Appendix 6-C: Soil and Materials Management Plan

EM&CP SEGMENT 20A
SOIL AND MATERIALS MANAGEMENT PLAN
CASE 10-T-0139

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1.0 INTRODUCTION

This Soil and Materials Management Plan (Plan) has been developed as an Appendix to the Environmental Management and Construction Plan (EM&CP) which was developed by NKT for the Champlain Hudson Power Express (CHPE) Project (Project). The objective of this Soil and Materials Management Plan is to set guidelines for the management of excavated soil and other materials generated by construction associated activities with the construction of the Bulkhead Penetration and Tie-in to the Transiting Vault (by others) at the Waste Management site as part of Segment 20A EM&CP.

2.0 MATERIAL GENERATION

During construction of the CHPE Project, material (i.e., soil, asphalt, concrete, tree debris, etc.) will be generated because of construction and by the excavation of the trench, splice locations, and other land disturbance activities. Generated material will be directly loaded into trucks and/or lined roll-offs and will be temporarily staged on-site or directly transported to an approved staging facility for sampling, characterization, and off-site re-use or proper transportation and disposal to an approved facility (see Table 5-1). The following narrative discusses the best management practices (BMP) and regulatory requirement to manage this material depending on its type, characteristics, and volume.

1. Sections 3.0 and 4.0 discuss the general procedure to classify the soil material as uncontaminated or contaminated soil for off-site disposal at an approved location by NYSDEC[1]. Disposal will occur off-site at an upland (i.e., not a wetland or waterbody) location.
2. Section 5.0 describes specific disposal locations based on classification of the material.
3. Section 8.0 describes the regulatory requirements and best management practices required for other potential waste materials that may be generated during construction.

When excavated material cannot be temporarily stockpiled onsite for use as backfill in trenches, it will be directly loaded into trucks and/or lined roll-offs (based on if the material is impacted or not) at the point of generation. It will then be transported to a temporary staging area or transfer station, sampled and tested prior to off-site transportation and disposal in accordance with this Soil and Materials Management Plan, the Project Erosion and Sediment Control Plan and the Material Handling Plan (Attachment A).

[1] https://www.dec.ny.gov/docs/materials_minerals_pdf/listregcdprocess.pdf

3.0 CLASSIFYING MATERIAL

According to Title 6 of the New York Codes, Rules, and Regulations (NYCRR) 360.2(107) fill material is soil and similar material excavated for the purpose of construction or maintenance. This material will be generated from excavation of trenches and other earthwork construction activities associated with the Project as described in Section 2.0. For Segment 20A, excavated material will be placed in a dump truck and/or lined roll-off and transported to a staging area where it will be sampled, tested, and properly transported and disposed of in accordance with this Plan. Soil/fill observations will be documented by the Environmental Inspector (EI) or their designee who will maintain a record to be submitted to the Certificate Holders on a regular basis determined by the EI (See Section 3.0 of the EM&CP for the qualifications and responsibilities of the EI). This record will be submitted to Department of Public Service (DPS) Staff upon request or as needed.

If the material is generated from within the public right-of-way (ROW), it will be transported (under a NYSDEC Part 364 permit and a New York City Waste Transporter Permit) to a local transfer station where it will be sorted and classified in accordance with the NYSDEC regulations (Part 360) regarding the beneficial off-site reuse of fill material (Table 3-1 below)

Fill Material Type	Fill Material End Use	Physical Criteria	Maximum Concentration Levels
General Fill	***Any setting*** where the fill material meets the engineering criteria for use, except: 1. Undeveloped land; 2. Agricultural crop land.	Only soil, sand, gravel or rock; no non-soil constituents.	Lower of Protection of Public Health-Residential Land Use and Protection of Groundwater in section 375-6.8(b) of Title 6.
Restricted-Use Fill	Engineered use for 1. embankments 2. subgrade in transportation corridors, 3. on sites where in-situ materials exceed Restricted-Use Fill or Limited-Use Fill criteria. Must be placed above the seasonal high water table.	Up to 40 percent by volume inert, non-putrescible non-soil constituents.	General Fill criteria except that up to 3 mg/kg (dry weight) total benzo(a)pyrene (BAP) equivalent. No detectable asbestos. In Nassau or Suffolk County – BAP equivalent does not apply. Polycyclic aromatic hydrocarbons must not exceed Protection of Groundwater Soil Cleanup Objectives in section 375-6.8(b) of this Title.
Limited-Use Fill	Engineered use for under foundations and pavements above the seasonal high water table.	No volume limit for inert, non-putrescible non-soil constituents.	General Fill criteria, except up to Protection of Public Health-Commercial SCOs for metals; up to 3 mg/kg (dry weight) benzo(a)pyrene equivalent is allowed. No detectable asbestos.

For Maximum Concentration Levels for each Fill Material Type, see 6 NYCRR 360.13(f).

Table 3-1 Acceptable Fill Material Uses (6 NYCRR 360.13(f))

If the excavated material has evidence of contamination (based on sight and smell), the material will be placed in a lined dump truck, transported to a temporary staging area, sampled, and classified based on laboratory analysis as described in the following paragraph and Section 8. See Table 5-1 for additional information.

For Segment 20A, if soil/groundwater exhibits evidence of contamination (visual or olfactory), the Contractor will stop work in the area and mobilize a qualified geotechnical contractor to sample, test, characterize, and manage the material with transportation to an approved disposal facility. The soil/groundwater will be characterized by testing samples for the following analyses:

1. The Metals (Method 6010B), Polychlorinated biphenyls (PCBs) (Method 8082)/Pesticides (Method 3546), and Semivolatile Organic Compounds (SVOCs) (Method 8270) listed in Section 375- 6.8(b) of Title 6 of the CRR-NY;
2. Asbestos (Method 600/R-93/116) if demolition of structures has occurred on the excavation or if buried asbestos is discovered and will be managed in accordance with 56-2.1(w)iii of 12 NYCRR 56;
3. Volume of physical contaminants, if present, based on visual observation;
4. Volatile Organic Compounds (VOCs) (Method 8260) listed in Section 375-6.8(b) of Title 6 of the CRR-NY, if their presence is possible based on knowledge of historic petroleum spills in the vicinity, odors and/or observations of a petroleum sheen or non-aqueous phase liquid (NAPL); and
5. If NAPL is observed, a sample will be collected, and the sample analyzed for TPH Oil Fingerprinting (Method 8100 modified).

Laboratory analysis will be performed by a laboratory currently certified by the New York State Department of Health's Environmental Laboratory Approval Program (ELAP). If soils/groundwater exhibit evidence of contamination, the Environmental Inspector and/or Certificate Holders will report a "Reportable Event" to the New York State Department of Environmental Conservation (NYSDEC) Oil and Hazardous Materials Spill Hotline (800/518-457-7362) (CC64). If the soils/groundwater do not meet the regulatory requirements of non-hazardous, then they must be disposed of in an off-site approved disposal location.

4.0 SOIL AND GROUNDWATER TRANSPORT OFF-SITE

As described in Section 2.0, all excavated material that is anticipated to be non-contaminated by visual and olfactory means will be placed into dump trucks at the point of generation, transported to a local transfer facility, sampled, and disposed of in accordance with this Soil and Materials Management Plan as well as the procedures outlined in Attachment A. If any excavated soil or encountered groundwater exhibits evidence of contamination as described in Section 3.0, it will be sampled as described in Section 3.0, 8.0 and as outlined in Attachment A.

All transport of excavated soil/groundwater will be performed by licensed haulers with NYSDEC Part 364 permit and New York City Waste Transporter Permit in accordance with appropriate local, state, and federal regulations. Haulers/transporters will be appropriately licensed and loaded vehicles leaving the active work area will be appropriately lined (if material is observed to be potential contaminated based on sight and smell), tarped, securely covered, manifested, and placarded in accordance with local, state, and federal requirements (and all other applicable transportation requirements). Impacted groundwater will be contained in appropriately sized containers (i.e., drums, vac truck, frac tank).

Trucks transporting excavated soil will be secured with tight fitting covers when needed to prevent excess debris and dust around and near the active work area.

Limited metals contamination has been identified along the bulkhead penetration portion of the work area included in Segment 20A. A detailed containment and disposal plan has been developed and is included in the Materials Handling Plan included in Attachment A. If contaminated soil is encountered during other construction activities, every effort will be made to keep truck tires from coming into contact with or potentially contaminated soils. Proper PPE in accordance with HAZWOPER defined in Appendix B to 1910.120 will be worn by the workers in the event impacted material is encountered. If needed, a truck wash/decontamination pad will be operated at the appropriate work/excavation area.

5.0 CONSTRUCTION DERIVED WASTE MATERIALS DISPOSAL OFF-SITE AT APPROVED DISPOSAL FACILITY

During the excavation activities prior to installation of the bulkhead penetration and ductbank, a variety of waste materials will be generated by the Contractor. Each material to be generated (i.e., CD, soil, groundwater, tree logs and branches) and others that may potentially be generated (impacted soil, impacted groundwater, NAPL) is listed below and the proposed disposal location is identified in Table 5-1. Disposal locations have been selected from the list of NYSDEC[1] approved disposal locations.

Based on the tree inventory performed no black cherry trees were identified or needed to be trimmed or removed. In the event, a black cherry tree is identified and needs to be trimmed/removed during construction, an approved landfill will be identified and provided to NYSDPS and NYSDEC for prior approval.

Table 5-1 Disposal Facility by Type

Material Type	Potential Impacted	Disposal Facility
Construction Debris (CD) – asphalt	No	All City Recycling 850 East 133rd Street Bronx, NY 10454
CD – concrete and rock	No	Allocco Recycling 540 Kingsland Avenue Brooklyn, NY 11222
Soil	No	Allocco Recycling 540 Kingsland Avenue Brooklyn, NY 11222
Soil – Non-hazardous	Yes	Bayshore Soil Management 75 Crows Mill Road Keasbey, NJ 08832
Soil – Hazardous	Yes	Clean Earth of NJ 115 Jacobus Ave. Kearny, NJ 07032
Groundwater	No	Disposed of to City Sewer via a Permit *
Groundwater	Yes	Clean Water of New York, Inc. 3249 Richmond Terrace Staten Island, NY 10303
Non-aqueous Phase Liquid (NAPL)	Yes	Safety Kleen Corporation 1200 Sylvan St. Linden, NJ 07036
Asbestos Containing Material	Yes	Waste Management of Fairless LLC 1513 Bordentown Rd. Morrisville, PA 19067
Trees (Trimmed Branches)	No	Cooper Recycling 123 Varick Avenue Brooklyn, NY 11237

* The discharge of groundwater associated with dewatering operations will require approval and permitting by NYCDEP via a New York City Dewatering and Discharge Permit.

Or Trees (Black Cheery)	No	Currently no black cherry trees have been identified in the Tree Inventory of the alignment. If a black cherry tree is identified by the CA, an approved landfill will be identified and submitted to the NYSDPS as a changed condition for prior approval.
Metal	No	Allocco Recycling 540 Kingsland Avenue Brooklyn, NY 11222

Excavated soil will be disposed of at an approved disposal facility in accordance with all local, state, and federal regulations. This includes all applicable sections of NYCRR Part 360. Actual disposal quantities and associated documentation will be reported as required by NYCRR Part 360. This documentation may include waste profiles, test results, facility acceptance letters, manifests/bills of lading and facility receipts/weight tickets. At minimum NYCRR Part 360 Series Waste Tracking Documents for Construction and Demolition Debris will be completed and submitted to the appropriate NYSDEC department and DPS Staff.

If impacted groundwater is encountered, the water will be addressed using a Vac truck to contain the impacted groundwater prior to off-site transportation to an approved facility. If NAPL and/or sheen is observed, the NAPL will be sampled; oil absorbent pads/socks will be utilized to contain the NAPL/sheen on the water table. Proper PPE will be worn.

6.0 CONTAMINATION AND WASTE CHARACTERIZATION

Various site walks were performed by Project staff prior to the commencement of construction and no evidence of contamination was observed within Segment 20A. Additionally, the NYSDEC Remediation database was reviewed in June 2023 and no remediation sites or releases of on-going concern were identified near Segment 20A. If contaminated soils and/or sites are encountered during the construction phase of Segment 20A, the following procedures will be followed:

1. Field screening for evidence of contamination such as the presence for volatile organic compounds (VOCs) will be performed using a photoionization detector (PID) on any soils excavated within 500 feet of known contamination sites.
2. Soils exhibiting PID readings below 10 ppm, will be considered non-contaminated and can be disposed of as non-hazardous.
3. Soils exhibiting PID readings of 10 ppm or greater will be segregated from non-contaminated soil and disposed of in accordance with the NYCRR Part 360.
4. Air particulate monitoring will also be performed within 500 feet of all known contamination sites in accordance with DER-10 (See Section 7.2).
5. As per Certificate Condition (CC) 64, the Environmental Inspector and/or the Certificate Holders will report a Reportable Event to NYSDEC via the NYSDEC Oil and Hazardous Materials Spills Hotline (800/518-457-7362) (CC64). In addition, as per the Best Management Practices (BMP) document, the Certificate Holders have established points of contact with the NYSDEC and DPS Staff who will also be notified in the event contamination is discovered. These contacts are:
    a. Matt Smith with DPS ((518) 402-5141) and
    b. Emily Thiel with DEC ((518) 402-1274).

In the event that field evidence of contamination is identified, potentially contaminated soils will be segregated and direct loaded into a lined roll-off/truck. The potentially impacted soils will then be sampled as described in Section 3.0. The contaminated soil will be properly characterized and disposed of at an off-site NYSDEC permitted facility.

In the event that contamination in the ground is detected during overland construction and such contamination is of the kind that will lead to volatilization or off-gassing of such

contamination/chemical constituents, the Certificate Holders will contact the New York State Department of Health (NYSDOH) and DPS Staff prior to further disturbance (CC64).

If any groundwater from the construction site (i.e., trench water) exhibits visual or olfactory evidence of contamination, it will be sampled and stored in a frac or similar container, removed off-site in accordance with applicable environmental regulations, and disposed of in one of the approved NYSDEC[1] locations. If evidence of a release or spill are detected in the soil during construction, as a result of the Project's activities, construction activities will be immediately halted in the area, and the Environmental Inspector will be notified. All field screening of soil, water, and air particulate monitoring will be performed in accordance with applicable environmental regulations including the NYSDEC Division of Environmental Remediation DER-10 Technical Guidance for Site Investigation and Remediation and the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (CAMP) (CC64). All results from field screening will be documented by the Environmental Inspector, in coordination with NYSDEC and DPS Staff. All necessary laboratory analysis will be performed by a laboratory with all applicable and required certifications.

If any excavated soils are found to exhibit visual or olfactory evidence of impact or contamination construction activities in the vicinity will be halted, and the Environmental Inspector will be notified. The procedures that will be followed in the event of a release or spill are described in the EM&CP Spill Prevention Control Plan in Appendix I. Any excavated soils that are found to contain hazardous substances will be analyzed and disposed of in accordance with the applicable solid waste and environmental regulations. These may include but are not limited to 6 NYCRR 360.13(d), (e), and (f).

