

Wenck Associates, Inc. 1800 Pioneer Creek center P.O. Box 249 Maple Plain, MN 55359

(763) 479-4200 Fax (763) 479-4242 wenckmp@wenck.com www.wenck.com

June 25, 2014

Ms. Maria Olson Mille Lacs Oil Company 102 Main Street Cambridge, MN 55088

RE: Proposal to Complete Additional Work Request – MPCA Leak# 8001 Pilot Test Work Plan Former Union 76 329 East First Avenue South Cambridge, MN 55088

Dear Ms. Olson,

At your request, Wenck Associates, Inc. (Wenck) has prepared this proposal to prepare a Pilot Test Work Plan (MPCA Guidance Document 7-05) required by the Minnesota Pollution Control Agency (MPCA) in the "Request for Additional Work" letter, dated April 11, 2014, for the property at the above-referenced location in Cambridge, Minnesota (the Property).

Background Information

Site:	MPCA LEAK ID#8001 Former Union 76 329 East First Avenue South Cambridge, MN 55088			
Applicant Name:	Mille Lacs Oil Ms. Maria Olson 102 Main Street Cambridge, MN 55088			
Consultant:	Wenck Associates, Inc. Mr. Aaron Benker 1800 Pioneer Creek Center P.O. Box 249 Maple Plain, MN 55359			

A Conceptual Corrective Action Design (CCAD) was completed for the release at the Property dated March 26, 2014. The MPCA approved the CCAD in a letter dated April 11, 2014 with the following comments:

- The MPCA approves the air sparge/soil vapor extraction (AS/SVE) recommended in the March 26, 2014 CCAD;
- Submit Guidance Document 7-05 Pilot Test Work Plan to describe the proposed pilot test. Include additional detail on the cross-sections that were included in the CCAD: interpret the soil

Mille Lacs Oil Company Former Union 76 (MPCA Leak# 8001) June 25, 2014

profile between borings, depict the LNAPL body as defined by the LIF (residual and mobile), and illustrate proposed vapor extraction and sparge points and their screening intervals in relation to the soil profile and saturated zone.

• Report ongoing groundwater monitoring results with each new CAD report submittal rather than in a separate report, such as Guidance Document 4-08 Monitoring Report. Include all cumulative and updated tables and figures from Guidance Document 4-08 with each CAD repot submittal.

Proposed Scope of Services

Wenck proposes to complete the following tasks as part of the Pilot Test Work Plan Report (MPCA Guidance Document 7-05), and the completion of additional information requested by the MPCA:

- Site Conceptual Model Includes updated findings and discussion of ongoing site monitoring activity;
- **2.** Pilot Test Overview Identify the pilot test technology, methodology, and individuals responsible for completing the pilot test;
- **3.** Target Zone Description Illustration of the remediation target zone on site map and updated cross-sections, and descriptions and discussion of the chemical and physical characteristics of the target zone;
- Remediation and Monitoring Points Selection Site map showing testing and monitoring point locations and descriptions of location selection rationale, and all drilling, sampling, monitoring, data collection methods and procedures;
- **5.** System Equipment, Process Flow, and System Controls Complete a process and instrumentation diagram (P&ID) and report the equipment, configuration, instrumentation, process flow, and monitoring of pilot test system functions.
- 6. Process Material Chemistry monitoring and sampling plan;
- **7.** Waste Generation, Handling, and Disposal Identification of waste materials, and how waste (emissions) will quantified and handled;
- 8. Installation Activities Discussion of permits, permit schedule, waste handling;
- **9.** Subsurface Response Monitoring Description and discussion of monitoring points, data collection, and instrumentation;
- **10.** *Pilot Test Description* Summary of pilot test from start to finish including equipment testing prior to start-up, system control adjustments, step testing, and rebound data collection;
- **11.** Operation Monitoring Plan rationale and discussion for types of data collection, locations, and frequency;
- **12.** Data Evaluation Example tables and figures that will be used to present data, explain equations for calculations of airflow and velocity, evaluation methods, and rationale;
- **13.** Technical Feasibility description of the criteria used to confirm the technical feasibility of the technology and equipment configuration when employed as the full-scale system;
- **14.** Economic Feasibility Discussion of the of how the pilot test results may effect full-scale system life-cycle cost estimates and evaluation;
- **15.** *Pilot Test Schedule* Propose a schedule for the pilot test and pilot test report submittal;
- 16. Figures Complete figures required for tasks 1-15 including new cross-sections;

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- **17.** *Tables* Complete cumulative tables.
- **18.** Bid specifications;
- **19.** Bid solicitation.

Cost Estimate and Schedule

Wenck will begin the above scope of services upon Petrofund approval of this proposal and upon authorization by Mille Lacs Oil Company. The Pilot Test Work Plan will be completed within 45 days of authorization.

