

October 16, 2019

Phil Richard submitted by email: Philip.Richard@Wisconsin.gov Wisconsin Dept. of Natural Resources 875 S 4th Avenue Park Falls, WI 54552-1130

Change Order #11 – Additional Direct Push Groundwater Sampling and Monitoring RE: Well Sampling

For: The Laundry Basket, 300 S. Main Street, Luck, WI WDNR BRRTS No. 02-49-544893

Dear Mr. Richard:

Based on the recommendations included in the MSA Status Report – Groundwater Sampling and Direct Push Groundwater Sampling report submitted to the Wisconsin Department of Natural Resources (WDNR) on August 28, 2019 and consultation with the WDNR project manager, additional vertical delineation of the solvent plume is necessary near the MW-13, MW-14, MW-15 and MW-10LT well nests and additional horizontal and vertical delineation is necessary north of MW-12 and west of MW-10. Considering the uncertainty regarding the vertical and horizontal extent of the plume, MSA is proposing a direct push discrete groundwater sampling event to coincide with a comprehensive groundwater sampling event that would include sampling all wells with current or historical detections of chlorinated solvents and several sentinel wells. The combined data from the discrete groundwater sampling, combined with a full round of groundwater sampling, should provide a comprehensive overview of the current extent and magnitude of the plume in addition to providing indications of plume expansion or stability.

In order to more fully delineate both the vertical and horizontal extent of the plume in the area of monitoring wells MW-13/13D, MW-14 and MW-15/15D, MSA is proposing the completion of discrete, direct push groundwater sampling at four locations between West Street and the Gandy Dancer Trail between West 1st Avenue and East 3rd Avenue in the Goldstar Cooperative and Luck Fire Association properties and one additional boring to the north of MW-10 in the Luck Senior Citizens property. Access agreements for each location will be obtained prior to drilling and a private utility locate will be conducted at each location prior to the advancement of any borings. At each location, a discrete groundwater sample will be collected from a shallow interval (approximately 5-10 feet below land surface (bls)), a middle interval (approximately 25-30 feet bls), a deep interval (approximately 45-50 feet bls) and a deeper interval (approximately 65-70 feet bls). Each boring will be advanced separately, drilling tooling will be decontaminated between each boring and borings will be abandoned according to Wisconsin Administrative Code. A total of twenty (20) groundwater samples and two (2) duplicate samples will be collected from the discrete intervals and will be analyzed for volatile organic compounds (VOCs) using EPA Method

1230 South Boulevard Baraboo, WI 53913

(608) 356-2771 TF (800) 362-4505 (608) 356-2770

www.msa-ps.com

#### Page 2

Mr. Phil Richard, Wisconsin Department of Natural Resources October 16, 2019

8260. The proposed boring/sampling locations are shown on the attached figure. The figure legend provides a description of the sample intervals proposed at each location.

In addition to the delineation efforts to the west of MW-10 and north of monitoring well MW-12, MSA proposes additional vertical delineation of the plume near several of the existing monitoring wells and monitoring well nests. Discrete groundwater samples from the deep interval (approximately 45-50 feet bls) and the deeper interval (65-70 feet bls) will be collected adjacent to the MW-13, MW-14 and MW-15 monitoring well nests and adjacent to monitoring well MW-10. A discrete groundwater sample will also be collected from the deepest interval (approximately 65-70 feet bls) adjacent to monitoring well nest MW-10LT. A total of nine (9) groundwater samples and one (1) duplicate sample will be collected from the discrete intervals and will be analyzed for volatile organic compounds (VOCs) using EPA Method 8260 and two duplicate samples and one trip blank will also be analyzed for VOCs using EPA Method 8260.

In an attempt to characterize the deeper lithology of the site, a soil lithology boring will be advanced in the vicinity of monitoring well MW-15. The boring will be advanced in five foot intervals between 40 and 70 feet below land surface using a discrete soil sampler. Soil samples from each interval will be collected and classified using the National Resource Conservation Service (NRCS) Universal Soil Classification System. Soil sampling results will be provided on a boring log and included with the discrete sampling results.

