



*River Corridor Closure Project*

# **Recovery Act Weekly Report**

For the week ending November 15, 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 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. Details including chemicals of potential concern, specific sample locations, frequencies, sampling protocols, and analytical methods are presented in site-specific work instructions. Samples are then collected and analyzed for radionuclide and/or non-radionuclide chemicals of potential concern to determine if the site requires remedial action.

This weekly report will provide evidence of these activities as they occur in support of ARRA.

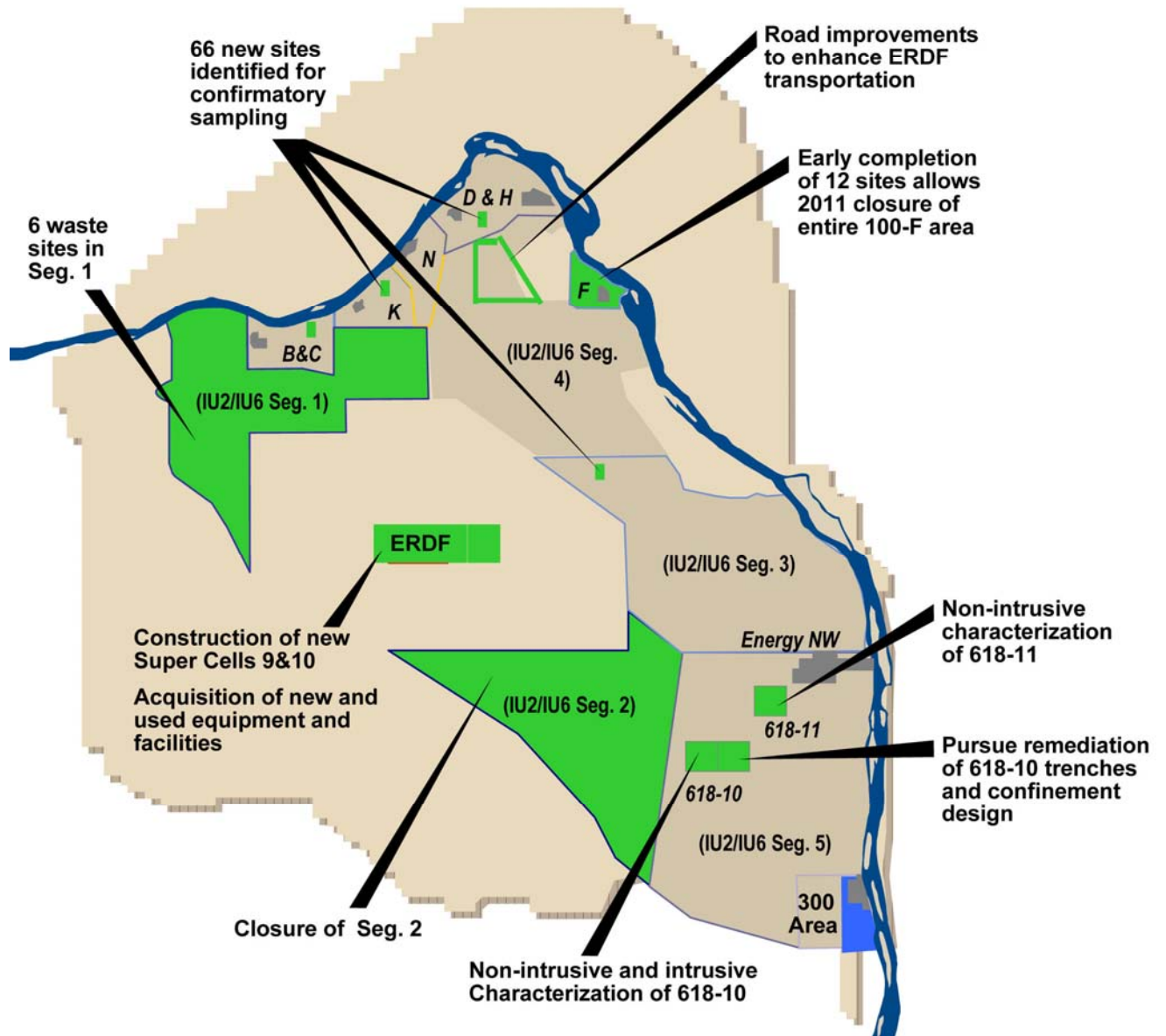
The following figure illustrates the overall scope of WCH's ARRA projects.



