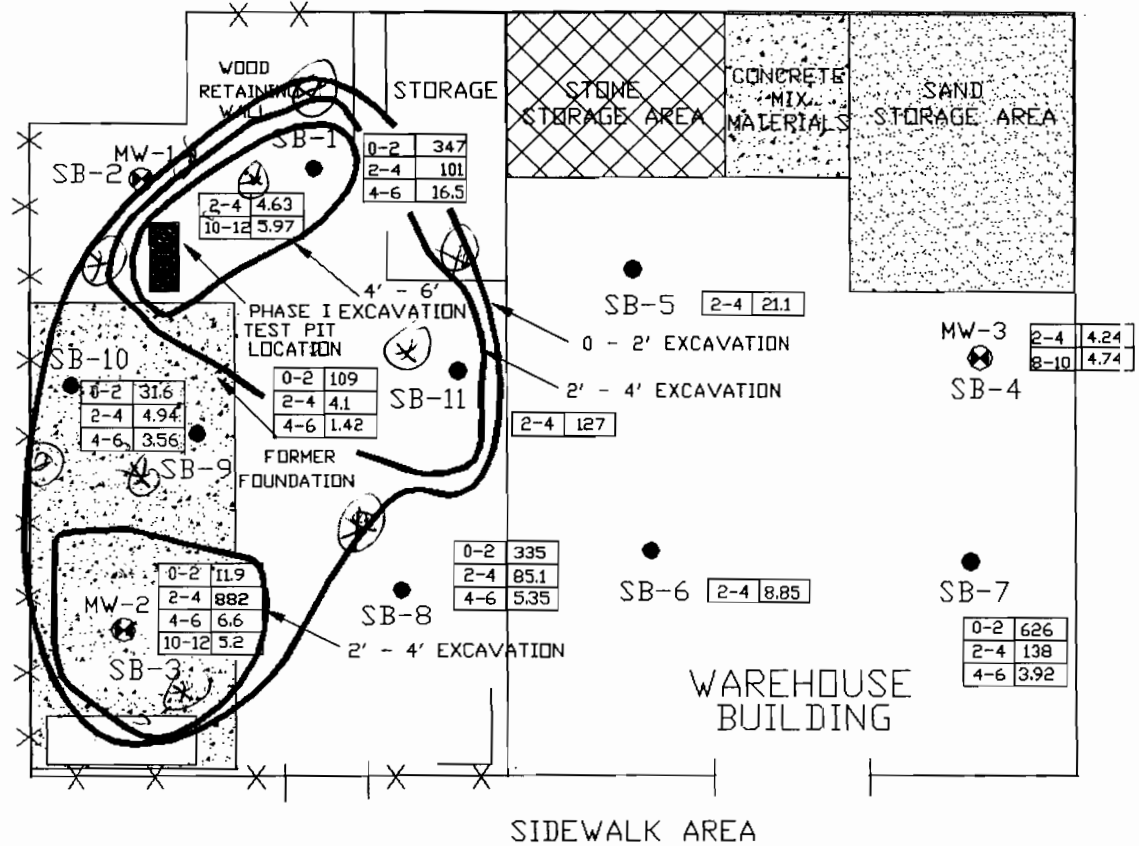
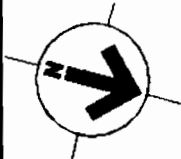
0-2 PPM	TOTAL MASS ANALYSIS RESULTS (PPM)
2-4 PPM	
4-6 PPM	
6-8 PPM	

- SOIL BORING
- ⊗ MONITORING WELL
- ★ SURVEY BENCH MARK
- ▨ CONCRETE SURFACE
- X-X FENCE

TITLE SOIL BORING AND MONITORING WELL LOCATION MAP INCLUDING MERCURY CONCENTRATIONS			PROJECT SAFEWAY CONSTRUCTION 105 WEST STREET BROOKLYN, NEW YORK		
REVISIONS			DRAWING PREPARED BY ENVIRONMENTAL CONCEPTS, INC. 142 FERRY ROAD SUITE 5 OLD SAYBROOK, CONNECTICUT		
mark	date	description	date 4/22/99		
			scale AS NOTED		
			drawn by TH		
			approved by		
			figure number 4		
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$V_{Tot} = 160 + 80 + 12 = 250 \text{ cu yd}$   
 1 grab 4 composite

LEAD TOTAL MASS ANALYSIS (PPM)



4' and 1' point - WEST STREET

5' and 1' point -

BM-1

BM-2

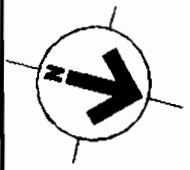
LEGEND

SCALE: 1" = 20'

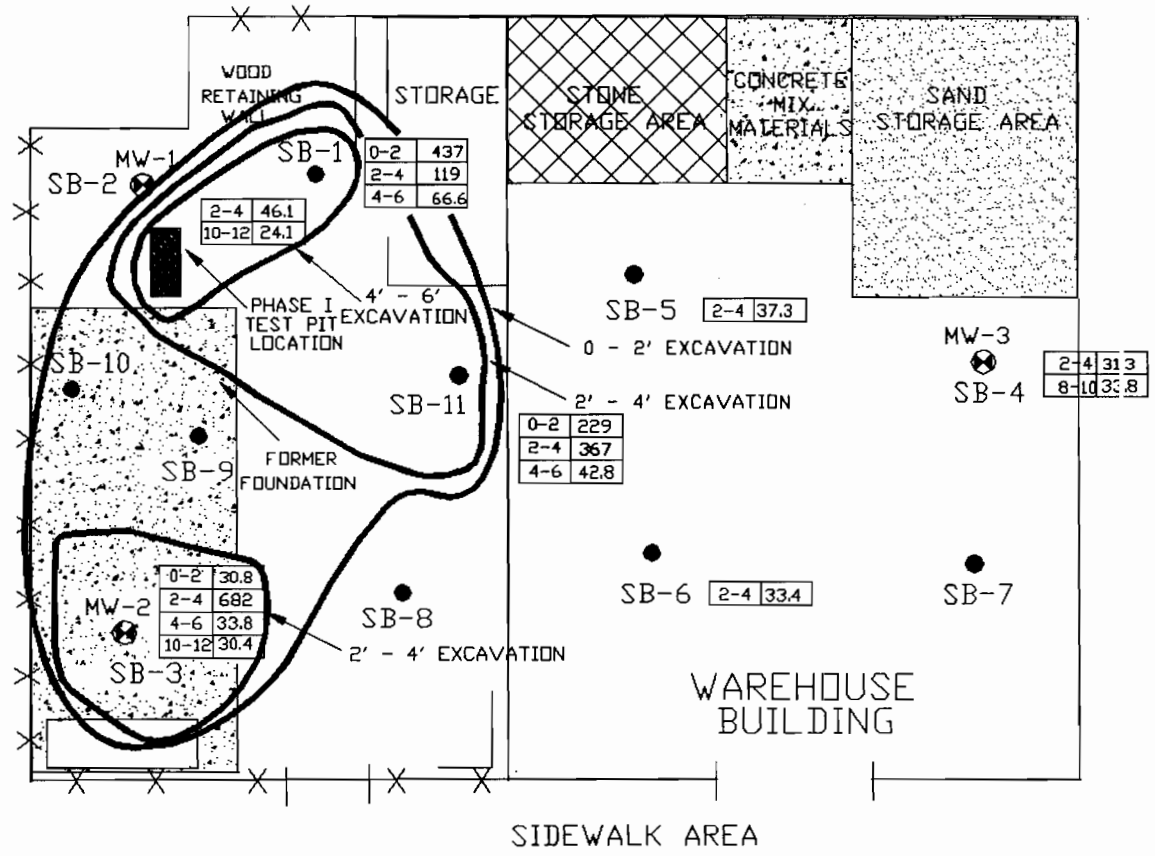
0-2	PPM	TOTAL MASS ANALYSIS RESULTS (PPM)
2-4	PPM	
4-6	PPM	
6-8	PPM	

- SOIL BORING
- ⊗ MONITORING WELL
- ★ SURVEY BENCH MARK
- ▨ CONCRETE SURFACE
- ✕✕ FENCE

TITLE SOIL BORING AND MONITORING WELL LOCATION MAP INCLUDING LEAD CONCENTRATIONS			PROJECT SAFeway CONSTRUCTION 105 WEST STREET BROOKLYN, NEW YORK		
REVISIONS			DRAWING PREPARED BY ENVIRONMENTAL CONCEPTS, INC. 142 FERRY ROAD SUITE 5 OLD SAYBROOK, CONNECTICUT		
mark	date	description	CLIENT LAUREL HILL REALTY		
			DATE 4/22/99		
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			FIGURE NUMBER 5		
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ZINC TOTAL MASS ANALYSIS (PPM)



BM-1

BM-2

LEGEND

SCALE: 1" = 20'

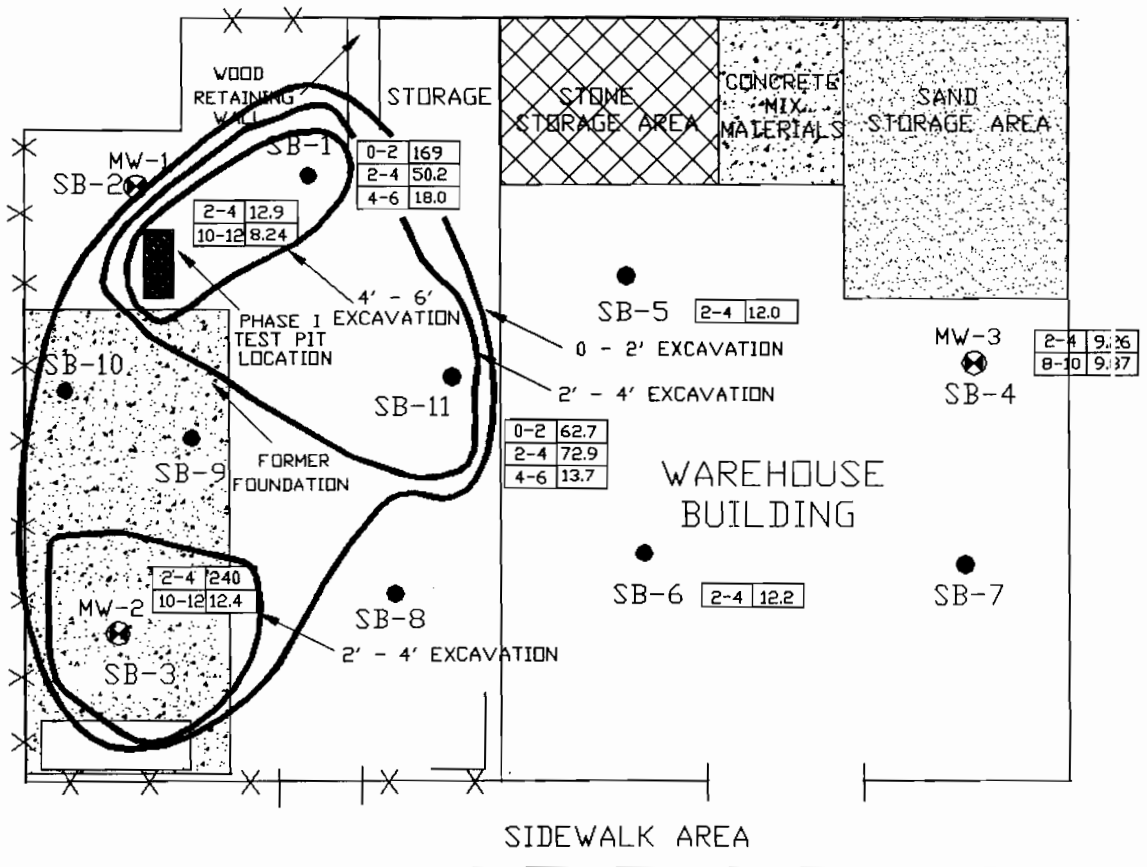
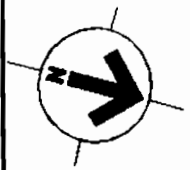
0-2	PPM	TOTAL MASS ANALYSIS RESULTS (PPM)
2-4	PPM	
4-6	PPM	
6-8	PPM	

- SOIL BORING
- ⊗ MONITORING WELL
- SURVEY BENCH MARK
- ▨ CONCRETE SURFACE
- ×-× FENCE

<p>TITLE SOIL BORING AND MONITORING WELL LOCATION MAP INCLUDING ZINC CONCENTRATIONS</p>			<p>PROJECT SAFeway CONSTRUCTION 105 WEST STREET BROOKLYN, NEW YORK</p>														
<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>mark</th> <th>date</th> <th>description</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			mark	date	description										<p>DRAWING PREPARED BY ENVIRONMENTAL CONCEPTS, INC. 142 FERRY ROAD SUITE 5 OLD SAYBROOK, CONNECTICUT</p>		<p>date 4/22/99</p>
mark	date	description															
<p>CLIENT LAUREL HILL REALTY</p>			<p>scale AS NOTED</p>		<p>drawn by TH</p>												
<p>filename C:\DRAWINGS\TCH\SAFEWSB</p>			<p>approved by</p>		<p>figure number 6</p>												



COPPER TOTAL MASS ANALYSIS RESULTS (PPM)



KENT STREET

WEST STREET

BM-1

BM-2

LEGEND

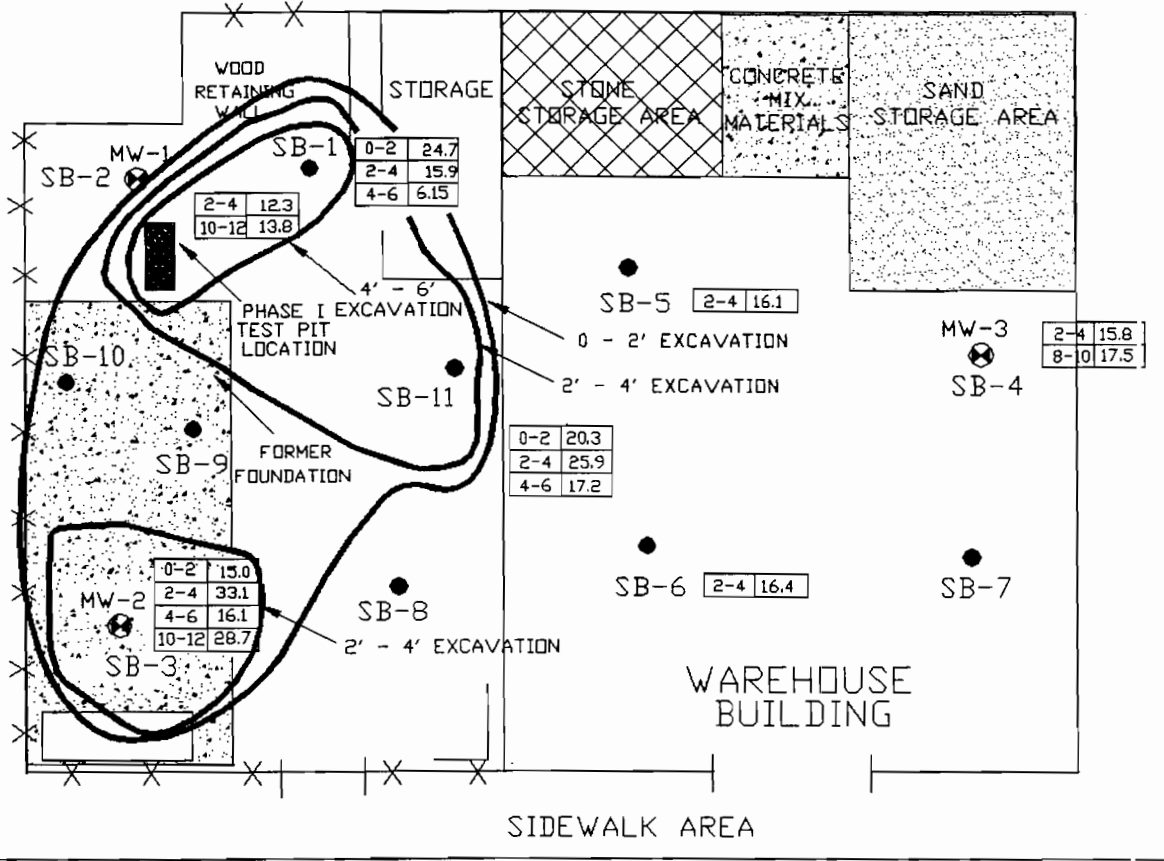
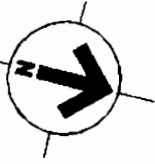
SCALE: 1" = 20'

0-2	PPM	TOTAL MASS ANALYSIS RESULTS (PPM)
2-4	PPM	
4-6	PPM	
6-8	PPM	

- SOIL BORING
- ⊗ MONITORING WELL
- ★ SURVEY BENCH MARK
- ▨ CONCRETE SURFACE
- X-X FENCE

<b>TITLE</b> SOIL BORING AND MONITORING WELL LOCATION MAP INCLUDING COPPER CONCENTRATIONS			<b>PROJECT</b> SAFEWAY CONSTRUCTION 105 WEST STREET BROOKLYN, NEW YORK		
<b>REVISIONS</b> mark    date    description			<b>DRAWING PREPARED BY</b> ENVIRONMENTAL CONCEPTS, INC. 142 FERRY ROAD SUITE 5 OLD SAYBROOK, CONNECTICUT		
			<b>CLIENT</b> LAUREL HILL REALTY		
			<b>DATE</b> 4/22/99		
			<b>SCALE</b> AS NOTED		
			<b>DRAWN BY</b> TH		
			<b>APPROVED BY</b>		
			<b>FIGURE NUMBER</b> 7		
			<b>FILENAME</b> C:\DRAWINGS\TCH\SAFEWSB		

NICKEL TOTAL MASS ANALYSIS (PPM)



KENT STREET

WEST STREET

BM-1

BM-2

LEGEND

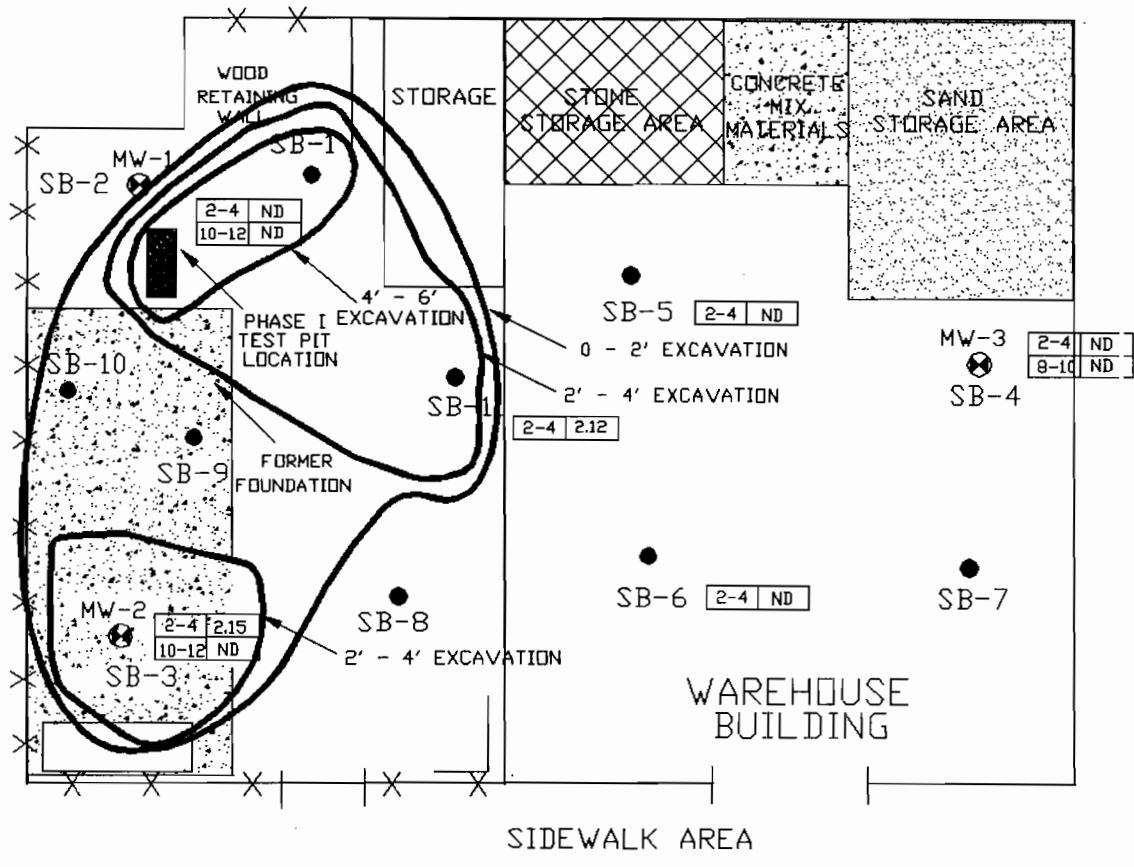
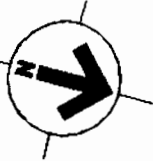
SCALE: 1" = 20'

0-2	PPM	TOTAL MASS ANALYSIS RESULTS (PPM)
2-4	PPM	
4-6	PPM	
6-8	PPM	

- SOIL BORING
- ⊕ MONITORING WELL
- ★ SURVEY BENCH MARK
- ▨ CONCRETE SURFACE
- ×-× FENCE

TITLE SOIL BORING AND MONITORING WELL LOCATION MAP INCLUDING NICKEL CONCENTRATIONS			PROJECT SAFEWAY CONSTRUCTION 105 WEST STREET BROOKLYN, NEW YORK		
REVISIONS			DRAWING PREPARED BY ENVIRONMENTAL CONCEPTS, INC. 142 FERRY ROAD SUITE 5 OLD SAYBROOK, CONNECTICUT		
mark	date	description	date 4/22/99		
			scale AS NOTED		
			drawn by TH		
			approved by		
			figure number 8		
filename C:\DRAWINGS\TCH\SAFEV.SB					

CADMIUM TOTAL MASS ANALYSIS (PPM)



KENT STREET

WEST STREET

BM-1

BM-2

LEGEND

0-2	PPH	TOTAL MASS ANALYSIS RESULTS (PPM)
2-4	PPH	
4-6	PPH	
6-8	PPH	

- SOIL BORING
- ⊗ MONITORING WELL
- SURVEY BENCH MARK
- ▨ CONCRETE SURFACE
- ×-× FENCE

SCALE: 1" = 20'

TITLE BORING AND MONITORING WELL LOCATION MAP INCLUDING CADMIUM CONCENTRATIONS			PROJECT		
			SAFEWAY CONSTRUCTION 105 WEST STREET BROOKLYN, NEW YORK		
REVISIONS			DRAWING PREPARED BY		
mark	date	description	ENVIRONMENTAL CONCEPTS, INC. 142 FERRY ROAD SUITE 5 OLD SAYBROOK, CONNECTICUT		date
			CLIENT		4/22/99
			LAUREL HILL REALTY		scale AS NOTED
					drawn by TH
					approved by
			filename		figure number
			C:\DRAWINGS\TCH\SAFEWSB		9

# **APPENDIX B**

## **SUBSURFACE LOGS**



**Environmental  
Concepts, Inc.**



**SUBSURFACE LOG**

Hole No. SB-1

Date Started: March 2, 1999  
Date Finished: March 3, 1999

Project Location: 105 West Street Brooklyn, NY  
Client: Laurel Hill Realty

Method of Investigation: 2 Foot Long Split-Spoon Sampler via 4.25" I.D. Hollow Stem Augers

Drilling Co.: Subsurface Drilling and Remediation  
Project Manager: Steven Costello Project No.:  
Geologist: David Went

Driller: Brad Haase  
Drill Rig: Mobile B-61  
Surface Elevation:

Weather: Sunny and Cool  
Site Assessment #:

Depth (ft.)	Sample					Sample Description	Field OVM Readings	Well Details	Groundwater and Other Observations/Remarks
	No.	Sample Depth (ft.)	Blows /6"	"N"	Recovery (in.)				
0	S-1	0' - 2'	5,14,10,6		18"	Dark brown, moist, medium to coarse SAND and GRAVEL	0 ppm		
	S-2	2' - 4'	5,5,8,7		5"	Dark brown, moist, fine to medium SAND, little GRAVEL	0 ppm		
5	S-3	4' - 6'	6,8,10,2		3"	Medium brown, moist, coarse SAND and GRAVEL	0 ppm		
	S-4	6' - 8'	1,1,3,2			No recovery			
	S-5	8' - 10'	4,13,13,17		10"	Medium to reddish brown, moist, fine to medium SAND, some coarse SAND	0 ppm		
10									
						EOB @ 11'			Refusal at 11'
15									
20									
25									
30									

EOB = End of Boring

SAMPLE TYPES: S = Split Spoon \_\_\_\_\_ T = Shelby Tube \_\_\_\_\_  
R = Rock Core \_\_\_\_\_ O = \_\_\_\_\_  
N-Value = ASTM D1586

BACKFILL WELL KEY

	Auger Spoils		Bentonite
	Grout		Sand



**Environmental Concepts, Inc.**

**SUBSURFACE LOG**

Hole No. SB-2  
MW-1

Date Started: March 2, 1999  
Date Finished: March 3, 1999

Project Location: 105 West Street Brooklyn, NY  
Client: Laurel Hill Realty

Method of Investigation: 2 Foot Long Split-Spoon Sampler via 4.25" I.D. Hollow Stem Augers

Drilling Co.: Subsurface Drilling and Remediation  
Project Manager: Steven Costello Project No.:  
Geologist: David Went

Driller: Brad Haase  
Drill Rig: Mobile B-61  
Surface Elevation:

Weather: Sunny and Cool  
Site Assessment #:

Depth (ft.)	Sample				Sample Description	Field OVM Readings	Well Details	Groundwater and Other Observations/Remarks
	No.	Sample Depth (ft.)	Blows /6"	"N"				
0	S-1	0' - 2'	2,3,3,4		12"	Dark brown, moist, fine, medium, and coarse SAND, little GRAVEL	1 ppm	
	S-2	2' - 4'	5,6,6,7		18"	Medium brown, moist, fine to medium SAND, some SILT	0 ppm	
	S-3	4' - 6'	2,3,2,2		18"	Medium brown, moist, fine and medium SAND	0 ppm	
5	S-4	6' - 8'	2,2,2,2		18"	Medium brown, moist, fine, medium, and coarse SAND, some GRAVEL	0 ppm	
	S-5	8' - 10'	2,2,2,2		12"	Medium brown, moist, fine to medium SAND	0 ppm	
10	S-6	10' - 12'	2,1,3,6		18"	Medium brown, saturated, fine, medium, and coarse SAND	0 ppm	
						EOB @ 17'		
15								
20								
25								
30								

SAMPLE TYPES: S = Split Spoon \_\_\_\_\_ T = Shelby Tube \_\_\_\_\_  
R = Rock Core \_\_\_\_\_ O = \_\_\_\_\_  
N-Value = ASTM D1586

BACKFILL WELL KEY

	Auger Spoils		Bentonite
	Grout		Sand



**Environmental Concepts, Inc.**



### SUBSURFACE LOG

Hole No. SB-3  
MW-2

Date Started: March 2, 1999  
Date Finished: March 3, 1999

Project Location: 105 West Street Brooklyn, NY  
Client: Laurel Hill Realty

Method of Investigation: 2 Foot Long Split-Spoon Sampler via 4.25" I.D. Hollow Stem Augers

Drilling Co.: Subsurface Drilling and Remediation  
Project Manager: Steven Costello Project No.:  
Geologist: David Went

Driller: Brad Haase  
Drill Rig: Mobile B-61  
Surface Elevation:

Weather: Sunny and Cool

Site Assessment #:

Depth (ft.)	Sample					Sample Description	Field OVM Readings	Well Details	Groundwater and Other Observations/Remarks
	No.	Sample Depth (ft.)	Blows /6"	"N"	Recovery (in.)				
0	S-1	0' - 2'	7,7,4,3		18"	Medium brown, dry, fine to medium SAND	0 ppm		
	S-2	2' - 4'	3,2,3,3		2"	Dark brown, dry, medium and coarse SAND, little GRAVEL	1 ppm		
	S-3	4' - 6'	2,1,1,1		6"	Medium brown, dry, fine and medium SAND	0 ppm		
5	S-4	6' - 8'	2,3,4,3		6"	Medium brown, dry, fine and medium SAND	0 ppm		
	S-5	8' - 10'	2,2,3,1			No recovery			
10	S-6	10' - 12'	2,2,4,9		3"	Medium brown, saturated, medium and coarse SAND	0 ppm		
15									
20						EOB@20'			
25									
30									

SAMPLE TYPES: S = Split Spoon \_\_\_\_\_ T = Shelby Tube \_\_\_\_\_  
R = Rock Core \_\_\_\_\_ O = \_\_\_\_\_  
N-Value = ASTM D1586

BACKFILL WELL KEY

	Auger Spoils		Bentonite
	Grout		Sand

EOB = End of Boring



**Environmental Concepts, Inc.**



**SUBSURFACE LOG**

Hole No. SB-4  
MW-3

Date Started: March 2, 1999  
Date Finished: March 3, 1999

Project Location: 105 West Street Brooklyn, NY

Method of Investigation: 2 Foot Long Split-Spoon Sampler via 4.25" I.D. Hollow Stem Augers

Client: Laurel Hill Realty

Drilling Co.: Subsurface Drilling and Remediation

Driller: Brad Haase

Weather: Sunny and Cool

Project Manager: Steven Costello Project No.:

Drill Rig: Mobile B-61

Site Assessment #:

Geologist: David Went

Depth (ft.)	Sample				Sample Description	Field OVM Readings	Well Details	Groundwater and Other Observations/Remarks
	No.	Sample Depth (ft.)	Blows /6"	"N"				
0		0' - 3"						
		Concrete Slab						
	S-1	3" - 2'	5,10,10,10		18"	0 ppm		
	S-2	2' - 4'	6,6,4,5		16"	0 ppm		
		Medium brown, dry, fine to medium SAND, some coarse SAND						
5	S-3	4' - 6'	1,1/12,1		17"	0 ppm		
		Medium brown, dry, fine to medium SAND						
	S-4	6' - 8'	2,2,2,1		22"	0 ppm		
		Medium brown, dry, fine to medium SAND, some coarse SAND						
	S-5	8' - 10'	3,1,1,1		20"	0 ppm		
		Medium brown, saturated, fine to medium SAND, little coarse SAND						
10								
15								
20								
25								
30								

EOB @ 17'

EOB = End of Boring

SAMPLE TYPES: S = Split Spoon \_\_\_\_\_ T = Shelby Tube \_\_\_\_\_  
R = Rock Core \_\_\_\_\_ O = \_\_\_\_\_  
N-Value = ASTM D1586

<b>BACKFILL WELL KEY</b>		Auger Spoils		Bentonite
		Grout		Sand





**Environmental  
Concepts, Inc.**



**SUBSURFACE LOG**

Hole No. SB-5

Date Started: March 2, 1999  
Date Finished: March 3, 1999

Project Location: 105 West Street Brooklyn, NY  
Client: Laurel Hill Realty

Method of Investigation: 2 Foot Long Split-Spoon Sampler via 4.25" I.D. Hollow Stem Augers

Drilling Co.: Subsurface Drilling and Remediation  
Project Manager: Steven Costello Project No.:  
Geologist: David Went





Driller: Brad Haase  
Drill Rig: Mobile B-61  
Surface Elevation:

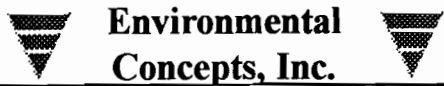
Weather: Sunny and Cool

Site Assessment #:

Depth (ft.)	Sample				Sample Description	Field OVM Readings	Well Details	Groundwater and Other Observations/Remarks
	No.	Sample Depth (ft.)	Blows /6"	"N"				
0		0" - 3"			Concrete Slab			
	S-1	3" - 2'	15,22,25,14		Medium brown, dry, fine to medium SAND	0 ppm		
	S-2	2' - 4'	13,8,8,5		Medium brown, dry, fine, medium, and coarse SAND, little GRAVEL	0 ppm		
	S-3	4' - 6'	2,2,2,2		Medium brown, dry, fine to medium SAND, some coarse SAND	0 ppm		
5								
	S-4	6' - 8'	3,1,2,2		Medium brown, dry, fine to medium SAND	0 ppm		Some quartzite
	S-5	8' - 10'	7,6,4,4		Medium brown, saturated, fine to medium SAND	0 ppm		
10					EOB @ 10'			
15								
20								
25								
30					EOB = End of Boring			

SAMPLE TYPES: S = Split Spoon \_\_\_\_\_ T = Shelby Tube \_\_\_\_\_  
R = Rock Core \_\_\_\_\_ O = \_\_\_\_\_  
N-Value = ASTM D1586

BACKFILL WELL KEY  
 Auger Spoils  
 Bentonite  
 Grout  
 Sand



**Environmental Concepts, Inc.**

**SUBSURFACE LOG**

Hole No. SB-6

Date Started: March 2, 1999  
Date Finished: March 3, 1999

Project Location: 105 West Street Brooklyn, NY  
Client: Laurel Hill Realty

Method of Investigation: 2 Foot Long Split-Spoon Sampler via 4.25" I.D. Hollow Stem Augers

Drilling Co.: Subsurface Drilling and Remediation  
Project Manager: Steven Costello Project No.:  
Geologist: David Went

Driller: Brad Haase  
Drill Rig: Mobile B-61  
Surface Elevation:

Weather: Sunny and Cool  
Site Assessment #:

Depth (ft.)	Sample				Sample Description	Field OVM Readings	Well Details	Groundwater and Other Observations/Remarks
	No.	Sample Depth (ft.)	Blows /6"	"N"				
0		0" - 3"			Concrete slab			
	S-1	3" - 2'	10,12,10,5		Medium brown, dry, fine and medium SAND	0 ppm		
	S-2	2' - 4'	3,3,3,3		Medium brown, dry, fine and medium SAND, some coarse SAND and GRAVEL	0 ppm		
	S-3	4' - 6'	1,5,7,2		Medium brown, dry, fine SAND, some medium SAND	0 ppm		
5								
	S-4	6' - 8'	2,3,5,2		Medium brown, dry, fine to medium SAND	0 ppm		
	S-5	8' - 10'	1,1/12,1		Medium brown, saturated, fine to medium SAND	0 ppm		
10					EOB@10'			
15								
20								
25								
30					EOB = End of Boring			

SAMPLE TYPES: S = Split Spoon \_\_\_\_\_ T = Shelby Tube \_\_\_\_\_  
R = Rock Core \_\_\_\_\_ O = \_\_\_\_\_  
N-Value = ASTM D1586

BACKFILL WELL KEY

	Auger Spoils		Bentonite
	Grout		Sand



**Environmental  
Concepts, Inc.**



**SUBSURFACE LOG**

Hole No. SB-7

Date Started: March 3, 1999  
Date Finished: March 3, 1999

Project Location: 105 West Street Brooklyn, NY  
Client: Laurel Hill Realty

Method of Investigation: Concord Hydraulic Direct Push Rig with 2 foot long sampling spoons

Drilling Co.: Subsurface Drilling and Remediation  
Project Manager: Steven Costello Project No.:  
Geologist: Steven Costello

Driller: David Went  
Drill Rig: Direct Push  
Surface Elevation:

Weather: Cloudy and Cool

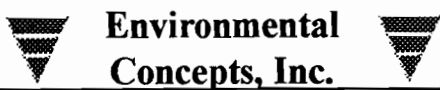
Site Assessment #:

Depth (ft.)	Sample				Sample Description	Field OVM Readings	Well Details	Groundwater and Other Observations/Remarks
	No.	Sample Depth (ft.)	Blows /6"	"N"				
0		0' - 3"			Concrete Slab			
	S-1	3" - 2'			Light to dark brown, dry, SAND and SILT, little COBBLES	0 ppm		
	S-2	2' - 4'			Medium to dark brown, moist, SAND and SILT	0 ppm		
	S-3	4' - 6'			Light brown, dry, medium SAND	0 ppm		
5								
	S-4	6' - 8'			Light brown, dry to moist, medium SAND	0 ppm		
	S-5	8' - 10'			Light and medium brown, saturated, fine SAND and SILT, some coarse SAND	0 ppm		
10					EOB @ 10'			
15								
20								
25								
30					EOB = End of Boring			

SAMPLE TYPES: S = Split Spoon \_\_\_\_\_ T = Shelby Tube \_\_\_\_\_  
R = Rock Core \_\_\_\_\_ O = \_\_\_\_\_  
N-Value = ASTM D1586

BACKFILL WELL KEY

	Auger Spoils		Bentonite
	Grout		Sand



# SUBSURFACE LOG

Hole No. SB-8

Date Started: March 3, 1999  
Date Finished: March 3, 1999

Project Location: 105 West Street Brooklyn, NY  
Client: Laurel Hill Realty

Method of Investigation: Concord Hydraulic Direct Push Rig with 2 foot long sampling spoons

Drilling Co.: Subsurface Drilling and Remediation  
Project Manager: Steven Costello Project No.:  
Geologist: Steven Costello

Driller: David Went  
Drill Rig: Direct Push  
Surface Elevation:

Weather: Cloudy and Cool

Site Assessment #:

Depth (ft.)	Sample					Sample Description	Field OVM Readings	Well Details	Groundwater and Other Observations/Remarks
	No.	Sample Depth (ft.)	Blows /6"	"N"	Recovery (in.)				
0	S-1	0' - 2'			6"	Black SILT, moist, some medium brown, medium SAND	0 ppm		
	S-2	2' - 4'			6"	Reddish and light brown, dry, medium SAND, trace black fine GRAVEL	0 ppm		
5	S-3	4' - 6'			17"	Medium brown, moist, medium SAND	0 ppm		
	S-4	6' - 8'			20"	Medium brown, moist, medium SAND	0 ppm		
	S-5	8' - 10'			22"	Medium brown, saturated, medium SAND	0 ppm		
10						EOB @ 10'			
15									
20									
25									
30						EOB = End of Boring			

SAMPLE TYPES: S = Split Spoon \_\_\_\_\_ T = Shelby Tube \_\_\_\_\_  
R = Rock Core \_\_\_\_\_ O = \_\_\_\_\_  
N-Value = ASTM D1586

BACKFILL WELL KEY

	Auger Spoils		Bentonite
	Grout		Sand



Project Location: 105 West Street Brooklyn, NY  
Client: Laurel Hill Realty

Method of Investigation: Concord Hydraulic Direct Push Rig with 2 foot long sampling spoons

Drilling Co.: Subsurface Drilling and Remediation  
Project Manager: Steven Costello Project No.:  
Geologist: Steven Costello

Driller: David Went  
Drill Rig: Direct Push  
Surface Elevation:

Weather: Cloudy and Cool  
Site Assessment #:

Depth (ft.)	Sample					Sample Description	Field OVM Readings	Well Details	Groundwater and Other Observations/Remarks
	Sample No.	Sample Depth (ft.)	Blows /6"	"N"	Recovery (in.)				
0	S-1	0' - 2'			12"	Medium to dark brown, dry to moist, medium SAND and SILT	0 ppm		
	S-2	2' - 4'			17"	Medium brown, dry to moist, medium SAND	0 ppm		
5	S-3	4' - 6'			20"	Light to medium brown, moist, medium SAND	0 ppm		
	S-4	6' - 8'			20"	White and medium brown, dry, medium SAND	0 ppm		
	S-5	8' - 10'			20"	Medium brown, saturated, medium SAND, some white medium SAND	0 ppm		
10						EOB@10'			
15									
20									
25									
30						EOB = End of Boring			

SAMPLE TYPES: S = Split Spoon \_\_\_\_\_ T = Shelby Tube \_\_\_\_\_  
R = Rock Core \_\_\_\_\_ O = \_\_\_\_\_  
N-Value = ASTM D1586

BACKFILL WELL KEY

	Auger Spoils		Bentonite
	Grout		Sand



**SUBSURFACE LOG**

Hole No. SB-10

Date Started: March 3, 1999  
Date Finished: March 3, 1999

Project Location: 105 West Street Brooklyn, NY  
Client: Laurel Hill Realty

Method of Investigation: Concord Hydraulic Direct Push Rig with 2 foot long sampling spoons

Drilling Co.: Subsurface Drilling and Remediation  
Project Manager: Steven Costello Project No.:  
Geologist: Steven Costello

Driller: David Went  
Drill Rig: Direct Push  
Surface Elevation:

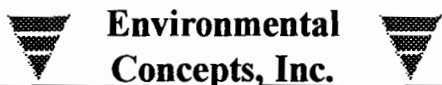
Weather: Cloudy and Cool  
Site Assessment #:

Depth (ft.)	Sample					Sample Description	Field OVM Readings	Well Details	Groundwater and Other Observations/Remarks
	Sample No.	Sample Depth (ft.)	Blows /6"	"N"	Recovery (in.)				
0	S-1	0' - 2'			8"	Medium brown, dry to moist, medium SAND	1 ppm		
	S-2	2' - 4'			18"	Medium brown, dry to moist, medium SAND	0 ppm		
5	S-3	4' - 6'			19"	Medium brown, dry to moist, medium SAND	0 ppm		
	S-4	6' - 8'			19"	Medium brown, dry to moist, medium SAND, some white medium SAND	0 ppm		
	S-5	8' - 10'			20"	Medium brown, saturated, medium SAND, some white medium SAND	0 ppm		
10						EOB@10'			
15									
20									
25									
30						EOB = End of Boring			

SAMPLE TYPES: S = Split Spoon \_\_\_\_\_ T = Shelby Tube \_\_\_\_\_  
R = Rock Core \_\_\_\_\_ O = \_\_\_\_\_  
N-Value = ASTM D1586

BACKFILL WELL KEY

	Auger Spoils		Bentonite
	Grout		Sand



# SUBSURFACE LOG

Hole No. SB-11

Date Started: March 3, 1999  
Date Finished: March 3, 1999

Project Location: 105 West Street Brooklyn, NY  
Client: Laurel Hill Realty

Method of Investigation: Concord Hydraulic Direct Push Rig with 2 foot long sampling spoons

Drilling Co.: Subsurface Drilling and Remediation  
Project Manager: Steven Costello Project No.:  
Geologist: Steven Costello

Driller: David Went  
Drill Rig: Direct Push  
Surface Elevation:

Weather: Cloudy and Cool  
Site Assessment #:

Depth (ft.)	Sample					Sample Description	Field OVM Readings	Well Details	Groundwater and Other Observations/Remarks
	No.	Sample Depth (ft.)	Blows /6"	"N"	Recovery (in.)				
0	S-1	0' - 2'			18"	Medium brown, wet, medium SAND	0 ppm		
	S-2	2' - 4'			5"	Medium brown and white, moist, medium SAND, some SILT	0 ppm		
5	S-3	4' - 6'			18"	Medium brown, dry to moist, medium SAND, some SILT	0 ppm		
	S-4	6' - 8'			20"	Medium brown, moist, medium SAND	0 ppm		
	S-5	8' - 10'			18"	Medium brown, saturated, fine SAND and SILT	0 ppm		
10						EOB@10'			
15									
20									
25									
30						EOB = End of Boring			

SAMPLE TYPES: S = Split Spoon \_\_\_\_\_ T = Shelby Tube \_\_\_\_\_  
R = Rock Core \_\_\_\_\_ O = \_\_\_\_\_  
N-Value = ASTM D1586

BACKFILL WELL KEY

	Auger Spoils		Bentonite
	Grout		Sand

# **APPENDIX C**

## **TABLES**



Table 1

SOIL SAMPLING ANALYTICAL RESULTS

FOR  
106 WEST STREET  
BROOKLYN, NEW YORK

March 2, 1999

Parameter	Soil Sample ID										NYSDEC TAGM 4046*	
	SB-2(S-2)	SB-2(S-6)	SB-3(S-2)	SB-3(S-6)	SB-4(S-2)	SB-4(S-6)	SB-5(S-2)	SB-5(S-6)	SB-6(S-2)	SB-6(S-6)	SCO to Protect CML (mg/kg)	Recommended RSC2 (mg/kg)
<b>VOC's by 8021 (ug/Kg)</b>												
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.06	0.06
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.5	6.5
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	1.5
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NL	NL
p-Xim-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NL	NL
Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.2
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NL	NL
n-Propylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NL	NL
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NL	NL
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NL	NL
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NL	NL
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NL	NL
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NL	NL
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NL	NL
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NL	NL
Methyl-tert-butyl ether (MTBE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NL	NL
<b>PAH's by 8270 (ug/Kg)</b>												
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13,000	13,000
Anthracene	ND	ND	518	ND	ND	ND	ND	ND	ND	700,000	50,000	50,000
Fluorene	ND	ND	2100	ND	ND	ND	ND	ND	ND	350,000	50,000	50,000
Phenanthrene	ND	ND	2300	ND	ND	ND	ND	ND	ND	220,000	50,000	50,000
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	660,000	50,000	50,000
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	90,000	50,000	50,000
Benzo[a]anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	3,000	224 or MDL	50,000
Fluoranthene	ND	ND	2200	ND	ND	ND	ND	ND	ND	1,500,000	50,000	50,000
Benzo[b]fluoranthene	ND	ND	970	ND	ND	ND	ND	ND	ND	1,100	1,100	1,100
Benzo[k]fluoranthene	ND	ND	995	ND	ND	ND	ND	ND	ND	1,100	1,100	1,100
Chrysene	ND	ND	1000	ND	ND	ND	ND	ND	ND	400	400	400
Benzo[e]pyrene	ND	ND	970	ND	ND	ND	ND	ND	ND	11,000	51 or MDL	50,000
Benzo[a,h]perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	600,000	50,000	50,000
Indeno[1,2,3-cd]pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	2200	3200	3200
Dibenz[a,h]anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	155,000,000	14 or MDL	14 or MDL

ND - Not Detected above laboratory detection limit

NL - Not Listed for specified compound

SCO - Soil Cleanup Objectives (NYSDEC TAGM 4046)

SB - Site Background concentrations

MDL - Method Detection Limit

\*NYSDEC TAGM 4046 - New York State Department of Environmental Conservation Division of Hazardous Waste Remediation  
Technical and Administrative Guidance Memorandum on Determination of Soil Cleanup Objectives and Cleanup Levels, Part 1, January 24, 1994

Values in **Bold** signify exceedence of respective NYSDEC TAGM 4046 Recommended SCO.

