

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau E

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December 28, 2017

Mr. Thomas Masaschi
Canandaigua Crossroads, LLC
2604 Elmwood Avenue, #352
Rochester, New York 14618

RE: Former Labelon Corp. Facility
Site ID No.: C835016
City of Canandaigua, Ontario County
Supplemental Remedial Investigation Report & Decision Document

Dear Mr. Masaschi:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) have reviewed the Supplemental Remedial Investigation Report (RIR) for the Former Labelon Corp. Facility site dated May 2017 and prepared by MacDonald Land Surveying and Engineering, DPC on behalf of Canandaigua Crossroads, LLC. The RIR is hereby approved. Please ensure that a copy of the approved RIR remains in the document repository.

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, Frank Sowers, at 585-226-5357 or frank.sowers@dec.ny.gov at your earliest convenience to discuss next steps.

Sincerely,



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

Enclosure

cc: Michael Ryan, NYSDEC
Kelly Lewandowski, NYSDEC
Ben Conlon, OGC, NYSDEC
Bernette Schilling/Frank Sowers/Danielle Miles, NYSDEC, Region 8
Krista Anders/Justin Deming/Julia Kenney, NYSDOH
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Department of
Environmental
Conservation

DECISION DOCUMENT

Former Labelon Corp. Facility
Brownfield Cleanup Program
Canandaigua, Ontario County
Site No. C835016
December 2017



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

DECLARATION STATEMENT - DECISION DOCUMENT

Former Labelon Corp. Facility
Brownfield Cleanup Program
Canandaigua, Ontario County
Site No. C835016
December 2017

Statement of Purpose and Basis

This document presents the remedy for the Former Labelon Corp. Facility 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 Former Labelon Corp. Facility site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The selected remedy is referred to as the Excavation with Enhanced Bioremediation and Vapor Mitigation remedy.

The estimated present worth cost to implement the remedy is \$225,000. The cost to construct the remedy is estimated to be \$205,000 and the estimated average annual cost is \$7,500.

The elements of the selected remedy, as shown in Figure 3, 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

Unsaturated soils in the chlorinated VOC and petroleum source area located outside of the southwest corner of the building (Area B) which exceed the excavation objectives described below will be excavated to the extent feasible:

- 6 NYCRR Part 375 protection of groundwater soil cleanup objectives (SCOs) for VOCs and restricted residential SCOs for SVOCs;
- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- soil with visual waste material or non-aqueous phase liquid;
- soils that create a nuisance condition, as defined in Commissioner Policy CP-51 Section G; and
- excavation and removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination.

Approximately 38 cubic yards of contaminated soil will be removed from the site.

On-site soil which does not exceed the above excavation criteria or the protection of groundwater SCOs for any constituent may be used anywhere beneath the cover system, including below the water table, to backfill the excavation or re-grade the site.

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 the excavation and establish the designed grades at the site.

3. Cover System

A site cover will be required to allow for restricted residential use of the site in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). The site cover may consist of paved surface parking areas, sidewalks, or a soil cover. Where a soil cover is to be used 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). In areas where building foundations or building slabs preclude contact with the soil, the requirements for a site cover will be deferred until such time that they are removed.

4. Enhanced Bioremediation

In-situ enhanced biodegradation will be employed to treat contaminants in groundwater in the chlorinated VOC source area located under the southern portion of the building (Area A), the Area B chlorinated VOC source area at the southwest corner of the building, on-site areas within the associated groundwater contaminant plumes, and at the downgradient site boundary. The biological breakdown of contaminants through anaerobic reductive dechlorination will be enhanced by injecting electron donor reagents into the overburden, the on-site plume areas, and

near the downgradient site boundary to control contaminant migration and promote microbe growth via injection wells screened from approximately 4 to 10 feet. The electron donor reagent will be placed and mixed within the source Area B excavation described in remedy element #2. Liquid activated carbon™ will also be injected near the downgradient site boundary to control contaminant migration.

5. Vapor Mitigation

Existing on-site buildings will be required to have a sub-slab depressurization system, or other acceptable measures, to mitigate the migration of likely contaminated soil vapors into the building.

6. 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, or commercial use or industrial 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.

7. 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 6 above.

