



**BERGMANN**  
ARCHITECTS ENGINEERS PLANNERS

# Environmental Management Plan

## SOLAR ARRAY WORK PLAN

500 Mamaroneck Avenue

NYSDEC Site #V00213 (Index #W3-0851-99-05)

Town of Harrison, Westchester County, New York



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## Acronyms

ACM	Asbestos Containing Materials
ASTM	American Society for Testing and Materials,
BUD	Beneficial Use Determinations
CAMP	Community Air Monitoring Plan
CCR	Construction Completion Report
CM	Construction Manager
CP-51	NYSDEC Commissioner Policy 51
CREC	Controlled Recognized Environmental Condition
DER	Division of Environmental Remediation
EC	Engineering Controls
EMP	Environmental Management Plan
EPA	US Department of Environmental Protection
ESA	Environmental Site Assessment
ERL	Environmental Risk Limited
ft bgs	Feet below ground surface
HASP	Health and Safety Plan
IC	Institutional Controls
mg/kg	Milligrams per kilogram
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOL	New York State Department of Labor
NYSDOT	New York Department of Transportation
OSHA	Occupational Safety and Health Administration
PACM	Presumed Asbestos Containing Materials
PAHS	Polycyclic Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls
PID	Photoionization Detector
PPE	Personal Protective Equipment
RSCO	Recommended Soil Cleanup Objectives
REC	Recognized Environmental Condition
SMP	Site Management Plan
SVI	Soil Vapor Intrusion
SVOCs	Semi-Volatile Organic Compounds
TAGM	NYSDEC Technical and Administrative Guidance Memorandum
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
TOGs 1.1.1	NYSDEC Ambient Water Quality Standards and Guidance values
TSDF	Treatment, Storage, and Disposal Facility
UFPO	Underground Facilities Protection Organization



UST	Underground Storage Tanks
VOCs	Volatile Organic Compounds
VCP	Voluntary Cleanup Program



## 1.0 INTRODUCTION

This Environmental Management Plan (EMP) was developed on behalf of Power Flex for the installation carport solar cells at 500 Mamaroneck Ave (Site) in Harrison in the State of New York (Figure 1-1). The purpose of the EMP is to discuss and document construction procedures to manage existing and potential environmental conditions in accordance with applicable federal, state, and local regulations, including the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER)-10. This EMP is intended to provide guidance to document as well as minimize project delays as a result of addressing environmental conditions within the Site in concert with the Site Management Plan (SMP) and Deed restriction for the site.

An Environmental Consultant will implement the EMP on behalf of, with concurrence and of oversight by Empire State Realty Trust (ESRT) and Power Flex. The Environmental Consultant will provide trained and qualified staff to be present on-Site during intrusive/ground-disturbing activities associated with the installation of the solar cells. This oversight includes but is not limited to disturbance of fill materials and impacted surface and subsurface media in known and unknown areas of the Site.

In addition, Bergmann will prepare a Change of Use Form (Appendix A) for ESRT and Power Flex's review and approval. The Change of Use Form will be submitted to the NYSDEC at the completion of the construction of the solar arrays.

### 1.1 PLAN ORGANIZATION

This EMP is organized as follows:

- Section 2.0 Site Description and History
- Section 3.0 Objectives
- Section 4.0 Applicable Regulatory Limits, Regulations, and Guidance
- Section 5.0 Environmental Management Plan
- Section 6.0 Implementation of the EMP
- Section 7.0 Equipment Decontamination
- Section 8.0 Community Air Monitoring Plan
- Section 9.0 Health and Safety Plan
- Section 10.0 Laboratory Testing
- Section 11.0 Reporting
- Section 12.0 Schedule



## 2.0 SITE DESCRIPTION AND BACKGROUND

### 2.1 SITE DESCRIPTION AND SURROUNDING PROPERTIES

The Site is located on the east side of Mamaroneck Ave, approximately 2,000 feet south of Union Avenue in the Town/Village of Harrison, Westchester County, New York. The Town/Village of Harrison defines the Site as Block 482, Lot 8. The approximately 34.5-acre Site, roughly rectangular in shape, is occupied by a five-story building with approximately 985 feet of roadway frontage along Mamaroneck Ave. A Site location map is included as Figure 1-1.

The U.S.G.S topographic map (Mamaroneck, NY Quadrangle, 2013, photo revised in 1975) shows the Site elevation ranges from approximately 20 feet along Mamaroneck Ave to 140 feet above mean sea level at the eastern property line. The elevation of the Site rises gradually throughout the northern and southern parking areas and is relatively level across the eastern boundary.

Approximately 14 acres of the Site have been improved by the construction of the office complex. This includes bituminous paved parking areas covering approximately nine acres and a building footprint of approximately 1.5 acres. The remaining area of the property are landscaped shrubbery and lawns. There is an undeveloped portion of the property east of the office complex.

The existing drainage area comprises a total of 29.4± acres. The Site consists mainly of developed areas, with some woods and smaller areas of maintained short grass. There is an existing federal wetland within the project area, and the project site discharges to the Mamaroneck River.

The bedrock beneath the Site is the Harrison Gneiss, which outcrops along the property's eastern and southern sides, and the bedrock's depth is between 2 feet below ground surface (ft bgs) to 15 ft bgs.

- North of the Property - A commercial building along Mamaroneck Avenue.
- West of the Property - Mamaroneck Avenue and Mamaroneck River.
- South of the Property - A commercial building along Mamaroneck Avenue.
- East of the Property - Wooded land. Further east is private residential properties.

Proposed Development Area is approximately 8-acres and includes the two (2) parking areas (Figure 2-1).

### 2.2 SITE BACKGROUND

The Site was occupied by the Town of Harrison municipal incinerator from at least 1954 to 1980. The construction of the current commercial office began in 1983, with tenant occupancy beginning around 1986. The 1986 aerial photograph shows the office building on the Site under construction. The town records the end of construction in 1986.

The construction activities changed the Site topography; approximately 340,000 cubic yards of soil and rock were removed during construction. The soil and rock were removed from the area closest to Mamaroneck Avenue. In 1999, the property was sold to 5000 Mamaroneck Ave L.P. and Viviane Paris, LLC.

The Site is currently managed under the 2005 Site Management Plan (SMP) (Appendix B). The SMP established the Institutional Controls (IC) and the Engineering Controls (EC) for the Site. The EC are the asphalt cover in the parking areas and a two-foot cover in landscaped areas. IC consist of management of the EC, regular inspections of the EC, and prohibition of the use of groundwater as a potable water source.



