

**Revised PCB Cleanup Plan
Special Area 13
Dredge Spoil Disposal Area**

May 2025

Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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CERTIFICATION

This certification, prepared in accordance with Title 40 of the Code of Federal Regulations 761.61, certifies that the New York State Department of Environmental Conservation (NYSDEC) is performing the cleanup of the Special Area 13 (SA-13) Dredge Spoils Disposal Site (Second and Third Fill Areas). NYSDEC provides this certification in accordance with 40 CFR 761.61(a)(3)(i)(e) and hereby certifies, to the best of its knowledge, information and belief, that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the SA-13 site, are on file at 625 Broadway, Albany, NY 12233, and are available for EPA inspection. These files are also available in NYSDEC's Environmental Remediation Database – DECInfoLocator (<https://extapps.dec.ny.gov/cfm/extapps/derexternal/haz/details.cfm?ProgNo=546041>).



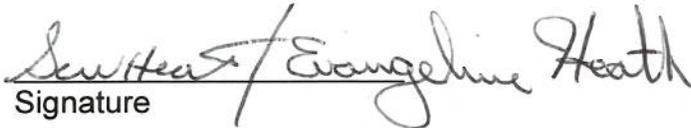
Signature

3/18/2024

Date

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List of Abbreviations and Acronyms

BGS	below ground surface
CFR	Code of Federal Regulations
DER	Division of Remediation
E & E	Ecology and Environment Engineering and Geology, P.C.
EPA	U.S. Environmental Protection Agency
FS	feasibility study
HASP	health and safety plan
LTGM	Long-term Groundwater Monitoring
NHP	(New York State) Natural Heritage Program
NYCRR	New York Codes, Rules, and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	New York State Department of Transportation
OSHA	Occupational Health and Safety Administration
PCB	polychlorinated biphenyl
ppm	part per million
RI	remedial investigation
ROD	Record of Decision
SA-13	Special Area 13 Dredge Spoil Disposal Area
SCO	soil cleanup objective
SMP	site management plan
TOC	total organic carbon
TSCA	Toxic Substances Control Act
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife

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Introduction

On behalf of the New York State Department of Environmental Conservation (NYSDEC), Ecology and Environment Engineering and Geology, P.C. (E & E) has prepared this hybrid Self-Implementing cleanup plan to address polychlorinated biphenyls (PCBs) contaminated soils present at the Special Area 13 Dredge Spoil Disposal Area (SA-13) site, NYSDEC Site No. 546041, a Class 2 inactive hazardous waste disposal site. The SA-13 site is located along the western shore of the Hudson River in the town of Moreau, Saratoga County, New York (see Figure 1-1). This plan presents the results of previous site investigations performed to characterize PCB contamination at the site and describes the proposed remedial activities to address site contamination.

1.1 Cleanup Plan Objectives

The objective of this hybrid self-implementing plan is to describe the Department's approach to remediate PCBs that remain on site at concentrations that exceed the NYSDEC Soil Cleanup Objective (SCO) for commercial and residential use of one ppm (NYSDEC 2006a) as described in the Record of Decision (ROD). To achieve this objective, the plan documents previous investigations, including the remedial investigation (RI) completed prior to issuance of the ROD by NYSDEC.

NYSDEC's December 2012 ROD determined the remedial actions for the different areas of the site (see Appendix A). This Plan describes the remedies defined in the ROD for areas of the site where current surficial PCB concentrations exceed one part per million (ppm) for the commercial portions of the site (Second Fill Area) and for the removal of PCB-contaminated soils above one ppm in the residential portions of the site (Third Fill Area). See Figure 1-2 for extent of these areas. This includes the excavation and off-site disposal of PCB-contaminated soils above 50 ppm and installation of a soil cover in the Second Fill Area, and excavation and off-site disposal of PCB-contaminated soils from the Third Fill Area. Remedial activities were previously performed at the Main Dredge Disposal Area and the First Fill Area, and as such those areas are not included as part of this Plan.

The remedial action goal for the Second Fill Area is to remediate and restore the PCB affected area for low occupancy use as defined by 40 CFR 761.3. The following actions will be performed to achieve this goal:

- Excavation and off-site disposal of PCB-contaminated soils above 50 ppm (see Figure 1-3) in accordance with 40 CFR 761.61(a)(5)(i)(B)(2)(iii);
- Installation of a clean soil cover over the uncovered portions (see Figure 1-3) of the site to prevent contact with remaining PCB contaminated soils and limit soil erosion;
- Installation of a fence and appropriate signage around the area in accordance with 40 CFR 761.61(a)(4)(i)(B)(2);
- Implementation of a Site Management Plan (SMP) including operations, maintenance, and monitoring of engineering controls and institutional controls; and
- Filing of an Environmental Notice (EN) that meets the requirements of 40 CFR 761.61(a)(8) to limit future use of the site to low occupancy use as defined in 40 CFR 761.3.

The remedial action goal for the Third Fill Area is to remediate and restore the PCB affected areas for residential use. The following actions will be performed to achieve this goal:

- Excavation of all site soils with PCB concentrations above the NYSDEC residential SCO of one ppm (see Figure 1-4);
- Post-excavation verification sampling to confirm that the SCO has been met at all vertical and horizontal extents of the remedial area (see Figure 1-4);
- Backfill of the excavated area with clean fill and topsoil meeting NYSDEC requirements for residential use; and
- Restoration of the affected areas in kind.

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Site Background

2.1 Site Description

The SA-13 site is located along the western shore of the Hudson River approximately 1,200 feet south of Champlain Canal Lock 7 and near Buoy 219 that marks the western margin of the navigation channel of the Champlain Canal within the Hudson River. The site consists of four distinct areas over approximately 25.3 acres (see Figure 1-2).

A series of unlined, transient settling basin and baffle systems were constructed at the main part of this site by the NYSDOT and were used to dewater and hold dredge spoil material removed from the Champlain Canal/Hudson River navigation channel south of Champlain Canal Lock 7 in conjunction with routine and emergency maintenance dredging operations of the Canal System. Available NYSDOT records report that the site was used between 1952 and 1979 for the disposal of up to 802,000 cubic yards of dredge spoil material during canal maintenance operations. These settling basin systems were initially constructed by excavating the soils across this area slightly and grading the displaced materials outward and upward to form the various containment berms. During subsequent maintenance operations, it is likely that some of the older dredge spoil materials were re-graded to deepen or modify the established settling basin to accommodate the disposal of additional dredge spoil materials. During one or more of these re-grading activities in the 1970s, it is believed that spoils from the basin and containment berm complex were pushed outward and into the three identified shallow depression areas adjacent to the main dredge disposal area as fill material.

2.1.1 Main Dredge Disposal Cell

The main dredge disposal area covers approximately 14 acres and consists of an EPA approved, TSCA regulated closed and covered basin, constructed by the Waterways Maintenance Division of NYSDOT to initially dewater and hold drainage network sediment as detailed in the Construction Summary report (NYSDOT 1992). In 1979, this area was covered with six- to 24-inches of sand/topsoil and seeded, monitoring wells were installed, and a monitoring program was established in compliance with TSCA requirements imposed by the EPA when an approval for the temporary storage/disposal of PCB-laden material at this site was issued in September 1979. In 1991, an EPA approved clay cover/cap was added over the existing “turf” cover by NYSDOT and the earlier monitoring wells were replaced (NYSDOT 1992). The new cover added a six-inch to five-foot-thick layer of clay over the entirety of the main disposal area. The combination of the

two cover layers put the top surface of the potentially contaminated dredge spoil materials at depths ranging between about one foot and nearly five feet below ground surface (BGS). This area is capped, fenced and has an ongoing monitoring plan in place maintained by NYSDOT as required by the 1994 Consent Decree issued by EPA (EPA 1994).

Sampling performed during the 2006 Remedial Investigation for the SA-13 site indicated remaining subsurface PCB contamination under the capped cell of up to 49 ppm total PCBs. Surface soils collected within the capped area were all non-detect for PCBs. Groundwater samples collected from monitoring wells at the Site in 2005 and 2006 as part of the RI were all non-detect for PCBs.

2.1.2 First Fill Area

The First Fill Area covers approximately three acres and consists of a closed and covered shallow depression fill area north of the main disposal area. This area was covered with a soil cover in 2008 by NYSDEC that consists of filter fabric, a demarcation layer, one-foot of clean soil meeting the requirements of 6 NYCRR Part 375 6.7(d), and a vegetated surface to limit the potential for human exposure to the dredge spoils below the soil cover.

Sampling performed during the 2006 Remedial Investigation for the SA-13 site indicated remaining surface and subsurface PCB contamination within this area of up to 12 ppm total PCBs. No groundwater monitoring wells are located within this area.

2.1.3 Second Fill Area

The Second Fill Area covers approximately 6.3 acres farther north beyond the First Fill Area and consists of both covered and uncovered areas. Approximately two acres of the Second Fill Area is covered with clean fill and pavement that was installed in 2008 as a Work Support Marina Facility for the Hudson River PCBs Site remedial dredging project. The remaining 4.3 acres is uncovered and consists of areas of varying vegetative growth.

2.1.4 Third Fill Area

The Third Fill Area is approximately two acres and consists of another shallow depression fill area and is zoned for residential and agricultural use located southwest of the main dredge disposal area. PCB contaminated dredge spoils were used to fill shallow depression areas across the properties. This area is covered by two parcels, one of which is occupied by a single dwelling that is uninhabited and in disrepair.

2.2 Investigation and Delineation Activities

Previous investigations were performed at the site to define the nature and extent of PCB contamination. Subsurface and surface soil sampling events and groundwater sampling events were performed.

2.2.1 Soil Sampling

In 1992 Malcolm Pirnie, Inc. conducted investigations of eight Hudson River upland dredge spoil sediment sites, including PCB sampling at the SA-13 site (MPI 1992). As part of this investigation, boreholes were installed across what is now the Second Fill Area of the site and soil samples were collected for analysis of PCBs. Total PCB concentrations in these samples ranged from non-detect to 55 ppm. Surface soil samples (0 to 6-inches bgs) were also collected, and concentrations of PCBs ranged from non-detect to 5.5 ppm.

In 2002 on behalf of NYSDEC, E & E conducted a study of the Third Fill Area (Morrison Property) under an Immediate Investigation Work Assignment to determine the extent of PCB contamination. Surface and subsurface soil samples were collected and analyzed for Total PCBs. Surface soil concentrations ranged from non-detect to 13 ppm, and subsurface soil concentrations ranged from non-detect to 30 ppm (E & E 2012g).

In 2002, NYSDEC conducted additional surface soil samples within the Second Fill Area. A 100-foot by 200-foot sampling grid was established across the site, with sample collection prioritized at publicly assessable areas. All surface soil samples were grab samples collected from the 0- to 2-inch depth interval and submitted for PCB analysis. PCB concentrations ranged from non-detect to 5.5 ppm.

In 2005 E & E performed a RI at the Site to define the nature and extent of PCB contamination in surface soils, subsurface soils, surface drainage water, and groundwater at the site and assess if site conditions posed a potential threat to human health or the environment (E & E 2012a). Investigations included the collection of surface soil and subsurface soil samples at the Second Fill Area. Surface soil concentrations ranged from non-detect to 7.2 ppm, and subsurface soil concentrations ranged from non-detect to 15 ppm.

In 2021 E & E collected soil samples from an additional four sampling locations within the northern section of the Third Fill Area. Soil borings were extended 10 to 15 feet bgs, and multiple samples were collected from each borehole location. PCB concentrations in these samples ranged from non-detect to 14 ppm.

2.2.2 Groundwater Sampling

Groundwater sampling was performed during the RI at five monitoring wells located within and adjacent to the Second Fill Area (see Figure 1-2 for monitoring well locations). Four rounds of groundwater samples were collected from the wells in March, June, September, and December 2006. All samples collected were unfiltered with turbidity of 43 nephelometric turbidity units or less. All samples collected from these wells came back non-detect for PCBs (E & E 2012a). The laboratory analytical reports for this sampling are included in Appendix B.

Additional groundwater sampling was performed in 2008 as part of supplemental sampling completed as part of the RI. Two monitoring wells within the Second

Fill Area were sampled. All samples collected from the two wells as part of this supplemental sampling event were non-detect for PCBs (E & E 2012h).

In July 2023, E & E conducted additional groundwater sampling at the monitoring wells located in the Second Fill Area. Both filtered and unfiltered samples were collected from four monitoring wells and analyzed for PCBs using method SW846 8082A. All sample results were non-detect for PCBs. The laboratory analytical reports for this sampling is included in Appendix B.

2.2.3 Sample Analysis

Samples collected during the MPI investigation were submitted to Upstate Laboratory, Inc. for analysis of PCBs by USEPA method 846 Third Edition (MPI 1992). The data quality assurance measures, validation and usability considerations for analytical data gathered during the MPI investigation are unknown as sampling collection, analysis and validation were completed by others.

Samples collected at the site during the E & E RI were submitted to Severn Trent Laboratories (STL) of Buffalo, New York for laboratory analysis. In an effort to reduce analytical costs, PCBs in soil samples were analyzed using two similar analytical methods, standard EPA Method 8082 and a screening level analysis based on EPA Method 8082, which primarily differ only in the method used to extract PCBs from the sample matrix. All samples were analyzed using the screening method (EPA Method 8082-screen) and approximately 20% of the samples were analyzed using standard EPA Method 8082. All groundwater samples collected at the site were analyzed for PCBs using the standard EPA Method 8082 analysis. Sample collection and analysis completed during the E & E RI was conducted in accordance with the NYSDEC approved Quality Assurance Plan (QAPP), provided in the E & E Remedial Investigation Work Plan (E & E 2005). The procedures described in the QAPP were consistent with the current updates of the EPA SW-846 sampling procedures at the time of sampling. STL followed NYSDEC Analytical Services Protocol (ASP) of June 2000 for all analytical methods, quality assurance (QA)/quality control (QC), holding times, and reporting requirements. Any deviations from acceptable QC specifications are discussed in the applicable Data Usability Summary Report (DUSR), provided in the respective RI reports (E & E 2012a,b,c). Appropriate qualifiers were added to the data by the E & E data validators to indicate potential concerns with data usability. Further details regarding the comparability of PCB screen results can be found in the Pathway Analysis Report (PAR) developed for the site (Appendix C).

