
From: Mallory Burlingame <msb@hallingcayo.com>
Sent: Wednesday, February 14, 2024 2:07 PM
To: Lester, Lawrence J - DNR <Lawrence.Lester@wisconsin.gov>
Cc: Ted Warpinski <taw@hallingcayo.com>; Andy Skwierawski <mas@hallingcayo.com>; Nicholas Hill <nhill@enviroforensics.com>; Wayne Fassbender <wfassbender@enviroforensics.com>
Subject: Request for Variance From Consultant / BRTTS#02-11-512824

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Good Afternoon,

Attached please find correspondence from Attorney Andy Skwierawski dated February 14, 2024, regarding the above-referenced matter.

Thank you,
Mallory



Mallory S. Burlingame
Legal Assistant
HALLING & CAYO, S.C.
320 E. Buffalo Street, Suite 700
Milwaukee, WI 53202

(414) 271-3400
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January 4, 2022

David Bieno
Portage Cleaners
104 East Wisconsin Street
Portage, Wisconsin 53901

Subject: SVE System Design Report
Portage Cleaners
104 East Wisconsin Street
Portage, Wisconsin 53901
BRRTS # 02-11-512824
EnviroForensics Project No: 6493

Dear Mr. Bieno:

EnviroForensics, LLC (EnviroForensics) is pleased to submit this Work Scope and Cost Estimate for the installation, startup, and one (1) year of operation, maintenance, and monitoring (OMM) for a Soil Vapor Extraction (SVE) remediation system at the Portage Cleaners property located at 101 East Wisconsin Street, Portage, Wisconsin (Site). As detailed in EnviroForensics' *Source Area Remediation Work Scope and Cost Estimate*, dated September 9, 2019, SVE implementation is deemed an appropriate, cost-effective remedial option at the Site and is likely to be highly effective in the closed conditions of the building with raised foundations, deep footers, and slab cover.

1.0 SVE INSTALLATION AND START UP

SVE technology will be used to remediate vadose zone soil impacts beneath and around the Site building. The primary objective of SVE is to remove contaminant mass from vadose zone soil to concentrations that no longer pose a risk of vapor intrusion to the Site building.

The following sections describe the SVE system design, OMM activities, and performance monitoring program.

EnviroForensics, LLC
N16 W23390 Stone Ridge Drive, Waukesha, WI 53188
Phone: 262-290-4001 • Fax 317-972-7875

1.1 Permitting

Construction and operation permits apply to remediation systems that emit contaminants under Wisconsin Administrative Code (WAC) Chapters NR 406 and 407, respectively. The following permitting thresholds apply to remediation systems, regardless of whether or not emissions control devices are used:

- Total volatile organic compound emissions greater than 5.7 pounds per hour (lb/hr) [NR 406.04(1)(m)2]; and
- Assuming a stack height less than 25 feet, tetrachloroethene (PCE) emissions greater than 9.11 lb/hr or 301 pounds per year (lb/yr) [NR 407.03(1)(sm)].

EnviroForensics anticipates that the SVE system will be exempt from permitting requirements, however, the SVE system is designed so that carbon treatment can be easily added if necessary to reduce the concentrations of chlorinated volatile organic compounds (CVOCs) to below the permit thresholds.

Ambient air quality criteria defined in WAC Chapter NR 445.07 also apply to remediation systems. For example, the concentration of PCE must be less than 4,069 $\mu\text{g}/\text{m}^3$ in ambient air while the SVE system is operating. The monitoring program designed to ensure compliance with all emissions and air quality standards is described in Section 1.3.

1.2 Infrastructure Installation

The extraction wells and piping locations are depicted on **Figure 1**. Two (2) extraction wells will be installed as shown on **Figure 1**. Each extraction well is anticipated to produce an effective radius of influence of at least 15 feet with negative pressure equal to, or exceeding, 0.1 inches of water (inH₂O). The system is equipped with individual conveyance line valves that can be adjusted to distribute vacuum in variable subsurface conditions as needed.

The new extraction wells will be constructed of 4-inch diameter schedule 40 polyvinyl chloride (PVC) with 0.020-slotted screen installed from 1.5 to 4.5 feet bgs. The extraction wells will be connected to the SVE blower equipment with 4-inch diameter PVC piping anchored to the inside wall of the Site building. The PVC piping will be extended to the SVE equipment enclosure located just outside the Site building along the south wall. **Figure 2** presents an SVE well construction diagram.

1.3 SVE Mechanical System

Below is a summary of system equipment. A process and instrumentation diagram is included as **Figure 3**.

- Regenerative vacuum blower capable of providing up to 150 actual cubic feet per minute of air and applying vacuum up to approximately 4 inches of mercury.
 - The blower will be powered by a 5Hp 3-phase, electric motor.
- A pressure relief valve assembly shall be installed to protect the blower by automatically reducing the applied vacuum at the blower.
- Vacuum dilution valve assembly with an intake air filter installed between the moisture separator and vacuum pump to reduce the vacuum applied to the extraction well network.
- A particulate air filter installed in the process plumbing between the moisture separator and vacuum extraction pump to protect the vacuum extraction pump from suspended particles in the inlet air flow.
- A moisture separator (30-gallon) to remove and contain moisture from the air stream prior to the vacuum extraction pump.
 - A float tree assembly will be installed on the moisture separator to automatically shut down the blower after sufficient moisture accumulation.
 - Moisture will likely contain contaminants, so liquid collected will be analyzed by a Wisconsin Certified Analytical Laboratory and managed according to State regulations.
- The remediation system controls shall include the following.
 - Low vacuum switch
- The remediation system instrumentation shall include the following.
 - A differential pressure gauge for calculating airflow (inH₂O)
 - Vacuum gauges at each extraction leg on the manifold (inH₂O)
 - Vacuum gauge at the blower (inH₂O)
 - Temperature gauge on the SVE exhaust (°F)

- System Telemetry will be utilized to monitor system operating conditions and receive alerts.

- Electrical Service
 - Power will be supplied to the system through a stand-alone power supply from the local power company.
 - The anticipated power supply is 3 phase, 4-wire, 208-volt service.
 - A licensed electrician will perform the work necessary to prepare the Site to receive a power drop from the local power company.
 - Upon installation, the electrical service will be inspected by the City of Portage and the local power provider, as required.

- The system equipment will be mounted within an enclosed insulated skid to be located outside along the southern wall of the building as shown on **Figure 1**.

- SVE Plumbing Connections
 - The conveyance piping will be plumbed to a manifold outside the remediation unit and the manifold will be connected to the vacuum pump.
 - Each branch from the SVE manifold will be equipped with a vacuum gauge and valve to control airflow from each extraction well.

1.4 Commissioning and Initial Startup

Once the remediation unit has been delivered, all plumbing connections have been made, and electrical service has been established, the system will be started. The objectives of the startup and optimization phase will be to:

- confirm the system has been constructed as designed;
- confirm the equipment operates as specified; and
- collect and evaluate initial operating data.

2.0 SVE SYSTEM OPERATION AND MAINTENANCE

For costing purposes, the SVE system is anticipated to operate for a period of one (1) year. The SVE system will be operated continuously for the first two (2) months of operation to satisfy air emissions monitoring requirements and to determine sustained mass removal rates. After the first two (2) months, the system may be operated intermittently allowing vapors to accumulate

within the subsurface during the period of inactivity. The intermittent operation may be two (2) weeks on, followed by two (2) weeks off. Operating in this fashion will conserve power costs.

Routine and periodic OMM of the SVE system will be required. OMM activities will include the following:

- Address system shutdowns or operational issues;
- Record operational parameters and vapor concentrations to evaluate efficiency:
 - Effluent CVOC vapor concentration by sample collection in vacuum canisters;
 - Total system run time;
 - System vacuum;
 - Vacuum at each wellhead;
 - Vacuum at monitoring points;
 - Flow rate; and
 - Exhaust temperature.
- Inspect, maintain, and/or repair the following components as needed and recommended by the manufacturers:
 - Blower belts and pulleys;
 - Blower inlet filter;
 - Blower motor bearings and oil level;
 - System enclosure exhaust fan;
 - Moisture separator tank and float switches;
 - Vacuum bypass valve;
 - Moisture separator dilution valve;
 - Exhaust muffler; and
 - Electrical power phase converter.

EnviroForensics will prepare and submit an OMM Plan to Wisconsin Department of Natural Resources (WDNR) in accordance with WAC Chapter NR 724.13 after the system has been installed.

2.1 SVE Performance Monitoring

The effectiveness of the SVE system will be evaluated periodically by monitoring the subsurface vacuum influence and air emissions of total CVOCs. These activities are summarized below.

Samples of the SVE system emissions will be collected from the effluent piping and analyzed for CVOCs to calculate mass removal rates and cumulative mass removed and to determine operational changes to optimize system performance. Testing is also required to determine whether emissions treatment is required to stay below permitting thresholds. The emissions testing schedule required under WAC Chapter 419.07 is as follows:

- Once each day for the first three (3) days of operation;
- Weekly for the next three (3) weeks; and
- Monthly thereafter.

The effluent samples will be collected in 1-liter vacuum canisters at a rate of 200 milliliters per minute and submitted to a laboratory for analysis for PCE and related compounds. The first two samples, collected on days 1 and 2 of operation, will be analyzed on a rush timeframe to avoid delays in meeting the emissions thresholds.