## 2.3 PREVIOUS ENVIRONMENTAL REPORTS

Based on readily available information for the Site, the following previous environmental studies have been completed at the Site. They are summarized below, and copies of the reports have been included in Appendix C. A general summary is provided below.

### 2.3.1 *Phase I and Phase II Environmental Site Assessments*

Previous Phase I investigations were completed at the Site by Goldenberg, Zoino, and Associates in May 1986, Merrit & Harris in 1987, Environmental Risk Limited in April 1988, U.S. Hydrogeological, Inc in October 1988, and AKRF in April 1997. The most recent Phase I Environmental Site Assessment (ESA) results are summarized below (Bergmann 2021).

Previous Phase II investigations were completed at the Site by Dames & Moore, Inc., in 1998, ERM in June 1998 and Coneco Environment Corporation in June 1999, ERM Final Investigation Site Assessment in April 2000, and ERM Supplemental Final Site Investigation in June 2000, revised June 2002. A summary of the findings of the Phase II investigations is provided below. Available historical reports are provided in Appendix C, and historical data tables are provided in Appendix D. Historical sample locations are presented on Figure 2-2.

#### 2.3.1.1 *Phase I - Bergmann 2021*

##### **Recognized Environmental Conditions**

A Recognized Environmental Condition (REC), as defined in the American Society for Testing and Materials (ASTM) Standard, is an environmental condition where the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a future release to the environment. Bergmann has identified the following RECs during this Phase I ESA:

- Bergmann observed a cooling tower in the Study Area. The cooling tower, Registration Number 10813, is used for Air Conditioning.
- Bergmann observed signage for a UST located on the Property. The UST is located on the southeast side of the building and contains fuel oil.
- The EDR reported a UST at Schuenke Residence, located about 2,000 ft east of the Property. EDR and the NYSDEC Database did not have any details pertaining to this UST.
- The Property was added to the Volunteer Cleanup Program (VCP) in 2000. The property was previously utilized as the site of the municipal incinerator and a transfer station for the Town of Harrison. Remediation at the site is complete. Prior to remediation, the primary contaminants of concern were metals and PAHs present in shallow soils and in a berm along the southern portion of the property. Remedial actions have successfully achieved soil cleanup objectives for commercial use. Residual contamination in the soil is being managed under a Site Management Plan and deed restriction that maintains vegetative cover to prevent exposure to site contaminants. The Property is under institutional controls and engineering controls.

##### **Controlled Recognized Environmental Conditions**

A Controlled Recognized Environmental Condition (CREC), as defined in the ASTM Standard, is a Recognized Environmental Condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by the regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the





implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). Bergmann identified one CRECs during this Phase I ESA.

- The Property was added in the Volunteer Cleanup Program (VCP) in 2000. The property was previously utilized as the site of the municipal incinerator and a transfer station for the Town of Harrison. Remediation at the site is complete. Prior to remediation, the primary contaminants of concern were metals and PAHs present in shallow soils and in a berm along the southern portion of the property. Remedial actions have successfully achieved soil cleanup objectives for commercial use. Residual contamination in the soil is being managed under a Site Management Plan and deed restriction that maintains vegetative cover to prevent exposure to site contaminants. The Property is under institutional controls and engineering controls.

### **2.3.1.2 Phase II - Dames & Moore, 1998**

In 1998, Dames & Moore collected six (6) soil samples and one groundwater sample for analysis of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), including polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs) and Resource, Conservation, and Recovery Act (RCRA) metals.

PAHs were detected in a soil sample collected in the northeastern section of the Site, at concentrations NYSDEC Technical and Administrative Guidance Memorandum Number 4046 (TAGMs-4046) Recommended Soil Cleanup Objectives (RSCOs), dated January 24, 1994. PCBs were detected at concentrations above the criteria in one soil sample. VOCs were not detected at concentrations above RSCOs in any soil samples.

RCRA metals were detected in six (6) soil samples at concentrations above the RSCO TAGMs-4046 criteria. VOCs and RCRA metals were not detected in groundwater at concentrations above the criteria (ERM, 2000)

### **2.3.1.3 Phase II - ERM May/June 1998**

ERM completed a Phase II Investigation in May and June 1998. The investigation included the completion of 21 soil borings to further evaluate Dames & Moore's findings and determine if there were any additional areas of concern.

#### **Results**

1. The results of the ERM investigation indicate PAHs at concentrations above the TAGM-4046 RSCO criteria in the south parking lot bordering the berm, at the location of the former incinerator, and in the northwest corner adjacent to the access road. Concentrations of PAHs ranged from 110 to 7,800 ug/kg , with individual PAH concentrations of benzo(a)anthracene (borings GP-12A, GP-12B, GP-13A), benzo(b)fluoranthene (borings GP-12B, GP-13A), benzo(k)fluoranthene (borings GP-12B, GP-13A), benzo(k)fluoranthene (boring GP-12B), benzo(a)pyrene (borings GP-12A, GP-12B, GP-13A), chrysene (borings GP-12A, GP-12B, GP-13A) and dibenzo(a,h)anthracene (Boring GP-12B) exceeding TAGM 4046 RECOs.

#### **Findings and Conclusions**

1. The soil sampling carried out by ERM detected PAHs and PCBs above regulatory guidance criteria in only 6 soil samples out of the 46 collected at the 500 Mamaroneck Avenue site. Upon reanalysis of 4 of these samples, using the TCLP leaching procedure, the concentrations of PAHs and PCBs were below regulatory guidance, indicating that these compounds are not mobile. This observation is consistent with the transport phenomena associated with PAHs and PCBs. Impacts to groundwater from these compounds are therefore not likely.



2. The PAH and PCBs were detected in soil samples where there is a greater thickness of soil, specifically along the southern parking lot boundary and in front of the building. The PAHs and PCBs were generally detected in samples collected at depths greater than 3-feet below the land surface. General, there is only a thin mantel of soil above the bedrock at the site.
3. More than 340,000 cubic yards of soil and bedrock were removed during construction and disposed of off-site; the potential amount of PAHs and PCBs remaining on-site is extremely limited.

#### **2.3.1.4 Phase II - Coneco Environmental Investigation, March 1999**

Coneco completed a Phase II investigation that included the completion of 57 soil borings and collection groundwater, surface water, and sediment samples.

##### **Results**

1. PAHs were detected in soil samples collected from the south parking lot adjacent to the berm and in the northwest corner of the property near the entrance roadway at concentrations above the TAGM-4046 RSCO criteria.
2. PCBs were not detected in soil at concentrations greater than TAGM-4046 RSCO criteria. Metals, including arsenic, lead, and mercury, were detected at concentrations above the 6 NYSCRR Part 375 Commercial Use criteria.
3. Analysis of groundwater, surface water, and sediment did not indicate contamination.