3

Sample Results and Risk Evaluation

3.1 Data Evaluation

In accordance with provisions of 40 CFR 761.61 (a)(2), 40 CFR 761 Subpart N, sample collection for a site characterization is generally intended to be on a 10-foot grid system (one sample every 100 square feet). Departure from this requirement is common as it proves to be expensive during the investigative phase for large sites such as this. The Second Fill Area comprises approximately 6 acres and to perform investigation sampling in accordance with these guidelines would have proved cost prohibitive. Statistical analysis was performed to evaluate the adequacy of the sample set available for the site study area to support a hybrid self-implementing corrective action. Results indicate that the current sample set consisting of both surface and subsurface soil samples are statistically acceptable for risk-based analysis and remedial design decision, and additional samples would provide limited benefit in reducing relative error on the mean. The statistical analysis is described in a technical memo submitted as Appendix D in the PAR (see Appendix C). Soil sampling locations (surface soil and borehole) from the previous site investigations can be found in Figures 3-1 through 3-4 for the different sections of the Site.

The Third Fill Area comprises approximately two acres. Investigative sampling was originally proposed on a 50-ft grid, but due to accessibility issues caused by significant overgrowth at the Site, sample points were located where they could be accessed by sampling equipment. Again, statistical analysis indicates that the current sample set for the Third Fill Area is sufficient for site characterization and additional sampling would not significantly refine the analysis. Additionally, the remedial goal for this portion of the Site is excavation and offsite disposal of all site soils with PCB concentrations greater than one ppm and post-excavation verification sampling will be performed to confirm that the SCO is reached (see Section 4.2 below for further details).

3.2 Sample Results

Sampling results from soil and groundwater sampling performed during the site investigations are presented in Tables 3-1 through 3-6. Soil sampling locations and results are shown on Figures 3-1 through 3-4. The sum of the individual Arochlor detections represent the total PCB concentrations shown in the Tables. The

3 Sample Results and Risk Evaluation

total PCB concentrations greater than the SCO of one ppm form the basis of the remediation plans.

3.2.1 Surface Soil

In the Second Fill Area, total PCB concentrations above one ppm were detected in nine of the 39 surface soil samples collected during the 2002 NYSDEC investigation and the 2005 RI. The highest total PCB concentration was detected during the 2005 RI sampling at 7.2 ppm. No surface soil samples contained PCBs above 10 ppm.

In the Third Fill Area, total PCB concentrations above one ppm were detected in 14 of the 23 surface soil samples collected. The highest total PCB concentration in these samples was 11 ppm.

3.2.2 Subsurface Soil

In the Second Fill Area, 66 borehole and 32 test pit subsurface soil samples were collected. Total PCB concentrations above one ppm were detected in 28 of the borehole samples collected and 14 of the test pit samples collected. The highest total PCB concentration detected (55 ppm) was at borehole location OM-62 at a depth interval of 2 – 3 feet bgs during the 1992 MPI investigation. Samples with PCB concentrations above the one ppm SCO ranged from 0.3 to 8 feet bgs.

In the Third Fill Area, total PCB concentrations above one ppm were detected in 23 of the 32 subsurface soil samples collected. The highest total PCB concentration in these samples was 30 ppm at a depth of approximately one foot bgs collected during the 2002 investigation work. Samples with PCB concentrations above the one ppm SCO ranged from 0.5 to two feet bgs.

3.2.3 Groundwater

Groundwater sampling was conducted during the RI (E & E 2012b) and additional monitoring was performed in 2023 (see analytical results in Appendix B) in order to evaluate potential groundwater impacts. PCBs have not been identified in groundwater at concentrations above the TSCA decontamination standard for water containing PCBs (less than or equal to 0.5 µg/L for unrestricted use) per 40 CFR 761.79(b)(1)(iii) and therefore groundwater impacts are not a concern for this Site.

3.3 Qualitative Risk Assessment

3.3.1 Surface Water Flow

Surface water flow can be a mechanism that allows migration of contaminants if those contaminants are present in surface soils or other uncontrolled debris piles. Surface water flow at the SA-13 site is a mechanism that potentially allows lateral migration of contaminants from surficial soil into on-site drainageways and ultimately into the Hudson River. Surface water flow at the site occurs primarily during heavy precipitation events or spring snow melts as surface runoff. The majority of the Site is vegetated with the exception of the paved portion of the Second Fill Area and a small percentage of unpaved roads. During heavy

3 Sample Results and Risk Evaluation

precipitation events, surface water from the Second Fill Area flows south into the drainage ditches and swale along the southern border of the fill area that ultimately discharges to the Hudson River and accumulates in topographic low areas and/or infiltrates the ground. Although erosional features are not prevalent on site due to vegetative cover, PCB contamination identified in drainage network soil samples collected off-site show that migration of contaminants via surface water runoff occurs at the site, however the drainage network is part of a neighboring NYSDEC Superfund site and is beyond this scope. Installation of a soil cover as described in Section 4.1 will prevent exposure of existing surface soils to surface water flow and thus migration offsite into the surrounding drainage network. The Site Management Plan as described in Section 5 will require periodic inspection of the Site for signs of erosion or deterioration of the installed soil cover.

3.3.2 Infiltration

PCBs present in soils will likely remain absorbed to soil particles at the site. PCBs are relatively insoluble in water and are not expected to appreciably leach into groundwater or runoff, if present. Sampling has shown that PCBs have not leached into the groundwater below the site. The potential for leaching is further reduced by the presence of organic carbon in the soil because PCBs may bind to the carbon. Once bound, PCBs are much less likely to leach from the carbon, thus limiting the potential for transport to groundwater. Based on the analytical data, total organic carbon (TOC) concentrations in the samples ranged from 1% to 5% indicating that PCBs would most likely remain adsorbed to soil and not leach appreciably (E & E 2012 a,b,c). Additionally, since PCBs were not detected in groundwater; PCBs that have been present in site soils for greater than 35 years have not migrated to the groundwater monitoring well locations. This further demonstrates that it is unlikely for absorbed PCBs to leach from contaminated soils into groundwater under current or future conditions.

3.3.3 Human Health Risk Evaluation

As part of the RI (E & E 2012a, b, c), human health excess cancer risk and non-cancer hazard estimates were calculated for current and potential future users of the Site. E & E completed an additional PAR (see Appendix C) to further evaluate the human-health exposure and toxicity risks within the Second Fill Area where a soil cover will be installed to limit contact with remaining PCB contaminated soils. As all contaminated soils above the SCO will be removed and disposed of off-site in the Third Fill Area, no remaining human health risks are anticipated. PCB levels in soils at the site exceed applicable regulatory standards and guidance values. It is possible that trespassers, construction workers and maintenance workers may come in contact with residual PCB contamination present at the site under current conditions. The installation of the soil cover system will mitigate nearly all of these exposure pathways. The only complete exposure pathway that will remain after implementation of the site remedy is the potential for future maintenance workers to come in contact with residual PCB contamination while performing maintenance on the cover system. The risk associated with this exposure pathway will be reduced through the implementation of the Site Management

3 Sample Results and Risk Evaluation

Plan (SMP), health and safety precautions, and the use of personal protective equipment.

The toxicity assessment qualitatively characterized risk associated with the residual PCB contamination present at the site under current and future site conditions. In accordance with results of the toxicity assessment, total excess cancer risk and non-cancer estimates indicate residual PCB contamination does not pose a significant threat to potential receptors and are generally considered acceptable by the USEPA and NYSDEC/NYSDOH. The greatest risk posed by residual contamination at the site is associated with potential exposure of construction workers and trespassers to Aroclor 1248 contamination in surface soils under current site conditions. The excess cancer risk for this exposure pathway was estimated to be 1.10×10^{-6} . This risk estimate is within the acceptable range as determined by USEPA and NYSDEC/NYSDOH and does not take into account any personal protective equipment or health and safety precautions that will be implemented by construction workers at the time of construction. Installation of the soil cover and implementation of the SMP would mitigate this risk.

3.3.4 Ecological Risk Assessment

The Ecological Risk Assessment evaluated potential impacts of site-related contaminants on the ecological resources at the site. The assessment was limited to terrestrial and aquatic habitats that lie on the site and does not include the Hudson River, which lies adjacent to the site. The following information summarizes these results.

- Risks to plant communities from contaminants in soil at the site appear to be minimal.
- No chemicals exceeded the available soil-fauna screening benchmarks. Overall, these results suggest that risks to the soil invertebrate community at the site from chemicals in the soil are minimal.
- Based on food-chain modeling results, total PCBs in soil are likely to pose a risk to songbirds, such as the American robin, and small mammals, such as the short-tailed shrew, that feed extensively on soil invertebrates. Risks to carnivorous birds and mammals and other wildlife species with large home ranges appear to be minimal.
- Benthic invertebrates using the on-site ditch may be at risk from total PCBs based on exceedances of low-level effect benchmarks in one or more samples.

As part of the RI, the New York State Natural Heritage Program (NHP) was contacted for information on species and habitats of concern in the site vicinity. The NHP indicated that the below species have been observed within a 2-mile radius of the site.

3 Sample Results and Risk Evaluation

- Birds
 - Short-eared owl (*Asio flammeus*); New York State legal status: endangered
 - Northern harrier (*Circus cyaneus*); New York State legal status: threatened
- Plants
 - Small whorled pogonia (*Isotria medeoloides*); New York State legal status: endangered.
 - Hooker's orchid (*Platanthera hookeri*); New York State legal status: endangered.

These species were not observed at the site during RI site reconnaissance in December 2005; however, it is unlikely that the small whorled pogonia or Hooker's orchid would have been evident at this time of year. Consequently, the occurrence of these two plant species at the site cannot be definitively ruled out, however it is unlikely that they would be found at the Site, given that it is elevated and regularly mowed and both plant species prefer shaded, swampy habitats. Additionally, the NHP indicated that Dead Creek Valley, which lies approximately 1 mile east of the site, is considered a raptor winter conservation area.

Based on discussions with the U.S. Fish and Wildlife Services (USFWS), there are no federal threatened or endangered species associated with this site. Wintering bald eagles may migrate through the area but are not known to use the site.

Overall, the current levels of environmental contamination at the site pose only minimal risks to communities of terrestrial plants and soil invertebrates, but may threaten some wildlife species, amphibians, and benthic invertebrates.

4

Description of PCB Cleanup Approach

This hybrid self-implementing cleanup approach for PCBs at the Site has been prepared to be in accordance with the Self-Implementing requirements of 40 CFR 761.61(a) with some modifications consistent with 40 CFR 761.61(c). The cleanup plan is designed to be protective of human health and the environment. To meet this objective, areas of potential exposures to PCB-affected media at the site were identified based on known or anticipated uses of the site. Additionally, the proposed site remedies account for the restoration of the site to promote green remediation practices. In accordance with 40 CFR 761.61(a)(3)(ii) the Director of Land, Chemicals, and Redevelopment will be notified of any deviations from the cleanup approach as described in this Plan 14 days prior to implementation of the changes.

4.1 Second Fill Area

The Second Fill Area is owned by New York State. It currently consists of the asphalt parking lot built for use during dredging of the Hudson River and a vegetated area. Soils with PCB concentrations above 50 ppm will be excavated and disposed of off-site in accordance with 40 CFR 761.61(a)(5)(i)(B)(2)(iii). PCB concentrations up to 50 ppm will remain onsite covered by a clean soil cover as per 40 CFR 761.61(a)(4)(i)(B). The Second Fill Area will be managed for low occupancy use with a fence and signage in accordance with 40 CFR 761.61(a)(4)(i)(B)(2). An Environmental Notice (EN) will be filed for the property identifying the presence of the remaining PCB waste, the presence of the soil cover and fence, and restrict site use to low occupancy as per 40 CFR 761.61(a)(8). The EN will specify that the constructed soil cover and fence must be maintained in perpetuity in accordance with the Site Management Plan.

Within 60 days of completion of cleanup activities, NYSDEC will record the EN which will in perpetuity notify any potential purchaser of the property:

1. That the land, identified as the Second Fill Area parcel, has been used for PCB remediation waste disposal, and that the area is restricted to use as a low occupancy area as defined in 40 CFR 761.3;
2. Of the existence of the soil cover and fence, and the requirement to maintain the soil cover and fence; and

4 Description of PCB Cleanup Approach

3. The applicable cleanup levels left at the site, including under the soil cover.

NYSDEC will submit a signed certification that they have recorded the above notation in an EN to the EPA Director of Land, Chemicals, and Redevelopment division.

Based on the potential exposure pathways for PCBs in the Second Fill Area, the primary concern is the potential for exposure to PCBs through direct contact with contaminated soils. To remedy this risk, a clean soil cover will be installed in unpaved areas in accordance with 40 CFR 761.61(a)(4)(i)(B) and 761.61(a)(7) with some modifications to prevent direct contact with PCB-contaminated soils (see Figure 1-3 for extent of clean soil cover). An area of the Second Fill Area where PCB concentrations are greater than 50 ppm will be excavated and disposed of offsite (see Figure 1-3 for excavation area). The excavation will consist of a 10-ft by 10-ft area around sample point OM-62 to a depth of 3-ft. Post-excavation verification samples will then be collected at the bottom of the excavation and on each sidewall to confirm that remaining PCB concentrations in this area are below 50 ppm. Verification samples will be analyzed for PCBs using EPA SW-846 Method 8082A. If samples indicate that PCB concentrations remain above 50 ppm, additional excavation will be completed and verification samples collected until results indicate that remaining PCB concentrations are below 50 ppm.

