

DECISION DOCUMENT

147 West Tupper Street Site
Brownfield Cleanup Program
Buffalo, Erie County
Site No. C915389
January 2024



**Department of
Environmental
Conservation**

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

DECLARATION STATEMENT - DECISION DOCUMENT

147 West Tupper Street Site
Brownfield Cleanup Program
Buffalo, Erie County
Site No. C915389
January 2024

Statement of Purpose and Basis

This document presents the remedy for the 147 West Tupper Street Site a brownfield cleanup site. The remedial program was chosen in accordance with the 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 decision is based on the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the 147 West Tupper Street Site and the public's input to the proposed remedy presented by NYSDEC.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design

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 to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at

a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) 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 Department 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

The existing on-site buildings 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. Excavation and off-site disposal of all on-site soils which exceed unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8, or soil that creates a nuisance condition, as defined in Commissioner Policy CP-51 Section G, will be completed. Approximately 12,100 tons of soil meeting these criteria will be excavated. Collection and analysis of confirmation samples at the remedial excavation extents 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 extent, further remedial excavation may be necessary.

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 laws, rules, and regulations.

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in as needed to replace the excavated soil and establish the designed grades at the site.

3. Building 1 Investigation

Further investigation and remediation (if necessary) beneath Building 1 will be completed after it is demolished, or as the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

Date

Michael Cruden, Director
Remedial Bureau E

DECISION DOCUMENT

147 West Tupper Street Site
Buffalo, Erie County
Site No. C915389
January 2024

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, where a contaminant is present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria or guidance, based on the reasonably anticipated use of the property.

NYSDEC has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

NYSDEC seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by NYSDEC in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repository:

DECInfo Locator - Web Application
<https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C915389>

Buffalo & Erie County Public Library
Attn: April Tompkins
1 Lafayette Square
Buffalo, NY 14203
Phone: 716-858-7129

Receive Site Citizen Participation Information By Email

Please note that NYSDEC'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 0.779-acre 147 West Tupper Street Site is located on the west side of Elmwood Avenue in a highly developed mixed use residential and commercial area of the City of Buffalo, Erie County. The site is bordered by Trinity Place and residential properties to the north, Elmwood Avenue to the east, West Tupper Street to the south, and residential properties to the west.

Site Features: The site consists of a vacant former automotive repair structure, four vacant residential buildings, and a vacant mixed-use building with commercial and residential spaces. The ground surface surrounding the buildings is a mix of asphalt pavement, gravel, and vegetated soil.

Zoning and Land Use: The site is zoned N-2R which is defined as Residential: areas adjoining more intensive mixed-use center, generally defined by compact residential blocks, which occasionally include small mixed-use buildings. The entire site is vacant.

The land uses surrounding the site consist of residential properties to the north and west, commercial properties to the east, and a bilingual elementary school to the south.

Past Use of the Site: Based on historic records and previous investigations, the site was primarily used for residential and commercial purposes, including automotive repair, dental equipment service/manufacturing, storefronts, a restaurant, a union hall, and a beauty salon.

Site Geology and Hydrogeology: Surficial soil at the site consist of urban fill up to eight feet below ground surface (fbgs). Underlying the fill material are alternating layers of native sandy lean clay, lean clay, and fine sand to at least 20 fbgs. Bedrock was not encountered.

Groundwater is present in both the fill and native soil, from 4 to 11 fbgs. Groundwater flow is to the south or southwest.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

NYSDEC 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, alternatives (or an alternative) that restrict(s) the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the Remedial Investigation (RI) to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do not have an obligation to address off-site contamination. However, NYSDEC has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor
- indoor air
- 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. NYSDEC has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. 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 contaminant 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 below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

indeno(1,2,3-cd)pyrene	alpha-BHC
benzo(b)fluoranthene	trichloroethene (TCE)
benzo(k)fluoranthene	cis-1,2-dichloroethene
chrysene	tetrachloroethene (PCE)
benzo(a)pyrene	DDT
dibenz[a,h]anthracene	DDD
benzo(a)anthracene	DDE
lead	nickel
manganese	zinc
mercury	copper
arsenic	acetone
barium	dieldrin

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 Decision Document.