The Environmental Inspector will report the unanticipated encounter of contaminants to the Certificate Holders, who will notify the NYSDEC, DPS Staff, and any applicable property owners. Construction will not be resumed until the contaminants of concern have been properly removed and approval to continue construction activities in the area of concern has been granted by the Environmental Inspector. All future construction activities at the referenced area of concern will be conducted in accordance with all applicable environmental regulations and procedures of this EM&CP.

The identification, handling, storage, testing and disposal of excess materials will be conducted in

accordance with the procedures outlined in this section of the EM&CP as well as applicable local, state, and federal safety and environmental regulations, requirements, and guidelines. If supplemental field screening or laboratory analysis of excess material not already identified in this Soil and Material Management Plan is required or necessary due to a change in field conditions, the subcontractors will submit a proposal for sampling needs to the Certificate Holders and Contractors as needed.

6.1 Soil Sampling Procedures

Soil sampling is conducted in potentially contaminated areas of concern (based on visual or olfactory methods), whether relating to historical spills or via migration from impacted adjacent properties, to determine whether contaminants are present above applicable standards. Surface soil sampling within Segment 20A is not anticipated since the entire alignment is primarily covered with asphalt or concrete. Sample locations will be biased to suspected areas of greatest contamination including soil discoloration, sheen, odor, etc. Sample locations are also chosen based on area specific requirements. This includes sampling in locations that includes past or present usage or hazardous substances or wastes, historical spills, and discharge points of past or present processes from adjacent properties. In general, the first 0-6 inches depth of soil is collected, however if evidence of contamination (staining, odors, etc.) persist additional sampling at deeper depths will be performed.

Composite Subsurface Sampling:

a. For Composite Sampling (applicable to non-VOC's only) where several discrete samples (of equal volume) are mixed together, collect the sample from 0-6 inches depth (or as specified by the Environmental Inspector) from the first composite point. Cover the stainless-steel bowl with aluminum foil and proceed to the next sampling point. Repeat between locations. If VOC samples are also being collected at each discrete point, the stainless-steel spoon/trowel will be decontaminated between locations (Refer to Step 4). Once equal volumes of soil have been collected from each point which will make up the composite sample, the soil will be homogenized to create a representative sample. Prior to homogenization, twigs, roots, leaves, rocks, and miscellaneous debris will be removed from the sample using the stainless-steel spoon or spatula. The soil will be mixed, quartered (divided into 4), and mixed again until a consistent physical appearance over the homogenized soil has been obtained. The soil will be transferred into the appropriate sample container using a stainless-

steel spoon or spatula.

1. Label the sample bottles (if the bottles are not pre-printed) with the sample location name, collection time, project name, analysis to be performed, and any other field required on the label.
2. Place the properly labeled sample bottles in a cooler with ice and maintain at 4°C for the duration of the sampling and transportation period. Do not allow samples to freeze. Describe and record the following properties of the sample: basic soil type (e.g., sand, gravel, and clay), structure, texture, sorting, grain size and shape, degree of saturation, color, odor, staining, and presence of foreign material.
3. After sampling is completed, the sampling location will be marked temporarily by a wooden stake and flagging and/or wire flag. The station number and date of sampling will be written on the stake using a permanent marker or other waterproof ink. A properly calibrated GPS unit will be used to mark the sample location.
4. Decontaminate the sampling equipment using a biodegradable detergent or other detergent as approved by the Environmental Inspector and move to the next sampling location. Repeat steps 1 through 4 for subsequent sampling locations. A SDS for the biodegradable detergent will be provided to the NYSDPS and EI for prior approval.
5. Soil samples will be packed and shipped to the laboratory with Chain of Custody Documentation for analyses.

6.2 Community Air Monitoring Plan (CAMP)

As stated above all field screening of soil, water, and air particulate monitoring will be performed in accordance with applicable environmental regulations including the NYSDEC Division of Environmental Remediation DER-10 Technical Guidance for Site Investigation and Remediation and the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (CAMP) (CC64). Per Certificate Condition 64, if contamination in the ground is detected during overland construction and such contamination is of the kind that will lead to volatilization or off-gassing of such contamination or chemical constituents thereof, the Certificate Holders with the assistance of the Environmental Inspector will implement a Generic CAMP if applicable. All procedures and practices included in the DER-10 Technical Guidance for Site Investigation and Remediation Appendix 1A: NYSDOH Generic Community Air Monitoring Plan will be followed (CC64).

8.0 DISPOSAL OF WASTE MATERIALS OTHER THAN SOIL

Numerous types of materials may be included in the soil material excavated along the project route including asphalt, concrete, metal, etc. In general, all non-soil material will be disposed of at approved disposal locations in accordance with all NYSDEC rules and regulations. Sanitary waste will be collected from portable units by a licensed NYC vendor. Under 15 RCNY § 19-06, companies that collect sanitary waste are only permitted to discharge such waste to the sewer at designated manholes under the terms of a NYCDEP issued scavenger waste permit.

8.1 Solid Waste Streams

Common solid waste streams include:

- General trash
- Wood scrap
- Scrap metal

Other non-hazardous solid wastes requiring special attention include:

- Used oil
- Used antifreeze
- Used oil filters
- Oily rags
- Oil/water mixture
- Concrete sealer/form oil/ water mixture
- Spill debris (i.e., sorbent pads, contaminated soil, PPE, etc.) (See the Spill Prevention, Control and Countermeasures Plan (SPCC) (Appendix I of the EM&CP).

These waste streams will be managed as indicated below.

General Trash. This stream includes construction waste and office trash. Trash cans will be located at each site along the right of way for collecting general trash. Trash cans must have a lid. All general trash containers must be labeled "TRASH". Trash containers will be dumped regularly and will not be overfilled. Trash will be disposed of at a landfill that has been reviewed and approved by the NYSDPS and NYSDEC.

Wood Scrap. Wood pallets, wire spools, concrete forms and other wood scrap will be collected separately and brought back to a local E-J yard for proper disposal. Wood scrap containers will be labeled "WOOD SCRAP". Wood scrap will be recycled if practical and cost effective to do so. Otherwise, it will be land filled at a NYSDPS and NYSDEC approved facility.

Scrap Metal. Metal scrap will be collected and brought back to a local E-J Yard and stored in a roll-off box and recycled. All scrap metal containers will be labeled "SCRAP METAL".

Used Oil. Used oil may not be mixed with any other chemical and must be recycled. Drip pans will be emptied into a sealed container by the end of each shift. Used oil must be stored in drums, totes or tanks. These containers must be closed tightly when not in use and must be clearly labeled

"USED OIL". Used oil will be stored in 55-gallon drums, clearly labeled and closed tightly, and will be transported off site within 90 days of initial accumulation for recycling at NYSDEC approved facility.

Used Antifreeze. Used antifreeze may not be mixed with any other chemical and must be recycled. Drip pans will be emptied into a sealed container by the end of each shift. Used antifreeze will be stored in 55-gallon drums. These drums must be closed tightly when not in use and must be clearly labeled.

Used Oil Filters. Used oil filters must be gravity drained for 24 hours before they can be disposed of. Oil filters will be collected in drums or other specified containers and recycled by an approved vendor. Containers of oil filters must be labeled and closed at all times.

Oily Rags. Rags soaked with oil, gasoline, diesel or solvent will be collected in covered containers for disposal by an approved vendor. Containers will be labeled and closed at all times.

Water/Oil Mixtures & Water/Concrete Sealer/Form Oil Mixtures. If water is allowed to collect in secondary containment, it may become contaminated with spillage from products such as oil, form oil or concrete sealer. Drums must be sealed and labeled at all times and transported off-site for disposal at a NYSDPS and NYSDEC approved facility as soon as practicable.

8.2 Asbestos

Asbestos is made up of natural fibers of hydrated silicate minerals and was sometimes used in buildings because of its thermal and electrical insulation properties. Asbestos may be found in cement, plaster, floor tiles, insulation and spray materials (used on ducts, beams, etc.). If encountered, asbestos will be disposed of at a NYSDPS and NYSDEC approved facility and managed in accordance with 56-2.1(w)iii of 12 NYCRR 56. While no asbestos is anticipated to be encountered during the construction of the Project, all relevant health and safety protocols will be followed as described in the Construction and Safety Policies and Procedures (Appendix G of the EM&CP) which follows the standards set forth in OSHA 1926 Subpart C-General Safety and Health Provisions.

8.3 Polychlorinated Biphenyls (PCBs)

Capacitors and ballasts must be handled as PCB unless labels indicate there is no PCBs. Non-PCB equipment will normally be stamped or labeled with the words “non-PCB” or “does not contain PCBs.”

8.4 Lead Paint

Residential, commercial, and industrial buildings constructed prior to 1978 are likely to contain lead-based paint (LBP). While no building removal or disturbance of LBP is anticipated, the Certificate Holders will ensure that all applicable project staff will be trained in lead-safe work practices if any work involving the disturbance of LBP is performed on pre-1978 structures (such as bridges). The United States Environmental Protection Agency (USEPA) requires that if you disturb more than six (6) square feet of interior surface or twenty (200) square feet of exterior service, the construction team must be certified under the 2008 Renovation, Repair, and Painting (RRP) Rule. If encountered, LBP and materials containing LBP will be disposed of at a NYSDPS and NYSDEC approved facility and managed in accordance with the USEPA’s RRP Rule.

8.5 Unexpected Material

If unknown/unexpected materials are encountered that are suspected as being hazardous, toxic, contaminated, radioactive, harmful, etc., immediately:

- Stop work in the affected area, as needed.
- Secure and make the area safe for Company personnel, public and the environment.
- Report the condition in writing and verbally to the Certificate Holders.
- Report the condition to the Environmental Inspector.
- Determine the type of waste and dispose at a NYSDPS and NYSDEC approved disposal facility.

ATTACHMENT A – MATERIALS HANDLING PLAN

Material Handling Plan

For

Construction of Champlain Hudson Power Express
Bulkhead Stabilization at 98 Lincoln Avenue
Bronx, New York 10454

Prepared for:

Champlain Hudson Power Express LLC
600 Broadway
Albany, N.Y. 12207

Caldwell Marine International
1333 Campus Parkway
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Prepared by:

Applemon Corporation
151 S. Mountain Road
New City, NY 10956

March 20, 2024

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Appendices

1. INTRODUCTION AND PURPOSE

At the request of Caldwell Marine International of Wall Township, New Jersey, Applemon Corporation (Applemon) of New City, New York, (see Appendix A for qualification), has prepared this Material Handling Plan (MHP) for excavation associated with the Champlain Hudson Power Express LLC project for Construction of Champlain Hudson Power Express Bulkhead Stabilization at 98 Lincoln Avenue in the Borough of Bronx, New York (see Figure 1).

The MHP is prepared based on the requirements of NYC Standard Highway Specifications Section 8.01 C1 (E) dated May 16, 2022 and abides by the requirements of Item 8.01 C1 (E) Handling, Transporting & Disposal of Non-Hazardous Contaminated Soils (see Appendix E). The MHP will be utilized by the Engineer in adopting procedures used in the identification and excavation of clean fill, non-hazardous contaminated and hazardous materials in the project area, including the identification of the proposed disposal facilities and controls used to maintain compliance with the project Health and Safety Plan.

2. SUMMARY OF FIELD INVESTIGATION

According to the Field Sampling Summary Report dated January 2024, field screening and laboratory analysis of the soil samples collected from the site did not identify petroleum odor and petroleum-impacted soils indicative of Volatile Organic Compounds (VOCs) or Semi-Volatile Organic Compounds (SVOCs) at levels in excess of NYS Part 375 Restricted-Residential Use and Restricted-Commercial Use (Track 2) Soil Cleanup Objectives (SCO). However, as shown on Table 2, one heavy metal (arsenic) was detected at levels in excess of Restricted-Commercial Use (Track 2) SCO in both samples. No pesticides or PCBs were detected at levels above Restricted-Residential Use SCO. According to the laboratory analytical results of the waste characterization samples, soil samples collected from the site did not exhibit evidence of hazardous waste characteristics.

3. CHARACTERIZATION OF EXCAVATED MATERIALS

Soils that are not hazardous waste but contain any pollutants at levels in excess of 6 NYCRR PART 375 Restricted Commercial Use Soil Cleanup Objectives or the disposal facilities acceptance limits will be characterized as Regulated Material. Soils that are not hazardous waste and regulated material but are visually made of unsuitable material such as glass, wood, brick, etc. will be characterized as Miscellaneous Waste. The disposal of Miscellaneous Waste will be determined once the Miscellaneous Waste has been characterized in the field.

Based on the field screening and laboratory analysis of the soil samples collected from the site, the excavated soils are considered contaminated as indicated on Table 2. The excavated soils with contamination at levels in excess of Restricted Commercial Use SCOs should be managed as contaminated material in accordance with the contract requirements and the project Material Handling Plan. The contaminated materials need to be disposed of at an authorized disposal facility. Some screening of the soils for removal of miscellaneous material such as man-made material or peat layers may be necessary. The miscellaneous material will be screened for separating unsuitable material such as glass, wood, etc. and disposing them in an appropriate facility.

Soils that exhibit Characteristics of Hazardous Waste published in the Resource Conservation and Recovery Act (RCRA) and NYSDEC Part 371 for presence of any pollutants will be characterized as Hazardous Waste. Hazardous material shall be defined as material that is listed hazardous waste or exhibits the characteristics of a hazardous waste, namely ignitability, corrosivity, reactivity, and/or toxicity as defined by 6 NYCRR Part 371, Section 371.3 and 40 CFR Section 261 upon laboratory analysis. Based on the field screening and laboratory analysis of the soil samples collected from the site, no hazardous soil has been identified along the project site.

4. MATERIAL HANDLING PROCEDURES

All activities related to material handling will be in compliance with OSHA requirements and the approved Site HASP. The Health and Safety Officer (HSO), his representative, or project manager in his absence will be responsible for the assessment of the site conditions and implementation of appropriate health and safety procedures during the construction activities. Site personnel should be aware that contaminated materials may be encountered in the course of the project. Therefore, the following minimum requirements for identification of potential contamination at the site should be in place to prevent mishandling of the contaminated material or exposure of the personnel to such materials. If needed, Photo Ionization Detector (PID) should be operated by the project's environmental consultant to detect VOCs at intervals of approximately 50 cubic yards (CY) of soil excavated. In case of any concerns, questions, or emergencies please see Table 3 for the Contact List of Key Personnel and Emergencies.

Excavated soils will be initially screened for presence of any petroleum odor, discoloration or deleterious material by the HSO. If such odors or discoloration are suspected, Total Organic Vapors (TOVs) in the field will be measured on a per- truckload basis with a PID by the project's environmental consultant. The specification sheet for the PID, the MiniRae 2000, is included in Appendix B. The PID shall be calibrated at the start of each working day. This meter shall be calibrated by analysis of a known concentration standard (i.e., 100 ppm isobutylene) and zeroed in ambient air. The PID readings of the excavated soils from these areas shall be recorded on a daily excavation air-monitoring log. Soils that exhibit elevated PID readings (subsequently confirmed by laboratory analysis) or visual evidence of contamination and/or petroleum odors, or have been documented as contaminated in previous environmental reports shall be defined as contaminated material. If deleterious material or any items raising concern such as biological waste, etc. are suspected to be present, the HSO or his designee shall sample the material for laboratory analysis based on the disposal facility requirements for proper characterization.

