PROPOSED REMEDIAL ACTION PLAN

Universal Waste, Inc.
Operable Unit Number 01: Remedial Program for On-site Contamination
State Superfund Project
Utica, Oneida County
Site No. 633009
October 2026



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

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SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (DEC), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the above referenced site. The disposal of hazardous wastes at the site has resulted in threats to public health and the environment that would be addressed by the remedy proposed by this Proposed Remedial Action Plan (PRAP). The disposal of hazardous wastes at this site, as more fully described in Section 6 of this document, has contaminated various environmental media. The proposed remedy is intended to attain the remedial action objectives identified for this site for the protection of public health and the environment. This PRAP identifies the preferred remedy, summarizes the other alternatives considered, and discusses the reasons for the preferred remedy.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment.

The DEC has issued this document in accordance with the requirements of New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York; (6 NYCRR) Part 375. This document is a summary of the information that can be found in the site-related reports and documents in the document repository identified below.

SECTION 2: CITIZEN PARTICIPATION

The DEC seeks input from the community on all PRAPs. This is an opportunity for public participation in the remedy selection process. The public is encouraged to review the reports and documents, which are available at the following repository:

Utica Public Library
303 Genesee Street
Utica, NY 13501
Phone: 315-735-2279

A public comment period has been set from:

October 28, 2026 to November 30, 2026

A public meeting is scheduled for the following date:

November 18, 2026

Public meeting location:

The North Utica Community Center
50 Riverside Drive
Utica, NY 13502
Phone: 315-724-2430

At the meeting, the findings of the remedial investigation (RI) and the feasibility study (FS) will be presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period will be held, during which verbal or written comments may be submitted on the PRAP.

Written comments may also be sent through to:

Kristin Granzen
NYS Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233
kristin.granzen@dec.ny.gov

The DEC may modify the proposed remedy or select another of the alternatives presented in this PRAP based on new information or public comments. Therefore, the public is encouraged to review and comment on the proposed remedy identified herein. Comments will be summarized and addressed in the responsiveness summary section of the Record of Decision (ROD). The ROD is DEC's final selection of the remedy for this site.

Receive Site Citizen Participation Information By Email

Please note that the DEC's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The Universal Waste site is a 20.3-acre site located in an urban area at the intersection of Wurz Avenue and Leland Avenue in the City of Utica, Oneida County. The site is bounded to the north by the Mohawk River and a Fire Training Facility, to the east is a former construction and demolition (C&D) debris recycling facility, which is currently unoccupied, to the south is a railroad yard, and to the west is a vacant lot that is a remediated former petroleum bulk storage facility. The Utica Alloys Site (DEC inactive hazardous waste disposal site number 633047) borders the Universal Waste site on the south and west. The site is located in a mixed industrial and commercial area.

Site Features: The site is relatively flat and includes a large unoccupied warehouse and two sheds that are being used for equipment storage. Concrete slabs remain in place that were either used for processing materials or to house large equipment as part of past operations. There is a railroad line running southeast to northwest through the property. There are also an underground active storm sewer line and an inactive sanitary sewer overflow line transecting the site from west to east that drains into a stream located on the property to the east of the site. The site is located in the Mohawk River flood plain with the northern portion of the site generally wooded. A segment of the Mohawk River historically flowed through the site and was relocated in 1907, resulting in the placement of historic fill across a portion of the site. Wetlands and a forested area are located east-southeast of the site and contain a stream that receives discharge from the site's storm sewer system. The stream flows east approximately 1,500 feet before discharging into the Mohawk River.

Current Zoning and Land Use: The site is currently inactive, fenced, and zoned for industrial use. The surrounding area is also zoned for industrial use. The nearest residential area is approximately 2,000 feet to the south on Catherine Street. The site is not located within a Disadvantaged Community or a Brownfield Opportunity Area. The site is located approximately one mile from the nearest school and there are no daycare centers located within 500 feet of the site.

Past Use of the Site: Until 2000, the site had been used as a scrap yard salvaging ferrous metals and stainless steel. Prior uses that appear to have led to site contamination include the handling of electrical components, including transformers that apparently contained polychlorinated biphenyls (PCBs).

Operable Units: The site was divided into three operable units. As described below, Operable Unit 1 (OU1) is on-site while Operable Unit 2 (OU2) and Operable Unit 3 (OU3) are located adjacent to the Universal Waste, Inc. site. An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination

OU1 is the on-site former recycling facility area which is a 20.3-acre fenced area. OU1 is comprised of all or part of four tax parcels owned by ELG Utica Alloys, Inc. (ELGUA). OU1 is the on-site source area for metals and PCB soil contamination.

OU2 is an off-site area which is generally located east and north of both OU1 and OU3. OU2 is

approximately 22 acres and includes a portion of the Mohawk Flats and a portion of the Mohawk River which flows north and east of the site. OU2 also consists of sewer outfall, the drainage channel flowing into the Mohawk River and wetland areas. The remedial program for OU2 is being implemented using State Superfund monies. OU2 consists of the off-site groundwater plume and sediment contamination.

OU3 is an off-site area consisting of approximately 11 acres located immediately north and east of OU1. OU3 consists of a small portion of the Mohawk Flats located east of OU1, and an access right-of-way located north of OU1. OU3 is bordered to the north and east by OU2. A closed C & D recycling facility is present along the southern portion of OU3. OU3 consists of the off-site soil contamination.

Site Geology and Hydrology: The eastern portion of the site was filled when the Mohawk River was relocated in 1907. The site is underlain primarily by fill material ranging in depth from two feet below ground surface (bgs) in the west to 16 feet bgs in the east. Alluvial deposits are observed below the fill material at depths ranging from six to 16 feet bgs. The alluvial deposits consist generally of low permeability, interbedded fine sand, silt and clay, and extend to about 28 to 37 feet bgs in most soil borings drilled on site. The upper alluvial deposits are underlain by an assortment of glacial deposits including glacio-lacustrine silts, outwash sand and gravel, and glacial till, which occurs between 20 and 73.5 feet bgs. The depth of the bedrock is approximately 84 feet below ground surface (bgs). Groundwater is typically present at depths less than ten feet bgs and generally flows northeast and east toward the Mohawk River. Topography at the site is relatively flat with the lowest elevation being near the center of the property along the railroad line with a gentle slope upwards towards the property boundaries to the north, south, and west. The site elevation ranges from approximately 400 feet to 450 feet above mean sea level (NAVD88). There are no water bodies on the site.

Operable Unit (OU) Number 01 is the subject of this document.

A Record of Decision will be issued for OU 02 and 03 in the future.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The DEC may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, an alternative that restricts the use of the site to industrial use as described in Part 375-1.8(g) is being evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers. The PRPs for the site, documented to date, include:

ELG Utica Alloy, Inc.;

United Contractors of Utica, Inc.;

Special Metals Corporation;

Precision Castparts Corp; and

National Grid

The DEC and ELG Utica Alloys entered into a Consent Order on November 16, 2012. The Order obligates ELG Utica Alloys to implement a limited On-Site Remedial Investigation. DEC and ELG Utica Alloys then entered into a Consent Order on October 1, 2015, that required ELG Utica Alloys to submit a Work Plan for an Interim Remedial Measures Focused Feasibility Study and implement a RI/FS for OU1 and OU3. Following remedy selection, DEC will seek to have the selected remedy implemented by the PRPs. If an agreement cannot be reached with the PRPs, DEC will evaluate the site for further action under the State Superfund. These and any other identified PRPs may be subject to legal actions by the state for recovery of all response costs the state has incurred.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- groundwater
- soil
- sub-slab vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The DEC has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCGs in the footnotes. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a hazardous waste that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified for this Operable Unit at this site is/are:

PCBs	lead
cadmium	nickel
chromium	toluene
copper	benzene

While volatile organic compounds (VOCs), primarily chlorinated ethenes, and 1,4-dioxane were detected in OU1 groundwater, these detections are associated with releases from the adjacent Utica Alloys site (see Figure 2 for Utica Alloys site location) that is currently under investigation and will be addressed under a separate PRAP and Record of Decision for the Utica Alloys site. Similarly, while per- and polyfluoroalkyl (PFAS) compounds, primarily perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), were detected in OU1 soil and groundwater, PFAS was not used at the site and given the nature and extent of this PFAS contamination, it is likely associated with an off-site source (e.g., an adjacent fire training facility).

As illustrated in Exhibit A, the contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- soil

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Record of Decision.

The following IRM has been completed at this site based on conditions observed during the RI.

IRM - Debris Piles and Berm Removal

Seventeen (17) debris piles and a large soil berm were located on OU1 (see Figure 2) and consisted of soil heterogeneously mixed with wood, scrap metal, plastic, glass, concrete, stone and brick. Some of the debris piles were determined to contain hazardous soils, and the berm was classified as hazardous based on polychlorinated biphenyl (PCB) concentrations exceeding Toxic Substances Control Act (TSCA) regulations (50 parts per million (ppm)), with a maximum concentration of 1,200 ppm from the large soil berm. An IRM that included berm and soil pile removal and off-site disposal was implemented between August and November 2018. The IRM removed 3,548 tons of non-hazardous soil and debris and 13,393 tons of hazardous soil and debris from the site. This effort removed a large portion of PCB mass from the site. More information can be found in the March 2019 IRM Construction Completion Report and/or the Universal Waste OU1 Remedial Investigation Report.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

The Fish and Wildlife Resources Impact Analysis (FWRIA) for OU 01, which is included in the RI report, presents a detailed discussion of the existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination:

For OU1: Onsite Areas
Soil and groundwater were analyzed for VOCs, semi-volatile organic compounds (SVOCs), metals, PCBs, PFAS, and pesticides. Sub-slab soil vapor samples were collected beneath the slab to further delineate the LNAPL source area. Based upon investigations conducted to date, the primary contaminants of concern for OU1 include metals and PCBs in soil. While VOCs were detected in groundwater at concentrations exceeding SCGs, the VOCs are not associated with the Universal Waste, Inc. site but instead are associated with disposal at the adjacent Utica Alloys site. The VOCs present in groundwater beneath the Universal Waste, Inc. site will be addressed under a Record of Decision for Utica Alloys.

Surface Soil: A total of 628 surface soil samples were collected during the Limited On-Site Remedial Investigation (LOSRI) and OU1 Remedial Investigation (RI). Surface soil samples were

taken from 0 - 1-foot bgs for PCBs and 0-2 inches bgs for non-PCB constituents to assess direct human exposure. Several metals located in the surface soil were detected at concentrations above the IUSCOs. Metals exceeding the IUSCOs associated with site operations include cadmium at 682 ppm (IUSCO is 4.4 ppm), total chromium at 59,200 ppm (IUSCO for hexavalent chromium is 11 ppm), copper at 46,000 ppm (IUSCO is 10,000 ppm), lead at 30,600 ppm (IUSCO is 3,900 ppm), nickel at 133,000 ppm (IUSCO is 5,900 ppm).

PCBs were detected in surface soils at concentrations exceeding both the Industrial Use Soil Cleanup Objectives (IUSCOs) of 25 ppm and the Toxic Substance Control Act (TSCA) criteria of 50 ppm. In total, 104 of 541 soil samples collected at the site exceeded the IUSCO and 58 of the soil samples exceeded the TSCA criteria (50 ppm). The maximum concentration of PCBs detected in surface soil was 3,670 ppm. This elevated PCB concentration was identified near a concrete slab in the central portion of the site. Other elevated concentrations were found by the former soil berm along the east side of the site and a former soil pile in the southwestern portion of the site (see Figure 3).

Surface soil near the former storage areas for metal turnings/bins and former productions areas had detections of metals exceeding their respective IUSCOs also indicated petroleum contamination. Total Petroleum Hydrocarbons (TPHs), including TPH Gasoline Range Organics, were detected in three locations ranging from 12.3 ppm to 188 ppm. TPH Diesel Range Organics were detected at a maximum concentration of 32,000 ppm.

