

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau E  
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January 6, 2017

Mr. Keith A. Nagel  
Tecumseh Redevelopment Inc.  
4020 Kinross Lakes Parkway  
Richfield, OH 44286

RE: Site(s) II-2, II-5, II-6, II-7, II-10, II-11 & II-12  
Tecumseh Business Park Sites  
Site ID Nos. C915198B, C915198E, C915198F, C915198G, C915198J,  
C915198K & C915198L  
Lackawanna (C), Erie County  
Decision Document(s)

Dear Mr. Nagel:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) have reviewed the section(s) of the Remedial Investigation/Alternatives Analysis applicable to the Site II-2, II-5, II-6, II-7, II-10, II-11 & II-12 Tecumseh Phase II Business Park dated March 2012 and prepared by Benchmark on behalf of Tecumseh Redevelopment Inc.

Enclosed is a copy of the Department's Decision Document for the sites. The remedies are to be implemented in accordance with these Decision Documents. Please ensure that copies of the Decision Documents are placed in the document repository.

Please contact the Department's Project Manager, Maurice Moore, at (716) 851-7220 or [maurice.moore@dec.ny.gov](mailto:maurice.moore@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: R. Schick/M. Ryan, NYSDEC  
C. Staniszewski/M. Moore/K. Draves, NYSDEC, Region 9  
K. Anders/C. Bethoney/S. Bogardus, NYSDOH  
T. Forbes, P.E., Benchmark  
C. Slater, Esq., The Slater Law Firm



Department of  
Environmental  
Conservation

# DECISION DOCUMENT

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Site II-7 Tecumseh Phase II Business Park  
Brownfield Cleanup Program  
Lackawanna, Erie County  
Site No. C915198G  
January 2017



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

# **DECLARATION STATEMENT - DECISION DOCUMENT**

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Site II-7 Tecumseh Phase II Business Park  
Brownfield Cleanup Program  
Lackawanna, Erie County  
Site No. C915198G  
January 2017

## **Statement of Purpose and Basis**

This document presents the remedy for the Site II-7 Tecumseh Phase II Business Park 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 Site II-7 Tecumseh Phase II Business Park 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. A remedial design program will be implemented to provide the details necessary for the construction, operation, 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 gas 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.

2. A site cover will be required to allow for commercial use of the site in areas where the upper one foot of exposed surface soil exceed the commercial soil cleanup objectives (SCOs). The site cover may consist of paved parking areas, sidewalks, soil cover, or other Department approved

cover. Where soil cover is required it will be a minimum of one foot of soil with the upper six inches of soil of sufficient quality to maintain a vegetative layer. All cover will be placed over a demarcation layer. Any 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, which preclude contact with soil exist, the requirement for a site cover will be deferred until such time that they are removed.

3. Imposition of an institutional control in the form of an environmental easement is required for the controlled property that:

- allows the use and development of the controlled property for 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; and
- 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.)

4. A Site Management Plan is required, which includes, but not limited to, the following:

- an Institutional and Engineering Control Plan that identifies all use restrictions for the site noted above and details the steps necessary to ensure the following controls remain in place and effective;
- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 2 above will be placed in any areas where the upper one foot of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
- a Monitoring Plan to ensure groundwater quality and to assess the performance and effectiveness of the site cover;
- 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.

### **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: 2017.01.03 15:32:11 -05'00'

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Date

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Michael Cruden, Director  
Remedial Bureau E

# DECISION DOCUMENT

Site II-7 Tecumseh Phase II Business Park  
Lackawanna, Erie County  
Site No. C915198G  
January 2017

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## **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 repositories:

Lackawanna Public Library  
Attn: Jennifer Hoffman  
560 Ridge Road  
Lackawanna, NY 14218  
Phone: 716-823-0630

NYS DEC  
Attn: Maurice Moore  
270 Michigan Ave.  
Buffalo, NY 14203

## **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 Tecumseh Phase II-7 site (site) is one of 12 sub-parcels comprising the Tecumseh Phase II Business Park (Phase II). Phase II is located at 2303 Hamburg Turnpike in the City of Lackawanna, Erie County. Situated in an industrial area, Phase II is part of a larger property that once included the Bethlehem Steel Company (BSC) and is identified on the Erie County Tax Maps as SBL 141.11-1-50. Phase II is located west of Route 5, south of the Tecumseh Phase I Business Park, and east of the Tecumseh Phase III Business Park.

