

Supplemental Remedial Injection Work Plan Former Matt Brewer Oil Site Remediation Project NYSDEC Site #808032

Location:

915 East Market Street
Elmira, NY 14901

Prepared for:

Contract #C100116, Callout ID #151838
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

LaBella Project No. 2234026.096

July 1, 2024



300 State Street, Suite 201 | Rochester, NY 14614 | p 585-454-6110 | f 585-454-3066

TABLE OF CONTENTS

1.0	INTRODUCTION & BACKGROUND	1
1.1	Site Description	1
1.2	Project Understanding and Scope of Work	1
2.0	PRE-CONSTRUCTION SUBMITTALS AND ACTIVITIES	2
2.1	Permits	2
2.2	Site Layout	2
2.3	Site Specific Health and Safety Plan (HASP)	2
2.4	Community Air Monitoring Plan (CAMP)	2
3.0	MOBILIZATION AND SITE PREPARATION	3
3.1	Utility Survey	3
3.2	Site Utilities	3
3.3	Support Facilities	3
3.4	Equipment and Material Staging Areas	3
3.5	Personnel Decontamination	3
3.6	Equipment Decontamination	3
4.0	REMEDIAL ACTIVITIES	3
4.1	Injection Well Installation	3
4.2	In-Situ Injection and Enhanced Bioremediation	4
4.3	Transportation and Disposal	4
4.4	Site Traffic Controls	4
4.5	Equipment Decontamination	4
5.0	PRELIMINARY SCHEDULE	5

Figures	Figure 1 – Site Location Map
	Figure 2 – Injection Site Plan
	Figure 3 – Injection Well Detail

Appendices	Appendix A – UIC Registration and Village of Horseheads Annual Drinking Water Quality Report 2023
	Appendix B – Site-Specific Health and Safety Plan (HASP)
	Appendix C – Community Air Monitoring Program (CAMP)



1.0 INTRODUCTION & BACKGROUND

This Supplemental Remedial Injection Work Plan (SRIWP) has been prepared by LaBella Associates, D.P.C. (LaBella) at the request of the New York State Department of Environmental Conservation (NYSDEC) for the Former Matt Brewer Oil Site, which is identified as NYSDEC Site No. 808032 (hereinafter referred to as “the Site”). The Site is located at 915 East Market Street, in the City of Elmira, Chemung County, New York (see Figure 1).

The objective of this RIWP is to detail supplemental remedial injection activities necessary to address Chlorinated volatile organic compound (CVOC) contamination, which has impacted soil and groundwater at the Site. All work will be performed in accordance with the Supplemental Remedial Injection Work Plan dated May 13th, 2024 by HRP Associates, Inc. (HRP) and in accordance with the terms and conditions of Standby Investigation & Remediation Contract C100116 and Call Out ID 151838 issued May 13, 2024.

1.1 Site Description

The Site is located at 915 East Market Street in the City of Elmira, Chemung County, New York. The approximately 1.1-acre site is currently zoned RC (residential 1-4 families), and the surrounding parcels are currently zoned residential, commercial, or industrial. The nearest residential areas are immediately west of the site along Judson Street. The area is served by public water supply. The Site is currently vacant, and all aboveground buildings have been demolished. Concrete floors, partial basement, and asphalt cover most of the site.

Prior uses of the site included lumber storage, coal storage, and possibly as a dump prior to being purchased by Matt Brewer in 1954. Matt Brewer operated the site for bulk storage of lubricants, petroleum, and solvents until the 1990s. Historical records indicate 33 above ground petroleum bulk storage tanks have been removed or closed in place at the site, which included those to store chlorinated solvents.

In June 2020, HRP performed a Pre-Design Investigation, which included a geophysical survey of the site, surface and subsurface soil sampling, installation of monitoring wells, and collection and analysis of soil and groundwater samples to assess environmental conditions at the Site. Based on visual observations and laboratory results, soil with concentrations greater than Protection of Groundwater Soil Cleanup Objective levels (PGWSCOs) at the Site was confirmed.

Between 2022 and 2023 the following remedial activities have been completed at the site:

- Remedial soil excavation to remove the onsite CVOC source area (Completed October 2022).
- Construction of a Site cap (Completed November 2022).
- Installation of eight (8) 4-inch diameter injection wells in the former CVOC source area (Completed April 2023).
- The first of two (2) planned rounds of in-situ injection of CarBstrate™ to facilitate the enhanced biodegradation of residual CVOC groundwater impacts (Completed 2023).

1.2 Project Understanding and Scope of Work

NYSDEC classifies the Site as a Class 2 Site in the Inactive Hazardous Waste Disposal Site Program due to the presence of petroleum and chlorinated impacts at the Site and associated elevated VOC



concentrations. The primary contaminants of concern are tetrachloroethene, trichloroethene, benzo(a)pyrene, cis-1,2-dichloroethane, methylene chloride, 1,1,1-TCA, xylene(mixed), and lead. The scope of work for the Site includes the following tasks:

- Mobilization, Demobilization and Site Preparation;
- Procurement and injection of ~6,000 pounds of CarBstrate™ from ETEC LLC

2.0 PRE-CONSTRUCTION SUBMITTALS AND ACTIVITIES

Prior to the start of remedial activities, several pre-construction submittals, permits, and activities are required to complete the work in accordance with the Project Specifications. Listed below are the anticipated pre-construction submittals, permits, and activities that must be completed prior to beginning Site mobilization.

2.1 Permits

Water is to be supplied and transported to the Site by The Water Wagon of Pine City, NY. Any permits necessary are held solely by the Water Wagon. The water provided is being sourced from a hydrant located in the Village of Horseheads, NY. A copy of the Annual Drinking Water Quality Report for 2023 from the Village of Horseheads is attached.

The previously installed Injection wells were registered with the United States Environmental Protection Agency (USEPA) Underground Injection Control (UIC) program. An online UIC registration was submitted on March 7th, 2023.

Copies of UIC registration and Village of Horseheads water report have been provided as Appendix A of this SRIWP.

2.2 Site Layout

Proposed Site layout, including material and equipment staging areas, construction water containerization areas and injection well locations are provided as Figure 2 to this SRIWP.

2.3 Site Specific Health and Safety Plan (HASP)

A site-specific HASP has been developed for the Site and is included as Appendix B of this SRIWP.

2.4 Community Air Monitoring Plan (CAMP)

A full CAMP monitoring program will not be conducted during the SRIWP activities as no ground-intrusive activities are planned.

Periodic monitoring for VOCs will be performed during non-intrusive activities, such as during Site mobilization and restoration work. Particulate monitoring will not be conducted during non-intrusive work. Instead, visual monitoring for dust will be conducted during non-intrusive activities.

Additional information regarding CAMP monitoring can be found in Appendix C, “Community Air Monitoring Plan.”



3.0 MOBILIZATION AND SITE PREPARATION

Well-planned mobilization and Site preparation activities are important to ensure that the project is successful. Presented below is LaBella's approach to these activities:

3.1 *Utility Survey*

Based on the SRIWP proposed scope of work lacking ground-intrusive activities UDig NY (f/k/a Dig Safely New York) will not be contacted prior to the start of work.

3.2 *Site Utilities*

Temporary Site utilities will be provided as follows:

- Water for mixing the CarBstrate™ slurry using a mobile water trailer and pumping unit. Water will be obtained and transported to the Site by The Water Wagon of Pine City, NY. All on-site water will be stored in a mini-Fractionation tank with an 8,400 gallon capacity provided by United rentals.

3.3 *Support Facilities*

Given the relatively short duration required to implement the Scope of Work, support facilities are not anticipated with the exception of portable toilets if needed.

3.4 *Equipment and Material Staging Areas*

LaBella plans on utilizing asphalt covered areas on the southern portion of the Site for staging areas for the CarBstrate™, water storage, and small equipment.

