



# **Draft Limited Remedial Investigation and Building Characterization Report**

Former Empire Electric Facility  
Brooklyn, NY  
NYSDEC Site #2-24-015  
NYSDEC Work Assignment #D003970-21

February 2007

DRAFT Report

Empire Electric

# Limited Remedial Investigation and Building Characterization Report

*5200 First Avenue  
Brooklyn, New York  
NYSDEC Site  
#2-24-015  
NYSDEC Work Assignment #D003970-21*

February 2007  
ERM Ref. No. 0024843

**Environmental Resources Management**  
399 Boylston Street, 6<sup>th</sup> Floor  
Boston, Massachusetts 02116



## TABLE OF CONTENTS

### LIST OF ACRONYMS

*v*

|            |                                                           |            |
|------------|-----------------------------------------------------------|------------|
| <b>1.0</b> | <b>INTRODUCTION</b>                                       | <b>1-1</b> |
| 1.1        | PURPOSE AND ORGANIZATION OF REPORT                        | 1-1        |
| 1.2        | SITE DESCRIPTION                                          | 1-1        |
| 1.3        | SITE GEOLOGY AND HYDROLOGY                                | 1-2        |
| 1.4        | SURFACE WATER HYDROGEOLOGY                                | 1-2        |
| 1.5        | SITE HISTORY                                              | 1-2        |
| <b>2.0</b> | <b>REMEDIAL INVESTIGATION ACTIVITIES</b>                  | <b>2-1</b> |
| 2.1        | WELL SEARCH                                               | 2-2        |
| 2.2        | UTILITY MARKOUT                                           | 2-2        |
| 2.3        | SUB-SLAB SOIL VAPOR AND INDOOR AIR SAMPLING               | 2-2        |
| 2.4        | INVESTIGATION OF SHALLOW SOIL                             | 2-3        |
| 2.5        | INVESTIGATION OF GROUNDWATER                              | 2-4        |
| 2.6        | ANALYTICAL DATA QUALITY EVALUATION                        | 2-4        |
| 2.7        | RELIABILITY OF LABORATORY ANALYTICAL DATA                 | 2-5        |
|            | 2.7.1 Laboratories Performing Analyses                    | 2-5        |
|            | 2.7.2 Analytical Procedures                               | 2-5        |
| 2.8        | DATA VALIDATION                                           | 2-6        |
|            | 2.8.1 Objectives                                          | 2-6        |
|            | 2.8.2 Procedures                                          | 2-6        |
|            | 2.8.3 Results                                             | 2-7        |
| <b>3.0</b> | <b>DESCRIPTION OF ENVIRONMENTAL CONDITIONS</b>            | <b>3-1</b> |
| 3.1        | EVALUATION OF DATA                                        | 3-1        |
|            | 3.1.1 Sub-slab Soil Vapor and Indoor Air                  | 3-1        |
|            | 3.1.2 Soil                                                | 3-1        |
|            | 3.1.3 Groundwater                                         | 3-3        |
|            | 3.1.3.1 Groundwater Quality                               | 3-3        |
| <b>4.0</b> | <b>BUILDING CLEANOUT AND CHARACTERIZATION</b>             | <b>4-1</b> |
| 4.1        | DOOR CONSTRUCTION AND DEBRIS REMOVAL                      | 4-1        |
| 4.2        | BUILDING MATERIALS CHARACTERIZATION                       | 4-1        |
| 4.3        | ASBESTOS CONTAINING MATERIALS AND LEAD BASED PAINT SURVEY | 4-2        |
| 4.4        | STRUCTURAL ASSESSMENT/SAFETY INSPECTION                   | 4-2        |
| <b>5.0</b> | <b>CONCLUSIONS</b>                                        | <b>5-1</b> |
| 5.1        | SUMMARY OF IMPACTS                                        | 5-1        |
| 5.2        | DATA GAPS AND AREAS FOR FURTHER INVESTIGATION             | 5-1        |
| <b>6.0</b> | <b>REFERENCES</b>                                         | <b>6-1</b> |

## **LIST OF FIGURES**

**1-1    *Site Location Map***

**1-2    *Site Map***

**2-1    *Soil, Soil Vapor, Indoor Air, and Groundwater Sample Location Plan with Soil PCB Results***

**4-1    *Basement Pillar Plan PCB Immuno-Assay Results***

**4-2    *Basement Floor Plan PCB Immuno-Assay Results***

**4-3    *Main Floor Plan PCB Immuno-Assay Results***

**4-4    *First Mezzanine Floor Plan PCB Immuno-Assay Results***

**4-5    *Second Mezzanine Floor Plan PCB Immuno-Assay Results***

**4-6    *Basement Floor Plan USEPA Method 8082 PCB Results***

**4-7    *Main Floor Plan USEPA Method 8082 PCB Results***

**4-8    *First Mezzanine Floor Plan USEPA Method 8082 PCB Results***

**4-9    *Second Mezzanine Floor Plan USEPA Method 8082 PCB Results***

## LIST OF TABLES

- 2-1 *Sample Inventory and Analyses Performed of Soil, Soil Vapor, Indoor Air, and Groundwater*
- 2-2 *Summary of Sub-Slab Soil Vapor and Indoor Air Sampling Results*
- 2-3 *Summary of Soil Boring Analytical Results - Volatile Organic Compounds*
- 2-4 *Summary of Soil Boring Analytical Results - Semivolatile Organic Compounds*
- 2-5 *Summary of Soil Boring Analytical Results - Pesticides and Polychlorinated Biphenyls*
- 2-6 *Summary of Soil Boring Analytical Results - Inorganics*
- 2-7 *Summary of Groundwater Analytical Results - Volatile Organic Compounds*
- 2-8 *Summary of Groundwater Analytical Results- Semivolatile Organic Compounds*
- 2-9 *Summary of Groundwater Analytical Results - Polychlorinated Biphenyls*
  
- 4-1 *Immuno-Assay Screening Results: Polychlorinated Biphenyls in Basement Building Materials*
- 4-1A *Immuno-Assay Screening Results: Polychlorinated Biphenyls in Basement Building Materials at 1/4-inch Depth*
- 4-2 *Immuno-Assay Screening Results: Polychlorinated Biphenyls in Main Floor Building Materials*
- 4-2A *Immuno-Assay Screening Results: Polychlorinated Biphenyls in Main Floor Building Materials at 1/4-inch Depth*
- 4-3 *Immuno-Assay Screening Results: Polychlorinated Biphenyls in First Mezzanine Building Materials*
- 4-4 *Immuno-Assay Screening Results: Polychlorinated Biphenyls in Second Mezzanine Building Materials*
- 4-5 *USEPA Method 8082 Results: Polychlorinated Biphenyls in Select Building Material Samples*

## ***LIST OF APPENDICES***

|                          |                                                                                                                |
|--------------------------|----------------------------------------------------------------------------------------------------------------|
| <b><i>APPENDIX A</i></b> | <b><i>Field Notes</i></b>                                                                                      |
| <b><i>APPENDIX B</i></b> | <b><i>Freedom of Information Request for Well Search</i></b>                                                   |
| <b><i>APPENDIX C</i></b> | <b><i>Laboratory Data Packages (on diskette)</i></b>                                                           |
| <b><i>APPENDIX D</i></b> | <b><i>Data Validation Reports (DVRs) (on diskette)</i></b>                                                     |
| <b><i>APPENDIX E</i></b> | <b><i>Photo Log</i></b>                                                                                        |
| <b><i>APPENDIX F</i></b> | <b><i>Disposal Tickets and Waste Manifests</i></b>                                                             |
| <b><i>APPENDIX G</i></b> | <b><i>Asbestos Containing Materials Inspection Report</i></b>                                                  |
| <b><i>APPENDIX H</i></b> | <b><i>Report of Lead Based Paint XRF Testing</i></b>                                                           |
| <b><i>APPENDIX I</i></b> | <b><i>Report on the Structural Assessment/Safety Inspection of the<br/>Former Empire Electric Facility</i></b> |

## LIST OF ACRONYMS

|        |                                                         |
|--------|---------------------------------------------------------|
| ACM    | Asbestos Containing Material                            |
| ASP    | Analytical Services Protocol                            |
| bgs    | Below Grade Surface                                     |
| CLP    | Contract Laboratory Program                             |
| DO     | Dissolved Oxygen                                        |
| DUSR   | Data Validation Report                                  |
| ELAP   | Environmental Laboratory Accreditation Program          |
| ERM    | Environmental Resources Management                      |
| FOIL   | Freedom of Information Law                              |
| GWQS   | Groundwater Quality Standards                           |
| LBP    | Lead-based Paint                                        |
| ml/min | Milliliters per Minute                                  |
| msl    | Mean Sea Level                                          |
| NYCRR  | New York Code of Rules and Regulations                  |
| NYSDEC | New York State Department of Environmental Conservation |
| NYSDOH | New York State Department of Health                     |
| NAPL   | Non-aqueous phase liquid                                |
| ORP    | Oxidation/Reduction Potential                           |
| PCE    | Tetrachloroethene                                       |
| PID    | Photoionization detector                                |
| ppb    | parts per billion                                       |
| ppm    | parts per million                                       |
| PSA    | Preliminary Site Assessment                             |
| QAPP   | Quality Assurance Project Plan                          |
| RI     | Remedial Investigation                                  |
| SCGs   | Standards, Criteria and Guidance                        |
| SCOs   | Soil Cleanup Objectives                                 |
| SOW    | Statement of Work                                       |
| STL    | Severn Trent Laboratories                               |
| SVOCs  | Semivolatile Organic Compounds                          |
| TAL    | Target Analyte List                                     |
| TCE    | Trichloroethene                                         |
| TCL    | Target Compound List                                    |
| TOGS   | Technical and Operational Guidance Series               |
| ug/kg  | micrograms/kilogram (ppb)                               |
| ug/l   | Micrograms per Liter                                    |
| USEPA  | United States Environmental Protection Agency           |
| VOCs   | Volatile Organic Compounds                              |

## **1.0**

### **INTRODUCTION**

This Limited Remedial Investigation (Limited RI) and Building Characterization Report has been prepared by Environmental Resources Management (ERM) on behalf of the New York State Department of Environmental Conservation (NYSDEC) under Work Assignment No. D003970-21 for the Former Empire Electric site, Brooklyn, New York. The Registry of Inactive Hazardous Waste Disposal Sites in New York identifies the Former Empire Electric facility as site Number 2-24-015.

## **1.1**

### **PURPOSE AND ORGANIZATION OF REPORT**

The purpose of the Limited RI and Building Characterization Report is to:

- (1) present results of the limited RI performed at the Former Empire Electric facility in November-December 2006, including soil, soil vapor, indoor air, and one groundwater sample;;
- (2) report on the building trash removal in February 2006; and
- (3) present the findings of the building cleanout and characterization conducted in February 2006 through December.

The report is divided into the following sections:

- Introduction: the Site description and background information, a summary of physical characteristics of the Site and a discussion of the operational and disposal history.
- Remedial Investigation Activities: the scope of field activities conducted during the Limited RI.
- Site Environmental Conditions: a discussion of the sampling program conducted during the RI, the analytical results, and the applicable Standards, Criteria and Guidance values (SCGs).
- Building Cleanout and Characterization: a discussion of the sampling program conducted for the building characterization, including asbestos containing materials (ACM) survey, lead-based paint (LBP) survey, and structural conditions survey.
- Conclusions: identifies any data gaps and/or areas for further investigation.
- References: The final section presents the reference documents used to prepare this report.

## **1.2**

### **SITE DESCRIPTION**

The Site is located at 5200 1<sup>st</sup> Avenue in Brooklyn, Kings County, New York, at the intersection of 52nd Street. The property is currently owned by Martin Goldman of 5200 Enterprises, Inc. The Site consists of an abandoned factory building, with the majority of the roof missing. The building takes up the whole property and is surrounded by sidewalk on



the north and east. To the west, a portion of the building is occupied by the East of Hollywood Company. Immediately to the north (separated by a small air-shaft) is a building formerly occupied by the Consolidated Edison Company. The majority of interior fixtures and all equipment has been removed. Currently, there are no public services connected to the building. A Site Location Map is presented in Figure 1-1. A facility layout of the main floor plan is presented in Figure 1-2.

### **1.3** *SITE GEOLOGY AND HYDROGEOLOGY*

The Site, situated approximately 1,200 feet from the Upper New York Bay at the western end of the borough of Brooklyn, in New York City, is topographically relatively flat. The elevation of the Site is approximately 16 feet above mean sea level (msl), sloping gradually up from the river. Site soil directly beneath the building consists primarily of fill and debris materials, underlain by sand and gravel, and beneath these layers, bedrock. The water table beneath the Site occurs at a depth of approximately 17 to 21 feet below ground surface (bgs). Regional groundwater flow direction is to the west, toward the Upper New York Bay. The depth to bedrock is unknown, but is likely greater than 100 feet bgs.

### **1.4** *SURFACE WATER HYDROLOGY*

Surface drainage generally follows the topography, and flow is northwest along 52<sup>nd</sup> Street toward the Upper New York Bay. Storm water drains are present along 52<sup>nd</sup> Street and First Avenue. Surface run-off collects in these drains and then flows directly into the Upper New York Bay.

### **1.5** *SITE HISTORY*

The Site building was constructed in 1892 by the Brooklyn City Railroad Company for use as a power plant for the municipally-owned trolley system. The power generating facility was used until the 1930s and conveyed to the City of New York in 1940. In 1951, the property was sold to Hastone Realty Corporation who subdivided the parcel into the two lots (Lot 9 and Lot 6). On 5 September 1951, Lot 9 was sold to Ben Hasnas. The Hasnas family operated the Empire Electric Company (Empire) on Lot 9, the eastern two-thirds of the building, from 1951 to December 1986 when the property was sold to 5200 Enterprises. Empire was utilized as a warehouse and electrical equipment re-conditioning facility. Significant polychlorinated biphenyl (PCB) contamination of Lot 9 was identified at the time of the building sale in 1986 and a cleanup was conducted by ENSI, Inc. However, PCBs at elevated levels were still present in post-clean up samples as documented by the cleanup contractor, ENSI, Inc. in their 12 December 1986 report.

On 28 February 1989, the NYSDEC listed the Site as a Class 2 site on the New York State Registry of Inactive Hazardous Waste Sites (The Registry). In 1993, NYSDEC collected and analyzed four shallow soil samples from outside the building along 52nd Street for PCBs. The data indicated the presence of PCBs above the NYSDEC surface soil cleanup guidelines (i.e., greater than 1 milligrams per kilograms [mg/kg]). In 1999, Lawler, Matusky, & Skelly Engineers LLP (LMS) conducted a Preliminary Site Assessment (PSA) of the Site on behalf of the NYSDEC to determine if the building was still contaminated and whether other media (i.e., soil and groundwater) had also been contaminated by site activities (LMS, 1999).

The PSA results were summarized in the LMS "Preliminary Site Assessment Report Volumes I and II, Empire Electric Company, Site No. 2-24-015" dated December 1999. This assessment showed that concrete chip samples contained PCBs at concentrations up to 260,000 mg/kg and soil samples collected from beneath the building contained PCB at concentrations up to 960 mg/kg. Additionally, PCBs were detected in groundwater collected from a downgradient monitoring well installed near the Site (71 micrograms per liter [ $\mu\text{g/L}$ ]) (LMS, 1999).

The purpose of the Limited RI was to:

- identify soil impacts beneath the existing building and in the vicinity of the parking lot associated with the adjoining building;
- evaluate potential soil vapor impacts beneath the existing building and indoor air quality;
- characterization of building for interim remedial measures (IRM), e.g. building demolition; and
- re-sample one existing monitoring well that had previously exhibited polychlorinated biphenyl (PCB) concentrations.

The Limited RI was performed after reviewing the reports and analytical data from previous work. A full RI was planned, however contractual constraints prevented its completion.

Additional pending RI work still to be performed includes:

- groundwater sampling;
- wipe sampling of steel beams; and
- possible additional soil sampling beneath the basement slab.

A discussion of the investigation activities that were completed as part of the Limited RI is presented in the following sections. Table 2-1 presents a summary of all sample identifications and the corresponding laboratory analyses for soil, soil vapor, indoor air, and groundwater. Additional details regarding the sampling and analytical methods and procedures used during the Limited RI are presented in the Interim Remedial Measures, Remedial Investigation, Feasibility Study Work Plan (Work Plan) dated September 2004 (ERM, 2004) and the Quality Assurance Project Plan (QAPP), which is an appendix of the Work Plan. Any modifications to activities specified in the Work Plan, necessitated/required by the field conditions, were reviewed and approved by the NYSDEC, and are also detailed in the following sections.

The Limited RI and Building Characterization Report also reports on the following Work Plan tasks:

- **Task 1: Door Construction And Debris Removal**
  - *Subtask 1A: Construct Access And Roll-Up Doors*
  - *Subtask 1B: Debris Removal And Disposal*
  - *Subtask 1C: Basement Evaluation*
- **Task 2: Building Characterization for IRM**
  - *Subtask 2A: Structural Assessment*
  - *Subtask 2B: Asbestos And/Or Lead Paint Survey*
  - *Subtask 2C: PCB Distribution Characterization*

- *Subtask 2E: Develop Plans and Specifications for Building Demolition*
- **Task 3: Remedial Investigation**
  - *Subtask 3B: Well Search*
  - *Subtask 3C: Utility Markout*
  - *Subtask 3E: Soil Boring Investigation*
  - *Subtask 3G: Groundwater Sampling of One Well*
  - *Subtask 3H: Sub-Slab Soil Vapor (Air) and Indoor Air Sample*
  - *Subtask 3J: Management of Investigative Derived Wastes*
  - *Subtask 3K: Analytical Data Quality Evaluation*
  - *Subtask 3L: Remedial Investigation Report Preparation*

Task 4, Feasibility Study, was not completed due to the contractual time constraints.

Field Notes taken by ERM's sampling personnel are present as Appendix A of this report.

## 2.1 **WELL SEARCH**

ERM submitted a Freedom of Information Law (FOIL) request to Region 2 NYSDEC to investigate any potential existing monitoring wells within one-quarter mile of the Site. NYSDEC Region 2 reported that no records could be located for addresses other than the Site. These correspondences are included in Appendix B.

## 2.2 **UTILITY MARK OUT**

Prior to drilling activities, a utility markout was called in to New York City One Call Center. This agency contacts local utility agencies, as required by law, for utility markouts. The locations of underground utilities identified by these surveys were marked with spray paint. Due to the presence of significant underground utilities, all borings were performed by hand.

## 2.3 **SUB-SLAB SOIL VAPOR AND INDOOR AIR SAMPLING**

As part of the Limited RI, one sub-slab soil vapor sample and one indoor air sample were collected from beneath the basement slab and from within the rear of the basement, respectively. The samples collected enabled ERM to relate indoor air concentration with a corresponding soil vapor concentration under the building. All air samples were collected using evacuated Summa canisters. Flow regulators, attached to the canister valve apparatus, allowed a maximum flow rate of 50 milliliters per minute (ml/min) of air into the Summa canisters, and a sample collection time of approximately two hours.

The basement slab in the Site building was penetrated using a  $5/8$ -inch drill bit and a hammer drill. For sub-slab samples collected from the Site building, the samples were collected 24 hours after drilling and capping a hole through the basement slabs to allow for equalization of indoor air. After penetration through the basement slab, tubing was connected to a Teflon-lined air sampling pump with Teflon discharge tubing. Approximately one liter of gas was purged from the sub-slab probe into a Tedlar bag, and a VOC measurement was made on the collected vapor using a PID. The tubing was then disconnected from the pump and attached to the Summa canister's flow regulators for the two-hour sampling period. After the samples were collected, all Teflon tubing and sampling supplies were removed and disposed in the general refuse dumpster.

The indoor air sample was collected from the rear portion of the building basement. The indoor air sample was collected at approximately the same time as the corresponding sub-slab sample.

The samples were analyzed for volatile organic compounds (VOCs) by Severn Trent Laboratories of Burlington, Vermont (STL-VT), a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP)-certified laboratory, using the USEPA Method TO-15. A summary of all air sampling results is presented in Table 2-2.

The sampling protocol for the air samples was developed using the NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006, and in consultation with the NYSDEC. Further details for the air sampling protocol are presented in the Work Plan.

## **2.4 INVESTIGATION OF SHALLOW SOIL**

Six soil borings were advanced beneath the basement slab and two soil borings were advanced in the vicinity of the parking lot associated with the adjoining building. Warren George, Inc. of Jersey City, NY completed the work with oversight by ERM. The approximate locations of each soil boring are shown on Figure 2-1.

The soil borings were advanced using a hand auger. Soil sampling was performed by driving a two-foot split-barrel core sampler (split spoon) in advance of the bottom of the borehole. The ERM site representative geologically logged the soil and documented the depths of each vertical sample taken. Boreholes were abandoned by backfilling with drill cuttings to grade.

The samples collected from the soil borings were analyzed by Severn Trent Laboratories of Shelton, Connecticut (STL-CT), a NYSDOH ELAP-certified laboratory, for Target Compound List (TCL) VOCs using USEPA SW-846 Method 8260B, TCL semi-volatile organic compounds (SVOCs) using USEPA SW-846 Method 8270C, TCL Pesticides and Polychlorinated Biphenyls (Pest/PCBs) using USEPA SW-846 Methods 8081 and 8082 respectively, and Target Analyte List (TAL) Metals using USEPA SW-846 Methods 6010 and 7471. The analytical results from the shallow soil boring samples are shown on Table 2-3 through Table 2-6 and discussed in Section 3.1.2. Figure 2-1 presents the PCB results in soil at the Site.

## 2.5 *INVESTIGATION OF GROUNDWATER*

The RI initially called for the sampling of the seven existing groundwater monitoring wells and the installation and sampling of two new groundwater monitoring wells. Due to expiration of ERM's Standby Contract prior to demolition of the building, NYSDEC did not wish to install new wells within the existing building. The groundwater investigation will therefore be conducted following building demolition. However, one groundwater sample was collected from one of the existing Site monitoring wells, EMMW-5, at the Site, which had previously contained 71 µg/L of PCBs (LMS, 1999). The purpose of this sample was to evaluate the potential for PCB non-aqueous phase liquid (NAPL).

The groundwater sample was collected via low-flow from a depth approximately two feet above the base of the well. After the stabilization of parameters dissolved oxygen (DO), temperature, oxidation-reduction potential (ORP), turbidity, and pH of the purge water from the well, the groundwater sample was collected.

Groundwater was analyzed by STL-CT for TCL VOCs using USEPA SW-846 Method 8260B, TCL SVOCs using USEPA SW-846 Method 8270C, and TCL PCBs using USEPA SW-846 Method 8082. PCB analysis was performed on both filtered and unfiltered groundwater samples from this EMMW-5. The sample results for the groundwater sample are shown on Table 2-7 through Table 2-9 and discussed in Section 3.1.3. Figure 2-1 presents a map showing the location of the monitoring well that was sampled. The groundwater sampling records are included in the field notes in Appendix A.

## 2.6 *ANALYTICAL DATA QUALITY EVALUATION*

The QAPP details the Data Quality Objectives (DQO) and the analytical requirements for this project. Quality Assurance (QA) protocols from the NYSDEC Analytical Services Protocol are provided in the QAPP. All samples gathered during this investigation were collected by the means

described in the QAPP. The analytical laboratories utilized for this project maintained New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP) certification in all applicable categories of analytical testing for the duration of the project. A NYSDEC ASP Category “B” deliverable package was provided by all laboratories for all samples. A pdf of each of the hard copy deliverables can be found in Appendix C. A Data Validation Report (DVR) was prepared for all samples, except those collected as part of building characterization. There are a total of eight (8) DVRs. A pdf of each of the DVRs can be found in Appendix D. Included with each DVR are the validated and qualified organic and inorganic analysis data sheets (Form I) for each sample referenced by the DVR. These validated Form I results have been transferred to each applicable analytical results summary table.

## **2.7 RELIABILITY OF LABORATORY ANALYTICAL DATA**

The following section summarizes the results of the laboratory analysis QA. Included in this section is the discussion of the analytical procedures performed for the analysis of all environmental samples of various media collected during the investigation. A discussion pertaining to the validation and qualification of the analytical results is also provided.

### **2.7.1 *Laboratories Performing Analyses***

STL-VT analyzed the sub-slab soil vapor and indoor air samples collected during the investigation, while STL-CT analyzed all soil and groundwater samples collected. Both labs are NYSDOH ELAP-certified and meet the requirements for documentation, data reduction and reporting and are certified to perform the analytical methods used in this investigation.