Engineering Controls: The cover system discussed in Paragraph 3 and the sub-slab depressurization system discussed in Paragraph 5.

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;
- a provision for removal or treatment of the source area located under the existing on-site building if and when the building is demolished or becomes vacant;
- descriptions of the provisions of the environmental easement including any land use and/or groundwater water use restrictions;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 3 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
- a provision for evaluation of the potential for soil vapor intrusion for any new buildings developed on the site including provision for implementing actions recommended to address exposures related to soil vapor intrusion;

- provisions for the management and inspection of the identified engineering controls;
 - maintaining site access controls and Department notification; and
 - the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- monitoring of soil, groundwater, soil vapor, sub-slab soil vapor, and indoor air to assess the performance and effectiveness of the remedy;
 - a schedule of monitoring and frequency of submittals to the Department;
 - monitoring for vapor intrusion for any existing or future buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.
- c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation systems. The plan includes, but is not limited to:
- procedures for operating and maintaining the systems; and
 - compliance inspection of the systems to ensure proper O&M as well as providing the data for any necessary reporting.

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: 2017.12.21 09:08:21 -05'00'

Date

Michael Cruden, Director
Remedial Bureau E

DECISION DOCUMENT

Former Labelon Corp. Facility
Canandaigua, Ontario County
Site No. C835016
December 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 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:

Wood Library
Attn: Carol R. Shama
134 North Main Street
Canandaigua, NY 14424
Phone: 585-394-1381

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 former Labelon Corp. Facility site is located at 10 Chapin Street, Tax Section 84.09 Block 02 Lot 23, just west of Main Street in an urban area of downtown Canandaigua.

Site Features: The 1.63-acre parcel consists of the former Labelon factory (a 4-story masonry and brick building of about 80,000 square feet) which is vacant, with dirt/gravel/asphalt parking areas and driveways. A small natural area consisting of grass is present on the north side of the building.

Current Zoning/Use: The site is currently unoccupied and is zoned for commercial/industrial use. The intended future use is a mix of commercial and restricted-residential. Surrounding land uses include a residential neighborhood to the west, commercial properties to the east and south, and a railroad right-of-way, City Hall, and West Avenue to the north.

Past Use of the Site: Over 100 years of industrial use included a coal yard, a corset factory, and a bicycle factory. Most recently, Labelon, a manufacturer of transparency films and pressure sensitive labels, operated at the site from 1960 until the early 2000s.

Labelon removed 15 underground storage tanks from the site in 1990 and surrounding soil and groundwater testing detected low levels of petroleum and chlorinated solvents. Private environmental assessments performed in 2001 and 2009 detected elevated levels of chlorinated solvents in groundwater at the site perimeter. Based on this information, this site was deemed eligible for the Brownfield Cleanup Program in 2010.

Site Geology and Hydrogeology: Soils consist of fine sands overlaying a hard glacial till at a depth of about 18 feet. Bedrock was not encountered during the Remedial Investigation. Groundwater occurs 6-8 feet below the surface and flows west.

A site location map is attached as Figure 1. A site boundary map is attached as 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, alternatives (or an alternative) that restrict(s) the use of the site to restricted residential as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the Remedial Investigation (RI) to the appropriate standards, criteria

and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Volunteer. The Volunteer does not have an obligation to address off-site contamination. The Department has determined that this site poses a significant threat to human health and the environment and there are off-site impacts that require remedial activities; accordingly, enforcement actions are necessary.

The Department has sought to identify any parties (other than the Volunteer) known or suspected to be responsible for contamination at or emanating from the site, referred to as Potentially Responsible Parties (PRPs). The Department has attempted to bring an enforcement action against the PRPs. If an enforcement action cannot be brought, or does not result in the initiation of a remedial program by any PRPs, the Department will evaluate the off-site contamination for action under the State Superfund. The PRPs are subject to legal actions by the State for recovery of all response costs the State incurs or has incurred.

The Department is addressing off-site contamination under Site #C835016A.

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:

trichloroethene (TCE)	barium
toluene	chromium
xylene (mixed)	benzo(a)pyrene
cis-1,2-dichloroethene	benzo(a)anthracene
vinyl chloride	benzo(b)fluoranthene
benzene	

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.