The proposed material staging area is shown on Figure 2.

3.5 *Personnel Decontamination*

Given the previous removal of impacted soil at the Site construction of a personnel decontamination station is not anticipated.

3.6 *Equipment Decontamination*

Direct contact with the contaminated portions of the Site are not anticipated. A decontamination pad will be not be required for the application of the remedial injection materials.

4.0 REMEDIAL ACTIVITIES

4.1 *Injection Well Installation*

In April 2023, a total of eight (8) injection wells were installed at the Site to a planned depth of approximately 30 feet below grade (ft bg). The Injection wells were constructed of 4-inch schedule-40 PVC and screened from approximately 1 foot above the seasonal high-water table to a depth of approximately 30 feet. The injection wells were finished at the surface with flush-mount protective casings with locking covers.

Injection wells were developed using a combination of surging and pumping to remove silt and clay particles and prevent biofouling of the well screen. Well development continued until temperature,



conductivity and pH have stabilized and a turbidity of less than 50 nephelometric turbidity units (NTUs) had been achieved.

Injection well locations are depicted on Figure 2. Injection well details are depicted on Figure 3.

4.2 *In-Situ Injection and Enhanced Bioremediation*

CarBstrate™ nutrient amended substrate will be injected into the subsurface using the injection wells described in Section 4.1 above.

CarBstrate™ will be mixed with water at a minimum ratio of 1 lb./1 gallon. Approximately 6,000 lbs. of CarBstrate™ will be used during supplemental remedial injection event. The CarBstrate™ will be mixed on site, and the solution will be directly applied to the subsurface using gravity feed or motorized injection methods as needed. Approximately 750 lbs. of CarBstrate™ will be injected in each well. Subsequent to injection of the CarBstrate™ solution each well will be flushed with a minimum of 300 gallons of water to help disperse the CarBstrate™ injection solution in the subsurface. Adding additional flush water will help distribute the product further from each injection well, and is recommended, if feasible, based on production in the field, budget allowances, and correspondence with the NYSDEC.

During injection, adjacent monitoring wells will be gauged and inspected using a bailer to monitor changes in appearance and groundwater elevation. Field measurements including, but not limited to drilling pressure, injection pressure, quantities, and injection flow rate will be collected.

Injection wells have been registered with the USEPA UIC program and have been indicated as “under construction”. A copy of the UIC registration submission is attached in Appendix A.

4.3 *Transportation and Disposal*

4.3.1 *Waste Disposal*

If waste material is generated including development water and decon fluids will be characterized and transported to an appropriate disposal facility.

All vehicles transporting waste from the Site will possess a valid NYSDEC Part 364 Waste Transporter Permit.

4.4 *Site Traffic Controls*

Due to the urban location of the Site, traffic controls will be required. Trucks will be instructed to enter the Site from the north end of the Site at the Ring Street entrance, so that trucks can systematically navigate through the site to minimize the need for backing or turning. Trucks will then depart the Site through the East Market Street exit. Trucks will be scheduled so that only one (1) truck is on-Site at a time. If there is a small overlap, trucks will be allowed to temporarily stage along Ring Street. Trucks delivering materials will be required to follow the same entrance routes as the transport and disposal trucks. Spotters and flagmen will be used to direct trucks and pedestrian traffic at the Ring Street and East Market Street access roadways, as needed.

4.5 *Equipment Decontamination*

Decontamination of equipment will be performed if necessary, using a temporary decontamination pad and use of a power washer and hand tools to remove large pieces of soil and/or debris. The decontamination pad will be equipped with a sump and wash water will be pumped to drums pending characterization, transportation, and disposal.



5.0 PRELIMINARY SCHEDULE

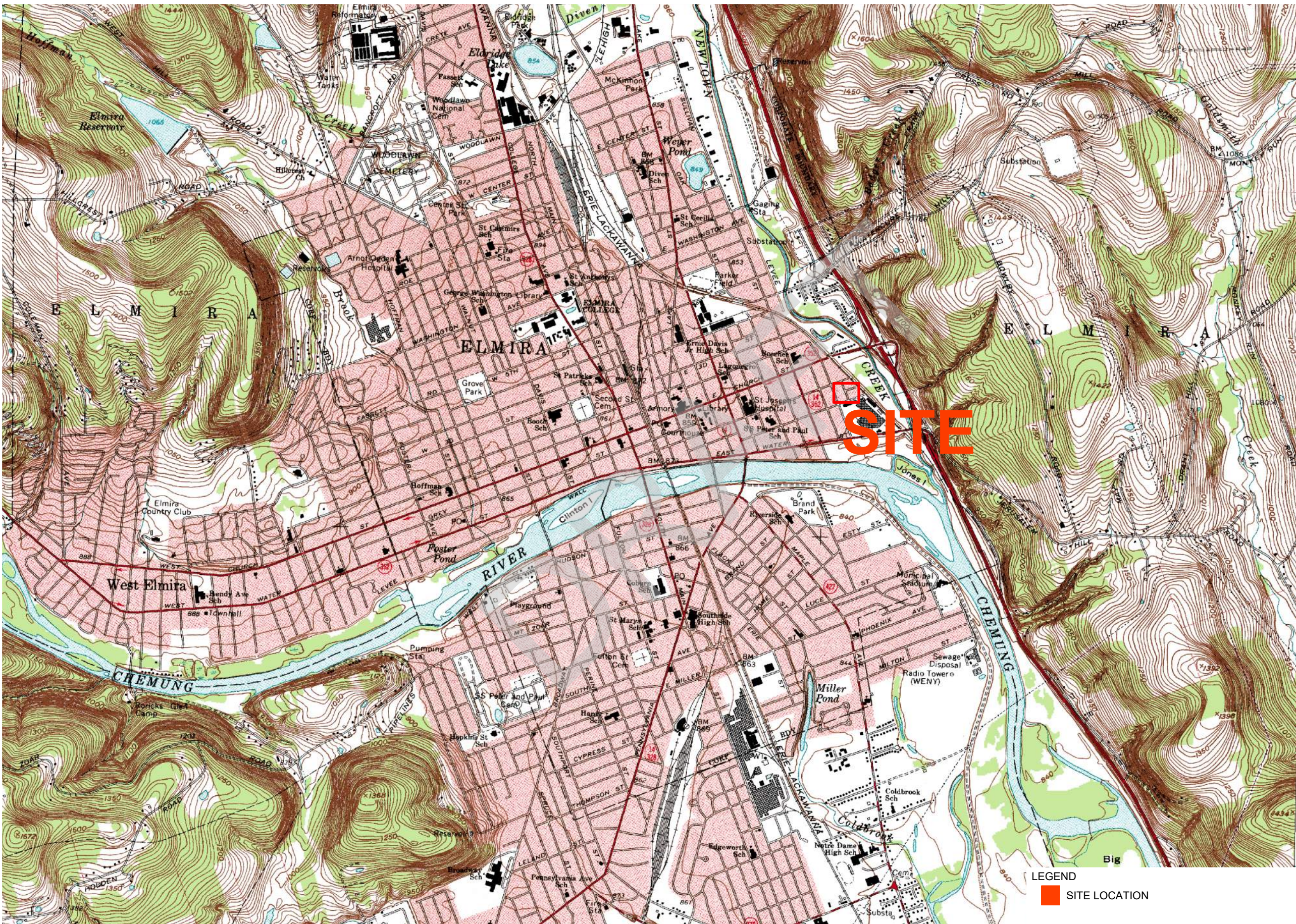
The following schedule is anticipated:

Task	Duration (Days)	Start	End
Mobilization	1	07/08/2024	07/08/2024
Mixing and injection of CarBstrate™	8	07/09/2024	07/18/2024
Demobilization	1	07/19/2023	07/19/2024

