

EXCAVATION WORK PLAN

LIBERTY INDUSTRIAL FINISHING SITE, NYSDEC SITE #152108

550 SUFFOLK AVENUE, BRENTWOOD, NEW YORK

This Excavation Work Plan (EWP) has been prepared for the Liberty Industrial Finishing Site (Site), located at 550 Suffolk Avenue in Brentwood New York and identified as New York State Department of Environmental Conservation (NYSDEC) Inactive Hazardous Waste Disposal Site #152108. This EWP is intended to be used during Site redevelopment activities, which include construction of new commercial facilities.

1.0 Introduction

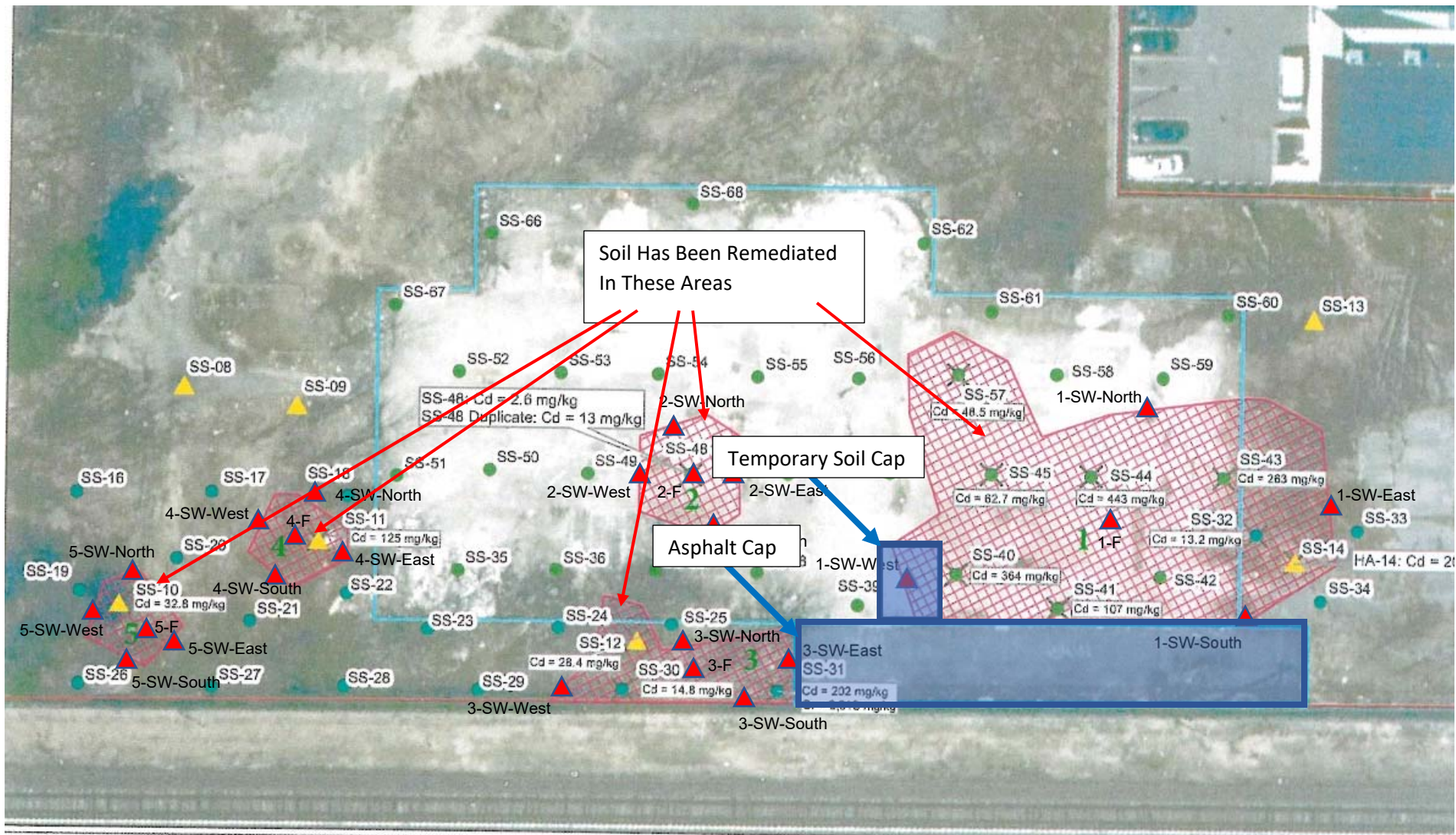
As noted in the September 2014 Site Management Plan (SMP) for this Site, extensive soil sampling was performed, remedial activities have previously been conducted, and soil that exceeded applicable regulatory criteria and remained present onsite was previously capped with asphalt. After the SMP was prepared additional soil sampling was conducted and the results were compared to the 6 NYCRR Part 375-6 Soil Cleanup Objectives (SCOs) for commercial use (the anticipated use for the Site), resulting in the identification of additional uncapped impacted soil. The majority of this soil was remediated by removal and offsite disposal in 2021 and the remedial work was approved by the NYSDEC on September 28, 2021. As part of that remedial activity a temporary soil cap was placed over a small area of soil that exceeded the commercial use SCO for cadmium and was not previously capped. A site plan showing the recent remedial areas and both of the capped areas is presented in Figure 1.0.

