

## **HAMMER Budget Analysis (09-001)**

### **STATEMENT OF WORK**

In order to develop the HAMMER baseline activity prior to taking over programmatic responsibility and to allow for decisions prior to the next fiscal year, the MSA Portfolio Management will provide budget analysis and trade study services to DOE-RL in support of analysis of the following tasks:

1. Perform a detailed analysis of the budget process used for funding the HAMMER facility and Hanford Training
2. Perform an analysis of HAMMER training costs and how they are liquidated
3. Develop proposed options for the future funding of the HAMMER facility and Hanford Training
4. Evaluate alternatives for 'work for others'
5. Evaluate options for future activities (e.g., construction worker program, QA programs, etc.)

The MSA Portfolio Management through the services of Nadine Highland will support the identified activities under the direct guidance of HAMMER facility management and DOE-RL guidance.

The MSAs specialized expertise in these areas will enhance HAMMER's ability to perform a detailed analysis of the annual budget process for HAMMER and Hanford Training, achieve cost improvements and efficiencies, and identify options for long-term funding viability.

### **RESPONSIBILITIES**

MSA personnel will be located at the HAMMER Training and Education Center to provide the requested services. Day-to-day management will be provided by the HAMMER management staff. MSA personnel will complete all work assignments in accordance with the technical direction provided by HAMMER management. While working at HAMMER, MSA personnel will be badged in accordance with Hanford requirements.

### **SCHEDULE AND DELIVERABLES**

The MSA will provide a detailed budget analysis of HAMMER and Hanford Training along with proposed alternatives for its future funding to DOE-RL on or before August 30, 2009. It is expected that the person(s) performing the analysis will coordinate closely with the RL HAMMER Program Manager and DOE-RL throughout the process to ensure that the work is meeting RL expectations. The deliverables will be presented to different DOE-RL functions.

### **ENVIRONMENTAL, SAFETY, AND HEALTH**

The MSA personnel supporting this task shall comply with applicable HAMMER ES&H requirements, all applicable laws and regulations, and with DOE directives.

## **200W Pump and Treat Construction Schedule Review Section C.2.5.3 - Task Order 11-001**

The contractor shall provide the following project independent review services, as requested and as described below.. The Contractor shall perform these services in accordance with Contract DE-AC06-09RL14728, C.2.5.3, Portfolio Management, meet milestones and delivery schedules as established by the AMCP Groundwater and Vadose Zone Remediation Project team, and comply with established criteria.

### **Task 200W P&T-1**

**Prepare Schedule Review Plan** by developing lines of inquiry for conducting a review of the construction schedule to complete the American Recovery and Re-investment Act Key Performance Parameter (KPP) 1 for the Groundwater Pump and Treat Remedies (RL-0030.R1.1) sub-project. KPP 1 requires the project to construct the 200 West Groundwater Pump and Treatment major system components and complete construction acceptance testing. The lines of inquiry shall identify the Task 200W P&T-2 activities to provide DOE-RL with an assessment of confidence in meeting KPP 1 by September 30, 2011 and identification of one or more key times or events where DOE should evaluate the need for project schedule recovery actions. In addition, the review plan should include a short summary of the review team participant qualifications.

#### ***Deliverables:***

Submit 200W Pump and Treat schedule review lines of inquiry to DOE-RL for approval. The lines of inquiry shall include review of the project integrated schedule for completeness, adequacy of logic, and ability to achieve schedule milestones leading to completion of KPP 1; review of current progress relative to the integrated schedule; and review of the methodology used to prepare the schedule.

### **Task 200W P&T-2**

**Perform Schedule Review** by completing a review of the project in accordance with the lines of inquiry from Task 200W P&T-1. Note, Task 200W P&T-2 may commence before submittal of Task 200W P&T-1.

#### ***Deliverables:***

1. No later than December 8, 2010, provide a briefing to DOE-RL on
  - a. Observations and recommendations developed during the schedule review relative to the lines of inquiry. Observations shall include reference to specific areas of source documents related to the observation.
  - b. Recommendations to DOE for timing of future DOE evaluations of project progress at key points that would provide sufficient time for recovery actions to address schedule issues.
2. Provide formal transmittal of briefing to DOE-RL.

The contractor shall provide the following services, as requested and as described below. The Contractor shall perform these services in accordance with Contract DE-AC06-09RL14728, C.2.5, Portfolio Management, meet milestones and delivery schedules as established by the Federal Project Director, River Corridor Closure Project and/or his designee, and comply with established criteria.

## Statement of Work

### Background

The 618-10 and 618-11 burial grounds were operated for disposal of TRU and low-to-high activity waste generated before 1970 in support of the defense production of plutonium at the Hanford site. Although documentation of materials placed in the burial grounds is incomplete, available information indicates that fission products, plutonium, and uranium wastes were placed in the burial grounds.