##### **Findings**

1. As in the ERM investigation, analytical results indicated residual PAH concentrations above the TAGM-4046 RSCO. These borings' locations were similar to ERM's observed exceedances, i.e., in the south parking lot adjacent to the berm and the northwest corner of the property near the entrance roadway. Contaminants were not detected in the groundwater, surface water, or sediment samples. The report is presented in Appendix C.

#### **2.3.1.5 Final Investigation Site Assessment- ERM April 2000**

The findings of the investigation are summarized below.

1. Soil and sediment samples collected during the investigation contained PAHs, PCBs, pesticides, and metals. PAHs were detected at concentrations above TAGM-4046 RSCO criteria in 19 of the 32 soil samples. The investigation confirmed the presence of PAHs below the parking lot and vegetative cover at the Site. Based on the study results, ERM concluded that there was no exposure pathway for the residual chemicals detected at the Site.
2. PAH concentrations exceeded soil clean-up objectives in 19 of the 32 samples collected, including ERM-28C, ERM-30A, ERM-31C, ERM-35A, ERM-36A, ERM-37A, ERM-39A, ERM-40F, ERM-41A, ERM-42A, ERM-44A, ERM-45A, ERM-46A, ERM-47A, ERM-48B, Upper and Lower Pond Sediments, and the northwest catch basin sediment.
3. The PAHs detected most frequently were: anthracene, benzo(a)anthracene, benzo(g,h,i)perylene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene. These compounds were detected more than 30 times in the 32 samples collected. PAHs are frequently formed during the incomplete combustion of coal, oil, gas, wood, garbage, or other organic substances and are consistent with an incinerator on site. Some detections of PAH's are also consistently found in urban industrial/commercial areas.



## Findings and Recommendations

1. The site has been impacted by past activities with detectable concentrations of PAHs, PCBs, pesticides, and metals observed in soil and sediment. The source of these contaminants is most likely emissions from the former Town of Harrison Municipal Incinerator and /or operations at the transfer station. Emission of contaminants from the incinerator stack followed by on-site deposition is suggested due to the site-wide distribution of contaminants, including areas of the site which have not been developed or reworked during the construction of the existing building.
2. PAH are the only chemicals whose concentrations exceed TAGM 4046 RSCOs.
3. The impacted areas are covered by asphalt pavement, grass, or ornamental plantings. The condition of the asphalt is good, and the vegetative cover is well maintained. These concentrations are not at the surface. Therefore, there are no current exposure pathways for human contact.
4. The high molecular weights PAHs are extremely immobile due to their low solubilities, and vapor pressures indicate that the residual PAHs at the site will strongly absorbed to the soil. The strong soil absorption rates reduce bioavailability.

### 2.3.1.6 Supplemental Final Site Investigation - ERM June 2001, revised June 2002

A supplemental Final Site Investigation was conducted in November 2000 by ERM. The Supplemental Investigation was conducted at NYSDEC's request to assess soil conditions in the northwestern section of the Site, along the southern berm and the eastern buffer zone.

Supplemental Final Site Investigation field soil sample screening, observations, and laboratory sample results are summarized below:

1. Six (6) soil samples were collected from the eastern buffer zone, five (5) soil samples were collected from the southern berm samples, and eight (8) soil samples were collected from the northwestern section area. The metals detected in the soil samples included aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper iron, lead, magnesium, manganese, mercury, potassium, selenium, silver, sodium, vanadium, and zinc. The results were compared to the 6 NYCRR Part 375 Commercial Use Criteria, and the following metals were detected at concentrations above criteria in one or more soil samples: arsenic, barium, cadmium, copper, and lead. A summary of the exceedances of the commercial use criteria is provided below.

Constituent	Commercial Use Criteria (mg/kg)*	Number of Exceedance of Criteria	Maximum Concentration (mg/kg)*
Arsenic	16	3/19	38.2
Barium	400	4/19	1,240
Cadmium	9.3	1/19	30.7
Copper	270	6/19	729
Lead	1,000	6/19	20,600

Notes:

\*mg/kg=milligrams per kilogram

2. Eight (8) soil samples were collected from the northwestern section of the site for the analysis of PAHs. PAHs were detected above TAGM 4046 RSCOs in five (5) of the eight (8) samples. These were ERM-48A (7-8'), ERM-48B (7-8'), ERM-48C (6-7'), ERM-48D (4-5'), and ERM-48E (5-6'). The PAHs that were detected above their RSCOs included naphthalene, 2-methylnaphthalene, acenaphthene, phenanthrene,



anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, benzo(g,h,i)perylene, chrysene dibenzofuran, dibenzo(a,h)anthracene, fluorene, fluoranthene, indeno(1,2,3-cd)pyrene, and pyrene.

3. A "tar-like" material was observed in borings ERM-48A (7-8') and ERM-48D (4-5.5'). Due to the limited volume of the tar-like material in the borings, the samples were combined and analyzed for Toxicity Characteristic Leaching Procedure (TCLP) SVOCs and metals.

The TCLP results were compared to the TCLP regulation criteria (CFR Part 261.3 and NYSDEC Ambient Water Quality Standards and Guidance values (TOGs 1.1.1 guidance values)) to determine if the leaching of SVOCs and metals from the tar-like material would impact the Site groundwater.

The PAHs detected in the TCLP sample of the tar-like material included naphthalene, 2-methylnaphthalene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, and pyrene. There are no regulatory criteria for these compounds in 40 CRF Part 261.3, and the concentrations were below the TOGs 1.1.1 guidance values.

Four (4) metals were detected in the TCLP sample of tar-like material sample including barium, cadmium, chromium, and lead. The concentrations of the metals were below the TOGs 1.1.1 guidance values.

#### **The following conclusions were made:**

1. Northwestern Section - SVOCs (PAHs) were detected above TAGM 4046 RSCOs in five (5) of eight (8) samples. PCBs were detected below TAGM 4046 RSCOs. Metals and PAHs were detected at concentrations below the TOCS 1.1.1 ambient water quality standards and guidance values in the TCLP sample (TAR-1). All samples from the northwestern section were collected from between 4 and 8 feet bgs.
2. Buffer Zone and Southern Berm - Based on the data collected during the supplemental investigation, except for lead, the concentrations of residual metals are generally within background levels or are below the residential RBCs. The lead concentration in two (2) surface soil samples was above background concentrations; however, concentrations were below the EPA acceptable average concentration of lead in bare soil in residential yards.

