PROPOSED DECISION DOCUMENT

Former Buffalo Service Station - OFF-SITE
Brownfield Cleanup Program
Buffalo, Erie County
Site No. C915194A
June 2016

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

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SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing 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 proposed by this Proposed Decision Document (PDD). The disposal or release of contaminants at this site, as more fully described in Section 6 of 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 Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York; (6 NYCRR) Part 375. This document is a summary of the information that can be found in the site-related reports and documents in the document repository identified below.

SECTION 2: CITIZEN PARTICIPATION

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

Buffalo & Erie County Public Library
Attn: Ms. Mary Jean Jakubowski
1 Lafayette Square
Buffalo, NY 14203
Phone: 716-858-9000

A public comment period has been set from:

6/13/2016 to 7/29/2016

Written comments may be sent through 7/29/2016 to:

Jaspal S. Walia
NYS Department of Environmental Conservation
Division of Environmental Remediation
270 Michigan Ave
Buffalo, NY 14203-2915
jaspal.walia@dec.ny.gov

The proposed remedy may be modified based on new information or public comments. Therefore, the public is encouraged to review and comment on the proposed remedy identified herein.

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

Site Location: The site is approximately 0.5 acres in size and is located in the City of Buffalo west of HealthNow building and Waterfront School consisting of the area between the eastern edge of Fourth Street and the railroad tracks on the west. The site includes a portion of Fourth Street and an area underneath the NYS Thruway (I-190) overpass. The area under the overpass is part of NYS Thruway and there are no buildings associated with this property.

Site Features: The I-190 overpass area is fenced on the east and west sides. The area underneath the overpass is covered with gravel. An 11.5 - foot diameter sewer runs parallel and beneath the northbound lane of Thruway overpass. A high voltage electrical line is buried in the site area.

Current Zoning and Land Use: The site area is being used as roads and right of way for roads and utilities.

Past Use of the Site: The site was historically the location of the confluence between the former Wilkeson Slip and the former Erie Canal. The Wilkeson Slip was contaminated with coal tar waste from the former Buffalo Service Station (BSS), a manufactured gas plant (MGP). The Wilkeson Slip was filled in between 1895 and 1915 and the Erie Canal was filled in the 1930's. The BSS was operated by various companies from 1848 to 1948. National Fuel Gas owned the

BSS property until 2005. During remedial action at the BSS site in 2006, a large portion of the Wilkeson Slip was cleaned up by Duke Realty. In 2012, a sheet pile was placed along the eastern side of Fourth Street in the Slip and the remaining portion of the Wilkeson Slip within Duke Realty property was cleaned up.

Site Geology and Hydrogeology: The overburden consists of fill and alluvium. The fill consists of bricks, slag, silt, clay, sands and gravels. The thickness of fill varies from 6 to 21 feet. The fill thickness is greatest in the 11.5 foot diameter sewer area. A native alluvial deposit of clay, silt, fine sands and gravel lies beneath the fill. The depth of bedrock varies from 21 to 25 feet bgs. The bedrock consists of Onondaga Limestone. The depth of groundwater is approximately 6 ft. bgs. The groundwater flows towards Lake Erie or towards west-southwest.

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, alternatives (or an alternative) that restrict(s) the use of the site to commercial use (which allows for industrial use) as described in Part 375-1.8(g) are/is being evaluated in addition to an alternative which would allow for unrestricted use of the site.

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

SECTION 5: ENFORCEMENT STATUS

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Site Characterization (SC)

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 SC 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 SC 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. The SC report is

available for the analytical data collected on this site includes data 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 SC 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: SC 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 SC Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

mercury	polycyclic aromatic hydrocarbons (PAHS),
benzene	acenaphthene
ethylbenzene	benzo(a)anthracene
toluene	benzo(a)pyrene
xylene (mixed)	benzo(b)fluoranthene

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 SC.

