



River Corridor Closure Project

Recovery Act Weekly Report

For the week ending February 28, 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 segments 1&2 are proposed for waste site remediation in the two year period starting in October 2009.

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.

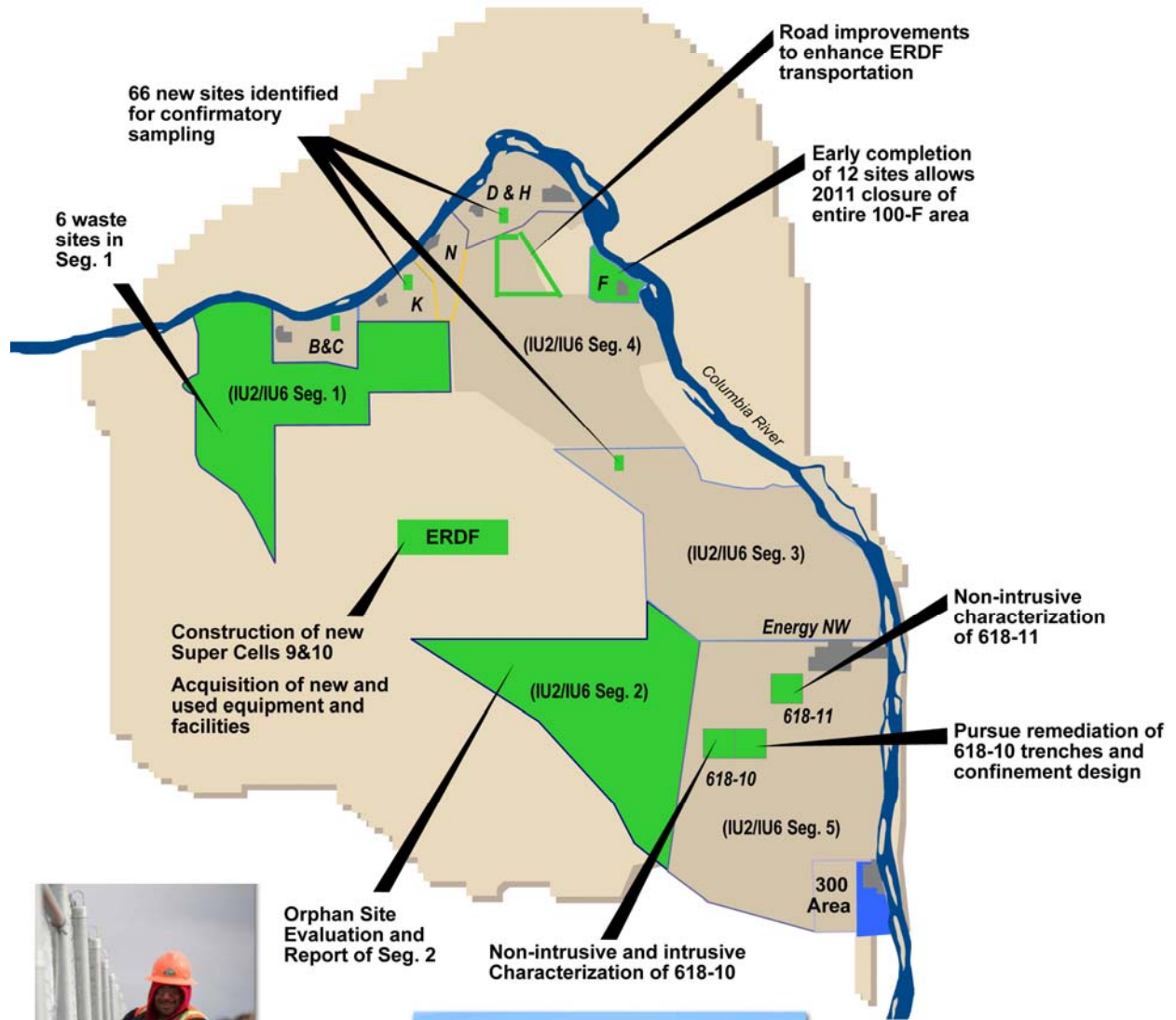


Overview (Continued)



River Corridor Cleanup Completion

ARRA Scope



Safety

Safety Accomplishments

As of February 21, 2010, WCH and its subcontractors have worked 152,000 hours of ARRA scope with no safety incidents.