The asphalt cap covers six concrete plating waste underground storage tanks (USTs) and an associated piping gallery that were abandoned in place during the initial remedial activities, as documented in the July 2002 Final Remediation Report for the Site. Soil removal was conducted in the UST/piping gallery area to depths ranging from two to ten feet below grade. Confirmatory samples were collected and then the excavated area was backfilled with sand topped by an orange polyethylene warning barrier, six inches of RCA base material, and asphalt pavement. The confirmatory samples showed that shallow soil (two feet below grade) exceeded the cadmium commercial use SCO at the E-6, E-9, E-10, and E-11 locations; and sidewall samples exceeded the cadmium commercial use SCO at the E-19SW and E-20SW locations. None of the confirmatory samples showed exceedances of the commercial use SCOs for the other constituents tested and none of the deep soil (10 feet below grade) confirmatory samples showed exceedances of the commercial use SCOs. The asphalt cap provides a cover above the abandoned USTs and piping gallery and the associated cadmium-impacted soil.

The temporary soil cap covers one area where the end-point sample (Area 1-west sidewall) exceeded the cadmium SCO for commercial use following the most recent remediation. During redevelopment it is planned to replace the temporary soil cap with an asphalt pavement cap unless the impacted soil is removed under this EWP and the remaining soil is tested to confirm that it meets the commercial use SCO for cadmium.

2.0 Proposed Redevelopment

It is planned to redevelop the Site with commercial uses. Figure 2.0 shows the proposed redevelopment plan and the two capped areas. A one-story Taco Bell restaurant is planned for the eastern portion of the Site (Parcel B); the two capped areas are present on Parcel B. This EWP is applicable to



Legend:

- October 2020 Surface Soil Samples
- September 2020 Surface Soil Samples
- 2013 Surface Soil Samples
- X Exceedance of SCO
- Approximate Location of Asphalt
- Approximate Location of Concrete
- Proposed Excavation Area
- Site-Boundary
- I EXCAVATION AREA

2-SW-West
Endpoint Sample Location



CAPPED AREAS



Reference:
2013 Half Foot 4 Band Long Island Zone
New York Statewide Digital Orthorectification Program

FPM Group

Prepared for:



FIGURE 1.0 – CAPPED AREAS

550 Suffolk Avenue
Brentwood, New York

redevelopment activities that involve soil within and in immediate proximity to the two capped areas on Parcel B. A two-story commercial building is proposed for the western portion of the Site (Parcel A); no soil exceeding the SCOs for commercial use remains present on Parcel A and this EWP is not applicable to redevelopment activities on Parcel A.

As shown on Figure 2.0, after redevelopment the two capped areas will be primarily covered by pavement and concrete curbing, although the eastern end of the asphalt-capped area will be vegetated. This EWP includes the procedures to be used during redevelopment activities that may encounter the remaining contamination in the capped areas and provisions for cap restoration as needed.