Subsurface Soil: A total of 1,164 subsurface soil samples were collected from a depth of 1 to 20 feet for PCBs and from 2 inches to 20 feet bgs for non-PCB constituents during the LOSRI and OU1 RI. Several metals, PCBs and SVOCs exceeded the applicable IUSCOs in subsurface soils across the site. Copper at 249,000 ppm (IUSCO is 10,000 ppm) was detected from approximately 2 inches to 2 feet bgs. Lead at 36,200 ppm (ISCO is 3,900 ppm) was detected at depths of approximately 4 to 6 feet bgs.

PCBs were detected in subsurface soil at concentrations exceeding both the IUSCO of 25 ppm and the TSCA criteria of 50 ppm. In total, 130 of 1,212 subsurface soil samples collected at the site exceeded the IUSCO and 83 of the soil samples exceeded the TSCA criteria. The highest PCB concentrations were identified at depths of approximately 2 to 4 feet bgs near the former soil berm along the east side of the site, a former soil pile in the southwestern portion of the site, and by a concrete slab in the central portion of the site, at concentrations of 4,870 ppm, 7,600 ppm and 3,670 ppm, respectively (see Figure 4).

SVOCs were detected in subsurface soil at concentrations exceeding the IUSCOs. Specifically, benzo(a)anthracene at 84.9 ppm (IUSCO is 37 ppm), benzo(a)pyrene at 67.2 ppm (IUSCO is 3.7 ppm) and benzo(b)fluoranthene at 83.7 ppm (IUSCO is 37 ppm), at depths between 10 and 12 beet bgs with the former soil berm area, dibenzo(a,h)anthracene at 13.7 ppm (IUSCO is 3.7 ppm) and indeno (1,2,3-c,d)pyrene at 41.2 (IUSCO is 37 ppm) at depths between 4 and 6 feet bgs also in the former soil berm area.

PFAS soil sampling was completed using the Synthetic Precipitation Leaching Procedure (SPLP), which was the guidance at the time of sampling. Results of the SPLP sampling had detections that

ranged from 0.0047 to 0.594 ppb for PFOS and 0.0023 to 0.0221 ppb for PFOA. However, the PFAS sampling results cannot be directly compared to current PFAS soil guidance values because the sampling methodology used at the time differs from current guidance and analytical requirements. During the pre-design investigation, additional PFAS soil sampling will be completed to further characterize the nature and extent of PFAS impacts in site soils.

No pesticides were detected above the IUSCOs.

Based on environmental data, there are off-site impacts in soil related to the site, which will be addressed under a separate PRAP and Record of Decision for OU2 and OU3.

Groundwater - Chlorinated ethenes, and 1,4-dioxane are the primary groundwater contaminants detected in OU1, and as described above, are associated with historic releases that occurred at the adjacent and hydraulically upgradient Utica Alloys site (Site No. 633047). The primary VOCs detected in groundwater exceeding the NYS Ambient Water Quality Standards and Guidance Values (AWQSGVs), included TCE, cis-1,2-DCE, and vinyl chloride at maximum concentrations of 3,980 ppb, 11,200 ppb and at 529 ppb respectively. These concentrations significantly exceed the AWQSGV of 5 ppb for TCE and cis-1,2-DCE and the AWQSGV of 2 ppb for vinyl chloride. In addition, 1,4-dioxane was detected at concentrations ranging from 0.048 to 1.75 ppb in groundwater samples collected on-site, which are compared to the AWQSGV of 0.35 ppb. A remedial investigation is currently underway at the Utica Alloys site and the VOCs and 1,4-dioxane contamination present in groundwater beneath the Universal Waste, Inc. site will be addressed as part of the Utica Alloys remedy. The remedy selected for the Utica Alloys site will address both on-site and off-site VOC groundwater contamination.

While PCBs were detected in groundwater samples at concentrations ranging from 0.015 ppb to 1.4 ppb and above the SCG of 0.09 ppb, the PCBs were attributed to suspended solids in the unfiltered groundwater samples. Subsequent sampling events that occurred between 2015 and 2018 did not have suspended solids and had no PCB detections, with the exception of one monitoring well, UW-2B that contained PCBs at concentrations of 0.17 ppb and 0.33 ppb during the 2016 and 2017 sampling events, respectively. Monitoring well UW-2B is adjacent to a concrete slab in the central portion of the site where PCBs were also detected at high concentrations in site soil.

Site-related metals such as cadmium, total chromium, and lead were detected in unfiltered groundwater samples with maximum concentrations of 58.8 ppb, 228 ppb and 185 ppb, respectively, compared to the AWQSGVs of 5 ppb, 50 ppb and 25 ppb, respectively.

Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) were also detected in the groundwater samples collected on-site at concentrations ranging from 6.03 to 56.2 nanograms per liter (ng/l) and 10.4 to 279 ng/l respectively. The highest concentrations of PFOA and PFOS were detected in monitoring wells MW-8R and UW-3 located along the eastern border of the site and towards the center of the site. As there are no known documented uses of PFOA or PFOS on the site, the source(s) of these detections in Site groundwater may be associated with an off-site source and possibly a nearby fire training facility.

There was one detection of benzo(b)fluoranthene in OU1 groundwater above the respective AWQSGV.

A free product investigation was completed from 2014 - 2017 when 0.88 ft of an unknown petroleum-like Light Non-Aqueous Phase Liquid (LNAPL) was detected on top of the groundwater within monitoring well UW-2 during a measuring event. UW-2 is located immediately adjacent to an area that historically maintained a baling operation, which included a concrete lined sump as part of its operation. The sump is believed to have been in the northeast corner of the concrete slab located adjacent to UW-2. The dimensions of the sump are unknown, and it was abandoned when the baling operations ceased. Free product characterization and delineation took place with soil borings, temporary monitoring wells, and sub-slab soil vapor samples were taken beneath the adjacent concrete slab for benzene, toluene, ethylbenzene, xylenes, and TPH. Based on the data it was determined that the LNAPL was consistent with mixtures of petroleum products in the lubricating oil range. The data also showed that the LNAPL was limited to the immediate vicinity of monitoring wells UW-2/2B, is not a PCB source area as defined by DER-10 and is no immediate threat to human health.

Pesticides were not detected in on-site groundwater above the AWQSGVs.

Data does not indicate any off-site impacts in groundwater-related to this site.

Based on the environmental data, VOCs in groundwater will be addressed under a separate PRAP and Record of Decision for the Utica Alloys site.

Soil Vapor - The site is currently vacant, and the buildings are unoccupied. However, as part of the LNAPL source investigation, sub-slab soil vapor sampling was implemented in October 2016 for BTEX and TPH to assist in locating the potential LNAPL source. In total, 24 soil vapor samples were collected for laboratory analysis within the immediate area of the LNAPL detection in UW-2. Based on the sub-slab soil vapor sampling, benzene, toluene, ethylbenzene, xylenes, and TPH were detected with maximum concentrations of 30,150 µg/m^3 (micrograms per meter cubed), 196,200 µg/m^3, 9,300 µg/m^3, 132,700 µg/m^3 and 328,000 µg/m^3, respectively.

Based on environmental data, it is not likely that soil vapor contamination from BTEX and TPH from the site will impact off-site areas.

Special Resources Impacted/Threatened: The northern portion of the site is undeveloped and wooded, and the balance of the site is generally open land containing three unoccupied buildings where historic recycling operations occurred. There are no known special resources present on the site based on the results of a Fish and Wildlife Impact Analysis Part 1.

A Fish and Wildlife Impact Analysis Part 2 has been requested for the OU3 portion of the site, that is wooded and contains surface water resources. PCBs were detected in the storm water samples collected from the storm sewer transecting the OU1 but not in the storm sewer discharge that is located on OU3. The sewer discharges into a channel and backwater area of the Mohawk River on OU3. OU1 is upgradient of OU2 and OU3 and could be a potential source for the migration of surface soil contaminants to the ecological resources identified on OU2 and OU3.

The off-site study performed by the DEC on OU2 has revealed the presence of PCBs and other contaminants including chlorinated VOCs in surface water and sediments in the discharge channel and Mohawk River. New York State has issued a Fish Consumption Advisory for a reach of the Mohawk River that is both upstream and downstream of the site. More information on OU2 can be found in the April 2019 UWI Off-Site Study Area OU2 Report.

Significant Threat: The site presents a significant threat to the environment and human health due to the release of PCBs and metals to on-site areas.

The proposed plan addresses contamination associated with OU1. Contamination associated with operable units OU2 and OU3 will be addressed under separate RODs.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

Although access is restricted to a portion of the site by a fence, persons who enter the site could contact contaminants in the soil by walking on the site, digging or otherwise disturbing the soil. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in soil vapor (air spaces within the soil), may move into buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the buildings on the site are vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. Furthermore, environmental sampling indicates soil vapor intrusion is not a concern for off-site buildings. People using the river for recreational purposes such as swimming and boating may come into direct contact with chemical contaminants. Fish in the river are likely to contain the same chemicals that are present in surface water therefore, people who consume fish from the river are likely to be consuming these contaminants as well. The fish advisory for the general population for Mohawk River in Oneida County from Lock 20 to Lock 18 is the following: yellow perch, bluegill, pumpkinseed/sunfish is up to 4 meals/month and Walleye up to 1 meal/month. Do not eat white sucker, tiger muskellunge, smallmouth bass, largemouth bass, or carp.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: SUMMARY OF THE PROPOSED REMEDY

To be selected, the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. The remedy must also attain the remedial action objectives identified for the site, which are presented in Section 6.5. Potential remedial alternatives for the Site were identified, screened and evaluated in the FS report.

A summary of the remedial alternatives that were considered for this site is presented in Exhibit B. Cost information is presented in the form of present worth, which represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved. A summary of the Remedial Alternatives Costs is included as Exhibit C.

The basis for DEC's proposed remedy is set forth at Exhibit D.

The proposed remedy is referred to as the Removal of PCBs in Soil Exceeding the Industrial Use SCO (25 ppm) Combined with a Cover System remedy.

The estimated present worth cost to implement the remedy is $14,600,000. The cost to construct the remedy is estimated to be $14,200,000 and the estimated average annual cost is $23,800.

The elements of the proposed remedy are as follows:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques, any future on-site buildings which are part of the remedy should be constructed, to the extent feasible, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) in order to improve energy efficiency as an element of construction.

As part of the remedial design program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWise(TM) (available in the Sustainable Remediation Forum [SURF] library) or similar NYSDEC accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use will be estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked

during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial design program.

Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

2. Excavation

Excavation and off-site disposal of soil exceeding the industrial use SCO of 25 ppm for PCBs, as defined by 6 NYCRR Part 375-6.8. Under this alternative, approximately 34,700 cubic yards of soil to a depth of approximately 10-12 feet bgs will be removed from an area encompassing 476,300 square feet (see Figure 7 for the soil excavation areas). This excavation will also remove collocated COCs such as site-related metals, including the location with LNAPL. Collection and analysis of confirmation soil samples at the remedial excavation depths will be used to verify that IUSCO for PCBs have been achieved. If confirmation sampling indicates that the IUSCO for PCBs are not achieved at the stated remedial depth, the Responsible Party must notify the DEC, submit the sample results, and in consultation with the DEC, determine if further remedial excavation is necessary. Further excavation for development will proceed after confirmation samples demonstrate that the PCB IUSCO for the site has been achieved.

To ensure proper handling and disposal of excavated material, waste characterization sampling will be completed for all identified contaminated site material. Waste characterization sampling will be performed exclusively for the purposes of off-site disposal in a manner suitable to receiving facilities and in conformance with applicable federal, state and local laws, rules, and regulations and facility-specific permits. Backfill meeting the requirements of 6 NYCRR Part 375-6.7 (d) will be brought in to replace excavated soil and establish designed grades at the site.

