

DECISION DOCUMENT

Jefferson Avenue Apartments
Brownfield Cleanup Program
Buffalo, Erie County
Site No. C915317
August 2018



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

DECLARATION STATEMENT - DECISION DOCUMENT

Jefferson Avenue Apartments
Brownfield Cleanup Program
Buffalo, Erie County
Site No. C915317
August 2018

Statement of Purpose and Basis

This document presents the remedy for the Jefferson Avenue Apartments 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 Jefferson Avenue Apartments site and the public's input to the proposed remedy presented by the Department.

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; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Excavation

Excavation and off-site disposal of all on-site soil and fill which exceed unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8. If a Track 1 cleanup is achieved, a Cover System will not be a required element of the remedy. Approximately 10,000 to 15,000 tons of contaminated soil or fill will be removed from the site.

3. Backfill

On-site native soil which does not exceed the above excavation criteria for any constituent may be used anywhere on-site to backfill the excavation or re-grade the site. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

4. Groundwater Restriction

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 is restricted. 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 use are necessary.

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

Jefferson Avenue Apartments
Buffalo, Erie County
Site No. C915317
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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 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:

Buffalo & Erie County Public Library
Attn: Mary Jean Jakubowski
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 Jefferson Avenue Apartments site is a 1.57-acre site located in a highly developed residential and commercial area of the City of Buffalo, Erie County, New York. The site is bordered by Northampton Street to the north, Dodge Street to the south, residential properties to the west, and Jefferson Avenue to the east. Southampton Street bisects the site.

Site Features: The site is currently unoccupied and vacant. The ground surface is generally flat and typified by grass or hard fill material. Some trees and small vegetation are present along the western site boundary.

Current Zoning and Land Use: The site is currently vacant and zoned for mixed use.

Past Use of the Site: From the late 1800s until the early 2000s portions of the site included residential and various commercial uses. Past commercial uses include automotive repair, a car dealership service department, trucking operations, paints and varnish/oils storage, and sheet metal and machine shop operations.

Site Geology and Hydrogeology: Near surface soils consist of non-native fill overlaying native lean clay or sandy clay soil. The non-native fill material is present at depths ranging between 1 to 4.5 feet below ground surface and consists of black fines, silt, sand, ash/cinders, brick/wood fragments, and gravel. Fill material depth averages 3 feet below ground surface across the Site.

Groundwater flow is to the north toward Scajaquada Creek. Local groundwater flow, however, may be influenced by subsurface features, such as excavations, utilities, and localized fill conditions. Groundwater has been encountered at depths ranging between 8 to 11 feet below ground surface.

A site location map is attached as Figure 1 and Figure 1A.

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(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, 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

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 contaminant(s) of concern identified at this site is/are:

polycyclic aromatic hydrocarbons (PAHS), total	chromium
barium	lead
copper	mercury
cadmium	zinc
aldrin	delta-benzenehexachloride (BHC)

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.

An IRM was planned for this site during the RI, but was not completed. All IRM components are included in the final remedy for the site.

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 discussion of any existing and potential impacts from the site to fish and wildlife receptors.

The RI sampled subsurface native soil and groundwater. Fill material present across the site was previously sampled prior to the RI. Based on the RI and previous investigations conducted at the site, the primary contaminants of concern at the site are semi-volatile organic compounds (SVOCs) and metals in on-site fill. Surface soil samples were not collected as the planned redevelopment included the removal of the entire site surface. Off-site areas were not investigated during the RI, but information collected during the RI does not indicate the site is a source of contamination to the surrounding area.

