



River Corridor Closure Project

Recovery Act Weekly Report

For the week ending March 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

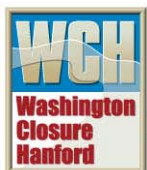
WCH is employing ARRA funds to clean up many failed waste sites not originally part of its contract. Sites in the 100-F and IU 2&6 segments 1&2 are proposed for waste site remediation in the two year period starting in October 2009.

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.

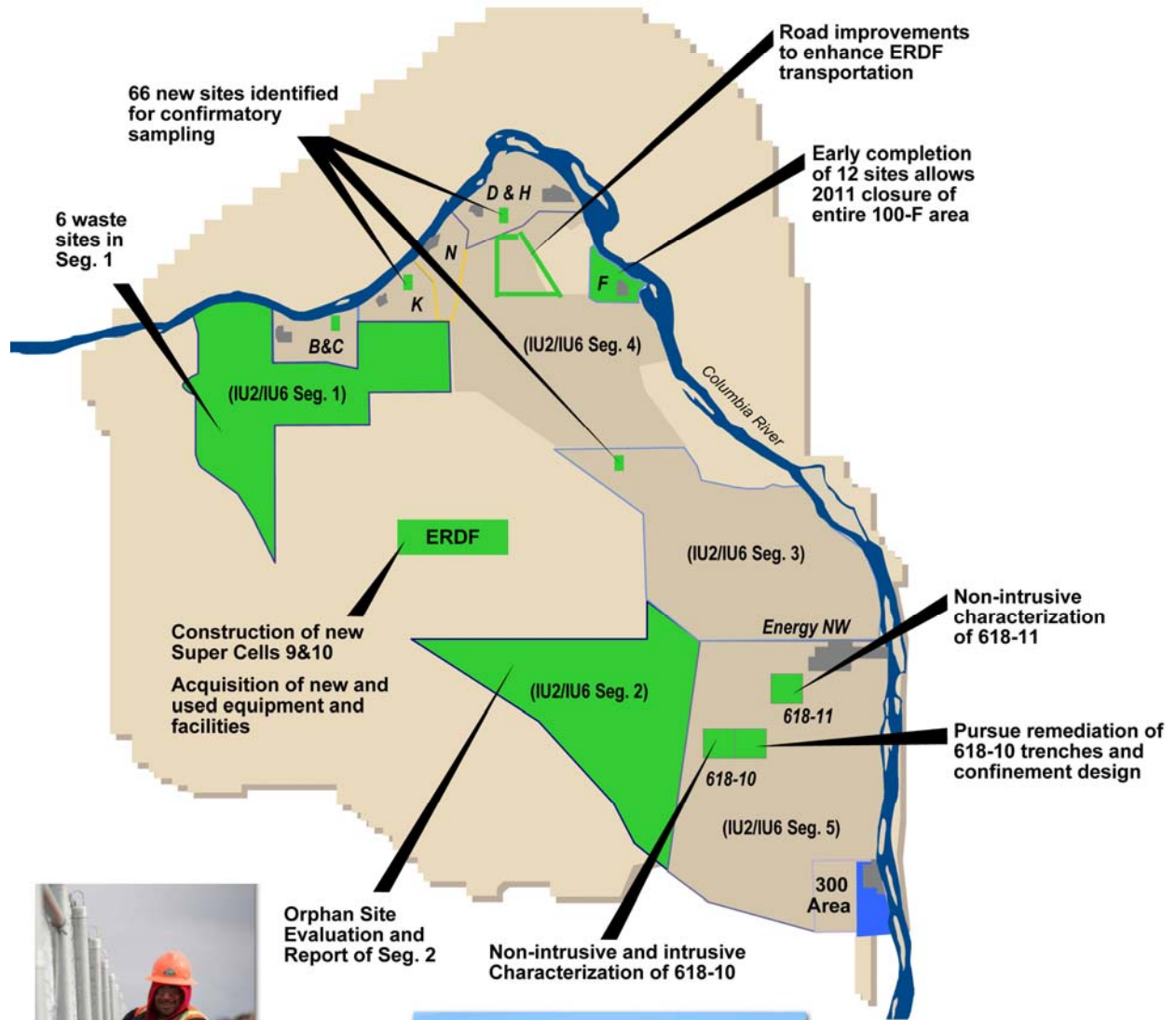


Overview (Continued)



River Corridor Cleanup Completion

ARRA Scope



Safety

Safety Accomplishments

As of 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. This week's "Take 5 for Safety" focused on confined spaces.

