Issue 18



River Corridor Closure Project

Recovery Act Weekly Report

For the week ending January 10, 2010

Contract DE-AC06-05RL14655

Protecting the Columbia River

Overview

Background Summary of Projects that Washington Closure Hanford (WCH) will accomplish using ARRA funds (pending definitization of scope and contract modifications).

A. The Environmental Restoration Disposal Facility (ERDF)

ERDF is the hub of the WCH scope of work and supports a major portion of other Hanford contractor (OHC) waste disposal. Wastes collected from sites around the Hanford complex are brought to ERDF for treatment and disposal. WCH operates the ERDF and is currently using ARRA funds to upgrade and expand its capabilities to meet the needs of Hanford's accelerating mission.

B. The 618-10 Burial Grounds

The trenches at 618-10 have long been regarded as some of Hanford's worst waste sites. Using ARRA funds, WCH will characterize the site. Intrusive and non-intrusive techniques will be used, and the subsequent analysis of data will enable the project to pursue remediation of the site safely and effectively.

C. The 618-11 Burial Grounds

Along with 618-10, the 618-11 Burial Grounds are among the biggest challenges faced by WCH using ARRA funds. The 618-11 characterization work will require special care because of its proximity to the Energy Northwest Generating Facility, north of the 300 Area.

D. Waste Site Remediation

WCH is employing ARRA funds to clean up many failed waste sites not originally part of its contract. Sites in the 100-F and IU 2&6 segment are proposed for waste site remediation in the two year period starting in October 2009. An orphan site evaluation report for IU 2&6 Segment 2 will be prepared and issued.

E. Confirmatory Sampling of other new sites

WCH is proposing to complete the early sampling process of 66 potential waste sites using ARRA funds. Confirmatory sampling is performed for sites that require additional information for determining if the site requires remediation.

This weekly report will provide evidence of these activities as they occur in support of ARRA.

The following figure illustrates the overall scope of WCH's ARRA projects.



Overview (Continued)

ARRA Scope





Safety

Safety Accomplishments

As of December 22, 2009, WCH and its subcontractors have worked more than 112,000 hours of ARRA scope with no safety incidents.

Hazard Reductions

"Post Holiday Safety Refocus" discussions were conducted at plan-of-the-day meetings. The following topics were included in the discussions:

Distractions and Seasonal Affective Disorder (SAD). SAD, often called the inter blues, is a mood disorder in which people experience depressive symptoms caused by the lack of exposure to sunlight. The disorder is most prevalent in January and February. The American Academy of Family Physicians reports that as many as 6% of Americans suffer from winter depression SAD. Another 10% to 20% may experience some mild form of SAD. Symptoms include depression, lethargy, overeating, and mood changes. Some ways to help overcome SAD include taking a walk outside, replacing lights with bright white fluorescent bulbs, and controlling your diet. If your depression is severe, seek assistance from a physician.

Applying HPI Error Prevention Tools. To mitigate SAD and holiday blues, one should apply Human Performance Improvement (HPI) tools. These include self-checking; peer-checking; procedure use and adherence; time outs (work pause); and Stop, Think, Act, and Review (STAR).

Specific Winter Hazards. Employees should always be aware of hazards caused by ice, snow, fog, freezing rain, and cold weather. Also, be aware of potholes filled with ice. To help prevent hazards, clean off icy areas, fill in pot holes and road ruts to avoid freezing water, use salt on stairs and walking paths, use handrails, and walk on designated paths. Also, always wear appropriate footwear.

Considerations for Deciding When to Take to the Roads. Employees are provided with several contacts to monitor changing weather and road conditions.

Seatbelt Campaign. WCH safety representatives will hand out Snickers bars with smile stickers to remind everyone to wear their seatbelts.

Picture This Winter Announcement. Employees are asked to recognize safe and unsafe acts or conditions and actively try to improve the conditions or behaviors. Employees are to take a picture to document the act or condition and determine ways to improve and/or reinforce the observations. The information will be used by the Safety and Health organization to generate safety information, topics, focus behavioral campaigns, and overall project initiatives to continuously improve the safety of employees on and off the job.



