



*River Corridor Closure Project*

# **Recovery Act Weekly Report**

For the week ending March 7, 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

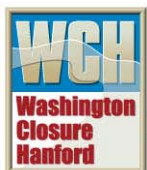
WCH is employing ARRA funds to clean up many failed waste sites not originally part of its contract. Sites in the 100-F and IU 2&6 segments 1&2 are proposed for waste site remediation in the two year period starting in October 2009.

### 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.

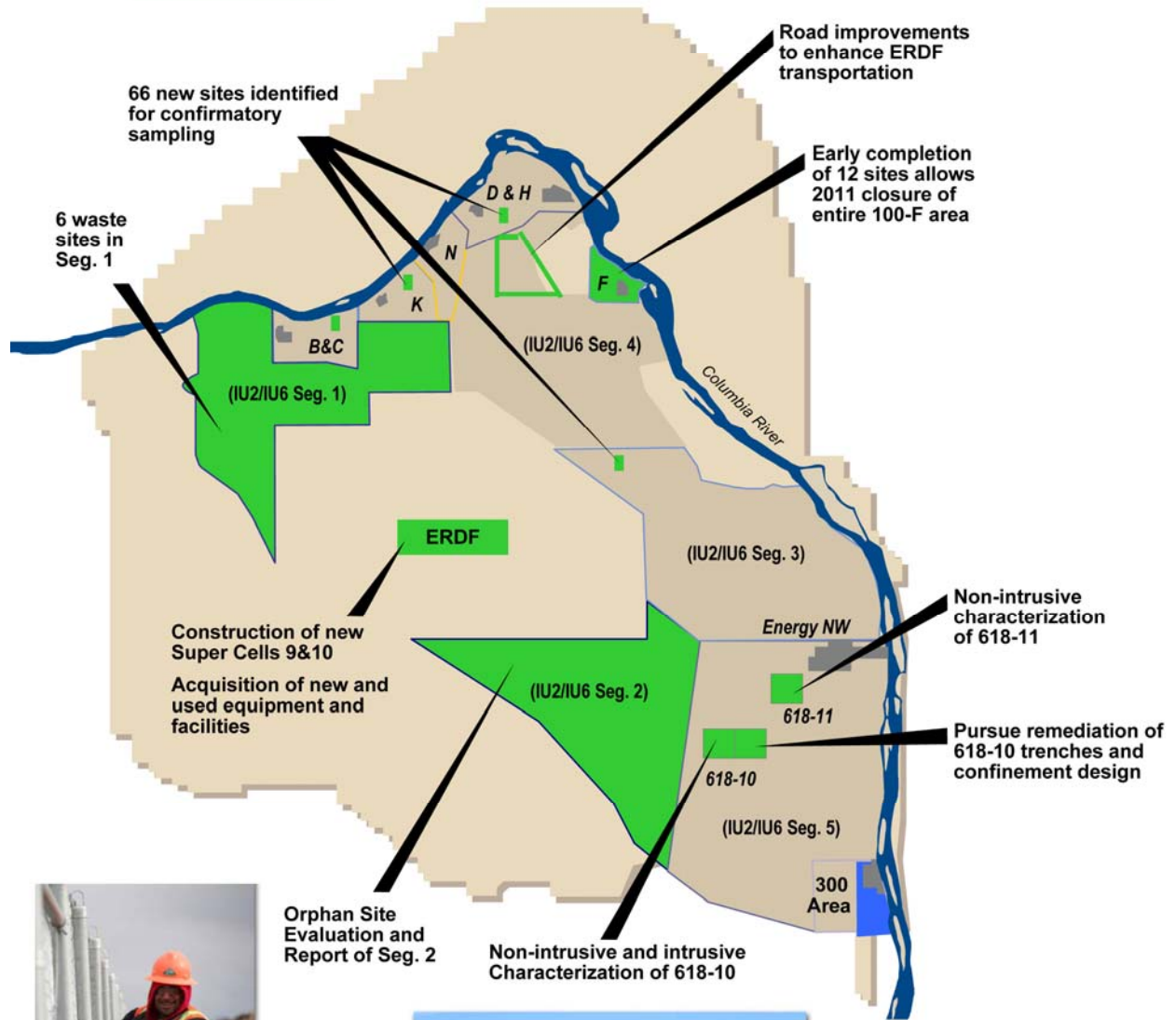


# Overview (Continued)



## 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 Fourth Annual Fermi Health Fair* took place at WCH's Fermi Building. The following services were provided to all employees:

- Blood pressure monitoring
- Body fat measurement
- Cholesterol level testing
- Glucose testing.

Information also was provided for:

- Heart attack/stroke
- Healthy heart lifestyle
- Diabetes
- Good diet habits
- Exercise
- Back safety.

*The Project Support Healthy Living Campaign* is underway. The campaign, which runs March 4 through April 28, is aimed to encourage all employees to engage in healthy living activities. A different Healthy Living topic will be presented each week.

A points system will be used for all participants. Participation awards will be presented. The points system is as follows:

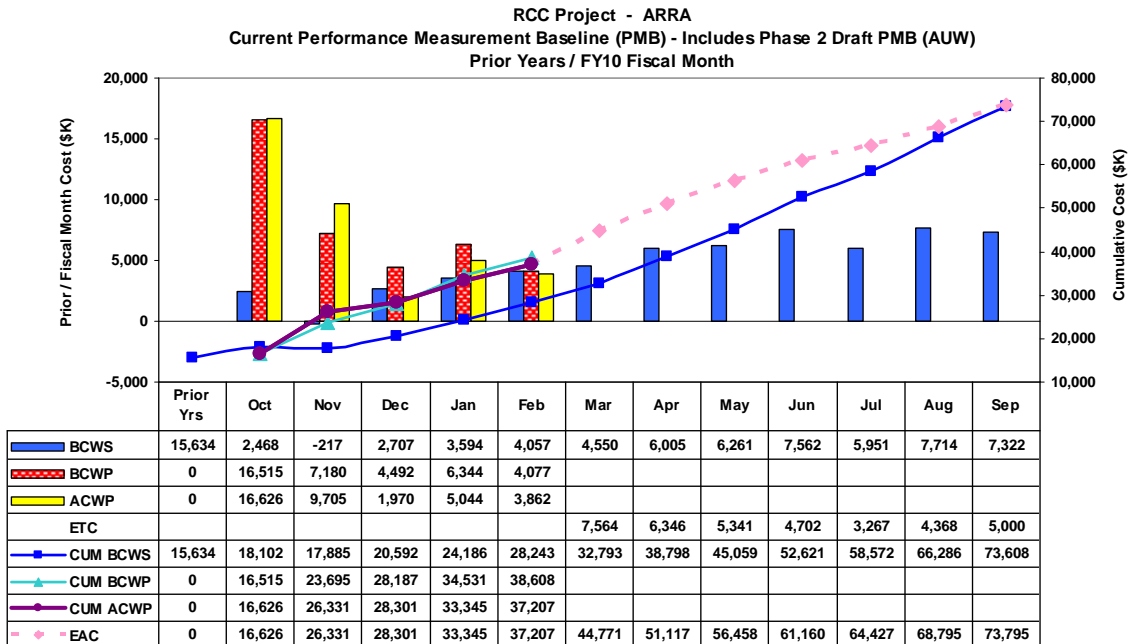
- *1 point* – every step taken (using a pedometer)
- *1,000 points* – wearing your seatbelt to and from work; eating a healthy breakfast
- *2,000 points* – completing a fitness activity away from work (e.g., walking, jogging, swimming, biking, rollerblading).
- *10,000 points* – keeping a diet logbook
- *15,000 points* – Each day participating in flex/stretch program at work and home; leading a stretch/flex program at your plan-of-the-day (POD) meeting; presenting a safety share/topic at your POD
- *100,000 points* – every pound lost
- *150,000 points* – quitting a vice (e.g., smoking, chewing tobacco).