# Overview (Continued)



### ARRA Scope



## Safety

### Safety Accomplishments

As of October 25, 2009, WCH and its subcontractors have safely worked over 79,000 hours of ARRA scope. Through November 15, 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.

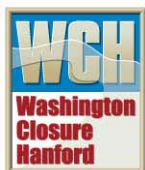
Over the past several weeks WCH has been discussing the first three guiding principles of Tenet 4. This week focus is on the fourth and final Guiding Principle – You can make it better.

Each and every worker at the RCCC whether working ARRA or other WCH scope has the opportunity and responsibility to make what we do better, safer, and more effective. Each worker on the job contributes to the ultimate outcome of cleaning up the Hanford site and restoring the land to what it once was. This contribution is by staying engaged in the work that is occurring and being committed to performing that work as prescribed by the work instruction. Being disciplined in how the work is performed has resulted in improvements such as the use of a radiological monitor mounted on an excavator; the use of truck and pup equipment, and the increase in container dumping at ERDF, just to name a few.

Each improvement makes the work safer for all. Every worker on the RCCC is challenged to maintain the rigor of performance that we have worked so hard to achieve. Discussions center on the need to stay vigilant about following our procedures and stopping when unsure, because safety tomorrow is not guaranteed by what we do today. WCH senior management continually emphasizes to workers of ARRA and base scope that “we are only as safe as the job we are currently performing.”

### Note

No report will be issued December 1. The report issued December 8 will include pertinent information that would have been included in the December 1 report.