#### **Voluntary Cleanup Plan (VCP) Considerations and Recommendations**

As indicated in the April 2000 Final Site Investigation Site Assessment Report, the Volunteer (500 Mamaroneck Ave Associates and the current owner have defined the nature and extent of the contamination at the Site,

1. The NYSDEC required this supplemental study to provide data to refine the potential risks posed by conditions at the site. Residual lead and PAHs detected in the southern berm present a potential for direct contact exposure to trespassers and workers at the Site. In addition, PAHs detected in the northwestern section present a limited potential for direct contact if excavation occurs in this area.

#### **2.3.1.7 ERM Remedial Action Work Plan – 2005**

The proposed Remedial Action was engineering and institutional controls to protect human health and the environment from direct contact soil that has been impacted with PAHs and metals.

Institutional controls will be implemented at the Site to control future soil use, ensure the engineering controls are in place and are maintained, control development of the Site, and restrict the use of groundwater and surface water. The deed restrictions as set forth in the Environmental Easement will specify the allowed uses of the Site and restrict future site uses. The environmental easement will specify that the Site may continue to be used as a



commercial facility. Groundwater will not be used for potable purposes. Trash will be removed from the Southern Berm area on a regular basis and native vegetation will be encouraged.

The engineering controls include a two-foot cover of all sub-surface soil and:

- 1) Pavement in the parking areas
- 2) Landscaping of unpaved areas

### 2.3.2 Summary of Environmental Conditions

Subsurface soil at the Site has been impacted by the operation of the Town of Harrison Municipal Incinerator, which formerly occupied the property. Residual municipal waste, ash/slag, and atmospheric deposition of particulates from the incinerator remain in the subsurface soil at the site. The concentrations of PAHs and certain metals (arsenic, barium, cadmium, copper, and lead) exceed SCOs specified in the NYSDEC Commissioner Policy 6 NYCRR Part 375-6.8 provides regulatory standards for the cleanup of Commercial Use properties. The building caps the residuals, parking areas paved with bituminous material, and landscaping. Direct contact with the residuals is thereby controlled and the potential for contact is minimized.

## 3.0 OBJECTIVE

The purpose of the EMP is to provide methods and procedures for the disposition and management of impacted soil, groundwater, and urban fill encountered during the construction of the solar cells (Construction Plans are included in Appendix G). The EMP also addresses procedures to adhere if underground storage tanks (USTs) and other subsurface structures of environmental concern are encountered during Site construction.

The objectives of the EMP are to:

- Establish goals, procedures, and appropriate response actions to be used by on-site personnel (including the Contractor) to ensure compliance with applicable federal, state, and local regulations should soil and fill materials containing regulated solid waste or groundwater impacted by constituents of concern be encountered during the project;
- Provide options and alternatives for managing regulated solid waste and impacted media, including on-site management, waste characterization, waste handling, and off-site disposal.
- Development of a Project-specific Health and Safety Plan (HASP) for on-site personnel;
- Provide a Community Air Monitoring Program (CAMP) to implement during subsurface ground disturbance activities. CAMP requirements will include;
  - Particulate air monitoring
  - VOC air monitoring
  - Dust and vapor suppression and site controls to reduce dust, vapors, and particulates
- Design and implement engineering and institutional controls to reduce potential environmental impacts to workers and the community if warranted.

### 3.1 APPLICABILITY OF ENVIRONMENTAL MANAGEMENT PLAN

This EMP should be referenced during all ground intrusive activities and solid waste handling aspects of the Project. The following Project organizations should reference this EMP during the Project: 1) Developer; 2) Contractor(s); 3) Utility Contractor(s); 4) Municipal Agency(s); 5) Environmental consultant(s); 6) other stakeholders involved in Solar Installation.



## 3.2 ROLES AND RESPONSIBILITIES

The table and list provided below are for general purposes only and are not meant to be comprehensive of all responsibilities under this EMP.

Organization	Point(s) of Contact	Role
To be determined	To be determined	Assist with coordination between the Environmental Consultant and Power Flex with respect to Project direction and Project EMP implementation.
	To be determined	NYSDEC point-of-contact for environmental aspects of the Project, including but not limited to: impacted material disposition, non-hazardous and hazardous material waste disposal.
To be determined	To be determined	Provide clear communication and project updates in relation to the engineering controls to the NYSDEC and NYSDOH. Provide project deliverables, including weekly Project updates and monthly EMP progress reports, and final reporting and documentation for the project. Direct field staff and regularly communicate project progress and deviations (if applicable) with Power Flex.
Contractor	To be determined	Complete intrusive work, including excavation, segregation, and staging of impacted and non-impacted solid waste under the guidance of the Environmental Consultant, ESRT and Power Flex, and the EMP.

The Environmental Consultant:

The Environmental Consultant will be responsible for managing the following EMP tasks:

- Working with the Contractor, Construction Manager (CM), ESRT and Power Flex to select permitted off-Site disposal locations.
- Working with the CM and Power Flex as necessary to characterize excavated material per Section 5.0 and to determine excavated material disposition.
- Work with the Contractor(s) to monitor excavations for evidence of environmental impacts.
- Assist the CM as to proper material segregation, staging, and containment of excavated materials as needed.
- Sampling, analysis, and any additional waste stream profiling as required by a receiving New York State Part 360 landfill.
- Assist the Contractor in providing required documentation for temporary discharge permits from the Westchester County Department of Public Works, as necessary. Documentation will include, but not be limited to, the discharge application form, waste characterization of samples, and coordination with the Westchester County Department of Public Works.



- Implementation of the existing Site-specific HASP for Bergmann personnel (Appendix E). Non-Bergmann contractors will be responsible for generating separate HASPs.
- Development and implementation of a Community Air Monitoring Plan (CAMP) for the Project that shall be used during all ground intrusive activities or other activities that may generate particulates or VOCs (Appendix F).

#### Contractor:

The Contractor shall provide all Project-approved labor, equipment, and materials necessary to complete the following required tasks, including but not limited to:

- Coordination of Underground Facilities Protection Organization (UFPO).
- Segregation and containment of impacted material from non-impacted material.
- Excavation dewatering and containerization and discharge/disposal of wastewater upon approval.
- Particulate/dust suppression measure(s) implementation, as necessary and determined by the Environmental Consultant, Power Flex, or the CM.
- Disposition of impacted material from removal areas, including loading, containment, and transportation to approved on-Site staging areas.
- Draft the waste profile for off-site landfill disposal with input and coordination with the Environmental Consultant, ESRT, and Power Flex.
- The Contractor shall not remove any material from the Project without the Environmental Consultant, ESRT, and/or Power Flex's prior approval.
- The Contractor is solely responsible for the means, methods, techniques, sequences, and procedures for all required Project activities under the Contractor's direct discretion.
- The Contractor shall perform all Project tasks pursuant to federal, state, and local regulations, including but not limited to regulations enforced by EPA, Occupational Safety and Health Administration (OSHA), NYSDEC, New York Department of Health (NYSDOH), and New York State Department of Labor (NYSDOT).
- Loading, transportation, and off-site disposal at a permitted landfill.