### **2.7.2 *Analytical Procedures***

The samples collected at the Site were analyzed following the methods detailed in the QAPP. The sub-slab soil vapor and indoor air samples were analyzed for VOCs by USEPA Method TO-15. The soil samples were analyzed for TCL VOCs using USEPA SW-846 Method 8260B, TCL SVOCs using USEPA SW-846 Method 8270C, TCL Pest/PCBs using USEPA SW-846 Methods 8081 and 8082 respectively, and TAL Metals using USEPA SW-846 Methods 6010 and 7471. The aqueous samples were analyzed for TCL VOCs using USEPA SW-846 Method 8260B, TCL SVOCs using USEPA SW-846 Method 8270C, and TCL PCBs using USEPA SW-846 Method 8082.

## 2.8 DATA VALIDATION

### 2.8.1 Objectives

Data validation is the assessment of data quality with respect to method requirements and technical performance of the analytical laboratory. The overall objective of the data validation process is to determine the degree of confidence that may be placed on the analytical results. The validation process identifies deviations from the methods, poor quality control (QC) results, matrix interference, and other analytical problems that may compromise the potential uses of the data. Analytical data packages were examined to ensure that all required laboratory components are included, all QA/QC requirements were performed, and the data use restrictions were well defined. The analytical data were qualified and appropriately flagged by the data validator. All data collected on this project, except those collected as part of the management of investigative derived wastes, were validated by a third party. Data collected during the investigation were validated by Environmental Data Services (EDS) of Williamsburg, Virginia. Validation results were taken into account during the interpretation of the data.

### 2.8.2 Procedures

The ERM QA/QC officer carried out a preliminary review of the data to verify that all of the necessary paperwork, such as Chains-of-Custody, traffic reports, analytical reports, and deliverable packages were present. A detailed QA review was then performed by the third party validator to verify the qualitative and quantitative reliability of the data as provided.

The review of the sampling data was performed in accordance with accepted protocols and procedures and the reviewer's professional judgment. The documents used in the data validation are presented in Section 6.0 – References.

The data validation performed by EDS indicated that all data are valid and usable with some exceptions as described in the validation reports, with the applicable data qualifiers on the data summary tables, and as described below. The data were, however, deemed of sufficient quality to make informed decisions at the Site.

Based upon the data validation process, qualifications of data, where appropriate, are made by the use of qualifier codes. These qualifiers serve as an indication of the qualitative and quantitative reliability of the data.

The qualifier codes utilized are as follows:



- No qualifier – Positive Detect. The compound/analyte was analyzed for and was positively identified above the sample reporting limit. The reported value is valid and useable.
- U – Non-Detect. The compound/analyte was analyzed for, but not detected. The associated numerical value is the reporting limit. The value is usable as a non-detect at the reporting limit.
- J - Estimated value. The value was designated as estimated either by the laboratory per the method to indicate the compound is present, but the concentration is less than the reporting limit or by the validation process due to a QC exceedance. The value is usable as an estimated result.
- UJ - The compound/analyte was analyzed for, but not detected. The associated numerical value is the reporting limit. However, due to a QC exceedance the value is an estimated quantity. The value is usable as a non-detect at the estimated reporting limit.

The ERM Quality Assurance Officer reviewed all validation reports.

### 2.8.3

#### *Results*

The analytical results for all samples collected as part of the investigation are valid and usable with qualifications as noted in each data validation report. All data qualifiers were taken into account during the interpretation of the analytical results. Analytical results were simplified for preparation of the analytical results summary tables and are presented in Tables 2-2 through 2-9, and Table 3-1. Overall there was no significant impact regarding the usability of the data set.

### 3.0

## DESCRIPTION OF ENVIRONMENTAL CONDITIONS

The validated results of the sampling and analyses carried out as part of the Limited RI are presented in Tables 2-2 through 2-9.

Data were evaluated by comparison of the results with the standards, and guidance values (criteria) presented in 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for restricted commercial use, Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH, 2006), and NYSDEC TOGS No. 1.1.1 "Ambient Water Quality Standards and Guidance Values" (June 1998).

### 3.1

## EVALUATION OF DATA

#### 3.1.1

### *Sub-slab Soil Vapor and Indoor Air*

Two air samples were collected as part of the Limited RI, one sub-slab soil vapor sample from beneath the Site building basement, SS-01, and one indoor air sample, IA-01, from within the rear of the basement. The results of the analysis performed are shown on Table 2-2.

Tetrachloroethene (PCE) and trichloroethene (TCE) were detected in the sub-slab air sample at 11 and 4.6 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), respectively. PCE and TCE were not detected in the indoor air sample. The sub-slab soil vapor and indoor air sample also contained low level concentrations of other VOCs. Many of the VOCs detected in these samples are common industrial pollutants derived either from petroleum products or solvents. The concentrations of these VOCs may be attributed to the nature of the Site location in an industrialized area. The only compound detected in the sub-slab soil vapor sample, which may be indicative of impacts from Empire Electric operations is 1,2,4-trichlorobenzene. Trichlorobenzenes are used in askarels, a commercial dielectric fluid, consisting of a PCB/trichlorobenzene mixture, used in transformers.

#### 3.1.2

### *Soil*

During the Limited RI, soil samples were collected from eight (8) shallow soil borings, six (6) from beneath the Site building basement and two (2) from the vicinity of the parking lot for the adjoining building. There were no obvious signs of impacted soil (i.e., stained soil, strong odor, or elevated PID readings) where the parking lot samples were collected. SB-05 was collected from an area where staining was noted on the floor and the nearby basement piers.

The samples from beneath the Site basement were collected from the approximately six inches to one foot below the concrete basement slab. The other two exterior soil samples were collected from grade to six (6) inches bgs and from 3.0 to 3.5 feet bgs. A total of ten (10) soil samples were collected and analyzed as described in Section 2.3. The results are presented in Tables 2-3 through 2-6, and PCB results are shown in Figure 2-2.

According to the New York City Department of City Planning, the Site is located in an M3-1 zoning area, which is for Heavy Manufacturing District (Low Performance). As such, the soil analytical results were compared to the restricted commercial use Soil Cleanup Objectives (SCO). This comparison shows that there are no soil exceedances of VOC restricted commercial use SCO.

PCBs were detected in all ten soil samples collected, mainly in the form of the PCB congener Aroclor 1260. Aroclor 1254 was detected in one of ten soil samples (SB-04, 0.5-1'). PCBs were detected below the commercial restricted use SCO of 1,000 ug/kg in three soil samples located in the vicinity of the parking lot for the adjacent building: SB-01 (3-3.5'), SB-02 (0-0.5'), and SB-02 (3-3.5'). PCBs were detected above the restricted use SCO in the other seven soil samples, with the highest detected concentration of 160,000 ug/kg occurring at SB-05 (0.5-1'), located between two pillars in the basement on the east side of the building at a location where previous PCB sampling during the PSA indicated elevated PCBs.

One SVOC - benzo(a)pyrene - was detected above the restricted commercial use SCO. At SB-02 (soil boring in the vicinity of the adjacent building parking lot), the benzo(a) pyrene concentration was 2,700 ug/kg in the grade to one-half foot depth interval, which exceeds its restricted commercial use SCO of 1000 ug/kg. The presence of benzo(a)pyrene is likely due to the asphalt paving or general nature of historic fill in this area of Brooklyn rather than related to Site activities.

Six metals- arsenic, barium, cadmium, copper, lead, and mercury - were detected above their restricted commercial use SCOs. Arsenic was detected above its restricted use SCO of 16 ug/kg in one of ten soil samples in SB-03 (0.5-1') at a concentration of 48.4J ug/kg. Barium was detected above its restricted use SCO of 400 ug/kg in three of ten soil samples at SB-01 (0-0.5'), SB-02 (0-0.5'), and SB-08 (0-0.5'), with the maximum detected concentration of 2,600J occurring at SB-08 (0-0.5'). Cadmium was detected above its restricted use SCO of 9.3 ug/kg in one of ten soil samples in SB-08 (0.5-1') at a concentration of 21.2 ug/kg. Copper was detected above its restricted use SCO of 270 ug/kg in five of ten soil

samples in SB-02 (0-0.5'), SB-05 (0.5-1'), SB-06 (0.5-1'), SB-07 (0.5-1'), and SB-08 (0.5-1'), with the maximum detected concentration of 15,600 ug/kg occurring at SB-05 (0.5-1'). Lead was detected above its restricted commercial use SCO in five of ten soil samples in SB-01 (0-0.5'), SB-02 (0-0.5'), SB-03 (0.5-1'), SB-06 (0.5-1'), and SB-07 (0.5-1'), with the maximum detected concentration of 4,860J ug/kg occurring at SB-07 (0.5-1'). Mercury was detected above its restricted use SCO of 2.8 ug/kg in two of ten soil samples at SB-01 (3-3.5') and SB-02 (0-0.5'), with the maximum detected concentration of 30.1 ug/kg occurring at SB-02 (0-0.5').

As noted above, SB-01 and SB-02 were collected from locations in the vicinity of the adjacent building parking lot. The metals impacts observed in these surficial and shallow soils may likely be due to historic filling in the area. The remainder of the soil samples were collected from beneath the Site basement. There is no pattern to the metals distribution in these soil samples. There is not a good understanding of the shoreline configuration at the time when the building was constructed in 1892. Hence, the developmental history of the area included filling activities, and the relation of the current building location to the historic shoreline is unclear. Thus, it is unknown whether the metals are related to filling activities or natural concentrations of metals in soils. Further, the processes conducted at the Site (i.e., electricity generation, transformer reclamation, recycling of fluids) do not generate metals. Thus, the presence of metals in Site soils beneath the basement is not believed to be Site-related.

### 3.1.3 *Groundwater*

One groundwater sample was collected from the Site groundwater monitoring well, EMMW-5. Extra sample volume was collected for the PCB sample to allow for laboratory analysis of both a filtered and unfiltered sample. The data was collected to confirm or deny the presence of PCB NAPL in EMMW-5 based on the prior result from the PSA indicating a PCB concentration of 71 µg/L ppb (LMS, 1999).

#### 3.1.3.1 *Groundwater Quality*

Groundwater sample results are shown in Tables 2-7 through 2-9. The groundwater sample was collected from approximately two feet above the bottom of the monitoring well. VOCs detected below the New York State Class GA Groundwater Quality Standard (GWQS) of 5 ug/L were chlorobenzene at 1.4J ug/L and TCE at 1.9J ug/L. Only one VOC, 1,3-dichlorobenzene, was detected above its GWQS at a concentration of 3.6J ug/L. PCBs were not detected in the filtered PCB groundwater sample. Aroclor 1260 was detected at a concentration of 0.31J ug/L, above the

GWQS of 0.09 ug/L in the unfiltered sample. These results do not indicate the presence of NAPL in this well. No SVOCs were detected in groundwater above the Class GA GWQS.

The purpose of the building cleanout and characterization were to:

- construct access ways, a roll-up man door and a roll-up garage door, to enter the building for debris removal and sampling;
- secure the building to prevent trespassers from entering a contaminated building;
- remove debris from all levels of the building so that areas inaccessible due to garbage obstructions could be sampled and surveyed;
- perform ACM and LBP surveys; and
- conduct a structural assessment/safety survey.

**DOOR CONSTRUCTION AND DEBRIS REMOVAL**

It was first necessary to remove cinder blocks that had been emplaced in front of a garage door and man door along 1<sup>st</sup> Avenue. Roll-up doors were then constructed for access from the building. Approximately 600 cy of debris was removed from the building consisting of mainly municipal type/household garbage. Photos of debris removal are provided in Appendix E. Disposal tickets and waste manifests for personal protective equipment (PPE) disposal are provided in Appendix F.

**BUILDING MATERIALS CHARACTERIZATION**

Two hundred ninety-five building material samples were collected for PCB characterization using immuno-assay screening analysis. Twelve of these 295 samples were collected at duplicate locations from ¼" depth into the wall to evaluate whether PCB concentration decreased with depth into the wall. The sample collection and analytical methodology were described in the Work Plan.

Sample results are presented on Figures 4-1 through 4-5 and in Tables 4-1 through 4-4. Based on these results, the majority of building samples contained PCBs above 50 parts per million (ppm). The concentrations of PCBs present in the samples was well beyond the calibration range of the immuno-assay test kits, results must therefore be viewed as estimated. and would be characterized as hazardous waste. The 12 samples collected from ¼" depth into the wall were all below 50 ppm. Sixty-one of the 295 building samples were sent to STL-CT for PCB analysis by USEPA Method 8082. These results did not correlate with the screening analysis results. Potential causes for this may be a change in moisture content of the samples or time elapsed between sample collection and analysis. The PCB results via USEPA Method 8082 are presented in Table 4-5 and Figures 4-6 through 4-9.

#### 4.3

#### **ASBESTOS CONTAINING MATERIALS AND LEAD BASED PAINT SURVEY**

Following access construction and debris removal, the need for ACM and LBP surveys were identified. Testing Mechanics Corporation (Testing Mechanics) performed these surveys. The ACM survey on 2 and 3 October 2006 and identified the following exposed materials as ACM or Potential ACM:

| <b>ACM/PACM</b>               | <b>Approximate Amount<br/>(square feet)</b> |
|-------------------------------|---------------------------------------------|
| 9" x 9" Green Floor Tile      | 453                                         |
| Fire Door Insulation          | 21                                          |
| Roof Membrane/Shingle         | 8,640                                       |
| Transite Board Electrical Box | 38                                          |

The ACM survey is documented in the Testing Mechanics "Report of Asbestos Containing Materials Inspection" dated 17 October 2006 and is provided in Appendix G.

The LBP survey was also conducted on 2 and 3 October 2006 using XRF testing, and identified the following surfaces as having LBP: numerous ceiling I beams, materials associated with stair cases, steel supports, columns, newel posts, hoist, a door jamb, a door header, a railing, door guards, shelf brackets, and various walls throughout the building. A full list of LBP surfaces and associated building maps is included in the report included in Appendix H entitled "Report of Lead Based Paint XRF Testing" dated 17 October 2006.

#### 4.4

#### **STRUCTURAL ASSESSMENT/SAFETY INSPECTION**

RAF Services, Inc. of Commack, NY performed a Structural Assessment/Safety Inspection to assess whether access to the building was safe for sampling of asbestos and lead materials throughout the building. The inspection was performed in July 2006. The inspection was conducted for egress and access locations, interior and exterior walls, floors, and roof framing.

The conclusions of the survey were that the building is generally structurally sound. Areas with safety concerns were identified where there is broken glass in windows, loose wooden beams, deteriorated stairways, and open hatches/areas without fall protection (railings). The

findings were reported in the “Report on the Structural Assessment/  
Safety Inspection of the Former Empire Electric Facility” dated August  
2006. The full report may be found in Appendix I.



## **5.0 CONCLUSIONS**

### **5.1 SUMMARY OF IMPACTS**

The former Empire Electric facility, located in Brooklyn, New York, is an abandoned factory building. The facility was used as a power plant for the Brooklyn City Railroad Company from 1892 until the 1930s. After subdivision of the building in the 1950's, the eastern two-thirds of the structure was later operated as the Empire Electric Company from 1951 through December 1986, when the structure was subsequently abandoned. PCB impacts are present throughout the majority of the building. PCB screening results suggest that a large percentage of the building materials may be classified as hazardous.

The Limited RI focused on evaluating soil impacts beneath the basement slab and in the vicinity of the parking lot associated with the adjoining building. Sub-slab soil vapor and indoor air samples were collected to identify potential VOC impacts to soil vapor and subsequent indoor air. One groundwater sample was collected to evaluate the potential for PCB NAPL in groundwater.

The soil vapor and air samples collected during the RI contained VOCs. The sub-slab sample contained PCE and TCE in soil vapor, however these VOCs were not present in indoor air.

One PCB congener, Aroclor 1260, was detected above the Class GA GWQS of 0.09 ug/L in the unfiltered groundwater sample from EMMW-5. PCBs were not detected in the filtered PCB sample from this well. 1,3-Dichlorobenzene was also detected above its GWQS. SVOCs were not detected in the groundwater sample above the Class GA GWQS.

Soil detections above the SCOs consisted of metals, benzo(a)pyrene, and PCBs. VOCs were not detected above the restricted use SCOs. The highest PCB concentration detected in soil was located at SB-05 (0.5-1').

### **5.2 DATA GAPS AND AREAS FOR FURTHER INVESTIGATION**

Groundwater at the Site and beneath the Site building has not been fully investigated to date. Further groundwater characterization needs to be conducted.

Immuno-assay screening was used to assess PCB impacts to building materials. As discussed, a large percentage of the building material samples (floor concrete, brick, etc.) contain PCBs at concentrations exceeding 50 mg/kg, the threshold concentration for characterization of

the materials as hazardous once the building is demolished. Many of the reported PCB concentrations in concrete and brick are out of the calibration range of the immuno-assay kits that were used. Confirmatory analysis conducted using SW-846 Method 8082 confirmed the inaccuracy of the immuno-assay testing.

The origin of the error in immuno-assay testing may be due to adopting the immuno-assay test method to brick and concrete, the heterogeneous distribution of PCBs contamination and/or exceedence of holding times for the confirmatory analyses. Because of the lack of correlation between the immuno-assay testing and the Method 8082 analyses, accurate prediction of the PCBs content of wastes generated during building demolition cannot be made and demolition wastes will need to be characterized as generated. The immuno-assay tests, however, did reveal that the first floor and basement of the Empire Electric building is thoroughly contaminated by PCBs. The upper floors are less contaminated. Segregation of materials from the upper and lower portions of the building may therefore reduce the quantity of hazardous waste generated during building demolition.

Environmental Resources Management. Interim Remedial Measures, Remedial Investigation, Feasibility Study Work Plan. September 2004.

Lawler, Matusky & Skelly Engineers LLP (LMS). Preliminary Site Assessment (PSA) Report. December 1999.

NYSDEC. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998.

NYSDEC. Division of Air Resources DAR-1 (Air Guide-1) AGC/SGC Tables. 22 December 2003

NYSDEC. Draft DER-10 Technical Guidance for Site Investigation and Remediation. December 2002.

NYSDEC. Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites. 1994.

NYSDEC. Analytical Services Protocol. 2005.

NYSDEC. Technical and Administrative Memorandum 4046 Determination of Soil Clean Up Objectives and Clean Up Levels. January 1994.

NYSDOH. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October 2006.

Testing Mechanics Corporation. Report of Asbestos Containing Materials Inspection. 17 October 2006.

U.S. Geological Survey Professional Paper 1270 Elemental Concentrations in Soils and Other Surficial Material of the Conterminous United States. H. T. Shacklette and J. G. Boerngen. 1984.

USEPA. SW-846 Test Methods for Evaluating Soil Waste.

USEPA Region II. Data Review Standard Operating Procedure (SOP) Number HW-2, Revision 13: Evaluation of Metals Data for the CLP Program. September 2005.

USEPA. Contract Laboratory Program (CLP) National Functional Guidelines for Inorganic Data Review. July 2002.

USEPA Region II. Data Review SOP Number HW-23B, Revision 1:  
Validating PCB Compounds by SW-846 Method 8082. May 2002.

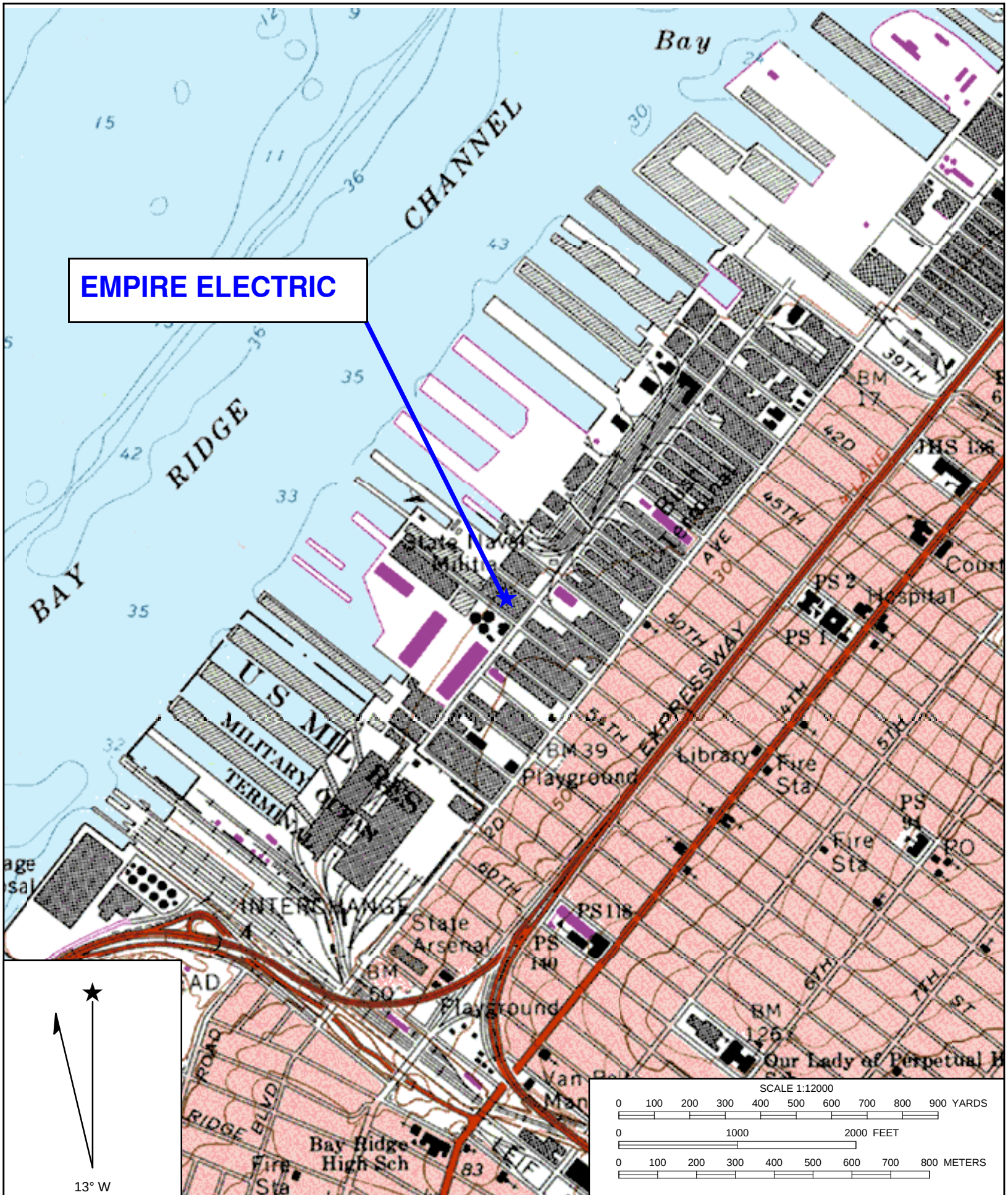
USEPA Region II. Data Review SOP Number HW-22, Revision 2:  
Validating Semivolatile Organic Compounds by SW-846 Method 8270C.  
June 2001.

USEPA. CLP National Functional Guidelines for Organic Data Review.  
October 1999.

USEPA Region II. Data Review SOP Number HW-24, Revision 1:  
Validating Volatile Organic Compounds by SW-846 Method 8260B. June  
1999.

USEPA Region II. Data Review SOP Number HW-18, Revision 0:  
Validating Canisters of Volatile Organics in Ambient Air. August 1994.