Hazard Reductions

The River Corridor Closure project's "Take 5 for Safety" is used to kick off the week with safety information and to share lessons learned with all WCH employees. Last week's "Take 5 for Safety" focused on industrial safety signs and barricades.

Signs and barricades must be visible at all times when work is being performed, and they must be removed or covered promptly when the hazards no longer exist. When signs and barricades that no longer apply are left in place, the stage is set for employees to develop the habit of disregarding warnings that do apply.

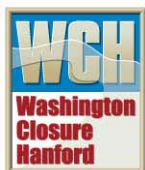
Warning signs are used to identify potentially hazardous situations that could result in death or serious injury. Warning signs can be used independent of barricades; however, barricades may have signs to provide specific warnings and/or other essential information about the hazard(s) that exist beyond the barricade. A "Danger" sign is to be used only where an immediate danger to a hazardous situation that, if not avoided, will result in death or serious injury. A "Caution" sign is to be used to identify potential hazards.

General Barricade Requirements

- Ensure all applicable personnel fully understand the hazard, the reason access is restricted, and who provides authorization for entry.
- Barricades are to be installed prior to or as soon as feasible before starting work that would create a hazard(s).
- Where feasible, an entry control point should be established at the restricted area to ensure personnel are made aware of the hazard.
- Barricades and signs must be visible at all times when work is being performed and must be removed promptly when the hazards no longer exist.
- Signage may not be required for obvious hazards; however, their absence must be approved by the PSR and Supervisor.

Safety Warning Signs

- Consideration is to be given to signs exposed to high levels of ultraviolet light (i.e., desert conditions), as the signs and warning tape are subject to fading.
- All emergency exits, passageways, fire door, first-aid stations, eyewash stations, and emergency staging areas must be highlighted with safety condition signs.



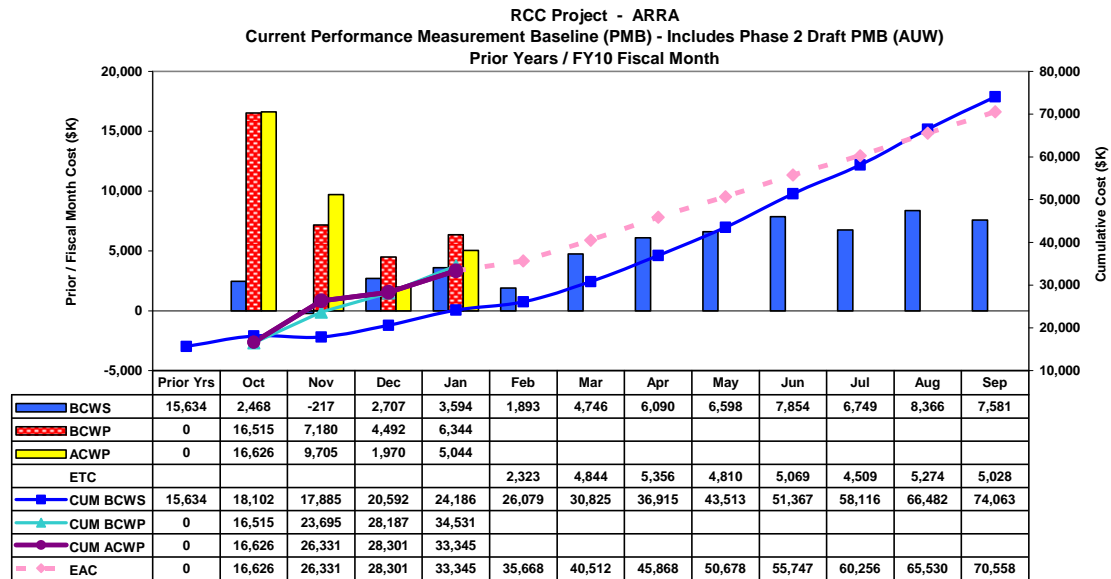
Safety (Continued)