Coincident with the direct push groundwater sampling, groundwater samples will be collected from all of the monitoring wells listed below:

- Laundry Basket source area wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, PZ-1, PZ-6, PZ-7, PZ-8 and PZ-9;
- Equity Co-op wells MW-2Eq, MW-4AEq, MW-5Eq, MW-7Eq, MW-8Eq and MW-9Eq;
- St. Croix Hardwoods wells MW-12, MW-13/MW-13D, MW-14, MW-15S/MW-15D, MW-16S/ MW-16D and MW-17/MW-17-40/MW-17-70; and
- o Luck Telephone well nests at MW-6LT, MW-7LT, and MW-10LT.

All forty two (42) wells will be sampled for VOCs using EPA Method 8260 and four (4) duplicates and a trip blank will also be collected for a total of forty seven (47) samples. The results from this sampling will be combined with results from the monitoring well groundwater sampling and presented in a letter report to the WDNR including updated tables and figures. A statistical analysis of each monitoring well (Mann-Kendall or similar) will be also be included in the letter report in order to determine plume stability.

#### Cost Estimate for Change Order #11

The attached DERF Site Investigation Bid Sheets include the costs to complete the above described activities and totals \$14,100.00 consultant, \$6,210.00 contractor costs (drilling), \$5,520.00 contractor costs (laboratory), and \$706.00 miscellaneous costs, which totals \$26,536.00.

The following presents a summary of the budget information for this project:

Page 3 Mr. Phil Richard, Wisconsin Department of Natural Resources October 16, 2019

<u>Consulting</u>	<u>Contractor</u>	<u>Budget</u>	<u>Total Budget</u>
\$54,900.00	\$41,400.00	\$96,300.00	\$96,300.00
\$390.00	\$700.00	\$1,090.00	\$97,390.00
\$10,113.00	\$6,900.00	\$17,013.00	\$114,403.00
\$12,012.00	\$6,208.00	\$18,220.00	\$132,623.00
\$3,185.00	\$4,265.00	\$7,450.00	\$140,073.00
\$15,105.00		\$15,105.00	\$155,178.00
\$18,190.00	\$7,125.00	\$25,315.00	\$180,493.00
\$5,810.00	\$2,984.00	\$8,794.00	\$189,287.00
\$17,780.00	\$14,040.00	\$31,820.00	\$221,107.00
\$2,060.00	\$474.00	\$2,534.00	\$223,641.00
\$7,360.00	\$6,780.00	\$14,090.00	\$237,731.00
\$14,806.00	\$11,730.00	\$26,536.00	\$264,267.00
	\$390.00 \$10,113.00 \$12,012.00 \$3,185.00 \$15,105.00 \$18,190.00 \$5,810.00 \$17,780.00 \$2,060.00 \$7,360.00	\$54,900.00 \$41,400.00 \$390.00 \$700.00 \$10,113.00 \$6,900.00 \$12,012.00 \$6,208.00 \$3,185.00 \$4,265.00 \$15,105.00 \$18,190.00 \$7,125.00 \$5,810.00 \$2,984.00 \$17,780.00 \$14,040.00 \$2,060.00 \$474.00 \$7,360.00 \$6,780.00	\$54,900.00 \$41,400.00 \$96,300.00 \$390.00 \$700.00 \$1,090.00 \$10,113.00 \$6,900.00 \$17,013.00 \$12,012.00 \$6,208.00 \$18,220.00 \$3,185.00 \$4,265.00 \$7,450.00 \$15,105.00 \$ \$15,105.00 \$18,190.00 \$7,125.00 \$25,315.00 \$5,810.00 \$2,984.00 \$8,794.00 \$17,780.00 \$14,040.00 \$31,820.00 \$2,060.00 \$474.00 \$2,534.00 \$7,360.00 \$6,780.00 \$14,090.00

Sincerely,

MSA Professional Services, Inc.

