



*River Corridor Closure Project*

# **Recovery Act Weekly Report**

October 13, 2009

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 Remediation 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. This report will provide written and visual evidence, weekly, of this expansion as it happens.

### B. The 618-10 Burial Grounds

Long regarded as one of Hanford's worst waste sites are the trenches in 618-10. 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.

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





# Safety

## Safety Accomplishments

As of September 30, 2009, WCH and its subcontractors have safely worked over 66,000 hours of ARRA scope. Through October 11, 2009, there have been no safety incidents.

## Hazard Reductions

WCH's Safety Ownership Program (SOP) was launched as a tool for the RCC project to focus on safety values. Safe work principles for all work, including ARRA, are organized under four SOP tenets:

- Tenet 1: Follow the Instruction
- Tenet 2: Ask the Question
- Tenet 3: Fix it Now
- Tenet 4: Own the Result.

WCH continued awareness activities for the third SOP Tenet; *Fix it Now*. Over the past few weeks, WCH has been discussing the importance of identifying and reporting issues, of fully understanding them before taking action; and being part of the solution. The focus this week is Guiding Principle 4 – *Make it Right Before Proceeding*. While the temptation may be strong to develop work-arounds in order to move forward with a task in spite of issues, problems need to be fixed before proceeding with the work. Discussions of the following areas need action before proceeding:

- Confusing procedure steps (action: change the procedure)
- Confusing task instructions or new scope (action: change the work package)
- Identifying a new hazard (action: change the JHA and work document)
- Incorrect PPE or dosimetry for the job (action: change the RWP)
- Incorrect or conflicting PPE (action: change the PPE Checklist)
- Unsafe or changed conditions (action: change the JHA and work document)
- New issues raised at pre-evaluation (action: evaluate the issue for impact to the work scope and hazards).

Workers are also advised that if the problem is not theirs to fix and if the fix is not needed immediately, they have at least two options available to register an issue and have confidence that the problem will be addressed and tracked to completion. The first option is to record the issue in the Local Safety Improvement Team (LSIT) logbooks. The second option is to enter the issue in the WCH Corrective Action Management (CAM) system.





