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

April 16, 2015

Mr. Anthony P. LoRusso 295 Maryland LLC 336 Elmwood Avenue Buffalo, New York 14222 aplpropertygrp@gmail.com

RE:

295 Maryland Street Site, No. C915242 Buffalo, Erie County Alternatives Analysis Report/Remedial Action Work Plan & Decision Document

Dear Mr. LoRusso:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) have reviewed the Alternatives Analysis Report/Remedial Action Work Plan (AAR/RAWP) for the 295 Maryland Street site dated December 2015 and prepared by Benchmark Environmental Engineering and Science on behalf of 295 Maryland LLC. The AAR/RAWP is hereby approved. Please ensure that a copy of the approved AAR/RAWP is placed in the document repositories. The draft plan 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 repositories.

It is understood that a draft Site Management Plan is the next scheduled submittal due on or before June 30, 2015.

Sincerely,

Milfel

Michael J. Cruden, P.E. Director Remedial Bureau E Division of Environmental Remediation

Enclosure

ec:

R. Schick, DER M. Ryan, DER M. Doster, Region 9 A. Lopes, Region 9 J. Dougherty, Region 9 D. Ripstein, NYSDOH S. McLaughin, NYSDOH T. Forbes, Benchmark C. Slater, Slater Law Firm, <u>cslater@cslaterlaw.com</u>



Department of Environmental Conservation

DECISION DOCUMENT

295 Maryland Street Brownfield Cleanup Program Buffalo, Erie County Site No. C915242 April 2015



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

DECLARATION STATEMENT - DECISION DOCUMENT

295 Maryland Street Brownfield Cleanup Program Buffalo, Erie County Site No. C915242 April 2015

Statement of Purpose and Basis

This document presents the remedy for the 295 Maryland 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 295 Maryland Street 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

Limited excavation and off-site disposal of approximately 3,584 tons (2,240 cubic yards) of

soil/fill 0.5 - 8 feet below ground surface (fbgs) impacted by metals, polycyclic aromatic hydrocarbons (PAHs), or grossly contaminated material as per NYCRR Part 375 1.2(u) in five (5) discrete areas of concern (AOCs) exceeding commercial SCOs for arsenic, lead and mercury and total PAH values above 100 mg/kg.

The site will be re-graded to accommodate installation of a cover system as described in remedy element 3. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) may be brought in to replace the excavated soil or complete the backfilling of the excavation and establish the design grades at the site.

3. Cover System

A site cover will be required to allow for restricted residential use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted residential use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

4. Institutional Controls

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

• requires the remedial party or site owner 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 restricted residential, 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.

5. Site Management Plan

A Site Management Plan is required, which includes the following:

a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: the Environmental Easement discussed above.

Engineering Controls: the cover system discussed 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 including any land use, and groundwater use restrictions;

• a provision for evaluation of the potential for soil vapor intrusion for any new buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;

• provisions for the management and inspection of the identified engineering controls;

· maintaining site access controls and Department notification; and

• the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan b. includes, but may not be limited to:

a schedule of monitoring and frequency of submittals to the Department;

monitoring for vapor intrusion for any new buildings developed on the site as may be required by the Institutional and Engineering Control Plan discussed above.

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.

Michael J Cruden DN: cn=Michael J Cruden, o=DER, ou=RBE, email=mjcruden@gw.dec.state.ny.us, c=US

Digitally signed by Michael J Cruden Date: 2015.04.07 08:53:40 -04'00'

Date

Michael Cruden, Director Remedial Bureau E

DECISION DOCUMENT

295 Maryland Street Buffalo, Erie County Site No. C915242 April 2015

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 and Erie County Public Library Attn: Mr. Brian Hoth Niagara Branch 280 Porter Avenue Buffalo, NY 14201 Phone: 716-882-1537

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 295 Maryland Street site is located in a residential area on the west side of the City of Buffalo. The site is bound by Maryland Street to the northwest and West Avenue to the southwest.

Site Features: The main site features include two vacant parcels totaling 1.5 acres: 295 Maryland Street (1.252 acres), and 129 West Avenue (0.243 acre). The project site is generally flat and partially vegetated. The site surrounds one residential property on three sides.

Current Zoning and Land Use: The site is currently inactive, and zoned for commercial/residential use. The surrounding parcels are mainly residential.

Past Use of the Site: Until 2000, the site was used for manufacturing commercial billboards, dating back to the 1920s. Prior uses that appear to have led to site contamination include three UST's, vehicle maintenance, and use and storage of paints, adhesives, solvents, and other flammables.

During past operations, three on-site UST's were removed: a 550 gallon gasoline UST (removed 1974), a 4000 gallon gasoline UST (removed in 1997), and a 100 gallon UST remover during facility decommissioning in 2001.