Learning from practical, real world experience often requires learning from your own mistakes. In many cases, this can be an effective way of developing greater level of competences and understanding in a given subject. However, when mistakes are made in confined spaces, lives could be lost.

To combat issues that you may face in a confined space, you must first understand the standard. OSHA defines a confined space as a space that:

- Is large enough and so configured that an employee can bodily enter and perform assigned work
- Has limited or restricted means for entry or exit (e.g., tanks, vessels, silos, storage bins, hoppers, vaults, or pits)
- Is not designed for continuous employee occupancy.

When a space meets these three criteria, further consideration must be given to determine whether it meets OSHA definition of a "permit required" confined space. If a confined space contains or has the potential to contain a hazardous atmosphere, or a material that has the potential for engulfing an entrant has an internal configuration such that an entrant could be trapped or asphyxiated or contains any other recognized serious safety or health hazards, then additional measures must be taken to safely enter and perform any work within the space.

Your hazard assessment must be thorough. Entry crews generally will not identify new hazards beyond what has been identified in the assessment. Crews should be trained to do hazard assessments at the beginning of their entry preparation.

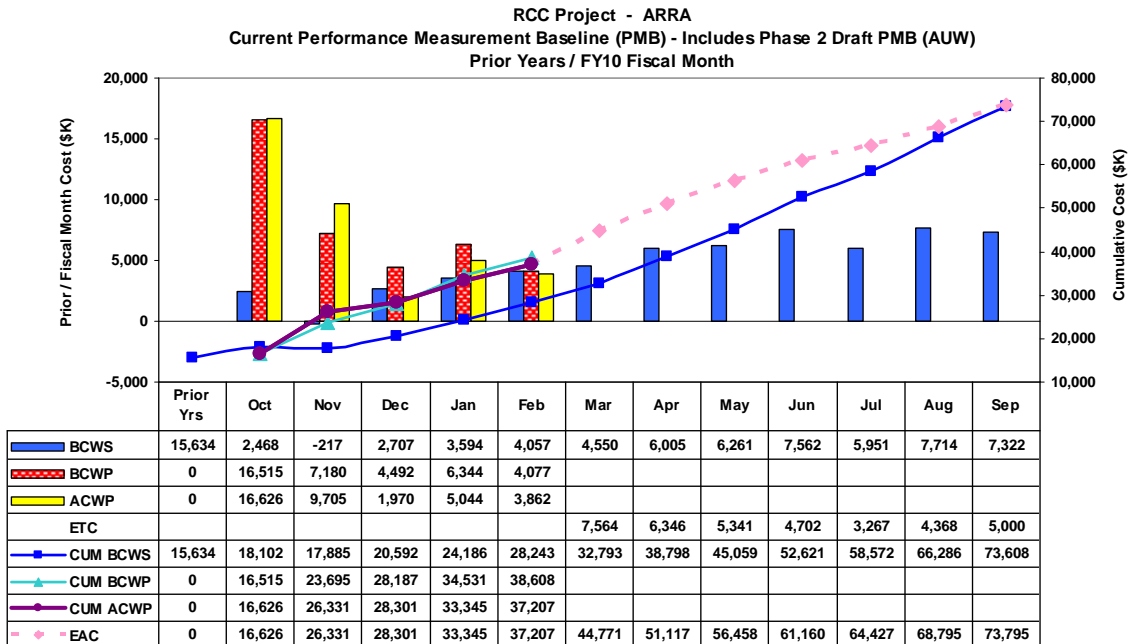
Effective hazard assessment provides the foundation for your confined space process. All major components of the process depend upon an understanding of the hazards, your training, equipment, policy/procedures, as well as rescue needs.