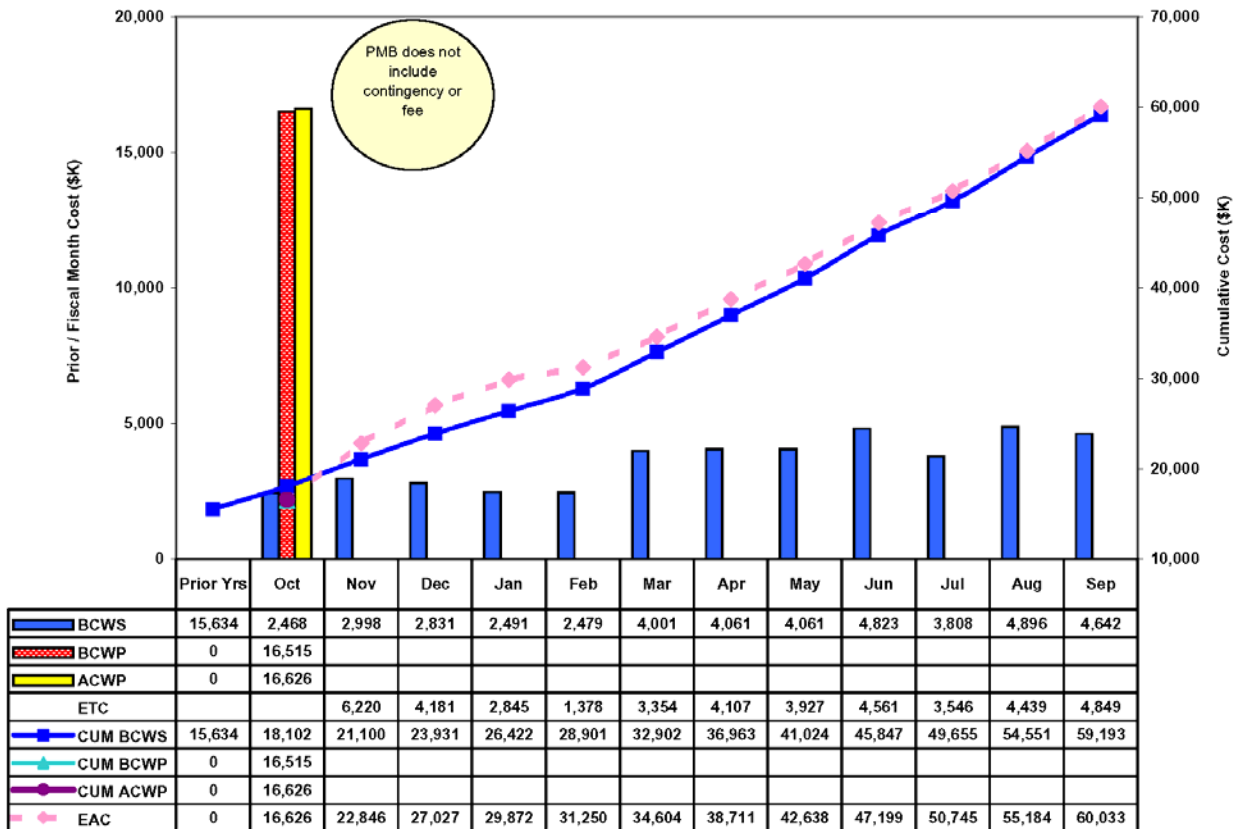
# Contract Status

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.

# Cost

RCC Project - ARRA  
Current Performance Measurement Baseline (PMB)  
Prior Years / FY10 Fiscal Month





## ERDF

### Super Cells 9 and 10 Construction

Under subcontract to Washington Closure Hanford, DelHur Industries has excavated 1,227,489 cubic yards of material for super cell 9.



*DelHur Industries continues excavation at super cell 9. Excavation work is about 60 percent complete.*

Bids have been received for the excavation of super cell 10 and the construction of super cells 9 and 10. The evaluation process of the bids is underway. Technical and cost analyses continue. Washington Closure will submit the award package to DOE in early December. Final award is expected in February after the DOE review and final approval.

DelHur Industries personnel completed the removal of the old boundary fence. The new fence was completed last week. It extends the ERDF boundary for construction of super cells 9 and 10 for the truck and pup operations.

## ERDF (Continued)

### Facility and Equipment Upgrades

DelHur personnel completed the installation of the reader board at the third scale, which accommodates traffic from the back road into ERDF. The reader board is part of the waste tracking system. The scale is scheduled to begin operation the first week of December.

Richland subcontractor George A. Grant Inc. began grading the back road into ERDF in preparation for paving. The road has experienced significantly more activity because of the super dumps, construction traffic and disposal of waste material from other Hanford contractors.



*Fill dirt is dumped on the back road into the Environmental Restoration Disposal Facility.*

Statements of work are being prepared for the new septic system, refueling station and maintenance facility.

Two more haul trucks were received, bringing the total to 13 of 20. Twenty-one waste containers also arrived, raising the total to 104 of 150 received to date. The trucks are from Peters and Keats of Lewiston, Idaho, and the containers are from Rule Steel of Caldwell, Idaho.

## ERDF (Continued)



*A ramp shack was installed at the Environmental Restoration Disposal Facility. The shack provides a place to store tools and equipment, and to process paperwork.*

### Upcoming Activities

Continue excavation of super cell 9. Excavation is on schedule to be completed in January.

The Mission Support Alliance, a Hanford contractor, is scheduled to begin work early next week to repair several Hanford Site roads used by haul trucks to transport radioactive and mixed waste for disposal at ERDF. Work will involve patching potholes on Federal Avenue and Route I. Also, a 900-foot stretch of broken-up asphalt on Route I will be scraped and a 2-inch overlay will be applied. The repairs will keep roads safe and operational through winter, with more extensive repairs to be made next spring.



## 618-10 Burial Ground

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

North Wind Inc. completed the installation of 100 cone penetrometers into the waste trenches. The team planned to install at least 10 per day but averaged nearly 17 per day over a six-day period. Cone penetrometers are long steel tubes that will house the instruments used to determine the type, amount, and distribution of radioactive materials within the waste trenches and vertical pipe units (VPUs).

