APPENDIX L
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 the Certificate Holders for the Champlain Hudson Power Express (CHPE) Project (Project). Section 1.0 of the EM&CP summarizes the EM&CP's purpose and intent. The objective of this Soil and Materials Management Plan is to set guidelines for the management of excess excavated soil and other materials generated by construction associated activities with the construction of Segment 12.

2.0 EXCESS SOIL MATERIAL GENERATION (SPOILS GENERATION)

During construction of the CHPE Project, excess material will be generated by the excavation of the trench, splice locations, horizontal directional drill (HDD) entry and exit pits, and other land disturbance activities, this material is referred to as "spoils". Generated material will be temporarily stockpiled or side cast at the point of generation, such as within railroad ROWs, around the HDD entry and exit pits, and splice box areas. The following narrative discusses the best management practices and regulatory requirements to manage this excess soil material depending on its location, characteristics and volume.

1. Sections 3 and 4 discusses the general procedure to classify the soil material as unrestricted fill for beneficial reuse, restricted use fill for beneficial reuse, limited use fill for beneficial reuse, or contaminated soil for off-site disposal at an approved location by NYSDEC. Beneficial reuse can occur on-site at the point of generation or within the railroad or NYSDOT ROW, or can occur offsite at an upland (i.e., not a wetland or waterbody) location. Section 9.0 discusses some specific information for work within railroad ROW to meet the railroad owner's requirements for spoils management. Spoils Management Plans (if applicable) are included as Appendix 1 to this document.
2. Section 5 discusses the regulatory requirements related to transporting waste materials off-site.
3. Section 6 and 7 describe specific disposal locations based on classification of the material and where the material originated.
4. Section 8 describes the regulatory procedures required for handling, classifying and disposal of contaminated materials.
5. Section 10 describes the regulatory requirements and best management practices required for waste materials other than spoils that may be generated during construction.

All excess material not used as backfill or spread within the limit of work to create a level surface will be placed in a dump truck at the point of generation, transported, and disposed of in accordance with this Soil and Materials Management Plan as well as the Project Erosion and Sediment Control Plan (ESCP) (Appendix C of the EM&CP).

3.0 CLASSIFYING SPOILS FOR USE AS FILL 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 12, since the material is originally from outside the New York City (NYC) Boundary, the spoils would be considered unrestricted fill as long as there is no evidence of historical impacts such as reported spill events, or visual or other indication (odors, etc.) of chemical or physical contamination as identified in section 360.12(c)(1)(ii) of Title 6. 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 spoils material originates in NYC or has evidence of contamination, including odor, staining, sheen, or visible free product, the material must be classified as Restricted Use Fill or Limited Use Fill by laboratory analysis described in the following paragraph and Section 8. Restricted-use fill means fill material that is up to 40 percent by volume inert, non-putrescible non-soil constituents. Limited-use fill has no volume limit for inert, non-putrescible non-soil constituents. Non-putrescible refers to material that may readily degrade or produce odors. Inert, non-putrescible material excludes plastic, gypsum wallboard, wood, paper, or other material that may readily degrade or produce odors. See Table 4.1 for additional information.

For Segment 12, if soil exhibits evidence of contamination, the soil will be characterized as restricted or limited use fill by testing spoil material samples for the following analyses:

1. The Metals, PCBs/Pesticides, and Semivolatile organic compounds listed in section 375-6.8(b) of Title 6 of the CRR-NY
2. Asbestos if demolition of structures has occurred on the site 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; and
4. Volatile organic compounds listed in section 375-6.8(b) of Title 6 of the CRR-NY, if their presence is possible based on site events such as historic petroleum spill, odors, photoionization detector meter or other field instruments readings.

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 spoils 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 spoils do not meet the regulatory requirements of restricted or limited use fill, then they must be disposed of in an off-site approved disposal location as described in Section 7.0.

The minimum number of analyses for volatile organic compounds (if required) and other parameters is determined by the quantity of spoils material and can be found in Section 360.13(e)(1) of Title 6 of the NYCRR.