### **Site Features:**

Located within the central portion of Phase II the site is an 12.23 acre, square shaped, mostly vegetated, parcel that is vacant except for a few rail sidings. The mostly rectangular Phase II is approximately 5,800 feet long, averages 1,250 feet wide and is 142.5 acres in size. Bisected by Smokes Creek Phase II is flat, covered with slag fill and remnants of former steel manufacturing buildings and foundations. Most of the business park is vegetated with natural grasses, shrubs and poplar trees typical of a primary shrub-young forest ecosystem. The entire BSC site is fenced with vehicle access limited to one automatic gate.

### **Current Zoning and Land Use:**

Phase II and the site are zoned medium industrial. Surrounding uses near the site include: to the east, across Route 5 is commercial and residential, adjacent the west, a rail corridor; further west, is a lumber redistribution operation and an ethanol transfer operation; to the south are rail lines and industrial areas. Future use anticipates industrial re-use.

### **Past Use of the Site:**

Formerly Phase II was a portion of BSC's steelmaking operations. Specific processes and steelmaking facilities performed on or proximate to the Site included:

- Cold saws
- Craneways
- Storage skids

#### Site Geology and Hydrology:

The entire Phase II is filled with between two to eight feet of steel and iron-making slag as well as other fill material being used for backfill. Underlying fill material are lacustrine silts and clays. Native materials are encountered from about 7 to 11 feet below ground surface.

Bedrock is Middle Devonian age, Skaneateles Formation, consisting of Levanna shale and Stafford limestone of the Hamilton Group. Bedrock varies from about 34 feet deep in the northwestern corner of the site to 45 feet deep with the near the southern portion of Phase II.

Due to the porous nature of the slag/soil fill there is very little storm water retention, or surface runoff, as most of the precipitation seeps into the highly permeable slag/soil fill. Any surface waters flow into Smokes Creek or the South Water Return Trench which parallels the western border of the property and flows southerly where it empties into Smokes Creek which discharges to the west into Lake Erie.

Groundwater, when encountered, is about 6 feet below ground surface trending westerly and northerly toward Lake Erie.

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 that restrict the use of the site to commercial use (which allows for industrial use) as described in Part 375-1.8(g) were evaluated in addition to an alternative which would allow for unrestricted use of the site.

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

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

The Applicant under the Brownfield Cleanup Agreement is a Volunteer. The Applicant does not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

#### **SECTION 6: SITE CONTAMINATION**

##### **6.1: 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:

- 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)pyrene	arsenic
benzo(a)anthracene	dibenz[a,h]anthracene
benzo(b)fluoranthene	chromium
indeno(1,2,3-CD)pyrene	

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

- 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:**

The nature and extent of contamination is consistent with the former site use as a steel manufacturing facility. Based upon investigations conducted to date, the primary contaminants of concern for soils at the Tecumseh Phase II-7 site are metals, including arsenic, chromium and lead. Contaminants of concern to a lesser extent are semi-volatile organic compounds (SVOCs) including polycyclic aromatic hydrocarbons (PAHs), such as benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

Widespread exceedances of unrestricted use site cleanup objectives (SCOs) for metals are common in the soil and fill. When compared to the unrestricted SCO of 13 ppm for arsenic, ranging from not detected (ND) to 86.9 ppm, exceeds the SCO in 6 of 8 samples and when compared to the commercial SCO of 16 ppm, exceeds in 5 of 8 samples. Chromium from 26.1 ppm to 1,100 ppm exceeds the unrestricted SCO of 1 ppm in 8 of 8 samples but when compared to the commercial SCO of 400 ppm two samples exceeded. Lead, from 49.1 ppm to 293 ppm, exceeds the unrestricted SCO (63 ppm) in 7 of 8 samples but when compared to the commercial SCO of 1,000 ppm, no sample exceeded the SCO.

