# Periodic Review Report

Tecumseh Phase II Business Park Site II-10 (BCP Site No. C915198J) 2303 Hamburg Turnpike Lackawanna, New York

June 2020 0489-019-002

**Prepared For:** 

Time Release Properties, LLC

Prepared By:



## PERIODIC REVIEW REPORT

#### TECUMSEH PHASE II BUSINESS PARK SITE II-10 BCP SITE No. C915198J

2303 HAMBURG TURNPIKE LACKAWANNA, NEW YORK

June 2020 B0489-019-002

Prepared for:

#### Time Release Properties, LLC

Prepared By:



Benchmark Environmental Engineering & Science, PLLC 2558 Hamburg Turnpike, Suite 300 Buffalo, NY 14218 (716) 856-0599

#### PERIODIC REVIEW REPORT

## Sites II-10: C915198J

#### **Table of Contents**

1.0	INT	RODUCTION	1
	1.1	Site Background	
	1.2	Remedial History	2
		1.2.1 Remedial Investigation	
		1.2.2 Interim Remedial Measures	3
	1.3	Corrective Measures	4
	1.4	Compliance	5
	1.5	Recommendations	5
2.0	SITI	E OVERVIEW	6
	2.1	Final Remedial Measures	6
3.0	REN	MEDY PERFORMANCE	8
4.0	SITI	E MANAGEMENT PLAN	9
	4.1	Institutional and Engineering Control (IC/EC) Plan	
		4.1.1 Institutional Controls	
		4.1.2 Engineering Controls	
	4.2	Excavation Work Plan	10
		4.2.1 New Building Construction & Cover System Modification Activities	
		4.2.1.1 Gamma Walk Over	
		4.2.1.2 Imported Materials	
		4.2.1.3 Community Air Monitoring Program (CAMP) Results	
		4.2.1.4 Reporting	
	4.3	Annual Inspection and Certification Program	
	4.4	Operation, Monitoring and Maintenance Plan	14
5.0	GRO	OUNDWATER MONITORING	15
6.0	Con	NCLUSIONS AND RECOMMENDATIONS	16
7.0	DEC	CLARATION/LIMITATION	17
8.0	REE	FERENCES	18
J.J			



#### PERIODIC REVIEW REPORT

# Sites II-10: C915198J Table of Contents

#### LIST OF FIGURES

Figure 1	Site Location & Vicinity Map
Figure 2	Tecumseh Phase II Business Park Site Plan
Figure 3	Completed Remedial Measures on Site II-10
Figure 4	Cover System Plan

#### **APPENDICIES**

Appendix A	Institutional & Engineering Controls Certification Forms
Appendix B	Site Photolog
Appendix C	Gamma Walk Over Field Notes
Appendix D	Import Documentation

;; 11



#### 1.0 Introduction

Benchmark Environmental Engineering and Science, PLLC (Benchmark) has prepared this Periodic Review Report (PRR) to summarize the post-remedial status of New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. C915198J located at 2303 Hamburg Turnpike in the City of Lackawanna, Erie County, New York.

This PRR has been prepared for the subject BCP Site in accordance with NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation (Ref 1). Appendix A includes the Institutional and Engineering Control (IC/EC) Certification Form completed based on the Site inspection performed on January 15, 2020.

This PRR has been completed on behalf of Time Release Properties, LLC (TRP) for Site II-10 (C915198J), subject Site. This PRR documents post-remedial activities covered by the January 2014 Site Management Plan (SMP; Ref. 2). The post remedial period covered by this PRR is April 28, 2019 to April 28, 2020.

#### 1.1 Site Background

Tecumseh Redevelopment, Inc. (Tecumseh) entered into a Brownfield Cleanup Agreement (BCA) with the NYSDEC in March 2007, to investigate and remediate the 102-acre Tecumseh Phase II Business Park site located in the City of Lackawanna, Erie County, New York (see Figure 1). The property, deemed the "Phase II Business Park Site" is bounded by the Business Parks I and IA to the north; South Buffalo Railroad Company to the south; Business Park III and the South Return Water Trench (SRWT) to the west; and Route 5 to the east. Business Park II is transected by Smokes Creek, which is specifically excluded from the BCP (see Figure 2). To facilitate cleanup and redevelopment the Phase II Business Park BCA was subsequently amended in August 2012 to provide for 12 smaller BCP "sub-parcels" within the Phase II Business Park area, deemed Sites II-1 through II-12. These Sites were alphanumerically designated as BCP Site number C915198 through C915198L.

Site II-10 was fully remediated according to the 2017 Decision Document (DD, Ref. 3) by the Buffalo and Erie County Industrial Land Development Corporation (ILDC) as a Track 4 commercial site under "Generation 1" of the BCP. Site II-10 is situated on an



approximately 15.78-acre area (portion of SBL No. 141.11-1-48.1) bounded by BCP Site II-12 to the north, BCP Site II-9 to the south, BCP Sites II-8 and II-11 to the east, and the SRWT and associated non-BCP embankment land to the west. An electrical substation, which is not part of the Phase II Business Park BCP site, is located adjacent to the northwest corner of the Site. In addition, a former manufacturing building known as the Number 15 Mill Roll Shop and a 1-foot thick crushed stone access drive is located on the northwestern portion of the Site. An active rail line (deemed East Harbor Lead) owned by South Buffalo Railroad runs north-south through the west end of Sites II-9 and II-10. The boundary of Site II-10 is legally defined in the Deed conveyed to TRP December 12, 2019.

The ILDC purchased Site II-10 on July 25, 2017 and Site II-9 on December 12, 2019 from Tecumseh and transferred both sites to TRP on December 12, 2019. A Notice of Transfer of Certificate of Completion was filed on December 12, 2019 for Site II-10 Tecumseh Phase II Business Park, Site ID No. C915198J.

TRP is currently redeveloping Sites II-9 and II-10 with an approximate 280,000 square foot manufacturing facility and attached 8,000 square foot office, as well as related infrastructure and site improvements, including utility services, access drives, parking, storm water detention, and landscaping. Redevelopment activities require modification of the cover system on Site II-10. Cover system modifications are currently underway in accordance with the SMP and the Remedial Action Work Plan and Cover System Modification Plan (RAWP/CSMP, Ref 4).

#### 1.2 Remedial History

The Phase II Business Park formerly housed several facilities associated with the Bethlehem Steel Corporation's (BSC's) steel manufacturing processes. These included a pure oxygen generating station (known as South Linde Area); various mills; a structural shipping yard; a car repair shop; metal storage; and miscellaneous office production support buildings. Five historical SWMUs (i.e., P-38 through P-42) are present within the Phase II Business Park. BSC performed assessments for these solid waste management units (SWMUs) during a Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) and subsequent RCRA Facility Investigation (RFI). Based on the findings, United States



Environmental Protection Agency (USEPA) Region II issued "No Further Action" determination for the identified SWMUs within the Phase II Business Park.

#### 1.2.1 Remedial Investigation

Remedial Investigation (RI) field activities on Site II-10 were initiated in March 2010 and substantially completed in April 2010. Investigative activities included the completion of test pits, supplemental test pits to delineate Hotspot D (TP-89), and monitoring wells. Soil and groundwater samples were collected as detailed in the July 2009 Remedial Investigation/Alternatives Analysis Report (RI/AAR) Work Plan (Ref. 5).