Due to the lack of PCB migration from site soil into groundwater and in effort to incorporate green remediation best practices, the cover will consist of clean common fill and topsoil. In accordance with the ROD, the proposed cover will include a minimum of six inches of compacted clean soils and six inches of topsoil (total of 12-inches of cover material) to promote growth of selected vegetation. All imported materials will meet the requirements of 6 NYCRR 375 Table 375-6.8(b) for commercial use. These materials will not meet all of the permeability, sieve, liquid limit, and plasticity index parameters in 40 CFR 761.75(b)(1)(ii) through (v) as the analytical data from the RI demonstrated that it is unlikely for PCBs in site soils to leach from contaminated soils into groundwater and thus preventing infiltration of stormwater through the cover is not of concern. While the soil cover will not be constructed to prevent infiltration of water, it will function with minimal maintenance, promote drainage, and minimize erosion of the cover surface.

A portion of the Second Fill Area was previously covered with an asphalt parking lot during remedial dredging of the Hudson River as part of a support marina facility. This area will be maintained as is and is considered sufficient cover in accordance with NYSDEC Part 375 regulations for a cover system.

Work on the Second Fill Area will consist of three phases. In the first phase, soils with PCB concentrations above 50 ppm will be excavated and disposed of off-site at a TSCA regulated facility as described in Section 4.3. In the second phase, the existing surface will be graded to establish slopes for proper drainage prior to

4 Description of PCB Cleanup Approach

placement of cover materials. After that, a demarcation layer will be placed on top of the graded surface to provide a visual separation between the dredge spoils and the final cover layer. The clean common fill will then be placed and compacted to a minimum 90% of the maximum dry density. The topsoil layer will then be placed and the final cover surface will be hydroseeded.

The vegetative cover planned for the Second Fill Area is intended to protect the final cover surface from wind and water erosion as well as to reduce runoff and enhance evapotranspiration. Hydroseeding will be completed following the placement of topsoil at the appropriate time for successful germination and growth. The vegetative cover will consist of a wide variety of grasses specifically selected to provide protection of the soil surface against erosion, preserve the integrity of the soil cover, enhance evapotranspiration, provide stormwater management, provide ecological habitat for soil fauna, and improve the appearance of the final land surface.

Following completion of the site work in the Second Fill Area, a fence and signage including the M_L mark will be installed around the area to limit access in accordance with 40 CFR 761.61(a)(4)(i)(B)(2). The fence will be 6-ft tall chain link with a locked access gate.

This soil cover will limit direct contact with PCB contaminated soils for potential site users and wildlife and prevent PCB contaminated soils from migrating offsite due to erosion. An Environmental Notice will be in place to limit future site use and development to low occupancy (as per 40 CFR 761.61(a)(8)), describe the presence of the soil cover and fence, and prevent use of site groundwater for drinking water purposes without proper treatment approved by NYSDOH. A NYSDEC approved SMP will be implemented for the site that provides descriptions of the engineering and institutional controls, and prescribes maintenance, monitoring, and reporting requirements in accordance with NYSDEC DER-10. The SMP will also include a soil management plan to guide any disturbance of materials containing greater than one ppm of total PCBs.

4.2 Third Fill Area

The Third Fill Area is comprised of two privately owned residential parcels. One parcel includes an abandoned residential structure that is proposed to be demolished as part of the remedial cleanup, and the second parcel is zoned agricultural. Based on the site's current use and zoning designation, the reasonable anticipated future land use will remain unchanged.

4.2.1 Excavation

The Third Fill Area will be excavated to remove all PCB-contaminated soils above the residential SCO of one ppm as per the ROD. The horizontal and vertical limits of excavation were established based on the information provided in the RI report (E & E 2012a) and are shown on Figure 1-4. Results of soil samples collected during site investigations demonstrate that the soil does not contain PCBs greater than 50 ppm. Excavated soil will be direct-loaded into labeled roll-

4 Description of PCB Cleanup Approach

off containers for disposal as non-TSCA waste. Verification sampling will be performed to confirm that the SCO has been met.

4.2.2 Verification Sampling

After completion of soil excavation, verification samples will be collected in accordance with 40 CFR 761 Subpart O (with some modifications to spacing) and NYSDEC DER-10 with a grid spacing of 30-foot by 30-foot to verify that the SCO has been met. Both bottom of excavation and sidewall samples will be collected. At the outer limits of the excavation area, sidewalls samples will be collected every 30-feet at a minimum of one sample for every foot of excavation depth and analyzed for total PCBs. Verification samples will be analyzed for PCBs using EPA SW-846 Method 8082A. Post-excavation verification sample locations are shown on Figure 1-4.

If PCBs are detected in bottom verification samples above the SCO, material will be excavated an additional one foot in that grid and a second round of verification samples will be collected. Additional excavation will occur in one-foot increments until verification sampling confirms that the SCO has been met.

If sidewall verification sampling indicates the presence of PCBs above the SCO, the excavation area will be expanded by one 10-foot grid interval followed by additional verification sampling of the bottom of excavation and along the new perimeter. This process will continue until the perimeter verification samples have met the SCO.

Bulk PCB remediation waste will be stored at the site (if necessary) for less than 180 days in accordance with 40 CFR 761.65(c)(9). Excavated soils will be disposed of off-site at an approved landfill in accordance with 40 CFR 761.61(a)(5)(i)(B) and as described in Section 4.3.

4.2.3 Backfill

After excavation and verification sampling show PCB concentrations less than the SCO, the excavated area will be restored to the proposed grading surface with imported common fill and topsoil meeting the satisfactory soil criteria including analytical sampling to meet NYSDEC DER-10 residential standards.

4.2.4 Vegetation

Topsoil, seeding and planting will be completed in coordination with the property owners and NYSDEC Fish and Wildlife.

In addition to seeding, tree species will be installed within the Third Fill Area footprint to increase soil stability as well as provide riparian wildlife habitat. Plant species will be selected based on various factors, including direct observations of current vegetation structure and composition, historical cover types, soil characteristics, hydrology, exposure, aspect, bioengineering and soil stabilization capabilities, biological performance, biodiversity, and compatibility, or sustainability within the existing riparian plant communities.

4.3 Management of PCB-Affected Media

Excavated materials from the hotspot removal in the Second Fill Area are expected to contain PCB concentrations above 50 ppm and as such will be handled as TSCA hazardous waste. These materials will be disposed of at a TSCA regulated facility in accordance with 40 CFR 761.61(a)(5)(i)(B)(iii).

Excavated materials from the Third Fill Area are not expected to contain concentrations of PCBs greater than 50 ppm based on the historical sampling performed at the Third Fill Area, and as such it is anticipated that these materials will be disposed of at a non-TSCA facility.

Soil containing less than 50 ppm PCBs will be directly loaded into roll-off containers. Bulk PCB remediation wastes will be disposed of at an approved PCB disposal facility, a permitted municipal solid waste, or non-municipal non-hazardous waste facility under 40 CFR 761.61(a) or (c). Manifesting and recordkeeping requirements will be followed as per 40 CFR 761.207(e).

If during waste characterization sampling performed for disposal PCB concentrations are found above 50 ppm, the materials will be handled as TSCA hazardous waste and will be disposed of in a RCRA Section 3004 or 3006 permitted hazardous waste landfill. If disposal in a TSCA permitted facility is required, final disposal will likely be at Chemical Waste Management's facility near Emelle, Alabama.

In accordance with 40 CFR 761.208, a Uniform Hazardous Waste Manifest will accompany the TSCA hazardous waste. A signed copy of each manifest will be retained for at least 3 years (40 CFR 761.209(a)). For any PCB waste shipment that requires a manifest, NYSDEC or E & E (acting as the authorized agent for NYSDEC) will comply with the following:

- Sign the manifest certification by hand
- Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest
- Retain one copy and provide the copy to NYSDEC for its records
- Give the transporter the remaining copies of the manifest that will accompany the shipment of TSCA waste
- Collect completed manifests and disposal certificates from disposal facility

Liquid wastes including free liquids, decontamination fluids, and precipitation that accumulates in the excavation areas will be collected in drums, characterized, and disposed of offsite at a properly permitted facility as either a TSCA or non-TSCA waste.

4.4 Health and Safety

4.4.1 Health and Safety Plan

A Site-specific HASP will be prepared for the work which will comply with 29 CFR 1910.120, the Hazardous Waste Operations and Emergency Response regulations. All subcontractors will be required to prepare and follow their own HASP that is commensurate with the work and activities. The HASP will include specifications for appropriate PPE, site controls, and medical surveillance to ensure that workers are not exposed to contaminants of concern above applicable OSHA thresholds.

The primary anticipated hazards include potential worker and public exposure to construction hazards and potential chemical exposure. Worker and public safety hazards will include those typically found at a construction site using heavy equipment. Potential chemical exposures are anticipated to derive from inhalation of particulates containing PCBs, and direct dermal contact with soil containing PCBs. The following engineering controls will be established to minimize these exposures:

- Excavation surfaces will be maintained damp to minimize dust generation
- Continuous air monitoring will be conducted while work is being performed to reliably measure airborne contaminants, to delineate areas where respiratory protection is required, and to verify that control measures are adequate
- Work zones will be established, including exclusion zones, contaminant reduction zones, and support zones, and workers will wear personal protective equipment as specified in the HASP.

4.4.2 Community Air Monitoring Plan

A site-specific CAMP will be prepared for the work outline in this plan. The CAMP will identify measures and/or actions to ensure that the public living and working near the Site as well as employees or visitors to the site are protected from exposure to site contaminants during remedial activities. Continuous particulate (dust) monitoring will be conducted during any remedial activities where PCB-impacted materials are disturbed to ensure that particulate matter is below OSHA exposure limits for remedial workers. Additionally, a community air monitoring program for particulates will be implemented during remedial work to ensure that off-site exposure of PCB-impacted materials does not occur.

4.4.3 Waste Characterization and Profiling

PCB remediation waste will be characterized for offsite disposal based on its as-found PCB concentrations. Where existing in-situ characterization data has already been collected during previous investigations, it will be used to profile PCB remediation waste for disposal. Additional waste characterization samples will be collected and analyzed for other site constituents of concern as needed to meet profile requirements of the designated waste disposal facility.

4.5 Decontamination

Equipment used during remedial work on the Second and Third Fill Areas will be decontaminated in accordance with 40 CFR 761.79(c)(2)(ii). All moveable equipment, tools, and sampling equipment that may have come in contact with PCB contaminated materials will be decontaminated using a double wash/rinse as defined in Subpart S of 40 CFR 761. All decontamination waters will be containerized onsite and sampled to determine appropriate disposal.

4.6 Environmental Notice

After completion of the remedial activities and installation of engineering controls, an Environmental Notice will be recorded for the Second Fill Area that will meet the requirements of 40 CFR 761.61(a)(8) and will in perpetuity notify any potential purchaser of the property:

- That the land has been restricted to low occupancy use (as defined in 40 CFR 761.3);
- That the land has been used for PCB remediation waste disposal pursuant to a cleanup plan approved under 40 CFR 761.61(a) and 40 CFR 761.61(c);
- Of the soil cleanup level used for PCBs in soils at the Site;
- Of the existence of the soil cover and fencing installed to prevent exposure to the PCB-containing materials remaining on site;
- Restrict the use of groundwater as a source of potable or process water (due to the presence of metals contamination above applicable screening criteria) unless necessary water quality treatment has been completed as determined by the NYSDOH or County DOH;
- Of the applicable PCB concentrations left at the Site under the soil cover, including detailed information about the concentration and physical location of the materials; and
- Of the long-term monitoring and maintenance requirements at the Site, including the site management plan (SMP) to be implemented.

No Environmental Notice/Easement will be required for the Third Fill Area as this portion of the site will be remediated to the residential SCO.

Any proposed redevelopment would be subject to the NYSDEC's Change of Use requirements and 40 CFR 761 and would be limited to instances where construction workers breach the soil cover during redevelopment pursuant to requirements of a soil management plan. A SMP will be implemented for the site that provides descriptions of the engineering and institutional controls, and prescribes maintenance, monitoring, and reporting requirements in accordance with the NYSDEC DER-10

4.7 Green and Sustainable Remediation

4 Description of PCB Cleanup Approach

The selected remedy for this Site will incorporate Green Remediation principles and techniques during design and construction in accordance with NYSDEC DER-31 (NYSDEC 2011) and as required per the ROD. Pursuant to DER-31, SiteWise version 3.2 was utilized during the remedial design to quantitatively evaluate the environmental footprint of the selected remedy. A thorough evaluation of Best Management Practice (BMP) was also performed to identify opportunities to implement green and sustainable techniques throughout construction and to improve the overall sustainability of the design. Green and sustainable remediation components incorporated into the remedial design include the following: a thicker, two-foot cover system to enhance biodiversity and ecological habitat; a pervious cover in lieu of a conventional clay cover to promote infiltration and preserve habitat; and a vegetative cover to reduce erosion and runoff as well as promote stormwater drainage and evapotranspiration. These design elements will also reduce the frequency of grass mowing, ultimately reducing greenhouse gas emissions generated by the Site. Additionally, by installing a cover system in lieu of excavation and removal of PCB contamination from all areas, waste generation and emissions associated with trucking material to an off-site waste facility are avoided.

A climate vulnerability assessment was performed to evaluate the remedy's capacity to adapt to climate change and ensure long-term effectiveness. Resources such as New York State Energy Research and Development Authority ClimAID projections were utilized to evaluate the Site's vulnerability to increased extreme storm frequency and precipitation. Results of this assessment indicated the design incorporates sufficient measures to withstand increased precipitation and frequency of extreme storm events provided final grades are constructed in accordance with the design and the vegetative covering is maintained per the SMP.

During remedial construction, the selected contractor will be required to conform with the requirements of DER-31 and meet the Green Remediation metrics and environmental performance requirements set forth in the remedial contract. Per design specification Section 01 89 29 – Green Remediation Practices, the contractor is required to maintain tracking sheets to monitor quantities of materials brought to the site, waste generation, recycled and bio-based materials, solid waste disposal, energy usage, water usage, emissions, and land/ecosystem quantities disturbed. Following the completion of restoration work, the tracked metrics will be applied to SiteWise to quantify actual environmental impact of the project. Select BMPs will also be implemented throughout construction to the extent possible, including sourcing imported materials and equipment rentals from local suppliers, renting newer equipment with emission control technology (specifically for diesel-powered vehicles), performing routine maintenance of vehicles, and avoiding idling of vehicles and equipment.

