STATEMENT OF WORK FOR AN INTERIM ACTION SOURCE AREA PILOT SCALE TEST
Tower Standard LUST Site (aka Haskell Lake Petroleum Contamination Site), Lac du Flambeau, Wisconsin
September 2017

Introduction

Site Description

See Previous Tower Standard Task Order for site description and background information.

Purpose

The purpose of this Statement of Work (SOW) is to set forth the requirements for conducting a Pilot Scale Test to evaluate two potential interim measures (excavation, air sparge/soil vapor extraction) to eliminate, reduce, or control risks to human health and the environment. This SOW is designed to provide the framework for conducting the Pilot Scale Test activities at the Tower Standard site. The estimated completion date for this tasking is November 2017.

General Requirements

A summary of the major deliverables and a schedule for submittals are attached (Attachment 1).

The purpose of this pilot test is to evaluate the effectiveness of Excavation and Air Sparge/Soil Vapor Extraction as an Interim Measure to substantially reduce contamination in the source soil area at the site.

The contractor shall furnish all necessary and appropriate personnel, materials, and services needed for, or incidental to, performing and completing the Pilot Scale Test.

The contractor shall communicate at least weekly with the Task Order COR (COR), either in face-to-face meetings or through conference calls.

EPA will provide oversight of contractor activities throughout the Pilot Scale Test effort. EPA review and approval of deliverables is a tool to assist this process and to satisfy, in part, EPA's responsibility to provide effective protection of public health, welfare, and the environment. EPA will review deliverables to assess the likelihood that the Pilot Scale Test will achieve its goals and that its performance requirements have been met. Acceptance of deliverables by EPA does not relieve the contractor of responsibility for the adequacy of the deliverables.

Record-Keeping Requirements

The contractor shall maintain all technical and financial records for the Pilot Scale Test in accordance with the contract. The Agency and the contractor shall submit documents and deliverables using electronic media whenever possible. At the completion of the tasking, the

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contractor shall submit an official record of the Pilot Scale Test in both CD and a hardcopy to the COR.

Equipment Transfer - N/A

USEPA Primary Contact

The primary contact for this tasking is Bob Egan. He can be reached at (312) 886-6212 or via e-mail at egan.robert@epa.gov . His mailing address is US EPA Region 5, 77 West Jackson Blvd. (LR/17J), Chicago, Illinois.

Task 1 Project Planning and Support

The purpose of this task is to determine how the Pilot Scale Test will be managed and controlled. The following activities shall be performed as part of the project planning task:

1.1 Project Planning. This task includes efforts related to project initiation.

1.1.1 Attend Kickoff Meeting. The contractor shall contact the COR within 3 calendar days after receipt of the tasking to schedule the kickoff meeting. The contractor shall attend a kickoff meeting to be held at the EPA Region 5 Office in Chicago, Illinois or by conference call after receipt of the technical direction document. It is anticipated that 1 - 2 contractor personnel will attend the kickoff meeting.

1.1.4 Work Plan

1.1.4.1 Develop the Pilot Test Work Plan. The contractor shall prepare and submit a Work Plan within 5 calendar days after receipt of the tasking. The contractor shall use information from the appropriate EPA guidance, and technical direction provided by the EPA COR as the basis for preparing the Work Plan. The Pilot Test work must be coordinated and properly sequenced with EPA activities. The contractor shall submit one copy of the work plan to the Contracting Officer (CO), Project Officer (PO) and COR.

Develop Narrative. The Work Plan shall include a comprehensive description of project tasks, the procedures to accomplish them, project documentation, and project schedule. The contractor shall use their quality assurance/quality control (QA/QC) systems and procedures to assure that the work plan and other deliverables are of professional quality requiring only minor revisions. Specifically, the Work Plan shall include the following:

- Identification of Pilot Scale Test project elements and the associated tasking including review of site documentation; previous field sampling and analysis activities, and treatability study activities (if necessary).

- The contractor's technical approach to each task to be performed, including a detailed description of each task; the assumptions used; any information to be produced during and at the conclusion of each task; and a description of the work products that will be submitted to EPA. Information shall be presented in a sequence consistent with the SOW.

- A schedule with specific dates for completion of each required activity and submission of each deliverable required by the SOW. This schedule shall also include information regarding timing, initiation, and completion of all critical path milestones for each activity and deliverable and the expected review time for EPA.

- A list of key contractor personnel providing support on the tasking.

1.1.4.2 Prepare Revised Work Plan (if necessary)

1.1.4.2.1 Attend Fact Finding/Negotiation Meeting. The contractor shall attend a Work Plan fact finding/negotiation meeting at the Region 5 office or by conference call. EPA and the Contractor will discuss and agree upon the final technical approach and costs required to accomplish the tasks outlined in the SOW.

1.1.4.2.2 Prepare & Submit Revised Work Plan. The contractor shall prepare and submit a revised work plan incorporating the agreements made in the fact finding/negotiation meeting.

1.2 Project Management

The contractor shall perform general management including management and tracking of costs, preparation of Monthly Progress Reports, attendance at project meetings, and preparation and submittal of invoices. It is anticipated that the period of performance for this project is from task receipt through 11/30/2017. The contractor shall prepare monthly progress reports in accordance with the requirements under the contract.

Meetings/Conference Calls. The contractor shall participate in progress meetings during the course of the task. For budgeting purposes, the contractor shall assume 5 meetings, with 1 - 2 people in attendance, for a total of 15 hours.