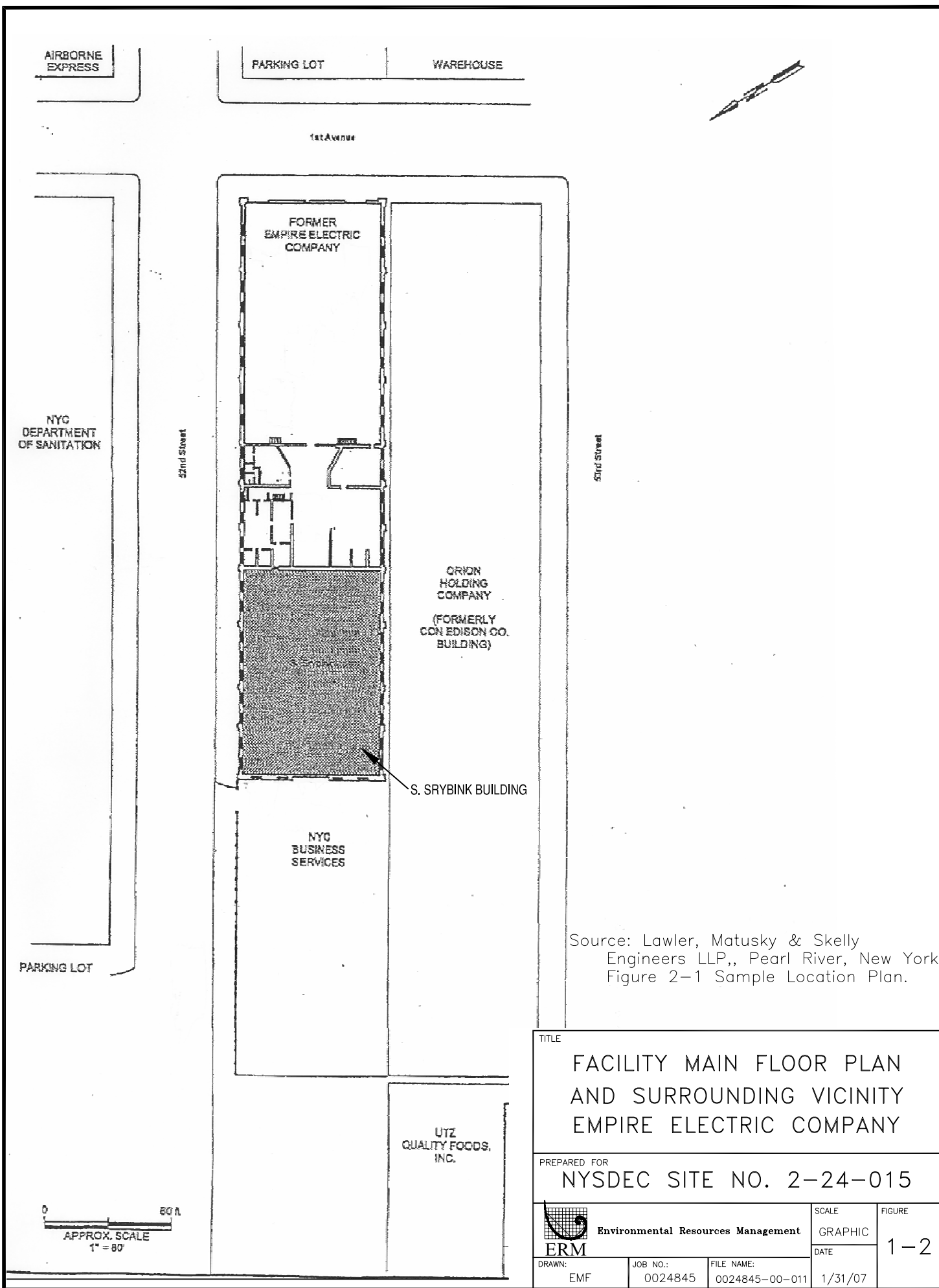
## *FIGURES*



Name: JERSEY CITY  
Date: 1/31/2007  
Scale: 1 inch equals 1000 feet

Location: 040° 38' 57.31" N 074° 01' 18.06" W  
Caption: Figure 1-1 Site Location Map  
Empire Electric  
NYSDEC Site No. 2-24-015





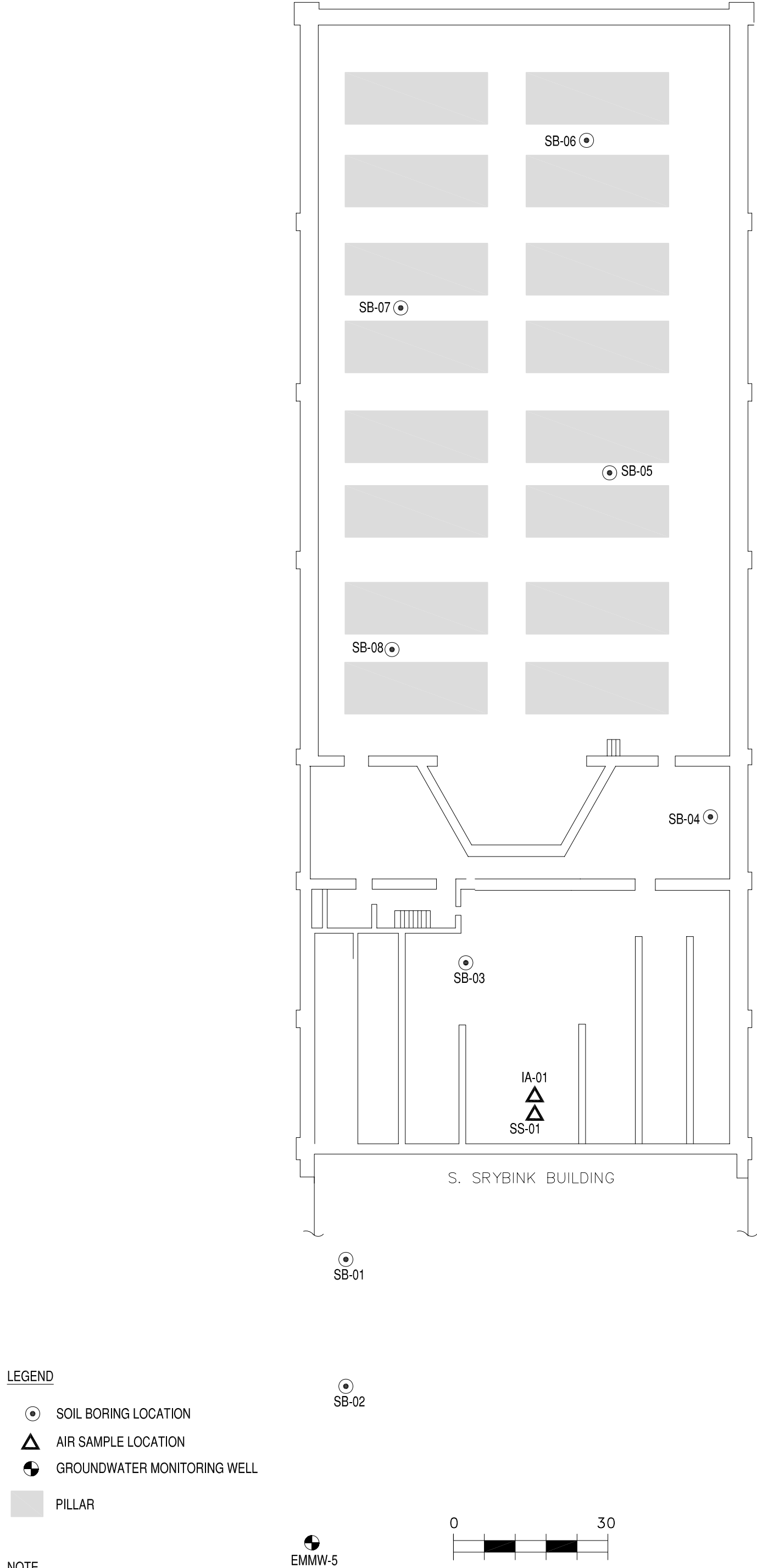
|                                                                                            |                                    |                              |                  |
|--------------------------------------------------------------------------------------------|------------------------------------|------------------------------|------------------|
| TITLE                                                                                      |                                    |                              |                  |
| FACILITY MAIN FLOOR PLAN<br>AND SURROUNDING VICINITY<br>EMPIRE ELECTRIC COMPANY            |                                    |                              |                  |
| PREPARED FOR<br>NYSDEC SITE NO. 2-24-015                                                   |                                    |                              |                  |
| <br>ERM | Environmental Resources Management |                              | SCALE<br>GRAPHIC |
|                                                                                            | DATE<br>1/31/07                    |                              | FIGURE<br>1-2    |
| DRAWN:<br>EMF                                                                              | JOB NO.:<br>0024845                | FILE NAME:<br>0024845-00-011 |                  |

LEGEND

- SOIL BORING LOCATION
- AIR SAMPLE LOCATION
- GROUNDWATER MONITORING WELL
- PILLAR

NOTE

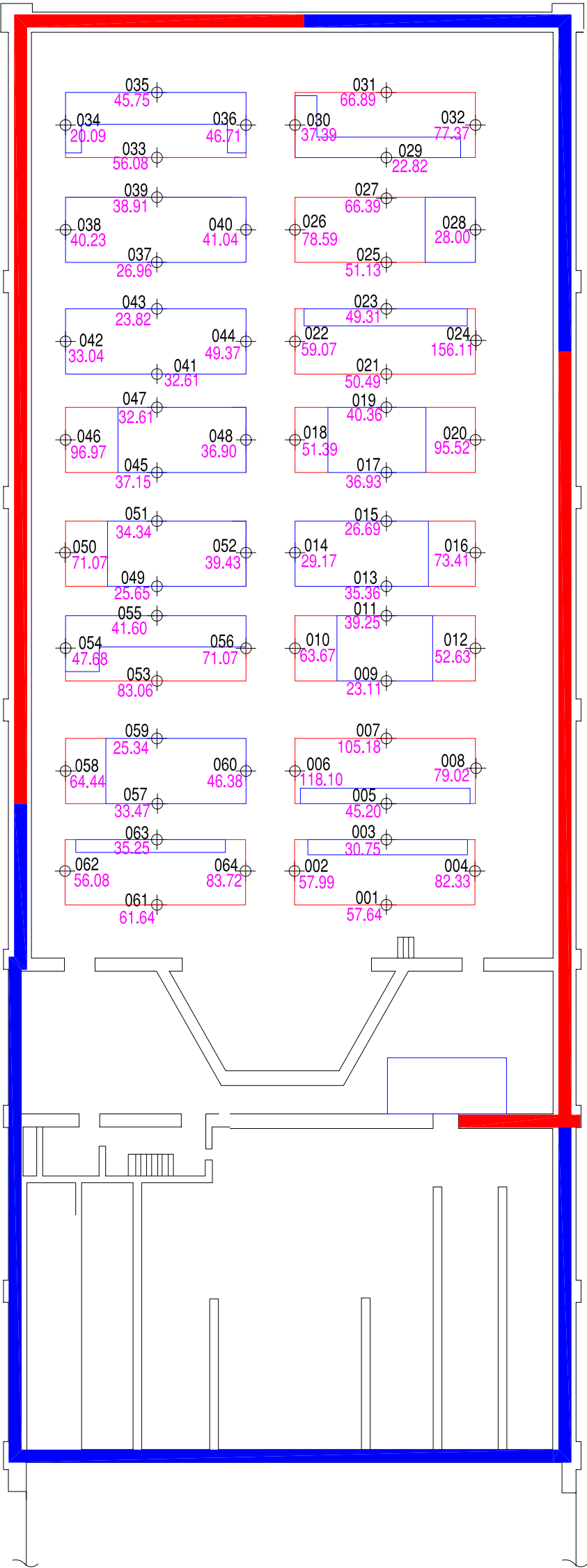
SB-01 AND SB-02 COLLECTED  
IN VICINITY OF PARKING LOT



| SOIL PCB RESULTS |         |               |               |
|------------------|---------|---------------|---------------|
| ID               | DEPTH   | AROCOLOR 1260 | AROCOLOR 1254 |
| SB-01            | 0.5-1.0 | 18.0 ppm      | -             |
| SB-01            | 3.0-3.5 | 0.031 ppm     | -             |
| SB-02            | 0.5-1.0 | 2.1 ppm       | -             |
| SB-02            | 3.0-3.5 | 0.18 ppm      | -             |
| SB-03            | 0.5-1.0 | 1.00 ppm      | -             |
| SB-04            | 0.5-1.0 | 1.20 ppm      | 1.90 ppm      |
| SB-05            | 0.5-1.0 | 160.00 ppm    | -             |
| SB-06            | 0.5-1.0 | 14.00 ppm     | -             |
| SB-07            | 0.5-1.0 | 6.00 ppm      | -             |
| SB-08            | 0.5-1.0 | 18.00 ppm     | -             |

| TITLE                                                                                           |  |  |         |
|-------------------------------------------------------------------------------------------------|--|--|---------|
| SOIL, SOIL VAPOR, INDOOR AIR AND<br>GROUNDWATER SAMPLE LOCATION PLAN<br>EMPIRE ELECTRIC COMPANY |  |  |         |
| PREPARED FOR                                                                                    |  |  |         |
| NYSDEC SITE NO. 2-24-015                                                                        |  |  |         |
| Environmental Resources Management                                                              |  |  | SCALE   |
| ERM                                                                                             |  |  | GRAPHIC |
| DRAWN: EMF                                                                                      |  |  | DATE    |
| JOB NO.: 0024845                                                                                |  |  | 2/1/07  |
| FILE NAME: 0024845-00-013                                                                       |  |  | FIGURE  |
|                                                                                                 |  |  | 2-1     |





LEGEND

002 SAMPLE DESIGNATION NUMBER

⊕ PILLAR SAMPLE

57.99 PCB CONCENTRATION

PILLAR PCB SAMPLE CONCENTRATION  
LESS THAN 50 ppm

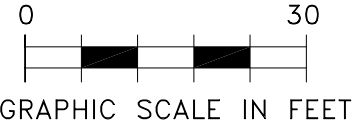
PILLAR PCB SAMPLE CONCENTRATION  
LESS THAN 50 ppm

WALL PCB SAMPLE CONCENTRATION  
GREATER THAN 50 ppm

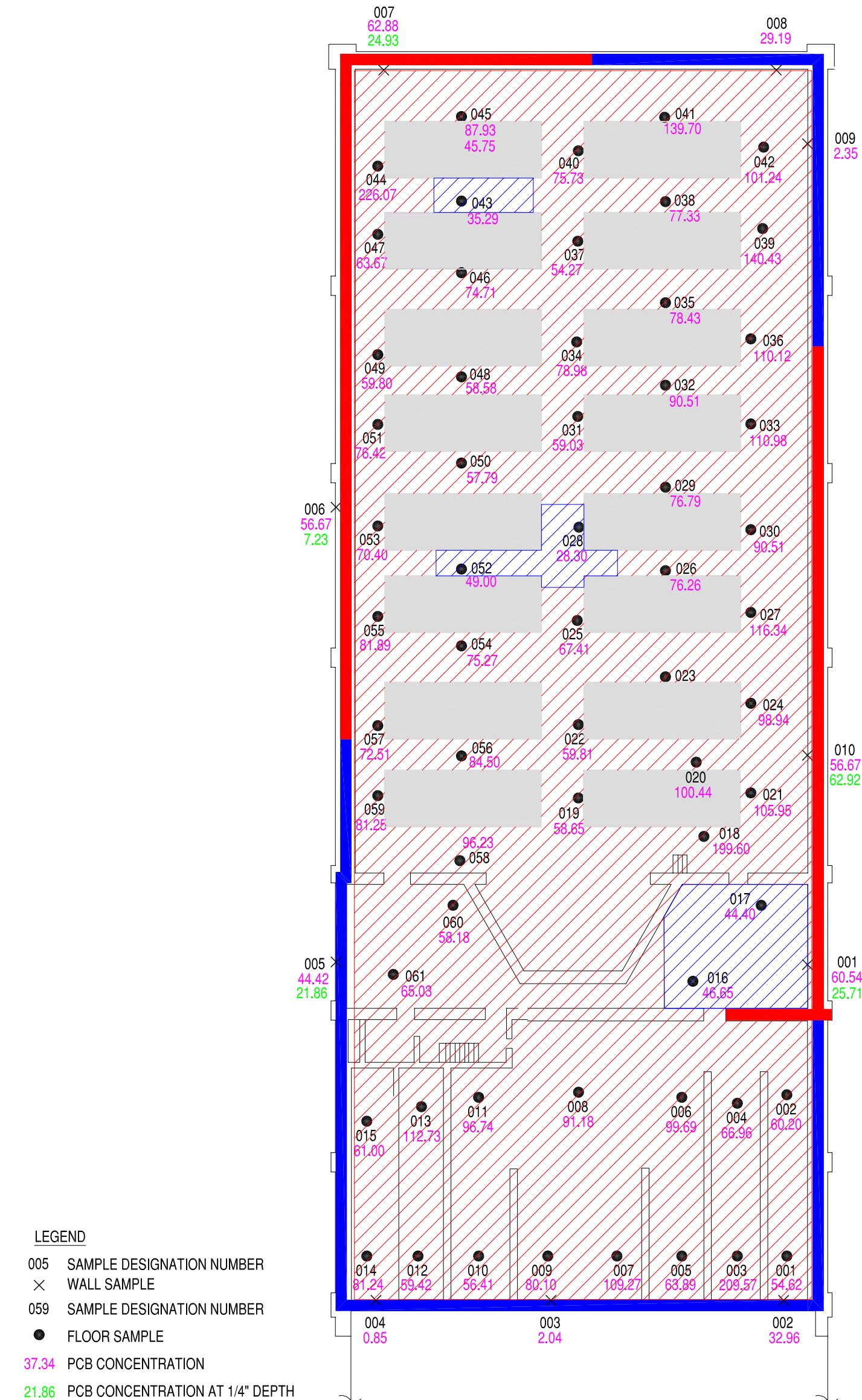
WALL PCB SAMPLE CONCENTRATION  
LESS THAN 50 ppm

NOTES

WALL AND FLOOR SAMPLING LOCATIONS  
DESIGNATED BY NUMBER ONLY ON MAPS  
FOR SPACE PURPOSES.



|                                                                             |  |                  |                           |
|-----------------------------------------------------------------------------|--|------------------|---------------------------|
| TITLE                                                                       |  |                  |                           |
| BASEMENT PILLAR PLAN<br>PCB IMMUNO-ASSAY RESULTS<br>EMPIRE ELECTRIC COMPANY |  |                  |                           |
| PREPARED FOR                                                                |  |                  |                           |
| NYSDEC                                                                      |  |                  |                           |
| DRAWN: EMF                                                                  |  | JOB NO.: 0024845 | FILE NAME: 0024845-00-010 |
| SCALE                                                                       |  | GRAPHIC          | FIGURE                    |
| DATE                                                                        |  | 1/29/07          | 4-1                       |



LEGEND

005 SAMPLE DESIGNATION NUMBER

× WALL SAMPLE

059 SAMPLE DESIGNATION NUMBER

● FLOOR SAMPLE

37.34 PCB CONCENTRATION

21.86 PCB CONCENTRATION AT 1/4" DEPTH

FLOOR PCB SAMPLE CONCENTRATION  
GREATER THAN 50 ppm

FLOOR PCB SAMPLE CONCENTRATION  
LESS THAN 50 ppm

PILLAR

WALL PCB SAMPLE CONCENTRATION  
GREATER THAN 50 ppm

WALL PCB SAMPLE CONCENTRATION  
LESS THAN 50 ppm

NOTES

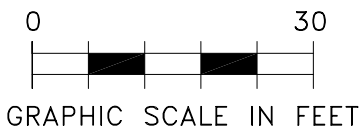
WALL ID: ERM-BWL-LXXX SAMPLE DESIGNATION NUMBER

FLOOR ID: ERM-BFL-XXX SAMPLE DESIGNATION NUMBER

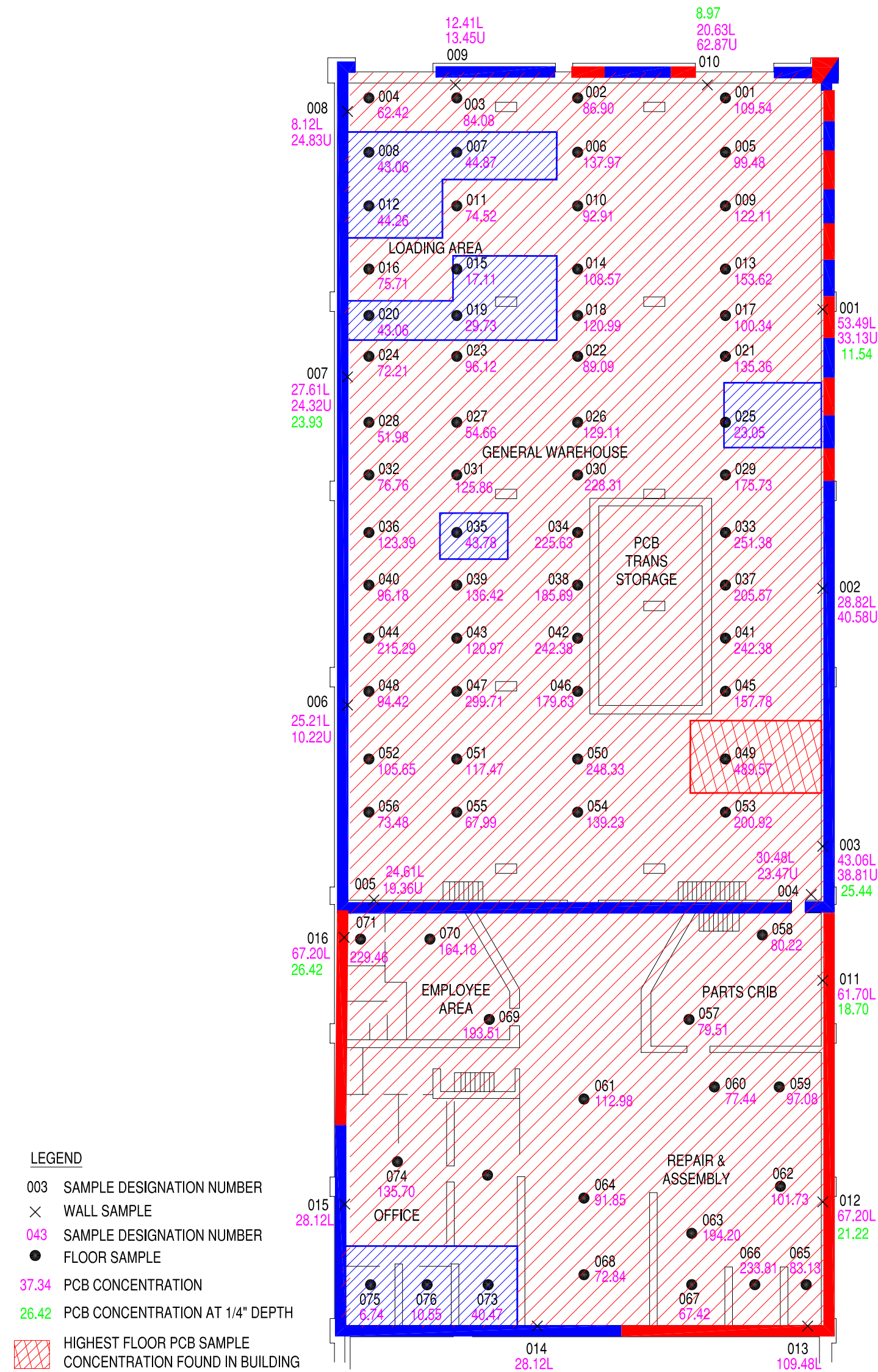
ppm: PARTS PER MILLION

WALL AND FLOOR SAMPLING LOCATIONS  
DESIGNATED BY NUMBER ONLY ON MAPS  
FOR SPACE PURPOSES.

