DECISION DOCUMENT

8 St. Louis Place Brownfield Cleanup Program Buffalo, Erie County Site No. C915355 November 2021



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

DECLARATION STATEMENT - DECISION DOCUMENT

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Statement of Purpose and Basis

This document presents the remedy for the 8 St. Louis Place 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 8 St. Louis Place site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

During the course of 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) oralternatives analysis (AA). The IRM(s) undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), 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. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the proposed remedy for the site.

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.

11/3/2021	Michael Cruden
Date	Michael Cruden, Director Remedial Bureau E

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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 resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the 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 alternative analysis (AA). The IRMs undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM, the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment. The IRM conducted at the site attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action is the selected remedy. A No Further Action remedy may include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This DD identifies the IRM conducted and discusses the basis for No Further Action.

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.

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:

Buffalo & Erie County Public Library Attn: April Tompkins 1 Lafayette Square Buffalo, NY 14203 Phone: (716) 858-8900

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, Voluntary 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 8 St. Louis Place site is an approximately 0.20-acre site located in a highly developed residential/commercial area at 8 St. Louis Place in the City of Buffalo, Erie County.

Site Features:

The site is currently vacant and improved with an asphalt parking lot.

Current Zoning and Land Use:

The site is zoned for residential use and is currently used as a parking lot. The site is bordered by residential properties to the north, south and west and by commercial property to the east.

Past Use of the Site:

The site was historically developed with buildings including residences/apartments, private garages and/or out-buildings beginning in at least 1889. The site has been used as a parking lot since approximately 1986.

Site Geology and Hydrogeology:

The site is located within the Lake Erie-Niagara River major drainage basin, which is typified by little topographic relief that gently slopes westward towards Lake Erie and the Niagara River, except in the immediate vicinity of major drainage ways. According to the United States Department of Agriculture (USDA) Web soil survey, site soils are characterized as Urban Land (Ud). Soils characterized as urban land (Ud) are covered by asphalt, concrete, buildings, or other impervious structures, typical of an urban environment.

Previous investigations have identified the site geology as non-native black granular fill with

ash and fragments of brick, asphalt, stone and metal from the ground surface or below asphalt to approximately six feet below ground surface (bgs). Fill materials are underlain by native brown, dry, medium to coarse sand up to six feet bgs. Based on the findings of the RI, groundwater was encountered ranging from 21 feet bgs to 23 feet bgs.

Regional groundwater is anticipated to flow in a westerly direction towards Lake Erie. However, local groundwater flow may be influenced by subsurface features, such as excavations, utilities, and localized fill-conditions.

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

SECTION 5: ENFORCEMENT STATUS

The Applicants under the Brownfield Cleanup Agreement are Volunteers. The Applicants do 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
- soil 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: 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 contaminants of concern identified at this site is/are:

benzo(a)anthracene DDD chrysene dieldrin

dibenz[a,h]anthracene polychlorinated biphenyls (PCB)

indeno(1,2,3-CD)pyrene benzo(a)pyrene lead benzo(b)fluoranthene mercury benzo(k)fluoranthene

zinc DDE Perfluorooctane Sulfonic Acid DDT

arsenic

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

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.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

IRM Excavation

IRM - Source Excavation of Impacted Soil materials

An IRM was implemented to remove all impacted soil and fill in which contaminant concentrations exceeded Unrestricted Soil Cleanup Objectives (USCOs). A total of 3,672 tons of impacted soil/fill material was removed from the site to achieve USCOs. Excavation occurred up to the site boundaries to depths varying from 5 to 11 feet below ground surface (fbgs). Excavation depths were determined using RI test pit sample results that did not exceeds USCOs within the native soil horizon. All impacted soil/fill removed from the site was properly handled and disposed of off-site at Republic Services - Allied Niagara Falls, Landfill, located in Niagara Falls, New York. A total of 16 post-excavation samples were collected following the IRM. Excavation sidewall samples at the site boundary lines indicate that contamination remains on adjoining properties and is indicative of local fill within the area. Sampling details and results can be found in the site's Final Engineering Report (FER)

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.