5

Monitoring and Maintenance of Engineering Controls

5.1 Site Management Plan

A detailed SMP will be developed for the institutional and engineering controls used to prevent direct exposure to PCB-contaminated materials in the Second Fill Area. This plan will be developed in accordance with the requirements of NYSDEC DER-10 and 40 CFR 761.61, and will include the following general components:

- Visual inspection: The engineering controls will be inspected at the frequency described in the SMP. The inspection will focus on exposed surfaces and physical barriers, and will identify any visual signs of wear, damage, or other evidence of threats to integrity of the engineering controls.
- Long-term Groundwater Monitoring (LTGM): A LTGM program will be implemented at the site in accordance with NYSDEC DER-10.
- Corrective measures: If inspections indicate any deficiency in the engineering controls, corrective measures will be initiated within 72 hours to address the deficiency.
- Documentation and reporting: Details of visual inspections will be documented as they are performed. Any deficiencies discovered and corrective measures taken will also be documented. This information will be compiled into an annual report that will be maintained by NYSDEC.

6

References

- Ecology and Environment Engineering, P.C. (E & E). 2005. Final Technical Work Plan for the Remedial Investigation and Feasibility Study at the Old Moreau Dredge Spoil Site, Site No. 5-46-040, Moreau, New York. 2005.
- Ecology and Environment Engineering, P.C. (E & E). 2012a. Remedial Investigation Report for the Special Area 13 Dredge Spoil Disposal Area. February 2012.
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- Ecology and Environment Engineering, P.C. (E & E). 2012g. Final IIWA Report Submittal – Morrison Property. July 2012.
- Ecology and Environment Engineering, P.C. (E & E). 2012h. Additional Site Investigation Report for Moreau Dredge Spoil Disposal Site. February 2012.
- Malcom Pirnie, Inc. (MPI). 1992. Hudson River PCB Project, Dredge Spoil Sites Investigation. December 1992.

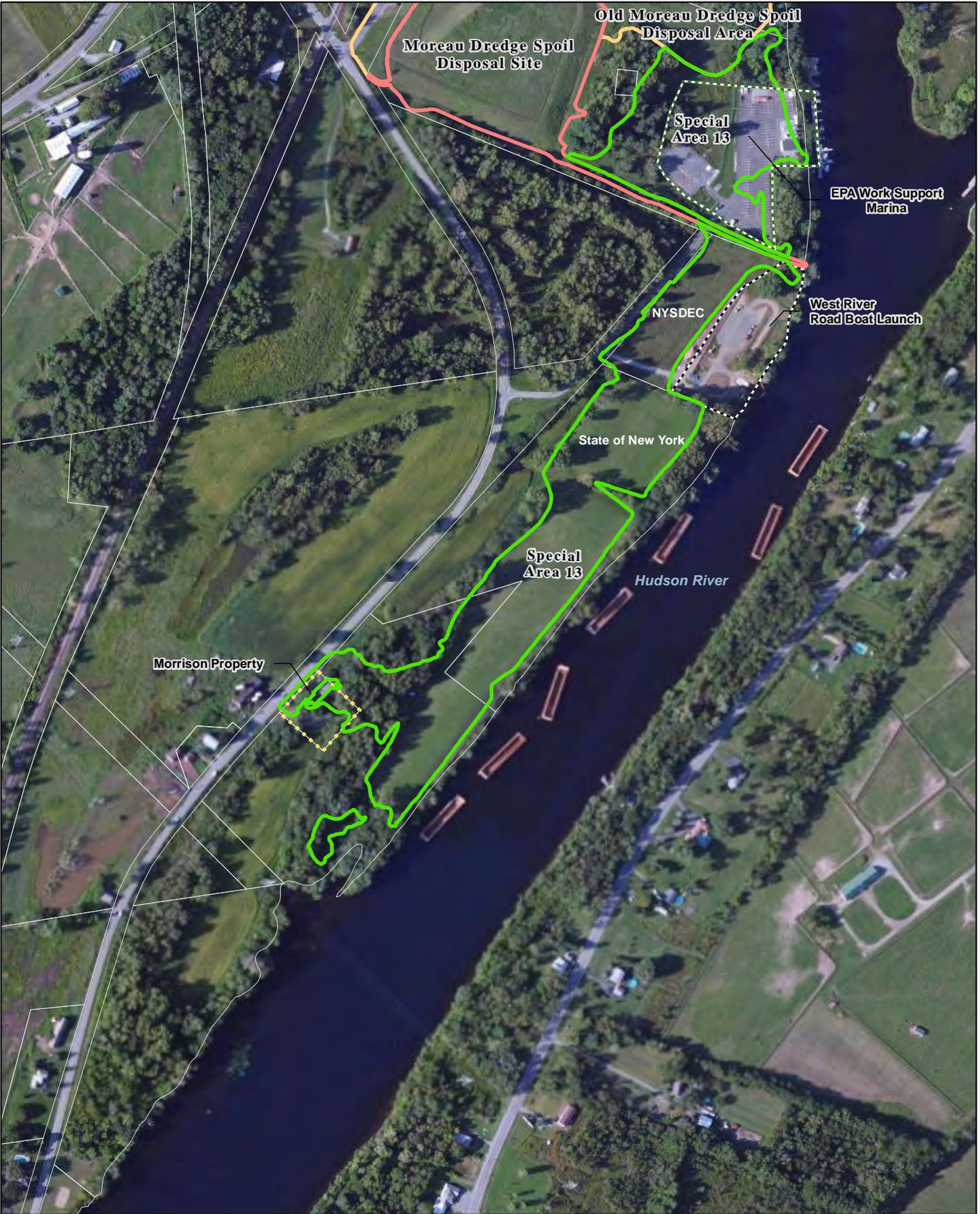
New York State Department of Environmental Conservation (NYSDEC). 2003. *Preliminary Sampling Project, Old Moreau Dredge Spoil Area*, prepared by the Division of Environmental Remediation, Albany, New York.

NYSDEC. 2006. Remedial Program Soil Cleanup Objectives, 6 NYCRR Sub part 375-6.8, December 14, 2006

NYSDEC. 2010. DER-10 – Technical Guidance for Site Investigation and Remediation.

NYSDEC. 2011. DER-31 – Green Remediation

FIGURES



- Morrison Property
- West River Road Boat Launch
- EPA Work Support Marina
- Parcel Boundary
- Old Moreau Dredge Spoil Disposal Area
- Moreau Dredge Spoil Disposal Site
- Special Area 13 Dredge Spoil Disposal Area

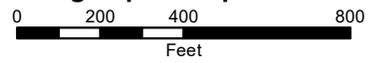
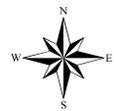
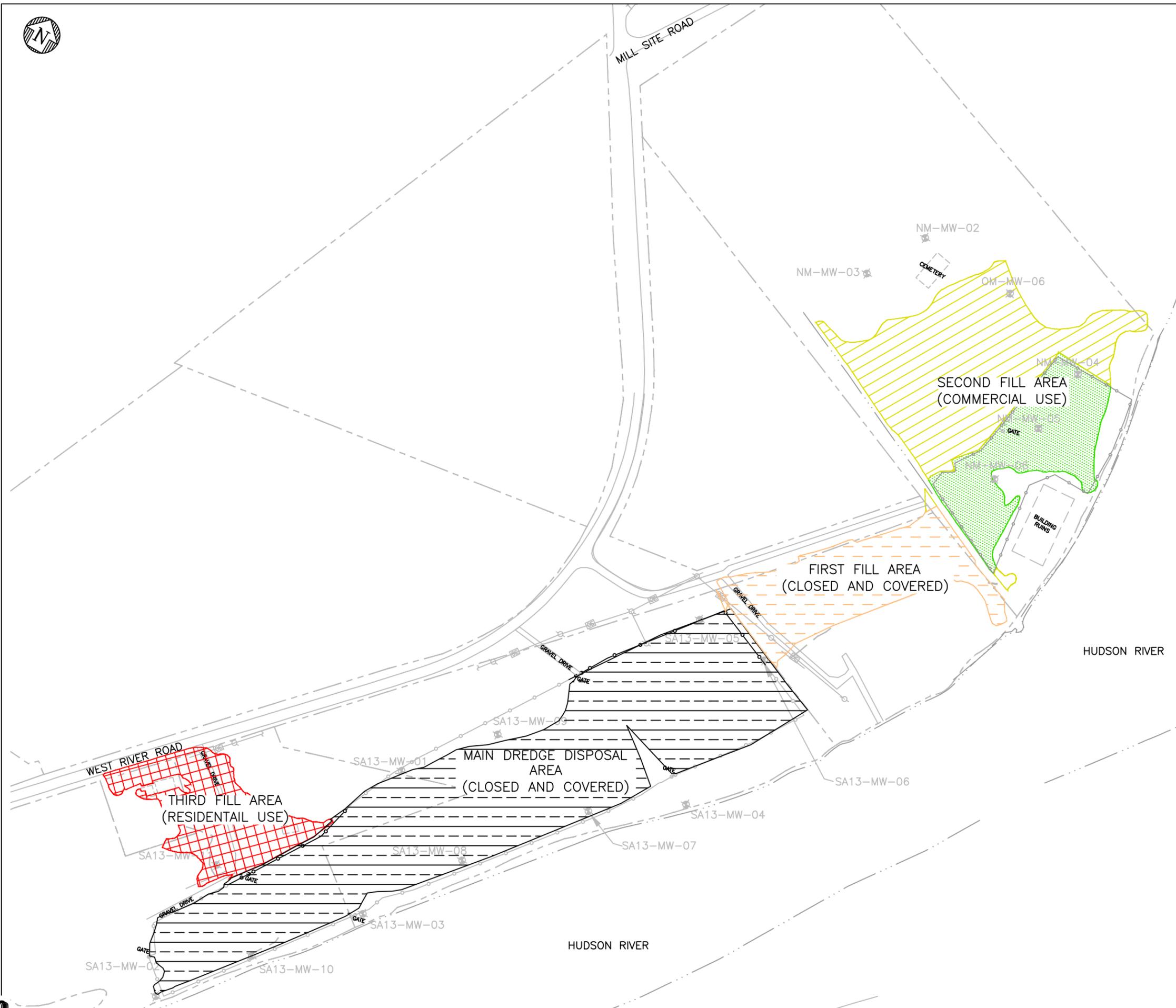


Figure 1-1
Site Location Map
Special Area 13
Dredge Spoil Disposal Area



LEGEND:

	APPROXIMATE EDGE OF WATER BOUNDARY
	APPROXIMATE LOCATION OF PROPERTY BOUNDARY (SEE NOTE 2)
	EXISTING FENCE
	APPROXIMATE LOCATION OF EXISTING STRUCTURE
	EXISTING MONITORING WELL
SA13-MW-04	EXISTING MONITORING WELL
	EXISTING OVERHEAD ELECTRIC
	EXISTING POWER POLE
	EXTENT OF CAPPED LANDFILL CELL
	EXTENT OF SOIL COVERED SPOILS; FIRST FILL AREA
	EXTENT OF ASPHALT COVERED SPOILS; SECOND FILL AREA
	EXTENT OF UNCOVERED SPOILS; SECOND FILL AREA
	EXTENT OF UNCOVERED SPOILS; THIRD FILL AREA

NOTES:

1. SITE FEATURE LOCATIONS BASED ON 2003 & 2012 AERIAL PHOTOGRAPHY.
2. PROPERTY LINES ARE APPROXIMATE IN LOCATION AND ARE BASED ON SARATOGA COUNTY PARCEL DATA, 2002.
3. EXISTING UTILITIES AND POWER POLES TAKEN FROM LU ENGINEERS DRAWING 10623-08CADD10623-08 SA 13.DWG, DATED 3/16/06.