For Pillar PCB Concentrations see Figure 4-1



|                                                                            |          |                |        |
|----------------------------------------------------------------------------|----------|----------------|--------|
| TITLE                                                                      |          |                |        |
| BASEMENT FLOOR PLAN<br>PCB IMMUNO-ASSAY RESULTS<br>EMPIRE ELECTRIC COMPANY |          |                |        |
| PREPARED FOR                                                               |          |                |        |
| NYSDEC                                                                     |          |                |        |
| Environmental Resources Management                                         |          | SCALE          | FIGURE |
| ERM                                                                        |          | GRAPHIC        | 4-2    |
| DATE                                                                       |          | 1/29/07        |        |
| DRAWN:                                                                     | JOB NO.: | FILE NAME:     |        |
| EMF                                                                        | 0024845  | 0024845-00-008 |        |



**NOTES**

— SAMPLE DESIGNATION NUMBER

WALL ID: ERM-1WL-LXXX

— SAMPLE DESIGNATION NUMBER

FLOOR ID: ERM-1FL-XXX

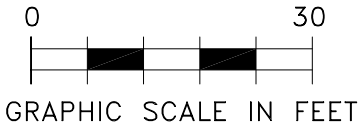
L: LOWER WALL SAMPLE (0 - 4 1/2 FOOT WALL HEIGHT)

U: UPPER WALL SAMPLE (GREATER THAN 15 FOOT WALL HEIGHT)

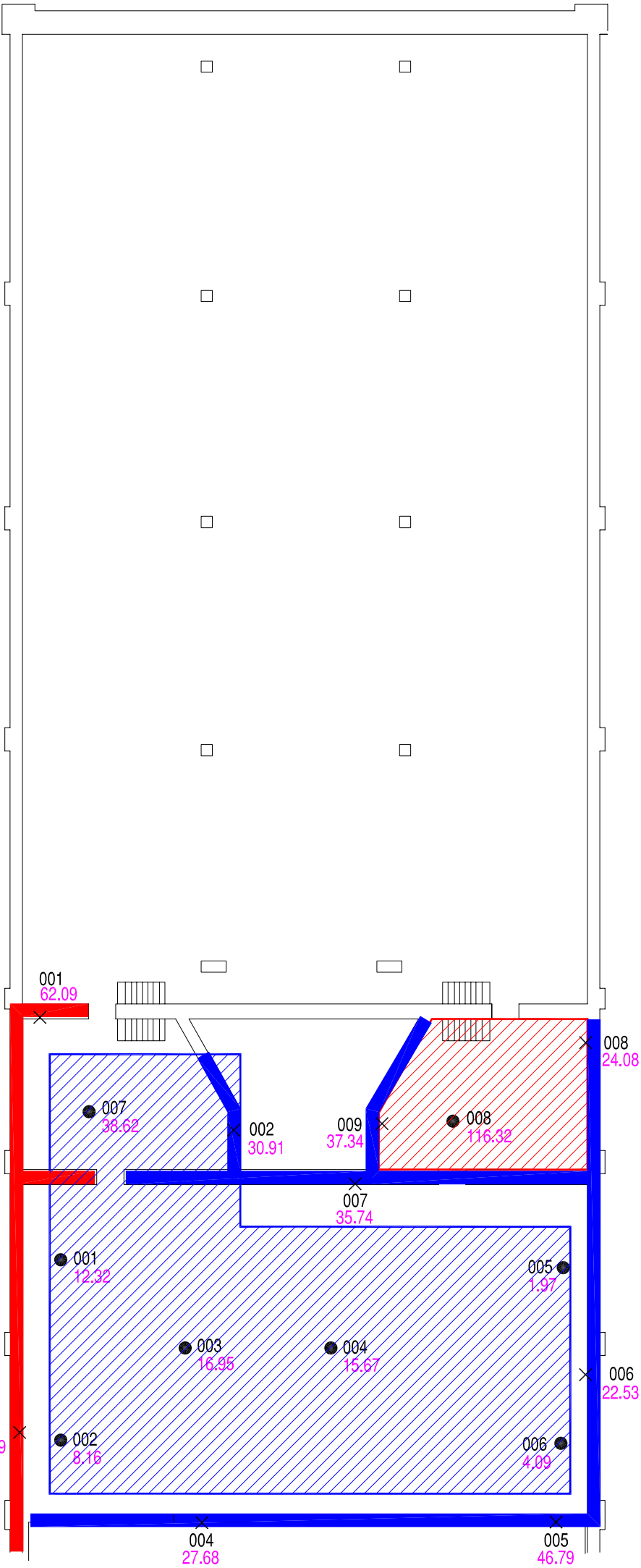
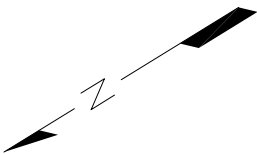
PCB: POLYCHLORINATED BIPHENYL

ppm: PARTS PER MILLION

WALL AND FLOOR SAMPLING LOCATIONS DESIGNATED BY NUMBER ONLY ON MAPS FOR SPACE PURPOSES.



|                                                                        |  |                           |         |
|------------------------------------------------------------------------|--|---------------------------|---------|
| TITLE                                                                  |  |                           |         |
| MAIN FLOOR PLAN<br>PCB IMMUNO-ASSAY RESULTS<br>EMPIRE ELECTRIC COMPANY |  |                           |         |
| PREPARED FOR                                                           |  |                           |         |
| NYSDEC                                                                 |  |                           |         |
| Environmental Resources Management                                     |  | SCALE                     | FIGURE  |
| ERM                                                                    |  | GRAPHIC                   | 4-3     |
| DRAWN: EMF                                                             |  | DATE                      |         |
| JOB NO.: 0024845                                                       |  | FILE NAME: 0024845-00-007 | 1/29/07 |



LEGEND

- 008 SAMPLE DESIGNATION NUMBER
- × WALL SAMPLE
- 007 SAMPLE DESIGNATION NUMBER
- FLOOR SAMPLE

37.34 PCB CONCENTRATION

FLOOR PCB SAMPLE CONCENTRATION  
GREATER THAN 50 ppm

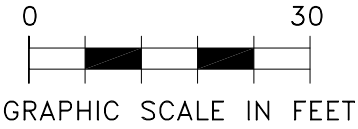
FLOOR PCB SAMPLE CONCENTRATION  
LESS THAN 50 ppm

WALL PCB SAMPLE CONCENTRATION  
GREATER THAN 50 ppm

WALL PCB SAMPLE CONCENTRATION  
LESS THAN 50 ppm

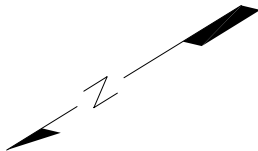
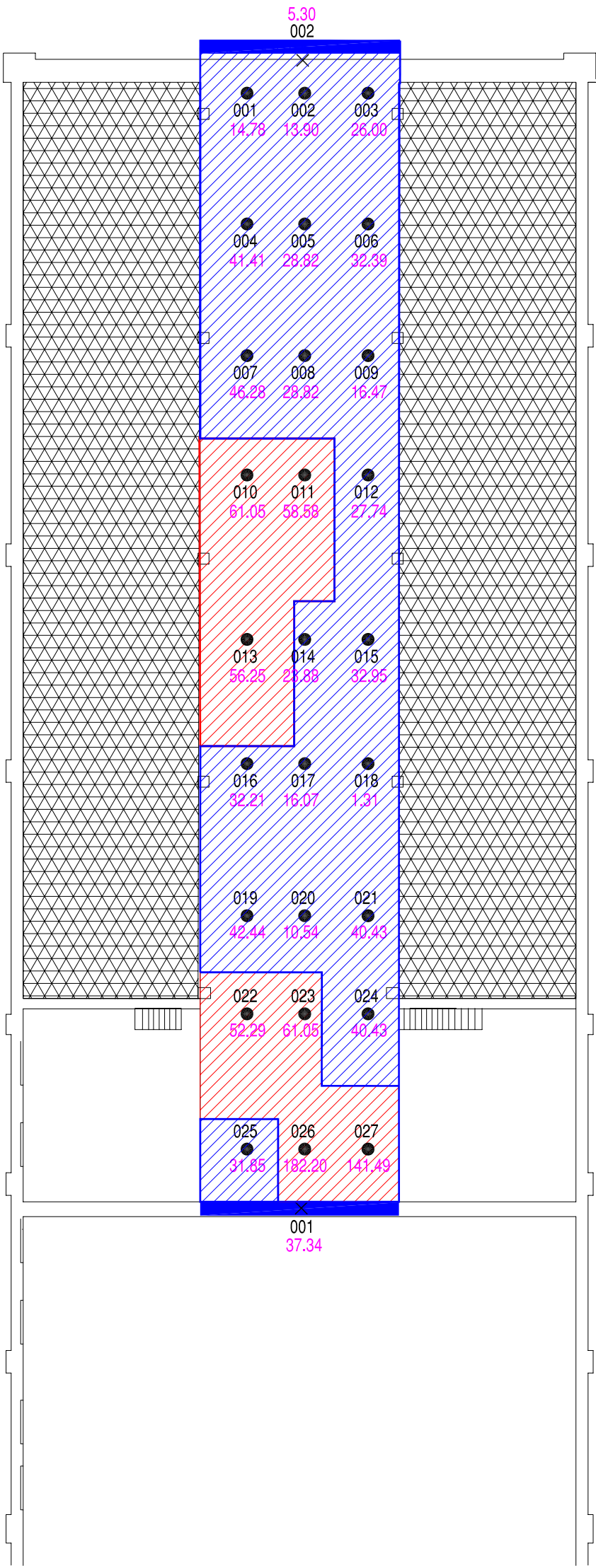
NOTES

- WALL ID: ERM-2WL-LXXX SAMPLE DESIGNATION NUMBER
- FLOOR ID: ERM-2FL-XXX SAMPLE DESIGNATION NUMBER
- PCB: POLYCHLORINATED BIPHENYL
- ppm: PARTS PER MILLION



WALL AND FLOOR SAMPLING LOCATIONS  
DESIGNATED BY NUMBER ONLY ON MAPS  
FOR SPACE PURPOSES.

| TITLE                                                                                        |                                    |                           |                  |
|----------------------------------------------------------------------------------------------|------------------------------------|---------------------------|------------------|
| FIRST MEZZANINE FLOOR PLAN<br>PCB IMMUNO-ASSAY RESULTS<br>EMPIRE ELECTRIC COMPANY            |                                    |                           |                  |
| PREPARED FOR                                                                                 |                                    | NYSDEC                    |                  |
| <br>ERM | Environmental Resources Management |                           | SCALE<br>GRAPHIC |
|                                                                                              | DRAWN: EMF                         |                           | DATE<br>1/26/07  |
| JOB NO.: 0024845                                                                             |                                    | FILE NAME: 0024845-00-005 | FIGURE<br>4-4    |



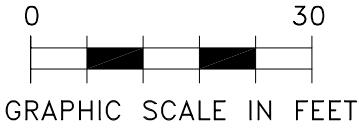
LEGEND

- 001 SAMPLE DESIGNATION NUMBER  
× WALL SAMPLE  
020 SAMPLE DESIGNATION NUMBER  
● FLOOR SAMPLE  
37.34 PCB CONCENTRATION
- FLOOR PCB SAMPLE CONCENTRATION  
GREATER THAN 50 ppm
- FLOOR PCB SAMPLE CONCENTRATION  
LESS THAN 50 ppm
- WALL PCB SAMPLE CONCENTRATION  
GREATER THAN 50 ppm
- WALL PCB SAMPLE CONCENTRATION  
LESS THAN 50 ppm

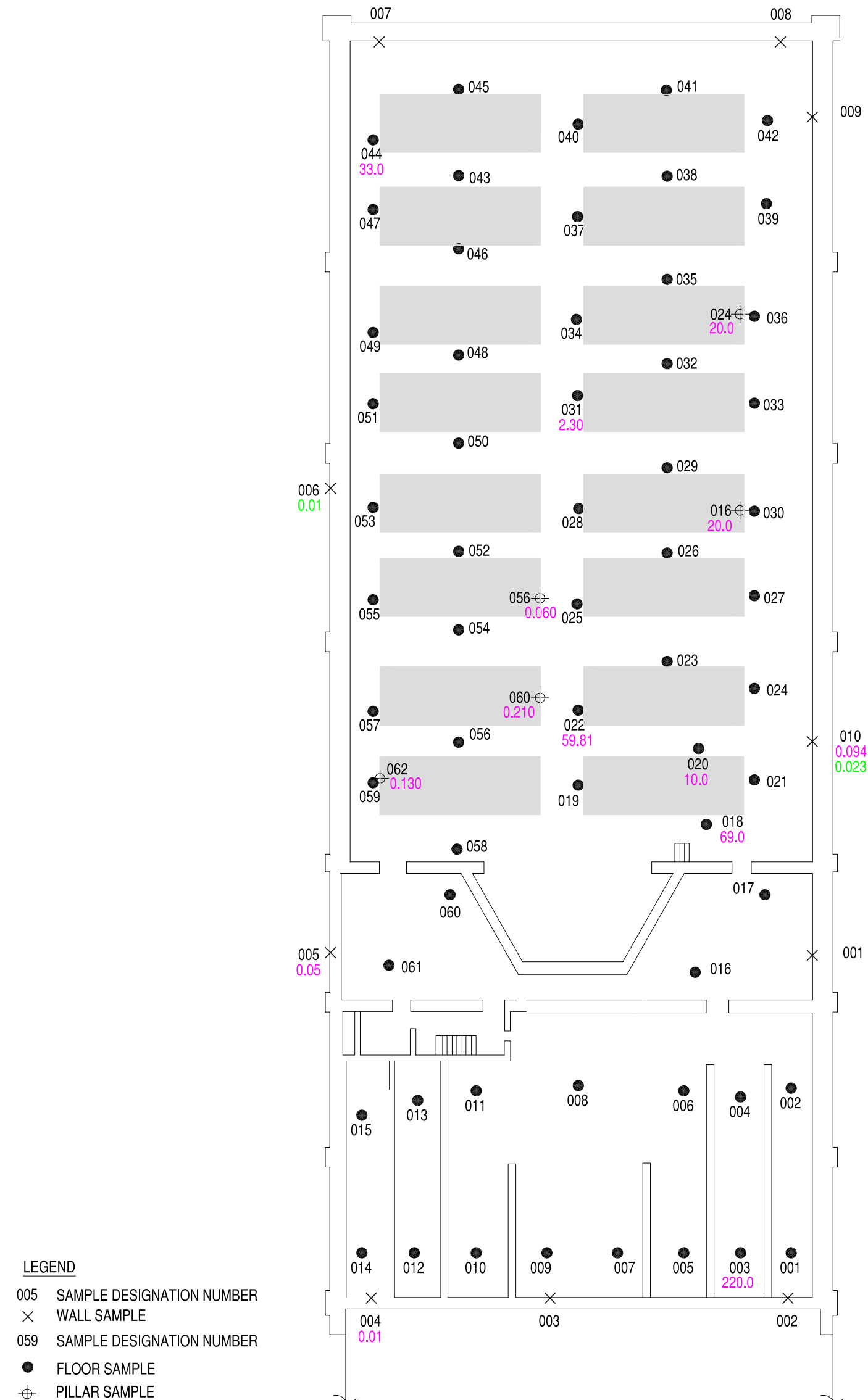
NOTES

WALL ID: ERM-3WL-LXXX SAMPLE DESIGNATION NUMBER  
FLOOR ID: ERM-3FL-XXX SAMPLE DESIGNATION NUMBER  
PCB: POLYCHLORINATED BIPHENYL  
ppm: PARTS PER MILLION

WALL AND FLOOR SAMPLING LOCATIONS  
DESIGNATED BY NUMBER ONLY ON MAPS  
FOR SPACE PURPOSES.



|                                                                                              |  |                                    |  |
|----------------------------------------------------------------------------------------------|--|------------------------------------|--|
| TITLE                                                                                        |  |                                    |  |
| SECOND MEZZANINE FLOOR PLAN<br>PCB IMMUNO-ASSAY RESULTS<br>EMPIRE ELECTRIC COMPANY           |  |                                    |  |
| PREPARED FOR                                                                                 |  |                                    |  |
| NYSDEC                                                                                       |  |                                    |  |
| <br>ERM |  | Environmental Resources Management |  |
| DRAWN: EMF                                                                                   |  | SCALE                              |  |
|                                                                                              |  | GRAPHIC                            |  |
| JOB NO.: 0024845                                                                             |  | DATE                               |  |
|                                                                                              |  | 1/26/07                            |  |
| FILE NAME: 0024845-00-006                                                                    |  | FIGURE                             |  |
|                                                                                              |  | 4-5                                |  |



LEGEND

- 005 SAMPLE DESIGNATION NUMBER
- × WALL SAMPLE
- 059 SAMPLE DESIGNATION NUMBER
- FLOOR SAMPLE
- ⊕ PILLAR SAMPLE
- PILLAR
- 37.34 PCB CONCENTRATION
- 21.86 PCB CONCENTRATION AT 1/4" DEPTH

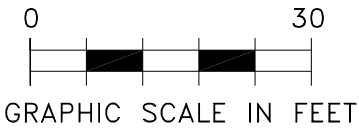
NOTES

- WALL ID: ERM-BWL-LXXX SAMPLE DESIGNATION NUMBER
- FLOOR ID: ERM-BFL-XXX SAMPLE DESIGNATION NUMBER
- PILLAR ID: ERM-P-XXX SAMPLE DESIGNATION NUMBER
- ppm: PARTS PER MILLION

WALL AND FLOOR SAMPLING LOCATIONS DESIGNATED BY NUMBER ONLY ON MAPS FOR SPACE PURPOSES.

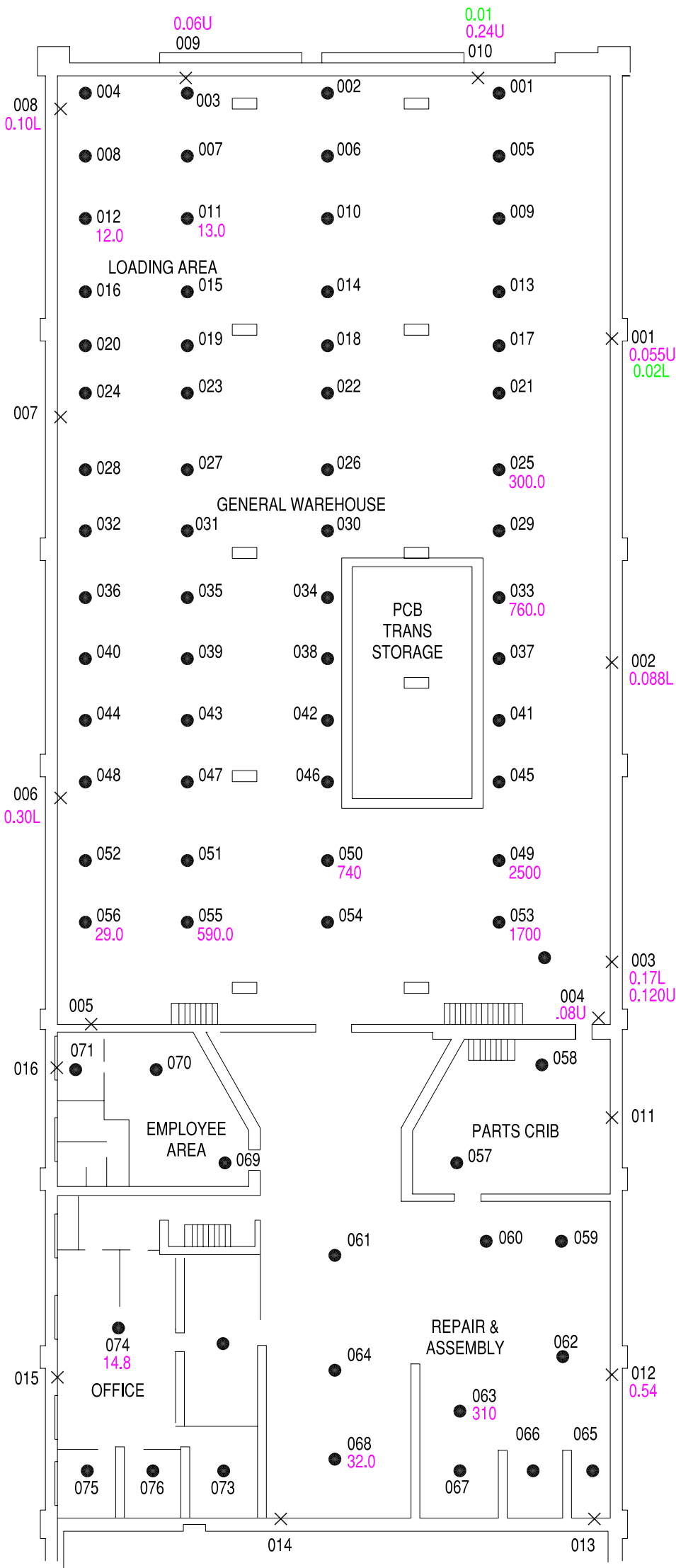
ONLY A SUBSET OF SAMPLES WERE ANALYZED BY USEPA METHOD 8082 ANALYSIS FOR PCBs.

ONLY PILLAR SAMPLES THAT WERE ANAYLZED BY USEPA METHOD 8082 ANALYSIS FOR PCBs ARE SHOWN HERE. ALL OTHER FLOOR AND WALL SAMPLES ARE SHOWN.



|                                                                                 |  |                           |        |
|---------------------------------------------------------------------------------|--|---------------------------|--------|
| TITLE                                                                           |  |                           |        |
| BASEMENT FLOOR PLAN<br>USEPA METHOD 8082 PCB RESULTS<br>EMPIRE ELECTRIC COMPANY |  |                           |        |
| PREPARED FOR                                                                    |  |                           |        |
| NYSDEC SITE NO. 2-24-015                                                        |  |                           |        |
| ERM<br>Environmental Resources Management                                       |  | SCALE<br>GRAPHIC          | FIGURE |
| DRAWN: EMF                                                                      |  | DATE<br>1/29/07           | 4-6    |
| JOB NO.: 0024845                                                                |  | FILE NAME: 0024845-00-015 |        |





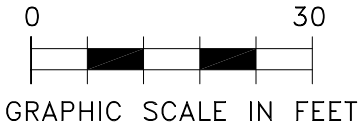
LEGEND

- 003 SAMPLE DESIGNATION NUMBER
- × WALL SAMPLE
- 043 SAMPLE DESIGNATION NUMBER
- FLOOR SAMPLE
- 0.17 PCB CONCENTRATION
- 0.02 PCB CONCENTRATION AT 1/4" DEPTH

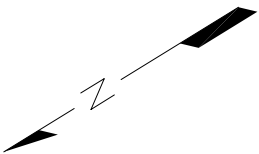
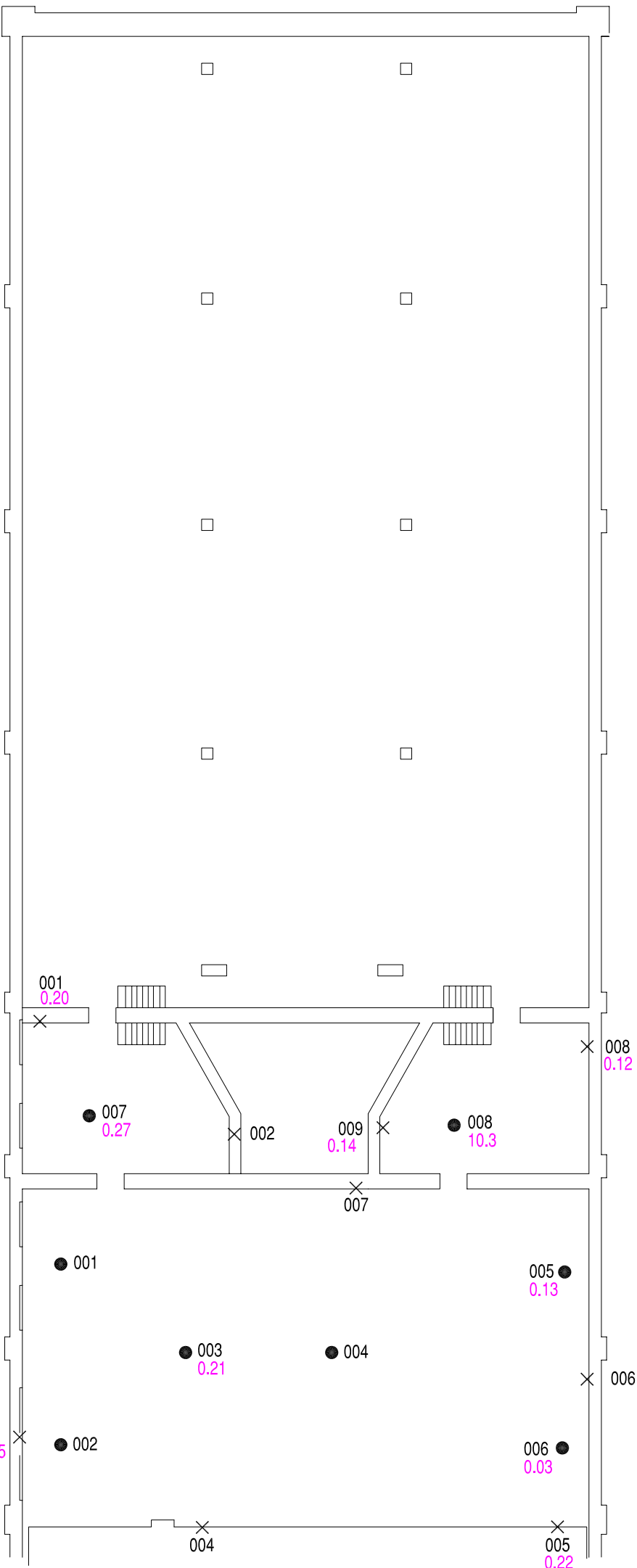
NOTES