Cost/Contract Status

Contract Mod #	Date	Scope	Obligated (\$M) (Inception to Date)	Not to Exceed (\$M) (Inception to Date)
099	4/9/09	ERDF Cell Expansion & Upgrades; 618-10 NIC	\$203.0	\$28.0
105	4/30/09	ERDF Cell Expansion & Upgrades; 618-10 NIC	\$203.0	\$44.5
126	7/23/09	H.37 Clause - Reporting Requirements	N/A	N/A
139	9/3/09	ERDF Cell Expansion & Upgrades; 618-10 NIC	\$253.6	\$44.5
142	9/30/09	ERDF Cell Expansion & Upgrades; 618-10 NIC; Road Upgrades; Remediation of Orphan Sites	\$253.6	\$123.8

Contract Modification #142 is the definition of the Phase 1 scope of work and was incorporated into the Integrated Project Baseline (IPB) (Performance Measurement Baseline) beginning with October 2009 reporting.



ARRA Actuals (includes	PMB and	Proposal	2)
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Apportionment		PMB or		Inception	NTE
Number	Apportionment Title	Balance *	Dec 2009	To Date	Amount
		РМВ	696	21,922	
RL-0041.R1.2	ERDF Cell Expansion	Balance	475	2,083	12,000
	River Corridor Soil & Groundwater	РМВ	1,274	6,380	
RL-0041.R2	(618-10)	Balance	50	183	5,000
		PMB	1,970	28,301	
Sub Total		Balance	526	2,265	17,000
Fee			204	1,840	
Total			2,700	32,407	

* PMB is the Phase 1 Performance Measurement Baseline. Balance is Proposal 2



ERDF

Super Cells 9 and 10 Construction

Under subcontract to WCH, DelHur Industries has excavated 1,694,116 cubic yards of material for super cell 9 (including 263,913 cubic yards of stockpile removal).



WCH subcontractor DelHur Industries continues excavation of super cell 9 at the Environmental Restoration Disposal Facility. Excavation is 95% complete.

DOE-RL has completed its review of the award package for the excavation of super cell 10 and the construction of super cells 9 and 10. The award package has been sent to DOE Headquarters for review.

Facility and Equipment Upgrades

The installation of fiber optic cable for internet access at the third scale was completed. The cable runs from a control center to the new reader board. Waste shipments will be entered in real-time into the Waste Management Information System. The new reader board and scale are part of the waste tracking system and accommodate traffic from the back road into ERDF. The scale is expected to be operational by late January.



ERDF (Continued)



Fiber optic cable has been installed to allow internet access for the new third scale at the Environmental Restoration Disposal Facility.

WCH is in the process of putting together request for proposals (RFPs) for expanding the truck maintenance facility, and constructing new equipment and container maintenance facilities and a new operations center.

The transportation truck maintenance facility provides mechanical repair, preventative maintenance, special project, and yearly inspections for the ERDF truck fleet. The facility will be expanded at the current location. The upgrade includes two additional truck bays, a large concrete pad, an exterior awning that will cover two smaller concrete pads, and a conference room.

The container maintenance facility provides mechanical repairs, preventative maintenance, and tarp services for ERDF waste containers. The facility upgrades include a large container repair line, a maintenance shop, a weld area, a lunch area, and an exterior awning over a concrete pad.



ERDF (Continued)

The equipment maintenance facility provides mechanical repair, special projects, and yearly inspections for heavy equipment used at ERDF. The facility upgrades include two service lines, an operational storage facility, a large concrete pad, and en exterior awning over a smaller concrete pad.

The new operations center to support ERDF operations will be attached to the equipment maintenance facility. It will contain a large meeting room, an administrative area, several offices, and a lunch area.

The RFP to build a new onsite refueling station and a new septic system has been issued, and the deadline for venders to send in their bids was extended to January 12. Bids will then be evaluated and the award package will be extended in February. The refueling station will service about 65 vehicles ranging from passenger vehicles to tractor-trailers.