B:\GLOBAL\Projects\NYSDEC\2234026.096 - Former Matt Brewer Oil Site 151838\11_Reports\Reports\Injection CWP\Former Matt Brewer Oil Site_CWP_Injection_rev 7.1.2024.docx



FIGURES



LEGEND
SITE LOCATION



REVISIONS	
NO.	DATE

DESIGNED BY:	SRT
DRAWN BY:	SRT
REVIEWED BY:	MEW

ISSUE DATE:	07/23/2020
PROJECT NUMBER:	DEC1009.RA
SHEET SIZE:	11"x17"

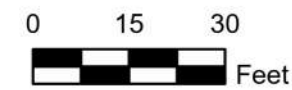
SITE LOCATION MAP
FORMER MATT BREWER OIL SITE
(SITE#808032)
915 EAST MARKET STREET
ELMIRA, NEW YORK 14901

FIGURE
1

Path: S:\Data\NIN\DEC - NYSDEC\ELMIRA\915 EAST MARKET, ELMIRA, NY\DEC1034RA\GIS\matt brewer injection\matt brewer injection.aprx



197 SCOTT SWAMP ROAD
FARMINGTON, CT 06032
(860) 674-9570
HRPASSOCIATES.COM



Revisions	No.	Date	Designed By:	Issue Date:
			CMS	3/20/2023
			Drawn By:	Project No:
			CMS	DEC1034.RA
			Reviewed By:	Sheet Size:
			MEW	11x17

Site Plan
Former Matt Brewer Oil Site
(Site #808032)
915 East Market Street
Elmira, New York 14901

Figure No.
2



APPENDIX A – UIC REGISTRATION VILLAGE OF HORSEHEADS ANNUAL DRINKING WATER QUALITY REPORT

1.Date Prepared (Year, Month, Day)

2023,03,07

FACILITY ID NUMBER (To be completed by the permitting authority)

3. FACILITY INFORMATION

Former Matt Brewer Oil - Site #808032

**915 East Market Street
Elmira, NY 14901**

dengert@labellapc.com

5852956630

No

Facility Name

Address

Email Address

Phone Number

Indian Country

4. LEGAL CONTACT INFORMATION

Robert Strang

New York State Department of Environmental Conservation

**Division of Environmental Remediation
625 Broadway
Albany, NY 12233**

robert.strang@dec.ny.gov

518-402-9813

Type

☒ Operator

☐ Owner

Owner/
Operator

Organization

Address

Email Address

Phone Number

5. LOCATIONAL INFORMATION

42.09397

-76.78973

Latitude

Longitude

Surface Location

1/4 of

1/4 of
1/4 of
Section
Township
Range
New

New

Loc Ew Feet

Loc Ew Line

ft. from (N/S)

Line of quarter section

ft. from (E/W)

Line of quarter section

6. WELL INFORMATION

Interactive Grid. Report: Primary Report, View: Grid.

A. Class and Type		B. Number of Wells		C. Total Number of Wells	D. Well Operation Status				
		Comm	Non-Comm		UC	AC	TA	PA	AN

Row 1, Column 1.

V	B		8	8	8				

Key:

AC = Active

PA = Permanently Abandoned and Approved by State

AN = Permanently Abandoned and not Approved by State

UC = Under Construction

TA = Temporarily Abandoned

Comments (Optional)

4" dia. injection wells to be installed to an approx. depth of 30'. Wells will be utilized to inject CarBstrate nutrient amended substrate to treat CVOC impacts in groundwater.

LaBella is contractor for NYSDEC.Contact Dave Engert dengert@labellapc.com

Name

Dave Engert

Official Title

Annual Drinking Water Quality Report for 2023

Village of Horseheads

Public Water Supply ID# NY0701009

To comply with State and Federal regulations, the Village of Horseheads will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all applicable State drinking water standards. In 2023, we conducted tests for over 100 possible contaminants. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to New York State standards. If you have any questions about this report or concerning your drinking water, please contact Don Gaylord at 607-739-5691. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meetings are held the second Mondays of each month at 7:00 P.M. at Horseheads Village Hall, 202 South Main Street. You may also call the Chemung County Health Department at 607-737-2019.

Where does our water come from?

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the maximum amount of certain contaminants in water provided by public water systems. The State Health Department and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Our water source is ground water drawn from two fifty-foot-deep wells on Mill Street. We also operate a 70 foot-deep well and filter plant at Well 5 on Old Ithaca Road and maintain a nearby backup well. Our water is treated prior to distribution with chlorine for disinfection and fluoride to promote healthy teeth. In addition, we filter all water at Well 5 because nearby Newtown Creek can infiltrate the aquifer during extreme high-water events.

Facts and Figures:

Our water system serves ~15,000 people through 3596 service connections. The total water produced in 2023 was 480,141,000 gallons. The amount of water delivered to customers was 304,499,982 gallons. 4,500,00 gallons were used to flush mains, test hydrants, fight fires, and for municipal use. This leaves an un-accounted for total of 171,141,018. Loss to leakage within the distribution system is believed to be approximately 35% of the un-accounted for water. Additionally, the daily average of water pumped into our system is 1,405,976 gallons. Our highest single day was 1,669,196 gallons. In 2023, water customers were charged an average of \$258 per account, for 80,000 gallons of water.

Are there contaminants in our drinking water?

State regulations require us to routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds (gasoline and industrial solvents), total trihalomethanes, and synthetic organic compounds.

The Village of Horseheads conducts testing throughout the year. This includes 180 samples (fifteen per month) in various locations throughout our system for coliform bacteria, chlorine and turbidity. We check chlorine residual and fluoride at each operating well every day. We test for a variety of possible contaminants at the wellheads, and in the distribution system. It should be noted that all drinking water, including bottled drinking water, might be reasonably expected to contain at least small amounts of some

contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Chemung County Health Department at 607-737-2019.

The table presented below compounds we detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some results are therefore more than a year old.

Table of Detected Contaminants

Well 5							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit	MCLG	Regulatory Limit (MCL , AL, MRDL, TT)	Likely Source of Contamination
Barium	No	02/2023 10/2023	0.14 0.14	mg/L	2	MCL = 2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chloride	No	06/2023	44	mg/L	N/A	MCL = 250	Naturally occurring or indicative of road salt contamination
Nickel	No	02/2023 10/2023	2.9 0.5	ug/L	N/A	N/A	Corrosion of plumbing or naturally
Sodium	No	06/2023	21	mg/L	N/A	N/A <i>Note 2</i>	Naturally occurs; Use of road salt
Fluoride	No	Sampled Daily	Average: 0.70 Range: 0.23- 1.0	mg/L	N/A	MCL = 2.2	Added by a provider to prevent tooth decay
Ra 228	No	11/2022	0.3	pic/L	0	15	Erosion of natural deposits
Total Organic Carbon (TOC) Source	No	Quarterly: 4 samples in 2023	Average: 1.9 Range: 1.3 – 2.7	mg/L	N/A	N/A	Naturally occurring organic materials from decaying leaves & plants
Well 5 Turbidity Measured every 4 hours at treatment plant	No	Maximum day 01/07/2023	0.17 Max for year Annual Average = 0.049	N/A	N/A	TT Always less than 1.0 NTU <i>Note 4</i>	Soil runoff
Well 5 Turbidity Measured every 4 hours at treatment plant	No	Highest monthly average	100% Less than 0.3	NTU	N/A	TT 95% of Samples less than 0.3 NTU <i>Note 4</i>	Soil Runoff