Table 1 (Continued)

SOIL SAMPLING ANALYTICAL RESULTS

FOR  
105 WEST STREET  
BROOKLYN, NEW YORK

March 2, 1999

Parameter	Soil Sample ID										NYSDEC TAGM 4046*			
	SB-2(S-2)	SB-2(S-6)	SB-3(S-2)	SB-3(S-6)	SB-4(S-2)	SB-4(S-6)	SB-5(S-2)	SB-5(S-6)	SB-6(S-2)	SB-6(S-6)	SB-11(S-2)	SB-11(S-6)	Eastern USA Background (mg/Kg)	Recommended SCO (mg/Kg)
<b>Total RCRA Metals by EPA 60107000 Series (mg/Kg)</b>														
Arsenic, total	ND	ND	9.3	ND	1.35	ND	1.45	1.55	1.48	2.6	ND	7.5 or SB	12	7.5 or SB
Selenium, total	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2 or SB	3.9	2 or SB
Chromium, total	9.53	11.6	38	20.6	10.9	20.6	9.61	10.5	12.2	18.3	18.3	10 or SB	40	10 or SB
Cadmium, total	ND	ND	<b>2.15</b>	ND	ND	ND	ND	ND	ND	<b>2.12</b>	127	1 or SB	1	1 or SB
Lead, total	4.63	5.97	<b>882</b>	5.2	4.24	4.74	21.1	8.85	8.85	127	136	SB	500**	SB
Barium, total	25.8	23.3	406	38.6	37.2	43.8	43.4	38.7	38.7	136	136	300 or SB	600	300 or SB
Silver, total	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SB	N/A	SB
Mercury	ND	ND	<b>3.45</b>	ND	ND	ND	ND	<b>1.96</b>	<b>2.73</b>	<b>0.33</b>	<b>0.33</b>	0.1	0.2	0.1
Copper	12.9	8.24	<b>240</b>	12.4	9.26	9.87	12	12.2	12.2	<b>72.9</b>	<b>72.9</b>	2.5 or SB	50	2.5 or SB
Nickel	12.3	13.8	<b>33.1</b>	<b>28.7</b>	15.8	17.5	16.1	16.4	16.4	<b>25.9</b>	<b>25.9</b>	13 or SB	25	13 or SB
Zinc	46.1	24.1	<b>682</b>	30.4	31.3	33.8	37.3	33.4	33.4	<b>387</b>	<b>387</b>	20 or SB	50	20 or SB
Iron	10,700	13,900	29,300	14,000	12,400	13,300	11,800	14,000	14,000	18,500	18,500	550,000	550,000	2,000 or SB
<b>PCB's by 8080 (mg/Kg)</b>														
PCB 1016	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	10	10	10
PCB 1221	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	10	10	10
PCB 1232	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	10	10	10
PCB 1242	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	10	10	10
PCB 1248	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	10	10	10
PCB 1254	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	10	10	10
PCB 1260	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	10	10	10
PCB Total	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	10	10	10

ND - Not Detected above laboratory detection limit  
 N/A - Not Available for specified compound  
 NS - Not Sampled for specified compound

SCO - Soil Cleanup Objectives (NYSDEC TAGM 4046)  
 SB - Site Background concentrations

\*NYSDEC TAGM 4046 - New York State Department of Environmental Conservation Division of Hazardous Waste Remediation Technical and Administrative Guidance Memorandum on Determination of Soil Cleanup Objectives and Cleanup Levels, Rev., January 24, 1994

\*\*Average background concentration for lead in metropolitan and suburban areas generally range from 200 to 500 ppm (Table 4, Appendix A, NYSDEC TAGM 4046). Values in Bold signify exceedence of respective NYSDEC TAGM 4046 Eastern USA Background concentration.

Table 2

SOIL SAMPLING ANALYTICAL RESULTS  
FOR

106 WEST STREET  
BROOKLYN, NEW YORK

March 3, 1999

Parameter	Soil Sample ID										NYSDEC TAGM 4046*			
	SB-1(S-1)	SB-1(S-2)	SB-1(S-3)	SB-3(S-1)	SB-3(S-2)	SB-3(S-3)	SB-5(S-1)	SB-5(S-3)	SB-6(S-1)	SB-6(S-3)	SB-7(S-1)	SB-7(S-2)	Eastern USA Background (mg/Kg)	Recommended SCO (mg/Kg)
<i>Metals by EPA 60107000 Series(mg/Kg)</i>														
Lead	347	101	16.5	11.9	NS	6.6	NS	NS	NS	NS	626	138	500**	SB
Copper	169	50.2	18	NS	NS	NS	NS	NS	NS	NS	NS	NS	50	2.5 or SB
Mercury	0.46	NS	ND	ND	NS	ND	ND	1.11	ND	ND	NS	NS	0.2	0.1
Nickel	24.7	15.9	6.15	15	NS	16.1	NS	NS	NS	NS	NS	NS	25	13 or SB
Zinc	437	119	66.6	30.8	NS	33.8	NS	NS	NS	NS	NS	NS	50	20 or SB
Cyanide***	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	N/A	NL

Parameter	Soil Sample ID										NYSDEC TAGM 4046*			
	SB-7(S-3)	SB-8(S-1)	SB-8(S-2)	SB-8(S-3)	SB-9(S-1)	SB-9(S-2)	SB-9(S-3)	SB-10(S-1)	SB-10(S-2)	SB-10(S-3)	SB-11(S-1)	SB-11(S-3)	Eastern USA Background (mg/Kg)	Recommended SCO (mg/Kg)
<i>Metals by EPA 60107000 Series(mg/Kg)</i>														
Lead	3.92	335	85.1	5.35	109	4.1	1.42	31.6	4.94	3.56	NS	NS	500**	SB
Copper	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50	2.5 or SB
Mercury	NS	NS	NS	NS	0.49	ND	ND	1.68	ND	ND	0.47	ND	0.2	0.1
Nickel	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20.3	17.2	25	13 or SB
Zinc	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	229	42.8	50	20 or SB
Cyanide***	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N/A	NL

ND - Not Detected above laboratory detection limit  
 NL - Not Listed for specified compound  
 NS - Not Sampled for specified compound

SCO - Soil Cleanup Objectives (NYSDEC TAGM 4046)  
 SB - Site Background concentrations  
 N/A - Not Available for specified compound

\*NYSDEC TAGM 4046 - New York State Department of Environmental Conservation Division of Hazardous Waste Remediation Technical and Administrative Guidance Memorandum on Determination of Soil Cleanup Objectives and Cleanup Levels, Rev., January 24, 1994

\*\*Average background concentration for lead in metropolitan and suburban areas generally range from 200 to 500 ppm (Table 4, Appendix A, NYSDEC TAGM 4046).

\*\*\*Cyanide analysis by Standard Method 412B

Values in Bold signify exceedence of respective NYSDEC TAGM 4046 Eastern USA Background concentration.

**Table 3**

**TCLP SOIL SAMPLING ANALYTICAL RESULTS**

FOR  
105 WEST STREET  
BROOKLYN, NEW YORK

April 12, 1999

Parameter	Soil Sample ID				NYSDEC TAGM 4046*	
	SB-3B(S-2)	SB-6B(S-2)	SB-7B(S-1)	SB-11B(S-2)	Allowable Soil Concentrations (ppm)	Protect Water Quality (ppm)
<b>TCLP Metals by EPA 1311/6010 (mg/L)</b>						
TCLP Lead	0.215	NS	0.136	NS	NA	N/A
TCLP Mercury	ND	ND	NS	NS	NA	N/A
TCLP Cadmium	ND	NS	NS	ND	NA	N/A
TCLP Cyanide	NS	NS	NS	ND	NA	N/A

Parameter	SB-3B(S-2)	SB-6B(S-2)	SB-7B(S-1)	SB-11B(S-2)	NYSDEC TAGM 4046*	
					Allowable Soil Concentrations (ppb)	Protect Water Quality (ppb)
<b>TCLP Pesticides by 8080 (ug/L)</b>						
Aldrin	NS	NS	NS	ND	5	
alpha-BHC	NS	NS	NS	ND	2	
beta-BHC	NS	NS	NS	ND	2	
delta-BHC	NS	NS	NS	ND	3	
gamma-BHC (Lindane)	NS	NS	NS	ND	0.6	
Chlordane	NS	NS	NS	ND	20	
4,4'-DDD	NS	NS	NS	ND	77	
4,4'-DDE	NS	NS	NS	ND	44	
4,4'-DDT	NS	NS	NS	ND	25	
Dieldrin	NS	NS	NS	ND	1	
Endosulfan I	NS	NS	NS	ND	9	
Endosulfan II	NS	NS	NS	ND	9	
Endosulfan sulfate	NS	NS	NS	ND	10	
Endrin	NS	NS	NS	ND	1	
Endrin aldehyde	NS	NS	NS	ND	NL	
Heptachlor	NS	NS	NS	ND	1	
Heptachlor epoxide	NS	NS	NS	ND	0.2	
Methoxychlor	NS	NS	NS	ND	9,000	
Toxaphene	NS	NS	NS	ND	NL	

ND - Not Detected above laboratory detection limit  
NL - Not Listed for specified compound  
NS - Not Sampled for specified compound

SB - Site Background concentrations  
N/A - Not Available for specified compound  
NA - Not Applicable for specified compound

Concentrations of milligrams per liter (mg/L) = parts per million (ppm).  
Concentrations of micrograms per liter (ug/L) = parts per billion (ppb).

\*NYSDEC TAGM 4046 - New York State Department of Environmental Conservation Division of Hazardous Waste Remediation Technical and Administrative Guidance Memorandum on Determination of Soil Cleanup Objectives and Cleanup Levels, Rev., January 24, 1994

Table 4

GROUNDWATER SAMPLING ANALYTICAL RESULTS  
 FOR  
 105 WEST STREET  
 BROOKLYN, NEW YORK

March 16, 1999

Parameter	GW Sample ID			NYSDEC TOGS 1.1.1* Class GA Groundwater Standard/Guidance Values (ug/L)
	MW-1	MW-2	MW-3	
<i>VOC's by 8021 (ug/L)</i>				
Benzene	ND	ND	ND	1
Ethylbenzene	ND	ND	ND	5
Toluene	ND	ND	ND	5
o-Xylene	ND	ND	ND	5
p- & m-Xylenes	ND	ND	ND	5
Total Xylenes	ND	ND	ND	5**
Isopropylbenzene	ND	ND	ND	5
n-Propylbenzene	ND	ND	ND	5
p-Isopropyltoluene	ND	ND	ND	5
1,2,4-Trimethylbenzene	ND	ND	ND	5
1,3,5-Trimethylbenzene	ND	ND	ND	5
n-Butylbenzene	ND	ND	ND	5
sec-Butylbenzene	ND	ND	ND	5
tert-Butylbenzene	ND	ND	ND	5
Naphthalene	ND	ND	ND	10
Methyl-tert-butyl ether	10	1	2	NL
<i>PAH's by 8270 (ug/L)</i>				
Naphthalene	ND	ND	ND	10
Anthracene	ND	ND	ND	50
Fluorene	ND	ND	ND	50
Pyrene	ND	ND	ND	50
Acenaphthene	ND	ND	ND	20
Benzo[a]anthracene	ND	ND	ND	0.002
Fluoranthene	ND	ND	ND	50
Benzo[b]fluoranthene	ND	ND	ND	0.002
Benzo[k]fluoranthene	ND	ND	ND	0.002
Chrysene	ND	ND	ND	0.002
Benzo[a]pyrene	ND	ND	ND	ND
Benzo[g,h,i]perylene	ND	ND	ND	NL
Indeno[1,2,3-cd]pyrene	ND	ND	ND	0.002
Dibenz[a,h]anthracene	ND	ND	ND	NL
<i>Metals by 6010/200 Series (ug/L)</i>				
Silver	ND	ND	ND	50
Arsenic	ND	ND	ND	25
Barium	61	92	167	1,000
Cadmium	ND	ND	ND	5
Chromium	ND	ND	ND	50
Mercury	ND	ND	ND	0.7
Lead	ND	ND	ND	25
Selenium	ND	ND	ND	10
Copper	7	6	8	200
Nickel	ND	ND	ND	100
Zinc	ND	ND	5	2,000
Iron	351	366	989	300

ND - Not Detected above the laboratory detection limit

NL - Not Listed for specified compound

\*NYSDEC TOGS 1.1.1 - New York State Department of Environmental Conservation  
 Division of Water Technical and Operational Guidance Series (1.1.1)  
 Ambient Water Quality Standards and Guidance Values and Groundwater  
 Effluent Limitations, Rev., June 1998

\*\*Class GA Groundwater Standard listed for individual Xylene concentrations.

# **APPENDIX D**

## **LABORATORY REPORTS**

# Technical Report

prepared for

**Environmental Concepts Inc.**  
142 Ferry Rd.  
Suite 5  
Old Saybrook, CT 06475  
Attention: Mr. Steve Costello

Report Date: 03/11/99

***Re: Client Project ID: Laurel Hill***  
York Project No.: 99030107

Report Date: 03/11/99  
 Client Project ID: Laurel Hill

York Project No.: 99030107

**Environmental Concepts Inc.**  
 142 Ferry Rd.  
 Suite 5  
 Old Saybrook, CT 06475  
 Attention: Mr. Steve Costello

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 03/04/99. The project was identified as your project "Laurel Hill".

The analysis was conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

The results of the analysis are summarized in the following table(s).

### Analysis Results

Client Sample ID			SB-2/S-2		SB-2/S-5	
York ID			99030107-01		99030107-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
PCB	SW846-8080	mg/Kg	---	---	---	---
PCB 1016			Not detected	0.02	Not detected	0.02
PCB 1221			Not detected	0.02	Not detected	0.02
PCB 1232			Not detected	0.02	Not detected	0.02
PCB 1242			Not detected	0.02	Not detected	0.02
PCB 1248			Not detected	0.02	Not detected	0.02
PCB 1254			Not detected	0.02	Not detected	0.02
PCB 1260			Not detected	0.02	Not detected	0.02
PCB, Total			Not detected	0.02	Not detected	0.02
Volatiles-8021 STARS soil	SW846-8260	ug/Kg	---	---	---	---
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10

**YORK**



Client Sample ID			SB-2/S-2		SB-2/S-6	
York ID			99030107-01		99030107-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Total Xylenes			Not detected	10	Not detected	10
Isopropylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
<b>Polynuclear Aromatic Hydroc.(BN)</b>	SW846-8270	ug/kG	---	---	---	---
Naphthalene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330
Acenaphthene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
<b>Total RCRA Metals</b>	SW846	mg/kG	---	---	---	---
Arsenic, total			Not detected	1.00	Not detected	1.00
Selenium, total			Not detected	1.00	Not detected	1.00
Chromium, total			9.53	0.50	11.6	0.50
Cadmium, total			Not detected	0.50	Not detected	0.50
Lead, total			4.63	0.50	5.97	0.50
Barium, total			25.8	0.50	23.3	0.50
Silver, total			Not detected	0.50	Not detected	0.50
Mercury	SW846-7471	mg/kG	Not detected	0.25	Not detected	0.25
Copper	SW846-6010	mg/kG	12.9	0.500	8.24	0.500
Nickel	SW846-6010	mg/kG	12.3	0.500	13.8	0.500
Zinc	SW846-6010	mg/kG	46.1	0.500	24.1	0.500
Iron	SW846-6010	mg/kG	10700	5.00	13900	5.00

Client Sample ID			SB-3/S-2		SB-3/S-6	
York ID			99030107-03		99030107-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS soil	SW846-8260	ug/Kg	---	---	---	---
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
Total Xylenes			Not detected	10	Not detected	10
Isopropylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Polynuclear Aromatic Hydroc.(BN)	SW846-8270	ug/kG	---	---	---	---
Naphthalene			Not detected	330	Not detected	330
Anthracene			518	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Phenanthrene			2100	330	Not detected	330
Pyrene			2300	330	Not detected	330
Acenaphthene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Fluoranthene			2200	330	Not detected	330
Benzo[b]fluoranthene			970	330	Not detected	330
Benzo[k]fluoranthene			995	330	Not detected	330
Chrysene			1000	330	Not detected	330
Benzo[a]pyrene			970	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Total RCRA Metals	SW846	mg/kG	---	---	---	---
Arsenic, total			9.30	1.00	Not detected	1.00
Selenium, total			Not detected	1.00	Not detected	1.00
Chromium, total			38.0	0.50	20.6	0.50
Cadmium, total			2.15	0.50	Not detected	0.50
Lead, total			882	0.50	5.20	0.50
Barium, total			406	0.50	38.6	0.50
Silver, total			Not detected	0.50	Not detected	0.50
Mercury	SW846-7471	mg/kG	3.45	0.25	Not detected	0.25
Copper	SW846-6010	mg/kG	240	0.500	12.4	0.500
Nickel	SW846-6010	mg/kG	33.1	0.500	28.7	0.500
Zinc	SW846-6010	mg/kG	682	0.500	30.4	0.500
Iron	SW846-6010	mg/kG	29300	5.00	14000	5.00

Client Sample ID			SB-4/S-2		SB-4/S-5	
York ID			99030107-05		99030107-06	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS soil	SW846-8260	ug/Kg	---	---	---	---
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
Total Xylenes			Not detected	10	Not detected	10
Isopropylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Polynuclear Aromatic Hydroc.(BN)	SW846-8270	ug/kG	---	---	---	---
Naphthalene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330
Acenaphthene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Total RCRA Metals	SW846	mg/kG	---	---	---	---
Arsenic, total			1.35	1.00	1.45	1.00
Selenium, total			Not detected	1.00	Not detected	1.00
Chromium, total			10.9	0.50	9.61	0.50
Cadmium, total			Not detected	0.50	Not detected	0.50
Lead, total			4.24	0.50	4.74	0.50
Barium, total			37.2	0.50	43.8	0.50
Silver, total			Not detected	0.50	Not detected	0.50
Mercury	SW846-7471	mg/kG	Not detected	0.25	Not detected	0.25
Copper	SW846-6010	mg/kG	9.26	0.500	9.87	0.500
Nickel	SW846-6010	mg/kG	15.8	0.500	17.5	0.500
Zinc	SW846-6010	mg/kG	31.3	0.500	33.8	0.500
Iron	SW846-6010	mg/kG	12400	5.00	13300	5.00

**YORK**

Client Sample ID			SB-5/S-2		SB-6/S-2	
York ID			99030107-07		99030107-08	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Result:	MDL
Volatiles-8021 STARS soil	SW846-8260	ug/Kg	---	---	---	---
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
Total Xylenes			Not detected	10	Not detected	10
Isopropylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Polynuclear Aromatic Hydroc.(BN)	SW846-8270	ug/kG	---	---	---	---
Naphthalene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330
Acenaphthene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Total RCRA Metals	SW846	mg/kG	---	---	---	---
Arsenic, total			1.55	1.00	1.48	1.00
Selenium, total			Not detected	1.00	Not detected	1.00
Chromium, total			10.5	0.50	12.2	0.50
Cadmium, total			Not detected	0.50	Not detected	0.50
Lead, total			21.1	0.50	8.85	0.50
Barium, total			43.4	0.50	38.7	0.50
Silver, total			Not detected	0.50	Not detected	0.50
Mercury	SW846-7471	mg/kG	1.96	0.25	2.73	0.25
Copper	SW846-6010	mg/kG	12.0	0.500	12.2	0.500
Nickel	SW846-6010	mg/kG	16.1	0.500	16.4	0.500
Zinc	SW846-6010	mg/kG	37.3	0.500	33.4	0.500
Iron	SW846-6010	mg/kG	11800	5.00	14000	5.00

**YORK**

Client Sample ID			SB-11/S-2	
York ID			99030107-09	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
<b>Volatiles-8021 STARS soil</b>	SW846-8260	ug/Kg	---	---
Benzene			Not detected	5.0
Ethylbenzene			Not detected	5.0
Toluene			Not detected	5.0
o-Xylene			Not detected	10
p- & m-Xylenes			Not detected	10
Total Xylenes			Not detected	10
Isopropylbenzene			Not detected	5.0
n-Propylbenzene			Not detected	5.0
p-Isopropyltoluene			Not detected	5.0
1,2,4-Trimethylbenzene			Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0
n-Butylbenzene			Not detected	5.0
sec-Butylbenzene			Not detected	5.0
tert-Butylbenzene			Not detected	5.0
Naphthalene			Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0
<b>Polynuclear Aromatic Hydroc.(BN)</b>	SW846-8270	ug/kG	---	---
Naphthalene			Not detected	330
Anthracene			737	330
Fluorene			Not detected	330
Phenanthrene			Not detected	330
Pyrene			3100	330
Acenaphthene			443	330
Benzo[a]anthracene			1300	330
Fluoranthene			2800	330
Benzo[b]fluoranthene			1500	330
Benzo[k]fluoranthene			1300	330
Chrysene			Not detected	330
Benzo[a]pyrene			1400	330
Benzo[g,h,i]perylene			Not detected	330
Indeno[1,2,3-cd]pyrene			436	330
Dibenz[a,h]anthracene			Not detected	330
<b>Total RCRA Metals</b>	SW846	mg/kG	---	---
Arsenic, total			2.60	1.00
Selenium, total			Not detected	1.00
Chromium, total			18.3	0.50
Cadmium, total			2.12	0.50
Lead, total			127	0.50
Barium, total			136	0.50
Silver, total			Not detected	0.50
Mercury	SW846-7471	mg/kG	0.33	0.25
Copper	SW846-6010	mg/kG	72.9	0.50
Nickel	SW846-6010	mg/kG	25.9	0.50
Zinc	SW846-6010	mg/kG	367	0.50
Iron	SW846-6010	mg/kG	18500	5.00

Report Date: 03/11/99  
Client Project ID: Laurel Hill

York Project No.: 99030107

**Units Key:**

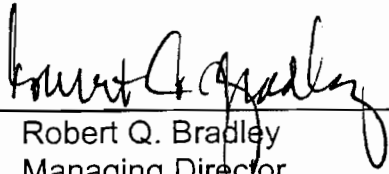
For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes:

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. If dilution factor is reported at the end of the compound list, the MDL is determined by multiplying the MDL times the listed dilution factor.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.

Approved By: \_\_\_\_\_

  
Robert Q. Bradley  
Managing Director

Date: 03/11/99

# Field Chain-of-Custody Record

<b>Company Name</b> ECI	<b>Report To:</b> Steven Costello	<b>Invoice To:</b> ECI	<b>Project ID/No.:</b> Lauvel Hill	<b>Samples Collected By (Signature)</b> <i>David Went</i>
				<b>Name (Printed)</b> David Went

Sample No.	Location/ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
SB-2	S-2	3/2/99		X		PCRA 8 + Cu, Ni, Zn, Fe PCB 8080 SVOC'S 8270, VOC'S 8021	803 Soil Sacs
SB-2	S-6	3/2/99		X		PCRA 8 + Cu, Ni, Zn, Fe PCB 8080, SVOC'S 8270, VOC'S 8021	↑
SB-3	S-2	^		X		SVOC'S 8270, VOC'S 8021, PCRA 8 + Cu, Ni, Zn, Fe	
SB-3	S-6			X		SVOC'S 8270, VOC'S 8021, PCRA 8 + Cu, Ni, Zn, Fe	
SB-4	S-2			X		SVOC'S 8270, VOC'S 8021, PCRA 8 + Cu, Ni, Zn, Fe	
SB-4	S-5			X		SVOC'S 8270, VOC'S 8021, PCRA 8 + Cu, Ni, Zn, Fe	
SB-5	S-2	∨		X		SVOC'S 8270, VOC'S 8021, PCRA 8 + Cu, Ni, Zn, Fe	
SB-6	S-2	∨		X		SVOC'S 8270, VOC'S 8021, PCRA 8 + Cu, Ni, Zn, Fe	
SB-11	S-2	3/2/99		X		SVOC'S 8270, VOC'S 8021, PCRA 8 + Cu, Ni, Zn, Fe	

<b>Chain-of-Custody Record</b>	<b>Bottles Relinquished from Lab by</b> <i>Jan Bishop</i>	<b>Date/Time</b> 3/4/99 2:35 PM	<b>Signature Received by</b> <i>Eric Flank</i>	<b>Date/Time</b> 3-4-99 @ 2:35 PM
	<b>Sample Relinquished by</b>	<b>Date/Time</b>	<b>Signature Received in LAB by</b> <i>Jandra J. G. Blau</i>	<b>Date/Time</b> 3/4/99 12:00

**Comments/Special Instructions**

**Turn-Around Time** \_\_\_\_\_ Standard \_\_\_\_\_ RUSH(define) \_\_\_\_\_

4/5

# Technical Report

prepared for

**Environmental Concepts Inc.**  
142 Ferry Rd.  
Suite 5  
Old Saybrook, CT 06475  
Attention: Mr. Steve Costello

Report Date: 04/05/99

*Re: Client Project ID: Laurel Hill*  
York Project No.: 99030476



Report Date: 04/05/99  
 Client Project ID: Laurel Hill

York Project No.: 99030476

**Environmental Concepts Inc.**  
 142 Ferry Rd.  
 Suite 5  
 Old Saybrook, CT 06475  
 Attention: Mr. Steve Costello

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 03/24/99. The project was identified as your project "Laurel Hill".

The analysis was conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

The results of the analysis are summarized in the following table(s).

### Analysis Results

Client Sample ID			SB-1/S-1	SB-1/S-2		
York ID			99030476-01	99030476-02		
Matrix			SOIL	SOIL		
Parameter	Method	Units	Results	MDL	Results	MDL
Lead	SW846-6010	mg/kG	347	0.500	101	0.500
Copper	SW846-6010	mg/kG	169	0.500	50.2	0.500
Mercury	SW846-7471	mg/kG	0.46	0.25	---	---
Nickel	SW846-6010	mg/kG	24.7	0.500	15.9	0.500
Zinc	SW846-6010	mg/kG	437	0.500	119	0.500

Client Sample ID			SB-1/S-3	SB-3/S-1		
York ID			99030476-03	99030476-04		
Matrix			SOIL	SOIL		
Parameter	Method	Units	Results	MDL	Results	MDL
Lead	SW846-6010	mg/kG	16.5	0.500	11.9	0.500
Copper	SW846-6010	mg/kG	18.0	0.500	---	---
Mercury	SW846-7471	mg/kG	Not detected	0.25	Not detected	0.25
Nickel	SW846-6010	mg/kG	6.15	0.500	15.0	0.500
Zinc	SW846-6010	mg/kG	66.6	0.500	30.8	0.500

Client Sample ID			SB-3/S-3	
York ID			99030476-05	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Lead	SW846-6010	mg/kG	6.60	0.500
Copper	SW846-6010	mg/kG	---	---
Mercury	SW846-7471	mg/kG	Not detected	0.25
Nickel	SW846-6010	mg/kG	16.1	0.500
Zinc	SW846-6010	mg/kG	33.8	0.500

Client Sample ID			SB-5/S-1		SB-5/S-3	
York ID			99030476-06		99030476-07	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Mercury	SW846-7471	mg/kG	Not detected	0.25	1.11	0.25

Client Sample ID			SB-6/S-1		SB-6/S-3	
York ID			99030476-08		99030476-09	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Mercury	SW846-7471	mg/kG	Not detected	0.25	Not detected	0.25

Client Sample ID			SB-7/S-1		SB-7/S-2	
York ID			99030476-10		99030476-11	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Lead	SW846-6010	mg/kG	626	0.500	138	0.500

Client Sample ID			SB-7/S-3		SB-8/S-1	
York ID			99030476-12		99030476-13	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Lead	SW846-6010	mg/kG	3.92	0.500	335	0.500

Client Sample ID			SB-8/S-2		SB-8/S-3	
York ID			99030476-14		99030476-15	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Lead	SW846-6010	mg/kG	85.1	0.500	5.35	0.500

Client Sample ID			SB-9/S-1		SB-9/S-2	
York ID			99030476-16		99030476-17	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Mercury	SW846-7471	mg/kG	0.49	0.25	Not detected	0.25
Lead	SW846-6010	mg/kG	109	0.500	4.10	0.500

Client Sample ID			SB-9/S-3		SB-10/S-1	
York ID			99030476-18		99030476-19	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Mercury	SW846-7471	mg/kG	Not detected	0.25	1.68	0.25
Lead	SW846-6010	mg/kG	1.42	0.500	31.6	0.500

Client Sample ID			SB-10/S-2		SB-10/S-3	
York ID			99030476-20		99030476-21	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Mercury	SW846-7471	mg/kG	Not detected	0.25	Not detected	0.25
Lead	SW846-6010	mg/kG	4.94	0.500	3.56	0.500

Client Sample ID			SB-11/S-1		SB-11/S-3	
York ID			99030476-22		99030476-23	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Mercury	SW846-7471	mg/kG	0.47	0.25	Not detected	0.25
Copper	SW846-6010	mg/kG	62.7	0.500	13.7	0.500
Nickel	SW846-6010	mg/kG	20.3	0.500	17.2	0.500
Zinc	SW846-6010	mg/kG	229	0.500	42.8	0.500

Client Sample ID			SB-3/S-2	
York ID			99030476-24	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Cyanide, total	SM412B	mg/kg	Not detected	1.00

**Units Key:**

For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

**Notes:**

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. If dilution factor is reported at the end of the compound list, the MDL is determined by multiplying the MDL times the listed dilution factor.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.

Approved By: \_\_\_\_\_

*Robert Q. Bradley*  
 Robert Q. Bradley  
 Managing Director

Date: 04/05/99

**YORK**

**Field Chain-of-Custody Record**

Company Name		Report To:	Invoice To:	Project ID/No.	Samples Collected By (Signature)		
ECI		Steve Costello	ECI	Laurel Hill	David T. Went		
Sample No.	Location/ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
SB-1/S-1		3/2/99		X			803 Soil
SB-1/S-2		3/2/99		X		Total Metals - only Pb, Cu, Hg, Ni, Zn	803 Soil
SB-1/S-3		3/2/99		X		Total Metals - only Pb, Cu, Ni, Zn	803 Soil
SB-3/S-1		3/2/99		X		Total Metals - only Pb, Hg, Ni, Zn	803 Soil
SB-3/S-3		3/2/99		X		Total Metals - only Pb, Hg, Ni, Zn	803 Soil
SB-5/S-1		3/2/99		X		Mercury only	803 Soil
SB-5/S-3		3/2/99		X		Mercury only	803 Soil
SB-6/S-1		3/2/99		X		Mercury only	803 Soil
SB-6/S-3		3/2/99		X		Mercury only	803 Soil
SB-7/S-1		3/3/99		X		Lead only	803 Soil

**Chain-of-Custody Record**

Bottles Relinquished from Lab by: April D. Dause Date/Time: 3/24/99 / 1:20 PM

Bottles Received in Field by: Eigi Florin Date/Time: 3/24/99 / 1:24

Comments/Special Instructions: Sample Relinquished by: April D. Dause Sample Received by: Eigi Florin

Sample Relinquished by: April D. Dause Date/Time: 3/24/99 / 1:20 PM

Sample Received in LAB by: April D. Dause Date/Time: 3/24/99 / 1:20 PM

Turn-Around Time: X Standard      RUSH(define)

**Field Chain-of-Custody Record**

<b>Company Name</b> ECI	<b>Report To:</b> Steven Costello	<b>Invoice To:</b> ECI	<b>Project ID/No.:</b> Laurel Hill	<b>Samples Collected By (Signature)</b> <i>David J. Went</i>
				<b>Name (Printed)</b> David J. Went

Sample No.	Location/ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
SB-7/S-2		3/3/99		X			8oz. Soil
SB-7/S-3		3/3/99		X			8oz. Soil
SB-8/S-1		3/3/99		X			8oz. Soil
SB-8/S-2		3/3/99		X			8oz. Soil
SB-8/S-3		3/3/99		X			8oz. Soil
SB-9/S-1		3/3/99		X			8oz. Soil
SB-9/S-2		3/3/99		X			8oz. Soil
SB-9/S-3		3/3/99		X			8oz. Soil
SB-10/S-1		3/3/99		X			8oz. Soil
SB-10/S-2		3/3/99		X			8oz. Soil

**Chain-of-Custody Record**

<b>Bottles Relinquished from Lab by</b> <i>David J. Went</i>	<b>Date/Time</b> 3/21/99/1:20PM	<b>Sample received by</b> <i>Eric Frink</i>	<b>Date/Time</b> 3-24-99 11:24
<b>Bottles Relinquished in Field by</b>	<b>Date/Time</b>	<b>Sample Relinquished by</b> <i>Eric Frink</i>	<b>Date/Time</b>

**Comments/Special Instructions**

Standard  Turn-Around Time RUSH(define) \_\_\_\_\_

# Field Chain-of-Custody Record

Company Name <b>ECI</b>		Report To: <b>Steve Costello</b>		Invoice To: <b>ECI</b>		Project ID/No. <b>Laurel Hill</b>		Samples Collected By (Signature) <i>David J. Went</i>		Name (Printed) <b>David J. Went</b>	
----------------------------	--	-------------------------------------	--	---------------------------	--	--------------------------------------	--	--	--	--	--

Sample No.	Location/ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
SB-10/S-3		3/3/99		X			8oz. Soil
SB-11/S-1		3/3/99		X		Lead and Mercury Only	8oz. Soil
SB-11/S-3		3/3/99		X		Cu, Hg, Ni, Zn only	8oz. Soil
						Cu, Hg, Ni, Zn only	8oz. Soil

<b>Chain-of-Custody Record</b>		3-24-99	
Bottles Relinquished from Lab by <i>David J. Went</i>	Date/Time 3/24/99 1:20	Sample Received by <i>Eric Fluh</i>	Date/Time 3/24/99
Bottles Received in Field by	Date/Time	Sample Relinquished by <i>David J. Went</i>	Date/Time 3/24/99
Comments/Special Instructions		Sample Received in LAB by <i>David J. Went</i>	
		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> RUSH(define)	

# YORK

ANALYTICAL LABORATORIES, INC.  
ONE RESEARCH DRIVE  
STAMFORD, CT 06906  
(203) 325-1371 FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 1 of 4

Company Name <b>ECI</b>	Report To: <b>Steven Costello</b>	Invoice To: <b>ECI</b>	Project ID/No. <b>Laurel Hill</b>	Samples Collected By (Signature) <i>[Signature]</i>
				Name (Printed) <b>Dave J. Hunt</b>

Sample No.	Location/ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
	SB-3/S-2	3/12/99		X		Cyanide, PCP Pesticides Only, PCP Lead	8oz. Soil
						- not enough sample so run	
						Cyanide only, as per Dave Hunt 3/25/99	
						<i>[Signature]</i>	

Chain-of-Custody Record		3-24-99	
Bottles Relinquished from Lab by <i>[Signature]</i>	Date/Time 3/24/99 1:20PM	Sample Received by <i>[Signature]</i>	Date/Time 1:24
Bottles Relinquished in Field by <i>[Signature]</i>	Date/Time	Sample Received in LAB by <i>[Signature]</i>	Date/Time 3/24/99 1:24

Comments/Special Instructions  
 This sample is already in York's possession under York E.D. 99030107-03  
 X Standard RUSH(define)

# Technical Report

prepared for

**Environmental Concepts Inc.**  
142 Ferry Rd.  
Suite 5  
Old Saybrook, CT 06475  
Attention: Mr. Steve Costello

Report Date: 04/15/99

*Re: Client Project ID: Laurel Hill*  
York Project No.: 99040229



Report Date: 04/15/99  
 Client Project ID: Laurel Hill

York Project No.: 99040229

**Environmental Concepts Inc.**  
 142 Ferry Rd.  
 Suite 5  
 Old Saybrook, CT 06475  
 Attention: Mr. Steve Costello

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 04/12/99. The project was identified as your project "Laurel Hill".

The analysis was conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

The results of the analysis are summarized in the following table(s).

### Analysis Results

Client Sample ID			SB-3B/S-2		SB-6B/S-2	
York ID			99040229-01		99040229-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
TCLP Lead	1311/6010	mg/L	0.215	0.005	---	---
TCLP Mercury	SW846-7470	mg/L	Not detected	0.0005	Not detected	0.0005
TCLP Cadmium	SW846-6010	mg/L	Not detected	0.005	---	---

Client Sample ID			SB-7B/S-1		SB-11B/S-2	
York ID			99040229-03		99040229-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
TCLP Lead	1311/6010	mg/L	0.136	0.005	---	---
TCLP Cadmium	SW846-6010	mg/L	---	---	Not detected	0.005
Pesticides 8080 List water	SW846-8080	ug/L	---	---	---	---
Aldrin					Not detected	0.06
alpha-BHC					Not detected	0.06
beta-BHC					Not detected	0.06

Client Sample ID			SB-7B/S-1		SB-11B/S-2	
York ID			99040229-03		99040229-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
delta-BHC					Not detected	0.06
gamma-BHC (Lindane)					Not detected	0.06
Chlordane					Not detected	0.24
4,4'-DDD					Not detected	0.06
4,4'-DDE					Not detected	0.06
4,4'-DDT					Not detected	0.06
Dieldrin					Not detected	0.06
Endosulfan I					Not detected	0.06
Endosulfan II					Not detected	0.06
Endosulfan sulfate					Not detected	0.06
Endrin					Not detected	0.06
Endrin aldehyde					Not detected	0.06
Heptachlor					Not detected	0.06
Heptachlor epoxide					Not detected	0.06
Methoxychlor					Not detected	2.4
Toxaphene					Not detected	2.4
Cyanide, TCLP	SW846	mg/L	---	---	Not detected	0.05

**Units Key:**

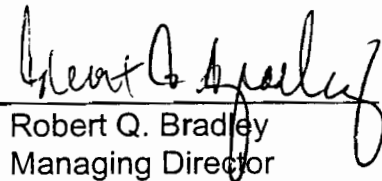
For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes:

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. If dilution factor is reported at the end of the compound list, the MDL is determined by multiplying the MDL times the listed dilution factor.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.

Approved By: \_\_\_\_\_

  
Robert Q. Bradley  
Managing Director

Date: 04/15/99

# Field Chain-of-Custody Record

Company Name <b>E C I</b>		Report To: Steven Costello		Invoice To: <b>E C I</b>		Project ID/No. <b>LAUREL HILL</b>		Name (Printed) <b>David West</b>		Samples Collected By (Signature) <i>David West</i>	
Sample No.	Location/ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)				
			Water	Soil	Air			OTHER			
→	SB-3B/S-2	4/12/99		X			TCLP Lead, TCLP Mercury Cadmium 2 8oz. Soil Jar				
→	SB-6B/S-2	↑		X			TCLP Mercury 1 8oz. Soil				
→	SB-7B/S-1	↓		X			TCLP Lead 1 8oz. Soil				
→	SB-11b/S-2	4/12/99		X			TCLP Cadmium, TCLP Arsenic / Cyanides 2 8oz. Soil				

## Chain-of-Custody Record

Bottles Relinquished from Lab by	Date/Time	Sample Relinquished by	Date/Time
		<i>Andrew Costello</i>	4/12/99 3:05
Bottles Received in Field by	Date/Time	Sample Received by	Date/Time
		<i>David West</i>	4/12/99 1:50

Comments/Special Instructions

Turn-Around Time 5 At: Standard RUSH(define) \_\_\_\_\_

# Technical Report

prepared for

**Environmental Concepts Inc.**  
142 Ferry Rd.  
Suite 5  
Old Saybrook, CT 06475  
Attention: Mr. Steve Costello

Report Date: 03/25/99

*Re: Client Project ID: Laurel Hill*  
York Project No.: 99030284

Report Date: 03/25/99  
 Client Project ID: Laurel Hill

York Project No.: 99030284

**Environmental Concepts Inc.**  
 142 Ferry Rd.  
 Suite 5  
 Old Saybrook, CT 06475  
 Attention: Mr. Steve Costello

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 03/16/99. The project was identified as your project "Laurel Hill".

The analysis was conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

The results of the analysis are summarized in the following table(s).

### Analysis Results

Client Sample ID			MW-1	MW-2		
York ID			99030284-01	99030284-02		
Matrix			WATER	WATER		
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS water	SW846-8260	ug/L	---	---	---	---
Benzene			Not detected	1	Not detected	1
Ethylbenzene			Not detected	1	Not detected	1
Toluene			Not detected	1	Not detected	1
o-Xylene			Not detected	2	Not detected	2
p- & m- Xylenes			Not detected	2	Not detected	2
Total Xylenes			Not detected	2	Not detected	2
Isopropylbenzene			Not detected	1	Not detected	1
n-Propylbenzene			Not detected	1	Not detected	1
p-Isopropyltoluene			Not detected	1	Not detected	1
1,2,4-Trimethylbenzene			Not detected	1	Not detected	1
1,3,5-Trimethylbenzene			Not detected	1	Not detected	1
n-Butylbenzene			Not detected	1	Not detected	1
sec-Butylbenzene			Not detected	1	Not detected	1
tert-Butylbenzene			Not detected	1	Not detected	1

Client Sample ID			MW-1		MW-2	
York ID			99030284-01		99030284-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Naphthalene			Not detected	1	Not detected	1
Methyl-tert-butyl ether			10	1	1	1
Polynuclear Aromatic Hydroc.(BN)	SW846-8270	ug/L	---	---	---	---
Naphthalene			Not detected	10	Not detected	10
Anthracene			Not detected	10	Not detected	10
Fluorene			Not detected	10	Not detected	10
Phenanthrene			Not detected	10	Not detected	10
Pyrene			Not detected	10	Not detected	10
Acenaphthene			Not detected	10	Not detected	10
Benzo[a]anthracene			Not detected	10	Not detected	10
Fluoranthene			Not detected	10	Not detected	10
Benzo[b]fluoranthene			Not detected	10	Not detected	10
Benzo[k]fluoranthene			Not detected	10	Not detected	10
Chrysene			Not detected	10	Not detected	10
Benzo[a]pyrene			Not detected	10	Not detected	10
Benzo[g,h,i]perylene			Not detected	10	Not detected	10
Indeno[1,2,3-cd]pyrene			Not detected	10	Not detected	10
Dibenz[a,h]anthracene			Not detected	10	Not detected	10
Silver, Dissolved	SW846-6010	mg/L	Not detected	0.005	Not detected	0.005
Arsenic, Dissolved	SW846-6010	mg/L	Not detected	0.010	Not detected	0.010
Barium, Dissolved	SW846-6010	mg/L	0.061	0.010	0.092	0.010
Cadmium, Dissolved	SW846	mg/L	Not detected	0.005	Not detected	0.005
Chromium, Dissolved	SW846-6010	mg/L	Not detected	0.005	Not detected	0.005
Mercury, Dissolved	SW-846-7470	mg/L	Not detected	0.0005	Not detected	0.0005
Lead, Dissolved	SW846-6010	mg/L	Not detected	0.005	Not detected	0.005
Selenium, Dissolved	SW846-6010	mg/L	Not detected	0.010	Not detected	0.010
Copper, Dissolved	SW846-6010	mg/L	0.007	0.005	0.006	0.005
Nickel, Dissolved	SW846-6010	mg/L	Not detected	0.005	Not detected	0.005
Zinc, Dissolved	SW846-6010	mg/L	Not detected	0.005	Not detected	0.005
Iron, Dissolved	SW846-6010	mg/L	0.351	0.005	0.366	0.005

Client Sample ID			MW-3	
York ID			99030284-03	
Matrix			WATER	
Parameter	Method	Units	Results	MDL
Volatiles-8021 STARS water	SW846-8260	ug/L	---	---
Benzene			Not detected	1
Ethylbenzene			Not detected	1
Toluene			Not detected	1
o-Xylene			Not detected	2
p- & m- Xylenes			Not detected	2
Total Xylenes			Not detected	2
Isopropylbenzene			Not detected	1
n-Propylbenzene			Not detected	1
p-Isopropyltoluene			Not detected	1
1,2,4-Trimethylbenzene			Not detected	1
1,3,5-Trimethylbenzene			Not detected	1

# Field Chain-of-Custody Record

Company Name		Report To:	Invoice To:	Project ID/No.	Samples Collected By (Signature)		
ECI		Steven Costello	ECI	Laurel Hill	David J Went		
Sample No.	Location/ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
MW-1		3/14/95	X			SWAC'S 827P, VOC'S 8221, ACRA 8+*	1 L Amber 2 40 mL 1 Plastic Jar
MW-2		3/14/95	X			SWAC'S 827P, VOC'S 8221, ACRA 8+*	1 L Amber 2 40 mL 1 Plastic Jar
MW-3		3/16/95	X			SWAC'S 827P, VOC'S 8221, ACRA 8+*	1 L Amber 2 40 mL 1 Plastic Amber

**Chain-of-Custody Record**

Bottles Relinquished from Lab by: David J Went Date/Time: 3/16/95 13:20

Bottles Received in Field by: Steven Costello Date/Time: 3/16/95 13:20

Sample Relinquished by: David J Went Date/Time: 3/16/95 13:20

Sample Received in Lab by: Steven Costello Date/Time: 3/16/95 13:20

Turn-Around Time:  Standard  RUSH(define) \_\_\_\_\_

Comments/Special Instructions: \* Cu, Ni, Zn, Fe \* Metals might need filtering

**YORK**  
ANALYTICAL LABORATORIES, INC.

# Technical Report

prepared for

**Environmental Concepts Inc.**  
142 Ferry Rd.  
Suite 5  
Old Saybrook, CT 06475  
Attention: Mr. Steve Costello

Report Date: 06/25/99

***Re: Client Project ID: Laurel Hill Realty***  
York Project No.: 99060371

CT License No. PH-0723 New York License No. 10854 Mass. License No. M-CT106 Rhode Island License No. 93 EPA I.D. No. CT00106

ONE RESEARCH DRIVE

STAMFORD, CT 06906

(203) 325-1371

FAX (203) 357-0166



Report Date: 06/25/99  
Client Project ID: Laurel Hill Realty

York Project No.: 99060371

**Environmental Concepts Inc.**  
142 Ferry Rd.  
Suite 5  
Old Saybrook, CT 06475  
Attention: Mr. Steve Costello

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 06/17/99. The project was identified as your project "Laurel Hill Realty".

The analysis was conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

The results of the analysis are summarized in the following table(s).

### Analysis Results

Client Sample ID			Surface 1		Surface 2	
York ID			99060371-01		99060371-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Metals, Priority Pollutant List	EPA SW846	mg/kg	---	---	---	---
Arsenic			1.63	1.00	Not detected	1.00
Selenium			3.50	1.00	2.63	1.00
Thallium			Not detected	1.00	Not detected	1.00
Antimony			Not detected	0.80	Not detected	0.80
Lead			56.9	0.30	40.9	0.30
Beryllium			Not detected	0.10	Not detected	0.10
Chromium			11.9	0.50	11.8	0.50
Cadmium			Not detected	0.30	Not detected	0.30
Copper			22.6	0.60	28.9	0.60
Nickel			13.5	0.90	10.8	0.90
Zinc			72.4	0.60	98.8	0.60
Silver			Not detected	0.30	Not detected	0.30
Mercury	SW846-7471	mg/kg	Not detected	0.25	0.92	0.25

Client Sample ID			Surface 1	Surface 2		
York ID			99060371-01	99060371-02		
Matrix			SOIL	SOIL		
Parameter	Method	Units	Results	MDL	Results	MDL
Polynuclear Aromatic Hydroc.(BN)	SW846-8270	ug/kg	---	---	---	---
Naphthalene			Not detected	330	Not detected	3300
Anthracene			700	330	Not detected	3300
Fluorene			380	330	Not detected	3300
Phenanthrene			3300	330	7200	3300
Pyrene			4500	330	8600	3300
Acenaphthene			400	330	Not detected	3300
Benzo[a]anthracene			1500	330	Not detected	3300
Fluoranthene			3500	330	7200	3300
Benzo[b]fluoranthene			1700	330	Not detected	3300
Benzo[k]fluoranthene			1500	330	Not detected	3300
Chrysene			Not detected	330	Not detected	3300
Benzo[a]pyrene			1400	330	Not detected	3300
Benzo[g,h,i]perylene			700	330	Not detected	3300
Indeno[1,2,3-cd]pyrene			600	330	Not detected	3300
Dibenz[a,h]anthracene			Not detected	330	Not detected	3300

Units Key:

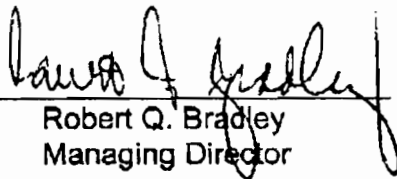
For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes:

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. If dilution factor is reported at the end of the compound list, the MDL is determined by multiplying the MDL times the listed dilution factor.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.