Personnel engaged in excavation activities will use personal protective equipment (PPE) to protect against site hazards. Selection of PPE is dependent upon the types and concentrations of hazards present and the operations to be performed. Level D protection will be used by Site

personnel performing excavation activities during the project. To ensure the safety of personnel, the level of protection may be upgraded based on visual observations of excessive dust generation and confirmation with a Mini Real Time Aerosol Monitor (mini-RAM, please see Appendix B for specifications), volatile organics odors followed by confirmation with a PID, and the professional judgment of the HSO. Daily logs on air monitoring (see Table 1) during excavation activities must be prepared and maintained by the Contractor/Consultant and submitted to the Engineer either on request or upon completion of the work.

For the purposes of this MHP, Level D protection zones are described as areas where gross ambient total organic vapor (TOV) concentrations (monitored in real-time) range from background to 5 parts-per-million (ppm) over background or areas where total particulate matter concentration (monitored in real-time) range from background to 5 mg/m^3 over background. If organic odors or excessive dust are identified by HSO, background readings will be obtained by the project's environmental consultant, using a PID and a dust monitor within the work areas, prior to commencement of work.

Any optional PPE needs to be identified prior the start of work and be readily accessible on site prior to start of excavation. For the purposes of this MHP, during on-site work activities, Level D protection shall consist of work clothes (chemical resistant coveralls for tasks with the potential for contact with the contaminated/hazardous soil when required by HSO), safety glasses, hearing protectors (when required by HSO), safety boots, latex boot covers (when required by HSO), hard hat, inner nitrile or latex surgical gloves with outer work gloves (when required by HSO), and dual cartridge respirators with appropriate cartridge (for tasks with the potential for contact with the contaminated/hazardous soil when required by HSO). For the purposes of this MHP, the Level D protection zone shall be synonymous with the contaminant reduction zone (CZ). If the concentration of TOVs, as identified by HSO and subsequently monitored in real-time, exceed 5 ppm over site background, or toxic (hazardous) airborne substances are known to exist at concentration exceeding 5 mg/m^3, personal protection may be upgraded to Level C by HSO while implementing engineering controls to suppress and reduce the concentration of air pollutants. For the purposes of this MHP, Level C protection zones are defined as areas where

gross ambient TOV concentrations, monitored in real-time, exceed 5 ppm over site background but are less than 25 ppm. Level C protection adds a full-face respirator, with appropriate cartridge, to the Level D protection described above. Level C protection also requires that chemical resistant gloves and boots be taped to the chemical resistant coveralls. For the purposes of this MHP, the Level C protection zone shall be synonymous with the exclusion zone (EZ). When concentrations of air pollutants are in excess of Level C upper limits, work should be suspended and engineering controls should be implemented to suppress the high concentration of air pollutants and corrective measures should be implemented to lower the VOC levels below 5 mg/m^3.

4.1 Engineering Controls

To prevent fugitive particulates from becoming airborne, water spray will be used during excavation. If the level of dust in air exceeds $100\mu g/m^3$, dust suppression measures must be applied. The dust level should not exceed the total nuisance particulate standard of $150\mu g/m^3$. If this dust level is exceeded, the site Supervisor should discontinue the construction activities until appropriate controls are implemented.

4.2 First Aid

Basic safety equipment will be kept on-site to monitor site conditions and respond to emergency situations. This equipment includes, but is not limited to, the following:

1) First Aid kits
2) Portable eyewash
3) Type ABC fire extinguisher

The following equipment will be brought to the site:

4) Photoionization detector (PID) - MiniRAE 2000 or equivalent
5) Dust Monitor – ThermoScientific or equivalent

For further information please refer to the site Health and Safety Plan that has been submitted and approved separately.

4.3 Training

All personnel working on-site will receive a minimum 8 hours of on-site Health and Safety Training in additional to OSHA 10-hour Construction Safety Training. Personnel dealing directly with sampling and handling of contaminated/hazardous materials need OSHA 40-hour HAZWOPER training and if warranted the 8-hour annual refreshers. It should be noted that the potential for confined space work exists within the tasks outlined by this contract. Any and all personnel conducting confined space activities will have Confined Space Health and Safety Training in accordance with OSHA 1910.146.

5. ANALYTICAL LABORATORY

York Analytical Laboratories will analyze any additional samples collected from the site. Their ELAP No. and contact information are as follow:

NYS Department of Health (DOH) approved [ELAP No.10854]

Telephone No.: (203) 325-1371

Fax No.: (203)357-0166

Address: York Analytical Laboratories
120 Research Drive
Stratford, CT 06615

Please see Appendix C for the Laboratory Statement of Qualification or refer to York Analytical Laboratories website at http://www.yorklab.com/ for current ELAP Certification documentation.

6. MATERIAL WASTE TRANSPORTER

The proposed waste hauler shall be an EPA-licensed waste hauler with an approved EPA identification number, and have worked at such sites in the past. The contractor will ascertain that the selected waste transporter has previous experience in performing similar type of work. Soils are accepted at the facilities based on their weight in tons determined at a weighing station.

In order to prevent accidents, special attention will be given to the followings:

- Only individuals specifically trained and certified in accordance with USDOT requirements (49 CFR) will prepare, handle, and transport materials
- Prior to transporting materials, the contractor will identify and record information about the material, quantity, Safety Data Sheet (obtained from the manufactures and available at the jobsites), destination and any special requirements
- Following proper procedures and the use of competent and trained workers for handling and transporting materials
- Each load will not exceed the maximum quantity limits and will be appropriately loaded to prevent shifting and leaking during transport
- Documentation and recording will be done in accordance with the required policies and procedures
- Prevent truck accidents by obeying all traffic laws and DOT rules including the speed limit; making sure transporting materials are properly and safely loaded in the vehicle; establishing routes; avoiding poor road conditions; minimizing driver distractions; not driving when intoxicated or fatigued; properly maintaining the vehicles; and avoiding driving in bad weather and poor visibility.
- A scale located at the disposal facility will be used.

7. MATERIAL STAGING/STOCKPILING PROCEDURES

If direct loading of excavated material into trucks for disposal is not achievable, temporary stockpiling within the project's limit of disturbance or at an approved site shall be allowed. Temporary stockpile of contaminated or hazardous material shall not exceed 100 cubic yards. All stockpiled regulated materials shall be placed on an impervious material such as a minimum 20-mil plastic sheeting or liner. Each stockpile shall be securely covered with an impervious material such as a minimum 10-mil polyethylene sheeting or cover to protect against contaminant migration to groundwater and runoff to storm water or wetlands. The cover shall be stabilized by positioning several weights (e.g. concrete block or brick) on the cover to prevent tearing or displacement by weather, and the ground surface surrounding the stockpile shall be graded so that storm runoff is directed away from the stockpiled material. Staging/stockpiling procedures for non-hazardous contaminated materials and hazardous materials shall be the same. However, soils with different classifications shall be staged in individual stockpiles separated by a minimum of 10 feet of clearance. The contractor will provide temporary loading facilities on site as required until completion of material handling activities. Stockpiles with hazardous material must be situated at least 800ft from any sensitive receptors such as schools, day care centers, hospitals, nursing homes etc.

Excavated soil from areas of hazardous waste, if any is found, will be handled and stockpiled separately and will be segregated from clean, non-hazardous contaminated soil and construction materials according to the Specifications (Appendix E). Stockpiles will be used only when necessary and will be removed as soon as practicable.

Loaded vehicles leaving the site will comply with all applicable materials transportation requirements (including appropriate covering, manifests, and placards) in accordance with applicable laws and regulations, including use of licensed haulers in accordance with 6 NYCRR Part 364. Whether loads contain dry or wet material capable of causing leakage from trucks, truck liners will be used at all times. If direct loading of excavated material into trucks for disposal is not achievable, temporary stockpiling and loading facility shall be provided, installed

and maintained by the contractor following the guidelines mentioned at the beginning of this section.

A portable decontamination station should be provided to decontaminate equipment and vehicles exiting the exclusion zone. Equipment will be decontaminated and demobilized at the completion of all field activities. Large equipment (e.g., soil excavators) will be washed at the truck inspection station as necessary. All decontamination waste will be appropriately disposed after proper characterization. Truck washing if necessary will be performed over gravel stabilization area at the interface of paved and unpaved surfaces. Water produced during equipment washing will be released to the pervious sand layer covering the site. If presence of contaminated material is suspected based on visual or olfactory indicators, the gravel stabilization pad will be underlain by an impermeable minimum 20-mil thick liner, placed so that water produced by equipment decontamination is collected over the liner and discharged to a tank. The liquid in the tank will be sampled for waste characterization and disposed of accordingly at an off-site appropriate disposal facility. Water produced from decontamination of small tools, if suspected to be contaminated, will be collected in 55-gallon drums and delivered to an appropriate disposal facility.

8. DISPOSAL FACILITIES

The proposed disposal facility shall be permitted by the location state as a disposal facility to receive the intended waste with an approved EPA identification number. Soils are accepted at the facilities based on their weight in tons determined at a weighing station. See Appendix D for the list of approved disposal facilities and their related information. If needed the contractor will separately provide and submit additional information (e.g. the date of last compliance inspection and a list of active compliance orders) about the selected facility including the letters of agreements and the facilities' project experience references. The proposed facilities are one of the largest specialty waste companies in the United States providing services to New York City's contractors performing similar type of work over a long period of time.

9. SHIPMENT DOCUMENTATION

9.1 Hazardous Waste Shipment

If the excavated soil will be profiled as a hazardous waste based on laboratory analysis, a Hazardous Waste Manifest form will be used to track the movement of hazardous waste soils from the point of generation to the point of ultimate disposition. Prior to transporting the excavated soil offsite, an authorized representative will sign each hazardous waste manifest. The hazardous waste hauler will then sign the manifest and distribute one signed copy to the removal action contractor's Site Manager. Contractor or its consultant will maintain a copy of the hazardous waste manifest for each truckload on-site until completion of the project. At a minimum, the shipping document will include the following information:

- Name and Address of Waste Generator
- Name and Address of Waste Transporter
- Name and Address of Disposal Facility
- Description of the Waste
- Quantity of Waste Shipped

9.1.1 Hazardous Waste Administration

The followings should be executed for coordination with the office of Resident Engineer (RE):

- Manifests shall be uniquely numbered and should also contain information on truck number to identify each load.
- A Copy of each manifest shall be provided to RE office the day a truckload leaves the job site.
- Another copy of each manifest shall be provided to RE office after arrival and weighing at Disposal Facility.

9.2 Non-hazardous Waste Shipment

When the excavated soil is profiled as non-hazardous or regulated material, a proper shipping document (such as non-hazardous waste manifest, bill of lading or invoice) of the hauler will be used to document and accompany each truck shipment. At a minimum, the shipping document will include the following information:

- Name and Address of Waste Generator
- Name and Address of Waste Transporter
- Name and Address of Disposal Facility
- Description of the Waste
- Quantity of Waste Shipped

Contractor will maintain a copy of the shipping document for each truckload on-site and will submit a copy if requested within 4 business days following shipment until completion of the project.

TABLES

TABLE 1. EXCAVATED SOILS AIR MONITORING LOG

Air Monitoring Log			Project		Date	
			Location		Inspector	
			Weather			
Time	**PID (ppm)**	**Dust (mg/m^3)**	**Comments**			

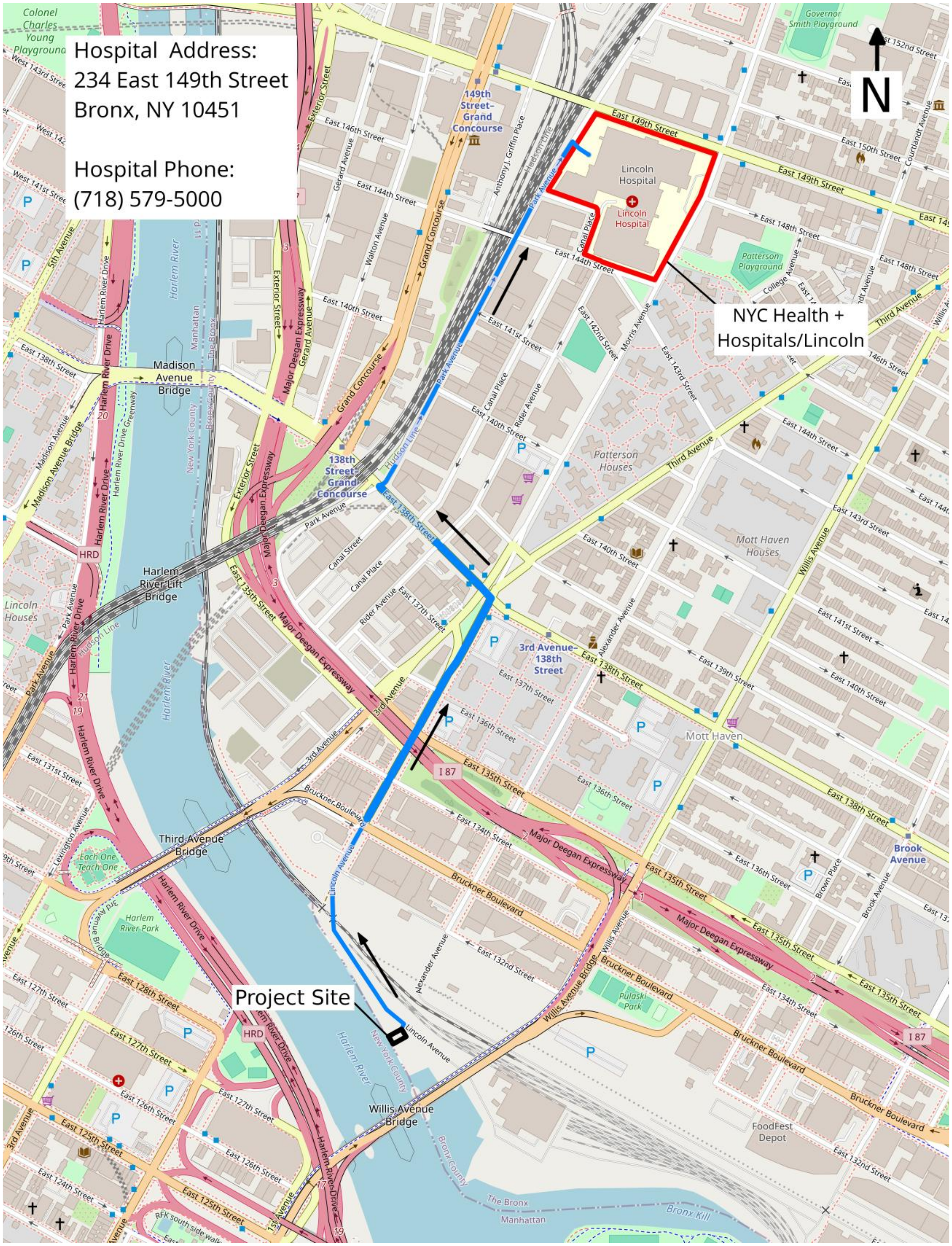
TABLE 2. GRID AND SAMPLE IDENTIFICATION

Grid No	Boring and Sample Identification	Sampling Depth Interval (ft-bgs)	Soil Classification*
1	SB-1	0-20	Exceeded RRUSCO and RCUSCO Contaminated
2	SB-2	0-24	Exceeded RRUSCO and RCUSCO Contaminated

* Laboratory Analytical Results were compared with Part 375-6.8 Restricted Residential Use Soil Cleanup Objectives (RRUSCO) and Restricted Commercial Use Soil Cleanup Objectives (RCUSCO). Not contaminated is defined as below RCUSCO.