Site Geology and Hydrology: The upper four foot consists of topsoil, lean clay, and silt fill materials, underlain by up to 22 feet of native red-brown lean clay to silty sand. The depth to groundwater is 15-20 feet below ground surface (fbgs) and flow is to the 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 restricted-residential use (which allows for commercial use and 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 Remedial Investigation (RI) 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 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. The Department, in consultation with NYSDOH, will evaluate potential off-site impacts of site-related 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: <u>Summary of the Remedial Investigation</u>

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 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: <u>RI Results</u>

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:

benzo(a)pyrene	naphthalene
benzo(b)fluoranthene	beta-bhc
chrysene	alpha-bhc
indeno(1,2,3-cd)pyrene	benzo(a)anthracene
lead	arsenic
mercury	dieldrin
chromium	dibenz[a,h]anthracene
benzene, toluene, ethylbenzene and	cadmium
xvlenes (BTEX)	

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 RI.

6.3: <u>Summary of Environmental Assessment</u>

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.

Nature and Extent of Contamination:

Based upon investigations conducted to date, the primary contaminants of concern include SVOCs, VOCs, and inorganics.

Soil - The following is a description of fill/soils that were representative of the most impacted (contaminated) materials on the site.

SVOCs exceeding restricted residential soil cleanup objectives (SCOs) were found primarily in the central portion of 295 Maryland Street, and include: benzo(a)anthracene @ 17 ppm, benzo(b)fluoranthene @ 19 ppm, and benzo(a)pyrene @ 13 ppm (all in exceeding the restricted residential SCO of 1 ppm), indeno (1,2,3-cd)pyrene @ 7 ppm (0.5 ppm SCO), and chrysene @ 14 ppm (3.9 ppm SCO). Inorganics found which exceeded restricted residential SCOs included arsenic @ 23 ppm (16 ppm SCO), barium @ 552 (400 ppm SCO), cadmium @ 4.2 ppm (4.3 ppm SCO), lead @ 8,160 ppm (400 ppm SCO), and mercury @ 1.3 ppm (0.81 ppm SCO).

In general, concentrations were higher in the samples from 0-0.5 feet below ground surface (fbgs) as compared to the deeper samples (greater than 0.5 fbgs)

Groundwater – VOC, SVOC, metal, and pesticides found to exceed NYSDEC Groundwater Quality Standards (GWQS) include benzene @ 38 ppb (1 ppb GWQS), toluene @ 18 ppb (5 ppb GWQS), total xylenes @ 97 ppb (5 ppb GWQS), 1,2,4-trimethylbenzene (19 ppb), ethylbenzene (46 ppb), m/p xylenes (43 ppb), o-xylenes (35 ppb), benzo(a)anthracene (0.35 ppb), naphthalene (92 ppb),), manganese (0.315 ppm), and sodium (88.8 ppm), alpha-BHC @ 0.18 ppb (0.01 ppb GWQS), beta-BHC (0.21 ppb), gamma-chlordane (0.15 ppb), heptachlor (0.14 ppb)

6.4: <u>Summary of Human Exposure Pathways</u>

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*.

The site is not fenced and persons who enter the site could contact contaminants in the soil by walking on the soil, digging or otherwise disturbing the soil. Access to the site is unrestricted. However, contact with contaminated soil or groundwater is unlikely unless they dig below the ground surface. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings 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 buildings, is referred to as soil vapor intrusion. Because there is no on-site building, inhalation of site contaminants in indoor air due to soil vapor intrusion does not represent a concern for the site in its current condition. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site development.

6.5: <u>Summary of the Remediation Objectives</u>

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.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

Remove the source of ground or surface water contamination.

<u>Soil</u>

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.

<u>Soil Vapor</u>

RAOs for Public Health Protection

• Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

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 4: Restricted use with site-specific soil cleanup objectives remedy.

The selected remedy is referred to as the Track 4 Restricted Residential Use remedy.

The elements of the selected remedy, as shown in Figure 2, are as follows:

I. 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

Limited excavation and off-site disposal of approximately 3,584 tons (2,240 cubic yards) of soil/fill 0.5 - 8 feet below ground surface (fbgs) impacted by metals, polycyclic aromatic hydrocarbons (PAHs), or grossly contaminated material as per NYCRR Part 375 1.2(u) in five (5) discrete areas of concern (AOCs) exceeding commercial SCOs for arsenic, lead and mercury and total PAH values above 100 mg/kg.

The site will be re-graded to accommodate installation of a cover system as described in remedy element 3. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) may be brought in to replace the excavated soil or complete the backfilling of the excavation and establish the design grades at the site.

3. Cover System

A site cover will be required to allow for restricted residential use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted residential use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

4. Institutional Controls

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

• requires the remedial party or site owner 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 restricted residential, 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.

5. Site Management Plan

A Site Management Plan is required, which includes the following:

a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: the Environmental Easement discussed above.

Engineering Controls: the cover system discussed 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 including any land use, and groundwater use restrictions;

• a provision for evaluation of the potential for soil vapor intrusion for any new buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;

• provisions for the management and inspection of the identified engineering controls;

• maintaining site access controls and Department notification; and

• the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

• a schedule of monitoring and frequency of submittals to the Department;

• monitoring for vapor intrusion for any new buildings developed on the site as may be required by the Institutional and Engineering Control Plan discussed above.