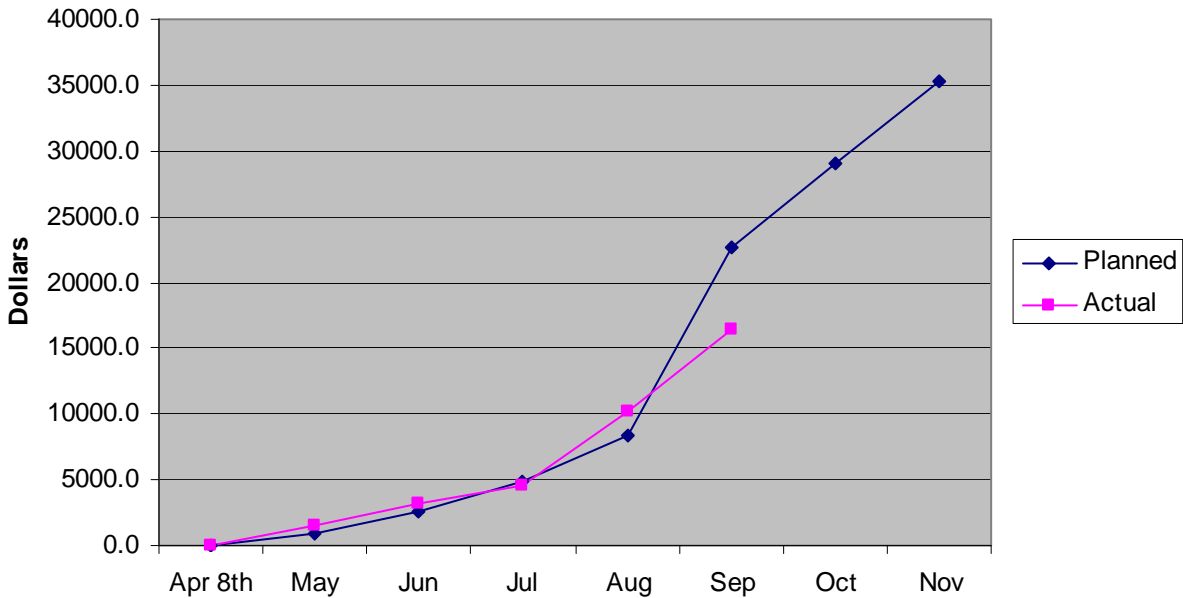
# Cost

180 Day Work Plan plus 60 Day Forecast  
Monthly Estimated Cost Plan Summary (K) Cumulative

WBS	Scope		180 Work Plan						← 60 Day F/C →	
			Apr 8th	May	Jun	Jul	Aug	Sep	Oct	Nov
1.03.14.75.25-27	618-10 NIC/TRP	Planned	0.0	123.8	258.4	475.0	778.2	1466.6	3241.6	4941.6
		Actual	0.0	392.4	648.1	1058.1	1873.9	2913.5		
		Planned %			5%	10%	16%	30%	66%	100%
		Actual %			13%	21%	38%	59%		
	100-F	Planned						0.0	75.0	150.0
		Actual						0.0		
		Planned %								
		Actual %								
	Confirmatory Sampling	Planned						0.0	69.9	166.7
		Actual						0.0		
		Planned %								
		Actual %								
1.04.01.01.3x	ERDF Cell Expansion/Upgrades	Planned	0.0	252.9	1538.2	3689.1	6831.6	20426.7	24748.4	29041.5
		Actual	0.0	753.9	1746.4	2524.8	7109.2	12197.6		
		Planned %			5%	13%	24%	70%		
		Actual %			6%	9%	24%	42%		
1.06.01.01.02	Mission/General Support	Planned	40.3	571.5	766.7	778.7	791.5	809.1	907.1	1018.7
		Actual	40.3	351.5	739.4	958.4	1140.7	1363.8		
		Planned %			75%	76%	78%	79%		
		Actual %			73%	94%	112%	134%		
Forecast	Total	Planned	40.3	948.2	2563.3	4942.8	8401.3	22702.4	29042.0	35318.5
		Actual	40.3	1497.8	3133.9	4541.3	10123.8	16474.9		
		Planned %			7%	14%	24%	64%		
		Actual %			9%	13%	29%	47%		

\* Not to Exceed = \$123.8m

240 Day Spend Plan  
(180 Day Work Plan plus 60 Day Forecast)



WCH will report CPI and SPI at 1.00 until the contract modification approving the ARRA baseline is reconciled to the current baseline.



## ERDF

### Super Cells 9 and 10 Construction

Excavation of super cell 9 continues. To date, the subcontractor has excavated 778,290 cubic yards of the estimated 1.7 million cubic yards (this includes 263,000 cubic yards of stockpile remove).

Installation of the boundary fence for super cells 9 and 10 continues and will be completed in mid-October.

### Facility and Equipment Upgrades

On October 1, upgrades were completed to ERDF and the facility declared “ready to serve” other Hanford contractors. The upgrades are designed to accommodate the substantially increased waste volumes projected by Hanford’s Plateau Remediation Contractor (PRC).



Several members of the Environmental Restoration Disposal Facility team who participated in making the facility “ready to serve” other Hanford contractors posed for photographs. The major upgrade was supported by personnel from DOE, Washington Closure Hanford, Eberline Services Hanford, S.M. Stoller, DelHur Industries, American Electric, and others.

Based on waste disposal volumes of 160 containers per day predicted by PRC, WCH met its October 1 commitment to have the facility ready to meet that demand. The commitment included dedicating nearly one-third of ERDF’s disposal operations to serve the PRC’s planned

## ERDF (Continued)

shipments to ERDF using their trucks and waste containers, along with 26-ton dump trucks, or super dumps. WCH also will supplement PRC efforts by transporting about 50 additional containers per day for them.

With PRC management reviews still underway on October 8, and a total of 15 waste shipments made via super dumps at the end of the week, WCH anticipates a slow ramp up of PRC waste disposal activities the week of October 12.



