#### 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

December 9, 2015

Mr. William Paladino 1093 Group, LLC 295 Main Street, Suite 210 Buffalo, New York 14203

> RE: 399 Ohio Street, Site No: C915287 City of Buffalo, Erie County **Remedial Investigation/Alternatives Analysis Report & Decision Document**

Dear Mr. Paladino:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) have reviewed the Remedial Investigation/Alternatives Analysis Report (RI/AAR) for the 399 Ohio Street site, revised December 2015 and prepared by Benchmark on behalf of 1093 Group, LLC. The RI/AAR is hereby approved. Please ensure that a copy of the approved RI/AAR is placed in the document repository. 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 repository.

Please contact the Department's Project Manager, Anthony Lopes, 716-851-7220 at your earliest convenience to discuss next steps.

Sincerely,

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

Enclosure

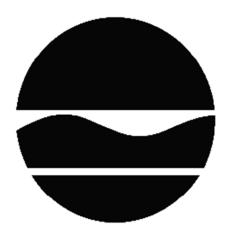
- R. Schick/M. Ryan, DER ec:
  - C. Staniszewski/A. Lopes, Region 9
  - J. Dougherty, OGC, Region 9
  - K. Anders/C. Bethoney/A. Perretta, NYSDOH
  - N. Munley/M. Lesakowski, Benchmark
  - C. Slater, Esq., The Slater Law Firm, PLLC



Environmental Conservation

# **DECISION DOCUMENT**

399 Ohio Street Site Brownfield Cleanup Program Buffalo, Erie County Site No. C915287 December 2015



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

# **DECLARATION STATEMENT - DECISION DOCUMENT**

399 Ohio Street Site Brownfield Cleanup Program Buffalo, Erie County Site No. C915287 December 2015

#### **Statement of Purpose and Basis**

This document presents the remedy for the 399 Ohio 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 399 Ohio 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

Excavation and off-site disposal of contaminant source areas of concern (Figure 2) including:

• Grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u); and

• Areas of soil/fill with total PAH concentrations greater than 100 ppm and arsenic concentrations greater than 16 ppm.

Approximately 900 tons of soil will be removed from the site for disposal at an off-site permitted facility. All excavations will include confirmation sampling. On-site soil which does not exceed the above excavation criteria may be used below the cover system described in remedy element 3 to backfill the excavation. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil or complete the backfilling of excavations and establish the designed grades at the site below the cover system described in remedial element 3.

### 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, and 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 placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d).

#### 4. Institutional and Engineering Control

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. The remedy will achieve a Track 4 restricted residential cleanup at a minimum and will include imposition of a site cover, an environmental easement, and site management plan as described below.

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 use 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; and

• 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 in Paragraph 4 above; and

• Engineering Controls: The soil cover discussed in Paragraph 3 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;

• 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.

#### **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

Digitally signed by Michael J Cruden DN: cn=Michael J Cruden, o=DER, ou=RBE, email=mjcruden@gw.dec.state.ny.us, c=US Date: 2015.12.08 16:04:09 -05'00'

Michael Cruden, Director Remedial Bureau E

Date

# **DECISION DOCUMENT**

399 Ohio Street Site Buffalo, Erie County Site No. C915287 December 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: <u>CITIZEN PARTICIPATION</u>

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 <a href="http://www.dec.ny.gov/chemical/61092.html">http://www.dec.ny.gov/chemical/61092.html</a>

# SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The 399 Ohio Street Site is located in an urban area of the City of Buffalo. The site is approximately 1/4 mile south of the intersection with Michigan Avenue.

Site Features: The site is currently improved with an approximately 10,000 square foot vehicle maintenance and office building, with the remainder of the site covered by asphalt and minor amounts of soil cover. The site is bordered by the River Fest Park to the north, a rowing club to the south, Ohio Street to the east, and the Buffalo River to the west.

Current Zoning and Land Use: The site is zoned for commercial use and currently used for various storage, recycling of road base materials from the Ohio Street re-construction project, and a maintenance building. The surrounding parcels are currently used for a combination of commercial, light industrial, and utility right-of-ways. The nearest residential area is 0.3 miles to the east.

Past Use of the Site: The site has been utilized for various industrial and commercial operations since at least 1889. Operations included rail lines, material handling and shipping equipment maintenance, and the use and storage of paints, solvents, thinners, greases, hydraulic oils and lubricants common among former commercial operations. More recently property uses have included the operation of bus and trucking terminal and maintenance operations, including the placement of underground storage tanks, aboveground storage tanks, and fuel dispensing pump(s).

Geology and Hydrogeology: The site consists of 4-6 feet of fill (soil, ash, brick, and sand) over native clay. Shallow groundwater was encountered at 4-6 feet below ground surface and flows westward towards the Buffalo River.

