Issue 36

River Corridor Closure Project

Recovery Act Weekly Report

For the week ending May 16, 2010

Contract DE-AC06-05RL14655

Protecting the Columbia River

E0908027

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.

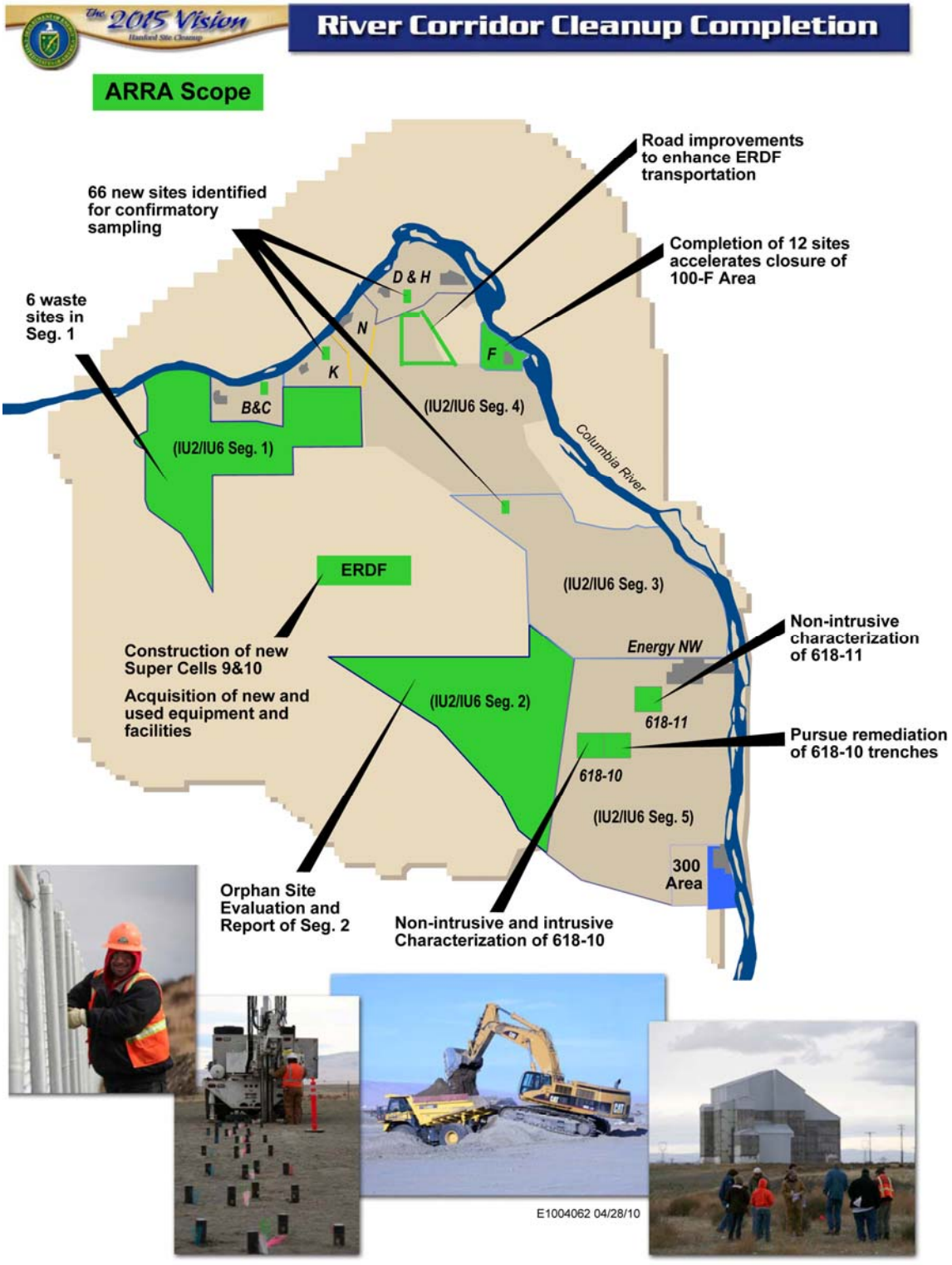
E. Confirmatory Sampling of other new sites

   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)



Safety

Safety Accomplishments
As of April 25, 2010, WCH and its subcontractors have worked more than 189,913 hours of ARRA scope with no safety incidents.

