DECISION DOCUMENT

140 Chandler Street Site
Brownfield Cleanup Program
Buffalo, Erie County
Site No. C915354
December 2020

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

DECLARATION STATEMENT - DECISION DOCUMENT

140 Chandler Street Site

Brownfield Cleanup Program
Buffalo, Erie County
Site No. C915354
December 2020

Statement of Purpose and Basis

This document presents the remedy for the 140 Chandler 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 (the Department) for the 140 Chandler Street site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

During the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternatives analysis (AA). The IRMs undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRMs, the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore, No Further Action is the selected remedy.

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.

12/29/2020
Date

Michael Cruden, Director
Remedial Bureau E

DECISION DOCUMENT

140 Chandler Street Site

Buffalo, Erie County
Site No. C915354
December 2020

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), 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, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department 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

The Department 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 the Department 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=C915354

North Park Library
975 Hertel Avenue
Buffalo, NY 14216
Phone: (716) 875-3748

Receive Site Citizen Participation Information By Email
Please note that the Department'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: This 0.512-acre site is bounded to the north by railroad tracks, to the south by Chandler Street, to the west by commercial operations, and to the east by a commercial structure, with occupants including a restaurant, brewery, salon and fitness center. The property is located within an urban area, utilized for industrial, commercial, and residential purposes.

Site Features: Originally there were three buildings on-site. Two of those buildings were demolished in early 2020. Currently, there is only one unoccupied 2,500 sq. ft building at the site.

Current Zoning and Land Use: The 140 Chandler Street site is currently zoned D-C for Flex Commercial.

Past Uses of the Site: Three buildings at the site were constructed in early 1900s. Two of those three buildings were demolished in 2020. The past businesses at the site included: Faramel Manufacturing Company, a feed mill manufacturing company; EJ Woodison Company, a plating manufacturing facility; Enterprise Oil Company, a soap and lubricating oils compound manufacturing company; Quaker State Oil Refining Corporation, a plating manufacturing facility; Quality Petroleum Products, Inc.; LASCO, Inc., and Niagara Lubricants. Over 58 storage tanks, both underground and aboveground, were located at the site since 1933, with the most recent tank closures in 2005.

Geology Hydrogeology: Based on observations from the soil borings and test pits completed during the RI work, subsurface conditions generally included approximately 2 to 6 feet of granular and cohesive fill material overlying native silt and clay which extended the full depth drilled of up to 20 feet. The fill material consisted of sand and gravel, intermixed with clay and silt, with lesser amounts of brick, concrete, cinders, wood and metal pieces. Interior soil borings identified approximately 2 to 3 feet of fill, that generally consisted of reworked silt and clay with lesser amounts of sand and gravel. A naturally deposited silty clay was encountered at each soil boring location underlying the fill material. Bedrock consists of shale and dolostone and is expected to be at depths greater than 100 feet below grade. The groundwater flow direction is in a northwesterly direction.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department 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 which allows for unrestricted use of the site was evaluated.

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

SECTION 5: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Volunteer. The Applicant does not have an obligation to address off-site contamination. However, the Department 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
- 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. The Department 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: Remedial Investigation 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 contaminants of concern identified at this site is/are:

cadmium
copper
lead
manganese
mercury
zinc
polycyclic aromatic hydrocarbons (PAHs)

The contaminants of concern exceed the applicable SCGs for:

- soil
- groundwater

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.

Based on conditions observed during the RI, the following IRMs were completed at this site between March and July 2020. The results of the IRM activities are detailed in the Remedial Investigation- Interim Remedial Measures – Alternatives Analysis Report, dated December 2020. The IRM locations are shown in Figure 2.

IRM Activities

Excavation and off-site disposal of contaminant source areas, including:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- soils that created a nuisance condition, as defined in Commissioner Policy CP-51 Section G, and all soils which exceeded the unrestricted use soil cleanup objectives (USCOs) for all contaminants including metals and polycyclic aromatic hydrocarbons (PAHs);

Interior Soil Removal: Approximately 185 cubic yards of soil were removed from inside of the remaining building and were taken to Modern Landfill for disposal.