Approved By:

  
 Robert Q. Bradley  
 Managing Director

Date: 06/25/99

**YORK**  
 ANALYTICAL LABORATORIES, INC.  
 ONE RESEARCH DRIVE  
 STAMFORD, CT 06906  
 (203) 325-1371 FAX (203) 357-0166

# Field Chain-of-Custody Record

<b>Company Name</b>	<b>Report To:</b> S. Costello	<b>Invoice To:</b> S. Costello	<b>Project ID/No.</b> Round Hill Realty Surface Samples	<b>Samples Collected By (Signature)</b> <i>John Bernard</i>
				<b>Name (Printed)</b> John Bernard

Sample No.	Location/ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
Surface 1	Round Hill			X		Variety Polynuclear Metals + Minerals 2270 PAH Variety Polynuclear Metals + Minerals 2270 PAH	1 glass jar 19 glass jars
Surface 2	Round Hill			X			

<b>Chain-of-Custody Record</b>	<i>John Bernard</i> Sample Relinquished by	6-17-99/1125 Date/Time	<i>John Bernard</i> Sample Received by	6/17/99 1125 Date/Time
<b>Bottles Relinquished from Lab by</b>				
<b>Bottles Received in Field by</b>				
<b>Comments/Special Instructions</b>	Turn Around Time <input checked="" type="checkbox"/> Standard <input type="checkbox"/> RUSH(define) _____			

# **APPENDIX E**

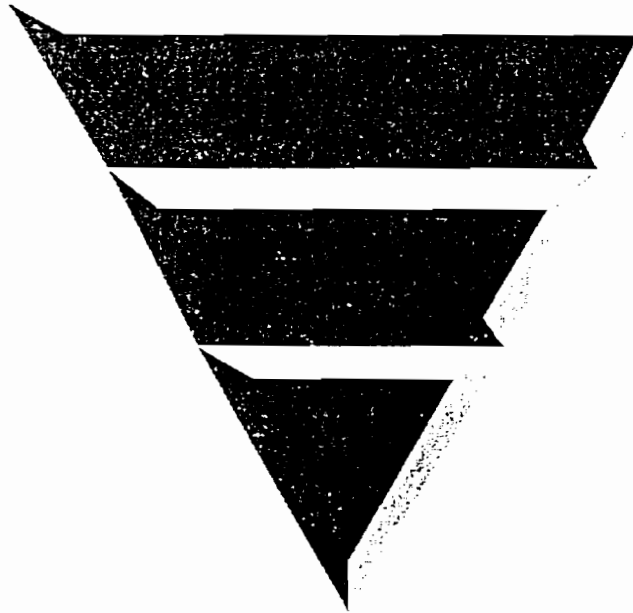
## **PREVIOUS STUDIES**

# PHASE I SITE ASSESSMENT

---

FOR

*105 WEST STREET, BROOKLYN, NY*



## *PHASE I SITE ASSESSMENT*

PREPARED FOR:

*Safeway Construction  
105 West Street  
Brooklyn, New York 11222*

PREPARED BY:

*Environmental Concepts, Inc.  
2 Salt Meadow Lane  
Old Lyme, Connecticut 06371*

MARCH 14, 1997

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## 1.0 INTRODUCTION

Environmental Concepts, Inc. (ECI) performed a Phase I Environmental Site Assessment at 105 West Street in Brooklyn, New York, for Safeway Construction of Brooklyn, New York, the proposed purchaser of the property. The purpose of the assessment was to document the current environmental conditions at the property and to identify any conditions which may need to be addressed. The following tasks were performed as part of this assessment.

- A visual site inspection of the property including photographic documentation of the current site conditions;
- Review of property title records to determine previous ownership and land usage;
- Review of available fire insurance rate maps of the site and surrounding properties; and;
- Examination of selected regulatory databases including federal, state, and local governments to determine if releases of hazardous substances have occurred, and evaluate the potential for releases on nearby properties.

The on-site inspection, ownership history, and local government record review was conducted on March 6, 1997, by Mr. Michael O'Connor of ECI. The title to the property was provided by Nations Title Service of New York, Inc. The regulatory database search was performed by Environmental Risk Information & Imaging Services (ERIIS) of Herndon, Virginia.

The reported site conditions are those observed during the on-site inspection on March 6, 1997. Analytical testing of materials, except those included in this report, were not performed.

**Environmental Concepts, Inc.**



## 2.0 SITE DESCRIPTION

### 2.1 Location and Legal Description

The site is located at the southwest corner of the intersection of West Street with Kent Street. According to the Brooklyn Tax Office, the address of the subject property is 105 West Street in the Greenpoint section of Brooklyn (Kings County), New York, and it is listed as Lct 58 in Block 2556. The Tax Office lists the owner of the site as Oak Cal Realty Corporation of Great Neck, New York. The Site Location Map (Figure 1 in Appendix A) illustrates the site's location.

### 2.2 Site and Vicinity Characteristics

The site is located on the US Geological Survey (USGS) Brooklyn, NY Topographic Quadrangle Map, as shown on Figure 2. According to this map, the site elevation is approximately 20 feet above Mean Sea Level and it is located at 73°57'30" West Longitude and 40°43'45" North Latitude. The Universal Transverse Mercator coordinates for the site are 587,929m E and 4,509,071m N. Kent Street borders the site to the north, West Street borders the site to the east, stores and apartments border the site to the south, and warehouses border the site to the west. Across Kent and West Streets are warehouses. Kent and West Streets are paved with asphalt and the sidewalks along West Street are paved with asphalt. The sidewalk on the north side of Kent Street is concrete and the sidewalk on the south side is unpaved. Catch basins are located at the northeast and southeast corners of the West Street/Kent Street intersection and in Kent Street west of the intersection. Electrical utilities along West Street are underground, with a junction box located at the southwest corner of the West Street/Kent Street intersection. Approximately 700 feet west of the site is the East River. Bordering the East River, between the river and the warehouses, is the New York City Department of Parks and Recreation Communications. The nearest surface water to the site is the East River.

According to the Bedrock Geologic Map of New York, Lower Hudson Sheet (Fisher et al. 1970), the bedrock beneath the site is unknown. According to the Surficial Geologic Map of New York, Lower Hudson Sheet (Cadwell, 1989), the surficial materials beneath the site are till. The till is composed of a variable mixture of clay, silt, sand and boulders, is generally unsorted and relatively impermeable, and was deposited beneath glacial ice

### 2.3 Descriptions of Site Structures, Roads, and Other Improvements

The property is currently occupied by Safeway Construction. A single building is located on the site. This building occupies the northern half of the site and is of steel frame construction with steel siding. The floor of the building is concrete with no floor drains. The building is not heated, contains no insulation, or boilers or furnaces. The roof is steel with a tar paper exterior. Two (2) above ground storage tanks containing diesel fuel for vehicle refueling are located inside the building. One tank has a capacity of 270-gallons and the second tank has a capacity of 250-gallons. Eight (8) gasoline/diesel cans of five (5) gallon capacity were adjacent to the tanks. The concrete floor contains surface staining apparently from parked vehicles. A trailer housing an office is located in the southeast corner of the building. Electricity is supplied to the building from the junction box located beneath the southwest corner of the West Street/Kent Street intersection. Overhead telephone and municipal water and sewer service the property from West Street. The building is used to store equipment and vehicles.

The southern half of the property is surrounded by an eight (8) foot fence with razor wire at the top. The southeast corner of the property is covered by a concrete pad. Within this fenced in area is the storage yard for Safeway Construction. Safeway stores traffic cones and barricades, metal plates, pipes, wire mesh for reinforced concrete, sand, and cobblestones. The Site Plan (Figure 3) illustrates the site layout. Photographs presented in Appendix B show the current site conditions.

#### 2.4 Information Reported by User Regarding Environmental Liens

Mr. Guido DiRe of Safeway Construction stated that to his knowledge there are no environmental liens or consent orders on the property.

#### 2.5 Current Property Uses

The property is currently used as a warehouse by Safeway Construction to store construction equipment, vehicles, and materials. Safeway has occupied the property since 1994. Prior to that, the property was unoccupied for five (5) years.

#### 2.6 Property Ownership History

The property ownership was researched at the Brooklyn Records Office back to 1912. The following list presents the ownership of the property.

<u>Grantee</u>	<u>Grantor</u>	<u>Date</u>
Oak Cal Realty Corp.	Perlen Ale	6/20/1958
Perlen Ale	Eberhard Faber Pencil Co.	6/03/1957
Eberhard Faber Pencil Co.	Tenth & 23rd Street Ferry Co.	8/14/1924
	Joseph J. O'Donohue, Jr.	
Tenth & 23rd Street Ferry Co	Seymour L. Husted	5/26/1912
	Brooklyn NY Ferry Co.	

#### 2.7 Past Property Uses

ECI contracted Environmental Risk Information and Imaging Services (ERIIS), a commercial environmental database supplier, to research the federal and state environmental databases for information regarding this property. ERIIS researched fire insurance maps for the site dating back to 1880. The 1880 map is provided by Hopkins whereas the remainder of the maps are provided by Sanborn. The 1951 map indicates a warehouse was located on the

property in the location of the current building and a building was present on the concrete slab in the southeast corner of the property and was used for paper storage. The 1942 map indicates the two buildings were present on the property with both being used as private garages. The 1928 map indicates the buildings were present on the property but the uses are not indicated. However, the property was owned by Eberhard Faber Pencil Co. The 1922 map indicates that neither building was present on the property. The property consisted of half the block extending from West Street to the East River. Several buildings were located on sections of the property which today are different lots. The 1916 map indicates the property was undeveloped with the exception of two smelters and a lumber shed; the property extended from West Street to the East River. One of the smelters was located on what is now the northwest corner of the property beneath the building. The 1905 map indicates an office, lumber storage, and tool house were located on the property where what is now the building. A stable was located on the concrete pad in the southeast corner of the lot. The 1887 map indicates a lumber storage area and stable were located on the property.

## 2.8 Current and Past Uses of Adjoining Properties

The properties located to the north, east, and west of the site are currently occupied by warehouses. The properties to the south of the site are occupied by stores and apartments. The property north of the site has been a warehouse since 1947. The 1942 fire insurance map indicates the property was used for lumber storage and an office. The 1928 and 1922 fire insurance maps indicate a warehouse was located on the property. The 1951 and all previous maps indicate a lumber yard, shed, and office were located on the property. The property to the east was undeveloped prior to 1928, since then it has been used as warehouses. The properties to the south of the site have been occupied by stores and apartment back to at least 1887. The property west of the site was occupied by a warehouse until at least 1928. Prior to then it was undeveloped with lumber storage, a shed, and a

smelter for a brief period of time. Photographs presented in Appendix B document the conditions of adjacent properties.

### 3.0 RECORDS REVIEW

ECI reviewed environmental records for the property and surrounding neighborhood to identify potential sources of contamination on or near the property. As part of this review, ECI contracted Environmental Risk Information and Imaging Services (ERIIS), a commercial environmental database service, to provide information on federal and state environmental lists. ERIIS reviewed the databases for sites surrounding the site according to the ASTM E 1527 search radius. The ERIIS report is presented in Appendix C. The following is a list of the databases reviewed for this report: New York City Fire Prevention; National Priorities List (NPL); Resource Conservation and Recovery Information System - Treatment, Storage and Disposal Facilities (RCRIS TS); Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS); Nor Further Remedial Action Planned Sites (NFRAP); Resource Conservation and Recovery Information System Large and Small Quantity Generators (RCRIS LG and SG); Emergency Response Notification System (ERNS); New York Inactive Hazardous Waste Disposal Sites (HWS); New York Leaking Storage Tanks (LRST); New York Active Solid Waste Facility Register (SWF); New York Chemical Bulk Storage Tanks (CBS); New York Major Oil Storage Facilities (MOSF); and New York Petroleum Bulk Storage Tanks (PBS). ERIIS reviewed plottable and unplotable sites listed on the databases within the ASTM search radius. Plottable sites are sites where exact addresses are known whereas unplotable sites are sites for which exact addresses are not known.

#### 3.1 New York City Fire Prevention Records

ECI reviewed the New York City Fire Prevention records to identify if any above ground or underground storage tanks are located on the site. According to the Fire Prevention records,

there are no above ground or underground storage tanks at the site. The Fire Prevention record is presented in Appendix C.

### 3.2 Plottable Federal Database Records

According to the ERIIS report, none of the surrounding properties within the ASTM E 1527 radius are listed on the NPL, RCRIS TS, CERCLIS, RCRIS SG, and ERNS databases. The ASTM E 1527 search radii are listed in the ERIIS report on the ERIIS ASTM Statistical Profile page, and they are of varying distances depending on the database. The only federal databases with listings are NFAP and RCRIS LG. The NFAP (No Further Remedial Action Planned Sites database) lists the Brooklyn Union Gas facility located at Kent Avenue and N. 12<sup>th</sup> Street, approximately 0.473 mile southeast of the site. The RCRIS LG (Resource Conservation Recovery Information System Large Quantity Generator database) lists three sites; Vanguard Diversified, Inc. Located at 10 Java Street, approximately 0.092 mile northwest of the site; Huxley Envelope Corporation located at 145 West Street, approximately 0.097 mile northwest of the site; and Ideal Precision Meter Company located at 126 Greenpoint Avenue, approximately 0.189 mile southeast of the site.

### 3.3 Unplottable Federal Database Records

According to the ERIIS report, two (2) unplottable sites were listed on the NFRAP, four (4) unplottable sites were listed on the RCRIS LG, and three (3) unplottable sites were listed on the RCRIS SG databases within the ASTM E 1527 search radius. The two NFRAP sites are both located on Lombardy Street with one listed as Jones Motor Site. The RCRIS LG sites are listed as a service station located at 176-194 McGuinness Boulevard (approximately one mile southeast of the site); the mercury room 102 at the Greenpoint Warehouse located at the foot of Noble Street. Noble Street is located three blocks south of the site, approximately 800 feet south; Exxon Company located at 546 Morgan Avenue and Meeker Avenue located

approximately one mile southeast of the site; and a NYCDOT BIN 2240370 located at the Greenpoint Avenue Overpass. The RCRIS SG sites are listed as NYC Sanitation - Greenpoint, Inc. located at North Henry Street & New Town Creek in downtown Brooklyn at least three miles to the southwest; Aphrodite Cleaners & Launderers located at 35-41 Division Place located approximately one mile southeast of the site; and Luqui Mark located at 71 Green Street located four blocks north of the site (approximately 1000 feet north).

#### 3.4 Plottable State Database Records

According to the ERIIS report, none of the surrounding properties within the ASTM E 1527 search radius are listed on the New York Hazardous Waste Sites database (HWS), New York Solid Waste Facility database (SWF), New York Chemical Bulk Storage Tanks database (CBS), or the New York Major Oil Storage Facilities database (MOSF). New York databases which have listings within the search radius are the Leaking Storage Tanks (LRST) and Petroleum Bulk Storage Tanks (PBS).

The plottable New York Leaking Storage Tanks database lists three (3) sites with leaking tanks within the search radius. These sites are Shimento Trucking, Inc. located at 11 West Street approximately 0.248 mile southeast of the site; 65 Commercial Street located approximately 0.451 mile northeast of the site; and a gas station located at 176 McGuinness Avenue approximately 0.475 mile southeast of the site. According to the database, the Shimento Trucking and gas station sites had releases to groundwater while the 65 Commercial Street site had a release to land. All releases involved petroleum products. The New York Petroleum Bulk Storage Facilities database lists 15 sites within the search radius. These sites, their address, tank status, and tank capacity are listed below:

<u>Site Occupant</u>	<u>Site Address</u>	<u>Tank Capacity</u>	<u>Tank Status</u>
Midis Greenpoint Realty Co.	96 West Street	5,000 gallon Fuel Oil	In Service
Kent Trans America Clothing Co.	122 West Street	4,800 gallon Fuel Oil	In Service
Guard General Merchandise Co.	61 Greenpoint Ave	7,000 gallon Fuel Oil	In Service
NYC Housing Preserv. & Devel.	65 Java Street	1,500 gallon Fuel Oil	In Service
Michael Pistilli	85 Java Street	5,000 gallon Fuel Oil	In Service
Huxley Envelope Corp.	145 West Street	20,000 gallon Fuel Oil 10,000 gallon Fuel Oil	Closed in-place In Service
74 India	74 India Street	5,000 gallon Fuel Oil	In Service
Greenpoint Corporation	111 Greenpoint Avenue	5,000 gallon Fuel Oil	In Service
Oscar's Service Station	193 Franklin Street	(4) 550 gal Unleaded Gas (3) 500 gal Diesel	In Service In Service
128-130 Greenpoint Avenue	128-130 Greenpoint Ave	4,000 gallon Fuel Oil	In Service
129 Huron Street	129 Huron Street	1,500 gallon Fuel Oil	In Service
S & B Caamono	54 Franklin Street	2,000 gallon Fuel Oil	In Service
A. Jochowitz	151 Java Street	2,000 gallon Fuel Oil	In Service
Polonaise Terrace	150 Greenpoint Avenue	2,000 gallon Fuel Oil	In Service
P. Chimento Trucking, Inc.	11 West Street	(10) 550 gal Diesel (4) 550 gal Unleaded Gas (2) 2,000 gal Fuel Oil (4) 275 gal Other (1) 5,000 gal Fuel Oil	In Service In Service In Service In Service Closed-Removed

All tanks are constructed of steel/carbon steel.

All the listed PBS sites are within a 0.25 mile radius of the site. The sites are listed in order from the nearest to the farthest from the site with the nearest site located 0.097 mile (approximately 500 feet) to the northwest.

**Environmental Concepts, Inc.**



### 3.5 Unplottable State Database Records

According to the ERIIS report, the New York Solid Waste Facilities (SWF) contains 60 unplottable sites within the ASTM search radius. These consist of large transfer stations which store and transfer residential and demolition wastes. The New York Petroleum Bulk Storage Facilities (PBS) database contains five (5) sites within the ASTM search radius. Of these, three (3) have addresses; Mersco Wholesale located at 40 Quay Street; Samtone Realty located on Engert Street; and Consolidated Laundries, Inc. located at 48 Eagle Street. The Quay Street site is located approximately 1500 feet south of the site, the Engert Avenue site is located approximately one (1) mile southeast of the site, and the Eagle Street site is located approximately 1500 feet north of the site. The other two sites, OMT, Inc. and Nash Metalware Co., Inc., have no listed address. The Quay Street, Consolidated Laundries, and Nash Metalware Co. sites have underground storage tanks which store fuel oil while the Samtone Realty site has above ground storage tanks which store fuel oil. The QTM site has underground storage tanks which store leaded gasoline and diesel fuel.

## 4.0 INFORMATION FROM SITE RECONNAISSANCE

ECl performed a site inspection to identify current and past areas of environmental concern or areas of releases of hazardous substances or petroleum products.

### 4.1 Hazardous Substances in Connection with Identified Uses

No hazardous substances were identified within the building or on the property.

### 4.2 Hazardous Substance Containers and Unidentified Substance Containers

The only hazardous substance containers identified on the property were 9 five-gallon fuel cans located adjacent to the diesel fuel tanks. No unidentified substance containers were observed on the property.

#### 4.3 Storage Tanks

Two storage tanks were present on the site, an above ground 275-gallon tank and an above ground 250-gallon tank, both store diesel fuel. The tanks are located adjacent to each other and do not have secondary containment. The tanks exhibit no evidence of leakage and are generally in good condition.

#### 4.4 Indications of PCBs

There are no indications of PCBs on the property. All electrical utilities in the neighborhood are underground, therefore the location of transformers is not known. An electrical junction box is located beneath the southwest corner of the West Street/Kent Street intersection.

#### 4.5 Indications of Solid Waste Disposal

Solid waste is disposed of in a dumpster located in front of the property. The solid waste is then removed from the site by a commercial waste hauler.

#### 4.6 Physical Setting Analysis

Should a release of hazardous substances or petroleum products occur in the building they would flow down slope out of the building into West Street. If a release should occur in the undeveloped part of the property, the released materials will infiltrate into the soil. The infiltration depth will depend on the volume released and the physical properties of the released materials and the soil. Should a release of these substances occur in either road, they will flow south along West Street and west along Kent Street and enter catch basins connected to the storm sewer system.

## 5.0 TEST PIT EXCAVATION AND SOIL SAMPLING

To inspect the subsurface conditions beneath the site, ECI supervised the excavation of a test pit for a visual inspection of the soils and to collect soil samples. A backhoe operated by Safeway Construction was used to excavate the test pit in the undeveloped section of the property.

### 5.1 Soil Excavation and Description

The test pit was excavated to a depth of approximately eight (8) feet below the ground surface just west of the concrete slab in the southern section of the property (refer to Figure 3). The soil profile consisted of dry, brown and black silt with some wood and a trace of rubber for the surface to two (2) feet below the surface. This soil contained a dark stained layer from one (1) to two (2) feet which exhibited no odors. From two (2) feet to 5.5 feet below the surface the soil was dry, brown, sandy silt with little wood, concrete, and red bricks. These two (2) layers are interpreted to be fill material. From 5.5 feet to eight (8) feet the soil was dry, brown, fine sand. This layer was interpreted to be native material. Groundwater was not encountered in the test pit. Soil descriptions are included on the Test Excavation Soil Log in Appendix C.

### 5.2 Soil Sample Collection and Laboratory Analytical Results

Soil samples were collected from the top and middle layers comprised of fill material, the 0 - 2' and the 2' - 5.5' layers below the ground surface. Both soil samples were analyzed for volatile organic compounds according to EPA Methods 8240 and 8260, semi-volatile organic compounds according to EPA Method 8270, and priority pollutant metals and iron according to EPA Method 200 Series. The samples were delivered to York Analytical Laboratories, Inc., a New York State Department of Health certified laboratory, for analysis.

### 5.3 Soil Sample Analytical Results

The analytical results of soil samples are summarized in Tables 1 through 6 (Appendix D), and the laboratory report, along with the Chain-of-Custody record, are presented in Appendix E. The EPA Method 8240 analyses revealed no detectable concentrations of 8240 target VOCs in the samples from either layer. Table 1 summarizes the results of the EPA Method 8240 analysis for the upper layer (0 - 2'). The EPA Method 8260 results of the sample collected from the upper layer (0 - 2') revealed 11,000  $\mu\text{g}/\text{kg}$  of naphthalene and 51  $\mu\text{g}/\text{kg}$  of 1,2,4-trimethylbenzene. The Naphthalene concentration exceeded the New York State Department of Environmental Conservation (NYSDEC) Petroleum-Contaminated Soil Guidance Policy, Toxicity Characteristic Leaching procedure Alternative Guidance Value. However, the naphthalene concentration was below the NYSDEC Recommended Soil Cleanup Criteria listed in the Technical and Administrative Guidance Memorandum (TAGM 4046) on Determination of Soil Cleanup Objectives and Cleanup Levels, January 24, 1994. The concentration of 1,2,4-trimethylbenzene was below the Alternative Guidance Value. Table 1 presents the EPA Method 8260 analytical results. The Priority Pollutant Metals results of the upper layer (0 - 2') revealed arsenic, selenium, antimony, lead, chromium, cadmium, copper, nickel, zinc, mercury, and iron at concentrations exceeding the Soil Cleanup Objectives. Table 2 summarizes the priority pollutant metals analytical results. The EPA Method 8270 results of the upper layer (0 - 2') revealed no detectable concentrations of the target compounds. Table 3 summarizes the EPA Method 8270 analytical results.

The EPA Method 8260 results of the middle layer (2' - 5.5') revealed 20  $\mu\text{g}/\text{kg}$  of isopropylbenzene, 390  $\mu\text{g}/\text{kg}$  of naphthalene, 66  $\mu\text{g}/\text{kg}$  of 1,2,4-trimethylbenzene, and 29  $\mu\text{g}/\text{kg}$  of 1,3,5-trimethylbenzene were present in the soil sample. The naphthalene was at a concentration exceeding the Alternative Guidance Value but below the Soil Cleanup Objective. The other three compounds were at concentrations below the Alternative Guidance Values. The Priority Pollutant Metals analyses of the sample collected from the

middle level (2' - 5.5') revealed arsenic, selenium, antimony, lead, chromium, cadmium, copper, nickel, zinc, mercury, and iron at concentrations exceeding the Soil Cleanup Objectives. TAGM 4046 lists a maximum concentration or site background concentration as the Soil Cleanup Objective for metals. Many of the metals are at concentrations just exceeding the maximum concentration listed as the Soil Cleanup Objective. The EPA Method 8270 results of the sample collected from the middle layer (2' - 5.5') revealed numerous compounds at concentrations exceeding the Alternative Guidance Values and the Soil Cleanup Objectives.

TAGM 4046 lists the Soil Cleanup Objectives for the Priority Pollutant Metals as maximum concentrations or site background concentrations. The site background concentration is the concentration of a metal in the soil which is representative of the site conditions even if this concentration is above the maximum concentration listed. Many of the metals are present in concentrations just exceeding the maximum allowable concentrations and may be representative of background conditions. However, the concentrations of lead, copper, zinc, and iron in the upper layer (2' - 5.5') are high. All metals concentrations exhibit a decreasing trend with depth indicating the source is or was near or at the surface.

Since neither fill layer exhibits an odor and the fill has evidently been there for some time, it is likely that the petroleum present in the layers is not of recent origin or from current site uses. Given that a smelter was located on the site in the past, fill comprising the top 5.5 feet of the soil column, and current site uses do not produce metals, the most likely origin for the petroleum hydrocarbons and metals is previous site uses rather than current site uses. No identified current site uses can account for the metals.

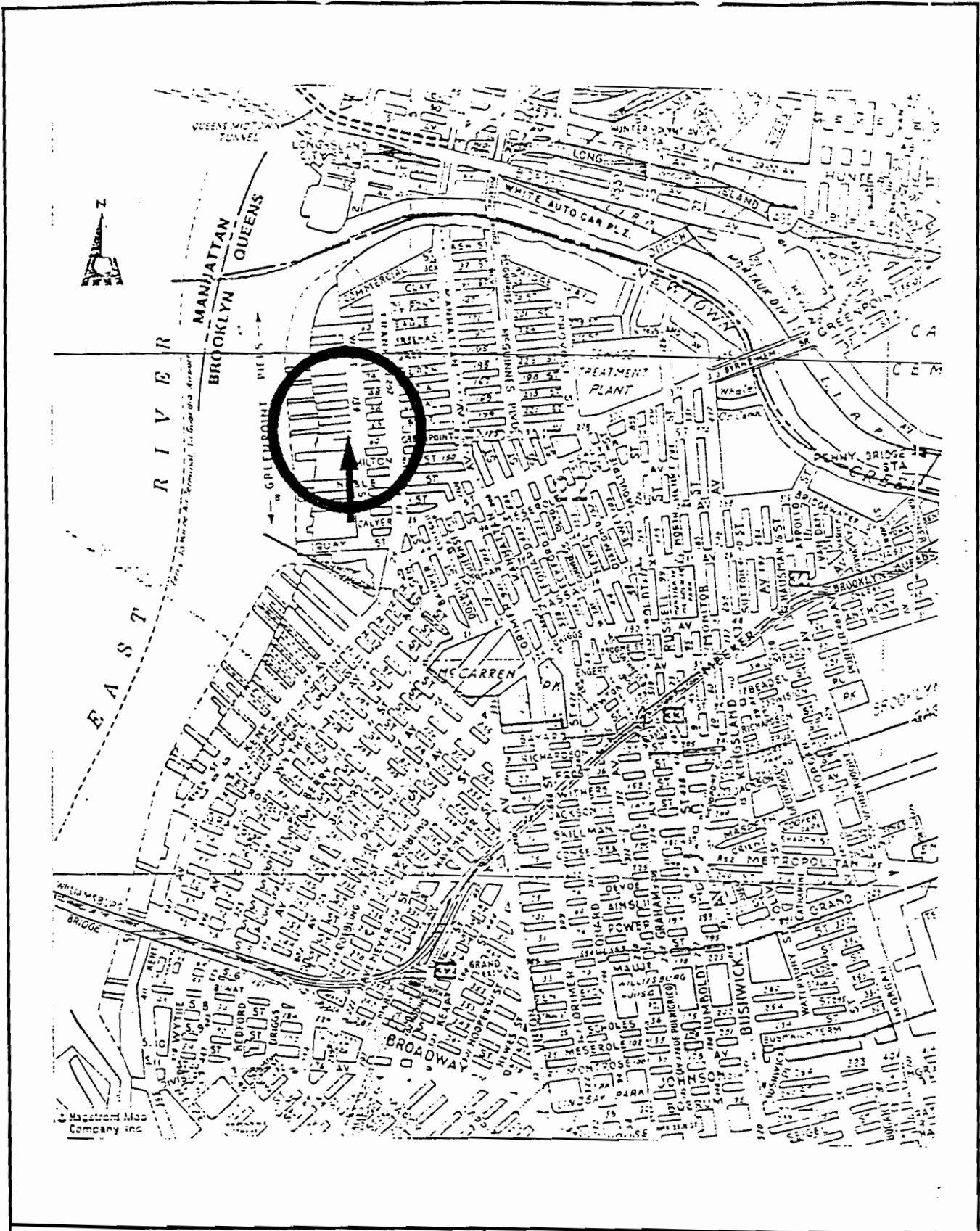
## 6.0 Summary and Conclusion

Environmental Concepts, Inc. performed an environmental Phase I Site Assessment at 105 West Street, Brooklyn, NY for Safeway Construction. The assessment consisted of a site inspection, review of federal, state, and local environmental databases, and the excavation of a test pit and collection and analysis of soil samples. The soil samples were analyzed for volatile organic compounds, semi-volatile organic compounds, and priority pollutant metals. The results of the site inspection revealed no current conditions at the property or with the building of environmental concern. The results of the database search revealed no listing for the site or adjacent properties on any of the environmental databases. The nearest properties listed on the databases are RCRA large and small quantity generators several hundred feet north and south of the site. The results of the soil sampling revealed several volatile and semi-volatile organic compounds and metals in the soil beneath the site. Given the current property use, and the extensive industrial history of the property, and the top five (5) to six (6) feet are fill, the presence of the detected compounds and metals are most likely a result of historical property use rather than current property use. Since the surrounding neighborhood is industrial and has an extensive industrial history (the surrounding properties having a similar and associated history as the site), the property has limited access and use, and the detected compounds are of a nonvolatile or low volatile nature, further investigation or remediation is not recommended. However, since some of the target compounds and metals exceeded the regulatory standards, the New York State Department of Environmental Conservation should be notified of the sampling results.

Based on the data obtained to date, ECI recommends that additional soil borings and/or monitoring wells be installed to delineate the extent of the petroleum hydrocarbons and heavy metals beneath the site.

# APPENDIX A

## FIGURES




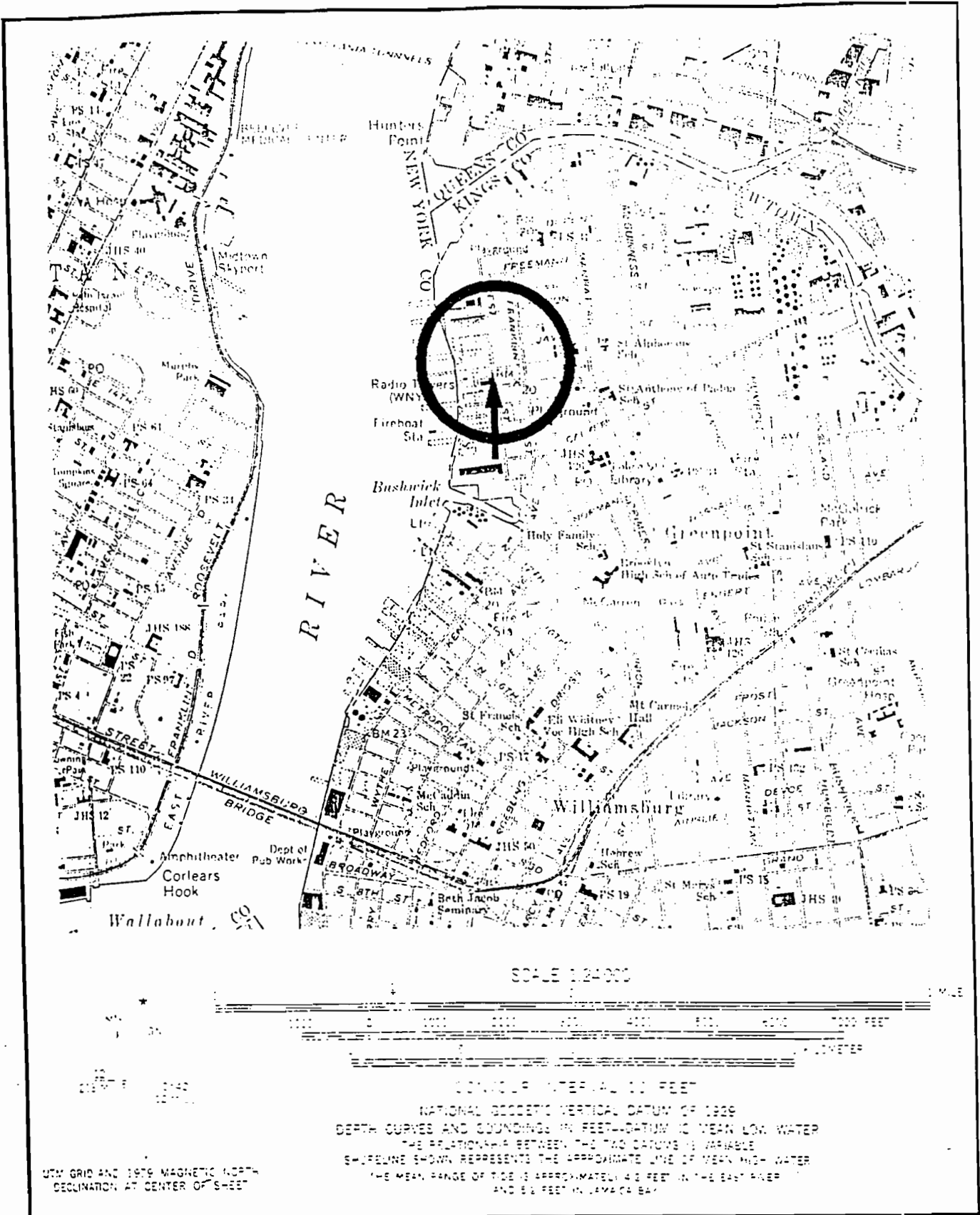
 Environmental Concepts, Inc.


Figure 1 - Site Location Map

Safeway Construction

105 West Street, Brooklyn, NY



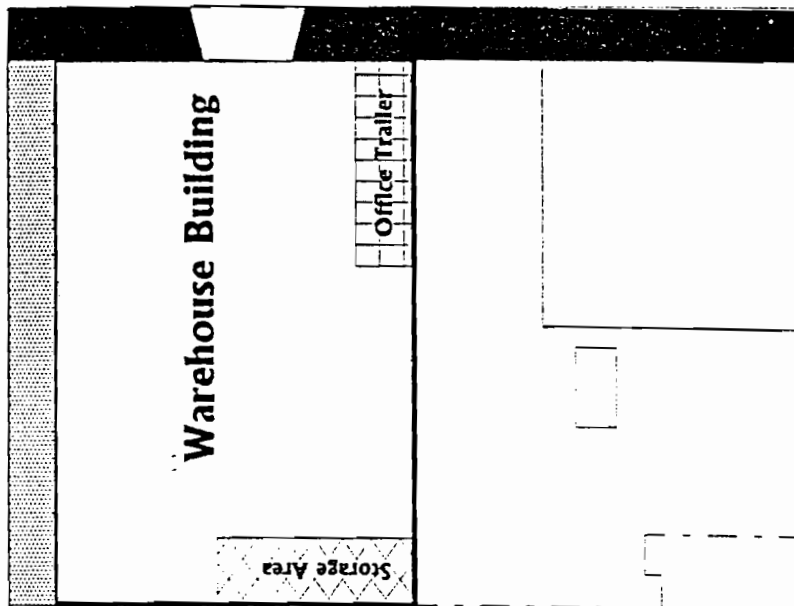


 <p><b>Environmental Concepts, Inc.</b></p>	<p><b>Figure 2 - Topographic Map</b></p>
<p><b>Safeway Construction</b></p>	<p><b>105 West Street, Brooklyn, NY</b></p>



Hydrant

**KENT STREET**



**WEST STREET**

<b>LEGEND</b>	
	Asphalt Surface
	Concrete Surface
	Location of Test Pit
	Unpaved Surface
	Protective Fencing



**ENVIRONMENTAL CONCEPTS, INC.**

**SITE PLAN**

**Safeway Construction  
105 West Street  
Brooklyn, NY**

DATE: **3/18/97**

PROJECT NO.:

SCALE: **Not to Scale**

FIGURE NO.: **3**

DRAWN BY:

LOCATION: **Brooklyn, NY**

# APPENDIX B

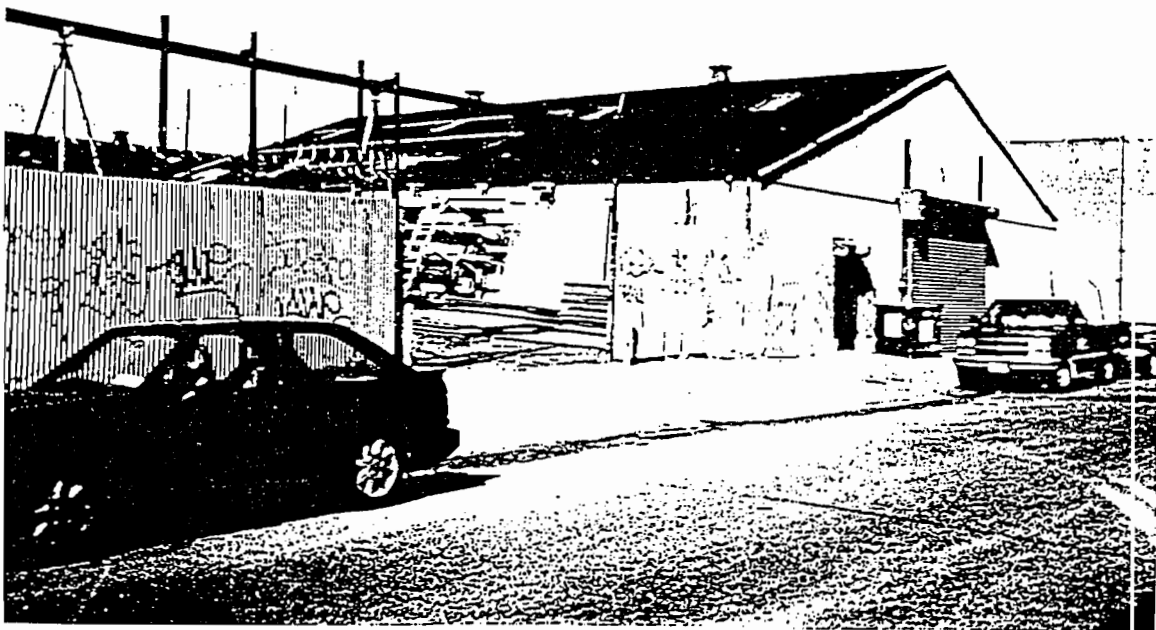
## PHOTOGRAPHS

TAY



Photo 1: View of the site from the northeast corner of the West Street - Kent Street intersection.

Photo 2: View of the site from the southeast. The entrance to the storage yard is visible in the center of the photo. Note the dumpster in front of the building.



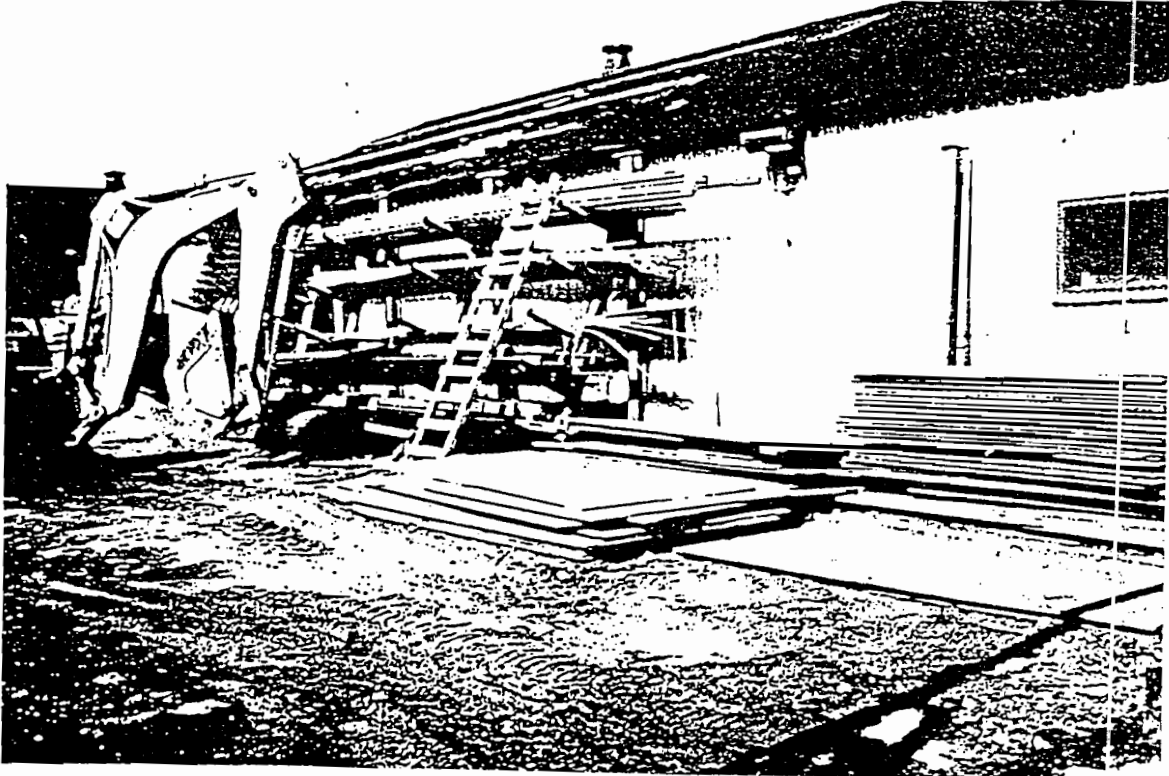


Photo 3: View of the north side of the storage yard showing construction materials.

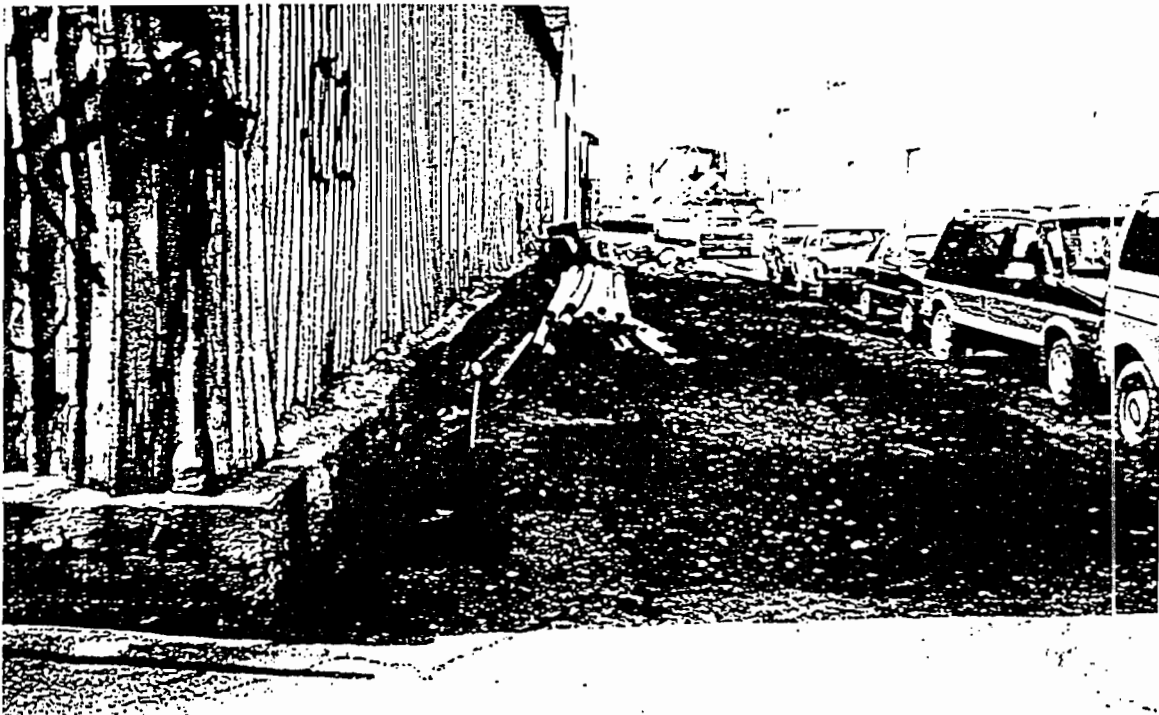
Photo 4: View of west side of the storage yard showing sand and cobblestone joins. The test pit was excavated at the ruts in the back-center of the photo.

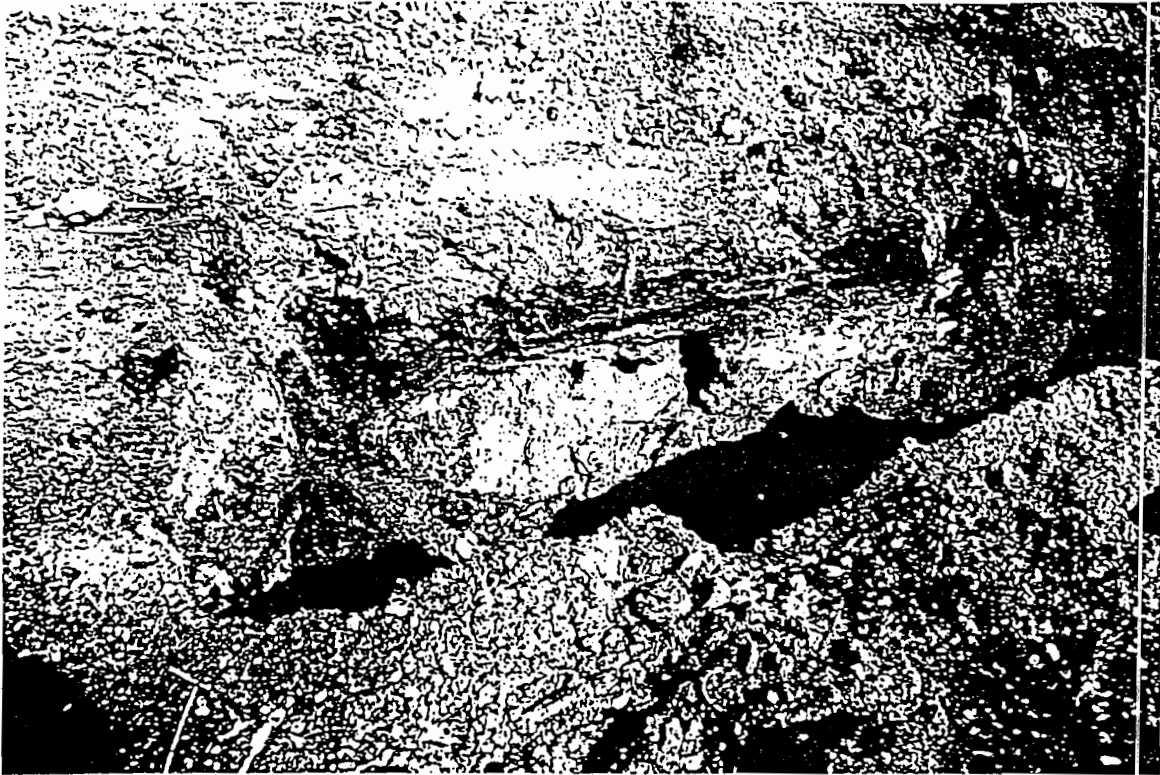




Photo 5: View of the south side of the storage area showing construction materials and traffic cones and barricades. Note the apartments in the second and third floors of the adjacent buildings. The first floors are occupied by stores.

Photo 6: View of the north side of the property showing pipes, other construction materials, and some debris.