- Warning signs must be installed and displayed for fire hazards, electrical equipment, openings, overhead working, noisy areas, utilities, overhead power lines, and other hazards identified by project personnel.
- Mandatory signs must be provided for enforcing the use of personal protective clothing and equipment and providing specific instructions appropriate to the task or condition.
- Prohibition signs must be displayed for restricting access or entry, no smoking areas, no parking, and any other unauthorized acts.

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

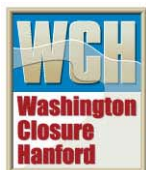
Contract Modification #142 is the definition of the Phase 1 scope of work and was incorporated into the Integrated Project Baseline (IPB) (Performance Measurement Baseline) beginning with October 2009 reporting. A \$5.4M de-obligation and re-obligation of equal value are in process.



ARRA Actuals (includes PMB and Proposal 2)

Apportionment Number	Apportionment Title	PMB or Balance *	Jan 2010	Inception To Date	NTE Amount
RL-0041.R1.2	ERDF Cell Expansion	PMB	1,094	23,016	
		Balance	(127)	1,955	12,000
RL-0041.R2	River Corridor Soil & Groundwater (618-10)	PMB	1,665	7,500	
		Balance	147	874	5,000
Sub Total		PMB	2,759	30,516	
		Balance	20	2,829	17,000
Fee			204	2,045	
Total			2,983	35,389	

* PMB is the Phase 1 Performance Measurement Baseline. Balance is Proposal 2 Not to Exceed draft PM (AUW)



ERDF

Super Cells 9 and 10 Construction

The completed excavation quantity for super cell 9 is 1,935,845 cubic yards (including stockpile removal) based on pre-and post-topographic surveys. Previously reported super cell 9 excavation quantities were estimated quantities based on load counts.

TradeWind Services and its prime subcontractor, DelHur Industries, continue excavation of super cell 10. Work to remove the eolian layer was completed, and crews now are focusing on forming the north and south ends of the super cell. Crews also removed the air monitors and are preparing to remove the wash/water tank.

An estimated 1.6 million cubic yards of soil will be removed to create the super cell, which will measure 500 feet by 1,000 feet by 70 feet deep. To date, 150,280 cubic yards of soil have been removed.

Excavation of super cell 10 will continue through August 2010. Construction of the liner and leachate collection system for super cells 9 and 10 will begin in April 2010. All work is to be completed by September 30, 2011.



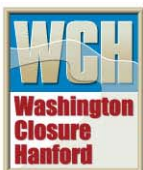
ERDF (Continued)



Excavation of super cell 10 begins at the Environmental Restoration Disposal Facility.

Facility and Equipment Upgrades

A 13-yard bucket excavator purchased by DelHur was delivered to the facility. The excavator is being assembled and is expected to be in service March 8.



ERDF (Continued)

WCH continues to review Sage Tec's 30% design of the new fueling station. Sage Tec is a Richland, Washington-based company.

WCH has responded to questions from potential subcontractors regarding the design and expansion of the truck maintenance facility, and the design and build of the new equipment and container maintenance facilities. WCH is working on an addendum to the request for proposals (RFP).

Columbia Engineers and Constructors, a Richland, Washington-based company, continues work on the design of a new septic system for the facility. The new system will service the existing and proposed facilities. The 30% design review is due to WCH on March 11.

Pacific Northwest National Laboratory (PNNL) scientists and engineers continue to prepare for a proof-of-concept demonstration of a new container tracking system to be used at ERDF. The onsite demonstration is scheduled for April 7. The system was originally designed by PNNL for the Army to track containers. The new system would allow for operations personnel to identify how many full and empty containers are available at ERDF and the generator sites. WCH also will issue an expression of interest to other companies for the container tracking system.

