



River Corridor Closure Project

Recovery Act Weekly Report

For the week ending December 6, 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.

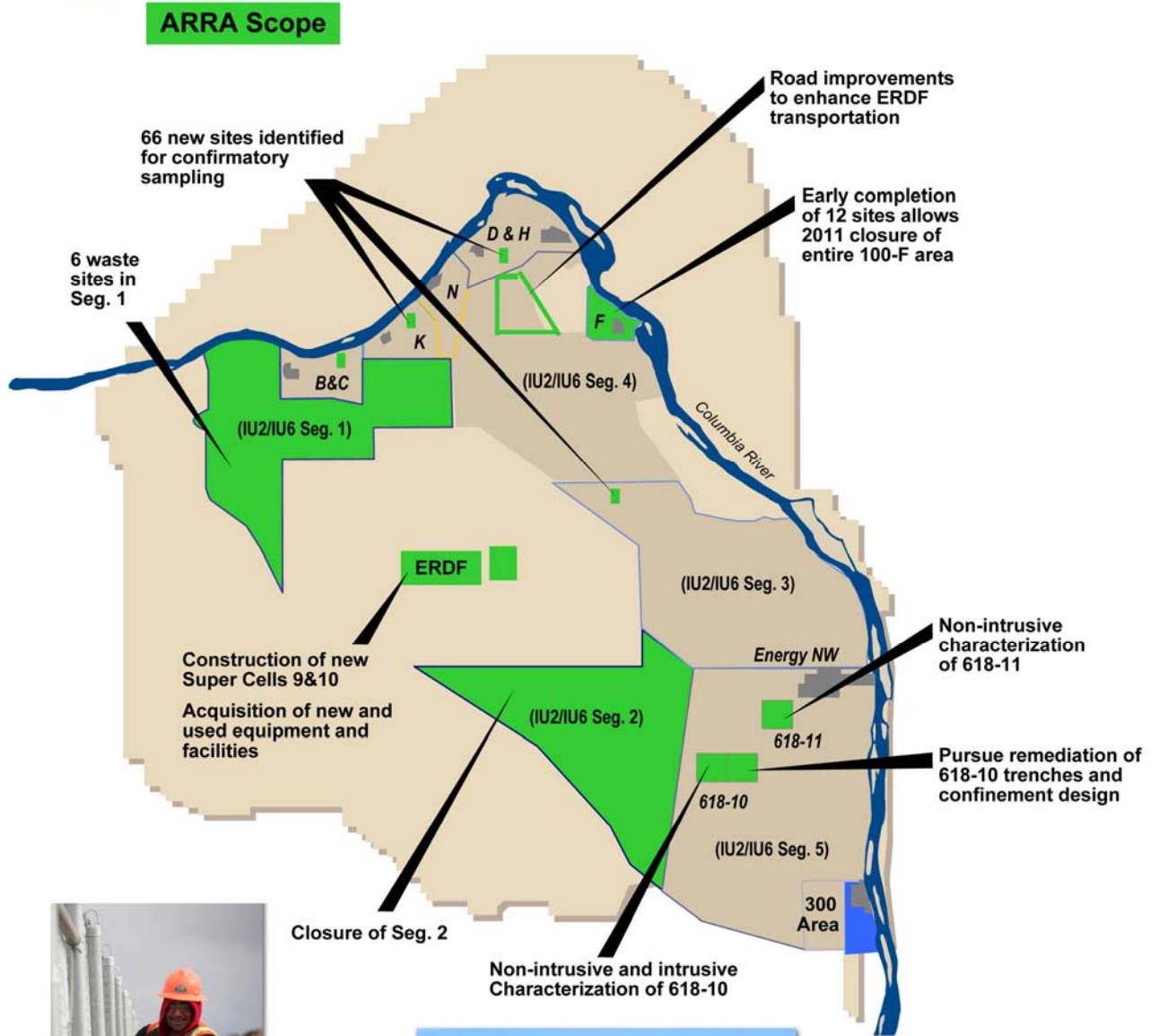
This weekly report will provide evidence of these activities as they occur in support of ARRA.

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



Overview (Continued)

ARRA Scope **River Corridor Cleanup Completion**



Safety

Safety Accomplishments

On November 30 WCH employees and subcontractors reached one million hours worked without a lost-time accident.