Wells 1 & 2							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit	MCLG	Regulatory Limit (MCL , AL, MRDL, TT)	Likely Source of Contamination
Barium	No	02/2022	Well 1 = 0.14	mg/L	2	MCL = 2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
		01/2022	Well 2 = 0.13				
Chloride	No	06/2023 06/2023	Well 1 = 56 Well 2 = 55	mg/L	N/A	MCL = 250	Naturally occurring or indicative of road salt contamination
Fluoride	No	Sampled Daily	Average 0.69 Range: 0.01 - 1.5	mg/L	N/A	MCL = 2.2	Added by a provider to prevent tooth decay
Nitrate	No	08/2023	Well 1 = 1.4	mg/L	10	MCL = 10	Runoff from fertilizer; leaching from septic tanks, sewers
			Well 2 = 1.4				
Nickel	No	01/2022	Well 2 = 1.1	ug/L	N/A	N/A	Corrosion of plumbing or naturally occurs
Ra 226	No	11/2022	Well 1 = 0.38	pic/L	0	15	Erosion of natural deposits
		11/2022	Well 2 = 0.66				
Ra 228	No	11/2022	Well 1 = 0.12	pic/L	0	15	Erosion of natural deposits
		11/2022	Well 2 = 0.21				
Sodium	No	02/2022	Well 1 = 25	mg/L	N/A	N/A <i>Note 2</i>	Naturally occurs; Use of road salt
		01/2022	Well 2 = 33				

Well 4 (Emergency Use Only)							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit	MCLG	Regulatory Limit (MCL , AL, MRDL, TT)	Likely Source of Contamination
Barium	No	02/2023	0.23	mg/L	2	MCL = 2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
		10/2023	0.22				
Chloride	No	06/2023	94	mg/L	N/A	MCL = 250	Naturally occurring or indicative of road salt
Nickel	No	02/2023	0.6	ug/L	N/A	N/A	Corrosion of plumbing or naturally
		10/2023	1.0				
Sodium	No	06/2023	46	mg/L	N/A	N/A <i>Note 2</i>	Naturally occurs; Use of road salt
Ra 228	No	11/2019	0.48	pic/L	0	15	Erosion of natural deposits

Distribution System							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit	MCLG	Regulatory Limit (MCL , AL, MRDL, TT)	Likely Source of Contamination
Chlorine Residual at consumer taps	No	15 samples each month	Average: 0.9 Range: 0.29 - 1.48	mg/L	4.0 MRDLG	MRDL = 4.0	Disinfectant added to control microbial contaminants
Copper at consumer taps <i>Note 1</i>	No	09/2021 30 samples	90 th % = 0.12 Range 0.01 - 0.16	mg/L	1.3	AL = 1.3	Corrosion of household plumbing
Lead at consumer taps <i>Note 1</i>	No	09/2021 30 samples	90 th % = 3.9 Range ND – 23	ug/L	0	AL = 15	Corrosion of household plumbing
Total Haloacetic Acids (HAAs) 2 sample sites	No	Quarterly: 8 samples in 2023	Highest annual average 3.9 Range: ND – 6.5	ug/L	N/A	MCL = 60 <i>Note 3</i>	By-product of drinking water chlorination
Total Trihalomethanes (THMs) 2 sample sites	No	Quarterly: 8 samples in 2023	Highest annual average 5.0 Range: 0.006 – 15	ug/L	N/A	MCL = 80 <i>Note 3</i>	By-product of drinking water chlorination
Turbidity at consumer taps sampled daily	No	365 samples in 2022	Average 0.19 Range: 0.04– 0.9	NTU	N/A	MCL = 5 <i>Note 4</i>	Sediments from old water mains
Total Coliform (15 samples Monthly)	No (TT) <i>Note 5</i>	3 Samples 09/2023	Present	Present or Absent	N/A	TT= 1 or more positive samples	Naturally present in the environment

Note 1 – The level presented represents the 90th percentile results of the 30 sites tested. It means 27 of the 30 samples were less than or equal to value given with 1 sample exceeding the 15 ppb action level (AL) for Lead.

Note 2 – An MCL for Sodium is not established. Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

Note 3 – The MCL is based on the running annual average at each sample site.

Note 4 – Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. We monitor turbidity in the distribution system because high turbidity can hinder effective disinfection.

Note 5 - Coliforms are harmless bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful bacteria may be present. Coliforms were detected in 3 of our routine monthly samples for September, so a Level 1 assessment was done by the Health Department. No problems with the wells or equipment was found. The Health Department reported the problem was with where and how the samples were collected.

Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Picocuries per Liter (pCi/L): A measurement of radioactivity in water.

Action Level (AL): The level of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

Not Detected (ND): Laboratory analysis indicates that the constituent is not present.

Not Applicable (N/A)

Is our water system meeting other rules that govern operations?

In 2023, our system followed all applicable drinking water regulations.

What does this information mean?

We have also learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State. Additional information can be obtained by calling the safe drinking water hotline at (1-800-426-4791).

Lead Information:

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Horseheads Village is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Horseheads Village, Don Gaylord, water operator at 607-739-1327. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

Information on fluoride addition:

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, we monitor fluoride levels daily to make sure that fluoride is maintained at a target level of 0.7 mg/l (parts per million). None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l NYS limit for fluoride.

Source Water Assessment:

The NYS DOH completed a source water assessment in 2004 based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water. It does not mean that the water delivered to consumers is or will become contaminated. See section “Are there contaminants in our drinking water?” for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

The source water assessment has rated our wells as having a high to very high susceptibility to microbials, nitrates, industrial solvents, and other industrial contaminants. These ratings are due primarily to the proximity of industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government. There are also low intensity residential activities in the assessment area. While the source water assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State’s drinking water standards for microbial contamination. A copy of the full assessment can be obtained by contacting us, as noted above.

Why save water and how to avoid wasting it?

Although our system has an adequate amount of water to meet present and future demands, there are many reasons why it is important to conserve water:

- ☐ Saving water saves energy and some of the costs associated with these necessities of life;
- ☐ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- ☐ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire-fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ☐ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up and you can save almost 6000 gallons per year.
- ☐ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- ☐ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes, if it moved, you have a leak.

In Closing:

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community and our way of life. Please call our office at 607-739-5691 if you have questions. Copies of our test reports may be viewed at the Horseheads Village Hall or please visit our web site: www.horseheads.org

Sincerely yours,

Don Gaylord
Chief Water Operator

Project Manager

03/07/2023

Date Submitted



APPENDIX B – SITE HEALTH AND SAFETY PLAN

Site-Specific Health and Safety Plan (HASP)



Project Title:

Former Matt Brewer Oil - Site #808032

Location:

915 East Market Street, Elmira, New York 12233

Prepared For:

New York State Department of Environmental Conservation

LaBella Project No. 2234026.096

TABLE OF CONTENTS

0.0	HASP Acknowledgment	4
1.0	Introduction	5
2.0	Responsibilities	5
3.0	Daily Pre-Job Safety Meetings	5
4.0	Site Information	5
5.0	Scope of Work	6
6.0	Emergency Information	6
7.0	Potential Health and Safety Hazards and Controls	7
	Physical Hazards	7
	Biological and Environmental Hazards	10
	Ergonomic Hazards	12
	Chemical Hazards (General)	12
	Individual Contaminant Hazards	13
8.0	Personal Protective Equipment (PPE)	7
9.0	Employee Training	15
10.0	Exposure Monitoring	15
11.0	Site Control	15
12.0	Recordkeeping	15

ATTACHMENTS

APPENDICES

APPENDIX A - Directions to Medical Facility

APPENDIX B – Incident Reporting Form

APPENDIX C – Pre job Safety Tailgate/ Toolbox Meeting Form

0.0 HASP Acknowledgment

All LaBella project personnel, contractors, and subcontractors are required to sign the following agreement prior to conducting work:

1. I have read and fully understand the requirements of this site-specific HASP including my individual responsibilities listed above.
2. I agree to abide by the provisions of the HASP and participate in any health and safety meetings or modifications to the HASP criteria during the implementation of work.