Photos 7 & 8: Views of the test pit excavation. The top layer is brown sand with a dark-stained layer at its base. The middle layer is brown sandy silt. Both layers are composed of fill material. The bottom layer, native material, is visible in the bottom of the excavation in photo 8.







Photo 9: View looking south from the site along West Street. The neighborhood consists of warehouses.

Photo 10: View looking north from the site along West Street. The neighborhood consists of warehouses.

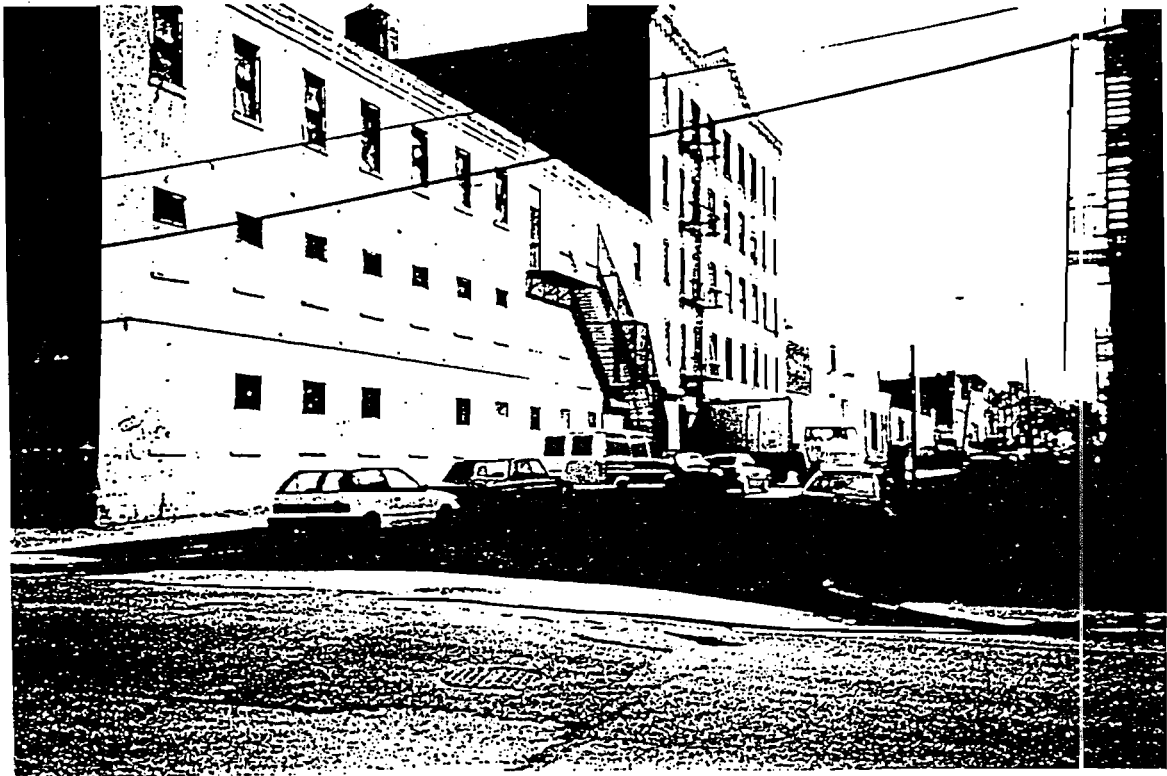






Photo 11: View from the site looking west along Kent Street. The neighborhood consists of warehouses. Note the catch basin in the center of the road.

Photo 12: View from the site looking east along Kent Street. The neighborhood consists of warehouses. Note catch basins at both corners and a sewer manhole in the road.



# APPENDIX C

## ENVIRONMENTAL RECORDS

*Manhattan Construction*

Nations Title Insurance of New York Inc.

**SCHEDULE A (Description)**

TITLE NO. 69210K

All that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, lying and being in the Borough of Brooklyn, County of Kings, City and State of New York, bounded and described as follows:

BEGINNING at the corner formed by the intersection of the southerly side of Kent Street with the westerly side of West Street;

THENCE westerly along the southerly side of Kent Street 92 feet;

THENCE northerly and parallel with the westerly side of West Street 29 feet;

THENCE easterly and parallel with the southerly side of Kent Street 7 feet;

THENCE northerly parallel with the westerly side of West Street 3 feet;

THENCE easterly parallel with the southerly side of Kent Street 6 feet 6 inches;

THENCE southerly parallel with the westerly side of West Street 23 feet;

THENCE easterly again parallel with the southerly side of Kent Street 50 feet 0 inches to the westerly side of West Street, and

THENCE northerly along the westerly side of West Street, 115 feet to the corner aforesaid at the point or place of BEGINNING.

EXCEPTING SO MUCH as is designated as Block 2586 Lot 58 on the Tax Map of New York City.

FIRE DEPARTMENT • CITY OF NEW YORK  
BUREAU OF FIRE PREVENTION  
250 Livingston Street—Room 439  
Brooklyn, N.Y. 11201-5884

RECORD SEARCH REQUEST  
FUEL (HEATING) OIL

Search No. 023188

MAIL TO:  
Stromberg  
Engineering  
100 11th Ave  
Brooklyn, NY

The undersigned requests the following information re: Premises

100 11th Ave Brooklyn  
ADDRESS BOROUGH

For Fuel (Heating) Oil Tanks Only

- 1. No. and Size of tanks (includes date of installation) ..... Fee: \$10.00
- 2. No. and Size of sealed and/or removed tanks ..... Fee: \$10.00  
Searched by \_\_\_\_\_ Date \_\_\_\_\_
- 3. Pending Headquarters violation orders ..... Fee: \$10.00
- 4. Other \_\_\_\_\_ Fee: \$10.00

Note: The N.Y.C. Fire Department Does Not Conduct Tests on Fuel (Heating) Oil Tanks.

State Applicants interest in or relation to premises:

\_\_\_\_\_  
Signed \_\_\_\_\_  
Date \_\_\_\_\_

DO NOT WRITE BELOW THIS LINE

Gentlemen:  
In reply to your request concerning the premises mentioned above, please be advised that as of 9 A.M. 11/17/70 our records show the following:  
(MAKE ADDITIONAL COMMENTS ON REVERSE SIDE)

\_\_\_\_\_  
\_\_\_\_\_  
No record of fuel oil tanks  
Searched by: GM, Mardock

VIOLATIONS RECORDED ABOVE ARE ONLY THOSE WHICH ARE A MATTER OF RECORD IN HEADQUARTERS OF THE BUREAU OF FIRE PREVENTION, AND MAY NOT INCLUDE VIOLATIONS ISSUED BY LOCAL UNITS, UNLESS A SUMMONS FOR "FAILURE TO COMPLY" WAS ISSUED. ALL REPORTED TANK INFORMATION COMES FROM RECORDS WHICH EXIST IN THE FIRE DEPARTMENT DISTRICT OFFICE FOLDERS OR ON COMPUTER FILES.

MAXIMUM RESPONSE TIME 20 BUSINESS DAYS



## ERIIS DISCLAIMER

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## ERIIS REPORT OVERVIEW

The following features are available for an ERIIS report:

- \* Database Report
  - \* Statistical Profile
  - \* Database Records
- \* Related Maps
  - \* Digital Custom Plotted Map
  - \* Sanborn Fire Insurance Map(s)
  - \* Topographical Map(s)

### Statistical Profile

The statistical profile is an at-a-glance numeric summary of the databases searched for your ERIIS Report.

### Database Records

The detailed federal and state database information indicates potential and actual environmental threats within the study radius. These records are sorted by their distance from the study site.

### Digital Custom Map

The digital custom map is cross referenced with the database records. The cross-in-circle in the center of the map represents the study site. The red circles represent distances from the study site. The plottable sites in the report are distinguished on the map by symbols of different shape and color.

### Historic Fire Insurance Maps

The ERIIS collection of historical Sanborn Fire Insurance Maps covers 14,000 cities and towns. These maps may indicate prior use of the study site. If no maps are available for the study site, a notice to that effect is included. This notice should serve as evidence of due diligence.

### Topographical Map

USGS topographical maps show natural and man-made features as well as the shape and elevation of the terrain. The 7.5 minute quad maps are produced at a scale of 1:24,000, or one inch represents 2,000 feet.

If you have any questions about this report,  
please contact ERIIS Customer Service at 1-800-989-0403

Site: 105 WEST STREET  
BROOKLYN, NY 11222

Latitude: 40.729902  
Longitude: -73.959685

<u>Database</u>	<u>Radius (Mi)</u>	<u>Target Area**</u>	<u>Property-1/4</u>	<u>1/4-1/2</u>	<u>1/2-1</u>	<u>&gt;1</u>	<u>TOTAL</u>
NPL	1		0	0	0		0
RCRIS_TS	1		0	0	0		0
CERCLIS	.5		0	0			0
NFRAP	.5		0	1			1
RCRIS_LG	.25		3				3
RCRIS_SG	.25		0				0
ERNS	.05		0				0
HWS	1		0	0	0		0
LRST	.5		1	2			3
SWF	.5		0	0			0
CBS	.25		0				0
MOSF	.25		0				0
PBS	.25		15				15
			<u>19</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>22</u>

Radon Zone Level: 3

Zone 3 has a predicted average indoor screening level < 2 pCi/L

A Radon Zone should not be used to determine if individual homes need to be tested for radon. The EPA's Office of Radiation and Indoor Air (202/233-9320) recommends that all homes be tested for radon, regardless of geographic location or the zone designation in which the property is located.

\*A target area is defined as a .02 mile buffer around the site's latitude and longitude.

A blank radius count indicates that the database was not searched by this radius per client instructions.

NR in a radius count indicates that the database cannot be reported by this search criteria due to insufficient and/or inaccurate addresses reported by a federal/state agency.



ERIIS SUMMARY OF PLOTTABLE SITES

Feb 27, 1997

ERIIS Report: #149363A

ERIIS ID.	FACILITY/ADDRESS	DATABASE	DISTANCE FROM SITE	DIRECTION FROM SITE	MAP ID
0 - 1/4 Miles					
36048037387	MADIS GREENPOINT REALTY CO 96 WEST ST BROOKLYN, NY 11222-1511 COUNTY: KINGS	PBS	0.002 Mi	SOUTHEAST	7387
36048022902	KENT TRANS AMERICA CLOTHING CO 122 WEST ST BROOKLYN, NY 11222-1513 COUNTY: KINGS	PBS	0.033 Mi	NORTHWEST	2902
36048032990	GUARD GENERAL MERCHANDISE CO 61 GREENPOINT AVE BROOKLYN, NY 11222-1503 COUNTY: KINGS	PBS	0.041 Mi	SOUTHEAST	2990
36048040246	65 JAVA STREET 65 JAVA ST BROOKLYN, NY 11222-1533 COUNTY: KINGS	PBS	0.055 Mi	NORTHEAST	246
36007001813	VANGUARD DIVERSIFIED INC 10 JAVA ST BROOKLYN, NY 11222-1508 COUNTY: KINGS	RCRIS_LG	0.092 Mi	NORTHWEST	1813
36048044506	MICHAEL PISTILLI 85 JAVA ST BROOKLYN, NY 11222-1638 COUNTY: KINGS	PBS	0.096 Mi	NORTHEAST	4506
36007001232	HUXLEY ENVELOPE CORPORATION 145 WEST ST BROOKLYN, NY 11222-1501 COUNTY: KINGS	RCRIS_LG	0.097 Mi	NORTHWEST	1232
36048021390	HUXLEY ENVELOPE CORPORATION 145 WEST ST BROOKLYN, NY 11222-1501 COUNTY: KINGS	PBS	0.097 Mi	NORTHWEST	1390
36048035622	74 INDIA 74 INDIA ST BROOKLYN, NY 11222-1655 COUNTY: KINGS	PBS	0.138 Mi	NORTHEAST	5622
36048023341	GREENPOINT CORP 111 GREENPOINT AVE BROOKLYN, NY 11222-2258 COUNTY: KINGS	PBS	0.158 Mi	SOUTHEAST	3341
36048044635	OSCAR'S SERVICE STATION INC 193 FRANKLIN ST BROOKLYN, NY 11222-1301 COUNTY: KINGS	PBS	0.173 Mi	NORTHEAST	4635
36048033982	128-130 GREENPOINT AV 128-130 GREENPOINT AVE BROOKLYN, NY 11222-2202 COUNTY: KINGS	PBS	0.189 Mi	SOUTHEAST	3982
36007000867	IDEAL PRECISION METER COMPANY 126 GREENPOINT AVE BROOKLYN, NY 11222-2202 COUNTY: KINGS	RCRIS_LG	0.189 Mi	SOUTHEAST	867
36048033694	129 HURON ST 129 HURON ST BROOKLYN, NY 11222-5817 COUNTY: KINGS	PBS	0.216 Mi	NORTHEAST	3694
36048043871	S & B CAAMONO 54 FRANKLIN ST BROOKLYN, NY 11222-2039 COUNTY: KINGS	PBS	0.227 Mi	SOUTHEAST	3871
36048044500	A JOCHNOWITZ 151 JAVA ST BROOKLYN, NY 11222-1643 COUNTY: KINGS	PBS	0.238 Mi	NORTHEAST	4500
36048022260	POLONAISE TERRACE 150 GREENPOINT AVE BROOKLYN, NY 11222-2202 COUNTY: KINGS	PBS	0.239 Mi	SOUTHEAST	2260
36048037805	P. CHIMENTO TRUCKING, INC 11 WEST ST BROOKLYN, NY 11222-2018 COUNTY: KINGS	PBS	0.248 Mi	SOUTHEAST	7805
36059001361	SHIMENTO TRUCKING INC. 11 WEST ST BROOKLYN, NY 11222-2018 COUNTY: KINGS	LRST	0.248 Mi	SOUTHEAST	1361

ERIS SUMMARY OF PLOTTABLE SITES

ERIS Report #149363A

Feb 27, 1997

ERIS ID.	FACILITY/ADDRESS	DATABASE	DISTANCE FROM SITE	DIRECTION FROM SITE	MAP ID
	1/4 - 1/2 Miles				
36059001637	65 COMMERCIAL ST: BKLYN 65 COMMERCIAL ST BROOKLYN, NY 11222-1005 COUNTY: KINGS	LRST	0.451 Mi	NORTHEAST	1637
36039000100	BKLYN UNION GAS /WILLIAMSBURGH WORKS KENT AVE N 12TH ST /E RIV BROOKLYN, NY 11211 COUNTY: KINGS	NFRAP	0.473 Mi	SOUTHEAST	100
36059005052	176 MCGUINNES AVE: GAS STA 176 MCGUINNESS BLVD BROOKLYN, NY 11222-2734 COUNTY: KINGS	LRST	0.475 Mi	SOUTHEAST	5052

ERIS ENVIRONMENTAL DATA REPORT  
 CERCLIS NO FURTHER REMEDIAL ACTION PLANNED SITES  
 NFRAP - PLOTTABLE SITES - PAGE 1

ERIS Report #149363A

Feb 27, 1986

ERIS ID EPA ID	FACILITY	FACILITY ADDRESS	DISTANCE FROM SITE	DIRECTION FROM SITE	M
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36039000100 NYD980532030	BKLYN UNION GAS /WILLIAMSBURGH WORKS COUNTY: KINGS	KENT AVE N 12TH ST /E RIV BROOKLYN, NY 11211	0.473 MILES	SOUTHEAST	
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SITE EVENT(S)  
 DISCOVERY  
 PRELIMINARY ASSESSMENT

COMPLETE DATE  
 06/01/81  
 09/24/86

ERIS ENVIRONMENTAL DATA REPORT  
 RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM  
 RCRIS\_LG - PLOTTABLE SITES - PAGE 1

ERIS Report #149363A

Feb 27, 1991

ERIS ID EPA ID	FACILITY	ADDRESS	RAATS ISSUE DATE RAATS ACTION/STATUS RAATS PENALTIES	DISTANCE FROM SITE	DIRECTION FROM SITE	MAP
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36007001813 NYD002414753	VANGUARD DIVERSIFIED INC. COUNTY: KINGS	10 JAVA ST BROOKLYN, NY 11222-1508	FACILITY NOT REPORTED IN RAATS	0.092 MILES	NORTHWEST	18
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HAZARDOUS WASTES

SOURCE OF INFO:

- | WASTE CODE: | AMOUNT OF WASTE: | SOURCE OF INFO: |
|-------------|------------------|-----------------|
| 1. D000     | .00000           | NOTIFICATION    |
| 2. D001     | .00000           | NOTIFICATION    |
| 3. F001     | .00000           | NOTIFICATION    |
| 4. F003     | .00000           | NOTIFICATION    |
| 5. F005     | .00000           | NOTIFICATION    |
| 6. F017     | .00000           | NOTIFICATION    |
| 7. U002     | .00000           | NOTIFICATION    |
| 8. U019     | .00000           | NOTIFICATION    |
| 9. U031     | .00000           | NOTIFICATION    |
| 10. U112    | .00000           | NOTIFICATION    |
| 11. U140    | .00000           | NOTIFICATION    |
| 12. U154    | .00000           | NOTIFICATION    |
| 13. U159    | .00000           | NOTIFICATION    |
| 14. U161    | .00000           | NOTIFICATION    |
| 15. U220    | .00000           | NOTIFICATION    |
| 16. U239    | .00000           | NOTIFICATION    |

36007001232 NYD002017481	HUXLEY ENVELOPE CORPORATION COUNTY: KINGS	145 WEST ST BROOKLYN, NY 11222-1501	FACILITY NOT REPORTED IN RAATS	0.097 MILES	NORTHWEST	1:
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HAZARDOUS WASTES

SOURCE OF INFO:

- | WASTE CODE: | AMOUNT OF WASTE: | SOURCE OF INFO: |
|-------------|------------------|-----------------|
| 1. D000     | .00000           | NOTIFICATION    |
| 2. K086     | .00000           | NOTIFICATION    |

36007000867 NYD000829614	IDEAL PRECISION METER COMPANY COUNTY: KINGS	126 GREENPOINT AVE BROOKLYN, NY 11222-2202	FACILITY NOT REPORTED IN RAATS	0.189 MILES	SOUTHEAST	8:
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HAZARDOUS WASTES

SOURCE OF INFO:

- | WASTE CODE: | AMOUNT OF WASTE: | SOURCE OF INFO: |
|-------------|------------------|-----------------|
| 1. F003     | .00000           | NOTIFICATION    |

violated, and any proposed & actual penalties  
- Information pertaining to corrective actions undertaken by the facility or EPA  
- A complete listing of EPA regulated hazardous wastes which are generated or stored on-site

**ERNS**

Date of Data: 08/22/1996  
Release Date: 08/26/1996  
Date on System: 11/22/1996  
US Environmental Protection Agency  
Office of Solid Waste and Emergency Response  
202/260-2342

**Emergency Response Notification System**

ERNS is a national computer database system that is used to store information concerning the sudden and/or accidental release of hazardous substances, including petroleum, into the environment. The ERNS Reporting System contains preliminary information on specific releases, including the spill location, the substance released, and the responsible party. Please note that the information in the ERNS Report pertains only to those releases that occurred between January 1, 1996 and August 22, 1996.

**HWS**

Date of Data: 04/01/1996  
Release Date: 12/20/1996  
Date on System: 02/14/1997  
NY Dept. of Environmental Conservation  
Hazardous Waste Remediation Division  
518/457-0740

**New York Inactive Hazardous Waste Disposal Sites**

The New York Inactive Hazardous Waste Disposal Sites List contains summary information pertaining to those facilities that are deemed potentially hazardous to the public health and welfare by the New York State Department of Environmental Conservation (NYSDEC).

**LRST**

Date of Data: 08/15/1996  
Release Date: 08/19/1996  
Date on System: 10/04/1996  
NY Dept. of Environmental Conservation  
Spill Prevention and Response Section  
518/457-7363

**New York Leaking Storage Tanks**

The New York Leaking Storage Tank Report is a comprehensive listing of all leaking storage tank cases reported to The New York State Department of Environmental Conservation which have not yet been resolved. The information for the LST Report is extracted from the original spills list provided to ERIIS by the NYSDEC. Information pertaining to leaking storage tank cases which have been resolved can be provided upon request.

**SWF**

Date of Data: 06/30/1996  
Release Date: 08/12/1996  
Date on System: 09/20/1996  
NY Dept. of Environmental Conservation  
Bureau of Solid Waste  
518/457-2051

**New York Active Solid Waste Facility Register**

The New York Solid Waste Facility Register is a comprehensive listing of all active and inactive permitted solid waste landfills and processing facilities within the State of New York.

**CBS**

Date of Data: 09/16/1996  
Release Date: 09/20/1996  
Date on System: 10/11/1996  
NY Dept. of Environmental Conservation  
Spill Prevention and Response Section  
518/457-7363

**New York Chemical Bulk Storage Tanks**

The New York Chemical Bulk Storage Report contains information pertaining to active and inactive facilities that store regulated substances in aboveground storage tanks with capacities of 185 gallons or greater, and/or underground storage tanks of any size.

**MOSF**

Date of Data: 09/16/1996  
Release Date: 09/20/1996  
Date on System: 10/18/1996  
NY Dept. of Environmental Conservation  
Spill Prevention and Response Section  
518/457-7363

**New York Major Oil Storage Facilities**

The Major Oil Storage Facilities Report contains summary information on active and inactive facilities with petroleum storage capacities in excess of four-hundred thousand gallons.

**PBS**

Date of Data: 09/16/1996  
Release Date: 09/20/1996  
Date on System: 10/15/1996  
NY Dept. of Environmental Conservation  
Spill Prevention and Response Section  
518/457-7363

**New York Petroleum Bulk Storage Tanks**

The New York Petroleum Bulk Storage Report is a comprehensive listing of all reported active and inactive facilities that have petroleum storage capacities in excess of 1100 gallons, and less than four hundred thousand gallons. ERIIS has obtained the PBS information from the Delegated Counties in the State of New York. The dates of the information for the specific counties are as follows:

Cortland	06/10/96
Nassau	06/27/96
Rockland	05/15/96
Suffolk	01/12/96

#### National Priorities List

**NPL**  
Date of Data: 12/01/1996  
Release Date: 01/09/1997  
Date on System: 02/14/1997  
US Environmental Protection Agency  
Office of Solid Waste and Emergency Response  
703/603-8881

The NPL Report, also known as the Superfund List, is an EPA listing of uncontrolled or abandoned hazardous waste sites. The list is primarily based upon a score which the site receives from the EPA's Hazardous Ranking System. These sites are targeted for possible long-term remedial action under the Superfund Act of 1980.

#### Resource Conservation and Recovery Information System - Treatment, Storage, And Disposal Facilities

**RCRIS TS**  
Date of Data: 05/10/1996  
Release Date: 06/10/1996  
Date on System: 07/19/1996  
US Environmental Protection Agency  
Office of Solid Waste and Emergency Response  
202/260-4610

The RCRIS TS Report contains information pertaining to facilities which either treat, store, or dispose of EPA regulated hazardous waste. The following information is also included in the RCRIS\_TS Report:

- Information pertaining to the status of facilities tracked by the RCRA Administrative Action Tracking System (RAATS)
- Inspections & evaluations conducted by federal and state agencies
- All reported facility violations, the environmental statute(s) violated, and any proposed & actual penalties
- Information pertaining to corrective actions undertaken by the facility or EPA
- A complete listing of EPA regulated hazardous wastes which are generated or stored on-site

**CERCLIS**  
Date of Data: 12/01/1996  
Release Date: 01/09/1997  
Date on System: 02/07/1997  
US Environmental Protection Agency  
Office of Solid Waste and Emergency Response  
703/603-8730

#### Comprehensive Environmental Response, Compensation, and Liability Information System

The CERCLIS Database is a comprehensive listing of known or suspected uncontrolled or abandoned hazardous waste sites. These sites have either been investigated, or are currently under investigation by the U.S. EPA for the release, or threatened release of hazardous substances. Once a site is placed in CERCLIS, it may be subjected to several levels of review and evaluation, and ultimately placed on the National Priorities List (NPL). In addition to site events and milestone dates, the CERCLIS Report also contains financial information from the Superfund Consolidated Accomplishments Plan (SCAP).

**NFRAP**  
Date of Data: 12/01/1996  
Release Date: 01/09/1997  
Date on System: 01/31/1997  
US Environmental Protection Agency  
Office of Solid Waste and Emergency Response  
703/603-8881

#### No Further Remedial Action Planned Sites

The No Further Remedial Action Planned Report (NFRAP), also known as the CERCLIS Archive, contains information pertaining to sites which have been removed from the U.S. EPA's CERCLIS Database. NFRAP sites may be sites where, following an initial investigation, either no contamination was found, contamination was removed quickly without need for the site to be placed on the NPL, or the contamination was not serious enough to require federal Superfund action or NPL consideration.

**RCRIS LG**  
Date of Data: 05/10/1996  
Release Date: 06/10/1996  
Date on System: 07/19/1996  
US Environmental Protection Agency  
Office of Solid Waste and Emergency Response  
202/260-4610

#### Resource Conservation and Recovery Information System - Large Quantity Generators

The RCRIS LG Report contains information pertaining to facilities which either generate more than 1000kg of EPA regulated hazardous waste per month, or meet other applicable requirements of the Resource Conservation and Recovery Act. The following information is also included in the RCRIS\_LG Report:

- Information pertaining to the status of facilities tracked by the RCRA Administrative Action Tracking System (RAATS)
- Inspections & evaluations conducted by federal and state agencies
- All reported facility violations, the environmental statute(s) violated, and any proposed & actual penalties
- Information pertaining to corrective actions undertaken by the facility or EPA
- A complete listing of EPA regulated hazardous wastes which are generated or stored on-site

**RCRIS SG**  
Date of Data: 05/10/1996  
Release Date: 06/10/1996  
Date on System: 07/19/1996  
US Environmental Protection Agency  
Office of Solid Waste and Emergency Response  
202/260-4610

#### Resource Conservation and Recovery Information System - Small Quantity Generators

The RCRIS SG Report contains information pertaining to facilities which either generate between 100kg and 1000kg of EPA regulated hazardous waste per month, or meet other applicable requirements of the Resource Conservation and Recovery Act. On advice of the U.S. EPA, ERIIS does not report so-called "RCRA Protective Filers." Protective Filers, commonly called Conditionally Exempt Small Quantity Generators (CESQG's), are facilities that have completed RCRA notification paperwork, but are not, in fact, subject to RCRA regulation. The determination of CESQG status is made by the U.S. EPA. The following information is also included in the RCRIS\_SG Report:

- Information pertaining to the status of facilities tracked by the RCRA Administrative Action Tracking System (RAATS)
- Inspections & evaluations conducted by federal and state agencies
- All reported facility violations, the environmental statute(s)

ERIS ENVIRONMENTAL DATA REPORT  
 NEW YORK LEAKING STORAGE TANKS  
 LIST - PLOTTABLE SITES - PAGE 1

ERIS Report #149363A

Feb 27, 199

ERIS ID SPILL NO.	TANK NAME	TANK LOCATION	SPILL DATE SPILL SOURCE NATURAL RESOURCE AFFECTED	MAP
36059001361 8906488	SHIMENTO TRUCKING INC. DISTANCE FROM SITE: 0.248 MILES DIRECTION FROM SITE: SOUTHEAST	11 WEST ST BROOKLYN, NY 11222-2018 COUNTY: KINGS	10/02/1989 NOT SPECIFIED GROUNDWATER	136
	MATERIAL CLASS: PETROLEUM		QUANTITY SPILLED: -1	
36059001637 9011113	65 COMMERCIAL ST/BKLYN DISTANCE FROM SITE: 0.451 MILES DIRECTION FROM SITE: NORTHEAST	65 COMMERCIAL ST BROOKLYN, NY 11222-1005 COUNTY: KINGS	01/18/1991 NOT SPECIFIED ON LAND	163
	MATERIAL CLASS: PETROLEUM		QUANTITY SPILLED: -1	
	MATERIAL CLASS: PETROLEUM		QUANTITY SPILLED: 0	
36059005052 9108332	176 MCGUINNES AVE/GAS STA DISTANCE FROM SITE: 0.475 MILES DIRECTION FROM SITE: SOUTHEAST	176 MCGUINNESS BLVD BROOKLYN, NY 11222-2734 COUNTY: KINGS	11/04/1991 NOT SPECIFIED GROUNDWATER	508
	MATERIAL CLASS: PETROLEUM		QUANTITY SPILLED: -1 GAL	

ERIS ENVIRONMENTAL DATA REPORT  
 NEW YORK PETROLEUM BULK STORAGE FACILITIES  
 PBS - PLOTTABLE SITES - PAGE 1

ERIS Report #149363A

Feb 27, 199

ERIS ID PBS NO. CBS NO.	FACILITY ADDRESS	CONTACT NAME PHONE	SITE STATUS FACILITY TYPE	NO. OF TANKS CAPACITY (GAL)	CERTIFICATE DATE EXPIRATION DATE
36048037387 2-253278	MADIS GREENPOINT REALTY CO 96 WEST ST 96 WEST ST; BROOKLYN, NY 11222-1511 DISTANCE FROM SITE: 0.002 MILES DIRECTION FROM SITE: SOUTHEAST	MEYERS GREENBERG (718) 383-3360	ACTIVE	1 5000	01/07/1988 01/07/1993
TANK ID 001	INSTALL DATE: 12/58 CAPACITY (GALLONS): 5000 PRODUCT STORED NOS. 1, 2 OR 4 FUEL OIL	TANK STATUS IN-SERVICE	TANK TYPE STEEL/CARBON STEEL	TANK LOCATION ABOVEGROUND	
36048022902 2-109029	KENT TRANS AMERICA CLOTHING CO 122 WEST ST 122 WEST ST; BROOKLYN, NY 11222-1513 DISTANCE FROM SITE: 0.033 MILES DIRECTION FROM SITE: NORTHWEST	KENT TRANS AMERICA CLOTHING (718) 383-3445	ACTIVE MANUFACTURING	1 4800	01/01/1992 03/24/1997
TANK ID 001	INSTALL DATE: 09/62 CAPACITY (GALLONS): 4800 PRODUCT STORED NOS. 1, 2 OR 4 FUEL OIL	TANK STATUS IN-SERVICE	TANK TYPE STEEL/CARBON STEEL	TANK LOCATION ABOVEGROUND	
36048032990 2-329711	GUARD GENERAL MERCHANDISE CO 61 GREENPOINT AVE 61 GREENPOINT AVE; BROOKLYN, NY 11222-1503 DISTANCE FROM SITE: 0.041 MILES DIRECTION FROM SITE: SOUTHEAST	HOWARD BERGER (718) 272-1540	ACTIVE MANUFACTURING	1 7500	11/20/1992 08/28/1997
TANK ID 001	INSTALL DATE: 00/00 CAPACITY (GALLONS): 7500 PRODUCT STORED NOS. 1, 2 OR 4 FUEL OIL	TANK STATUS IN-SERVICE	TANK TYPE STEEL/CARBON STEEL	TANK LOCATION ABOVEGROUND	
36048040246 2-467286	65 JAVA STREET 65 JAVA ST 65 JAVA STREET; BROOKLYN, NY 11222-1533 DISTANCE FROM SITE: 0.055 MILES DIRECTION FROM SITE: NORTHEAST	NYC HOUSING PRESERV & DEVEL (212) 806-8565	ACTIVE	1 1500	02/15/1989 02/15/1994
TANK ID 001	INSTALL DATE: 00/00 CAPACITY (GALLONS): 1500 PRODUCT STORED NOS. 1, 2 OR 4 FUEL OIL	TANK STATUS IN-SERVICE	TANK TYPE STEEL/CARBON STEEL	TANK LOCATION ABOVEGROUND	
36048044506 2-366102	MICHAEL PISTILLI 85 JAVA ST 85 JAVA ST; BROOKLYN, NY 11222-1638 DISTANCE FROM SITE: 0.096 MILES DIRECTION FROM SITE: NORTHEAST	JOSEPH PISTILLI (718) 726-9455	ACTIVE APARTMENT BUILDING	1 5000	07/20/1993 10/15/1997
TANK ID 001	INSTALL DATE: 00/00 CAPACITY (GALLONS): 5000 PRODUCT STORED NOS. 5 OR 6 FUEL OIL	TANK STATUS IN-SERVICE	TANK TYPE STEEL/CARBON STEEL	TANK LOCATION ABOVEGROUND	



ERIS ENVIRONMENTAL DATA REPORT  
 NEW YORK PETROLEUM BULK STORAGE FACILITIES  
 PBS - PLOTTABLE SITES - PAGE 2

ERIS Report #149363A

Feb 27, 1993

ERIS ID PBS NO. CBS NO.	FACILITY ADDRESS	CONTACT NAME PHONE	SITE STATUS FACILITY TYPE	NO. OF TANKS CAPACITY (GAL)	CERTIFICATE DATE EXPIRATION DATE
36048021390 2-054739	HUXLEY ENVELOPE CORPORATION 145 WEST ST 145 WEST STREET; BROOKLYN, NY 11222-1501 DISTANCE FROM SITE: 0.097 MILES DIRECTION FROM SITE: NORTHWEST	BAL RAMDEO (718) 389-7800	ACTIVE MANUFACTURING	1 10000	10/25/1994 12/30/1996
TANK ID 001 002	INSTALL DATE 09/70 12/94	CAPACITY (GALLONS) 20000 10000	PRODUCT STORED NOS. 1, 2 OR 4 FUEL OIL NOS. 1, 2 OR 4 FUEL OIL	TANK LOCATION UNDERGROUND ABOVEGROUND	
36048035622 2-366099	74 INDIA 74 INDIA ST 74 INDIA ST; BROOKLYN, NY 11222-1655 DISTANCE FROM SITE: 0.138 MILES DIRECTION FROM SITE: NORTHEAST	JOSEPH PISTILLI (718) 726-9455	ACTIVE APARTMENT BUILDING	1 5000	07/20/1993 10/15/1997
TANK ID 001	INSTALL DATE 00/00	CAPACITY (GALLONS) 5000	PRODUCT STORED DIESEL	TANK LOCATION ABOVEGROUND	
36048023341 2-095508	GREENPOINT CORP 111 GREENPOINT AVE 111 GREENPOINT AVE; BROOKLYN, NY 11222-2258 DISTANCE FROM SITE: 0.158 MILES DIRECTION FROM SITE: SOUTHEAST	JUDY BROWN (718) 389-3333	ACTIVE APARTMENT BUILDING	1 5000	04/28/1992 05/07/1997
TANK ID 001	INSTALL DATE 00/00	CAPACITY (GALLONS) 5000	PRODUCT STORED NOS. 1, 2 OR 4 FUEL OIL	TANK LOCATION UNDERGROUND, VAULTED WITH ACCESS	
36048044635 2-600769	OSCAR'S SERVICE STATION INC 193 FRANKLIN ST 193 FRANKLIN ST; BROOKLYN, NY 11222-1301 DISTANCE FROM SITE: 0.173 MILES DIRECTION FROM SITE: NORTHEAST	MILTON CORNWALL (718) 383-4830	ACTIVE RETAIL GASOLINE SALES	8 4250	07/07/1992 07/07/1997
TANK ID 001 002 003 004 005 006 007 008	INSTALL DATE 00/00 00/00 00/00 00/00 06/69 06/69	CAPACITY (GALLONS) 550 550 550 550 550 500 500 500	PRODUCT STORED UNLEADED GASOLINE UNLEADED GASOLINE UNLEADED GASOLINE UNLEADED GASOLINE DIESEL DIESEL	TANK LOCATION UNDERGROUND UNDERGROUND UNDERGROUND UNDERGROUND UNDERGROUND UNDERGROUND UNDERGROUND	
36048033982 2-398845	128-130 GREENPOINT AV 128-130 GREENPOINT AVE 128 GREENPOINT AV ASSOCIAT; BROOKLYN, NY DISTANCE FROM SITE: 0.189 MILES DIRECTION FROM SITE: SOUTHEAST	BRIAN MCMATION (718) 383-4975	ACTIVE	1 4000	10/06/1997 10/06/1992

ERIS ENVIRONMENTAL DATA REPORT  
 NEW YORK PETROLEUM BULK STORAGE FACILITIES  
 PBS - PLOTTABLE SITES - PAGE 3

ERIS Report #149363A

Feb 27, 1997

ERIS ID PBS NO. CBS NO.	FACILITY ADDRESS	INSTALL DATE	CAPACITY (GALLONS)	PRODUCT STORED NOS. 1, 2 OR 4 FUEL OIL	CONTACT NAME PHONE	SITE STATUS FACILITY TYPE	NO. OF TANKS CAPACITY (GAL)	CERTIFICATE DATE EXPIRATION DATE
36048033694 2-374687	129 HURON ST 129 HURON ST 129 HURON ST;BROOKLYN, NY 11222-5817 DISTANCE FROM SITE: 0.216 MILES DIRECTION FROM SITE: NORTHEAST	00/00	4000	NOS. 1, 2 OR 4 FUEL OIL	JAVED ABIDI (718) 426-9889	TANK TYPE STEEL/CARBON STEEL ACTIVE APARTMENT BUILDING	TANK LOCATION UNDERGROUND, VAULTED WITH ACCESS 1 1500	09/17/1992 10/02/1997
36048043871 2-110795	S & B CAAMONO 54 FRANKLIN ST 54 FRANKLIN ST;BROOKLYN, NY 11222-2039 DISTANCE FROM SITE: 0.227 MILES DIRECTION FROM SITE: SOUTHEAST	00/00	1500	PRODUCT STORED NOS. 1, 2 OR 4 FUEL OIL	BUDD WOODWORK INC (718) 389-1111	TANK TYPE STEEL/CARBON STEEL ACTIVE MANUFACTURING	TANK LOCATION ABOVEGROUND 1 2000	11/23/1992 05/07/1997
36048044500 2-361771	A JOCHINOWITZ 151 JAVA ST 151 JAVA ST;BROOKLYN, NY 11222-1613 DISTANCE FROM SITE: 0.238 MILES DIRECTION FROM SITE: NORTHEAST	00/00	2000	PRODUCT STORED NOS. 1, 2 OR 4 FUEL OIL	ROSE SANTA CRUZ (718) 969-1268	TANK TYPE STEEL/CARBON STEEL ACTIVE APARTMENT BUILDING	TANK LOCATION UNDERGROUND 1 2000	02/03/1993 10/06/1997
36048022260 2-082392	POLONAISE TERRACE 150 GREENPOINT AVE 150 GREENPOINT AVENUE;BROOKLYN, NY 11222-2202 DISTANCE FROM SITE: 0.239 MILES DIRECTION FROM SITE: SOUTHEAST	00/00	2000	PRODUCT STORED NOS. 1, 2 OR 4 FUEL OIL	MR VINCENT BRUNIARD JR (718) 383-3700	TANK TYPE STEEL/CARBON STEEL ACTIVE OTHER RETAIL SALES	TANK LOCATION UNDERGROUND, VAULTED WITH ACCESS 1 2000	02/26/1992 03/24/1997
36048037805 2-032816	P. CHIMENTO TRUCKING, INC 11 WEST ST 11 WEST ST;BROOKLYN, NY 11222-2018 DISTANCE FROM SITE: 0.248 MILES DIRECTION FROM SITE: SOUTHEAST	12/18	2000	PRODUCT STORED NOS. 1, 2 OR 4 FUEL OIL	P. CHIMENTO TRUCKING, INC (718) 389-1335	TANK TYPE STEEL/CARBON STEEL ACTIVE TRUCKING/TRANSPORTATION	TANK LOCATION UNDERGROUND 20 12800	10/16/1992 10/29/1997
TANK ID 001 002 003	INSTALL DATE	CAPACITY (GALLONS)	PRODUCT STORED DIESEL DIESEL DIESEL	TANK STATUS IN-SERVICE IN-SERVICE IN-SERVICE	TANK TYPE STEEL/CARBON STEEL	TANK LOCATION UNDERGROUND		

ERIS ENVIRONMENTAL DATA REPORT  
 NEW YORK PETROLEUM BULK STORAGE FACILITIES  
 PBS - PLOTTABLE SITES - PAGE 4

ERIS Report #149363A

Feb 27, 199

ERIS ID PBS NO. CBS NO.	FACILITY ADDRESS	INSTALL DATE	CAPACITY (GALLONS)	PRODUCT STORED	CONTACT NAME PHONE	SITE STATUS FACILITY TYPE	NO. OF TANKS CAPACITY (GAL)	CERTIFICATE DATE EXPIRATION DATE
TANK ID 004		05/61	550	DIESEL	IN-SERVICE	STEEL/CARBON STEEL	1	
005		05/61	550	DIESEL	IN-SERVICE	STEEL/CARBON STEEL	1	
006		05/61	550	DIESEL	IN-SERVICE	STEEL/CARBON STEEL	1	
007		05/61	550	DIESEL	IN-SERVICE	STEEL/CARBON STEEL	1	
008		05/61	550	DIESEL	IN-SERVICE	STEEL/CARBON STEEL	1	
009		05/61	550	DIESEL	IN-SERVICE	STEEL/CARBON STEEL	1	
010		05/61	550	DIESEL	IN-SERVICE	STEEL/CARBON STEEL	1	
011		05/61	550	UNLEADED GASOLINE	IN-SERVICE	STEEL/CARBON STEEL	1	
012		05/61	550	UNLEADED GASOLINE	IN-SERVICE	STEEL/CARBON STEEL	1	
013		05/61	550	UNLEADED GASOLINE	IN-SERVICE	STEEL/CARBON STEEL	1	
014		05/61	550	UNLEADED GASOLINE	IN-SERVICE	STEEL/CARBON STEEL	1	
015		00/00	2000	NOS. 1, 2 OR 4 FUEL OIL	IN-SERVICE	STEEL/CARBON STEEL	1	
016		00/00	275	OTHER	IN-SERVICE	STEEL/CARBON STEEL	1	
017		00/00	275	OTHER	IN-SERVICE	STEEL/CARBON STEEL	1	
018		00/00	275	OTHER	IN-SERVICE	STEEL/CARBON STEEL	1	
019		00/00	275	OTHER	IN-SERVICE	STEEL/CARBON STEEL	1	
020		00/00	5000	NOS. 1, 2 OR 4 FUEL OIL	CLOSED - REMOVED	STEEL/CARBON STEEL	1	
021		10/88	2000	NOS. 1, 2 OR 4 FUEL OIL	IN-SERVICE	STEEL/CARBON STEEL	1	

## Unplottable Sites

The remaining report pages list additional environmental sites that have been selected based on geographic criteria unique to your study site. They are classified as "unplottable sites" and require further investigation to assess their potential impact on your site.

### How to Evaluate Unplottable Sites

#### Step 1

**Streets Within the Radius:** the following page is an alphabetical index of all streets that intersect or are contained within the largest study radius (usually one mile).

#### Step 2

**Cross-Reference:** use the "Streets Within the Radius" index to cross-reference the unplottable sites. For example, if Maple Avenue and Oak Avenue are listed in the street index, then any unplottable sites with a Maple Avenue or Oak Avenue address should be checked for possible impact on study site.

### Questions on ERIIS' Proprietary Geocoding?

We're happy to answer any questions you might have about our data processing and point-geocoding (assigning a latitude and longitude to each address). Just give us a call on our toll-free number at (800) 989-0402 and let us know what state you're calling from. Our customer service staff is available from 8 a.m. to 8 p.m. (EST).

### The ASTM Standard Practice For Environmental Site Assessments

As stated in the recently published **Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E1527)** by the American Society for Testing and Materials (ASTM):

"For large databases with numerous facility records (such as RCRA hazardous waste generators and registered underground storage tanks), the records are not practically reviewable unless they can be obtained from the source agency in the smaller geographic area of ZIP code (3.3.24)."

Therefore, this Report contains information available by latitude/longitude or by ZIP code. If your research requires environmental records for which only city or county information is available (i.e., no valid street or ZIP code) ERIIS will include this data at no extra charge.