The one-million-hour accomplishment included work on several projects funded with the American Recovery and Reinvestment Act (ARRA). Recovery Act-funded project employees and subcontractors have worked injury-free since the projects began in April 2009.

“A good safety record is synonymous with a well-run project,” said Neil Brosee, president and project manager for Washington Closure Hanford. “We have that, and it’s because our workers are committed to working safely and ensuring their coworkers are doing the same.”

“We are getting into some especially risky and challenging cleanup work with building demolitions in the 100 and 300 Areas, as well as cleanup work at waste burial grounds, such as the 618-10 Burial Ground,” Brosee said. “Construction, demolition and waste cleanup are especially hazardous activities. Nevertheless, our goal is to send every home at the end of each day in the same condition as when they arrived.”

Hazard Reductions

On November 30, WCH management and safety representatives met with workers for a “Safety Refocus.” The refocus meetings, held after each holiday vacation, were designed to refresh employees’ focus on job safety. They were meant to reiterate the critical importance of safety. The agenda for the meetings included the following topics and recommendations:

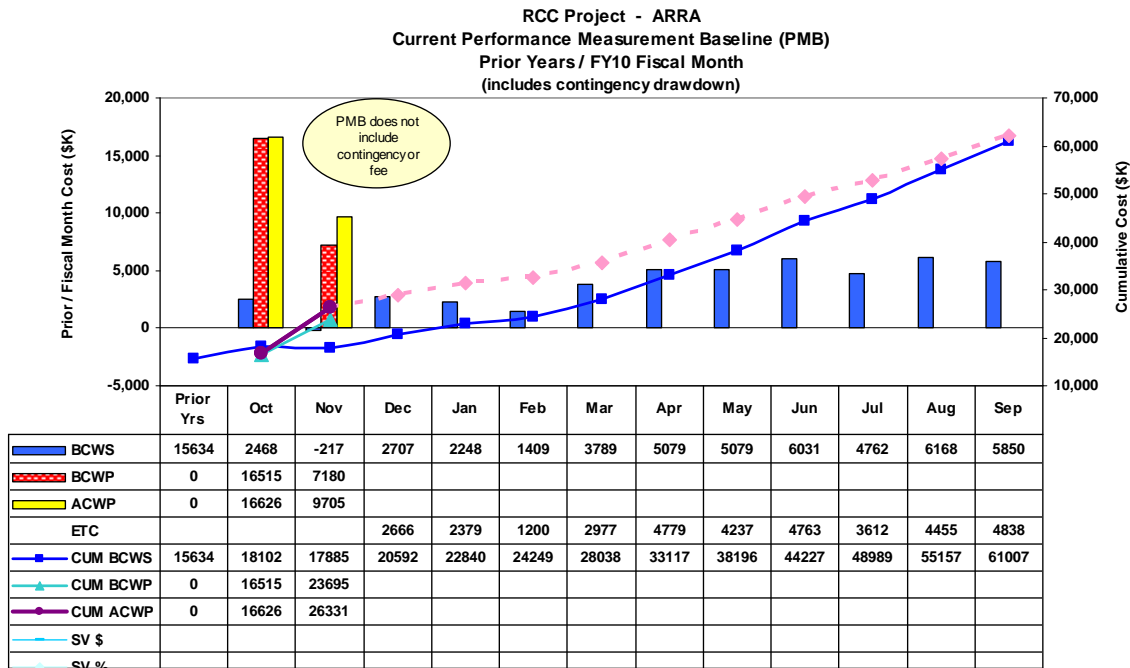
- Why Safety Ownership Program, and how does it work?
- What does it mean to you?
- What is our ultimate goal?
- Clean off icy areas
- Use ice-melt and sand on stairs and walking paths
- Wear footwear appropriate for the conditions
- Walk on designated paths.



Cost

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

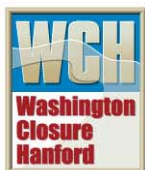
Contract Modification #142 is the definition of the Phase 1 scope of work and was incorporated into the Integrated Project Baseline (IPB) (Performance Measurement Baseline) beginning with October 2009 reporting.