TABLE 3. CONTACT LIST FOR KEY PERSONNEL AND EMERGENCY

Police Department:	911
Ambulance:	911
Fire Department:	911
Local FDNY Station	911
NYSDEC Spill Hotline	1-800-457-7362
Caldwell Marine International Project Manager	Greg Gashlin Office: (732) 557-6100 Cell: (732) 620-3133
Caldwell Marine International Health and Safety Officer	TBD
Hospital Name:	NYC Health + Hospitals/Lincoln
Hospital Address:	234 East 149th Street, Bronx, NY 10451 See next page for hospital route map
Hospital Phone:	(718) 579-5000
Champlain Hudson Power Express	TBD


Hospital Address:
234 East 149th Street
Bronx, NY 10451
Hospital Phone:
(718) 579-5000
N
Lincoln Hospital
NYC Health +
Hospitals/Lincoln
Project Site
East 149th Street
East 138th Street
Lincoln Avenue
Park Avenue
Third Avenue Bridge
Willis Avenue Bridge
Madison Avenue Bridge
Harlem River Lift Bridge
Harlem River
Major Deegan Expressway
Bruckner Boulevard
Mott Haven
Patterson Houses
Mott Haven Houses

FIGURES

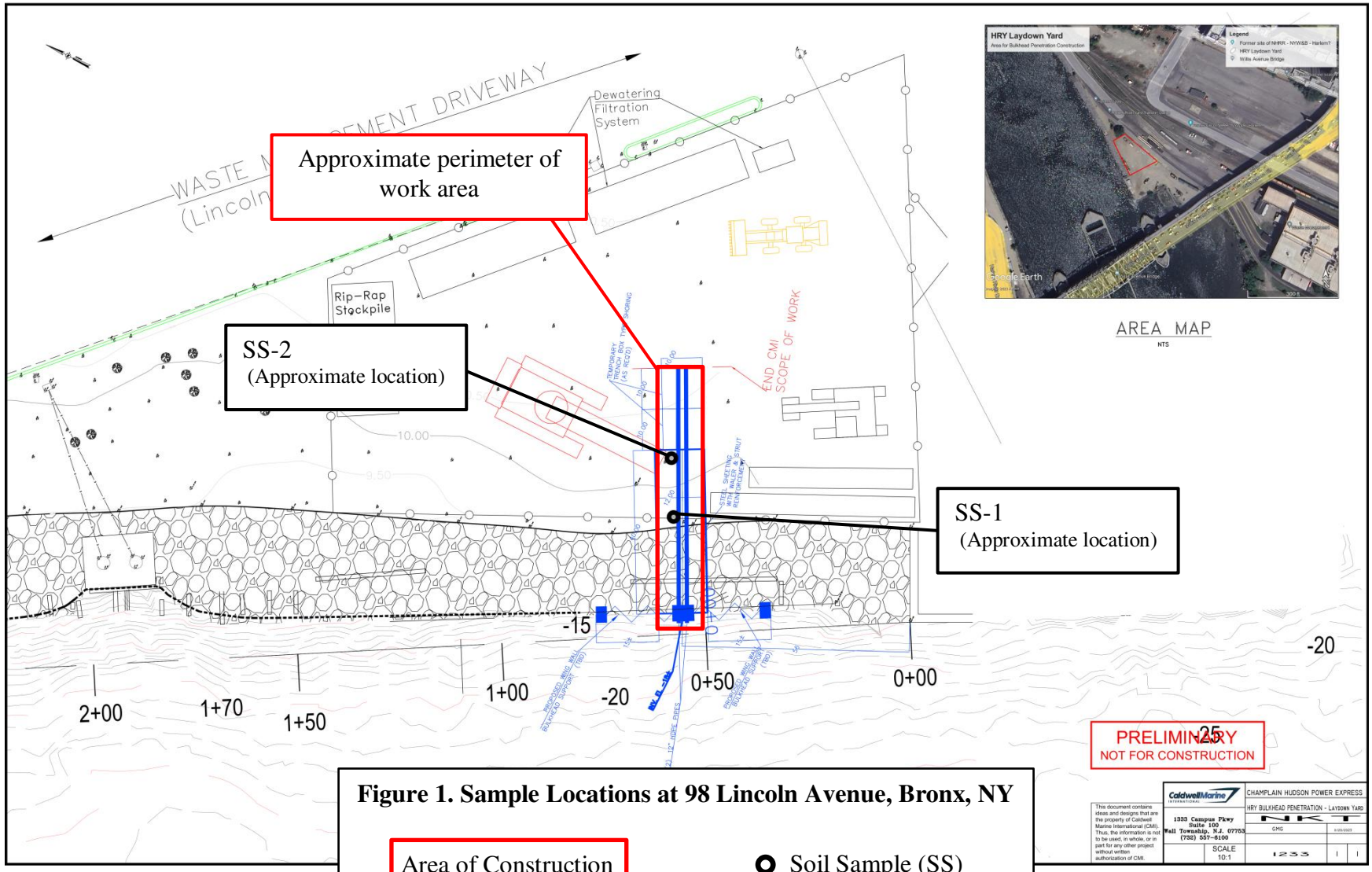


Figure 1. Sample Locations at 98 Lincoln Avenue, Bronx, NY

Area of Construction

Soil Sample (SS)

APPENDIX A

CONSULTANT STATEMENT OF QUALIFICATION AND TRAINING CERTIFICATION

APPLEMON CORPORATION

Applemon has been the lead consultant in many projects executed by contractors for government agencies providing civil and environmental engineering consulting services. For a detailed company profile including a list of projects please visit www.applemon.com

Director of Engineering Consulting Services and Quality Assurance Officer
Fuad F. Adib, Ph.D., P.E.,

Phone: (845) 634-0858
Cell Phone: (845) 367-1917

Summary

Accomplished project manager and director with more than 35 years experience in all phases of civil and environmental engineering including site assessment, investigation, planning, and remediation management. Doctorate in Environmental Engineering with demonstrated skills in management of large and small-scale projects in private and public sectors.

Experience

2001-present **Applemon Corporation,** New City, NY

Perform management assignments in civil and environmental engineering projects for major corporations including Hess, Northeast Remsco Construction, DiFazio Industries, Bedford Carp Construction, C.A.C. Industries, JRCRUZ Corporation, City and State Universities of NY, and the United Nations. Provide consulting for scoping, planning and conducting a variety of environmental engineering projects. Examples include:

- Bedford CARP Construction:
  - NYCDEP's Alley Creek CSO Storage project within wetlands, in Alley Park, Queens (2005-2012)
  - NYCDDC Construction of Sewers in City Island Avenue project within wetlands in City Island in Bronx (2010)
  - NYCDDC's Construction of Sewers in McBaine Avenue project within wetlands in Staten Island
- A.L.A.C. Contracting Corporation:
  - Nassau County Cedarhurst Sewer Construction project adjacent to wetlands in Long Island, NY
- Griffin Dewatering Services:
  - Town of Babylon Wyandanch Wastewater Pump Station project adjacent to wetlands in Long Island, NY (2011)

- Perfetto Contracting Corporation:
  - NYCEDC East River Waterfront Esplanade and Piers Project in Lower Manhattan (2011)
- C.A.C. Industries:
  - NYCDDC's project for construction of Storm Sewers and Outfall on Beach 94th Street, Rockaway, Queens
  - NYCDDC's project for construction of Storm Sewers and Outfall on Beach 42nd Street, Rockaway, Queens (2011)
  - NYCDDC's project for construction of Storm Sewers and Outfall on Beach 29th Street, Rockaway, Queens
- DeBoe Construction:
  - NYCDDC's project Construction of Sewers in Edgewood Street & Area adjacent to wetlands, Queens (2010)
  - NYCDDC's project Reconstruction of Pratt Avenue Area, Borough of the Bronx, New York (2012)
- JRCRUZ Corporation:
  - NYCDDC's project for construction of Storm Sewers and Outfall on Bay 32nd Street, Rockaway, Queens
  - NYCDDC's project for construction of Storm and Sanitary Sewers in Richmond Terrace, adjacent to wetlands in Staten Island (2009)
- Northeast Remsco Construction:
  - NYCDEP project Gowanus Facilities Upgrade project on Gowanus Canal, Brooklyn (Ongoing since 2010)
  - NYCDEP project Kensico Water Treatment UV Light Filtration and Disinfection project adjacent to wetlands, Westchester, NY (2011)
  - NYCDEP project Reconstruction of Bronx CSO Facilities within wetlands, Bronx (2010)
- Difazio Industries:
  - NYCDDC's project for Construction of Storm Sewers and Sanitary Sewers in Titus Avenue, etc., Staten Island, New York

05/01 – 09/01 **Sr. Project Manager, AquaTerra Environmental Services** New York, NY. In charge of environmental services. Conducted site assessment services including:

- McBurney YMCA: A comprehensive pre-demolition asbestos survey of a 14 story- commercial building.
- HSBC Bank (USA), Chase Manhattan Bank (USA): performed a total of twelve site assessments in commercial properties.

1994 –2001 **Project Director, Consultant, City University of New York,** NY
Provides management services for several high profile technical and industrial projects including:

- New York City Department of Environmental Protection (NYCDEP): Regular consultant services for 14 wastewater treatment plants in NYC.
- United Nations: Received a grant from United Nations for development of a model for contaminant transport due to oil fires in Persian Gulf. Provides ongoing project management, coordinating two teams of scientists in CUNY and SUNY.

Education

- B.S. Civil Engineering, Purdue University, IN, 1978
- M.S. Environmental Engineering, City College of New York, 1995
- Ph.D. Environmental Engineering, City University of New York, 2000

Professional Certifications

- Registered Professional Engineer in State of New York
- OSHA 40-hour Hazardous Waste Operations and Emergency Response Training

Applemon Field Personnel

CareerSafe®

presents

Certificate of Completion

to

Nathan Paul

has completed the OSHA 10-Hour Construction Industry Course.
All requirements have been satisfactorily met.

Trainer: *Andrea Foster Mack* Date: *January 19, 2020*

As an OSHA authorized trainer, I verify that I have conducted this OSHA outreach training class in accordance with OSHA Outreach Training Program requirements. I will document this class to my authorizing OSHA training organization. Upon successful review of my documentation, I will provide each student his or her completion card within 90 days of the end of class.

www.careersafeonline.com

CERTIFICATE OF COMPLETION

This is to certify that
Nathan Paul

Has successfully completed the
40-hour Hazardous Waste Operations and
Emergency Response Training

Course Completion: March 25, 2021
Expiration Date: March 25, 2022

Enayat Nassry, OSHA Training Instructor

www.applemon.com

CERTIFICATE OF COMPLETION

This is to certify that
Nathan Paul

Has successfully completed the
8-hour OSHA HAZWOPER Training Refresher

Course Completion: April 15, 2023
Expiration Date: April 15, 2024

Enayat Nassry, OSHA Training Instructor

www.applemon.com

Nathan Paul, Field Technician and Project Coordinator,
September 2019-Present

With over four years of experience involving in NYCDDC infrastructure construction projects, Nathan Paul performs environmental field activities including subsurface investigation and field screening, collecting soil and water samples, vibration monitoring, air monitoring, noise monitoring, and inspection activities related to erosion and sediment control.

APPENDIX B

FIELD ANALYTICAL EQUIPMENT SPECIFICATION

MiniRae 2000

The rugged MiniRae 2000 is the smallest pumped handheld volatile organic compound (VOC) monitor on the market. Its Photo ionization Detector (PID) extended range of 0-10,000 ppm makes it an ideal instrument for applications from environmental site surveying to HazMat/Homeland Security.

Features

- Proven PID technology - The patented 3D sensor provides a 3 second response up to 10,000 ppm and sets a new standard for resistance to moisture and dirt.
- Self cleaning lamp and sensor - Rae's patented self cleaning lamp and sensor minimize the need for maintenance and calibration
- The MiniRae 2000 lamp and sensor can be taken apart in seconds for easy maintenance without any tools!
- Measures more chemicals than with any other PID - With over 100 correction factors built into the MiniRae 2000 memory and the largest printed list of correction factors in the world (300+), Rae Systems offers the ability to accurately measure more ionizable chemicals than any other PID. When a gas is selected form the MiniRae's 2000's library, the alarm points are automatically loaded into the meter.
- User friendly screens make it easy to use for simple applications and flexible enough for sophisticated operations.
- Drop in battery - When work schedules require putting in more than the 10 hours supplied by the standard NiMH battery, the drop in alkaline pack supplied with every MiniRae 2000 lets you finish the job.
- Rugged rubber boot - the standard rubber boot helps assure that the MiniRae 2000 survives the bumps and knocks of tough field use.
- Strong built in sample pump draws up to 100 feet horizontally and vertically.
- Tough flexible inlet probe
- Large keys operable with 3 layers of gloves
- Stores up to 267 hours of data at one minute intervals for downloading to PC (with the data logging option).
- 3 Year 10.6 eV lamp warranty.

Applications

- Initial PPE (personal protective equipment) assessment
- Leak detection
- Perimeter establishment and maintenance
- Spill delineation
- Decontamination
- Remediation
- Homeland Security
- Confined Space Entry
- IAQ
- Worker exposure studies
- Soil and water headspace analysis
- Leaking underground storage tanks
- Fugitive emissions (EPA Method 21)
- Vapor recovery breakthrough
- Landfill monitoring

Specifications

Detector	PID sensor with 10.6 eV lamp standard, 9.8 or 11.7 eV lamp optional
Operating Hours	10 hours continuous
Battery	Rechargeable, external, field replaceable nickel metal hydride battery pack, Alkaline battery holder also supplied
Operating Hours	10 hours continuous
Display	Large, LCD, manual, darkness and alarm activated
Calibration	Two points field calibration of zero and standard reference gas. Calibration memory of 8 calibration gases, alarm limits, span values and calibration time
Keypad	1 operation key, two programming keys
Direct Readout	VOCs as ppm by volume, high and low values, STEL and TWA (in hygiene mode), battery and shut down voltage
Alarms	90 dB buzzer and flashing red LED to indicate exceeded preset limits. High; 3 beeps and flashes per second, Low; 2 beeps and flashes per second, STEL & TWA; 1 beep and flash per second, Alarms automatic reset or latching with manual override, optional plug in pen size vibration alarm, user adjustable alarm limits
Data logging	Standard 267 hours (at 1 minute intervals) with date/time, header information includes monitor serial number, user ID, site ID, date and time
Communication	Download data and up load instrument setup from PC through RS-232 link to serial port
Low Flow Alarm	Auto shut off pump at low flow condition
Sampling Pump	Internal integrated flow rate 400 cc/min, sample from 100'

	horizontally or vertically
Temperature	14 to 104°F
Humidity	0 to 95% rH
EMI/RFI	Highly resistant to EMI/RFI, Compliant with EMC Directive 89/336/EEC
IP Rating	IP-55 protected against dust, protected against low pressure jets of water from all directions
Size	8.2" L x 3" W x 2" H
Weight	20 ounces with battery pack
Approvals	UL and cUL: Class 1, Div 1, Group A, B, C, D
Attachment	Durable bright yellow rubber boot with belt clip and wrist strap
Warranty	Lifetime on non-consumable components, 3 years for 10.6 eV PID lamp, 1 year for pump and battery

Sensor Specifications

Sensor	Range	Resolution	Response Time
VOCs	0-999 ppm	0.1 ppm	<3 seconds
	100-10,000 ppm	1 ppm	<3 seconds

Calibration

The equipment will be calibrated regularly before use on a minimum weekly basis for accuracy. Calibration consists of two-point field calibration of zero and standard reference gas such as isobutylene of known concentration. The instrument is equipped with calibration memory of 8 calibration gases, alarm limits, span values and calibration date.

