# **DECISION DOCUMENT**

211 Main Street
Brownfield Cleanup Program
North Tonawanda, Niagara County
Site No. C932171
February 2021



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

## **DECLARATION STATEMENT - DECISION DOCUMENT**

211 Main Street
Brownfield Cleanup Program
North Tonawanda, Niagara County
Site No. C932171
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### **Statement of Purpose and Basis**

This document presents the remedy for the 211 Main 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 211 Main 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;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy

efficiency as an element of construction.

2. Excavation - Excavation and off-site disposal of all on-site soil and fill (approximately 1,800 cubic yards) that exceed unrestricted use soil cleanup objectives (SCOs) as defined by 6 NYCRR Part 375-6.8. This includes fill material under the building slab, which will be removed as part of site redevelopment. The area of elevated gamma activity soil along the south side of the building will also be removed for proper disposal at an approved off-site waste facility. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

The intent of the remedy is to achieve a Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated. If groundwater standards and screening levels are not achieved prior to completion of the Final Engineering Report, then a Site Management Plan (SMP) and Environmental Easement (EE) will be required to address groundwater monitoring; a Track 1 cleanup can only be achieved if groundwater monitoring is no longer needed within 5 years of the date of the Certificate of Completion.

If a Track 1 unrestricted use remediation is not achieved, including achievement of groundwater remedial objectives, the following contingent remedial elements will be required, and the remedy will achieve a Track 2 residential cleanup. The contingent remedy will include the following:

- 3. Institutional Controls: Imposition of an institutional control in the form of an Environmental Easement for the controlled property that:
- (a) 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);
- (b) Allows the use and development of the controlled property for residential, commercial or industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- (c) 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
- (d) Requires compliance with the Department approved Site Management Plan.
- 4. 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 3 above.

This plan includes, but may not be limited to:

- An Excavation Plan that details the provisions for the 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 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;
- 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.

02/10/21	Michael Cruden
Date	Michael Cruden, Director
	Remedial Bureau E

## **DECISION DOCUMENT**

211 Main Street North Tonawanda, Niagara County Site No. C932171 February 2021

### **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:

DECInfo Locator - Web Application <a href="https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C932171">https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C932171</a>

North Tonawanda Public Library 505 Meadow Drive
North Tonawanda, NY 14120

Phone: (716) 693-4132

**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 and Resource Conservation and Recovery Act Program. We the public to sign for one or more county listservs encourage up http://www.dec.ny.gov/chemical/61092.html

### **SECTION 3: SITE DESCRIPTION AND HISTORY**

#### Location:

The site is located at 211 Main Street in the City of North Tonawanda, Niagara County, just south of the intersection of Main and Thompson Streets. The site is 0.67 acres in size, and is bordered on the west by Main Street, commercial properties, River Road, and the Little Niagara River; on the south by commercial properties; on the east by a rail line, vacant and commercial properties; and to the north by commercial property and Thompson Street.

#### Site Features:

The site contains an approximately 11,000-square foot building that was deemed unfit for occupancy by the City of North Tonawanda in 2015. The building is surrounded by asphalt and gravel parking lots with a fence at the property lines. The site is generally flat, but gently slopes to the west. Surface drainage is primarily towards storm drains located along Main Street to the west.

#### Current Zoning and Land Use:

The property is zoned for industrial use and is currently vacant. Surrounding properties are zoned for industrial, commercial, and residential uses. The nearest residential properties are located approximately 1000 feet east of the site

#### Past Use of the Site:

The site was first developed as a lumber mill in the 1880s, and maintained that use until the 1960s. Since that time, the site has been used as an automobile service station and a warehouse. Historical operations at the property included lumber planing, pallet production, industrial cutting, machinery sales, and automobile repair, storage and painting.

In September 2017, a Phase II Environmental Site Assessment (ESA) was completed at the property. This investigation documented the presence of several semi-volatile organic compounds (SVOCs) and arsenic at concentrations that exceeded the Department's Part 375 commercial use soil cleanup objectives (SCOs).

## Site Geology and Hydrogeology:

Asphalt and gravel sub-base were observed throughout the site from the surface to eight inches below grade. Fill material, consisting of crushed rock, lumber, sand, ash/cinders, bricks, ceramics, and gravel, was encountered throughout the site to depths up to six feet below grade. Native reddish-brown clay was observed directly beneath the fill. Bedrock was not encountered

at the site.