Installation of four cone penetrometers around each of the 94 VPUs began this week. VPUs are typically five open-ended 55-gallon drums welded together end to end. During the mid-1950s to the early 1960s, high activity waste was dumped into the VPUs. Historical information indicates that up to 10 of the VPUs were constructed of smaller diameter pipe. Each of the locations will be logged using a multi-detector probe (MDP) measurement, designed specifically for use in characterizing the 618-10 and 618-11 burial grounds. The detectors are configured to measure radiation sources through the wall of the cone penetrometers and VPUs.



*Four cone penetrometers are installed around each of the 94 vertical pipe units at the 618-10 Burial Ground.*

## 618-10 Burial Ground (Continued)



*North Wind Inc. workers continue to install cone penetrometers around the vertical pipe units at the 618-10 Burial Ground.*

Road construction continues near the burial ground. Road crews are working to install entrance and exit lanes, pave the median, and restripe the road. Grading is nearing completion and paving is expected to begin by early next week. The project is on schedule to be completed by November 19.



## 618-10 Burial Ground (Continued)



*Road crews continue to prepare the entrance/exit lanes for paving at the 618-10 Burial Ground.*

An expression of interest was posted for companies interested in providing a mobile assay lab.

### Upcoming Activities

- Initiate radiological characterization activities
- Complete records research and begin records research report
- Continue planning for soil sampling, scheduled to begin in March
- Continue confinement design criteria development activities

### Video

[Click here to view the video showing installation of cone penetrometers around the vertical pipe units at the 618-10 Burial Ground.](#)

## 100-F Area

Design planning, historical research, the integrated hazard evaluation and the Design Basis Report have been completed. A walkdown of remediation sites that have been identified is scheduled for next week. The purpose of the walkdown is to develop a common understanding of the remediation scope for these sites and to begin identifying potential cultural and ecological limitations on remediation of these sites. The remediation sites are: 100-F-26:4 pipeline, 100-F-26:7 pipeline, 100-F-44:8 piping, 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.

### Profile

To your average Joe, a pile of rocks is a pile of rocks. But to Tom Marceau, it can help tell the story of what life was like on the Hanford Site hundreds, even thousands, of years ago.

A dirty old bottle is a dirty old bottle, right? Not to Marceau, who knows it can help paint a picture of the thousands of workers who lived at the Hanford Construction Camp during the Manhattan Project.

Marceau is the Cultural Resources Supervisor at WCH, a position he has held for the past 15 years. He conducts reviews on Hanford project activities, many of which are ARRA funded, to determine the effects they may have on cultural and historic properties. His work ensures that cultural resources are handled in a way that preserves their historic, archaeological, and cultural significance. Marceau conducts the reviews before any work involving land disturbance or the modification or demolition of structures is performed.

Even before Marceau arrives at a site to conduct a foot survey, also known as a walkdown, there is plenty of research to be done. He begins with a literary review to learn more about the site. For example, is the site associated with an important event or an important individual? Does it contain a unique structure or facility, or can it provide historical information?

While Marceau says written and oral findings are critical to his investigations, what he is really after is physical evidence.

“You can’t argue with physical evidence,” Marceau said. “But my goal is to get a balance between the written, oral and physical findings.”

During a walkdown, Marceau searches for any type of clue that Native Americans or settlers living on the homesteads or townsites occupied the area.

“The first thing I do is ask myself, ‘does anything look out of place?’” Marceau said. “Sometimes just the smallest little things can tell you a lot.”

Some of the little things include ground depressions, unearthed soil, mussel shells, trees and rocks. Trees were planted for windbreak, while rock was used for tools, shelter and sustaining fire.





## 100-F Area (Continued)

Marceau, who earned a master's degree in archaeology from the State University of New York at Albany, has reviewed hundreds of projects in the past 15 years. Seven have resulted in archaeological excavations, including current work at the 600-202 landfill, which was used for domestic refuse during construction of the Hanford Site.