Product Specifications

Passive, real-time, personal aerosol monitor/datalogger

Thermo Scientific personal DataRAM pDR-1000AN Monitor

Key Features

- Measure airborne particulate concentration in real-time
- Highest measurement range of any real-time personal particulate monitor
- Simple zeroing and calibration
- No moving parts, silent operation
- Compact, durable, and self-contained

The Thermo Scientific personal DataRAM pDR-1000AN Monitor is a passive sampling, light-scattering nephelometer that measures real-time mass concentrations of dust, smoke, mists, and fumes in industrial as well as other indoor and outdoor environments.

Nephelometry, a light-scattering technology, is highly sensitive and incorporates a pulsed, high output, near-infrared light emitting diode source, as well as a silicon detector/hybrid preamplifier, collimating optics and a source reference feedback PIN silicon detector.

The pDR-1000AN monitor features a high measurement range of 0.001 to 400 mg/m^3 (auto-ranging), a 400,000-fold span. An optical feedback and stabilized sensing system, sets the standard for sensitivity, long-term stability and reliability.

Simple zeroing, with particle-free air, is quick using the included zeroing kit. The internal firmware controls an automatic calibration check. A gravimetric calibration can be performed by weighing a separate filter sample and programming in the calibration constant to provide the same reading.

The pDR-1000AN monitor is an ultra-compact, durable and self-contained instrument designed for hand-held or belt-worn unattended operation. There are no moving parts which provides for silent, dependable operation.

Selectable alarm levels with built-in audible signal and switched output, a RS-232 communications port, and a programmable analog concentration output are all part of this versatile instrument.

Part of Thermo Fisher Scientific

Thermo SCIENTIFIC

Product Specifications

To maintain optimal product performance, you need immediate access to experts worldwide, as well as priority status when your air quality equipment needs repair or replacement. We offer comprehensive, flexible support solutions for all phases of the product life cycle. Through predictable, fixed-cost pricing, our services help protect the return on investment and total cost of ownership of your Thermo Scientific air quality products.

Thermo Scientific personal DataRAM pDR-1000AN Monitor

Concentration Measurement Range	0.001 to 400 mg/m³ range (auto ranging)[1]
Scattered Coefficient Range	1.5 x 10^{-6} to 0.6m^{-1} (approx.) @ lambda= 880nm (not displayed)
Precision/Repeatability Over 30 Days	±0.5 of reading or ± 0.015 mg/m³, whichever is larger, for 1 second averaging time
	±0.5 of reading or ± 0.015 mg/m³, whichever is larger for 10 second averaging time
	±0.2% of reading or ± 0.005 mg/m³, whichever is larger for 60 second averaging time
Accuracy[1]	±5% of reading ± precision (traceable to SAE Fine Test Dust)
Resolution	0.1% of reading or 0.001 mg/m³, whichever is larger
Particle Size Range of Max. Response	0.1 to 10µm
Aerodynamic Particle Cut-Point Range	10µm nominal
Concentration Display Updating Interval	1 second
Concentration Display Averaging Time[2]	1 to 60 seconds (user selectable)
Data Logging Averaging Periods[3]	1 second to 1 hour
Total # of Data Points Logged in Memory	13,391
Number of Data Tags	99 (maximum)
Logged Data	Average concentration, time/date, and data point number
Readout Display	LCD 16 characters (4 mm height) x 2 lines
Serial Interface	RS-232 / 4,800 baud
Computer Requirements	IBM-PC compatible, 486 or higher, Windows 95® or higher, ≥ 8 MB memory,
	Hard disc drive 3.5" floppy, VGA or higher resolution monitor
Analog Output	0 - 5V and 4-20mA
Physical Dimensions	6" (153mm) H x 3.6" (92mm) W x 2.5" (63mm) D
Weight	18oz. (0.5kg)

Instrument Accessories

The following accessories are available for the **personal DataRAM pDR-1000AN Monitor**:

Standard Accessories:
- Soft shell carrying case
- Digital communications cable
- Z-Pouch zeroing kit
- Belt clip kit
- AC power supply and charger
- Analog signal output cable

Optional Accessories:
- Rechargeable (NiMH) battery pack
- Remote alarm unit
- Active sampling kit
- Portable pump unit
- Should strap
- Wall mounting bracket

Lit_pDR1000ANAQI_8/10

This product is manufactured in a plant whose quality management system is ISO 9001 certified.

Air Quality Instruments 27 Forge Parkway Franklin, MA 02038 USA (866) 282-0430 (508) 520-0430 (508) 520-1460 fax www.thermoscientific.com/AQI

APPENDIX C

LABORATORY STATEMENT OF QUALIFICATION

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2024
Issued April 01, 2023
Revised April 04, 2023

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MS. CATHERINE L. MOSHER
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD, CT 06615

NY Lab Id No: 10854

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2016) for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Acrylates	
Acrolein (Propenal)	EPA 8260D
	EPA 8260C
Acrylonitrile	EPA 8260D
	EPA 8260C
Methyl methacrylate	EPA 8260D
	EPA 8260C
Amines	
1,2-Diphenylhydrazine	EPA 8270D
	EPA 8270E
2-Nitroaniline	EPA 8270D
	EPA 8270E
3-Nitroaniline	EPA 8270D
	EPA 8270E
4-Chloroaniline	EPA 8270D
	EPA 8270E
4-Nitroaniline	EPA 8270D
	EPA 8270E
Aniline	EPA 8270D
	EPA 8270E
Carbazole	EPA 8270D
	EPA 8270E
Diphenylamine	EPA 8270D
	EPA 8270E
Benzidines	
3,3'-Dichlorobenzidine	EPA 8270D
	EPA 8270E

Serial No.: 67726

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2024
Issued April 01, 2023
Revised April 04, 2023

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MS. CATHERINE L. MOSHER
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD, CT 06615

NY Lab Id No: 10854

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2016) for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Benzidines

Benzidine	EPA 8270D
	EPA 8270E

Characteristic Testing

Corrosivity (pH)	EPA 9045D
Free Liquids	EPA 9095B
Ignitability	EPA 1010A
Synthetic Precipitation Leaching Proc.	EPA 1312
TCLP	EPA 1311

Chlorinated Hydrocarbon Pesticides

4,4'-DDD	EPA 8081B
4,4'-DDE	EPA 8081B
4,4'-DDT	EPA 8081B
Aldrin	EPA 8081B
alpha-BHC	EPA 8081B
alpha-Chlordane	EPA 8081B
Atrazine	EPA 8270D
	EPA 8270E
beta-BHC	EPA 8081B
Chlordane Total	EPA 8081B
delta-BHC	EPA 8081B
Dieldrin	EPA 8081B
Endosulfan I	EPA 8081B
Endosulfan II	EPA 8081B
Endosulfan sulfate	EPA 8081B
Endrin	EPA 8081B
Endrin aldehyde	EPA 8081B

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Chlorinated Hydrocarbon Pesticides

Endrin Ketone	EPA 8081B
gamma-Chlordane	EPA 8081B
Heptachlor	EPA 8081B
Heptachlor epoxide	EPA 8081B
Lindane	EPA 8081B
Methoxychlor	EPA 8081B
Mirex	EPA 8081B
Toxaphene	EPA 8081B

Chlorinated Hydrocarbons

1,2,3-Trichlorobenzene	EPA 8260D
	EPA 8260C
1,2,4,5-Tetrachlorobenzene	EPA 8270D
	EPA 8270E
1,2,4-Trichlorobenzene	EPA 8270D
	EPA 8270E
2-Chloronaphthalene	EPA 8270D
	EPA 8270E
Hexachlorobenzene	EPA 8270D
	EPA 8270E
Hexachlorobutadiene	EPA 8270D
	EPA 8270E
Hexachlorocyclopentadiene	EPA 8270D
	EPA 8270E
Hexachloroethane	EPA 8270D
	EPA 8270E

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Chlorophenoxy Acid Pesticides

2,4,5-T	EPA 8151A
2,4,5-TP (Silvex)	EPA 8151A
2,4-D	EPA 8151A
Dicamba	EPA 8151A

Haloethers

2,2'-Oxybis(1-chloropropane)	EPA 8270D
	EPA 8270E
4-Bromophenylphenyl ether	EPA 8270D
	EPA 8270E
4-Chlorophenylphenyl ether	EPA 8270D
	EPA 8270E
Bis(2-chloroethoxy)methane	EPA 8270D
	EPA 8270E
Bis(2-chloroethyl)ether	EPA 8270D
	EPA 8270E

Metals I

Barium, Total	EPA 6020A
	EPA 6020B
Cadmium, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B
Calcium, Total	EPA 6010C
	EPA 6010D
Chromium, Total	EPA 6010C
	EPA 6010D

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Metals I

Chromium, Total	EPA 6020A
	EPA 6020B
Copper, Total	EPA 6020A
	EPA 6020B
Iron, Total	EPA 6010C
	EPA 6010D
Lead, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B
Magnesium, Total	EPA 6010C
	EPA 6010D
Manganese, Total	EPA 6020A
	EPA 6020B
Nickel, Total	EPA 6020A
	EPA 6020B
Potassium, Total	EPA 6010C
	EPA 6010D
Silver, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B

Metals II

Aluminum, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B

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Metals II

Antimony, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B
Arsenic, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B
Beryllium, Total	EPA 6010C
	EPA 6010D
Chromium VI	EPA 7196A
Mercury, Total	EPA 7471B
	EPA 7473
Selenium, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B
Vanadium, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B
Zinc, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B

Metals III

Cobalt, Total	EPA 6010C

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Metals III

Cobalt, Total	EPA 6010D
	EPA 6020A
	EPA 6020B
Molybdenum, Total	EPA 6020A
Thallium, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B
Tin, Total	EPA 6020A
	EPA 6020B
Titanium, Total	EPA 6020A

Miscellaneous

Boron, Total	EPA 6020A
	EPA 6020B
Cyanide, Total	EPA 9014
Extractable Organic Halides	EPA 9023

Nitroaromatics and Isophorone

2,4-Dinitrotoluene	EPA 8270D
	EPA 8270E
2,6-Dinitrotoluene	EPA 8270D
	EPA 8270E
Isophorone	EPA 8270D
	EPA 8270E
Nitrobenzene	EPA 8270D
	EPA 8270E
Pyridine	EPA 8270D

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Nitroaromatics and Isophorone	
Pyridine	EPA 8270E
Nitrosoamines	
N-Nitrosodimethylamine	EPA 8270D
	EPA 8270E
N-Nitrosodi-n-propylamine	EPA 8270D
	EPA 8270E
N-Nitrosodiphenylamine	EPA 8270D
	EPA 8270E
Organophosphate Pesticides	
Parathion ethyl	EPA 8270D
	EPA 8270E
Petroleum Hydrocarbons	
Diesel Range Organics	EPA 8015D
Gasoline Range Organics	EPA 8015D
Phthalate Esters	
Benzyl butyl phthalate	EPA 8270D
	EPA 8270E
Bis(2-ethylhexyl) phthalate	EPA 8270D
	EPA 8270E
Diethyl phthalate	EPA 8270D
	EPA 8270E
Dimethyl phthalate	EPA 8270D
	EPA 8270E
Di-n-butyl phthalate	EPA 8270D
	EPA 8270E
Di-n-octyl phthalate	EPA 8270D

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Phthalate Esters

Di-n-octyl phthalate	EPA 8270E

Polychlorinated Biphenyls

Aroclor 1016 (PCB-1016)	EPA 8082A
Aroclor 1016 (PCB-1016) in Oil	EPA 8082A
Aroclor 1221 (PCB-1221)	EPA 8082A
Aroclor 1221 (PCB-1221) in Oil	EPA 8082A
Aroclor 1232 (PCB-1232)	EPA 8082A
Aroclor 1232 (PCB-1232) in Oil	EPA 8082A
Aroclor 1242 (PCB-1242)	EPA 8082A
Aroclor 1242 (PCB-1242) in Oil	EPA 8082A
Aroclor 1248 (PCB-1248)	EPA 8082A
Aroclor 1248 (PCB-1248) in Oil	EPA 8082A
Aroclor 1254 (PCB-1254)	EPA 8082A
Aroclor 1254 (PCB-1254) in Oil	EPA 8082A
Aroclor 1260 (PCB-1260)	EPA 8082A
Aroclor 1260 (PCB-1260) in Oil	EPA 8082A
Aroclor 1262 (PCB-1262)	EPA 8082A
Aroclor 1262 (PCB-1262) in Oil	EPA 8082A
Aroclor 1268 (PCB-1268)	EPA 8082A
Aroclor 1268 (PCB-1268) in Oil	EPA 8082A

Polynuclear Aromatic Hydrocarbons

Acenaphthene	EPA 8270D
	EPA 8270E
Acenaphthylene	EPA 8270D
	EPA 8270E
Benzo(a)anthracene	EPA 8270D

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Polynuclear Aromatic Hydrocarbons

Benzo(a)anthracene	EPA 8270E
Benzo(a)pyrene	EPA 8270D
	EPA 8270E
Benzo(b)fluoranthene	EPA 8270D
	EPA 8270E
Benzo(g,h,i)perylene	EPA 8270D
	EPA 8270E
Benzo(k)fluoranthene	EPA 8270D
	EPA 8270E
Chrysene	EPA 8270D
	EPA 8270E
Dibenzo(a,h)anthracene	EPA 8270D
	EPA 8270E
Fluoranthene	EPA 8270D
	EPA 8270E
Fluorene	EPA 8270D
	EPA 8270E
Indeno(1,2,3-cd)pyrene	EPA 8270D
	EPA 8270E
Naphthalene	EPA 8270D
	EPA 8270E
Phenanthrene	EPA 8270D
	EPA 8270E
Pyrene	EPA 8270D
	EPA 8270E

Priority Pollutant Phenols

2,3,4,6 Tetrachlorophenol	EPA 8270D

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Priority Pollutant Phenols

2,3,4,6 Tetrachlorophenol	EPA 8270E
2,4,5-Trichlorophenol	EPA 8270D
	EPA 8270E
2,4,6-Trichlorophenol	EPA 8270D
	EPA 8270E
2,4-Dichlorophenol	EPA 8270D
	EPA 8270E
2,4-Dimethylphenol	EPA 8270D
	EPA 8270E
2,4-Dinitrophenol	EPA 8270D
	EPA 8270E
2-Chlorophenol	EPA 8270D
	EPA 8270E
2-Methyl-4,6-dinitrophenol	EPA 8270D
	EPA 8270E
2-Methylphenol	EPA 8270D
	EPA 8270E
2-Nitrophenol	EPA 8270D
	EPA 8270E
4-Chloro-3-methylphenol	EPA 8270D
	EPA 8270E
4-Methylphenol	EPA 8270D
	EPA 8270E
4-Nitrophenol	EPA 8270D
	EPA 8270E
Pentachlorophenol	EPA 8270D
	EPA 8270E