WALL ID: ERM-1WL-LXXX  
FLOOR ID: ERM-1FL-XXX  
L: LOWER WALL SAMPLE (0 - 4 1/2 FOOT WALL HEIGHT)  
U: UPPER WALL SAMPLE (GREATER THAN 15 FOOT WALL HEIGHT)  
PCB: POLYCHLORINATED BIPHENYL  
ppm: PARTS PER MILLION

WALL AND FLOOR SAMPLING LOCATIONS DESIGNATED BY NUMBER ONLY ON MAPS FOR SPACE PURPOSES.  
ONLY A SUBSET OF SAMPLES WERE ANALYZED BY USEPA METHOD 8082 ANALYSIS FOR PCBs.



|                                                                             |  |                           |        |
|-----------------------------------------------------------------------------|--|---------------------------|--------|
| TITLE                                                                       |  |                           |        |
| MAIN FLOOR PLAN<br>USEPA METHOD 8082 PCB RESULTS<br>EMPIRE ELECTRIC COMPANY |  |                           |        |
| PREPARED FOR                                                                |  |                           |        |
| NYSDEC SITE NO. 2-24-015                                                    |  |                           |        |
| Environmental Resources Management                                          |  | SCALE                     | FIGURE |
| ERM                                                                         |  | GRAPHIC                   | 4-7    |
| DRAWN: EMF                                                                  |  | DATE                      |        |
| JOB NO.: 0024845                                                            |  | FILE NAME: 0024845-00-014 | 2/2/07 |



LEGEND

- 008 SAMPLE DESIGNATION NUMBER
- × WALL SAMPLE
- 007 SAMPLE DESIGNATION NUMBER
- FLOOR SAMPLE
- 37.34 PCB CONCENTRATION

NOTES

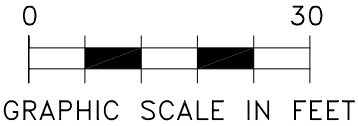
WALL ID: ERM-2WL-LXXX  
FLOOR ID: ERM-2FL-XXX

PCB: POLYCHLORINATED BIPHENYL

ppm: PARTS PER MILLION

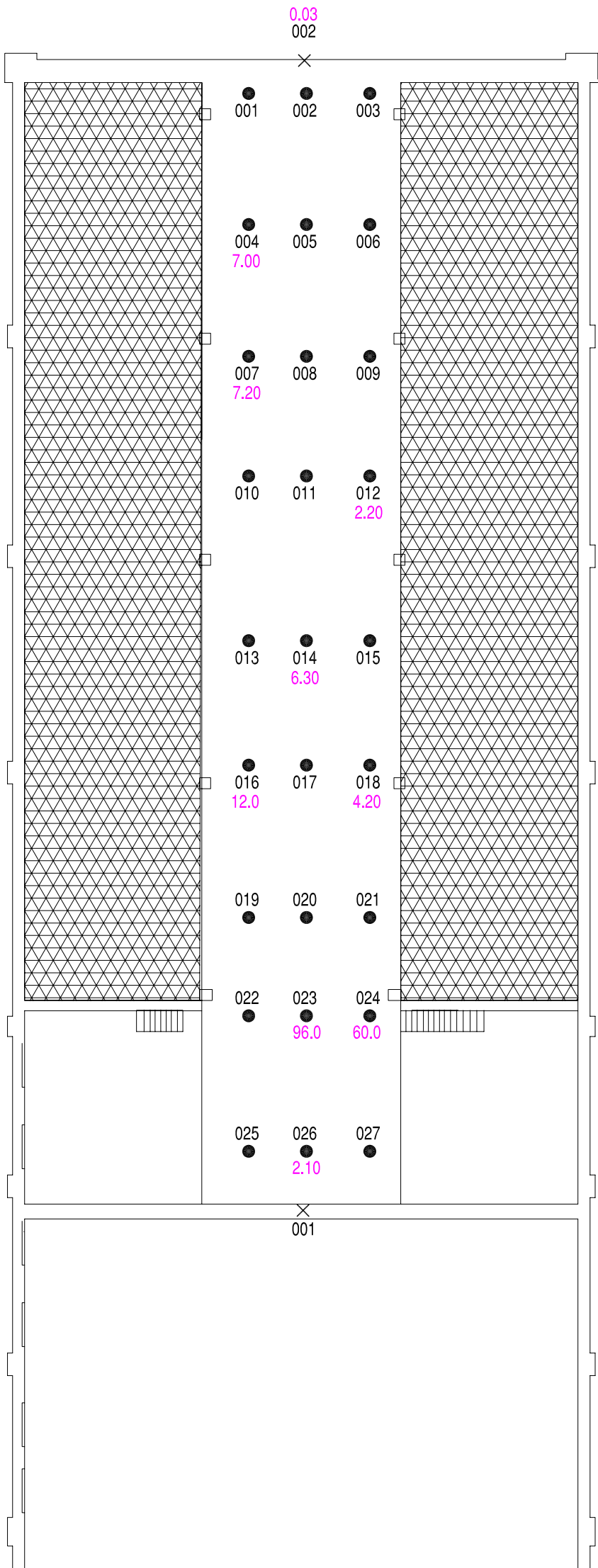
WALL AND FLOOR SAMPLING LOCATIONS  
DESIGNATED BY NUMBER ONLY ON MAPS  
FOR SPACE PURPOSES.

ONLY A SUBSET OF SAMPLES WERE ANALYZED  
BY USEPA METHOD 8082 ANALYSIS FOR PCBs.



|                                                                                              |                                    |               |                  |
|----------------------------------------------------------------------------------------------|------------------------------------|---------------|------------------|
| TITLE                                                                                        |                                    |               |                  |
| FIRST MEZZANINE FLOOR PLAN<br>USEPA METHOD 8082 PCB RESULTS<br>EMPIRE ELECTRIC COMPANY       |                                    |               |                  |
| PREPARED FOR                                                                                 |                                    |               |                  |
| NYSDEC SITE NO. 2-24-015                                                                     |                                    |               |                  |
| <br>ERM | Environmental Resources Management |               | SCALE<br>GRAPHIC |
|                                                                                              | DRAWN: EMF                         |               | DATE<br>1/26/07  |
| JOB NO.:<br>0024845                                                                          | FILE NAME:<br>0024845-00-016       | FIGURE<br>4-8 |                  |





LEGEND

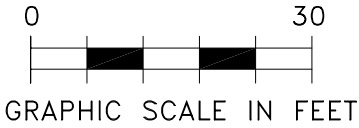
- 001 SAMPLE DESIGNATION NUMBER
- × WALL SAMPLE
- 020 SAMPLE DESIGNATION NUMBER
- FLOOR SAMPLE
- 37.34 PCB CONCENTRATION

NOTES

- WALL ID: ERM-3WL-LXXX
- FLOOR ID: ERM-3FL-XXX
- PCB: POLYCHLORINATED BIPHENYL
- ppm: PARTS PER MILLION

WALL AND FLOOR SAMPLING LOCATIONS DESIGNATED BY NUMBER ONLY ON MAPS FOR SPACE PURPOSES.

ONLY A SUBSET OF SAMPLES WERE ANALYZED BY USEPA METHOD 8082 ANALYSIS FOR PCBs.



|                                                                                              |                                    |                              |         |
|----------------------------------------------------------------------------------------------|------------------------------------|------------------------------|---------|
| TITLE                                                                                        |                                    |                              |         |
| SECOND MEZZANINE FLOOR PLAN<br>USEPA METHOD 8082 PCB RESULTS<br>EMPIRE ELECTRIC COMPANY      |                                    |                              |         |
| PREPARED FOR                                                                                 |                                    |                              |         |
| NYSDEC SITE NO. 2-24-015                                                                     |                                    |                              |         |
| <br>ERM | Environmental Resources Management |                              | SCALE   |
|                                                                                              |                                    |                              | GRAPHIC |
| DRAWN: EMF                                                                                   | JOB NO.:<br>0024845                | FILE NAME:<br>0024845-00-017 | DATE    |
|                                                                                              |                                    |                              | 1/26/07 |
|                                                                                              |                                    |                              | FIGURE  |
|                                                                                              |                                    |                              | 4-9     |

## ***TABLES***

**Table 2-1**  
**Sample Inventory and Analyses Performed of Soil, Soil Vapor, Indoor Air, and Groundwater**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

|                                                                               | Matrix      | Laboratory Analysis Method |                   |                  |                        |                    |                |
|-------------------------------------------------------------------------------|-------------|----------------------------|-------------------|------------------|------------------------|--------------------|----------------|
| <b>Sub-Slab &amp; Indoor Air Samples</b>                                      |             | <b>TO-15</b>               |                   |                  |                        |                    |                |
| SS-01                                                                         | Air         | x                          |                   |                  |                        |                    |                |
| IA-01                                                                         | Air         | x                          |                   |                  |                        |                    |                |
|                                                                               |             |                            |                   |                  |                        |                    |                |
| <b>Groundwater Monitoring Wells - December 2006</b>                           |             | <b>VOCs 8260b</b>          | <b>SVOCs 8270</b> | <b>PCBs 8082</b> |                        |                    |                |
| EMMW-5                                                                        | Groundwater | x                          | x                 | x                |                        |                    |                |
| EMMW-5 (Filtered)                                                             | Groundwater |                            |                   | x                |                        |                    |                |
|                                                                               |             |                            |                   |                  |                        |                    |                |
| <b>Soil Boring Samples (Depth in feet below basement grade or road grade)</b> |             | <b>VOCs 8260b</b>          | <b>SVOCs 8270</b> | <b>PCBs 8082</b> | <b>Pesticides 8081</b> | <b>Metals 6010</b> | <b>Hg 7471</b> |
| SB-01-0.0-0.6                                                                 | Soil        | x                          | x                 | x                | x                      | x                  | x              |
| SB-01-3.0-3.5                                                                 | Soil        | x                          | x                 | x                | x                      | x                  | x              |
| SB-02-0.0-0.6                                                                 | Soil        | x                          | x                 | x                | x                      | x                  | x              |
| SB-02-3.0-3.5                                                                 | Soil        | x                          | x                 | x                | x                      | x                  | x              |
| SB-03-0.6-1.0                                                                 | Soil        | x                          | x                 | x                | x                      | x                  | x              |
| SB-04-0.6-1.0                                                                 | Soil        | x                          | x                 | x                | x                      | x                  | x              |
| SB-05-0.6-1.0                                                                 | Soil        | x                          | x                 | x                | x                      | x                  | x              |
| SB-06-0.6-1.0                                                                 | Soil        | x                          | x                 | x                | x                      | x                  | x              |
| SB-07-0.6-1.0                                                                 | Soil        | x                          | x                 | x                | x                      | x                  | x              |
| SB-08-0.6-1.0                                                                 | Soil        | x                          | x                 | x                | x                      | x                  | x              |

TO = Toxic Organics

VOCs = Volatile Organic Compounds

SVOCs = Semi-Volatile Organic Compounds

PCBs = Polychlorinated Biphenyls

Hg = Mercury

Table 2-2  
Summary of Sub-Slab Soil Vapor & Indoor Air Sampling Results  
Volatile Organic Compounds  
Former Empire Electric Facility, Brooklyn, New York  
Site Number 2-24-015

PERIOD: From 10/31/2006 thru 10/31/2006 - Inclusive

SAMPLE TYPE: Air

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | IA-01<br>690221<br>10/31/2006 | SS-01<br>690220<br>10/31/2006 |
|---------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1,1,1-Trichloroethane                                   | (ug/m3)                       | 1.1 U                         | 1.1 U                         |
| 1,1,2,2-Tetrachloroethane                               | (ug/m3)                       | 1.4 U                         | 1.4 U                         |
| 1,1,2-Trichloroethane                                   | (ug/m3)                       | 1.1 U                         | 1.1 U                         |
| 1,1-Dichloroethane                                      | (ug/m3)                       | 0.81 U                        | 0.81 U                        |
| 1,1-Dichloroethene                                      | (ug/m3)                       | 0.79 U                        | 0.79 U                        |
| 1,2,4-Trichlorobenzene                                  | (ug/m3)                       | 3.7 U                         | 7.0                           |
| 1,2,4-Trimethylbenzene                                  | (ug/m3)                       | 5.4                           | 1.4                           |
| 1,2-Dibromoethane                                       | (ug/m3)                       | 1.5 U                         | 1.5 U                         |
| 1,2-Dichlorobenzene                                     | (ug/m3)                       | 1.2 U                         | 1.2 U                         |
| 1,2-Dichloroethane                                      | (ug/m3)                       | 0.81 U                        | 0.81 U                        |
| 1,2-Dichloroethene                                      | (ug/m3)                       | 0.79 U                        | 0.79 U                        |
| 1,2-Dichloropropane                                     | (ug/m3)                       | 0.92 U                        | 0.92 U                        |
| 1,3,5-Trimethylbenzene                                  | (ug/m3)                       | 1.9                           | 0.98 U                        |
| 1,3-Butadiene                                           | (ug/m3)                       | 6.6                           | 1.1 U                         |
| 1,3-Dichlorobenzene                                     | (ug/m3)                       | 1.2 U                         | 1.3                           |
| 1,4-Dichlorobenzene                                     | (ug/m3)                       | 1.2 U                         | 4.2                           |
| 1,4-Dioxane                                             | (ug/m3)                       | 18 U                          | 18 U                          |
| 2-Butanone                                              | (ug/m3)                       | 2.1                           | 4.1                           |
| 2-Chlorotoluene                                         | (ug/m3)                       | 1.0 U                         | 1.0 U                         |
| 2-Hexanone                                              | (ug/m3)                       | 2.0 U                         | 2.0 U                         |
| 4-Ethyltoluene                                          | (ug/m3)                       | 4.0                           | 0.98 U                        |
| 4-Methyl-2-Pentanone                                    | (ug/m3)                       | 2.0 U                         | 2.0 U                         |
| Acetone                                                 | (ug/m3)                       | 12 U                          | 31                            |
| Allyl chloride                                          | (ug/m3)                       | 1.6 U                         | 1.6 U                         |
| Benzene                                                 | (ug/m3)                       | 21                            | 2.0                           |
| Bromodichloromethane                                    | (ug/m3)                       | 1.3 U                         | 1.3 U                         |
| Bromoform                                               | (ug/m3)                       | 2.1 U                         | 2.1 U                         |
| Bromomethane                                            | (ug/m3)                       | 0.78 U                        | 0.78 U                        |
| Carbon Disulfide                                        | (ug/m3)                       | 1.6 U                         | 2.9                           |
| Carbon Tetrachloride                                    | (ug/m3)                       | 1.3 U                         | 1.3 U                         |
| Chlorobenzene                                           | (ug/m3)                       | 0.92 U                        | 0.92 U                        |
| Chloroethane                                            | (ug/m3)                       | 1.3 U                         | 1.3 U                         |
| Chloroform                                              | (ug/m3)                       | 0.98 U                        | 0.98 U                        |
| Chloromethane                                           | (ug/m3)                       | 1.1                           | 1.0 U                         |
| cis-1,2-Dichloroethene                                  | (ug/m3)                       | 0.79 U                        | 0.79 U                        |
| cis-1,3-Dichloropropene                                 | (ug/m3)                       | 0.91 U                        | 0.91 U                        |
| Cyclohexane                                             | (ug/m3)                       | 3.3                           | 0.69 U                        |
| Dibromochloromethane                                    | (ug/m3)                       | 1.7 U                         | 1.7 U                         |
| Dichlorodifluoromethane                                 | (ug/m3)                       | 3.4                           | 3.7                           |
| See the Endnotes following the last page of this table. |                               |                               |                               |

Table 2-2  
Summary of Sub-Slab Soil Vapor & Indoor Air Sampling Results  
Volatile Organic Compounds  
Former Empire Electric Facility, Brooklyn, New York  
Site Number 2-24-015

PERIOD: From 10/31/2006 thru 10/31/2006 - Inclusive

SAMPLE TYPE: Air

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | IA-01<br>690221<br>10/31/2006 | SS-01<br>690220<br>10/31/2006 |
|---------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Ethylbenzene                                            | (ug/m3)                       | 5.2                           | 1.4                           |
| Freon 113                                               | (ug/m3)                       | 1.5 U                         | 1.5 U                         |
| Freon 114                                               | (ug/m3)                       | 1.4 U                         | 1.4 U                         |
| Hexachlorobutadiene                                     | (ug/m3)                       | 2.1 U                         | 2.1 U                         |
| Hexane                                                  | (ug/m3)                       | 15                            | 1.8 U                         |
| Isooctane                                               | (ug/m3)                       | 6.5                           | 0.93 U                        |
| Isopropyl Alcohol                                       | (ug/m3)                       | 12 U                          | 12 U                          |
| m+p-Xylene                                              | (ug/m3)                       | 19                            | 2.7                           |
| Methyl Tertiary Butyl Ether                             | (ug/m3)                       | 1.8 U                         | 1.8 U                         |
| Methylene Chloride                                      | (ug/m3)                       | 1.9                           | 2.7                           |
| n-Heptane                                               | (ug/m3)                       | 4.5                           | 0.82 U                        |
| o-Xylene                                                | (ug/m3)                       | 6.5                           | 1.1                           |
| Styrene                                                 | (ug/m3)                       | 2.8                           | 3.5                           |
| Tertiary Butyl Alcohol                                  | (ug/m3)                       | 15 U                          | 15 U                          |
| Tetrachloroethene                                       | (ug/m3)                       | 1.4 U                         | 11                            |
| Tetrahydrofuran                                         | (ug/m3)                       | 15 U                          | 15 U                          |
| Toluene                                                 | (ug/m3)                       | 41                            | 6.8                           |
| trans-1,2-Dichloroethene                                | (ug/m3)                       | 0.79 U                        | 0.79 U                        |
| trans-1,3-Dichloropropene                               | (ug/m3)                       | 0.91 U                        | 0.91 U                        |
| Trichloroethene                                         | (ug/m3)                       | 1.1 U                         | 4.6                           |
| Trichlorofluoromethane                                  | (ug/m3)                       | 1.7                           | 1.9                           |
| Vinyl bromide                                           | (ug/m3)                       | 0.87 U                        | 0.87 U                        |
| Vinyl chloride                                          | (ug/m3)                       | 0.51 U                        | 0.51 U                        |
| Xylene (total)                                          | (ug/m3)                       | 25                            | 3.8                           |
| See the Endnotes following the last page of this table. |                               |                               |                               |

**Table 2-2**  
**Summary of Sub-Slab Soil Vapor and Indoor Air Sampling Results**  
**Volatile Organic Compounds**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

Notes:

- $\mu\text{g}/\text{m}^3$  = micrograms per cubic meter.
- The samples were analyzed by Severn Trent Laboratories Burlington, Vermont (STL-VT) following "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition 1997, EPA/625/R-96/010B", Compendium Method TO-15, "Determination Of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)".

Qualifiers

|              |                                                                                                                                                                                 |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| no qualifier | The compound was positively identified at the associated numerical value which is the concentration of the compound in the sample.                                              |
| U            | Non-Detect. The compound was analyzed for, but not detected. The associated numerical value is the reporting limit. The value is usable as a non-detect at the reporting limit. |

SAMPLE TYPE: Soil

[illegible]

SAMPLE TYPE: Soil

[illegible]



SAMPLE TYPE: Soil

[illegible]

SAMPLE TYPE: Soil

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC Part 375<br>Restricted SCO<br>Commercial | SB-01<br>214087-001<br>10/30/2006 | SB-01<br>214087-002<br>10/30/2006 | SB-02<br>214087-003<br>10/30/2006 | SB-02<br>214087-004<br>10/30/2006 | SB-03<br>214087-005<br>10/30/2006 |
|---------------------------------------------------------|-------------------------------|-------------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| trans-1,3-Dichloropropene                               | (ug/kg)                       |                                                 | 5.9 U                             | 6.0 U                             | 6.2 U                             | 5.5 U                             | 6.3 U                             |
| Trichloroethene                                         | (ug/kg)                       | 200000                                          | 5.9 U                             | 0.97 J                            | 6.2 U                             | 1.6 J                             | 1.2 J                             |
| Trichlorofluoromethane                                  | (ug/kg)                       |                                                 | 5.9 U                             | 6.0 U                             | 6.2 U                             | 5.5 U                             | 6.3 U                             |
| Vinyl Acetate                                           | (ug/kg)                       |                                                 | 5.9 U                             | 6.0 U                             | 6.2 U                             | 5.5 U                             | 6.3 U                             |
| Vinyl chloride                                          | (ug/kg)                       | 13000                                           | 5.9 U                             | 6.0 U                             | 6.2 U                             | 5.5 U                             | 6.3 U                             |
| Xylene (total)                                          | (ug/kg)                       | 500000                                          | 5.9 U                             | 2.6 J                             | 6.2 U                             | 5.5 U                             | 6.3 U                             |
| See the Endnotes following the last page of this table. |                               |                                                 |                                   |                                   |                                   |                                   |                                   |

SAMPLE TYPE: Soil

[illegible]

SAMPLE TYPE: Soil

[illegible]

SAMPLE TYPE: Soil

[illegible]

SAMPLE TYPE: Soil

|                                                         | SITE          | NYSDEC Part 375 | SB-04      | SB-05      | SB-06      | SB-07      | SB-08      |
|---------------------------------------------------------|---------------|-----------------|------------|------------|------------|------------|------------|
| CONSTITUENT                                             | LAB SAMPLE ID | Restricted SCO  | 214087-006 | 214087-007 | 214087-008 | 214087-009 | 214087-010 |
|                                                         | DATE          | Commercial      | 10/30/2006 | 10/30/2006 | 10/30/2006 | 10/30/2006 | 10/30/2006 |
| trans-1,3-Dichloropropene                               | (ug/kg)       |                 | 6.2 U      | 5.8 U      | 5.8 U      | 6.3 U      | 7.2 U      |
| Trichloroethene                                         | (ug/kg)       | 200000          | 0.86 J     | 5.8 U      | 1.3 J      | 1.8 J      | 1.4 J      |
| Trichlorofluoromethane                                  | (ug/kg)       |                 | 6.2 U      | 5.8 U      | 5.8 U      | 6.3 U      | 7.2 U      |
| Vinyl Acetate                                           | (ug/kg)       |                 | 6.2 U      | 5.8 U      | 5.8 U      | 6.3 U      | 7.2 U      |
| Vinyl chloride                                          | (ug/kg)       | 13000           | 6.2 U      | 5.8 U      | 5.8 U      | 6.3 U      | 7.2 U      |
| Xylene (total)                                          | (ug/kg)       | 500000          | 6.2 U      | 5.8 U      | 5.8 U      | 6.3 U      | 7.2 U      |
|                                                         |               |                 |            |            |            |            |            |
| See the Endnotes following the last page of this table. |               |                 |            |            |            |            |            |

**Table 2-3**  
**Summary of Soil Boring Analytical Results**  
**Volatile Organic Compounds**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

Notes:

- µg/kg = micrograms per kilogram (parts per billion; ppb).
- NYSDEC Part 375 Restricted SCO Commercial = Final Restricted Use Soil Cleanup Objectives (SCOs) as Presented in 6 NYCRR Part 375-6.8(b) Table 11-2, Protection of Public Health - Commercial.
- Bracketed values indicate exceedances of the NYSDEC Part 375 Restricted SCO Commercial.
- The samples were analyzed by Severn Trent Laboratories (STL) – Shelton, Connecticut, for Target Compound List (TCL) Volatile Organic Compound (VOC) analysis by USEPA SW-846 Method 8260B, in accordance with *“Test Methods for Evaluation Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions.”*

Qualifiers

|    |                                                                                                                                                                                                                                                                                             |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| U  | Non-Detect. The compound was analyzed for, but not detected. The associated numerical value is the reporting limit. The value is usable as a non-detect at the reporting limit.                                                                                                             |
| J  | Estimated value. The value was designated as estimated either by the laboratory per the method to indicate the compound is present, but the concentration is less than the reporting limit or by the validation process due to a QC exceedance. The value is usable as an estimated result. |
| UJ | The compound was analyzed for, but not detected. The associated numerical value is the reporting limit. However, due to a QC exceedance the value is an estimated quantity. The value is usable as a non-detect at the estimated reporting limit.                                           |