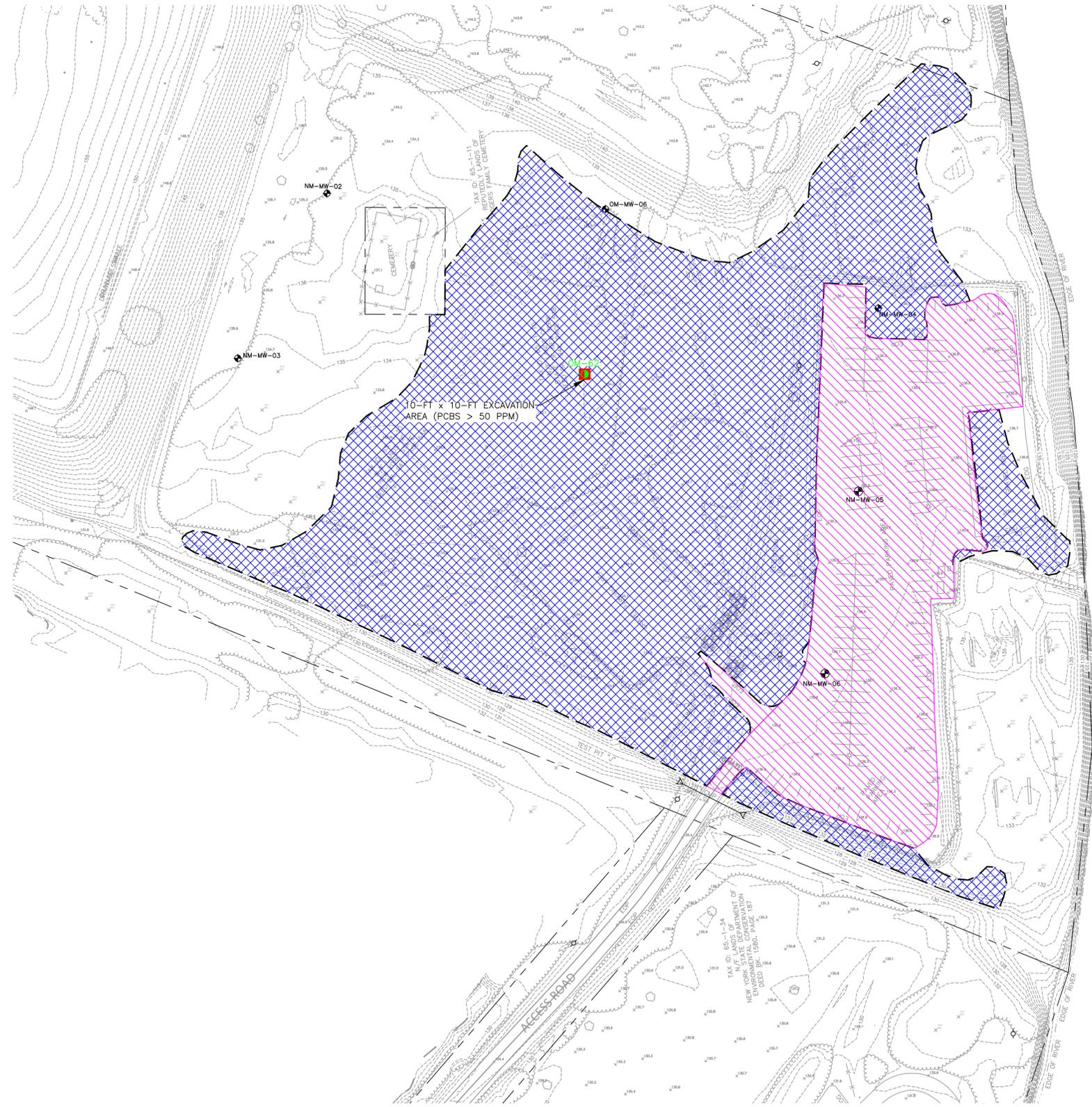
APPROXIMATE SCALE IN FEET



FIGURE 1-2 EXTENT OF CONTAMINATION SPECIAL AREA 13 MOREAU, NEW YORK

LEGEND

-  COVER BOUNDARY
-  EXISTING ASPHALT AREA
-  CLEAN SOIL COVER AREA
-  OM-62-01 EXISTING BOREHOLE LOCATION
-  HOTSPOT REMOVAL AREA

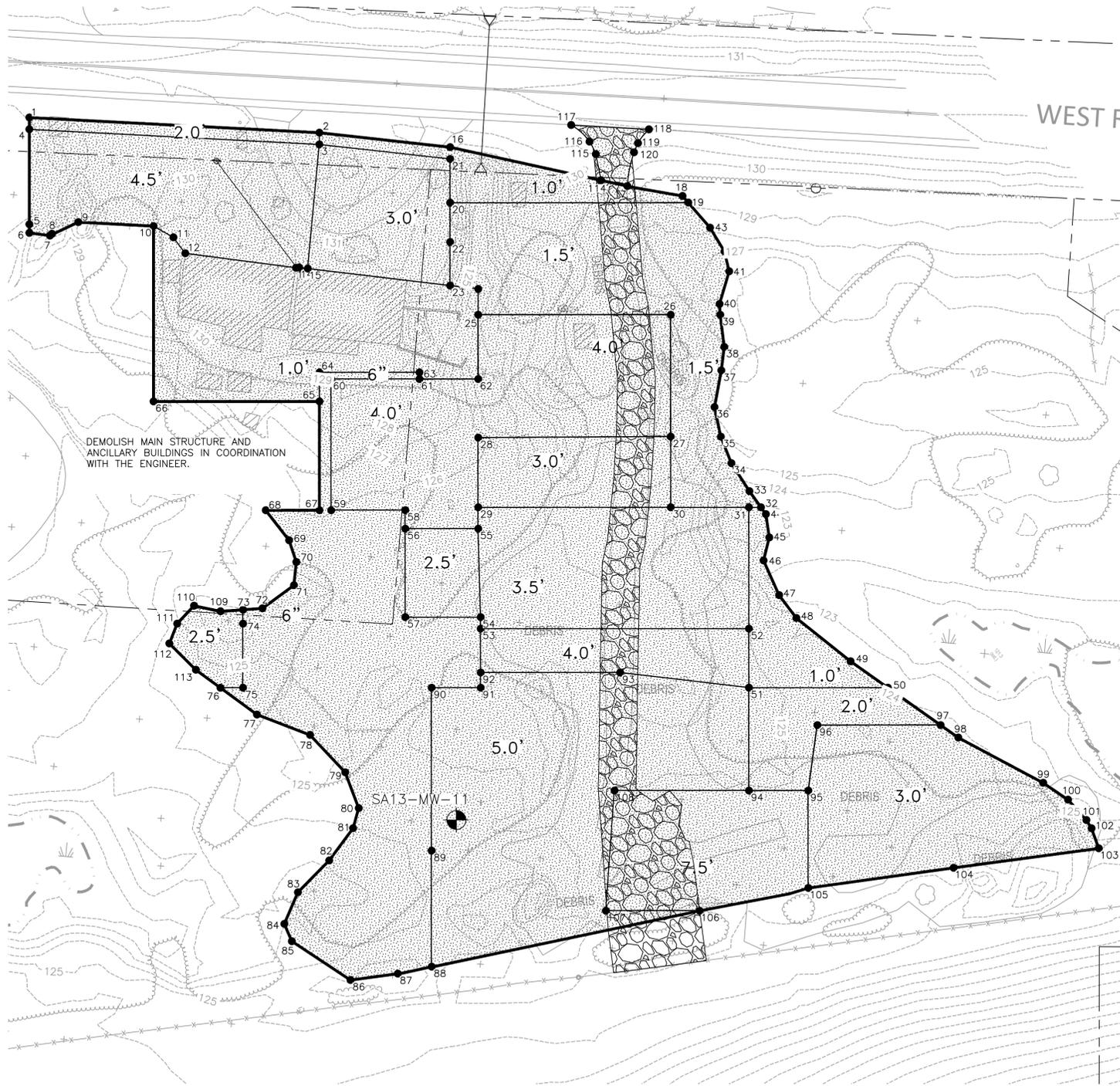


EXISTING SITE PLAN - SECOND FILL AREA

SCALE: 1"=60'-0"

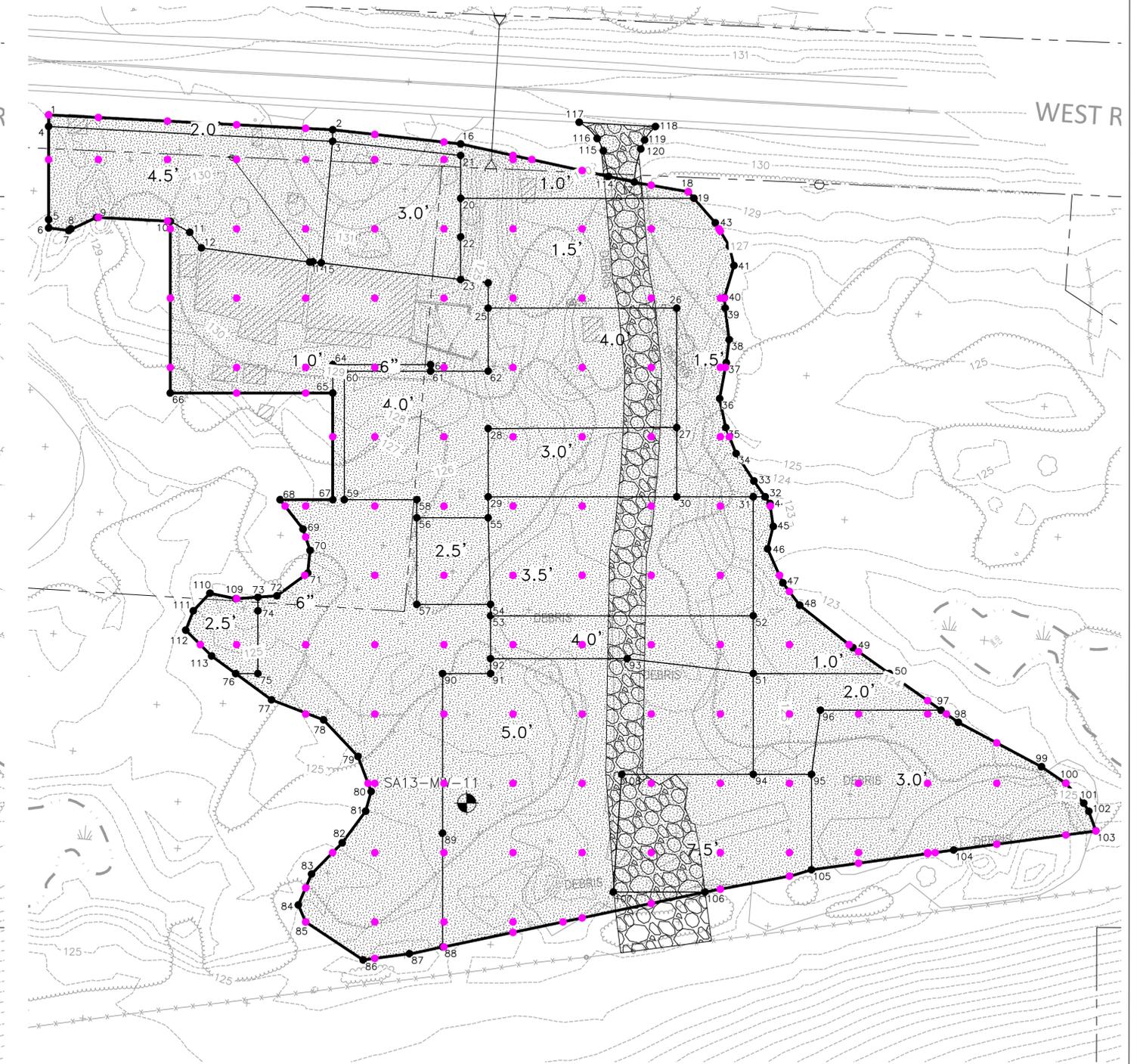


FIGURE 1-3 SECOND FILL AREA COVER
SPECIAL AREA 13
MOREAU, NEW YORK



EXCAVATION PLAN - THIRD FILL AREA

SCALE: 1"=30'-0"



**EXCAVATION PLAN - THIRD FILL AREA
POST EXCAVATION SAMPLE (30' GRID)**

SCALE: 1"=30'-0"

LEGEND

- 2.0' EXCAVATION AREA WITH EXCAVATION DEPTH
- 1' COORDINATE POINT LOCATION
- POST EXCAVATION SAMPLE



**FIGURE 1-4 THIRD FILL AREA EXCAVATION AREA
SPECIAL AREA 13
MOREAU, NEW YORK**

LEGEND

NM-SS-18 ● SURFACE SOIL LOCATION

S-27
0.81 ● SURFACE SOIL LOCATION
(NYSDEC 1992)



NOTE

1. ORTHO IMAGERY SHOWN IS FROM SARATOGA COUNTY (2019).
2. BOLD AND SHADED VALUES EXCEED SOIL CLEANUP OBJECTIVE OF 1 MG/KG, WHILE BOLD ITALICIZED SCREENING TEST VALUES MAY EXCEED THE SOIL CLEANUP OBJECTIVE (NYSDEC PART 375.6-8 RESIDENTIAL USE).

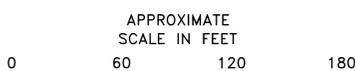
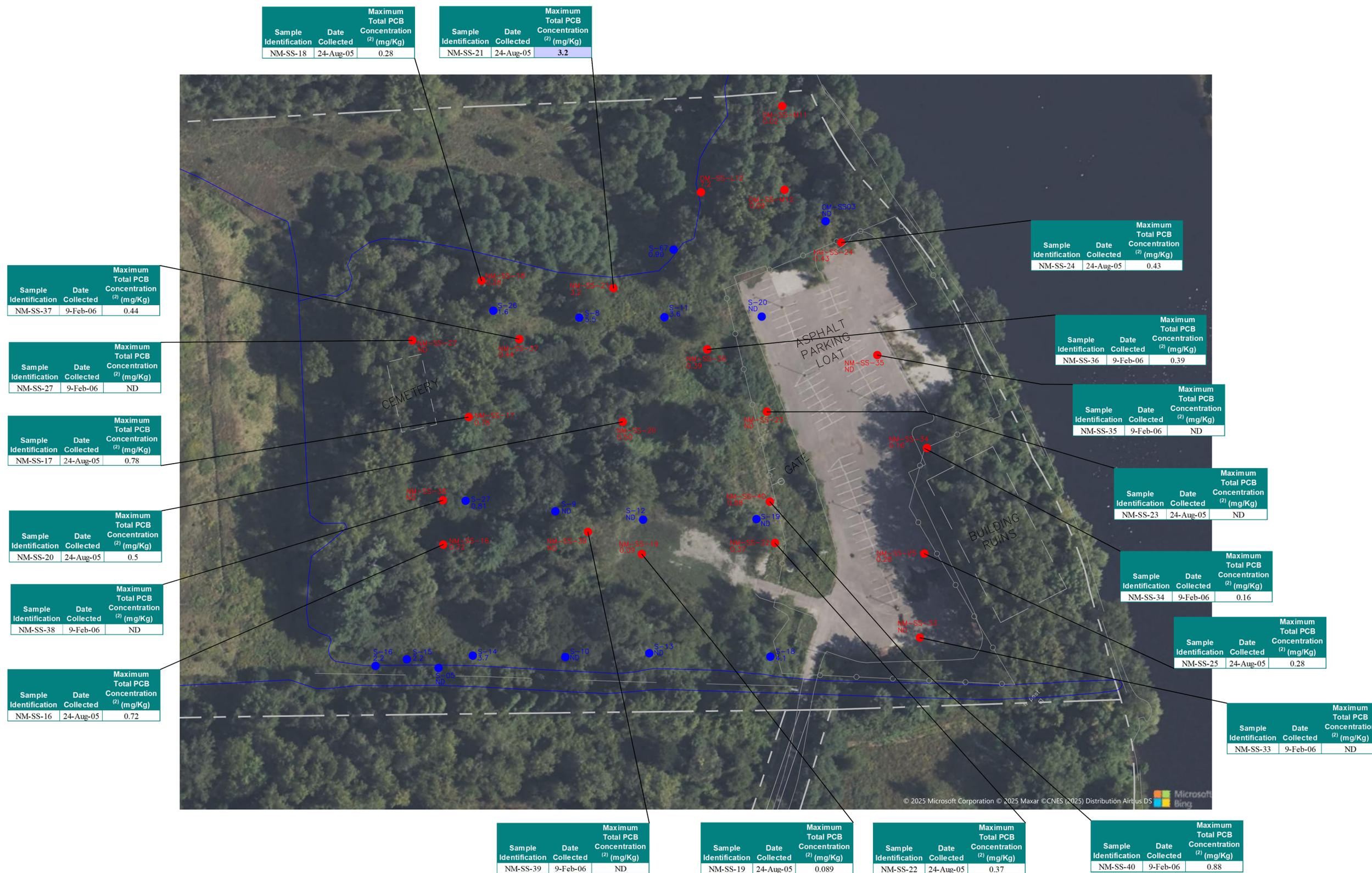


FIGURE 3-1 SURFACE SOIL LOCATIONS AND RESULTS SPECIAL AREA 13 – SECOND FILL AREA MOREAU, NEW YORK



NOTE

1. ORTHO IMAGERY SHOWN IS FROM SARATOGA COUNTY (2019).
2. BOLD AND SHADED VALUES EXCEED SOIL CLEANUP OBJECTIVE OF 1 MG/KG, WHILE BOLD ITALICIZED SCREENING TEST VALUES MAY EXCEED THE SOIL CLEANUP OBJECTIVE (NYSDEC PART 375.6-8 RESIDENTIAL USE).