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 restricts 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) 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. 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
- sub-slab vapor
- indoor air
- -ambient air

# 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: <u>http://www.dec.ny.gov/regulations/61794.html</u>

# 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 contaminants of concern identified at this site are:

lead	cadmium
benzo(a)anthracene	indeno(1,2,3-CD)pyrene
benzo(a)pyrene	bis(2-ethylhexyl)phthalate
benzo(b)fluoranthene	chrysene
dibenz[a,h]anthracene	chromium
arsenic	mercury

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

During the RI analytical samples were collected from subsurface soil, soil vapor (including subslab soil vapor), ambient air, indoor air, and groundwater. No surface soil samples were collected as a majority of the site is covered by asphalt with very minor amounts of soil. The results of the RI identified contamination related to arsenic, cadmium, chromium, lead, mercury, polycyclic aromatic hydrocarbons (PAHs), and grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u).

# Soil:

On-site subsurface soil samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides/herbicides, polychlorinated biphenyls (PCBs), and metals. The PAHs benzo(a)anthracene (up to 24 ppm), benzo(a)pyrene (up to 19 ppm), benzo(b)fluoranthene (up to 24 ppm), dibenz[a,h]anthracene (up to 3.5 ppm), indeno(1,2,3-CD)pyrene (up to 12 ppm), and chrysene (up to 24 ppm) were detected above Restricted Residential Soil Cleanup Objectives (RRSCOs) in up to 10 of 30 locations sampled from the upper fill layer. Total PAHs in all cases are below 500 ppm. Data does not indicate any off-site impacts in soil related to this site.

Metals arsenic (up to 89 ppm), cadmium (up to 32 ppm), and lead (up to 1300 ppm) were detected above RRSCOs in up to 5 out of 30 samples.

No VOCs were detected above RRSCO's with the minor exception of acetone at TP-20 of 0.16 ppm slightly above the RRSCO.

No pesticides, herbicides, or PCBs were detected above RRSCOs.

# Groundwater:

Groundwater samples were collected and analyzed for TCL VOCs and SVOCs, TAL metals, PCBs, pesticides, and herbicides. PAHs and metals including lead, manganese, and selenium were detected above NYSDEC TOGS 1.1.1 Class GA Groundwater Quality Standards (GWQS). Data does not indicate any off-site impacts in groundwater related to this site.

No VOCs or PCBs were detected above GWQS. PAHs including benzo(a)anthracene (up to 0.35 ppb), benzo(a)pyrene (up to 0.39 ppb), benzo(b)fluoranthene (up to 0.5 ppb), bis(2-ethylhexyl)phthalate (up to 6.7 ppb), and chrysene (up to 0.35 ppb) were detected at concentrations above GWQS in two of five sample locations. Lead was detected (up to 55.9 ppm) in 3 of the 5 sample locations. The majority of pesticide and herbicide analytes were reported as non-detectable or trace (estimated) concentrations below the laboratory quantitation limit and GWQS, with 4,4'-DDT being detected above GWQS at one sample location (up to 0.484 ppb) and chlordane being detected above GWQS at one sample location (up to 0.199 ppb).

# Soil Vapor, Indoor Air, and Ambient Air:

A soil vapor intrusion (SVI) investigation was completed to assess the potential for soil vapor conditions within the existing building (office and garage/storage space). To perform the evaluation, one (1) location within the building was selected as a sub slab vapor (SSV) sample location. Two (2) air samples were also collected, one (1) indoor air sample was collected adjacent to the SSV location and one (1) outdoor ambient air sample was collected to establish background conditions.

All soil vapor, ambient air, and indoor air samples were analyzed for TCL VOCs by United States Environmental Protection Agency (EPA) Method TO-15. While many compounds were detected in all samples, the data indicate that the potential for inhalation of site-related

contaminants in indoor air from soil vapor intrusion is not a concern. With the knowledge that the building houses an active garage/vehicle storage area, the detected compounds were concluded as being indicative of the current on-site uses.

## 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*.

Since the site is fenced and covered by asphalt or concrete, people are not likely to come into contact with site-related soil and groundwater contamination. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not contaminated by the site.

# 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 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.

# 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 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:

• 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 contaminant source areas of concern (Figure 2) including:

• Grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);

• Areas of soil/fill with total PAH concentrations greater than 100 ppm and arsenic concentrations greater than 16 ppm.

Approximately 900 tons of soil will be removed from the site for disposal at an off-site permitted facility. All excavations will include confirmation sampling. On-site soil which does not exceed the above excavation criteria may be used below the cover system described in remedy element 3 to backfill the excavation. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil or complete the backfilling of excavations and establish the designed grades at the site below the cover system described in remedial element 3.

### 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, and 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 placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to

the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d). 4. Institutional and Engineering Control

#### 4. Institutional and Engineering Control

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. The remedy will achieve a Track 4 restricted residential cleanup at a minimum and will include imposition of a site cover, an environmental easement, and site management plan as described below.

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 use 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; and

• 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 in Paragraph 4 above; and
- Engineering Controls: The site cover discussed in Paragraph 3 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;

- 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.