SAMPLE TYPE: Soil

[illegible]



SAMPLE TYPE: Soil

[illegible]

SAMPLE TYPE: Soil

[illegible]

SAMPLE TYPE: Soil

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC Part 375<br>Restricted SCO<br>Commercial | SB-01<br>214087-001<br>10/30/2006 | SB-01<br>214087-002<br>10/30/2006 | SB-02<br>214087-003<br>10/30/2006 | SB-02<br>214087-004<br>10/30/2006 | SB-03<br>214087-005<br>10/30/2006 |
|---------------------------------------------------------|-------------------------------|-------------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Phenol                                                  | (ug/kg)                       | 500000                                          | 390 U                             | 380 U                             | 400 U                             | 350 U                             | 410 U                             |
| p-Nitroaniline                                          | (ug/kg)                       |                                                 | 1000                              | 760 U                             | 250 J                             | 710 U                             | 820 U                             |
| p-Nitrophenol                                           | (ug/kg)                       |                                                 | 1900 U                            | 1800 U                            | 1900 U                            | 1700 U                            | 2000 U                            |
| Pyrene                                                  | (ug/kg)                       | 500000                                          | 820                               | 380 U                             | 3300                              | 160 J                             | 170 J                             |
|                                                         |                               |                                                 |                                   |                                   |                                   |                                   |                                   |
| See the Endnotes following the last page of this table. |                               |                                                 |                                   |                                   |                                   |                                   |                                   |

SAMPLE TYPE: Soil

[illegible]

SAMPLE TYPE: Soil

| CONSTITUENT                                             | SITE          | NYSDEC Part 375 | SB-04      | SB-05      | SB-06      | SB-07      | SB-08      |
|---------------------------------------------------------|---------------|-----------------|------------|------------|------------|------------|------------|
|                                                         | LAB SAMPLE ID | Restricted SCO  | 214087-006 | 214087-007 | 214087-008 | 214087-009 | 214087-010 |
|                                                         | DATE          | Commercial      | 10/30/2006 | 10/30/2006 | 10/30/2006 | 10/30/2006 | 10/30/2006 |
| Acenaphthene                                            | (ug/kg)       | 500000          | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| Acenaphthylene                                          | (ug/kg)       | 500000          | 400 U      | 360 U      | 170 J      | 410 U      | 460 U      |
| Anthracene                                              | (ug/kg)       | 500000          | 400 U      | 360 U      | 240 J      | 410 U      | 460 U      |
| Benzo(a)anthracene                                      | (ug/kg)       | 5600            | 400 U      | 210 J      | 400        | 410 U      | 240 J      |
| Benzo(a)pyrene                                          | (ug/kg)       | 1000            | 400 U      | 200 J      | 310 J      | 410 U J    | 450 J      |
| Benzo(b)fluoranthene                                    | (ug/kg)       | 5600            | 400 U      | 210 J      | 290 J      | 410 U J    | 2000 J     |
| Benzo(ghi)perylene                                      | (ug/kg)       | 500000          | 400 U      | 190 J      | 240 J      | 52 J       | 510 J      |
| Benzo(k)fluoranthene                                    | (ug/kg)       | 56000           | 400 U      | 110 J      | 230 J      | 410 U J    | 460 U J    |
| Benzyl alcohol                                          | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| Bis(2-chloroethoxy)methane                              | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| Bis(2-chloroethyl)ether                                 | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| Bis(2-ethylhexyl)phthalate (BEHP)                       | (ug/kg)       |                 | 400 U      | 360 U      | 190 J      | 240 J      | 570        |
| Butyl benzyl phthalate                                  | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| Carbazole                                               | (ug/kg)       |                 | 400 U      | 360 U      | 95 J       | 410 U      | 460 U      |
| Chrysene                                                | (ug/kg)       | 56000           | 400 U      | 440        | 510        | 130 J      | 1400       |
| Dibenzo(a,h)anthracene                                  | (ug/kg)       | 560             | 400 U J    | 82 J       | 97 J       | 410 U J    | 220 J      |
| Dibenzofuran                                            | (ug/kg)       | 350000          | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| Diethyl phthalate                                       | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| Dimethyl phthalate                                      | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| Di-n-butyl phthalate                                    | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 91 J       | 460 U      |
| Di-n-octyl phthalate                                    | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| See the Endnotes following the last page of this table. |               |                 |            |            |            |            |            |

SAMPLE TYPE: Soil

|                                                         | SITE          | NYSDEC Part 375 | SB-04      | SB-05      | SB-06      | SB-07      | SB-08      |
|---------------------------------------------------------|---------------|-----------------|------------|------------|------------|------------|------------|
| CONSTITUENT                                             | LAB SAMPLE ID | Restricted SCO  | 214087-006 | 214087-007 | 214087-008 | 214087-009 | 214087-010 |
|                                                         | DATE          | Commercial      | 10/30/2006 | 10/30/2006 | 10/30/2006 | 10/30/2006 | 10/30/2006 |
| Fluoranthene                                            | (ug/kg)       | 500000          | 400 U      | 180 J      | 800        | 57 J       | 390 J      |
| Fluorene                                                | (ug/kg)       | 500000          | 400 U      | 360 U      | 110 J      | 410 U      | 460 U      |
| Hexachlorobenzene                                       | (ug/kg)       | 6000            | 320 J      | 360 U      | 360 U      | 410 U      | 460 U      |
| Hexachlorobutadiene                                     | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| Hexachlorocyclopentadiene                               | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| Hexachloroethane                                        | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| Indeno(1,2,3-cd)pyrene                                  | (ug/kg)       | 5600            | 400 U      | 130 J      | 190 J      | 410 U      | 490        |
| Isophorone                                              | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| m-Nitroaniline                                          | (ug/kg)       |                 | 1900 U     | 1700 U     | 1800 U     | 2000 U     | 2200 U     |
| Naphthalene                                             | (ug/kg)       | 500000          | 400 U      | 120 J      | 86 J       | 410 U      | 460 U      |
| Nitrobenzene                                            | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| N-Nitrosodiphenylamine                                  | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| N-Nitrosodipropylamine                                  | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| o-Cresol                                                | (ug/kg)       | 500000          | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| o-Nitroaniline                                          | (ug/kg)       |                 | 1900 U     | 1700 U     | 1800 U     | 2000 U     | 2200 U     |
| o-Nitrophenol                                           | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| p-Chloroaniline                                         | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| p-Chloro-m-cresol                                       | (ug/kg)       |                 | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| p-Cresol                                                | (ug/kg)       | 500000          | 400 U      | 360 U      | 360 U      | 410 U      | 460 U      |
| Pentachlorophenol                                       | (ug/kg)       | 6700            | 1900 U     | 1700 U     | 1800 U     | 2000 U     | 2200 U     |
| Phenanthrene                                            | (ug/kg)       | 500000          | 400 U      | 250 J      | 940        | 410 U      | 130 J      |
| See the Endnotes following the last page of this table. |               |                 |            |            |            |            |            |

SAMPLE TYPE: Soil

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC Part 375<br>Restricted SCO<br>Commercial | SB-04<br>214087-006<br>10/30/2006 | SB-05<br>214087-007<br>10/30/2006 | SB-06<br>214087-008<br>10/30/2006 | SB-07<br>214087-009<br>10/30/2006 | SB-08<br>214087-010<br>10/30/2006 |
|---------------------------------------------------------|-------------------------------|-------------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Phenol                                                  | (ug/kg)                       | 500000                                          | 400 U                             | 360 U                             | 360 U                             | 410 U                             | 460 U                             |
| p-Nitroaniline                                          | (ug/kg)                       |                                                 | 800 U                             | 720 U                             | 720 U                             | 820 U                             | 910 U                             |
| p-Nitrophenol                                           | (ug/kg)                       |                                                 | 1900 U                            | 1700 U                            | 1800 U                            | 2000 U                            | 2200 U                            |
| Pyrene                                                  | (ug/kg)                       | 500000                                          | 400 U                             | 170 J                             | 580                               | 63 J                              | 330 J                             |
|                                                         |                               |                                                 |                                   |                                   |                                   |                                   |                                   |
| See the Endnotes following the last page of this table. |                               |                                                 |                                   |                                   |                                   |                                   |                                   |

**Table 2-4**  
**Summary of Soil Boring Analytical Results**  
**Semivolatile Organic Compounds**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

Notes:

- µg/kg = micrograms per kilogram (parts per billion; ppb).
- NYSDEC Part 375 Restricted SCO Commercial = Final Restricted Use Soil Cleanup Objectives (SCOs) as Presented in 6 NYCRR Part 375-6.8(b) Table 11-2, Protection of Public Health - Commercial.
- Bracketed values indicate exceedances of the NYSDEC Part 375 Restricted SCO Commercial.
- The samples were analyzed by Severn Trent Laboratories (STL) – Shelton, Connecticut, for Target Compound List (TCL) Semivolatile Organic Compound (SVOC) analysis by USEPA SW-846 Method 8270C, in accordance with *“Test Methods for Evaluation Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions.”*

Qualifiers

|              |                                                                                                                                                                                                                                                                                            |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| no qualifier | The compound was positively identified at the associated numerical value which is the concentration of the compound in the sample.                                                                                                                                                         |
| U            | Non-Detect. The compound was analyzed for, but not detected. The associated numerical value is the reporting limit. The value is usable as a non-detect at the reporting limit.                                                                                                            |
| J            | Estimated value. The value was designated as estimated either by the laboratory per the method to indicate the compound is present, but the concentration is less than the reporting limit or by the validation process due to a QC exceedance. The value is usable as an estimated result |
| UJ           | The compound was analyzed for, but not detected. The associated numerical value is the reporting limit. However, due to a QC exceedance the value is an estimated quantity. The value is usable as a non-detect at the estimated reporting limit.                                          |



SAMPLE TYPE: Soil

[illegible]

SAMPLE TYPE: Soil

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC Part 375<br>Restricted SCO<br>Commercial | SB-01<br>214087-001<br>10/30/2006 | SB-01<br>214087-002<br>10/30/2006 | SB-02<br>214087-003<br>10/30/2006 | SB-02<br>214087-004<br>10/30/2006 | SB-03<br>214087-005<br>10/30/2006 |
|---------------------------------------------------------|-------------------------------|-------------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Methoxychlor                                            | (ug/kg)                       |                                                 | 2000 U                            | 20 U                              | 830 U                             | 19 U                              | 42 U                              |
| Toxaphene                                               | (ug/kg)                       |                                                 | 7900 U                            | 81 U                              | 3300 U                            | 73 U                              | 170 U                             |
| Aroclor 1016                                            | (ug/kg)                       |                                                 | 20000 U                           | 20 U                              | 410 U                             | 19 U                              | 210 U                             |
| Aroclor 1221                                            | (ug/kg)                       |                                                 | 39000 U                           | 40 U                              | 800 U                             | 36 U                              | 410 U                             |
| Aroclor 1232                                            | (ug/kg)                       |                                                 | 20000 U                           | 20 U                              | 410 U                             | 19 U                              | 210 U                             |
| Aroclor 1242                                            | (ug/kg)                       |                                                 | 20000 U                           | 20 U                              | 410 U                             | 19 U                              | 210 U                             |
| Aroclor 1248                                            | (ug/kg)                       |                                                 | 20000 U                           | 20 U                              | 410 U                             | 19 U                              | 210 U                             |
| Aroclor 1254                                            | (ug/kg)                       |                                                 | 20000 U                           | 20 U                              | 3600                              | 19 U                              | 210 U                             |
| Aroclor 1260                                            | (ug/kg)                       |                                                 | 18000 J                           | 31                                | 2100                              | 180                               | 1000                              |
| See the Endnotes following the last page of this table. |                               |                                                 |                                   |                                   |                                   |                                   |                                   |

SAMPLE TYPE: Soil

[illegible]

SAMPLE TYPE: Soil

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC Part 375<br>Restricted SCO<br>Commercial | SB-04<br>214087-006<br>10/30/2006 | SB-05<br>214087-007<br>10/30/2006 | SB-06<br>214087-008<br>10/30/2006 | SB-07<br>214087-009<br>10/30/2006 | SB-08<br>214087-010<br>10/30/2006 |
|---------------------------------------------------------|-------------------------------|-------------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Methoxychlor                                            | (ug/kg)                       |                                                 | 210 U                             | 450 J                             | 380 U                             | 420 U                             | 240 U                             |
| Toxaphene                                               | (ug/kg)                       |                                                 | 820 U                             | 7600 U                            | 1500 U                            | 1700 U                            | 960 U                             |
| Aroclor 1016                                            | (ug/kg)                       |                                                 | 1000 U                            | 19000 U                           | 960 U                             | 420 U                             | 4900 U                            |
| Aroclor 1221                                            | (ug/kg)                       |                                                 | 2000 U                            | 38000 U                           | 1900 U                            | 820 U                             | 9400 U                            |
| Aroclor 1232                                            | (ug/kg)                       |                                                 | 1000 U                            | 19000 U                           | 960 U                             | 420 U                             | 4900 U                            |
| Aroclor 1242                                            | (ug/kg)                       |                                                 | 1000 U                            | 19000 U                           | 960 U                             | 420 U                             | 4900 U                            |
| Aroclor 1248                                            | (ug/kg)                       |                                                 | 1000 U                            | 19000 U                           | 960 U                             | 420 U                             | 4900 U                            |
| Aroclor 1254                                            | (ug/kg)                       |                                                 | 1900                              | 19000 U                           | 960 U                             | 420 U                             | 4900 U                            |
| Aroclor 1260                                            | (ug/kg)                       |                                                 | 1200                              | 160000                            | 14000                             | 6000                              | 18000                             |
| See the Endnotes following the last page of this table. |                               |                                                 |                                   |                                   |                                   |                                   |                                   |

**Table 2-5**  
**Summary of Soil Boring Analytical Results**  
**Pesticides and Polychlorinated Biphenyls**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

Notes:

- µg/kg = micrograms per kilogram (parts per billion; ppb).
- NYSDEC Part 375 Restricted SCO Commercial = Final Restricted Use Soil Cleanup Objectives (SCOs) as Presented in 6 NYCRR Part 375-6.8(b) Table 11-2, Protection of Public Health - Commercial.
- Bracketed values indicate exceedances of the NYSDEC Part 375 Restricted SCO Commercial.
- The samples were analyzed by Severn Trent Laboratories (STL) – Shelton, Connecticut, for Target Compound List (TCL) Pesticide Compound (Pest) analysis by USEPA Method 8081A and TCL Polychlorinated Biphenyl (PCB) analysis by USEPA Method 8082 in accordance with *“Test Methods for Evaluation Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions.”*

Qualifiers

|              |                                                                                                                                                                                                                                                                                            |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| no qualifier | The compound was positively identified at the associated numerical value which is the concentration of the compound in the sample.                                                                                                                                                         |
| U            | Non-Detect. The compound was analyzed for, but not detected. The associated numerical value is the reporting limit. The value is usable as a non-detect at the reporting limit.                                                                                                            |
| J            | Estimated value. The value was designated as estimated either by the laboratory per the method to indicate the compound is present, but the concentration is less than the reporting limit or by the validation process due to a QC exceedance. The value is usable as an estimated result |
| UJ           | The compound was analyzed for, but not detected. The associated numerical value is the reporting limit. However, due to a QC exceedance the value is an estimated quantity. The value is usable as a non-detect at the estimated reporting limit.                                          |

SAMPLE TYPE: Soil

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC Part 375<br>Restricted SCO<br>Commercial | SB-01<br>214087-001<br>10/30/2006 | SB-01<br>214087-002<br>10/30/2006 | SB-02<br>214087-003<br>10/30/2006 | SB-02<br>214087-004<br>10/30/2006 | SB-03<br>214087-005<br>10/30/2006 |
|---------------------------------------------------------|-------------------------------|-------------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Starting Depth                                          | (feet)                        |                                                 | 0.00                              | 3.00                              | 0.00                              | 3.00                              | 0.50                              |
| Ending Depth                                            | (feet)                        |                                                 | 0.50                              | 3.50                              | 0.50                              | 3.50                              | 1.00                              |
| Aluminum                                                | (mg/kg)                       |                                                 | 4250                              | 2430                              | 4140                              | 4700                              | 9430                              |
| Antimony                                                | (mg/kg)                       |                                                 | 12.1 U J                          | 12.4 U J                          | 12.5 U J                          | 8.9 U J                           | 11.8 U J                          |
| Arsenic                                                 | (mg/kg)                       | 16                                              | 9.5 J                             | 9.9 U J                           | 8.4 J                             | 7.1 U J                           | [48.4] J                          |
| Barium                                                  | (mg/kg)                       | 400                                             | [2120]                            | 72.3                              | [637]                             | 42.7                              | 158                               |
| Beryllium                                               | (mg/kg)                       | 590                                             | 2.4 U                             | 2.5 U                             | 2.5 U                             | 1.8 U                             | 2.4 U                             |
| Cadmium                                                 | (mg/kg)                       | 9.3                                             | 9.2                               | 6.2 U                             | 7.7                               | 4.5 U                             | 5.2 J                             |
| Calcium                                                 | (mg/kg)                       |                                                 | 20000                             | 3220                              | 16500                             | 2080                              | 41400                             |
| Chromium                                                | (mg/kg)                       |                                                 | 95.9 J                            | 4.1 J                             | 50.4 J                            | 11.3 J                            | 21.7 J                            |
| Cobalt                                                  | (mg/kg)                       |                                                 | 10.6                              | 3.8                               | 8.3                               | 6.2                               | 6.9                               |
| Copper                                                  | (mg/kg)                       | 270                                             | 270                               | 41.1                              | [379]                             | 19.6                              | 98.3                              |
| Iron                                                    | (mg/kg)                       |                                                 | 65100                             | 4120                              | 40500                             | 12300                             | 78600                             |
| Lead                                                    | (mg/kg)                       | 1000                                            | [1170]                            | 50.3                              | [1040]                            | 34.8                              | [1370]                            |
| Magnesium                                               | (mg/kg)                       |                                                 | 2820                              | 790                               | 3180                              | 1550                              | 8820                              |
| Manganese                                               | (mg/kg)                       | 10000                                           | 415                               | 76.7                              | 357                               | 244                               | 582                               |
| Mercury                                                 | (mg/kg)                       | 2.8                                             | 1.3                               | [11.6]                            | [30.1]                            | 0.13                              | 1.2                               |
| Nickel                                                  | (mg/kg)                       | 310                                             | 67.3                              | 10.7                              | 59.8                              | 24.5                              | 18.0                              |
| Potassium                                               | (mg/kg)                       |                                                 | 486                               | 293                               | 294                               | 570                               | 1200                              |
| Selenium                                                | (mg/kg)                       | 1500                                            | 12.1 U J                          | 12.4 U J                          | 12.5 U J                          | 8.9 U J                           | 5.5 J                             |
| Silver                                                  | (mg/kg)                       | 1500                                            | 1.4 J                             | 3.7 U                             | 1.5 J                             | 2.7 U                             | 3.5 U                             |
| See the Endnotes following the last page of this table. |                               |                                                 |                                   |                                   |                                   |                                   |                                   |

SAMPLE TYPE: Soil

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC Part 375<br>Restricted SCO<br>Commercial | SB-01<br>214087-001<br>10/30/2006 | SB-01<br>214087-002<br>10/30/2006 | SB-02<br>214087-003<br>10/30/2006 | SB-02<br>214087-004<br>10/30/2006 | SB-03<br>214087-005<br>10/30/2006 |
|---------------------------------------------------------|-------------------------------|-------------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Sodium                                                  | (mg/kg)                       |                                                 | 269 J                             | 142 J                             | 166 J                             | 75.7 J                            | 1380 J                            |
| Thallium                                                | (mg/kg)                       |                                                 | 24.2 U J                          | 24.8 U J                          | 25.0 U J                          | 17.8 U J                          | 23.5 U J                          |
| Vanadium                                                | (mg/kg)                       |                                                 | 55.8                              | 12.3                              | 53.4                              | 15.9                              | 23.9                              |
| Zinc                                                    | (mg/kg)                       | 10000                                           | 1730 J                            | 164 J                             | 1240 J                            | 58.6 J                            | 237 J                             |
|                                                         |                               |                                                 |                                   |                                   |                                   |                                   |                                   |
| See the Endnotes following the last page of this table. |                               |                                                 |                                   |                                   |                                   |                                   |                                   |

SAMPLE TYPE: Soil

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC Part 375<br>Restricted SCO<br>Commercial | SB-04<br>214087-006<br>10/30/2006 | SB-05<br>214087-007<br>10/30/2006 | SB-06<br>214087-008<br>10/30/2006 | SB-07<br>214087-009<br>10/30/2006 | SB-08<br>214087-010<br>10/30/2006 |
|---------------------------------------------------------|-------------------------------|-------------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Starting Depth                                          | (feet)                        |                                                 | 0.50                              | 0.50                              | 0.50                              | 0.50                              | 0.50                              |
| Ending Depth                                            | (feet)                        |                                                 | 1.00                              | 1.00                              | 1.00                              | 1.00                              | 1.00                              |
| Aluminum                                                | (mg/kg)                       |                                                 | 6580                              | 2650                              | 3310                              | 4820                              | 11800                             |
| Antimony                                                | (mg/kg)                       |                                                 | 11.7 U J                          | 9.5 U J                           | 9.4 U J                           | 15.2 U J                          | 14.5 U J                          |
| Arsenic                                                 | (mg/kg)                       | 16                                              | 12.7 J                            | [25.6] J                          | 9.0 J                             | 12.2 U J                          | [38.0] J                          |
| Barium                                                  | (mg/kg)                       | 400                                             | 49.4                              | 159                               | 83.9                              | 336                               | [2600]                            |
| Beryllium                                               | (mg/kg)                       | 590                                             | 2.3 U                             | 1.9 U                             | 1.9 U                             | 3.0 U                             | 1.1 J                             |
| Cadmium                                                 | (mg/kg)                       | 9.3                                             | 5.9 U                             | 9.0                               | 3.4 J                             | 4.3 J                             | [21.2]                            |
| Calcium                                                 | (mg/kg)                       |                                                 | 42600                             | 33900                             | 86800                             | 47300                             | 25900                             |
| Chromium                                                | (mg/kg)                       |                                                 | 7.1 J                             | 37.5 J                            | 13.0 J                            | 19.7 J                            | 92.5 J                            |
| Cobalt                                                  | (mg/kg)                       |                                                 | 2.6                               | 19.3                              | 4.3                               | 2.7 J                             | 15.9                              |
| Copper                                                  | (mg/kg)                       | 270                                             | 20.3                              | [15600]                           | [1710]                            | [349]                             | [5300]                            |
| Iron                                                    | (mg/kg)                       |                                                 | 5330                              | 129000                            | 33700                             | 8480                              | 80800                             |
| Lead                                                    | (mg/kg)                       | 1000                                            | 25.1                              | 415                               | [1600]                            | [4860]                            | [5770]                            |
| Magnesium                                               | (mg/kg)                       |                                                 | 3330                              | 5020                              | 35800                             | 4970                              | 3400                              |
| Manganese                                               | (mg/kg)                       | 10000                                           | 152                               | 865                               | 325                               | 240                               | 799                               |
| Mercury                                                 | (mg/kg)                       | 2.8                                             | 0.17                              | [3.4]                             | 2.2                               | 1.5                               | 2.7                               |
| Nickel                                                  | (mg/kg)                       | 310                                             | 8.0                               | 72.3                              | 18.5                              | 10.0                              | 59.7                              |
| Potassium                                               | (mg/kg)                       |                                                 | 955                               | 529                               | 726                               | 908                               | 1920                              |
| Selenium                                                | (mg/kg)                       | 1500                                            | 11.7 U J                          | 3.0 J                             | 9.4 U J                           | 15.2 U J                          | 14.5 U J                          |
| Silver                                                  | (mg/kg)                       | 1500                                            | 3.5 U                             | 1.8 J                             | 2.8 U                             | 4.6 U                             | 2.0 J                             |
| See the Endnotes following the last page of this table. |                               |                                                 |                                   |                                   |                                   |                                   |                                   |