3. Cover System

A site cover will be required in areas where the upper two feet of exposed surface soil will exceed the ecological soil cleanup objectives (SCOs), to allow for future industrial use of the site. A cover system will be used that may include gravel, asphalt, soil, etc., which will be determined during the design. Due to the site being upgradient of ecologically sensitive areas, where a soil cover is to be used, a minimum of two feet clean soil material will be placed over a demarcation layer to meet ecological soil cleanup objectives for metals. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to: pavement, concrete, sidewalks, building foundations and building slabs. The required thickness of hardscaped areas (including sub-base, if applicable) must otherwise meet the requirements of the New York State Uniform Fire Prevention and Building Code or local building code, whichever is applicable for the site. Concrete slabs that are in poor condition will be demolished and materials which

cannot be beneficially reused on-site will be taken off-site for proper disposal in order to implement the remedy. Slabs that remain on site will be used as the cover system.

4. Engineering and Institutional Controls

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. The remedy will achieve an industrial cleanup at a minimum.

Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- Require the remedial party or site owner to complete and submit to the DEC a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- Allow the use and development of the controlled property for industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- Restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- Require compliance with the DEC approved SMP.

5. Site Management Plan

A Site Management Plan is required, which includes the following:

1. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed above.

Engineering Controls: The soil cover discussed above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including a provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Remedy Element 3 above will be placed in any areas where the upper two feet of exposed surface soil exceeds the ecological soil cleanup objectives (SCOs);
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and DEC notification; and

- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

2. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- monitoring of groundwater to assess the performance and effectiveness of the remedy;
- a schedule of the groundwater monitoring and frequency of submittals to DEC;
- monitoring for vapor intrusion for any buildings that may be constructed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are arranged into four categories; volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides/ polychlorinated biphenyls (PCBs), and inorganics (metals and cyanide). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 4 and Section 6.1.1 are also presented.

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting groundwater, soil, surface water, and soil vapor.

Wastes are defined in 6 NYCRR Part 375-1.2 (aw) and include solid, industrial and/or hazardous wastes. Source Areas are defined in 6 NYCRR Part 375 (au). Source areas are areas of concern at a site were substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and Source areas were identified at the site include, the locations of the former soil berm on the east portion of the site, one of the former soil pile on the south-west corner of the site, and one of the concrete slabs on-site that contained PCB concentrations of 4,870 ppm, 7,600 ppm and 3,670 ppm respectively as well as metals including arsenic, cadmium, chromium, lead, and mercury at concentrations significantly exceeding industrial use SCOs. The soil berm and soil piles were removed but no additional excavations took place in these areas and high concentrations of site contaminants remain in the underlying soil. These areas are shown on Figure 2.

The past disposal at the site lead to exceedances of these high concentrations of PCBs and metals in soil, as the site was a former scrap yard salvaging ferrous metals, stainless steel and even electrical components, including transformers. Groundwater contamination consisting of volatile organic compounds (VOCs) specifically related to chlorinated solvents, has migrated onto and across the Universal Waste site property is associated with the adjacent Utica Alloys site (Site No. 633047) and will be addressed in the Utica Alloys remedy. However, 0.88 ft of LNAPL was discovered on top of the groundwater in monitoring well UW-2 and investigations consisting of soil borings, sub-slab soil vapor samples and groundwater samples were collected vertically and horizontally to delineate the LNAPL source. Free product characterization and delineation took place with soil borings, temporary monitoring wells, and sub-slab soil vapor samples were taken beneath the adjacent concrete slab for benzene, toluene, ethylbenzene, xylenes, and TPH. Based on the data it was determined that the LNAPL was consistent with mixtures of petroleum products in the lubricating oil range. The data also showed that the LNAPL was limited to the immediate vicinity of monitoring wells UW-2/2B, is not a PCB source area as defined by DER-10 and is no immediate threat to human health. This LNAPL will be addressed as part of the remedy.

The waste/source areas identified will be addressed in the remedy selection process.

Groundwater

Ten rounds of groundwater samples were collected from 42 monitoring wells from 2014 to 2020. The monitoring wells were located in the shallow fill/alluvium zone which ranges from approximately 2 – 16 feet below ground surface (bgs) and the deep alluvium zone which ranges from approximately 28 – 40 feet bgs. A total of 205 groundwater samples were analyzed for PCBs, VOCs, metals, herbicides and pesticides, 1,4-dioxane and PFAS. Groundwater samples were unfiltered. Refer to Table 1 for sampling results.

Table #1 – Summary of Detections in Groundwater

Detected Constituents	Concentration Range Detected (ppb)[b]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
1,1-Dichloroethene	0.28-38.9	5	6/157
Benzene	0.19 - 10	1	6/157
Chloroform	0.31-7.4	7	3/157
Cis-1,2-Dichloroethene	0.31 – 11,200	5	22/157
Toluene	0.22-10	5	2/157
Trans-1,2-Dichloroethene	0.47-273	5	9/157
Trichloroethylene	0.25-3,980	5	5/157
Vinyl Chloride	0.36-529	2	21/157
SVOCs			
Benzo(b)fluoranthene	0.41	0.002	1/68
Inorganics			
Antimony	2-3.7	3	2/94
Arsenic	2.4-6,500	25	29/97
Barium	49.4-1,470	1,000	15/97
Cadmium	0.17-58.8	5	7/94
Chromium, total	0.48-228	50	2/94
Copper	0.85-343	200	1/94
Iron	100-58,800	300	94/97
Lead	1.5-185	25	6/94
Manganese	15-12,600	300	85/97
Mercury	0.0.38-0.83	0.7	1/72
Nickel	0.49-381	100	4/97
Sodium	5,000-796,000	20,000	54/97
Pesticides/PCBs			
PCB-1242(Aroclor 1242)	0.021-0.15	0.09	2/129
PCB-1254(Aroclor 1254)	0.015 – 1.4	0.09	11/129
Alpha BHC (Alpha Hexachlorocyclohexane)	0.0037 – 0.073	0.01	22/79
Dieldrin	0.004 – 0.0048	0.004	4/79
Emerging Contaminants			
1,4-Dioxane	0.048 – 1.75	0.35	8/19
PFOA	6.03 – 56.2	0.0067	11/13
PFOS	1.9 - 279	0.0027	12/13

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

The primary groundwater contaminants are VOCs, primarily chlorinated ethenes, and 1,4-dioxane detected in OU1 groundwater and are most likely due to releases at the adjacent Utica Alloys site (Site No. 633047) and is continuing to be investigated and will be addressed under the Utica Alloys Feasibility Study.

While there was an exceedance of benzo(b)fluoranthene in groundwater, LNAPL product was discovered in one of the monitoring wells (UW-2 on Figure 2) located adjacent to a former baling operation. The LNAPL is likely a hydraulic fluid that did not contain PCBs. Investigations were completed to delineate the LNAPL horizontally and vertically, and it is believed that the LNAPL is restricted to the location it was found in, which is within the UW-2 monitoring well adjacent to a concrete slab near the center of the site. The LNAPL will be addressed in the remedy selection process.

Site related metals such as cadmium, total chromium, and lead have been detected in select wells above their respective AWQSGVs. These exceedances are localized and have not been observed to be widespread across the site and will be addressed in the proposed remedy.

The PCBs found in groundwater related to the storm sewer sampling had low-level detections above the AWQSGV that were attributed to suspended solids in groundwater. PCBs were detected in MW-8R, UW-2, and UW-3 at low levels ranging from 0.015 ppb to 1.4 ppb. However, subsequent rounds of sampling for these wells had non-detects. Monitoring well UW-2B had concentrations of 0.17 ppb and 0.33 ppb, during 2016 and 2017, respectively however, UW-2B was not sampled again due to its location near the LNAPL. The area surrounding UW-2B with observed LNAPL will be addressed in the proposed remedy.

Seven of the 10 monitoring wells sampled for PFAS had detections of PFOA above its AWQSGV of 6.7 ng/L and 10 of the 10 monitoring wells had detections of PFOS above its AWQGV of 2.7 ng/L, including the background (upgradient) monitoring well. As there are no known documented uses of PFOA or PFOS on the Site, the source(s) of these detections in Site groundwater may be associated with an off-site source and possibly a nearby Fire Training Facility. 1,4-dioxane exceeded its AWQSGV of 0.35 ppb in eight out of 22 monitoring wells. 1,4-dioxane is associated with the adjacent Utica Alloys site and is being investigated under that remedial investigation.

The only wells identified within a one-mile radius of the Site were observation wells installed by the USGS New York Water Science Center. The City of Utica primarily relies on Hinckley Reservoir for its water source, rather than public supply wells and the Site and the areas surrounding the Site rely on the Mohawk Valley Water Authority for their drinking water supply.

Based on the findings of the RI, the presence of VOCs has resulted in the contamination of groundwater. The site contaminants that are considered to be the primary contaminants of concern which will drive the remediation of groundwater to be addressed by the remedy selection process are: VOCs, such as TCE and its degradation products, DCE and vinyl chloride. These contaminants found in the groundwater at the Universal Waste site are associated with the Utica Alloys site (Site No. 633047) immediately upgradient and adjacent to Universal Waste and will be addressed as part of the remediation for the Utica Alloys site; therefore, groundwater remediation is not required at this site.

Soil

Surface Soil

A total of 628 surface soil samples were collected during the Limited On-Site Remedial Investigation (LOSRI) and OU1 Remedial Investigation (RI). Surface soil samples were taken from 0-1 foot bgs for PCBs and 0-2 inches bgs for non-PCB constituents to assess direct human exposure. Refer to Table 2 and Figure 3 for sampling results.

Table #2 – Summary of Detections in Surface Soil

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Industrial Use SCG[c] (ppm)	Frequency Exceeding Industrial SCG
VOCs					
Acetone	0.0407-0.692	0.03	8/60	1,000	0/60
SVOCs					
2-Methylphenol (O-Cresol)	0.0441-2.98	0.33	1/117	1,000	0/117
4-Methylphenol (P-Cresol)	0.015-1.5	0.33	1/44	1,000	0/44
Benzo(a)anthracene	0.0205-24.9	1	55/117	37	0/117
Benzo(a)pyrene	0.019-26.9	1	58/117	3.7	20/117
Benzo(b)fluoranthene	0.0303-34	1	66/117	37	0/117
Benzo(g,h,i)perylene	0.0351-14.6	0.64	58/117	78	0/117
Benzo(k)fluoranthene	0.0237-21.2	0.8	51/117	78	0/117
Chrysene	0.0198-25.3	1	56/117	78	0/117
Dibenz(a,h)anthracene	0.0322-4.6	0.33	33/117	3.7	1/117
Indeno(1,2,3-c,d)pyrene	0.0183-15.9	0.5	67/117	37	0/117
Phenanthrene	0.021-28.1	1.1	55/117	78	0/117
Phenol	0.0686-1.75	0.33	5/116	1,000	0/117
Inorganics					
Arsenic	0.57-15,200	13	60/119	16	46/119
Barium	23.5-7,350	410	31/119	10,000	0/119
Cadmium	0.85-682	2.5	82/119	4.4	66/119
Chromium, total d	7-59,200	1	119/119	11	116/119
Copper	7.2-46,000	50	111/119	10,000	2/119
Lead	3.5-30,600	63	111/119	3,900	5/119
Manganese	152-5,680	1600	17/119	10,000	0/119
Mercury	0.024-15.6	0.18	109/119	1.1	0/119
Nickel	8.3-133,000	30	113/119	5,900	33/119
Selenium	0.68-39.9	3.9	10/119	2,000	0/119
Silver	0.34-138	2	58/119	2,000	0/119
Zinc	24.4-25,800	109	112/119	10,000	2/119
PCBs					
PCB-1242 (Aroclor 1242)	0.13-3,670	0.1	22/419	25	4/419
PCB-1248 (Aroclor 1248)	0.357-110	0.1	66/405	25	15/405
PCB-1254 (Aroclor 1254)	0.0041-268	0.1	334/419	25	93/419
PCB-1260 (Aroclor 1260)	0.0022-26.1	0.1	94/420	25	1/420

Total PCBs Aroclors	0-3670	0.1	433/541	25	104/541
Herbicides					
Aldrin	0.2-0.2	0.0048	1/49	0.33	0/49
Alpha BHC (Alpha Hexachlorocyclohexane)	0.02-0.21	0.02	9/51	1.2	0/51
Beta BHC (Beta Hexachlorocyclohexane)	0.017-0.046	0.021	5/51	2.9	0/51
Delta BHC (Delta Hexachlorocyclohexane)	0.022-0.25	0.04	6/51	1,000	0/51
Dieldrin	0.029-1.5	0.005	19/43	0.48	7/43
Endrin	0.1-0.39	0.014	3/51	87	0/51
Gamma BHC (Lindane)	0.018-0.071		7/50		0/50
Heptachlor	0.033-0.059	0.013	7/50	5.1	0/50
4,4'-DDD	0.011-2.2	0.0033	14/51	33	0/51
4,4'-DDE	0.03-1.8	0.0033	28/49	22	0/49
4,4'-DDT	0.082-5.5	0.0033	30/47	27	0/47
Emerging contaminants[c]					
PFOA	N/A	0.00066	N/A	0.6	N/A
PFOS	N/A	0.00088	N/A	0.44	N/A

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Industrial Use, unless otherwise noted.
d – Sample data was reported as total chromium and was compared to Part 375-6.8, Unrestricted and Restricted Use Soil Cleanup Objective for Hexavalent Chromium.
e – Sample method for PFAS at the date of samples collected does not compare to the current soil SCOs for PFAS.