ARRA Actuals (includes PMB and Proposal 2)

Apportionment Number	Apportionment Title	PMB or Balance *	Current Month	Inception To Date
RL-0041.R1.2	ERDF Cell Expansion	PMB	8031	21226
		Balance	616	1607
RL-0041.R2	River Corridor Soil & Groundwater (618-10)	PMB	1675	5106
		Balance	55	132
Sub Total		PMB	9705	26331
		Balance	671	1739
Fee			-896	1636
Total			9480	29707

* PMB is the Phase 1 Performance Measurement Baseline. Balance is Proposal 2



ERDF

Super Cells 9 and 10 Construction

Under subcontract to WCH, DelHur Industries has excavated 1,413,036 cubic yards of material for super cell 9 (including 263,913 cubic yards of stockpile removal).

WCH plans to submit the award package for the excavation of super cell 10 and the construction of super cells 9 and 10 next week to DOE for review. Final award is expected in February.

Facility and Equipment Upgrades

Richland subcontractor George A. Grant Inc. is nearing completion of preparation work for paving the back road to ERDF by laying down 4 inches of gravel. Weather permitting, paving is scheduled to begin Monday, December 7. The work will improve traffic flow and safety on the road, which has come under much higher use with truck and pups, super dumps, construction traffic, and disposal of other Hanford contractor waste material.



Richland subcontractor George A. Grant continues work in preparation of paving the back road to the Environmental Restoration Disposal Facility.

ERDF (Continued)

The new reader board at the third scale has electrical power. The reader board, which is part of the waste tracking system, accommodates traffic from the back road into ERDF. The next step is to run a fiber optic cable from the scale house to a control center for internet access. This will allow for loads to be entered in real-time into the Waste Management Information System.

Hanford contractor Mission Support Alliance continues repairing several Hanford Site roads used to haul radioactive and mixed waste to ERDF for disposal. The repairs will allow the roads to operate through the winter. About 50% of the total work has been completed. A 900-foot section of broken-up asphalt on Route 1 was scraped and prepared for paving. Small potholes on Route 1 and Federal Avenue have been repaired, and work now is focused on the larger problem areas. Weather permitting, all paving will be completed by December 10. More extensive repairs will be made next spring.



ERDF (Continued)



A 900-foot section of Route 1 is being prepared for paving.

A scope of work continues to be developed with specifications necessary for issuing a request for proposals (RFP) to expand the truck maintenance facility, and construct new equipment and container maintenance facilities. An RFP is expected to be issued by the end of the year.

ERDF (Continued)