The RI identified several Constituents of Concern (COCs) that were generally present across widespread areas of Phase II Business Park Site in site soils and groundwater. The COCs included polyaromatic hydrocarbons (PAHs), arsenic, chromium, and lead. Isolated areas of petroleum product were also encountered.

The RI/AAR was submitted to NYSDEC in May 2011, revised, and finalized in March 2012 (Ref. 6). The RI/AAR recommended remediation of hotspot slag/fill with deferred soil cover system placement during redevelopment as well as engineering controls (ECs) and institutional controls (ICs) to limit future use of the Controlled Property to restricted (commercial or industrial) applications and prevent groundwater use for potable purposes (see Section 4.1).

#### 1.2.2 Interim Remedial Measures

The remediation of Site II-10 included Interim Remedial Measures (IRMs) to expedite remedial activities and facilitate redevelopment. In October 2010, Tecumseh submitted to NYSDEC an IRM Work Plan for Railroad Realignment (Ref. 7). The following work was performed on Site II-10 in December 2010:

Approximately 60 cubic yards of arsenic-impacted slag/fill was excavated within the vicinity of test pit RR-TP-42 (See Figure 3). Excavation proceeded to a depth of 2 feet below grade. The slag/fill was direct-loaded onto truck trailer dumps and transported by Zoladz, a licensed solid waste transporter (NYSDEC #9A499), and disposed at the Chautauqua County Landfill (CCLF) in Ellery, NY in accordance with Disposal Permit #CC1201.10S1. Minor regrading was performed to fill in low spots and achieve subgrade elevations; no backfill was placed.



In April 2017, Tecumseh submitted to NYSDEC an IRM Work Plan for Phase II Business Park Sites II-10 and II-12 (Ref. 8). The Sites were remediated between February 9 and May 17, 2017 in accordance with the NYSDEC-approved IRM Work Plan. The following remedial work performed on Site II-10 is documented in the Final Engineering Report (FER; Ref. 9) and shown on Figure 3:

- Hotspot A: Approximately 45 cubic yards of PAH-impacted slag/fill were excavated to a depth of 2 feet below ground surface (fbgs).
- **Hotspot D-1**: Approximately 2,030 cubic yards of petroleum-impacted slag/fill were excavated over a 3-foot interval from 6 to 9 fbgs.
- Hotspot D-2: Approximately 220 cubic yards of petroleum-impacted slag/fill were excavated over a 3-foot interval from 5 to 8 fbgs.
- **Hotspot G**: Approximately 90 cubic yards of petroleum-impacted slag/fill were excavated over a 4-foot interval from 5 to 9 fbgs.
- **Biotreatment:** Excavated materials were transported to a biotreatment pad constructed on Site II-9, treated and tested to meet Site-Specific Action Levels (SSALs), and reused as fill in low spots of the uncovered Business Park.
- In-Situ Amendment: To address residual smear zone slag/fill impacts (i.e., sheen) in Hotspot G, approximately 320 pounds of RegenOx <sup>TM</sup> and 55 pounds of ORC Advanced® were applied to the bottom and sidewalls of the excavation using an excavator bucket prior to backfilling with clean overburden slag/fill.
- Backfill: Following replacement of clean overburden materials and receipt of passing confirmatory results, where applicable, excavations were re-graded with surrounding slag/fill. In the case of Hotspot D, the backfill was supplemented with biotreated soils from other locations within the Tecumseh BCP Business Park Sites that were treated to meet SSALs and approved for use by the NYSDEC as subgrade backfill.

Tecumseh received a letter on June 5, 2017 from NYSDEC that stated the IRM satisfies the requirements for hotspot removal as outlined in the Decision Document for Sub-Parcel II-10.

#### 1.3 Corrective Measures

The integrity of the cover system could not be certified as compliant with the NYSDEC-approved SMP at the time of the Site inspection. Cover system soils are

4



temporarily removed as part of current redevelopment activities for the new TRP manufacturing facility. Corrective measures are currently being implemented in accordance with the revised November 2019 RAWP/CSMP, described in Section 4.2 below.

#### 1.4 Compliance

At the time of the Site inspection, all controls were in-place and functioning as intended in accordance with the SMP, with the exception of the cover system.

#### 1.5 Recommendations

Based on observations recorded during the annual inspection and IC/EC certification, no modifications are recommended at this time other than the corrective measures described herein.



#### 2.0 SITE OVERVIEW

All remediated properties within the Phase II Business Park are subject to a comprehensive, site wide SMP that identifies requirements for monitoring and maintenance of engineering and institutional controls and procedures for post-remedial excavation and related activities. Specific requirements affecting individual Sites within Phase II Business Park are included as appendices to the comprehensive plan. These appendices are prepared once a Phase II Business Park Site is remediated. Final remedial activities undertaken on Site II-10, covered by this PRR, are described below.

#### 2.1 Final Remedial Measures

The Site was remediated in accordance with the remedies selected by the NYSDEC as memorialized in the November 2016 Decision Document for Sub-Parcel II-10. Benchmark was retained by Tecumseh Redevelopment Inc. to serve as the design-builder and Engineer of Record for the BCP activities.

The factors considered during the selection of the remedies are those listed in 6NYCRR 375-1.8. The following are the components of the selected remedies for Sub-Parcel II-10:

- 1. Excavation of arsenic-impacted hotspot at RR-TP-42 in advance of a railroad realignment project.
- 2. Excavation of petroleum/organic-impacted slag/fill from two hotspot areas deemed Hotspots "D" and "G" and PAH-impacted soil from a third area deemed "Hotspot A". Following completion of the excavation activities, post-excavation documentation samples were required from Hotspot A since slag/fill samples from this area indicated total semi-volatile organic compound (SVOC), specifically PAH, concentrations above the site-specific action level (SSAL) of 500 ppm.
- 3. Introduction of in-situ treatment amendments (RegenOx <sup>TM</sup> and ORC Advanced®) to address residual smear zone impacts in Hotspot G.
- 4. Backfilling and/or re-grading of the excavations as needed for safety reasons.
- 5. On-site (Site II-9) biotreatment of excavated petroleum/organic-impacted slag/ fill.
- 6. Sampling of transformer oil from the 54" Mill Roll Shop (former Artmeier Building on Sub-Parcel II-10). All oils were found to be less than 50 ppm.



- 7. Construction and maintenance of a vegetated cover system consisting of a demarcation layer atop the sub-grade soil/fill followed by a minimum 12-inch soil layer in areas not covered by existing competent asphalt, concrete or railroad bedding/tracks to prevent human exposure to remaining contaminated soil/fill. Existing active East Harbor Lead railroad tracks with wooden ties and stone ballast were left undisturbed as final cover. In addition an access drive was constructed to service Substation 11A and the Roll Mill Shop. The drive was constructed of 1 foot of No. 2 run of crush stone placed over a geotextile fabric.
- 8. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the Site.
- 9. Development and implementation of a SMP for long-term management of remaining contamination as required by the Environmental Easement (EE), which includes plans for: (1) institutional and engineering controls, (2) monitoring, (3) operation and maintenance, and (4) reporting.
- 10. Periodic certification of the institutional and engineering controls listed above.

The remedial program was successful in achieving the remedial objectives for the Site. These activities were documented in the August 2017 Final Engineering Report for Tecumseh Business Park II Sub-Parcels II-10 and II-12. NYSDEC issued a COC for Site II-10 in December 2017.