Subsurface Soil

A total of 1,164 subsurface soil samples were collected from a depth of one to 20 feet for PCBs and from two inches to 20 feet bgs for non-PCB constituents during the investigations. Refer to Table 3 and Figure 4 for sampling results.

Table 3 – Summary of Detections in Subsurface Soil

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Industrial Use SCG[c] (ppm)	Frequency Exceeding Industrial SCG
VOCs					
Acetone	0.0044-23.2	0.03	128/257	1,000	0/257
Benzene	0.00033-1.74	0.06	15/257	20	0/257
Cis-1,2-Dichloroethene	0.00036-66	0.19	16/257	590	0/257
Ethylbenzene	0.0004-27	1	6/256	390	0/256
Methyl Ethyl Ketone	0.0046-3.81	0.10	2/257	1,000	0/257
Methylene Chloride	0.0018-2.79	0.05	5/256	1,000	0/256
Tert-Butyl Methyl Ether	0.0005-0.0145		1/257		0/257
Toluene	0.00026-18.1	0.7	5/257	1,000	0/257
Trans-1,2-Dichloroethene	0.0017-0.353	0.19	1/256	1,000	0/256
Trichloroethylene	0.00058-150	0.47	10/257	54	1/257
Vinyl Chloride	0.00049-0.58	0.03	1/257	7.1	0/257
Xylenes	0.00056-200	0.26	14/257	1,000	0/257
1,1,1-Trichloroethane	0.0013-12.9	0.68	1/257	1,000	0/257

1,1-Dichloroethane	0.00037-27.4	0.27	1/257	240	0/257
1,1-Dichloroethene	0.00065-0.353	0.24	2/257	5.1	0/257
1,2-Dichlorobenzene	0.00085-8.56	1.1	2/255	1,000	0/255
1,2-Dichloroethane	0.0008-0.36	0.02	1/257	30	0/257
SVOCs					
2-Methylphenol (O-Cresol)	0.0387-4.32	0.33	3/226	1,000	0/226
4-Methylphenol (P-Cresol)	0.018-1.18	0.33	3/106	1,000	0/106
Acenaphthene	0.0066-23	20	1/229	1,000	0/229
Anthracene	0.01-141	100	1/229	1,000	0/229
Benzo(a)anthracene	0.017-84.2	1	128/229	37	5/229
Benzo(a)pyrene	0.0188-67.2	1	128/229	3.7	60/229
Benzo(b)fluoranthene	0.0207-83.7	1	143/229	37	6/229
Benzo(g,h,i)perylene	0.0121-39.3	0.64	131/229	78	0/229
Benzo(k)fluoranthene	0.023-37	0.8	110/229	78	0/229
Chrysene	0.0146-76.7	1	130/229	78	0/229
Dibenz(a,h)anthracene	0.0143-13.7	0.33	82/229	3.7	7/229
Dibenzofuran	0.011-25	2.1	12/228	290	0/228
Fluoranthene	0.0248-180	85	2/229	1,000	0/229
Fluorene	0.0177-55	30	2/229	1,000	0/229
Indeno(1,2,3-c,d)pyrene	0.0134-41.2	0.5	139/229	37	1/229
Naphthalene	0.0133-28	12	3/229	1,000	0/229
Phenanthrene	0.0161-243	1.1	127/229	78	3/229
Phenol	0.0472-6.98	0.33	12/226	1,000	0/226
Pyrene	0.0221-156	64	6/229	1,000	0/229
Inorganics					
Arsenic	1.9-216	13	110/232	16	80/232
Barium	15.9-3530	410	75/232	4.4	0/232
Cadmium	0.045-41.8	2.5	105/232	4.4	79/232
Chromium, total[d]	5.7-40,600	1	232/232	11	216/232
Copper	9.4-249,000	50	172/232	10,000	4/232
Cyanide, total	0.16-2.6	2.3	1/54	240	0/54
Lead	4.5-36,200	63	180/232	3,900	10/232
Manganese	151-6,800	1600	13/232	10,000	0/232
Mercury	0.0087-33.2	0.18	176/232	1.1	0/232
Nickel	7.3-45800	30	172/232	5,900	8/232
Selenium	0.46-6.7	3.9	2/232	2,000	0/232
Silver	0.3-50.1	2	38/232	2,000	0/232
Zinc	22-12,600	109	187/232	10,000	2/232
PCBs					
PCB-1242 (Aroclor 1242)	0.026-3,670	0.1	34/911	25	4/911
PCB-1248 (Aroclor 1248)	0.0052-270	0.1	85/907	25	20/907
PCB-1254 (Aroclor 1254)	0.0032-7,600	0.1	445/916	25	97/916
PCB-1260 (Aroclor 1260)	0.0021-158	0.1	288/915	25	3/915
PCB-1262 (Aroclor 1262)	0.0255-0.346	0.1	4/312	25	0/312
Total PCBs Aroclors	0-7600	0.1	417/1212	25	130/1212
Herbicides					
Alpha BHC (Alpha Hexachlorocyclohexane)	0.019-0.05	0.02	3/128	1.2	0/128
Beta BHC (Beta	0.014-0.14	0.021	4/127	2.9	0/127

Hexachlorocyclohexane)					
Delta BHC (Delta Hexachlorocyclohexane)	0.025-0.45	0.04	6/128	1,000	0/128
Cis-Chlordane	0.0158-0.522	0.014	4/127	11	0/127
Dieldrin	0.011-0.52	0.005	8/110	0.48	1/110
Endrin	0.11-0.25	0.014	3/127	87	0/127
Gamma BHC (Lindane)	0.0069-0.74	0.025	12/124	3.4	0/124
4,4'-DDD	0.00049-35.7	0.0033	17/123	33	1/123
4,4'-DDE	0.00053-1	0.0033	28/126	22	0/126
4,4'-DDT	0.00075-7.32	0.0033	29/102	27	0/102
Emerging contaminants[e]					
PFOA	N/A	0.00066	N/A	0.6	N/A
PFOS	N/A	0.00088	N/A	0.44	N/A

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Industrial Use, unless otherwise noted.
d - Sample data was reported as total chromium and was compared to Part 375-6.8, Unrestricted and Restricted Use Soil Cleanup Objective for Hexavalent Chromium.
e – Sample method for PFAS at the date of samples collected does not compare to the current soil SCOs for PFAS.

The primary soil contaminants are PCBs and metals such as, cadmium, chromium, copper, lead and nickel, which are directly related to past site operations. PCB surface soil concentrations were found above the Protection of Public Health SCO for an industrial property. Of the metals, chromium has the most widespread exceedances of the IUSCO in the surface soils. Concentrations of PCBs and metals on OU1 generally decreased with depth, which is consistent with a surficial source/release, such as the historical transformer handling and metal processing operations. See Figures 4 showing PCB soil data.

Surface soil near the former storage areas for metal turnings/bins and former productions areas had detections of metals exceeding their respective IUSCOs also indicated petroleum contamination. Total Petroleum Hydrocarbons (TPHs), including TPH Gasoline Range Organics, were detected in three locations ranging from 12.3 ppm to 188 ppm. TPH Diesel Range Organics were detected at a maximum concentration of 32,000 ppm.

1,4-dioxane was not detected in OU1 surface or subsurface soils above its Unrestricted Use SCO of 0.1 ppm. PFOA and PFOS were detected using Synthetic Precipitate Leaching Procedure (SPLP) as a screening tool and not a direct measure of contamination in soil. SPLP is used to assess the potential of PFAS to leach into groundwater. There are no documented known uses of PFOA or PFOS on the Site, and the source(s) of these detections in Site groundwater are potentially due to operations/former operations along Leland Avenue, which includes a Fire Training Facility immediately adjacent to the Site.

VOCs and pesticides were detected in soils above the Unrestricted SCOs but none were detected above the applicable Industrial Use SCOs. Polycyclic Aromatic Hydrocarbons (PAHs) detected in OU1 surface and subsurface soil most closely resemble Petroleum Combustion and Grass/Wood/Coal Combustion sources. Since there are no known activities that were performed on OU1 that would produce PAHs, it is believed that the source of PAHs in OU1 soil is due to the historical fill material brought to the site.

Based on the findings of the Remedial Investigation, the past disposal of hazardous waste has resulted in the contamination of soil. The site contaminants identified in soil which are considered to be the primary contaminants of concern, to be addressed by the remedy selection process are, PCBs, metals such as, cadmium, chromium, copper, lead and nickel. Based on environmental data, there are off-site impacts in soils related to the site, which will be addressed under a separate PRAP and Record of Decision for OU2 and OU3.

Soil Vapor

The evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil or groundwater contamination was evaluated by the sampling of sub-slab soil vapor under structures. At this site due to the presence of concrete slabs with no overlying buildings in the impacted area, a full suite of samples were not collected to evaluate whether soil vapor intrusion was occurring. Instead, soil vapor sampling was completed to delineate an LNAPL source area. Chlorinated VOCs present in groundwater originate from and will be addressed under the adjacent Utica Alloys site. Any buildings that are planned to be constructed or occupied will need to be sampled and evaluated for soil vapor and the need for a Sub-Slab Depressurization System (SSDS).

As part of the LNAPL source investigation, sub-slab soil vapor samples were implemented in October 2016 to assist in locating the potential LNAPL source. Semi-permanent sub-slab soil vapor ports were installed in a grid-like fashion across one of the concrete slabs on site, immediately adjacent to the well where the LNAPL was discovered, and where the baling operations took place. Indoor air sampling was not completed because there was no building located in this LNAPL impacted area. Detections of benzene, toluene, ethylbenzene, xylenes, and TPH were detected with maximum concentrations of 30,150 $\mu g/m^3$ (micrograms per meter cubed), 196,200 $\mu g/m^3$, 9,300 $\mu g/m^3$, 132,700 $\mu g/m^3$ and 328,000 $\mu g/m^3$, respectively. The concrete slab where this sampling occurred is planned to be removed and this area along with the LNAPL source will be addressed during the remedy. Any buildings that are planned to be constructed or occupied will need to be sampled and evaluated for soil vapor and the need for a SSDS due to the VOCs present in groundwater originating from the adjacent Utica Alloys site.

Based on the findings of the Remedial Investigation, the presence of benzene and toluene has resulted in the contamination of soil vapor. The site contaminants that are considered to be the primary contaminants of concern which will drive the remediation of soil vapor to be addressed by the remedy selection process are, benzene and toluene. Based on environmental data, it is not likely that soil vapor contamination from BTEX and TPH from the site will impact off-site areas.