Mark Davidson

Sr. Project Hydrogeologist

Cc: Lois Baldwin, Luck, WI

Debra Sylvester (via email) Erica Klingfus, MSA (via email)

**Enclosures: Proposed Drilling Location Figure**  State of WIsconsin Department of Natural Resources PO Box 7921, Madison WI 53707-7921 dnr.wi.gov

## DERF Site Investigation Bid Summary Consultant Selection Cover Sheet

Form 4400-233 (R 4/04) Page 1 of 6

Notice: Use this form to notify the Department of Natural Resources of the consultant you are selecting to conduct a site investigation and to submit and summarize the bids required in the Dry Cleaner Environmental Response Fund (DERF) Program. This form is authorized under s. 292.65, Wis. Stats. and s. NR 169.23, Wis. Adm. Code. Completion of this form is mandatory for any person applying for DERF reimbursement. Persons who do not submit a completed form will not be eligible for reimbursement under DERF. Personal information will be used to manage the DERF program, and be made available to requesters under Wisconsin's Open Records laws (ss. 19.32-19.39, Wis. Stats.) and requirements.

Complete the following infor	mation and submit	it to your DNR	regional proje	ct manager. C	opy this form	as necessary.
Site Information Site name: The Laundry E	Basket	Facility Nam	e: The Laund	Irv Basket		BRRTS # 02-49-544893
Consultant Selected			I			
Consultant Name: MSA P	rofessional Servic	es	Consultant A	Address: 1230	) South Boule	evard, Baraboo, WI 53913
Summary of Costs:						
Consultant Name: MSA	A Professional S	ervices		Consultant	Name:	
Consulting costs:	\$14,100	0.00		Consulting of	costs:	
Drilling costs:	\$6,210	.00		Drilling cost	s:	
Analytical costs:	\$5,520	.00		Analytical co	osts:	
Miscellaneous costs:	\$706.	00	]	Miscellaneo	us costs:	
Total Costs:	\$26,536	6.00	]	Total Costs:		
Consultant Name:				Optional 4t	h bid inform	nation:
Consulting costs:				Consultant	Name:	
Drilling costs:			]	Consulting of	costs:	
Analytical costs:			]	Drilling cost	s:	
Miscellaneous costs:				Analytical co	osts:	
Total Costs:				Miscellaneo	us costs:	
Justification for Selection				Total Costs:		
Change Order #11 to o		_		and monito	oring well sa	ampling to determine
comprehensive extent	and magnitude	of the plum	<u>e</u>			
Amaliaant lafamastia		<b></b>				
Applicant Information  I certify that the information			ect to the best	of my knowled	ne	
Applicant Name				<u></u>	Date	
517 S. Fourth Street			Luck		WI	54853-9045
Signature						
		Dep	artment Use			
Project Manager Approval S	ignature		Phone Numb	er		Date
If not approved, reason for r	non-approval:					

## DERF Site Investigation Bid Sheet Consultant Bid Summary

Form 4400-233 (R 4/04) Page 2 of 6

Site Information					
Site Name					
	The L	_aundry Basket, L	uck WI		
Consultant Name				Applicant Name	
	MSA	Professional Seri	vces		Lois and Ardell Baldw
Bid Summary	<del>-</del>				
Drilling Costs Total =	\$	6,210.00			
Analytical Costs Total =	\$	5,520.00			
Consulting Costs Total =	\$	14,100.00			
Misc Costs Total =	\$	706.00			
Grand Total =	\$	26,536.00			
I certify that the costs are an accura			d costs for the site	investigation and	I understand and will adhere
to s.292.65 Stats. and ch NR 169, V Consultant Signature	vis. Aam	1. Code.			16-Oct-19
The S	)<	Dane		_	

Please attach to these forms a written narrative specifying how the tasks outlined in these sheets will be performed.