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. Work to form the north and south embankments is complete.

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, 405,115 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.



DelHur Industries gets an early start during excavation of super cell 10 at the Environmental Restoration Disposal Facility. This view is from the north end of super cell 9.

ERDF (Continued)

Facility and Equipment Upgrades

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

WCH has received proposals for the design and expansion of the truck maintenance facility, and the design and build of new equipment and container maintenance facilities. WCH will begin to review the proposals next week.

Upgrades to the transportation truck maintenance facility includes two additional truck bays, a large concrete pad, an exterior awning that will cover two smaller concrete pads, and a conference room. Upgrades to the container maintenance facility include a large container repair line, a maintenance shop, a weld area, a lunch area, and an exterior awning over a concrete pad. Upgrades to the equipment maintenance facility include two service lines, an operational storage facility, a large concrete pad, and an exterior awning over a smaller concrete pad.

WCH has received the 30% design by Columbia Engineers and Constructors for ERDF's new septic system. WCH will begin to review the design next week.

WCH subcontractor Inland Asphalt Co. of Richland, Washington, has nearly completed work to pave the back road to the disposal facility. The road will help accommodate the increased traffic due to the accelerated amount of waste material generated by WCH and other Hanford contractors. The new scale on the 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)



Inland Asphalt Co. lays asphalt on the back road to the Environmental Restoration Disposal Facility.

Hanford contractor Mission Support Alliance (MSA) has completed grading and will begin paving several Hanford Site roads next week. 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. The roads are used to haul radioactive and mixed waste to ERDF for disposal.

TradeWind and DelHur continue work to expand and upgrade the disposal facility's transportation yard. DelHur is grading the site and has begun to lay gravel. The transportation yard will be used for transportation equipment including truck-and-pups.

ERDF (Continued)



DelHur Industries grades the site for the expanded 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. The loader is scheduled to be delivered April 5. An RFP for a heavy-duty forklift was issued, and proposals are due March 17.

ERDF (Continued)

Upcoming Activities

- Continue excavation of super cell 10.
- Continue work on the transportation yard.
- Continue work on the back road to the facility.
- Removal of the wash water tank in preparation for installing a new leachate tank to support cell expansion.
- Pave problem areas on Hanford Site roads (Route 1 and Federal Avenue).

Video

[*Paving the Back Road to the Environmental Restoration Disposal Facility*](#)

Profile

Digging a 70-foot hole that measures 500 feet by 1,000 feet, or about nine football fields, seems like a complicated operation. But DelHur Industries knows how to make it look routine.

Approximately 20 pieces of equipment including excavators, 70-ton off-road trucks, bulldozers, and water trucks are working in unison to excavate super cell 10 at the Environmental Restoration Disposal Facility (ERDF). DelHur will remove an estimated 1.675 million cubic yards of soil by July.

“That’s what we strive for, to make it look easy,” said DelHur Project Manager Kurt Massey, who has worked at the facility on and off for the past 10 years. “Our goal is for everybody to work together and get the job done safely and efficiently.”



DelHur Industries has removed 405,115 cubic yards of soil from super cell 10 at the Environmental Restoration Disposal Facility.

Profile (Continued)

DelHur is a subcontractor for TradeWind Services, which was awarded the subcontract by Washington Closure Hanford early this year to excavate super cell 10 and construct the liner and leachate collection systems for super cells 9 and 10. Nine million tons of waste material has been disposed to date in cells 1 through 8. With the addition of super cells 9 and 10, ERDF's capacity will be 16.4 million tons.

Excavation of super cell 10 began in early February, and work to build the liner is scheduled to begin in April. Massey said DelHur currently has about 30 employees working at the facility and will have 50 at the site next month.