There were no IRMs performed at this site during the RI.

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 RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination:

Soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), pesticides, and per- and polyfluoroalkyl substances (PFAS). Soil vapor, sub-slab soil vapor, and indoor air samples were analyzed for VOCs. Based on investigations conducted to date, the primary contaminants of concern are SVOCs, pesticides, and metals in soil; and metals and pesticides in groundwater. Several chlorinated VOCs were detected in one groundwater well during the Phase II investigation but were not detected during the RI. Data from the Phase II submitted with the BCP application has also been utilized to determine the nature and extent of contamination at the site.

Surface Soil: Eight samples were collected across the entire site from 0 to 2 inches below the vegetative cover and analyzed at a variable frequency for SVOCs, metals, pesticides, herbicides, PCBs, and PFAS. Seven samples were collected across the entire site from 0 to 6 inches below the vegetative cover and analyzed for VOCs. No VOCs, herbicides, or PCBs were detected at levels exceeding unrestricted soil cleanup objectives (USCOs). No PFAS were detected at levels exceeding current guidance values for unrestricted use. The following compounds were detected exceeding USCOs in surface soil in at least one location:

- Indeno(1,2,3-c,d)pyrene (up to 5.6 parts per million (ppm), USCO 0.5 ppm);
- Benzo(b)fluoranthene (up to 12 ppm, USCO 1 ppm);
- Benzo(k)fluoranthene (up to 5.1 ppm, USCO 0.8 ppm);
- Chrysene (up to 9.2 ppm, USCO 1 ppm);
- Benzo(a)pyrene (up to 9.1 ppm, USCO 1 ppm);
- Dibenz(a,h)anthracene (up to 1.8 ppm, USCO 0.33 ppm);
- Benzo(a)anthracene (up to 7.9 ppm, USCO 1 ppm);
- Lead (up to 1300 ppm, USCO 63 ppm);
- Nickel (up to 36.3 ppm, USCO 30 ppm);
- Manganese (up to 7400 ppm, USCO 1600 ppm);
- Mercury (up to 1.7 ppm, USCO 0.81 ppm);
- Arsenic (up to 16.6 ppm, USCO 13 ppm);
- Copper (up to 59.2 ppm, USCO 50 ppm);
- Zinc (up to 497 ppm, USCO 109 ppm);
- p,p'-Dichlorodiphenyltrichloroethane (DDT) (up to 25 ppm, USCO 3.3 ppm);
- p,p'-Dichlorodiphenyldichloroethane (DDD) (up to 5.3 ppm, USCO 3.3 ppm);
- p,p'-Dichlorodiphenyldichloroethylene (DDE) (up to 47 ppm, USCO 3.3 ppm);
- Dieldrin (up to 59 ppm, USCO 5 ppm).

Investigation results do not indicate that site contaminants have migrated off-site in surface soil.

Subsurface Soil: Samples were collected from thirty-three locations at depths ranging from 1 to 12 fbs and analyzed at a variable frequency for VOCs, SVOCs, metals, pesticides, herbicides, PCBs, and PFAS. No herbicides, or PCBs were detected at levels exceeding USCOs. No PFAS were detected at levels exceeding current guidance values for unrestricted use. The following compounds were detected exceeding their USCOs in subsurface soil in at least one location:

- Acetone (up to 59 ppm, USCO 50 ppm);
- Indeno(1,2,3-c,d)pyrene (up to 15 ppm, USCO 0.5 ppm);
- Benzo(b)fluoranthene (up to 27 ppm, USCO 1 ppm);
- Benzo(k)fluoranthene (up to 11 ppm, USCO 0.8 ppm);
- Chrysene (up to 26 ppm, USCO 1 ppm);
- Benzo(a)pyrene (up to 23 ppm, USCO 1 ppm);
- Dibenz(a,h)anthracene (up to 5.2 ppm, USCO 0.33 ppm);
- Benzo(a)anthracene (up to 30 ppm, USCO 1 ppm);
- Lead (up to 1950 ppm, USCO 400 ppm);
- Mercury (up to 8.8 ppm, USCO 0.81 ppm);
- Arsenic (up to 38.4 ppm, USCO 13 ppm);
- Barium (up to 527 ppm, USCO 350 ppm);
- Copper (up to 143 ppm, USCO 50 ppm);
- Zinc (up to 633 ppm, USCO 109 ppm);
- Dichlorodiphenyldichloroethane [DDD] (up to 5.5 ppm, USCO 3.3 ppm); and
- Dichlorodiphenyldichloroethylene [DDE] (up to 6.4 ppm, USCO 3.3 ppm);