Four overburden groundwater monitoring wells were installed at the 211 Main Street Site. Groundwater at the site ranges in depth from 2.0 to 6.4 feet below grade, and flows northwest towards the Little Niagara River. The site and surrounding area are serviced by a public water system and are not affected by site contamination.

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, an alternative which allows for unrestricted use of the site was evaluated.

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

### **SECTION 5: ENFORCEMENT STATUS**

The Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do 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:** Summary of the Remedial Investigation

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:

- 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: RI 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 RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

benzo(a)anthracene lead
benzo(a)pyrene mercury
benzo(b)fluoranthene zinc
chrysene perfluorooctane sulfonic acid
indeno(1,2,3-CD)pyrene perfluorooctanoic acid
arsenic radium
copper

The contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- soil

## **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.

There were no IRMs performed at this site during the RI.

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

During the Environmental Site Assessments completed at this site and the Remedial Investigation (RI) completed in 2019, samples for analysis were collected from near-surface soil/fill, subsurface fill, native soil and groundwater. Surface water and sediment are not found at the site. A soil vapor intrusion investigation was not completed at the site because VOCs were not detected in site soils, fill or groundwater.

Near-surface soil/fill, subsurface fill and native soil samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), and metals. Groundwater was also analyzed for VOCs, SVOCs, pesticides, PCBs, metals and emerging contaminants. These investigations determined that metals and several polycyclic aromatic hydrocarbons (PAHs) were the primary contaminants of concern at the site.

#### Remedial Investigation Results:

#### Near-Surface Soil/Fill:

Thirty-three near-surface soil/fill samples (0 to 4-inches depth) were collected from on-site and analyzed for VOCs, SVOCs, pesticides, PCBs, and metals. No VOCs, pesticides, or PCBs were detected above the Department's Part 375 unrestricted use soil cleanup objectives (SCOs). Several SVOCs, specifically PAHs, were detected in on-site near-surface soils above the Department's Part 375 unrestricted use SCOs. The PAHs that exceeded the Part 375 unrestricted use SCOs in over 25% of the samples collected (with the number of exceedances and highest concentrations) include:

- benzo(a)anthracene (9 samples exceeded the 1.0 ppm SCO; maximum detection 34.3 parts per million (ppm);
- benzo(a)pyrene (8 samples exceeded the 1.0 ppm SCO; maximum detection 30.9 ppm);
- benzo(b)fluoranthene (10 samples exceeded the 1.0 ppm SCO; maximum detection 50.5 ppm);
- chrysene (8 samples exceeded the 1.0 ppm SCO; maximum detection 27.6 ppm); and
- indeno(1,2,3-cd)pyrene (10 samples exceeded the 0.5 ppm SCO; maximum detection 36.0 ppm).

Several metals were detected in on-site near-surface soil/fill above the Department's Part 375 unrestricted use SCOs. These metals (with the number of exceedances and highest concentrations) include:

• arsenic (12 samples exceeded the 13 ppm SCO; maximum detection 61.0 ppm);

- copper (17 samples exceeded the 50 ppm SCO; maximum detection 280 ppm);
- lead (25 samples exceeded the 63 ppm SCO; maximum detection 328 ppm);
- mercury (19 samples exceeded the 0.18 ppm SCO; maximum detection 0.99 ppm); and
- zinc (24 samples exceeded the 109 ppm SCO; maximum detection 950 ppm).

Figure 3 also shows that potential off-site surface soil/fill contamination may be present near the southeast corner of the site.

#### Subsurface Fill:

Thirteen subsurface fill samples (0.5 to 6-feet depth) were collected from on-site and analyzed for VOCs, SVOCs, pesticides, PCBs, and metals. No VOCs, pesticides, or PCBs were detected above the Department's Part 375 unrestricted use SCOs. No PAHs exceeded the Part 375 unrestricted use SCOs in over 25% of the samples collected.

Several metals were detected in on-site subsurface fill above the Department's Part 375 unrestricted use SCOs. These metals (with the number of exceedances and highest concentrations) include:

- arsenic (4 samples exceeded the 13 ppm SCO; maximum detection 19.3 ppm);
- lead (12 samples exceeded the 63 ppm SCO; maximum detection 792 ppm);
- mercury (5 samples exceeded the 0.18 ppm SCO; maximum detection 1.07 ppm); and
- zinc (11 samples exceeded the 109 ppm SCO; maximum detection 562 ppm).