The Remedial Investigation (RI) was conducted in 2021 and included sampling of surface soil, subsurface soil/fill, groundwater, and soil vapor. The data collected during the RI identified metals, semi-volatile organic compounds (SVOCs), pesticides and polychlorinated biphenyls (PCBs) above unrestricted soil clean up objectives (USCOs).

Surface Soils:

Surface soils were sampled from 0-2 inches bgs and analyzed for SVOCs, metals, PCBs, herbicides/pesticides and emergent contaminants. No exceedances of USCOs were identified for herbicides/pesticides or PCBs.

SVOCs detected in surface soil samples included benzo(a)anthracene at concentrations up to 36 parts per million (ppm) (USCO 1.0 ppm), benzo(a)pyrene up to 36 ppm (USCO 1.0 ppm) benzo(b)fluoranthene up to 40 ppm (USCO 1.0 ppm), benzo(k)fluoranthene up to 23 ppm

(USCO 0.8 ppm), chrysene up to 39 ppm (USCO 1.0 ppm), dibenzo(a,h)anthracene up to 6.6 ppm (USCO 0.33 ppm) and indeno(1,2,3-cd)pyrene up to 21 ppm (USCO 0.5 ppm).

Metals detected in surface soil samples included lead at concentrations up to 3,080 ppm (USCO 63 ppm), mercury up to 0.71 ppm (USCO 0.18 ppm) and zinc up to 467 ppm (USCO 109 ppm).

The emergent contaminant perfluorooctanesulfonic acid (PFOS) was detected in surface soil samples at concentrations up to 1.6 parts per billion (ppb) (unrestricted use guidance value 0. 88 ppb).

Subsurface Soils:

Subsurface samples were analyzed for VOCs, SVOCs, metals, herbicides/pesticides, PCBs and emergent contaminants. No exceedances of USCOs for VOCs, or emergent contaminants were identified in these samples.

SVOCs detected in subsurface soil included benzo(a)anthracene at concentrations up to 3.9 ppm (USCO 1.0 ppm), benzo(a)pyrene up to 3.9 ppm (USCO 1.0 ppm), benzo(b)fluoranthene up to 4.3 ppm (USCO 1.0 ppm), benzo(k)fluoranthene up to 2.5 ppm (USCO 0.8 ppm), chrysene up to 4.0 ppm (USCO 1.0 ppm) dibenzo(a,h)anthracene up to 0.69 ppm (USCO 0.33 ppm) and indeno(1,2,3-cd)pyrene up to 2.3 ppm (USC 0.5 ppm).

Metals detected in subsurface soil included arsenic at concentrations up to 15.7 ppm (USCO 13 ppm), lead up to 1,800 ppm (USCO 63 ppm), mercury up to 1.1 ppm (USCO 0.18 ppm) and zinc up to 529 ppm (USCO 109 ppm).

Pesticides/herbicides detected in subsurface soil included 4,4-DDD at concentrations up to 0.18 ppm (USCO 0.0033 ppm), 4-4-DDE up to 0.011 ppm (USCO 0.0033 ppm, 4-4-DDT up to 0.62 ppm (USCO 0.0033 ppm) and dieldrin up to 0.12 ppm (USCO 0.005 ppm).

Total PCBs detected in subsurface soil were identified at concentrations up to 2.6 ppm (USCO 2.6 ppm).

Groundwater:

Groundwater samples were analyzed for VOCs, SVOCs, metals, pesticides/herbicides, PCBs, and emergent contaminants. Samples were evaluated against the NYS Groundwater Quality Standards (GWQS). No exceedances of GWQS for VOCs, SVOCs, herbicides/pesticides or PCBs were identified.

Metals detected above GWQS included iron at concentrations up to 2,600 ppm (GWQS 300 ppm), magnesium up to 73,900 ppm (GWQS 35,000 ppm) and sodium up to 288,000 ppm (GWQS 20,000). These metals are naturally occurring minerals and are not considered contaminants of concern for this site

Emergent contaminants were detected in one monitoring well during the initial groundwater monitoring event. Perfluorooctanonic acid (PFOA) was detected up to 14.0 parts per trillion (ppt) (NYSDEC threshold criteria: 10 ppt). Following the PFOA detection, an additional groundwater sample was collected from the well exhibiting the exceedance, which resulted in all PFAS below guidance thresholds.