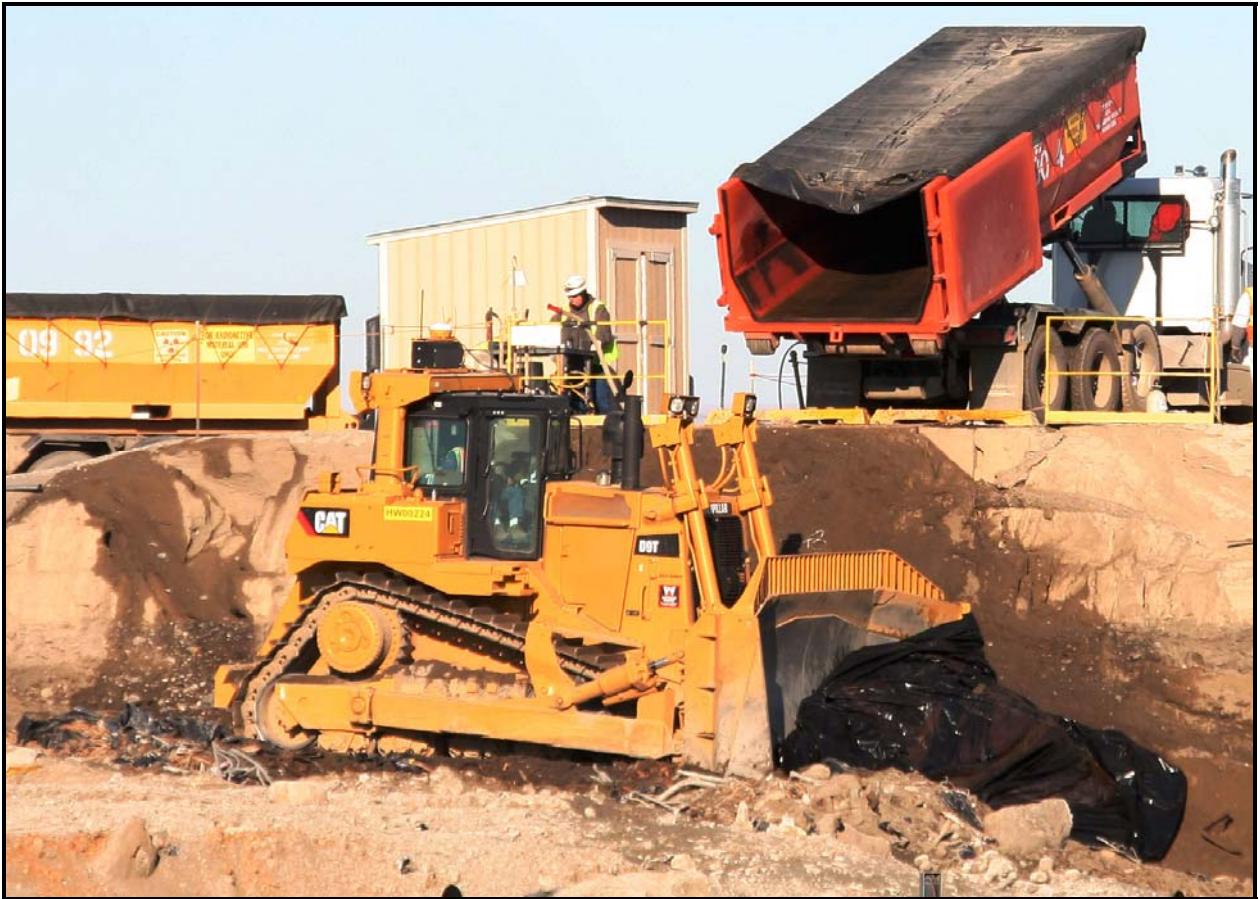
The RFP to build a new onsite refueling station and a new septic system has been issued. The refueling station will service about 65 vehicles, ranging from passenger vehicles to tractor-trailers.

The facility has received the final shipment of 12 containers, bringing the total to 150. Ten of the new containers are green, designating non-radioactive shipments. The containers are from Rule Steel of Caldwell, Idaho. Two additional bulldozers also have been received and are operational. The bulldozers are from Western States Equipment Co. of Pasco, Washington.



Ten new non-radioactive “green” containers were delivered to the Environmental Restoration Disposal Facility. The green containers are part of the 150 delivered to the facility.

ERDF (Continued)



One of the two new bulldozers from Western States Equipment Co. of Pasco operates at the Environmental Restoration Disposal Facility.

Upcoming Activities

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

Continue work issue an RFP to expand the truck maintenance facility, and construct new equipment maintenance and container maintenance facilities.

Video

[Click here to view the video on ERDF road construction.](#)