Name	Company	Date

1.0 Introduction

The purpose of this Health and Safety Plan (HASP) is to provide guidelines for responding to potential health and safety issues that may be encountered at the project site, located at 915 East Market Street, Elmira, New York 12233. This HASP only reflects the policies of LaBella Associates D.P.C. and its affiliated companies LaBella Environmental, LLC and Aztech Environmental Technologies, Inc., collectively referred to as “LaBella”. The requirements of this HASP are applicable to all approved LaBella personnel, contractors and subcontractors at the work site. This document’s project specifications are to be consulted for guidance in preventing and quickly abating any threat to human safety or the environment. The provisions of the HASP do not replace or supersede any federal, state or local regulatory requirements.

2.0 Responsibilities

This HASP presents guidelines to minimize the risk of injury to project personnel, and to provide rapid response in the event of injury. The HASP is applicable only to activities of approved LaBella personnel and their authorized visitors specific to this project. The Project Manager shall implement the provisions of this HASP for the duration of the project. It is the responsibility of LaBella employees to follow the requirements of this HASP, and all applicable company safety procedures.

3.0 Daily Pre-Job Safety Meetings

Prior to the beginning of work each day the Field Supervisor/Foreman or on-site Project Manager will review upcoming daily job requirements, anticipated hazards and hazard control measures with the project team members. At this meeting information such as personal protective equipment, site conditions, emergency procedures, and other applicable topics may be addressed. A copy of the **Daily Pre-Job Safety Tailgate/Toolbox Meeting Form** is attached to this HASP.

4.0 Site Information

Project Name:	Former Matt Brewer Oil - Site #808032
LaBella Project No.:	2234026.096
Project Location:	915 East Market Street, Elmira, New York 12233
Current Use of Project Location:	Vacant land with monitoring and injection wells. Site contains vegetated and paved portions with partial foundation and building remnants.
Uses of Surrounding Areas (Res Vacant Land, Commercial, etc.):	Industrial businesses with nearby residential properties.
Proposed Date(s) of Field Activity - Start:	2024-07-08

Proposed Date(s) of Field Activity - End:	2024-08-01
---	------------

5.0 Scope of Work

The proposed field work covered under this HASP includes the following:

- Remedial Injection activities involving 6,000 pounds of CarBstrate. Use of a skid steer or other heavy equipment. Water storage and mixing operations.

6.0 Emergency Information

The personnel and emergency response contacts associated with the proposed scope of work are presented below and are to be posted onsite during all field activities. The Site Safety Officer (SSO) is the primary authority for directing site operations and relaying communications under emergency conditions. During the SSO's absence, the Project Manager or Site Supervisor will lead emergency operations.

Project Personnel		
Contact	Name	Phone
LaBella Project Manager	Jason Natale	518-528-5439
LaBella Site Supervisor	Tom Giamichael	518-337-7635
Corporate Safety Manager	Catherine Monian	845-486-1557
Environmental Division Safety Program Manager	Tim Ruddy	315-440-5125
Site Safety Officer	Tom Giamichael	518-337-7635
Site Contact	Tom Giamichael	518-337-7635
Human Resources	Shamika McDuffie	518-540-4932
Emergency Personnel including Police and Fire Dept and Ambulance – Dial 911		
Hospital- see <i>Hospital Route Section below for directions</i>	St. Joseph's Hospital 555 St. Joseph's Blvd, Elmira, NY	607-733-6541
Poison Control		800-336-6997
NYSDEC Spill Response Hotline		800-457-7362

First Aid

A First Aid Kit will be located as follows: company vehicles The injured person may be transported to a trained medical center for further examination and treatment. The preferred transport method is a professional emergency transportation service; however, if this option is not readily available or would result in excessive delay, other transport is authorized.

Under no circumstances should an injured person transport themselves to a medical facility for treatment, no matter how minor the injury may appear.

Incident Reporting

Employees shall report all incidents and injuries to their supervisor as soon as possible, including those involving employees operating vehicles and other equipment. All reporting procedures contained in LaBella Safety Policy 1.22 must be followed.

During emergencies employees should seek medical care immediately. When contacting their Supervisor/Safety Manager/HR, employees should discuss medical care options. If an employee is asked by medical personnel for a worker's compensation number they should tell them that LaBella should be billed directly.

When emergency medical care is not imminent, employees shall immediately report events to their immediate Supervisor, the Safety Manager and Human Resources, and participate in the investigation process as well as the corrective action process, as needed. An Accident-Incident-Near Miss-Hazard Form must be submitted online or by e-mail to the Supervisor, Safety Manager and HR as soon as possible but no later than 24 hours after the event. The Form can be found on LaBella's intranet under "Operations".

7.0 Potential Health and Safety Hazards and Controls

This section lists potential health and safety hazards that project personnel may encounter at the project site and actions to be implemented by approved personnel to control and reduce the associated risk to health and safety. This is not intended to be a complete listing of any and all potential health and safety hazards. New or different hazards may be encountered as site environmental and site work conditions change. The suggested actions to be taken under this plan are not to be substituted for good judgment on the part of project personnel. At all times, the Site Safety Officer has responsibility for site safety and their instructions must be followed.

<i>Physical Hazards</i>		
Work Action or Condition	Potential Safety Hazard	Controls (including PPE)
Blades and Sharp Objects	Injury	Blades and Sharp objects are likely to be present on site, presenting risk of physical injury. The following

		<p>hazard control measures will be applied:</p> <ul style="list-style-type: none"> • Only use tools designed for the task. Do not improvise. • Inspect the tool before use; do not use dull or damaged blades. • Carry blades with tip sheathed or pointed down and away from the body. • Cut on a stable surface with sufficient lighting. • Wear appropriate PPE (gloves, safety glasses, etc.).
Hand Tools	Physical injury	<ul style="list-style-type: none"> • Do not use a tool if you have not been trained. Inspect tool before use and do not use damaged tools. • Maintain tools in good condition and follow manufacturers' instructions. • Wear gloves, safety glasses and appropriate PPE /apparel, avoiding loose clothing; secure long hair. • When using a cutting tool hold it firmly and cut away from your body, never towards it. • If working on a ladder or scaffold raise and lower tools using a bucket and hand line; never carry tools in a way that prevents using both hands on a ladder (maintain three points of contact)
Heavy Equipment - Working Near	Struck by, Caught in between, Causing an obstruction on existing roadway, Rollaway, and hearing damage.	<p>Working near heavy equipment presents struck-by and caught-in or in-between risks. Heavy equipment can also rollaway or obstruct roadways, limiting visibility. The following hazard control measures will be applied:</p> <ul style="list-style-type: none"> • Maintain 360 degrees of awareness of your surroundings. • Meet the Operator, discuss work operations, and stay in line of sight. • Wear high visibility clothing (outer layer), hard hat, safety glasses, work boots. • Stand in safe zone away from blind areas. Never walk behind or to the side of heavy equipment without the operator's knowledge. Have an escape plan. • Stay out of the swing zone of heavy equipment such as excavators or traditional auger rigs. The swing zone is defined as an entire 360 degree circle equipment may move within as measured from a central location point. • Only approach drill rig after auger has stopped rotating and the operator has given the OK for you to approach to collect a sample. • Wear hearing protection when working near heavy or moving equipment.
Hot Weather & Sun, Other Heat Hazards	Prickly Heat (Heat rash), Heat Cramps, Heat Exhaustion	Environmental heat hazards, whether indoors or outdoors, present physical injury risks. Exercise caution when working in hot temperatures or around hot tar or