Nature and Extent of Contamination:

Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides. Based upon investigations conducted to date, the primary contaminants of concern for the site include trichloroethene (TCE), petroleum-related VOCs, metals, and a group of SVOCs called polycyclic aromatic hydrocarbons (PAHs).

Surface Soil (0-2"): PAHs, especially benzo(a)pyrene (B(a)P), benzo(a)anthracene (B(a)A), and benzo(b)fluoranthene (B(b)F), appear to be the primary contaminants in the on-site surface soil located north of the building. B(a)P, B(a)A, and B(b)F exceed the 1 part per million (ppm) soil cleanup objectives (SCOs) for unrestricted and restricted residential use with maximum concentrations of 2.42 ppm, 2.42 ppm, and 3.11 ppm, respectively. Compounds for other analyte groups were not detected at concentrations exceeding restricted-residential SCOs. Data does not indicate any off-site impacts in surface soil related to this site.

Subsurface Soil: Metals are located under limited portions of the building. Petroleum-related VOCs are primarily found in sub-surface soils from depths of 3 feet to 15 feet in the vicinity of a 200-gallon underground gasoline storage tank outside of the southwest corner of the building. TCE is found in subsurface soil from depths of 7 to 12 feet underneath the southern section of the building and starting at a depth of 4 feet outside the southwest corner of the building. Concentrations of TCE found underneath the building (up to 81 ppm) and outside of the building (up to 25 ppm) exceed the unrestricted and protection of groundwater (PGW) SCO of 0.47 ppm and the restricted-residential SCO of 21 ppm.

Specific metals include barium at up to 430 ppm (the unrestricted SCO is 350 ppm and the restricted-residential SCO is 400 ppm) and trivalent chromium at up to 215 ppm (the unrestricted SCO is 30 ppm and the restricted-residential SCO is 180 ppm).

Petroleum related VOCs include benzene up to 9.6 ppm (the unrestricted and PGW SCO is 0.06 ppm and the restricted-residential SCO is 4.8 ppm), xylenes up to 231 ppm (the unrestricted SCO is 0.26 ppm, the PGW SCO is 1.6 ppm, and the restricted-residential SCO is 100 ppm), and toluene up to 110 ppm (the unrestricted and PGW SCO is 0.7 ppm and the restricted-residential SCO is 100 ppm). VOC tentatively identified compounds (TICs) are reported with a maximum total VOC TIC concentration of 301 ppm. While there are no SCOs for TICs, elevated TIC levels are often indicative of nuisance conditions such as visibly stained soil and odors.

PAHs, especially B(a)P, B(a)A, and B(b)F, were detected at the bottom of a covered catch basin-like structure in the parking lot. B(a)P, B(a)A, and B(b)F in the catch basin exceed the 1 ppm SCO for unrestricted and restricted residential use with maximum concentrations of 16 ppm, 15 ppm, and 24 ppm, respectively.

Compounds for other analyte groups were not detected at concentrations exceeding restricted-residential SCOs.

Data does not indicate any off-site impacts in subsurface soil related to this site.

Groundwater: TCE and its associated degradation products, cis-1,2-dichloroethene (cis-DCE) and vinyl chloride (VC), are found in groundwater under the southern portion of the building and under the parking lot west of the building at concentrations exceeding groundwater standards (y 5 parts per billion (ppb) for TCE and cis-DCE and 2 ppb for VC), with a maximum concentrations of 4,720 ppb for TCE, 128 ppb for cis-DCE, and 32 ppb for VC. Benzene, toluene and xylene are also found in groundwater under the southwest portion of the site (in the vicinity of the underground gasoline storage tank) at concentrations exceeding groundwater standards (typically 5 ppb), with a maximum concentration of 190 ppb for benzene, 340 ppb for toluene, and 620 ppb for xylene.

TCE, cis-DCE and VC from the site have migrated off-site to the west toward a residential neighborhood. Data does not indicate any off-site benzene, toluene, or xylene impacts in groundwater related to this site.

Soil Vapor: The on-site building is vacant; therefore, a soil vapor intrusion investigation was not completed during the Remedial Investigation. If on-site building was occupied, there would be the potential for soil vapor impacts based on the environmental conditions documented at the site. There is the potential for off-site impacts in soil vapor related to this site associated with the off-site migration of TCE in groundwater. Off-site impacts are being addressed by the Department under Site #C835016A.