SAMPLE TYPE: Soil

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC Part 375<br>Restricted SCO<br>Commercial | SB-04<br>214087-006<br>10/30/2006 | SB-05<br>214087-007<br>10/30/2006 | SB-06<br>214087-008<br>10/30/2006 | SB-07<br>214087-009<br>10/30/2006 | SB-08<br>214087-010<br>10/30/2006 |
|---------------------------------------------------------|-------------------------------|-------------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Sodium                                                  | (mg/kg)                       |                                                 | 831 J                             | 251 J                             | 365 J                             | 560 J                             | 2050 J                            |
| Thallium                                                | (mg/kg)                       |                                                 | 23.5 U J                          | 18.9 U J                          | 18.8 U J                          | 30.4 U J                          | 29.1 U J                          |
| Vanadium                                                | (mg/kg)                       |                                                 | 22.6                              | 40.5                              | 17.3                              | 23.4                              | 66.1                              |
| Zinc                                                    | (mg/kg)                       | 10000                                           | 19.1 J                            | 1060 J                            | 357 J                             | 447 J                             | 5160 J                            |
| See the Endnotes following the last page of this table. |                               |                                                 |                                   |                                   |                                   |                                   |                                   |

**Table 2-6**  
**Summary of Soil Boring Analytical Results**  
**Inorganics**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

Notes:

- mg/kg = milligrams per kilogram (parts per million; ppm).
- NYSDEC Part 375 Restricted SCO Commercial = Final Restricted Use Soil Cleanup Objectives (SCOs) as Presented in 6 NYCRR Part 375-6.8(b) Table 11-2, Protection of Public Health - Commercial.
- Bracketed values indicate exceedances of the NYSDEC Part 375 Restricted SCO Commercial.
- The samples were analyzed by Severn Trent Laboratories (STL) – Shelton, Connecticut, for Target Analyte List (TAL) Metals analysis with mercury analyzed by USEPA Method 7471A and all other metals analyzed by USEPA Method 6010B, in accordance with *“Test Methods for Evaluation Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions.”*

Qualifiers

|              |                                                                                                                                                                                                                                                  |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| no qualifier | The analyte was positively identified at the associated numerical value which is the concentration of the analyte in the sample.                                                                                                                 |
| U            | Non-Detect. The analyte was analyzed for, but not detected. The associated numerical value is the reporting limit. The value is usable as a non-detect at the reporting limit.                                                                   |
| J            | Estimated value. The value was designated as estimated either by the validation process due to a QC exceedance. The value is usable as an estimated result.                                                                                      |
| UJ           | The analyte was analyzed for, but not detected. The associated numerical value is the reporting limit. However, due to a QC exceedance the value is an estimated quantity. The value is usable as a non-detect at the estimated reporting limit. |

Table 2-7  
Summary of Groundwater Analytical Results  
Volatile Organic Compounds  
Former Empire Electric Facility, Brooklyn, New York  
Site Number 2-24-015

PERIOD: From 12/06/2006 thru 12/06/2006 - Inclusive

SAMPLE TYPE: Water

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC<br>TOGS | EMMW-5<br>214356-001<br>12/06/2006 |
|---------------------------------------------------------|-------------------------------|----------------|------------------------------------|
| 1,1,1,2-Tetrachloroethane                               | (ug/l)                        | 5              | 5.0 U                              |
| 1,1,1-Trichloroethane                                   | (ug/l)                        | 5              | 5.0 U                              |
| 1,1,2,2-Tetrachloroethane                               | (ug/l)                        | 5              | 5.0 U J                            |
| 1,1,2-Trichloroethane                                   | (ug/l)                        | 1              | 5.0 U                              |
| 1,1-Dichloroethane                                      | (ug/l)                        | 5              | 5.0 U                              |
| 1,1-Dichloroethene                                      | (ug/l)                        | 5              | 5.0 U                              |
| 1,1-Dichloropropene                                     | (ug/l)                        | 5              | 5.0 U                              |
| 1,2,3-Trichlorobenzene                                  | (ug/l)                        | 5              | 5.0 U J                            |
| 1,2,3-Trichloropropane                                  | (ug/l)                        | 5              | 5.0 U J                            |
| 1,2,4-Trichlorobenzene                                  | (ug/l)                        | 5              | 5.0 U                              |
| 1,2,4-Trimethylbenzene                                  | (ug/l)                        | 5              | 5.0 U                              |
| 1,2-Dibromoethane                                       | (ug/l)                        | 0.0006         | 5.0 U                              |
| 1,2-Dichlorobenzene                                     | (ug/l)                        | 3              | 5.0 U                              |
| 1,2-Dichloroethane                                      | (ug/l)                        | 0.6            | 5.0 U                              |
| 1,2-Dichloropropane                                     | (ug/l)                        | 1              | 5.0 U                              |
| 1,3,5-Trimethylbenzene                                  | (ug/l)                        | 5              | 5.0 U                              |
| 1,3-Dichlorobenzene                                     | (ug/l)                        | 3              | [3.6] J                            |
| 1,3-Dichloropropane                                     | (ug/l)                        | 5              | 5.0 U                              |
| 1,4-Dichlorobenzene                                     | (ug/l)                        | 3              | 5.0 U                              |
| 2,2-Dichloropropane                                     | (ug/l)                        |                | 5.0 U                              |
| 2-Butanone                                              | (ug/l)                        | 50             | 10 U J                             |
| See the Endnotes following the last page of this table. |                               |                |                                    |

Table 2-7  
Summary of Groundwater Analytical Results  
Volatile Organic Compounds  
Former Empire Electric Facility, Brooklyn, New York  
Site Number 2-24-015

PERIOD: From 12/06/2006 thru 12/06/2006 - Inclusive

SAMPLE TYPE: Water

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC<br>TOGS | EMMW-5<br>214356-001<br>12/06/2006 |
|---------------------------------------------------------|-------------------------------|----------------|------------------------------------|
| 2-Chloroethyl vinyl ether                               | (ug/l)                        |                | 5.0 U J                            |
| 2-Chlorotoluene                                         | (ug/l)                        | 5              | 5.0 U                              |
| 2-Hexanone                                              | (ug/l)                        | 50             | 10 U                               |
| 4-Chlorotoluene                                         | (ug/l)                        | 5              | 5.0 U                              |
| 4-Methyl-2-Pentanone                                    | (ug/l)                        |                | 10 U                               |
| Acetone                                                 | (ug/l)                        | 50             | 10 U J                             |
| Benzene                                                 | (ug/l)                        | 1              | 5.0 U                              |
| Bromobenzene                                            | (ug/l)                        | 5              | 5.0 U                              |
| Bromochloromethane                                      | (ug/l)                        | 5              | 5.0 U                              |
| Bromodichloromethane                                    | (ug/l)                        | 50             | 5.0 U                              |
| Bromoform                                               | (ug/l)                        | 50             | 5.0 U                              |
| Bromomethane                                            | (ug/l)                        | 5              | 5.0 U                              |
| Carbon Disulfide                                        | (ug/l)                        | 60             | 5.0 U                              |
| Carbon Tetrachloride                                    | (ug/l)                        | 5              | 5.0 U                              |
| Chlorobenzene                                           | (ug/l)                        | 5              | 1.4 J                              |
| Chloroethane                                            | (ug/l)                        | 5              | 5.0 U                              |
| Chloroform                                              | (ug/l)                        | 7              | 5.0 U                              |
| Chloromethane                                           | (ug/l)                        | 5              | 5.0 U                              |
| cis-1,2-Dichloroethene                                  | (ug/l)                        | 5              | 5.0 U                              |
| cis-1,3-Dichloropropene                                 | (ug/l)                        | 0.4            | 5.0 U                              |
| Dibromochloromethane                                    | (ug/l)                        | 50             | 5.0 U                              |
| See the Endnotes following the last page of this table. |                               |                |                                    |

Table 2-7  
Summary of Groundwater Analytical Results  
Volatile Organic Compounds  
Former Empire Electric Facility, Brooklyn, New York  
Site Number 2-24-015

PERIOD: From 12/06/2006 thru 12/06/2006 - Inclusive

SAMPLE TYPE: Water

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC<br>TOGS | EMMW-5<br>214356-001<br>12/06/2006 |
|---------------------------------------------------------|-------------------------------|----------------|------------------------------------|
| Dibromochloropropane                                    | (ug/l)                        | 0.04           | 5.0 U J                            |
| Dibromomethane                                          | (ug/l)                        | 5              | 5.0 U                              |
| Dichlorodifluoromethane                                 | (ug/l)                        | 5              | 5.0 U                              |
| Ethylbenzene                                            | (ug/l)                        | 5              | 5.0 U                              |
| Hexachlorobutadiene                                     | (ug/l)                        | 0.5            | 5.0 U J                            |
| Iodomethane                                             | (ug/l)                        |                | 10 U                               |
| Isopropylbenzene                                        | (ug/l)                        | 5              | 5.0 U                              |
| Methyl Tertiary Butyl Ether                             | (ug/l)                        | 10             | 5.0 U                              |
| Methylene Chloride                                      | (ug/l)                        | 5              | 5.0 U                              |
| Naphthalene                                             | (ug/l)                        | 10             | 1.1 J                              |
| n-Butylbenzene                                          | (ug/l)                        | 5              | 5.0 U                              |
| n-Propylbenzene                                         | (ug/l)                        | 5              | 5.0 U                              |
| p-Isopropyltoluene                                      | (ug/l)                        | 5              | 5.0 U                              |
| sec-Butylbenzene                                        | (ug/l)                        | 5              | 5.0 U                              |
| Styrene                                                 | (ug/l)                        | 5              | 5.0 U                              |
| tert-Butylbenzene                                       | (ug/l)                        | 5              | 5.0 U                              |
| Tetrachloroethene                                       | (ug/l)                        | 5              | 5.0 U                              |
| Toluene                                                 | (ug/l)                        | 5              | 5.0 U                              |
| trans-1,2-Dichloroethene                                | (ug/l)                        | 5              | 5.0 U                              |
| trans-1,3-Dichloropropene                               | (ug/l)                        | 0.4            | 5.0 U                              |
| Trichloroethene                                         | (ug/l)                        | 5              | 1.9 J                              |
| See the Endnotes following the last page of this table. |                               |                |                                    |

Table 2-7  
Summary of Groundwater Analytical Results  
Volatile Organic Compounds  
Former Empire Electric Facility, Brooklyn, New York  
Site Number 2-24-015

PERIOD: From 12/06/2006 thru 12/06/2006 - Inclusive  
SAMPLE TYPE: Water

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC<br>TOGS | EMMW-5<br>214356-001<br>12/06/2006 |
|---------------------------------------------------------|-------------------------------|----------------|------------------------------------|
| Trichlorofluoromethane                                  | (ug/l)                        | 5              | 5.0 U                              |
| Vinyl Acetate                                           | (ug/l)                        |                | 5.0 U                              |
| Vinyl chloride                                          | (ug/l)                        | 2              | 5.0 U                              |
| Xylene (total)                                          | (ug/l)                        | 5              | 5.0 U                              |
| See the Endnotes following the last page of this table. |                               |                |                                    |

**Table 2-7**  
**Summary of Groundwater Analytical Results**  
**Volatile Organic Compounds**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

Notes:

- µg/l = micrograms per liter (parts per billion; ppb).
- NYSDEC TOGS = ambient water quality standards and guidance values for Class GA groundwater as identified in New York State Department of Environmental Conservation Technical and Operational Guidance Series No. 1.1.1.
- Bracketed values indicate exceedances of the standards and guidance values identified in TOGs 1.1.1.
- The samples were analyzed by Severn Trent Laboratories (STL) – Shelton, Connecticut, for Target Compound List (TCL) Volatile Organic Compound (VOC) analysis by USEPA SW-846 Method 8260B, in accordance with *“Test Methods for Evaluation Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions.”*

Qualifiers

|    |                                                                                                                                                                                                                                                                                            |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| U  | Non-Detect. The compound was analyzed for, but not detected. The associated numerical value is the reporting limit. The value is usable as a non-detect at the reporting limit.                                                                                                            |
| J  | Estimated value. The value was designated as estimated either by the laboratory per the method to indicate the compound is present, but the concentration is less than the reporting limit or by the validation process due to a QC exceedance. The value is usable as an estimated result |
| UJ | The compound was analyzed for, but not detected. The associated numerical value is the reporting limit. However, due to a QC exceedance the value is an estimated quantity. The value is usable as a non-detect at the estimated reporting limit.                                          |

Table 2-8  
Summary of Groundwater Analytical Results  
Semivolatile Organic Compounds  
Former Empire Electric Facility, Brooklyn, New York  
Site Number 2-24-015

PERIOD: From 12/06/2006 thru 12/06/2006 - Inclusive

SAMPLE TYPE: Water

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC<br>TOGS | EMMW-5<br>214356-001<br>12/06/2006 |
|---------------------------------------------------------|-------------------------------|----------------|------------------------------------|
| 1,2,4-Trichlorobenzene                                  | (ug/l)                        | 5              | 10 U J                             |
| 1,2-Dichlorobenzene                                     | (ug/l)                        | 3              | 10 U J                             |
| 1,3-Dichlorobenzene                                     | (ug/l)                        | 3              | 3 J                                |
| 1,4-Dichlorobenzene                                     | (ug/l)                        | 3              | 2 J                                |
| 2,2'-oxybis(1-Chloropropane)                            | (ug/l)                        |                | 10 U J                             |
| 2,4,5-Trichlorophenol                                   | (ug/l)                        | 1              | 50 U J                             |
| 2,4,6-Trichlorophenol                                   | (ug/l)                        | 1              | 10 U J                             |
| 2,4-Dichlorophenol                                      | (ug/l)                        | 5              | 10 U J                             |
| 2,4-Dimethylphenol                                      | (ug/l)                        | 1              | 10 U J                             |
| 2,4-Dinitrophenol                                       | (ug/l)                        | 10             | 50 U J                             |
| 2,4-Dinitrotoluene                                      | (ug/l)                        | 5              | 10 U J                             |
| 2,6-Dinitrotoluene                                      | (ug/l)                        | 5              | 10 U J                             |
| 2-Chloronaphthalene                                     | (ug/l)                        | 10             | 10 U J                             |
| 2-Chlorophenol                                          | (ug/l)                        | 1              | 10 U J                             |
| 2-Methylnaphthalene                                     | (ug/l)                        |                | 10 U J                             |
| 3,3-Dichlorobenzidine                                   | (ug/l)                        | 5              | 20 U J                             |
| 4,6-Dinitro-o-cresol                                    | (ug/l)                        | 1              | 50 U J                             |
| 4-Bromophenyl phenyl ether                              | (ug/l)                        |                | 10 U J                             |
| 4-Chlorophenyl phenyl ether                             | (ug/l)                        |                | 10 U J                             |
| Acenaphthene                                            | (ug/l)                        | 20             | 10 U J                             |
| Acenaphthylene                                          | (ug/l)                        |                | 10 U J                             |
| See the Endnotes following the last page of this table. |                               |                |                                    |



Table 2-8  
Summary of Groundwater Analytical Results  
Semivolatile Organic Compounds  
Former Empire Electric Facility, Brooklyn, New York  
Site Number 2-24-015

PERIOD: From 12/06/2006 thru 12/06/2006 - Inclusive

SAMPLE TYPE: Water

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC<br>TOGS | EMMW-5<br>214356-001<br>12/06/2006 |
|---------------------------------------------------------|-------------------------------|----------------|------------------------------------|
| Anthracene                                              | (ug/l)                        | 50             | 10 U J                             |
| Benzo(a)anthracene                                      | (ug/l)                        | 0.002          | 10 U J                             |
| Benzo(a)pyrene                                          | (ug/l)                        | 0              | 10 U J                             |
| Benzo(b)fluoranthene                                    | (ug/l)                        | 0.002          | 10 U J                             |
| Benzo(ghi)perylene                                      | (ug/l)                        |                | 10 U J                             |
| Benzo(k)fluoranthene                                    | (ug/l)                        | 0.002          | 10 U J                             |
| Benzyl alcohol                                          | (ug/l)                        |                | 10 U J                             |
| Bis(2-chloroethoxy)methane                              | (ug/l)                        | 5              | 10 U J                             |
| Bis(2-chloroethyl)ether                                 | (ug/l)                        | 1              | 10 U J                             |
| Bis(2-ethylhexyl)phthalate (BEHP)                       | (ug/l)                        | 5              | 10 U J                             |
| Butyl benzyl phthalate                                  | (ug/l)                        | 50             | 10 U J                             |
| Carbazole                                               | (ug/l)                        |                | 10 U J                             |
| Chrysene                                                | (ug/l)                        | 0.002          | 10 U J                             |
| Dibenzo(a,h)anthracene                                  | (ug/l)                        |                | 10 U J                             |
| Dibenzofuran                                            | (ug/l)                        |                | 10 U J                             |
| Diethyl phthalate                                       | (ug/l)                        | 50             | 10 U J                             |
| Dimethyl phthalate                                      | (ug/l)                        | 50             | 10 U J                             |
| Di-n-butyl phthalate                                    | (ug/l)                        | 50             | 10 U J                             |
| Di-n-octyl phthalate                                    | (ug/l)                        | 50             | 10 U J                             |
| Fluoranthene                                            | (ug/l)                        | 50             | 10 U J                             |
| Fluorene                                                | (ug/l)                        | 50             | 10 U J                             |
| See the Endnotes following the last page of this table. |                               |                |                                    |

Table 2-8  
Summary of Groundwater Analytical Results  
Semivolatile Organic Compounds  
Former Empire Electric Facility, Brooklyn, New York  
Site Number 2-24-015

PERIOD: From 12/06/2006 thru 12/06/2006 - Inclusive

SAMPLE TYPE: Water

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC<br>TOGS | EMMW-5<br>214356-001<br>12/06/2006 |
|---------------------------------------------------------|-------------------------------|----------------|------------------------------------|
| Hexachlorobenzene                                       | (ug/l)                        | 0.04           | 10 U J                             |
| Hexachlorobutadiene                                     | (ug/l)                        | 0.5            | 10 U J                             |
| Hexachlorocyclopentadiene                               | (ug/l)                        | 5              | 10 U J                             |
| Hexachloroethane                                        | (ug/l)                        | 5              | 10 U J                             |
| Indeno(1,2,3-cd)pyrene                                  | (ug/l)                        | 0.002          | 10 U J                             |
| Isophorone                                              | (ug/l)                        | 50             | 10 U J                             |
| m-Nitroaniline                                          | (ug/l)                        | 5              | 50 U J                             |
| Naphthalene                                             | (ug/l)                        | 10             | 10 U J                             |
| Nitrobenzene                                            | (ug/l)                        | 0.4            | 10 U J                             |
| N-Nitrosodiphenylamine                                  | (ug/l)                        | 50             | 10 U J                             |
| N-Nitrosodipropylamine                                  | (ug/l)                        |                | 10 U J                             |
| o-Cresol                                                | (ug/l)                        | 1              | 10 U J                             |
| o-Nitroaniline                                          | (ug/l)                        | 5              | 50 U J                             |
| o-Nitrophenol                                           | (ug/l)                        | 1              | 10 U J                             |
| p-Chloroaniline                                         | (ug/l)                        | 5              | 10 U J                             |
| p-Chloro-m-cresol                                       | (ug/l)                        | 1              | 10 U J                             |
| p-Cresol                                                | (ug/l)                        | 1              | 10 U J                             |
| Pentachlorophenol                                       | (ug/l)                        | 1              | 50 U J                             |
| Phenanthrene                                            | (ug/l)                        | 50             | 10 U J                             |
| Phenol                                                  | (ug/l)                        | 1              | 10 U J                             |
| p-Nitroaniline                                          | (ug/l)                        | 5              | 20 U J                             |
| See the Endnotes following the last page of this table. |                               |                |                                    |

Table 2-8  
Summary of Groundwater Analytical Results  
Semivolatile Organic Compounds  
Former Empire Electric Facility, Brooklyn, New York  
Site Number 2-24-015

PERIOD: From 12/06/2006 thru 12/06/2006 - Inclusive  
SAMPLE TYPE: Water

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC<br>TOGS | EMMW-5<br>214356-001<br>12/06/2006 |
|---------------------------------------------------------|-------------------------------|----------------|------------------------------------|
| p-Nitrophenol                                           | (ug/l)                        | 1              | 50 U J                             |
| Pyrene                                                  | (ug/l)                        | 50             | 10 U J                             |
| See the Endnotes following the last page of this table. |                               |                |                                    |

**Table 2-8**  
**Summary of Groundwater Analytical Results**  
**Semivolatile Organic Compounds**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

Notes:

- µg/l = micrograms per liter (parts per billion; ppb).
- NYSDEC TOGS = ambient water quality standards and guidance values for Class GA groundwater as identified in New York State Department of Environmental Conservation Technical and Operational Guidance Series No. 1.1.1.
- Bracketed values indicate exceedances of the standards and guidance values identified in TOGs 1.1.1.
- The samples were analyzed by Severn Trent Laboratories (STL) – Shelton, Connecticut, for Target Compound List (TCL) Volatile Organic Compound (VOC) analysis by USEPA SW-846 Method 8260B, in accordance with *“Test Methods for Evaluation Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions.”*

Qualifiers

- |    |                                                                                                                                                                                                                                                                                            |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| J  | Estimated value. The value was designated as estimated either by the laboratory per the method to indicate the compound is present, but the concentration is less than the reporting limit or by the validation process due to a QC exceedance. The value is usable as an estimated result |
| UJ | The compound was analyzed for, but not detected. The associated numerical value is the reporting limit. However, due to a QC exceedance the value is an estimated quantity. The value is usable as a non-detect at the estimated reporting limit.                                          |

Table 2-9  
Summary of Groundwater Analytical Results  
Polychlorinated Biphenyls  
Former Empire Electric Facility, Brooklyn, New York  
Site Number 2-24-015

PERIOD: From 12/06/2006 thru 12/06/2006 - Inclusive

SAMPLE TYPE: Water

| CONSTITUENT                                             | SITE<br>LAB SAMPLE ID<br>DATE | NYSDEC<br>TOGS | EMMW-5<br>214356-002<br>12/06/2006 | EMMW-5<br>214356-001<br>12/06/2006 |
|---------------------------------------------------------|-------------------------------|----------------|------------------------------------|------------------------------------|
| Aroclor 1016                                            | (ug/l)                        | 0.09           | NA                                 | 0.54 U                             |
| Aroclor 1221                                            | (ug/l)                        | 0.09           | NA                                 | 1.1 U                              |
| Aroclor 1232                                            | (ug/l)                        | 0.09           | NA                                 | 0.54 U                             |
| Aroclor 1242                                            | (ug/l)                        | 0.09           | NA                                 | 0.54 U                             |
| Aroclor 1248                                            | (ug/l)                        | 0.09           | NA                                 | 0.54 U                             |
| Aroclor 1254                                            | (ug/l)                        | 0.09           | NA                                 | 0.54 U                             |
| Aroclor 1260                                            | (ug/l)                        | 0.09           | NA                                 | [0.31] J                           |
| Aroclor 1016 ()                                         | (ug/l)                        | 0.09           | 0.54 U J                           | NA                                 |
| Aroclor 1221 ()                                         | (ug/l)                        | 0.09           | 1.1 U J                            | NA                                 |
| Aroclor 1232 ()                                         | (ug/l)                        | 0.09           | 0.54 U J                           | NA                                 |
| Aroclor 1242 ()                                         | (ug/l)                        | 0.09           | 0.54 U J                           | NA                                 |
| Aroclor 1248 ()                                         | (ug/l)                        | 0.09           | 0.54 U J                           | NA                                 |
| Aroclor 1254 ()                                         | (ug/l)                        | 0.09           | 0.54 U J                           | NA                                 |
| Aroclor 1260 ()                                         | (ug/l)                        | 0.09           | 0.54 U J                           | NA                                 |
| See the Endnotes following the last page of this table. |                               |                |                                    |                                    |

**Table 2-9**  
**Summary of Groundwater Analytical Results**  
**Polychlorinated Biphenyls**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

Notes:

- µg/l = micrograms per liter (parts per billion; ppb).
- NYSDEC TOGS = ambient water quality standards and guidance values for Class GA groundwater as identified in New York State Department of Environmental Conservation Technical and Operational Guidance Series No. 1.1.1.
- Bracketed values indicate exceedances of the standards and guidance values identified in TOGs 1.1.1.
- The samples were analyzed by Severn Trent Laboratories (STL) – Shelton, Connecticut, for Target Compound List (TCL) Polychlorinated Biphenyl (PCB) analysis by USEPA Method 8082 in accordance with *“Test Methods for Evaluation Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions.”*
- Sample was filtered and re-analyzed. Second set of data is the filtered results. Due to a software limitation, the data can not be reported together.