In addition to the analytical results above, petroleum contamination may be present below Building 1 based on the observation of petroleum staining and odors (nuisance conditions) during the completion of several soil borings.

Investigation results do not indicate that site contaminants have migrated off-site in subsurface soil.

Groundwater: Samples were collected from seven monitoring wells screened at depths between 10 and 20 fbs. The wells were analyzed at a variable frequency for VOCs, SVOCs, metals, pesticides, herbicides, PCBs, and PFAS. Dissolved metals were analyzed for at one well due to high turbidity in the sample. There were no SVOCs, herbicides, or PCBs detected above groundwater quality standards (GWQS).

During the Phase II Investigation the following compounds were detected in a temporary monitoring well installed below Building 1 exceeding GWQS:

- Tetrachloroethene (up to 6.1 parts per billion (ppb), GWQS 5 ppb);
- Trichloroethene (up to 200 ppb, GWQS 5 ppb); and
- Cis-1,2-dichloroethene (up to 110 ppb, GWQS 5 ppb).

These VOCs were not detected in groundwater during the RI, but additional sampling is needed to confirm these results. The naturally occurring metals iron, magnesium, manganese, and sodium were the only metals detected exceeding GWQS in unfiltered samples. The following compounds were detected at one location exceeding GWQS during the RI:

- Dichlorodiphenyltrichloroethane [DDT] (up to 0.34 ppb, GWQS 0.2 ppb); and
- Alpha-benzenehexachloride [alpha-BHC] (up to 0.02 ppb, GWQS 0.01 ppb).

Investigation results do not indicate that site contaminants have migrated off-site in groundwater.

Soil Vapor: Eight soil vapor probes were installed across the site and analyzed for VOCs. Probes were installed to 4 fbs. Multiple VOCs were detected at all eight locations but were generally low in concentration. There are currently no standards for soil vapor.

Investigation results do not indicate that site contaminants have the potential to migrate off-site in soil vapor.

Sub-Slab Soil Vapor and Indoor Air: Four sub-slab soil vapor/indoor air sampling point pairs were installed in buildings across the site and analyzed for VOCs. Multiple VOCs were detected at all four locations but were generally low in concentration. All of the buildings sampled are vacant and planned for demolition prior to site redevelopment.

Investigation results do not indicate that site contaminants have the potential to cause off-site soil vapor intrusion.

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*.

Direct contact with contaminants in the soil is unlikely because the majority of the site is covered with buildings and pavement. 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 overlying 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. Sampling indicates soil vapor intrusion is not a concern for on- or off-site structures.

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.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- 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.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is a Track 1: Unrestricted use remedy.

The selected remedy is referred to as the Track 1 Excavation remedy.

The elements of the selected remedy, as shown in Figure 2, are as follows:

1. Remedial Design

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 to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) 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 Department 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

The existing on-site buildings 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. Excavation and off-site disposal of all on-site soils which exceed unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8, or soil that creates a nuisance condition, as defined in Commissioner Policy CP-51 Section G, will be completed. Approximately 12,100 tons of soil meeting these criteria will be excavated. Collection and analysis of confirmation samples at the remedial excavation extents 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 extent, further remedial excavation may be necessary.

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 laws, rules, and regulations.

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in as needed to replace the excavated soil and establish the designed grades at the site.

3. Building 1 Investigation

Further investigation and remediation (if necessary) beneath Building 1 will be completed after it is demolished, or as the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department.