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*.

People who enter the site could contact contaminants in the soil by walking on the soil, 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. Volatile organic compounds in the groundwater, soil, and underground storage tanks may move into the soil vapor (air between soil particles), 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. The potential exists for people to inhale site contaminants in indoor air due to soil vapor intrusion in the event the site is re-occupied. Environmental sampling indicates soil vapor intrusion is a concern at several off-site structures and actions have been implemented. Additional sampling is recommended at structures where access was previously declined.

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.
- 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.

Soil

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

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

The selected remedy is referred to as the Excavation with Enhanced Bioremediation and Vapor Mitigation remedy.

The estimated present worth cost to implement the remedy is \$225,000. The cost to construct the remedy is estimated to be \$205,000 and the estimated average annual cost is \$7,500.

The elements of the selected remedy, as shown in Figure 3, 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

Unsaturated soils in the chlorinated VOC and petroleum source area located outside of the southwest corner of the building (Area B) which exceed the excavation objectives described below will be excavated to the extent feasible:

- 6 NYCRR Part 375 protection of groundwater soil cleanup objectives (SCOs) for VOCs and restricted residential SCOs for SVOCs;
- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- soil with visual waste material or non-aqueous phase liquid;
- soils that create a nuisance condition, as defined in Commissioner Policy CP-51 Section G; and
- excavation and removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination.

Approximately 38 cubic yards of contaminated soil will be removed from the site.

On-site soil which does not exceed the above excavation criteria or the protection of groundwater SCOs for any constituent may be used anywhere beneath the cover system, including below the water table, to backfill the excavation or re-grade the site.

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 the excavation and establish the designed grades at the site.

3. Cover System

A site cover will be required to allow for restricted residential use of the site in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). The site cover may consist of paved surface parking areas, sidewalks, or a soil cover. Where a soil cover is to be used 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). In areas where building foundations or building slabs preclude contact with the soil, the requirements for a site cover will be deferred until such time that they are removed.

4. Enhanced Bioremediation

In-situ enhanced biodegradation will be employed to treat contaminants in groundwater in the chlorinated VOC source area located under the southern portion of the building (Area A), the Area B chlorinated VOC source area at the southwest corner of the building, on-site areas within the associated groundwater contaminant plumes, and at the downgradient site boundary. The biological breakdown of contaminants through anaerobic reductive dechlorination will be enhanced by injecting electron donor reagents into the overburden, the on-site plume areas, and near the downgradient site boundary to control contaminant migration and promote microbe growth via injection wells screened from approximately 4 to 10 feet. The electron donor reagent will be placed and mixed within the source Area B excavation described in remedy element #2. Liquid activated carbonTM will also be injected near the downgradient site boundary to control contaminant migration.

5. Vapor Mitigation

Existing on-site buildings will be required to have a sub-slab depressurization system, or other acceptable measures, to mitigate the migration of likely contaminated soil vapors into the building.

6. 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, or commercial use or industrial 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.

7. 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 6 above.

Engineering Controls: The cover system discussed in Paragraph 3 and the sub-slab depressurization system discussed in Paragraph 5.

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;
 - a provision for removal or treatment of the source area located under the existing on-site building if and when the building is demolished or becomes vacant;
 - descriptions of the provisions of the environmental easement including any land use and/or groundwater water use restrictions;
 - a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 3 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
 - a provision for evaluation of the potential for soil vapor intrusion for any new buildings developed on the site including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
 - provisions for the management and inspection of the identified engineering controls;
 - maintaining site access controls and Department notification; and
 - the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- monitoring of soil, groundwater, soil vapor, sub-slab soil vapor, and indoor air to assess the performance and effectiveness of the remedy;
 - a schedule of monitoring and frequency of submittals to the Department;
 - monitoring for vapor intrusion for any existing or future buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.
- c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation systems. The plan includes, but is not limited to:
- procedures for operating and maintaining the systems; and
 - compliance inspection of the systems to ensure proper O&M as well as providing the data for any necessary reporting.