Qualifiers

|    |                                                                                                                                                                                                                                                                                            |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| U  | Non-Detect. The compound was analyzed for, but not detected. The associated numerical value is the reporting limit. The value is usable as a non-detect at the reporting limit.                                                                                                            |
| J  | Estimated value. The value was designated as estimated either by the laboratory per the method to indicate the compound is present, but the concentration is less than the reporting limit or by the validation process due to a QC exceedance. The value is usable as an estimated result |
| UJ | The compound was analyzed for, but not detected. The associated numerical value is the reporting limit. However, due to a QC exceedance the value is an estimated quantity. The value is usable as a non-detect at the estimated reporting limit.                                          |

**Table 4-1**  
**Immuno-Assay Screening Results: Polychlorinated Biphenyls in Basement Building Materials**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

| Samples Below 25 ppm |       | Samples >25 & <50 ppm |       | Samples >50 & <75 ppm |       | Samples >75 & <100 ppm |        | Samples >100 & <125 ppm |        |
|----------------------|-------|-----------------------|-------|-----------------------|-------|------------------------|--------|-------------------------|--------|
| ERM-BWL-003          | 2.04  | ERM-B-016             | 46.66 | ERM-B-001             | 54.63 | ERM-B-006              | 99.69  | ERM-B-007               | 109.27 |
| ERM-BWL-004          | 0.85  | ERM-B-017             | 44.41 | ERM-B-002             | 60.21 | ERM-B-008              | 91.18  | ERM-B-013               | 112.74 |
| ERM-BWL-009          | 2.36  | ERM-B-028             | 28.31 | ERM-B-004             | 66.96 | ERM-B-009              | 80.10  | ERM-B-020               | 100.45 |
| ERM-P-009            | 23.12 | ERM-B-043             | 35.30 | ERM-B-005             | 63.90 | ERM-B-011              | 96.74  | ERM-B-021               | 105.95 |
| ERM-P-029            | 22.83 | ERM-B-052             | 49.01 | ERM-B-010             | 56.41 | ERM-B-014              | 81.25  | ERM-B-027               | 116.35 |
| ERM-P-034            | 20.09 | ERM-BWL-002           | 32.97 | ERM-B-012             | 59.42 | ERM-B-023              | 91.86  | ERM-B-036               | 110.13 |
| ERM-P-043            | 23.83 | ERM-BWL-005           | 44.43 | ERM-B-015             | 61.00 | ERM-B-024              | 98.94  | ERM-B-042               | 101.24 |
|                      |       | ERM-BWL-008           | 29.20 | ERM-B-019             | 58.65 | ERM-B-026              | 76.27  | ERM-P-006               | 118.11 |
|                      |       | ERM-P-003             | 30.75 | ERM-B-022             | 59.81 | ERM-B-029              | 76.80  | ERM-P-007               | 105.18 |
|                      |       | ERM-P-005             | 45.20 | ERM-B-025             | 67.41 | ERM-B-030              | 90.52  |                         |        |
|                      |       | ERM-P-011             | 39.25 | ERM-B-031             | 59.04 | ERM-B-032              | 90.52  |                         |        |
|                      |       | ERM-P-013             | 35.36 | ERM-B-037             | 54.28 | ERM-B-033              | 110.99 |                         |        |
|                      |       | ERM-P-014             | 29.17 | ERM-B-046             | 74.71 | ERM-B-034              | 78.98  |                         |        |
|                      |       | ERM-P-015             | 26.70 | ERM-B-047             | 63.67 | ERM-B-035              | 78.43  |                         |        |
|                      |       | ERM-P-017             | 36.94 | ERM-B-048             | 58.59 | ERM-B-038              | 77.34  |                         |        |
|                      |       | ERM-P-019             | 40.36 | ERM-B-049             | 59.80 | ERM-B-040              | 75.74  |                         |        |
|                      |       | ERM-P-023             | 49.32 | ERM-B-050             | 57.79 | ERM-B-045              | 87.94  |                         |        |
|                      |       | ERM-P-028             | 28.00 | ERM-B-053             | 70.41 | ERM-B-051              | 76.42  |                         |        |
|                      |       | ERM-P-030             | 37.40 | ERM-B-057             | 72.52 | ERM-B-054              | 75.28  |                         |        |
|                      |       | ERM-P-035             | 45.76 | ERM-B-060             | 58.19 | ERM-B-055              | 81.89  |                         |        |
|                      |       | ERM-P-036             | 46.71 | ERM-B-061             | 65.04 | ERM-B-056              | 84.51  |                         |        |
|                      |       | ERM-P-037             | 26.97 | ERM-BWL-001           | 60.55 | ERM-B-058              | 96.23  |                         |        |
|                      |       | ERM-P-038             | 40.23 | ERM-BWL-006           | 56.68 | ERM-B-059              | 81.26  |                         |        |
|                      |       | ERM-P-039             | 38.91 | ERM-BWL-007           | 62.88 | ERM-P-004              | 82.34  |                         |        |
|                      |       | ERM-P-040             | 41.05 | ERM-BWL-0010          | 56.68 | ERM-P-008              | 79.03  |                         |        |
|                      |       | ERM-P-041             | 32.62 | ERM-P-001             | 57.64 | ERM-P-020              | 95.53  |                         |        |
|                      |       | ERM-P-042             | 33.04 | ERM-P-002             | 58.00 | ERM-P-026              | 78.59  |                         |        |
|                      |       | ERM-P-044             | 49.38 | ERM-P-010             | 63.68 | ERM-P-032              | 77.37  |                         |        |
|                      |       | ERM-P-045             | 37.15 | ERM-P-012             | 52.64 | ERM-P-046              | 96.97  |                         |        |
|                      |       | ERM-P-047             | 32.62 | ERM-P-016             | 73.41 | ERM-P-053              | 83.06  |                         |        |
|                      |       | ERM-P-048             | 36.91 | ERM-P-018             | 51.40 | ERM-P-064              | 83.73  |                         |        |
|                      |       | ERM-P-049             | 25.66 | ERM-P-021             | 50.49 |                        |        |                         |        |
|                      |       | ERM-P-051             | 34.35 | ERM-P-022             | 59.08 |                        |        |                         |        |
|                      |       | ERM-P-052             | 39.43 | ERM-P-025             | 51.14 |                        |        |                         |        |
|                      |       | ERM-P-054             | 47.69 | ERM-P-027             | 66.40 |                        |        |                         |        |
|                      |       | ERM-P-055             | 41.60 | ERM-P-031             | 66.90 |                        |        |                         |        |
|                      |       | ERM-P-057             | 33.47 | ERM-P-033             | 56.09 |                        |        |                         |        |
|                      |       | ERM-P-059             | 25.34 | ERM-P-050             | 71.07 |                        |        |                         |        |
|                      |       | ERM-P-060             | 46.39 | ERM-P-056             | 71.07 |                        |        |                         |        |
|                      |       | ERM-P-063             | 35.26 | ERM-P-058             | 64.44 |                        |        |                         |        |
|                      |       |                       |       | ERM-P-061             | 61.65 |                        |        |                         |        |
|                      |       |                       |       | ERM-P-062             | 56.09 |                        |        |                         |        |

All sample results shown in parts per million (ppm)

**Table 4-1**  
**Immuno-Assay Screening Results: Polychlorinated Biphenyls in Basement Building Materials**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

| Samples >125 & <150 ppm |        | Samples >150 & <175 ppm |        | Samples >175 & <200 ppm |        | Samples >200 & < 225 ppm |        | Samples >225 & < 250 ppm |        |
|-------------------------|--------|-------------------------|--------|-------------------------|--------|--------------------------|--------|--------------------------|--------|
| ERM-B-039               | 140.43 | ERM-P-024               | 156.11 | ERM-B-018               | 199.60 | ERM-B-003                | 209.57 | ERM-B-044                | 226.08 |
| ERM-B-041               | 139.71 |                         |        |                         |        |                          |        |                          |        |

All sample results shown in parts per million (ppm)



**Table 4-1A**  
**Immuno-Assay Screening Results: Polychlorinated Biphenyls in Basement Building Materials at 1/4-Inch Depth**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

| Samples >25 ppm |       | Samples >25 & <50 ppm |       |
|-----------------|-------|-----------------------|-------|
| ERM-BWL-L005-02 | 21.86 | ERM-BWL-L001-02       | 25.71 |
| ERM-BWL-L006-02 | 7.23  | ERM-BWL-L010-02       | 62.92 |
| ERM-BWL-L007-02 | 24.93 |                       |       |

All sample results shown in parts per million (ppm)

**Table 4-2**  
**Immuno-Assay Screening Results: Polychlorinated Biphenyls in Main Floor Building Materials**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

| Samples >25 ppm |       | Samples >25 & <50 ppm |       | Samples >50 & <75 ppm |       | Samples >75 & <100 ppm |       |
|-----------------|-------|-----------------------|-------|-----------------------|-------|------------------------|-------|
| ERM-1FL-015     | 17.11 | ERM-1FL-007           | 44.87 | ERM-1FL-004           | 62.43 | ERM-1FL-002            | 86.90 |
| ERM-1FL-025     | 23.06 | ERM-1FL-008           | 43.07 | ERM-1FL-011           | 74.53 | ERM-1FL-003            | 84.09 |
| ERM-1FL-075     | 6.75  | ERM-1FL-012           | 44.26 | ERM-1FL-024           | 72.22 | ERM-1FL-005            | 99.48 |
| ERM-1FL-076     | 10.56 | ERM-1FL-019           | 29.74 | ERM-1FL-027           | 54.67 | ERM-1FL-010            | 92.91 |
| ERM-1WL-L-005   | 24.61 | ERM-1FL-020           | 43.07 | ERM-1FL-028           | 51.98 | ERM-1FL-016            | 75.72 |
| ERM-1WL-L-008   | 8.12  | ERM-1FL-035           | 43.79 | ERM-1FL-055           | 68.00 | ERM-1FL-022            | 89.10 |
| ERM-1WL-L-009   | 12.41 | ERM-1FL-073           | 40.47 | ERM-1FL-056           | 73.48 | ERM-1FL-023            | 96.12 |
| ERM-1WL-L-010   | 20.64 | ERM-1WL-L-002         | 28.83 | ERM-1FL-067           | 67.42 | ERM-1FL-032            | 76.76 |
| ERM-1WL-U-004   | 23.47 | ERM-1WL-L-003         | 43.07 | ERM-1FL-068           | 72.85 | ERM-1FL-040            | 96.19 |
| ERM-1WL-U-005   | 19.37 | ERM-1WL-L-004         | 30.49 | ERM-1WL-L-001         | 53.50 | ERM-1FL-048            | 94.42 |
| ERM-1WL-U-006   | 10.22 | ERM-1WL-L-006         | 25.21 | ERM-1WL-L-011         | 61.70 | ERM-1FL-057            | 79.52 |
| ERM-1WL-U-007   | 24.33 | ERM-1WL-L-007         | 27.61 | ERM-1WL-L-012         | 67.21 | ERM-1FL-058            | 80.23 |
| ERM-1WL-U-008   | 24.83 | ERM-1WL-L-014         | 28.12 | ERM-1WL-L-016         | 67.21 | ERM-1FL-059            | 97.08 |
| ERM-1WL-U-009   | 13.46 | ERM-1WL-L-015         | 28.12 | ERM-1WL-U-010         | 62.88 | ERM-1FL-060            | 77.44 |
|                 |       | ERM-1WL-U-001         | 33.14 |                       |       | ERM-1FL-064            | 91.85 |
|                 |       | ERM-1WL-U-002         | 40.59 |                       |       | ERM-1FL-065            | 83.14 |
|                 |       | ERM-1WL-U-003         | 38.82 |                       |       |                        |       |

All sample results shown in parts per million (ppm)

**Table 4-2**  
**Immuno-Assay Screening Results: Polychlorinated Biphenyls in Main Floor Building Materials**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

| Samples >100 & <125 ppm |        | Samples >125 & <150 ppm |        | Samples >150 & <175 ppm |        | Samples >175 & <200 ppm |        |
|-------------------------|--------|-------------------------|--------|-------------------------|--------|-------------------------|--------|
| ERM-1FL-001             | 109.54 | ERM-1FL-006             | 137.98 | ERM-1FL-013             | 153.62 | ERM-1FL-029             | 175.73 |
| ERM-1FL-009             | 122.11 | ERM-1FL-021             | 135.37 | ERM-1FL-045             | 157.78 | ERM-1FL-038             | 185.70 |
| ERM-1FL-014             | 108.58 | ERM-1FL-026             | 129.12 | ERM-1FL-070             | 164.19 | ERM-1FL-046             | 179.63 |
| ERM-1FL-017             | 100.34 | ERM-1FL-031             | 125.87 | ERM-1FL-072             | 160.69 | ERM-1FL-063             | 194.21 |
| ERM-1FL-018             | 120.99 | ERM-1FL-039             | 136.42 |                         |        | ERM-1FL-069             | 193.52 |
| ERM-1FL-036             | 123.39 | ERM-1FL-054             | 139.24 |                         |        |                         |        |
| ERM-1FL-043             | 120.98 | ERM-1FL-074             | 135.71 |                         |        |                         |        |
| ERM-1FL-051             | 117.47 |                         |        |                         |        |                         |        |
| ERM-1FL-052             | 105.66 |                         |        |                         |        |                         |        |
| ERM-1FL-061             | 112.99 |                         |        |                         |        |                         |        |
| ERM-1FL-062             | 101.73 |                         |        |                         |        |                         |        |
| ERM-1WL-L-013           | 109.48 |                         |        |                         |        |                         |        |

All sample results shown in parts per million (ppm)

**Table 4-2**  
**Immuno-Assay Screening Results: Polychlorinated Biphenyls in Main Floor Building Materials**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

| Samples >200 & < 225 ppm |        | Samples >225 & < 250 ppm |        | Samples >250 & < 275 ppm |        | Samples >275 & < 300 ppm |        | Samples >300 & < 500 ppm |        |
|--------------------------|--------|--------------------------|--------|--------------------------|--------|--------------------------|--------|--------------------------|--------|
| ERM-1FL-037              | 205.57 | ERM-1FL-030              | 228.32 | ERM-1FL-033              | 251.38 | ERM-1FL-047              | 299.71 | ERM-1FL-049              | 489.57 |
| ERM-1FL-044              | 215.30 | ERM-1FL-034              | 225.63 |                          |        |                          |        |                          |        |
| ERM-1FL-053              | 200.93 | ERM-1FL-041              | 242.39 |                          |        |                          |        |                          |        |
|                          |        | ERM-1FL-042              | 242.39 |                          |        |                          |        |                          |        |
|                          |        | ERM-1FL-050              | 248.34 |                          |        |                          |        |                          |        |
|                          |        | ERM-1FL-066              | 233.81 |                          |        |                          |        |                          |        |
|                          |        | ERM-1FL-071              | 229.47 |                          |        |                          |        |                          |        |

All sample results shown in parts per million (ppm)

**Table 4-2A**  
**Immuno-Assay Screening Results: Polychlorinated Biphenyls in Main Floor Building Materials at 1/4-inch Depth**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

| Samples >25 ppm |       | Samples >25 & <50 ppm |       |
|-----------------|-------|-----------------------|-------|
| ERM-1WL-L001-02 | 11.54 | ERM-1WL-L003-02       | 25.44 |
| ERM-1WL-L007-02 | 23.93 |                       |       |
| ERM-1WL-L010-02 | 8.97  |                       |       |
| ERM-1WL-L011-02 | 18.70 |                       |       |
| ERM-1WL-L012-02 | 21.22 |                       |       |
| ERM-1WL-L016-02 | 24.42 |                       |       |

All sample results shown in parts per million (ppm)

**Table 4-3**  
**Immune-Assay Screening Results: Polychlorinated Biphenyls in First Mezzanine**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

| Samples >25 ppm |       | Samples >25 & <50 ppm |       | Samples >50 & <75 ppm |       | Samples >100 & <125 ppm |        |
|-----------------|-------|-----------------------|-------|-----------------------|-------|-------------------------|--------|
| ERM-2FL-001     | 12.33 | ERM-2FL-007           | 38.63 | ERM-2WL-L-001         | 62.09 | ERM-2FL-008             | 116.32 |
| ERM-2FL-002     | 8.16  | ERM-2WL-L-002         | 30.92 | ERM-2WL-L-003         | 50.20 |                         |        |
| ERM-2FL-003     | 16.96 | ERM-2WL-L-004         | 27.69 |                       |       |                         |        |
| ERM-2FL-004     | 15.68 | ERM-2WL-L-005         | 46.80 |                       |       |                         |        |
| ERM-2FL-005     | 1.98  | ERM-2WL-L-007         | 35.75 |                       |       |                         |        |
| ERM-2FL-006     | 4.09  | ERM-2WL-L-009         | 37.35 |                       |       |                         |        |
| ERM-2WL-L-006   | 22.54 |                       |       |                       |       |                         |        |
| ERM-2WL-L-008   | 24.08 |                       |       |                       |       |                         |        |

All sample results shown in parts per million (ppm)

**Table 4-4**  
**Immune-Assay Screening Results: Polychlorinated Biphenyls in Second Mezzanine**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

| Samples >25 ppm |       | Samples >25 & <50 ppm |       | Samples >50 & <75 ppm |       | Samples >125 & <150 ppm |        | Samples >175 & <200 ppm |        |
|-----------------|-------|-----------------------|-------|-----------------------|-------|-------------------------|--------|-------------------------|--------|
| ERM-3FL-001     | 14.79 | ERM-3FL-003           | 26.00 | ERM-3FL-010           | 61.06 | ERM-3FL-027             | 141.50 | ERM-3FL-026             | 182.20 |
| ERM-3FL-002     | 13.09 | ERM-3FL-004           | 41.42 | ERM-3FL-011           | 58.59 |                         |        |                         |        |
| ERM-3FL-009     | 16.48 | ERM-3FL-005           | 28.82 | ERM-3FL-013           | 56.25 |                         |        |                         |        |
| ERM-3FL-014     | 23.89 | ERM-3FL-006           | 32.40 | ERM-3FL-022           | 52.29 |                         |        |                         |        |
| ERM-3FL-017     | 16.07 | ERM-3FL-007           | 46.29 | ERM-3FL-023           | 61.06 |                         |        |                         |        |
| ERM-3FL-018     | 1.32  | ERM-3FL-008           | 28.82 |                       |       |                         |        |                         |        |
| ERM-3FL-020     | 10.55 | ERM-3FL-012           | 27.74 |                       |       |                         |        |                         |        |
| ERM-3WL-L-002   | 5.30  | ERM-3FL-015           | 32.95 |                       |       |                         |        |                         |        |
|                 |       | ERM-3FL-016           | 32.22 |                       |       |                         |        |                         |        |
|                 |       | ERM-3FL-019           | 42.44 |                       |       |                         |        |                         |        |
|                 |       | ERM-3FL-021           | 40.43 |                       |       |                         |        |                         |        |
|                 |       | ERM-3FL-024           | 40.43 |                       |       |                         |        |                         |        |
|                 |       | ERM-3FL-025           | 31.86 |                       |       |                         |        |                         |        |
|                 |       | ERM-3WL-L-001         | 37.35 |                       |       |                         |        |                         |        |

All sample results shown in parts per million (ppm)

**Table 4-5**  
**USEPA Method 8082 Results: Polychlorinated Biphenyls in Select Building Material Samples**  
**Former Empire Electric Facility, Brooklyn, New York**  
**Site Number 2-24-015**

| Sample ID       | Aroclor 1260 | Aroclor 1242 | Aroclor 1254 | Aroclor 1248 | Total PCBs |
|-----------------|--------------|--------------|--------------|--------------|------------|
| ERM-BWL-004     | 0.01         |              |              |              | 0.01       |
| ERM-BWL-L006-02 | 0.01         |              |              |              | 0.01       |
| ERM-1WL-L001-02 | 0.02         |              |              |              | 0.02       |
| ERM-1WL-L-008   | 0.10         |              |              |              | 0.10       |
| ERM-1WL-L010-02 | 0.01         |              |              |              | 0.01       |
| ERM-1WL-U-004   | 0.08         |              |              |              | 0.08       |
| ERM-1WL-U-009   | 0.06         |              |              |              | 0.06       |
| ERM-1FL-025     | 300.0        |              |              |              | 300.0      |
| ERM-2FL-003     | 0.21         |              |              |              | 0.21       |
| ERM-2FL-005     | 0.13         |              |              |              | 0.13       |
| ERM-2FL-006     | 0.03         |              |              |              | 0.03       |
| ERM-2WL-L-008   | 0.08         |              | 0.04         |              | 0.12       |
| ERM-3FL-014     | 6.30         |              |              |              | 6.30       |
| ERM-3FL-018     | 4.20         |              |              |              | 4.20       |
| ERM-3WL-L-002   | 0.03         |              |              |              | 0.03       |
| ERM-BWL-005     | 0.050        |              |              |              | 0.050      |
| ERM-BWL-0010    | 0.094        |              |              |              | 0.094      |
| ERM-BWL-L010-02 | 0.023        |              |              |              | 0.023      |
| ERM-B-031       | 2.30         |              |              |              | 2.30       |
| ERM-P-016       | 20.0         |              |              |              | 20.0       |
| ERM-P-056       | 0.060        |              |              |              | 0.060      |
| ERM-P-060       | 0.210        |              |              |              | 0.210      |
| ERM-P-062       | 0.130        |              |              |              | 0.130      |
| ERM-1WL-U-001   | 0.055        |              |              |              | 0.055      |
| ERM-1WL-U-003   | 0.120        |              |              |              | 0.120      |
| ERM-1WL-U-010   | 0.240        |              |              |              | 0.240      |
| ERM-1WL-L-002   | 0.088        |              |              |              | 0.088      |
| ERM-1WL-L-006   | 0.30         |              |              |              | 0.30       |
| ERM-1WL-L-012   | 0.54         |              |              |              | 0.54       |
| ERM-1WL-L003-02 | 0.170        |              |              |              | 0.17       |
| ERM-1FL-011     | 13.0         |              |              |              | 13.0       |
| ERM-1FL-012     | 12.0         |              |              |              | 12.0       |
| ERM-1FL-055     | 590.0        |              |              |              | 590.0      |
| ERM-1FL-056     | 29.0         |              |              |              | 29.0       |
| ERM-1FL-068     | 32.0         |              |              |              | 32.0       |
| ERM-2WL-L-001   | 0.20         |              |              |              | 0.20       |
| ERM-2WL-L-003   | 0.095        |              |              |              | 0.095      |
| ERM-2WL-L-005   | 0.22         |              |              |              | 0.22       |
| ERM-2WL-L-009   | 0.14         |              | 0.160        |              | 0.30       |
| ERM-2FL-007     | 0.27         |              |              |              | 0.27       |
| ERM-3FL-004     | 4.30         |              | 2.70         |              | 7.00       |
| ERM-3FL-007     | 7.20         |              |              |              | 7.20       |
| ERM-3FL-012     | 2.20         |              |              |              | 2.20       |
| ERM-3FL-016     | 12.0         |              |              |              | 12.0       |
| ERM-3FL-023     | 96.0         |              |              |              | 96.0       |
| ERM-3FL-024     | 60.0         |              |              |              | 60.0       |
| ERM-B-003       | 220.0        |              |              |              | 220.0      |
| ERM-B-018       | 48.0         |              | 21.0         |              | 69.0       |
| ERM-B-020       | 10.0         |              |              |              | 10.0       |
| ERM-B-039       | 39.0         |              |              |              | 39.0       |
| ERM-B-044       | 33.0         |              |              |              | 33.0       |
| ERM-P-024       | 20.0         |              |              |              | 20.0       |
| ERM-1FL-033     | 920.0        |              |              |              | 920.0      |
| ERM-1FL-047     | 110.0        |              |              | 650.0        | 760.0      |
| ERM-1FL-049     | 2500         |              |              |              | 2500       |
| ERM-1FL-050     | 740          |              |              |              | 740        |
| ERM-1FL-053     | 1700         |              |              |              | 1700       |
| ERM-1FL-063     | 310          |              |              |              | 310        |
| ERM-1FL-074     | 13.0         | 1.80         |              |              | 14.8       |
| ERM-2FL-008     | 7.80         |              | 2.50         |              | 10.3       |
| ERM-3FL-026     | 2.10         |              |              |              | 2.10       |

All sampe results shown in parts per million (ppm)  
Samples ending in '-02' were collected from  
1/4" depth into the wall.