SVOCs, like metals are widespread throughout the Phase II Business Park. Most of the contaminants are PAHs and are usually associated with those activities that include burning of fossil fuels and heavy rail use, both of which were ubiquitous at the former steel mill. At the Site the above noted contaminants exceed the unrestricted SCOs in almost all of the samples. However, when compared to the commercial use SCOs benzo(a)pyrene ranging from 0.27 ppm to 32 ppm, exceeded the SCO of 1 ppm in 3 of 5 samples exceeding. Dibenz(a,h)anthracene ranging from 0.06 ppm to 5 ppm with an SCO of 0.56 ppm exceeded the commercial SCO in 1 of 5 samples. With commercial SCOs of 5.6 ppm, benzo(a)anthracene from 0.22 ppm to 32 ppm, benzo(b)fluoranthene, from 0.38 ppm to 38 ppm and indeno(1,2,3-cd)pyrene from 0.21 ppm to 17 ppm, each exceeded SCOs in 1 of 4 samples.

No VOCs or PCBs exceeded unrestricted SCOs in soils. No petroleum impacts were noted.

Groundwater at the Tecumseh Business Park property has been impacted by years of industrial activity. Groundwater pH from a low value of 6.28 to high value of 9.28 has exceeded quality standards (GwQS) of 6.5 - 8.5. Metals, such as, iron as high as 1,043 parts per billion (ppb) exceeds the standard of 300 ppb, magnesium as high as 58,200 ppb exceeds groundwater guidance values of 35,000 ppb and arsenic as high as 491 ppb exceeds the GwQS of 25 ppb. VOCs and SVOCs were not detected or well below groundwater quality standards. Groundwater was not sampled on this particular sub-parcel.

#### **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 completely fenced, which restricts public access. However, persons who enter the site could contact contaminants in the soil by walking on the site, 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.

#### **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:

#### **Soil**

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

- Prevent ingestion/direct contact with contaminated soil.

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

- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

### **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 with Institutional Controls remedy.

The elements of the selected remedy, as shown in Figure 2, are as follows:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, 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 gas 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.

2. A site cover will be required to allow for commercial use of the site in areas where the upper one foot of exposed surface soil exceed the commercial soil cleanup objectives (SCOs). The site cover may consist of paved parking areas, sidewalks, soil cover, or other Department approved cover. Where soil cover is required it will be a minimum of one foot of soil with the upper six inches of soil of sufficient quality to maintain a vegetative layer. All cover will be placed over a demarcation layer. Any 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, which preclude contact with soil exist, the requirement for a site cover will be deferred until such time that they are removed.

3. Imposition of an institutional control in the form of an environmental easement is required for the controlled property that:

- allows the use and development of the controlled property for 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; and
- 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.)