Fill: samples were collected from depths ranging from 0 to 4 feet below ground surface (ft bgs) and analyzed for volatile organic compounds (VOCs), SVOCs, polychlorinated biphenyls (PCBs), and metals. SVOCs exceeding unrestricted SCOs (USCO) include benzo(a)anthracene (up to 10 parts per million (ppm); USCO 1 ppm), benzo(a)pyrene (up to 9.9 ppm; USCO 1 ppm), benzo(b)fluoranthene (up to 14 ppm; USCO 1 ppm), benzo(k)fluoranthene (up to 4.6 ppm; USCO 0.8 ppm), chrysene (up to 10 ppm; USCO 1 ppm), dibenzo(a,h)anthracene (up to 1.8 ppm; USCO 0.33 ppm), and indeno(1,2,3-cd)pyrene (up to 6.7 ppm; USCO 0.5 ppm). Metals exceeding USCOs include barium (up to 1,400 ppm; USCO 350 ppm), cadmium (up to 70 ppm; USCO 2.5 ppm), chromium (up to 33 ppm; USCO 30 ppm), copper (up to 140 ppm; USCO 50 ppm), lead (up to 62,000 ppm; USCO 63 ppm), mercury (up to 0.65 ppm; USCO 0.18 ppm), and zinc (up to 300 ppm; USCO 109 ppm). VOCs and PCBs were detected, but at concentrations not exceeding unrestricted use SCOs.

Native Soil: samples were collected from 8 to 16 ft bgs and analyzed for VOCs, SVOCs, PCBs, pesticides, and metals. Several VOCs, SVOCs, and metals were detected, but not at levels exceeding unrestricted use SCOs. PCBs and pesticides were not detected above laboratory detection limits, which were below unrestricted use SCOs.

Groundwater: samples were collected from six monitoring wells and analyzed for VOCs, SVOCs, pesticides, PCBs, metals, and perfluorinated compounds. No VOCs, SVOCs, or PCBs were detected exceeding groundwater quality standards (GWQS). Pesticides exceeding GWQS include aldrin (up to 0.037 parts per billion (ppb), GWQS non-detect) and beta-benzenehexachloride (BHC) (up to 0.041 ppb, GWQS 0.04 ppb). Metals exceeding GWQS include magnesium (up to 104,000 ppb, GWQS 35,000 ppb) and sodium (up to 313,000 ppb, GWQS 20,000 ppb). These metals are naturally occurring and are not related to the site. Up to ten of the individual perfluorinated compounds were detected in groundwater samples (up to 40 parts per trillion (ppt) per compound), with none detected exceeding 70 ppt. GWQS have not been developed for perfluorinated compounds, but the USEPA has a health advisory level of 70 ppt. The Buffalo Water Authority provides potable drinking water to the site and surrounding area.

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*.

Information submitted with the BCP application regarding the conditions at the site are currently under review and will be revised as additional information becomes available.

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

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 Historic Fill 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;