	Heat Fatigue, Heat Collapse, Heat Stroke, Sunburn	<p>other materials, hot ovens or other equipment, heat absorbing surfaces such as roofs and roads, and reflective surfaces such as water or metal. The following hazard control measures will be applied:</p> <ul style="list-style-type: none"> • Have sunscreen available for ultraviolet protection on sunny days. • Have water or electrolyte drinks for dehydration. • Check the weather and adjust work schedules if heat is excessive. Work early or later in day. • Perform work during cooler hours of the day or at night if adequate lighting can be provided. • Utilize shelter (air-conditioned, if possible) or shaded areas to protect personnel during rest periods. • Use cooling devices such as fans and water misters. • Allow workers to take breaks in air-conditioned vehicles.
Parking Vehicle	Struck by, caught in between, casing an obstruction on existing roadway. Fire from plants under hot exhaust	<ul style="list-style-type: none"> • Workers will park far enough off the edge of the road to stay well clear of traffic. • Put on hi-visibility vest before exiting parked car. • Leave Field Card on dashboard. • Use appropriate number of cones to mark for oncoming traffic as needed. • Do not park on/in flammable vegetation. • Keys stay on field person.
Power Tools	Injury from improper use Electrical shock and electrocution	<ul style="list-style-type: none"> • Unplug power tools when not in use. • Do not use a tool if you have not been trained. Inspect tool and cord before use and do not use damaged tools. • Maintain tools in good condition and follow manufacturers' instructions. • Wear gloves, safety glasses and appropriate PPE /apparel, avoiding loose clothing; secure long hair. • Never remove a safety guard when a tool is being used. • Only plug electric tools into a grounded receptacle with a GFCI. Stop using tool if slight shock or tingling is felt. • Secure work with clamps to have both hands free to use the tool. • Keep power tool cords away from heat, oil and sharp edges. • Tag all damaged tools with "Do Not Use".
Roads/Traffic - Near/On	Getting struck by vehicle	<ul style="list-style-type: none"> • If working in or around traffic (including in parking lots), workers will wear an ANSI Level 2 high visibility clothing (vest). An ANSI Level 3 vest (with sleeves) is required when working near traffic exceeding 50 mph. Additional reflective gear is also required for night

		<p>work.</p> <ul style="list-style-type: none"> • Maintain 360 degrees of awareness of your surroundings. • Face traffic, stay in a safe zone, and have an escape route. • Do not wear a headset or talk on your cell phone. • DOT aproved Traffic Cones and all Traffic Cobtral Devices must be designed and placed according to Uniform Traffic Contral Devices (MUTCD) standards (See 3.13 WORK ZONE SAFETY in Labella's Safety Manual for more information) • If possible, close the entrance/exit to ensure the worker's safety, and use a spotter if the worker will not have the ability to keep their attention on vehicles maneuvering in the area. • Workers should NOT sit down or turn their back to traffic when working. If they must do either of these things to complete the work scope, use a spotter or consider alternate ways or tools to do the work.
Slip-Trip-Fall	Injury	<ul style="list-style-type: none"> • Reduce and avoid slippery (wet, icy, oily, muddy, etc.) surfaces. • Workers will watch where they step and wear proper footwear. • Keep work areas free of obstructions and debris.
Uneven or Wet Terrain (Slopes, Leaves, Holes, etc.)	Slip, Trip, Fall	<ul style="list-style-type: none"> • Wear appropriate footwear for the site and conditions: steel toe or composite boots for construction sites, skid-resistant, hiking boots for other field work if indicated. • Use walking stick or other object for additional support/balance and to check for animal burrows/holes. • Watch for trip hazards such as uneven terrain, holes, ditches, puddles (if raining) stretched wires or ropes, or other materials or pieces of equipment in path.

<i>Biological and Environmental Hazards</i>		
Work Action or Condition	Potential Safety Hazard	Controls (including PPE)
Allergens	Allergic reaction	Common workplace allergens like dust mites, mold, pollen, fungi, and metal can trigger a dangerous reaction. The following hazard control measures will be applied:

		<ul style="list-style-type: none"> • Take medication (i.e. anti-histamine) to minimize allergic reaction to pollen or other allergen as directed by your medical care practitioner, and bring it with you in the field. • Wear a dust mask, if necessary.
Hazardous Insects	Injury from hazardous insects, including allergic reactions	<p>Hazardous animals and insects may be encountered on a variety of properties, including rural sites. The following hazard control measures will be applied:</p> <ul style="list-style-type: none"> • Apply bug repellant spray or lotion to exposed skin. • If you have been prescribed medication for stings, bring it with you. • Be cautious of walking path and foot placement to avoid places where snakes/spiders may be, (e.g., stepping over logs). • Stay on trails away from high grassy areas/bushes. Tuck pants into boots, wear tall boots if going through tall grass/bush. • For Ticks: Conduct daily tick check, wear long pants/long-sleeved shirts/hats/socks that are light in color, put hair up, carry tick removal kit. • For Spiders: Don't put unprotected hands inside items that might have spiders and be careful moving undisturbed piles of materials. • For Bears: Make noise and use bear spray. • For Snakes: Stay away - striking distance is 1/2 to 2/3 their body length.
Hazardous Plants	Injury from Hazardous Plants	<p>Hazardous plants may be encountered on rural sites. The following hazard control measures will be applied:</p> <ul style="list-style-type: none"> • Create a narrow path or route when possible. • Wear appropriate PPE for the vegetation (i.e. leather gloves, Carhart coveralls, and face shield for vegetation that could cause cuts/punctures and/or is higher than waist level) • Become familiar with and avoid poisonous plants, see Safety Manual section '3.05 Plants' • Separate clothes from normal laundry if you've been in contact with poisonous plants. • Use soap/water or Technu to wash poisonous plant oils from skin.
Thunderstorms, Lightning	Lightning, Severe Thunderstorms, Tornadoes	<ul style="list-style-type: none"> • Check the weather and adjust work schedules. • Do not begin or continue work until lightning subsides for 20 minutes. • Take shelter immediately, 360 degrees of awareness. • Thunderstorms - do not stand under a tree, near water or in the middle of a field. • Tornado: lie flat on the ground, preferably a low shallow space (ditch)

<i>Ergonomic Hazards</i>		
Work Action or Condition	Potential Safety Hazard	Controls (including PPE)
Lifting Heavy Objects	Injury from Improper Lifting/Lifting weights that are too heavy	<ul style="list-style-type: none"> • When lifting heavy objects, keep the load close to the body and use the leg muscles instead of the back muscles to perform lifting tasks. • Do not attempt to lift large, heavy (especially over 50-lbs), or awkwardly shaped objects without assistance from another employee or from a manual lifting devise.
Noise (Loud, Sustained)	Hearing Damage	<ul style="list-style-type: none"> • Ear protection will be worn at all times when personnel are within 20-feet of operating equipment or when noise level becomes consistently loud enough to have to raise voice to communicate with someone. • Hearing protection will also be worn in the vicinity of generators, concrete cutters, and any other high noise emitting equipment.

<i>Chemical Hazards (General)</i>		
Work Action or Condition	Potential Safety Hazard	Controls (including PPE)
Sample Collection - Soil or Groundwater	<i>Exposure to contaminants. Hand injury from cutting, crushing, tool or glass breakage. Back strain from lifting cooler.</i>	<ul style="list-style-type: none"> • When collecting samples, workers will utilize nitrile gloves, safety glasses or goggles. If material being sampled potentially contains fill or other sharp material, use a stainless steel spoon (or similar) as a tool to collect the sample. Any such tools should be dedicated or properly decontaminated between samples. • When lifting sample coolers, workers will use proper lifting techniques and get assistance when possible, especially for containers heavier than 50 lbs.
Chemical Exposure - Semi-Volatile Organic Compounds (SVOC)	<i>Contaminants identified in testing locations at the Site include SVOCs. SVOC-impacted media including fill material may be encountered during</i>	<p>The presence of SVOCs in site media may be detected by their odor and monitoring instrumentation. SVOC concentrations at this Site are not anticipated to exceed PELs. The following hazard control measures will be applied, however:</p> <ul style="list-style-type: none"> • Workers should be wearing appropriate PPE and following listed decontamination procedures to prevent exposures. Refer to the relevant sections of this HASP

	<i>subsurface activities at the project work site.</i>	for more detail regarding PPE and decontamination procedures.
Chemical Exposure - Volatile Organic Compounds (VOC)	<i>Contaminants identified in testing locations at the Site include various volatile organic compounds (VOCs), primarily VOCs associated with Site contamination. Volatile organic vapors may be encountered during subsurface activities at the project work site. Inhalation of high concentrations of volatile organic vapors can cause headache, stupor, drowsiness, confusion and other health effects. Skin contact can cause irritation, chemical burn, or dermatitis. Relevant Safety Data Sheets are included as Appendix 1.</i>	<p>Volatile Organic Compound (VOC) gases may be emitted from a number of materials and products. The presence of organic vapors may be detected by their odor and by monitoring instrumentation and can lead to physical harm. VOC concentrations at this Site are not anticipated to exceed PELs. The following hazard control measures will be applied, however:</p> <ul style="list-style-type: none"> • Workers should be wearing appropriate PPE, following listed decontamination procedures and be periodically screening the work zone to prevent against and evaluate for unexpected exposures. Refer to the relevant sections of this HASP for more detail regarding PPE, decontamination procedures and work zone screening.

