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.