Exhibit B

Description of Remedial Alternatives

The following alternatives were considered based on the remedial action objectives (see Section 6.5) to address the contaminated media identified at the site as described in Exhibit A.

Alternative 1: No Further Action

The No Further Action Alternative recognizes the remediation of the site completed by the IRM(s) described in Section 6.2. This alternative leaves the site in its present condition and does not provide any additional protection of the environment.

Present Worth: *$0*
Capital Cost: *$0*
Annual Costs: *$0*

Alternative 2: Removal of PCBs in Soil Exceeding the Hazardous Waste Limit (50 ppm) Combined with a Cover System

This alternative includes the excavation and off-site disposal of PCBs in soil exceeding the hazardous waste limit of 50 ppm combined with a cover system. Under this alternative, approximately 27,500 cubic yards (CY) of contaminated surface and subsurface soil to a depth of around 10-12 feet bgs will be removed from an area encompassing 367,000 square feet (see Figure 6 for the soil excavation areas). This excavation will also remove collocated cadmium, chromium, copper, lead, and nickel in soil that exceed the Industrial Use SCO (IUSCO) and the location with LNAPL saturated soil. Collection and analysis of confirmation samples at the remedial excavation depth will be used to verify that the remedial objective of 50 ppm for PCBs for the site have been achieved. If confirmation sampling indicates that SCOs were not achieved at the stated remedial depth, the Responsible Party must notify the DEC, submit the sample results, and in consultation with the DEC, determine if further remedial excavation is necessary. The site will be backfilled meeting the requirements of 6 NYCRR Part 375-6.7 (d) and regraded to accommodate installation of a cover system. The cover system includes a Toxic Substance Control Act (TSCA) cap where PCBs in soil exceed the IUSCO of 25 ppm and a two-foot soil cover and a demarcation layer over the remaining site in areas where PCBs and metals exceed the Ecological Soil Cleanup Objectives (ESCOs). Alternative 2 includes monitoring of the cap/cover, an Environmental Easement, a Site Management Plan (SMP) and periodic site reviews.

Present Worth: *$13,600,00*
Capital Cost: *$13,200,000*
Annual Costs: *$23,800*

Alternative 3: Removal of PCBs in Soil Exceeding the Industrial Use SCO (25 ppm) Combined with a Cover System

This alternative includes the excavation and off-site disposal of PCBs in soil exceeding the IUSCO of 25 ppm for PCBs combined with a cover system. Under this alternative, approximately 34,700 CY of contaminated surface and subsurface soil to a depth of approximately 10-12 feet bgs will be removed from an area encompassing 476,000 square feet (see Figure 7 for the soil excavation areas). This excavation will also remove collocated cadmium, chromium, copper, lead, and nickel in soil and the location with LNAPL saturated soil. Collection and analysis of confirmation samples at the remedial excavation depth will be used to verify that the IUSCO for the site have been achieved. If confirmation sampling indicates that SCOs were not achieved at the stated remedial depth, the Responsible Party must notify the DEC, submit the sample results, and in consultation with the DEC, determine if further remedial excavation is necessary. The site will be backfilled meeting the requirements of 6 NYCRR Part 375-6.7 (d) and regraded to accommodate installation of a cover system. The cover system includes a two-foot cover and a demarcation layer where metals remain that exceed the IUSCOs and where other Site COCs (predominantly PCBs and metals) remain that exceed their respective ESCOs. ESCOs are being applied for the two-foot cover due to OU1 being upgradient of ecologically sensitive areas that are part of both OU2 and OU3. Alternative 3 includes monitoring of the cap/cover, an Environmental Easement, a Site Management Plan (SMP) and, periodic site reviews.

Present Worth:.....*$14,600,000*
Capital Cost:.....*$14,200,000*
Annual Costs:.....*$23,800*

Alternative 4: Removal of PCBs in Soil Exceeding the Commercial Use SCO (Removal of PCBs Exceeding 1 ppm within Top One Foot and Removal of PCBs Exceeding 10 ppm Below One Foot (NYSDEC CP-51)) Combined with a Cover System

This alternative includes the excavation and off-site disposal of PCBs in soil exceeding 1 ppm to a depth of one foot and 10 ppm in subsurface soil combined with a cover system in areas where site metals remaining after excavation exceed the respective Commercial SCOs or ESCOs. Under this alternative, approximately 64,000 CY of contaminated surface and subsurface soil to a depth of approximately 10-12 feet bgs will be removed from an area encompassing 782,000 square feet (see Figure 8 for soil excavation areas). This excavation will also remove collocated cadmium, chromium, copper, lead, and nickel in soil and the location with LNAPL saturated soil. Collection and analysis of confirmation samples at the remedial excavation depth will be used to verify that SCOs for the site have been achieved. If confirmation sampling indicates that SCOs were not achieved at the stated remedial depth, the Responsible Party must notify the DEC, submit the sample results, and in consultation with the DEC, determine if further remedial excavation is necessary.

Following excavation, the site will be backfilled meeting the requirements of 6 NYCRR Part 375-6.7 (d) and regraded to accommodate installation of a two-foot cover system. The two-foot cover is being applied due to soils that will remain on site exceeding the ESCOs. OU1 is upgradient of ecologically sensitive areas that are part of both OU2 and OU3. The cover system includes a two-foot soil cover and a demarcation layer where subsurface soils remain with PCB concentrations greater than 1 ppm but less than 10 ppm. The cover system will address locations where site contaminants exceed Commercial Use SCOs and ESCOs. Alternative 4 includes monitoring of the cap/cover, an Environmental Easement, a Site Management Plan (SMP) and periodic site reviews.

Present Worth:.....*$21,700,000*
Capital Cost:.....*$21,400,000*
Annual Costs:.....*$19,300*

Alternative 5: Removal of PCBs in Soil Exceeding the Restricted Residential Use SCO (1 ppm)

This alternative includes the excavation and off-site disposal of PCBs in soil exceeding the Restricted Residential SCO of 1 ppm. Under this alternative, approximately, 154,000 CY of surface and subsurface soil to a depth of approximately 10-12 feet bgs will be removed from an area encompassing 782,000 square feet (see Figure 9 for the soil excavation areas) and disposed off-site. This excavation will also remove collocated cadmium, chromium, copper, lead, and nickel in soil and the location with LNAPL saturated soil. Collection and analysis of confirmation samples at the remedial excavation depth will be used to verify that the SCOs for the site have been achieved. If confirmation sampling indicates that SCOs were not achieved at the stated remedial depth, the Responsible Party must notify the DEC, submit the sample results, and in consultation with the DEC, determine if further remedial excavation is necessary.

The site will be backfilled meeting the requirements of 6 NYCRR Part 375-6.7 (d) to replace excavated soil, cover any remaining site-related COCs at depth, and establish designed grades at the site. No cover system or additional remediation will be required under Alternative 5. This alternative will include an Environmental Easement, a Site Management Plan (SMP), and periodic site reviews.

Present Worth:.....*$37,000,000*
Capital Cost:.....*$36,900,000*
Annual Costs:.....*$4,350*

Alternative #6: Restoration to Pre-Disposal or Unrestricted Conditions (Removal of PCBs in Soil Exceeding the Unrestricted Use SCO (0.1 ppm))

This alternative achieves all of the SCGs discussed in Section 6.1.1 and Exhibit A and soil meets the unrestricted soil clean objectives listed in Part 375-6.8 (a). This alternative would include: the excavation and off-site disposal of all on-site soil which exceed the unrestricted SCOs for PCBs and site-related metals, as defined by 6 NYCRR Part 375-6.8. Under this alternative, approximately 227,500 cubic yards of contaminated surface and subsurface soils to a depth of approximately 18-20 feet bgs will be removed from an area encompassing 782,000 square feet (see Figure 10 for the soil excavation areas). This excavation will also remove collocated COCs such as site-related metals and SVOCs in soil are present at concentrations exceeding unrestricted SCOs, including the location where LNAPL saturated soil is present. Collection and analysis of confirmation soil samples at the remedial excavation depth will be used to verify that SCOs for the site have been achieved. If confirmation sampling indicates that SCOs were not achieved at the stated remedial depth, the Responsible Party must notify the DEC, submit the sample results, and in consultation with the DEC, determine if further remedial excavation is necessary. Further excavation for development will proceed after confirmation samples demonstrate that SCOs for the site have been achieved.

Backfill meeting the requirements of 6 NYCRR Part 375-6.7 (d) will be brought in to replace excavated soil and establish designed grades at the site. Due to the groundwater contamination originating from the Utica Alloys site, this Alternative will still require Institutional Controls that will restrict the use of groundwater on site and address any potential vapor intrusion impacts until the groundwater contamination originating from the Utica

Alloys site has been remediated. Costs of long-term monitoring due to contaminated groundwater will be included under the Utica Alloys remedy.

Capital Cost:.....$52,200,000

Exhibit C

Remedial Alternative Costs

Remedial Alternative	Capital Cost ($)	Annual Costs ($)	Total Present Worth ($)
1 – No Further Action	0	0	0
2 – Removal of PCBs in Soil Exceeding the Hazardous Waste Limit (50 ppm) Combined with a Cover System	$13,200,000	$23,800	$13,600,000
3 – Removal of PCBs in Soil Exceeding the Industrial Use SCO (25 ppm) Combined with a Cover System	$14,200,000	$23,800	$14,600,000
4 – Removal of PCBs in Soil Exceeding the Commercial Use SCO (Removal of PCBs Exceeding 1 ppm within Top One Foot and Removal of PCBs Exceeding 10 ppm Below One Foot (NYSDEC CP-51)) Combined with a Cover System	$21,400,000	$19,300	$21,700,000
5 – Removal of PCBs in Soil Exceeding the Restricted Residential Use SCO (1 ppm)	$36,900,000	$4,350	$37,000,000
6 – Restoration to Pre-Disposal or Unrestricted Conditions (Removal of PCBs in Soil Exceeding Unrestricted Use SCO (0.1 ppm))	$52,200,000	0	$52,200,000

Exhibit D

SUMMARY OF THE PROPOSED REMEDY

The DEC is proposing Alternative 3, Removal of PCBs in Soil Exceeding the 25 ppm Industrial Use SCO Combined with a Cover System as the remedy for this site. Alternative #3 would achieve the remediation goals for the site by removing nearly 35,000 CY of contaminated soil thereby eliminating exposure of soil contamination on-site above the site's specific Industrial use SCOs and by restricting the site to industrial use through an environmental easement. Alternative 3 also includes a cover system to provide protection to ecologically sensitive areas that are downgradient of the site. The elements of this remedy are described in Section 7. The proposed remedy is depicted in Figure 7.

Basis for Selection

The proposed remedy is based on the results of the RI and the evaluation of alternatives. The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375. A detailed discussion of the evaluation criteria and comparative analysis is included in the FS report.

The first two evaluation criteria are termed "threshold criteria" and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

The proposed remedy Alternative 3 would satisfy this criterion by removing the potential for direct contact with the soil that exceeds the Industrial Use SCOs through excavation and off-site disposal, backfilling with clean fill material to existing land surface and providing a two-foot cover over remaining soil containing site contaminants exceeding the Industrial Use SCOs and ESCOs, and restricting future use of the property with an environmental easement. Alternative 1, with no further actions, leaves PCBs in both surface and subsurface soil at concentrations exceeding 50 ppm. As such, Alternative 1 does not provide protection to public health and the environment and will not be evaluated further. Alternative 6, that involves restoring the site to pre-disposal conditions by removing over 200,000 cubic yards of PCB, metals, and SVOC contaminated soil, is the most effective alternative in satisfying this criterion. While Alternative 6 is the most protective of human health and the environment, Alternatives 2 through 5 do provide varying degrees of protection through a combination of excavation of contaminated soil, use of cover systems, and land use controls.

Due to an off-site source of VOC groundwater contamination (originating from the Utica Alloys site), the potential for soil vapor intrusion will remain high under Alternatives 2 through 6. As a result, each of these alternatives include a provision for soil vapor mitigation should buildings be constructed on-site to protect human health prior to a remedy being selected for the Utica Alloys site. With the exception of Alternative 1 (No Further Action), each of the alternatives will require groundwater use restrictions.