On-site radiological findings were within typical background levels, except for an approximate 600 square foot area along the southern side of the building. At this location, the gamma surface scan (0 to 4-feet depth) showed readings 2.5 times above background levels (4,261 counts per minute), while the downhole gamma reading (0 to 18-inches depth) was four-times above background levels. These readings are above the recommended value of two-times background. The approximate extent of this area is shown on Figure 4a. One sample was collected from this area and sent to Pace Laboratories for gamma spectroscopy analysis. The results from this survey indicate the sample contained a concentration of 0.267 picocurie/gram (pCi/g) of Radium-226 and a concentration of 0.136 pCi/g of Radium-228.

#### Native Soil:

Sixteen native soil samples were collected from on-site and analyzed for VOCs, SVOCs, pesticides, PCBs, and metals. None of these contaminants were detected above the Department's Part 375 unrestricted use SCOs.

#### Groundwater:

Eleven overburden groundwater samples were collected from the four on-site wells and analyzed for VOCs, SVOCs, pesticides, PCBs, metals, and emerging contaminants. Contaminants that exceeded the Department's groundwater standards or screening levels (with the number of exceedances and highest concentrations) include:

• benzo(a)anthracene (2 samples exceeded the 0.002 ppb Groundwater Standard; maximum detection 0.03 ppb);

- benzo(b)fluoranthene (1 sample exceeded the 0.002 ppb Groundwater Standard; maximum detection 0.01 ppb);
- chrysene (1 sample exceeded the 0.002 ppb Groundwater Standard; maximum detection 0.01 ppb);
- iron (9 samples exceeded the 300 ppb Groundwater Standard; maximum detection 3,730 ppb);
- manganese (6 samples exceeded the 300 ppb Groundwater Standard; maximum detection 2,843 ppb);
- sodium (1 sample exceeded the 20,000 ppb Groundwater Standard; maximum detection 49,600 ppb);
- perfluorooctanoic acid (PFOA; 4 samples exceeded the 10 parts per trillion (ppt) Screening Level; maximum detection 29.4 ppt); and
- perfluorooctanesulfonic acid (PFOS; 2 samples exceeded the 10 ppt Groundwater Screening Level; maximum detection 22.8 ppt).

The area surrounding the site is serviced by a public water supply.

### **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*.

The site is fenced and mostly covered by asphalt and the site building. Persons who enter the site could contact contaminants in exposed soil areas by walking on the site digging or otherwise disturbing the soil. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination.

#### **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.

#### **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.

#### **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 1: Unrestricted use remedy.

The selected remedy is referred to as the Conditional Track 1 Excavation 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;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

2. Excavation - Excavation and off-site disposal of all on-site soil and fill (approximately 1,800 cubic yards) that exceed unrestricted use soil cleanup objectives (SCOs) as defined by 6 NYCRR Part 375-6.8. This includes fill material under the building slab, which will be removed as part of site redevelopment. The area of elevated gamma activity soil along the south side of the building will also be removed for proper disposal at an approved off-site waste facility. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

The intent of the remedy is to achieve a Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated. If groundwater standards and screening levels are not achieved prior to completion of the Final Engineering Report, then a Site Management Plan (SMP) and Environmental Easement (EE) will be required to address groundwater monitoring; a Track 1 cleanup can only be achieved if groundwater monitoring is no longer needed within 5 years of the date of the Certificate of Completion.

If a Track 1 unrestricted use remediation is not achieved, including achievement of groundwater remedial objectives, the following contingent remedial elements will be required, and the remedy will achieve a Track 2 residential cleanup. The contingent remedy will include the following:

- 3. Institutional Controls: Imposition of an institutional control in the form of an Environmental Easement for the controlled property that:
- (a) 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);
- (b) Allows the use and development of the controlled property for residential, commercial or industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- (c) 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
- (d) Requires compliance with the Department approved Site Management Plan.
- 4. 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 3 above.

This plan includes, but may not be limited to:

- An Excavation Plan that details the provisions for the 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 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; and
- A schedule of monitoring and frequency of submittals to the Department.













