#### 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

November 22, 2017

Mr. James Jerge Hurondel I, Inc. 275 Franklin Street Buffalo, New York 14202

> RE: 73-79 W. Huron Street Site ID No. C915282 Buffalo, Erie County Remedial Work Plan & Decision Document

Dear Mr. Jerge:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) have reviewed the Remedial Work Plan (RWP) a.k.a. the Site Investigation/Interim Remedial Measure/Alternatives Analysis Report (SI/IRM/AAR) for the 73-79 W. Huron Street site dated May 2017 and prepared by Benchmark Environmental Engineering and Science, PLLC on behalf of the Hurondel I, Inc. The RWP is hereby approved. Please ensure that a copy of the approved RWP is placed in the document repository. Draft copies of the 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, David Locey, at (716) 851-7220 or <u>david.locey@dec.ny.gov</u> at your earliest convenience to discuss next steps.

Sincerely,

Mulfle

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

Enclosure

ec: M. Ryan - DER

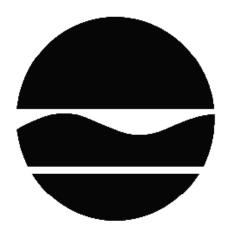
- C. Staniszewski/D. Locey Region 9
- K. Anders/C. Bethany/S. Karpinski NYSDOH
- T. Forbes Benchmark
- R. Knoer The Knoer Group, PLLC



Department of Environmental Conservation

# **DECISION DOCUMENT**

73-79 W. Huron St. Brownfield Cleanup Program Buffalo, Erie County Site No. C915282 November 2017



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

# **DECLARATION STATEMENT - DECISION DOCUMENT**

73-79 W. Huron St. Brownfield Cleanup Program Buffalo, Erie County Site No. C915282 November 2017

#### Statement of Purpose and Basis

This document presents the remedy for the 73-79 W. Huron St. 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 73-79 W. Huron St. site and the public's input to the proposed remedy presented by the Department.

#### Description of Selected Remedy

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternatives analysis (AA). The IRM undertaken at this site is discussed in Section 6.2.

Based on the implementation of the IRM, the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore, No Further Action with continued Site Management is the selected remedy. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the proposed remedy for the site.

#### **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: 2017.11.16 16:20:32 -05'00'

Michael Cruden, Director Remedial Bureau E

# **DECISION DOCUMENT**

73-79 W. Huron St. Buffalo, Erie County Site No. C915282 November 2017

#### 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 resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternative analysis (AA). The IRM undertaken at this site is discussed in Section 6.2.

Based on the implementation of the IRM, the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment. The IRM conducted at the site attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action with continued Site Management is the selected remedy. A No Further Action remedy may include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This DD identifies the IRM conducted and discusses the basis for No Further Action.

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:

Erie County Central Library 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 site is located at 73-79 W. Huron Street, Buffalo, in Erie County. The site is approximately 0.6 acres in size.

Site Features: The site consists of a six-story building and an asphalt-paved parking lot. The building is a vacant, brick structure with a basement and basement sump. The parking lot is located to the west of the building and covers the remainder of the site.

Current Zoning and Land Use: The site is located in the City's N-1D, Downtown/Regional Hub neighborhood zone which allows for restricted residential and commercial uses.

Past Use of the Site: The building was constructed in the early 1900s as a horse stable. It was later converted to an automobile parking ramp. Historical activities included the use of petroleum products in above ground drums and underground tanks. The southern end of the paved parking lot was once occupied by a gas station. Immediately west of the site is another former gas station, currently being remediated under the Department's Spill Response program (spill #1106834).

Geology and Hydrogeology: Soils beneath the asphalt parking lot consist of general fill (i.e. bricks, metal, glass, etc.) co-mingled with fine sand to depths of 2 to 5 feet below ground surface (fbgs). Beneath the general fill and the basement of the building, the soil is a poorly graded sand and silty sand. Bedrock was not encountered during any of the site investigations, however, based on observations at other nearby sites, it is estimated that the limestone bedrock is approximately 40 fbgs.

Groundwater is present at approximately 9 to 11 fbgs. Site groundwater flow direction is influenced by an active sump, located in the western half of the building's basement. Based on observations made during the remedial investigation, the sump pump operates continuously, creating a localized depression in the groundwater table, pulling groundwater from beneath the central portion of the parking lot eastward. Beyond the vicinity of this sump, in the southern end

of the parking lot, groundwater flows in a southeast direction. Based on the elevation of the sump pump inlet, and observations from the soil borings completed through the basement floor, there is no unsaturated space (i.e. air space) beneath the basement floor slab.