#### 3.0 REMEDY PERFORMANCE

A post-remedial site inspection involving a walk-over of the Site covered by this PRR was performed on January 15, 2020 to visually observe and document the use of the Site for commercial/industrial use, confirm absence of Site groundwater use, inspect the integrity of the cover system, and verify conformance with other requirements under the SMP. The Site inspection confirmed that the controls are in-place and functioning as intended in accordance with the SMP, with the exception of the cover system. Corrective measures related to the cover system are currently being implemented, described in Section 4.2 below.

Appendix A includes the completed IC/EC Certification forms, and Appendix B includes photographs taken during the course of topsoil removal work.



#### 4.0 SITE MANAGEMENT PLAN

A Site-wide SMP was prepared for the Phase II Business Park in January 2014 and approved by NYSDEC. Parcel-specific SMP requirements for Site II-10 were added by Addenda in August 2017 and are presented in SMP Appendix H-10/H-12. Key components of the SMP are described below.

#### 4.1 Institutional and Engineering Control (IC/EC) Plan

Since remaining contaminated soil/fill and groundwater exists beneath the Phase II Business Park, institutional and engineering controls are required to protect human health and the environment. The IC/EC Plan describes the procedures for the implementation and management of all IC/ECs on the Sites within the Phase II Business Park.

#### 4.1.1 Institutional Controls

The following institutional controls apply to all Sites within the Phase II Business Park:

- The use and development of the property is restricted to commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws.
- Groundwater cannot be used as a source of potable or process water, without necessary water quality treatment as determined by the New York State Department of Health (NYSDOH) or County DOH.
- All Sites must comply with the NYSDEC-approved SMP.
- The remedial party or site owner must complete and submit to the NYSDEC a periodic certification of institutional and engineering controls in accordance with Part 375-1.8(h)(3.)
- There are no site-specific institutional control requirements.

#### 4.1.2 Engineering Controls

Engineering controls covering Sites within the Phase II Business Park include:



Cover System: The cover system, including railroad, building foundations, access
drive, concrete sidewalks, concrete or asphalt driveways, parking areas, and
landscaped vegetated areas, must be maintained in compliance with the SMP.

At the time of the site inspection, Site II-10 covered by this PRR was compliant with IC/EC requirements, with the exception of the cover system. Corrective measures related to the cover system are currently being implemented in accordance with the revised November 2019 RAWP/CSMP.

#### 4.2 Excavation Work Plan

An Excavation Work Plan (EWP) was included in the approved SMP for the Phase II Business Park. The EWP provides guidelines for the management of soil/fill material during any future intrusive actives. Any intrusive work that will penetrate the cover or cap, or encounter or disturb the remaining contamination, including any modifications or repairs to the existing cover system, must be performed in compliance with the EWP and must also be conducted in accordance with a site-specific Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) meeting the minimum requirements of the sample HASP and CAMP included with the SMP.

In September 2019, a Cover System Modification Work Plan was submitted to notify the NYSDEC of the planned intrusive activities related to new building construction and cover modification resulting from the building and associated paving and landscaping. Comments on the Work Plan were addressed, and the Work Plan was approved in November 2019 (Ref. 4).

Ground-intrusive activities requiring disturbance of the cover system, management of on-site soil/fill material, and placement of backfill materials occurred during the April 28, 2019 to April 28, 2020 reporting period. Activities subject to the EWP during the reporting period are described below.

#### 4.2.1 New Building Construction & Cover System Modification Activities

Construction of a new manufacturing and packaging facility began November 2019 and is currently underway in accordance with the November 2019 RAWP/CSMP. TRP is

10



redeveloping Tecumseh Phase II Business Park Site II-9 and a portion of Site II-10 for TRS Packaging, a subsidiary of TMP Technologies dedicated to producing custom consumer components including the Mr. Clean Magic Eraser® product line for Procter & Gamble. Redevelopment will accommodate an approximate 280,000 square foot (SF) manufacturing facility, 8,000 SF office building, and related infrastructure and site improvements, including utility services, access drives, parking, storm water detention, and landscaping.

Benchmark was retained by TRP to serve as the Engineer of Record and provide civil and engineering design, oversight, and community air monitoring for intrusive activities. Construction of the new facility and cover system is currently being performed by Kulback's General Contractors & Construction Managers (Kulback's) of Lancaster, New York. The NYSDEC is monitoring BCP activities to verify that the work is performed in accordance with the BCA, the January 2014 SMP, the approved November 2019 RAWP/CSMP, and NYSDEC DER-10 guidance.

Ground intrusive activities performed on Site II-10 during the PRR reporting period related to redevelopment activities included:

- November 21 December 14, 2019 SJB completed geotechnical soil borings to bedrock on Sites II-9 and II-10.
- December 2 20, 2019, Kulback's stripped the existing cover system, comprised of one-foot of topsoil underlain by demarcation fabric, and stockpiled the cover material on poly sheeting on the northern portion of Site II-10 for reuse.
- On February 21, 2020 Kulback's began excavating test pits to prepare for building foundation pile excavations, and on April 10, 2020, Ferro Steel began drilling building foundation piles. Pile driving activities are currently underway.
- On April 16, 2020, Kulback's began excavating the building perimeter foundation to a depth of approximately 4 feet below ground surface (fbgs). Foundation excavation activities are currently underway.

Non-impacted slag/fill removed from beneath the cover system will be used to fill low sub-grade areas on Site II-9 prior to construction of the cover system. No impacted material exhibiting visual or olfactory evidence of contamination or elevated photoionization



detector (PID) measurements was observed on Site II-10 during redevelopment activities. Concrete identified during excavation activities was transported off-site to Iron City for recycling. Off-site concrete recycling documentation will be provided in the next PRR.

Upon completion of cover system modification activities, cover material will be compacted to mitigate potential for settlement and depth will be verified by Benchmark through survey or grade stake level measurements. Depth verification measurements will be included in the FER for Site II-9 and in the next PRR for Site II-10. Figure 4 presents the cover system plan for the Site.

#### 4.2.1.1 Gamma Walk Over

On January 6 and January 14, 2020, preliminary gamma radiation walkover scans to check imported beneficial use determination (BUD)-approved slag materials (discussed below) were performed by Mr. Paul W. Werthman of Benchmark with oversight by Mr. Kenneth Martin, the Department's Environmental Radiation Specialist experienced in performing this type of monitoring. Benchmark laid out the 200-foot grid across Sites II-9 and II-10 and scanned the imported slag using Ludlum Model 2221 Ratemeter/Scalers. Benchmark recorded 1-minute readings at each node and center point of the 200-foot grid. Appendix C includes field notes and readings recorded during the scan.

#### 4.2.1.2 Imported Materials

Between December 16, 2019 and April 24, 2020, approximately 31,500 tons of beneficial use determination (BUD)-approved crushed slag (BUD #555-9-15) from Iron City was imported to Sites II-9 and II-10 as general fill for construction activities and as the upper 3-inches of the building subbase and approximately 17,600 tons of BUD-approved oversized slag from Iron City was imported to the Site to be used as the lower 12-inches of the building subbase. Based on the configuration of the building approximately 48% of these materials were used on Site II-10.