Consultant Name: Site Name: BRRTS #: Date:

## **DERF Site Investigation Bid Sheet Drilling Costs** Form 4400-233 (R 4/04) Page 3 of 6

Drilling Costs						
Task	Interval	Number of Borings or Wells	Number of Days	Total Number of Feet	Cost/feet, Day or Well	Total Cost
Well installation and Comp	pletion					
2 inch PVC	_1ft_to _20ft			I		
1 inch PVC (GeoProbe)	ft to ft					\$ -
<u> </u>	ft to ft					\$ -
	> ft					\$ -
Decontamination Costs	•		•	•		
Mobilization Costs						
Hollow Stem Auger Drilling	g 2.25 ID					
2 1/4 Augers	0 to 40 ft					\$ -
	40 to 80 ft					\$ -
Bore Abandonment	per ft					\$
						\$ -
Decontamination Costs	'					
Mobilization / per diem Co	sts					
Hollow Stem Auger Drilling	4.25 ID					
4 1/4 Augers	0 to 40 ft					
	40 to 80 ft					\$ -
Bore Abandonment	per ft					\$ -
						\$ -
Decontamination Costs			ļ			
Mobilization						
Direct Push Borings (per p	ooint)					
Unit and Operator	< 30 ft depth					\$ 4,400.0
Abandonment	per foot					\$ -
Concrete Core/Patch	each					\$ -
Soil Gas Subcontractor	'		1	•		•
Mobilization Costs						\$ 900.0
Well Development (if done	by subcontractor)					<del>,</del>
	Monitoring Wells					
	Piezometers					
	Recovery Wells					
Other						
Drums for soil/water						\$ -
Private Locate		<u> </u>				\$ 750.0
Per Diem						\$ 160.0
Steel Bumper Posts						\$ -
Traffic Control						
Total Drilling Costs						\$ 6,210.0

Cost includes soil and groundwater sampling and borehole abandonment

Consultant Name: Site Name: BRRTS #: Date:

## **DERF Site Investigation Bid Sheet** Analytical Costs Form 4400-233 (R 4/04) Page 4 of 6

Parameter	WI Certified Lab			Field	d Test/Fi	eld Kit	1			
	\$/	#	Method	\$/	#	Method		# Samples	Method	
	sample	samples	Used	sample	samples	Used	\$/Day	# Days	Used	Total Costs
Solids Analysis										
VOCs										\$0.00
TCLP										\$0.00
RCRA Metals										\$0.00
Duplicate Analyses										\$0.00
Blank Analyses										\$0.00
Other: (Specify)										\$0.00
										\$0.00
Water Analysis		•								
VOCs	\$ 70	71	8260							\$4,970.00
Nitrate*	\$ 13		4500							\$0.00
Dissolved Oxygen*										\$0.00
Temperature*										\$0.00
Ferrous Iron*	\$ 10		6010							\$0.00
Sulfate*	\$ 11		D516							\$0.00
Sulfide*										\$0.00
ORP*										\$0.00
pH*										\$0.00
TOC*										\$0.00
Alkalinity*										\$0.00
Chloride*										\$0.00
Spec. Conductance*										\$0.00
Ethene/Ethane/Methane*	\$5		RSK1							\$0.00
Hydrogen*	1									\$0.00
Carbon Dioxide*										\$0.00
RCRA Metals										\$0.00
Duplicate Analyses	\$6	8	8260							\$480.00
Blank Analyses	\$ 70									\$70.00
Other: DOC	\$6									\$0.00
	7.									\$0.00
Air Analysis										73.55
VOCs			Ι			Ι				\$0.00
TCE										\$0.00
PCE (minimum detection limit										\$3.00
is <10 ppbv)			<u></u>			<u></u>				\$0.00
Other: (Specify)										\$0.00
TO-15	\$ 237	0	TO-15							\$0.00
Waste Analyses (soil/water)										
TCLP Ext + VOC Analysis										\$0.00
										\$0.00
Miscellaneous										
										\$0.00
										\$0.00
Charge for Mobile Lab (indicate	# days	and daily fee	<del>)</del>							
Total Analytical Costs										\$5,520.00

<sup>\*</sup> Natural Attenuation parameters required for consideration of NA as remedy.

