

New York State Department of Environmental Conservation

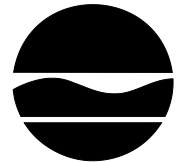
Division of Environmental Remediation

Remedial Bureau E, 12th Floor

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Joe Martens
Commissioner

September 19, 2014

Mr. Lou Visone
Rock One Development, LLC
10151 Main Street
Clarence, New York 14031

RE: 600 River Road Apartments
Site ID No. C932161
North Tonawanda, Niagara County
Remedial Work Plan & Decision Document

Dear Mr. Visone:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) have reviewed the Alternatives Analysis Report (AAR) for the 600 River Road Apartments site dated August 14, 2014 and prepared by Panamerican Environmental Inc., on behalf of the Rock One Development, LLC. The AAR is hereby approved. Please ensure that a copy of the approved 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, Tim Dieffenbach, at (716) 851-7220 or timothy.dieffenbach@dec.ny.gov at your earliest convenience to discuss next steps. Please recall the Department requires seven (7) days' notice prior to the start of field work.

Sincerely,



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

Enclosure

cc: T. Dieffenbach, Region 9

DECISION DOCUMENT

600 River Road Apartments
Brownfield Cleanup Program
North Tonawanda, Niagara County
Site No. C932161
September 2014



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

DECLARATION STATEMENT - DECISION DOCUMENT

600 River Road Apartments
Brownfield Cleanup Program
North Tonawanda, Niagara County
Site No. C932161
September 2014

Statement of Purpose and Basis

This document presents the remedy for the 600 River Road Apartments 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 600 River Road Apartments 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. Cover System

A site cover will be required to allow for restricted residential use of the site. Any site

redevelopment will maintain a site cover, which may 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 a 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).

3. Institutional Control

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.

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/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 3 above.

Engineering Controls: A soil cover system as discussed in the Paragraph 2 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/or 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:

- monitoring of soil cover system to assess the performance and effectiveness of the remedy; and
- a schedule of monitoring and frequency of submittals to the Department.

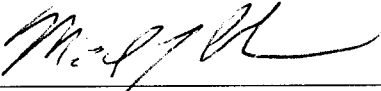
c. an Operation and Maintenance (O&M) Plan to ensure continued maintenance, optimization, monitoring, inspection, and reporting of the physical components of the remedy. The plan includes, but is not limited to:

- compliance monitoring of cover system to ensure proper O&M;
- maintaining site access controls and Department notification; and
- providing the Department access to the site and O&M records.

Declaration

The remedy conforms to 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.

9/19/2014
Date


Michael Cryden, Director
Remedial Bureau E

DECISION DOCUMENT

600 River Road Apartments
North Tonawanda, Niagara County
Site No. C932161
September 2014

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:

North Tonawanda Public Library
Attn: Margaret Waite
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, 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 site is located in an urban area at 600 River Road in the city of North Tonawanda. The Niagara River runs along the western edge of the site and River Road along the eastern side. It is bordered by a health care facility to the north and a commercial boating sales and service facility and marina to the south.

Site Features: The main feature of the site is a 2,940 square foot metal warehouse building that is contained within a perimeter fence around the western portion of the property. The property is generally flat with several grass-covered piles of apparent soil/fill present on the eastern portion of the site. Miscellaneous piles of debris are located throughout the site.

Current Zoning/Use(s): The property is located in the WD (Water District) zone. The site is within a designated Brownfield Opportunity Area (BOA) study area and the City of North Tonawanda Local Waterfront Revitalization Program (LWRP) area.

Past Use of the Site: The site was a portion of a greater parcel utilized by Niagara Iron Works/Tonawanda Iron Works from at least 1886 through at least 1972. Historic usage included several railroad tracks throughout the property and a pig-iron casting operation. The site was then vacant until 1988 when AJ Marine Construction, a commercial retailer, began operations and continued until 2008. Since 2008 the metal building on the site has been used as a warehouse.

Site Geology and Hydrogeology: The surficial geology is fill material overlaying sand and silty clay. The fill varies across the site and consists of brown to reddish brown poorly graded sand and gravel which includes cinders, orange brick fragments, concrete, and coal with noted iron staining at depths ranging from surface to 12 feet below ground surface (fbgs). At some locations, white/grey fill material which includes slag and weathered gravel extends to a depth of 12 fbgs. Clay with sand exists at depths from 10 to 12 fbgs. Groundwater is at approximately 7 to 9 fbgs and flows west towards the Niagara 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 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(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:

LEAD	BENZO[K]FLUORANTHENE
ARSENIC	DIBENZ[A,H]ANTHRACENE
CADMIUM	Chrysene
BARIUM	indeno(1,2,3-cd)pyrene
BENZ(A)ANTHRACENE	MANGANESE
BENZO(A)PYRENE	SELENIUM
BENZO(B)FLUORANTHENE	

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: 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.

A majority of the site appears to contain fill materials as a result of past industrial use and operations on the property. The site investigations found heavy metal and PAH impacts to near-surface and subsurface soils. Multiple metals were detected above Part 375 restricted residential soil cleanup objectives (SCOs), with cadmium, barium and arsenic being detected above

Commercial SCOs in several samples. Elevated polycyclic aromatic hydrocarbons (PAHs) were also detected above Part 375 restricted residential SCOs in several samples.

No volatile or semi-volatile target compound list analytes were detected in any groundwater samples. Concentrations of several metals exceeded NYSDEC groundwater standards. Lead was detected at 49.6 parts per billion (ppb) in one sample, manganese detected at 485 to 1,540 ppb in three samples, selenium detected at 11.4 ppb in one sample and iron concentrations ranged from 1410 to 9790 ppb in two samples.

A radiological survey conducted during test trench operations indicated that surface readings on average were at general area background for the Western New York area. The soil removed from the test pits was elevated to above two (2) times background and test pit readings on average approached four times background. Samples were collected from 5 of 20 test pits and analyzed by gamma spectroscopy. It appears that the cause of the elevated readings is the presence of phosphate ore process slag. This slag is common to many industrial sites, roadways, parking lot and areas that have been filled in Niagara County. Based on NYSDOH and NYSDEC review of the radiological studies it has been determined that the radioactive slag present at the site does not pose a significant threat.

This site was a portion of a greater parcel utilized by Niagara Iron Works/Tonawanda Iron Works so we would expect similar contamination to extend off-site.

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*.

Persons who enter the site could contact contaminants in the soil by walking on the soil, digging or otherwise disturbing the soil. 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.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The 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 Soil Cover System 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. Cover System

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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).

3. Institutional Control

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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/or 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:

- monitoring of soil cover system to assess the performance and effectiveness of the remedy; and
- a schedule of monitoring and frequency of submittals to the Department.

c. an Operation and Maintenance (O&M) Plan to ensure continued maintenance, optimization, monitoring, inspection, and reporting of the physical components of the remedy. The plan includes, but is not limited to:

- compliance monitoring of cover system to ensure proper O&M;

- maintaining site access controls and Department notification; and
- providing the Department access to the site and O&M records.



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 BUFFALO, NY 14218
 (716) 856-0635

PROJECT NO.: 0247-012-100

DATE: MAY 2012

DRAFTED BY: JGT

SITE PLAN (AERIAL)

PHASE II ENVIRONMENTAL SITE INVESTIGATION REPORT

600 RIVER ROAD SITE

NORTH TONAWANDA, NEW YORK

PREPARED FOR

ROCK ONE DEVELOPMENT, LLC

FIGURE 1