Between April 7 and 24, 2020, Ferro Steel imported 100 tons of DEC-approved sand from Iron City Recovery, LLC, Gernatt Pit in Gowanda, New York to be used for building foundation piles. Appendix D includes imported slag and sand approval documentation.



#### 4.2.1.3 Community Air Monitoring Program (CAMP) Results

During all activities involving disturbance of slag/fill materials, Benchmark personnel conducted community air monitoring. Particulate monitoring was performed approximately 100 feet downwind of the work area during grading and soil/fill handling activities and no visible dust was allowed beyond the Site perimeter in accordance with the RAWP/CSMP. Community air monitoring was performed in accordance with the Community Air Monitoring Program (CAMP) included with the Health and Safety Plan (HASP) in the NYSDEC approved RAWP/CSMP. Per the CAMP, action limits of 100 ug/m³ for respirable particulates and 5 parts per million (ppm) were employed. No exceedances of the 15-minute time weighted average (TWA) thresholds were recorded during intrusive activities, with the exception of:

- On November 21, 2019, a maximum volatile organic concentration of 56.237 ppm was observed for a very short time period (12:03 PM to 12:13 PM) when the CAMP station was first turned on. The exceedance was likely due to equipment malfunction, as the volatile organic concentration fell to 0.0 ppm at 12:18 PM.
- On January 6, 2020, a maximum particulate concentration of 376.7 ug/m³ was observed at 11:08 AM. The particulate concentration was attributable to a high wind speed of 28 miles per hour (mph).

A CAMP summary report and CAMP data will be provided in the next PRR.

#### 4.2.1.4 Reporting

Benchmark personnel working under the direction of a licensed NYS Professional Engineer were on-site during all intrusive construction activities during this PRR reporting period. Appendix B includes a photolog of initial ground cover stripping activities. Daily field notes will be included in the next PRR.

#### 4.3 Annual Inspection and Certification Program

The Annual Inspection and Certification Program outlines requirements for certifying and attesting that the IC/ECs employed on the Sites are unchanged from the original design



and/or previous certification. The Annual Certification includes a site inspection and completion of the NYSDEC's IC/EC Certification Form. The Site inspection is intended to verify that the IC/ECs:

- Are in place and effective.
- Are performing as designed.
- That nothing has occurred that would impair the ability of the controls to protect the public health and environment.
- That nothing has occurred that would constitute a violation or failure to comply with any operation and maintenance plan for such controls.
- Access is available to the Site to evaluate continued maintenance of such controls.

Inspection of Site II-10 was conducted by Mr. Thomas Forbes, P.E. of Benchmark on January 15, 2020. Mr. Forbes is a licensed and registered NY State Professional Engineer and meets the requirements of a Qualified Environmental Professional (QEP) per 6NYCRR Part 375.12. At the time of the inspection, Site II-10 was undergoing redevelopment activities for construction of a new manufacturing facility. Intrusive activities that were underway are described in Section 4.2 above. Corrective measures are currently being implemented in accordance with the revised November 2019 Remedial Action Work Plan and Cover System Modification Plan (Ref. 4) and will be documented in an addendum to the SMP and in the next PRR.

Appendix A includes the completed Site Management PRR Notice – Institutional and Engineering Controls Certification Forms. Appendix B includes a PRR photo log.

#### 4.4 Operation, Monitoring and Maintenance Plan

The remedy for Site II-10 does not rely on any mechanical systems such as sub-slab depressurization or soil vapor extraction, to protect public health and the environment. Therefore, an Operation and Maintenance Plan is not required.



#### 5.0 GROUNDWATER MONITORING

There are no post-remedial groundwater monitoring requirements for Site II-10 per the NYSDEC-approved SMP.



#### 6.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions and recommendations are as follows:

• At the time of the Site inspection, cover system soils were temporarily removed as part of the current redevelopment activities for the new TRP manufacturing facility. Corrective measures are currently being implemented in accordance with the revised November 2019 Remedial Action Work Plan and Cover System Modification Plan (Ref. 4). A summary of new cover system details related to Site II-10 will be provided via an update to Appendix H-10 of the January 2014 SMP, which will be prepared and submitted following completion of redevelopment activities.

No other modifications of the SMP are recommended at this time.



#### 7.0 DECLARATION/LIMITATION

This PRR has been prepared for the exclusive use of Time Release Properties, LLC. The contents of this PRR are limited to information available at the time of the Site inspection. The findings herein may be relied upon only at the discretion of Time Release Properties, LLC. Use of or reliance upon this PRR or its findings by any other person or entity is prohibited without written permission of Benchmark Environmental Engineering & Science, PLLC.



#### 8.0 REFERENCES

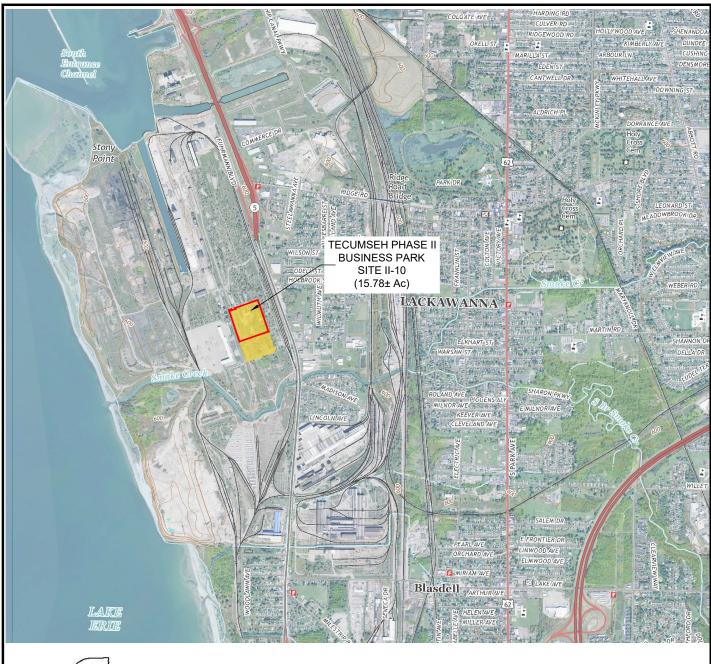
- 1. New York State Department of Environmental Conservation. DER-10/ Technical Guidance for Site Investigation and Remediation. May 3, 2013.
- 2. TurnKey Environmental Restoration, LLC. Site Management Plan for Tecumseh Phase II Business Park, NYSDEC Site No. C915198 through C915198L, Lackawanna, New York. January 2014.
- 3. New York State Department of Environmental Conservations. Decision Document, Site II-10 Tecumseh Phase II Business Park, Brownfield Cleanup Program, Lackawanna, Erie County, Site No. C915198J. November 2016.
- 4. Benchmark Environmental Engineering & Science, PLLC. Remedial Action Work Plan and Cover System Modification Plan, Tecumseh Business Park Sites II-9 (C915198I) and II-10 (C915198I), Lackawanna, New York. Revised November 2019.
- 5. TurnKey Environmental Restoration, LLC in association with Benchmark Environmental Engineering & Science, PLLC. Remedial Investigation/Alternatives Analysis Report (RI/AAR) Work Plan, Phase II Business Park, Tecumseh Redevelopment Inc., Lackawanna, New York. November 2008; revised July 2009.
- 6. TurnKey Environmental Restoration, LLC and Benchmark Environmental Engineering & Science, PLLC. Remedial Investigation/Alternatives Analysis (RI/AA) Report, Phase II Business Park, Tecumseh Redevelopment Inc., Lackawanna, New York. May 2001; revised March 2012.
- 7. TurnKey Environmental Restoration, LLC and Benchmark Environmental Engineering & Science, PLLC. *Interim Remedial Measures Work Plan, Railroad Realignment, Phase I-III Business Parks, BCP Sites C915197-C915199, Lackawanna, New York.* October 2010.
- 8. TurnKey Environmental Restoration, LLC., in association with Benchmark Environmental Engineering & Science, PLLC Interim Remedial Measures (IRM) Work Plan, Phase II Business Park, Sites II-10, II-11 and II-12, BCP Site Nos. C915198J, C915198K & C915198L, Lackawanna, New York. February 2017, revised April 2017.
- 9. TurnKey Environmental Restoration, LLC in association with Benchmark Environmental Engineering & Science, PLLC. Final Engineering Report, Tecumseh Business Park II, Sub-Parcels II-10 and II-12, Lackawanna, New York. August 2017.