## 4.0 APPLICABLE REGULATORY LIMITS, REGULATIONS, AND GUIDANCE

All work will be completed in accordance with applicable state, federal, and local regulations and code requirements, including but not limited to laws, regulations, and codes summarized in the following sections.

### 4.1 SOLID WASTE REGULATIONS

Pursuant to 6 NYCRR Part 360.2(a), subsurface materials consisting of ash and cinders, commonly referred to as urban fill, is categorized as solid waste and cannot be disposed as Construction and Demolition (C&D) debris.

Urban fill may also be disposed of at an approved landfill in accordance with 6 NYCRR Part 360, contingent upon waste characterization and disposal facility requirements as non-hazardous waste. The Contractor will inform the





Environmental Consultant when fill relocation or disposal is scheduled so the Environmental Consultant team can provide oversight and material screening during this process.

## 4.2 HAZARDOUS WASTE REGULATIONS

As defined by the Resource Conservation and Recovery Act (RCRA), waste (e.g., excavated soil, fill materials, or building materials removed during redevelopment activities) can be classified as “hazardous waste” if it meets the following criteria:

- 1) The material meets one (1) of the federal listed wastes
- 2) Material has one (1) of the four (4) hazardous waste characteristics of toxicity, reactivity, corrosivity, and ignitability (TCLP).

It is noted that there are no known listed hazardous wastes for the Site at this time.

To assess whether materials are hazardous wastes, representative composite samples of the material are collected and submitted to a laboratory for analysis. Composite samples are representative samples of the material that are collected from multiple locations. If the results of laboratory testing indicate that the physical or toxicity characteristics of the sample exceed RCRA limits pursuant to 40 CFR Part 261, the material is designated hazardous waste and must be transported and disposed of as hazardous waste, separate from non-hazardous waste.

## 4.3 REFERENCE VALUES

Applicable reference values to evaluate environmental impacts, including surface/ subsurface soil and groundwater analytical samples, will include the following regulatory reference values:

### 4.3.1 Evaluation of Soil and Fill

- NYSDEC Commissioner Policy (CP) 51 “Soil Cleanup Guidance,” dated October 2010.
- NYSDEC Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation, dated May 2010.
- 6 NYCRR Part 375-6.8 provides regulatory standards with respect to cleanup standards. The established SCO for this Project is Commercial Use.

### 4.3.2 Groundwater Standard Values

Standards and/or guidance values to assess constituents in groundwater are included in 6 NYCRR Part 703.5 and TOGS 1.1.1. Groundwater Standards.

### 4.3.3 New York State Guidance on Petroleum Storage Tanks

Guidance on the removal and closure of petroleum storage tanks is included in 6 NYCRR Part 613. Under this regulation, petroleum tanks that are out of use for twelve or more months must be closed in place or removed. Tank decommissioning procedures are provided in 6 NYCRR Part 613.3 and Appendix H of this EMP. Over-excavation of impacted soil surrounding the tank, free-phase oil in water, or dissolved petroleum in groundwater, must be removed with NYSDEC oversight for formal closure.





#### 4.3.4 Guidance for Evaluating Soil Vapor Intrusion

Soil Vapor Intrusion (SVI) evaluation procedures are provided in the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006 and revised May 2017. The guidance document provides a methodology for assessing SVI in enclosed structures and determining follow-up actions. At this time, no new buildings are proposed to be constructed on the study area and VOCs were not detected above criteria, therefore, soil vapor intrusion is not considered a potential concern.

#### 4.3.5 Asbestos Containing Materials (ACM)

New York State Department of Labor (NYSDOL) Industrial Code Rule 56 regulates the handling of ACM during sampling, removal, encapsulation, enclosure, repair, and/or disturbance of friable and non-friable asbestos. The likelihood of presumed ACM (PACM) being intermixed with soil and fill at the Site based on known historic uses is low at this time. However, if PACM is encountered at the Site during construction and earthwork, it will be sampled by an NYSDOL-certified Asbestos Inspector in accordance with Code Rule 56.

Additional Federal Regulations pertaining to asbestos that may be applicable for the duration of the Site Redevelopment include:

1. 29 CFR 1910.1001, "Asbestos" (OSHA)
2. 29 CFR 1910.1200, "Hazard Communication" (OSHA)
3. 29 CFR 1910.134, "Respiratory Protection" (OSHA)
4. 29 CFR 1910.145, "Specification for Accident Prevention Signs and Tags" (OSHA)
5. 29 CFR 1910.146 "Permit Required Confined Space" (OSHA)
6. 29 CFR 1926, "Safety and Health Regulations for Construction" (OSHA)
7. 29 CFR 1926.1101, "Asbestos" (OSHA)
8. 40 CFR 61, Subpart A, "General Provisions" (EPA)
9. 40 CFR 61, Subpart M, "National Emission Standard for Asbestos" (EPA)
10. 49 CFR 171-172, Transportation Standards (DOT)

Applicable New York State Asbestos Regulations that may apply during this Site Redevelopment project include:

1. 12 NYCRR, Part 56, "Asbestos", Industrial Code Rule 56 (NYSDOL)
2. 6 NYCRR, Parts 360, 364, Disposal and Transportation (NYSDEC)
3. 10 NYCRR, Part 73, "Asbestos Safety Program Requirements" (NYSDOH)

Additional Standards and Guidance Documents:

1. American National Standard Institute (ANSI) Z88.2-80, Practices for Respiratory Protection
2. ANSI Z9.2-79, Fundamentals Governing the Design and Operation of Local Exhaust Systems
3. EPA 560/585-024, Guidance for Controlling Asbestos Containing Materials in Buildings (Purple Book)
4. EPA 530-SW-85-007, Asbestos Waste Management Guidance.