# 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 *	Feb 2010	Inception To Date	NTE Amount
RL-0041.R1.2	ERDF Cell Expansion	PMB	2,190	25,205	
		Balance	482	2,438	12,000
RL-0041.R2	River Corridor Soil & Groundwater (618-10)	PMB	926	8,050	
		Balance	265	1,515	5,000
Sub Total		PMB	3,116	33,255	
		Balance	747	3,953	17,000
Fee			204	2,249	
Total			4,067	39,457	

\* 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

TradeWind Services and its prime subcontractor, DelHur Industries, continue excavation of super cell 10. Two excavators and a crew of more than 20 are working to form the north and south ends of the super cell.

An estimated 1.675 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, 276,218 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.



*TradeWind Services/DelHur Industries personnel continue to excavate super cell 10 at the Environmental Restoration Disposal Facility.*

## ERDF (Continued)

The 13 cubic yard bucket excavator purchased by DelHur was assembled and put into service in super cell 10.



*An excavator with a 13 cubic yard bucket was put into service at the Environmental Restoration Disposal Facility.*

### **Facility and Equipment Upgrades**

Sage Tec continues to work on the design of the new fueling station. Sage Tec, a Richland, Washington-based company, is scheduled to submit its 90% design March 22.

WCH is working on a second addendum to the request for proposals (RFP) for the design and expansion of the truck maintenance facility, and the design and build of new equipment and container maintenance facilities. Bids are due March 11.

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

## ERDF (Continued)

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 approximately 900 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.

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 an exterior awning over a smaller concrete pad.

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.

Surveying work was completed on the back road to the facility. Work on the road, which connects the facility to Route 3, was postponed in early December because of cold weather. The road will be used to accommodate the disposal of waste material from other Hanford contractors as well as from WCH. Subcontractor George A. Grant is scheduled to begin final grading next week, and paving is scheduled for mid-March. 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).

Hanford contractor Mission Support Alliance (MSA) is preparing to pave several Hanford Site roads used to haul radioactive and mixed waste to ERDF for disposal. Work was postponed in early December because of weather. Rock placement and grading has begun and paving is scheduled to begin in mid-March. A 900-foot section of broken-up asphalt on Route 1, and some smaller problem areas on Route 1 and Federal Avenue will be paved.

WCH issued a notice to proceed for TradeWind/DelHur to expand and upgrade the facility's transportation yard. DelHur personnel began clearing and grubbing the 7-acre site, which will be lighted and used for transportation equipment including truck-and-pups.





## ERDF (Continued)



*TradeWind Services/DelHur Industries personnel began work on the new transportation yard at the Environmental Restoration Disposal Facility.*

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 would allow for operations personnel to identify how many full and empty containers are available at ERDF and the generator sites. WCH also issued an expression of interest to other companies for the container tracking system.

WCH has awarded a subcontract for a front-end loader to Indian Eyes, a Pasco, Washington-based company. An RFP for a heavy-duty forklift was issued.

## ERDF (Continued)

### Upcoming Activities

- Continue excavation of super cell 10.
- Removal of the wash water tank in preparation for installing a new leachate tank to support cell expansion.
- George A. Grant will begin final grading of the back road to the facility.
- MSA will begin to pave Hanford Site roads.

### Video

[\*Super Cell 10 Excavation Progress  
at the Environmental Restoration Disposal Facility\*](#)



## Profile

It's not often people are presented with an American flag at work, but that's what Luis Flores' transportation coworkers did for him last month at the Environmental Restoration Disposal Facility (ERDF). The event was a celebration of Luis becoming a U.S. citizen.

"It was a big surprise to Luis," said Jim Atkins, who was Flores' swing shift supervisor before taking a new position at the facility. "With his wife's help, we put together a PowerPoint presentation with family photographs, had a celebration, and presented him with his own American flag."