An annual outdoor air sample is required to evaluate ambient air quality and the need for emissions treatment to meet the ambient air standard. The sample will be collected from a location downwind of the exhaust stack at the time of sampling. The ambient air sample will be collected following the first day of continuous system operation. This is likely the worst-case scenario since subsurface vapor concentrations collected by the SVE system will be reduced over time. One (1) 24-hour sample will be collected using a 6-liter vacuum canister and shipped to a laboratory for analysis of total CVOCs.

Two additional permanent sub-slab vapor monitoring points will be installed within the Site building as indicated on **Figure 1** to measure the negative pressure field extension beneath the building slab.

2.2 Confirmation Sampling

Once performance monitoring data indicates a significantly diminished mass removal rate, or after one (1) year of operation, the SVE system will be shut down for at least 30 days to allow the subsurface to reach equilibrium and sub-slab vapor samples will be collected at the Site building to determine the concentrations of residual impacts and confirm the effectiveness of the SVE remedy. Two (2) sub-slab vapor samples will be collected from the Site building and analyzed via EPA Method TO-15 for the dry cleaner list of CVOCs .

EnviroForensics will then provide recommendations for system decommissioning or a proposed timeframe for continued operation, maintenance, and monitoring. If additional remediation is warranted, a change order will be issued to cover the anticipated duration of system operation.

3.0 ANNUAL GROUNDWATER MONITORING

Due to an already extensive data set, the Site is proposed for annual sampling only as remedial activities are completed.

3.1 2022 Groundwater Monitoring and Reporting

The current monitoring network consists of 11 water table wells (MW-1 through MW-11) and two (2) piezometers (MW-4P and MW-10P) to monitor the groundwater plume emanating from the Site. The well locations are depicted on **Figure 4**.

Prior to sampling, well caps will be removed at least 15 minutes prior to measurement to allow equilibration with atmospheric pressure. The depth to water in each well at the site will be measured to the nearest 0.01 foot. Monitoring well sampling will be completed using low flow (minimal drawdown) groundwater sampling procedures. The procedure involves low volume groundwater purging rates while maintaining minimal drawdown, typically less than 0.1 meters.

EnviroForensics will employ a submersible pump to evacuate water from the screened portion of the well to a water quality probe with flow-through cell apparatus. The water quality probe measures groundwater geochemical parameters: pH, oxidation-reduction potential (ORP), specific conductivity, temperature, turbidity, and dissolved oxygen. Water quality parameters will be monitored throughout purging to verify stabilization prior to groundwater sample collection. Equipment will be calibrated prior to use. Data collected during the sampling activities will be documented on sampling logs and presented in the semi-annual reports.

Groundwater samples will be collected directly into laboratory provided containers with hydrochloric acid preservative and immediately placed into a cooler containing ice. Groundwater samples will be submitted to a state-certified laboratory for analysis of volatile organic compounds (VOCs) according to U.S. Environmental Protection Agency (EPA) Method SW-846 8260B. Proper chain-of-custody documentation will be maintained throughout the process.

One (1) duplicate sample and one (1) equipment blank sample will be collected for every ten (10) or fewer investigative samples. One (1) trip blank sample will be analyzed per sample cooler for quality assurance and quality control (QA/QC) purposes.

3.2 Annual Reporting

EnviroForensics will evaluate groundwater monitoring data annually. The groundwater elevations and contaminant concentrations will be compared to historical monitoring data to identify unexpected or anomalous results. The submittal will be developed to document the results of the sampling events to keep the WDNR updated regarding site activities. Appropriate tables, maps, figures, and appendices will be updated and provided, as needed, to aid data presentations and interpretation and the findings of the investigation as outlined in the WDNR guidelines.

3.3 Investigation Derived Media Management

Groundwater and decontamination fluids generated during monitoring well purging will be placed in 55-gallon steel drums. As with previous monitoring events, all purge water will be transported to the City of Portage Wastewater Treatment Plant is discharged as a non-hazardous material.

4.0 PROPOSED IMPLEMENTATION SCHEDULE

The SVE system will need to be disconnected and transported from a location in Wisconsin, and that process is anticipated to take 3 weeks upon WDNR approval of this design report. Installation of the extraction wells and conveyance piping can be completed within a few days of upon delivery of the SVE system to the Site. The timing of system startup will depend on the availability of electrical service; however, it is anticipated that startup will occur within 90 days of WDNR approval of this design report. Construction documentation will be submitted within 60 days after the remedial system construction is completed. Operation and monitoring reports will be submitted on a semi-annual basis, as required.

5.0 COST ESTIMATES

Costs are based on an initial estimated SVE system operating life of one (1) year. WDNR Form 4400-214D has been completed to allow budget tracking of this work and is included in **Appendix A**. Subcontracted services including SVE use fees, installation costs, laboratory

expenses, and utility service charges are actual charges with no markup. The costs are subdivided into these main work categories:

- Costs to install SVE system infrastructure such as SVE extraction wells, conveyance piping, electrical connections, telemetry and make connections to the SVE mechanical system;
- Anticipated costs for electrical usage for one (1) year and fees for use of the SVE;
- Initial startup and preparation of OMM Plan, exhaust sampling and SVE system OMM for one (1) year;
- Data analysis and bi-annual performance reporting (2 remedial progress reports);
- Annual groundwater monitoring;
- One (1) year post operation sub-slab vapor confirmation sampling; and
- Project coordination and management during design engineering, system installation, and carrying through one (1) year of system operation, maintenance, and reporting.

The SVE system costs including design, installation, OMM, monitoring, and reporting through one (1) year of operation are summarized below. Detailed cost breakdown sheets showing special DERF rates are provided in **Appendix B**. The following table outlines the tasks and cost summary:

TASK	LABOR COSTS	SUB-CONTRACTOR COSTS	DIRECT COSTS	TOTAL COST
Phase C101a				
SVE System and Infrastructure Installation	\$10,220.00	\$9,786.12	\$3,658.20	\$23,664.32
Phase #101b				
SVE System O&M for 12 Months	\$4,360.00	\$10,210.00	\$11,730.80	\$26,300.80
Phase #101c				
Data Analysis and Bi-annual Performance Reporting	\$8,780.00	\$0.00	\$37.30	\$8,817.30
Phase C101d				
Annual Groundwater Monitoring and Reporting	\$6,917.00	\$1,546.86	\$2,019.40	\$10,483.26
Phase #101e				
Confirmation Sampling and Results Reporting	\$2,525.00	\$270.00	\$379.00	\$3,174.00
Phase C101f				
Project Management (through install and one year O&M)	\$6,200.00	\$0.00	\$16.80	\$6,216.80
TOTAL	\$39,002	\$21,813	\$17,842	\$78,656

Certain limitations and circumstances encountered during the implementation of this Work Scope may result in the need for additional work activities and/or additional costs incurred. In these situations, EnviroForensics will contact you via telephone to discuss the issue or to leave a voicemail with a summary. A written Change Order summarizing the additional required work activities and/or estimated costs will then be issued, if warranted, and submitted via email.

We appreciate the opportunity to provide you this with this Work Scope and Cost Estimate. Please contact us at 262-290-4001 should you have any questions.

Sincerely,
EnviroForensics, LLC

A handwritten signature in black ink that reads "R. Scott Powell".

R. Scott Powell, P.E., LPG
Senior Engineer

A handwritten signature in black ink that reads "Rob Hoverman".