Consultant Name: Site Name: BRRTS#: Date:

### **DERF Site Investigation Bid Summary** Consultant Costs Form 4400-233 (R 4/04) Page 5 of 6

											Hours	/Task									
			ant		v						>-	<u> </u>	иo					Other (sp	ecify	,	
Position (specify)	Hourly Rate	y	Workplan Development	Offsite Access	Town Of Luck Access Requests	Well Agreement with St. Croix Hardwoods	Drilling Oversight	Well elevation survey	Drilling sampling	Well Development	Hydraulic Conductivity Test	Groundwater sampling	Soil gas/vapor intrusion sampling	SSRCL calculations (contained out or remedial actions)	Statistical Well analysis	Letter Reports	Project Management	Site Recon for Sub- Slab Locations, Report			Total Costs
Professional Staff																					
Project Manager		30	2	6												4	6				\$2,340.00
Senior Hydro/Eng/Sci		90	4												12	12					\$2,520.00
, , ,	<u> </u>	80																			\$0.00
Staff Hydro/Eng/Sci	\$	70														18					\$1,260.00
																					\$0.00
Field Staff																					
Senior Hydro/Eng/Sci	\$	90					24														\$2,160.00
Project Hydro/Eng/Sci	\$	80										72	2								\$5,760.00
Staff Hydro/Eng/Sci	\$	70																			\$0.00
Env. Specialist	\$	60																			\$0.00
Tech Support	\$	60																			\$0.00
Clerical		50																			\$0.00
Survey Staff	\$	90																			\$0.00
Office Support Staff																					
Tech Support	\$	60														1					\$60.00
Clerical	\$	50																			\$0.00
																					\$0.00
																					\$0.00
																					\$0.00
Total Consulting Costs			\$ 620	\$ 780	\$ -	\$ -	\$ 2,160	\$ -	\$ -	\$ -	\$ -	\$ 5,760	\$ -	\$ -	\$ 1,080	\$ 2,920	\$ 780	\$ -	\$-	\$ -	\$14,100.00

Consultant Name: Site Name: BRRTS #: Date:

# DERF Site Investigation Bid Summary Sheet Miscellaneous Costs

Form 4400-233 (R 4/04) Page 6 of 6

Major Activity	Specifications	Commodity Unit (specify)	Unit Rate	Number of Units	Total Cos
IDW Disposal	i i				
Soil	Non-Hazardous	55 gal drum			\$ -
Water	Non-Hazardous	55 gal drum			\$ -
Profile/Transportation		per trip			\$ -
Soil	Hazardous	55 gal drum			\$ -
Water	Hazardous	55 gal drum			\$ -
Equipment Rental (list and include sh	nipping costs if applica	ible)			
Multi-Parameter Downhole Meter	RNA parameters	per day	\$ 75.00	3	\$ 225.0
Water Level Meter		per day	\$ 25.00	3	\$ 75.0
Field PID	soil screening	per day	\$ 75.00		\$ -
Helium Detector (includes shut in appratus, helium, supplies)	Sub Slab Sampling	per day	\$ 200.00		\$ -
Laser Survey Instrument			\$150.00		\$ -
Field Supplies (list)					
Bailers		each	\$8.00	38	\$ 304.0
Bailer string		each	\$5.00	6	\$ 30.0
EnTech Sub-Slab Sampling Ports		each	\$60.00		\$ -
Whey - Burnett Dairy		Once			\$ -
Luck Access Permits		Once	\$50.00		\$ -
-					
Surveying					
Geodometer		per hr			\$ -
Personal Protection Equipment (list)					
Nitrile gloves	box	each	12	6	\$ 72.0
					,
Sample Shipping Costs					
1 11 3 -					
		-			
Other (specify)					
(5650.)					
Tabal Microsoft Co.					<b>Ф700</b>
Total Miscellaneous Costs					\$706.

**Reminders:** DERF does not reimburse for attorney, closure or GIS fees. Mileage and meals are also non-reimbursable. Also, costs to prepare a reimbursement application and discuss the application with the department are not reimburseable. No expedited