# **FIGURES**



#### FIGURE 1





500' 0' 2,500' 5,000'

SCALE: 1 INCH = 2,500 FEET SCALE IN FEET (approximate)



TRP REDEVELOPMENT SITE

BASE MAP USGS QUAD BUFFALO SE 2016



2558 HAMBURG TURNPIKE SUITE 300 BUFFALO, NY 14218 (716) 856-0599

PROJECT NO.: 0489-019-002

DATE: JUNE 2020 DRAFTED BY: CCB

#### SITE LOCATION AND VICINITY MAP

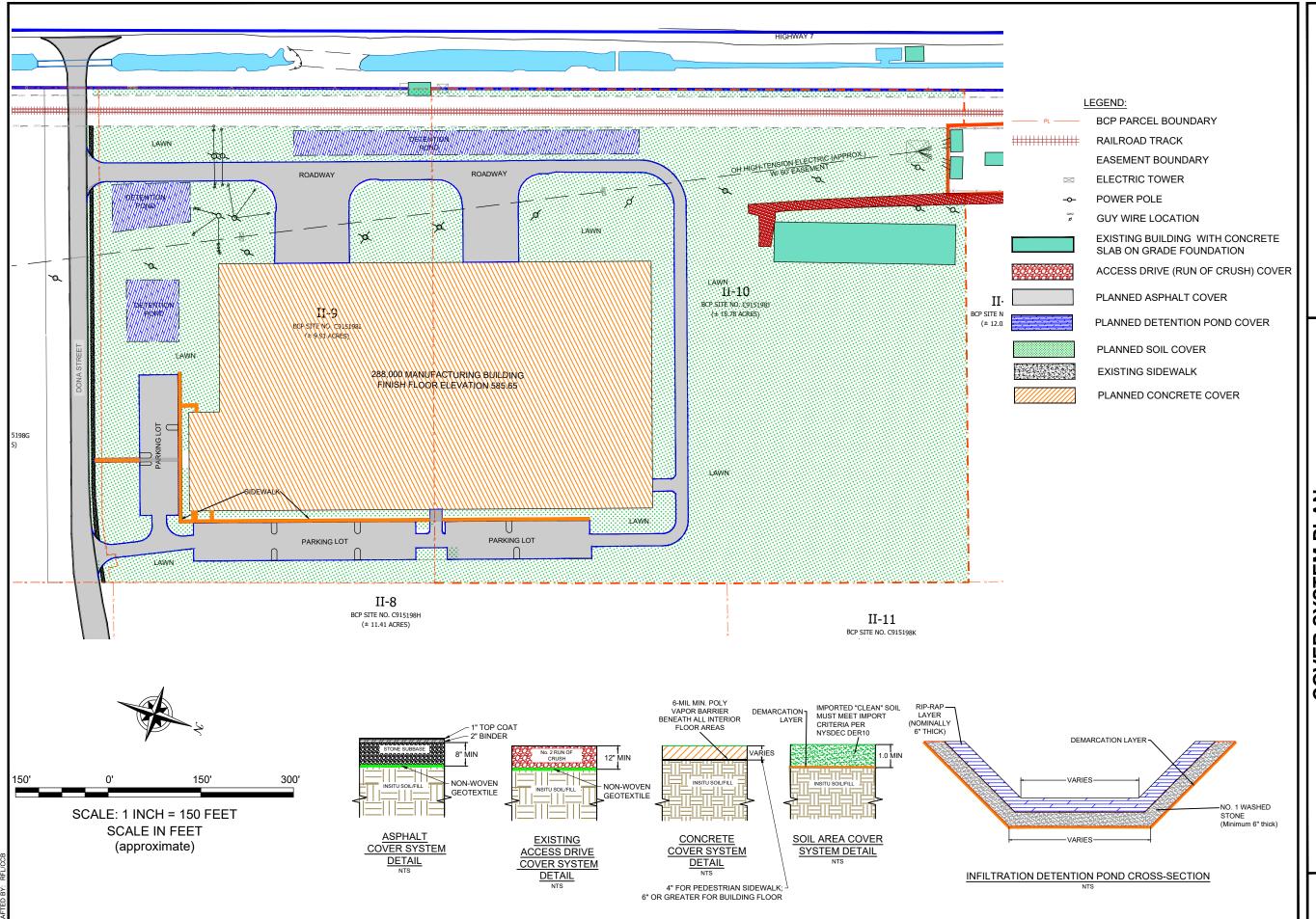
PERIODIC REVIEW REPORT

TECUMSEH PHASE II BUSINESS PARK SITE II-10: C915198J LACKAWANNA, NEW YORK PREPARED FOR

TIME RELEASE PROPERTIES, LLC

#### DISCLAIMER:

DECEMBER OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC.



# SYSTEM PLAN COVER

TECUMSEH PHASE II BUSINESS PARK SITE II-10: C915198J LACKAWANNA, NEW YORK PERIODIC REVIEW REPORT

BENCHMARK

₹ 👁

JOB NO.: 0489-019-002

PREPARED FOR TIME RELEASE PROPERTIES, LLC

FIGURE 4

## **APPENDIX A**

# INSTITUTIONAL & ENGINEERING CONTROLS CERTIFICATION FORMS





# Enclosure 2 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form



Site Details Site No. C915198J	Box 1
Site Name Site II-10 Tecumseh Phase II Business Park	
Site Address: 2303 Hamburg Turnpike Zip Code: 1421 City/Town: Lackawanna County: Erie Site Acreage: 15.780	8
Reporting Period: April 28, 2019 to April 28, 2020	
	YES NO
Is the information above correct?	<b>✓</b>
If NO, include handwritten above or on a separate sheet	
Has some or all of the site property been sold, subdivide tax map amendment during this Reporting Period?      A 60 Day Advance Notice of Transfer was filed on Sold as the site during this (see 6NYCRR 375-1.11(d))?	eptember 19, 2019 for Site II-10.
Have any federal, state, and/or local permits (e.g., buildifor or at the property during this Reporting Period?      Air State Facility Permit Issued 11-14-19	
If you answered YES to questions 2 thru 4, include of that documentation has been previously submitted	
5. Is the site currently undergoing development?	<b>✓</b> 0
	Box 2 YES NO
Is the current site use consistent with the use(s) listed b     Commercial and Industrial	elow?
7. Are all ICs/ECs in place and functioning as designed?	
IF THE ANSWER TO EITHER QUESTION 6 OR 7 DO NOT COMPLETE THE REST OF THIS FO	-
A Corrective Measures Work Plan must be submitted along	g with this form to address these issues.
Signature of Owner, Remedial Party or Designated Representa	tive Date

Cover system soils are temporarily removed as part of redevelopment. Corrective measures are currently being implemented in accordance with the November 2019 Remedial Action Work Plan & Cover System Modification Plan.