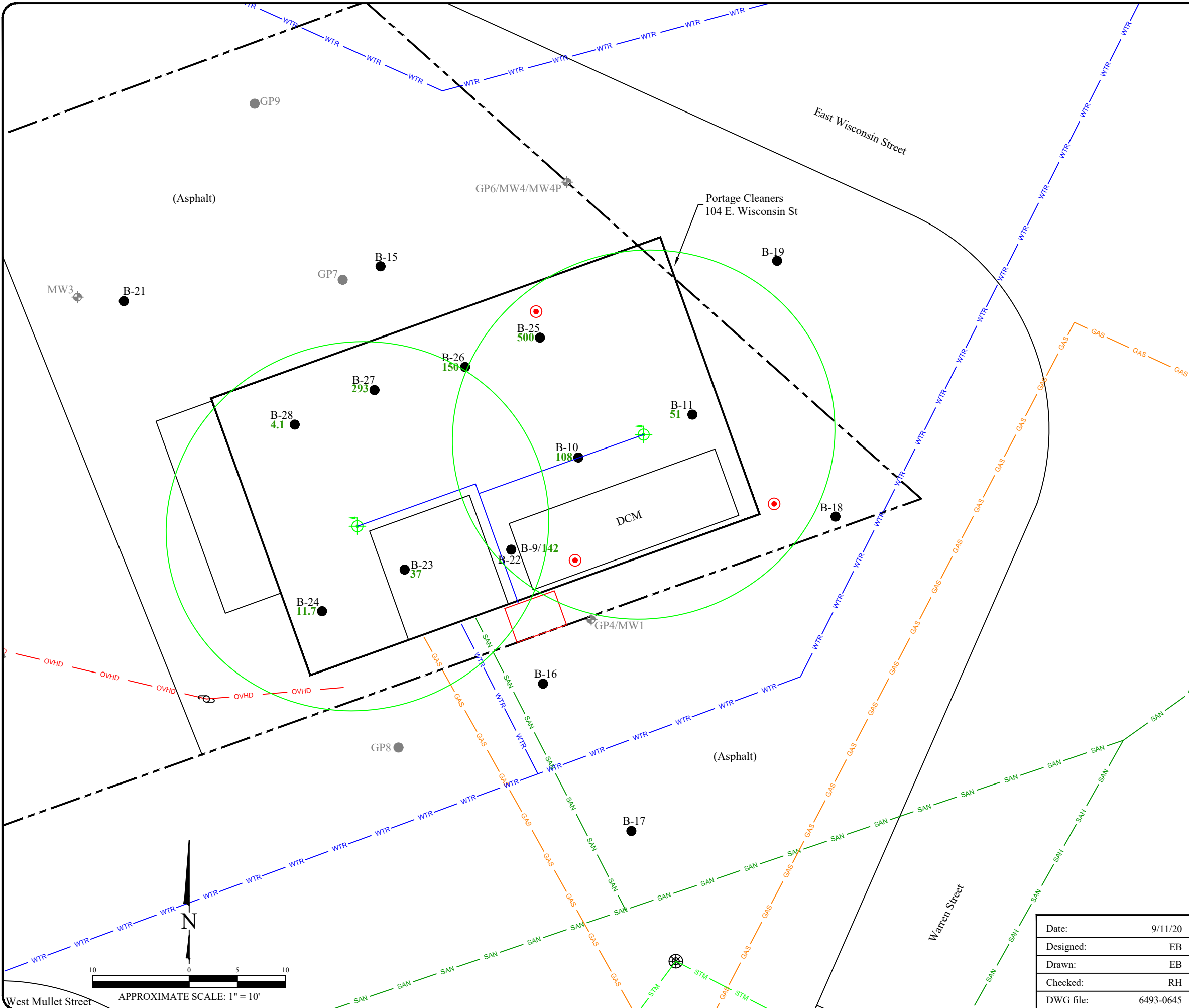
Rob Hoverman, PG
Senior Project Manager

FIGURES

- 1 Proposed Remediation System Layout
- 2 SVE Wellhead Construction Diagram
- 3 Process and Instrumentation Diagram
- 4 Monitoring Well Location Map

APPENDICES

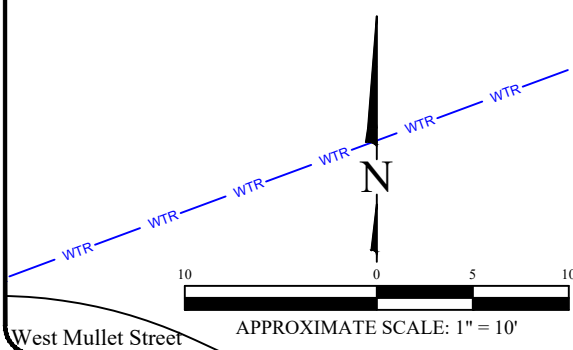
- Appendix A WDNR Form 4400-214D
Appendix B Detailed Cost Breakdown Sheets

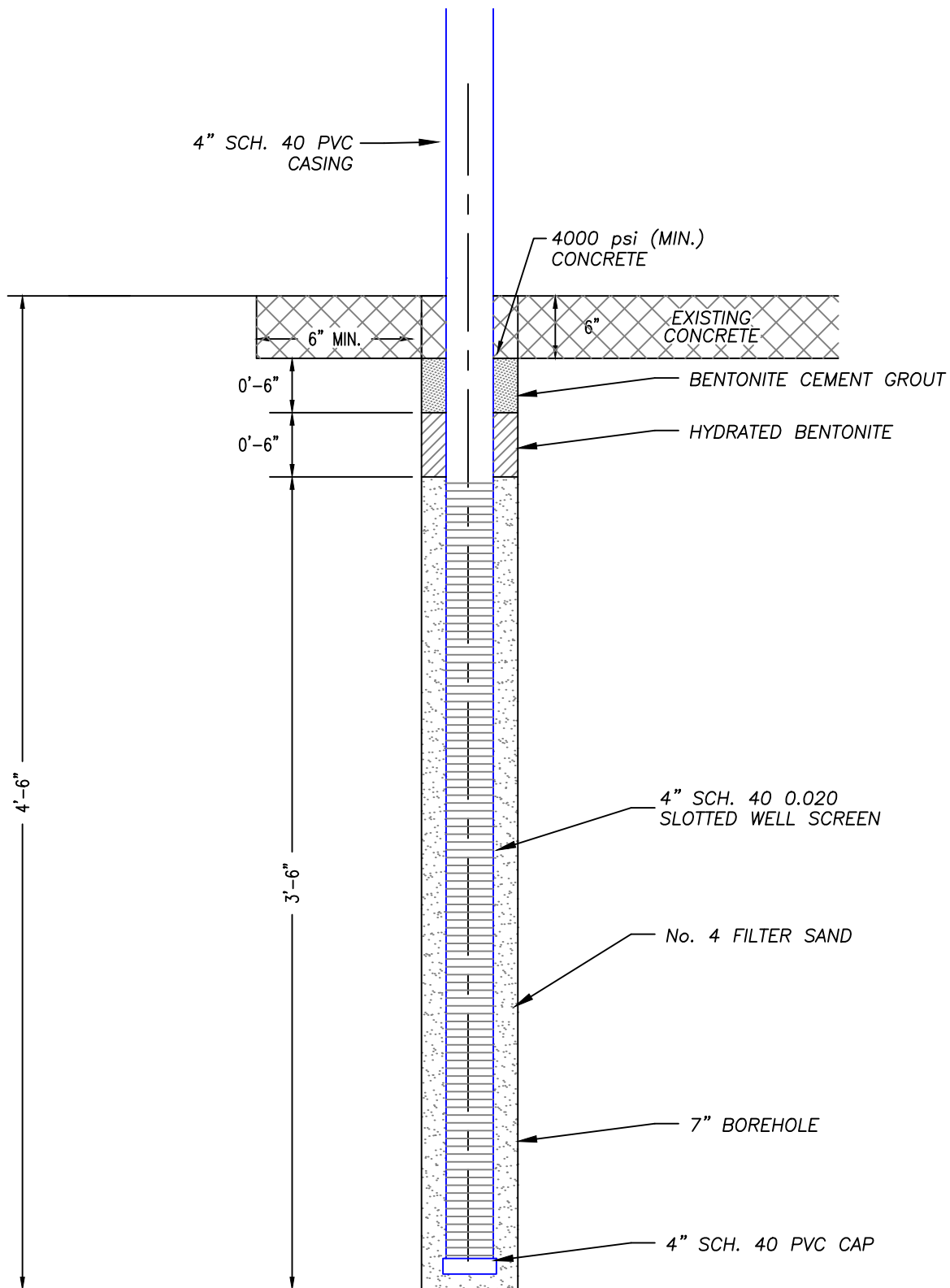


Legend

- Property boundary
- SAN Underground sanitary utility line
- WTR Underground water utility line
- GAS Underground gas utility line
- STM Underground storm utility line
- OVHD Over head electrical utility line
- Utility Pole
- Catch Basin
- Manhole
- DCM Dry cleaning machine location
- FDCM Former dry cleaning machine location
- MW1 Monitoring well location (By Others)
- GP1 Soil boring location (By Others)
- B-1 Direct push soil boring location
- Proposed extraction point
- Proposed aboveground conveyance piping
- Proposed SVE header connection
- Proposed SVE system location
- 700 Highest PCE concentration in vadose zone soil sample (mg/kg)
- Estimated ROI
- Proposed vapor point

PROPOSED REMEDIATION SYSTEM LAYOUT															
Portage Cleaners 104 East Wisconsin Street Portage, Wisconsin															
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No.	Date	Revision	Approved

ENVIROforensics

825 North Capitol Avenue • Indianapolis, IN 46204
 EnviroForensics.com

Date:	12/16/20
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Checked:	BK
DWG file:	6493-0736