LEGEND:

- BCP SITE BOUNDARY
- - - PARCEL BOUNDARY



Title:			
SITE PLAN (AERIAL)			
REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT			
147 WEST TUPPER STREET SITE (BCP SITE NO. C915389) BUFFALO, NEW YORK			
Prepared for:			
147 WEST TUPPER LLC			
	Compiled by:	Date: AUGUST 2023	FIGURE 2
	Prepared by: CMS	Scale: AS SHOWN	
	Project Mgr: MAL	Project: B0646-022-001	
	File: FIGURE 2; SITE PLAN (AERIAL).DWG		

F:\CAD\TURNKEY\KNOER GROUP\149_161 WEST TUPPER AND 42 TRINITY PLACE\FIGURE 5: TRACK 1 UNRESTRICTED USE CLEANUP ALTERNATIVE_REV.DWG



AREA 1
 Total Area = 9,900 sf
 Area of Houses = 2,480 sf
 Net Area = 7,420 sf x 2
 TONS (APPROXIMATE) = 880

AREA 2
 Total Area = 24,200 sf
 Area of Basements = 5,300 sf
 Net Area = 19,000 sf x 10 ft
 TONS (APPROXIMATE) = 11,300

Decision Document Figure 2

LEGEND:

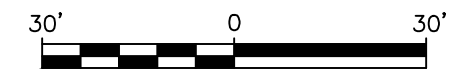
- BCP SITE BOUNDARY
- - - PARCEL BOUNDARY
- EXTENT OF EXCAVATION (SEE NOTE 2)
- SB-1 ● HISTORIC SOIL BORING (PHASE II, TURNKEY)
- SB-1/1W ⊙ HISTORIC SOIL BORING/ TEMPORARY MONITORING WELL (PHASE II, TURNKEY)
- HC-1 ● HISTORIC HAND CORE SAMPLE (PHASE II, TURNKEY)
- SS-1 ▣ RI SURFACE SOIL SAMPLE
- TP-1 ▭ RI TEST PIT
- MW-1 ⊕ RI SOIL BORING/MONITORING WELL
- SV-1 ↗ RI SOIL VAPOR SAMPLE
- OA-1 ○ RI OUTDOOR AIR SAMPLE
- SSV-1 ↘ RI SUBSLAB VAPOR SAMPLE
- IA-1 ⊙ RI INDOOR AIR SAMPLE
- HC-7 ● RI HAND CORE SAMPLE
- SAMPLE LOCATION EXCEEDS USCOS
- 1 BUILDING NUMBER
- 6 DEPTH TO NATIVE MATERIAL (FBGS)

NOTES:

1. IMAGE TAKEN FROM GOOGLE EARTH 2021.
2. EXCAVATION EXTENTS SHOWN WITHIN BCP SITE BOUNDARY FOR PRESENTATION PURPOSES ONLY. FINAL EXCAVATION EXTENTS WILL BE TO THE BCP PROPERTY BOUNDARY WHERE POSSIBLE. APPROXIMATE DEPTH OF EXCAVATION IS ESTIMATED AT SIX (6) FEET BELOW GROUND SURFACE (FBGS).

ESTIMATED TOTAL SOIL/FILL REMOVED:

- AREA = 30,050 SQUARE FEET (S.F.)
- DEPTH = AS NOTED IN FIGURE
- VOLUME (APPROXIMATE) = 224,100 CUBIC FEET (C.F.) OR 8,300 CUBIC YARDS (C.Y.)
- TONNAGE (APPROXIMATE) = 13,280 TONS (C.Y. * 1.6 TONS/C.Y.)



Title:			
TRACK 1 UNRESTRICTED USE CLEANUP ALTERNATIVE			
REMEDIAL INVESTIGATION/ALTERNATIVE ANALYSIS REPORT			
147 WEST TUPPER STREET SITE (BCP SITE NO. C915389) BUFFALO, NEW YORK			
Prepared for:			
147 WEST TUPPER LLC			
	Compiled by:	Date: AUGUST 2023	FIGURE 5
	Prepared by: CMS	Scale: AS SHOWN	
	Project Mgr: MAL	Project: B0646-022-001	
	File: FIGURE 5, TRACK 1 UNRESTRICTED USE CLEANUP ALTERNATIVE_REV.DWG		