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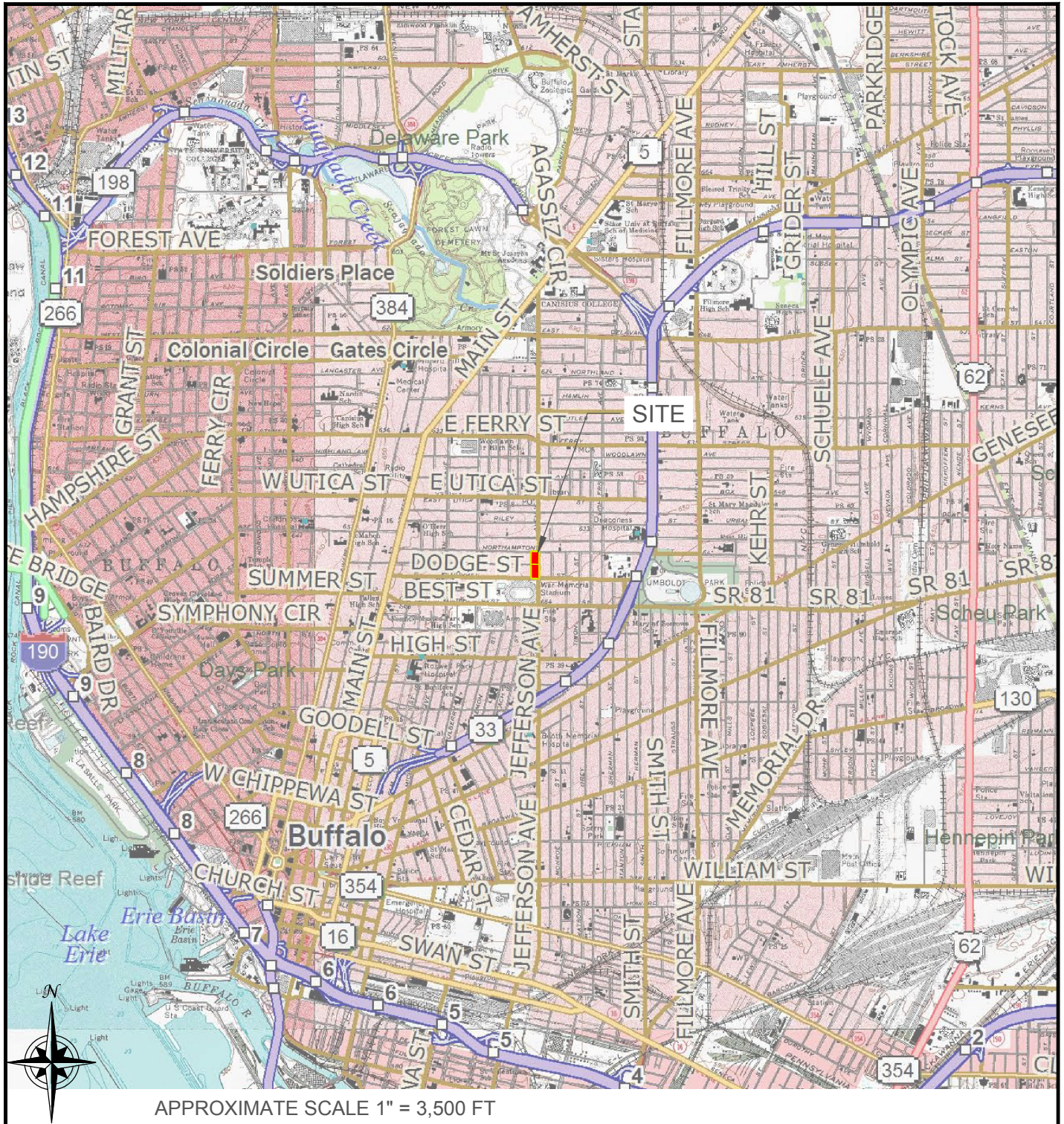
3. Backfill

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FIGURE 1



APPROXIMATE SCALE 1" = 3,500 FT



2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: 0408-016-001

DATE: APRIL 2018

DRAFTED BY: CCB/RFL

SITE LOCATION & VICINITY MAP
 REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT

JEFFERSON AVENUE APARTMENTS SITE
 BUFFALO, NEW YORK


PREPARED FOR

JEFFERSON AVENUE GP LLC & JEFFERSON AVENUE APARTMENTS L.P.

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LEGEND:

- BCP BOUNDARY
- - - - PARCEL BOUNDARY
- NAME ROAD




SCALE: 1 INCH = 80 FEET
SCALE IN FEET
(approximate)



Figure 1A

SITE PLAN
REMEDIAL INVESTIGATIONAL/ALTERNATIVES ANALYSIS REPORT

JEFFERSON AVENUE APARTMENTS SITE
BUFFALO, NEW YORK
PREPARED FOR

JEFFERSON AVENUE GP LLC & JEFFERSON AVENUE APARTMENTS L.P.






2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

JOB NO.: 0408-016-001

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LEGEND:

-  BCP BOUNDARY
-  PARCEL BOUNDARY
-  PLANNED REMEDIAL EXCAVATION AREA



SCALE: 1 INCH = 80 FEET
SCALE IN FEET
(approximate)



Figure 2

PREFERRED REMEDY

REMEDIATION INVESTIGATIONAL/ALTERNATIVES ANALYSIS REPORT

JEFFERSON AVENUE APARTMENTS SITE
BUFFALO, NEW YORK

PREPARED FOR

JEFFERSON AVENUE GP LLC & JEFFERSON AVENUE APARTMENTS L.P.



BENCHMARK
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ENGINEERING &
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