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Priority Pollutant Phenols

Phenol	EPA 8270D
	EPA 8270E

Semi-Volatile Organics

1,1'-Biphenyl	EPA 8270D
	EPA 8270E
1,2-Dichlorobenzene, Semi-volatile	EPA 8270D
	EPA 8270E
1,3-Dichlorobenzene, Semi-volatile	EPA 8270D
	EPA 8270E
1,4-Dichlorobenzene, Semi-volatile	EPA 8270D
	EPA 8270E
2-Methylnaphthalene	EPA 8270D
	EPA 8270E
Acetophenone	EPA 8270D
	EPA 8270E
Benzaldehyde	EPA 8270D
	EPA 8270E
Benzoic Acid	EPA 8270D
	EPA 8270E
Benzyl alcohol	EPA 8270D
	EPA 8270E
Caprolactam	EPA 8270D
	EPA 8270E
Dibenzofuran	EPA 8270D
	EPA 8270E

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Volatile Aromatics

1,2,4-Trichlorobenzene, Volatile	EPA 8260D
	EPA 8260C
1,2,4-Trimethylbenzene	EPA 8260D
	EPA 8260C
1,2-Dichlorobenzene	EPA 8260D
	EPA 8260C
1,3,5-Trimethylbenzene	EPA 8260D
	EPA 8260C
1,3-Dichlorobenzene	EPA 8260D
	EPA 8260C
1,4-Dichlorobenzene	EPA 8260D
	EPA 8260C
2-Chlorotoluene	EPA 8260D
	EPA 8260C
4-Chlorotoluene	EPA 8260D
	EPA 8260C
Benzene	EPA 8260D
	EPA 8260C
Bromobenzene	EPA 8260D
	EPA 8260C
Chlorobenzene	EPA 8260D
	EPA 8260C
Ethyl benzene	EPA 8260D
	EPA 8260C
Isopropylbenzene	EPA 8260D
	EPA 8260C
m/p-Xylenes	EPA 8260D

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Volatile Aromatics

m/p-Xylenes	EPA 8260C
Naphthalene, Volatile	EPA 8260D
	EPA 8260C
n-Butylbenzene	EPA 8260D
	EPA 8260C
n-Propylbenzene	EPA 8260D
	EPA 8260C
o-Xylene	EPA 8260D
	EPA 8260C
p-Isopropyltoluene (P-Cymene)	EPA 8260D
	EPA 8260C
sec-Butylbenzene	EPA 8260D
	EPA 8260C
Styrene	EPA 8260D
	EPA 8260C
tert-Butylbenzene	EPA 8260D
	EPA 8260C
Toluene	EPA 8260D
	EPA 8260C
Total Xylenes	EPA 8260D
	EPA 8260C

Volatile Halocarbons

1,1,1,2-Tetrachloroethane	EPA 8260D
	EPA 8260C
1,1,1-Trichloroethane	EPA 8260D
	EPA 8260C
1,1,2,2-Tetrachloroethane	EPA 8260D

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Volatile Halocarbons

1,1,2,2-Tetrachloroethane	EPA 8260C
1,1,2-Trichloro-1,2,2-Trifluoroethane	EPA 8260D
	EPA 8260C
1,1,2-Trichloroethane	EPA 8260D
	EPA 8260C
1,1-Dichloroethane	EPA 8260D
	EPA 8260C
1,1-Dichloroethene	EPA 8260D
	EPA 8260C
1,1-Dichloropropene	EPA 8260D
	EPA 8260C
1,2,3-Trichloropropane	EPA 8260D
	EPA 8260C
1,2-Dibromo-3-chloropropane	EPA 8260D
	EPA 8260C
1,2-Dibromoethane	EPA 8260D
	EPA 8260C
1,2-Dichloroethane	EPA 8260D
	EPA 8260C
1,2-Dichloropropane	EPA 8260D
	EPA 8260C
1,3-Dichloropropane	EPA 8260D
	EPA 8260C
2,2-Dichloropropane	EPA 8260D
	EPA 8260C
2-Chloroethylvinyl ether	EPA 8260D
	EPA 8260C

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Volatile Halocarbons

Bromochloromethane	EPA 8260D
	EPA 8260C
Bromodichloromethane	EPA 8260D
	EPA 8260C
Bromoform	EPA 8260D
	EPA 8260C
Bromomethane	EPA 8260D
	EPA 8260C
Carbon tetrachloride	EPA 8260D
	EPA 8260C
Chloroethane	EPA 8260D
	EPA 8260C
Chloroform	EPA 8260D
	EPA 8260C
Chloromethane	EPA 8260D
	EPA 8260C
cis-1,2-Dichloroethene	EPA 8260D
	EPA 8260C
cis-1,3-Dichloropropene	EPA 8260D
	EPA 8260C
Dibromochloromethane	EPA 8260D
	EPA 8260C
Dibromomethane	EPA 8260D
	EPA 8260C
Dichlorodifluoromethane	EPA 8260D
	EPA 8260C
Hexachlorobutadiene, Volatile	EPA 8260D

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All approved analytes are listed below:

Volatile Halocarbons

Hexachlorobutadiene, Volatile	EPA 8260C
Methylene chloride	EPA 8260D
	EPA 8260C
Tetrachloroethene	EPA 8260D
	EPA 8260C
trans-1,2-Dichloroethene	EPA 8260D
	EPA 8260C
trans-1,3-Dichloropropene	EPA 8260D
	EPA 8260C
Trichloroethene	EPA 8260D
	EPA 8260C
Trichlorofluoromethane	EPA 8260D
	EPA 8260C
Vinyl chloride	EPA 8260D
	EPA 8260C

Volatile Organics

1,4-Dioxane	EPA 8260D
	EPA 8260C
	EPA 8270D SIM
	EPA 8270E
	EPA 8270E SIM
2-Butanone (Methylethyl ketone)	EPA 8260D
	EPA 8260C
2-Hexanone	EPA 8260D
	EPA 8260C
4-Methyl-2-Pentanone	EPA 8260D
	EPA 8260C

Serial No.: 67726

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2024
Issued April 01, 2023
Revised April 04, 2023

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MS. CATHERINE L. MOSHER
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD, CT 06615

NY Lab Id No: 10854

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2016) for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Volatile Organics

Acetone	EPA 8260D
	EPA 8260C
Carbon Disulfide	EPA 8260D
	EPA 8260C
Cyclohexane	EPA 8260D
	EPA 8260C
Methyl acetate	EPA 8260D
	EPA 8260C
Methyl cyclohexane	EPA 8260D
	EPA 8260C
Methyl tert-butyl ether	EPA 8260D
	EPA 8260C
tert-butyl alcohol	EPA 8260D
	EPA 8260C
Vinyl acetate	EPA 8260D
	EPA 8260C

Sample Preparation Methods

EPA 5035A-L
EPA 5035A-H
EPA 3580A
EPA 3010A
EPA 3050B
EPA 3550C
EPA 3546
EPA 3545A
EPA 9010C

Serial No.: 67726

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2024
Issued April 01, 2023

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. KRZYSZTOF TRAFALSKI
YORK ANALYTICAL LABORATORIES, INC. (II)
132-02 89TH AVENUE SUITE 217
RICHMOND HILL, NY 11418

NY Lab Id No: 12058

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2016) for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Acrylates	
Acrolein (Propenal)	EPA 8260D
	EPA 8260C
Acrylonitrile	EPA 8260D
	EPA 8260C
Methyl methacrylate	EPA 8260D
	EPA 8260C
Chlorinated Hydrocarbons	
1,2,3-Trichlorobenzene	EPA 8260D
	EPA 8260C
Volatile Aromatics	
1,2,4-Trichlorobenzene, Volatile	EPA 8260D
	EPA 8260C
1,2,4-Trimethylbenzene	EPA 8260D
	EPA 8260C
1,2-Dichlorobenzene	EPA 8260D
	EPA 8260C
1,3,5-Trimethylbenzene	EPA 8260D
	EPA 8260C
1,3-Dichlorobenzene	EPA 8260D
	EPA 8260C
1,4-Dichlorobenzene	EPA 8260D
	EPA 8260C
2-Chlorotoluene	EPA 8260D
	EPA 8260C
4-Chlorotoluene	EPA 8260D
	EPA 8260C

Serial No.: 67326

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WADSWORTH CENTER

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Issued April 01, 2023

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NY Lab Id No: 12058

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All approved analytes are listed below:

Volatile Aromatics

Benzene	EPA 8260D
	EPA 8260C
Bromobenzene	EPA 8260D
	EPA 8260C
Chlorobenzene	EPA 8260D
	EPA 8260C
Ethyl benzene	EPA 8260D
	EPA 8260C
Isopropylbenzene	EPA 8260D
	EPA 8260C
m/p-Xylenes	EPA 8260D
	EPA 8260C
Naphthalene, Volatile	EPA 8260D
	EPA 8260C
n-Butylbenzene	EPA 8260D
	EPA 8260C
n-Propylbenzene	EPA 8260D
	EPA 8260C
o-Xylene	EPA 8260D
	EPA 8260C
p-Isopropyltoluene (P-Cymene)	EPA 8260D
	EPA 8260C
sec-Butylbenzene	EPA 8260D
	EPA 8260C
Styrene	EPA 8260D
	EPA 8260C
tert-Butylbenzene	EPA 8260D

Serial No.: 67326

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

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RICHMOND HILL, NY 11418

NY Lab Id No: 12058

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2016) for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Volatile Aromatics

tert-Butylbenzene	EPA 8260C
Toluene	EPA 8260D
	EPA 8260C
Total Xylenes	EPA 8260D
	EPA 8260C

Volatile Halocarbons

1,1,1,2-Tetrachloroethane	EPA 8260D
	EPA 8260C
1,1,1-Trichloroethane	EPA 8260D
	EPA 8260C
1,1,2,2-Tetrachloroethane	EPA 8260D
	EPA 8260C
1,1,2-Trichloro-1,2,2-Trifluoroethane	EPA 8260D
	EPA 8260C
1,1,2-Trichloroethane	EPA 8260D
	EPA 8260C
1,1-Dichloroethane	EPA 8260D
	EPA 8260C
1,1-Dichloroethene	EPA 8260D
	EPA 8260C
1,1-Dichloropropene	EPA 8260D
	EPA 8260C
1,2,3-Trichloropropane	EPA 8260D
	EPA 8260C
1,2-Dibromo-3-chloropropane	EPA 8260D
	EPA 8260C
1,2-Dibromoethane	EPA 8260D

Serial No.: 67326

NEW YORK STATE DEPARTMENT OF HEALTH
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RICHMOND HILL, NY 11418

NY Lab Id No: 12058

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All approved analytes are listed below:

Volatile Halocarbons

1,2-Dibromoethane	EPA 8260C
1,2-Dichloroethane	EPA 8260D
	EPA 8260C
1,2-Dichloropropane	EPA 8260D
	EPA 8260C
1,3-Dichloropropane	EPA 8260D
	EPA 8260C
2,2-Dichloropropane	EPA 8260D
	EPA 8260C
2-Chloroethylvinyl ether	EPA 8260D
	EPA 8260C
Bromochloromethane	EPA 8260D
	EPA 8260C
Bromodichloromethane	EPA 8260D
	EPA 8260C
Bromoform	EPA 8260D
	EPA 8260C
Bromomethane	EPA 8260D
	EPA 8260C
Carbon tetrachloride	EPA 8260D
	EPA 8260C
Chloroethane	EPA 8260D
	EPA 8260C
Chloroform	EPA 8260D
	EPA 8260C
Chloromethane	EPA 8260D
	EPA 8260C

Serial No.: 67326

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

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MR. KRZYSZTOF TRAFALSKI
YORK ANALYTICAL LABORATORIES, INC. (II)
132-02 89TH AVENUE SUITE 217
RICHMOND HILL, NY 11418

NY Lab Id No: 12058

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2016) for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Volatile Halocarbons

cis-1,2-Dichloroethene	EPA 8260D
	EPA 8260C
cis-1,3-Dichloropropene	EPA 8260D
	EPA 8260C
Dibromochloromethane	EPA 8260D
	EPA 8260C
Dibromomethane	EPA 8260D
	EPA 8260C
Dichlorodifluoromethane	EPA 8260D
	EPA 8260C
Hexachlorobutadiene, Volatile	EPA 8260D
	EPA 8260C
Methylene chloride	EPA 8260D
	EPA 8260C
Tetrachloroethene	EPA 8260D
	EPA 8260C
trans-1,2-Dichloroethene	EPA 8260D
	EPA 8260C
trans-1,3-Dichloropropene	EPA 8260D
	EPA 8260C
Trichloroethene	EPA 8260D
	EPA 8260C
Trichlorofluoromethane	EPA 8260D
	EPA 8260C
Vinyl chloride	EPA 8260D
	EPA 8260C

Serial No.: 67326

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WADSWORTH CENTER

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132-02 89TH AVENUE SUITE 217
RICHMOND HILL, NY 11418

NY Lab Id No: 12058

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2016) for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Volatile Organics

1,4-Dioxane	EPA 8260D
	EPA 8260C
2-Butanone (Methylethyl ketone)	EPA 8260D
	EPA 8260C
2-Hexanone	EPA 8260D
	EPA 8260C
4-Methyl-2-Pentanone	EPA 8260D
	EPA 8260C
Acetone	EPA 8260D
	EPA 8260C
Carbon Disulfide	EPA 8260D
	EPA 8260C
Cyclohexane	EPA 8260D
	EPA 8260C
Methyl acetate	EPA 8260D
	EPA 8260C
Methyl cyclohexane	EPA 8260D
	EPA 8260C
Methyl tert-butyl ether	EPA 8260D
	EPA 8260C
tert-butyl alcohol	EPA 8260D
	EPA 8260C
Vinyl acetate	EPA 8260D
	EPA 8260C

Sample Preparation Methods

	EPA 5035A-L
	EPA 5035A-H

Serial No.: 67326

APPENDIX D

DISPOSAL FACILITIES INFORMATION

STATE OF NEW YORK
DEPARTMENT OF PUBLIC SERVICE

CHANGE NOTICE

March 13, 2024

TO: JASON ZEHR
CHIEF, ENVIRONMENTAL CERTIFICATION AND COMPLIANCE
OFFICE OF ENERGY SYSTEM PLANNING AND PERFORMANCE

FROM: Daniel Connor, Utility Analyst II (Environmental)
ENVIRONMENTAL CERTIFICATION AND COMPLIANCE
OFFICE OF ENERGY SYSTEM PLANNING AND PERFORMANCE

SUBJECT: CASE 10-T-0139 – Application of Champlain Hudson Power Express, Inc. for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the PSL for the Construction, Operation and Maintenance of a High Voltage Direct Current Circuit from the Canadian Border to New York City.

RECOMMENDATION: Approval of EM&CP Change Notices 079 & 82 as Requested.

*** *** ***

In accordance with Certificate Condition 158 of the Order Granting Certificate of Environmental Compatibility and Public Need in the above referenced proceeding, Champlain Hudson Power Express, Inc. (CHPE or the Certificate Holder), has notified Staff of the Department of Public Service (DPS Staff) of two proposed minor changes (see attachments).

