



*River Corridor Closure Project*

# **Recovery Act Weekly Report**

For the week ending February 14, 2010

Contract DE-AC06-05RL14655

## 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.

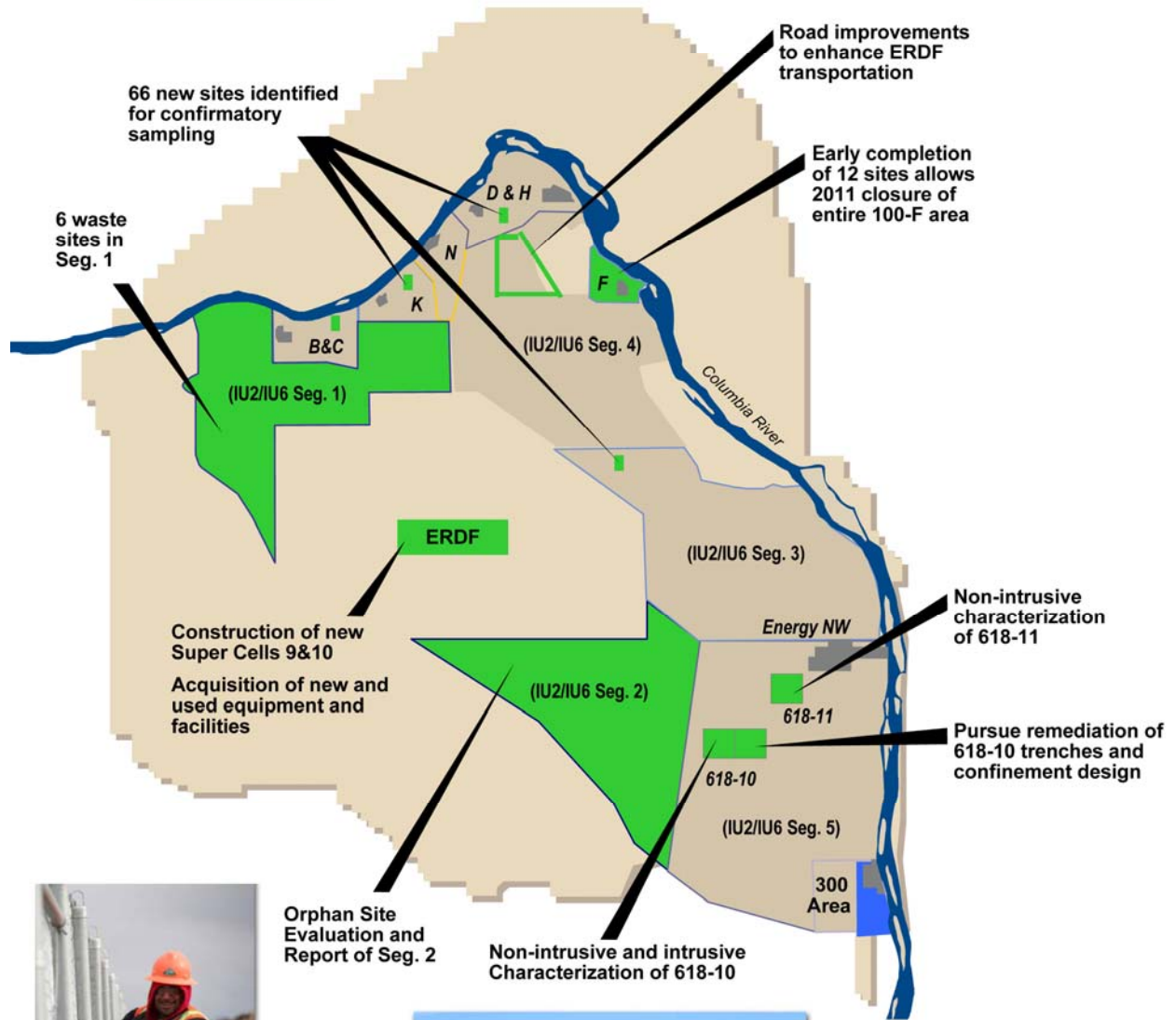


# Overview (Continued)



## River Corridor Cleanup Completion

### ARRA Scope



# Safety

## Safety Accomplishments

As of January 24, 2010, WCH and its subcontractors have worked more than 135,000 hours of ARRA scope with no safety incidents.

## Hazard Reductions

“Take 5 for Safety” was initiated by the Safety, Health & Quality department to be used at Monday morning plan-of-the-day meetings for all RCCC work locations. It is used to kick off the week with safety information and to share lessons learned with all WCH employees.

Last week’s River Corridor Closure project’s “Take 5 for Safety” focused on hazard mitigation.

### On a typical United States workday:

- 17,138 people will be injured on the job, 17 of whom will die from the injury
- 137 people will die from occupational related illnesses.

Dangerous jobs and activities are inevitable at the Hanford Site. It is imperative that people recognize hazards and take appropriate measures to ensure hazard mitigation. There are three levels in hazard mitigation.