4.0 MANAGING FILL MATERIAL FROM CONSTRUCTION ACTIVITIES AS BENEFICIAL REUSE

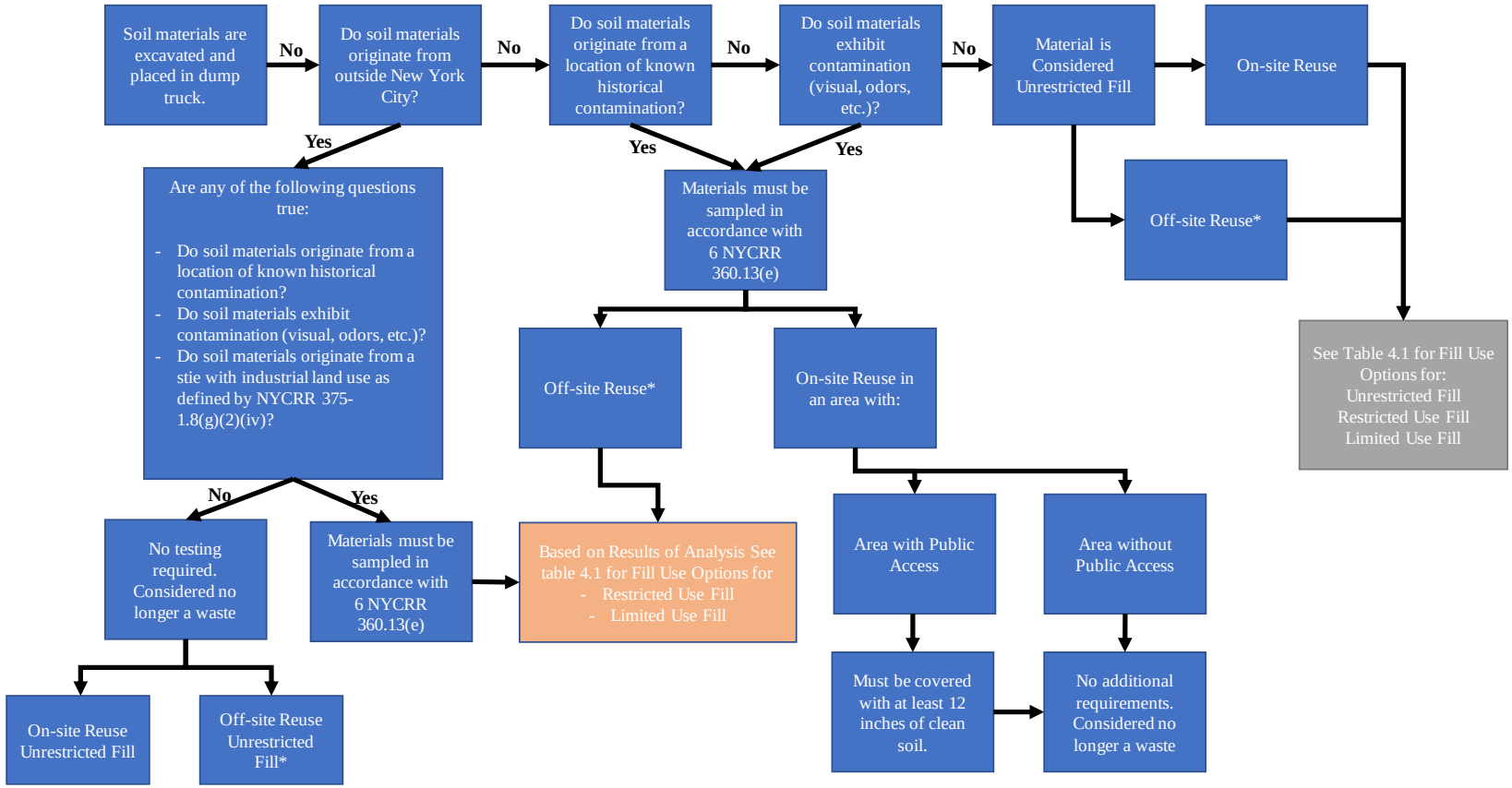
Figure 4.1 and Table 4.1 provide a summary of NYSDEC regulations regarding the beneficial reuse of fill material.

Table 4-1. Acceptable Fill Material Uses (6 NYCRR 360.13(f))

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).

Figure 4-1. Beneficial Reuse Decision Tree



*Offsite reuse must be in accordance with all NYDEC regulations. For instance, the offsite reuse cannot impact a wetland.

[1] Land use category which shall only be considered for the primary purpose of manufacturing, production, fabrication or assembly processes and ancillary services. Industrial use does not include any recreational component.

[2] (1) Sample method and frequency. Samples must be representative of the fill material. The sampling program must be designed and implemented by or under the direction of a qualified environmental professional (QEP), using the table below as a minimum sampling frequency. Written documentation of the sampling program with certification from the QEP that samples were representative of the fill material must be retained for three years after the sampling occurs and must be provided to the department upon request.