The 600-202 dig unearthed many items, such as ceramic shaving mugs, Coca Cola bottles from across the nation, and plenty of beer bottles. The information collected will be used to help construct a social history of Hanford workers

Perhaps the most intriguing item Marceau has discovered on the Hanford Site was a projectile point uncovered during the excavation of a pump-and-treat well. The projectile point is estimated to be between 9,000 and 11,000 years old, making it the oldest recovered artifact at the Hanford Site.

"Sometimes you find some pretty cool stuff," Marceau said.



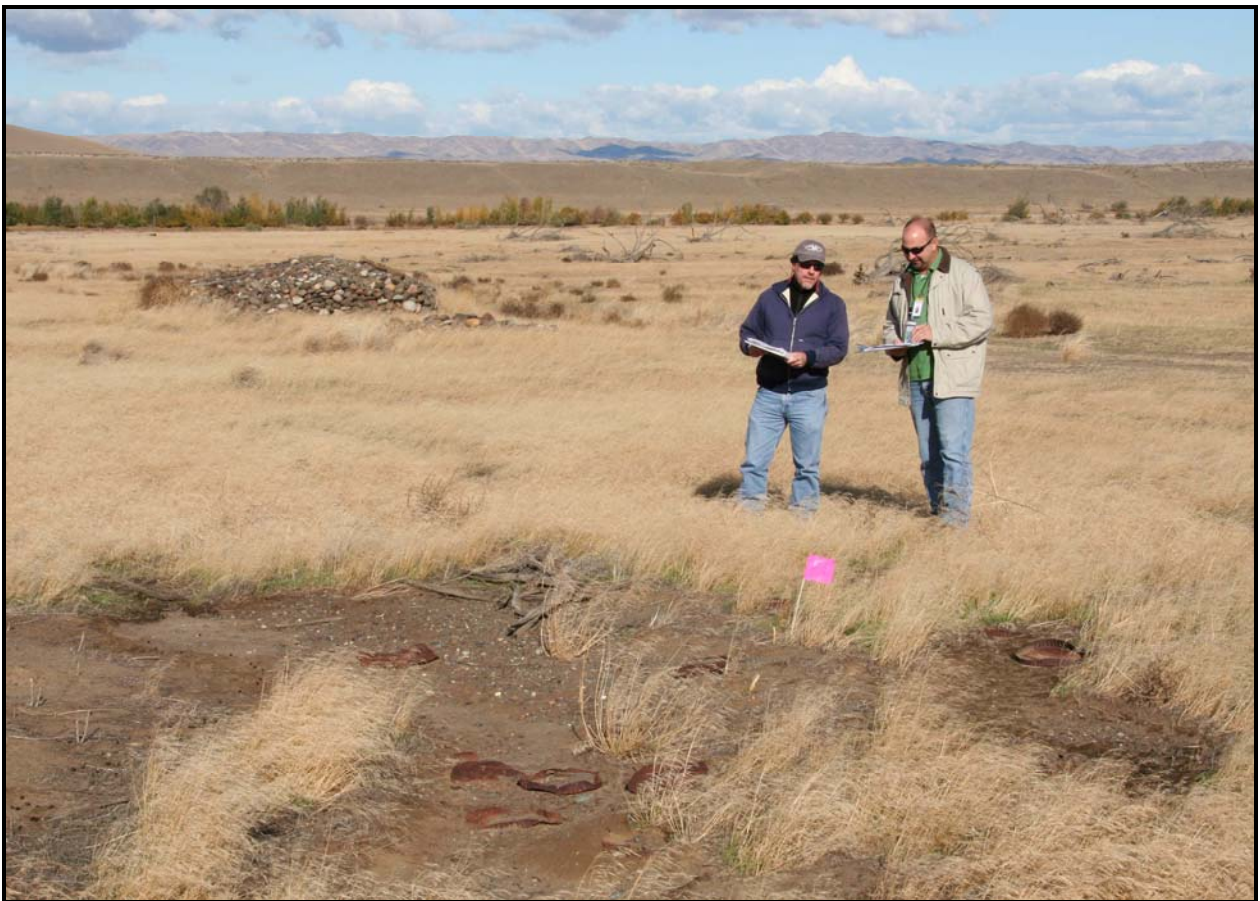
## 100-F Area (Continued)