Change Notices 079 & 082 – These minor changes incorporate eight additional material disposal locations, effective upon Commission approval and the issuance of a Notice to Proceed for each Segment. The disposal locations noted below will be utilized by the Project for the disposal of various material as noted for each location:

1. Clean Harbors Environmental Services (Non-hazardous/Hazardous Liquids)
1900 Russell St, Baltimore, MD 21230
2. Advanced Enterprises Recycling, Inc. (Unrestricted and Restricted Soil & Solidified HDD Drill Mud)
540 Doremus Ave. Newark, NJ 07105

3. Cardella Waste Services Inc. (Vegetative Waste, Concrete, Asphalt)2400 Tonnelle Ave. North Bergen, NJ 07047

4. West Side Transload LLC (Unrestricted/Restricted Soils & Solidified Drill Mud)5600 West Side Avenue, North Bergen, NJ 07047

5. Safety Kleen (Non-Hazardous/Hazardous ground water; unrestricted/restricted/hazardous Soils and HDD Mud in Solid and Aqueous form)1200 Sylvan Ave. Linden, NJ 07036

6. Lands of Bayshore Recycling (Unrestricted/Restricted soils and HDD mud)75 Crows Mill Road, Keasbey, NJ 08832

7. Lands of Clean Earth (Unrestricted/Restricted/Hazardous Soils and HDD mud)24 Middlesex Ave. Carteret, NJ 07008

8. Lands of Clean Earth (Unrestricted/Restricted/Hazardous - Soils, liquids, HDD Mud)115 Jacobus Ave., Kearny, NJ 07032

The Certificate Holder states that the changes do not involve impacts to sites listed in the New York State or National Register of Historic places, state or federally regulated wetlands or waterbodies, occupied habitat of a threatened or endangered species and plants, agricultural resources, or land or water owned or controlled by the City of New York. Staff of the New York State Department of Environmental Conservation were consulted as part of DPS Staff's review of these changes, and no concerns were raised.

DPS Staff have reviewed these proposed minor changes and believe that they will not result in any permanent net increase of adverse

environmental impacts, nor are they directly related to any issues contested during the proceedings. It is recommended that these changes be approved, and CHPE be so notified.

REVIEWED & APPROVED: _____

JASON ZEHR, CHIEF
ENVIRONMENTAL CERTIFICATION AND COMPLIANCE
OFFICE OF ENERGY SYSTEM PLANNING AND PERFORMANCE

cc: Josh Bagnato (josh.bagnato@transmissiondevelopers.com)
Laura Darling (ldarling@youngsommer.com)
David Albers (dave.albers@wsp.com)
Matthew Smith (matthew.smith@dps.ny.gov)
10-T-0139 Case File
DPS Central File

Attachments

CHPE LLC
623 Fifth Avenue, 20th Floor
New York, NY 10022

Champlain Hudson Power Express ("CHPE")
Environmental Management & Construction Plan
Notice of Minor Change

Project: Champlain Hudson Power Express
Segment: All Approved Segment EM&CPs
Notice Number: 079
PSC Case: 10-T-0139
USACE Permit Number: NAN-2009-01089-M9
Location (Milepost, Town/County): Baltimore, MD 21230; Newark, NJ 07105; North Bergen, NJ 07047; Linden, NJ 07036
Drawing References: N/A
Other Documents/References: All Approved Segment EM&CP Appendix Ls
Component(s) Impacted by Change: All Approved Segment EM&CP Appendix Ls

Description of Change:

This minor change is to incorporate five additional disposal sites to all approved Segment EM&CP's. See disposal location list below.

1. Clean Harbors Environmental Services (Non-hazardous/Hazardous Liquids)
   1900 Russell St, Baltimore, MD 21230
2. Advanced Enterprises Recycling, Inc. (Unrestricted and Restricted Soil & Solidified HDD Drill Mud)
   540 Doremus Ave. Newark, NJ 07105
3. Cardella Waste Services Inc. (Vegetative Waste, Concrete, Asphalt)
   2400 Tonnelle Ave. North Bergen, NJ 07047
4. West Side Transload LLC (Unrestricted/Restricted Soils & Solidified Drill Mud)
   5600 West Side Avenue, North Bergen, NJ 07047
5. Safety Kleen (Non-Hazardous/Hazardous ground water; unrestricted/restricted/hazardous Soils and HDD Mud in Solid and Aqueous form)
   1200 Sylvan Ave. Linden, NJ 07036

Desktop analyses for environmental and cultural resources including National Register of Historic Places, State-regulated wetland or protected stream or water bodies, occupied habitat of a threatened or endangered species, agricultural lands, herbicide planned for use, land owned or controlled by CNY, and federally regulated wetland or protected stream or waterbodies have been completed.

CC Requirements for Modifying an EMCP

#	Certificate Condition	Description of the Proposed change
158	The EM&CP approved by the Commission may incorporate modifications from the EM&CP proposed by the Certificate Holders. No change to the approved EM&CP may thereafter be made except in accordance with the following procedures:	
158(a)	For a proposed change that: (i) would involve a site listed or eligible for listing on the New York State or National Register of Historic Places, the Certificate Holders shall give at least two (2) weeks prior notice to the Field Service Bureau of OPRHP. (ii) would involve any State-regulated wetland or	(i)This change does not involve a site listed in the NYS or National Register of Historic Places. (ii)This change does not result in an increased impact to any federal or State-regulated wetland or waterbody and is not

CHPE
Champlain Hudson Power Express

CHPE LLC
623 Fifth Avenue, 20th Floor
New York, NY 10022

	protected stream or water body, the Certificate Holders shall give at least two weeks prior notice to NYSDEC, and, if within the Adirondack Park, to APA. (iii) would affect the occupied habitat of a TE species, the Certificate Holders shall give at least two weeks prior notice to NYSDEC and to the USFWS or NMFS (where applicable) prior to providing notice to DPS staff of the proposed change. (iv) would affect the individual or habitat supporting RTE plants, the Certificate Holders shall give at least two (2) weeks prior notice to NYSDEC and DPS. (v) would involve agricultural land, the Certificate Holders shall give at least two (2) weeks prior notice to Ag & Mkts. (vi) would involve the herbicides planned for use (including mixed proportions, additives or method of application), the Certificate Holders shall give at least thirty (30) days prior notice to NYSDEC. (vii) would affect land or water owned or controlled by CNY, the Certificate Holders shall give at least two (2) weeks prior notice to CNY.	located in the Adirondack Park based on desktop analysis conducted on 2/9/2024. (iii)This change does not affect an occupied habitat of a TE species based on desktop analysis conducted on 2/9/2024. (iv) This change does not affect individual species or habitat supporting RTE plants based on desktop analysis conducted on 2/9/2024. (v)The change does not involve Agricultural Land. (vi)There are no changes in herbicide use as result of the requested revision. (vii) The change is not on land owned or occupied by New York City.
158(b)	The Certificate Holders shall report any proposed changes to the EM&CP to DPS Staff. DPS Staff will refer to the Commission for approval any proposed changes that cause a substantial increase in environmental impact, after consultation with NYSDEC, any proposed changes that relate to contested issues decided during the proceeding, and any proposed changes affecting State highways (but need not do so if the report indicates NYSDOT's agreement to such proposed changes). DPS Staff is authorized to approve all other proposed changes, in accordance with the procedure outlined herein, and will submit reports of such changes to the Secretary or the Secretary's designee, which reports will be posted on the Commission's website under this case number.	See description above.
158(c)	Upon being advised that DPS Staff will refer a proposed change to the Commission, the Certificate Holders shall notify all active parties that have requested to be so notified, as well as property owners or lessees whose property is affected by the proposed change. The notice shall: (i) describe the original conditions and the requested change; (ii) provide documents supporting the request; and (iii) state that persons may comment by writing to the Commission within twenty-one (21) days of the notification date.	N/A
158(d)	The Certificate Holders shall not execute any proposed change until they receive written approval from the Commission (if Commission approval is required pursuant to subparagraph (a) of this paragraph) or oral or written approval from DPS Staff (in the case of a change that Staff has authority to approve) except in emergency situations threatening personal injury, property damage, or severe adverse environmental impact, or as specified in the EM&CP. When the Certificate Holders have obtained oral approval from DPS Staff for a change, DPS Staff will confirm such approval in writing within ten (10) business days.	CHPE anticipates receiving oral or written approval from DPS staff.

CHPE LLC
623 Fifth Avenue, 20th Floor
New York, NY 10022

Proposed Change Involves New/Additional Impacts to:

☐Site listed or eligible for listing on the New York State or National Register of Historic Places [CC 158(a)(i)]
☐State-regulated wetland or protected stream or water body [CC 158(a)(ii)]
☐Occupied habitat of a TE species [CC 158(a)(iii)]
☐Individual or habitat supporting RTE plants [CC 158(a)(iv)]
☐Agricultural land [CC 158(a)(v)]
☐Herbicides planned for use (including mixed proportions, additives or method of application) [CC 158(a)(vi)]
☐Land or water owned or controlled by CNY [CC 158(a)(vii)]
☐Federally regulated wetland or protected stream or water body [Requires Transmittal to ACOE]

List of References and Attachments:

Clean Harbors Environmental Services Aerial Disposal Site Map
Advanced Enterprises Recycling, Inc. Aerial Disposal Site Map
Cardella Waste Services Inc. Aerial Disposal Site Map
West Side Transload LLC Aerial Disposal Site Map
Safety Kleen Aerial Disposal Site Map

Signoff by: CHPE Overland Team Date: 02/21/2024

Approvals

Position	Name	Signature	Date
Segment Engineer:	Eric Schlosser	Eric.Schlosser Digitally signed by Eric.Schlosser DN: CN=Eric.Schlosser, OU=Employees, OU=Users, OU=Kiewit, DC=KIEWITPLAZA, DC=com Date: 2024.02.14 08:40:23-05'00'	2/14/2024
Segment Manager:	Andrew J. DeSorbo	Electronically signed by Andrew.Desorbo Date: 02/16/2024 10:40:53 AM	2/16/24
CHPE, LLC Approval:	Scott Tracy-Inglis		02/21/2024
Transmitted to DPS by:	Laura Darling		02/21/2024
DPS Approval By:			
Transmitted to ACOE by:			

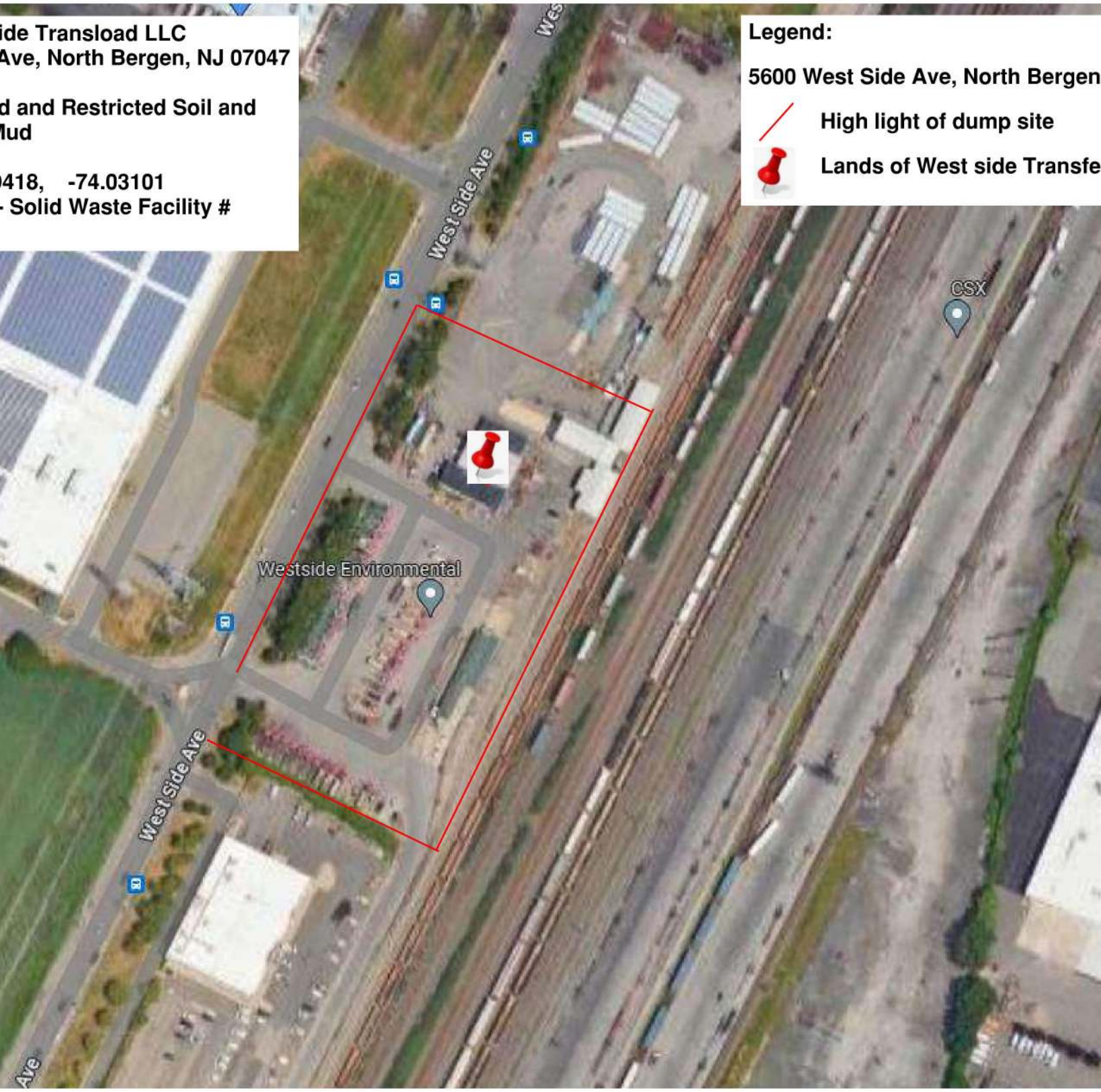

f Clean Harbors Environmental Services
ssel Street Baltimore, MD 21230
ardous and Hazardous Liquid Waste
n: - 39.27120, -76.63292
EPA RCRA ID # MDD980555189
Legend:
1910 Russel Street Baltimore, MD 21230
High light of dump site
.ands of Clean Harbors Environmental S
Clean Harbors
295
Middle Br Trl
Annapolis Rd
95
53

ng, Inc.

nd

-
g
for


Waste Services, Inc.
North Bergen, NJ 07047
Concrete and Asphalt
8, -74.04170
olid Waste Facility #
Legend:
2400 Tonnelle Ave, North Bergen,
High light of dump site
Lands of Cardella Waste Serv
3-star hotel
Days Hotel by Wyndham North Bergen /NYC Area
3.0 (476)
3-star hotel
Extra Space Storage
Tonnelle Ave
Paterson Plank
Jane St
Grand Ave
26th St
Cottage Ave
Substation 42 Hackensack
NYC Factory Inc
DJ Danny Productions
23rd St
March Associates
Hudson Training Center Inc
Google


ide Transload LLC
Ave, North Bergen, NJ 07047
d and Restricted Soil and
Mud
0418, -74.03101
- Solid Waste Facility #
Legend:
5600 West Side Ave, North Bergen
High light of dump site
Lands of West side Transfe
West Side Ave
CSX
Westside Environmental
West Side Ave


86
water;
Soils and HDD
Legend:
1200 Sylva
High light
Lands of
Aspen Dental
Pleasant St
Wildcat Way
Wildcat Way
W Edgar Rd
Clean Harbors
Smith St
Zenith Roofing
Pro Plastics
CheckOutStore
Avenue C
Avenue C
Avenue C
Buffalo Wild Wings
Chicken Wings · $$
Linden Commons
Shopping mall
Blink Fitness Linden
Google
Coda Logistics

CHPE LLC
623 Fifth Avenue, 20th Floor
New York, NY 10022

Champlain Hudson Power Express ("CHPE")
Environmental Management & Construction Plan
Notice of Minor Change

Project: Champlain Hudson Power Express
Segment: All Approved Segment EM&CPs
Notice Number: 082
PSC Case: 10-T-0139
USACE Permit Number: NAN-2009-01089-M9
Location (Milepost, Town/County): Keasbey, NJ 08832; Carteret, NJ 07008; Kearny, NJ 07032
Drawing References: N/A
Other Documents/References: All Approved Segment EM&CPs Appendix Ls
Component(s) Impacted by Change: All Approved Segment EM&CPs Appendix Ls

Description of Change:

This minor change is to expand the disposal materials at the listed disposal sites for all approved CHPE Segment EM&CPs. The listed disposal sites have been previously approved for non-hazardous soil disposal with Change Notice 043 on 2/2/2024. The expanded disposal material descriptions are included in the list below. See disposal locations listed below:

1. Lands of Bayshore Recycling (Unrestricted/Restricted soils and HDD mud)
   75 Crows Mill Road, Keasbey, NJ 08832
2. Lands of Clean Earth (Unrestricted/Restricted/Hazardous Soils and HDD mud)
   24 Middlesex Ave. Carteret, NJ 07008
3. Lands of Clean Earth (Unrestricted/Restricted/Hazardous - Soils, liquids, HDD Mud)
   115 Jacobus Ave., Kearny, NJ 07032

Desktop analyses for environmental and cultural resources including National Register of Historic Places, State-regulated wetland or protected stream or water bodies, occupied habitat of a threatened or endangered species, agricultural lands, herbicide planned for use, land owned or controlled by CNY, and federally regulated wetland or protected stream or waterbodies have been completed.