## 5.0 ENVIRONMENTAL MANAGEMENT PLAN

This EMP has been designed for the construction activities at the Site. The Construction Plans are included in Appendix G. It is estimated that 1,970 cubic yards of soil will be removed during construction. Known and unknown environmental conditions associated with the Site will be handled in accordance with this EMP. The Environmental Consultant will directly coordinate with ESRT, Power Flex and the Contractor to execute this plan and provide continuous on-Site management during soil disturbance activities. This section is structured to present reasonable procedures and precautions to ensure that future work activities are implemented Safely, without impacting Site workers or the environment. Because the concentrations of PAHs and metals in subsurface soil are highly variable across the site, precautions must be taken during all excavation activities.

### 5.1 SITE ENVIRONMENTAL CONTEXT

Known environmental impacts, including PAHs and metals, impacted soil exist on-Site and should be managed through exercising this EMP to prevent worker, community, and environmental resource(s) exposures. The Contractor shall be responsible for complying with applicable federal, state, and local regulations during the Project. As such, the Contractor shall understand the waste characterization and disposal process so as not to disrupt the Project schedule.

Environmental concerns, including fill material and impacted surface/subsurface soil, are known to exist on-Site from historical activities. Fill material is known to contain elevated concentrations of PAHs and metals in exceedance of Commercial Use SCOs.

The soil will be covered with a minimum of two (2) feet of clean, approved fill or other capping impervious barriers such as asphalt or concrete. Groundwater should not be encountered during construction activities proposed for this project; however, if encountered, will be handled appropriately, as detailed in Section 5.11 of this EMP.

### 5.2 KNOWN CONTAMINANTS OF CONCERN

During the site investigations, metals and PAHs were identified as contaminants of concern. PAHs and metals were detected at concentrations above criteria throughout the site. Refer to Section 2 for summaries of the environmental investigations.

### 5.3 POTENTIAL CONTAMINANTS OF CONCERN

#### 5.3.1 Volatile Organic Compounds

No VOCs were detected in exceedance of RSCOs during the site investigations; however, VOCs may be encountered during the Project. A fuel oil tank is located outside of the study area (area to the north of the southern parking lot). Petroleum-related VOCs include but are not limited to, benzene, toluene, ethylbenzene, and xylenes. Chlorinated solvents include, but are not limited to, tetrachloroethylene (PCE), trichloroethene, and vinyl chloride.

#### 5.3.2 PAHs

PAHs were widely detected in exceedance of RSCOs the site during the site investigations. PAHs are by-products of incineration and are commonly detected in fill material. A tar-like material was identified in previous investigations, however, the material was identified in an area outside of the proposed soil disturbance (the northwest berm area).



### 5.3.3 Metals

Numerous metals were detected in exceedance of RSCOs during the site investigations and are covered by a clean cap, pavement, or building. The potential for encountering metals in the soil at concentrations above the RSCOs below the caps is high. Metals are the by-products of incineration and are common in fill materials.

## 5.4 FIELD SCREENING METHODS

During ground intrusive Site work, the Environmental Consultant will use visual and olfactory observations and photoionization detector (PID) readings to observe and assess for potentially impacted soils and material.

## 5.5 IDENTIFICATION OF REGULATED SOLID WASTE-IMPACTED MATERIAL

Based on Phase II ESA findings, urban fill materials are present at the Project Site. Fill materials identified at the Site during previous environmental investigations are comprised of ash, cinders, slag, crushed brick, concrete, coal fragments, gravel, and wood. Because such materials may be derived from an industrial source and considered regulated solid waste, disposal at a C&D disposal facility is not permitted.

## 5.6 IDENTIFICATION OF PETROLEUM-IMPACTED MATERIAL

Based on the Phase II investigations, impacted surface and subsurface material may be encountered during the Project redevelopment work. If petroleum-impacted subsurface material is encountered, the environmental professional will identify it by observing petroleum odors, gray to black discoloration, and/or elevated PID readings. Additionally, VOC-impacted groundwater can be identified through petroleum or odors as well as discoloration and surface sheen. The Environmental Consultant will evaluate and classify materials during the excavation process and determine generated soil and groundwater handling, if necessary.

## 5.7 ON-SITE MANAGEMENT OF SOLID WASTE-IMPACTED MATERIAL AND CONSTITUENT IMPACTED MATERIAL

The staging of impacted solid waste shall be segregated from non-solid waste impacted material, and all staging area locations and designs will be approved by the Environmental Consultant.

If encountered, solid (non-aqueous) VOC/SVOC-impacted material shall be segregated from non-VOC/SVOC impacted material into separate staging stockpiles on two (2) layers of 6-mil poly sheeting. Waste that is visually, olfactorily, or has a PID measurement above 5 ppm will be segregated for waste characterization purposes, no excavated soil will be re-used onsite.

The stockpiles shall be covered with at minimum one (1) layer of 6-mil poly sheeting when not in use or at the end of each day. The Contractor shall implement reasonable care to secure sheeting with sandbags or equivalent and replace sheeting when necessary. Waste material shall be characterized and disposed of at an NYSDEC Part 360 permitted landfill.

The Contractor shall collect, filter/treat (if deemed warranted), and properly dispose of VOC/SVOC-impacted groundwater encountered during the Project. The Contractor shall complete each task pursuant to federal, state, and local regulations with oversight and direction from the Environmental Consultant.

- the Environmental Consultant will collect characterization the analysis required by the Westchester County Department of Public Works. the Environmental Consultant shall request all required sample analyses from an Environmental Laboratory Approval Program certified laboratory. The Contractor shall provide all disposal documentation to the Environmental Consultant, if necessary.

It is noted that VOC-impacted material shall not leave the Site without written approval from Power Flex and the Environmental Consultant.



## 5.8 MANAGEMENT OF DEMOLITION AND SOLID WASTE MATERIAL

Non-impacted buried demolition debris and solid waste material, including but not limited to wood, scrap metal, draining piping, masonry, or other solid waste, shall be separately stockpiled for off-Site disposal or recycling.

Impacted demolition and solid waste material that cannot be cleaned to a non-impacted condition, as determined by the Environmental Consultant, shall be staged on a minimum of two (2) layers of 6-mil polyethylene sheeting and securely covered with at least two (2) layers of 6-mil polyethylene sheeting until waste characterized results are evaluated. Stockpiling design and locations shall be approved by the Environmental Consultant. Impacted demolition and solid waste material shall be disposed of off-Site at an NYSDEC Part 360 permitted landfill.

Cleaning of impacted demolition and solid waste material shall be removed using physical/mechanical means, including but not limited to scraping, shaking, and brushing. The Contractor shall be responsible for proper containment, segregation, and disposal of liquid waste streams that are generated during cleaning. Individual waste streams shall be segregated to the extent practicable and approved by the Environmental Consultant. The Environmental Consultant will determine when the material is deemed clean by visual and/or lab analytical sampling and analysis.