The 618-10 burial ground covers approximately 2.1 hectares (5.2 acres) and lies approximately 3.62 km (2.25 miles) from the Columbia river. The burial ground operated between 1954 and 1963, receiving primarily radioactive waste in some form. The burial ground contains an estimated 38 drum equivalents (8.4 cubic meters [11 cubic yards]) of remote handled (RH) TRU waste (estimated to contain 1-2 kg of plutonium) and no recorded Contact Handled (CH) waste. The burial ground consists of 12 trenches (50-320 ft long by 40 to 70 feet wide) and 94 vertical pipe units. Approximately 5-10 ft of soil covers the waste. The vertical pipe units received RH or high-activity wastes. Each unit consisted of five 55 gallon drums welded end to end and stood vertically 15 ft in height. In a recent characterization effort cone penetrometer techniques were used to drive a shaft beside the VPU and a string of various radiation detection instrumentation was lowered into the shaft. Measurements were recorded at various depths.

### Task 1

Evaluate any recent technical assessments performed on the characterization work and the characterization report issued by the prime contractor WCH or their subcontractor Northwind. Perform an independent assessment using the following criteria as a starting point:

- What was the basis for selection of the instrumentation used for nonintrusive characterization?
- Training of operators/quality of the data obtained.
- Did the WCH subcontractor (North Wind) meet the conditions specified in their contract with WCH (ref X), e.g., were the non-destructive assay (NDA) methods effective in determining whether waste was RH/CH TRU, SNF, or meets ERDF criteria?
- Review the characterization report provided by NorthWind and make a determination whether the process should be used for similar activities at the 618-11 burial ground? Make

recommendations for changes to the process that would enhance the results obtained or for portions that should be eliminated.

- Also, make a determination as to whether the data generated from the NDA characterization be used to change or guide the remediation effort.

## Task 2

Prepare an executive level presentation of the results of the independent assessment and a comprehensive final report and present to the RCCP Federal Project Director.

## Deliverables

- Executive level presentation (power-point). Due date: January 28, 2011
- Comprehensive final report meeting the criteria given in Task 1. Due date: January 28, 2011.

Period of performance will be **December 20, 2010 through January 28, 2011**. Follow-up activities may be required and will be addressed separately.

## **Task Order 11-003 (Rev 2)**

**Title:** Consulting Support to HQ EM-2.1 Associate Principal Deputy for Corporate Operations and the Office of Environmental Management

**Revision Number: 2**

**Start: February 1, 2011**

**Finish: March 31, 2012**

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### **1.0 DESCRIPTION**

**Task 1 Subject Matter Expert (SME) Technical and Programmatic Support to DOE Office of Environmental Management (EM) Headquarters (HQ) Principal Deputy Assistant Secretary for Corporate Operations in support of DOE's Cleanup Mission**

#### **SCOPE**

Provide independent review capability through March 31, 2012, including the following activities:

1. Development of lines of inquiry and presentation content/format requirements for DOE Cleanup Mission offices.
2. Participate in video teleconferences with DOE Cleanup Mission offices.
3. Review technical and programmatic information and other supporting documents.
4. Develop and present recommendations.
5. Perform other tasks as directed by DOE EM 2.1.

**Task 2 SME Technical and Programmatic Support to the Environmental Management Advisory Board (EMAB)**

#### **SCOPE**

Provide expert services in the assembly and preparation of data, previous reports, analyses, etc., that the Subcommittee will need as part of their effort.

Prepare analyses or conduct review as requested by the Technical Subcommittee to support their ability to develop recommendations to provide to the EMAB.

Travel to support the Technical Subcommittee meetings and assist with real-time requests for information as is feasible.

As desired by the Technical Subcommittee, prepare background and factual information for the Subcommittee's incorporation in their report which will include their recommendations.

The contractor will:

1. Low-Activity Waste Tc-99 and I-129 Management

The Subcommittee should evaluate strategies for Tc-99 and I-129 management on waste loading that could further extend the treatment mission and increase the life-cycle cost.

2. Low-Activity Waste Forms

Evaluate the advantages of alternate waste forms (to the current baseline of vitrified borosilicate glass at Hanford or grouted “salt stone” at SRS) by addressing Tc-99 and I-129 capture and contribution to lower life cycle costs.

3. Sodium and Sodium Management

Evaluate strategies for management of sodium within the Hanford Tank Waste inventory field and the supplemental addition of sodium hydroxide within the Waste Treatment and Immobilization Plant process flow sheet to improve plan performance and manage life cycle costs.

4. Life Cycle Cost and Schedule Changes

Evaluate the life cycle costs and challenges for alternatives to the baseline planning of vitrification and of supplemental low-activity waste capacity (Hanford) and/or minimizing life cycle costs by successfully implementing pretreatment capabilities to ensure that low-activity waste treatment is operated in a manner that matches high-level waste vitrification campaigns (SRS).