Work to expand and upgrade ERDF is funded by the American Recovery and Reinvestment Act. Washington Closure will receive an estimated \$100 million – \$55 million on expansion and \$45 million on other improvements.

TradeWind recently was named a Washington Closure Mentor-Protégé. The U.S. Department of Energy (DOE) established the Mentor-Protégé program to encourage subcontracting opportunities for small and disadvantaged businesses by pairing them with DOE prime contractors.

As part of the Mentor-Protégé program, TradeWind is eligible to receive significant guidance regarding business development, safety, quality, and operations from Washington Closure. In addition, TradeWind selected DelHur Industries as its prime subcontractor on the ERDF expansion project.

DelHur has been working at ERDF since the mid-1990s. The company built the first, second, and fourth pairs of cells at the disposal facility, and most recently excavated super cell 9. DelHur also constructed Hanford's Integrated Disposal Facility, which will support the Waste Treatment Plant.

Built two cells at a time, the first pair went online when the facility opened in 1996. Designed to be expanded as needed, this is the fourth time the facility has been expanded since it opened – in 1999, 2003, 2007, and now 2010.

"It's pretty much business as usual for us, just on a larger scale," Massey said of the latest expansion project. "We'll be excavating super cell 10 and building the liner for super cell 9 at the same time."

DelHur is based out of Port Angeles, Washington, and has satellite offices in Hermiston, Oregon, and Durango, Colorado. It plans to open an office in Richland soon.

The company also has expertise in mine construction/reclamation, road and heavy construction, mobile soils processing, environmental remediation, and underground utilities involving large pipe.

"DelHur is a well-managed company with a great deal of experience building hazardous waste cells," said Bill Melvin, Washington Closure Project Manager. "Their employees are hard working; they give you a full day's work every day. They're the right guys to have on the job."



618-10 Burial Ground

618-10 Non-Intrusive Characterization/Trench Remediation Project

Nonintrusive characterization activities are focusing on the trenches at the 618-10 Burial Ground. To date, data has been collected for 148 cone penetrometers in the vertical pipe unit (VPU) area and 17 in the trenches.

WCH is obtaining 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.

Progress also continues in planning for intrusive characterization. Intrusive characterization will provide information on the actual form, level of contamination, and the condition of various waste types. The review of submittals necessary to begin mobilization for intrusive characterization is complete, and a pre-bid meeting for infrastructure construction was conducted.

The 618-10 Burial Ground consists of 23 trenches and 94 VPUs, which were constructed by welding five bottomless drums together and buried vertically about 10 feet apart. The site operated from 1954 to 1963 and received low- and high-level radioactive waste from 300 Area laboratories and fuel development facilities.

The 618-10 Burial Ground is the most challenging burial ground WCH has addressed to date. Information collected during nonintrusive characterization and intrusive characterization activities will help determine how best to clean up the burial ground and what protective measures to employ during cleanup.

Upcoming Activities

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



100-F Area

Progress continues on preparing a request for proposal (RFP) for remediation of the 12 remaining 100-F Area waste sites. The RFP is expected to be issued in late March.

The process to obtain an excavation permit for the 100-F sites is underway.

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.

IU 2 & 6 Segment 1

WCH continues with the closeout process for three of the six waste sites discovered at IU 2 & 6 Segment 1 during orphan site evaluations. Remediation was completed last month at sites 600-343, 600-345, and 600-346. Remediation also was completed for portions of site 600-341.

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.

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.

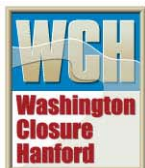


Confirmatory Sampling

The team continues to develop sampling instructions for waste sites at the 100-D, 100-K, and 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. To date, approximately 25% of the confirmatory work instructions have been issued, which includes DOE and regulator approval.

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.

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 remediation 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

- Transmitted request for proposal (RFP) to bidders for 618-10 Infrastructure Construction Subcontract