SVE INTERIOR WELLHEAD CONSTRUCTION DIAGRAM

Portage Cleaners
 104 East Wisconsin Street
 Portage, Wisconsin

Figure	2
Project	6165

ABBREVIATIONS

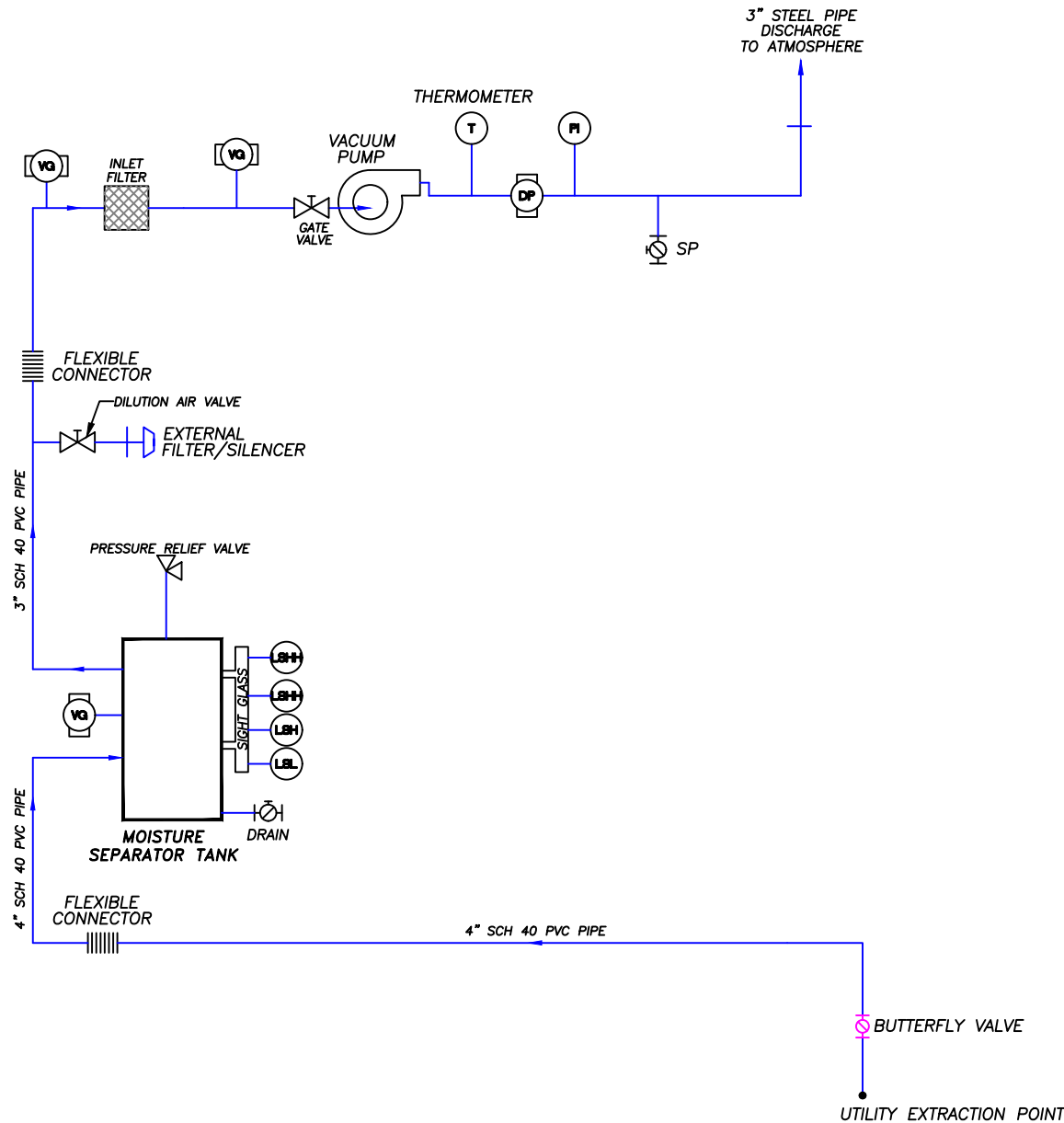
DP	DIFFERENTIAL PRESSURE	M	MOTOR
DO	DISSOLVED OXYGEN	NO	NORMALLY OPEN
FC	FAIL CLOSED	NC	NORMALLY CLOSED
FI	FAIL INDETERMINATE	P	PRESSURE
FL	FAIL LOCKED	PI	PRESSURE INDICATOR
FO	FAIL OPEN	PS	PRESSURE SWITCH
FO	FAIL QUANTIFIER	PT	PRESSURE TRANSMITTER
HOA	HAND-OFF-AUTOMATIC	PRV	PRESSURE RELIEF VALVE
HS	HAND SWITCH	PSH	PRESSURE SWITCH
IL	INDICATOR LIGHT	-	HIGH
I/I	CURRENT-TO-CURRENT	SG	SIGHT GLASS
I/P	CURRENT-TO-PNEUMATIC	SP	SAMPLING PORT
KC	PROGRAM CONTROLLER	UA	UNIVERSAL ALARM
LC	LEVEL CONTROLLER	FMT	FLOW METER TOTALIZER
LEL	LOWER EXPLOSIVE LIMIT	AFM	AIR FLOW METER
LR	LOCAL-REMOTE		
LS	LEVEL SENSOR		
LSHH	LIQUID SWITCH		
LSL		HIGH / LOW	
LSH			

VALVE AND PIPING SYMBOLS

	GATE VALVE
	SOLENOID VALVE
	CHECK VALVE
	BALL VALVE
	SAMPLING PORT
	EXHAUST TO ATMOSPHERE (INSIDE)
	EXHAUST TO ATMOSPHERE (OUTSIDE)
	PRESSURE RELIEF VALVE
	VACUUM GAUGE

EQUIPMENT SYMBOLS

	PUMP
	BLOWER



No.	Date	Revision	Approved

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






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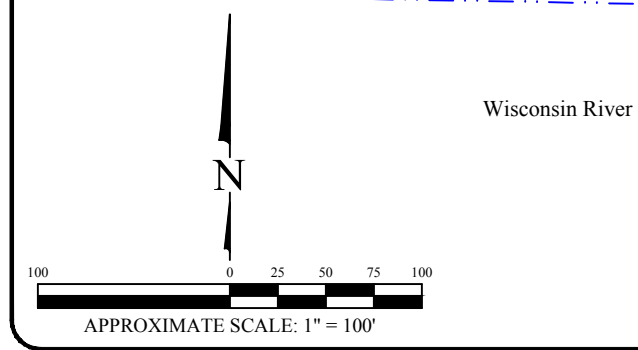
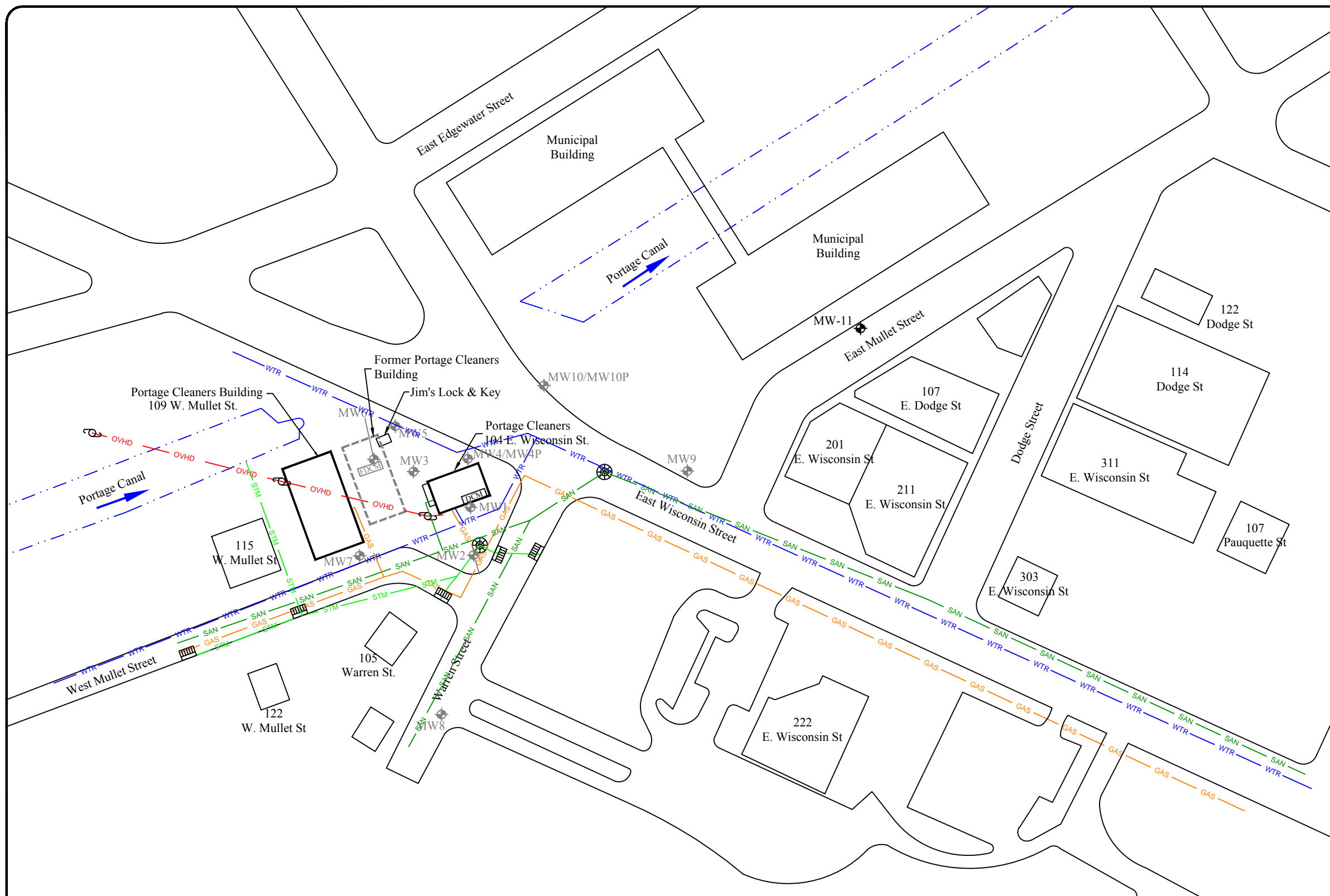
PROCESS AND INSTRUMENTATION DIAGRAM

Portage Cleaners
 104 East Wisconsin Street
 Portage, Wisconsin

Figure	3
Project	6493

Legend

- GAS — Underground gas utility line
- STM — Underground storm utility line
- OVHD — Over head electrical utility line
- SAN — Underground sanitary utility line
- WTR — Underground water utility line
-  Utility Pole
-  Catch Basin
-  Manhole
-  DCM Dry cleaning machine location
-  FDCM Former dry cleaning machine location
-  MW1 Monitoring well (By Others)
-  MW-11 Monitoring well (EnviroForensics)