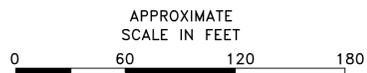
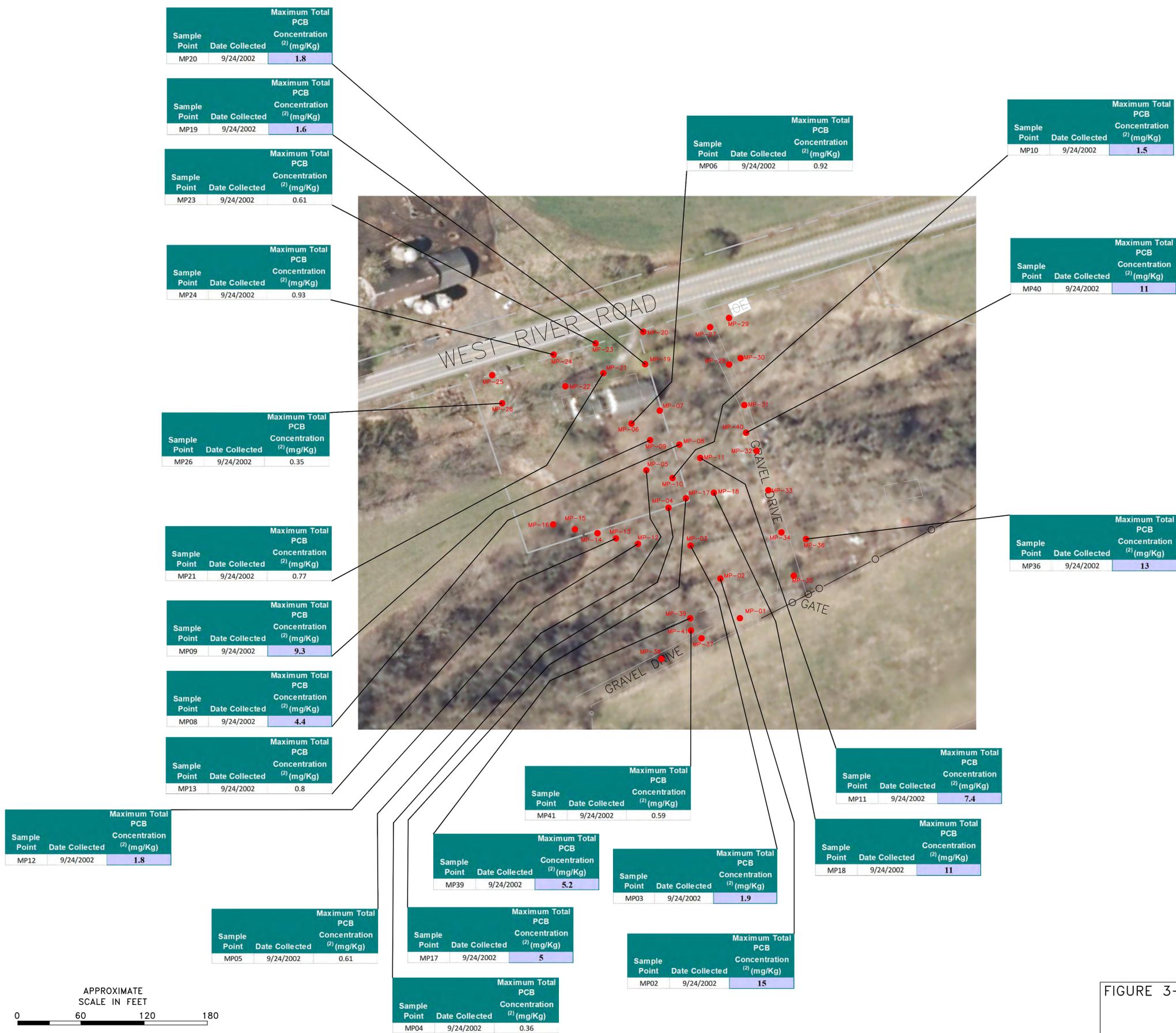


FIGURE 3-2 SURFACE SOIL LOCATIONS AND RESULTS
 SPECIAL AREA 13 - THIRD FILL AREA
 MOREAU, NEW YORK

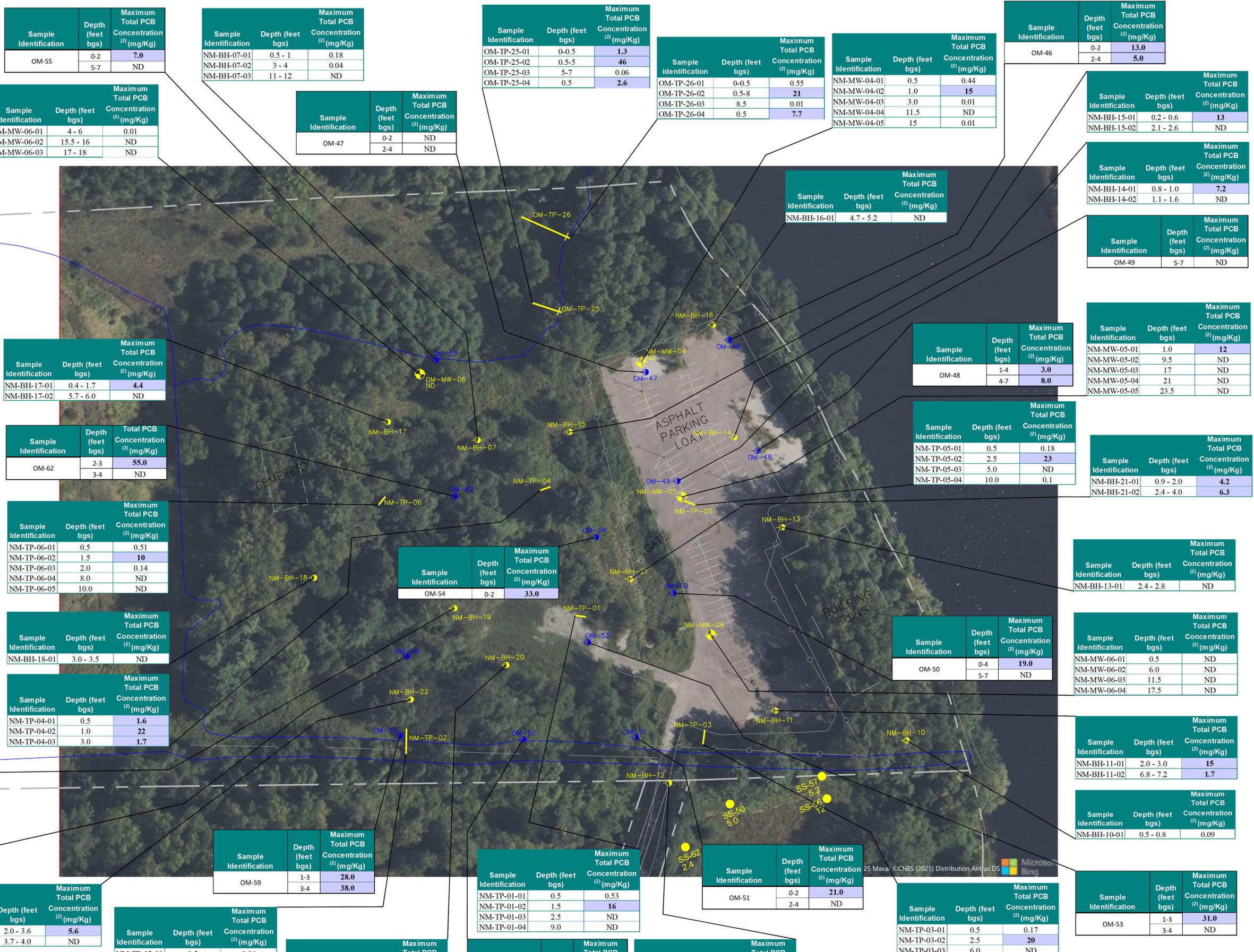
LEGEND

- OM-55-0 BOREHOLE LOCATION (NYSDEC 1992)
- NM-BH-07-0 BOREHOLE LOCATION
- OM-TP-25 TEST PIT LOCATION
- OM-MW-06 MONITORING WELL LOCATION
- ND MONITORING WELL LOCATION



NOTE

1. ORTHO IMAGERY SHOWN IS FROM SARATOGA COUNTY (2019).
2. BOLD AND SHADED VALUES EXCEED SOIL CLEANUP OBJECTIVE OF 1 MG/KG, WHILE BOLD ITALICIZED SCREENING TEST VALUES MAY EXCEED THE SOIL CLEANUP OBJECTIVE (NYSDEC PART 375.6-8 RESIDENTIAL USE).



Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
OM-55	0-2	7.0
	5-7	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-BH-07-01	0.5 - 1	0.18
NM-BH-07-02	3 - 4	0.04
NM-BH-07-03	11 - 12	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
OM-TP-25-01	0-0.5	1.3
OM-TP-25-02	0.5-5	46
OM-TP-25-03	5-7	0.06
OM-TP-25-04	0.5	2.6

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
OM-TP-26-01	0-0.5	0.55
OM-TP-26-02	0.5-8	21
OM-TP-26-03	8.5	0.01
OM-TP-26-04	0.5	7.7

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-MW-04-01	0.5	0.44
NM-MW-04-02	1.0	15
NM-MW-04-03	3.0	0.01
NM-MW-04-04	11.5	ND
NM-MW-04-05	15	0.01

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
OM-46	0-2	13.0
	2-4	5.0

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-BH-15-01	0.2 - 0.6	13
NM-BH-15-02	2.1 - 2.6	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-BH-14-01	0.8 - 1.0	7.2
NM-BH-14-02	1.1 - 1.6	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
OM-49	5-7	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-MW-05-01	1.0	12
NM-MW-05-02	9.5	ND
NM-MW-05-03	17	ND
NM-MW-05-04	21	ND
NM-MW-05-05	23.5	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
OM-48	1-4	3.0
	4-7	8.0

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-BH-21-01	0.9 - 2.0	4.2
NM-BH-21-02	2.4 - 4.0	6.3

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-TP-05-01	0.5	0.18
NM-TP-05-02	2.5	23
NM-TP-05-03	5.0	ND
NM-TP-05-04	10.0	0.1

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-BH-17-01	0.4 - 1.7	4.4
NM-BH-17-02	5.7 - 6.0	ND

Sample Identification	Depth (feet bgs)	Total PCB Concentration ⁽²⁾ (mg/Kg)
OM-62	2-3	55.0
	3-4	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-TP-06-01	0.5	0.51
NM-TP-06-02	1.5	10
NM-TP-06-03	2.0	0.14
NM-TP-06-04	8.0	ND
NM-TP-06-05	10.0	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
OM-54	0-2	33.0

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-BH-18-01	3.0 - 3.5	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
OM-50	0-4	19.0
	5-7	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-BH-13-01	2.4 - 2.8	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-MW-06-01	0.5	ND
NM-MW-06-02	6.0	ND
NM-MW-06-03	11.5	ND
NM-MW-06-04	17.5	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-TP-04-01	0.5	1.6
NM-TP-04-02	1.0	22
NM-TP-04-03	3.0	1.7

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-BH-11-01	2.0 - 3.0	15
NM-BH-11-02	6.8 - 7.2	1.7

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-BH-19-01	1.0 - 2.0	11
NM-BH-19-02	2.6 - 3.1	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
OM-59	1-3	28.0
	3-4	38.0

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-TP-01-01	0.5	0.53
NM-TP-01-02	1.5	16
NM-TP-01-03	2.5	ND
NM-TP-01-04	9.0	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
OM-51	0-2	21.0
	2-4	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-TP-03-01	0.5	0.17
NM-TP-03-02	2.5	20
NM-TP-03-03	6.0	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-BH-10-01	0.5 - 0.8	0.09

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
OM-56	0.5-3.75	50.0
	5-7	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-BH-22-01	2.0 - 3.6	5.6
NM-BH-22-02	3.7 - 4.0	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-TP-02-01	0.5	0.84
NM-TP-02-02	2.0	16
NM-TP-02-03	3.0	0.037
NM-TP-02-04	8.0	ND
NM-TP-02-05	1.0	13

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-BH-20-01	2.0 - 3.5	9.8
NM-BH-20-02	3.7 - 4.0	1.6

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
OM-52	0-2	41.0
	2-4	ND

Sample Identification	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-BH-12-01	0.3 - 1.0	1.9
NM-BH-12-02	2.3 - 2.6	ND

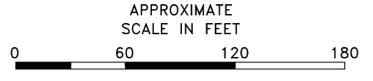


FIGURE 3-3 BOREHOLES, MONITORING WELLS, AND TEST PIT LOCATIONS AND RESULTS SPECIAL AREA 13 - SECOND FILL AREA MOREAU, NEW YORK

LEGEND
 MP-25 ● BOREHOLE LOCATION
 BOREHOLE LOCATION –
 ECOLOGY AND
 ENVIRONMENT ENGINEERING
 AND GEOLOGY P.C. (2021)
 SA13-GP04 ●



NOTE

1. ORTHO IMAGERY SHOWN IS FROM SARATOGA COUNTY (2019).
2. BOLD AND SHADED VALUES EXCEED SOIL CLEANUP OBJECTIVE OF 1 MG/KG, WHILE BOLD ITALICIZED SCREENING TEST VALUES MAY EXCEED THE SOIL CLEANUP OBJECTIVE (NYSDEC PART 375.6-8 RESIDENTIAL USE).