## 5.9 MANAGEMENT OF BURIED ASBESTOS CONTAINING C&D MATERIAL

If buried or PACM is encountered, the Contractor shall notify and the Environmental Consultant. A stop work will be issued for the immediate location of the PACM. Subsequent sampling, containment, removal, and disposal of ACM shall be completed pursuant to federal, state, and local regulations including NYS Code Rule 56. An NYSDOL-licensed asbestos handler and Contractor shall complete sampling and removal of ACM with certified workers.

## 5.10 MANAGEMENT OF EXCAVATION DERIVED GROUNDWATER

If impacted groundwater is encountered during redevelopment activities, the Contractor shall pump impacted groundwater into a frac tank (or equivalent holding tank) and stage on-Site. The Environmental Consultant shall perform characterization sampling and submission to the analytical laboratory for analysis. If groundwater is acceptable for discharge to the sewer, the Environmental Consultant will facilitate obtaining a temporary discharge permit from the Westchester County Department of Public Works. After receiving necessary approvals, groundwater will either be discharged to the sanitary sewer or, if necessary, may be transported off-Site for treatment and/or disposal at a permitted facility.

## 5.11 MANAGEMENT OF UNKNOWN UNDERGROUND STORAGE TANKS AND SUBSURFACE STRUCTURES

If the Contractor encounters unknown USTs or subsurface structures, work in the area of the tank or structure shall immediately stop, and the Environmental Consultant will be promptly notified. The Environmental Consultant will evaluate the condition of the tank or structure and notify the Contractor when it is appropriate to resume work. Tank decommissioning procedures pursuant to 6 NYCRR Part 613 and local regulations will be adhered to by the Contractor. Details for storage tank(s) removal are outlined in Appendix H – Petroleum Tank Removal Procedure.

The Contractor shall promptly notify the Environmental Consultant, ESRT, and Power Flex in the event of chemical/material releases to the environment from tanks or subsurface structures. Power Flex shall determine the applicability of spill reporting requirements with respect to the context of the release. All UST removals and closures shall be completed in accordance with NYSDEC requirements for UST removal and closure permitting.

If the integrity of a tank or sub-grade structure is compromised and contents are released to environmental media, the Contractor shall provide resources, including appropriately trained personnel and equipment, to



address the release through removing the impacted material from the tank/structure and storing it in an appropriate container (e.g., frac tank, drum, etc.).

Tanks and sub-grade structures may contain sludges, non-aqueous liquids, or contaminated water. To the extent practicable, the Contractor shall prevent compromising the integrity of the structures when encountered during work. Contingent upon the presence of regulated or hazardous waste present in the structure, physical removal of the tank or structure may be completed by others (e.g., an environmental response contractor). Such structures shall be decontaminated pursuant to NYSDEC CP-51 and the sludges or liquids appropriately stored and characterized until off-Site disposal is approved. Coordination between the Contractor and environmental response contractor shall be expeditiously coordinated.

Demolition of presumed benign subsurface structures (i.e., catch basins, storm distribution boxes) will be the Contractor's responsibility. The Environmental Consultant shall observe the removal/decommissioning of such structures for surrounding soil impacts. Subsurface materials shall be observed and evaluated by the Environmental Consultant for the purposes of reuse, recycling, or disposal options with consideration of applicable regulations.

The Environmental Consultant shall be responsible for analytical sampling and characterization of impacted material, including buried demolition material, during the Project.

## 5.12 IMPORTED FILL MATERIAL

Imported fill material proposed for the Project shall be reviewed by the Environmental Consultant and approved by Power Flex prior to on-site use. The Contractor shall complete the Imported Fill Material Request Form provided as Appendix I to this plan. Fill material imported from a permitted quarry is anticipated to be accepted for Project use with appropriate documentation and without additional required sampling and analysis of constituents of concern. Fill material imported from a non-permitted quarry is anticipated to require sampling and analysis for constituents of concern. The acceptable quantity and types of samples and analyses will be completed pursuant to DER-10. The material will not be accepted for use at the Project from an NYSDEC spill or remediation site as well as other federal, state, or local remediation sites.

The following information will be requested from the Contractor for approval of imported fill:

- Power Flex and the Environmental Consultant will be provided with the type of fill material, source (with quarry permit information), sieve analysis, and anticipated volume of material to be imported to each Project location. If applicable, analytical samples and results will also be provided to Power Flex and the Environmental Consultant.
- Power Flex and the Environmental Consultant will review the fill material information and determine if the material is acceptable, if additional sampling and analysis are necessary, or if the material is prohibited from use.
- the Environmental Consultant will collect samples for laboratory analysis if additional sampling is determined necessary. Analytical results will be evaluated upon receipt and a determination by the Environmental Consultant or Power Flex will be made with respect to material use approval or disapproval.

## 5.13 OFF-SITE DISPOSAL OF SOLID WASTE AND VOC/SVOC-IMPACTED MATERIAL

Treatment, Storage, and Disposal Facilities (TSDF) and waste transporters must provide documentation of NYSDEC permits to the Environmental Consultant and Power Flex prior to handling, transporting, and/or receiving solid waste and/or impacted materials. Removal of Project materials shall receive documented approval by the



Environmental Consultant and Power Flex. Waste profiles and manifests shall be signed by Power Flex or an authorized representative on behalf of Power Flex. The draft waste profile must be submitted to the Environmental Consultant and Power Flex prior to submission to any TSDF.

Waste disposal manifests, and landfill receipts shall be submitted to the Environmental Consultant two (2) business days after the solid waste and impacted material was removed from the Site.

Solid waste impacted material and VOC/SVOC/Metal-impacted material approved for off-Site disposal by Power Flex and the Environmental Consultant shall be transported by a NYSDEC Part 364 permitted vehicle to an approved and permitted NYSDEC Part 360 landfill. the Environmental Consultant shall perform additional characterization testing required for landfill disposal approval, if required. The Contractor will be responsible for drafting the waste profile with input and coordination from the Environmental Consultant and Power Flex.

While hazardous waste is not anticipated to be encountered in this project, special handling procedures, including but not limited to additional waste characterization and disposal to a hazardous waste facility will be required for waste characterized as hazardous.

## 5.14 TRACKING OF OFF-SITE WASTE DISPOSAL

Each waste stream shall be logged by the Environmental Consultant using a spreadsheet for material quantification. The Environmental Consultant will also log any material transported under the NYSDEC-approved to a landfill by means of a Bill of Lading. Waste disposal receipts shall be submitted to the Environmental Consultant within two (2) business days from removal from the Site.