Excavation: Approximately 4,597 cubic yards of soil were removed from the exterior areas of the site. Soil/fill was disposed off-site either at Modern Landfill or at Allied Waste Niagara Falls Landfill. The depths of excavations ranged from ground surface to approximately 6 feet below ground surface. The excavation in the former tank area was to 8 feet below ground surface.

The soil cleanup was confirmed by collecting samples after completion of the excavation. The contaminant levels of all confirmatory soil samples collected were below USCOs. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) for unrestricted residential use was brought in to complete the backfilling of the excavations.

Asbestos Removal: Asbestos abatement was completed in all three on-site buildings, prior to renovation of the building that remains on-site and the demolition of the two easternmost buildings in July 2020.

Building Cleanout and Demolition: Approximately 46 cubic yards of concrete was removed from the interior of the remaining building. Also, six material mixing tanks and other containers ranging in size from one-gallon to 55-gallons were removed and disposed off-site. The cleaned tanks were taken to Niagara Metals for metals recycling.

Underground Storage Tank (UST) Removal: A 2,500-gallon fuel oil UST was removed. Approximately 3,400 gallons of liquid, including the tank contents and groundwater impacted with the contents, were removed and disposed off-site.

Stormwater Management: Approximately 46,900 gallons of stormwater collected in the excavations was treated and discharged to the City of Buffalo sanitary sewer under a permit.

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.

Remedial Investigation Results:
The field work for the remedial investigation (RI) was completed in March 2020. The RI included sampling of soil/fill, groundwater, and sub-slab vapor. The sub-surface soil/fill and groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, herbicides, and Target Analyte List (TAL) metals. Soil/fill samples were collected across the site to native soil which was present from four to approximately 6 feet below ground surface. Deeper soil borings (20 feet below ground surface) did not identify the presence of contamination in native soil

Prior to the IRM activities, the concentrations of contaminants in on-site media were as follows:

Sub-surface soil/fill:
Volatile Organic Compounds (VOCs): The levels of acetone found in soil ranged from 0.059 to 0.59 parts per million (ppm) which exceeded the unrestricted soil cleanup objective (USCO) of 0.05 ppm.

Semi-volatile Organic Compounds (SVOCs): Among the SVOCs, polycyclic aromatic hydrocarbons (PAHs) exceeding USCOs included: up to 14 ppm benzo(a)anthracene (USCO - 1 ppm); 18 ppm benzo(a)pyrene (USCO - 1 ppm); 24 ppm benzo(b)fluoranthene (USCO - 1 ppm); 6.8 ppm benzo(k)fluoranthene (USCO - 0.8 ppm); 15 ppm chrysene (USCO - 1 ppm); 2.9 ppm dibenz(a,h)anthracene (USCO - 0.33 ppm), and 13 ppm indeno(1,2,3-cd)pyrene (USCO - 0.5 ppm).

Metals: The metals exceeding USCOs included: up to 3.32 ppm cadmium (USCO - 2.5 ppm); 127 ppm copper (USCO - 50 ppm); 830 ppm lead (USCO - 63 ppm); 1,810 ppm manganese (USCO - 1,600 ppm); 0.355 ppm mercury (USCO - 0.18 ppm); and 496 ppm zinc (USCO - 109 ppm).

PCBs were detected at a concentration of 0.216 ppm at one location, which exceeds the USCO of 0.1 ppm.

Pesticides: Approximately 0.00428 ppm of 4,4-DDE (USCO - 0.0033 ppm) was detected at one location.

Groundwater:
Three overburden groundwater monitoring wells were sampled and analyzed for VOCs, SVOCs, metals, PCBs, pesticides, and emerging contaminants. Groundwater Quality Standards (GWQS) were exceeded for PAHs and several metals.

PAHs exceeding the Groundwater Quality Standards (GWQS) included: benzo(a)anthracene (0.83 ppb; GWQS - 0.002 ppb), benzo(a)pyrene (0.99 ppb; GWQS - 0 ppb), benzo(b)fluoranthene (1.4 ppb; GWQS - 0.002 ppb), benzo(k)fluoranthene 0.44 ppb; GWQS - 0.002 ppb), chrysene (0.87 ppb; GWQS - 0.002 ppb), and indeno(1,2,3-cd)pyrene (0.76 ppb; GWQS - 0.002 ppb).