*On October 7-8, Plateau Remediation Contractor staff conducted a Management Assessment on the use of their containers and trucks as part of the October 1 start-up of "ready to serve" operations at the Environmental Restoration Disposal Facility.*



## ERDF (Continued)



*PRC's super dump truck start-up review was completed on October 6, and the ramp used for the first time on October 7 as part of the ERDF ready-to-serve concept for fiscal year 2010.*

In other activities, the final of six waste transport trucks to be used to support waste disposal for other Hanford contractors arrived this week, as did two new bulldozers. The trucks were



## ERDF (Continued)

provided by Peters & Keats of Lewiston, Idaho, and the bulldozers are from Western States Equipment Co. of Pasco, Washington.

Waste containers from Rule Steel of Caldwell, Idaho, continued arriving. The total so far is 27 of 150.

Work was completed on the new access road into the facility. The access road is part of a major safety upgrade. As a result, traffic flow will be rerouted to reduce heavy truck traffic by 50 % in areas used by pedestrians and personal vehicles.



*U.S. Department of Energy, Richland Operations Office Manager David A. Brockman, left, and Deputy Manager Doug S. Shoop, right, tour the Environmental Restoration Disposal Facility with WCH Waste Operations Director Bruce C. Covert, center. The group viewed recently completed upgrades designed to accommodate other Hanford contractors' waste disposal efforts, as well as a major facility expansion.*

### Upcoming Activities

- Continue excavation of super cell 9.
- Complete fence installation.
- Work on the scale continues with placing of the scale on the concrete pads.
- Receive additional bulldozers.

## ERDF (Continued)

- Award a subcontract to pave the 1.3 miles of back road into ERDF.

### Video

[Click here to view the video showing inspection of the new C9 bulldozer at ERDF.](#)

## 618-10 Burial Ground

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

Preparations continue for the start-up of the nonintrusive characterization of the trenches and vertical pipe units at the 618-10 Burial Ground.

Civil surveys for the placement of the cone penetrometers at the 618-10 Burial Ground were completed this week. Stakes were placed to identify insertion points for the cone penetrometers. The 100 cone penetrometers will be inserted in the 23 selected trenches. In addition, four penetrometers will be inserted around each of the 94 vertical pipe units.



*Last week, workers from Permit Surveying placed markers near trenches at the 618-10 Burial Ground in preparation for nonintrusive characterization, scheduled to begin in late October.*

The penetrometers, which are steel tubes, will be driven by machine about 17 feet into the soil. Instruments will be inserted into the penetrometers to measure the type, amount of, and location of radioactive materials in the trenches and vertical pipe units. Placement is expected to begin in late October.

Also completed this week was installation of a communications tower at the 618-10 Burial Ground project office. A relatively remote location, no permanent utility services are available at



## 618-10 Burial Ground (Continued)

the site. Electricity is provided by generator and potable water is trucked in. Portable units serve as restroom facilities.



*Workers from Sun River Electric Service of Pasco, Washington, install a communications tower at the 618-10 Burial Ground. The tower will provide Internet services at the remote location where clean-up activities at the high-risk site will begin later this year.*

Finally, project staff completed the Waste Streams Hazards and Controls Evaluation. The report analyzes what is known to be in the burial ground, along with what could be expected based on 15 years of field remediation at Hanford, and identifies potential risks and appropriate hazard mitigation.

### Upcoming Activities

- Conduct a demonstration to verify geophysical identification of vertical pipe unit center-points.
- Complete radiological characterization project startup review activities.



## 618-10 Burial Ground (Continued)

- Begin installation of cone penetrometers.
- Conduct value engineering to determine if a confinement structure is needed to support intrusive characterization or remediation of the trenches or VPUs.

## IU 2 & 6 Segment 1

An area designated as the IU 2 & 6 segment 1 encompasses about 23 square miles of the northeastern portion of the Hanford Site, away from the nine surplus plutonium production reactor areas. Six waste sites located in IU 2 & 6 segment 1 were discovered and require remediation.

The sites are relatively small and contain mostly surface debris that must be removed and transported to an approved disposal facility. The first piece of work to be done is to design the remediation strategy. An existing subcontractor will remediate the sites beginning in March 2010. Full remediation, including transportation and disposal of excavated waste, sampling and waste site closeout documentation, backfill, and revegetation, is to be completed by February 2011.



## 100-F Area

F Area is the home of F Reactor, one of Hanford's nine surplus plutonium production reactors. During reactor construction and operations, all site refuse, ranging from office trash to radioactive equipment and debris, was disposed in unlined pits and trenches throughout the 100-F Area.