TABLE 1: Minimum Analysis Frequency for Fill Material

Fill Material Quantity (cubic yards)	**Minimum Number of Analyses for Volatile Organic Compounds, if Required**	**Minimum Number of Analyses for all other parameters**
0-300	2	1
301-1000	4	2
1001-10,000	6	3
10,001+	Two for every additional 10,000 cubic yards or fraction thereof	One per every additional 10,000 cubic yards or fraction thereof

(2) Analytical parameters. Fill material samples must be analyzed for:

(i) the Metals, PCBs/Pesticides, and Semivolatile organic compounds listed in section 375-6.8(b) of this Title;

(ii) asbestos if demolition of structures has occurred on the site;

(iii) volume of physical contaminants, if present, based on visual observation; and

(iv) volatile organic compounds listed in section 375-6.8(b) of this Title, if their presence is possible based on site events such as an historic petroleum spill, odors, photoionization detector meter or other field instrument readings.

(3) Laboratory and analytical requirements. Laboratory analyses must be performed by a laboratory currently certified by the New York State Department of Health's Environmental Laboratory Approval Program (ELAP).

4.1 REQUIRED NOTIFICATIONS

Per Section 360.13(g)(3) of Title 6 of the NYCRR, for restricted use fill and limited use fill material, the NYSDEC must be notified at least five days before delivery of greater than ten cubic yards of restricted use or limited use fill material. Notification must be made on forms or in a manner acceptable to the NYSDEC and must include any analytical data required by Section 360.13(e) of Title 6 of the NYCRR. The NYSDEC may request to inspect any site receiving fill material.

5.0 SOIL MATERIALS TRANSPORT OFF-SITE

As described in Section 2.0, in general, all excess material not used as backfill near the points of generation such as the HDD entry and exit pits, may be placed into dump trucks at the point of generation, transported, and disposed of in accordance with this Soil and Materials Management Plan as well as the Project's ESCP (Appendix C of the EM&CP). Some excavated soil from points of generation such as the HDD entry and exit pits, and the splice box locations, that meets the criteria for beneficial reuse as defined in Section 4.0, will be used as backfill or spread around upland areas (either on or off-site) to create a level surface. If any excavated soil exhibits evidence of contamination as described in Section 3.0, it will be sampled as described in Section 3.0 and 8.0.

Materials resulting from trench excavation for utility line installation or ditch reshaping activities which are temporarily side cast into wetlands will be backfilled or removed to an upland area per USACE requirements. Wetlands have been identified in Section 9.1 of the EM&CP as well as the Wetland Delineation Report (Appendix M of the EM&CP). The criteria for beneficial reuse of fill material are described in Section 4.0. If beneficial reuse is not feasible, off-site disposal locations will be identified for each type of potential construction derived waste (soil, vegetation, asbestos, spill cleanup, etc.) These locations will be identified for each Segment of the Project and will be submitted to DPS for approval prior to construction and update as needed during the regular construction progress meetings. Erosion and sediment controls for temporary stockpiles are described in the Stormwater Pollution Prevention Plan (SWPPP) (Appendix G of the EM&CP) and the Erosion and Sediment Control Plans (Appendix C of the EM&CP).

All transport of excess excavated soil will be performed by licensed haulers 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, tarped, securely covered, manifested, and placarded in accordance with local, state, and federal requirements (and all other applicable transportation requirements). If the material is determined to be restricted or limited use fill, the fill transporter must complete "Notification of Fill Material Transport" form[1].

[1] Available from NYSDEC at https://www.dec.ny.gov/docs/materials_minerals_pdf/budfillnotify.pdf.

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

While no known contaminated sites have been identified within Segment 12, if contaminated soil is encountered during any construction activities, every effort will be made to keep trucks from coming into contact with contaminated or potentially contaminated soils. If needed, a truck wash/decontamination pad will be operated at the appropriate work/excavation area.

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

Disposal locations for spoils, HDD drilling fluids, and cleared vegetation are still being identified and confirmed with landowners. For materials that are not managed as "beneficial reuse" fill, disposal locations will be selected from the list of NYSDEC approved disposal locations.

Excess excavated soil that is not managed as beneficial use of fill material will be disposed of at an approved disposal facility or an approved beneficial reuse 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.

7.0 DISPOSAL OF WASTE MATERIALS LOCATIONS – BY TYPE

The following is an example of the disposal location plan that will be utilized for the Project, the final disposal locations will be provided to DPS Staff and NYSDEC prior to the start of construction related activities and will be submitted via the EM&CP change notice process.

The Certificate Holders are currently evaluating suitable Soil Beneficial Reuse Locations based on soil characterization efforts completed on site. Identified locations will be reported in Table 7-1 once an agreement has been established with the property owners. Table 7-2 identified potential landfill sites and Treatment Storage Disposal facilities in Rockland County.