2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the DEC has determined to be applicable on a case-specific basis.

Alternative 2, that only includes the excavation of PCB contaminated soil that exceeds 50 ppm, would be the least compliant with directly achieving SCGs. A cover system, combined with land use controls, would be required under Alternative 2 to achieve the SCGs for contamination not removed as part of the excavation. Alternative 6 (Restoration to Pre-Disposal Conditions) would be the most effective alternative in achieving SCGs by removing nearly 230,000 cubic yards of contaminated soil. Alternative 3, 4, and 5, with increasing volumes of soil being removed to achieve lower SCOs respectively, provide increasing compliance with the SCGs. Specifically, Alternative 3 achieves the Industrial use SCOs (which is consistent with the current zoning) by removing 34,700 CY of soil, Alternative 4 complies with the Commercial SCOs by removing 64,000 CY of soil, and Alternative 5 complies with the Residential SCO by removing 154,000 CY of soil. Furthermore, with the removal of PCBs at concentrations greater than 1 ppm under Alternative 5, a site cover is not needed. Both Alternatives 3 and 4 rely on cover systems to achieve the SCGs. Alternatives 2 through 6 satisfy the threshold criteria, therefore the remaining criteria are particularly important in selecting a final remedy for the site.

The next six "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

Alternatives 2 through 4 will provide long-term effectiveness and permanence by removing PCB contaminated soil off-site and installing a cover system to address contamination left on-site. However, the alternatives differ in the amount and concentrations of contaminated soil that would remain on-site. Alternative 2 will remove all PCB-contaminated soil exceeding 50 ppm (only 12% of contaminated soil exceeding the Unrestricted SCO) but will leave soil containing PCBs between the IUSCO of 25 ppm and 50 ppm in place beneath a TSCA cap and the cover system over the remaining areas of the remaining parcel. Consequently, Alternative 2 would rely to a greater degree on engineering and institutional controls for long-term protection than the other alternatives. Alternatives 3 and 4 will result in the removal of approximately 15% and 28% of contaminated soil above the Unrestricted SCO, respectively. Alternatives 3 and 4, through excavation and off-site disposal of contaminated soil, backfill, placement of a two-foot cover of clean material over the entire 20.3 acre parcel, an SMP and an Environmental Easement, will limit the potential for exposure to remaining contaminated soil. Alternative 5, with the removal of 154,000 cubic yards of PCB contaminated soil exceeding the Restricted Residential SCOs, will result in the removal of approximately 67% of contaminated soil above the Unrestricted Use SCO and no cover will be required. Alternative 6 has the greatest long-term effectiveness and permanence through excavation and offsite disposal of all contaminated soil (227,506 CY) above the Unrestricted Use SCOs. Alternative 3 will provide equal amounts of long-term effectiveness as Alternatives 4 through 5 and will meet the current and anticipated industrial use of the property, while providing greater permanence than Alternative 2.

4. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

Alternatives 2 through 6 will reduce the mobility and volume of contaminated material through excavation, off-site disposal, and where necessary, containment beneath a cover system. The degree of permanent contaminant removal increases progressively from Alternative 2 through 6. Alternative 2 will remove PCB contaminated soil exceeding 50 ppm and reduce the mobility of remaining contaminated soil through placement of a soil cover system. However, Alternative 2 will leave a greater volume and higher concentrations of PCB contaminated soil on-site than each of the other alternatives. Alternative 3 will remove approximately 34,700 CY of soil/fill material,

including PCB contaminated soil exceeding the IUSCO of 25 ppm. Alternative 4 will remove approximately 64,000 CY of soil/fill material, Alternative 5 will remove approximately 154,000 CY of soil/fill material exceeding the Residential Use SCO, and Alternative 6 will remove approximately 227,506 CY of soil exceeding the Unrestricted Use SCOs. Alternatives 5 and 6 will not require a cover. Alternative 3 provides a meaningful increase in permanent contaminant removal compared with Alternative 2 by removing the PCB contaminated soil that exceeds the cleanup objective applicable to the site's anticipated industrial use. Furthermore, the use of a cover system as part of Alternative 3 will prevent off-site migration of site contaminants (reduced mobility). The additional volume of contaminated soil removed under Alternative 4 through 6 consists largely of material that would not present an unacceptable risk under the site's anticipated future use.

5. Short-term Impacts and Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

With Alternatives 2 through 6 involving excavation and off-site disposal of PCB contaminated soil and the use of heavy construction equipment, they each have short-term impacts on the community (e.g., increased noise, increased traffic, possible air emissions, etc.). The magnitude and duration of these impacts generally increase with the volume of soil excavated and transported off-site. Alternative 2 will result in the least excavation-related short-term impacts because it will remove the smallest volume of contaminated soil. Alternative 3 will require additional excavation and truck traffic compared with Alternative 2 but will remain substantially less disruptive than Alternatives 4 through 6. Alternative 4 approximately doubles the amount of truck traffic (approximately 5,1000 trucks would be needed to transport PCB contaminated soil to a disposal facility) that will be required to complete the remediation compared to Alternative 3. Alternatives 5 and 6 will involve substantially greater excavation volumes and will require work being performed over multiple construction seasons where Alternatives 2, 3 and 4 will only require one construction season. As would be expected, Alternatives 4 through 6 will have a much greater volume of traffic, noise, dust, and potential odors due to the much larger excavation areas and exaction depths. While Alternative 2 will have fewer short-term construction impacts than Alternative 3, Alternative 3 provides the additional benefit of permanently removing PCB contaminated soil exceeding the IUSCO while maintaining a relatively limited construction duration and level of community disruption. It should be noted that disruptions to the community can be minimized using standard construction best practices. Alternatives 4 through 6 will result in substantially greater short-term impacts without a proportional increase in site protectiveness.

Green and sustainable remediation (GSR) and the potential indirect environmental impacts of the alternatives have also been evaluated and included in the Short-Term Impacts Effectiveness balancing criterion. Under GSR, preference is given to alternatives that have the potential to remediate the site with the lowest potential negative environmental impact, such as CO2 emissions. This evaluation considers the resilience of alternatives to potential climate change effects such as sustained changes in average temperatures, increased heavy precipitation events, and increased coastal flooding.

The environmental impacts of each remedial alternative were calculated using SiteWiseTM. Environmental footprint analyses for each alternative include calculations of greenhouse gas emissions (GHG) emissions, total energy use, air emissions of pollutants (nitrogen oxides, sulfur oxides, and particulate matter), water consumption, resource consumption, and worker safety ratings. Inputs considered during the calculations of these metrics include the production of required treatment or construction materials, transportation of materials, equipment, and personnel, on-site equipment operation, and waste management. A detailed analysis can be found in the October 2026 Feasibility Study.

Alternative 2 has the lowest footprint analysis as there will be limited hauling of contaminated materials off site compared to Alternatives 3 through 6. Alternative 3 rates second according to the footprint analysis having a higher emissions footprint than Alternative 2. There are higher emissions associated with more volume of contaminated materials needing to be hauled off site. Alternatives 4 and 5 rate third and fourth, respectively, because of the larger footprint and depth of soil to be excavated and backfilled. Alternative 6 is calculated to have the highest footprint. Alternative 6 will require significant resources for additional transportation and disposal of excavated soil, and replacement soil, and fuel for equipment and water for dust control.

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

Since each of the alternatives (Alternatives 2 through 6) involve varying amounts of excavation and off-site disposal of PCB contaminated soil using establish and standard construction techniques, each of the alternatives is readily implementable. However, implementation becomes progressively more complex as the area and depth of PCB contaminated soil requiring excavation and off-site disposal increases. Alternative 2 will require the least amount of excavation (27,500 cubic yards) and therefore will be the easiest alternative to implement from a construction standpoint. Alternative 3 will require additional excavation compared with Alternative 2 but remains readily implementable and will avoid the substantially greater earthwork associated with Alternatives 4 through 6. Alternatives 4 through 6 will require excavation across progressively larger and deeper portions of the site and will increase the complexity due to the increased volume of excavation, backfilling, truck traffic, and off-site disposal. These activities will also increase potential impacts on the structural integrity of nearby roads and complicate coordination with the active rail line that runs through the site. Although Alternative 2 is somewhat easier to implement, Alternative 3 is the most readily implementable and achieves the IUSCO for PCBs through permanent removal while avoiding the substantial implementation challenges associated with Alternative 4 through 6.

7. Cost-Effectiveness. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision.

Alternative 2 has the lowest cost among the active remedial alternatives because it limits excavation to PCB-contaminated soil exceeding 50 ppm and relies to a greater extent on a cover system and institutional controls to manage remaining contamination. However, Alternative 2 will leave PCB-contaminated soil exceeding the IUSCO of 25 ppm on-site. Alternative 3 has present-worth cost of approximately $14,600,000 and will remove all PCBs in soil exceeding the IUSCO of 25 ppm, meeting the current and anticipated use of the site. The additional cost of Alternative 3, compared with Alternative 2, provides a meaningful increase in permanent contaminant removal by addressing PCB contamination above the cleanup objective applicable to the sites anticipated use. With its large volume of soil to be handled, Alternative 4 has a higher present worth cost at $21,700,000 compared to Alternative 3 but removes a greater volume of contaminated soil from the site. Alternatives 5 and 6 have the highest present worth cost, with Alternative 5 more than doubling the cost of Alternative 3 and Alternative 6 more than tripling the cost of Alternative 3 without significant environmental benefit and with significant short-term impacts. Although Alternatives 5 and 6 would remove greater quantities of contaminated soil, the additional expenditures do not result in a proportionate increase in protectiveness given

the site's industrial zoning and anticipated future use. Alternative 3 provides the best balance between cost and permanent contaminant removal by achieving the IUSCO for PCBs without incurring the substantially greater costs and short-term impacts associated with cleanup to more stringent soil cleanup objectives.

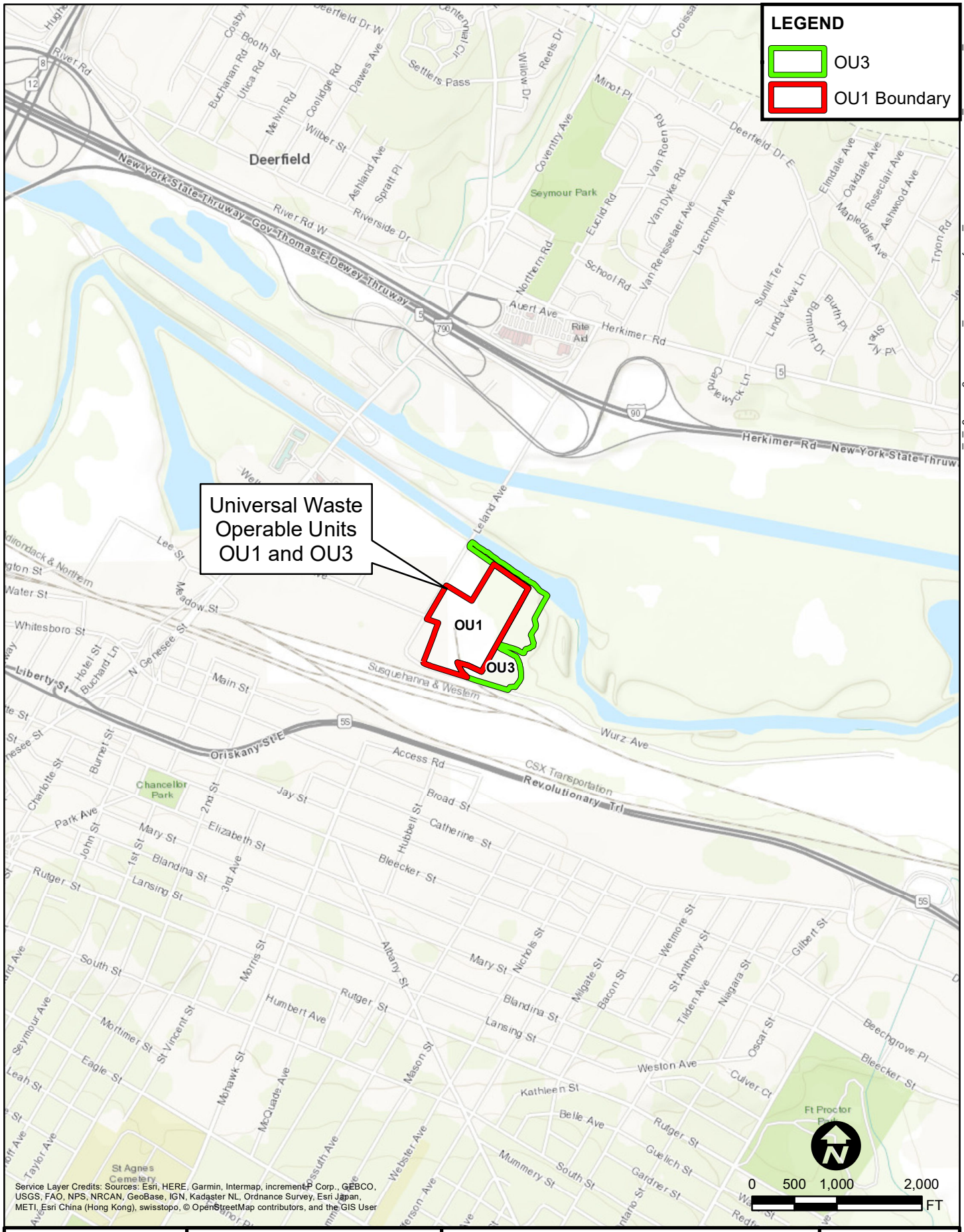
8. Land Use. When cleanup to pre-disposal conditions is determined to be infeasible, the DEC may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings in the selection of the soil remedy.