Flores' work helps support the recent volume surge at ERDF due in part to a \$100 million expansion and upgrade of the facility. The expansion is being funded by the American Recovery and Reinvestment Act.



*Luis Flores, second from right, is congratulated by colleagues at the Environmental Restoration Disposal Facility after becoming an American citizen.*

Flores, who has worked at ERDF for about a year, was born on La Utatera Ranch in Jalisco, Mexico. At two months of age, his parents took a six-hour ride on horseback on the first leg of their journey to America.

They settled in Prosser, Washington, where Flores grew up and went to school. Flores was 14 years old when he found out he was not a U.S. citizen. This new perspective motivated him to work hard, get good grades, and to participate in school clubs. He also earned varsity in soccer and football.

## Profile (Continued)

Flores worked hard and had a family. Taking both rolls seriously, he put his desire to become a citizen on the back burner. His desire was reawakened after watching his parents, brothers, and sisters become citizens. And on February 9, Flores became the last person in his family to do so.

"It is a profound joy, a sense of belonging and security that does not exist when you are considered a resident alien," said Flores, who works as a tire and lubrication specialist. "We owe our allegiance to the United States. We are proud. It is a choice and a privilege."

Atkins said, "Luis is a valuable member of the ERDF transportation crew. He's always been an American to us; now he's a U.S. citizen, too."



## 618-10 Burial Ground

### **618-10 Non-Intrusive Characterization/Trench Remediation Project**

Nonintrusive characterization activities continue at the 618-10 Burial Ground. To date, 148 cone penetrometers in the vertical pipe unit (VPU) area and 4 cone penetrometers in the trenches have been characterized.

Work also continues on trench remediation planning. WCH is reviewing submittals for subcontractors for intrusive characterization. The RFP for the infrastructure construction was issued by procurement.

The burial ground contains 23 trenches and 94 VPUs, which are five bottomless 55-gallon drums welded together end-to-end and buried vertically. 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. Information collected during nonintrusive characterization activities is helping to determine how best to clean up the burial ground and what protective measures to employ during cleanup.



## 618-10 Burial Ground (Continued)



*Nonintrusive radiological characterization activities continue in the vertical pipe unit area at the 618-10 Burial Ground.*

### **Upcoming Activities**

- Continue trench radiological characterization activities.
- Continue soil sampling project startup review activities.
- Complete the project startup review portion for the mobilization segment of work to support intrusive characterization.

## 100-F Area

Work continues to a request for proposal (RFP) for remediation of the 12 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 area. 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 the Environmental Restoration Disposal Facility (ERDF).

## IU 2 & 6 Segment 1

WCH continues 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 were small and contained 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.

Detailed closeout documentation is developed when waste sites are reclassified as completed and closed. As part of the approval package submitted to the lead regulatory, along with a waste site reclassification form, DOE submits a cleanup verification package (CVP) or remaining site verification package (RSVP) for an individual waste site or group of waste sites. CVPs and RSVPs provide technical information regarding the cleanup, document post-cleanup soil concentrations based on statistical analysis of verification sample results, and may include long-term stewardship requirements for institutional controls.

Earlier this year, 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.



## IU 2 & 6 Segment 1 (Continued)



*Site 600-343 was one of three sites recently remediated at IU 2&6 Segment 1. Washington Closure Hanford is in the process of closing out the remediated sites.*



## Confirmatory Sampling

The team continues to develop sampling instructions for waste sites at the 100-D, 100-K, and 100-IU 2/6 Areas. Its 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. To date, confirmatory work instructions for seven sites have been issued, which includes DOE and regulator approval.

The team also has 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.

On February 24, 2010, a procurement notice was issued for the Confirmatory Sampling Subcontract. WCH will issue an RFP for a company to support implementation of the sampling work instructions (e.g., excavation and sampling) in late March. 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.



## General

### **Mentoring/Training**

No significant mentoring/training events this week.

### **Media, Visits, Press Releases**

No significant media events this week.

### **Contracting Actions**

No significant contracting actions this week.