WCH completed the technical review of a proposal from TradeWind/DelHur to construct the facility's new transportation yard. A notice to proceed is expected next week. The 7-acre site will be lighted and used for truck-and-pups.

Subcontractor George A. Grant is preparing to resume work on the back road to ERDF. The road will be used to accommodate the disposal of waste material from other Hanford contractors along with WCH. Surveys will be conducted, followed by final grading. Paving is scheduled for March 15. The new scale on the back road was completed last month. The wireless communication system at the new scale and reader board will allow waste shipments to be entered real-time into the Waste Management Information System (WMIS).



ERDF (Continued)



A 13-yard bucket excavator delivered to the Environmental Restoration Disposal Facility will be used to help dig super cell 10.

ERDF (Continued)



Work has begun on assembling the 13-yard bucket excavator at the Environmental Restoration Disposal Facility.

ERDF (Continued)

Upcoming Activities

- Continue excavation of super cell 10.
- Continue preparation for work on the back road to ERDF.
- Review proposal for the new transportation yard.

Video

[*Progress at the Environmental Restoration Disposal Facility*](#)



618-10 Burial Ground

618-10 Non-Intrusive Characterization/Trench Remediation Project

Nonintrusive characterization activities continue at the 618-10 Burial Ground. To date, 124 cone penetrometers in the vertical pipe unit (VPU) area and three cone penetrometers in the trenches have been characterized.

A confinement workshop in support of future trench intrusive characterization and trench remediation also was completed. The workshop concluded that a confinement would not be needed in support of the planned trench activities.

The burial ground contains 94 VPUs, which are five bottomless 55-gallon drums welded together end to end and buried vertically, and 23 trenches. From 1954 to 1963, Hanford workers used the burial ground to dispose of low- and high-level radioactive waste from 300 Area laboratories and fuel development facilities.

WCH is obtaining in situ radiological characterization data of the VPUs and trenches using a multi-detector probe (MDP), designed for measuring a wide range of radiation sources. The MDP contains two gamma-ray detectors used as spectrometers, two neutron detectors, and a gross gamma detector. The MDP is inserted into the cone penetrometers to measure radiation sources. Four cone penetrometers were inserted around each VPU.

The 618-10 Burial Ground is the most challenging burial ground WCH has addressed to date. While an extensive search of Hanford records yielded some valuable information about the burial ground contents, many unknowns still exist. Information collected during nonintrusive characterization activities will help determine how best to clean up the burial ground and what protective measures to employ during cleanup.

Upcoming Activities

- Continue VPU radiological characterization activities.
- Continue trench radiological characterization activities.
- Continue soil sampling project startup review activities.



618-10 Burial Ground (Continued)



A multi-detector probe used to measure radiation source is retrieved from a cone penetrometer at the 618-10 Burial Ground.

618-10 Burial Ground (Continued)



A multi-detector probe is shown at the 618-10 Burial Ground. Measurements are taken each foot with a 3-minute count time. A radiological control technician then checks for contamination as the probe is removed from the cone penetrometer.

Profile

Billy Martin just closed the biggest deal of his life – he bought his first house.

Martin, less than three years removed from college, accomplished this milestone with a little help from the American Recovery and Reinvestment Act. The Richland native was hired in September by Washington Closure Hanford subcontractor North Wind Inc. to help clean up the highly contaminated 618-10 Burial Ground.

The burial ground is the most hazardous Washington Closure has confronted to date. From the mid-1950s to the early 1960s, Hanford Site personnel used the burial ground to dispose of low- and high-activity radioactive waste from 300 Area laboratories and fuel development facilities.

North Wind is conducting nonintrusive characterization activities at the burial ground, where work is funded by Recovery Act dollars. Martin's job is to operate the multi-detector probes, or MDPs, which are instruments used to measure a wide range of radiation sources.



Billy Martin was hired as a multi-detector probe technician for work at the 618-10 Burial Ground. Work at the site is funded by Recovery Act dollars.