Solid waste material shall not leave the Site without Power Flex's permission. As such, documentation including, but not limited to NYSDEC Part 360 landfill permit(s) and NYSDEC Part 364 waste transporter permit(s), will be required by Power Flex for approval. The Contractor shall be responsible for complying with applicable federal, state, and local regulations, including but not limited to:

- 6 NYCRR Part 360 – Solid Waste Management Facilities
- 6 NYCRR Part 364 – Waste Transporter Permits
- 6 NYCRR Part 370 – Hazardous Waste Management System
- 6 NYCRR Part 371 – Identification and Listing of Hazardous Wastes
- 29 CFR 1910.120 – Hazardous Operations and Emergency Response
- 40 CFR 260 – Hazardous Waste Management System
- 40 CFR 261 – Identification and Listing of Hazardous Wastes
- 40 CFR 100 to 179 – DOT Hazardous Materials Transport and Manifest System
- NYSDEC CP-51 – Soil Cleanup Levels
- 6 NYCRR Part 375-6.8 – NYSDEC Remedial Program Soil Cleanup Objectives

## 5.15 WASTE DISPOSAL DOCUMENTATION

Documentation for waste disposal, including waste profiles and manifests, shall be completed by the Environmental Consultant on behalf of Power Flex. Waste manifests shall be signed by the Site Owner or the designated representative on behalf of the owner. Waste manifests and landfill receipts shall be collected and submitted to the Environmental Consultant by the Contractor within two (2) business days of disposal. The



Environmental Consultant and the Contractor shall track quantities of material disposed of off-Site, concurrently for comparison and accuracy purposes.

## 5.16 UNKNOWN ENVIRONMENTAL CONDITIONS

In the event of unknown environmental impacts encountered during the Project, the Environmental Consultant will determine appropriate measures to proceed, with NYSDEC concurrence. The Contractor shall immediately inform the Environmental Consultant if unknown or potential environmental impacts are encountered during the Project. Indications of impacts in areas previously not identified as impacted, may include but not be limited to the following:

- Petroleum or solvent odor;
- Stained soil or groundwater with a sheen; and
- Presumed or suspected asbestos-containing materials intermixed in subsurface soils.



## 6.0 IMPLEMENTATION OF THE EMP

### 6.1 SUBSURFACE EXCAVATIONS, MATERIAL REUSE, AND OFF-SITE DISPOSAL

The Environmental Consultant will provide continuous oversight during surface and subsurface intrusive tasks involving impacted and un-impacted soil and solid waste management. The Environmental Consultant will also provide continuous oversight for material disposal.

## 7.0 EQUIPMENT DECONTAMINATION

Field construction equipment coming into contact with impacted Site soils will require brush cleaning of loose dirt or debris as adequate decontamination prior to leaving the Site. Refer to Sections 5.5 and 5.6 for impacted material identification.

Re-usable sampling equipment will be rough washed with a mixture of water and Alconox® type soap, rinsed with ionized or distilled water, then air or paper towel dried.

Personal decontamination procedures shall follow the steps outlined in the Project-specific HASP and the Contractor shall supply an appropriately staged container (e.g., steel drum) for collection and disposal of personal protective equipment (PPE). The Contractor will be responsible for scheduling and coordinating PPE disposal.

## 8.0 COMMUNITY AIR MONITORING PLAN

The NYSDOH Generic CAMP and Fugitive Dust and Particulate Monitoring, included as an appendix to this plan, will be utilized for this EMP. The CAMP describes required NYSDOH VOC vapor and/or particulate monitoring that will be conducted during intrusive ground activities. This CAMP intends to monitor airborne releases of on-Site impacts and particulate dust to protect the surrounding communities. The CAMP specifies potential air emissions, air monitoring procedures, and monitoring schedules. Air monitoring data will be organized and submitted in the EMP Monthly Progress Reports and Final EMP. The CAMP is attached as Appendix F.

## 9.0 HEALTH AND SAFETY PLAN

A HASP for Bergmann personnel use is attached in Appendix E to this EMP and will be adhered to during all work performed by a Bergmann employee. A HASP for Coneco Engineers & Scientist, Inc. (Coneco) personnel use is attached in Appendix E to the EMP and will be adhered to during all work performed by Coneco employees. Non-Bergmann and Non-Coneco project personnel, including other contractors or a separate Environmental Consultant, will be required to develop and adhere to a separate HASP during the project.

The NYSDOH Emergency Contact for the site is Eamonn O'Neil (518)-402-7877.

## 10.0 LABORATORY ANALYSIS

Samples will be collected in the field in accordance with project quality control and quality assurance procedures, as provided in the Quality Assurance/Quality Control Plan. Analytical samples collected during the project will be relinquished for analysis to an NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory for analysis.





## 11.0 REPORTING

Project summaries will be provided to Power Flex and NYSDEC by the Environmental Consultant on a weekly basis and will include, but not be limited to, the following information:

- Summary of work completed;
- EMP deviations;
- CAMP and/or HASP exceedances and corrective measures; and
- Project schedule and anticipated scope of work for the next week.

EMP Monthly Progress Reports will also be provided to Power Flex during intrusive ground phases of the project including waste disposition/disposal. Impacted and unimpacted soil disturbance, removal, and disposal activities, and regulated solid waste will be summarized in the EMP Monthly Progress Reports. Both known and unknown environmental conditions will be summarized in the progress reports. Figures indicating material removal areas (including known and unknown removal areas) and associated analytical sampling will be generated and provided as an attachment to each progress report. The progress reports will also include non-hazardous and hazardous waste disposal documentation, tabulated analytical laboratory results (compared to applicable SCOs) and reports, and waste stream tracking information. Deviations to the EMP and an updated project schedule will be provided in the monthly progress reports.

Upon completion of intrusive groundwork and waste disposition/disposal phases of the project, a Final EMP Construction Report (CR) documenting all excavation, sampling, and waste disposal activities will be developed for submission to Power Flex and the NYSDEC. The Final EMP (CR) will be a comprehensive summary of the work completed during the project, complete with all relevant documentation. The Final EMP (CR) will also include an Operation, Maintenance, and Monitoring section for engineering controls, if necessary as well as a certification by the Qualified Environmental Consultant and a Final property survey by a NYS Licensed Surveyor of all the location of utilities, appurtenances and as built structures, drainage features on the site. The Final CR shall be approved by the NYSDEC and be amended to the Final SMP for the site.

## 12.0 SCHEDULE

To be determined in conjunction with the proposed construction schedule/in progress and upon approval for Change of Use from NYSDEC and NYSDOH. All schedule changes shall be approved by NYSDEC.