Scientists and engineers from Pacific Northwest National Laboratory (PNNL) are working on a presentation for the design of a container monitoring system to be used at ERDF. Designers and engineers from ERDF hosted a meeting with PNNL personnel last month to discuss the possibility of adapting a PNNL designed system for tracking Army cargo containers to meet ERDF's needs. The system would allow for ERDF operations personnel to know exactly how many full and empty containers are available at any time.

The last of 20 new haul trucks were received. The trucks are from Peters & Keats of Lewiston, Idaho. A second water truck also arrived. The water truck is from Veteran Products of Pasco, Washington.



ERDF (Continued)



The second of two new water trucks from Veteran Products was delivered to the Environmental Restoration Disposal Facility on December 28.

Upcoming Activities

- Continue excavation for super cell 9.
- Evaluate bids for construction of the fueling station and septic system.



618-10 Burial Ground

618-10 Non-Intrusive Characterization/Trench Remediation Project

WCH subcontractor North Wind Inc. began radiological characterization activities at the 618-10 Burial Ground.

North Wind is using a multi-detector probe (MDP) designed for measuring a wide range of radiation sources and activities through the walls of cone penetromers. The MDP includes two gamma-ray detectors used as spectrometers, two neutron detectors, and a gross gamma detector. Four cone penetrometers are being placed around each the 94 vertical pipe units (VPUs) in the burial ground to characterize their contents. Measurements are taken each foot with a 3-minute count time.



North Wind workers drop a multi-detector probe (MDP) down a cone penetrometer to measure radiation activity at the 618-10 Burial Ground.

Cone penetrometers are steel cylinders that accommodate the instruments used to determine the type and distribution of radioactive materials within the VPUs. During the mid-1950s and early 1960s, highly radioactive waste from Hanford's 300 Area was dumped into the VPUs, which are five bottomless 55-gallon drums welded end to end.



618-10 Burial Ground (Continued)

A radiological control technician checks for contamination as the MDP is removed from the cone penetrometer. A computer then analyzes the data, showing graphics of the detector's activity.



North Wind's Meghan Cochrane uses a computer to gather data from a multi-detector probe at the 618-10 Burial Ground.

Upon completion of the MDP measurements, the cone pentrometers will be capped with threaded caps as close to the ground surface as practicable so future activities will not be affected.

North Wind installed 100 cone penetrometers to a target depth of about 22 feet and characterized 22 cone penetrometers in the VPU area.



618-10 Burial Ground (Continued)



North Wind personnel continues to install cone penetrometers to a target depth of 22 feet at the 618-10 Burial Ground.



618-10 Burial Ground (Continued)

Upcoming Activities

- Continue cone pentrometer installation
- Continue radiological characterization
- Continue confinement design criteria development activities.
- Continue soil sampling project startup review development activities.

Video

Click here to view video of radiological characterization activities <u>at the 618-10 Burial Ground.</u>



Profile

The two inches of snow that fell on New Year's Eve was a welcome sight for Meghan Cochrane, a Wisconsin native who can't image winter without the white stuff.

Cochrane is a native of Wild Rose, a town of about 750 in central Wisconsin. She's made her way to the Pacific Northwest for the first time, thanks to a job created by Recovery Act funding.

Cochrane began work last month for Washington Closure Hanford subcontractor North Wind Inc., a company based in Idaho Falls with an office in Richland. She was hired to operate multi-detector probes (MDPs), which are being used for radiological characterization at the 618-10 Burial Ground.

"The stimulus money created a great opportunity for me," said Cochrane, who last spring earned a bachelor's degree in environmental studies from Lawrence University, a small liberal arts college in Appleton, Wisconsin. "I feel very fortunate to get such a good job right out of college."



Meghan Cochrane, a recent college graduate, helps operate the multi-detector probes at the 618-10 Burial Ground.



Profile (Continued)

Cochrane was turned on to North Wind by her uncle, whose company worked with North Wind in the past. She sent in her resume and before long she got the call inviting her to join North Wind. And it hasn't taken long for her to make a good impression.

