NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau E 625 Broadway, 12th Floor, Albany, NY 12233-7017 P: (518) 402-9813 I F: (518) 402-9819 www.dec.ny.gov

August 26, 2016

Ms. Tanya Alexander National Fuel Gas Distribution Corp. 6363 Main Street Williamsville, New York 14221

RE: Former Buffalo Service Station - Off-Site

Site ID No.: C915194A, Buffalo, Erie County

Site Characterization Report & Decision Document

Dear Ms. Alexander:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) have reviewed the Site Characterization Report for the Former Buffalo Service Station – Off-Site dated December 2015 and prepared by Arcadis of New York, Inc., on behalf of the National Fuel Gas Distribution Corporation.

The Site Characterization Report is hereby approved. Please ensure that a copy of the approved Site Characterization Report is placed in the document repository. The draft report should be removed.

Enclosed is a copy of the Department's Decision Document for the site. The remedy is to be implemented in accordance with this Decision Document. Please ensure that a copy of the Decision Document is placed in the document repository.

Please contact the Department's Project Manager, Jaspal S. Walia, at (716) 851-7220 or jaspal.walia@dec.ny.gov at your earliest convenience to discuss next steps. Please recall the Department requires seven (7) days' notice prior to the start of field work.

Sincerely,

Michael J. Cruden, P.E.

Director

Remedial Bureau E

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Division of Environmental Remediation

Enclosure

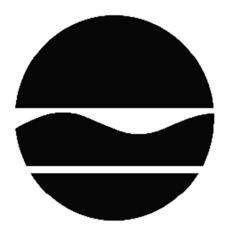
ec: Robert Schick/Michael Ryan, NYSDEC
Kelly Lewandowski, NYSDEC
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Patrick Foster, Esq., NYSDEC
Jacquelyn Nealon, NYSDOH

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DECISION DOCUMENT

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



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

DECLARATION STATEMENT - DECISION DOCUMENT

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

Statement of Purpose and Basis

This document presents the remedy for the Former Buffalo Service Station - Off-Site 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 Former Buffalo Service Station - OFF-SITE site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

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

DECISION DOCUMENT
Former Buffalo Service Station - OFF-SITE, Site No. C915194A

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.

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.

Digitally signed by Michael J Cruden Michael J Cruden DN: cn=Michael J Cruden, o=DER, ou=RBE, email=mjcruden@gw.dec.state.ny.us, c=US Date: 2016.08.23 16:20:10 -04'00'

Date

Michael Cruden, Director Remedial Bureau E

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DECISION DOCUMENT

Former Buffalo Service Station - OFF-SITE Buffalo, Erie County Site No. C915194A August 2016

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: Ms. Mary Jean Jakubowski 1 Lafayette Square Buffalo, NY 14203 Phone: 716-858-9000

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 off-site area of the former Buffalo Service Station site in the City of Buffalo is approximately 0.5 acres in size and is located west of the HealthNow building and Waterfront School and consists of the area between the eastern edge of Fourth Street and the railroad tracks on the west side. 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 also buried in the site area.

Current Zoning and Land Use: The site area is being used as either a major State highway or is a part of the right of way for the highway and/or 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

DECISION DOCUMENT August 2016 Former Buffalo Service Station - OFF-SITE, Site No. C915194A Page 4 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) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the Site Characterization (SC) 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 SC Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Participant. The Participant has an obligation to address off-site contamination. However, at this time and based on available information the Department has determined that no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

Summary of the Site Characterization (SC) 6.1:

A remedial investigation/SC 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 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: Site Characterization (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 benzo(a)anthracene ethylbenzene toluene benzo(a)pyrene benzo(b)fluoranthene xylene (mixed)

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 off-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 BTEX (58.9 ppm), PAHs (11,186 ppm), and mercury (4.0 ppm).

2012 -2013 Site Characterization:

A 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 the 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*.

Direct contact with contamination in the soil is unlikely because the majority of the site is a major vehicle thoroughfare and pedestrian access is prohibited. Drinking contaminated groundwater is not expected as the area is served by public water that is not affected by this contamination.

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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 SELECTED REMEDY

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 referred to as the institutional control remedy.

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

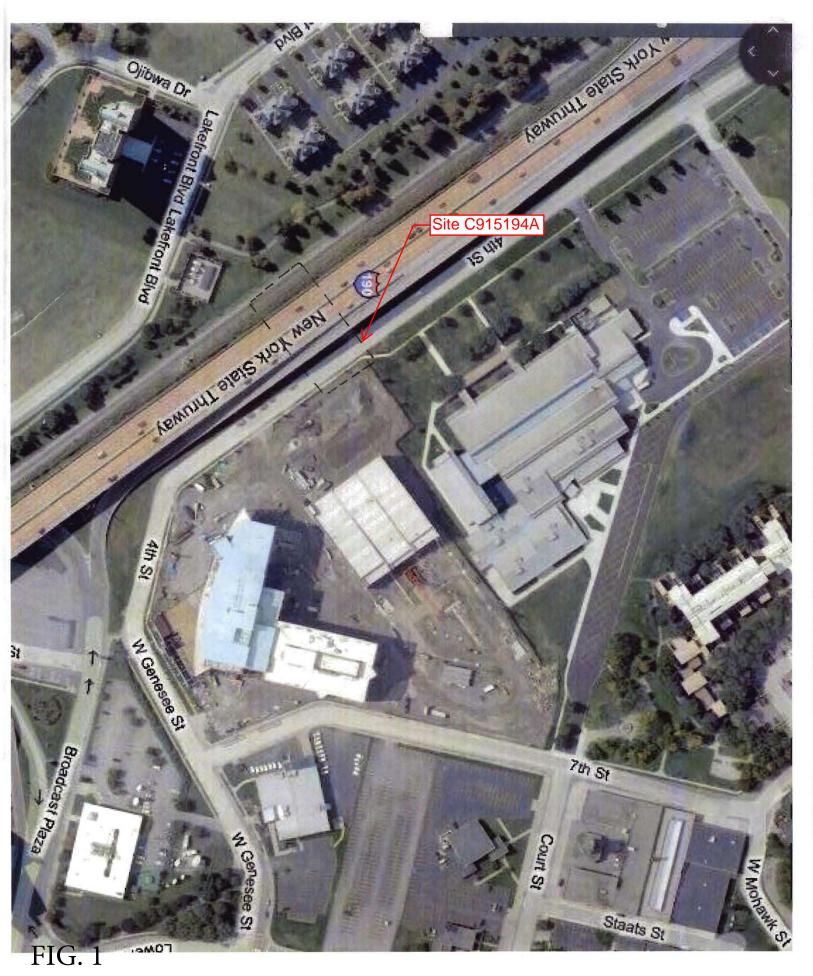
• an Institutional Control Plan that identifies all use restrictions for the site and details the steps and media-specific requirements necessary to ensure the following institutional controls remain in place and effective;

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.

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FORMER BUFFALO SERVICE STATION- OFF-SITE - C915194A