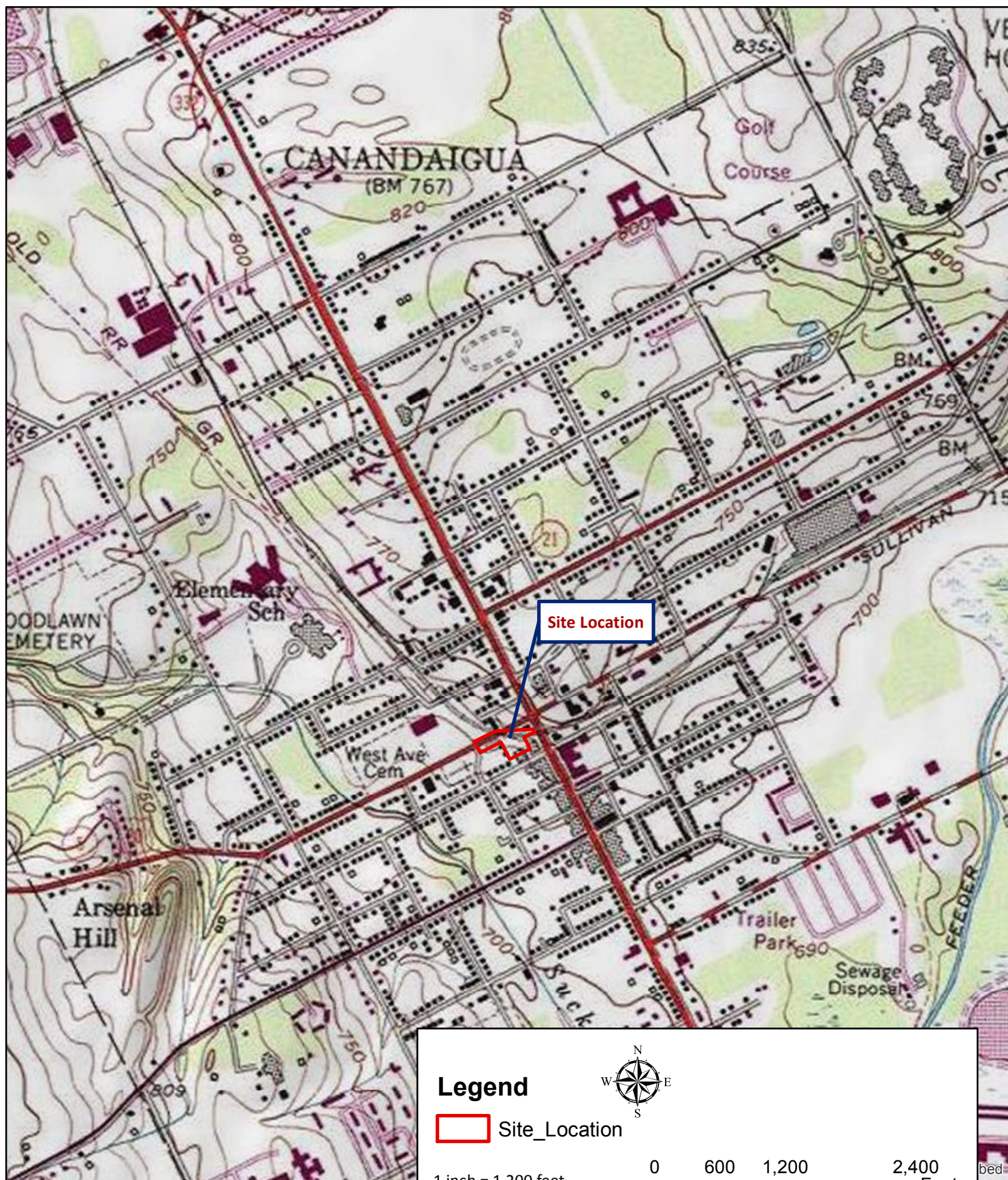


Figure 1... Site Location
 FORMER LABELON BCP SITE
 Alternative Analysis Report
 10 Chapin Street, Canandaigua, NY