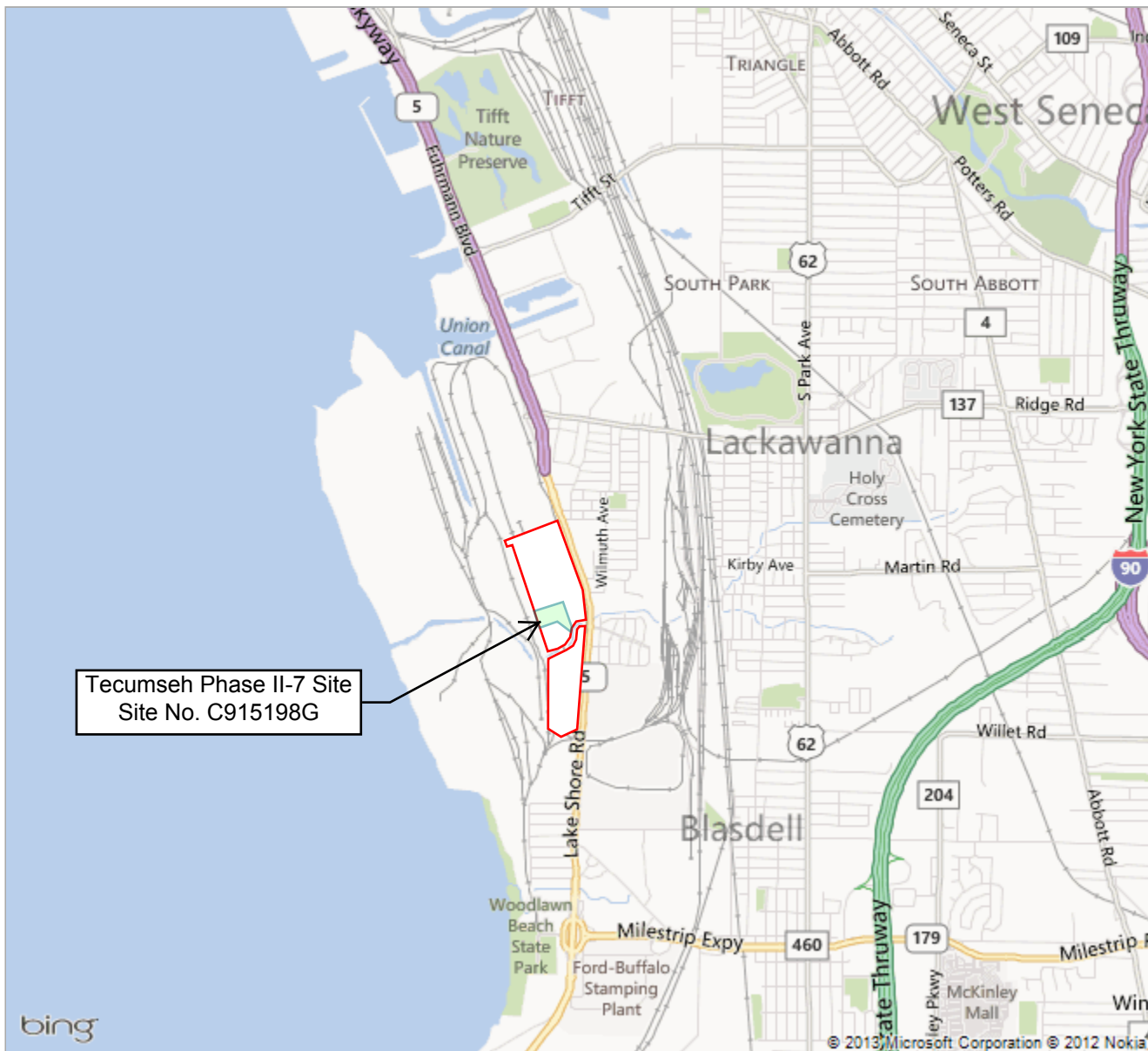
4. A Site Management Plan is required, which includes, but not limited to, the following:

- an Institutional and Engineering Control Plan that identifies all use restrictions for the site noted above and details the steps necessary to ensure the following controls remain in place and effective;
- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 2 above will be placed in any areas where the upper one foot of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
- a Monitoring Plan to ensure groundwater quality and to assess the performance and effectiveness of the site cover;
- 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.