A site location map is attached as Figure 1. A site plan showing the BCP site boundary is presented in Figure 2.

## SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, an alternative 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 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

The Applicant under the Brownfield Cleanup Agreement is a Participant. The Applicant has an obligation to address on-site and 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 contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3. The analytical data collected on this site includes data for:

- outdoor air
- groundwater
- soil
- indoor air
- sub-slab vapor

#### 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:

1,2,4-trimethylbenzene	xylene (mixed)
1,3,5-trimethylbenzene	trichloroethene
ethylbenzene	n-propylbenzene
toluene	

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM described in Section 6.2. More complete information can be found in the RI Report.

#### 6.2: <u>Interim Remedial Measures</u>

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.

The following IRM has been completed at this site based on conditions observed during the RI and earlier site investigations.

#### IRM - Soil Removal

Between March and December 2015, a total of 4,458 tons of petroleum-contaminated soils were excavated from the central and southern portions of the paved parking lot and disposed in an offsite permitted landfill. Previous site investigations had determined the initial IRM excavation limits (both vertically and horizontally). The excavation targeted contaminant source areas, which included:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- soils which exceeded the protection of groundwater soil cleanup objectives (PGW SCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards; and
- soils that created a nuisance condition, as defined in Commissioner Policy CP-51 Section G.

As the IRM excavation progressed from north to south, visual and olfactory field observations were used to further define the limits of excavation. Near surface soils were not impacted. Excavated soils immediately above and below the groundwater table were stained and had a distinct petroleum odor. There were no underground storage tanks uncovered. The depth of excavation ranged from 5 feet at the north end of the excavation to greater than 20 feet at its southern end. Twenty-four (24) confirmatory post-excavation sidewall and ten (10) bottom soil samples were then collected for volatile organic compound (VOC) analyses.

On-site soil which did not exceed the above excavation criteria was used to backfill the excavation. Clean, imported fill replaced the disposed excavated soil to complete the backfilling of the excavation and establish the designed grades at the site. The imported fill met the requirements of 6NYCRR Part 375-6.7 for the intended restricted residential/commercial land use. The asphalt pavement was then replaced. Details of the completed IRM were included with the findings of the RI in the combined report entitled *Site Investigation / Interim Remedial Measures / Alternative Analysis Report*, May 2017.

The extent of the IRM excavation is depicted in the attached Figure 3.

#### 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.

#### Post IRM

#### Soil:

No surface soil samples were collected from the site as the entire site footprint is covered with hardscape (concrete and asphalt).

Subsurface soil samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, total cyanide and metals. SVOCs, PCBs, pesticides, total cyanide and metals were not reported in any of the samples at concentrations above restricted residential soil cleanup objectives (RR SCOs).

Approximately sixty soil samples were collected and analyzed for VOCs, to characterize the soils remaining on site, following implementation of the IRM excavation. Eight of these samples, collected from depths of 12 to 16 feet, exceeded the PGW SCOs for the following contaminants:

- 1,2,4 trimethylbenzene up to 74 ppm (3.6 ppm PGW SCO);
- 1,3,5 trimethylbenzene -up to 21 ppm (8.4 ppm);
- n-propylbenzene up to 40 ppm (3.9 ppm); and
- total xylenes up to 89 ppm (1.6 ppm).

Only one sample reported VOC contamination above the RR SCOs and that was for just the VOC 1,2,4 trimethylbenzene (74 ppm reported, 52 ppm RR SCO). That sample was collected from a depth of 12 to 16 fbgs, near the southeast corner of the parking lot.

Based on the analytical results for soil samples collected near the site boundary and off-site groundwater data, site-related soil contamination is not expected to be present off site. No further soil removal actions are warranted.

#### Groundwater:

Groundwater samples were analyzed for VOCs, SVOCs, PCBs, pesticides and metals. Seven (7) monitoring wells were sampled including four (4) on-site wells and three (3) downgradient offsite wells. PCBs and pesticides were not detected above New York State Ambient Groundwater Standards or Guidance Values (AGWSGV). Metals were either reported below AGWSGV or at concentrations consistent with naturally occurring levels. Naphthalene (210 ppb) was the only SVOC reported, in one well, at a concentration above its AGWSGV (10 ppb).

All VOCs concentrations in off-site wells were below AGWSGV. VOCs reported in on-site wells after completion of the IRM, at concentrations exceeding AGWSGV, included:

- 1,2,4 trimethylbenzene up to 760 ppb;
- 1,3,5 trimethylbenzene 33 ppb;
- n-propylbenzene 180 ppb;
- ethylbenzene up to 840 ppb;
- toluene 350 ppb; and
- total xylenes 427 ppb.