DATE: DECEMBER 2014
PROJECT NO: 50279-02
DRAWN/CHECKED: CSB/GLA
DATA SOURCE: USGS, ESRI ONLINE

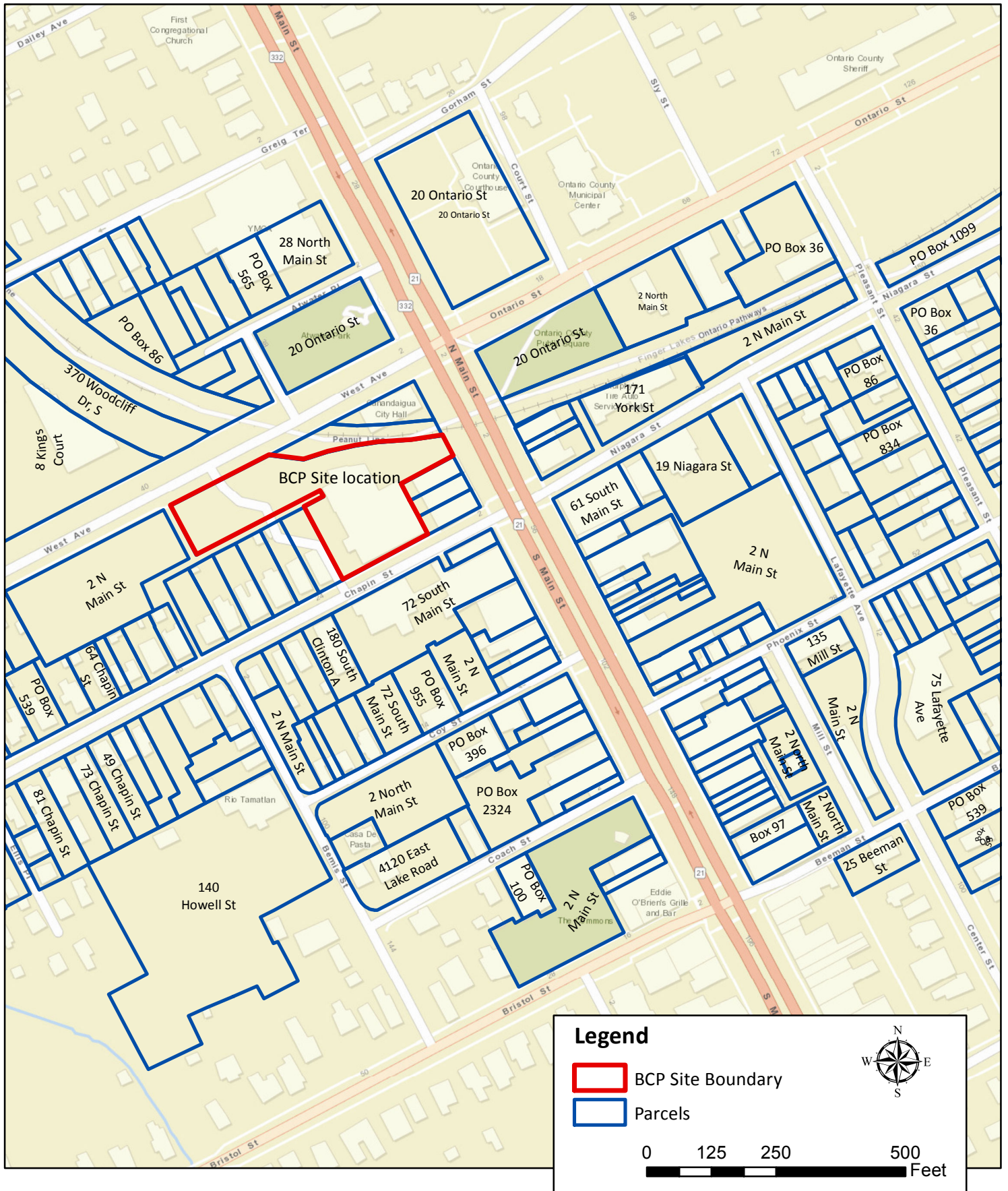


Figure 2: Former Labelon BCP Site Boundary

Alternative Analysis Report

10 Chapin Street, Canandaigua, NY

DATE: APRIL 2017

PROJECT NO: 50279-02

DRAWN/CHECKED: CSB/GLA

DATA SOURCE:

USGS, ESRI ONLINE



