



The Brownfield Opportunity Area Program Determination of Conformance Application Form

Applicability/Purpose: This application should be used to request a Determination of Conformance from the Secretary of State for a project located on a real property site that is (1) enrolled in and subject to the remediation requirements of the Brownfield Cleanup Program (BCP) as determined by the Department of Environmental Conservation (DEC), and located within a designated Brownfield Opportunity Area (BOA) that has been designated by the Secretary.

This application may be submitted at any time after DEC has issued a BCP Final Decision Document approving a Remedial Work Plan as described in section 375-3.8(g) of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR §375-3.8(g)) for the real property site proposed for development.

Please do not complete this application if you wish to claim tax credits for expenditures related to these other components of the brownfield redevelopment tax credit: (1) site preparation and cleanup tax credit component, and (2) on-site groundwater remediation tax credit component.

Section 1: Applicant/Requestor Information

Is the Requestor the Property Owner? [X] YES or [] NO

Name of Requestor: Time Release Properties, LLC

Address: 1200 Northland Avenue, Buffalo, NY 14215-3835

Phone: (716) 895-6100

Email: rlaughlin@tmpotech.com

Name and Contact Information of Authorized Representative (if different): Robert Laughlin

Name and Contact Information of Property Owner (if different):

Section 2: Brownfield Cleanup Program (BCP) Application Information

A. BCP Project Site Number: C915198I and C915198J

B. Date that the DEC executed the Brownfield Cleanup Agreement (BCA) for the project: 3/14/2007 (Business Park II) 08/22/2012 (Sites II-9 and II-10)

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C. Provide date of the Final Decision Document: November 2016
 (Attach Final Decision Document for the DEC BCP site per application instructions DOS-2015-INST.)

D. Has DEC issued a Certificate of Completion (COC) for the BCP site?
 YES (If yes, date of COC: Site II-10 COC issued 12/28/2017; COC not yet issued for Site II-9) or NO

Section 3: Property Information

A. Proposed Project Name: Construction of Manufacturing Facility for Time Release Properties, LLC

B. Address/Location: 2303 Hamburg Turnpike

City/Town/Village and Zip: Lackawanna 14218

Municipality(ies): City of Lackawanna

County(ies): Erie

C. Size of Site to be Developed (acres): 27.76

D. Tax map information for all tax parcels included within the project boundaries. Attach required maps per the application instructions.

Part of 141.11-1-48.11 (Site II-9)

Part of 141.11-1-48.13 (Site II-10)

Section 4: Brownfield Opportunity Area (BOA) Information

A. Name of Designated BOA: City of Lackawanna First Ward BOA

B. Municipality or municipalities, including any county, in which the BOA is located. If more than one, list all.
City of Lackawanna, Erie County

C. Is the proposed development located on a Strategic Site as described in the BOA Nomination document?

YES or NO If yes, list the page(s) in the BOA Nomination where this information is referenced:

	Strategic Site Information	BOA Nomination Page(s)
1		
2		
3		
4		

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Section 5: Project Information

- A. Project Narrative. Describe the proposed development, including location, uses and density, site layout and relationship of development to surrounding uses. (Attach additional sheets if necessary.)

Time Release Properties, LLC intends to procure and redevelop Sites II-9 and II-10 of the Tecumseh Phase II Business Park in Lackawanna, NY. The redevelopment will accommodate an approximate 288,000 square foot manufacturing facility and related infrastructure and site improvements, including utility services, access drives, parking, storm water detention, and landscaping. The facility will manufacture a foam-based consumer cleaning product. Raw foam blocks (akin to foam rubber) will be imported to the facility where they will be cut, laminated, packaged then shipped off-site to retail distribution centers for consumer purchase.

These Sites fall within the Bethlehem Redevelopment Area-Medium Industry (BRA-MI) District as identified in the May 2018 Draft City of Lackawanna Local Waterfront Revitalization Program (LWRP). The BRA-MI encourages 'non-smokestack' manufacturing. Allowed uses include enclosed bulk cargo storage and light manufacturing. The proposed project is considered light manufacturing; therefore, it conforms to the City's Zoning Ordinance.

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- B. List of maps and documents attached to the application: (Refer to instructions DOS-2045-INST.)

- Property base map
- Site plan
- Renderings
- Other (Describe: _____)

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Section 6. Project Conformance to Criteria

- A. How are the uses proposed for the site consistent with the vision statement, goals and objectives for revitalization as described in the BOA plan? (Attached additional sheets if necessary.)