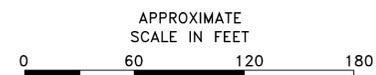
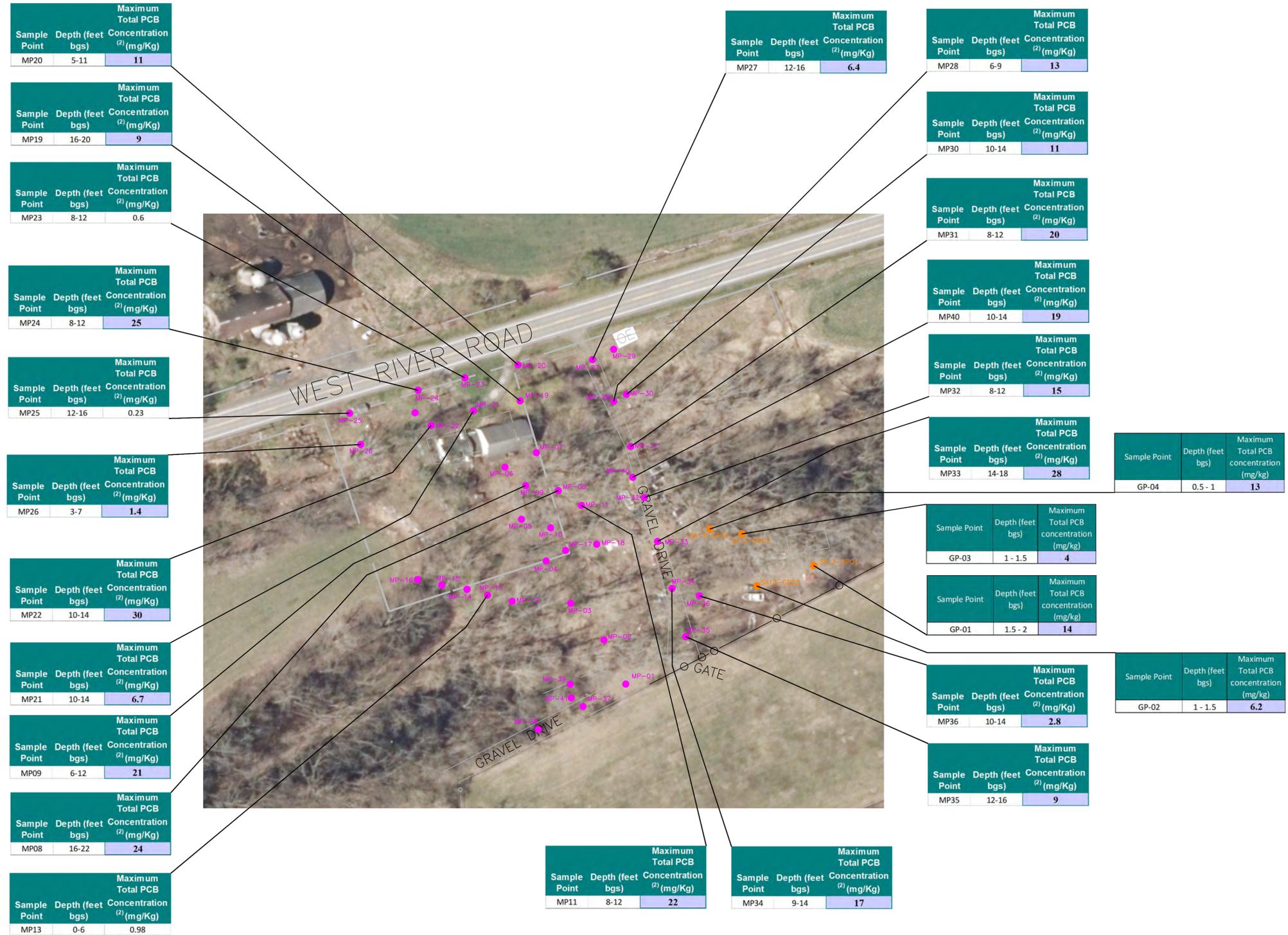


FIGURE 3-4 BOREHOLE LOCATIONS AND RESULTS SPECIAL AREA 13 – THIRD FILL AREA MOREAU, NEW YORK

TABLES

**Table 3-1 Summary of Total PCB Concentrations in Surface Soil Samples,
Second Fill Area**

Sample Identification	Date Collected	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-SS-16	24-Aug-05	0.72
NM-SS-17	24-Aug-05	0.78
NM-SS-18	24-Aug-05	0.28
NM-SS-19	24-Aug-05	0.089
NM-SS-20	24-Aug-05	0.5
NM-SS-21	24-Aug-05	3.2
NM-SS-22	24-Aug-05	0.37
NM-SS-23	24-Aug-05	ND
NM-SS-24	24-Aug-05	0.43
NM-SS-25	24-Aug-05	0.28
NM-SS-27	9-Feb-06	ND
NM-SS-33	9-Feb-06	ND
NM-SS-34	9-Feb-06	0.16
NM-SS-35	9-Feb-06	ND
NM-SS-36	9-Feb-06	0.39
NM-SS-37	9-Feb-06	0.44
NM-SS-38	9-Feb-06	ND
NM-SS-39	9-Feb-06	ND
NM-SS-40	9-Feb-06	0.88
OM-SS-03	26-Aug-05	0.042
OM-SS-L12	17-Aug-05	7.2
OM-SS-M11	17-Aug-05	0.015
OM-SS-M12	17-Aug-05	0.091
S-05	2002	ND
S-08	2002	5.5
S-09	2002	ND
S-10	2002	ND
S-11	2002	3.6
S-12	2002	ND
S-13	2002	ND
S-14	2002	3.7
S-15	2002	2.2
S-16	2002	2.2
S-18	2002	4.1
S-19	2002	ND
S-20	2002	ND
S-26	2002	1.6
S-27	2002	0.81
S-67	2002	0.9

⁽¹⁾ Field duplicate samples listed in parentheses are from confirmation samples.

⁽²⁾ Bold and shaded values exceed soil cleanup objective of 1 mg/Kg, while

⁽³⁾ 2002 samples collected by NYSDEC

Key:

mg/Kg = Milligrams/Kilogram.

ND = All Aroclors were non-detect.

U = Not detected at the reporting limit shown.

UJ = Not detected at the estimated reporting limit shown.

Blank spaces indicate PCBs were not analyzed for confirmation or field duplicate samples.

**Table 3-2 Summary of Total PCB Concentrations in Surface Soil Samples,
Third Fill Area**

Sample Identification	Date Collected	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
MP-02	24-Sep-02	15
MP-03	24-Sep-02	1.9
MP-04	24-Sep-02	0.36 J
MP-05	24-Sep-02	0.61
MP-06	24-Sep-02	0.92
MP-08	24-Sep-02	4.4
MP-09	24-Sep-02	9.3
MP-10	24-Sep-02	1.5
MP-11	24-Sep-02	7.4
MP-12	24-Sep-02	1.8
MP-13	24-Sep-02	0.8
MP-17	24-Sep-02	5
MP-18	24-Sep-02	11
MP-19	24-Sep-02	1.6
MP-20	24-Sep-02	1.8
MP-21	24-Sep-02	0.77
MP-23	24-Sep-02	0.61 J
MP-24	24-Sep-02	0.93
MP-26	24-Sep-02	0.35 J
MP-36	24-Sep-02	13
MP-39	24-Sep-02	5.2
MP-40	24-Sep-02	11
MP-41	24-Sep-02	0.59

⁽¹⁾ Field duplicate samples listed in parentheses are from confirmation samples.

⁽²⁾ Bold and shaded values exceed soil cleanup objective of 1

Key:

mg/Kg = Milligrams/Kilogram.

ND = All Aroclors were non-detect.

U = Not detected at the reporting limit shown.

UJ = Not detected at the estimated reporting limit shown.

Blank spaces indicate PCBs were not analyzed for confirmation or field duplicate samples.

**Table 3-3 Summary of Total PCB Concentrations in Borehole Subsurface Soil Samples,
Second Fill Area**

Sample Identification	Date Collected	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-BH-07-01	21-Sep-05	0.5 - 1	0.18
NM-BH-07-02	21-Sep-05	3 - 4	0.04
NM-BH-07-03	21-Sep-05	11 - 12	ND
NM-BH-10-01	7-Feb-06	0.5 - 0.8	0.09
NM-BH-11-01	7-Feb-06	2.0 - 3.0	15
NM-BH-11-02	7-Feb-06	6.8 - 7.2	1.7
NM-BH-12-01	7-Feb-06	0.3 - 1.0	1.9
NM-BH-12-02	7-Feb-06	2.3 - 2.6	ND
NM-BH-13-01	7-Feb-06	2.4 - 2.8	ND
NM-BH-14-01	7-Feb-06	0.8 - 1.0	7.2
NM-BH-14-02	7-Feb-06	1.1 - 1.6	ND
NM-BH-15-01	7-Feb-06	0.2 - 0.6	13
NM-BH-15-02	7-Feb-06	2.1 - 2.6	ND
NM-BH-16-01	7-Feb-06	4.7 - 5.2	ND
NM-BH-17-01	7-Feb-06	0.4 - 1.7	4.4
NM-BH-17-02	7-Feb-06	5.7 - 6.0	ND
NM-BH-18-01	7-Feb-06	3.0 - 3.5	ND
NM-BH-19-01	7-Feb-06	1.0 - 2.0	11
NM-BH-19-02	7-Feb-06	2.6 - 3.1	ND
NM-BH-20-01	7-Feb-06	2.0 - 3.5	9.8
NM-BH-20-02	7-Feb-06	3.7 - 4.0	1.6
NM-BH-21-01	7-Feb-06	0.9 - 2.0	4.2
NM-BH-21-02	7-Feb-06	2.4 - 4.0	6.3
NM-BH-22-01	7-Feb-06	2.0 - 3.6	5.6
NM-BH-22-02	7-Feb-06	3.7 - 4.0	ND
NM-MW-04-01	28-Sep-05	0.5	0.44
NM-MW-04-02	28-Sep-05	1.0	15
NM-MW-04-03	28-Sep-05	3.0	0.01
NM-MW-04-04	28-Sep-05	11.5	ND
NM-MW-04-05	28-Sep-05	15	0.01
NM-MW-05-01	3-Oct-05	1.0	12
NM-MW-05-02	3-Oct-05	9.5	ND
NM-MW-05-03	3-Oct-05	17	ND
NM-MW-05-04	3-Oct-05	21	ND
NM-MW-05-05	3-Oct-05	23.5	ND
NM-MW-06-01	3-Oct-05	0.5	ND
NM-MW-06-02	3-Oct-05	6.0	ND
NM-MW-06-03	3-Oct-05	11.5	ND
NM-MW-06-04	3-Oct-05	17.5	ND
OM-MW-06-01	20-Sep-05	4 - 6	0.01
OM-MW-06-02	22-Sep-05	15.5 - 16	ND
OM-MW-06-03	22-Sep-05	17 - 18	ND
OM-46	10-Sep-90	0-2	13
OM-46	10-Sep-90	2-4	5
OM-47	10-Sep-90	0-2	ND
OM-47	10-Sep-90	2-4	ND

Table 3-3 Summary of Total PCB Concentrations in Borehole Subsurface Soil Samples, Second Fill Area

Sample Identification	Date Collected	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
OM-48	17-Sep-90	1-4	3
OM-48	17-Sep-90	4-7	8
OM-49	5-Sep-90	5-7	ND
OM-50	5-Sep-90	0-4	19
OM-50	5-Sep-90	5-7	ND
OM-51	6-Sep-90	0-2	21
OM-51	6-Sep-90	2-4	ND
OM-52	6-Sep-90	0-2	41
OM-52	6-Sep-90	2.4	ND
OM-53	5-Sep-90	1-3	31
OM-53	5-Sep-90	3-4	ND
OM-54	5-Sep-90	0-2	33
OM-55	6-Sep-90	0-2	7
OM-55	6-Sep-90	5-7	ND
OM-58	10-Sep-90	2-4	ND
OM-58	10-Sep-90	4-6	24
OM-59	6-Sep-90	1-3	28
OM-59	6-Sep-90	3-4	38
OM-62	10-Sep-90	2-3	55
OM-62	10-Sep-90	3-4	ND

⁽¹⁾ Field duplicate samples listed in parentheses are from confirmation samples.

⁽²⁾ Bold and shaded values exceed soil cleanup objective of 1 mg/Kg, while bold italicized screening test values may exceed the soil cleanup objective (NYSDEC Part 375.6-8 Residential Use).

⁽³⁾ Sample was re-extracted and re-analyzed well outside of holding time due inconsistency in results. The re-analysis results is reported.

Key:

bgs = Below ground surface.

mg/Kg = Milligrams/Kilogram.

ND = All Aroclors were non-detect.

U = Not detected at the reporting limit shown.

UJ = Not detected at the estimated reporting limit shown.