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

This site was impacted by the manufactured gas plant (MGP) waste from the former Buffalo Service Station (BSS) site (C915194). MGP waste such as coal tar migrated to this site through the former Wilkeson Slip. The Wilkeson Slip was located along the northern side of the BSS Plant. The BSS site was remediated in 2005-06 but this site area (west of OU-2A area) was not addressed at that time.

Investigations:

2003 Investigation:
During this subsurface investigation by National Fuel Gas, non-aqueous phase liquid (NAPL) blebs were observed at a depth of 17 feet below ground surface along the western side of the Fourth Street. Testing of this material showed elevated levels of benzene, toluene, ethyl benzene, and xylenes (BTEX) (58.9 ppm), PAHs (11,186 ppm), and mercury (4.0 ppm).

2012 -2013 Site Characterization:
Site characterization (SC) was conducted by National Fuel Gas. The National Fuel Gas contractor (ARCADIS), drilled ten soil borings and installed four groundwater monitoring wells. ARCADIS also completed an assessment of the 11.5 – foot diameter combined sewer (South Interceptor) that runs parallel with and beneath the northbound lane of Thruway overpass. The findings of SC were as follows:

Sub surface soil:
No coal tar or NAPL blebs were found during this investigation. The contaminants that exceeded Part 375 Commercial SCOs (CSCO) were PAHs such as benzo(a) pyrene (3.7 ppm at 4-8 ft, 8.8 ppm at 18-21 ft, and 3.1 ppm at 20-22 ft bgs. CSCO-1.1 ppm); benzo(a) anthracene (9 ppm at 18-21 ft. CSCO -5.6 ppm); benzo(b) flouranthene (13 ppm at 18-21 ft. CSCO- 5.6 ppm) and metals such as arsenic (34 ppm below 18 ft. CSCO-16 ppm) and mercury (4.5 ppm below 8 ft. and 6.4 ppm below 18 ft. CSCO- 2.8 ppm). The highest concentration of total PAHs reported in a sample 18 feet below ground surface was 110.32 ppm. None of the VOCs exceeded CSCOs.

Groundwater:
Two rounds of groundwater sampling were conducted during SC. Class GA Groundwater Standards or guidance values for VOCs and PAHs exceeded in only one on-site monitoring well [AW-03 (benzene -12 ppb, Std.-1 ppb; acenaphthene - 81 ppb, Std.-20 ppb)]. Some other PAHs were also found in the groundwater. AW-03 is believed to be installed in the former Wilkeson Slip. Groundwater Standards for iron, manganese, and sodium exceeded in all monitoring wells. The monitoring well (AW-02) towards residential area did not show significant contamination [AW-02 (acenaphthene – 3.3 ppb, Std.20 ppb; BTEX-ND)].

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.*

A health assessment will be provided when sufficient information becomes available for the area of concern.

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.

SECTION 7: ELEMENTS OF THE PROPOSED REMEDY

The alternatives developed for the site and 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 proposed remedy is referred to as the institutional control remedy.

The proposed remedy is no action with institutional controls. The contamination at this off-site area is from Former Buffalo Service Center. The contamination is below 15 feet below ground surface and is under the active roadways. The elements of the proposed remedy are as follows:

1. Institutional Controls:
Imposition of institutional controls in the form of an environmental easement (City of Buffalo property) and environmental notice (NYSTA property) for the controlled properties that:
requires the remedial party or site owners to complete and submit to the Department

a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
• allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
• restricts 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;
• requires compliance with the Department approved Site Management Plan.

2. Site Management Plan:
A Site Management Plan is required, which includes the following:
• an Institutional Control Plan that identifies all use restrictions for the site and details the steps and media-specific requirements necessary to ensure the following institutional controls remain in place and effective;

Institutional Controls: The environmental easement and environmental notice discussed in Paragraph 1 above.
This plan includes, but may not be limited to:
• an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
• descriptions of the provisions of the environmental easement and environmental notice including any land use and groundwater use restrictions;
• maintaining site access controls and Department notification; and
• the steps necessary for the periodic reviews and certification of the institutional controls.