The grading plan for redevelopment was reviewed to evaluate the anticipated depth of excavation and volume of excavated materials that may be removed from the two capped areas. The grading plan indicates that minimal excavation (0 to 3 inches) is anticipated in the capped areas. Based on the cap configurations, this minimal excavation is not anticipated to encounter the demarcation barrier, the former USTs or piping gallery, or the remaining impacted soil beneath the asphalt-capped area. Impacted soil may be encountered beneath the area with the temporary soil cap. The total volume of materials (asphalt, RCA base and/or soil) to be removed from the capped areas is about 22 cubic yards.

A Community Air Monitoring Plan (CAMP) and a Health and Safety Plan (HASP) to be used during activities under this EWP are included in the Final Site Management Plan (SMP) for this Site.

3.0 Notification

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the Site owner or their representative will notify the NYSDEC:

Mr. Payson Long
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7013
Office (518) 402-9813
Email: payson.long@dec.ny.gov

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for activities in the capped areas, estimated volumes of contaminated soil to be excavated and any work that may impact the remaining contamination and/or the caps;
- Any plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work involving the caps and/or contaminated soil;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's HASP, in electronic format, if it differs from the HASP provided in Appendix F of the SMP;
- Identification of potential disposal facilities for contaminated soil that is removed; and

- Identification of sources of any anticipated backfill in the remedial areas, along with all required chemical testing results.

4.0 Soil Screening Methods

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional (QEP) during all remedial and development excavations into soil beneath or in close proximity to the capped areas. Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed in the targeted areas.

5.0 Materials Excavation, Stockpile Methods, and Confirmatory Sampling

A QEP or person under their supervision will oversee all invasive work and the excavation and load-out of all contaminated material. The owner of the property and its contractors are solely responsible for safe execution of all invasive and other work performed under this EWP. The presence of utilities and easements in the work areas will be investigated by the QEP and it will be determined if a risk or impediment to the planned work under this EWP is posed by utilities or easements in the work areas.

Contaminated soils that are excavated will be segregated from other soils that may be excavated during redevelopment and will be properly disposed offsite in accordance with applicable regulations. Contaminated soils are present in the shallow subsurface beneath the asphalt cap and the temporary soil cap, as shown on Figure 1.0. Any shallow soils excavated from these areas will be segregated, stockpiled, and assumed contaminated.

Stockpiles of contaminated soil will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points. Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced. Stockpiles of contaminated soil will be inspected at a minimum once each week and after every storm event producing greater than 1/2 inches of rain within 24 hours. Results of inspections will be recorded in a logbook maintained at the site and available for inspection by NYSDEC.

If contaminated soil is removed in the capped areas, confirmatory sampling will be conducted to document the condition of the remaining soil. Sampling will be conducted following the procedures in the SMP and related documents, including the Quality Assurance Project Plan (QAPP) for this site. The samples will be collected by the QEP using dedicated disposable sampling equipment and will include sidewall and excavation floor samples in accordance with the frequencies specified in DER-10, Section 5.4(b)(5). All samples will be managed under chain of custody. Quality assurance quality control (QA/QC) samples will also be collected as per the QAPP, including one blind duplicate sample per 20 primary environmental samples and one matrix spike/matrix spike duplicate (MS/MSD) sample per 20 primary environmental samples.

The confirmatory samples will be transported to a New York State Department of Health (NYSDOH) ELAP-certified laboratory and tested for cadmium, which is the only constituent that exceeded the commercial use SCOs in the capped areas. The lab data will be provided to the QEP in Category B deliverables, together with information needed for upload to the NYSDEC's EIMS. The laboratory data package(s) for the confirmatory samples in each capped area will be included in the report of the excavation work.

A Data Usability Summary Report (DUSR) will be prepared for each sample delivery group to evaluate data quality, as required in the SMP. Copies of the DUSRs will be included in the report of the excavation work.