## ERIS LIST OF STREETS IN THE RADIUS

ERIS Report #149363A

Feb 27, 1997

## STREET NAME

E 10TH ST  
N 10TH ST  
11TH ST  
E 11TH ST  
N 11TH ST  
E 12TH ST  
N 12TH ST  
E 13TH ST  
N 13TH ST  
E 14TH ST  
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E 15TH ST  
N 15TH ST  
E 16TH ST  
N 1ST ST  
E 20TH ST  
21ST ST  
23RD ST  
E 23RD ST  
25TH ST  
E 25TH ST  
2ND ST  
N 3RD ST  
49TH AVE  
N 4TH ST  
50TH AVE  
51ST AVE  
53RD AVE  
54TH AVE  
55TH AVE  
5TH ST  
N 5TH ST  
N 6TH ST  
N 7TH ST  
E 8TH ST  
N 8TH ST  
E 9TH ST  
N 9TH ST  
ASH ST  
ASSER LEVY PL  
AVE C  
AVE B  
AVE D  
BANKER ST  
BAYARD ST  
BEDFORD AVE  
BERRY ST  
BORDEN AVE  
BOX ST  
BROOME ST  
CALYER ST  
CLAY ST  
CLIFFORD PL  
COMMERCIAL ST  
CRESCENT ST  
DIAMOND ST  
DOBBIN ST  
DRIGGS AVE  
DUPONT ST  
EAGLE ST  
ECKFORD ST  
ENGERT AVE  
FDR DR  
FRANKLIN ST  
FREEMAN ST  
FROST ST  
GEM ST  
GRAHAM AVE  
GREEN ST  
GREENPOINT AVE  
GUERNSEY ST  
N HENRY ST  
HUMBOLDT ST  
HURON ST  
INDIA ST  
JACKSON AVE  
JAVA ST  
JEWEL ST  
KENT AVE  
KINGSLAND AVE  
LEONARD ST  
LORIMER ST  
MANHATTAN AVE  
MCGUINNESS BLVD  
MESEROLE AVE  
METROPOLITAN AVE  
MILTON ST  
MONITOR ST  
MOULTRIE ST  
NASSAU AVE  
NEWELL ST  
NEWTON ST  
NOBLE ST  
NORMAN AVE  
OAK ST  
PAIDGE AVE  
PETER COOPER ROAD  
PROVOST ST  
QUAY ST  
QUEENS MIDTOWN TUN  
RICHARDSON ST

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**STREET NAME**

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RIVER ST  
ROEBLING ST  
RUSSELL ST  
STUYVESANT LOOP S  
SUTTON ST  
SZOLD PL  
UNION AVE  
VERNON AVE  
WEST ST  
WYTHE AVE

ERIS SUMMARY OF UNPLOTTABLE SITES  
 (Locations sorted alphabetically within ZIP Code)

Feb 27, 1997

ERIS Report #149363A

ERIS ID.	FACILITY/STREET	CITY/STATE/ZIP/COUNTY	DATABASE
36008012317	APHRODITE CLEANERS & LAUNDERERS 35-41 DIVISION PL ST	BROOKLYN, NY 11222 COUNTY: KINGS	RCRIS_SG
36048035243	CONSOLIDATED LAUNDRIES INC 48 EAGLE ST	BROOKLYN, NY 11222-1013 COUNTY: KINGS	PBS
36007009973	EXXON CO USA 38204 546 MORGAN AVE & MEEKER AVE	BROOKLYN, NY 11222 COUNTY: KINGS	RCRIS_LG
36039000115	JONES MOTOR SITE LOMBARDY ST	BROOKLYN, NY 11222 COUNTY: KINGS	NFRAP
36008012226	LIQUI MARK 71 GREEN ST	BROOKLYN, NY 11222-5831 COUNTY: KINGS	RCRIS_SG
36039000118	LOMBARDY ST LOMBARDY ST	BROOKLYN, NY 11222 COUNTY: KINGS	NFRAP
36007002753	MERCURY ROOM 102 C/O GREENPOINT WHSE. GREENPOINT WAREHOUSE ROOM 102	FOOT OF NOBLEST BROOKLYN, NY 11222 COUNTY: KINGS	RCRIS_LG
36048031676	MERSCO WHOLESALE 4096 QUAY ST	GREENPOINT, NY 11222 COUNTY: KINGS	PBS
36048034343	NASH METALWARE CO INC	NEW YORK CITY, NY 11222 COUNTY: KINGS	PBS
36008007781	NYC SANITATION - GREENPOINT INC NORTH HENRY ST & NEWTOWN CREEK	BROOKLYN, NY 11222 COUNTY: KINGS	RCRIS_SG
36007012826	NYCDOT BIN 2240370 GREENPOINT AVE OVER	BROOKLYN, NY 11222 COUNTY: KINGS	RCRIS_LG
36048020971	Q M T INC	NEW YORK CITY, NY 11222 COUNTY: KINGS	PBS
36048037328	SAMTONE REALTY 6110 ENGERT AVENUE	BKLYN, NY 11222 COUNTY: KINGS	PBS
36007000239	SERVICE STATION 176-194 MCGUNNES BLVD	BROOKLYN, NY 11222 COUNTY: KINGS	RCRIS_LG
36018000259	20TH CENTURY RECYCLING	NY COUNTY: KINGS	SWF
36018000255	AFFIRMATIVE PIPE CLEANING	NY COUNTY: KINGS	SWF
36018000241	ALL-CITY PAPER FIBERS	NY COUNTY: KINGS	SWF
36018000235	ALLEGRO CARTING T.S.	NY COUNTY: KINGS	SWF
36018000211	ASTORIA RUBBISH T.S.	NY COUNTY: KINGS	SWF
36018000222	BASIN HAULAGE T.S.	NY COUNTY: KINGS	SWF
36018000218	BIG EXCAVATING & DEMO	NY COUNTY: KINGS	SWF
36018000225	BLACK BULL CARTING T.S.	NY COUNTY: KINGS	SWF
36018000250	CON EDISON OF N.Y. INC.	NY COUNTY: KINGS	SWF
36018000249	CONOVER T.S.	NY COUNTY: KINGS	SWF

ERIS ID.	FACILITY/STREET	CITY/STATE/ZIP/COUNTY	DATABASE
36018000278	CROSS COUNTY RECYCLING	NY COUNTY: QUEENS	SWF
36018000303	CROWN CONTAINER CO.	NY COUNTY: QUEENS	SWF
36018000301	DEMOLITION TRANSFER CORP.	NY COUNTY: QUEENS	SWF
36018000262	DJR T.S.	NY COUNTY: KINGS	SWF
36018000279	FIVE COUNTIES T.S.	NY COUNTY: QUEENS	SWF
36018000252	GRAND RECYCLING CORP.	NY COUNTY: KINGS	SWF
36018000226	HIGHWAY CONTAINER T.S.	NY COUNTY: KINGS	SWF
36018001994	HITECH RESOURCE RECOVERY.	NY COUNTY: KINGS	SWF
36018000253	INTERCONTINENTAL RECY.	NY COUNTY: KINGS	SWF
36018000231	J & R SALACQUA CONTROL	NY COUNTY: KINGS	SWF
36018000293	JAMAICA RECYLING LIBERTY	NY COUNTY: QUEENS	SWF
36018000243	KARNAK INC.	NY COUNTY: KINGS	SWF
36018000246	KINGS COMPANY TS (3 ACES)	NY COUNTY: KINGS	SWF
36018000247	LOCAL WASTE C&D T.S.	NY COUNTY: KINGS	SWF
36018000223	LOSTRITTO & CALANDRILLO	NY COUNTY: KINGS	SWF
36018000294	M. DELLAONA CARTING T.S.	NY COUNTY: QUEENS	SWF
36018000237	M. PALADINO INC. T.S.	NY COUNTY: KINGS	SWF
36018000307	METRO CONT. CORP.	NY COUNTY: QUEENS	SWF
36018000216	MIDWOOD CONTAINER T.S.	NY COUNTY: KINGS	SWF
36018000238	MILL BASIN CONSTR. T.S.	NY COUNTY: KINGS	SWF
36018000232	NATIONAL CARTING	NY COUNTY: KINGS	SWF
36018000254	NATIONAL PAPER STOCK CART	NY COUNTY: KINGS	SWF
36018000305	NEW STYLE RECYCLING CORP.	NY COUNTY: QUEENS	SWF
36018000272	NY NEWS GRAVURE PLANT	NY COUNTY: QUEENS	SWF



ERIS SUMMARY OF UNPLOTTABLE SITES  
 (Locations sorted alphabetically within ZIP Code)

ERIS Report #149363A

Feb 27, 1997

ERIS ID.	FACILITY/STREET	CITY/STATE/ZIP/COUNTY	DATABASE
36018000221	NY PAVING CO. T.S.	NY COUNTY: KINGS	SWF
36018000233	NY PAVING CO. T.S.	NY COUNTY: KINGS	SWF
36018000207	NYCDOS @ 52ND ST BROOKLYN 52ND STREET & NY BAY	BROOKLYN, NY COUNTY: KINGS	SWF
36018000208	NYCDOS @ GREENPOINT NORTH HENRY STREET	BROOKLYN, NY COUNTY: KINGS	SWF
36018000215	NYCDOS MTS @ HAMILTON AVE HAMILTON AVENUE	NEW YORK, NY COUNTY: KINGS	SWF
36018000209	NYCDOS S.W. BROOKLYN MTS 41ST STREET & GRAVESEND BAY	BROOKLYN, NY COUNTY: KINGS	SWF
36018000239	ORSANO CARTING T.S.	NY COUNTY: KINGS	SWF
36018000285	P & F TRUCKING INC T.S.	NY COUNTY: QUEENS	SWF
36018000286	PATANO DEMO T.S.	NY COUNTY: QUEENS	SWF
36018000266	PENN CENTRAL DEMO	NY COUNTY: NEW YORK	SWF
36018000219	PERFERRED CONTAINER T.S.	NY COUNTY: KINGS	SWF
36018000242	PRONTO DEMO. CORP	NY COUNTY: KINGS	SWF
36018000213	RABEN DEMO T.S.	NY COUNTY: KINGS	SWF
36018000310	RECYCLING INDUSTRIES CORP	NY COUNTY: QUEENS	SWF
36018000289	REVIEW AVENUE RECYCLING	NY COUNTY: QUEENS	SWF
36018000302	ROYAL CARTING CO. INC.	NY COUNTY: QUEENS	SWF
36018000265	RUTIGLIANO PAPER STOCK	NY COUNTY: KINGS	SWF
36018000228	SHAMROCK CONTRACTING #2	NY COUNTY: KINGS	SWF
36018000227	SHAMROCK CONTRACTING T.S.	NY COUNTY: KINGS	SWF
36018000248	SID WASTE OIL INC.	NY COUNTY: KINGS	SWF
36018000304	TYNO CONTRACTING INC.	NY COUNTY: QUEENS	SWF
36018000263	U.S. COAST LINE, INC.	NY COUNTY: KINGS	SWF
36018000309	UNITED WASTE REMOVAL INC	NY COUNTY: QUEENS	SWF
36018000300	V MARANGI CARTING CORP	NY COUNTY: QUEENS	SWF

ERIS SUMMARY OF UNPLOTTABLE SITES  
(Sites sorted alphabetically within ZIP Code)

ERIS Report #149363A

Feb 27, 1997

ERIS ID.	FACILITY/STREET	CITY/STATE/ZIP/COUNTY	DATABASE
36018000234	WASTE MANAGEMENT RECY.	NY COUNTY: KINGS	SWF
36018000284	WELBASH ELECTRIC CORP.	NY COUNTY: QUEENS	SWF

ERIS ENVIRONMENTAL DATA REPORT  
 CERCLIS NO FURTHER REMEDIAL ACTION PLANNED SITES  
 NFRAP - UNPLOTTABLE SITES

ERIS ID EPA ID	FACILITY	FACILITY ADDRESS
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36039000115 NYD059358655	JONES MOTOR SITE COUNTY: KINGS	LOMBARDY ST BROOKLYN, NY 11222
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SITE EVENT(S) DISCOVERY PRELIMINARY ASSESSMENT	COMPLETE DATE 10/01/79 09/01/80
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36039000118 NYD980532360	LOMBARDY ST COUNTY: KINGS	LOMBARDY ST BROOKLYN, NY 11222
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SITE EVENT(S) PRELIMINARY ASSESSMENT DISCOVERY	COMPLETE DATE 09/02/87 07/25/87
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ERIS ENVIRONMENTAL DATA REPORT  
 RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM  
 RCRI\_SG - UNPLOTTABLE SITES

ERIS Report #149303A

Feb 27, 1994

ERIS ID EPA ID FACILITY ADDRESS RAATS ISSUE DATE RAATS ACTION/STATUS RAATS PENALTIES

36008007781 NYD986972008 NYC SANITATION - GREENPOINT INC COUNTY: KINGS NORTH HENRY ST & NEWTOWN CREEK BROOKLYN, NY 11222 FACILITY NOT REPORTED IN RAATS

HAZARDOUS WASTES

WASTE CODE: AMOUNT OF WASTE: SOURCE OF INFO:

- 1. D001 .00000 NOTIFICATION
- 2. X001 .00000 NOTIFICATION

36008012317 NY0000465393 APIRODITE CLEANERS & LAUNDERERS COUNTY: KINGS 35-41 DIVISION PL ST BROOKLYN, NY 11222 FACILITY NOT REPORTED IN RAATS

HAZARDOUS WASTES

WASTE CODE: AMOUNT OF WASTE: SOURCE OF INFO:

- 1. D001 .00000 NOTIFICATION
- 2. F002 .00000 NOTIFICATION

36008012226 NY0000374363 LIQUI MARK COUNTY: KINGS 71 GREEN ST BROOKLYN, NY 11222-5831 FACILITY NOT REPORTED IN RAATS

FACILITY VIOLATIONS

DATE DETERMINED: DATE RESOLVED: AREA OF VIOLATION:

- 1. 06/02/94 07/25/94 GENERATOR-ALL REQUIREMENTS
- 2. 06/02/94 07/24/94 GENERATOR-ALL REQUIREMENTS
- 3. 06/02/94 08/30/94 GENERATOR-ALL REQUIREMENTS
- 4. 06/02/94 08/30/94 GENERATOR-LAND BAN REQUIREMENTS
- 5. 06/02/94 07/25/94 GENERATOR-ALL REQUIREMENTS
- 6. 06/02/94 08/30/94 GENERATOR-ALL REQUIREMENTS

FACILITY EVALUATIONS

EVALUATION DATE: EVALUATION AGENCY: TYPE OF EVALUATION:

- 1. 06/02/94 EPA PERSONNEL COMPLIANCE EVALUATION INSPECTION

ENFORCEMENT DATE: ENFORCEMENT AGENCY: TYPE OF ACTION:

- 1. 06/24/1994 EPA IMMINENT HAZARD ORDER, FINAL FORMAL ADMINISTRATIVE ACTION

AREAS OF EVALUATION:

NOT REPORTED

PENALTY(S):

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ERIIS ENVIRONMENTAL DATA REPORT  
 RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM  
 RCRIS\_SG - UNPLOTTABLE SITES

ERIIS Report #149363A

Feb 27, 19

ERIIS ID EPA ID	FACILITY	ADDRESS	RAATS ISSUE DATE RAATS ACTION/STATUS RAATS PENALTIES

HAZARDOUS WASTES

WASTE CODE:	AMOUNT OF WASTE:	SOURCE OF INFO:
1. D001	.00000	NOTIFICATION
2. F001	.00000	NOTIFICATION
3. F003	.00000	NOTIFICATION
4. NONE	.00000	EPA INSPECTION

ERIS ENVIRONMENTAL DATA REPORT  
 NEW YORK SOLID WASTE FACILITIES  
 SWF - UNPLOTTABLE SITES

ERIS Report #149363A

Feb 27, 1999

ERIS ID FACILITY	OPERATOR NAME FACILITY ADDRESS PHONE NO.	PERMIT NO. ISSUE DATE	REGULATORY STATUS	FACILITY ACTIVITY WASTE TYPE
36018000207 24T01 NYCDOS @ 52ND ST BROOKLYN	NYCDOS 52ND STREET & NY BAY BROOKLYN, NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) DEMOLITION, PUTRESCIBLE
36018000208 24T02 NYCDOS @ GREENPOINT	NYCDOS NORTH HENRY STREET BROOKLYN, NY COUNTY: KINGS (212) 788-3926	0 NOT REPORTED	PERMIT	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) PUTRESCIBLE
36018000209 24T03 NYCDOS S.W. BROOKLYN MTS	NYCDOS 41ST STREET & GRAVESEND BAY BROOKLYN, NY COUNTY: KINGS (212) 788-3926	261060002000010 NOT REPORTED	PERMIT	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) PUTRESCIBLE
36018000215 24T11 NYCDOS MTS @ HAMILTON AVE	NYCDOS HAMILTON AVENUE NEW YORK, NY COUNTY: KINGS (212) 837-3926	2610200010000010 NOT REPORTED	NONE	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) PUTRESCIBLE
36018000211 24T06 ASTORIA RUBBISH T.S.	JOHN GAJESKI NOT REPORTED NY COUNTY: KINGS	337 NOT REPORTED	NONE	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) RESIDENTIAL
36018000213 24T09 RABEN DEMO T.S.	NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) DEMOLITION
36018000216 24T12 MIDWOOD CONTAINER T.S.	PHILLIPS TURECAMO NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) DEMOLITION, PUTRESCIBLE
36018000218 24T16 BIG EXCAVATING & DEMO	BIAGIO LAMBERTI NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) DEMOLITION
36018000219 24T17 PREFERRED CONTAINER T.S.	ANTHONY QUARANT NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) RESIDENTIAL
36018000221 24T20 NY PAVING CO. T.S.	JAMES J. QUINN NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) DEMOLITION

ERIS ENVIRONMENTAL DATA REPORT  
 NEW YORK SOLID WASTE FACILITIES  
 SWF - UNPLOTTABLE SITES

ERIS Report #149363A

Feb 27, 1

ERIS ID FACILITY ID FACILITY	OPERATOR NAME FACILITY ADDRESS PHONE NO.	PERMIT NO. ISSUE DATE	REGULATORY STATUS	FACILITY ACTIVITY WASTE TYPE
36018000222 24T22 BASIN HAULAGE T.S.	NOT REPORTED NY COUNTY: KINGS	20840868 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) RESIDENTIAL
36018000223 24T23 LOSTRITTO & CALANDRILLO	RALPH SCOPO NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000225 24T26 BLACK BULL CARTING T.S.	JOSEPH ZUCCARELLO NOT REPORTED NY COUNTY: KINGS	354 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000226 24T27 HIGHWAY CONTAINER T.S.	FRANK MELE NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000227 24T28 SHAMROCK CONTRACTING T.S.	STEVE BARRANCA NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000228 24T29 SHAMROCK CONTRACTING #2	STEVEN BARANCA NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000231 24T32 J & R SALACQUA CONTROL	MIKE BALLAZE NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000232 24T35 NATIONAL CARTING	NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) RESIDENTIAL
36018000233 24T37 NY PAVING CO. T.S.	ANTHONY BARTONE NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000234 24T40 WASTE MANAGEMENT RECY.	WASTE MANAGEMENT NOT REPORTED NY COUNTY: KINGS (718) 497-4000	2610400096000010 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) PUT RESCIBL



ERIS ENVIRONMENTAL DATA REPORT  
 NEW YORK SOLID WASTE FACILITIES  
 SWF - UNPLOTTABLE SITES

ERIS Report #149363A

Feb 27, 1995

ERIS ID FACILITY	OPERATOR NAME FACILITY ADDRESS PHONE NO.	PERMIT NO. ISSUE DATE	REGULATORY STATUS	FACILITY ACTIVITY WASTE TYPE
36018000235 24T42 ALLEGRO CARTING T.S.	JOSEPH & FRANK SAVINO NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	UPGRADE ORDER	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION, ASBESTOS
36018000237 24T45 M. PALADINO INC. T.S.	FRANK PALADINO NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000238 24T48 MILL BASIN CONSTR. T.S.	DANIEL VULPIS NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000239 24T50 ORSANO CARTING T.S.	DONALD ORSANO NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000241 24T57 ALL-CITY PAPER FIBERS	MICHAEL VITARELLI NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	UPGRADE ORDER	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) PUTRESCIBLE
36018000242 24T58 PRONTO DEMO. CORP	NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) RESIDENTIAL
36018000243 24T60 KARNAK INC.	NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) RESIDENTIAL
36018000246 24T69 KINGS COMPANY TS (3 ACES)	RAJPI SERPICO NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000247 24T71 LOCAL WASTE C&D T.S.	JOHN RIVERA NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000248 24T72 SID WASTE OIL INC.	NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) RESIDENTIAL

ERIS ENVIRONMENTAL DATA REPORT  
NEW YORK SOLID WASTE FACILITIES  
SWF - UNPLOTTABLE SITES

ERIS ID FACILITY ID FACILITY	OPERATOR NAME FACILITY ADDRESS PHONE NO.	PERMIT NO. ISSUE DATE	REGULATORY STATUS	FACILITY ACTIVITY WASTE TYPE
36018000249 24T78 CONOVER T.S.	CARL DIVONA NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) PUTRESCIBLE
36018000250 24T80 CON EDISON OF N.Y. INC.	WILLIAM COFIELD NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000252 24T84 GRAND RECYCLING CORP.	NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) SLUDGE
36018000253 24T88 INTERCONTINENTAL RECY.	MICHAEL STRAMIELLO NOT REPORTED NY COUNTY: KINGS	2610300075 NOT REPORTED	PERMIT	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) PUTRESCIBLE
36018000254 24T91 NATIONAL PAPER STOCK CART	LOU MANZIONE NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION, HIGH GRADE PAPER, PUTRESCIBLE
36018000255 24T94 AFFIRMATIVE PIPE CLEANING	NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000259 24TA2 80TH CENTURY RECYCLING	NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY)
36018000262 24TA7 DJR T.S.	RICHARD DEALICHESNE NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000263 24TAB I.S. COAST LINE, INC.	MICHAEL MURPHY NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) OIL, DEMOLITION
36018000265 24T97 DUTIGLIANO PAPER STOCK	NOT REPORTED NY COUNTY: KINGS	0 NOT REPORTED	PERMIT	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) RESIDENTIAL

ERIS ENVIRONMENTAL DATA REPORT  
NEW YORK SOLID WASTE FACILITIES  
SWF - UNPLOTTABLE SITES

ERIS ID FACILITY ID FACILITY	OPERATOR NAME FACILITY ADDRESS PHONE NO.	PERMIT NO. ISSUE DATE	REGULATORY STATUS	FACILITY ACTIVITY WASTE TYPE
36018001994 24T73 HITECH RESOURCE RECOVERY,	VINCINT ZAMBROTTA NOT REPORTED NY COUNTY: KINGS (718) 386-0225	2610400012000010 NOT REPORTED	NONE	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) RESIDENTIAL
36018000266 31D02 PENN CENTRAL DEMO	NOT REPORTED NY COUNTY: NEW YORK	0 NOT REPORTED	NONE	CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL DEMOLITION
36018000272 41D01 NY NEWS GRAVURE PLANT	NOT REPORTED NY COUNTY: QUEENS	0 NOT REPORTED	NONE	CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL DEMOLITION
36018000278 41T03 CROSS COUNTY RECYCLING	JOHN PERSICHIILLI NOT REPORTED NY COUNTY: QUEENS	2630700106000010 NOT REPORTED	NONE	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) PUTRESCIBLE
36018000279 41T06 FIVE COUNTIES T.S.	JOEY TROTTA NOT REPORTED NY COUNTY: QUEENS	2630700108000010 NOT REPORTED	SAPA	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) DEMOLITION, PUTRESCIBLE
36018000284 41T15 WELBASH ELECTRIC CORP.	NOT REPORTED NY COUNTY: QUEENS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) RESIDENTIAL
36018000285 11T16 & F TRUCKING INC T.S.	RALPH SABATELLI NOT REPORTED NY COUNTY: QUEENS	0 NOT REPORTED	UPGRADE ORDER	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) DEMOLITION, PUTRESCIBLE
36018000286 11T19 PATANO DEMO T.S.	JOHN PATANO NOT REPORTED NY COUNTY: QUEENS	2630400112000011 NOT REPORTED	NONE	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) DEMOLITION, PUTRESCIBLE, METAL
36018000289 11T23 REVIEW AVENUE RECYCLING	ANTHONY CASAVECCHIA NOT REPORTED NY COUNTY: QUEENS	2630400029000010 NOT REPORTED	NONE	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) DEMOLITION, PUTRESCIBLE
36018000292 11T30 AMAICA RECYCLING LIBERTY	MICHAEL RELLINO NOT REPORTED NY COUNTY: QUEENS	2630700126000010 NOT REPORTED	PERMIT	LARGE TRANSFER STATION (>50,000 CY ANNUALLY) DEMOLITION, PUTRESCIBLE

ERIS ENVIRONMENTAL DATA REPORT  
NEW YORK SOLID WASTE FACILITIES  
SWF - UNPLOTTABLE SITES

ERIS ID FACILITY ID FACILITY	OPERATOR NAME FACILITY ADDRESS PHONE NO.	PERMIT NO. ISSUE DATE	REGULATORY STATUS	FACILITY ACTIVITY WASTE TYPE
36018000294 11T31 M. DELLAONA CARTING T.S.	MARTIN DELLAONA NOT REPORTED NY COUNTY: QUEENS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000300 41T44 V MARANGI CARTING CORP	NOT REPORTED NY COUNTY: QUEENS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) RESIDENTIAL
36018000301 11T45 DEMOLITION TRANSFER CORP.	NOT REPORTED NY COUNTY: QUEENS	263040004000010 NOT REPORTED	PERMIT	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000302 41T49 ROYAL CARTING CO. INC.	MICHAEL REALI NOT REPORTED NY COUNTY: QUEENS	263070008000010 NOT REPORTED	PERMIT	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION, PUTRESCIBLE
36018000303 11T50 CROWN CONTAINER CO.	GERALD ANTONACCI NOT REPORTED NY COUNTY: QUEENS	26302000030000010 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION, PUTRESCIBLE
36018000304 11T51 LYNO CONTRACTING INC.	MICHAEL LOGAIDICE NOT REPORTED NY COUNTY: QUEENS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000305 11T53 JEW STYLE RECYCLING CORP.	DOR CRISTINA NOT REPORTED NY COUNTY: QUEENS	26304000210000010 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) PUTRESCIBLE, DEMOLITION
36018000307 11T60 METRO CONT. CORP.	JOHN RAJAMONTE NOT REPORTED NY COUNTY: QUEENS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) DEMOLITION
36018000309 11T67 UNITED WASTE REMOVAL INC	NOT REPORTED NY COUNTY: QUEENS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY)
6018000310 11T69 RECYCLING INDUSTRIES CORP.	TOM STEWART NOT REPORTED NY COUNTY: QUEENS	0 NOT REPORTED	NONE	LARGE TRANSFER STATION (> 50,000 CY ANNUALLY) PUTRESCIBLE, METAL

ERIS ENVIRONMENTAL DATA REPORT  
 NEW YORK PETROLEUM BULK STORAGE FACILITIES  
 PBS - UNPLOTTABLE SITES

ERIS ID PBS NO. CBS NO.	FACILITY ADDRESS	CONTACT NAME PHONE	SITE STATUS FACILITY TYPE	NO. OF TANKS CAPACITY (GAL)	CERTIFICATE DATE EXPIRATION DATE
36048020971 2-034398	Q M T INC NEW YORK CITY, NY 11222	Q M T INC (718) 383-6552	ACTIVE	4 4000	12/02/1986 12/02/1991
TANK ID 001	INSTALL DATE 00/00	CAPACITY (GALLONS) 1000	PRODUCT STORED LEADED GASOLINE	TANK TYPE STEEL/CARBON STEEL	TANK LOCATION UNDERGROUND
002	00/00	1000	LEADED GASOLINE	STEEL/CARBON STEEL	UNDERGROUND
003	00/00	1000	DIESEL	STEEL/CARBON STEEL	UNDERGROUND
004	00/00	1000	DIESEL	STEEL/CARBON STEEL	UNDERGROUND
36048031676 2-260428	MERSCO WHOLESale 4096 QUAY ST 40 QUAY ST; GREENPOINT, NY 11222	MERSCO WHOLESale CO OWNER (212) 560-0590	ACTIVE OTHER	2 15000	06/24/1992 08/17/1997
TANK ID 01R 01L	INSTALL DATE 00/00	CAPACITY (GALLONS) 7500	PRODUCT STORED NOS. 1, 2 OR 4 FUEL OIL	TANK TYPE STEEL/CARBON STEEL	TANK LOCATION UNDERGROUND
01R	00/00	7500	NOS. 1, 2 OR 4 FUEL OIL	STEEL/CARBON STEEL	UNDERGROUND
01L	00/00	7500	NOS. 1, 2 OR 4 FUEL OIL	STEEL/CARBON STEEL	UNDERGROUND
36048034343 2-361364	NASHI METALWARE CO INC NEW YORK CITY, NY 11222	NASHI METALWARE CO INC (212) 431-8660	ACTIVE	1 10000	10/06/1987 10/06/1992
TANK ID 001	INSTALL DATE 00/00	CAPACITY (GALLONS) 10000	PRODUCT STORED NOS. 1, 2 OR 4 FUEL OIL	TANK TYPE STEEL/CARBON STEEL	TANK LOCATION UNDERGROUND
001	00/00	10000	NOS. 1, 2 OR 4 FUEL OIL	STEEL/CARBON STEEL	UNDERGROUND
36048037328 2-338923	SAMTONE REALTY 6110 ENGERT AVENUE 610100ENGEN AVE; BKLYN, NY 11222	HERBERT PETRO TRANS (718) 782-5290	ACTIVE	2 7000	01/07/1988 01/07/1993
TANK ID 001	INSTALL DATE 00/00	CAPACITY (GALLONS) 2000	PRODUCT STORED DIESEL	TANK TYPE STEEL/CARBON STEEL	TANK LOCATION ABOVEGROUND
001	00/00	2000	DIESEL	STEEL/CARBON STEEL	ABOVEGROUND
002	00/00	5000	NOS. 1, 2 OR 4 FUEL OIL	STEEL/CARBON STEEL	ABOVEGROUND
36048035243 2-216000	CONSOLIDATED LAUNDRIES INC 48 EAGLE CT 48 EAGLE STREET; BROOKLYN, NY 11222-1013	M KORTAS (718) 389-2165	ACTIVE	3 26000	10/15/1987 10/15/1992
TANK ID 001	INSTALL DATE 12/72	CAPACITY (GALLONS) 10000	PRODUCT STORED NOS. 1, 2 OR 4 FUEL OIL	TANK TYPE STEEL/CARBON STEEL	TANK LOCATION UNDERGROUND
001	12/72	10000	NOS. 1, 2 OR 4 FUEL OIL	STEEL/CARBON STEEL	UNDERGROUND

ERIS Report #149363A

ERIS ENVIRONMENTAL DATA REPORT  
NEW YORK PETROLEUM BULK STORAGE FACILITIES  
PBS - UNPLOTTABLE SITES

Feb 27, 1997

ERIS ID PBS NO. CBS NO.	FACILITY ADDRESS	INSTALL DATE	CAPACITY (GALLONS)	PRODUCT STORED NOS. 1, 2 OR 4 FUEL OIL NOS. 1, 2 OR 4 FUEL OIL.	CONTACT NAME PHONE	SITE STATUS FACILITY TYPE	NO. OF TANKS CAPACITY (GAL)	CERTIFICATE DATE EXPIRATION DATE	TANK LOCATION UNDERGROUND UNDERGROUND
TANK ID 002 003		12/72 12/72	6000 10000		TANK STATUS IN-SERVICE IN-SERVICE	TANK TYPE STEEL/CARBON STEEL STEEL/CARBON STEEL			

## EPA HAZARDOUS WASTE NUMBERS -- HAZARDOUS WASTE DESCRIPTION

D001 -- A solid waste that exhibits the characteristic of ignitability, but is not listed as a hazardous waste in Subpart D.

D002 -- A solid waste that exhibits the characteristic of corrosivity, but is not listed as a hazardous waste in Subpart D.

D003 -- A solid waste that exhibits the characteristic of reactivity, but is not listed as a hazardous waste in Subpart D.

<u>EPA HW #</u>	<u>CAS #</u>	<u>COMMON CHEMICAL NAME</u>
D004	7740-38-2	ARSENIC
D005	7740-39-3	BARIUM
D006	7440-43-9	CADMIUM
D007	7440-47-3	CHROMIUM
D008	7439-92-1	LEAD
D009	7439-97-6	MERCURY
D010	7782-49-2	SELENIUM
D011	7440-22-4	SILVER
D012	72-20-8	ENDRIN
D013	58-89-9	LINDANE
D014	72-43-5	METHOXYCHLOR
D015	8001-35-2	TOXAPHENE
D016	94-75-7	2,4-D
D017	93-72-1	2,4,5-TP(SILVEX)
D018	71-39-2	BENZENE
D019	56-23-5	CARBON TETRACHLORIDE
D020	57-74-9	CHLORDANE
D021	108-90-7	CHLOROBENZENE
D022	67-66-3	CHLOROFORM
D023	95-48-7	O-CRESOL
D024	108-39-4	M-CRESOL
D025	106-44-5	P-CRESOL
D026		CRESOL
D027	106-46-7	1,4-DICHLOROBENZENE
D028	107-06-2	1,2-DICHLOROETHANE
D029	75-35-4	1,1-DICHLOROETHYLENE
D030	121-14-2	2,4-DINITROTOLUENE
D031	76-44-8	HEPTACHLOR (AND ITS EPOXIDE)
D032	118-74-1	HEXACHLOROBENZENE
D033	87-68-3	HEXACHLOROBUTADIENE
D034	67-72-1	HEXACHLOROETHANE
D035	78-93-3	METHYL ETHYL KETONE
D036	98-95-3	NITROBENZENE
D037	87-86-5	PENTACHLOROPHENOL
D038	110-86-1	PYRIDINE
D039	127-18-4	TETRACHLOROETHYLENE
D040	79-01-6	TRICHLOROETHYLENE
D041	95-95-4	2,4,5-TRICHLOROPHENOL
D042	88-06-2	2,4,6-TRICHLOROPHENOL
D043	75-01-4	VINYL CHLORIDE

## EPA HAZARDOUS WASTE NUMBERS -- HAZARDOUS WASTE DESCRIPTION

F001 -- The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

F002 -- The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

F003 -- The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

F004 -- The following spent non-halogenated solvents: Cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

F005 -- The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

F006 -- Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.

F007 -- Spent cyanide plating bath solutions from electroplating operations.

F008 -- Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.



## EPA HAZARDOUS WASTE NUMBERS -- HAZARDOUS WASTE DESCRIPTION

F009 -- Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.

F010 -- Quenching bath residue from oil baths from metal heat treating operations where cyanides are used in the process.

F011 -- Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.

F012 -- Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.

F019 -- Wastewater treatment sludges from the chemical conversion coating of aluminum.

F020 -- Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.)

F021 -- Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.

F022 -- Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.

F023 -- Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.)

F024 -- Wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of chlorinated aliphatic hydrocarbons, having carbon content from one to five, utilizing free radical catalyzed processes. (This listing does not include light ends, spent filters and filter aids, spent desiccants, wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in §261.32.)

F026 -- Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.

F027 -- Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)

## EPA HAZARDOUS WASTE NUMBERS -- HAZARDOUS WASTE DESCRIPTION

F028 -- Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.

K001 -- Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.

K002 -- Wastewater treatment sludge from the production of chrome yellow and orange pigments.

K003 -- Wastewater treatment sludge from the production of molybdate orange pigments.

K004 -- Wastewater treatment sludge from the production of zinc yellow pigments.

K005 -- Wastewater treatment sludge from the production of chrome green pigments.

K006 -- Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).

K007 -- Wastewater treatment sludge from the production of iron blue pigments.

K008 -- Oven residue from the production of chrome oxide green pigments.

K009 -- Distillation bottoms from the production of acetaldehyde from ethylene.

K010 -- Distillation side cuts from the production of acetaldehyde from ethylene.

K011 -- Bottom stream from the wastewater stripper in the production of acrylonitrile.

K013 -- Bottom stream from the acetonitrile column in the production of acrylonitrile.

K014 -- Bottoms from the acetonitrile purification column in the production of acrylonitrile.

K015 -- Still bottoms from the distillation of benzyl chloride.

K016 -- Heavy ends or distillation residues from the production of carbon tetrachloride.

K017 -- Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.

K018 -- Heavy ends from the fractionation column in ethyl chloride production.

K019 -- Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.

K020 -- Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.

K021 -- Aqueous spend antimony catalyst waste from fluoromethane production.

K022 -- Distillation bottom tars from the production of phenol/acetone from cumene.

K023 -- Distillation light ends from the production of phthalic anhydride from naphthalene.

EPA HAZARDOUS WASTE NUMBERS -- HAZARDOUS WASTE DESCRIPTION

- K024 -- Distillation bottoms from the production of phthalic anhydride from naphthalene.
- K025 -- Distillation bottoms from the production of nitrobenzene by the nitration of benzene.
- K026 -- Stripping still tails from the production of methyl ethyl pyridines.
- K027 -- Centrifuge and distillation residues from toluene diisocyanate production.
- K028 -- Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.
- K029 -- Wastes from the product steam stripper in the production of 1,1,1-trichloroethane.
- K030 -- Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.
- K031 -- By-product salts generated in the production of MSMA and cacodylic acid.
- K032 -- Wastewater treatment sludge from the production of chlordane.
- K033 -- Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.
- K034 -- Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.
- K035 -- Wastewater treatment sludges generated in the production of creosote.
- K036 -- Still bottoms from toluene reclamation distillation in the production of disulfoton.
- K037 -- Wastewater treatment sludges from the production of disulfoton.
- K038 -- Wastewater from the washing and stripping of phorate production.
- K039 -- Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.
- K040 -- Wastewater treatment sludge from the production of phorate.
- K041 -- Wastewater treatment sludge from the production of toxaphene.
- K071 -- Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.
- K073 -- Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.
- K083 -- Distillation bottoms from aniline production.

## EPA HAZARDOUS WASTE NUMBERS -- HAZARDOUS WASTE DESCRIPTION

- K085 -- Distillation or fractionation column bottoms from the production of chlorobenzenes.
- K093 -- Distillation light ends from the production of phthalic anhydride from ortho-xylene.
- K095 -- Distillation bottoms from the production of 1,1,1-trichloroethane.
- K096 -- Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.
- K097 -- Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.
- K098 -- Untreated process wastewater from the production of toxaphene.
- K103 -- Process residues from aniline extraction from the production of aniline.
- K104 -- Combined wastewater streams generated from nitrobenzene/aniline production,
- K105 -- Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.
- K106 -- Wastewater treatment sludge from the mercury cell process in chlorine production.
- K111 -- Product washwaters from the production of dinitrotoluene via nitration of toluene.
- K112 -- Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.
- K113 -- Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
- K114 -- Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
- K115 -- Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
- K116 -- Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.
- K117 -- Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.
- K118 -- Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.
- K136 -- Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.

EPA HAZARDOUS WASTE NUMBERS -- COMMON CHEMICAL NAME

EPA HW #	CAS #	COMMON CHEMICAL NAME
F027	88-06-2	2,4,6-TRICHLOROPHENOL
F027	58-90-2	2,3,4,6-TETRACHLOROPHENOL
F027	95-95-4	2,4,5-TRICHLOROPHENOL
F027	87-86-5	PENTACHLOROPHENOL
F027	93-76-5	2,4,5-TRICHLOROPHENOXYACETIC ACID
F027	93-72-1	SILVEX
P002	591-08-28	1-ACETYL-2-THIOUREA
P003	107-02-88	ACROLEIN
P001	81-81-2	WARFARIN
P004	309-00-28	ALDRIN
P005	107-18-68	ALLYL ALCOHOL
P006	20859-73-8	ALUMINUM PHOSPHIDE
P007	2763-96-4	MUSCIMOL
P008	504-24-58	PYRIDINE, 4-AMINO
P010	7778-39-4	ARSENIC ACID
P011	1303-28-2	ARSENIC PENTOXIDE, SOLID
P012	1327-53-3	ARSENIC TRIOXIDE, SOLID
P013	542-62-18	BARIUM CYANIDE, SOLID
P014	108-98-58	PHENYL MERCAPTAN
P015	7440-41-7	BERYLLIUM
P016	542-88-18	BIS(CHLOROMETHYL)ETHER
P017	598-31-28	BROMOACETONE
P018	357-57-38	BRUCINE
P020	88-85-7	DINOSEB
P021	592-01-88	CALCIUM CYANIDE, SOLID
P022	75-15-0	CARBON DISULFIDE
P023	107-20-08	CHLOROACETALDEHYDE
P024	106-47-88	P-CHLOROANILINE
P026	5344-82-1	1-(O-CHLOROPHENYL) THIOUREA
P027	542-76-78	3-CHLOROPROPIONITRILE
P028	100-44-78	BENZYL CHLORIDE
P029	544-92-38	CUPROUS CYANIDE
P030	57-12-5	CYANIDES (SOLUBLE SALTS AND COMPLEXES)
P031	460-19-58	CYANOGEN
P033	506-77-48	CYANOGEN CHLORIDE, INHIBITED
P034	131-89-58	4,6-DINITRO-O-CYCLOHEXYLPHENOL
P036	696-28-68	DICHLOROPHENYLARSINE
P037	60-57-1	DIELDRIN
P038	692-42-28	DIETHYLARSINE
P039	298-04-48	DISULFOTON
P040	297-97-28	THIONAZIN
P041	311-45-58	DIETHYL P-NITROPHENYL PHOSPHATE
P042	51-43-4	EPINEPHRINE
P043	55-91-4	ISOFLUROPHATE
P044	60-51-5	DIMETHOATE
P045	39196-18-4	THIOFANOX
P046	122-09-88	ALPHA, ALPHA-DIMETHYLPHENETHYLAMINE
P047	534-52-18	DINITRO-ORTHO-CRESOL

EPA HAZARDOUS WASTE NUMBERS -- COMMON CHEMICAL NAME

EPA HW #	CAS #	COMMON CHEMICAL NAME
P048	51-28-5	2,4-DINITROPHENOL
P049	541-53-78	2,4-DITHIOBIURET
P050	115-29-78	ENDOSULFAN
P051	72-20-8	ENDRIN
P054	151-56-48	ETHYLENEIMINE
P056	7782-41-4	FLUORINE
P057	640-19-78	FLUORACETAMIDE
P058	62-74-8	SODIUM FLUOROACETATE
P059	76-44-8	HEPTACHLOR
P060	465-73-68	ISODRIN
P062	757-58-48	HEXAETHYL TETRAPHOSPHATE
P063	74-90-8	HYDROGEN CYANIDE, ANHYDROUS, STABILIZED
P064	624-83-98	METHYL ISOCYANATE
P065	628-86-48	MERCURY FULMINATE
P066	16752-77-5	METHOMYL
P067	75-55-8	PROPYLENE IMINE
P068	60-34-4	METHYL HYDRAZINE
P069	75-86-5	ACETONE CYANOHYDRIN
P071	298-00-08	METHYL PARATHION
P072	86-88-4	THIOUREA, 1-NAPHTHALENYL-(ANTU)
P073	13463-39-3	NICKEL CARBONYL
P074	557-19-78	NICKEL CYANIDE
P075	54-11-5	NICOTINE
P076	10102-43-9	NITRIC OXIDE
P077	100-01-68	P-NITROANILINE
P078	10102-44-0	NITROGEN DIOXIDE
P081	55-63-0	NITROGLYCERIN
P082	62-75-9	N-NITROSODIMETHYLAMINE
P084	4549-40-0	N-NITROSOMETHYLVINYLAMINE
P085	152-16-98	SCHRADAN
P087	20816-12-0	OSMIUM TETROXIDE
P088	145-73-38	ENDOTHAL
P089	56-38-2	PARATHION
P092	62-38-4	PHENYLMERCURIC ACETATE
P093	103-85-58	PHENYLTHIOUREA
P094	298-02-28	PHORATE
P095	75-44-5	PHOSGENE
P096	7803-51-2	PHOSPHINE
P097	52-85-7	FAMPHUR
P098	151-50-88	POTASSIUM CYANIDE
P099	506-61-68	POTASSIUM SILVER CYANIDE
P100	107-12-08	ETHYL CYANIDE
P101	107-12-08	PROPIONITRILE
P102	107-19-78	PROPARGYL ALCOHOL
P103	630-10-48	SELENOUREA
P104	506-64-98	SILVER CYANIDE
P105	26628-22-8	SODIUM AZIDE (NA(N3))

EPA HAZARDOUS WASTE NUMBERS -- COMMON CHEMICAL NAME

EPA HW #	CAS #	COMMON CHEMICAL NAME
P106	143-33-98	SODIUM CYANIDE (NA(CN))
P108	57-24-9	STRYCHNINE
P109	3689-24-5	SULFOTEP
P110	78-00-2	TETRAETHYL LEAD
P111	107-49-38	TETRAETHYL PYROPHOSPHATE
P112	509-14-88	TETRANITROMETHANE
P113	1314-32-5	THALLIC OXIDE
P114	12039-52-0	SELENIOUS ACID, DITHALLIUM(1+) SALT
P115	7446-18-6	THALLOUS SULFATE
P116	79-19-6	THIOSEMICARBAZIDE
P119	7803-55-6	AMMONIUM METAVANADATE
P120	1314-62-1	VANADIUM PENTOXIDE
P121	557-21-18	ZINC CYANIDE
P122	1314-84-7	ZINC PHOSPHIDE
P123	8001-35-2	TOXAPHENE
U001	75-07-0	ACETALDEHYDE
U002	67-64-1	ACETONE
U003	75-05-8	ACETONITRILE
U004	98-86-2	ACETOPHENONE
U005	53-96-3	2-ACETYLAMINOFLUORENE
U006	75-36-5	ACETYL CHLORIDE
U007	79-06-1	ACRYLAMIDE
U008	79-10-7	ACRYLIC ACID
U009	107-13-18	ACRYLONITRILE, INHIBITED
U010	50-07-7	MITOMYCIN C
U011	61-82-5	AMITROLE
U012	62-53-3	ANILINE
U014	492-80-88	C.I. SOLVENT YELLOW 34
U015	115-02-68	AZASERINE
U016	225-51-48	BENZ(C)ACRIDINE
U017	98-87-3	BENZAL CHLORIDE
U018	56-55-3	BENZ(A)ANTHRACENE
U019	71-43-2	BENZENE
U020	98-09-9	BENZENESULFONYL CHLORIDE
U021	92-87-5	BENZIDINE
U022	50-32-8	BENZO(A)PYRENE
U023	98-07-7	BENZOIC TRICHLORIDE
U024	111-91-18	BIS(2-CHLOROETHOXY)METHANE
U025	111-44-48	2,2'-DICHLOROETHYL ETHER
U026	494-03-18	CHLORNAPHAZINE
U027	108-60-18	BIS(2-CHLOROISOPROPYL)ETHER
U028	117-81-78	DI-(2-ETHYLHEXYL)PHTHALATE
U029	74-83-9	METHYL BROMIDE
U030	101-55-38	4-BROMOPHENYL PHENYL ETHER
U031	71-36-3	N-BUTYL ALCOHOL
U032	13765-19-0	CALCIUM CHROMATE
U033	353-50-48	CARBONIC DIFLUORIDE
U034	75-87-6	ACETALDEHYDE, TRICHLORO-

EPA HAZARDOUS WASTE NUMBERS -- COMMON CHEMICAL NAME

EPA HW #	CAS #	COMMON CHEMICAL NAME
U035	305-03-38	CHLORAMBUCIL
U036	57-74-9	CHLORDANE
U037	108-90-78	CHLOROBENZENE
U038	510-15-68	CHLOROBENZILATE
U039	59-50-7	4-CHLORO-M-CRESOL
U041	106-89-88	EPICHLOROHYDRIN
U042	110-75-88	2-CHLOROETHYL VINYL ETHER
U043	75-01-4	VINYL CHLORIDE
U044	67-66-3	CHLOROFORM
U045	74-87-3	METHYL CHLORIDE
U046	107-30-28	CHLOROMETHYL METHYL ETHER
U047	91-58-7	BETA-CHLORONAPHTHALENE
U048	95-57-8	O-CHLOROPHENOL
U049	3165-93-3	4-CHLORO-O-TOLUIDINE HYDROCHLORIDE
U050	218-01-98	1,2-BENZPHENANTHRENE
U051	8021-39-4	WOOD CREOSOTE
U052	1319-77-3	CRESOL
U053	4170-30-3	CROTONALDEHYDE
U055	98-82-8	CUMENE
U056	110-82-78	CYCLOHEXANE
U057	108-94-18	CYCLOHEXANONE
U058	50-18-0	CYCLOPHOSPHAMIDE
U059	20830-81-3	DAUNOMYCIN
U060	72-54-8	1,1-DICHLORO-2,2-BIS (P-CHLOROPHENYL)ETHANE
U061	50-29-3	DICHLORODIPHENYLTRICHLOROETHANE
U062	2303-16-4	DIALLATE
U063	53-70-3	DIBENZ(A,H)ANTHRACENE
U064	189-55-98	DIBENZO(A,I)PYRENE
U066	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE
U067	106-93-48	ETHYLENE DIBROMIDE
U068	74-95-3	METHYLENE BROMIDE
U069	84-74-2	DIBUTYL PHTHALATE
U070	95-50-1	O-DICHLOROBENZENE, LIQUID
U071	541-73-18	M-DICHLOROBENZENE
U072	106-46-78	P-DICHLOROBENZENE
U073	91-94-1	3,3'-DICHLOROBENZIDINE
U074	764-41-08	1,4-DICHLORO-2-BUTENE (I,T)
U075	75-71-8	DICHLORODIFLUOROMETHANE
U076	75-34-3	1,1-DICHLOROETHANE
U077	107-06-28	ETHYLENE DICHLORIDE
U078	75-35-4	VINYLDENE CHLORIDE
U079	156-60-58	TRANS-1,2-DICHLOROETHYLENE
U080	75-09-2	DICHLOROMETHANE
U081	120-83-28	2,4-DICHLOROPHENOL
U082	87-65-0	2,6-DICHLOROPHENOL
U083	78-87-5	PROPYLENE DICHLORIDE
U084	542-75-68	1,3-DICHLOROPHENOL



EPA HAZARDOUS WASTE NUMBERS -- COMMON CHEMICAL NAME

EPA HW #	CAS #	COMMON CHEMICAL NAME
U085	1464-53-5	2,2-BIOXIRANE
U086	1615-80-1	1,2-DIETHYLHYDRAZINE
U087	3288-58-2	0,0-DIETHYL S-METHYL DITHIOPHOSPHATE
U088	84-66-2	DIETHYL PHTHALATE
U089	56-53-1	DIETHYLSTILBESTROL
U090	94-58-6	DIHYDROSAFROLE
U091	119-90-48	3,3'-DIMETHOXYBENZIDINE
U092	124-40-38	DIMETHYLAMINE, ANHYDROUS
U093	60-11-7	4-DIMETHYLAMINOAZOBENZENE
U094	57-97-6	7,12-DIMETHYLBENZ(A)ANTHRACENE
U095	119-93-78	3,3'-DIMETHYLBENZIDINE
U096	80-15-9	CUMENE HYDROPEROXIDE
U097	79-44-7	DIMETHYLCARBAMOYL CHLORIDE
U099	540-73-88	1,2-DIMETHYLHYDRAZINE
U101	105-67-98	2,4-XYLENOL
U102	131-11-38	DIMETHYL PHTHALATE
U103	77-78-1	DIMETHYL SULFATE
U105	121-14-28	2,4-DINITROTOLUENE
U106	606-20-28	2,6-DINITROTOLUENE
U107	117-84-08	DIOCTYL PHTHALATE
U108	123-91-18	1,4-DIOXANE
U109	122-66-78	1,2-DIPHENYLHYDRAZINE
U110	142-84-78	DIPROPYLAMINE
U111	621-64-78	N-NITROSODI-N-PROPYLAMINE
U112	141-78-68	ETHYL ACETATE
U113	140-88-58	ETHYL ACRYLATE
U114	111-54-68	ETHYLENEBIS(DITHIOCARBAMIC ACID)
U115	75-21-8	ETHYLENE OXIDE
U116	96-45-7	ETHYLENE THIOUREA
U117	60-29-7	ETHYL ETHER
U118	97-63-2	ETHYL METHACRYLATE
U119	62-50-0	ETHYL METHANESULFONATE
U120	206-44-08	FLUORANTHENE
U121	75-69-4	FLUOROTRICHLOROMETHANE
U122	50-00-0	FORMALDEHYDE GAS
U123	64-18-6	FORMIC ACID
U124	110-00-98	FURAN
U125	98-01-1	FURFURAL
U126	765-34-48	GLYCIDALDEHYDE
U127	118-74-18	HEXACHLOROBENZENE
U128	87-68-3	HEXACHLOROBUTADIENE
U129	58-89-9	LINDANE
U130	77-47-4	HEXACHLOROCYCLOPENTADIENE
U131	67-72-1	HEXACHLOROETHANE
U132	70-30-4	HEXACHLOROPHENE
U133	302-01-28	HYDRAZINE, ANHYDROUS