Soil Vapor:

Soil vapor studies included the collection and testing of soil vapor samples from several locations within the site boundary. Samples were analyzed for VOCs. Soil vapor sampling results did not indicate a level of concern for potential 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*.

People will not come into contact with site-related soil contamination because soil removal actions have been completed across the entire site footprint and no contamination remains. People are not drinking contaminated groundwater because the area is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in soil vapor (air spaces within the soil), may move into structures 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 structures, is referred to as soil vapor intrusion. Environmental sampling indicates that vapor intrusion in not a concern for on- and 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.

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 IRM that has been performed, and the evaluation presented here, the Department has selected No Further Action as the remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

The completed IRM met the requirements for a Track 1 Unrestricted Use cleanup and does not require additional remedial action, including any institutional or engineering controls.

No groundwater use restriction is needed because the area is served by public water and the City of Buffalo code prohibits potable use of groundwater without prior approval.

Figure 1 – Site Location Map

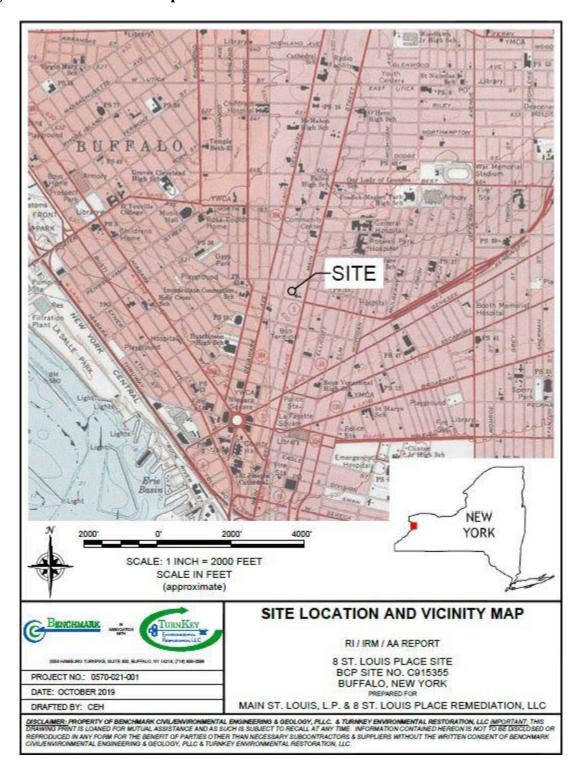


Figure 2 – Site Plan

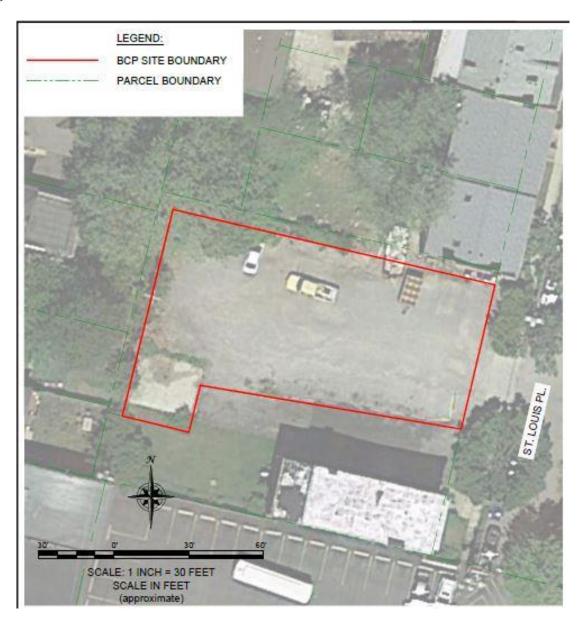


Figure 3 – Selected Remedy (Excavation Location/Limits)