As outlined in Section 9.0 (Design Framework) of the November 2018 Draft BOA Implementation Study (page 113), one of the visions of the BOA is promotion of economic development via development of vacant and underutilized parcels along the Hamburg Turnpike to include a mix of uses and establish density; increase light industrial uses in the BOA; and encourage conversion of vacant former Bethlehem Steel land into multiple types of productive industrial uses. Implementation of the proposed project fulfills this vision by turning a significant portion of this vacant property into a light consumer product manufacturing facility employing over 100 people. The attraction of 100-150 persons per day to the Site will provide additional patrons to the Ridge Road commercial district.

The following goal is presented in Section 6.0 (page 83) of the 2018 BOA Implementation Study:

"Attracting Industrial Uses to Lackawanna and the Bethlehem Steel Site"

Considering the readiness of the site for industrial properties and the strengthening demand for same in the larger Buffalo-Niagara MSA, (re)using these properties for such uses is considered a suitable alternative. In particular, a revitalized Bethlehem Steel site would:

1. Contribute to a more sustainable fiscal situation in the City of Lackawanna;
2. Provide much needed employment opportunities for the local and regional workforce; and
3. Provide a setting for an alternative energy sector cluster where supply chain businesses can grow and prosper.

-
- B. How are the density and configuration of the proposed development and associated buildings and structures consistent with the objectives, desired redevelopment, and priorities for investment as stated in the BOA plan? (Attach additional sheets if necessary.)

According to the November 2018 BOA Implementation Study (page 220), these Sites fall within the BOA Sub-Zone referred to as the Former Bethlehem Steel Site. For the purpose of design standards, this Sub-Zone is divided into the Industrial Park and Hamburg Pike West Edge. These Sites fall within the Industrial Park portion; specifically, within a north-south band of approximately 800 feet wide on the eastern side of the Ship Canal. The Site design follows the Design Standards provided on pages 220-224 of the 2018 BOA Implementation Study.

While the larger site from which the parcels were subdivided is highly visible from Route 5 (Hamburg Turnpike), the proposed one-story building will be the second row of buildings set back from Route 5. Landscaping will consist of grass and a mixture of deciduous and coniferous trees along the eastern, southern and western boundaries of Site II-9. The primary frontage along Dona Street is designed with natural landscape features including appropriate landscape to enhance the surrounding area. In addition, the building will act as a shield such that the truck unloading facilities will not be in view from Route 5 and the bike path.

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C. Please explain whether zoning and other land use regulations are applicable to your proposed development and if such applicable zoning or other land use regulations are set forth or proposed in the related BOA Nomination(s). How does the proposed development comply with the zoning and other land use regulations that were provided for or proposed in the BOA Nomination (if applicable)? (Attach additional sheets if necessary.)

These properties fall within the Bethlehem Redevelopment Area (BRA) of the First Ward BOA. The zoning west of Route 5 was updated in July 2018 to include light industrial, medium industrial, heavy industrial, intermodal port and green space. The First Ward BOA Master Redevelopment Plan not only outlines suggested uses for all strategic sites but also lays out a program for the BRA. The BRA has a separate zoning code that functions as an amendment to the City of Lackawanna’s Zoning Ordinance. The BRA zoning addendum future land uses include the following:

Medium Industry District – 149 acres of land (which includes the portion designated as Wind Energy Conversion Overlay). This area will be available for redevelopment after the Light Industrial Use area and is designated as a transitional zone between the high industrial and light industrial areas to encourage “non-smokestack manufacturing and high employment uses to promote redevelopment.

Policy 1.3 within the City of Lackawanna’s Comprehensive Plan aims to ensure flexibility in the future development of Bethlehem Steel lands to allow the flow of new economic opportunities within the area.

This project also follows the design guidelines for the Seaway Trail Overlay District as outlined in the 2018 BOA Implementation Study (page 40).

Therefore, the proposed development can be constructed under the current zoning.

Section 7: Municipal Notification

For each municipality receiving notification, provide contact information and date the application was sent. (Attach proof of delivery as per instructions DOS-2045-INST.)

Municipality	Mailing Address	Date Application Sent
City of Lackawanna	714 Ridge Road, Room 309 Lackawanna, New York 14218	10/11/2019
Erie County DEP	95 Franklin St, Room 1064, Buffalo, NY 14202	10/11/2019

The Brownfield Opportunity Area Program Determination of Conformance Application Form

Statement of Certification and Signatures

(By requestor who is an individual)

I hereby affirm that information provided on this form and its attachments is true and complete to the best of my knowledge and belief. I am aware that any false statement made herein is punishable under law, which may include punishment as a Class A misdemeanor pursuant to section 210.45 of the Penal Law.