"Meghan is pleasant, hard working, and very intelligent," said Benson Krull, North Wind's manager of the 618-10 project. "She's already shown that she's a big asset to the company. We're thrilled to have her."

Cochrane feels it's a great fit, too. She and her co-workers began MDP operation January 4.

"I really like it here," Cochrane said. "I'm working on a very important project. My work is a part of the process that will determine how to clean up the burial ground. I'm glad I'm here."

Now she just needs to get used to the weather.

"It's a little mild," she said. "When I went home for Christmas, we had 17 inches of snow."



100-F Area

Prequalification questionnaires from companies interested in remediating the remaining F Area waste sites have been received. WCH is in the process of evaluating potential subcontractors that meet requirements and are interested in receiving an RFP.

Remediation will involve the excavation of radioactive and hazardous soil and debris, and the packaging of the material to be shipped to ERDF. A wide range of contaminated soil, miscellaneous debris, buried equipment, and structural materials may be encountered during remedial activities.

The remediation sites are: 100-F-26:4 pipeline, 100-F-26:7 pipeline, 100-F-44:8 piping, 100-F-44:9 pipeline, 100-F-45 riverbank pipeline, 100-F-47 substation, 100-F-48 coal pit debris, 100-F-49 maintenance garage, 100-F-51 fish lab, 100-F-55 ash layer, 100-F-56 scattered surface debris, 100-F-57 pump house pipe cradle debris, and 100-F-58 scattered ACM debris.

WCH continues to prepare design drawings for the waste sites. Ecological and cultural resource reviews in support of the remediation design have been completed.

IU 2 & 6 Segment 1

Ecological and cultural reviews have been completed for four of the six waste sites. The cultural review for the remaining two sites is forecast to complete in March. A geophysical investigation was conducted, completing the excavation permit requirements. The waste profile samples collected last month have been sent to the laboratory. The sites at IU 2& 6 Segment 1 are smaller than those found at F Area and contain mostly surface debris that must be removed and transported to an approved disposal facility.



Confirmatory Sampling

The team continues drafting sampling instructions for waste sites at the 100-D and 100-K Areas. Development of sampling instructions includes conducting historical research and consulting regulatory documents, developing a list of contaminants of potential concern to be sampled, and determining potential sample locations for review by DOE and Hanford Site regulators. Internal drafts of 11 sampling instructions have been completed for review by DOE and the Washington Department of Ecology (Ecology) or U.S. Environmental Protection Agency (EPA). Comments from the regulatory agency have been received on one of these, and the team will now work with the agency to reach resolution.

The team has also completed drafting closure documentation for two waste sites for review by DOE and Hanford Site regulators. These sites have historic data or information gained during remediation of other nearby sites to support closure without further sample collection.

Five remove, treat, and dispose recommendation reports have been completed for 100-D and 100-K Area sites. There is sufficient existing information for these sites to warrant remediation without further confirmatory sampling. For example, one of the sites is a degraded piece of asbestos pipe lagging lying on the ground. Remediation of these sites will be addressed under a future separate scope of work.

Planning for 100-D Area pipeline waste sites continues this week. These sites consist of many pipe segments that are frequently not related to one another. Therefore, pipeline sites are usually broken into smaller, more manageable subsites based on usage, location, and relationship to other waste sites. The team has drafted sampling instructions to remove, treat, and dispose recommendations for each subsite, as appropriate, and is now meeting with DOE and Ecology to brief them ahead of document reviews.

Work also continues on developing procurement documentation. In late January or early February, WCH will issue a request for proposals for a company to provide excavation and sampling support for all 66 waste sites.

Sampling of the sites is expected to begin this spring.



General

Mentoring/Training

No significant activities this week.

Media, Visits, Press Releases

No significant activities this week.

Contracting Actions

- Bids received for construction quality assurance for ERDF super cells 9 and 10.
- Received submittals from 8 potential subcontractors for 618-10 site infrastructure.
- Contracts are issued for 618-10 Ortec Detective & Accessories.
- Contract is issued for 618-10 Ortec Fission Meter.