MONITORING WELL LOCATION MAP																			
Portage Cleaners 104 East Wisconsin Street Portage, Wisconsin																			
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APPENDIX A

WDNR Form 4400-214D



APPENDIX B

Detailed Cost Breakdown Sheets

Project Title:
 Project Number/Name:
 Date:

OHM - Wauwatosa
 6140
 12/22/2022



Phase C101a SVE System and Infrastructure Installation						
Labor	Price	Unit	# Units		Subtotal	Task Total
Director Technical Services	\$ 175.00	hr			\$0.00	
Sr Engineer	\$ 155.00	hr	8.0		\$1,240.00	
Sr Professional	\$ 155.00	hr	8.0		\$1,240.00	
Project Manager	\$ 130.00	hr			\$0.00	
Project Professional	\$ 130.00	hr			\$0.00	
Staff Professional	\$ 120.00	hr	36.0		\$4,320.00	
Field Professional	\$ 95.00	hr	36.0		\$3,420.00	
Health and Safety Specialist	\$ 130.00	hr			\$0.00	
		hr			\$0.00	
					\$10,220.00	\$10,220.00
Contractors/Consultants	Price	Unit	# Units	Markup	Subtotal	Task Total
Drum	\$ 100.00	LS	1.0	1.00	\$100.00	
Driller/Contractor	\$ 3,093.12	LS	1.0	1.00	\$3,093.12	
Electrical Contractor for Supply and Connections	\$ 3,593.00	LS	1.0	1.00	\$3,593.00	
SVE Delivery	\$ 2,000.00	LS	1.0	1.00	\$2,000.00	
Telemetry Unit	\$ 1,000.00	LS	1.0	1.00	\$1,000.00	
					\$9,786.12	\$9,786.12
Direct Costs - Expenses	Price	Unit	# Units	Markup	Subtotal	
Hotel	\$ 130.00	day	2.0	1.00	\$260.00	
Meals	\$ 65.00	day	3.0	1.00	\$195.00	
Misc Materials (PVC piping manifold and valves)	\$ 800.00	LS	1.0	1.00	\$800.00	
Equipment Rental	\$ 125.00	day	1.0	1.00	\$125.00	
Waste Disposal	\$ 800.00	drum	1.0	1.00	\$800.00	
					\$2,180.00	\$2,180.00
Direct Costs - Chargeable Equipment Expense	Rate (hr/unit)	# Hrs/Units	Rate (day/use)	# days/use	Subtotal	
Vehicles						
Field Vehicle - Full Day	\$ 20.00		\$ 130.00	\$ 8.00	\$ 1,040.00	
Support Vehicle - Full Day	\$ 30.00		\$ 180.00		\$ -	
Mileage at Federal IRS Reimbursement Rate (used only for daily use over 230 miles)	\$ 0.545				\$ -	
Hand Auger			\$ 30.00	1	\$ 30.00	
Helium QA/QC Kit			\$ 265.00		\$ -	
Other						
Helium QA/QC Accessories	\$ 20.00				\$ -	
Oil/Water Interface Probe			\$ 105.00		\$ -	
Padlocks	\$ 15.00	3			\$ 45.00	
Coring Machine			\$ 200.00	1	\$ 200.00	
Safety						
Gloves (Chemical Resistant)	\$ 10.00	1			\$ 10.00	
Routine Field and Safety Equipment			\$ 50.00	\$ 3.00	\$ 150.00	
Production						
Binder Tabs (Set of 8)	\$ 5.00				\$ -	
Color Copies	\$ 0.40	8			\$ 3.20	
					\$ 1,478.20	\$1,478.20
PHASE TOTAL						\$23,664.32

Project Title: OHM - Wauwatosa
 Project Number/Name: 6140
 Date: 12/22/2022



Phase C101b SVE System O&M for 12 Months						
Labor						
Director Technical Services	\$ 175.00	hr				\$0.00
Sr Engineer	\$ 155.00	hr	6.0			\$930.00
Sr Professional	\$ 155.00	hr	10.0			\$1,550.00
Project Manager	\$ 130.00	hr	2.0			\$260.00
Staff Professional	\$ 120.00	hr	4.0			\$480.00
Field Professional	\$ 95.00	hr	12.0			\$1,140.00
Drafting	\$ 85.00	hr				\$0.00
Admin	\$ 65.00	hr				\$0.00
Health and Safety Specialist	\$ 130.00	hr				\$0.00
		hr				\$0.00
						\$4,360.00
Task Total						
\$4,360.00						
Contractors/Consultants						
Electrical Usage and Telemetry	\$ 700.00	month	12.0	1.00		\$8,400.00
						\$0.00
						\$0.00
						\$0.00
						\$8,400.00
Task Total						
\$8,400.00						
Contractor/Consultant - Laboratory						
Air TO-15 -- SVE Effluent	\$ 90.00	ea	17.0	1.00		\$1,530.00
Air TO-15 -- outdoor Air	\$ 180.00	ea	1.0	1.00		\$180.00
Air - Individual Certification	\$ 50.00	ea	1.0	1.00		\$50.00
Air - Batch Certification	\$ 50.00	LS	1.0	1.00		\$50.00
						\$1,810.00
Task Total						
\$1,810.00						
Direct Costs - Expenses						
Misc Materials	\$ 500.00	LS	1.0	1.00		\$500.00
						\$500.00
Task Total						
\$500.00						

	Direct Costs - Chargeable Equipment Expense	Rate (hr/unit)	# Hrs/Units	Rate (day/use)	# days/use	Subtotal	
Vehicles	Field Vehicle - Full Day	\$ 20.00		\$ 130.00	\$ 16.00	\$ 2,080.00	
	Support Vehicle - Full Day	\$ 30.00		\$ 180.00		\$ -	
	Mileage at Federal IRS Reimbursement Rate (used only for daily use over 230 miles)	\$ 0.545				\$ -	
Meters	ppb RAE			\$ 175.00	12	\$ 2,100.00	
	Ozone Leak Detector			\$ 135.00		\$ -	
	Inline Ozone Meter			\$ 230.00		\$ -	
Pumps	ORP Meter			\$ 30.00		\$ -	
	Air Pump - Low Flow (Barcard)			\$ 25.00		\$ -	
	Development Pump			\$ 130.00		\$ -	
	Electric Submersible Pump with Control Box (Units)			\$ 130.00		\$ -	
	Low-Flow Sampling Bladder	\$ 12.00				\$ -	
	Peristaltic Pump			\$ 105.00		\$ -	
	Pumping Test Accessory Equipment (Flow Meters/Manifolds/Tubing)	\$ 100.00				\$ -	
	Portable SVE Unit - 1.5 HP			\$ 155.00		\$ -	
	Intrinsically Safe Vapor Evacuation Blower			\$ 125.00		\$ -	
	Pneumatic Low-Flow Pump - 1" Well			\$ 50.00		\$ -	
Other	Pneumatic Low-Flow Sampling Kit w/ Flow Cell and Multimeter			\$ 270.00		\$ -	
	SVE Monthly Rental			\$ 500.00	\$ 12.00	\$ 6,000.00	
	Rotary Hammer Drill			\$ 170.00	\$ 0.50	\$ 85.00	
	Vapor Pin Sub-Slab Sampling Port	\$ 75.00	2			\$ 150.00	
	Sub-Slab Cover (Stainless Steel)	\$ 40.00	2			\$ 80.00	
	Manometers	\$ 105.00	1			\$ 105.00	
	Gloves (Chemical Resistant)	\$ 10.00	2			\$ 20.00	
	Routine Field and Safety Equipment			\$ 50.00	12	\$ 600.00	
	O&M Binder	\$ 9.00				\$ -	
	Color Copies	\$ 0.40	12			\$ 4.80	
Production	B/W Copies	\$ 0.25	24			\$ 6.00	
	Document - Format/Sending	\$ 15.00				\$ -	
	Report CD Copy	\$ 5.00				\$ -	
PHASE TOTAL						\$ 11,230.80	\$ 26,300.80

Project Title:
 Project Number/Name:
 Date:

OHM - Wauwatosa
 6140
 12/22/2022



Phase C101c Data Analysis and Bi-annual Performance Reporting						
Labor - Office/Reporting	Price	Unit	# Units		Subtotal	Task Total
Director Technical Services	\$ 175.00	hr	4.0		\$700.00	
Sr Engineer	\$ 155.00	hr	8.0		\$1,240.00	
Sr Professional	\$ 155.00	hr	12.0		\$1,860.00	
Project Manager	\$ 130.00	hr			\$0.00	
Project Professional	\$ 130.00	hr	24.0		\$3,120.00	
Staff Professional	\$ 120.00	hr			\$0.00	
Field Professional	\$ 95.00	hr	16.0		\$1,520.00	
Drafting	\$ 85.00	hr	4.0		\$340.00	
Admin	\$ 65.00	hr			\$0.00	
Health and Safety Specialist	\$ 130.00	hr			\$0.00	
					\$8,780.00	\$8,780.00