_				Box 2	Α
•				YES	NO
8.		ed that assumptions made in the Quantamination are no longer valid?	alitative Exposure		
		ion 8, include documentation or expreviously submitted with this ce			
9.	•	litative Exposure Assessment still va ssment must be certified every five y			
		on 9, the Periodic Review Report n Assessment based on the new as			
SITE	NO. C915198J			Вох	3
ı	Description of Institutional Cor	trols			
Parce	<del></del>	lease Properties, LLC	Institutional Control	<u>l</u>	
141.1	1-1-40.1	iodoc i Toportios, EEO	Ground Water Use Soil Management F Landuse Restriction Monitoring Plan Site Management F IC/EC Plan	Plan n	ion
Institu	tional Control Description:				
Restr Prohi Allow	rence to Site Management Plan ( iction to commercial re-use bition of groundwater use ance for Departmental access ires a Periodic Review and Repo	•			
				Вох	4
I	Description of Engineering Cor	ntrols			
Parce 141.1	<u> </u> 1-1-48.1	Engineering Control			
Engin	eering Control Desription:	Cover System			
Soil c	over, over 5 acres				

Box	5
-----	---

	Periodic Review Report (PRR) Certification Statements
1.	I certify by checking "YES" below that:
	a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
	<ul> <li>b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.</li> </ul>
	YES NO
2.	If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:
	(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
	(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
	(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
	(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
	(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.
	YES NO
	IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.
	A Corrective Measures Work Plan must be submitted along with this form to address these issues.
	Signature of Owner, Remedial Party or Designated Representative Date

# IC CERTIFICATIONS SITE NO. C915198J

Box 6

#### SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

T	at	,
print name	print business address	
am certifying as	(Owne	er or Remedial Party)
for the Site named in the Site Details	Section of this form.	
Signature of Owner, Remedial Party, Rendering Certification	or Designated Representative Date	

	IC/EC CERTIFICATIO	NS	
Qualifie	d Environmental Profes	sional Signature	Box 7
certify that all information in Boxes unishable as a Class "A" misdeme			
	at		
print name	print bu	siness address	
		(Owner or Reme	dial Party)

# **APPENDIX B**

SITE PHOTO LOG





#### **PHOTOGRAPHIC LOG**

**Client Name:** 

**Site Location:** 

Project No.:

Time Release Properties, LLC

Tecumseh Phase II Business Park Site II-10

B0489-019-002

Photo No.

Date

1

12/16/19

**Direction Photo Taken:** 

North

Description:

**Redevelopment Activities:** 

Stripping Site II-10 cover system material (topsoil).



Photo No.

Date

2

12/16/19

**Direction Photo Taken:** 

West

**Description:** 

**Redevelopment Activities:** 

Stripping Site II-10 cover system material (topsoil).





#### **PHOTOGRAPHIC LOG**

Client Name:

Site Location:

Project No.:

Time Release Properties, LLC

Tecumseh Phase II Business Park Site II-10

B0489-019-002

Photo No.

Date

3

12/19/19

**Direction Photo Taken:** 

South

Description:

**Redevelopment Activities:** 

Detention Pond #2 excavation.



Photo No.

Date

4

12/24/19

**Direction Photo Taken:** 

Southeast

**Description:** 

**Redevelopment Activities:** 

Detention Pond #2 excavation.





### **PHOTOGRAPHIC LOG**

Project No.: **Client Name: Site Location:** 

Time Release Properties, LLC Tecumseh Phase II Business Park Site II-10

Date

02/24/20

B0489-019-002

**Direction Photo Taken:** 

North

**Description:** 

Photo No.

5

**Redevelopment Activities:** 

Building foundation excavation and pile installation.



Photo No. Date 6 03/25/20

**Direction Photo Taken:** 

South

**Description:** 

**Redevelopment Activities:** 

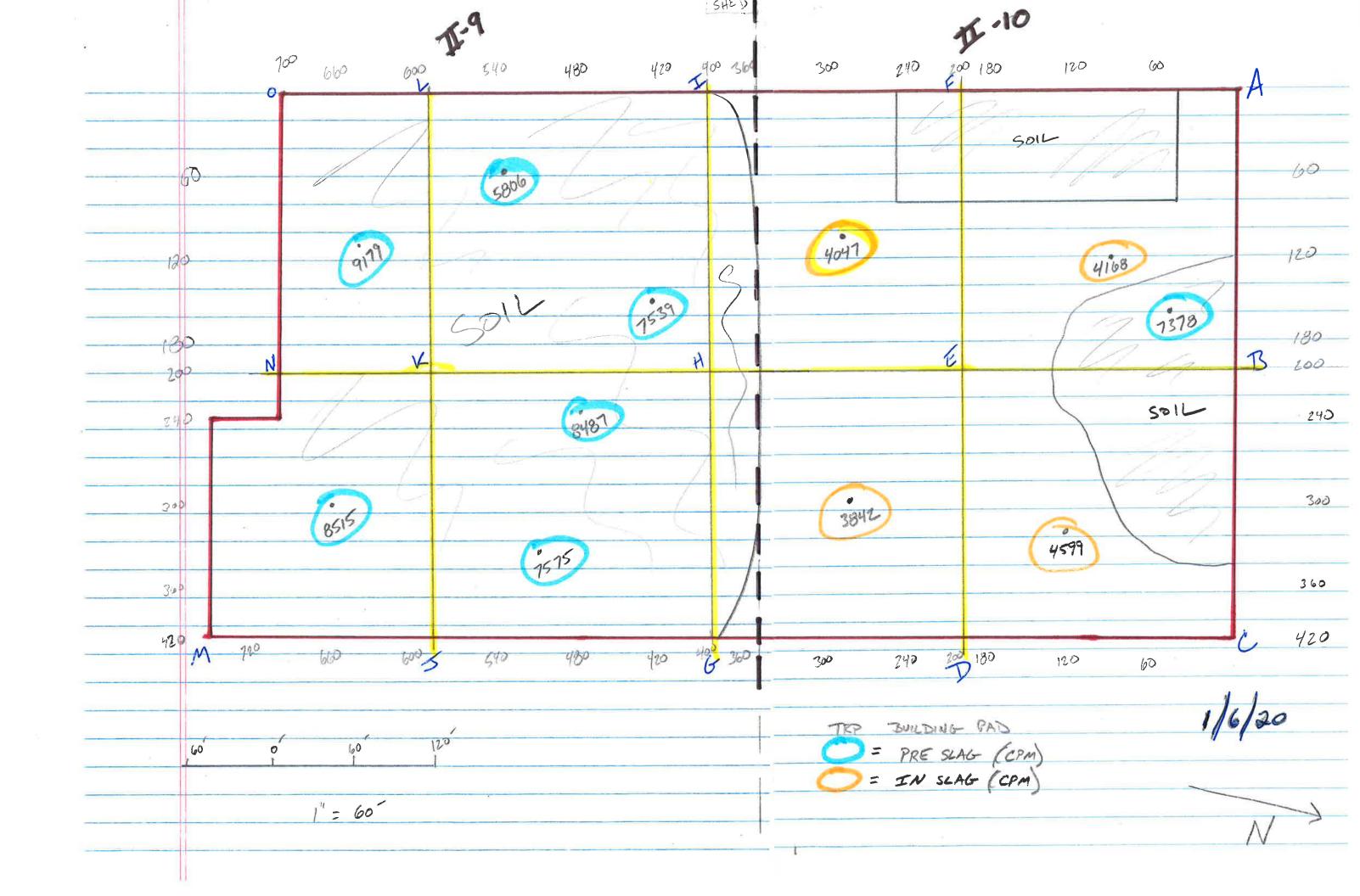
Building foundation excavation and pile installation.