*Tom Marceau, the Cultural Resources Supervisor at WCH, soon will conduct a cultural walkdown at 100-F Area.*

## IU 2 & 6 Segment 1

Fire protection evaluation and scope of work documents are being prepared for remediation activity. Cultural and ecological reviews continue, and a cultural walkdown was completed. The sites are expected to require minor remediation. A need for haul road construction, waste stockpiling, or fire breaks at these sites is not anticipated. Limited blading of existing roads may be needed. A tracked or rubber-tired excavator, rubber-tired haul truck, and a rubber-tired water truck most likely will be used over existing roadways with little to no additional improvement of the existing roadways. The water truck would be dedicated at each site during the remediation activity for fire protection as well as for dust suppression. There also could be a need for an additional water truck to monitor the unimproved road or path for traffic in and out of the site during the activity.



*An ecological walkdown recently was conducted at several IU 2 & 6 remediation sites.*

## Confirmatory Sampling

Initial planning has been completed for confirmatory sampling of 66 sites near the Columbia River. Some of the sites were used as burn pits and tar dumps, while others were used to store batteries or are suspected of housing dichromate facilities. It's not clear what the remaining sites might contain, therefore, further investigation is required.

The team continued drafting sampling instructions for waste sites at the 100-D Area. Development of sampling instructions includes 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. Initial drafts of seven other sampling instructions have been completed and are being reviewed by WCH subject matter experts and sampling personnel.

The team also completed drafting closure documentation for two waste sites. These sites have historic data or information gained during remediation of other nearby sites to support closure without further sample collection. After review by WCH subject matter experts, the documentation will be submitted to DOE and Hanford Site regulators for review.

Planning for 100-D Area pipeline waste sites continues. These sites consist of many pipe segments that are frequently not related to one another. Therefore, pipeline sites are usually broken into smaller, more manageable subsites based on usage, location, and relationship to other waste sites. Individual sampling instructions are then drafted for each subsite.

Work also continues on developing a scope of work and other procurement documentation. In late 2009 or early 2010, WCH will issue a request for proposals for a company to provide excavation and sampling support for the 66 sites. Those 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 spring 2010.





## Mission Support/General Support

### Accomplishments

- WCH continued the development of the *2015 Vision Roadmap*
- WCH continued to support DOE-RL's review of the ARRA Phase II Technical and Cost Proposal questions.
- WCH completed the reconciliation of the performance measurement baseline to the executed Phase I contract modification.
- Provided WCH and Tier1 Subcontractor data to support DOE-HQ request for jobs data by zip code.
- Attended kick-off meeting for DOE-RL Assessment of WCH Jobs Reporting
- Supported DOE request for staffing projections encompassing both ARRA and WCH base scope.
- Submitted the RCC Recovery Act Monthly Report for October 2009.
- Created a new one-page flier that summarizes WCH weekly achievements

### Upcoming Events

- Continue to work on finalizing the *2015 Vision Roadmap*.
- Continue preparation of Phase II proposed performance measurement baseline.
- Continue to provide support towards Definitization of the Phase II Technical and Cost Proposal.
- Provide Jobs Reporting information to DOE RL to support the Assessment of WCH Jobs Reporting



## General

### **Mentoring/Training**

No significant activities this week.

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

A staff writer and political reporter from The Oregonian newspaper in Portland, Oregon, toured ARRA projects to collect information for an upcoming story about the projects and their funding. The writer visited ERDF, the B/C areas, and the 618-10 Burial Ground.

### **Contracting Action**

The requisition for a Civil Survey Master Agreement for the 618-10 project was approved.