1. Engineer the hazard out – Is there a way to do the task differently? If you have a person working on a ledge wearing fall protection, evaluate for an alternative method to do the job using only equipment. If a person is not exposed to a hazard, he/she cannot get hurt.
2. Administrative controls (work practice controls) – How can we change the controls/procedures? The goal is to reduce the duration, frequency, and severity of exposure to potentially harmful situations. Job or task rotation is an example.
3. Personal protective equipment – If there is still a hazard after engineering and administrative controls are utilized, PPE is the last resort. This control is physically having the workers don certain items (e.g. respiratory protection) to protect them from hazards that cannot be avoided any other way.

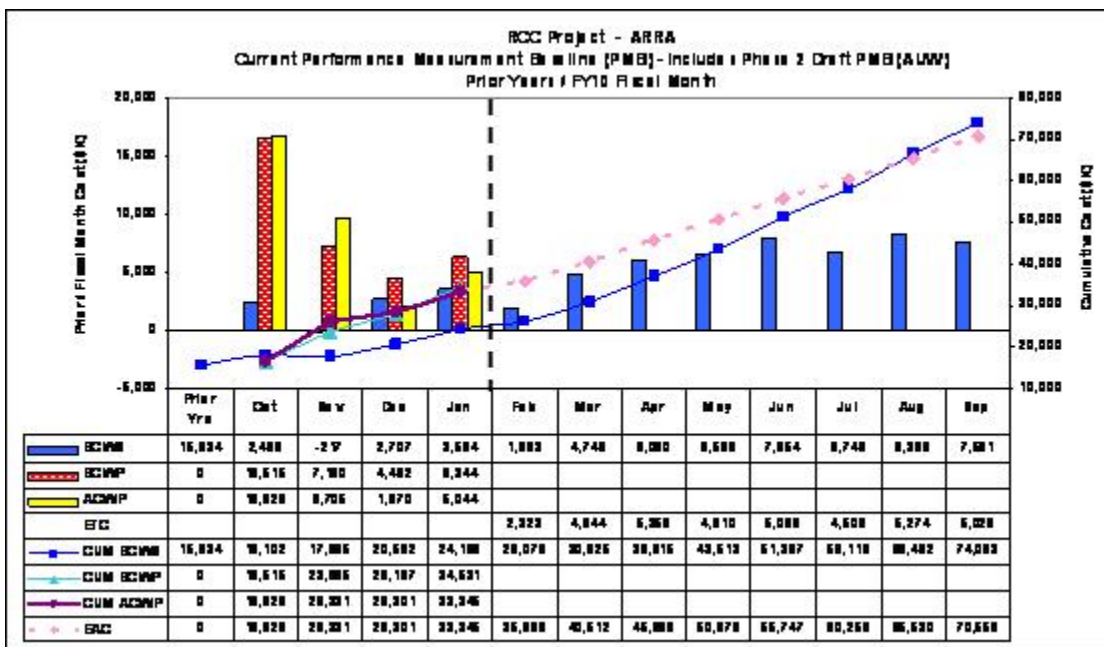
Being crushed by a piece of machinery, heavy equipment in general, vehicle accidents, falls, suffocation, and electrocution are all ways that Hanford workers have died. It all began as a typical day for those workers, too.



# 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)

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 (AUV)



## ERDF

### Super Cells 9 and 10 Construction

TradeWind Services began excavation of super cell 10. The service-disabled, veteran-owned small business was awarded a subcontract worth up to \$30 million to expand ERDF by 50 percent. TradeWind, based in Richland, Washington, also will construct the liner and leachate collection system for both super cells 9 and 10. Excavation of super cell 9 was completed last month.

DelHur Industries, based in Port Angeles, Washington, is TradeWind Services' prime subcontractor on the ERDF expansion project. DelHur built the first, second, and fourth pair of cells, and most recently completed excavation of nearly 1.8 million cubic yards of soil for super cell 9.

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



An aerial view from the north side of the Environmental Restoration Disposal Facility.

## ERDF (Continued)



*TradeWind Services and its subcontractor, DelHur Industries began excavation of super cell 10 at the Environmental Restoration Disposal Facility.*

## ERDF (Continued)



*Excavation of super cell 10 is scheduled to be completed in August. This photo shows work next to the east sidewall of super cell 9.*

### **Facility and Equipment Upgrades**

Sage Tec, a small, woman-owned business based in Richland, Washington, is working on the design of the new fueling station. Sage Tech's prime subcontractor on the project is WHPacific, an Anchorage, Alaska-based company with a regional office in Richland.

WCH conducted a pre-bid meeting for the design and build of the expansion of the truck maintenance facility, and the new equipment and container maintenance facilities.

Columbia Engineers and Constructors, based in Richland, Washington, is working on the design for the new septic system. The new system will service both the existing and proposed facilities.

WCH has issued a work order to Pacific Northwest National Laboratory (PNNL) scientists and engineers to perform a proof-of-concept demonstration of a new container tracking system to be used at ERDF. The system was originally designed by PNNL for the Army to track containers.



## ERDF (Continued)

The ERDF system would allow for operations personnel to identify how many full and empty containers are available at ERDF and the generator sites.