	Direct Costs - Chargeable Equipment Expense	Rate (hr/unit)	# Hrs/Units	Rate (day/use)	# days/use	Subtotal	
Production	1 Inch Binder	\$ 9.00				\$ -	
	2 Inch Binder	\$ 12.00				\$ -	
	3 Inch Binder	\$ 15.00				\$ -	
	4 Inch Binder	\$ 22.00				\$ -	
	Binder Tabs (Set of 8)	\$ 5.00				\$ -	
	Color Copies	\$ 0.40	12			\$ 4.80	
	B/W Copies	\$ 0.25	10			\$ 2.50	
	Document - Format/Sending	\$ 15.00	2			\$ 30.00	
	Report CD Copy	\$ 5.00				\$ -	
						\$ 37.30	\$37.30
PHASE TOTAL							\$8,817.30

Project Title:
 Project Number/Name:
 Date:

Portage Cleaners
 6493
 12/22/2022



Phase C101d Annual Groundwater Monitoring and Reporting

Labor - Field	Price	Unit	# Units		Subtotal	Task Total
Sr Professional	\$ 155.00	hr	2.0		\$310.00	
Staff Professional-Office	\$ 125.00	hr	8.0		\$1,000.00	
Staff Professional-Field	\$ 110.00	hr			\$0.00	
Staff Professional - Field	\$ 120.00	hr	30.0		\$3,600.00	
Drafting	\$ 95.00	hr	2.0		\$190.00	
					\$5,100.00	\$5,100.00

Sr Professional	\$ 175.00	hr	2.0		\$350.00	
Staff Professional-Field	\$ 112.50	hr	8.0		\$900.00	
Field Professional	\$ 103.50	hr	3.0		\$310.50	
Drafting	\$ 85.50	hr	3.0		\$256.50	
					\$1,817.00	\$1,817.00

Contractor/Consultant - Laboratory	Price	Unit	# Units	Markup	Subtotal	
GW VOC 8260	\$ 82.72	ea	14.0	1.10	\$1,273.89	
GW VOC 8260 QA/QC	\$ 82.72	ea	2.0	1.10	\$181.98	
Trip Blank VOCs 8260 gw202	\$ 82.72	ea	1.0	1.10	\$90.99	
					\$1,546.86	\$1,546.86

Direct Costs - Expenses	Price	Unit	# Units	Markup	Subtotal	
Hotel	\$ 120.00	day	1.0	1.10	\$132.00	
Meals	\$ 67.00	LS	1.0	1.10	\$73.70	
Equipment Rental and Materials	\$ 700.00	LS	1.0	1.10	\$770.00	
					\$975.70	\$975.70

	Direct Costs - Chargeable Equipment Expense	Rate (hr/unit)	# Hrs/Units	Rate (day/use)	# days/use	Subtotal	
Vehicles	Field Vehicle - Full Day	\$ 20.00		\$ 135.00	3	\$ 405.00	
	Support Vehicle - Full Day	\$ 30.00		\$ 180.00		\$ -	
Pumps	Mileage at Federal IRS Reimbursement Rate (used only for daily use over 230 miles)	\$ 0.545				\$ -	
	Pneumatic Low-Flow Sampling Kit w/ Flow Cell and Multimeter			\$ 243.00	2	\$ 486.00	
Other	Elec. Well Sounder (Probe)			\$ 27.00	2	\$ 54.00	
Safety	Nitrile Sampling Gloves (Disposable)	\$ 0.13	30.00			\$ 3.90	
	Routine Field and Safety Equipment			\$ 45.00	2	\$ 90.00	
Production	Color Copies	\$ 0.40	2			\$ 0.80	
	B/W Copies	\$ 0.25	16			\$ 4.00	
						\$ 1,043.70	\$ 1,043.70
TOTAL						\$ 10,483.26	

Project Title:

OHM - Wauwatosa

Project Number/Name:

6140

Date:

12/22/2022



Phase C101e Confirmation Sampling and Results Reporting						
Labor - Office/Reporting	Price	Unit	# Units		Subtotal	Task Total
Director Technical Services	\$ 175.00	hr			\$0.00	
Sr Engineer	\$ 155.00	hr	2.0		\$310.00	
Sr Professional	\$ 155.00	hr	5.0		\$775.00	
Project Manager	\$ 130.00	hr			\$0.00	
Project Professional	\$ 130.00	hr			\$0.00	
Staff Professional	\$ 120.00	hr	12.0		\$1,440.00	
					\$2,525.00	\$2,525.00
Contractor/Consultant - Laboratory	Price	Unit	# Units	Markup	Subtotal	
Soil VOC 8260 dry wt		ea		1.00	\$0.00	
Soil VOC 8260 dry wt QA/QC		ea		1.00	\$0.00	
GW VOC 8260		ea		1.00	\$0.00	
GW VOC 8260 QA/QC		ea		1.00	\$0.00	
Air TO-15 - Soil Gas		ea		1.00	\$0.00	
Air TO-15 - Sub-Slab	\$ 90.00	ea	3.0	1.00	\$270.00	
Air TO-15 - Indoor Air		ea		1.00	\$0.00	
Air - Individual Certification		ea		1.00	\$0.00	
Air - Batch Certification	\$ 50.00	LS		1.00	\$0.00	
Trip Blank VOCs 8260		ea		1.00	\$0.00	
					\$270.00	\$270.00

	Direct Costs - Chargeable Equipment Expense	Rate (hr/unit)	# Hrs/Units	Rate (day/use)	# days/use	Subtotal	
Vehicles	Field Vehicle - Full Day	\$ 20.00		\$ 130.00	\$ 1.00	\$ 130.00	
	Support Vehicle - Full Day	\$ 30.00		\$ 180.00		\$ -	
	Mileage at Federal IRS Reimbursement Rate (used only for daily use over 230 miles)	\$ 0.545				\$ -	
Meters	ppb RAE			\$ 175.00	\$ 1.00	\$ 175.00	
	Tubing - Polyethylene: 1/4" OD (per foot)	\$ 0.60	9			\$ 5.40	
Other	Tubing - Polyethylene: 1/2" OD (per foot)	\$ 0.85				\$ -	
	Tubing - Tygon: 3/8" STD (per foot)	\$ 4.45				\$ -	
	Tubing - Silicone: 3/8" STD (per foot)	\$ 4.50	1.5			\$ 6.75	
Safety	Gloves (Chemical Resistant)	\$ 10.00	1			\$ 10.00	
	Routine Field and Safety Equipment			\$ 50.00	\$ 1.00	\$ 50.00	
Production	Color Copies	\$ 0.40	4			\$ 1.60	
	B/W Copies	\$ 0.25	1			\$ 0.25	
	Document - Format/Sending	\$ 15.00				\$ -	
	Report CD Copy	\$ 5.00				\$ -	
						\$ -	\$ 379.00
PHASE TOTAL							\$3,174.00

Project Title:
 Project Number/Name:
 Date:

OHM - Wauwatosa
 6140
 12/22/2022



Phase C101f Project Management (through install and one year O&M)						
Labor - Office/Reporting		Price	Unit	# Units	Subtotal	Task Total
Sr Project Manager		\$ 155.00	hr	40.0	\$6,200.00	\$6,200.00
					\$6,200.00	\$6,200.00

Direct Costs - Chargeable Equipment Expense		Rate	# Hrs/Units	Rate	# days/use	Subtotal	
Production	Color Copies	\$ 0.40	12			\$ 4.80	
	B/W Copies	\$ 0.25	48			\$ 12.00	
	Document - Format/Sending	\$ 15.00				\$ -	
	Report CD Copy	\$ 5.00				\$ -	
					\$ 16.80	\$16.80	
PHASE TOTAL						\$6,216.80	



February 14, 2024

VIA EMAIL ([lawrence.lester @wisconsin.gov](mailto:lawrence.lester@wisconsin.gov))

Mr. Lawrence Lester

Hydrogeologist

Wisconsin Department of Natural Resources

3911 Fish Hatchery Road

Fitchburg, WI 53711

**RE: Request for Variance From Consultant
Bidding Process Portage Cleaners, Inc.
BRRTS# 02-11-512824**

Dear Mr. Lester:

Our firm represents Porter Badger Management LLC, which is the agent of the above sites' responsible party, Portage Cleaners, Inc. We are writing to request a variance to the NR 169.11(1)(c)10 bid requirements as allowed by NR 169.29 to allow EnviroForensics, LLC to perform remedial activities at the site and preserve our client's right to seek reimbursement for these costs under DERF. We hope that you will be convinced that EnviroForensics' lengthy history at the site and unique knowledge of subsurface conditions puts it in the best position to complete the remedial activities needed to move the site to case closure.

Historical Site Investigations and Funding Sources

PERC was detected at the site and reported to the WDNR on August 28, 2003. The Site entered DERF that same year and between 2003 and 2016, the previous consultants performed work at the site under the DERF program. Site investigation activities were taken over by EnviroForensics starting in 2016 and the site investigation appears complete and remedial activities have been undertaken as is well documented in the site's BRRTs database listing.

These activities were completed utilizing proceeds from historical insurance policies and were not reimbursed by DERF.

Funding Clarification

It has been determined that the remaining remedial effort needed to complete the site

February 14, 2024

Page 2 of 2

remediation is the installation of an SVE system to remove contaminant mass from the vadose zone adjacent to the primary site building, as described in the SVE System Design Report provided to the DNR on January 4, 2023¹. The cost of implementing the SVE System will exceed the available funding, including monies recovered from all known historical insurance policies. As such, EnviroForensics, as agent of the responsible party, will seek reimbursement directly from the DERF program to fund this next scope of work. Reimbursement is not being sought for any past Site investigative or remediation activities.