Blank spaces indicate PCBs were not analyzed for confirmation or field duplicate samples.

Table 3-4 Summary of Total PCB Concentrations in Test Pit Subsurface Soil Samples, Second Fill Area

Sample Identification	Date Collected	Depth (feet bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
NM-TP-01-01	25-Aug-05	0.5	0.53
NM-TP-01-02	25-Aug-05	1.5	16
NM-TP-01-03	25-Aug-05	2.5	ND
NM-TP-01-04	25-Aug-05	9.0	ND
NM-TP-02-01	26-Aug-05	0.5	0.84
NM-TP-02-02	26-Aug-05	2.0	16
NM-TP-02-03	26-Aug-05	3.0	0.037
NM-TP-02-04	26-Aug-05	8.0	ND
NM-TP-02-05	26-Aug-05	1.0	13
NM-TP-03-01	26-Aug-05	0.5	0.17
NM-TP-03-02	26-Aug-05	2.5	20
NM-TP-03-03	26-Aug-05	6.0	ND
NM-TP-04-01	26-Aug-05	0.5	1.6
NM-TP-04-02	26-Aug-05	1.0	22
NM-TP-04-03	26-Aug-05	3.0	1.7
NM-TP-05-01	26-Aug-05	0.5	0.18
NM-TP-05-02	26-Aug-05	2.5	23
NM-TP-05-03	26-Aug-05	5.0	ND
NM-TP-05-04	26-Aug-05	10.0	0.1
NM-TP-06-01	29-Aug-05	0.5	0.51
NM-TP-06-02	29-Aug-05	1.5	10
NM-TP-06-03	29-Aug-05	2.0	0.14
NM-TP-06-04	29-Aug-05	8.0	ND
NM-TP-06-05	29-Aug-05	10.0	ND
OM-TP-25-01	22-Aug-05	0-0.5	1.3
OM-TP-25-02	22-Aug-05	0.5-5	46
OM-TP-25-03	22-Aug-05	5-7	0.06
OM-TP-25-04	22-Aug-05	0.5	2.6
OM-TP-26-01	22-Aug-05	0-0.5	0.55
OM-TP-26-02	22-Aug-05	0.5-8	21
OM-TP-26-03	22-Aug-05	8.5	0.01
OM-TP-26-04	22-Aug-05	0.5	7.7

⁽¹⁾ Field duplicate results listed in parentheses are from confirmation samples.

⁽²⁾ Bold and shaded value exceeds cleanup objective of 1 mg/Kg (New York State Department of Environmental Conservation Part

Key:

bgs = below ground surface

J = Estimated value ("-" is biased low and "+" is biased high)

U = Not detected

µg/Kg = micrograms/kilogram

ND = All samples were non-detect

U = Non-detect at the reported practical quantitation limit

Blank spaces indicate PCBs were not analyzed for confirmation or field duplicates.

**Table 3-5 Summary of Total PCB Concentrations in Subsurface Soil Samples,
Third Fill Area**

Sample Identification	Date Collected	Sample Interval (inches bgs)	Maximum Total PCB Concentration ⁽²⁾ (mg/Kg)
MP-08	23-Aug-02	16-22	24
MP-09	23-Aug-02	6-12	21
MP-11	23-Aug-02	8-12	22
MP-13	23-Aug-02	0-6	0.98
MP-19	23-Aug-02	16-20	9
MP-20	23-Aug-02	5-11	11
MP-21	23-Aug-02	10-14	6.7
MP-22	23-Aug-02	10-14	30
MP-23	23-Aug-02	8-12	0.6
MP-24	23-Aug-02	8-12	25
MP-25	23-Aug-02	12-16	0.23 J
MP-26	23-Aug-02	3-7	1.4
MP-27	23-Aug-02	12-16	6.4
MP-28	23-Aug-02	6-9	13
MP-30	23-Aug-02	10-14	11
MP-31	23-Aug-02	8-12	20
MP-32	23-Aug-02	8-12	15
MP-33	23-Aug-02	14-18	28
MP-34	23-Aug-02	9-14	17
MP-35	23-Aug-02	12-16	9
MP-36	23-Aug-02	10-14	2.8
MP-40	23-Aug-02	10-14	19
GP-01	23-Jul-21	18 - 24	14
GP-01	23-Jul-21	84 - 96	ND
GP-02	23-Jul-21	12 - 18	6.2
GP-02	23-Jul-21	96 - 110	ND
GP-02	23-Jul-21	130 - 140	ND
GP-03	23-Jul-21	12 - 18	4
GP-03	23-Jul-21	30 - 36	ND
GP-04	23-Jul-21	6 - 12	13
GP-04	23-Jul-21	18 - 24	ND
GP-04	23-Jul-21	18 - 24	ND

⁽¹⁾ Field duplicate samples listed in parentheses are from confirmation samples.

⁽²⁾ Bold and shaded values exceed soil cleanup objective of 1 mg/Kg.

Key:

mg/Kg = Milligrams/Kilogram.

ND = All Aroclors were non-detect.

U = Not detected at the reporting limit shown.

UJ = Not detected at the estimated reporting limit shown.

Blank spaces indicate PCBs were not analyzed for confirmation or field duplicate samples.

Table 3-6 Summary of Analytical Results for Groundwater Special Area 13 Dredge Spoils Disposal Area

Analyte	Screening Criteria ^{(1) (2)}	Sample ID: Date:	NM-MW-02-GW 12/06/2005	NM-MW-02-GW 3/21/2006	NM-MW-02-GW/D 3/21/2006	NM-MW-02-GW 6/16/2006	NM-MW-02-GW 9/27/2006	NM-MW-02 6/24/2008	NM-MW-02 9/25/2008	NM-MW-02-JUL23 7/13/2023	NM-MW-02-JUL23-FF 7/13/2023
PCBs by Method 8082 (µg/L)											
Aroclor 1016	0.5		0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.50 U	0.50 U
Aroclor 1221	0.5		0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.50 U	0.50 U
Aroclor 1232	0.5		0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.50 U	0.50 U
Aroclor 1242	0.5		0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.50 U	0.50 U
Aroclor 1248	0.5		0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.50 U	0.50 U
Aroclor 1254	0.5		0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.50 U	0.50 U
Aroclor 1260	0.5		0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.50 U	0.50 U
Total PCBs (µg/L)	0.5		ND	ND	ND	ND	ND	ND	ND	ND	ND

⁽¹⁾ United States Environmental Protection Agency Toxic Substances and Control Act (TSCA) Decontamination standard for water containing PCBs per 40 CFR 761.79(b)(1)(iii)

⁽²⁾ Groundwater standards for PCBs apply to the total concentration. The values are shown for individual Aroclors for comparison purposes only.

Bolded and shaded values exceed screening criteria.

Key:

/D or -Q = field duplicate sample

J = Estimated value ("-" is biased low and "+" is biased high)

PCB = Polychlorinated Biphenyls

U = Not detected

µg/L = microgram/Liter

Table 3-6 Summary of Analytical Results for Groundwater Special Area 13 Dredge Spoils Disposal Area

Analyte	Screening Criteria ^{(1) (2)}	Sample ID: Date:	NM-MW-03-GW 12/6/2005	NM-MW-03-GW 3/21/2006	NM-MW-03-GW 6/19/2006	NM-MW-03-GW 9/27/2006	NM-MW-03 6/24/2008	NM-MW-03 9/25/2008	NM-MW-04-GW 12/6/2005	NM-MW-04-GW 3/22/2006	NM-MW-04-GW 6/19/2006
PCBs by Method 8082 (µg/L)											
Aroclor 1016	0.5		0.48 U	0.48 U	0.47 U	0.48 U	0.47 UJ	0.48 UJ	0.49 U	0.47 U	0.47 U
Aroclor 1221	0.5		0.48 U	0.48 U	0.47 U	0.48 U	0.47 UJ	0.48 UJ	0.49 U	0.47 U	0.47 U
Aroclor 1232	0.5		0.48 U	0.48 U	0.47 U	0.48 U	0.47 UJ	0.48 UJ	0.49 U	0.47 U	0.47 U
Aroclor 1242	0.5		0.48 U	0.48 U	0.47 U	0.48 U	0.47 UJ	0.48 UJ	0.49 U	0.47 U	0.47 U
Aroclor 1248	0.5		0.48 U	0.48 U	0.47 U	0.48 U	0.47 UJ	0.48 UJ	0.49 U	0.47 U	0.47 U
Aroclor 1254	0.5		0.48 U	0.48 U	0.47 U	0.48 U	0.47 UJ	0.48 UJ	0.49 U	0.47 U	0.47 U
Aroclor 1260	0.5		0.48 U	0.48 U	0.47 U	0.48 U	0.47 UJ	0.48 UJ	0.49 U	0.47 U	0.47 U
Total PCBs (µg/L)	0.5		ND	ND	ND	ND	ND	ND	ND	ND	ND

⁽¹⁾ United States Environmental Protection Agency Toxic Substances and Control Act (TSCA) Decontamination standard for water containing PCBs per 40 CFR 761.79(b)(1)(iii)

⁽²⁾ Groundwater standards for PCBs apply to the total concentration. The values are shown for individual Aroclors for comparison purposes only.

Bolded and shaded values exceed screening criteria.

Key:

/D or -Q = field duplicate sample

J = Estimated value ("-" is biased low and "+" is biased high)

PCB = Polychlorinated Biphenyls

U = Not detected

µg/L = microgram/Liter

Table 3-6 Summary of Analytical Results for Groundwater Special Area 13 Dredge Spoils Disposal Area

Analyte	Screening Criteria ^{(1) (2)}	Sample ID: Date:	NM-MW-04-GW 9/27/2006	NM-MW-04-JUL23 7/12/2023	NM-MW-04-JUL23-Q 7/12/2023	NM-MW-04-JUL23-FF 7/12/2023	NM-MW-04-JUL23-Q-FF 7/12/2023	NM-MW-05-GW 12/6/2005	NM-MW-05-GW 3/22/2006	NM-MW-05-GW 6/19/2006
PCBs by Method 8082 (µg/L)										
Aroclor 1016	0.5		0.48 U	0.50 U	0.50 U	0.50 U	0.50 U	0.47 UJ	0.47 U	0.47 U
Aroclor 1221	0.5		0.48 U	0.50 U	0.50 U	0.50 U	0.50 U	0.47 UJ	0.47 U	0.47 U
Aroclor 1232	0.5		0.48 U	0.50 U	0.50 U	0.50 U	0.50 U	0.47 UJ	0.47 U	0.47 U
Aroclor 1242	0.5		0.48 U	0.50 U	0.50 U	0.50 U	0.50 U	0.47 UJ	0.47 U	0.47 U
Aroclor 1248	0.5		0.48 U	0.50 U	0.50 U	0.50 U	0.50 U	0.47 UJ	0.47 U	0.47 U
Aroclor 1254	0.5		0.48 U	0.50 U	0.50 U	0.50 U	0.50 U	0.47 UJ	0.47 U	0.47 U
Aroclor 1260	0.5		0.48 U	0.50 U	0.50 U	0.50 U	0.50 U	0.47 UJ	0.47 U	0.47 U
Total PCBs (µg/L)	0.5		ND	ND	ND	ND	ND	ND	ND	ND

⁽¹⁾ United States Environmental Protection Agency Toxic Substances and Control Act (TSCA) Decontamination standard for water containing PCBs per 40 CFR 761.79(b)(1)(iii)

⁽²⁾ Groundwater standards for PCBs apply to the total concentration. The values are shown for individual Aroclors for comparison purposes only.

Bolded and shaded values exceed screening criteria.

Key:

/D or -Q = field duplicate sample

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Table 3-6 Summary of Analytical Results for Groundwater Special Area 13 Dredge Spoils Disposal Area

Analyte	Screening Criteria ^{(1) (2)}	Sample ID: Date:	NM-MW-05-GW 9/27/2006	NM-MW-05-JUL23 7/13/2023	NM-MW-05-JUL23-FF 7/13/2023	NM-MW-06-GW 12/6/2005	NM-MW-06-GW 3/22/2006	NM-MW-06-GW 6/19/2006	NM-MW-06-GW 9/27/2006	OM-MW-06-GW/D 12/06/2005	OM-MW-06-GW 12/06/2005
PCBs by Method 8082 (µg/L)											
Aroclor 1016	0.5		0.48 U	0.50 U	0.50 U	0.48 UJ	0.48 U	0.47 U	0.48 U	0.48 UJ	0.47 UJ
Aroclor 1221	0.5		0.48 U	0.50 U	0.50 U	0.48 UJ	0.48 U	0.47 U	0.48 U	0.48 UJ	0.47 UJ
Aroclor 1232	0.5		0.48 U	0.50 U	0.50 U	0.48 UJ	0.48 U	0.47 U	0.48 U	0.48 UJ	0.47 UJ
Aroclor 1242	0.5		0.48 U	0.50 U	0.50 U	0.48 UJ	0.48 U	0.47 U	0.48 U	0.48 UJ	0.47 UJ
Aroclor 1248	0.5		0.48 U	0.50 U	0.50 U	0.48 UJ	0.48 U	0.47 U	0.48 U	0.48 UJ	0.47 UJ
Aroclor 1254	0.5		0.48 U	0.50 U	0.50 U	0.48 UJ	0.48 U	0.47 U	0.48 U	0.48 UJ	0.47 UJ
Aroclor 1260	0.5		0.48 U	0.50 U	0.50 U	0.48 UJ	0.48 U	0.47 U	0.48 U	0.48 UJ	0.47 UJ
Total PCBs (µg/L)	0.5		ND	ND	ND	ND	ND	ND	ND	ND	ND

⁽¹⁾ United States Environmental Protection Agency Toxic Substances and Control Act (TSCA) Decontamination standard for water containing PCBs per 40 CFR 761.79(b)(1)(iii)

⁽²⁾ Groundwater standards for PCBs apply to the total concentration. The values are shown for individual Aroclors for comparison purposes only.

Bolded and shaded values exceed screening criteria.

Key:

/D or -Q = field duplicate sample

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