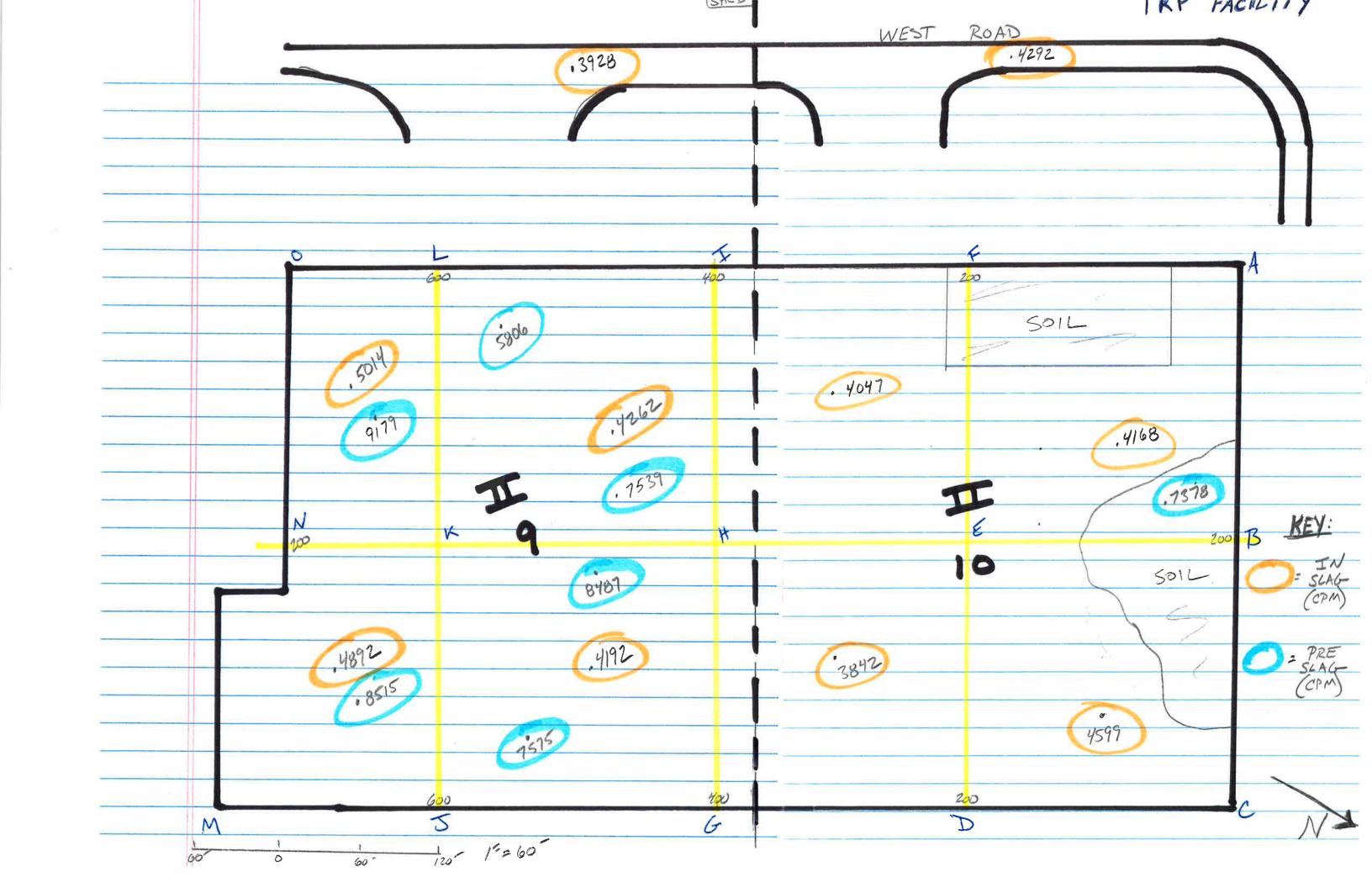


## **APPENDIX C**

GAMMA WALK OVER FIELD NOTES







## **APPENDIX D**

## **IMPORT DOCUMENTATION**





# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



### Request to Import/Reuse Fill or Soil

\*This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.\*

SECTION 1 – SITE BACKGROUND
The allowable site use is: Commercial or Industrial Use
Have Ecological Resources been identified? no
Is this soil originating from the site? no
How many cubic yards of soil will be imported/reused? >1000
If greater than 1000 cubic yards will be imported, enter volume to be imported: Est. 15,000
SECTION 2 – MATERIAL OTHER THAN SOIL
Is the material to be imported gravel, rock or stone? no
Does it contain less than 10%, by weight, material that would pass a size 80 sieve? yes
Is this virgin material from a permitted mine or quarry? no
Is this material recycled concrete or brick from a DEC registered processing facility? yes
SECTION 3 - SAMPLING
Provide a brief description of the number and type of samples collected in the space below:
Material is BUD approved crushed slag from a permitted mining facility (BUD #555-9-15). Estimated 10,00 cubic yards of 2" minus crushed slag and 5,000 cubic yards of oversized (2"-6" slag) material to be imported to the site.
Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.
If the material meets requirements of DER-10 section 5.5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING
Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):
Not applicable
Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.
If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.
SECTION 4 – SOURCE OF FILL
Name of person providing fill and relationship to the source:
Iron City Recovery, LLC.
Location where fill was obtained:
1951 Hamburg Turnpike, Lackawanna, NY 14218
Identification of any state or local approvals as a fill source:
NA
If no approvals are available, provide a brief history of the use of the property that is the fill source:
Provide a list of supporting documentation included with this request:
Sieve analysis attached for 2" minus crushed slag material.

Revised August 2014

The information provided on this form is accurate and complete.