EPA HAZARDOUS WASTE NUMBERS -- COMMON CHEMICAL NAME

EPA HW #	CAS #	COMMON CHEMICAL NAME
U134	7664-39-3	HYDROGEN FLUORIDE SOLUTION
U134	7664-39-3	HYDROGEN FLUORIDE
U135	7783-06-4	HYDROGEN SULFIDE
U136	75-60-5	CACODYLIC ACID
U137	193-39-58	INDENO(1,2,3-CD)PYRENE
U138	74-88-4	METHYL IODIDE
U139	9004-66-4	IRON DEXTRAN COMPLEX
U140	78-83-1	ISOBUTYL ALCOHOL
U141	120-58-18	ISOSAFROLE
U142	143-50-08	CHLORDECONE
U143	303-34-48	LASIOCARPINE
U144	301-04-28	LEAD ACETATE
U145	7446-27-7	LEAD PHOSPHATE
U146	1335-32-6	LEAD SUBACETATE
U147	108-31-68	MALEIC ANHYDRIDE
U148	123-33-18	MALEIC HYDRAZIDE
U149	109-77-38	MALONONITRILE
U150	148-82-38	MELPHALAN
U151	7439-97-6	MERCURY
U152	126-98-78	METHACRYLONITRILE
U153	74-93-1	METHYL MERCAPTAN
U154	67-56-1	METHYL ALCOHOL
U155	91-80-5	METHAPYRILENE
U156	79-22-1	METHYL CHLOROFORMATE
U157	56-49-5	3-METHYLCHOLANTHRENE
U158	101-14-48	4,4'-METHYLENEBIS(2-CHLOROENZAMINE)
U159	78-93-3	METHYL ETHYL KETONE
U160	1338-23-4	2-BUTANONE PEROXIDE
U161	108-10-18	METHYL ISOBUTYL KETONE
U162	80-62-6	METHYL METHACRYLATE, INHIBITED
U163	70-25-7	N-METHYL-N'-NITRO-N-NITROSOGUANIDINE
U164	56-04-2	METHYLTHIOURACIL
U165	91-20-3	NAPHTHALENE
U166	130-15-48	1,4-NAPHTHOQUINONE
U167	134-32-78	ALPHA-NAPHTHYLAMINE
U168	91-59-8	BETA-NAPHTHYLAMINE
U169	98-95-3	NITROBENZENE, LIQUID
U170	100-02-78	P-NITROPHENOL
U171	79-46-9	2-NITROPROPANE
U172	924-16-38	N-NITROSODI-N-BUTYLAMINE
U173	1116-54-7	N-NITROSODIETHANOLAMINE
U174	55-18-5	ETHANAMINE,N-ETHYL-N-NITROSO-
U176	759-73-98	N-NITROSO-N-ETHYLUREA
U177	684-93-58	N-NITROSO-N-METHYLUREA
U178	615-53-28	N-NITRO-N-METHYLURETHANE
U179	100-75-48	N-NITROSOPIPERIDINE
U180	930-55-28	N-NITROSOPIRROLIDINE
U181	99-55-8	5-NITRO-O-TOLUIDINE

EPA HAZARDOUS WASTE NUMBERS -- COMMON CHEMICAL NAME

EPA HW #	CAS #	COMMON CHEMICAL NAME
U182	123-63-78	PARALDEHYDE
U183	608-93-58	PENTACHLOROENZENE
U184	76-01-7	PENTACHLOROETHANE
U185	82-68-8	PENTACHLORONITROBENZENE
U186	504-60-98	1,3-PENTADIENE
U187	62-44-2	PHENACETIN
U188	108-95-28	PHENOL
U189	1314-80-3	PHOSPHOROUS PENTASULFIDE
U190	85-44-9	PHTHALIC ANHYDRIDE
U191	109-06-88	2-PICOLINE
U192	23950-58-5	PRONAMIDE
U193	1120-71-4	PROPANE SULTONE
U194	107-10-88	PROPYLAMINE
U196	110-86-18	PYRIDINE
U197	106-51-48	QUINONE
U200	50-55-5	RESERPINE
U201	108-46-38	RESORCINOL
U202	81-07-2	SACCHARIN
U203	94-59-7	SAFROLE
U204	7783-00-8	SELENIOS ACID
U205	7488-56-4	SELENIUM DISULFIDE
U206	18883-66-4	STREPTOZOTOCIN
U207	95-94-3	1,2,4,5-TETRACHLOROENZENE
U208	630-20-68	1,1,1,2-TETRACHLOROETHANE
U209	79-34-5	1,1,2,2-TETRACHLOROETHANE
U210	127-18-48	TETRACHLOROETHYLENE
U211	56-23-5	CARBON TETRACHLORIDE
U212	58-90-2	2,3,4,6-TETRACHLOROPHENOL
U213	109-99-98	TETRAHYDROFURAN
U214	563-68-88	THALLIUM ACETATE
U215	6533-73-9	THALLOUS CARBONATE
U216	7791-12-0	THALLIUM CHLORIDE
U217	10102-45-1	THALLIUM NITRATE
U218	62-55-5	THIOACETAMIDE
U219	62-56-6	THIOUREA
U220	108-88-38	TOLUENE
U221	25376-45-8	TOLUENEDIAMINE
U222	636-21-58	O-TOLUIDINE HYDROCHLORIDE
U223	26471-62-5	TOLUENE DIISOCYANATE (MIXED ISOMERS)
U225	75-25-2	BROMOFORM
U226	71-55-6	METHYL CHLOROFORM
U227	79-00-5	1,1,2-TRICHLOROETHANE
U228	79-01-6	TRICHLOROETHYLENE
U230	88-06-2	2,4,6-TRICHLOROPHENOL
U232	93-76-5	2,4,5-T ACID
U233	93-72-1	SILVEX (2,4,5-TP)
U234	99-35-4	1,3,5-TRINITROBENZENE

EPA HAZARDOUS WASTE NUMBERS -- COMMON CHEMICAL NAME

EPA HW #	CAS #	COMMON CHEMICAL NAME
U235	126-72-78	TRIS
U236	72-57-1	TRYPAN BLUE
U237	66-75-1	URACIL MUSTARD
U238	51-79-6	URETHANE
U239	95-47-6	O-XYLENE
U239	106-42-38	P-XYLENE
U239	108-38-38	M-XYLENE
U239	1330-20-7	XYLENE (MIXED ISOMERS)
U239	95-47-6	BENZENE, O-DIMETHYL-
U239	106-42-38	BENZENE, P-DIMETHYL-
U239	108-38-38	BENZENE, M-DIMETHYL-
U240	94-75-7	2,4-DICHLOROPHENOXYACETIC ACID
U242	87-86-5	PENTACHLOROPHENOL
U243	1888-71-7	HEXACHLOROPROPENE
U244	137-26-88	THIRAM
U246	506-68-38	CYANOGEN BROMIDE
U247	72-43-5	METHOXYCHLOR
U248	506-68-38	CYANOGEN BROMIDE
U249	1314-84-7	ZINC PHOSPHIDE (CONC. < = 10%)
U328	95-53-4	O-YOLUIDINE
U353	106-49-08	P-TOLUIDINE
U359	110-80-58	2-ETHOXYETHANOL

ENVIRONMENTAL RISK INFORMATION & IMAGING SERVICES  
AERIAL PHOTOGRAPHY SEARCH REPORT

The following sources have reported aerial photo coverage for the subject site USGS topographic. For site-specific photo availability and ordering, please call the individual source agency or call AIC at 1-800-945-9509 or fax this page to AIC at 512-478-5215.

US Report #149363A

NDOR NAME	STREET	STATE	ZIP	PIONE				
NATIONAL OCEAN SERVICE NOAA/COAST AND GEODETIC SURVEY SUPPORT	0AA/COAST AND GEODETIC SURVEY S	MD	20910-3282	(301) 713-2692				
DATE OF COVERAGE	SENSOR CLASS	PROJECT CODE	SCALE	FOCAL LENGTH/1	FILM TYPE	CLOUD COVER	QUADRANGLE COVERAGE	REMARKS
1980 OCT 10	VERTICAL CARTO (IMPLIES STEREO)	80 EC	30000	6.00in OR 152mm	COLOR	0%	20%	132LM4-7060 7071
1980 OCT 10	VERTICAL CARTO (IMPLIES STEREO)	80 EC	30000	6.00in OR 152mm	COLOR	0%	50%	132LM4-7021
1984 JUN 21	VERTICAL CARTO (IMPLIES STEREO)	84 ZC	50000	6.00in OR 152mm	COLOR	0%	20%	132LM5-5332 5347
1984 JUN 21	VERTICAL CARTO (IMPLIES STEREO)	84 ZC	50000	6.00in OR 152mm	COLOR	0%	30%	132JK3-5312
1984 JUN 21	VERTICAL CARTO (IMPLIES STEREO)	84 ZC	50000	6.00in OR 152mm	COLOR	0%	50%	132LM5-5313-5330
1980 OCT 10	VERTICAL CARTO (IMPLIES STEREO)	80 EC	30000	6.00in OR 152mm	COLOR	0%	30%	132LM4-7057-7059
1984 JUN 21	VERTICAL CARTO (IMPLIES STEREO)	84 ZC	50000	6.00in OR 152mm	COLOR	0%	20%	132JK3-5348
1943 DEC 24	VERTICAL CARTO (IMPLIES STEREO)	43C-2	20000	3.46in OR 88mm	B&W	0%	70%	132KNE 0397-0403
1947 MAY 26	VERTICAL CARTO (IMPLIES STEREO)	47D	17500	6.00in OR 152mm	B&W	0%	40%	132-L 0001-0018
1947 MAY 27	VERTICAL CARTO (IMPLIES STEREO)	47C-3	24000	3.46in OR 88mm	B&W	0%	40%	132-L 1823-1832
1947 MAY 27	VERTICAL CARTO (IMPLIES STEREO)	47D-2	14500	6.00in OR 152mm	B&W	0%	20%	132-L 0118-0142
1949 APR 27	VERTICAL CARTO (IMPLIES STEREO)	49D-1	10000	6.00in OR 152mm	B&W	0%	20%	132-L 0001-0008
1949 APR 27	VERTICAL CARTO (IMPLIES STEREO)	49D-2	10000	6.00in OR 152mm	B&W	0%	20%	132-L 0009-0017
1949 APR 27	VERTICAL CARTO (IMPLIES STEREO)	49D-3	10000	6.00in OR 152mm	B&W	0%	30%	132-L 0018-0028
1949 APR 27	VERTICAL CARTO (IMPLIES STEREO)	49D-4	10000	6.00in OR 152mm	B&W	0%	30%	132-L 0029-0039
1949 APR 27	VERTICAL CARTO (IMPLIES STEREO)	49D-5	10000	6.00in OR 152mm	B&W	0%	20%	132-L 0040-0050
1949 APR 27	VERTICAL CARTO (IMPLIES STEREO)	49D-6	10000	6.00in OR 152mm	B&W	0%	20%	132-L 0051-0061
1949 APR 28	VERTICAL CARTO (IMPLIES STEREO)	49D-2	24000	6.00in OR 152mm	B&W	0%	20%	132-L 0400-0409
1949 APR 28	VERTICAL CARTO (IMPLIES STEREO)	49D-3	24000	6.00in OR 152mm	B&W	0%	40%	132-L 0410-0419
1960 MAY 06	VERTICAL CARTO (IMPLIES STEREO)	60S-1	36000	6.00in OR 152mm	B&W	0%	30%	132LNW 3038-3044
1960 MAY 06	VERTICAL CARTO (IMPLIES STEREO)	60S-8	36000	6.00in OR 152mm	B&W	0%	20%	132LNW 3063-3064
1961 APR 12	VERTICAL CARTO (IMPLIES STEREO)	61W	36000	6.00in OR 152mm	B&W	0%	20%	132LNW 5694-5699
1961 APR 12	VERTICAL CARTO (IMPLIES STEREO)	61W-4	36000	6.00in OR 152mm	B&W	0%	60%	132LNW 5716-5731
1961 APR 12	VERTICAL CARTO (IMPLIES STEREO)	61S-1	40000	6.00in OR 152mm	B&W	0%	30%	132LNW 5655-5661
1961 DEC 06	VERTICAL CARTO (IMPLIES STEREO)	63M	40000	6.00in OR 152mm	B&W	0%	30%	132LNW 9303-9306
1963 JUL 04	VERTICAL CARTO (IMPLIES STEREO)	64W-1	24000	3.46in OR 88mm	B&W	0%	20%	132LNW 2075-2079
1964 SEP 06	VERTICAL CARTO (IMPLIES STEREO)	65S-1	30000	6.00in OR 152mm	B&W	0%	20%	132LNW 267 17
1965 JUN 04	VERTICAL CARTO (IMPLIES STEREO)	65S-2	30000	6.00in OR 152mm	B&W	0%	20%	132LNW 4574 487
1965 JUN 04	VERTICAL CARTO (IMPLIES STEREO)	67L-1	30000	6.00in OR 152mm	B&W	0%	20%	132LNW 4589-4597
1967 APR 23	VERTICAL CARTO (IMPLIES STEREO)	67L-1	30000	6.00in OR 152mm	B&W	0%	40%	132LNW 1593-1613
1967 APR 25	VERTICAL CARTO (IMPLIES STEREO)	70L-2	30000	6.00in OR 152mm	B&W	0%	30%	132LNW 1761-1777
1970 MAY 21	VERTICAL CARTO (IMPLIES STEREO)	70L-5	30000	6.00in OR 152mm	B&W	0%	20%	132LNW 1779-1787
1970 MAY 21	VERTICAL CARTO (IMPLIES STEREO)	70L-6	30000	6.00in OR 152mm	B&W	0%	60%	132LM 3451-3467
1970 MAY 21	VERTICAL CARTO (IMPLIES STEREO)	71L-1	30000	6.00in OR 152mm	B&W	0%	20%	132LM 3474-3476
1971 JUN 04	VERTICAL CARTO (IMPLIES STEREO)	71L-3	30000	6.00in OR 152mm	B&W	0%	40%	132LM 3478-3486
1974 SEP 15	VERTICAL CARTO (IMPLIES STEREO)	74L-3	30000	6.00in OR 152mm	B&W	0%	30%	132LM 6407-6417
1974 SEP 15	VERTICAL CARTO (IMPLIES STEREO)	74L-4	30000	6.00in OR 152mm	B&W	0%	50%	132LM 6430-6438
1974 SEP 15	VERTICAL CARTO (IMPLIES STEREO)	74L-5	30000	6.00in OR 152mm	B&W	0%	20%	132LM 5744 5752
1974 OCT 05	VERTICAL CARTO (IMPLIES STEREO)	74C-1	60000	3.46in OR 88mm	B&W	0%	30%	132LM 5766-5770
1974 OCT 05	VERTICAL CARTO (IMPLIES STEREO)	74C-1	60000	3.46in OR 88mm	B&W	0%	30%	132LM 0870-0871
1974 OCT 05	VERTICAL CARTO (IMPLIES STEREO)	74C-1	60000	3.46in OR 88mm	B&W	0%	30%	132LM2 0856-0862
1974 OCT 05	VERTICAL CARTO (IMPLIES STEREO)	74C-2	60000	3.46in OR 88mm	B&W	0%	50%	132LM2 0886-0889
1974 OCT 05	VERTICAL CARTO (IMPLIES STEREO)	74C-4	60000	3.46in OR 88mm	B&W	0%	70%	132LM2 0863-0869
1974 OCT 19	VERTICAL CARTO (IMPLIES STEREO)	74E	30000	6.00in OR 152mm	B&W	0%	40%	132JK 0879 0885
1974 OCT 19	VERTICAL CARTO (IMPLIES STEREO)	74E-1	30000	6.00in OR 152mm	B&W	0%	50%	132LM2 7078-7082
1974 OCT 19	VERTICAL CARTO (IMPLIES STEREO)	74E-1	30000	6.00in OR 152mm	B&W	0%	20%	132LM2 7141-7142

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NDOR NAME	STREET	STATE	ZIP	PHONE
<b>§ AIR FORCE DEPT OF THE AIR FORCE EDC</b>				
DATE OF COVERAGE	SENSOR CLASS	PROJECT CODE	SCALE	FOCAL LENGTH
1974 OCT 19	VERTICAL CARTO (IMPLIES STEREO)	74E-2	30000	6.00in OR 152mm
1974 OCT 19	VERTICAL CARTO (IMPLIES STEREO)	74E-3	30000	6.00in OR 152mm
1975 MAY 08	VERTICAL CARTO (IMPLIES STEREO)	75C-1	60000	3.46in OR 88mm
1975 MAY 08	VERTICAL CARTO (IMPLIES STEREO)	75C-3	60000	3.46in OR 88mm
1975 OCT 03	VERTICAL CARTO (IMPLIES STEREO)	75B-2	30000	6.00in OR 152mm
1975 OCT 03	VERTICAL CARTO (IMPLIES STEREO)	75B-3	15000	6.00in OR 152mm
1977 AUG 25	VERTICAL CARTO (IMPLIES STEREO)	77B-1	36000	6.00in OR 152mm
1978 JUN 30	VERTICAL CARTO (IMPLIES STEREO)	78B	36000	6.00in OR 152mm
1980 OCT 10	VERTICAL CARTO (IMPLIES STEREO)	80E	30000	6.00in OR 152mm
1980 OCT 10	VERTICAL CARTO (IMPLIES STEREO)	80E-1	30000	6.00in OR 152mm
1984 JUN 27	VERTICAL CARTO (IMPLIES STEREO)	84CR	0050000	3.46in OR 88mm
1984 JUN 27	VERTICAL CARTO (IMPLIES STEREO)	84CR	0050000	3.46in OR 88mm
REMARKS 132LM2 7055-706 132LM2 7181-718 132LM3 5841 -74 132LM3 585 132LM2 5941 -74 132LM3 5883-588 132LM3 8780 879 132LM 4861-486 132-LM 7025-703 132-LM 7057-705 132JK4-5882 + 59 132LM4-5873-595				
QUADRANGLE COVERAGE				
100%				
(800) USA MAPS				
<b>§ GEOLOGICAL SURVEY RESTON ESIC</b>				
DATE OF COVERAGE	SENSOR CLASS	PROJECT CODE	SCALE	FOCAL LENGTH
1959 OCT 09	VERTICAL RECONNAISSANCE	000MC	78893	6.00in OR 152mm
1959 OCT 18	VERTICAL CARTO (IMPLIES STEREO)	59035	60000	UNKNOWN
REMARKS 2 00A0352 1 0950198				
QUADRANGLE COVERAGE				
100%				
(703) 648-5920				
<b>§ NATIONAL CENTER</b>				
DATE OF COVERAGE	SENSOR CLASS	PROJECT CODE	SCALE	FOCAL LENGTH
1954 FEB 18	VERTICAL CARTO (IMPLIES STEREO)	VBV	20000	OTHER
1966 JAN 23	VERTICAL CARTO (IMPLIES STEREO)	VBIO	24034	OTHER
1976 OCT 29	VERTICAL CARTO (IMPLIES STEREO)	VDUW	78000	OTHER
1985 APR 01	VERTICAL CARTO (IMPLIES STEREO)	N4 73	58000	OTHER
1985 APR 01	VERTICAL CARTO (IMPLIES STEREO)	N4 73	80000	OTHER
1984 MAY	SLAR	RADNEW	0250000	OTHER
REMARKS NEW YORK				
QUADRANGLE COVERAGE				
100%				
(800) USA MAPS				
<b>TIONAL AERONAUTICS AND SPACE ADMINISTRATION, AMES RESEARCH CNTR CONTACT U S GEOLOGICAL SURVEY ESIC OFFICES</b>				
DATE OF COVERAGE	SENSOR CLASS	PROJECT CODE	SCALE	FOCAL LENGTH
1972 JUL 20	VERTICAL RECONNAISSANCE	00528	131000	6.00in OR 152mm
1972 AUG 21	VERTICAL RECONNAISSANCE	00637	132000	6.00in OR 152mm
1972 AUG 21	VERTICAL RECONNAISSANCE	Y0637	128285	6.00in OR 152mm
1972 SEP 23	VERTICAL RECONNAISSANCE	00699	126000	6.00in OR 152mm
1972 SEP 23	VERTICAL RECONNAISSANCE	00699	130000	6.00in OR 152mm
1972 SEP 23	VERTICAL RECONNAISSANCE	00699	134000	6.00in OR 152mm
1973 MAR 28	VERTICAL RECONNAISSANCE	01074	128000	6.00in OR 152mm
1973 APR 30	VERTICAL RECONNAISSANCE	01127	126000	6.00in OR 152mm
1973 APR 30	VERTICAL RECONNAISSANCE	01127	127000	6.00in OR 152mm
1973 APR 30	VERTICAL RECONNAISSANCE	01127	128000	6.00in OR 152mm
1973 APR 30	VERTICAL RECONNAISSANCE	01127	130000	6.00in OR 152mm
1976 APR 30	VERTICAL RECONNAISSANCE	Y1127	129067	6.00in OR 152mm
1976 APR 30	VERTICAL RECONNAISSANCE	02416	126000	1.97in OR 50mm
1976 AUG 30	VERTICAL RECONNAISSANCE	02416	133000	1.97in OR 50mm
REMARKS 572000528 3651 572000637 3502 5CITY0637 3503 572000699 4443 572000699 4454 572000699 4453 573001034 0153 573001127 9711 573001127 9698 573001127 9714 573001127 9712 5CITY1127 9710 576002416 0467 576002416 0469				
QUADRANGLE COVERAGE				
100%				
(800) USA MAPS				

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NDOR NAME	STREET	STATE	ZIP	PIHONE			
ATIONAL AERONAUTICS AND SPACE ADMINISTRATION, JS	JOHNSON SPACE CENTER			(800) USA-MPAS			
DATE OF COVERAGE	PROJECT CODE	SCALE	FOCAL LENGTH	FILM TYPE	CLOUD COVER	QUADRANGLE COVERAGE	REMARKS
1986 JUL 05	03574	65000	12.00in OR	COLOR	0%	70%	586003574 2765 2
1986 JUL 05	03574	65000	12.00in OR	COLOR	0%	80%	586003574 2766 2
DATE OF COVERAGE	PROJECT CODE	SCALE	FOCAL LENGTH	FILM TYPE	CLOUD COVER	QUADRANGLE COVERAGE	REMARKS
1969 SEP 14	1030	65290	12.00in OR	COLOR	0%	70%	61030008C 0077 0
1969 SEP 14	1030	65345	12.00in OR	COLOR	0%	20%	61030008C 0045 0
1969 SEP 14	1030	120543	6.00in OR 152mm	COLOR	0%	70%	61030007A 6169 6
1969 SEP 14	1030	120579	6.00in OR 152mm	COLOR	0%	40%	61030007A 6163 6
1969 SEP 14	1030	121623	6.00in OR 152mm	COLOR	0%	40%	61030009B 6484 6
1969 SEP 14	1030	122097	6.00in OR 152mm	COLOR	0%	60%	61030007A 6173 6
1969 SEP 14	1030	122365	6.00in OR 152mm	COLOR	0%	20%	61030007A 6154 6
1969 SEP 14	1030	123394	6.00in OR 152mm	COLOR	0%	70%	61030009B 6497 6
1969 SEP 14	1030	123748	6.00in OR 152mm	COLOR	0%	100%	61030007A 6206 6
1969 SEP 14	1030	123873	6.00in OR 152mm	COLOR	0%	100%	61030007A 6196 6
1969 SEP 14	1030	123952	6.00in OR 152mm	COLOR	0%	20%	61030009B 6546 6
1969 SEP 14	1030	125368	6.00in OR 152mm	COLOR	0%	100%	61030009B 6533 6
1971 MAY 19	1660	120324	6.00in OR 152mm	COLOR	0%	70%	616600350 8746 8
1971 MAY 19	1660	120622	6.00in OR 152mm	COLOR	0%	70%	616600330 5745 5
1971 MAY 19	1660	121729	6.00in OR 152mm	COLOR	0%	80%	616600350 8744 8
1971 MAY 19	1660	123708	6.00in OR 152mm	COLOR	0%	80%	616600330 5743 5
IV OF CALIFORNIA, SANTA BARBARA	MAP AND IMAGERY LABORATORY LIBRARY			CA	93106	(805) 893-4049	
DATE OF COVERAGE	PROJECT CODE	SCALE	FOCAL LENGTH	FILM TYPE	CLOUD COVER	QUADRANGLE COVERAGE	REMARKS
1945 SEP 04	45	9600	8.25in OR 210mm	B&W	0%	30%	IDLEWILD AP
ROGRAPHICS INC	P O BOX 248			NY	11716	(516) 589 6045	
DATE OF COVERAGE	PROJECT CODE	SCALE	FOCAL LENGTH	FILM TYPE	CLOUD COVER	QUADRANGLE COVERAGE	REMARKS
1976 APR 12	67075B	12000	6.00in OR 152mm	B&W	0%	70%	
1983 JAN 13	67075B	30000	6.00in OR 152mm	COLOR	UNK	70%	
1976 MAR 29	670750	12000	6.00in OR 152mm	B&W	0%	20%	
1982	670750	0036000	6.00in OR 152mm	B&W	0%	100%	NEW YORK CITY NY
1983 JAN	670750	0030000	6.00in OR 152mm	B&W	0%	20%	MANHATTAN NY
ROGRAPHICS INC	1 AERIAL WAY			NY	11791	(516) 938 0600	
DATE OF COVERAGE	PROJECT CODE	SCALE	FOCAL LENGTH	FILM TYPE	CLOUD COVER	QUADRANGLE COVERAGE	REMARKS
1970 APR	78-1	0019200	6.00in OR 152mm	B&W	0%	20%	QUEENS NY
1978	78-1	19200	6.00in OR 152mm	B&W	0%	100%	NEW YORK CITY NY
1970 APR	78-1	0019200	6.00in OR 152mm	B&W	0%	60%	BROOKLYN NY
1974 MAY	78-1	0060000	3.35in OR 85mm	B&W	0%	100%	NEW YORK CITY NY
1975 FEB	78-1	0012000	12.00in OR	B&W	0%	20%	MANHATTAN NY

AKWOOD, KESSLER, AND PARTI, INC

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ENDOR NAME	PROJECT CODE	SENSOR CLASS	SCALE	FOCAL LENGTH	FILM TYPE	STATE	ZIP	PIIONE	REMARKS
DATE OF COVERAGE 1975 APR 1978 1984		VERTICAL CARTO (IMPLIES STEREO) VERTICAL CARTO (IMPLIES STEREO) VERTICAL CARTO (IMPLIES STEREO)	0014400 0019200 0019200	6.00in OR 152mm 6.00in OR 152mm 6.00in OR 152mm	B&W B&W B&W	NY	11702	QUADRANGLE COVERAGE 20% 100% 100%	MANHATTAN NY NEW YORK CITY NY NEW YORK CITY NY
AIRAL CARTOGRAPHICS OF AMERICA (ACA)			100 WEST MAIN ST					(516) 587-5060	
DATE OF COVERAGE 1984 APR		SENSOR CLASS VERTICAL CARTO (IMPLIES STEREO)	SCALE 0019200	FOCAL LENGTH 6.00in OR 152mm	FILM TYPE COLOR	NY		QUADRANGLE COVERAGE 70%	EAST NEW YORK
NEW YORK DEPT OF TRANSPORTATION MAP INFORMATION UNIT			STATE ESIC OFFICE BLDG 4 RM 105				12232	(518) 457-3555	
DATE OF COVERAGE 1970		SENSOR CLASS VERTICAL CARTO (IMPLIES STEREO)	SCALE 0024000	FOCAL LENGTH 6.00in OR 152mm	FILM TYPE B&W	PA	19114	QUADRANGLE COVERAGE 100%	NEW YORK CITY
YSTONE AERIAL SURVEYS INC NORTHEAST PHILADELPHIA AIRPORT			P O BOX 21059					(215) 677-3119	
DATE OF COVERAGE 1976 FEB 29 1980 1980 MAR 1980 MAR		SENSOR CLASS VERTICAL CARTO (IMPLIES STEREO) VERTICAL CARTO (IMPLIES STEREO) VERTICAL CARTO (IMPLIES STEREO) VERTICAL CARTO (IMPLIES STEREO)	SCALE 80000 0024000 0080000 0006000 0009600	FOCAL LENGTH 6.00in OR 152mm 6.00in OR 152mm 6.00in OR 152mm 6.00in OR 152mm 6.00in OR 152mm	FILM TYPE R&W B&W B&W B&W B&W	TX	77042	QUADRANGLE COVERAGE 100% 100% 100% 30% 100%	QUAD CENTERED NEW YORK CITY NEW YORK CITY MANHATTAN NY NEW YORK CITY
AIRAL VIEWPOINT			10200 RICHMOND AVE SUITE 140					(713) 784-5801	
DATE OF COVERAGE 1977 APR 1977 APR		SENSOR CLASS VERTICAL CARTO (IMPLIES STEREO) VERTICAL CARTO (IMPLIES STEREO)	SCALE 0009600 0009600	FOCAL LENGTH 6.00in OR 152mm 6.00in OR 152mm	FILM TYPE B&W B&W	TX	77042	QUADRANGLE COVERAGE 20% 60%	QUEENS NY BROOKLYN NY
AIRAL VIEWPOINT			10200 RICHMOND AVE SUITE 140					(713) 784-5801	
DATE OF COVERAGE 1965 1977 1964		SENSOR CLASS VERTICAL CARTO (IMPLIES STEREO) VERTICAL CARTO (IMPLIES STEREO) VERTICAL CARTO (IMPLIES STEREO)	SCALE 0003600 0003000 0018000	FOCAL LENGTH UNKNOWN UNKNOWN UNKNOWN	FILM TYPE R&W R&W R&W	TX		QUADRANGLE COVERAGE 70% 70% 40%	BROOKLYN, NY BROOKLYN, NY NEW YORK CITY



# APPENDIX D

## TABLES

TABLE 1

Safeway Construction  
105 West Street  
Brooklyn, New York

EPA Method 8240 Results for 0 - 2' Layer

Compound	Concentration	AGV	SCO	Compound	Concentration	AVG	SCO
Acetone	ND		200	1,2-Dichloropropane	ND		NA
Acrolein	ND		NA	cis-1,3-Dichloropropylene	ND		NA
Acrylonitrile	ND		NA	trans-1,3-Dichloropropylene	ND		NA
Benzene	ND	14	60	Ethanol	ND	100	NA
Bromodichloromethane	ND		NA	Ethylbenzene	ND		5,500
Bromoform	ND		NA	Ethyl methacrylate	ND		NA
Bromomethane	ND		NA	2-Hexanone	ND		NA
2-Butanone	ND		300	Iodomethane	ND		NA
Carbon disulfide	ND		2,700	Methylene chloride	ND		100
Carbon tetrachloride	ND		600	4-Methyl-2-pentanone	ND		1,000
Chlorobenzene	ND		1,700	Styrene	ND		NA
Chloroethane	ND		1,900	1,1,2,2-Tetrachloroethane	ND		600
2-Chloroethylvinyl ether	ND		NA	Tetrachloroethylene	ND		1,400
Chloroform	ND		NA	Toluene	ND	100	1,500
Chloromethane	ND		NA	1,1,1-Trichloroethane	ND		800
Dibromochloromethane	ND		NA	1,1,2-Trichloroethane	ND		NA
Dibromomethane	ND		NA	Trichloroethylene	ND		700
1,4-Dichloro-2-butene	ND		NA	Trichlorofluoromethane	ND		NA
Dichlorodifluoromethane	ND		NA	1,2,3-Trichloropropane	ND		400
1,1-Dichloroethane	ND		200	Vinyl acetate	ND		NA
1,2-Dichloroethane	ND		100	Vinyl chloride	ND		200
1,1-Dichloroethylene	ND		400	Xylenes	ND	100	1,200
1,2-Dichloroethylene	ND		300				

All concentrations are in micrograms per kilogram (ug/kg).

ND - Not detected

AGV - Alternative Guidance Value

SCO - Soil Cleanup Criteria

**TABLE 1 (cont)**  
**Safeway Construction**  
**105 West Street**  
**Brooklyn, New York**

**EPA Method 8260 Results for 0 - 2' Layer**

Compound	Concentration	AGV	SCO	Compound	Concentration	AGV	SCO
Benzene	ND	14	60	2,2-Dichloropropane	ND	.	NA
Bromobenzene	ND		NA	1,1-Dichloropropylene	ND		NA
Bromochloromethane	ND		NA	cis-1,3-Dichloropropylene	ND		NA
Bromodichloromethane	ND		NA	trans-1,3-Dichloropropylene	ND		NA
Bromoform	ND		NA	Ethylbenzene	ND	100	5,500
Bromomethane	ND		NA	Hexachlorobutadiene	ND		NA
n-Butylbenzene	ND	100	NA	Isopropylbenzene	ND	100	NA
sec-Butylbenzene	ND	100	NA	p-Isopropyltoluene	ND	100	NA
tert-Butylbenzene	ND		NA	Methylene chloride	ND		100
Carbon tetrachloride	ND		600	Naphthalene	11,000	200	13000
Chlorobenzene	ND		1,700	n-Propylbenzene	ND	100	NA
Chloroethane	ND		1,900	Styrene	ND		NA
Chloroform	ND		300	1,1,1,2-Tetrachloroethane	ND		NA
1-Chlorohexane	ND		NA	1,1,2,2-Tetrachloroethane	ND		600
Chloromethane	ND		NA	Tetrachloroethane	ND		1,400
2-Chlorotoluene	ND		NA	Toluene	ND	100	1,500
4-Chlorotoluene	ND		NA	1,2,3-Trichlorobenzene	ND		NA
Dibromochloromethane	ND		NA	1,2,4-Trichlorobenzene	ND		NA
1,2-Dibromo-3-chloropropane	ND		NA	1,1,1-Trichloroethane	ND		800
1,2-Dibromoethane	ND		NA	1,1,2-Trichloroethane	ND		NA
Dibromomethane	ND		NA	Trichloroethylene	ND		700
1,2-Dichlorobenzene	ND		7,900	Trichlorofluoromethane	ND		NA
1,3-Dichlorobenzene	ND		1,600	1,2,3-Trichloropropane	ND		400
1,4-Dichlorobenzene	ND		8,500	1,2,3-Trimethylbenzene	ND		NA
Dichlorodifluoromethane	ND		NA	1,2,4-Trimethylbenzene	51	100	NA
1,1-Dichloroethane	ND		200	1,3,5-Trimethylbenzene	ND	100	NA
1,2-Dichloroethane	ND		100	Vinyl chloride	ND		200
1,1-Dichloroethylene	ND		400	o-Xylene	ND	100	1,200
1,2-Dichloroethylene	ND		300	p- & m-Xylenes	ND	100	1,200
1,2-Dichloropropane	ND		NA	MTBE	ND	1,000	NA
1,3-Dichloropropane	ND		300				

All concentrations are in micrograms per kilogram (µg/kg).

ND - Not detected

AGV - Alternative Guideline Value

SCO - Soil Cleanup Criteria

**TABLE 2**

Safeway Construction  
105 West Street  
Brooklyn, New York

**Priority Pollutant Metals Results for 0 - 2' Layer**

Metal	Concentration	SCO
Arsenic	52.0	7.5 or SB
Selenium	5.56	0.2 or SB
Thallium	ND	SB
Antimony	9.34	SB
Lead	1,930	SB
Beryllium	ND	0.16 or SB
Chromium	49.3	10 or SB
Cadmium	12.5	1.0 or SB
Copper	649	25 or SB
Nickel	30.9	13 or SB
Zinc	1,490	20 or SB
Silver	ND	SB
Mercury	1.27	0.1
Iron	54,900	2000 or SB

Metals concentrations are in milligrams per kilogram (mg/kg).  
SVOC concentrations are in micrograms per kilogram (ug/kg).  
ND - Not detected  
SCO - Soil Cleanup Objective  
SB - Site Background concentration  
Lead SB in metropolitan areas ranges from 200 to 500 mg/kg.

Table 3

Safeway Construction  
105 West Street  
Brooklyn, New York

EPA Method 8270 Results for 0 - 2' Layer

Compound	Concentration	AGV	SCO	Compound	Concentration	AGV	SCO
Acenaphthene	ND		90000	4,6-Dinitro-2-methylphenol	ND		NA
Acenaphthylene	ND	1000	41000	2,4-Dinitrophenol	ND		200
Anthracene	ND		700000	2,4-Dinitrotoluene	ND		1000
Benzo(a)anthracene	ND	0.04	3000	2,6-Dinitrotoluene	ND		NA
Benzo(b)fluoranthene	ND	0.04	1100	Di-n-octylphthalate	ND		120000
Benzo(k)fluoranthene	ND		1100	Fluoranthene	ND	1000	1900000
Benzo(g,h,i)perylene	ND	0.04	800000	Fluorene	ND	1000	350000
Benzo(a)pyrene	ND	0.04	11000	Hexachlorobenzene	ND		1400
Benzyl alcohol	ND		NA	Hexachlorobutadiene	ND		NA
Bis(2-chloroethoxy)methane	ND		NA	Hexachlorocyclopentadiene	ND		NA
Bis(2-chloroethyl)ether	ND		NA	Hexachloroethane	ND		NA
Bis(2-chloroisopropyl)ether	ND		NA	Indeno(1,2,3-cd)pyrene	ND	0.04	32000
Bis(2-ethylhexyl)phthalate	ND		435000	Isophorone	ND		4400
4-Bromophenyl phenyl ether	ND		NA	2-Methylnaphthalene	ND		36400
Butyl benzyl phthalate	ND		122000	2-Methylphenol	ND		100
4-Chloroaniline	ND		NA	4-Methylphenol	ND		900
2-Chloronaphthalene	ND		NA	Naphthalene	ND	200	13000
4-Chloro-3-methyl phenol	ND		NA	2-Nitroaniline	ND		430
2-Chlorophenol	ND		NA	3-Nitroaniline	ND		NA
4-Chlorophenyl phenyl ether	ND		NA	4-Nitroaniline	ND		NA
Chrysene	ND	0.04	400	Nitrobenzene	ND		200
Dibenz(a,h)anthracene	ND	1000	1.65E+08	2-Nitrophenol	ND		330
Dibenzofuran	ND		6200	4-Nitrophenol	ND		100
Di-n-butylphthalate	ND		8100	N-Nitrosodiphenylamine	ND		NA
1,3-Dichlorobenzene	ND		1600	N-Nitrosodi-n-propylamine	ND		NA
1,4-Dichlorobenzene	ND		8500	Pentachlorophenol	ND		1000
1,2-Dichlorobenzene	ND		7900	Phenanthrene	ND	1000	220000
3,3'-Dichlorobenzidine	ND		NA	Phenol	ND		30
2,4-Dichlorophenol	ND		NA	Pyrene	ND	1000	665000
Diethylphthalate	ND		7100	1,2,4-Trichlorobenzene	ND		NA
2,4-Dimethylphenol	ND		NA	2,4,5-Trichlorophenol	ND		100
Dimethylphthalate	ND		2000	2,4,6-Trichlorophenol	ND		NA

All concentrations are reported in micrograms per kilogram (ug/kg).

ND - Not detected

AGV - Alternative Guidance Values

SCO - Soil Cleanup Objective

TABLE 4

Safeway Construction  
105 West Street  
Brooklyn, New York

EPA Method 8240 Results for 2' - 5.5' Layer

Compound	Concentration	AGV	SCO	Compound	Concentration	AVG	SCO
Acetone	ND		200	1,2-Dichloropropane	ND		NA
Acrolein	ND		NA	cis-1,3-Dichloropropylene	ND		NA
Acrylonitrile	ND		NA	trans-1,3-Dichloropropylene	ND		NA
Benzene	ND	14	60	Ethanol	ND		NA
Bromodichloromethane	ND		NA	Ethylbenzene	ND	100	5,500
Bromoform	ND		NA	Ethyl methacrylate	ND		NA
Bromomethane	ND		NA	2-Hexanone	ND		NA
2-Butanone	ND		300	Iodomethane	ND		NA
Carbon disulfide	ND		2,700	Methylene chloride	ND		100
Carbon tetrachloride	ND		600	4-Methyl-2-pentanone	ND		1,000
Chlorobenzene	ND		1,700	Styrene	ND		NA
Chloroethane	ND		1,900	1,1,2,2-Tetrachloroethane	ND		600
2-Chloroethylvinyl ether	ND		NA	Tetrachlorethylene	ND		1,400
Chloroform	ND		NA	Toluene	ND	100	1,500
Chloromethane	ND		NA	1,1,1-Trichloroethane	ND		800
Dibromochloromethane	ND		NA	1,1,2-Trichloroethane	ND		NA
Dibromomethane	ND		NA	Trichloroethylene	ND		700
1,4-Dichloro-2-butene	ND		NA	Trichlorofluoromethane	ND		NA
Dichlorodifluoromethane	ND		NA	1,2,3-Trichloropropane	ND		400
1,1-Dichloroethane	ND		200	Vinyl acetate	ND		NA
1,2-Dichloroethane	ND		100	Vinyl chloride	ND		200
1,1-Dichloroethylene	ND		400	Xylenes	ND	100	1,200
1,2-Dichloroethylene	ND		300				

All concentrations are in micrograms per kilogram (ug/kg).

ND - Not detected

AGV - Alternative Guidance Value

SCO - Soil Cleanup Criteria

TABLE 4 (cont)

Safeway Construction  
105 West Street  
Brooklyn, New York

EPA Method 8260 Results for 2' - 5.5' Layer

Compound	Concentration	AGV	SCO	Compound	Concentration	AGV	SCO
Benzene	ND	14	60	2,2-Dichloropropane	ND	..	NA
Bromobenzene	ND		NA	1,1-Dichloropropylene	ND		NA
Bromochloromethane	ND		NA	cis-1,3-Dichloropropylene	ND		NA
Bromodichloromethane	ND		NA	trans-1,3-Dichloropropylene	ND		NA
Bromoform	ND		NA	Ethylbenzene	ND	100	5,500
Bromomethane	ND		NA	Hexachlorobutadiene	ND		NA
n-Butylbenzene	ND	100	NA	Isopropylbenzene	20	100	NA
sec-Butylbenzene	ND	100	NA	p-Isopropyltoluene	ND	100	NA
tert-Butylbenzene	ND		NA	Methylene chloride	ND		100
Carbon tetrachloride	ND		600	Naphthalene	390	200	13000
Chlorobenzene	ND		1,700	n-Propylbenzene	ND	100	NA
Chloroethane	ND		1,900	Styrene	ND		NA
Chloroform	ND		300	1,1,1,2-Tetrachloroethane	ND		NA
1-Chlorohexane	ND		NA	1,1,2,2-Tetrachloroethane	ND		600
Chloromethane	ND		NA	Tetrachloroethane	ND		1,400
2-Chlorotoluene	ND		NA	Toluene	ND	100	1,500
4-Chlorotoluene	ND		NA	1,2,3-Trichlorobenzene	ND		NA
Dibromochloromethane	ND		NA	1,2,4-Trichlorobenzene	ND		NA
1,2-Dibromo-3-chloropropane	ND		NA	1,1,1-Trichloroethane	ND		800
1,2-Dibromoethane	ND		NA	1,1,2-Trichloroethane	ND		NA
Dibromomethane	ND		NA	Trichloroethylene	ND		700
1,2-Dichlorobenzene	ND		7,900	Trichlorofluoromethane	ND		NA
1,3-Dichlorobenzene	ND		1,600	1,2,3-Trichloropropane	ND		400
1,4-Dichlorobenzene	ND		8,500	1,2,3-Trimethylbenzene	ND		NA
Dichlorodifluoromethane	ND		NA	1,2,4-Trimethylbenzene	66	100	NA
1,1-Dichloroethane	ND		200	1,3,5-Trimethylbenzene	29	100	NA
1,2-Dichloroethane	ND		100	Vinyl chloride	ND		200
1,1-Dichloroethylene	ND		400	o-Xylene	ND	100	1,200
1,2-Dichloroethylene	ND		300	p- & m-Xylenes	ND	100	1,200
1,2-Dichloropropane	ND		NA	MTBE	ND	1,000	NA
1,3-Dichloropropane	ND		300				

All concentrations are in micrograms per kilogram (µg/kg).

ND - Not detected

AGV - Alternative Guidance Value

SCO - Soil Cleanup Criteria

**TABLE 5**

Safeway Construction  
105 West Street  
Brooklyn, New York

Priority Pollutant Metals Results for 2' - 5.5' Layer

Metal	Concentration	SCO
Arsenic	11.4	7.5 or SB
Selenium	1.52	0.2 or SB
Thallium	ND	SB
Antimony	3.27	SB
Lead	310	SB
Beryllium	ND	0.16 or SB
Chromium	29	10 or SB
Cadmium	2.34	1.0 or SB
Copper	92.9	25 or SB
Nickel	19.7	13 or SB
Zinc	345	20 or SB
Silver	ND	SB
Mercury	0.75	0.1
Iron	18,000	2000 or SB

Metals concentrations are in milligrams per kilogram (mg/kg).  
SVOC concentrations are in micrograms per kilogram (ug/kg).  
ND - Not detected  
SCO - Soil Cleanup Objective  
SB - Site Background concentration  
Lead SB in metropolitan areas ranges from 200 to 500 mg/kg.  
AGV - Alternative Guidance Value



Table 6

Safeway Construction  
105 West Street  
Brooklyn, New York

EPA Method 8270 Results for 2' - 5' Layer

*mpd*

Compound	Concentration	AGV	SCO	Compound	Concentration	AGV	SCO
Acenaphthene	14000		90000	4,6-Dinitro-2-methylphenol	ND		NA
Acenaphthylene	3100	1000	41000	2,4-Dinitrophenol	ND		200
Anthracene	18000		700000	2,4-Dinitrotoluene	ND		1000
Benzo(a)anthracene	43000	0.04	3000	2,6-Dinitrotoluene	ND		NA
Benzo(b)fluoranthene	41000	0.04	1100	Di-n-octylphthalate	ND		120000
Benzo(k)fluoranthene	26000		1100	Fluoranthene	59000	1000	1900000
Benzo(g,h,i)perylene	17000	0.04	800000	Fluorene	15000	1000	350000
Benzo(a)pyrene	41000	0.04	11000	Hexachlorobenzene	ND		1400
Benzyl alcohol	ND		NA	Hexachlorobutadiene	ND		NA
Bis(2-chloroethoxy)methane	ND		NA	Hexachlorocyclopentadiene	ND		NA
Bis(2-chloroethyl)ether	ND		NA	Hexachloroethane	ND		NA
Bis(2-chloroisopropyl)ether	ND		NA	Indeno(1,2,3-cd)pyrene	19000	0.04	32000
Bis(2-ethylhexyl)phthalate	8800		435000	Isophorone	ND		4400
4-Bromophenyl phenyl ether	ND		NA	2-Methylnaphthalene	6000		36400
Butyl benzyl phthalate	ND		122000	2-Methylphenol	ND		100
4-Chloroaniline	ND		NA	4-Methylphenol	ND		900
2-Chloronaphthalene	ND		NA	Naphthalene	22000	200	13000
4-Chloro-3-methyl phenol	ND		NA	2-Nitroaniline	ND		430
2-Chlorophenol	ND		NA	3-Nitroaniline	ND		NA
4-Chlorophenyl phenyl ether	ND		NA	4-Nitroaniline	ND		NA
Chrysene	38000	0.04	400	Nitrobenzene	ND		200
Dibenz(a,h)anthracene	3900	1000	1.65E+08	2-Nitrophenol	ND		330
Dibenzofuran	12000		6200	4-Nitrophenol	ND		100
Di-n-butylphthalate	ND		8100	N-Nitrosodiphenylamine	ND		NA
1,3-Dichlorobenzene	ND		1600	N-Nitrosodi-n-propylamine	ND		NA
1,4-Dichlorobenzene	ND		8500	Pentachlorophenol	ND		1000
1,2-Dichlorobenzene	ND		7900	Phenanthrene	69000	1000	220000
3,3-Dichlorobenzidine	ND		NA	Phenol	ND		30
2,4-Dichlorophenol	ND		NA	Pyrene	83000	1000	655000
Diethylphthalate	ND		7100	1,2,4-Trichlorobenzene	ND		NA
2,4-Dimethylphenol	ND		NA	2,4,5-Trichlorophenol	ND		100
Dimethylphthalate	ND		2000	2,4,6-Trichlorophenol	ND		NA

All concentrations are reported in micrograms per kilogram (ug/kg).