Variance From Consultant Bidding Process

Given the length of time EnviroForensics has been working at the site, and the high complexity of the subsurface geology and the remediation that has been performed to date, a variance to the NR 169.11(1)(c)10 bid requirements is allowed by NR 169.29 for the for the SVE system. Since taking over in 2016, EnviroForensics has created the site conceptual model, performed the vast majority of the investigative work and implemented remedial actions at the site, and has fully designed the SVE system to be implemented. Once the SVE System task is complete, it is likely the only tasks remaining at the site are post-remedial monitoring and interpretation of the data within the conceptual site model designed by EnviroForensics. Thus, it would be a substantial inefficiency to have to ask another consultant to get up to speed and perform the work. EnviroForensics' knowledge of Site conditions and remedial actions taken puts it in a position to provide the most complete and cost-effective proposal, and to proceed to closure in the most expeditious manner.

As a courtesy, another copy of the January 4, 2023 SVE System Design Report is attached. If this is acceptable to the WDNR, please notify us at your earliest convenience.

We appreciate the continued opportunity to work with the WDNR to remediate contaminated properties throughout Wisconsin. If you have any questions or require additional information, please do not hesitate to contact me by email or by phone.

Very truly yours,

HALLING & CAYO, S.C.



Andy Skwierawski
mas@hallingcayo.com

MAS/msb
Enclosure

¹ Please note the report was accidentally dated January 4, 2022, but was in fact sent on January 4, 2023.

From: Mallory Burlingame <msb@hallingcayo.com>
Sent: Wednesday, February 14, 2024 2:42 PM
To: Lester, Lawrence J - DNR <Lawrence.Lester@wisconsin.gov>
Cc: Ted Warpinski <taw@hallingcayo.com>; Andy Skwierawski <mas@hallingcayo.com>; Nicholas Hill <nhill@enviroforensics.com>; Wayne Fassbender <wfassbender@enviroforensics.com>
Subject: RE: Request for Variance From Consultant / BRTTS#02-11-512824

**CAUTION: This email originated from outside the organization.
Do not click links or open attachments unless you recognize the sender and know the content is safe.**

Mr. Lester,

Attached please find an additional enclosure relative to my previous email.

Thanks,
Mallory



Mallory S. Burlingame
Legal Assistant

HALLING & CAYO, S.C.

320 E. Buffalo Street, Suite 700
Milwaukee, WI 53202

(414) 271-3400
(414) 271-3841 Facsimile

www.hallingcayo.com

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From: Mallory Burlingame

Sent: Wednesday, February 14, 2024 2:07 PM

To: lawrence.lester@wisconsin.gov

Cc: Ted Warpinski <taw@hallingcayo.com>; Andy Skwierawski <mas@hallingcayo.com>; Nicholas Hill <nhill@enviroforensics.com>; Wayne Fassbender <wfassbender@enviroforensics.com>

Subject: Request for Variance From Consultant / BRTTS#02-11-512824

Good Afternoon,

Attached please find correspondence from Attorney Andy Skwierawski dated February 14, 2024, regarding the above-referenced matter.

Thank you,
Mallory



Mallory S. Burlingame

Legal Assistant

HALLING & CAYO, S.C.

320 E. Buffalo Street, Suite 700

Milwaukee, WI 53202

(414) 271-3400

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EnviroForensics, LLC
825 North Capitol Avenue
Indianapolis, Indiana 46204
866.888.7911



MEMORANDUM

TO: Andrew Skwierawski, Halling & Cayo

FROM: Nicholas Hill, EnviroForensics

CC: Dave Bieno, Portage Cleaners
Wayne Fassbender, EnviroForensics
Collin Martin, Porter Badger Management, LLC

DATE: February 14, 2024

SUBJECT: **SVE System Cost Estimate Update**
Former Portage Cleaners
BRRTS #02-11-512824
EnviroForensics Project #6493

As requested, EnviroForensics, LLC (EnviroForensics) is presenting this Soil Vapor Extraction (SVE) System Cost Estimate Update memorandum to perform installation, startup, and one (1) year of operation, maintenance, and monitoring (OMM) activities for an SVE system for the former Portage Cleaners facility located at 101 East Wisconsin Street, Portage, Wisconsin (Site).

The proposed scope of work and associated costs for the above SVE activities were initially presented in the SVE System Design Report (SVE RAD Report), that was submitted to the Wisconsin Department of Natural Resources (WDNR) on January 4, 2023 (incorrectly dated, January 4, 2022). This memorandum presents a refined estimate for the necessary SVE and OMM activities, and the rationale for the increase in cost. The refined cost estimate is shown in the attached **Table 1**, with the included cost detail spreadsheets.

After our recent review of the documentation, we determined the proposed SVE remedial design was appropriate, but the work efforts for the respective task-phases had been significantly underestimated. It appears that the original cost estimate was hastily prepared by former EnviroForensics staff that were in the process of moving on to new job opportunities with different firms, and our typical internal review process was not implemented prior to WDNR submittal. Some of the inconsistencies in estimating cost that we discovered include:

1. The costing of tasks to relocate the SVE system and install controls, electrical hookups, subsurface vents, and piping appurtenances were proposed to be performed by in-house EnviroForensics staff and did not account for the arduousness of the tasks which require the use of subcontractors having specialized equipment.
2. The amount of time and effort needed to travel to and from the Site, evaluate SVE system effectiveness, and comply with air emission standards was significantly underestimated.
3. Outdated staff rates dating back to 2017 or earlier were utilized throughout the estimate. These rates need to be increased to more current industry standards.

In conclusion, we intend on implementing the proposed tasks as presented in the January 2023 SVE RAD Report and within the increased budgets outlined in the attached **Table 1**.

We appreciate your assistance on this matter. Please do not hesitate to contact EnviroForensics if you have any questions.



TABLE 1
COST ESTIMATE: DERF REQUEST
Former Portage Cleaners
Portage, Wisconsin

TASK	LABOR COSTS	SUB-CONTRACTOR COSTS	DIRECT COSTS	TOTAL COST	PHASE COST
Phase C100b - SVE System Mobilization and Infrastructure Installation					
· Mobilize SVE trailer unit to Site. Complete installation of 2 extraction points and associated connection of conveyance piping to trailer. Complete electrical connection.	\$14,275.00	\$35,767.50	\$2,418.40	\$52,461	\$52,461
Phase C100c - SVE Startup, Routine OM&M (12 Months) & Confirmation Sampling					
· Initiate system startup and initial optimization activities, including emission testing procedures during first month. Costs included for 6 visits and collection of 6 emission samples and 1 ambient air sample during first 4 weeks. · Perform routine operation, maintenance, and monitoring activities for 11 subsequent months. Costs included for 1 visit and collection of 1 emission sample each month. · Perform SVE confirmation sampling 30 days after shutdown. Costs included for 1 visit and collection of 2 sub-slab vapor samples.	\$14,780.00	\$30,674.00	\$10,550.00	\$56,004	\$56,004
Phase C100d - SVE OM&M Plan & Bi-Annual Reporting					
· Prepare and submit two (2) Bi-Annual Reports for submittal to WDNR for reporting operational status · Prepare and submit one (1) Operation, Maintenance, and Monitoring Plan to WDNR for presenting necessary procedures for approval.	\$12,280.00	\$0.00	\$31.00	\$12,311	\$12,311
Phase C101b - 2023 Annual Groundwater Monitoring and Reporting					
· Perform routine groundwater monitoring field and reporting for entire well network. Includes submission of 18 samples for VOCs.	\$9,432.50	\$1,449.00	\$2,515.84	\$13,397	\$13,397
TOTAL	\$50,768	\$67,891	\$15,515	\$134,173	\$134,173

Project Title:
 Project Number/Name:
 Date:

2023 SVE Install&Operation and 2023 Annual GWM
 6493 - Portage Cleaners
 2/14/2024



Phase C100b - SVE System Mobilization and Infrastructure Installation

Labor - Field	Price	Unit	# Units	Subtotal	Task Total
Staff Professional FS-II	\$ 125.00	hr	48.0	\$6,000.00	
		hr		\$0.00	
				\$6,000.00	

Labor - Office Coordination & Oversight	Price	Unit	# Units	Subtotal	Task Total
Principal	\$ 210.00	hr	3.0	\$630.00	
Sr Professional	\$ 195.00	hr	12.0	\$2,340.00	
Project Professional	\$ 160.00	hr	31.0	\$4,960.00	
Field Professional	\$ 115.00	hr	3.0	\$345.00	
		hr		\$0.00	
				\$8,275.00	\$8,275.00

Contractors/Consultants	Price	Unit	# Units	Markup	Subtotal	Task Total
SVE Delivery	\$ 2,400.00	LS	1.0	1	\$2,400.00	
Infrastructure Installation	\$ 29,390.00	LS	1.0	1	\$29,390.00	
Electrical Contractor for Supply and Connections	\$ 3,094.00	LS	1.0	1	\$3,094.00	
Waste Disposal	\$ 800.00	LS	1.0	1	\$800.00	
					\$35,684.00	
					\$35,684.00	\$35,684.00