## 2.0 DELIVERABLES

### **Task 1 Subject Matter Expert (SME) Technical and Programmatic Support to DOE Office of Environmental Management (EM) Headquarters (HQ) Principal Deputy Assistant Secretary for Corporate Operations**

- a. Development of lines of inquiry and presentation content/format requirements for the field and HQ program offices. Due date: at the direction of EM 2.1.
- b. Participate in video teleconferences with the EM field/site offices and HQ – ongoing at the direction of EM 2.1.
- c. Review technical and programmatic information and other supporting documents – ongoing at the direction of EM 2.1.
- d. Develop and present recommendations. Due date: at the direction of EM 2.1.
- e. Perform other tasks within scope as directed by DOE EM 2.1. Due date: at the direction of EM 2.1.

## **Task 2 SME Technical and Programmatic Support to the Environmental Management Advisory Board (EMAB)**

a. Low-Activity Waste Tc-99 and I-129 Management

Due date: Review documents will be provided one week prior to each technical subcommittee meeting and recommendations will be provided one week following each technical subcommittee meeting.

b. Low-Activity Waste Forms

Due date: Review documents will be provided one week prior to each technical subcommittee meeting and recommendations will be provided one week following each technical subcommittee meeting.

c. Sodium and Sodium Management

Due date: Review documents will be provided one week prior to each technical subcommittee meeting and recommendations will be provided one week following each technical subcommittee meeting.

d. Life Cycle Cost and Schedule Changes

Due date: Review documents will be provided one week prior to each technical subcommittee meeting and recommendations will be provided one week following each technical subcommittee meeting.

### **2.0 ASSUMPTIONS AND CONSTRAINTS**

It is assumed that Longenecker & Associates will be the primary provider of consulting support to HQ EM-2.1, with support from others as needed.

1. The following table presents the labor hour estimates to accomplish the scope of work as described in each task above. Also included are assumptions for travel to meet the scope of work for each activity. These assumptions are the basis for the attached Cost Estimate to this Technical Proposal and reflect the requests to increase the staffing level of support.

As presented in MSA-1004609 R1, the original PMTO estimate hours and travel details are listed below:

<b>Task</b>	<b>Labor hours</b>	<b>Air Trips to Hanford</b>	<b>Air Trips to Augusta</b>	<b>Hotels nights</b>	<b>Day per diem</b>
Task 1	100	2	0	4	6
Task 2	360	3	3	12	15

The following table represents the increase in hours and travel in revision 1:

<b>Task</b>	<b>Additional Labor hours</b>	<b>Additional Air Trips</b>	<b>Additional Hotels nights</b>	<b>Additional Days per diem</b>
Task 1	221	1	3	4
Task 2	485	6	12	18

2. DOE will provide the schedule (including agenda) for each technical subcommittee meeting at least 15 calendar days prior.
3. Review documents will be provided one week prior to each technical subcommittee meeting and recommendations will be provided one week following each technical subcommittee meeting.

## **Task Order 11-004 (Rev. 2)**

**Title: MSA Support to DOE-RL Project Integration and Control Division (PIC)**

**Start: February 28, 2011**

**Finish: September 30, 2011**

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### **1.0 DESCRIPTION**

This support will provide expert services in the preparation and assembly of a Hanford level Project Controls System Description (PCSD). This effort will include the review of program/project-related documentation, such as Project Execution Plans, System Descriptions, Project Procedures, etc.

These services shall be performed in accordance with Contract DE-AC06-09RL14728, C.2.5.3, Independent Assessment and Analysis, meet delivery schedule as established by the PIC task lead and comply with established criteria.

The contractor shall provide support in the following areas:

1. Provide effective client interface and comprehension of documentation vision and correlation with various site documentation and tasks.
2. Perform duties in a competent, professional manner that meets established milestones as established by the PIC task lead.
3. Demonstrate effective document development and comment resolution skills during preparation.

This effort is required for the period of February 22, 2011 through September 30, 2011.

### **2.0 DELIVERABLES**

- Completion of a comprehensive PCSD that meets the criteria described by this Statement of Work is due September 30, 2011.

### **3.0 ASSUMPTIONS AND CONSTRAINTS**

- It is assumed that the Contractor staff will have knowledge of DOE/RL program/project-related documentation: a knowledge of MS Office tools, with emphasis in Microsoft Word; and excellent written and oral communications skills.
- Services will follow the MSA standard work schedule including Holidays. After hour or weekend support must be coordinated in advance and approved in advance by the Department of Energy Contracting Officer.
- Delays in documentation reviews by DOE-RL may create impacts to the schedule.
- It is understood that the following individuals are allowed to request services on this request:
  - *Jim Rodriguez, PIC POC*
  - *Jon Peschong, PIC Division Director*