CC Requirements for Modifying an EMCP

#	Certificate Condition	Description of the Proposed change
158	The EM&CP approved by the Commission may incorporate modifications from the EM&CP proposed by the Certificate Holders. No change to the approved EM&CP may thereafter be made except in accordance with the following procedures:	
158(a)	For a proposed change that: (i) would involve a site listed or eligible for listing on the New York State or National Register of Historic Places, the Certificate Holders shall give at least two (2) weeks prior notice to the Field Service Bureau of OPRHP. (ii) would involve any State-regulated wetland or protected stream or water body, the Certificate Holders shall give at least two weeks prior notice to NYSDEC, and, if within the Adirondack Park, to APA. (iii) would affect the occupied habitat of a TE species, the Certificate Holders shall give at least two weeks prior notice to NYSDEC and to the USFWS or NMFS (where applicable) prior to providing notice to DPS	(i)This change does not involve a site listed in the NYS or National Register of Historic Places. (ii)This change does not result in an increased impact to any federal or State-regulated wetland or waterbody and is not located in the Adirondack Park based on desktop analyses conducted on 12/20/2023.

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Champlain Hudson Power Express

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623 Fifth Avenue, 20th Floor
New York, NY 10022

	staff of the proposed change. (iv) would affect the individual or habitat supporting RTE plants, the Certificate Holders shall give at least two (2) weeks prior notice to NYSDEC and DPS. (v) would involve agricultural land, the Certificate Holders shall give at least two (2) weeks prior notice to Ag & Mkts. (vi) would involve the herbicides planned for use (including mixed proportions, additives or method of application), the Certificate Holders shall give at least thirty (30) days prior notice to NYSDEC. (vii) would affect land or water owned or controlled by CNY, the Certificate Holders shall give at least two (2) weeks prior notice to CNY.	(iii)This change does not affect an occupied habitat of a TE species based on desktop analyses conducted on 12/20/2023. (iv) This change does not affect individual species or habitat supporting RTE plants based on desktop analyses conducted on 12/20/2023. (v)The change does not involve Agricultural Land. (vi) There are no changes in herbicide use as result of the requested revision. (vii) The change is not on land owned or occupied by New York City.
158(b)	The Certificate Holders shall report any proposed changes to the EM&CP to DPS Staff. DPS Staff will refer to the Commission for approval any proposed changes that cause a substantial increase in environmental impact, after consultation with NYSDEC, any proposed changes that relate to contested issues decided during the proceeding, and any proposed changes affecting State highways (but need not do so if the report indicates NYSDOT's agreement to such proposed changes). DPS Staff is authorized to approve all other proposed changes, in accordance with the procedure outlined herein, and will submit reports of such changes to the Secretary or the Secretary's designee, which reports will be posted on the Commission's website under this case number.	See description above.
158(c)	Upon being advised that DPS Staff will refer a proposed change to the Commission, the Certificate Holders shall notify all active parties that have requested to be so notified, as well as property owners or lessees whose property is affected by the proposed change. The notice shall: (i) describe the original conditions and the requested change; (ii) provide documents supporting the request; and (iii) state that persons may comment by writing to the Commission within twenty-one (21) days of the notification date.	N/A
158(d)	The Certificate Holders shall not execute any proposed change until they receive written approval from the Commission (if Commission approval is required pursuant to subparagraph (a) of this paragraph) or oral or written approval from DPS Staff (in the case of a change that Staff has authority to approve) except in emergency situations threatening personal injury, property damage, or severe adverse environmental impact, or as specified in the EM&CP. When the Certificate Holders have obtained oral approval from DPS Staff for a change, DPS Staff will confirm such approval in writing within ten (10) business days.	CHPE anticipates receiving oral or written approval from DPS staff.

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Proposed Change Involves New/Additional Impacts to:

☐Site listed or eligible for listing on the New York State or National Register of Historic Places [CC 158(a)(i)]
☐State-regulated wetland or protected stream or water body [CC 158(a)(ii)]
☐Occupied habitat of a TE species [CC 158(a)(iii)]
☐Individual or habitat supporting RTE plants [CC 158(a)(iv)]
☐Agricultural land [CC 158(a)(v)]
☐Herbicides planned for use (including mixed proportions, additives or method of application) [CC 158(a)(vi)]
☐Land or water owned or controlled by CNY [CC 158(a)(vii)]
☐Federally regulated wetland or protected stream or water body [Requires Transmittal to ACOE]

List of References and Attachments:

Bayshore Recycling Aerial Disposal Map
Clean Earth (24 Middlesex Ave) Aerial Disposal Map
Clean Earth (115 Jacobus Ave) Aerial Disposal Map

Signoff by: CHPE Overland Team Date: 02/21/2024

Approvals

Position	Name	Signature	Date
Segment Engineer:	Eric Schlosser	Electronically signed by Eric.Schlosser Date: 02/15/2024 4:33:26 PM	2/15/2024
Segment Manager:	Andrew J. DeSorbo	Electronically signed by Andrew.Desorbo Date: 02/15/2024 4:38:26 PM	2/15/24
CHPE, LLC Approval:	Scott Tracy-Inglis		02/21/2024
Transmitted to DPS by:	Laura Darling		02/21/2024
DPS Approval By:			
Transmitted to ACOE by:			


LANDS OF BAYSHORE RECYCLING
Non Hazardous/Unrestricted/Restricted
soils and HDD Mud
75 Crows Mill Road, Keasbey, NJ 08832
LOCATION: 40.512893, LONG -74.307945
FRS ID: 110007138178
LEGEND:
PERIMETER OF OPERATION
LANDS OF BAYSHORE RECYCLING
OL Warehouse
Alex Road Service - Commercial Trucks...
Smith St
Bruce Supply Corporation
NJDOT Keasbey/ Woodbridge Garage
United States Postal Service
Racz's Towing
Smith St
Russell Reid Waste Management
Woodbridge Public Works Department
Slay Transportation Corporation
Clayton Concrete
Woodbridge Recycling Center
Schneider National Bulk
Amazon
J.V. Delivers
Keasby Reach
Ellis S. Viesers Memorial Brg
Rock Industries
Alliance
Governor Alfred E. Driscoll Bridge
Raritan River

LANDS OF Clean Earth
Non-Hazardous/Unrestricted/Restricted/Hazardous soils and HDD Mud
24 Middlesex Ave, Carteret, NJ 07008
LOCATION: 40.743768, LONG -74.1122502
FACILITY ID - 132310


Schneider
All Cartage Express
CSX Transportation
New Jersey CSX parking
Pennsylvania Ave
Pennsylvania Ave
Pennsylvania Ave
MAC Products
P. Judge & Sons
Passaic River
Pennsylvania Ave
Pde Disposal
115 Jacobus Aven
Jacobus Ave
Jacobus Ave
MVT New Jersey
Eastern Drayage
PJT Logistics
LANDS OF Clean Earth
Non-Hazardous/Unrestricted/Restricted/Ha
zardous soils, liquids and HDD Mud
115 Jacobus, Kearny, NJ 07032
LOCATION: 40.74020, LONG -74.11173
PERMIT NO. NJD99129105
LEGEND:
PERIMETER OF OPERATION
LANDS OF Clean Earth

APPENDIX E

SPECIFICATIONS

Office of Contract Opportunity (OCO) will review the subcontractor/subconsultant's overall business integrity and compliance with Vendor Exchange System (VENDEX), Executive Order 50, Local Law 1, and Minority- and Women-Owned Business Enterprise/ Disadvantaged Business Enterprise (MWBE/DBE) participation as per the contract. ACCO will issue the final Approval or Denial. The original RFAS will be returned to the Engineer, who will subsequently notify and return the original RFAS to the Contractor.

(C) Independent Environmental Consultant

The Contractor must retain an independent Environmental Consultant to obtain all permits, prepare the plans required in the specification 8.01, and perform all field screening, sampling, air monitoring, and other health and safety services. The independent Environmental Consultant must be approved under the RFAS process and must demonstrate the minimum requirements as set forth below:

1. The independent Environmental Consultant project supervisor on site and other designated key personnel must have a minimum of three (3) years of experience in the environmental field dealing with issues associated with contaminated soils. Such experience must include oversight on environmental, specifically volatile organic compounds and dust monitoring services as a routine part of its daily operations.
2. The independent Environmental Consultant must be experienced in work of similar nature, size, and complexity and must have previous experience in working with DDC.
3. The independent Environmental Consultant must furnish a project listing identifying the location, nature of services provided, owner, owner's contact, contact's working telephone number, project duration and value for at least five (5) projects within the last 3 years.

(D) Sampling and Analysis

Prior to the performance of soil sampling, the Contractor will submit a Field Sampling Plan (FSP). Soil sampling must not be conducted until OEGS has approved the FSP. The Contractor must conduct sampling and analysis of the impacted soils as specified under **Section 8.01 C2**. The laboratory results must be forwarded to OEGS for review to determine if the soils would be handled and disposed of as contaminated soils or hazardous soils.

(E) Material Handling Plan

At least 45 days prior to the commencement of work, the Contractor must submit to the OEGS for review a Material Handling Plan (MHP). The MHP must be approved by the OEGS prior to the Contractor beginning any soil excavation work. The MHP must, at a minimum, consist of:

1. The Contractor's procedures for identifying contaminated soils during excavation, including the specific model and manufacturer of intended organic vapor monitoring equipment and calibration procedures to be used. It should also include the training and experience of the personnel who will operate the equipment.
2. The Contractor's procedures for safely handling contaminated soils. The procedures must include personnel safety and health as well as environmental protection considerations.
3. For the proposed laboratory for analysis of representative soil samples, provide the following: (a) name, (b) address, (c) telephone number, and (d) New York State Department of Health's (NYSDOH) Environmental Laboratories Accreditation Program (ELAP) status.
4. Identification of the Contractor's proposed waste transporter(s) (hauler). This information must include:
    1. Name and Waste Transporter Permit Number
    2. Address
    3. Name of responsible contact for the waste transporter
    4. Telephone number for the contact
    5. All necessary permit authorizations for each type of waste transported
    6. Previous experience in performing the type of work specified herein
5. The name and location of the facility where an off-site scale is located. The Contractor must outline the procedures on controlling trucks leaving the work site and en-route to the off-site scale.

6. All staging/stockpiling areas (if stockpiling areas are intended and available), or alternate procedures that will be used. Alternate procedures may include, but are not limited to, agreements from the intended disposal facilities to accept boring data and/or analytical data previously obtained during the site characterization so that materials may be directly loaded into vehicles for shipment to the disposal facility.
7. A backup facility must be provided, should the staging/stockpile areas become unavailable, insufficient in area or presented by some other unforeseen difficulty.
8. Identification of the Contractor's two proposed Treatment Storage or Disposal (TSD) facilities for contaminated soils (primary and back-up) for final disposal of the soils. Both primary and backup TSD facilities must be currently state-licensed disposal facilities approved to receive contaminated soil. The information required for each facility must include:
    a. General Information
        1. Facility name and the State identification number
        2. Facility location
        3. Name of responsible contact for the facility
        4. Telephone number for contact
        5. Signed letter of agreement to accept waste as specified in this contract. The letter must indicate agreement to handle and accept the specified estimated quantities and types of material during the time period specified in the project schedule and any time extension as deemed necessary.
        6. Unit of measure utilized at disposal facility for costing purposes
    b. A listing of all permits, licenses, letters of approval, and other authorizations to operate, which are currently held and valid for the proposed facility.
    c. A listing of all permits, licenses, letters of approval, and other authorizations to operate which have been applied for by the proposed facility but not yet granted or issued.
    d. The Contractor must specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste. The Contractor must identify the capacity available in the units and the capacity reserved for the subject waste.
    e. The Contractor must provide the date of the proposed facility's last compliance inspection.
    f. A list of all active (unresolved) compliance orders (or agreements), enforcement notices, or notices of violations issued to the proposed facility must be provided. The source and nature of the cause of violation must be stated, if known.
9. Description of all sampling and field/laboratory analyses that will be needed to obtain disposal facility approval.

8.01 C1.2. MATERIALS

(A) The Contractor must provide containers as specified in the United State Department of Transportation (USDOT) regulations.

(B) The Contractor must provide polyethylene sheeting, which is to be placed under (20 mil. thickness minimum) and over (10 mil. thickness minimum) soil piles.

(C) The Contractor must assure that the waste transporter's appropriate choice of vehicles and operating practices are fitted to prevent spillage or leakage of contaminated material during transportation.

(D) The Contractor must provide, install, and maintain any temporary stockpiling or loading facilities on site as required until completion of material handling activities. The location and design of any such facilities must be included in the MHP.

8.01 C1.3. CONSTRUCTION DETAILS

(A) Material Handling

1. Immediately after excavation of non-hazardous contaminated soil the Contractor must:
    a. Load material directly onto trucks/tankers/roll offs for disposal off site; or
    b. If interim stockpiling is required, place contaminated soil on a minimum of 20 mil. polyethylene sheeting and cover it securely by minimum of 10 mil. polyethylene sheeting to protect against cross contamination, airborne dust, leaching or runoff of contaminants into the subsurface,