Contractor/Consultant - Laboratory	Price	Unit	# Units	Markup	Subtotal	Task Total
Soil VOC 8260 dry wt IDM Characterization	\$ 83.50	ea	1.0	1	\$83.50	
					\$83.50	
					\$83.50	\$83.50

Direct Costs - Expenses	Price	Unit	# Units	Markup	Subtotal	Task Total
Hotel	\$ 130.00	day		1	\$0.00	
Meals	\$ 65.00	day		1	\$0.00	
Misc Materials (PVC piping manifold and valves)	\$ 800.00	LS	0.0	1	\$0.00	
Telemetry Unit	\$ 1,000.00	each	1.0	1	\$1,000.00	
Equipment Rental (fork lift)	\$ 125.00	day	1.0	1	\$125.00	
					\$0.00	
					\$0.00	
					\$0.00	
					\$1,125.00	\$1,125.00

	Direct Costs - Chargeable Equipment Expense	Rate (hr/unit)	# Hrs/Units	Rate (day/use)	# days/use	Subtotal	Task Total
Vehicles	Field Vehicle - Full Day	\$ 20.00		\$ 150.00	4	\$ 600.00	
	Rotary Hammer Drill			\$ 170.00	1	\$ 170.00	
	Nitrile Sampling Gloves (Disposable)	\$ 0.22	20			\$ 4.40	
Other	55-Gallon Drum	\$ 100.00	1			\$ 100.00	
	Vapor Pin Sub-Slab Sampling Port	\$ 75.00	2			\$ 150.00	
	Sub-Slab Cover (Stainless Steel)	\$ 40.00	2			\$ 80.00	
	Measuring Wheel			\$ 15.00	0	\$ -	
Safety	Routine Field and Safety Equipment			\$ 60.00	3	\$ 180.00	
Production	Color Copies	\$ 0.40	10			\$ 4.00	
	B/W Copies	\$ 0.25	20			\$ 5.00	
						\$ 1,293.40	
PHASE TOTAL							

Project Title:
 Project Number/Name:
 Date:

2023 SVE Install&Operation and 2023 Annual GWM
 6493 - Portage Cleaners
 2/14/2024



Phase C100c - SVE Startup, Routine OM&M (12 Months) & Confirmation Sampling							
Labor - Field		Price	Unit	# Units		Subtotal	Task Total
	Staff Professional FS-II	\$ 125.00	hr	10.0		\$1,250.00	
			hr			\$0.00	
						\$1,250.00	\$1,250.00
Labor - Office Oversight / OMM Plan		Price	Unit	# Units		Subtotal	Task Total
	Principal	\$ 210.00	hr	6.0		\$1,260.00	
	Sr Professional	\$ 195.00	hr	30.0		\$5,850.00	
	Project Professional	\$ 160.00	hr	30.0		\$4,800.00	
	Drafting	\$ 110.00	hr	6.0		\$660.00	
						\$13,530.00	\$13,530.00
Contractors/Consultants		Price	Unit	# Units	Markup	Subtotal	Task Total
	Electrcial usage	\$ 700.00	month	12.0	1.00	\$8,400.00	
	telemetry	\$ 450.00	each	1.0	1.00	\$450.00	
	System Operator	\$ 17,524.00	LS	1.0	1.00	\$17,524.00	
						\$26,374.00	\$26,374.00
Contractor/Consultant - Laboratory		Price	Unit	# Units	Markup	Subtotal	Task Total
	Air TO-15 -- Sub-Slab	\$ 200.00	ea	3.0	1.00	\$600.00	
	Air TO-15 -- Effluent Air	\$ 200.00	ea	17.0	1.00	\$3,400.00	
	Air TO-15 -- Outdoor Air	\$ 200.00	ea	1.0	1.00	\$200.00	
	Air - Individual Certification	\$ 50.00	ea	1.0	1.00	\$50.00	
	Air - Batch Certification	\$ 50.00	LS	1.0	1.00	\$50.00	
						\$4,300.00	\$4,300.00
Direct Costs - Expenses		Price	Unit	# Units	Markup	Subtotal	Task Total
	Hotel	\$ 120.00	day		1.00	\$0.00	
	Meals	\$ 67.00	LS		1.00	\$0.00	
	Sample Shipment	\$ 100.00	month	12.0	1.00	\$1,200.00	
	SVE Monthly Rental	\$ 750.00	month	12.0	1.00	\$9,000.00	
						\$10,200.00	\$10,200.00
	Direct Costs - Chargeable Equipment Expense	Rate (hr/unit)	# Hrs/Units	Rate (day/use)	# days/use	Subtotal	
Vehicles	Field Vehicle - Full Day	\$ 20.00		\$ 150.00	1	\$ 150.00	
Meters	ppb RAE			\$ 175.00	0	\$ -	
Other	Manometers	\$ 105.00	1			\$ 105.00	
Safety	Routine Field and Safety Equipment			\$ 60.00	1	\$ 60.00	
Production	Color Copies	\$ 0.40	25			\$ 10.00	
	B/W Copies	\$ 0.25	100			\$ 25.00	
						\$ 350.00	\$350.00
PHASE TOTAL							\$56,004.00

Project Title:
 Project Number/Name:
 Date:

2023 SVE Install&Operation and 2023 Annual GWM
 6493 - Portage Cleaners
 2/14/2024



Phase C100d - SVE OM&M Plan & Bi-Annual Reporting							
	Labor - Office Oversight / Bi-Annual Reporting	Price	Unit	# Units		Subtotal	Task Total
	Principal	\$ 210.00	hr	8.0		\$1,680.00	
	Sr Professional	\$ 195.00	hr	16.0		\$3,120.00	
	Project Manager	\$ 160.00	hr	34.0		\$5,440.00	
	Staff Professional-Office	\$ 145.00	hr	8.0		\$1,160.00	
	Drafting	\$ 110.00	hr	8.0		\$880.00	
						\$12,280.00	\$12,280.00
	Direct Costs - Chargeable Equipment Expense	Rate (hr/unit)	# Hrs/Units	Rate (day/use)	# days/use	Subtotal	
Production	Color Copies	\$ 0.40	15			\$ 6.00	
	B/W Copies	\$ 0.25	100			\$ 25.00	
						\$ 31.00	\$31.00
PHASE TOTAL							\$12,311.00

Project Title:
 Project Number/Name:
 Date:

2023 SVE Install&Operation and 2023 Annual GWM
 6493 - Portage Cleaners
 2/14/2024



Phase C101b - 2023 Annual Groundwater Monitoring and Reporting

Labor - Field		Price	Unit	# Units	Subtotal	Task Total
Staff Professional FS-II		\$ 125.00	hr	34.0	\$4,250.00	
			hr		\$0.00	
					\$4,250.00	\$4,250.00

Labor - Office Oversight / Reporting		Price	Unit	# Units	Subtotal	Task Total
Principal		\$ 210.00	hr	1.5	\$315.00	
Sr Professional		\$ 195.00	hr	6.5	\$1,267.50	
Project Manager		\$ 160.00	hr	1.0	\$160.00	
Project Professional		\$ 160.00	hr	16.5	\$2,640.00	
Staff Professional-Office		\$ 145.00	hr	4.0	\$580.00	
Drafting		\$ 110.00	hr	2.0	\$220.00	
					\$5,182.50	\$5,182.50

Contractor/Consultant - Laboratory		Price	Unit	# Units	Markup	Subtotal	Task Total
GW VOC 8260		\$ 70.00	ea	13.0	1.00	\$910.00	
GW VOC 8260 QA/QC		\$ 70.00	ea	4.0	1.00	\$280.00	
Trip Blank VOCs 8260		\$ 70.00	ea	1.0	1.00	\$70.00	
Level IV QA/QC (15%)						\$189.00	
						\$1,449.00	\$1,449.00

Direct Costs - Expenses		Price	Unit	# Units	Markup	Subtotal	Task Total
Hotel		\$ 120.00	day		1.10	\$0.00	
Meals		\$ 67.00	LS		1.10	\$0.00	
						\$0.00	\$0.00

Direct Costs - Chargeable Equipment Expense		Rate (hr/unit)	# Hrs/Units	Rate (day/use)	# days/use	Subtotal	Task Total
Vehicles	Field Vehicle - Full Day	\$ 20.00		\$ 150.00	3	\$ 450.00	
	Mileage at Federal IRS Reimbursement Rate (used only for daily use over 230 miles)	\$ 0.545				\$ -	
Pumps	Pneumatic Low-Flow Sampling Kit w/ Flow Cell and Multimeter			\$ 390.00	3	\$ 1,170.00	
	Elec. Well Sounder (Probe)			\$ 35.00	3	\$ 105.00	
Other	Tubing (Bonded) - Polyethylene (Teflon): 1/4" OD X 3/8" OD (per foot)	\$ 2.60	160			\$ 416.00	
	Tubing - Silicone: 3/8" STD (per foot)	\$ 4.80	13			\$ 62.40	
	Nitrile Sampling Gloves (Disposable)	\$ 0.22	52			\$ 11.44	
	55-Gallon Drum	\$ 100.00	1			\$ 100.00	
Safety	Routine Field and Safety Equipment			\$ 60.00	3	\$ 180.00	
Production	Color Copies	\$ 0.40	15			\$ 6.00	
	B/W Copies	\$ 0.25	60			\$ 15.00	
						\$ 2,515.84	\$2,515.84

PHASE TOTAL						\$13,397.34
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