<i>Individual Contaminant Hazards</i>			
Chemical	OSHA Permissible Exposure Limit (PEL)/ NIOSH Recommended Exposure Limit (REL) or Immediately dangerous to life or health air	Routes of Exposure	Symptoms of Overexposure

	concentration values (IDLH)		
1,2-Dichloroethylene (VOC)	TWA 200 ppm (790 mg/m3) NIOSH REL/IDLH: TWA 200 ppm (790 mg/m3)	The substance can be absorbed into the body by inhalation of its vapour and by ingestion.	irritation eyes, respiratory system; central nervous system depression
Tetrachloroethane (VOC)	REL: TWA 10 ppm (60 mg/m3) ST 20 ppm (120 mg/m3)	inhalation, skin absorption, ingestion, skin and/or eye contact	nausea, vomiting, abdominal pain; tremor fingers
Trichloroethylene (VOC)	TWA: 50 ppm 270 mg/m3 Ceiling: 200 ppm STEL: 200 ppm NIOSH REL/IDLH: IDLH: 1000 ppm	The substance can be absorbed into the body by inhalation and by ingestion.	dizziness, headaches, sleepiness, confusion, nausea, unconsciousness
Vinyl Chloride (VOC)	TWA: 1PPM carcinogen category: 1 NIOSH REL/IDLH: REL: 1 ppm = 2.56 mg/m3 IDLH - NA	inhalation, skin and/or eye contact (liquid)	lassitude (weakness, exhaustion); abdominal pain, gastrointestinal bleeding; enlarged liver; pallor or cyanosis of extremities; liquid: frostbite

Additional chemicals of concern at the Site include:

1,1,1 – TCA
Cis-1,2-dichloroethene
Xylene (mixed)
Toluene
Benzo(a)pyrene
Methylene chloride
Lead

8.0 Personal Protective Equipment (PPE)

All site workers will have appropriate training as identified in Section 7.0. Training includes the identification of PPE necessary for various tasks; how to don, doff, adjust, and wear PPE; limitations of PPE; and proper care, inspection, testing, maintenance, useful life, storage, and disposal of the PPE. PPE will be inspected on a regular basis.

Modified Level D:	<ul style="list-style-type: none"> • Street clothes • Safety glasses • Safety toed boots • Hard hat • An ANSI Level II safety vest
-------------------	---

	<ul style="list-style-type: none">• Nitrile glove if potentially contacting any contaminated materials• Disposable N95 masks will be provided for use if needed
--	--

9.0 Employee Training

All workers and other personnel shall receive appropriate training prior to engaging in site activities. All workers must recognize and understand the potential hazards to health and safety that are associated with the proposed scope of work and must be thoroughly familiar with programs and procedures contained in this Safety Plan.

The following training levels were determined to be needed:

- OSHA 10 Hour Safety (Construction Industry)
- OSHA 40 Hour - HAZWOPER

10.0 Exposure Monitoring

No - VOC Exposure Monitoring not required or applicable

11.0 Site Control

No - Contaminant Exclusion or Reduction zone not required or applicable at the site.

12.0 Recordkeeping

An electronic or hard-copy version of this HASP will be present at the Site during all fieldwork activities. Copies of field logs, including daily pre-job safety meeting logs, will be filed by LaBella and available for the duration of the project.

Employees will be able to provide physical or electronic copies of the required training certificates.

Incident reporting will be completed in accordance with LaBella policies.



APPENDIX A

Directions to Nearest Medical Facility

Hospital Route

Hospital Directions:

← from 915 E Market St, Elmira, NY 14901
to St Joseph's Hospital, 555 St Joseph's Blvd, Elmi...

2 min (0.6 mile)
via E Church St
Fastest route

915 E Market St
Elmira, NY 14901

- ↑ Head southwest on E Market St toward Judson St
335 ft
- Turn right at the 1st cross street onto Judson St
0.1 mi
- ← Turn left onto E Church St
0.3 mi
- ← Turn left onto Washington St
266 ft
- Turn right
Destination will be on the left
374 ft

St Joseph's Hospital
555 St Joseph's Blvd, Elmira, NY 14901

The map displays a route from 915 E Market St to St Joseph's Hospital. The route is highlighted in blue and orange. The map includes street names, landmarks, and a search bar. The route is as follows: Head southwest on E Market St toward Judson St, Turn right at the 1st cross street onto Judson St, Turn left onto E Church St, Turn left onto Washington St, Turn right. The destination will be on the left.

Search along the route

Gas EV charging Hotels

Virginia's Hair Design
Beecher Elementary School
COLDIRON FUELS
Kalec Monument Services
ACCESS-VR - Elmira Office
Workforce Corning Community College
St Joseph's Apartments
St Joseph's Hospital
Arnot Health Dermatology
Titan Strength
Twin Tiers Auto Wash
Top Emergency Dental
Eastgate Homes
Blandford Park
Dandy Mini Mart Convenience store