The QEP will evaluate the confirmatory sample results to determine if any soil exhibiting exceedances of the commercial use SCO for cadmium remains present in the excavation areas. If no soil exhibiting such exceedances remains present in the area that presently has a temporary soil cap, then cap restoration will not be needed or performed in that area. If exceedances remain present, then the affected area will be capped, as discussed below.

As abandoned USTs and a former piping chase remain present in the area that presently has an asphalt cap, and these structures will not be removed during the redevelopment work, cap restoration will be conducted for this area regardless of the confirmatory sample results.

6.0 Contaminated Soil Load-Out

Vehicles loaded with contaminated soil leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSOOT requirements and all other applicable transportation requirements.

All trucks loaded with contaminated soil will be cleaned of any adhering soil prior to leaving the site. The QEP will be responsible for ensuring that all loaded outbound trucks are thoroughly cleaned before leaving the site until the activities performed under this EWP are complete.

Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking. The QEP will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities involving contaminated soil. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived contaminated materials.

7.0 Materials Transport Offsite

All transport of contaminated materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

The truck transport route is as follows:

- Exit the site, turn right onto Suffolk Avenue, proceed east to Washington Avenue, turn left, proceed north on Washington Avenue to the Long Island Expressway. Follow the service road to the nearest entrance (east or westbound).

All trucks loaded with site-derived contaminated materials will exit the vicinity of the site using only this approved truck route. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city-mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site. Queuing of trucks will be performed onsite in order to minimize offsite disturbance. Offsite queuing will be prohibited.

8.0 Materials Disposal Offsite

All contaminated soil excavated and removed from the site will be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of contaminated soil from this site is proposed for unregulated offsite disposal (i.e., soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated offsite management of contaminated materials from this site will not occur without formal NYSDEC approval.

Offsite disposal facilities for excavated contaminated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate (e.g., hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility).

Waste characterization testing will be performed as required by the targeted disposal facilities. The results of the waste characterization samples will be reviewed by the QEP to confirm that they meet the disposal facility requirements. If the facility requirements are met, then the data will also be provided to the facilities for use in obtaining waste disposal approval.

Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Excavation Report. This documentation will include waste profiles, test results, facility acceptance letters, manifests, bills of lading, and facility receipts.

Non-hazardous contaminated soils taken offsite will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet unrestricted use SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

9.0 Materials Reuse Onsite

Onsite reuse of soil from the capped areas is not planned. If onsite reuse of soil from the capped areas is contemplated, chemical criteria for onsite reuse of soil from these areas will be approved by NYSDEC prior to any excavation work. The QEP will ensure that procedures defined for materials reuse in this EWP are followed and that unacceptable material does not remain onsite.

Contaminated onsite soil that is determined by the NYSDEC to be acceptable for reuse onsite will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Concrete crushing or processing onsite will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused onsite.

10.0 Fluids Management

All liquids to be removed from the site, including excavation dewatering and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, but will be managed offsite.

Discharge of water generated during large-scale construction activities to surface waters (i.e., a local pond, stream or river) will be performed under a state pollution discharge elimination system (SPDES) permit.

11.0 Cover System Restoration

After the completion of soil removal and any other invasive activities that involve the capped areas, the caps will be restored as needed to cover any remaining contaminated soils and the abandoned USTs and piping gallery. If all of the soil exceeding the commercial use SCO for cadmium in the area presently covered by the temporary soil cap is documented (via confirmatory sample results) to have been removed, then cap restoration is not needed in this area. If soil exceeding the commercial use SCO for cadmium remains present in this area, then this soil will be covered by a demarcation layer (orange snow fencing material or equivalent material) to provide a visual reference to the top of the 'Remaining Contamination Zone', the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in the SMP for this site. The demarcation layer will be covered by road base material and asphalt or pavement and curbing associated with the new roadway for the proposed redevelopment, as shown on Figure 2.0. These materials will serve as the cap for the remaining contaminated soils in this area.