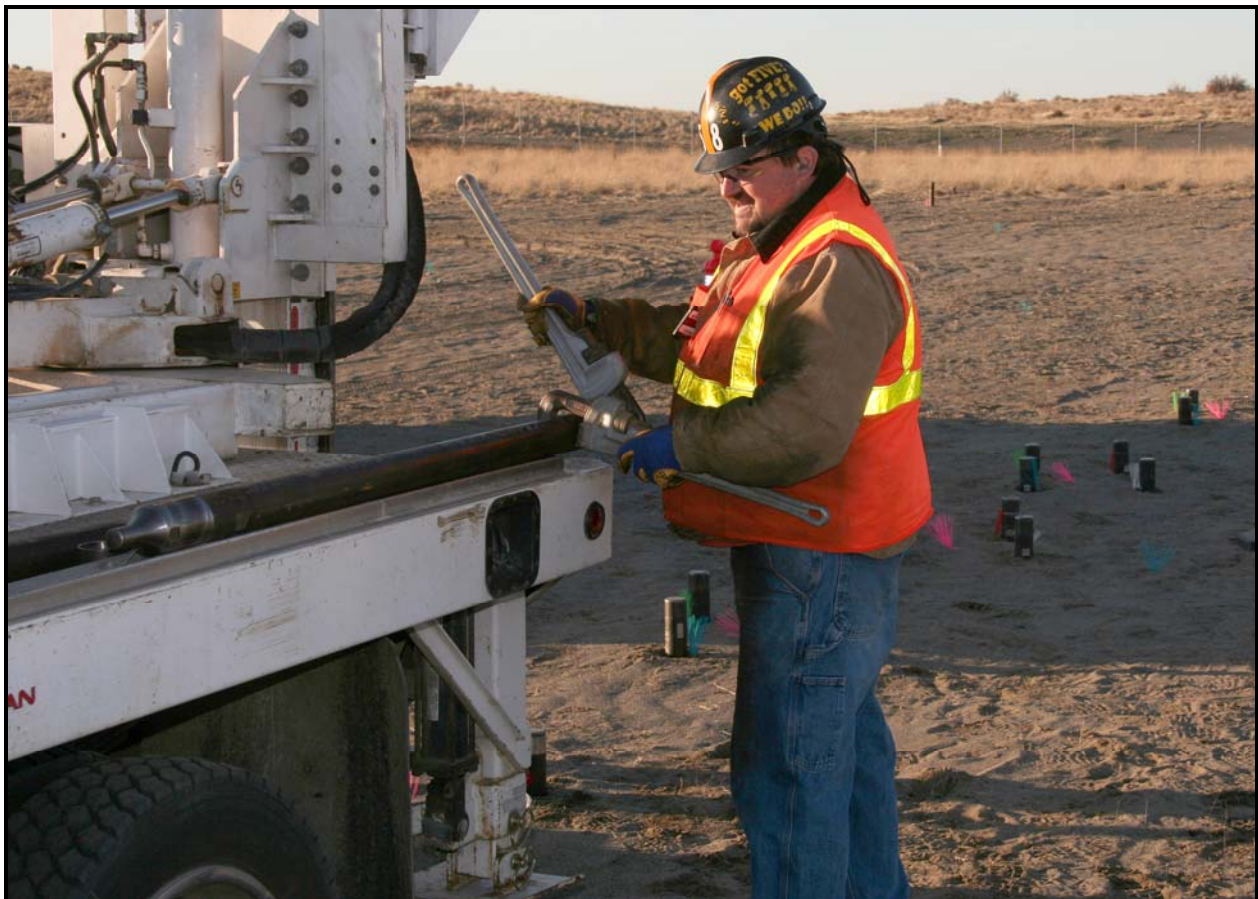
618-10 Burial Ground

618-10 Non-Intrusive Characterization/Trench Remediation Project

North Wind Inc. continues to install cone penetrometers around the vertical pipe units (VPUs). The cone penetrometers are steel cylinders that accommodate the instruments used to determine the type, amount, and distribution of radioactive materials within the VPUs. During the mid-1950s and early 1960s, highly radioactive waste from Hanford's 300 Area was dumped into the VPUs, which typically consist of five bottomless 55-gallon drums welded end to end.