The estimated fee for this scope of services is \$11,908.00. The fees and rates for specific project tasks are shown on the attached **Cost Estimate**. Fees for the MPCA requested scope of services are up to 90% reimbursable through the Minnesota Department of Commerce Petrofund. Wenck does not guarantee full reimbursement.

Wenck will assist with the Petrofund reimbursement application for an additional lump sum fee of \$1,000. Fees for the completion of the Petrofund Application are not reimbursable by Petrofund.

Upon Petrofund approval of the estimated costs to complete the above scope of services, indicate your acceptance to this proposal by signing below and also sign the attached Petrofund Proposal Signature Page Step B Part 1, and have it notarized. Retain the original notarized for your records and return a copy to Wenck. The original signed proposal will be required upon filing the Petrofund Reimbursement Application.

Sincerely,

WENCK ASSOCIATES, INC.

Aaron Benker Environmental Principal

ACCEPTED BY:

Mille Lacs Oil Company

by

Title

(Date)





Pilot Test Work Plan and **Bid Specifications and Solicitation Proposal Signature Page**



Petroleum Tank Release Cleanup Fund (Petrofund)

Leak #: 8001

Proposal Amount: \$11,908.00

Consultant Certification

I hereby certify that the attached proposal accurately reflects the anticipated costs for this step of work.

Consultant Signature Aaron Benker, Principal Consultant Name and Title (please print) Wenck Associates, Inc.

Consulting Firm

June 25, 2014

Date

1024 Petrofund Registration Number

Petrofund Determination

(this section to be completed by Petrofund staff)

Petrofund Reviewer

Date Proposal Received

Date Proposal Review Completed

Petrofund staff has determined that the proposed costs for the scope of work outlined in this document are reasonable, as noted in the letter dated

Petrofund staff has determined that the proposed costs for the scope of work outlined in this document are reasonable, with the exceptions noted in the letter dated

Applicant Certification and Notarization

I hereby certify that I accept this proposal. I further certify that I did not approve this proposal until after it was reviewed by Petrofund staff.

Notarization

7/2013

		Subscribed and sworn to before me this day			
Applicant Signature	Date	of, 20			
Applicant Name (please print)					
		Notary Public			
Title and Name of Corporation/P	artnership/				
Governmental Unit (if applicable)					
		[Stamp]			
		My commission expires			

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Cost Estimate										
Pilot Test Work Plan, Bid Spec, Bid Solicitation										
Business Professionals MPCA Leaksite #8001										
Former Union 76										
Cambridge. MN										
Wenck Associates Inc.										
Hourly Rate: \$137 \$112 \$85 \$67 \$48										
	Senior Level	Mid-Level	Entry Level		Word					
Staff:	Prrofessional	Professional	Professional	Drafting	Processing	TOTAL				
TASK				-		-				
Agency Status Update	1	1	0	0	0	\$249.00				
Applicant Status Update	1	1	0	0	0	\$249.00				
1- Site Conceptual Model	0	1	4	0	0	\$452.00				
2- Pilot Test Overview	0.5	1	2	0	0	\$350.50				
3- Target Zone Description (includes site										
maps and cross-sections)	0	4	2	12	1	\$1,470.00				
4- Remediation and Monitoring Points										
Selection (includes site maps)	0	4	0	6	1	\$898.00				
5- System Equipment, Process Flow, and										
System Controls (includes process and										
instrumentation diagram)	1	4	0	10	1	\$1,303.00				
6- Process Material Chemistry	1	2	0	0	0	\$361.00				
7- Waste Generation, Handling and										
Disposal	1	2	0	0	0	\$361.00				
8- Installation Activities	1	2	0	0	0	\$361.00				
9- Subsurface Response Monitoring	1	2	0	0	0	\$361.00				
10- Pilot Test Description	2	5	0	0	0	\$834.00				
11- Operation Monitoring Plan	1	2	0	0	0	\$361.00				
12- Data Evaluation	1	2	0	0	0	\$361.00				
13- Technical Feasibility	0.5	1	0	0	0	\$180.50				
14- Economic Feasibility	0.5	1	0	0	0	\$180.50				
15- Pilot Test Schedule	0	0.5	0	0	0	\$56.00				
16- Figure updates (includes contour										
maps, hydrographs, and concentration										
graphs)	0.5	4	4	8	1	\$1,440.50				
17- Update Cumulative Tables	0	1	4	0	0	\$452.00				
18- Bid Specifications	0.5	4	0	6	4	\$1,110.50				
19- Bid Solicitations	0.5	4	0	0	0	\$516.50				
TOTAL PROFESSIONAL FEES	14	48.5	16	42	8	\$11,908.00				