The cap in the area of the abandoned USTs and piping gallery (which are anticipated to remain present following redevelopment) will be restored regardless of confirmatory sample results. The existing demarcation layer (orange snow fencing material or equivalent material) will be replaced as needed above the USTs, piping gallery and remaining contaminated soils in this area to provide a visual reference to the top of the 'Remaining Contamination Zone', the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in the SMP for this site. The demarcation barrier will be covered by road base material and asphalt or concrete pavement and curbing associated with the new roadway for the proposed redevelopment. The eastern end of this area will be covered by at least one foot of cover soil meeting the cover soil quality standards established in 6NYCRR 375-6.8(b) for commercial use. As the type of cover system will change from the existing (asphalt to be replaced by concrete, asphalt and cover soil), this will constitute a modification of the cover element of the remedy and the upper surface of the Remaining Contamination. A figure showing the modified surface will be included in the Excavation Report, the subsequent PRR, and in any updates to the SMP.

12.0 Backfill From Offsite Sources

All backfill materials proposed for import onto the site will be approved by the QEP and will be in compliance with provisions in the SMP prior to receipt at the site. Material from industrial sites, spill sites, other environmental remediation sites, or potentially contaminated sites will not be imported to the site.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.8(b) for commercial use. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

Trucks entering the site with imported backfill soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated contaminated materials and covered to prevent dust releases.

13.0 Stormwater Pollution Prevention

Barriers and hay bale checks will be installed around excavations and stockpiles of contaminated soils and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC. All necessary

repairs shall be made immediately. Accumulated sediments will be removed as required to keep the barrier and hay bale checks functional. All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials. Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the stormwater pollution prevention plan (SWPPP) for this site, if applicable, shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

14.0 Contingency Plan

If USTs or other previously-unidentified contaminant sources are found during subsurface excavations or development-related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment, and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for full a full list of analytes (TAL metals; TCL volatiles and semivolatiles, TCL pesticides and PCBs), unless the site history and previous sampling results in the affected area provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the Excavation Report and the subsequent PRR prepared pursuant to Section 5 of the SMP.

15.0 Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) has been prepared and is included as Appendix G of the SMP.

16.0 Odor Control Plan

This odor control plan is capable of controlling emissions of nuisance odors offsite. Based on the nature of the remaining contamination at the site, nuisance odors are not anticipated to present a concern. However, if nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the activities involving contaminated materials. Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's QEP, and any measures that are implemented will be discussed in the Excavation Report and subsequent PRR.

All necessary means will be employed to prevent onsite and offsite nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers as needed to prevent odors and/or dust; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise

controlled, additional means to eliminate odor nuisances will include (a) direct load-out of contaminated soils to trucks for offsite disposal; (b) use of chemical odorants in spray or misting systems; and, (c) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to onsite conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the affected excavation and handling areas in a temporary containment structure equipped with appropriate air venting /filtering systems.

17.0 Dust Control Plan

A dust suppression plan that addresses dust management during invasive onsite work involving contaminated materials will include, at a minimum, the items listed below:

- Dust suppression, if needed, will be achieved through the use of a dedicated onsite water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas, including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways as needed to provide a clean and dust-free road surface.
- Onsite roads will be limited in total area to minimize the area required for water truck sprinkling.

18.0 Other Nuisances

A plan for rodent control will be developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all remedial work.

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

19.0 Reporting

Following completion of all contaminated soil removal and disposal, import of backfill in the targeted remedial areas, and restoration of the caps as needed, an Excavation Report will be prepared to document the work completed under this EWP. This Excavation Report will include details of the waste characterization, removal and disposal of impacted soil, confirmatory sampling, backfill sampling, and cap restoration. This report will also include a narrative of the procedures, with supporting notes, photographs, and other documentation as needed, tabulated laboratory data, a site plan showing the excavations, confirmatory sample locations, and restored cap(s), copies of the laboratory reports, copies of all manifests, weight tickets, and bills of lading, a tabulated list of the soils disposed, and other documentation generated as a result of the soil removal and testing activities. The Excavation Report will be prepared and certified by a NYS-licensed Professional Engineer (PE) that the remedial work was conducted in accordance with the NYSDEC-approved EWP. The completed Excavation Report will be submitted to the NYSDEC for review and approval.