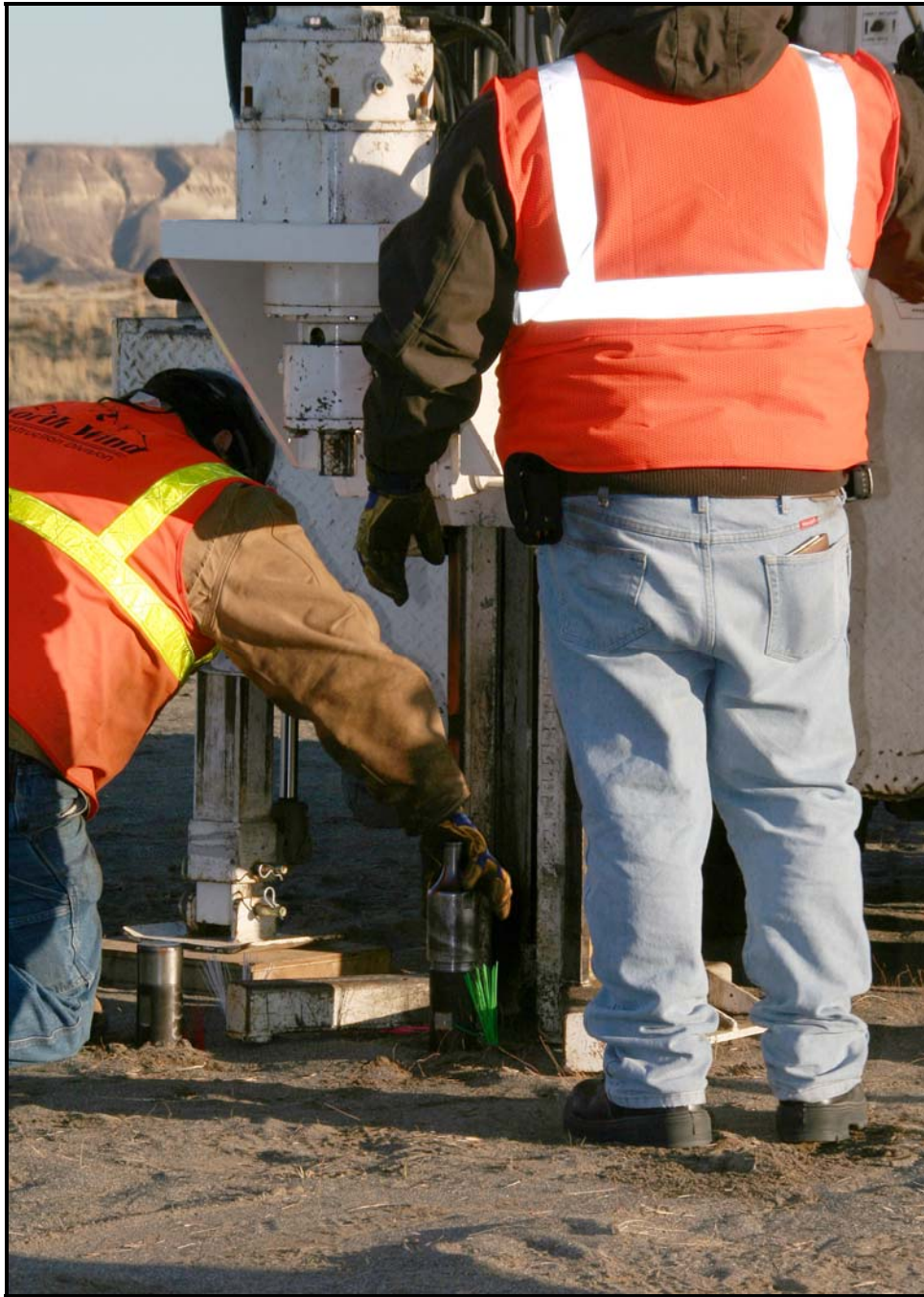
To date, 182 cone penetrometers have been installed to target depth of about 22 feet. Installation of the cone penetrometers in the VPU area is about 48 percent complete.

Preparations continue for radiological characterization activities, which are expected to begin later this month. Multidetector probes (MDP) designed for use in characterizing VPUs, will be placed inside the cone penetrometers. The MDP includes two gamma-ray detectors used as spectrometers, two neutron detectors, and a gross gamma detector. The detectors measure a wide range of radiation sources and activities through the walls of the cone penetrometers.



A North Wind worker prepares a cone penetrometer for installation around a vertical pipe unit at the 618-10 Burial Ground. Four cone penetrometers are being installed about 6 to 8 inches around each of the vertical pipe units.

618-10 Burial Ground (Continued)



North Wind workers install a cone penetrometer around a vertical pipe unit at the 618-10 Burial Ground.

618-10 Burial Ground (Continued)

Upcoming Activities

- Continue installing cone penetrometers around VPUs.
- Continue reviewing subcontractor submittals.
- Initiate trench radiological characterization activities.
- Continue preparation of the records search summary report.
- Continue confinement design criteria development activities.
- Continue soil sampling project startup review development activities.

Profile

Zac Leach is ready to buy some furniture, hook up his TV, and watch his beloved Cincinnati Bengals make their playoff push.

“I’ve finally got a place to call home,” said Leach, who began work last month as a safety specialist for North Wind Inc., a subcontractor of WCH. His position was made possible by ARRA funding.