Signature: _____

Print Name: _____

Date: _____

(By a requestor other than an individual)

I hereby affirm that I am President (title)
of Time Release Properties, LLC (entity);

that this application was prepared by me or under my supervision and direction. I hereby affirm that information provided on this form and its attachments is true and complete to the best of my knowledge and belief. I am aware that any false statement made herein is punishable under law, which may include punishment as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Signature: Robert Laughlin

Print Name: Robert Laughlin

Date: 10/3/19

SUBMISSION INSTRUCTIONS

Submit one (1) hard copy of this completed application form with original signatures and all required attachments. In addition, transmit one (1) complete electronic copy of the completed application with all required attachments in Portable Document Format (PDF). The hard copy documents, together with a thumb drive, compact disk (CD), or DVD containing the electronic PDF copy of the completed application, should be sent to:

Honorable Rossana Rosado
Secretary of State
New York State Department of State
One Commerce Plaza, 99 Washington Avenue
Albany, NY 12231-0001
Attn: BOA Program

**Brownfield Opportunity Area Program
Determination of Conformance Application Form**

**Construction of Manufacturing Facility for Time Release Properties, LLC
BCP Site Nos. C915198I (II-9) and C915198J (II-10)**

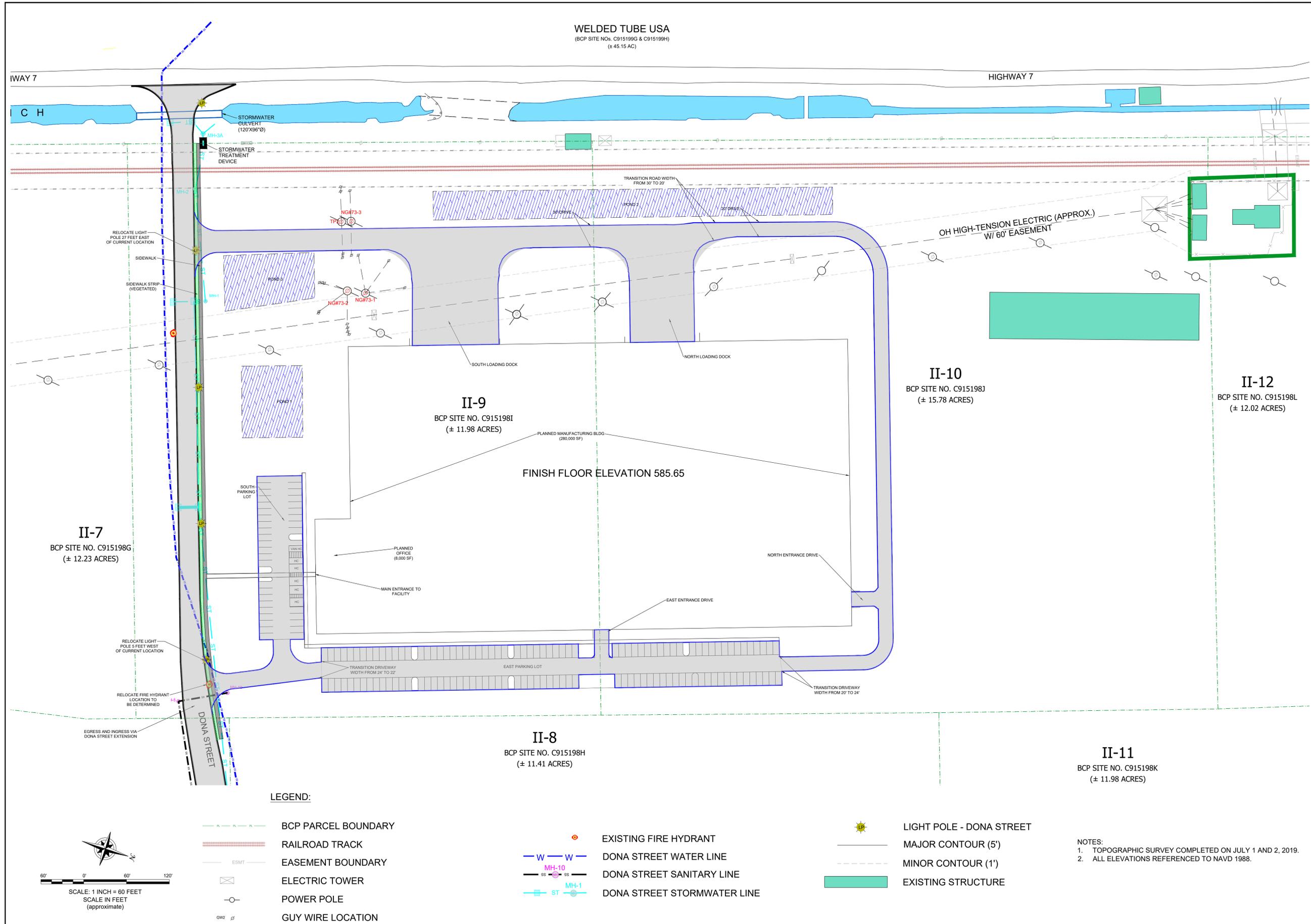
List of Figures

- Figure 1 Property Base Map
Figure 2 Site Plan
Figure A3 Rendering (Facility Elevations)
Figure A4 Rendering (New Office Elevations)

Attachments

- Final Decision Document for Site II-9 dated December 2016
- Final Decision Document for Site II-10 dated January 2017
- Proof of Delivery to City of Lackawanna and Erie County DEP

F:\CAD\Benchmarks\BMP\Figure 2 Site Plan.dwg, 10/26/2019 11:53:14 AM



BENCHMARK
 ENVIRONMENTAL
 ENGINEERING &
 SCIENCE, PLLC

2558 HAMBURG TURNPIKE
 SUITE 100
 LACKAWANNA, NY 14218
 (716) 856-0589

JOB NO.: 0489-019-001

NO.		DATE		REVISIONS	
1	1	7/9/19	RFL	LR	REVISED LIMITS OF TREES AND BRUSH
REMARKS					

DRAWN BY:	RFL	DATE:	OCTOBER 2019
CHECKED BY:	LR	APPROVED BY:	TF

SEAL

SITE PLAN

BOA PROGRAM DETERMINATION OF CONFORMANCE
 TRP SITE
 LACKAWANNA, NEW YORK

PREPARED FOR
 TIME RELEASE PROPERTIES, LLC

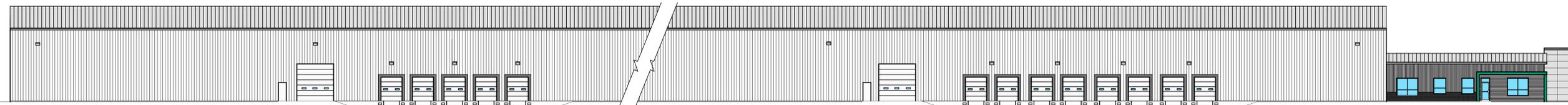
FIGURE 2

WARNING
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 7209 PROVISION 2 OF THE
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 LAW.

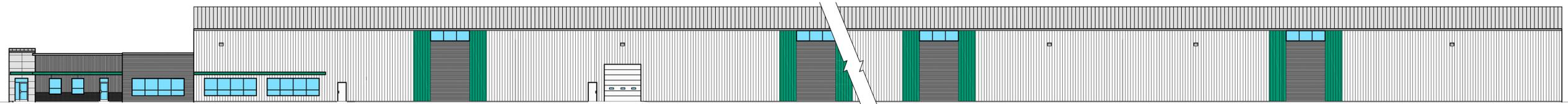


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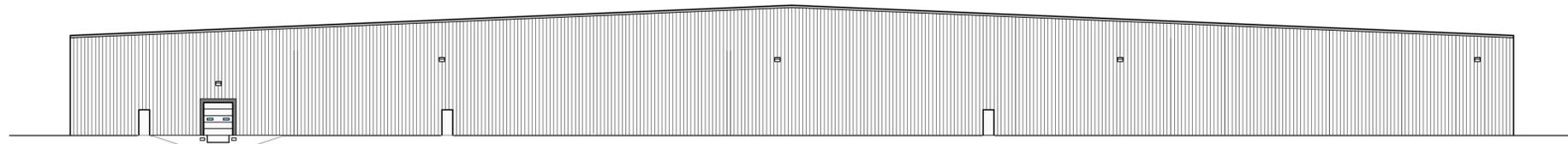
Revision	Date