Metals: Several naturally occurring metals including iron, magnesium, manganese and sodium were detected at concentrations exceeding GWQS. Total (unfiltered) lead was detected in one monitoring well at 29.46 ppb (GWQS - 25 ppb), but it was not detected in the dissolved metal analysis samples. Thallium was detected in one monitoring well at an estimated concentration of 0.81 ppb (GWQS - 0.5 ppb) in the dissolved groundwater analysis.

No VOCs, PCBs, pesticides or herbicides were found in groundwater.

Emerging Contaminants: Groundwater samples analyzed for emerging contaminants (Per- and Polyfluoroalkyl substances (PFAS)) prior to IRM activities contained 109 parts per trillion (ppt) of perfluorooctanoic acid (PFOA) and 151 ppt of perfluorooctanesulfonic acid (PFOS). The screening values for groundwater use for both PFOA and PFOS are 10 ppt. The groundwater at the site is not used for any purposes.

After removal of all fill soils during IRM, the confirmatory bottom samples did not identify emerging contaminants above unrestricted soil cleanup objectives.

Soil Vapor:
The potential for soil vapor intrusion was evaluated in the on-site building, as per the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006). Concentrations of trichloroethene (TCE) were 1.54 micrograms per cubic meter (ug/m^3) in sub-slab vapors and 2.39 ug/m^3 in indoor air. Based on the levels of TCE in indoor air, it is recommended to identify source(s); however, the TCE detections do not appear to be from soil vapor intrusion. The samples were collected during building roof repair and indoor construction work, which are likely sources of TCE. The indoor air concentrations of methylene chloride and tetrachloroethene (PCE) were 2.3 ug/m^3 and 11.2 ug/m^3, respectively; both concentrations are below their respective NYSDOH Guideline values of 60 ug/m^3 and 30 ug/m^3.

Post IRM:
Soil: Post excavation verification sampling of excavation bottom and sidewalls was implemented to ensure project cleanup goals were achieved. The concentrations of contaminants remaining in soil/fill were less than the USCOs. There is no evidence of off-site migration of contaminants of concern.

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.*

Remedial actions taken have eliminated the potential for contact with site related contaminants. People are not drinking contaminated groundwater as the area is supplied by a municipal source that is not affected by this site.

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.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