The AGWSGV for each of these contaminants is 5 ppb. These VOC concentrations in groundwater represent a decrease of 38 to 92 percent from an earlier, post-IRM, round of sampling and can be expected to continue to decline with the removal of the source by the IRM.

#### Sump Water:

Sumps within the building (only one of which is actively pumped) were analyzed for VOCs, SVOCs, PCBs, pesticides and metals. SVOCs, PCBs and pesticides were below their respective AGWSGV. Metals were either reported below AGWSGVs or at concentrations consistent with naturally occurring levels.

The active sump contained only one VOC above its AGWSGV - 1,2,4 trimethylbenzene at 6.7 ppb (5 ppb AGWSGV). An inactive sump, located at the south end of the basement, contained low levels of VOCs above AGWSGV including ethylbenzene up to 13 ppb, toluene up to 7.6 ppb and total xylenes up to 40 ppb. The AGWSGV for each of these contaminants is 5 ppb. The active sump discharges to the municipal combined sewer system. The inactive sump has no discharge.

#### Indoor Air / Outdoor Air / Sub-slab Vapor:

One (1) indoor air and four (4) sub-slab vapor samples from beneath the building were collected and analyzed for VOCs. As a basis for comparison, one (1) outdoor air sample was also collected and analyzed for VOCs. No air space exists beneath the building, therefore, only by temporarily and purposely lowering the groundwater surface (by pumping groundwater from a pit located immediately east of the site) was sampling of the sub-slab vapor possible.

The results were generally characterized as requiring no further action. The exception was trichloroethene; the 0.54 microgram per cubic meter (mcg/m<sup>3</sup>) reported in one of the sub-slab vapor samples warrants further monitoring when compared to the indoor air concentrations of 9.4 to 14 mcg/m<sup>3</sup>. One anomalous result was 30,000 mcg/m<sup>3</sup> of cyclohexane reported in one of the sub-slab samples (the concentrations of the other three samples were up to 19 mcg/m<sup>3</sup>); the concentration in the indoor sample was 6.1 mcg/m<sup>3</sup> and none was found in the outdoor air sample above the 1.7 mcg/m<sup>3</sup> reporting limit.

Other VOCs reported in the indoor air sample were petroleum-related. The indoor concentrations were typically more than ten times higher than the outdoor concentrations:

- 1,2,4 trimethylbenzene 16 mcg/m<sup>3</sup> (0.7 mcg/ m<sup>3</sup> outdoor air);
- 1,3,5 trimethylbenzene 2.9 (0.15);
- ethylbenzene 3 (0.18);
- toluene 11 (0.79); and
- total xylenes 15.5 (0.71).

The indoor air concentrations might be attributed to the vacant building's past use as a parking ramp and the lack of ventilation when the samples were collected. A provision for the evaluation of the potential for soil vapor intrusion for the existing building and any new buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion, will be part of the site management plan.

## 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*.

Direct contact with contaminants in the soil is unlikely because the site is covered with buildings and pavement. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source 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 the building is not currently occupied, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. However, the potential exists for the inhalation of site contaminants in indoor air for any future occupancy or redevelopment. Sampling indicates soil vapor intrusion may be a concern for off-site buildings.

#### 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.

#### **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**

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

#### <u>Soil</u>

#### **RAOs for Public Health Protection**

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

#### **RAOs for Environmental Protection**

• Prevent migration of contaminants that would result in groundwater or surface water contamination.

#### Soil Vapor

#### **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

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation presented here, the Department is proposing No Further Action with continued Site Management as the remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

The elements of the selected remedy are as follows:

- **1. Institutional Control** Imposition of an institutional control in the form of an environmental easement for the controlled property which will:
  - require 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);
  - allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
  - restrict 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
  - require compliance with the Department approved Site Management Plan.
- **2.** 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 engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement 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 including any land use and groundwater restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and engineering controls.
- b) a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
  - monitoring of groundwater to assess the performance and effectiveness of the remedy;
  - monitoring for vapor intrusion for any buildings on the site, including the existing building and any new buildings developed, as may be required by the Institutional and Engineering Control Plan discussed above; and,

- a schedule of monitoring and frequency of submittals to the Department.
- **3.** Green Remediation Green remediation principals and techniques will be implemented to the extent feasible in the 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 gas and other emissions;
  - Increasing energy efficiency and minimizing use of non-renewable energy;
  - Conserving and efficiently managing resources and materials; and
  - Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste.

## **FIGURE 1**