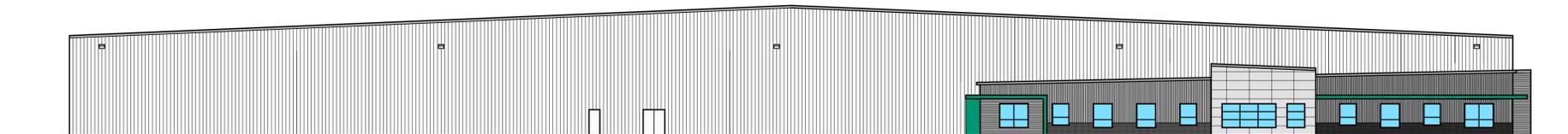
WEST ELEVATION
 NTS



EAST ELEVATION
 NTS



NORTH ELEVATION
 NTS



SOUTH ELEVATION
 NTS

Project: **TMP Technologies Inc.**
 Route 5
 Lackawanna, New York

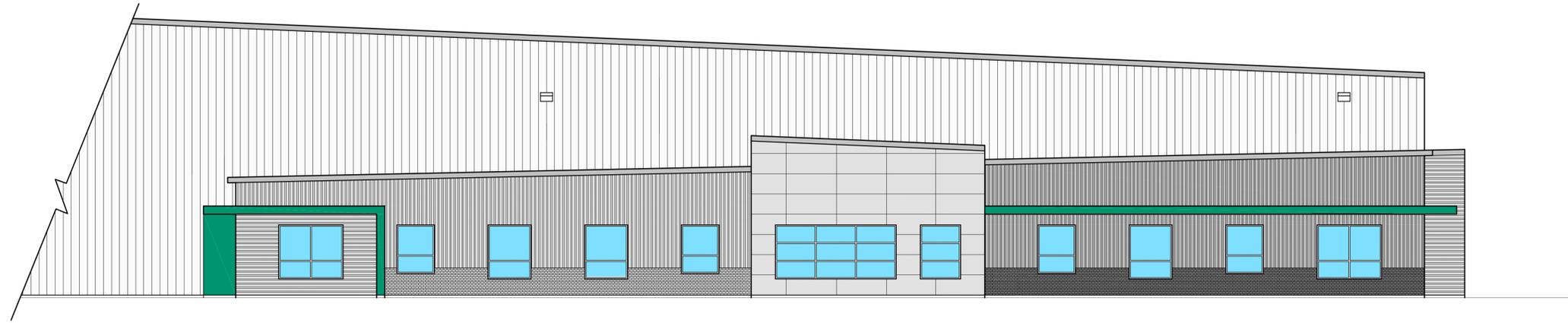
Drawing Title: **Elevations**

Drawn	HCS	Sheet
Checked		A3
Date	09-19	
Scale	AS NOTED	
Project No.		

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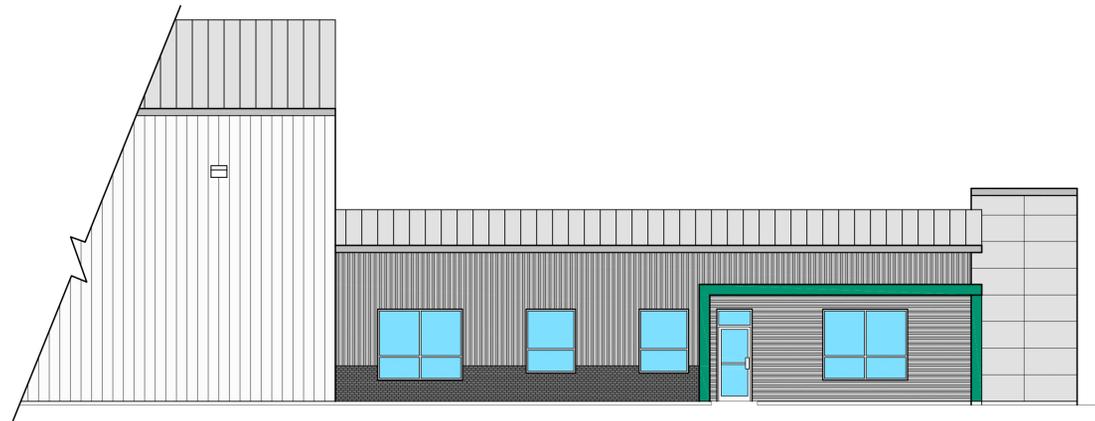
SOUTH ELEVATION

1/8" = 1'-0"



EAST ELEVATION

1/8" = 1'-0"



WEST ELEVATION

1/8" = 1'-0"

Revision

Date

Project: **TMP Technologies Inc.**
 Route 5 Lackawanna, New York

Drawing Title: **Elevations**

Drawn HCS

Checked

Date 09-19

Scale AS NOTED

Project No.