Most of the cleanup work at F Area has been completed. However, during the course of cleanup, 12 other waste sites were discovered. A visual inspection of some sites confirmed remediation was necessary. They include sites that contain asbestos and a pipeline that contains 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.

The first piece of work to be done is to design the remediation strategy for the waste sites. Then, in the spring of 2010, a request for proposals will be issued soliciting bids from companies to clean up the 12 sites. The selected subcontractor should be ready to begin site cleanup by fall 2010.



## Confirmatory Sampling

In the 1980s and 1990s, an extensive effort was conducted to catalog all of Hanford's known wastes sites and burial grounds. Those sites were included in cleanup agreements between the U.S. Department of Energy and its regulators, as well as in the scope of work for Hanford's cleanup contractors.

However, as cleanup progressed across the 586-square-mile Hanford Site, other suspicious areas were discovered that, at a minimum, required further investigation to determine if the site met cleanup standards. The process of making that determination is called confirmatory sampling.

Sixty-six sites scattered about the northern portion of the Hanford Site were recently added to the list of those requiring confirmatory sampling. Some sites were used as burn pits and tar dumps, while others were used to store batteries or are suspected of housing dichromate facilities. Still there are others that are not clear what they might contain, which is why sampling is required.

By the end of 2009, WCH will issue a request for proposals to hire a company to perform sampling of the 66 sites. Those that pass the confirmatory sampling process will be closed out and no further action will be required. Those sites that fail will be cleaned up to meet regulatory standards.

Sampling of the sites are expected to begin in spring 2010.





## Mission Support/General Support

### Accomplishments

- Washington Closure Hanford received notice to proceed with three additional areas of work using funds from the American Recovery and Reinvestment Act. The work includes cleaning up 18 waste sites in Hanford's outer areas and sampling 66 recently discovered sites to see if they do, in fact, need to be cleaned up.
- WCH incorporated the Vision 2015 Roadmap into the FY10 and FY11 Contractor Performance Plan (CPP) to support the DOE's goal of reducing the site clean-up footprint. The CPP is now being readied for internal management reviews.
- WCH submitted the Recovery Act Quarterly Report to the FederalReporting.gov website on Friday October 9, 2009, one day before the required submittal date.

### Upcoming Events

- Support the review and comment period for the Recovery Act Quarterly Report.
- Support DOE independent reviews ARRA Phase II Technical and Cost Proposal.
- Continue to work on finalizing the Vision 2015 Roadmap for planned issuance October 2009.



## General

### Job Fairs

WCH, in partnership with Washington Division of URS, and Washington River Protection Solutions (WRPS) attended the Boise State University Career Fair on 10/7/2009. WCH also attended the Washington State University Career Fair on 10/7/2009.

Refer to the weekly EM Recovery Act Jobs Data Call spreadsheet for more detailed Jobs Fair reporting.

### Hiring Actions

WCH finalized the definitions and methodology for counting WCH "Jobs Created" and "Jobs Saved/Retained" and has updated the WCH actual direct jobs reported (headcount, FTEs, and cumulative hours worked) on the EM Recovery Act Jobs Data Call spreadsheet. This has resulted in an overall increase through October 2, 2009.

**Jobs Created as of 10-02-09**

	Subcontractors	ROS	WCH	Total
Total To Date	128	8	164	300

Jobs created represent new lives touched by ARRA, and are not expressed in full-time equivalents (FTEs). Refer to the weekly EM Recovery Act Jobs Data Call spreadsheet for detailed report of Jobs Creation/Saved as of October 2, 2009.

### Mentoring/Training

No significant activities this week.

### Media, Visits, Press Releases

- DOE-HQ representatives Norman Graves and Elver Robbins visited ERDF and 618-10 on their October 6 ARRA site visit.
- A media event is anticipated by late October on ARRA funded work at the 618-10 Burial Ground. Workers will be installing cone penetrometers (tubes) for characterization of the highly contaminated site.

### Contracting Actions

- Issued Request for Proposal for ERDF super cell 9 and 10 construction.
- The sixth of 20 shuttle trucks was delivered. One per week to be delivered until the order is complete