Task 2 Preparation of Site-Specific Plans

2.1 Site-Specific Quality Assurance Project Plan (QAPP) - The contractor shall use the Region 5 QAPP, or if necessary, develop a site-specific QAPP in accordance with EPA QA/R-5 EPA/240/B-01/003, March 2001, reissued 2006, for all environmental data collection, generation and/or use including existing data identified in this Task Order for the COR's review and comment.

The contractor will finalize the QAPP addressing all EPA comments. QAPP revisions must be approved and signed by the Region 8 Quality Assurance Manager before starting environmental data collection, generation and/or use.

The contractor shall maintain and document necessary changes of the approved QAPP.

Deliverable: Draft QAPP
Due Date: **5 days** after receipt of approved Task Order

Deliverable: Final QAPP
Due Date: Within **3 days** after receipt of comments from EPA

2.2 Site-Specific Health and Safety Plan (HASP) - The contractor shall prepare a HASP that addresses field activities for the project.

Deliverable: Draft HASP
Due Date: **5 days** after receipt of approved Task Order

Deliverable: Final HASP
Due Date: Within **3 days** after receipt of comments from EPA

2.3 Develop Pilot Test Plan- The contractor shall prepare the Pilot Test Plan and submit it to the COR for review and comment. The Pilot Test Plan shall describe the technology to be tested, test objectives, test equipment or systems, experimental procedures, conditions to be tested, measurements of performance, analytical methods, data management and analysis, and residual waste management. The DQOs for data collection shall also be documented.

The Pilot Test Plan shall also describe pilot test installation and startup, pilot test operation and maintenance procedures, and operating conditions to be tested. A schedule for performing the pilot test shall be included with specific dates for each task and subtask, including EPA review periods. Key milestones that should have completion dates specified included, but are not limited to, the procurement of contractors and the completion of sample collection, the performance period, sample analysis, and report preparation.

The Pilot Test Plan shall describe in detail the treatment process and how the proposed technology will meet the performance evaluated as part of the IM CMS

effort in the original Task Order for the Tower Standard site. The Pilot Test Plan shall address how the contractor will meet all discharge or disposal requirements for any and all treated material, air, water, and expected effluents. Additionally, the Pilot Test Plan shall explain the proposed final treatment and disposal of all material generated by the proposed treatment system.

Deliverable: Draft Test Plan
Due Date: **5 days** after receipt of approved Task Order

Deliverable: Final Test Plan
Due Date: Within **3 days** after receipt of comments from EPA

Task 3 Pilot Scale Field Work

The contractor shall conduct the Pilot Test, as necessary, to determine whether each remediation technology can achieve the performance goals.

The following activities may be required during the performance of the pilot testing:

Pilot-Scale Test. The contractor shall conduct a pilot-scale test.

2.1 Procure Test Facility and Equipment. The contractor shall procure test facility and equipment, including the procurement procedures necessary to acquire the vendor, equipment, or facility to execute the tests.

2.2 Provide Vendor and Analytical Services. The contractor shall provide vendor and analytical services.

2.3 Test and Operate Equipment. The contractor shall test equipment to ensure operation, then start up and operate equipment.

2.4 Retrieve Samples for Testing. The contractor shall obtain samples for testing as specified in the Pilot Test Work Plan.

2.5 Perform Laboratory Analysis. The contractor shall procure outside laboratory services to analyze the test samples and evaluate test results.

2.6 Characterize and Dispose of Residuals. The contractor shall characterize and dispose of residuals.

Deliverable: Initiate Field Work
Due Date: As soon as possible after approval of the Pilot Test Work Plan

Task 4 Pilot Scale Test Report

Develop Pilot Test Report. Due **7 days** after completion of the Pilot Test or receipt of laboratory data, whichever is later. The contractor shall prepare and submit the Draft Pilot Test Evaluation Report that describes the performance of the technologies. The study results shall clearly indicate the performance of each technology or vendor compared with the performance standards established for the site. The report shall also evaluate each technology's effectiveness, implementability, cost, and final results compared with the predicted results. The report shall also evaluate full-scale

application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation. The Final Pilot Test Evaluation Report shall be submitted **3 days** after receipt of EPA comments on the draft report.

Deliverable: Draft Test Report
Due Date: **7 days** after completion of the Pilot Test/Receipt of Laboratory Data

Deliverable: Final Test Report
Due Date: Within **3 days** after receipt of comments from EPA on the Draft Report

Task 5 Post Pilot Scale Test Support

The contractor shall provide post Pilot Scale Test technical support. The contractor's support may include the following support activities: attendance at technical meetings and briefings, presentation/meeting with the LDF Band on the Pilot Test's findings. The contractor shall assume 30 LOE for this task.

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Attachment 1
Summary of Major Submittals for the Pilot Scale Test at Tower Standard LUST Site

TASK	DELIVERABLE	NO. OF COPIES	DUE DATE (calendar days)
2.1,2.2,2.3	Pilot Test Plan/QAPP/HSP	2	5 days after receipt of approved Task Order
2.1,2.2,2.3	Revised Pilot Test Plan/QAPP/HSP	2	3 days after receipt of comments from EPA on Pilot Test Plan
4	Draft Pilot Test Report	2	5 days after completion of the Pilot Test/Receipt of Laboratory Data
5	Final Pilot Test Report	2	3 days after receipt of comments from EPA on Draft Report