Table 7-1. Acceptable Beneficial Reuse Locations Generated in Roadways ROW Classified as Unrestricted Fill

Segment	Disposal Location	Max Quantity Capacity	Anticipated Quantity Capacity
12	TBD	TBD	TBD

*__Error! Reference source not found.__ is anticipated to be Unrestricted Fill and managed as Beneficial Reuse.

**Disposal Locations are subject to change. Currently reviewing locations on the list:
https://www.dec.ny.gov/docs/materials_minerals_pdf/listregcdprocess.pdf

***Certificate Holders will notify DEC on all material that exceeds the beneficial use determination by filing all proper permitting.

Table 7-2. Acceptable Disposal Locations – Generated from Known Contaminant Locations, or Unrestricted Fill, Restricted Fill or Limited Use Fill without an Acceptable Alternative Location for Beneficial Reuse.

Segment	Disposal Location	Max Quantity Capacity	Anticipated Quantity Capacity
12	Safety Kleen - West Nyack, NY	TBD	TBD
12	Deep Green of New York - New Windsor, NY	TBD	TBD
12	Waste Management – Yonkers, NY	TBD	TBD

**Disposal Locations are subject to change and will be done so via EMCP Change Notice.

8.0 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 12. Additionally, the NYSDEC Remediation database was reviewed in April 2023 and the following remediation sites were identified near Segment 12:

- Gabriel Manufacturing Co. Inc. – State Superfund Program – 125 South Liberty Drive, Stony Point, New York
- Ciabattoni Property – Brownfield Cleanup Program – 153 South Liberty Drive, Stony Point, New York

If contaminated soils and/or sites are encountered during the construction phase of Segment 12, the following procedures will be followed:

1. Field screening for evidence of contamination such as the presence for volatile organic compounds will be performed using a photoionization detector (PID) on any soils excavated within 500 feet of known contamination sites.
    - Soils exhibiting PID readings below 10 ppm, will be considered non-contaminated and can be stockpiled and used as backfill for excavation where needed.
    - 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.
2. Air particulate monitoring will also be performed within 500 feet of all known contamination sites in accordance with DER-10 (See Section 8.2).
3. 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:
    - Matt Smith with DPS ((518) 402-5141) and
    - Karen Gaidasz with DEC ((518) 402-9167).

In the event that field evidence of contamination is identified, potentially contaminated soils will be segregated and stockpiled on polyethylene sheeting and covered in a pre-determined staging area. The potentially impacted, stockpiled 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. The excavation will be backfilled with clean, imported fill.

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 water 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 locations2. If evidence of a release or spill are found 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 and 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 K. 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). Any contaminated soils removed from the Project area may not be used as unrestricted fill.

The Environmental Inspector will report the unanticipated encounter of contaminants to the Certificate Holders, who will notify the NYSDEC, DPS Staff, and any applicable landowners. 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

2 https://www.dec.ny.gov/docs/materials_minerals_pdf/listregcdprocess.pdf

be conducted in accordance with all applicable environmental regulations and procedures of this EM&CP as well as all technical specifications provided on the Plan and Profile Drawings in Appendix C.

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, subcontractors will submit a proposal for sampling needs to the Certificate Holders and Contractors as needed.

8.1 SOIL SAMPLING PROCEDURES

Surficial soil sampling is generally conducted in potentially contaminated areas of concern, whether relating to former or current uses of the site, to determine whether contaminants are present above applicable standards. Sample locations will be biased to suspected areas of greatest contamination including stressed vegetation, soil discoloration, 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, discharge points of past or present processes, and former and current containers that may contain or previously contained hazardous substances or waste. 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. For sampling performed on soil material originating in railbeds that may contain gravel, to the greatest extent possible the gravel should be removed from the sample.
Surficial soil sampling will generally be in accordance with the following procedures.

1. Use a shovel to clear any surface debris from the sampling location, including grasses or other vegetation.
2. If appropriate to the investigation, screen the soil with a Photo Ionization Detector (PID)or Flame Ionization Detector (FID) and record the results on a Field Log.
3. Sampling Procedure: Discrete Sample Collection:
    a. Collect the sample from 0-6 inches depth (or as specified by the Environmental Inspector). In instances where a soil is collected for Volatile Organic Compounds (VOC) analysis as well as other non-VOC parameters, the soil for VOC analysis must be collected first to minimize volatilization and biodegradation.
    b. When analyzing for VOCs, the soil sample must be collected directly from the soil

sample location into the sample container without disturbing the matrix structure.

c. Once VOC soil sampling is complete, the remaining soil to be analyzed for non-VOC parameters such as Semivolatile Organic Compounds (SVOC), pesticides, Polychlorinated Biphenyls (PCB), metals, or cyanide 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 decontaminated 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 decontaminated stainless-steel spoon or spatula.