Profile (Continued)

North Wind began nonintrusive characterization by installing narrow steel tubes, called cone penetrometers, around each of the 94 burial vertical pipes and into selected trenches. The MDPs are then lowered into the cone penetrometers and measurements are recorded as the MDPs are pulled out.

“The 618-10 site is a unique project, and I’m glad to be a part of it,” Martin said. “Working the MDPs is very important. The data collected will help us safely clean up the burial ground.”

Martin earned a degree in economics with a minor in environmental studies from St. Olaf College, a liberal arts school of 3,000 students located in Northfield, Minnesota. Martin also played hockey at St. Olaf, located about 35 miles from Minneapolis and St. Paul, and continues to play in a Tri-City men’s recreation league.

After college, Martin worked for a painting business in town. A longtime family friend recommended that he submit his resume to North Wind.

“I’ve always used the economics side of my education, so it’s nice to finally get to use the environmental side,” he said. “And the timing was perfect. The painting business shuts down during the winter months, and now I have a steady paycheck coming in. And the people here have been great to work with.”



100-F Area

Progress continues in preparing a request for proposal (RFP) for remediation of the remaining 100-F Area waste sites. The RFP is expected to be issued in early spring.

F Area is the home of F Reactor, one of Hanford's nine surplus plutonium production reactors. During reactor construction and operations, all site waste, ranging from office trash to radioactive equipment and debris, was disposed in unlined pits and trenches throughout the site.

Most of the cleanup work at F Area has been completed. However, during the course of cleanup, 12 additional waste sites were discovered. Inspection of the sites confirmed remediation was necessary. Some sites contain asbestos and a pipeline that consists of chromium. Other sites required sampling, called confirmatory sampling, to determine if cleanup was necessary. Those sites failed the confirmatory sampling process and require cleanup to meet regulatory standards.

Remediation will involve the excavation of radioactive and hazardous soil and debris, and the packaging of the material to be shipped to ERDF.

IU 2 & 6 Segment 1

WCH is proceeding with closeout after remediation was completed at three of the six waste sites discovered at IU 2&6 Segment 1. The three sites are 600-343, 600-345, and 600-346. Some remediation work also was completed at site 600-341, which consists of four areas.

The sites are relatively small and contain mostly surface debris. Site 600-343 consisted of residual ash from burned material and dumped asphalt in an excavated trench, site 600-345 was a stained area with oil filters, and site 600-346 consisted of four small fly ash dump areas with metal debris. The remediated areas of site 600-341 consisted of dry cell battery remnants and/or battery debris. This waste stream consists of Land Disposal Restricted (LDR) waste and requires treatment prior to disposal.

Last month, a global positioning environmental radiological survey indicated that site 600-342 did not require additional remediation.

Remediation work of site 600-344 and remaining areas of 600-341 will proceed after a historical and cultural review is completed.



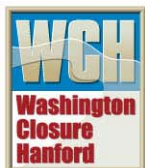
Confirmatory Sampling

The team continues to develop sampling instructions for waste sites at the 100-D, 100-K, and 100-IU 2/6 Areas. Their efforts include 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.

The team has also begun development of the Remove, Treat, and Dispose (RTD) memos for sites that have been determined to require waste site remediation. The memos provide a basis for developing the remediation design.

Work also continues on developing procurement documentation. In March, WCH will issue an RFP for a company to support implementation of the sampling work instructions (e.g., excavation and sampling). Sites that pass the confirmatory sampling process will be closed out and no further action will be required under the existing interim record of decision. Those that fail will be recommended for cleanup to meet regulatory standards.

Sampling of the sites is expected to begin in late spring.



General

Mentoring/Training

No significant mentoring/training events this week.

Media, Visits, Press Releases

No significant media events this week.

Contracting Actions

- Posted expression of interest on 90-day forecast and Fedbizops for Radio Frequency Identification Global Positioning System/Tracking System for ERDF.
- Purchase requisition approved for 618-10 infrastructure construction subcontract.
- 618-10 Intrusive Characterization awarded to Terranear PMC.