The anticipated use of the site is Industrial and this is consistent with the current City of Utica zoning for this parcel. Alternative 2 will allow continued industrial use of the property through a combination of limited excavation, a cover system, an SMP, and an environmental easement. However, PCB-contaminated soil exceeding the IUSCO would remain beneath the cover system, resulting in greater reliance on engineering and institutional controls to maintain the sites suitability for industrial use. Alternatives 3 through 6 will remove or cover the contaminated soil exceeding the Industrial SCOs. Alternative 3 complies with the current and reasonably anticipated future use of the property for industrial purposes. The surrounding properties are also used for industrial purposes and there is an active rail line that bisects the property. Alternatives 4 through 6 will remove soils beyond the Industrial SCO, however if the property were to be used for Commercial or Residential use, a zoning change will be required. The residual contamination in Alternatives 3 through 5 will be controllable with implementation of a Site Management Plan. Alternative 6 will remove the contaminated soil permanently and restrictions will not be needed on the site.

The final criterion, Community Acceptance, is considered a "modifying criterion" and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP are evaluated. A responsiveness summary will be prepared that describes public comments received and the manner in which the DEC will address the concerns raised. If the selected remedy differs significantly from the proposed remedy, notices to the public will be issued describing the differences and reasons for the changes.

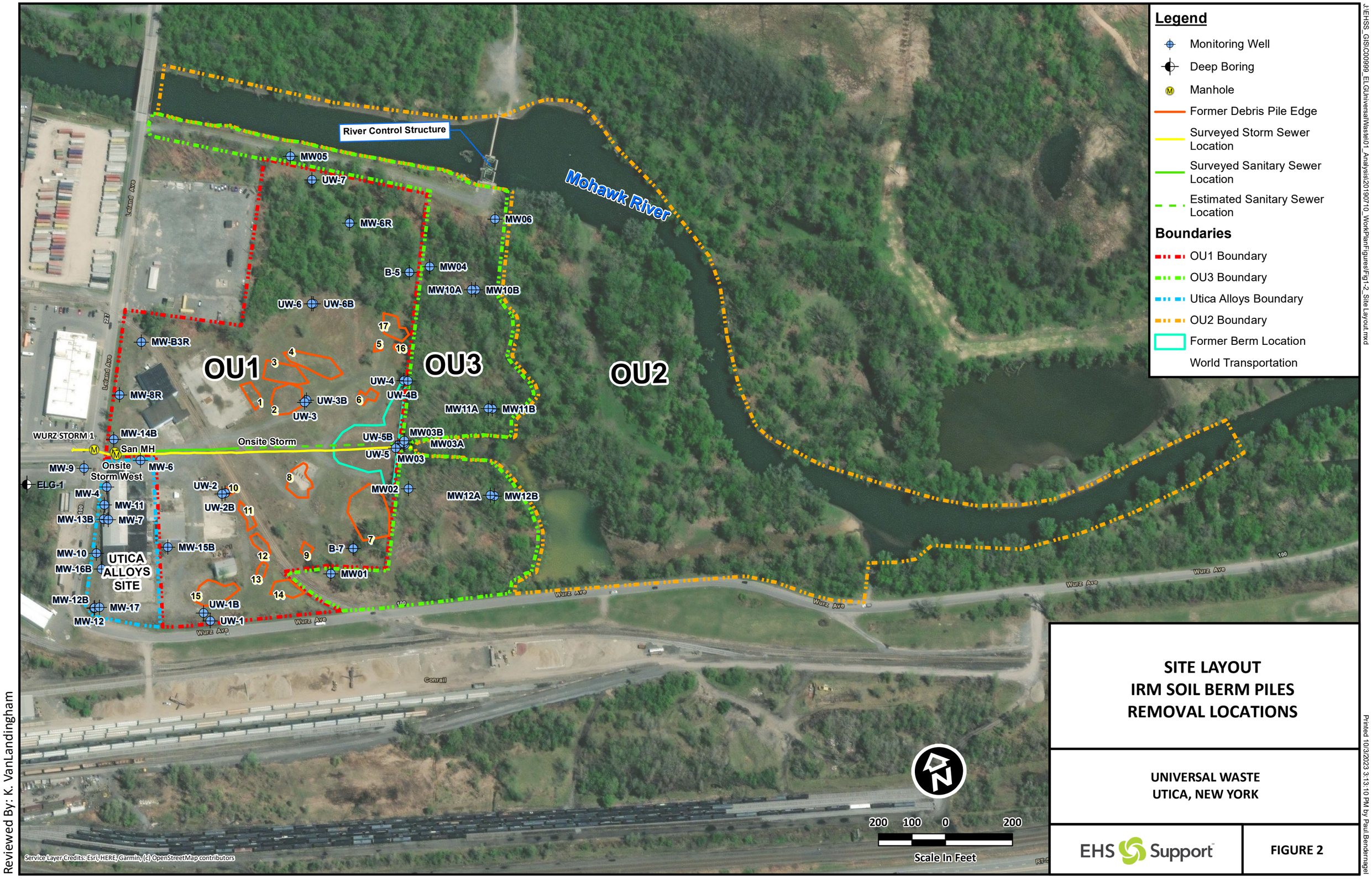
Alternative 3 is being proposed because, as described above, it satisfies the threshold criteria and provides the best balance of the balancing criterion.



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EHS Support	UNIVERSAL WASTE UTICA, NEW YORK	SITE LOCATION	FIGURE 1



SITE LAYOUT
IRM SOIL BERM PILES REMOVAL LOCATIONS

UNIVERSAL WASTE
UTICA, NEW YORK

EHS Support

FIGURE 2

Reviewed By: K. VanLandingham

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LEGEND

- 95 — Maximum PCB Concentration (mg/kg)
- (2') — Depth of maximum concentration in feet
- Below the Unrestricted Use SCO of 0.1 mg/kg (6 NYCRR Part 375) or below the laboratory reporting
- Exceeds the Unrestricted Use SCO of 0.1 mg/kg (6 NYCRR Part 375) but is at or below the Residential and Commercial Use SCOs (6 NYCRR Part 375) and the CP-51 Surface Standard of 1 mg/kg
- Exceeds the Residential and Commercial Use SCOs (6 NYCRR Part 375) and the CP-51 Surface Standard of 1 mg/kg but is at or below the Industrial Use SCO of 25 mg/kg (6 NYCRR Part 375)
- Exceeds the Industrial Use SCO of 25 mg/kg (6 NYCRR Part 375) but is
- Exceeds 50 mg/kg
- Storm Sewer Location
- Surveyed Sanitary Sewer Location
- Estimated Sanitary Sewer Location
- OU1 Boundary
- OU3 Boundary
- Utica Alloys Site Boundary
- Railroad
- Concrete Slab

Notes:
1. mg/kg = milligrams per kilogram
2. PCBs = polychlorinated biphenyls
3. J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
4. ND = Non-detect

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N

0 110 220 330 440
Feet

FIGURE 3

Total PCBs in OU1 Surface Soil (0-1 feet)

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LEGEND

- 95 — Maximum PCB Concentration (mg/kg)
- (2') — Depth of maximum concentration in feet
- Below the Unrestricted Use SCO of 0.1 mg/kg (6 NYCRR Part 375) or below the laboratory reporting
- Exceeds the Unrestricted Use SCO of 0.1 mg/kg (6 NYCRR Part 375) but is at or below the CP-51 Surface Standard of 10 mg/kg
- Exceeds the CP-51 Surface Standard of 10 mg/kg but is at or below the Industrial Use SCO of 25 mg/kg (6 NYCRR Part 375)
- Exceeds the Restricted Industrial SCO of 25 mg/kg (6 NYCRR Part 375) but is ≤ 50 mg/kg
- Exceeds 50 mg/kg
- Storm Sewer Location
- Surveyed Sanitary Sewer Location
- Estimated Sanitary Sewer Location
- OU1 Boundary
- OU3 Boundary
- Utica Alloys Site Boundary
- Railroad
- Concrete Slab

Notes:
1. mg/kg = milligrams per kilogram
2. PCBs = polychlorinated biphenyls
3. J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
4. ND = Non-detect

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N

0 110 220 330 440
Feet

FIGURE 4

Total PCBs in Subsurface Soil (>1 feet)

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Class GA Groundwater Quality Standards (GQS)	
Analyte	**GQS (ug/L)**
DCE	5
TCE	5
VC	2
cDCE	5
tDCE	5
Benzene	1
Chlorobenzene	5

PZ-2

	2017-05-10	2020-11-10
DCE	38.9J	4.3
TCE	3980	12.6
VC	113	76.5
cDCE	8220	1360
tDCE	31.9J	8.6

MW-6

	2017-05-10	2020-11-06
VC	6.2	1U

PZ-1

	2016-11-01	2017-05-10
VC	6.6	1.8
cDCE	10.3	7.5

MW-4

	2017-05-10	2020-11-04
TCE	46.8	53.7
VC	104	36.8
cDCE	232	104

MW-11

	2017-05-10	2020-11-10
TCE	155	19.3
VC	1U	12.4
cDCE	14.6	95.6

MW-7

	2017-05-10	2020-11-09
TCE	557	661
cDCE	31	90.8

MW-10

	2017-05-10	2020-11-10
TCE	70.2	43.5
cDCE	8.9	20.3

UW-2

	2017-05-10	2020-11-10
Benzene	0.65	4.3
VC	0.7J	8.8
cDCE	3	44.6

MW11A

	2017-10-04	2020-11-03
Benzene	0.85	0.5U
Chlorobenzene	1U	1U
DCE	1U	1U
TCE	1U	1U
VC	1U	1U
cDCE	1U	1U
tDCE	1U	1U

MW12A

	2017-05-09	2020-11-06
1,4-Dichlorobenzene	2.7	1U
Chlorobenzene	19.6	1U
cDCE	1U	5.3