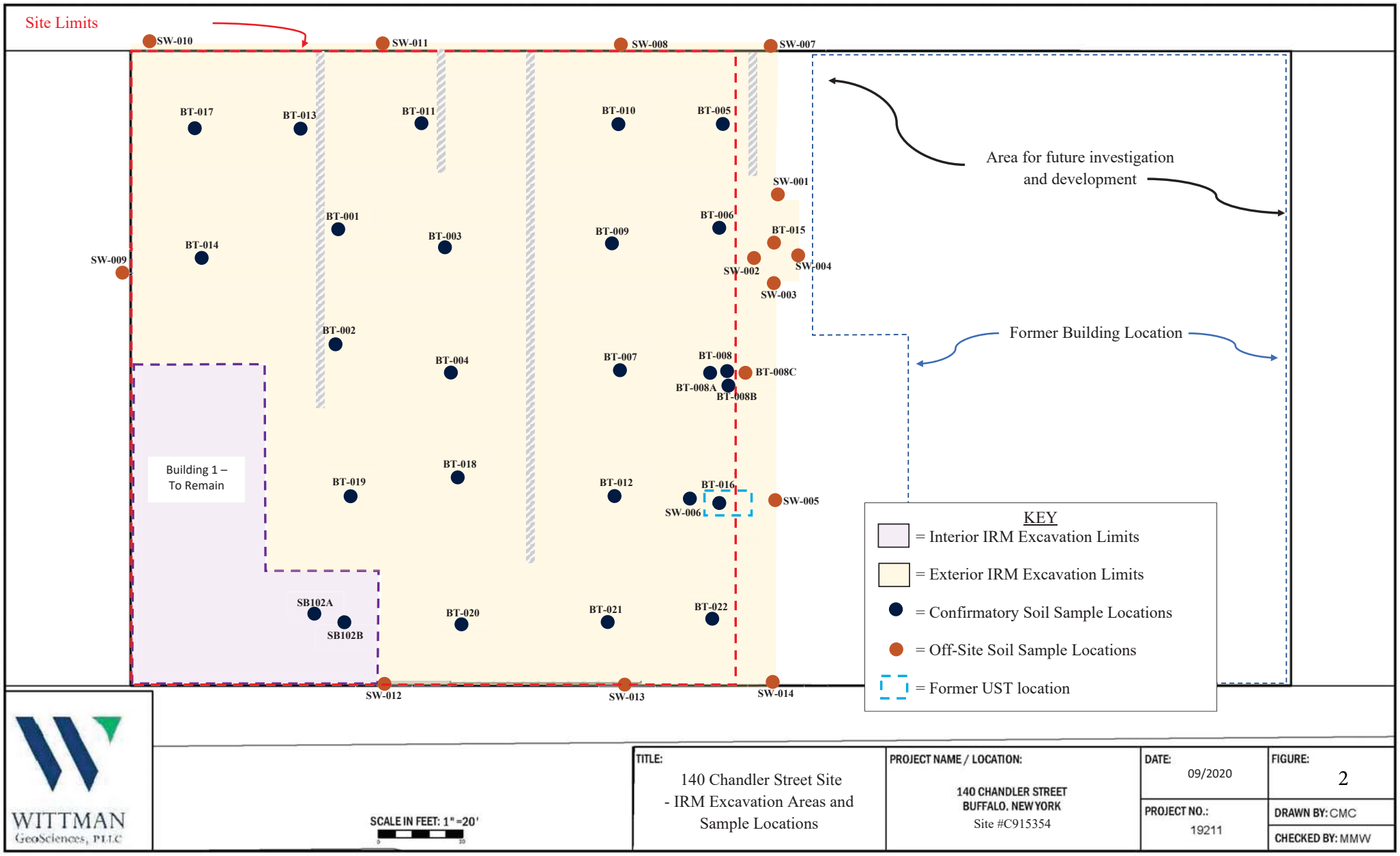
SECTION 7: ELEMENTS OF THE SELECTED REMEDY

Based on the results of the investigations at the site, the interim remedial measures (IRMs) that have been performed, and the evaluation presented here, the Department has selected No Further Action as the remedy for the site. The selected remedy is referred to as the Unrestricted Use remedy. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

To address the Groundwater RAO for public health, 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 should be restricted. However, an environmental easement is not required to achieve this restriction due to a requirement of the Buffalo Water Board Regulations (21 NYCRR § 10085.3) that "every dwelling, house or other building requiring the use of water must be supplied from the water mains of the water board...". As public water suppliers must also meet the requirements of 10 NYCRR Chapter I Subpart 5-2, no additional restrictions on potable water use are necessary. There are no known public or private groundwater wells within half mile radius of the site.

WITTMAN
GeoSciences, PLLC

WITTMAN GEOSCIENCES, PLLC	Date: 09/2020	**Site Limits**	Project: 19211
	Scale: not to scale	140 Chandler Street, Site #C915354	Figure: 1


Site Limits
SW-010
SW-011
SW-008
SW-007
BT-017
BT-013
BT-011
BT-010
BT-005
Area for future investigation and development
SW-001
BT-001
BT-006
BT-015
BT-014
BT-003
BT-009
SW-009
SW-002
SW-004
SW-003
BT-002
Former Building Location
BT-004
BT-007
BT-008
BT-008C
BT-008A
BT-008B
Building 1 – To Remain
BT-018
BT-019
BT-012
BT-016
SW-005
SW-006
SB102A
SB102B
BT-020
BT-021
BT-022
SW-012
SW-013
SW-014
KEY
= Interior IRM Excavation Limits
= Exterior IRM Excavation Limits
= Confirmatory Soil Sample Locations
= Off-Site Soil Sample Locations
= Former UST location
WITTMAN GeoSciences, PLLC
SCALE IN FEET: 1" =20'
TITLE: 140 Chandler Street Site - IRM Excavation Areas and Sample Locations
PROJECT NAME / LOCATION: 140 CHANDLER STREET BUFFALO, NEW YORK Site #C915354
DATE: 09/2020
FIGURE: 2
PROJECT NO.: 19211
DRAWN BY: CMC
CHECKED BY: MMW