Composite 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 7). 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.

4. 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.
5. 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.
6. After sampling is completed, the sampling location will be marked 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.

7. 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 7 for subsequent sampling locations.
8. Soil samples will be packed and shipped to the laboratory with Chain of Custody Documentation for analyses.

8.2 COMMUNITY AIR MONITORING PLAN (CAMP)

As stated above all field screening of soil and 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).

9.0 REQUIREMENTS FOR MATERIAL MANAGEMENT IN RAILROAD RIGHTS OF WAY

The purpose of this section is to provide guidelines for the management of materials in accordance with Canadian Pacific Railway (CP), CSX Transportation (CSX), Norfolk Southern Railway (NS) and, Pan Am Railway (PAR) requirements. Work in packages that will take place on railroad property will meet railroad-specific requirements in addition to the requirements of the Article VII Certificate Conditions. Segment 12 does not take place on railroad property.

10.0 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, rock, rail ballast, etc. In general, all non-soil material that is not going to be reused will be disposed of at approved disposal locations in accordance with all NYSDEC rules and regulations. For non-soil excavated material being considered for reuse, the following restrictions and regulations apply.

For material excavated from work areas consisting of recognizable, uncontaminated concrete and concrete products, asphalt pavement, rock, brick and soil ("RU-CARBS"), sampling/testing is not required under NYCRR Part 360. Per Section 363.2.1(h) of Title 6, mixed RU-CARBS can be used in highway ROWS with no volume limitations. Additionally, up to 5,000 cubic yards of Mixed RU-CARBS can be used in residential developments and under pavement. For material excavated from work areas consisting of mixed soil and unrecognizable excavated material including concrete, asphalt, ash, slag, etc., sampling/testing is required in accordance with Section 360.13(e)(3) of Title 6 of the NYCRR. If analysis indicates the mixed soil and unrecognizable excavated material meets the limited-use fill criteria as described in Table 4.1, this material can be used under pavement.

10.1 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 (sorbent pads, contaminated soil, PPE, etc.) (See the EM&CP Spill Prevention, Control and Countermeasures Plan (SPCC) (Section 3.6 of Appendix K 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, hoppers and roll-off boxes will be located throughout the site 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 scraps will be collected separately in designated roll-off boxes. 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 in hoppers and roll-off boxes 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 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.

10.2 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 H of the EM&CP) which follows the standards set forth in OSHA 1926 Subpart C-General Safety and Health Provisions.

10.3 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.”

10.4 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.

10.5 HDD FLUIDS

As described in the BMP document and Inadvertent Release Contingency Plan, drilling fluid (typically bentonite and water based with selected polymers/additives) will be National Sanitation Foundation (NSF) certified and all recycling and reuse regulations will be followed where applicable. The drilling fluid management system and subsequent disposal is the responsibility of the subcontractor performing HDD work. The drilling fluid management system and subsequent disposal will adhere to the following requirements:

- Used drilling fluid will be processed through an initial cleaning that separates the solid materials from the fluid if a reclaiming unit is being used.
- Heavy solids will be sifted out by a screening apparatus/system and the solids deposited into a dump truck and periodically transported off-site and disposed of at an approved disposal facility determined by the HDD construction subcontractor.
- All drilling fluid that is deemed unacceptable to be reused during construction or left over at the end of drilling will be collected and transferred into a tanker truck for disposal at an approved disposal facility determined by the HDD construction subcontractor.
- All drilling fluid accidentally spilled during construction and operation of drilling rigs will be contained following the mitigation measures described in the SPCC and disposed of at an approved disposal facility as determined by the HDD construction subcontractor. All disposal locations will be submitted to Kiewit, DPS Staff and NYSDEC prior to construction.
- A supply of spill containment equipment and measures will be maintained and readily available around drill rigs, drilling fluid mixing system, entry and exit pits and drilling

fluid recycling system, if used, to prevent spills into the surrounding environment. Pumps, vacuum trucks, and/or storage of sufficient size will be in place to contain excess drilling fluid.

- Under no circumstances will drilling fluid that has escaped containment be reused in the drilling system.
- An overview of the drilling fluid system will be submitted to the Environmental Inspector for approval once determined and prior to any HDD installation activities.
- Drilling fluid may be solidified by the HDD subcontractor using solidification agents for the purposes of complying with landfill requirements and aiding with disposal.

10.6 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.