MW03

	2016-11-02	2017-05-09
DCE	86.6	2.5
TCE	3020	0.8J
VC	3930	500
cDCE	22800	1010
tDCE	99.3	4

Legend

- Abandoned/Destroyed Well
- Shallow Well
- Deep Well
- Piezometer
- Surveyed Storm Sewer Location
- Surveyed Sanitary Sewer Location
- Estimated Sanitary Sewer Location
- Universal Waste Site OU1 Boundary
- Universal Waste Site OU3 Boundary
- Utica Alloys Boundary
- Groundwater Flow Direction

NOTES:

1) All concentrations in microgram per liter (ug/L)
2) Date format is yyyy-mm-dd
3) U = Analyte was analyzed for but not detected
4) * = No VOCs were detected above the Class GA GQS during the 2016, 2017, and 2020 site-wide sampling events
5) Constituent Abbreviations:
DCE - 1,1-Dichloroethene
TCE - Trichloroethene
VC - Vinyl Chloride
cDCE - cis-1,2-dichloroethene
tDCE - trans-1,2-dichloroethene

Mohawk River
Universal Waste Site OU1
Universal Waste Site OU3
UTICA ALLOYS SITE
Leland Avenue
Wurz Avenue
Sewage Plant Road
River Control Structure
MW05
UW-7
MW-6R
MW06
B-5
MW04
UW-6
UW-6B
MW10B
MW10A
MW-3R
MW-B3R
MW-8
MW-8R
UW-4
UW-4B
UW-3
UW-3B
MW11A
MW11B
MW-14B
PZ-2
PZ-3
PZ-4
PZ-5
PZ-6
PZ-7
PZ-8
PZ-9
PZ-10
UW-5B
MW03B
MW03
MW03A
UW-5
MW-5
PZ-1
MW-6
MW-9
MW-4
MW-11
MW-7
MW-13B
MW-3
UW-2
UW-2B
MW-2
MW-15B
B-7
MW01
MW12A
MW12B
MW-10
MW-16B
MW-12
MW-12B
MW-1
MW-7
UW-1B
UW-1
150 75 0 150
Scale In Feet

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VOLATILE ORGANIC COMPOUNDS (VOCS)
DETECTED ABOVE CLASS GA GROUNDWATER QUALITY STANDARDS
IN FILL/ALLUVIUM GROUNDWATER

FIGURE 5

Remedy Alternative RA-2 Description:

1. Excavation and off-site disposal of PCBs in soils with concentrations greater than 50 ppm (27,500 cubic yards removed).
2. Excavation and off-site disposal of LNAPL saturated soil.
3. Removal and off-site disposal of three concrete slabs.
4. Placement of two-ft thick clean soil in areas where remaining surface soil will exceed the Ecological SCOs.

LEGEND

- Below the Unrestricted Use SCO of 0.1 mg/kg (6 NYCRR Part 375) or below the laboratory reporting
- Exceeds the Unrestricted Use SCO of 0.1 mg/kg (6 NYCRR Part 375) but is at or below the Residential and Commercial Use SCOs (6 NYCRR Part 375) and the CP-51 Surface Standard of 1 mg/kg
- Exceeds the Residential and Commercial Use SCOs (6 NYCRR Part 375) and the CP-51 Surface Standard of 1 mg/kg but is at or below the Industrial Use SCO of 25 mg/kg (6 NYCRR Part 375)
- Exceeds the Industrial Use SCO of 25 mg/kg (6 NYCRR Part 375) but is ≤ 50 mg/kg
- Exceeds 50 mg/kg
- Storm Sewer Location
- Surveyed Sanitary Sewer Location
- Estimated Sanitary Sewer Location
- OU1 Boundary
- OU3 Boundary
- Utica Alloys Site
- Railroad
- Concrete Slab
- Excavation Area: 27,500 cubic yards removed
- LNAPL Area
- Slabs to be removed

Notes:
1. PCBs = polychlorinated biphenyls
2. mg/kg = milligram per kilogram
3. ppm = parts per million
4. LNAPL = Light Non-Aqueous Phase Liquid
5. SCO = Soil Cleanup Objective
6. Sample depth is 0-1 feet

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UTICA, NEW YORK

N

0 110 220 330 440
Feet

FIGURE 6
Alternative 2: Removal of PCBs in Soil Exceeding the Hazardous Waste Limit (50 ppm) Combined with a Cover System

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Remedy Alternative RA-3 Description:

1. Excavation and off-site disposal of PCBs in soils with concentrations greater than 25 ppm (34,700 cubic yards removed).
2. Excavation and off-site disposal of LNAPL saturated soil.
3. Removal and off-site disposal of three concrete slabs.
4. Placement of two-ft thick clean soil cover in areas where remaining surface soil will exceed the Ecological SCO.

LEGEND

- Below the Unrestricted Use SCO of 0.1 mg/kg (6 NYCRR Part 375) or below the laboratory reporting
- Exceeds the Unrestricted Use SCO of 0.1 mg/kg (6 NYCRR Part 375) but is at or below the Residential and Commercial Use SCOs (6 NYCRR Part 375) and the CP-51 Surface Standard of 1 mg/kg
- Exceeds the Residential and Commercial Use SCOs (6 NYCRR Part 375) and the CP-51 Surface Standard of 1 mg/kg but is at or below the Industrial Use SCO of 25 mg/kg (6 NYCRR Part 375)
- Exceeds the Industrial Use SCO of 25 mg/kg (6 NYCRR Part 375) but is ≤ 50 mg/kg
- Exceeds 50 mg/kg
- Storm Sewer Location
- Surveyed Sanitary Sewer Location
- Estimated Sanitary Sewer Location
- OU1 Boundary
- OU3 Boundary
- Utica Alloys Site
- Railroad
- Concrete Slab
- Excavation Area: 34,700 cubic yards removed
- LNAPL Area
- Slabs to be removed

Notes:
1. PCBs = polychlorinated biphenyls
2. mg/kg = milligram per kilogram
3. ppm = parts per million
4. LNAPL = Light Non-Aqueous Phase Liquid
5. SCO = Soil Cleanup Objective
6. Sample depth is 0-1 feet

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N

0 110 220 330 440
Feet

FIGURE 7
Alternative 3: Removal of PCBs in Soil Exceeding the Industrial Use SCO (25 ppm) Combined with a Cover System

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Remedy Alternative RA-4 Description:

1. Excavation and off-site disposal of PCBs in surface soils (0-1 ft) with concentrations greater than 1 ppm and subsurface soils (>1 ft) with concentrations greater than 10 ppm (64,000 cubic yards removed).
2. Excavation and off-site disposal of LNAPL saturated soil.
3. Removal and off-site disposal of three concrete slabs.
4. Placement of two-ft thick clean soil cover in areas where remaining surface soil will exceed the Ecological SCOs.

LEGEND

- Below the Unrestricted Use SCO of 0.1 mg/kg (6 NYCRR Part 375) or below the laboratory reporting
- Exceeds the Unrestricted Use SCO of 0.1 mg/kg (6 NYCRR Part 375) but is at or below the Residential and Commercial Use SCOs (6 NYCRR Part 375) and the CP-51 Surface Standard of 1 mg/kg
- Exceeds the Residential and Commercial Use SCOs (6 NYCRR Part 375) and the CP-51 Surface Standard of 1 mg/kg but is at or below the Industrial Use SCO of 25 mg/kg (6 NYCRR Part 375)
- Exceeds the Industrial Use SCO of 25 mg/kg (6 NYCRR Part 375) but is ≤ 50 mg/kg
- Exceeds 50 mg/kg
- Storm Sewer Location
- Surveyed Sanitary Sewer Location
- Estimated Sanitary Sewer Location
- OU1 Boundary
- OU3 Boundary
- Utica Alloys Site
- Railroad
- Concrete Slab
- Excavation Area: 64,000 cubic yards removed
- LNAPL Area
- to be removed

Notes:
1. PCBs = polychlorinated biphenyls
2. mg/kg = milligram per kilogram
3. ppm = parts per million
4. LNAPL = Light Non-Aqueous Phase Liquid
5. SCO = Soil Cleanup Objective
6. Sample depth is 0-1 feet

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N

0 110 220 330 440
Feet

FIGURE 8
Alternative 4: Removal of PCBs in Soil Exceeding the Commercial SCO (Removal of PCBs Exceeding 1 ppm with Top One Foot and Removal of PCBs Exceeding 10 ppm Below 1 Foot (NYSDEC CP-51)) Combined with a Cover System

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Remedy Alternative RA-5 Description:

1. Excavation and off-site disposal of PCBs in soils with concentrations greater than 1 ppm (154,000 cubic yards removed).
2. Excavation and off-site disposal of LNAPL saturated soil.
3. Removal and off-site disposal of three concrete slabs.

LEGEND

- Below the Unrestricted Use SCO of 0.1 mg/kg (6 NYCRR Part 375) or below the laboratory reporting
- Exceeds the Unrestricted Use SCO of 0.1 mg/kg (6 NYCRR Part 375) but is at or below the Residential and Commercial Use SCOs (6 NYCRR Part 375) and the CP-51 Surface Standard of 1 mg/kg
- Exceeds the Residential and Commercial Use SCOs (6 NYCRR Part 375) and the CP-51 Surface Standard of 1 mg/kg but is at or below the Industrial Use SCO of 25 mg/kg (6 NYCRR Part 375)
- Exceeds the Industrial Use SCO of 25 mg/kg (6 NYCRR Part 375) but is ≤ 50 mg/kg
- Exceeds 50 mg/kg
- Storm Sewer Location
- Surveyed Sanitary Sewer Location
- Estimated Sanitary Sewer Location
- OU1 Boundary
- OU3 Boundary
- Utica Alloys Site
- Railroad
- Concrete Slab
- Excavation Area: 154,000 cubic yards removed
- LNAPL Area
- Slabs to be removed

Notes:
1. PCBs = polychlorinated biphenyls
2. mg/kg = milligram per kilogram
3. ppm = parts per million
4. LNAPL = Light Non-Aqueous Phase Liquid
5. SCO = Soil Cleanup Objective
6. Sample depth is 0-1 feet

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N

0 110 220 330 440
Feet

FIGURE 9
Alternative 5: Removal of PCBs in Soil Exceeding the Restricted Residential Use SCO (1 ppm)

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Remedy Alternative RA-6 Description:

1. Excavation and off-site disposal of PCBs in soils with concentrations greater than 0.1 ppm (227,500 cubic yards removed).
2. Excavation and off-site disposal of LNAPL saturated soil.
3. Removal and off-site disposal of three concrete slabs.

LEGEND

- Below the Unrestricted Use SCO of 0.1 mg/kg (6 NYCRR Part 375) or below the laboratory reporting
- Exceeds the Unrestricted Use SCO of 0.1 mg/kg (6 NYCRR Part 375) but is at or below the Residential and Commercial Use SCOs (6 NYCRR Part 375) and the CP-51 Surface Standard of 1 mg/kg
- Exceeds the Residential and Commercial Use SCOs (6 NYCRR Part 375) and the CP-51 Surface Standard of 1 mg/kg but is at or below the Industrial Use SCO of 25 mg/kg (6 NYCRR Part 375)
- Exceeds the Industrial Use SCO of 25 mg/kg (6 NYCRR Part 375) but is ≤ 50 mg/kg
- Exceeds 50 mg/kg
- Storm Sewer Location
- Surveyed Sanitary Sewer Location
- Estimated Sanitary Sewer Location
- OU1 Boundary
- OU3 Boundary
- Utica Alloys Site
- Railroad
- Concrete Slab
- Excavation Area: 227,500 cubic yards removed
- LNAPL Area
- Slabs to be removed

Notes:
1. PCBs = polychlorinated biphenyls
2. mg/kg = milligram per kilogram
3. ppm = parts per million
4. LNAPL = Light Non-Aqueous Phase Liquid
5. SCO = Soil Cleanup Objective
6. Sample depth is 0-1 feet

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N

0 110 220 330 440
Feet

FIGURE 10
Alternative 6: Restoration to Pre-Disposal or Unrestricted Conditions
(Removal of PCBs in Soil Exceeding the Unrestricted Use SCO (0.1 ppm))

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