Sheet

A4

DECISION DOCUMENT

Site II-9 Tecumseh Phase II Business Park
Brownfield Cleanup Program
Lackawanna, Erie County
Site No. C915198I
December 2016



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

DECLARATION STATEMENT - DECISION DOCUMENT

Site II-9 Tecumseh Phase II Business Park
Brownfield Cleanup Program
Lackawanna, Erie County
Site No. C915198I
December 2016

Statement of Purpose and Basis

This document presents the remedy for the Site II-9 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-9 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. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or other approved cover in areas where the upper one foot of exposed surface soil will exceed the

applicable soil cleanup objectives (SCOs). Where cover is required it will be a minimum of one foot thick, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The cover will be placed over a demarcation 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). 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.

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.)

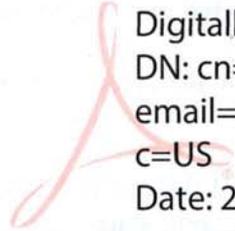
4. A Site Management Plan is required, which includes, but not limited to, the following:

- 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: 2016.12.22 11:44:10 -05'00'

Date

Michael Cruden, Director
Remedial Bureau E

DECISION DOCUMENT

Site II-9 Tecumseh Phase II Business Park
Lackawanna, Erie County
Site No. C915198I
December 2016

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

Phone: 716-851-7220

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-9 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 southern portion of Phase II the site is a 11.98 acre, triangular shaped, sparsely 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:

- Chipping Transfer Beds
- Craneways
- Cold saws
- Electrical transformers

- Covered runways
- Cooling beds.

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 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
dibenz[a,h]anthracene	lead
benzo(a)anthracene	cyanides(soluble cyanide salts)
indeno(1,2,3-CD)pyrene	polychlorinated biphenyls (PCB)

petroleum products

chromium

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.

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

Railroad Realignment Hot Spot Removal

Soils impacted with levels of poly-chlorinated biphenyls (PCBs) exceeding site cleanup objectives for commercial use, as set forth in 6 NYCRR Part 375-1.8(g)(2)(iii), were discovered during a supplemental test pit program conducted in support of a realignment of the South Buffalo Railroad. One test pit, RR TP-30 contained PCBs at 52 parts per million (ppm).

An IRM was completed in conformance with a 2010 Department approved IRM Work Plan. The IRM removed and disposed off-site approximately 258 tons of contaminated soils and slag.

The excavations were restored with placement of backfill meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use and establishment of an active rail line. A Construction Completion Report detailing the removal effort and final disposal of removed material was complete in October 2010.

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-9 site are metals, including arsenic, chromium, cyanide, lead and polychlorinated bi-phenyls (PCBs). 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, levels ranging from 6.6 ppm to 37.1 ppm exceed the SCO in 10 of 13 samples and when compared to the commercial SCO of 16 ppm, also exceed in 8 of 13 samples. Chromium from 29.2 ppm to 176 ppm exceeds the unrestricted SCO of 1 ppm in 13 of 13 samples but when compared to the commercial SCO of 400 ppm no sample exceeded. Lead, from 121 ppm to 1,090 ppm, exceeds the unrestricted SCO (63 ppm) in 13 of 13 samples but when compared to the commercial SCO of 1,000 ppm, only one sample exceeded the SCO. Cyanide from ND (not detected) to 27.8 ppm exceeded both the unrestricted and commercial SCOs of 27 ppm in 1 of 8 samples.

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 from 0.28 ppm to 8.5 ppm, exceeded SCO of 1 ppm with 4 of 9 samples exceeding. Dibenzo(a,h)anthracene, ranging from 0.07 ppm to 1.7 ppm with an SCO of 0.56 ppm exceeded the commercial SCO in 3 of 10 samples. With commercial SCOs of 5.6 ppm, benzo(a)anthracene from 0.25 ppm to 7.6 ppm, and indeno(1,2,3-cd)pyrene from 0.22 ppm to 6 ppm, each exceeded SCOs in 1 of 9 samples.

PCBs ranging from ND to 52 ppm exceeded the commercial SCOs in soils in 2 of 4 samples.

No VOCs exceeded unrestricted SCOs.

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 1.43 ppm exceeds the standard of 0.3 ppm, magnesium as high as 58.2 ppm exceeds groundwater guidance values of 35 ppm and arsenic as high as 0.49 ppm exceeds the GwQS of 0.25 ppm. 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:

Groundwater

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

Soil

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.
- 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 Site 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. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or other approved cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where cover is required it will be a minimum of one foot thick, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The cover will be placed over a demarcation 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). 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.

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.

DECISION DOCUMENT

Site II-10 Tecumseh Phase II Business Park
Brownfield Cleanup Program
Lackawanna, Erie County
Site No. C915198J
January 2017



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

DECLARATION STATEMENT - DECISION DOCUMENT

Site II-10 Tecumseh Phase II Business Park
Brownfield Cleanup Program
Lackawanna, Erie County
Site No. C915198J
January 2017

Statement of Purpose and Basis

This document presents the remedy for the Site II-10 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-10 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. Excavation and off-site disposal of contaminant source areas, including: grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u); removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other

structures associated with a source of contamination; and non-aqueous phase liquids.