2 min 0.6 miles
2 min 0.6 miles
3 min 0.6 miles

915 East Market Street



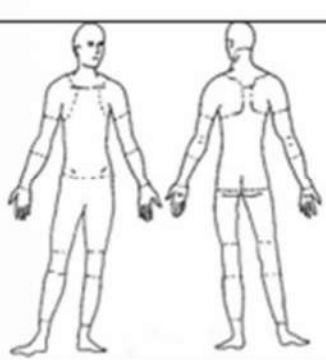


APPENDIX B

Incident Reporting Form



PART B - EMPLOYEE ACCIDENT/ INCIDENT/ NEAR MISS / HAZARD REPORT

Completed by Employee with Supervisor			
Complete all fields. Be as specific as possible and include drawings, photos, additional narrative, as needed.			
Person Submitting Form:	Name of Affected Employee:	Employee's Supervisor:	
Employee's Division Director:	Employee's Home Office Location:	Date of Hire:	
<p>-An accident is bodily injury or illness. -An incident is damage to property/equipment - including stolen equipment*. -A near-miss is an incident in which no property was damaged and no personal injury was sustained but where given a slight shift in time or position, damage or injury easily could have occurred. -A hazard is an object or situation that has the potential to harm people or cause damage to property or the environment.</p> <p>If you have IT equipment that has been stolen or damaged, you must complete the IT Incident Report located on the Information Technology page of the intranet immediately for security purposes.</p>			
Date of Event	Time of Event:	Type of Incident: <input type="checkbox"/> Accident <input type="checkbox"/> Incident <input type="checkbox"/> Near Miss <input type="checkbox"/> Hazard	Project Number:
Address of Incident:	Additional Information Regarding Incident Location:		
How did the incident happen? (Describe step by step the events that led up to the event and site conditions, weather and tools. Document any immediate action taken to protect internal/external staff)			
Incident involved the following (check all that apply): <input type="checkbox"/> Vehicles If Yes, list license Plate Numbers: <input type="checkbox"/> Machines <input type="checkbox"/> Equipment <input type="checkbox"/> Tools <input type="checkbox"/> Property <input type="checkbox"/> Environment <input type="checkbox"/> Chemicals <input type="checkbox"/> Electronic Equipment <input type="checkbox"/> Wildlife			
Describe how items above played a part in the accident/incident and if they contributed to/resulted in injury:			
Did property or equipment damage occur: <input type="checkbox"/> Yes <input type="checkbox"/> No		Approximate estimated value of damage:	
Names of all involved persons:		Witness Statements Attached (1 for each witness)(see Safety Manual 11.01): <input type="checkbox"/> Yes <input type="checkbox"/> No	
Did this incident involve an injury? <input type="checkbox"/> Yes <input type="checkbox"/> No If No - sign at bottom and provide to Supervisor, Safety Manager and HR.			
Injured Employee Name:	SSN: (last 4 digits)	Date of Birth:	Gender:
Job Title:	Employee type: <input type="checkbox"/> Full time <input type="checkbox"/> Part Time <input type="checkbox"/> On-Call/temporary	Time Employee began Work & Time of Injury:	Phone Number:
Type of injury (e.g. abrasion, bruise, burn, sprain, cut, etc):		Was PPE being used & what type:	
Was medical treatment provided? <input type="checkbox"/> Yes <input type="checkbox"/> No Was medicine prescribed? <input type="checkbox"/> Yes <input type="checkbox"/> No Type: Describe treatment:		 Part of body affected: Shade all that apply or list:	
Hospital/Clinic & Dr Name:	Is employee still being treated? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Has employee returned to work? <input type="checkbox"/> Yes <input type="checkbox"/> No	Was employee assigned: <input type="checkbox"/> Restricted duty <input type="checkbox"/> Job transfer <input type="checkbox"/> Days away from work		
Employee Name (print):		Signature:	Date:
Supervisor Name (print):		Signature:	Date:

APPENDIX C

Pre job Safety Tailgate / Toolbox Meeting Form

PRE-JOB SAFETY TAILGATE/TOOLBOX MEETING FORM

Date		Time	
Location or Address		Temperature	
Project Number		Humidity	
Conducted by		Conditions	
Were all workers reminded that COVID is still prevalent and that appropriate measures should be taking to prevent infection of themselves and others?			Yes <input type="checkbox"/> No <input type="checkbox"/>

911

If 911 is unavailable at this location, please state the procedure for reporting emergencies

List Safety Topic of Discussion and/or Any Specific Hazards for the Work Being Performed Today	
1	
2	
3	
4	
5	
6	
7	
List Control Measures for Each Specific Hazard Listed Above	
1	
2	
3	
4	
5	
6	
7	

PLEASE SIGN THE BACK OF THIS SHEET

The presenter and all attendees shall print and sign in the appropriate areas on the back of this sheet



APPENDIX C – COMMUNITY AIR MONITORING PLAN (CAMP)



Community Air Monitoring Plan (CAMP)

Site Location:

Former Matt Brewer Oil Site
NYSDEC Site #808032
915 East Market Street
Elmira, NY

May 2022

Table of Contents

1.0	Introduction.....	1
2.0	Site Monitoring Requirements.....	1
2.1	Monitoring Locations	1
2.2	Monitoring Location Setup	1
2.3	Periodic Monitoring	1
2.4	Continuous Monitoring.....	2
3.0	VOC Monitoring, Response Levels, and Actions	2
4.0	Particulate Monitoring, Response Levels, and Actions.....	3

1.0 Introduction

LaBella's Community Air Monitoring Plan (CAMP) is intended to provide protocols for particulate and volatile organic compound (VOC) monitoring in air for the duration of the project. Development of this plan is based on the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan, included as Attachment 1 to this plan.

2.0 Site Monitoring Requirements

2.1 Monitoring Locations

Due to the proximity of adjacent commercial and residential properties, CAMP monitoring stations will be installed at the perimeter of the work area. It is anticipated that a total of three (3) CAMP monitoring stations will be utilized during all intrusive work. CAMP monitoring locations will consist of one (1) upwind location and two (2) downwind locations. This will ensure that small changes in wind direction are captured by the downwind CAMP locations. Upwind and downwind locations will be selected at the beginning of the day based on prevailing wind direction, and will be reassessed in the middle of the day to determine if CAMP monitoring locations should be adjusted based on wind direction. Any changes to CAMP monitoring locations will be noted in LaBella's CAMP monitoring reporting.

2.2 Monitoring Location Setup

Each monitoring location will consist of the following:

- One (1) DustTrak particulate monitor, which will be capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes or less for comparison to the airborne particulate action level. Each monitor will be equipped with an audible or visual alarm to indicate exceedance of the action level.
- One (1) photoionization detector (PID), which will be capable of calculating 15-minute running average concentrations to be compared to the standards presented in Section 3.0 below.

Additionally, LaBella's on-Site geologist will have a handheld PID meter to monitor the work area and ensure that VOC levels are safe for all on-Site personnel. This PID will also be used to screen excavated soils to help determine when the limits of excavation have been reached.

2.3 Periodic Monitoring

Periodic monitoring for VOCs will be required during non-intrusive activities, such as during Site mobilization and restoration work. LaBella's on-Site personnel will collect VOC readings during non-intrusive Site activities to ensure that VOC levels are below action levels presented in Section 3.0 below. Particulate monitoring will not be conducted during non-intrusive work. Instead, visual monitoring for dust will be conducted during non-intrusive work.

2.4 Continuous Monitoring

Continuous monitoring for VOCs and particulates will be required for all ground intrusive activities and during demolition of contaminated or potentially contaminated features (i.e. asphalt removal). Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

In the event that soil borings are advanced at the Site, LaBella will utilize a modified CAMP setup which will include one (1) upwind monitoring location and one (1) downwind monitoring location. This setup will be utilized for soil borings only, as it is anticipated that VOC and dust generation will be minimal during soil boring activities.

3.0 VOC Monitoring, Response Levels, and Actions

VOCs must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis during all intrusive work. Upwind concentrations will be measured at the start of each workday and at the same monitoring intervals as downwind locations to establish background conditions. If wind direction changes, the upwind monitoring location will be adjusted in the middle of the day accordingly. The monitoring work will be performed using PIDs at each monitoring location, as well as a handheld PID to monitor breathing zone VOC concentrations. Since the contamination of concern (PCE) is a VOC, PIDs are appropriate for perimeter and work area monitoring.

PIDs will be calibrated daily for total VOCs. PIDs utilized will be capable of calculating 15-minute running average concentrations, which will be compared to the following levels:

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapor identified, corrective actions be taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less – but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.
4. All 15-minute readings must be recorded and be available for the State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

4.0 Particulate Monitoring, Response Levels, and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at CAMP monitoring locations. The particulate monitoring will be performed using real-time equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. In addition, fugitive dust migration will be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) great than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed $150 \text{ mcg}/\text{m}^3$ above the upwind level and provided that no visible dust is migrating from the work area.
2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than $150 \text{ mcg}/\text{m}^3$ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within $150 \text{ mcg}/\text{m}^3$ of the upwind level and in preventing visible dust migration.
3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

In addition to the above action levels, LaBella's CAMP monitoring program will adhere to Appendix 1B, "Fugitive Dust and Particulate Monitoring" of the NYSDOH Generic CAMP found in NYSDEC's DER-10 Guidance Document. This Appendix provides guidance for particulate monitoring performance standards, QA/QC procedures, and dust mitigation techniques. This Appendix is included in Attachment 1 of this plan.

J:\NYSDEC\2161937 - INVESTIGATION & REMEDIATION\064- FORMER MATT BREWER OIL SITE CALLOUT
144267\SUBMITTALS\CAMP\CAMP_FORMER MATT BREWER SITE.DOC