Leach is a native of Summerfield, Ohio, a town of about 300 in the southeastern part of the state. Since graduating from Ohio State University four years ago with a bachelor’s degree in agricultural business and economics, the 26-year-old has literally been on the move.

His previous job as a safety coordinator with Layne Christensen Company took him to Denver, Colorado, and Phoenix, Arizona. Leach also spent a great deal of time working on a project in Los Alamos, New Mexico. Layne Christensen is a Kansas City-area company that specializes in resource exploration and production.

“I would usually spend about five days a month at home,” Leach said. “I was always out of town working on a project. I’m ready for some stability.”

Leach was hired to work at the 618-10 Burial Ground, considered one of the most complex burial grounds at Hanford.

“I flew up in October to meet everyone and see what the project was all about,” Leach said. “The selling point for me was the people. From WCH to North Wind, the 618-10 project is surrounded with great people. It’s a pleasure to work with this group.”

Leach joined the project just before North Wind began installing 100 cone penetrometers in a selection of waste trenches at the burial ground. Cone penetrometers are steel tubes that will house the instruments used to determine the type, amount, and distribution of radioactive materials within the waste trenches.

North Wind employees are installing cone penetrometers around 94 vertical pipe units at the burial ground. During the mid-1950s and early 1960s, Hanford workers dumped highly radioactive waste into the VPUs, which typically consist of five bottomless 55-gallon drums welded end to end.

“I’m really enjoying the job,” Leach said. “It’s pretty cool to be able to tell your friends and family that you’re helping to clean up the old Manhattan Project work sites.”



Profile (Continued)



Zac Leach is a safety specialist for North Wind Inc., a subcontractor of Washington Closure Hanford. He is working at the 618-10 Burial Ground.

100-F Area

Pre-qualified companies interested in helping clean up F Area waste sites are being sought. Remediation will involve the excavation of radioactive and hazardous soil and debris, and the packaging of the material into shipping containers. To be eligible to bid on the work, potential bidders are required to show they can meet the requirements. Requirements can be found by visiting the procurement section of the WCH website and filling out a pre-qualification questionnaire.

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.

A walkdown of remediation sites was recently completed. The walkdown included DOE and U.S. Environmental Protection Agency project managers, environmental and archeological specialists, and engineers preparing the design. The purpose of the walkdown was to develop a common understanding of the remediation scope of work for the sites and to begin identifying potential cultural and ecological limitations.

The volume estimation calculation has been completed. EPA is reviewing the design drawings presented during the walkdown. Work also continues on subcontract exhibits and material at risk calculations.

IU 2 & 6 Segment 1

Work on a remediation volume estimate was completed, and work continues on an integrated chemical and radiological hazard evaluation, as well as ecological and cultural reviews.

A scope of work for remediation activity is being drafted, and the excavation permit process and a fire protection evaluation for the remediation activity is also underway.

Sampling the sites could begin as early as mid-December.



Confirmatory Sampling

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. Internal drafts of three sampling instructions have been completed for review by DOE and the Washington State Department of Ecology.

The team has 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, this documentation will be submitted to DOE and Hanford Site regulators for review and input.

Draft development of remove, treat, and dispose recommendation reports are also in development for four 100-K Area sites. There is sufficient existing information for these sites to warrant remediation without further confirmatory sampling. For example, one of the sites is a tar dumping area where tar is still visibly present at the surface.

Planning for 100-D Area pipeline waste sites continues this week. 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.

As specific excavation and sampling details are finalized, a wide range of readiness checks will be performed to ensure that all field work will be performed in compliance with environmental and safety laws, DOE directives, and best work practices. Most of these readiness checks require the process to be further along, but planning has started with the various subject matter experts that will support this work, particularly ecological and cultural resources specialists. The cultural and ecological resource review and approval process can be lengthy if sites are near to sensitive areas, but a lot can be accomplished before specific sampling details are finalized just by knowing where the sites are.

Work also continues on developing 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 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.



General

Mentoring/Training

No significant activities this week.

Media, Visits, Press Releases

An article about ARRA projects and their funding was published in The Oregonian, a daily newspaper in Portland, Oregon. The writer toured the Hanford Site last month to collect information. He visited ERDF, the B/C Areas, and the 618-10 Burial Ground.

Contracting Actions

- All 150 IP-1 containers have been delivered.