3. Ex-situ bio-remediation will be implemented to treat two petroleum impacted areas totaling approximately 2,300 cubic yards of fill material. The contaminated soil will be excavated and treated on-site in a manner encouraging naturally occurring biological processes. Once the soils have been treated to goals as set forth in 6 NYCRR Part 375-6.7(d) for commercial use* the stabilized soil will be used as on-site backfill as needed and then be covered as described in element 5 to prevent direct exposure. This treatment changes the contamination from a soluble form to a stable, insoluble compound to reduce or eliminate the matrix as a source of contamination.

* If after 12 months the material is sampled and fails to attain the goals as set forth in 6 NYCRR Part 375-6.7(d) for commercial use the contaminated material will be disposed, properly, off-site.

4. In-situ stabilization (ISS) will be implemented to treat a weathered organic fill area 20 feet by 20 feet over a four-foot depth 5 to 9 feet below ground surface, located in the north central portion of the site, as indicated on Figure 2. ISS is a process that uses a stabilizing agent which chemically changes contamination to make it less soluble. The contaminated soil will be treated in place with stabilizing agents using a direct push rig or augers. The stabilized soil will then be covered with a cover system as described in element 3 to prevent direct exposure. This treatment changes the contamination from a soluble form to a stable, insoluble compound to reduce or eliminate the matrix as a source of groundwater contamination.

5. 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.

6. 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.)

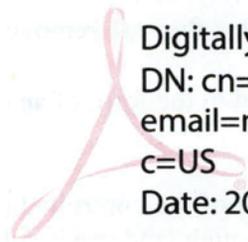
7. A Site Management Plan is required, which includes, but not limited to, the following:

- 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 5 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
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Date

Michael Cruden, Director
Remedial Bureau E

DECISION DOCUMENT

Site II-10 Tecumseh Phase II Business Park
Lackawanna, Erie County
Site No. C915198J
January 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 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

Phone: 716-851-7220

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-10 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 west-central portion of Phase II the site is an 15.79 acre, square shaped, mostly vegetated, parcel that is vacant except one former manufacturing building known as the Number 15 Mill Roll Shop currently used for the manufacture of pet bedding material. A electrical sub-station is located within the site but is excluded from the Brownfield program. 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:

- 48" and 54" Mill Roll Shop
- 48" and 54" Finishing Mill

- 28” – 35” Mill
- 14” – 18” Mill
- Cooling Beds
- Hot Bed Building
- Tie Plate Shop

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 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:

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

arsenic
chromium
petroleum products
lead

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.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

Railroad Realignment Hotspot Removal

Soils impacted with levels of arsenic exceeding site cleanup objectives for commercial use, as set forth in 6 NYCRR Part 375-1.8(g)(2)(iii), were discovered during a supplemental test pit program conducted in support of a realignment of the South Buffalo Railroad. A test pit, RR-TP-41 contained arsenic at 149 parts per million (ppm).

An IRM was completed in 2013 in conformance with a Department approved IRM Work Plan which removed and disposed off-site approximately 542 cubic yards of contaminated soils from the test pit areas.

The excavation was restored with placement of backfill meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use and establishment of an active rail line. A Construction Completion Report detailing the removal effort and final disposal of removed material was complete in October 2010.

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-10 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, levels ranging from 3.1 ppm to 149 ppm exceed the SCO in 9 of 15 samples and when compared to the commercial SCO of 16 ppm, exceed in 8 of 15 samples. Chromium from 3.6 ppm to 671 ppm exceeds the unrestricted SCO of 1 ppm in 15 of 15 samples but when compared to the commercial SCO of 400 ppm only one sample exceeded. Lead, from 6.9 ppm to 603 ppm, exceeds the unrestricted SCO (63 ppm) in 13 of 15 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 only benzo(a)pyrene, from 1.7 ppm to 110 ppm, exceeded the SCO of 1 ppm for the same number of samples as unrestricted with 11 of 11 samples exceeding. Dibenz(a,h)anthracene, ranging from 0.4 ppm to 20 ppm with an SCO of 0.56 ppm, exceeded the commercial SCO in 9 of 11 samples. Benzo(b)fluoranthene, ranging from 1.8 ppm to 120 ppm exceeded the SCO of 5.6 ppm in 7 of 11 samples. With commercial SCOs of 5.6 ppm, benzo(a)anthracene from 1.3 ppm to 120 ppm, and indeno(1,2,3-cd)pyrene from 1.2 ppm to 69 ppm, each exceeded SCOs in 5 of 11 samples.