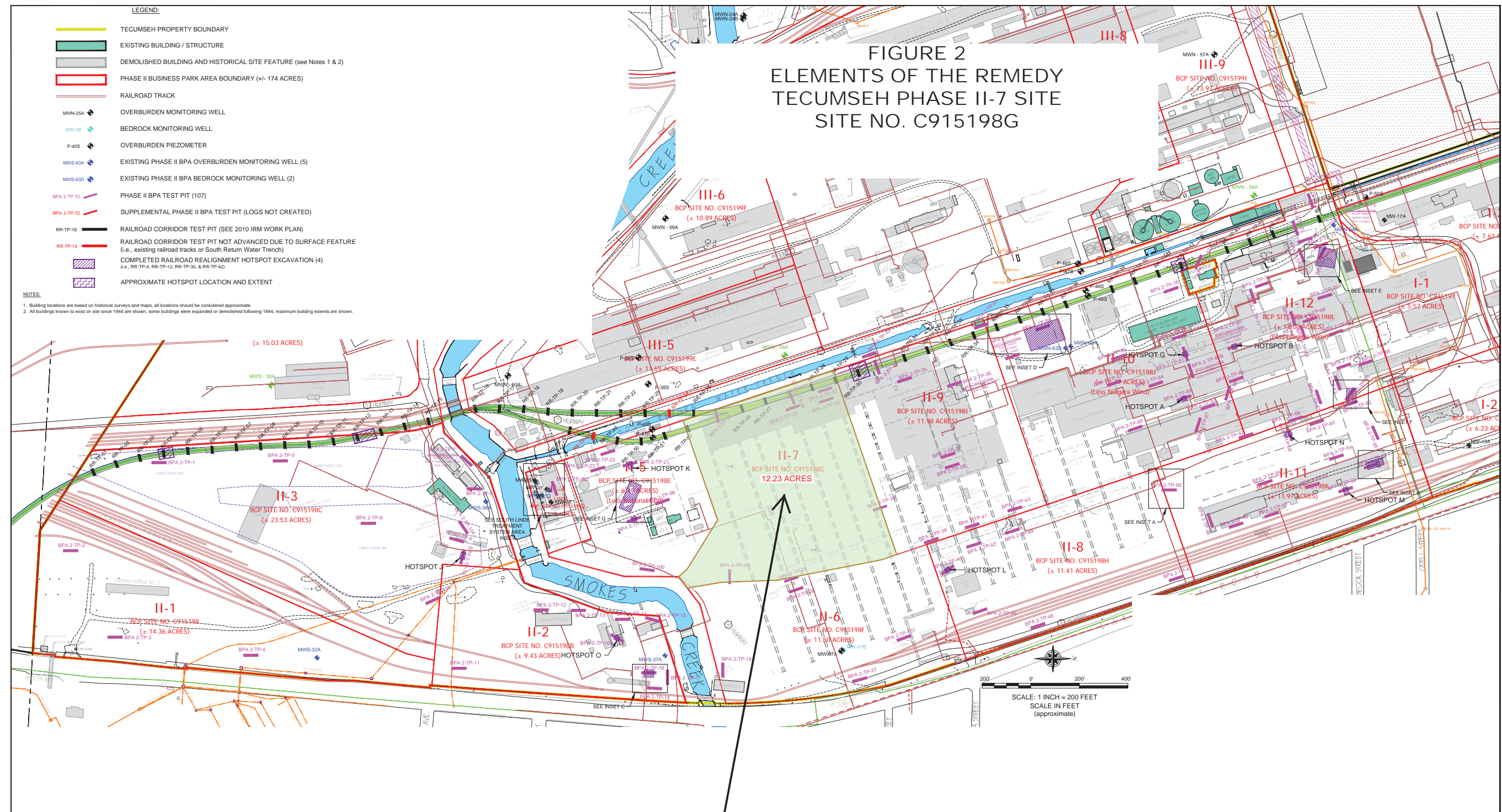
FIGURE 1

Site Location  
Tecumseh Phase II Business Park

Phase II-7 Site  
Site No. C915198G







One foot cover meeting SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d)

FIGURE 2  
ELEMENTS OF THE REMEDY  
TECUMSEH PHASE II-7 SITE  
SITE NO. C915198G


<div>ELEMENTS OF THE REMEDY</div> <div>REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT</div> <div>PHASE II BUSINESS PARK AREA</div> <div>LACKAWANNA, NEW YORK</div> <div>PREPARED FOR</div> <div>TECUMSEH REDEVELOPMENT INC.</div>	<div>DRAWN BY: BCH (REV BY JCT)</div> <div>DATE: NOVEMBER 2008 (REV MAR 2012)</div> <div>CHECKED BY:</div> <div>APPROVED BY:</div> <div>DISCLAIMER: THIS BENCHMARK EES, PLLC, IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL. THIS DRAWING PRINT IS NOT TO BE REPRODUCED OR NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN CONSENT OF THE BENCHMARK EES, PLLC. SUPPLIER THAN NECESSARY, SUBCONTRACTORS, AND SUPPLIER WITHOUT THE WRITTEN CONSENT OF BENCHMARK EES, PLLC.</div>	<div>SEAL</div>	<div><div></div><div>2558 HAMBURG TURNPIKE SUITE 300 LACKAWANNA, NY 14218 (716) 856-0635</div></div>			
	REVISIONS					
	NO.			BY	DATE	REMARKS

FIGURE 2