TradeWind Services/DelHur Industries are developing a proposal for the facility's new transportation yard.

Request for bids have been issued for the purchase of a new front-end loader. A statement of work and specifications was completed for a new heavy duty forklift.

### Upcoming Activities

- Continue excavation of super cell 10.
- Review bids for front-end loader.

### Video

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



## Profile

Laura Shikashio's career has taken her all over the map, and now she's back in an old stomping ground ready for an exciting new venture.

Shikashio is an Idaho native with extensive experience working on government contracts, especially remediation and waste management. She has lived and worked in Cambridge, Massachusetts; Richland, Washington; Idaho Falls, Idaho; Washington, D.C.; Houston, Texas; and Somerset, England. She has also worked on projects in Oklahoma, California, South Carolina, and Tennessee.

Last year, Shikashio returned to Richland to launch a small engineering firm called Sage Tec. Sage Tec was recently awarded the contract for the design of a new gasoline and diesel fueling station at the Environmental Restoration Disposal Facility (ERDF). The fueling station is part of an estimated \$100 million being spent on ERDF expansions and upgrades funded by the American Recovery and Reinvestment Act.



*Laura Shikashio is the owner and founder of Sage Tec, which will design the new fueling station at the Environmental Restoration Disposal Facility.*

## Profile (Continued)

“It’s been great to get to know some of the people at Washington Closure Hanford and to be a part of the interesting work at ERDF,” Shikashio said. “With my experience in waste management, I know what it takes to put an operation like this together.”

Shikashio, a University of Idaho graduate, began her professional career at the Massachusetts Institute of Technology (MIT), where she concentrated on project controls management for research and development projects at MIT.

She moved to Richland in the mid-1970s to work as a contracts specialist for Battelle, and she served in many capacities for the U.S. Department of Energy (DOE) and CH2M Hill.

In 1989, Shikashio accepted a position to work for Admiral James Watkins, U.S. Secretary of Energy under George H.W. Bush. She was part of Watkins’ team that established the Office of Environmental Restoration and Waste Management within DOE.

Shikashio also worked for Waste Control Specialists in Houston, and spent two years in Somerset, England, working for Magnox South Limited, defueling and decommissioning five of the United Kingdom’s historic Magnox nuclear reactors.

Now, though, she’s glad to be back in a more familiar place.

“I’m ready for the challenges of running my own company,” said Shikashio, who has about a half dozen specialists under her direction. “We’ve got some great people with valuable Hanford experience. We’re very excited about our work.”



## 618-10 Burial Ground

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

Nonintrusive characterization activities continue at the 618-10 Burial Ground. To date, 77 cone penetrometers in the vertical pipe unit (VPU) area and three cone penetrometers in the trenches have been characterized.

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

Cone penetrometers are narrow steel cylinders that were installed around the VPUs. WCH is obtaining in situ radiological characterization data of the VPUs and trenches using a multi-detector probe (MDP). The MDP is inserted into the cone penetrometers to measure radiation sources.

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



## 100-F Area

Progress continues on the air monitoring plan for the remediation of the remaining F Area waste sites. An RFP is expected to be issued in early spring.

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 pipeline, 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.

## IU 2 & 6 Segment 1

Remediation began at four of the six waste sites discovered at IU 2&6 Segment 1 during the 2008 orphan site evaluation. Remediation at 600-343 was completed. Work at 600-345, 600-346, and portions of 600-341 is expected to be completed next week.

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 is a stained area with oil filters, site 600-346 consists of four small fly ash dump areas with metal debris, and site 600-341 consists of four areas that contain dry cell battery remnants and/or battery debris.

Last month, a global positioning environmental radiological survey (GPERS) indicated that site 600-342 did not require additional remediation. The site is proceeding with closeout.



## Confirmatory Sampling

The U.S. Department of Energy and the Washington State Department of Ecology approved a waste site reclassification form for one of the sites at 100-D. Progress continues on the development of confirmatory work instructions and design memoranda of the remaining 65 sites.

Work also continues on developing procurement documentation. WCH will issue an RFP later this month for a company to provide excavation and sampling support for all 66 sites. 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 2010.



## General

### Mentoring/Training

No significant events this week.

### Media, Visits, Press Releases

WCH hosted a local media event at the Environmental Restoration Disposal Facility. A reporter and photographer from the Tri-City Herald, three television reporters, and a reporter from Northwest Public Radio attended the event. The Tri-City Herald ran an article titled "Hanford landfill still growing." KNDU's story was titled "\$30M contract for Hanford disposal site," KEPR's story was titled "Local business gets \$30M to expand Hanford landfill," and KVEW's story was titled "Hanford landfill expanding, doubling capacity."



*Owen Robertson, left, of the U.S. Department of Energy is interviewed by a Northwest Public Radio reporter during a media visit at the Environmental Restoration Disposal Facility.*

### Contracting Actions

- Issued a Notice to Proceed to the subcontractor constructing super cells 9 & 10.
- Awarded 618-10 Building leases: 1 shower trailer, 1 restroom trailer, 1 four-wide office building.