Due to the presence of high voltage transformers and switching gear no information was collected within the electrical sub-station, however, test pits near the sub-station did not indicate impacts emanating from the site.

Weathered petroleum impacts were noted in several test pit areas as sheens or product.

No VOCs or PCBs exceeded unrestricted SCOs in soils.

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 sampled from overburden and bedrock monitoring wells on the parcel and there were no exceedances of groundwater quality standards (GwQS).

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:

Groundwater

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

Soil

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.
- 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 Excavation with Ex-situ and In-situ Treatment 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. Excavation and off-site disposal of contaminant source areas, including: grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u); removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination; and non-aqueous phase liquids.

3. Ex-situ bio-remediation will be implemented to treat two petroleum impacted areas totaling approximately 2,300 cubic yards of fill material. The contaminated soil will be excavated and treated on-site in a manner encouraging naturally occurring biological processes. Once the soils have been treated to goals as set forth in 6 NYCRR Part 375-6.7(d) for commercial use* the stabilized soil will be used as on-site backfill as needed and then be covered as described in element 5 to prevent direct exposure. This treatment changes the contamination from a soluble form to a stable, insoluble compound to reduce or eliminate the matrix as a source of contamination.

* If after 12 months the material is sampled and fails to attain the goals as set forth in 6 NYCRR Part 375-6.7(d) for commercial use the contaminated material will be disposed, properly, off-site.

4. In-situ stabilization (ISS) will be implemented to treat a weathered organic fill area 20 feet by 20 feet over a four-foot depth 5 to 9 feet below ground surface, located in the north central portion of the site, as indicated on Figure 2. ISS is a process that uses a stabilizing agent which chemically changes contamination to make it less soluble. The contaminated soil will be treated in place with stabilizing agents using a direct push rig or augers. The stabilized soil will then be covered with a cover system as described in element 3 to prevent direct exposure. This treatment changes the contamination from a soluble form to a stable, insoluble compound to reduce or eliminate the matrix as a source of groundwater contamination.

5. 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.

6. 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.)

7. 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 5 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.

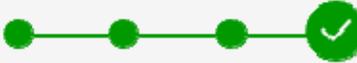
Lori E. Riker

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Sent: Tuesday, October 15, 2019 1:05 PM
To: Lori E. Riker
Subject: FedEx Shipment 776696669771 Delivered

Your package has been delivered

Tracking # 776696669771

Ship date: Fri, 10/11/2019	Delivery date: Tue, 10/15/2019 12:58 pm
Louise Seymour Benchmark Env. Eng & Science Buffalo, NY 14218 US	Richard E. Stanton City of Lackawanna 714 Ridge Road RM 309 BUFFALO, NY 14218 US


Delivered

Shipment Facts

Our records indicate that the following package has been delivered.

Tracking number:	776696669771
Status:	Delivered: 10/15/2019 12:58 PM Signed for By: S.KATRA
Signed for by:	S.KATRA
Delivery location:	LACKAWANNA, NY
Delivered to:	Receptionist/Front Desk
Service type:	FedEx Standard Overnight®
Packaging type:	FedEx® Envelope
Number of pieces:	1
Weight:	0.50 lb.
Special handling/Services:	Deliver Weekday
Standard transit:	10/14/2019 by 3:00 pm

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Lori E. Riker

From: TrackingUpdates@fedex.com
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To: Lori E. Riker
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Your package has been delivered

Tracking # 776696561642

Ship date: Fri, 10/11/2019	Delivery date: Mon, 10/14/2019 9:18 am
Louise Seymour Benchmark Env. Eng & Science Buffalo, NY 14218 US	Christopher Pawenski Erie Country Dept. of Environment & 95 Franklin Street RM 1065 BUFFALO, NY 14202 US



Delivered

Shipment Facts

Our records indicate that the following package has been delivered.

Tracking number:	776696561642
Status:	Delivered: 10/14/2019 09:18 AM Signed for By: J.CASDONA
Reference:	0489-019-001
Signed for by:	J.CASDONA
Delivery location:	BUFFALO, NY
Delivered to:	Mailroom
Service type:	FedEx Standard Overnight®
Packaging type:	FedEx® Envelope
Number of pieces:	1
Weight:	0.50 lb.
Special handling/Services:	Deliver Weekday
Standard transit:	10/14/2019 by 3:00 pm

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