ND - Not detected

AGV - Alternative Guidance Values

SCO - Soil Cleanup Objective

# APPENDIX E

## LABORATORY REPORTS

# YORK

ANALYTICAL LABORATORIES, INC.

## Technical Report

prepared for

Environmental Concepts, Inc.

2 Salt Meadow Lane

Old Lyme, CT 06371

Attention: Mr. Steve Costello

Report Date: 03/17/97

*Re: Client Project ID: Safeway Construction*

York Project No.: 97030072

Report Date: 03/17/97  
 Client Project ID: Safeway Construction

York Project No.: 97030072

Environmental Concepts, Inc.  
 2 Salt Meadow Lane  
 Old Lyme, CT 06371  
 Attention: Mr. Steve Costello

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 03/06/97. The project was identified as your project "Safeway Construct. ".

The analysis was conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables .

The results of the analysis are summarized in the following table(s).

### Analysis Results

Client Sample ID			TP-1 (0-2')		TP-1 (2-5')	
York ID			97030072-01		97030072-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8240 List soil	SW846-8240	ug/Kg	---	---	---	---
Acetone			Not Detected	10	Not Detected	10
Acrolein			Not Detected	50	Not Detected	50
Acrylonitrile			Not Detected	50	Not Detected	50
Benzene			Not Detected	1	Not Detected	1
Bromodichloromethane			Not Detected	10	Not Detected	10
Bromoform			Not Detected	1	Not Detected	1
Bromomethane			Not Detected	5	Not Detected	5
2-Butanone			Not Detected	10	Not Detected	10
Carbon disulfide			Not Detected	2	Not Detected	2
Carbon tetrachloride			Not Detected	2	Not Detected	2
Chlorobenzene			Not Detected	1	Not Detected	1
Chloroethane			Not Detected	10	Not Detected	10
2-Chloroethylvinyl ether			Not Detected	10	Not Detected	10
Chloroform			Not Detected	1	Not Detected	1
Chloromethane			Not Detected	10	Not Detected	10

Client Sample ID			TP-1 (0-2')		TP-1 (2-5')	
York ID			97030072-01		97030072-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Dibromochloromethane			Not Detected	1	Not Detected	1
Dibromomethane			Not Detected	5	Not Detected	5
1,4-Dichloro-2-butene			Not Detected	50	Not Detected	50
Dichlorodifluoromethane			Not Detected	10	Not Detected	10
1,1-Dichloroethane			Not Detected	2	Not Detected	2
1,2-Dichloroethane			Not Detected	2	Not Detected	2
1,1-Dichloroethylene			Not Detected	2	Not Detected	2
1,2-Dichloroethylene (Total)			Not Detected	2	Not Detected	2
1,2-Dichloropropane			Not Detected	2	Not Detected	2
cis-1,5-Dichloropropylene			Not Detected	2	Not Detected	2
trans-1,3-Dichloropropylene			Not Detected	2	Not Detected	2
Ethanol			Not Detected	500	Not Detected	500
Ethylbenzene			Not Detected	2	Not Detected	2
Ethyl methacrylate			Not Detected	100	Not Detected	100
2-Hexanone			Not Detected	10	Not Detected	10
Iodomethane			Not Detected	10	Not Detected	10
Methylene chloride			Not Detected	1	Not Detected	1
4-Methyl-2-pentanone			Not Detected	10	Not Detected	10
Styrene			Not Detected	1	Not Detected	1
1,1,2,2-Tetrachloroethane			Not Detected	1	Not Detected	1
Tetrachlorethylene			Not Detected	1	Not Detected	1
Toluene			Not Detected	1	Not Detected	1
1,1,1-Trichloroethane			Not Detected	1	Not Detected	1
1,1,2-Trichloroethane			Not Detected	1	Not Detected	1
1,2,3-Trichloroethylene			Not Detected	1	Not Detected	1
Trichlorofluoromethane			Not Detected	1	Not Detected	1
1,2,3-Trichloropropane			Not Detected	1	Not Detected	1
Vinyl acetate			Not Detected	1	Not Detected	1
Vinyl chloride			Not Detected	10	Not Detected	10
Xylenes (Total)			Not Detected	1	Not Detected	1
DILUTION FACTOR			7.4		5.8	
Volatiles-8260+MTBE soil		SW846-8260	ug/Kg	---	---	---
Benzene			Not Detected	1	Not Detected	1
Bromobenzene			Not Detected	1	Not Detected	1
Bromochloromethane			Not Detected	10	Not Detected	10
Bromodichloromethane			Not Detected	10	Not Detected	10
Bromoform			Not Detected	1	Not Detected	1
Bromomethane			Not Detected	10	Not Detected	10
n-Butylbenzene			Not Detected	1	Not Detected	1
sec-Butylbenzene			Not Detected	1	Not Detected	1
tert-Butylbenzene			Not Detected	1	Not Detected	1
Carbon tetrachloride			Not Detected	1	Not Detected	1
Chlorobenzene			Not Detected	1	Not Detected	1
Chloroethane			Not Detected	1	Not Detected	1
Chloroform			Not Detected	10	Not Detected	10
1-Chlorohexane			Not Detected	1	Not Detected	1
Chloromethane			Not Detected	10	Not Detected	10
2-Chlorotoluene			Not Detected	1	Not Detected	1

YORK

Client Sample ID			TP-1 (0-2')	TP-1 (2-5')		
York ID			97030072-01	97030072-02		
Matrix			SOIL	SOIL		
Parameter	Method	Units	Results	MDL	Results	MDL
4-Chlorotoluene			Not Detected	1	Not Detected	1
Dibromochloromethane			Not Detected	1	Not Detected	1
1,2-Dibromo-3-chloropropane			Not Detected	1	Not Detected	1
1,2-Dibromoethane			Not Detected	1	Not Detected	1
Dibromomethane			Not Detected	1	Not Detected	1
1,2-Dichlorobenzene			Not Detected	1	Not Detected	1
1,3-Dichlorobenzene			Not Detected	1	Not Detected	1
1,4-Dichlorobenzene			Not Detected	1	Not Detected	1
Dichlorodifluoromethane			Not Detected	1	Not Detected	1
1,1-Dichloroethane			Not Detected	1	Not Detected	1
1,2-Dichloroethane			Not Detected	1	Not Detected	1
1,1-Dichloroethylene			Not Detected	1	Not Detected	1
1,2-Dichloroethylene (Total)			Not Detected	1	Not Detected	1
1,2-Dichloropropane			Not Detected	1	Not Detected	1
1,3-Dichloropropane			Not Detected	1	Not Detected	1
2,2-Dichloropropane			Not Detected	1	Not Detected	1
1,1-Dichloropropylene			Not Detected	1	Not Detected	1
cis-1,3-Dichloropropylene			Not Detected	1	Not Detected	1
trans-1,3-Dichloropropylene			Not Detected	1	Not Detected	1
Ethylbenzene			Not Detected	1	Not Detected	1
Hexachlorobutadiene			Not Detected	1	Not Detected	1
Isopropylbenzene			Not Detected	1	Not Detected	1
p-Isopropyltoluene			Not Detected	1	20	1
Methylene chloride			Not Detected	1	Not Detected	1
Naphthalene			11000	1	590	1
n-Propylbenzene			Not Detected	1	Not Detected	1
Styrene			Not Detected	1	Not Detected	1
1,1,1,2-Tetrachloroethane			Not Detected	1	Not Detected	1
1,1,2,2-Tetrachloroethane			Not Detected	1	Not Detected	1
Tetrachloroethylene			Not Detected	1	Not Detected	1
Toluene			Not Detected	1	Not Detected	1
1,2,3-Trichlorobenzene			Not Detected	1	Not Detected	1
1,2,4-Trichlorobenzene			Not Detected	1	Not Detected	1
1,1,1-Trichloroethane			Not Detected	1	Not Detected	1
1,1,2-Trichloroethane			Not Detected	1	Not Detected	1
Trichloroethylene			Not Detected	1	Not Detected	1
Trichlorofluoromethane			Not Detected	1	Not Detected	1
1,2,3-Trichloropropane			Not Detected	1	Not Detected	1
1,2,3-Trimethylbenzene			Not Detected	1	Not Detected	1
1,2,4-Trimethylbenzene			51	1	66	1
1,3,5-Trimethylbenzene			Not Detected	1	29	1
Vinyl chloride			Not Detected	10	Not Detected	10
o-Xylene			Not Detected	1	Not Detected	1
p- & m-Xylenes			Not Detected	1	Not Detected	1
Methyl tert-butyl ether (MTBE)			Not Detected	1	Not Detected	1
DILUTION FACTOR			7.4		5.8	
Metals, Priority Pollutant List	EPA SW846	mg/kg	---	---	---	---
Mercury	SW846-7471	mg/kg	1.27	0.25	0.75	0.25

YORK

Client Sample ID			TP-1 (0-2')	TP-1 (2-5')		
York ID			97030072-01	97030072-02		
Matrix			SOIL	SOIL		
Parameter	Method	Units	Results	MDL	Results	MDL
Arsenic			52.0	0.25	11.4	0.25
Selenium			5.56	0.25	1.52	0.25
Thallium			Not detected	0.25	Not detected	0.25
Antimony			9.34	0.25	3.27	0.25
Lead			1930	0.25	310	0.25
Beryllium			Not detected	0.25	Not detected	0.25
Chromium			49.5	0.25	29.0	0.25
Cadmium			12.5	0.25	2.34	0.25
Copper			649	0.25	92.9	0.25
Nickel			30.9	0.25	19.7	0.25
Zinc			1490	0.25	345	0.25
Silver			Not detected	0.25	Not detected	0.25
Iron	SW846-6010	mg/kg	54900	5.00	18000	5.00
BNA-8270 List soil	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			Not Detected	330	14,000	330
Acenaphthylene			Not Detected	330	3,100	330
Anthracene			Not Detected	330	18,000	330
Benzo(a)anthracene			Not Detected	330	13,000	330
Benzo(b)fluoranthene			Not Detected	330	11,000	330
Benzo(k)fluoranthene			Not Detected	330	26,000	330
Benzo(g,h,i)perylene			Not Detected	330	17,000	330
Benzo(a)pyrene			Not Detected	330	41,000	330
Benzyl alcohol			Not Detected	330	Not Detected	330
Bis(2-chloroethoxy)methane			Not Detected	330	Not Detected	330
Bis(2-chloroethyl)ether			Not Detected	330	Not Detected	330
Bis(2-chloroisopropyl)ether			Not Detected	330	Not Detected	330
Bis(2-ethylhexyl)phthalate			Not Detected	330	8,800	330
4-Bromophenyl phenyl ether			Not Detected	330	Not Detected	330
Butyl benzyl phthalate			Not Detected	330	Not Detected	330
4-Chloroaniline			Not Detected	330	Not Detected	330
2-Chloronaphthalene			Not Detected	330	Not Detected	330
4-Chloro-3-methyl phenol			Not Detected	330	Not Detected	330
2-Chlorophenol			Not Detected	330	Not Detected	330
4-Chlorophenyl phenyl ether			Not Detected	330	Not Detected	330
Chrysene			Not Detected	330	38,000	330
Dibenz(a,h)anthracene			Not Detected	330	3,900	330
Dibenzofuran			Not Detected	330	12,000	330
Di-n-butylphthalate			Not Detected	330	Not Detected	330
1,3-Dichlorobenzene			Not Detected	330	Not Detected	330
1,4-Dichlorobenzene			Not Detected	330	Not Detected	330
1,2-Dichlorobenzene			Not Detected	330	Not Detected	330
3,3'-Dichlorobenzidine			Not Detected	330	Not Detected	330
2,4-Dichlorophenol			Not Detected	330	Not Detected	330
Diethylphthalate			Not Detected	330	Not Detected	330
2,4-Dimethylphenol			Not Detected	330	Not Detected	330
Dimethylphthalate			Not Detected	330	Not Detected	330
4,6-Dinitro-2-methylphenol			Not Detected	1700	Not Detected	1700
2,4-Dinitrophenol			Not Detected	1700	Not Detected	1700

YORK

Client Sample ID			TP-1 (0-2')		TP-1 (2-5')	
York ID			97030072-01		97030072-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
2,4-Dinitrotoluene			Not Detected	330	Not Detected	330
2,6-Dinitrotoluene			Not Detected	330	Not Detected	330
Di-n-octylphthalate			Not Detected	330	Not Detected	330
Fluoranthene			Not Detected	330	59,000	330
Fluorene			Not Detected	330	15,000	330
Hexachlorobenzene			Not Detected	330	Not Detected	330
Hexachlorobutadiene			Not Detected	330	Not Detected	330
Hexachlorocyclopentadiene			Not Detected	330	Not Detected	330
Hexachloroethane			Not Detected	330	Not Detected	330
Indeno(1,2,3-cd)pyrene			Not Detected	330	19,000	330
isophorone			Not Detected	330	Not Detected	330
2-Methylnaphthalene			Not Detected	330	6,000	330
2-Methylphenol			Not Detected	330	Not Detected	330
4-Methylphenol			Not Detected	330	Not Detected	330
Naphthalene			Not Detected	330	22,000	330
2-Nitroaniline			Not Detected	1700	Not Detected	1700
3-Nitroaniline			Not Detected	1700	Not Detected	1700
4-Nitroaniline			Not Detected	1700	Not Detected	1700
Nitrobenzene			Not Detected	330	Not Detected	330
2-Nitrophenol			Not Detected	330	Not Detected	330
4-Nitrophenol			Not Detected	1700	Not Detected	1700
N-Nitrosodiphenylamine			Not Detected	330	Not Detected	330
N-Nitrosodi-n-propylamine			Not Detected	330	Not Detected	330
Pentachlorophenol			Not Detected	1700	Not Detected	1700
Phenanthrene			Not Detected	330	69,000	330
Phenol			Not Detected	330	Not Detected	330
Pyrene			Not Detected	330	83,000	330
1,2,4-Trichlorobenzene			Not Detected	330	Not Detected	330
2,4,5-Trichlorophenol			Not Detected	330	Not Detected	330
2,4,6-Trichlorophenol			Not Detected	330	Not Detected	330
DILUTION FACTOR			36.8		5.8	

Units Key:

For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes:

1 MDL (Minimum Detectable Limit) is reported for a dilution factor of 1.0 (no dilution); the MDLs for dilution factors in the above table(s) other than 1.0 are determined multiplying the MDL by this dilution factor. This applies to volatiles, semi-volatiles, pesticides/PCBs, and herbicides

Approved By:

*Robert Q. Bradley*

Robert Q. Bradley  
Managing Director

Date: 03/17/97

YORK



## QA/QC Summary Data

Environmental Concepts Project ID: Safeway Construction

York Project No.: 97030072

*Table 1.0 Volatiles QA/QC Summary Data-Method Blank Results*

### Method Blank Summary-Volatiles 8260 list - Soils

Parameter	MDL	Method Blank 3/12/97
Benzene	5	ND
Bromobenzene	5	ND
Bromochloromethane	5	ND
Bromo-dichloromethane	5	ND
Bromoform	10	ND
Bromomethane	10	ND
n-Butylbenzene	10	ND
sec-Butylbenzene	10	ND
tert-Butylbenzene	10	ND
Carbon tetrachloride	10	ND
Chlorobenzene	10	ND
Chloroethane	10	ND
Chloroform	10	ND
Chloromethane	10	ND
2-Chlorotoluene	10	ND
4-Chlorotoluene	10	ND
Dibromochloromethane	10	ND
1,2-Dibromo-3-chloropropane	20	ND
1,2-Dibromoethane	10	ND
Dibromomethane	20	ND
1,2-Dichlorobenzene	10	ND
1,3-Dichlorobenzene	10	ND
1,4-Dichlorobenzene	10	ND
Dichlorodifluoromethane	10	ND
1,1-Dichloroethane	10	ND
1,2-Dichloroethane	10	ND
1,1-Dichloroethene	10	ND
cis-1,2-Dichloroethene	10	ND
trans-1,2-Dichloroethene	10	ND

Parameter	MDL	Method Blank 3/12/97
1,2-Dichloropropane	10	ND
1,3-Dichloropropane	10	ND
2,2-Dichloropropane	20	ND
1,1-Dichloropropene	10	ND
1,3-Dichloropropene	10	ND
Ethylbenzene	10	ND
Hexachlorobutadiene	10	ND
Isopropylbenzene	10	ND
p-Isopropyltoluene	10	ND
Methylene chloride	10	ND
Naphthalene	10	ND
n-Propylbenzene	10	ND
Styrene	10	ND
1,1,1,2-Tetrachloroethane	10	ND
1,1,2,2-Tetrachloroethane	10	ND
Tetrachloroethene	10	ND
Toluene	10	ND
1,2,3-Trichlorobenzene	10	ND
1,2,4-Trichlorobenzene	10	ND
1,1,1-Trichloroethane	10	ND
1,1,2-Trichloroethane	10	ND
Trichloroethene	10	ND
Trichlorofluoromethane	10	ND
1,2,3-Trichloropropane	20	ND
1,2,3-Trimethylbenzene	20	ND
1,2,4-Trimethylbenzene	10	ND
1,3,5-Trimethylbenzene	10	ND
Vinyl Chloride	10	ND
o-xylene	10	ND
m-xylene	10	ND
p-xylene	10	ND
MTBE	10	ND

ND - None Detected

YORK

Table 2.0 Volatiles QA/QC Summary-Matrix Spike/Matrix Spike Duplicates

Compound	% Recovery Matrix spike	% Recovery Matrix spike Duplicate	RPD %
Benzene	98	100	7
Toluene	96	96	6
Chlorobenzene	96	100	4
1,1-Dichloroethylene	88	100	13
Trichloroethylene	92	96	4

Table 3.0 Semi-Volatiles(Base-Neutral Fraction & PCBs) QA/QC Summary Matrix Spike/Matrix Spike Duplicates

Compound	% Recovery Matrix spike	% Recovery Matrix spike Duplicate	RPD %
1,4-Dichlorobenzene	54	35	44
N-Nitroso-di-n-propylamine	52	40	27
1,2,4-Trichlorobenzene	34	38	33
Acenaphthene	68	46	33
2,4-Dinitrotoluene	72	56	24
Pyrene	110	95	15

Table 4.0 Metals (Lead) QA/QC Summary Digestion Spike and Laboratory Control Sample (LCS)

Element	Digestion Spike-% Recovery	LCS % Recovery
Arsenic	96.3	111
Selenium	97.8	101
Thallium	91.0	112
Lead	108	99.0
Chromium	96.1	91.1
Copper	91.8	103
Antimony	93.4	88.2
Cadmium	82.6	100
Beryllium	87.8	104
Zinc	90.2	95.5
Nickel	93.0	101
Mercury	109.2	97.2

# Field Chain-of-Custody Record

Company Name: 35000 Linnell Report To: Project ID: 10  
 Invoiced To: System of Contamination  
 Samples Collected By (Signature): [Signature]  
 Name (Printed): [Name]

Sample No.	Location/ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
1	T-101	3/6/97		X			500 ml (BNA) SWA
2	T-102	3/6/97		X			500 ml (BNA) SWA

Chain-of-Custody Record

Bottles Relinquished from Lab by: [Signature] Date: 3/6/97

Bottles Received in Field by: [Signature] Date/Time: 3/6/97 11:00

Comments/Special Instructions: [Handwritten notes]

Turn-Around Time: \_\_\_\_\_ Standard: \_\_\_\_\_ RUSH(define): \_\_\_\_\_



AMERICAN  
ENVIRONMENTAL  
ASSESSMENT CORP.

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June 11, 1997

Mr. Grant Pudalov  
Law Offices of Aaron & Carus, P.C.  
115 Eileen Way, Suite 103  
Syosset, NY 11791-9021

Re: 101-105 & 107 West Street, Brooklyn, NY.

Dear Mr. Pudalov

On May 21, 1997, American Environmental Assessment Corp. (AEAC) obtained and analyzed a total of 10 soil samples from the above referenced property.

The objective of the investigation was to determine the horizontal and vertical extent of lead contaminated soil in order to estimate costs for removal and proper disposal of the soil as hazardous or non-hazardous.

A total of 5 borings were installed to a depth of approximately 6 feet below grade. One shallow sample (2'-3') and one deeper sample (5'-6') were obtained and analyzed. Sample depth and locations were chosen based on the information provided in a Phase I Site Assessment Report generated by Environmental Concepts Inc.

Based on the results of this investigation it appears that the main contamination is within the first two feet below grade and that there are two main areas ("hot spots") of approximately 20 x 25 x 4 (74 cubic yards) and 30 x 20 x 4 (89 cubic yards) that have been impacted by lead to a depth of about 4 feet (see Figure 2).

Unfortunately some areas of the property were not accessible at the time of the investigation. Therefore, the above delineation is only an estimate. We would recommend to remove the two areas described above and additionally remove the first two feet of soil throughout the entire yard area except for the area underneath the former concrete foundation.

It is estimated that the two "hot spots" will comprise approximately 220 tons of contaminated soil and the additional area will entail approximately 140 tons.

Initial laboratory results suggested that some of the material could be hazardous to lead. However, AEAC submitted the sample with the highest concentration of lead to the laboratory to be analyzed for TCLP lead. The result of this analyzes showed that the soil can be disposed of as non-hazardous waste. The costs associated with the disposal of non-hazardous waste is significantly lower than the costs for disposal of hazardous soil.

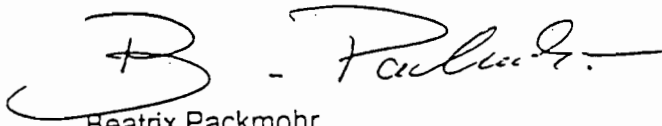
A cost estimate for soil removal and disposal is based on the results of the above investigation and will be provided as a separate document.

Furthermore, in addition to the removal of soil which is essential for the remediation of the property, AEAC would recommend to further investigate the groundwater conditions, in order to ensure that contaminants have not entered the groundwater beneath the subject site.

A minimum of six groundwater samples should be obtained and analyzed for lead and total petroleum hydrocarbons. The results of such a groundwater investigation would determine if any groundwater remediation is necessary in addition to the soil remediation efforts.

If you have any further questions please do not hesitate to call me at (516) 454-6100.

Sincerely

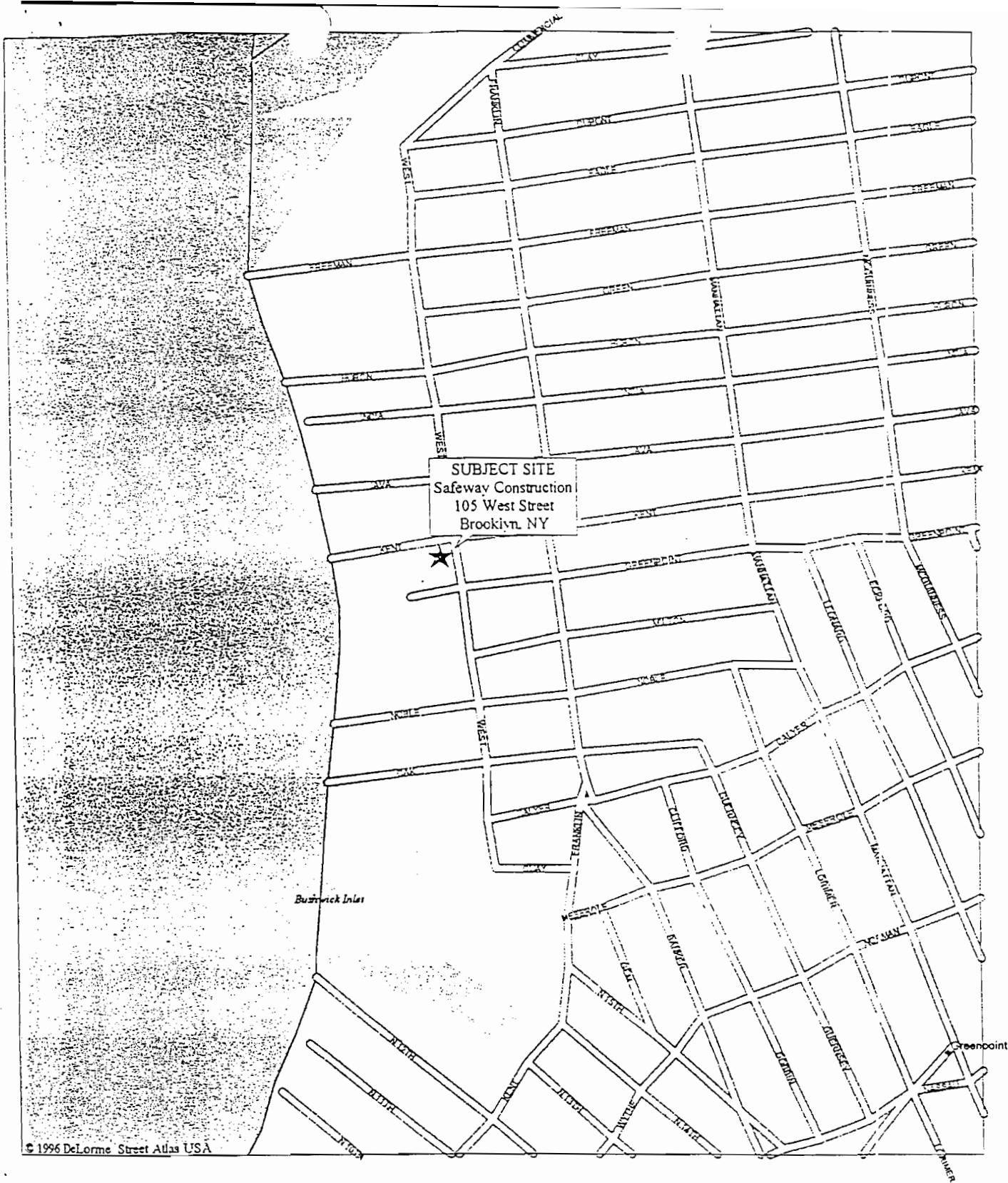


Beatrix Packmohr  
Hydrogeologist/Sr. Project Manager

- Figure 1: Site Location Map
- Figure 2: Site Plan with Soil Boring Locations
  
- Appendix A: Laboratory Report

*enclosures: Invoice  
Cost Estimate for Soil Removal and Disposal*





Mag 16.00  
 Fri Jun 20 15:50 1997

Scale 1:7,812 (at center)

500 Feet

200 Meters

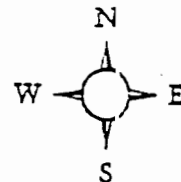


Figure 1: Site Map



AMERICAN  
 ENVIRONMENTAL  
 ASSESSMENT GROUP

West Street

Entrance

Road Plates

SB-2

15.0	2'-3' below grade
4.91	5'-6' below grade

SB-5

417
85.6

SB-4

62.8
5.30

SB-3

39.9
17.6

SB-2

15.0
4.91

Remains of former foundation Wall

Building Structure

Truck

SB-1

955
8.95

Previous Test Pit

Trailer

Trailer

Gravel Bin

Block Bin

101, 105 & 107 West St  
Brooklyn, NY

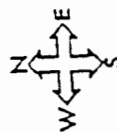
(sketch not to scale)



Soil Boring

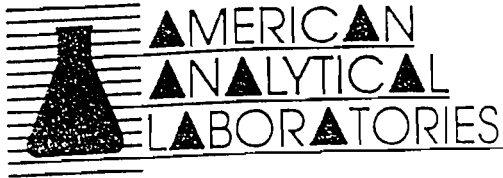
Building Perimeter

Fence



American Environmental  
Assessment Corp.  
Site Plan





May 30, 1997

Ms. Trixi Packmohr  
American Environmental Assessment  
56 Toledo Plaza  
Farmingdale, New York 11735

Re: Safeway Construction, Brooklyn

Dear Ms. Packmohr;

Enclosed please find the Laboratory Analysis Report(s) for sample(s) received on May 21, 1997. American Analytical Laboratories, Inc. analyzed the sample on May 22, 1997 for the following:

Client Sample ID	Analytical Method
SB-1 (2'-3')	Total Lead
SB-1 (5'-6')	Total Lead
SB-2 (2'-3')	Total Lead
SB-2 (5'-6')	Total Lead
SB-3 (2'-3')	Total Lead
SB-3 (5'-6')	Total Lead
SB-4 (2'-3')	Total Lead
SB-4 (5'-6')	Total Lead
SB-5 (2'-3')	Total Lead
SB-5 (5'-6')	Total Lead

If you have any questions or require further information, please call at your convenience. American Analytical Laboratories, Inc. would like to thank you for the opportunity to be of service to you.

Best Regards,

*American Analytical Laboratories, Inc.*

Client: AEAC	Client ID: Safeway Construction (See Below)
Date received: 5/21/97	Laboratory ID: See Below
Date extracted: 5/22/97	Matrix: Soil
Date analyzed: 5/22/97	Contractor: 11418

### LEAD ANALYSIS

Lab ID#	Client ID	MDL	Results mg/kg
9715322	SB-1 (2'-3')	1.65 mg/kg	955
9715323	SB-1 (5'-6')	1.65 mg/kg	5.95
9715324	SB-2 (2'-3')	1.65 mg/kg	15.0
9715325	SB-2 (5'-6')	1.65 mg/kg	4.91
9715326	SB-3 (2'-3')	1.65 mg/kg	39.9
9715327	SB-3 (5'-6')	1.65 mg/kg	17.6
9715328	SB-4 (2'-3')	1.65 mg/kg	62.8
9715329	SB-4 (5'-6')	1.65 mg/kg	5.30
9715330	SB-5 (2'-3')	1.65 mg/kg	417
9715331	SB-5 (5'-6')	1.65 mg/kg	85.6

Method: SW846, 7000 series analysis

*Michael Versaldi*

Laboratory Director



NYSDOH ELAP 11418  
 AIHA PAT, LPAT 15668  
 CTDOH PH-0205

56 TOLEDO STREET • FARMINGDALE, NY 11735 • (516) 454-6100 • FAX (516) 454-8027

# CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

CLIENT NAME/ADDRESS		CONTACT:		SAMPLER (SIGNATURE)	DATE	TIME	SAMPLE(S) SEALED	YES/NO		
AFAC		TUXI JAMES		<i>[Signature]</i>	5/21	skibn		<input checked="" type="checkbox"/>		
PROJECT LOCATION:		SAMPLE # - LOCATION		SAMPLER NAME (PRINT)	DATE	TIME	CORRECT CONTAINER(S)	YES/NO		
SAFeway CONSTRUCTION 105 W 83rd St, Brooklyn		LEAD		JAMES EARL				<input checked="" type="checkbox"/>		
LABORATORY ID #	MATRIX	TYPE	PRES.	ANALYSIS REQUIRED	TURNAROUND REQUIRED:	RECEIVED BY LAB (SIGNATURE)	RECEIVED BY LAB (SIGNATURE)	DATE	TIME	PRINTED NAME
9715322	S	G	LPC	SB-1 (2'-3')	Normal	<i>[Signature]</i>	<i>[Signature]</i>	5/21		mpelanie
9715323	S	G	LPC	SB-1 (5'-6')						
9715324	S	G	LPC	SB-2 (2'-3')						
9715325	S	G	LPC	SB-2 (4'-6')						
9715326	S	G	LPC	SB-3 (2'-3')						
9715327	S	G	LPC	SB-3 (5'-6')						
9715328	S	G	LPC	SB-4 (2'-3')						
9715329	S	G	LPC	SB-4 (5'-6')						
9715330	S	G	LPC	SB-5 (2'-3')						
9715331	S	G	LPC	SB-5 (5'-6')						
					STAT U	BY	DATE	TIME	PRINTED NAME	
							5/21		<i>[Signature]</i>	mpelanie
									<i>[Signature]</i>	Rodriguez

MATRIX S=SOIL; L=LIQUID; SL=SLUDGE; A=AIR; W=WIFE; P=PAINT CHIPS; B=BULK MATERIAL  
 TYPE G=GRAB; C=COMPOSITE, SS=SPLIT SPOON

COMMENTS / INSTRUCTIONS



June 4, 1997

Ms. Trixi Packmohr  
American Environmental Assessment  
56 Toledo Plaza  
Farmingdale, New York 11735

Re: Safeway Construction, Brooklyn

Dear Ms. Packmohr;

Enclosed please find the Laboratory Analysis Report(s) for sample(s) received on May 21, 1997. American Analytical Laboratories, inc. analyzed the sample on June 3, 1997 for the following:

Client Sample ID	Analytical Method
SB-1 (2'-3')	TCLP Lead

If you have any questions or require further information, please call at your convenience. American Analytical Laboratories, Inc. would like to thank you for the opportunity to be of service to you.

Best Regards,

*American Analytical Laboratories, Inc.*

Client: AEAC	Client ID: Safeway Construction (SB-1 (2'-3'))
Date received: 5/21/97	Laboratory ID: 9715322
Date extracted: 6/2/97	Matrix: Soil
Date analyzed: 6/3/97	Contractor: 11418

### TCLP Pb ANALYSIS

Regulatory Limit	Results mg/L
5.00 PPM	3.27

Method: SW846, 1311 extraction tcp, 7000 series analysis.

*Michael Venezia*

Laboratory Director



NYSDOH ELAP 11418  
 AIIA PAT, LPAT 15668  
 CTDOH PH-0205

56 TOLEDO STREET • FARMINGDALE, NY 11735 • (516) 454-6100 • FAX (516) 454-8027

### CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

CLIENT NAME/ADDRESS		CONTACT:		SAMPLER (SIGNATURE)	DATE	TIME	SAMPLE(S) SEALED	YES NO						
AEAC		TUXI JAMES		[Signature]	5/21	skiba		YES NO						
PROJECT LOCATION:		SAMPLER NAME (PRINT)		ANALYSIS REQUIRED X TICKETS JAMES SAM					CORRECT CONTAINER(S)	YES NO				
SAFEWIRE CONSTRUCTION		JAMES SAM												
105 W 830 ST., BROOKLYN														
LABORATORY ID #	MATRIX	TYPE	PRES.						SAMPLE # - LOCATION	P.O.#				
9715322	S	G	LPC						SB-1 (2'-3')					
	S	G	LPC						SB-1 (5'-6')					
	S	G	LPC						SB-2 (2'-3')					
	S	G	LPC						SB-2 (5'-6')					
	S	G	LPC						SB-3 (2'-3')					
	S	G	LPC						SB-3 (5'-6')					
	S	G	LPC	SB-4 (2'-3')										
	S	G	LPC	SB-4 (5'-6')										
	S	G	LPC	SB-5 (2'-3')										
	S	G	LPC	SB-5 (5'-6')										

TURNAROUND REQUIRED:		COMMENTS / INSTRUCTIONS	
NORMAL	STAT	RECEIVED BY LAB (SIGNATURE)	DATE
✓		[Signature]	5/21
		RECEIVED BY LAB (SIGNATURE)	TIME
		[Signature]	4:00
		RECEIVED BY LAB (SIGNATURE)	DATE
		[Signature]	
		PRINTED NAME	DATE
		JAMES BACK	5/21
		PRINTED NAME	TIME
		JAMES BACK	skiba
		PRINTED NAME	DATE
		Melanie Rodriguez	5/21
		PRINTED NAME	TIME
		Melanie Rodriguez	4:00
		PRINTED NAME	DATE
		Melanie Rodriguez	
		PRINTED NAME	TIME
		Melanie Rodriguez	

MATRIX S=SOIL; L=LIQUID; SL=SLUDGE; A=AIR; W=WIPE; P=PAINT CHIPS; B=BULK MATERIAL  
 TYPE G=GRAB; C=COMPOSITE, SS=SPLIT SPOON

# **APPENDIX F**

## **COMPREHENSIVE FACILITY REPORT**

## VISTA INFORMATION SOLUTIONS

<b>COMPREHENSIVE FACILITY PROFILE</b>				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">Client Project/P.O. No.: 9901-27</td> <td style="width: 50%; border: none;">Report No.: 1677001</td> </tr> <tr> <td style="border: none;">Client Reference Name:</td> <td style="border: none;">Date of Report: Apr. 17, 1999</td> </tr> </table>	Client Project/P.O. No.: 9901-27	Report No.: 1677001	Client Reference Name:	Date of Report: Apr. 17, 1999
Client Project/P.O. No.: 9901-27	Report No.: 1677001			
Client Reference Name:	Date of Report: Apr. 17, 1999			

## SITE DESCRIPTION

LAUREL HILL REALTY CORP.

101-105 WEST STREET

BROOKLYN, NY

11222

BROOKLYN COUNTY

## ADDITIONAL SEARCH CRITERIA

Facility Names: 1) LAUREL HILL REALTY

Street Names: 1) WEST

A search of the VISTA Environmental Database did not find facility record(s) which fit the above site descriptions and/or additional search criteria. The following is a summary of the combined risks listed in those records:

Based on the site location information provided by the client, a search of the VISTA Environmental Database found no record of environmental risks for this site.



## INVENTORY OF ENVIRONMENTAL RECORDS REVIEWED

### Records of Existing and Potential Contamination

Agency/Database	Type of Record	List Available	Record Found	Rec. Not Found
US EPA NPL	FEDERAL SUPERFUND SITE	Y		X
US EPA CERC/NFRAP	CERCLIS(C)/NFRAP(N) SITE	Y		X
US EPA CORRACTS	CORRECTIVE ACTIONS SITE	Y		X
US EPA ERNS	SPILL NOTIFICATION	Y		X
STATE SPL/SCL	CONTAMINATED SITE	Y		X
STATE LUST	LEAKING TANKS SITE	Y		X
STATE SOLID WASTE	SOLID WASTE SITE	Y		X
STATE SPILL	SPILL SITE	Y		X

### Records Indicating Hazardous Materials or Environmental Permits Present

Agency/Database	Type of Record	List Available	Record Found	Rec. Not Found
US EPA RCRIS	HAZ WASTE TSD SITE	Y		X
US EPA RCRIS	HAZ WASTE TRANSPORTER	Y		X
US EPA RCRIS	HAZ WASTE GENERATOR	Y		X
US EPA PADS	PCB HANDLER	Y		X
US EPA CICIS	CHEMICAL PRODUCER SITE	Y		X
US EPA TRIS	TOXIC CHEMICAL RELEASES	Y		X
US EPA PCS	WASTE WATER PERMIT	Y		X
US EPA AIRS	REGULATED AIR EMISSIONS	Y		X
US EPA FATES	PESTICIDES PROCESSOR	Y		X
US EPA FRDS	PUBLIC WATER SUPPLY	Y		X
US EPA FINDS	FACILITY INDEX SYSTEM	Y		X
STATE UST/AST	TANK SITES	Y		X

### Records of Environmental Compliance

Agency/Database	Type of Record	List Available	Record Found	Rec. Not Found
US EPA RCRIS	RCRA COMPLIANCE	Y		X
US EPA RAATS	RCRA ADMIN. ACTIONS	Y		X
US EPA PCS	NPDES COMPL/ENF	Y		X
US EPA AIRS	AIR EMISSION COMPLIANCE	Y		X
US EPA FTTS	FIFRA/TSCA/EPCRA COMP	Y		X
US DoL OSHA	OSHA COMPLIANCE	Y		X
US EPA SETS	RESPONSIBLE PARTY	Y		X
US EPA DOCKET	CIVIL JUDICIAL ACTIONS	Y		X

<b>APPENDIX 1</b>
-------------------

**Explanation of VISTA's Database Search for this Report:**

Environmental reporting from the EPA and other government agencies is often inconsistent. The same facility or property may be listed many different ways. A facility may have more than one name (e.g., 'Smith's Garage' and 'Exxon Service Station #12') or an inconsistent presentation of the same name. A street may also be known by more than one name (e.g., 'Main Street' is also known as 'Route 9'). An area may have more than one city name. City names also are frequently abbreviated.

To provide you with the most complete search of government records possible, VISTA does extensive computerized matching of records to combine agency data from different sources. VISTA also performs address verification to the Post Office's Zip+4 database to assure the accuracy of the city and zip code information.

The additional search criteria indicated on Page 1 were used to further enhance the search for government records. This report comprises all VISTA records which fit any of the following conditions relative to the subject property:

<b>Search Criteria</b>
------------------------

- |  |
|--|
| <ul style="list-style-type: none"> <li>• matching street number, street name, city but no zip code:</li> <li>• matching street number, street name, zip code:</li> <li>• within 10 street numbers with matching facility name:</li> <li>• no street number, but matching street name, city or zip and facility name:</li> <li>• intersection of matching street name, matching city or zip and facility name:</li> <li>• no street number or street name with matching city or zip and facility name:</li> <li>• P.O. Box with matching city or zip and facility name:</li> <li>• matching EPA Identification Number:</li> </ul> |
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**Limitations of Information:**

All data contained in this report was obtained from the federal and state government environmental databases. VISTA does not warrant the accuracy, timeliness, merchantability, completeness or usefulness of any information furnished, and the subscriber accepts any and all risks resulting from decisions made based solely or in part on VISTA information.

# COMPREHENSIVE FACILITY PROFILE

## FEDERAL AGENCY RECORDS SEARCHED

Agency	Database	Type of Record	Database Currency
US EPA	NPL	Federal Superfund Sites	06/96
US EPA	CERCLIS	Sites Under Review by US EPA	01/99
US EPA	NFRAP	NFRAP Sites Under Review by US EPA	01/99
US EPA	TRIS	Facilities Releasing Toxic Chemicals	01/98
US EPA	CICIS	Chemical Producers (as of 1981)	05/86
US EPA	FATES	Manufacturers or Processors of Pesticides	07/98
US EPA	PCS	Site with NPDES Water Dischg. Permit	03/98
US EPA	AIRS	Produces Regulated Air Emissions	04/98
US EPA	RCRIS	Hazardous Waste Handlers	02/99
US EPA	CORRACTS	RCRA Corrective Action Site	02/99
US EPA	RAATS	RCRA Administrative Action Site	04/95
US EPA	PADS	PCB Handler	09/97
US EPA	FRDS	Operators of a Pub. Drinking Water Sys.	10/97
US EPA	FINDS	Site on EPA's Facility Index System	04/98
US EPA	ERNS	Spill Sites	03/96
US DoL	OSHA	Facilities with OSHA Inspections	07/95
US EPA	FTTS	FIFRA/TSCA/EPCRA Compliance Sites	11/98
US EPA	SETS	Superfund Potentially Responsible Parties	11/97
US EPA	DOCKETS	Sites listed in Civil Enforcement System	01/99

## NEW YORK STATE AGENCY RECORDS SEARCHED

Agency	Type of Record	Database Currency
Department of Environmental Conservation, Division of Environmental Remediation	Voluntary Cleanup Projects List	01/99
Department of Environmental Conservation, Bureau of Hazardous Site Control	Inactive Hazardous Waste Disposal Sites	06/98
Bureau of Hazardous Site Control, Division of Hazardous Waste Remediation	New York Hazardous Substance Waste Disposal Site Study (includes Coal Tar & Wood)	06/95
Department of Environmental Conservation	LUST (Tank Test Failures) Database	02/99

## NEW YORK State Agency Databases Searched (continued)

Agency	Type of Record	Database Currency
Department of Environmental Conservation, Bureau of Municipal Waste	Recycler's Listing	07/98
Department of Environmental Conservation, Bureau of Waste Management	Incinerators-Resource Recovery Projects	06/96
Department of Environmental Conservation, Division of Solid Waste	Inactive Solid Waste Sites	07/98
Bureau of Technical Support, Division of Solid and Hazardous Material	Regulated Medical Waste Facilities	03/97
Department of Environmental Conservation, Division of Municipal Waste	Active Solid Waste Disposal Sites	07/98
Department of Environmental Conservation, Petroleum Bulk Storage Program	Aboveground Storage Tanks	01/99
Cortland County Health Department, Division of Environmental Health	Cortland County Petroleum Bulk Storage-Aboveground Tanks	08/98
Nassau County Department of Health	Nassau County Article XI In Service Tanks Database	12/98
Rockland County Department of Health	Rockland County Petroleum Bulk Storage-Aboveground Tanks	02/99
Suffolk County Department of Health Services	Suffolk County Petroleum Bulk Storage-Aboveground Tanks	04/98
Department of Environmental Conservation, Petroleum Bulk Storage Program	Underground Storage Tank Database	01/99
Cortland County Health Department, Division of Environmental Health	Cortland County Petroleum Bulk Storage Database	08/98
Nassau County Department of Health	Nassau County Article XI In Service Tanks Database	12/98
Rockland County Department of Health	Rockland County Petroleum Bulk Storage Database	02/99
Suffolk County Department of Health Services	Suffolk County Petroleum Bulk Storage Database	04/98
Department of Environmental Conservation	Spills Database	02/99

**Count Summary and Record Index  
Records of Existing and Potential Contamination**

Agency/Database	# of Records	Page Numbers
NPL - Federal Superfund Site	0	N/A
CERCLIS/NFRAP Site	0	N/A
SPL/SCL - Contaminated Sites	0	N/A
CORRACTS - Corrective Actions Site	0	N/A
LUST - Leaking Tanks Sites	0	N/A
Solid Waste Sites	0	N/A
ERNS Spill Notifications	0	N/A
State Spill Records	0	N/A

**Records of Hazardous Materials or Environmental Permits**

Agency/Database	# of Records	Page Numbers
RCRA Summary Information	0	N/A
RCRA Notification Letters	0	N/A
RCRA EPA/State Inspections	0	N/A
RCRA Part A Application	0	N/A
RCRA Permit Activity Information	0	N/A
PADS - PCB Handler Sites	0	N/A
CICIS - Chemical Producer Sites	0	N/A
TRIS - Toxic Chemical Release Records	0	N/A
PCS - NPDES Waste Water Permits	0	N/A
AIRS - Regulated Air Emissions	0	N/A
FATES - Pesticide Processor Records	0	N/A
FRDS - Drinking Water Supply	0	N/A
FINDS - Facility Index System	0	N/A
UST/AST - Storage Tanks	0	N/A

**Records of Environmental Compliance**

Agency/Database	# of Records	Page Numbers
RCRA Compliance	0	N/A
SETS - Responsible Party	0	N/A
OSHA - OSHA Violations	0	N/A
FTTS - FIFRA/TSCA/EPCRA	0	N/A
DOCKETS - Civil Judicial Actions	0	N/A
PCS - NPDES Viol/Enf	0	N/A
AIRS - Emission Compliance	0	N/A

**Records of Environmental Compliance**

Agency/Database	# of Records	Page Numbers
RAATS - RCRA Admin. Actions	0	N/A

**APPENDIX G**

**SITE**

**MATERIAL SAFETY DATA**

**SHEETS**

**SAFEWAY CONSTRUCTION ENTERPRISES INC.**

105 West Street, Brooklyn, NY 11222.Tel(718)349-6645Fax(718)349-6675

DATE: 4-29-99

PAGE 1 OF 5

TO:	Environmental Concepts, Inc.
ATTN:	Steven Costello
FAX NO:	860-388-6520
TIME SENT:	5:15 pm.
FROM:	Donna Singh

Message:

Re: Material Safety Data Sheet.