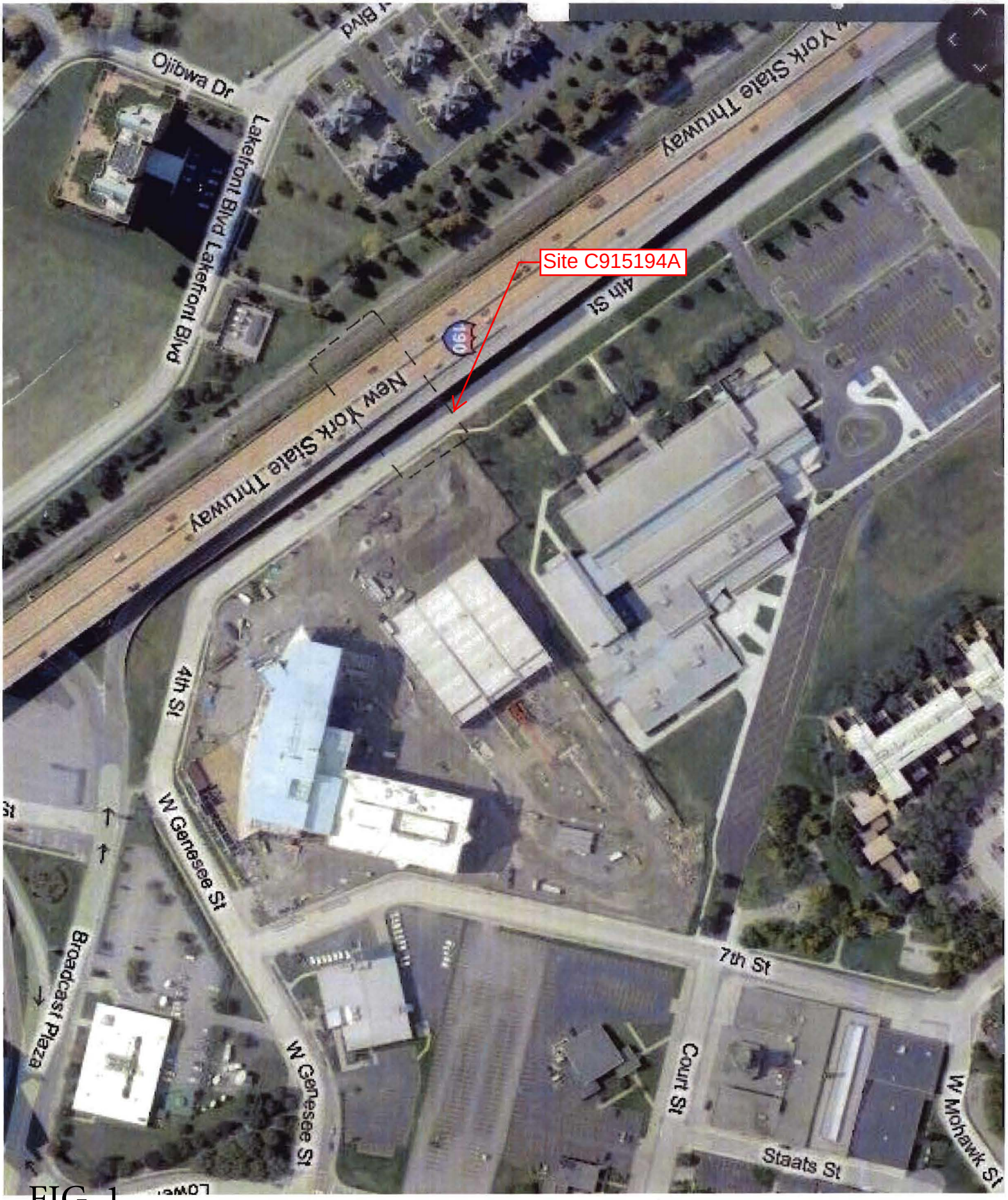

FIG. 1

FORMER BUFFALO SERVICE STATION- OFF-SITE - C915194A