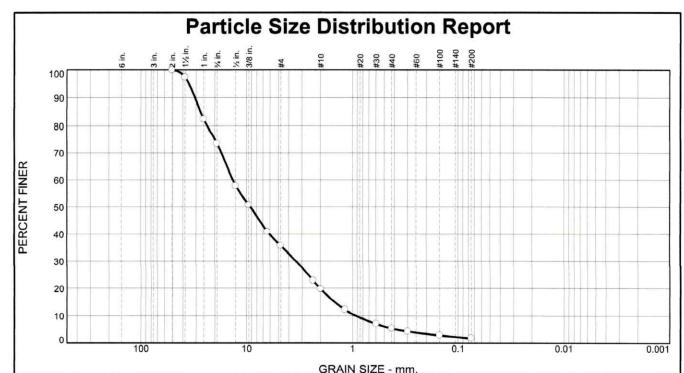
Signature i/2/20Date

Eric Warren

Print Name

Turnkey Environmental Restoration, LLC

Firm



				INAIN OILL	HIHH.		
8/ +2"	% Gravel		% Sand			% Fines	
% +3"	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	26.4	37.8	16.0	14.4	3.5	1.9	

Opening	Percent	Spec.*	Pass?	
Size	Finer	(Percent)	(X=Fail)	
2"	100.0			
1.5	97.4			
1	82.5			
.75	73.6			
.5	57.8			
.375	50.9			
.25	41.0			
#4	35.8			
#8	22.9			
#10	19.8			
#16	12.3			
#30	7.0			
#40	5.4			
#50	4.3			
#100	2.9			
#200	1.9			

	Material	Description	on		
LAB ID# 19-768					
Atte	erberg Limi	ts (ASTM		)	
PL=	LL=		PI=		
USCS (D 2487)=		ification AASHTO (	M 145)=		
	Coef	ficients			
D <sub>90</sub> = 30.6950 D <sub>50</sub> = 9.1608	D <sub>85</sub> = 27 D <sub>30</sub> = 3.4	.1748 4171	D <sub>60</sub> =	13.5313 1.4752	
D <sub>10</sub> = 0.9287	C <sub>u</sub> = 14.:	57	C <sub>c</sub> = (	0.93	
	Re	marks			
F.M.=5.93					
Date Received:	10/7/19	Date T	ested:	10/9/19	
Tested By:	EBS				
Checked By:	IMA				
Title:	LM				

(no specification provided)

Source of Sample: 2" Crushed Slag Sample Number: 2" CR Slag

Date Sampled:

3rd Rock, LLC

Client: Iron City

Project:

East Aurora, NY

Project No: 19-053

Figure

#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 9 270 Michigan Avenue, Buffalo, NY 14203-2915 P: (716) 851-7220 I F: (716) 851-7226 www.dec.ny.gov

October 27, 2017

Mr. Thomas Forbes, P.E. Benchmark Environmental Engineering & Science, PLC. 2558 Hamburg Turnpike, Suite 300 Buffalo, NY 14218

Dear Mr. Forbes:

Site #C915197
Tecumseh Remediation Sites
Steel Slag Use as Cover

Stockpiles of slag on the Tecumseh site were evaluated for the potential presence of Technologically-Enhanced Naturally Occurring Radioactive Material (TENORM), a regulated waste stream. The evaluation process involved creating laydown areas from two background areas and from the two types of slag (steel production and iron production) present on the site, and collecting composite samples from each of those laydown areas for analysis.

The steel slag on this site is unique in that, even though slag samples were biased high by collecting them at the areas of highest radiation readings in the laydown areas, the radiological concentrations appear to be below the average local background for Ra-226, as well as for other potentially significant NORM constituents. Background results average ~ 1.5 pCi/g for Ra-226. The steel slag averages ~ 0.5 pCi/g Ra-226, and the iron slag averages ~ 3 pCi/g. Not only does the Ra-226 results average a little more than twice the local background value for the iron slag, but three other NORM isotopes, Th-230, U-234 and U-238, also average more than twice background concentrations.

Based on this data, the steel production slag does not contain TENORM waste. Therefore, there are no limitations based on its' radiological content for use as fill on the Tecumseh property. Going forward, due to the large amount of slag and the potential for variability of radiological content, it should be screened at regular intervals to monitor for possible variability in its radiological content. As discussed, the following monitoring plan must be implemented if steel slag is to be used for cover, backfill, roads/roadbase, etc on the Tecumseh BCP or RCRA/Superfund sites.

- Gamma walk over scan of each 200x200 foot area to determine the area with highest readings.
- At the location of the highest readings in each 200x200 foot grid, a 1 minute reading shall be taken.



Mr. Thomas Forbes, P.E. October 27, 2017 Page 2

- If that one minute reading is below 5,500 cpm (which is approximately 1.5 times the average steel slag cpm determined from the initial test pads) then the 200x200 area is acceptable.
- If the reading is above 5,500 cpm then, based on 1 minute readings, the area exceeding 5,500 cpm will be delineated, sampled, sent to a lab to determine its radiological content (Ra-226 by 21-day in-growth) and removed into a discrete stockpile (to be assess later based on analytical data). The next highest area based on the walkover would then be checked with a 1 minute reading to verify it is below 5,500 cpm...and the process repeated.
- The monitoring must be performed by, or in the presence of, a certified radiological technician experienced in performing this type of monitoring.

Please be aware, due to the elevated radiological constituents found in the iron production slag, this slag will require further evaluation before any of it can be approved for use as fill either on the Tecumseh site or elsewhere.

If you have any questions, please feel free to give me a call at (716) 851-7220. Also, please keep Ken Martin and Maurice Moore of this office informed as this project moves forward.

Sincerely,

Chad Staniszewski, P.E.

Regional Remediation Engineer

#### CS/tm

cc. Michael Cruden, NYSDEC
James Strickland, NYSDEC
Eric Obrecht, NYSDEC
Timothy Rice, NYSDEC
Thomas Papura, NYSDEC
Kenneth Martin, NYSDEC
Maurice Moore, NYSDEC
Paul Werthman, Benchmark



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



#### Request to Import/Reuse Fill or Soil

\*This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.\*

SECTION 1 – SITE BACKGROUND
The allowable site use is: Commercial or Industrial Use
Have Ecological Resources been identified? no  Is this soil originating from the site? no  Manual Ma
Is this soil originating from the site? no Manual Morre
How many cubic yards of soil will be imported/reused? 200-300
If greater than 1000 cubic yards will be imported, enter volume to be imported:
SECTION 2 – MATERIAL OTHER THAN SOIL
Is the material to be imported gravel, rock or stone?
Does it contain less than 10%, by weight, material that would pass a size 80 sieve? no
Is this virgin material from a permitted mine or quarry? yes
Is this material recycled concrete or brick from a DEC registered processing facility? no
SECTION 3 - SAMPLING
Provide a brief description of the number and type of samples collected in the space below:
One sample of sand was collected and analyzed for the required DER-10 constituents. The sample consisted of one discrete sample for VOCs (three encores) and one composite sample for SVOCs, Inorganics, PCBs and Pesticides.
Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.  If the material meets requirements of DER-10 section 5.5 (other material), no chemical testing needed.

#### **SECTION 3 CONT'D - SAMPLING**

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

All results are below NYSDEC Unrestricted use.

Material will be used only as subgrade backfill in pile boring locations.

Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

#### **SECTION 4 – SOURCE OF FILL**

Name of person providing fill and relationship to the source:

Iron City Recovery, LLC., as broker originated at Gernatt Pit in Gowanda, NY

Location where fill was obtained:

1951 Hamburg Turnpike, Lackawanna, NY 14218

Identification of any state or local approvals as a fill source:

NA

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Originally mined from Gernatt Pit in Gowanda, NY, then transported to Iron City, LLC for screening and the virgin excess material was available for use.

Provide a list of supporting documentation included with this request:

Please see the attached analytical report (Alpha L2015301).

The information provided on this form is accurate and complete.  $\frac{4/14/20}{4/14/20}$ 

Eric Warren

Print Name

Turnkey Environmental Restoration, LLC

Firm