NOTE: If you do not receive all pages, please contact us at the above number.





DARCOLE PRODUCTS, INC.  
 P. O. Box 1460  
 Henderson, KY. 42419-1450

## Material Safety Data Sheet

Product Code: DSA 110

Product Name: DarCole Synthetic Air 110

Emergency Phone: 502-826-6499

Effective Date: 01-02-93

Date Printed: 06-29-93 Page 1

### CHEMICAL FAMILY

Sodium Hydroxide

### REACTIVITY DATA

Stability: Stable  
 Incompatibility: N/A  
 Hazardous Combustion: N/A  
 Decomposition Products: N/A  
 Hazardous Polymerization: N/A  
 Conditions to Avoid: N/A

### PHYSICAL DATA

Boiling Point: N/A  
 Vapor Pressure: N/A  
 Vapor Density (Air = 1): N/A  
 Solubility in Water: 100%  
 Specific Gravity (H<sub>2</sub>O): 1.030 -1.080  
 Appearance: Black Liquid  
 Odor: Moderate Odor

### SPILL OR LEAK PROCEDURES

*Steps to be taken if material is released or spilled:*

Flush with water using a wet/dry vac or dry sand/sol absorbent.

Waste Disposal Method:

Dispose where permitted under appropriate Federal, State and Local regulations.

Precautions to be taken in handling and storing:

Avoid exposure to cold weather to keep from freezing.

### FIRE AND EXPLOSION HAZARD DATA

Flash point: N/A  
 Method Used: N/A  
Flammable Limits  
 LFL: N/A  
 UFL: N/A  
 Extinguishing Media: Non-Flammable  
 Fire and Explosion Hazardous: N/A  
 Fire-Fighting Equipment: N/A

### HEALTH HAZARD DATA

Eye: Soluble may cause irritation.  
 Skin Contact: Essential nonirritating to skin.  
 Skin Absorption: Prolonged contact may cause irritation.  
 Ingestion: No hazard is anticipated.  
 Inhalation: Exposure is not likely to be hazardous.



DARCOLE PRODUCTS, INC.  
P. O. Box 1460  
Henderson, KY. 42419-1460

## Material Safety Data Sheet

Product Code: DSA 110

Page: 2

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### FIRST AID

**Eyes:** Flush with water for 15 minutes. Obtain medical attention.  
**Skin:** Wash with soap.  
**Ingestion:** Rinse mouth, then immediately drink 2 - 4 glasses of water and induce vomiting. Obtain medical attention.  
**Inhalation:** Remove to fresh air. Obtain medical attention.

---

### HANDLING PRECAUTIONS

**Exposure Guideline(s):** N/A  
**Ventilation:** Mechanical  
**Respiratory Protection:** N/A  
**Skin Protection:** Rubber and Neoprene Gloves.  
**Eye Protection:** Safety Goggles

---

### ADDITIONAL INFORMATION

This information expressed herein is current as of the date of the Material Safety Data Sheet. DARCOLE PRODUCTS, INC. makes no warranty of any kind express or implied, including those of merchantability and fitness for purpose. The responsibility of DARCOLE PRODUCTS, INC. for claims arising out of breach of warranty, negligence, strict liability or otherwise are limited to the purchase price of the materials.



DARCOLE PRODUCTS, INC  
 P. O. Box 1460  
 Henderson, KY. 42419-1460

**Material Safety Data Sheet**

Product Code: DNS 166

Product Name: DarNset 166

Emergency Phone: 502-826-6499

Effective Date: 05-01-95

Date Printed: 06-29-95 Page 1

**CHEMICAL FAMILY**

NO HAZARDOUS INGREDIENTS

**PHYSICAL DATA**

Boiling Point: 212 F  
 Vapor Pressure: N/A  
 Vapor Density (Air = 1): N/A  
 Solubility in Water: Soluble  
 Specific Gravity (H2O): 1.41 - 1.43  
 Appearance: Dark Brown Liquid  
 Odor: Slight Odor

**FIRE AND EXPLOSION HAZARD DATA**

Flash point: N/A  
 Method Used: N/A  
Flammable Limits  
 LFL: N/A  
 UFL: N/A  
 Extinguishing Media: N/A  
 Fire and Explosion Hazardous: N/A  
 Fire-Fighting Equipment: Regular foam, self contained breathing apparatus.

**REACTIVITY DATA**

Stability: N/A  
 Incompatibility: N/A  
 Hazardous Combustion  
 Decomposition Products: N/A  
 Hazardous Polymerization: N/A  
 Conditions to Avoid: N/A

**SPILL OR LEAK PROCEDURES**

*Steps to be taken if material is released or spilled:*

Flush with water using a wet/dry vac or dry sand/soil absorbent, shovel up. In either case, flush with water following removal. Do not dispose in river or streams.

**Waste Disposal Method:**

Dispose where permitted under appropriate Federal, State and Local regulations.

**Precautions to be taken in handling and storing:**

Keep at controlled temperature (5 F to 120 degrees F) and mix well before using.

**HEALTH HAZARD DATA**

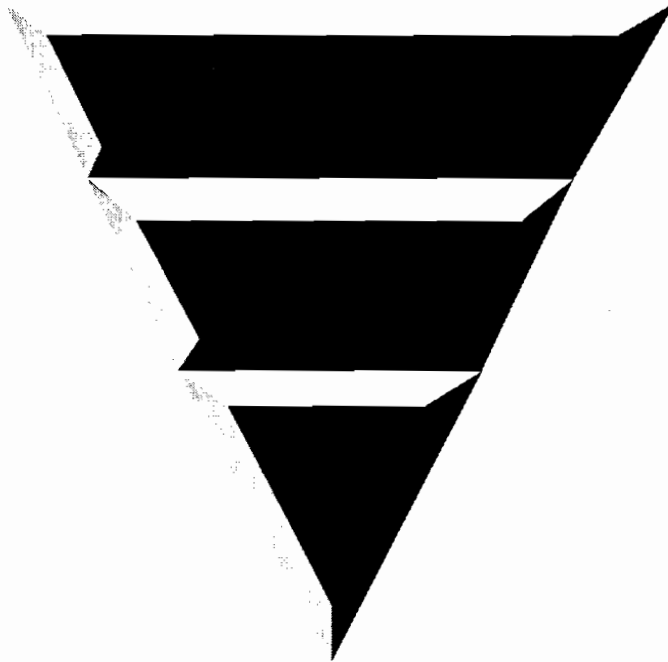
Eye: Soluble may cause irritation.  
 Skin Contact: May be irritating to skin.  
 Skin Absorption: Prolonged contact with skin may cause irritation.  
 Ingestion: May irritate mouth or stomach (nausea).  
 Inhalation: Solution may irritate respiratory tract if inhaled.

# **APPENDIX H**

## **HEALTH & SAFETY PLAN**

**HEALTH AND SAFETY PLAN**  
**FOR 101-105 WEST ST. BROOKLYN, NY**

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**HEALTH & SAFETY**  
**PLAN**

**PREPARED BY ENVIRONMENTAL CONCEPTS, INC.**  
**142 FERRY ROAD SUITE 5**  
**OLD SAYBROOK, CONNECTICUT 06485**

**JULY 29, 1999**

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TABLE 2 ..... Action Levels  
TABLE 3 ..... Site Information Sheet & Emergency Call List  
TABLE 4 ..... Site Specific Safety Concerns  
APPENDIX A ..... Spill Notification Procedure



## 1.0 PROJECT PERSONNEL RESPONSIBILITIES

### 1.1 ECI Project Manager

This person will act in a supervisory capacity over all employees and activities with respect to the remediation of contamination at 101-105 West Street Brooklyn, NY. The project manager has the authority to direct response operations and assumes total control over all site activities. This person has been identified as Steven Costello, Senior Engineer of Environmental Concepts, Inc..

### 1.2 ECI Project Supervisor

The project supervisor oversees all field and related activities specific to Environmental Concepts, Inc. and reports all project related developments on site to the Con Edison Project Manager. The project supervisor for the remediation efforts will be Mr. John Bernhard of ECI.

### 1.3 ECI Site Safety and Health Officer

This ECI individual advises the Con Edison Project Manager and Project Supervisor on all aspects of health and safety on site. The individual also has the authority to stop work if any operation threatens workers or public safety and health. This individual is aware of the site specific safety requirements and the potential hazards found at the site, for example, the presence of overhead and underground electrical utilities. The ECI Site Safety and Health Officer for the project will be Ms. April Krause of ECI.

### 1.4 Work Party

Personnel in the work party safely will complete the on-site tasks required to fulfill the work plan. Personnel in the work party will comply with the site safety plan and ensure that the Site Safety Officer is notified of any unsafe conditions. It is anticipated that the work party will consist of three to five personnel. This may vary due to any changes that occur during the actual site work. All personnel in the work party will have the required 29 CFR 1910.120 40-Hour Training.

### 1.5 ECI Quality Assurance Officer

The ECI Quality Assurance Officer will assist the Project Manager in the development of the sampling and analytical portion of the Quality Assurance Project Plan. The QAO or his/her designee shall conduct periodic field and sampling audits, interface with the analytical laboratory to make requests and resolve problems. The ECI Quality Assurance Officer for the project will be Ms. April Krause of ECI.

**Environmental Concepts, Inc.**

## 2.0 SITE STANDARD OPERATING SAFETY PROCEDURES

Standard operating safety procedures include safety precautions and operating practices, that all Environmental Concepts, Inc. (ECI) personnel and contractors will follow. These include:

### 2.1 Personal Precautions

- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer and ingestion of material is prohibited in any area designated contaminated.
- Hands and face must be thoroughly washed upon leaving the work area.
- Whenever decontamination procedures for outer garments are in effect, the entire body should be thoroughly washed as soon as possible after the protective garment is removed.
- No facial hair which interferes with a satisfactory fit of the mask-to-face seal is allowed on personnel required to wear respirators. Personnel will use the negative pressure fit test prior to each use of the equipment.
- Contact with contaminated or suspected contaminated surfaces should be avoided. Whenever possible, do not walk through puddles, leachate, discolored surfaces, kneel on ground, lean, sit, or place equipment on drums, containers, or the ground.
- Medicine and alcohol can potentiate the effects of exposure to toxic chemicals. Prescribed drugs should not be taken by personnel where the potential for absorption, inhalation, or ingestion of toxic substances exists unless specifically approved by a qualified physician.

### 2.2 Operations

- All personnel going on-site must be adequately trained and thoroughly briefed on anticipated hazards, equipment to be worn, safety practices to be followed, emergency procedures, and communications.
- Any required respiratory protection and chemical protective clothing must be worn by all personnel going into areas designated for wearing protective equipment.
- Personnel on-site must use the buddy system when wearing respiratory protection. As a minimum, two other persons, suitably equipped, are required as safety backup during initial entry.

- Visual contact must be maintained between pairs on-site and safety personnel. Entry team members should remain together to assist each other during emergencies.
- During continual operations, on-site workers act as safety backup to each other. Off-site personnel provide emergency assistance.
- Personnel should practice unfamiliar operations prior to doing the actual procedure.
- Entrance and exit locations must be designated and emergency escape routes delineated. Warning signals for site evacuation must be established.
- Communications using radios, hand signals, signs, or other means must be maintained between initial entry members at all times. Emergency communications should be prearranged in case of radio failure, necessity for evacuation of site, or other reasons.
- Wind indicators visible to all personnel should be strategically located throughout the site, if required.
- Personnel and equipment in the contaminated area should be minimized, consistent with effective site operations.
- Personnel shall not enter any excavations deeper than 4 feet below ground surface unless the excavation is shored according to all applicable OSHA regulations
- Work areas for various operational activities must be established.
- Procedures for leaving a contaminated area must be planned and implemented prior to going on-site. Work areas and decontamination procedures must be established based on expected site conditions.

### **3.0 HEALTH AND SAFETY HAZARDS**

The potential exists for personnel in the work party coming into contact with hazardous materials or equipment during the performance of the work. Areas where concentrations of hazardous materials may exceed the established permissible exposure limits will be roped off from general access.

ECI personnel and subcontractors will perform excavation and disposal of contaminated soils. These ECI operations will involve disturbing localized areas of surface and subsurface soils. Such operations may create minor releases of friable soils potentially containing concentrations of semi-volatile compounds. Wind erosion while on site will create additional exposure.

Such operations will create: potential inhalation exposures to the aforementioned dust and potential skin contact hazards from water sample collection.

Table 1 lists potential health and safety hazards that may be encountered based on general site tasks. This list has been compiled based on the scheduled activities and potential site conditions.

## 4.0 PERSONAL PROTECTIVE EQUIPMENT

### 4.1 Protective Equipment

All personnel will be provided with appropriate personal safety equipment and protective clothing. Each individual will be properly trained in the use of this safety equipment before the start of field activities. Safety equipment and protective clothing shall be used as directed by the ECI Project Supervisor and/or ECI Site Health and Safety Officer. All such equipment and clothing will be cleaned and maintained in proper condition by the personnel. The ECI Site Health and Safety Officer will monitor the maintenance of personnel protective equipment to ensure proper procedures are followed.

Personal protective equipment will be worn at all time designated by this Health and Safety Plan. Levels of protective clothing and equipment are not expected to exceed Level C. Results from the site walk-through, and on-site readings will be used to set task and location specific action levels and levels of personal protection. These are detailed in Section 6.

The personal protective equipment levels designated below are in conformance with EPA criteria for Level A, B, C, and D protection. All respiratory protective equipment used will be approved by National Institute for Occupational Safety and Health (NIOSH) and Mine Safety and Health Administration (MSHA).

### 4.2 Level A Protection

#### A. Personnel Protective Equipment

- Supplied air respirator approved by the NIOSH and MSHA. Respirators may be:
  - ~ Pressure-demand, self-contained breathing apparatus (SCBA)

or

  - ~ Pressure-demand, airline respirator (with escape bottle for Immediately Dangerous to Life and Health (IDLH) or potential for IDLH atmosphere).
- Fully encapsulating chemical resistant suit.
- Coveralls\*
- Long cotton underwear\*
- Gloves (inner), chemical resistant

- Boots, chemical resistant, steel toe and shank (Depending on suit construction, worn over or under suit boot.)
- Hard hat\* (under suit)
- Disposal gloves and boot covers\* (worn over fully encapsulating suit)
- Cooling unit\*
- Two-way radio communications\* (inherently safe).

\* Optional

#### B. Criteria for Selection

Meeting any of these criteria warrants use of Level A Protection:

- The chemical substance has been identified and requires the highest level of protection for skin, eyes, and the respiratory system based on:
  - ~ Measured (or potential for) high concentration of atmospheric vapors, gases or particulates.

or

  - ~ Site operations and work functions involves high potential for splash, immersion, or exposure to unexpected vapors, gases, or particulates of materials highly toxic to the skin.
- Substances with a high degree of hazard to the skin are known or suspected to be present, and skin contact is possible.
- Operations must be conducted in confined, poorly ventilated areas until the absence of substances requiring Level A Protection is determined.
- Direct readings on field Flame Ionization Detectors (FID) or Photoionization Detectors (PID) and similar instruments, indicate high levels of unidentified vapors and gases in the air.

### C. Guidance on Selection

1. Fully encapsulating suits are primarily designed to provide a gas or vapor tight barrier between the wearer and atmospheric contaminants. Therefore Level A is generally worn when high concentrations of airborne substances could severely effect the skin. Since Level A requires the use of a self-contained breathing apparatus, the eyes and respiratory system are also more protected.

Until air surveillance data becomes available to assist in the selection of the appropriate Level of Protection, the use of Level A may have to be based on indirect evidence of the potential for atmospheric contamination or other means of skin contact with severe skin affecting substances.

Conditions that may require Level A Protection include:

- Confined spaces: Enclosed, confined, or poorly ventilated areas are conducive to the build up of toxic vapors, gases, or particulates. (Explosive or oxygen-deficient atmospheres also are more probable in confined spaces). Confined space entry does not automatically warrant wearing Level A Protection, but should serve as a cue to carefully consider and to justify a lower level of protection.
- Suspected/known highly toxic substances: Various substances that are highly toxic for example, fuming corrosives, cyanide compounds, concentrated pesticides. Department of Transportation Poison "A" materials, suspected carcinogens, and infectious substances may be known or suspected to be involved. Field instruments may not be available to detect or quantify air concentrations of these materials. Until these substances are identified and concentrations measured, maximum protection may be necessary.
- Visible emissions: Visible air emissions from leaking containers or railroad/vehicular tank cars, as well as smoke from chemical fires and others, indicate high potential for concentrations of substances that could be extreme respiratory or skin hazards.
- Job Functions: Initial site entries are generally walk-throughs in which instruments and visual observations are used to make a preliminary evaluation of the hazards. In initial site entries, Level A should be worn when:

- ~ There is a probability for exposure to high concentrations of vapors, gases, or particulates.
- ~ Substances are known or suspected of being extremely toxic directly to the skin or by being absorbed.

Subsequent entries are to conduct the many activities needed to reduce the environmental impact of the incident. Levels of protection for later operations are based not only on data obtained from the initial and subsequent environmental monitoring, but also on the probability of contamination and ease of decontamination.

Examples of situations where Level A has been worn are:

- Excavating of soil to sample buried drums suspected of containing high concentrations of dioxin.
  - Entering a cloud of chlorine to repair a valve broken in a railroad accident.
  - Handling and moving drums known to contain waste.
  - Responding to accidents involving cyanide, arsenic, and undiluted pesticides.
2. The fully encapsulating suit provides the highest degree of protection to skin, eyes, and respiratory system if the suit material resists chemicals during the time the suit is worn. While Level A provides maximum protection, all suit material may be rapidly permeated and degraded by certain chemicals from extremely high air concentrations, splashes, or immersion of boots or gloves in concentrated liquids or sludges. These limitations should be recognized when specifying the type of fully encapsulating suit. Whenever possible, the suit material should be matched with the substance it is used to protect against.



### 4.3 Level B Protection

#### A. Personal Protective Equipment

- Pressure-demand, self-contained breathing apparatus (MSHA/NIOSH) approved).
- or
- Pressure-demand, airline respirator (with escape bottle for IDLM or potential for IDLH, atmosphere) OSHA/NIOSH approved.
- Chemical resistant clothing (overalls and long sleeved jacket; coveralls or hooded, one or two-piece chemical-splash suit; disposable chemical resistant one-piece suits).
- Coveralls
- Gloves (outer), chemical resistant
- Gloves (inner), chemical resistant
- Boots (inner), leather work shoe with steel toe and shank
- Boots (outer), chemical resistant (disposable\*)
- Hard Hat (face shield\*)
- Taping between suit and gloves, and suit and boots

\* Optional

#### B. Criteria for Selection

Anyone of the following conditions warrants use of Level B Protection:

- 1) The type and atmospheric concentration of toxic substances have been identified and require a high level of respiratory protection. These would be atmospheres:
  - ~ With concentrations Immediately Dangerous to Life and Health (IDLH)
  - or
  - ~ Exceeding limits of protection afforded by a full-face, air-purifying mask

**Environmental Concepts, Inc.**

or

- ~ Containing substances for which air-purifying canisters do not exist or have low removal efficiency

or

- ~ Containing substances requiring air-supplied equipment, but substances and/or concentrations do not represent a serious skin hazard.

- 2) The atmosphere contains less than 19.5% oxygen.
- 3) Site operations make it highly unlikely that the small, unprotected area of the head or neck will be contacted by splashes of extremely hazardous substances.
- 4) Working in confined spaces.

#### C. Guidance on Selection Criteria

Level B equipment provides a high level of protection to the respiratory tract, but a somewhat lower level of protection to skin than Level A. The chemical resistant clothing required in Level B is available in a wide variety of styles, materials, construction detail, permeability, etc. These factors all affect the degree of protection afforded. Therefore, the Safety Officer should select the most effective chemical resistant clothing based on the known or anticipated hazards and/or job function. (It is anticipated that Level A Protection will not be required under this contract.)

Generally, if a self-contained breathing apparatus is required, Level B clothing rather than a fully encapsulating suit (Level A) is selected based on needing less protection against known or anticipated substances affecting the skin. Level B skin protection is selected by:

- Comparing the concentrations of known or identified substances in air with skin toxicity data.
- Determining the presence of substances that are destructive to and/or readily absorbed through the skin by liquid splashes, unexpected high levels of gases, vapor or particulates, or other means of direct contact.
- Assessing the effect of the substance (at its measured air concentrations or splash potential) on the small area of the head and neck unprotected by chemical resistant clothing.

#### 4.4 Level C Protection

##### A. Personal Protective Equipment

- Half-face, air-purifying, canister-equipped respirator (MSHA/NIOSH approved) with organic vapor and HEPA filter
  - Chemical resistant clothing, poly-coated Tyvek
  - Coveralls
  - \*Gloves (outer), chemical resistant
  - Gloves (inner), chemical resistant, N-DEX
  - Boots (inner), leather work shoe with steel toe and shank
  - Boots (outer), chemical resistant (disposable\*)
  - Hard Hat (face shield\*)
  - Taping between suit and gloves, and suit and boots
- \* Optional

##### B. Criteria for Selection

Meeting all of these criteria permits use of Level C Protection.

- Measured air concentration of identified substances will be reduced by the respirator to, at, or below the substance's Threshold Limit Value (TLV)/Permissible Exposure Limits (PEL) and the concentration is within the service limit of the canister.
- Atmospheric contaminant concentrations do not exceed IDLH levels.
- Atmospheric contaminants, liquid splashes, or other direct contact will not adversely affect the small area of skin left unprotected by chemical resistant clothing.

#### 4.5 Level D Protection

##### A. Personal Protective Equipment

- Coveralls
- Leather, steel-toed boots
- As required:
  - Hard hat
  - Safety glasses/goggles
  - Hearing protection
  - Gloves

##### B. Criteria for Selection

Meeting all of these criteria permits the use of Level D Protection.

- Measured air concentrations of identified substances are below the substances Permissible Exposure Limit (PEL) or TLV.
- Oxygen content is > 19.5%.
- No unknown substances are present.

## 5.0 DECONTAMINATION

It is expected a level D of safety protection will be used for this project. However, ECI will be prepared to upgrade to level C should the need be determined by the ECI Site Health and Safety officer in accordance with guidelines outlined in Section 4.4 of this plan.

### 5.1 Personnel Decontamination

It is expected that Level D decontamination procedures will be in effect at the site. The extent of the decontamination procedures will be at the discretion of ECI's Site Supervisor.

All decontamination waste will be collected and disposed of according to applicable regulations. This disposal will be done at the direction of the ECI Project Supervisor or Project Manager.

In general, poly-coated Tyvek chemical protective clothing (CPC) will be utilized with N-DEX gloves. Personnel will wash hands and face with soap and water as soon as possible upon leaving the site. Personnel are to shower by the end of the day.

### 5.2 Equipment Decontamination

Decontamination will be applicable to all activities on-site and in the contamination reduction zone (CRZ). All equipment (i.e., tools, monitoring equipment, etc.) will receive initial decontamination. All equipment which has been in contact with contaminants shall be stored in an area within the limits of the existing exclusion zone or shall be thoroughly decontaminated prior to leaving the work area. Decontamination will consist of cleaning of the entire piece of equipment to the satisfaction of the Site Supervisor or the responsible Quality Assurance Officer. All dirt, oil, grease, or other foreign materials that are visible will be removed from metal surfaces. Scrubbing with a wire brush may be required to remove materials that adhere to the surfaces.

Decontamination will take place inside the exclusion area. All equipment will be stored on plastic sheeting above ground. All decontamination waters will be collected and disposed of in accordance with applicable regulations. Equipment not in use will be covered with plastic and stored at a designated storage area.

Air monitoring equipment will be protected with an outer coating (i.e., plastic) prior to the initial entry into the exclusion zone. Decontamination will then consist of removal of the protective coating in a manner that will not contaminate the air monitoring equipment.

## 6.0 SITE AIR MONITORING

Field activities associated with the excavation and disposal of soils at the site may pose hazards, such as the release of hazardous substances into the workers' breathing zone. These substances may be in the form of vapors, dusts, or mists that can enter the body through ingestion, inhalation, or direct skin or eye contact. If the ECI Health and Safety Officer, relying on instrument observations and odor, determines that a condition exists in which workers may be exposed to airborne hazardous materials. Monitoring will be performed to ensure appropriate personal protective measures are employed during site activities.

The following describes the monitoring parameters to be evaluated if the ECI Health and Safety Officer determines that a condition exists in which workers may be exposed to airborne hazardous materials. All instruments to be used during site activities will meet the established requirements set forth by OSHA, MSHA, NIOSH, and state agencies where applicable.

### 6.1 Airborne Sampling

Observations will be made during the site walk-through with direct reading equipment where appropriate, such as Photoionization Detectors (PID).

Organic vapor concentrations and/or dust concentrations will be used for upgrading or downgrading protective equipment and implementing additional precautions or procedures (see Table 2, Action Levels).

All site monitoring will be conducted by or under the direction of the ECI Health and Safety Officer or his designated representative. All readings obtained will be recorded in a dedicated site notebook maintained by the ECI Project Supervisor or designate. The ECI Site Health and Safety Officer will maintain all monitoring instruments throughout the site investigation to ensure their reliability and proper operation.

The following sampling and analytical procedures will be used where necessary at the discretion of the ECI Site Health and Safety Officer to change the levels of protection.

#### 6.1.1 *Direct Reading Instruments*

Direct reading instruments will be used for initial screening purposes and elsewhere as appropriate. The PID will be used for screening airborne levels of volatile organic compounds.

A direct reading instrument will be used to monitor airborne particulate levels upwind, downwind and in the work area. If the downwind particulate reading is greater than 150 ug/m<sup>3</sup> than the upwind particulate level, dust suppression techniques will be employed.

## **7.0 ACTION LEVELS**

Action levels have been established for activity cessation, site evacuation, emergency response, and the upgrade or downgrade in the levels of personal protective equipment. Table 2 lists the action levels, airborne concentrations and their respective personal protection. Section 8.0 discusses the minimal personal protection required for specified site activities based on current information. Changes to these specified levels are dependent on the results of air monitoring, as described below.

Note that these action levels are for monitoring in the breathing space of workers on the site. The action levels are based on the 1990 Permissible Exposure Limits (PELs) as determined by OSHA for the specific compounds detected during on-site monitoring.

## **8.0 SITE ACTIVITIES AND ASSOCIATED PERSONNEL PROTECTIVE REQUIREMENTS**

The levels of protection assigned to each activity represent a best estimate of exposure potential and protective equipment needed for that exposure. The site safety officer will revise these levels of protection, up or down, based on his professional judgement utilizing air monitoring results and on-site assessment of actual exposures or other means of evidence, such as observations or wipe sampling, etc.

Note: The ECI Site Safety and Health Officer will make changes to the levels of protection required based on the identification of known substances and any required changes to the scope of the work.



## 9.0 CONTINGENCY PLAN

The ECI Project Supervisor is responsible for implementing the Contingency Plan whenever there is either a threat to **human health** or an environmental hazard. Such situations may include actual or imminent fires, explosions or spills.

The individual discovering the emergency situation is to notify the ECI Project Supervisor and the ECI Site Safety Officer who will then notify the appropriate personnel as described in Table 3.

In the event of an emergency, contractors and non-essential personnel are required to exit the work area and report to their designated emergency mobilization area and wait for instructions from the ECI Site Safety Officer. Emergency notification is provided through an audible alarm system, consisting of an air horn which will be sounded to warn all personnel of fires or other site emergencies.

Upon start of work at the site all contractor representatives will be instructed by the Site Safety Officer concerning emergency evacuation procedures. Contractors will be required to familiarize their employees with these instructions and the location of all exits. In the event an emergency evacuation is required, once outside the work area, the contractor foreman must take a head count to assure all his employees are present and immediately relate this information to the Site Safety Officer.

### 9.1 Assessment

The ECI Project Supervisor is responsible for ascertaining any possible health or environmental hazards and determining the need for evacuation and notification of the proper authorities.

### 9.2 Control Procedure

The employee discovering a fire, explosion, spill or other emergency situation is responsible for notifying the ECI Project Supervisor, and the ECI Site Safety Officer. The Site Safety Officer will assess the situation to determine if it can be adequately handled by available personnel or if additional assistance is needed.

Before any employee attempts to extinguish a fire, clean-up and contain a spill or take any other action, he or she must be aware of the properties of the material involved and its associated hazards. All employees are familiarized with this information during their training period and are instructed on the proper protective clothing to be worn in such a situation.

Table 3 includes a list of the organizations that are available to provide emergency assistance.

### 9.3 Fire and/or Explosion

The most serious emergency situation that could be faced at the facility would be a chemical release or major fire. In the event of a fire or explosion, the ECI Project Supervisor and the Site Safety Officer should be notified as described in the preceding section. The Site Safety Officer is responsible for determining the requirements for outside assistance as well as the necessity for facility evacuation.

The Fire Department should be notified immediately once a fire is detected. Small fires can be extinguished using a fire extinguisher located throughout the facility. Larger fires will require the assistance of the fire department. The fire department will be informed of the nature of the wastes handled on the property and whether or not water is not an adequate extinguishing material. Foam may be required to extinguish major fires at the facility.

Any contaminated structures or equipment must be properly cleaned before being returned to service. Decontamination procedures are described in Section 9.6.

### 9.4 Spill and/or Material Releases

The procedure for notification of the ECI Project Supervisor and the appropriate authorities was described in Section 9.2. In addition, Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, or Superfund) requires that the National Response Center be notified of any release in excess of the reportable quantity of a listed hazardous material.

Spill clean-up poses no danger under normal conditions. The first step is to determine the source of the spill and correct it which would normally involve patching a leaking drum, closing a valve or turning off a pump. In the event of a small spill, absorbent granules or sorbent pads will be utilized to soak up the spilled material. Absorbent materials are kept in designated storage locations in the facility. The granules would then be swept up and containerized in Department of Transportation approved drums.

On-site equipment, i.e., pumps and vacuum trucks, would be put into service to transfer the spilled material from the collection area into the storage tanks. Final clean-up of residuals would involve the use of adsorbents as described for a small spill. Once the cause of the spill is determined and restorative work is complete, the recovered waste could be transferred back into the storage tanks or drums. All sorbent materials would be placed in DOT approved drums.

Any contaminated structures and equipment must be properly cleaned before being returned to service. This procedure will include use of pressure washers and sorbent materials. All affected floors and equipment, pumps and hoses, will be cleaned with detergent.

### 9.5 Prevention of Recurrence or Spread of Fires, Explosions or Releases

The recurrence or spread of fires, explosions and releases will be prevented by the specific actions detailed in Section 9.2. In the event of any such emergency situation, operations at the property will be suspended until it is determined that no risk remains. All response actions are to be taken with the primary objective of protecting human health and safety, and then the environment. The cause and subsequent handling of any emergencies that occur at the site will be methodically reviewed in order to prevent future occurrences.

### 9.6 Post-Emergency Equipment Maintenance

After an emergency situation, any emergency equipment that was used will be decontaminated or replaced.

Equipment needed for decontamination would be: sorbent (such as Speedi-Dry), broom, shovel, rags, detergent, degreaser, water, rinse basin, protective clothing, containers for disposal.

Decontamination of equipment involves these steps:

- 1) Wash thoroughly with detergent and, if necessary, degrease.
- 2) Rinse with water.
- 3) Collect all detergent, degreaser, and rinse water. Drum all contaminated disposables, such as sorbents and protective clothing.

Before operations are resumed, state, local and regional administrators must be notified that clean-up and decontamination activities were performed and that operations will resume.

### 9.7 Container Spills and Leakage

Emergency response procedures for container spills and leakage are specified in Section 9.4.

### 9.8 Tank Spills and Leakage

Emergency response procedures for spills or leaks from the storage tanks or transfer lines are described in Section 9.4.

## 10.0 WORK AREAS

ECI will clearly layout and identify work areas in the field and will limit equipment, operations, and personnel as defined in the following areas:

- a) "Exclusion Zone" - This area will include all areas where environmental monitoring has shown or it is suspected that a potential hazard may exist to workers. The level of personnel protective equipment required in these areas will be determined by the ECI Health and Safety Officer after air monitoring and on-site inspection has been conducted. The area will be clearly delineated from the decontamination area. As work within the exclusion zone proceeds, the delineating boundary will be relocated as necessary to prevent the accidental contamination of nearby people and equipment. The Exclusion Zone will be delineated by fencing (e.g., chain link, snow, or orange plastic fencing).
- b) Support Zone ("Clean" Area) - This area is the remainder of the work site and project site. The "Clean" area will be clearly delineated and procedures implemented to prevent active or passive contamination from the work site. The function of the "Clean" area includes:
  - 1) An entry area for personnel, material, and equipment to the "Exclusion Zone" area of site operations through the Support Zone.
  - 2) An exit for decontamination personnel, materials, and equipment from the "Decontamination" area of site operations.
  - 3) The housing of site special services (for example, laboratory analysis preparation); and
  - 4) A clean storage area for safety and work equipment.

## **11.0 SAFETY EQUIPMENT AND PROTECTIVE CLOTHING SPECIFICATIONS**

ECI shall provide all project personnel with the necessary safety equipment and protective clothing, taking into consideration the potential hazards at the site. ECI will supply all ECI and contractor personnel with clothing specified in Section 4.4.

All contractor employees must wear a non-metallic hard hat that complies with specifications contained in American National Standard Institute Z89,1-1986.

Hearing protection must be worn when working on all operating levels when units are in service and while operating noise-producing equipment.

Leather work shoes or boots meeting ANSI standards must be worn at all times on the work site. Sneakers, sandals, etc., are not permitted at any time.

Appropriate flame retardant clothing must be worn at all times. Tank tops, shorts, and cutoffs are not permitted.

Face and eye protection are required to be worn when working near equipment or operations which present potential face injury from physical or chemical agents.

## 12.0 COMMUNITY AIR MONITORING PLAN

Real-time air monitoring, for volatile compounds and particulate levels at the perimeter of the work area will be implemented. The air monitoring plan includes the following:

- Volatile organic compounds will be monitored at the downwind perimeter of the work area on a continuous basis. If total organic vapor levels exceed 5 ppm above background, work activities will be halted and monitoring continued under the provisions of the Vapor Emissions Response Plan. All readings will be recorded and available for State (DEC & DOH) personnel to review.
- Particulates will be continuously monitored upwind, downwind, and within the work area at temporary particulate monitoring stations. If the downwind particulate level is greater than 150  $\mu\text{g}/\text{m}^3$  than the upwind particulate level, then dust suppression techniques will be implemented. All readings will be recorded and available for State (DEC & DOH) personnel to review.

### **Vapor Emission Response Plan**

If the ambient air concentration of organic vapors exceeds 5 ppm above background at the perimeter of the work area, activities will be halted and monitoring continued. If the organic vapor level decreases to less than 5 ppm above background, then work activities will resume. If the organic vapor levels are greater than 5 ppm over background but less than 25 ppm over background at the perimeter of the work area, activities will resume provided:

- the organic vapor level 200 feet downwind of the work area or half the distance to the nearest residential or commercial structure, whichever is less, is below 5 ppm over background.

If the organic vapor level is above 25 ppm over background at the perimeter of the work area, activities will be halted. When work shutdown occurs, downwind air monitoring as directed by the Site Safety Officer will be employed to ensure that the vapor emission does not impact the nearest residential or commercial structure at levels exceeding those specified in the Major Vapor Emission section.

### **Major Vapor Emission**

If any organic levels greater than 5 ppm over background are identified 200 feet downwind from the work area or half the distance to the nearest residential or commercial property, whichever is less, then all work activities will be halted.

If, following the cessation of the work activities, or as the result of an emergency, organic vapor

levels persist above 5 ppm above the background 200 feet downwind or half the distance to the nearest residential or commercial property from the work area, then the air quality will be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20 foot zone).

If efforts to abate the emission source are unsuccessful and if the following levels persist for more than 30 minutes in the 20 foot zone, the Major Emission Response plan shall automatically be placed into effect;

- if organic vapor levels are approaching 5 ppm above background.

However, the Major Vapor Emission Response Plan shall immediately be placed into effect if the organic vapor levels are greater than 10 ppm above background.

### **Major Vapor Emission Response Plan**

Upon activation, the following activities will be undertaken:

- All Emergency Response Contacts as listed in the Health and Safety Plan will go into effect
- The local police authorities will be immediately contacted by the Site Safety Officer and advised of the situation.
- Frequent air monitoring will be conducted at 30 minute intervals within the 20 foot zone. If 2 successive readings below action levels are measured, air monitoring may be halted or modified at the discretion of the Site Safety Officer.

### **13.0 ADDITIONAL HEALTH AND SAFETY COMMENTS**

- 1) ECI will ensure that all safety equipment and protective clothing are kept clean and well maintained.
- 2) All prescription eyeglasses in use on this project will be safety glasses and will be compatible with respirators. No contact lenses shall be allowed on-site.
- 3) All disposable or reusable gloves worn on the site will be approved by the ECI Health and Safety Officer.
- 4) During periods of prolonged respirator usage in contaminated areas, respirator filters will be changed upon breakthrough. Respirator filters will always be changed daily.
- 5) All re-usable personal protective equipment used on-site will be decontaminated at the end of the work day. Used disposable outerwear will be removed upon leaving the exclusion zone and will be placed inside disposable containers provided for that purpose. These containers will be stored at the site at the designated staging area and the contractor will be responsible for proper disposal of these materials at the completion of the project.
- 6) All air purifying respirators will be individually assigned and not interchanged between workers.
- 7) Contractor, subcontractor, and service personnel unable to pass a fit test as a result of facial hair or facial configuration shall not enter or work in an area that requires respiratory protection.
- 8) The contractor will ensure that all project personnel shall have vision or corrected vision to at least 20/40 in one eye.
- 9) On-site personnel found to be disregarding any provision of this plan will, at the request of the ECI Health and Safety Officer, be barred from the project.
- 10) Poly-coated Tyvek/Saranax suits which become torn or badly soiled will be replaced immediately.
- 11) Eating, drinking, chewing gum or tobacco, smoking, etc., will be prohibited in the work zones.



- 12) All personnel will thoroughly cleanse their hands, face, forearms, and other exposed areas prior to eating, smoking, or drinking.
- 15) All personnel will wash their hands, face, and forearms before using toilet facilities.
- 16) No alcohol, firearms, or drugs (without prescriptions) will be allowed on-site at any time.

## 14.0 MISCELLANEOUS HEALTH AND SAFETY ITEMS

### 14.1 Heat Stress

Pervious Clothing: When the ambient air temperature had exceeded 80° F. for one hour, the ECI Site Health and Safety Officer will begin to monitor employees for signs of heat stress. Monitoring will take the form of measuring oral temperatures. As the air temperature will be measured after every shift at a minimum or as determined by the ECI Site Health and Safety Officer.

Impervious Clothing: When the ambient air temperature has exceed 70° F. for one hour, the ECI Site Health and Safety Officer will begin to monitor employees for signs of heat stress. Monitoring will take the form of measuring oral temperatures. As the air temperature exceeds 85° F., oral temperatures will be measured after every shift at a minimum or as determined by the ECI Site Health and Safety Officer.

In the event that the oral temperature at the beginning of the rest period exceeds 100° F., the employee will be decontaminated and be advised to proceed to an air conditioned room or to apply cool wet cloths to his/her head and neck areas and to drink some fluids. At the end of the rest period, the oral temperature will be taken again to ensure that the employee's temperature is below 100° F. If the oral temperature has remained above 100° F., the employee will be advised to take a shower to reduce his/her temperature. However, if the oral temperature still remains above 100° F. after the shower, the employee will be immediately sent to consult with a physician.

A fluid/electrolyte replacement will be used as necessary to minimize fluid loss. This liquid supplement will be stored in a cooler at the edge of the decontamination zone in plastic squeeze bottles. The plastic bottles will be marked with individual's names. Disposable cups with lids and straws may be used in place of the squeeze bottles. Prior to drinking within the decontamination zone the project personnel shall follow the following decontamination procedures:

- 1) Personnel shall wash and rinse their outer gloves and remove them.
- 2) Personnel shall remove their hard hats and respirators and place on a table.
- 3) Personnel shall remove their inner gloves and place them on a table.
- 4) Personnel shall wash and rinse their face and hands.

- 5) Personnel shall carefully remove their personal bottle or cup from the cooler to ensure that their outer clothes do not touch any bottles, cups, etc.
- 6) The used bottle or cups will not be returned to the cooler, but will be placed in a receptacle or container to be cleaned or disposed of.
- 7) Personnel shall replace their respirators, hard hats, gloves, and tape gloves prior to re-entering the exclusion zone.

#### 14.2 Equipment and Materials Retained On-Site

Equipment used on a continuing basis within the Exclusion Zone, such as drilling rig(s), sampling equipment, etc., will be stored in a segregated area within the substation compound. All equipment stored within the Exclusion Zone will be decontaminated in accordance with the procedures described in 14.3. This area will be secured to prevent unauthorized access.

Prior to testing and proper disposal, drums of contaminated auger cuttings, well development and purge water, and used personal protective equipment will be placed in a staging area. This area will be secured to prevent unauthorized access.

#### 14.3 Equipment and Materials Decontamination Facility

All equipment and material used in this project shall be thoroughly washed down in accordance with established Federal and State procedures before it is removed from the project. With the exception of the excavated materials, all other contaminated debris, clothing, etc., which cannot be decontaminated shall be disposed of.

#### 14.5 Heavy Equipment

Earth moving equipment, etc., all pose significant and potentially serious safety hazards. Safety hazards include strike hazards, point of operation entanglement hazards, and dismemberment and impalement hazards. All operations around any type of earth moving equipment where rotating machinery, etc., shall be in accordance with OSHA standards for construction, 29 CFR 1926.

## **15.0 SAFETY MEETINGS**

The ECI Site Health & Safety Officer or his designated representative will conduct safety meetings which will be mandatory for all project personnel. The meetings will provide a review of existing equipment and protocols, and will examine new site conditions as they are encountered.

Additional safety meetings will be held on an as required basis.

## 16.0 MEDICAL SURVEILLANCE

ECI retains Middlesex Medical Services to ensure that it is in compliance with the Medical Monitoring Program that is outlined in 29 CFR 1910.134. The pre-employment physical includes, but is not limited to, the following:

1. Complete blood profile.
2. Blood chemistry to include: chloride, CO<sub>2</sub>, potassium, sodium, BUN, glucose, globulin, total protein, albumin, calcium, cholesterol, alkaline phosphates, triglycerides, uric acid, creatinine, total bilirubin, phosphorus, lactic dehydrogenase, SGPT, SGOT.
3. Urine analysis.
4. "Hands on" physical examination to include a complete evaluation of all organ systems including any follow-up appointments deemed necessary in the clinical judgement of the examining physician to monitor any chronic conditions or abnormalities.
5. Electrocardiogram
6. Chest X-ray
7. Pulmonary function
8. Tetanus booster shot (if no inoculation has been received within the last five years).
9. Complete medical history as provided in the current questionnaire used by the New York State Department of Civil Service, Employee Health Service, State Office Building Campus, Albany, New York.

ECI also conducts annual exams and termination exams in accordance with 29 CFR 1910.134. All personnel working at the site will be enrolled in the ECI Medical Monitoring Program.

## TABLE 1 (Typical)

### A. Known and Potential Site Hazards: *Chemical*

<i>Aromatic Compounds</i>	<i>Permissible Exposure Levels (PEL)</i>
<b>Benzene</b>	<b>1 ppm</b>
<b>Toluene</b>	<b>100 ppm</b>
<b>Xylene</b>	<b>100 ppm</b>

### B. Known and Potential Site Hazards: *Non-Chemical*

- **Physical injury caused by holes or ditches, sharp objects, steep grades, slippery surfaces, uneven terrain, etc.**
- **Fire and Explosion**
- **Heat Stress**
- **Personal Protective Equipment failure, such as air source failure, tearing or permeation of protective clothing, facepiece fogging**
- **Noise**
- **Personal injury caused by earth moving equipment**

## TABLE 2 (Typical)

### ACTION LEVELS

<u>Substance Concentrations (ppm)</u>	<u>Level of Protection</u>
---------------------------------------	----------------------------

**Benzene (ppm)**

< 1	Level D
≥ 1 < 10	Level C
> 10	Level B

**Xylene and Toluene (ppm)**

< 100	Level D
≥ 100 < 1,000	Level C
> 1,000	Level B

**Note:** Unknown organic vapor action levels are based on the lowest known exposure limits for chlorine (PEL = 1 ppm, IDLH = 30 ppm). The air purifying cartridge limitation for chlorine is 10 ppm.

# TABLE 3

## SITE INFORMATION SHEET & EMERGENCY CALL LIST

### MUNICIPAL EMERGENCY PERSONNEL:

<u>FIRES - SPILLS:</u>	Fire Dept.	Tel.	Emergency	911
<u>AMBULANCE:</u>	Police	Tel.	Emergency	911
<u>LOCAL POLICE:</u>	Police	Tel.	Emergency	911
<u>EMERGENCY MEDICAL SERVICES</u>	West Queens General Hospital Astoria, NY	Tel.	(914) 932-1000	



## **TABLE 3 (Continued)**

### **SITE INFORMATION SHEET & EMERGENCY CALL LIST**

#### **DIRECTIONS TO SITE:**

**BQE to LIE. Take 1st exit (Greenpoint Ave). Follow Greenpoint Avenue to West St. Take right on West St. Site will be on the left.**

#### **DIRECTIONS TO HOSPITAL:**

**West Street to Greenpoint Avenue. Greenpoint Avenue to McGuiness Blvd. McGuiness Blvd to 21st Street. 21st Street toward 59th Street Bridge. Left on 30th Avenue. Proceed two blocks. Hospital is on 30th Avenue and Crescent Street.**

# **TABLE 4**

## **Site Specific Safety Concerns**

### **Site Schedule Requirements:**

**8:00 a.m. To 5:00 p.m.**

### **Site Space Limitations:**

**None**

### **Site Access Requirements:**

**8:00 a.m. to 5:00 p.m.**

### **Site Overhead Utility Limitations:**

**None**

### **Known Site Subsurface Contaminants:**

**Generic Soil hydrocarbon and metals contamination.**

# **APPENDIX A**

# **Spill Notification Procedure**

In the event of a spill and/or a Major Vapor Emission as described in Section 12.0, the ECI Site Safety Officer will immediately contact local police and fire authorities. All non-essential personnel will exit the exclusion zone and the Site Health and Safety Officer shall determine the nature and extent of the release, and cooperate with local authorities in determining a monitoring and response plan.