Hazard Reductions
The River Corridor Closure Project's "Hot Topics" safety highlights focused on WCH setting the stage for vehicle safety. A WCH vehicle safety campaign is in full swing. With a focus on 360-degree inspections, seat belt use, stop sign use, and adherence to speed limit rules, employees and their behaviors have responded positively.

To continue to reduce risk and enable safe and orderly parking in and around WCH project areas, zones/areas have been identified, labeled, and physically marked to identify parking locations for government and private vehicles. Since the majority of the vehicle incidents involving WCH have been located in our project parking areas, this focus area targets highest risk areas.

360 Plus Program
The 360 Plus Program is a simple initiative started by the Local Safety Improvement Team (LSIT) at 118-K-1 to help reduce vehicle incidents. The 360 Plus Program requires vehicle operators to take a minute before leaving the vehicle they are operating to ensure that they are not leaving their vehicle in a situation that could set a trap for another vehicle operator.

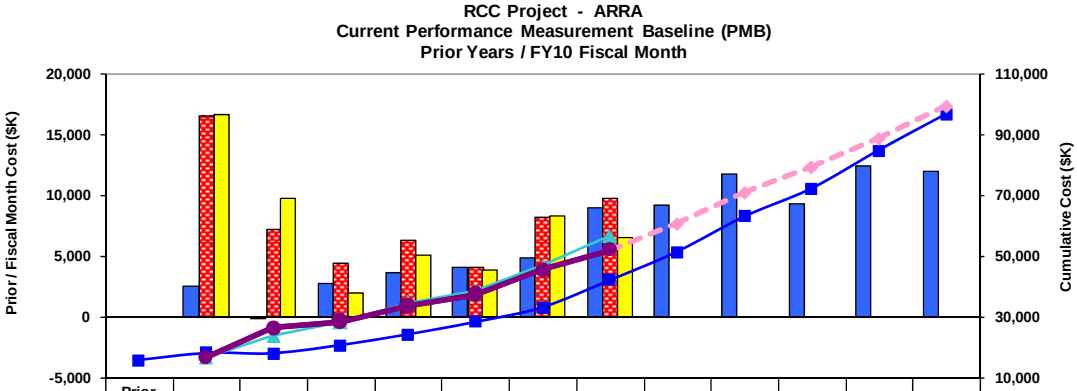
Vehicle operators are reminded to:
- Never park behind another vehicle.
- Never park along the route used by shuttle trucks or water trucks and never park in or near the area where shuttle trucks are working.
- When parking out in the field in an area where other vehicles are parking, park in the same direction as the vehicles already parked in the area.
- Always park in designated parking spots when possible.
- Even if you are running into the office for only a minute, park properly in a designated parking space.
- Never park in a loading zone, unless you are actually loading or unloading equipment or supplies from a vehicle.

This information was reviewed and discussed with the work crew at plan-of-the-day (POD) meetings and has proven successful.

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; Phase 2 Scope	$253.6	$123.8
174	2/22/10	ERDF Cell Expansion & Upgrades; 618-10 NIC; Phase 2 Scope	$248.2	$123.8
182	3/25/10	ERDF Cell Expansion & Upgrades; 618-10 NIC; Phase 2 Scope	$248.2	$155.8
185	4/19/10	Phase 1 and Phase 2 Scope	$248.2	$178.0
192	4/27/10	Phase 1 and Phase 2 Scope	$253.6	$178.0

Contract Modification #192 re-obligated $5.4M to the contract that had previously been de-obligated.



	Prior Yrs	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
BCWS	15,634	2,468	-217	2,707	3,594	4,057	4,808	8,963	9,122	11,770	9,267	12,374	11,938
BCWP	0	16,515	7,180	4,492	6,344	4,077	8,253	9,803					
ACWP	0	16,626	9,705	1,970	5,044	3,862	8,324	6,460					
ETC									8,601	10,215	8,344	9,443	10,680
CUM BCWS	15,634	18,102	17,885	20,592	24,186	28,243	33,051	42,014	51,136	62,906	72,173	84,547	96,485
CUM BCWP	0	16,515	23,695	28,187	34,531	38,608	46,861	56,664					
CUM ACWP	0	16,626	26,331	28,301	33,345	37,207	45,531	51,991					
EAC	0	16,626	26,331	28,301	33,345	37,207	45,531	51,991	60,592	70,807	79,151	88,594	99,274

ARRA Actuals (includes Proposals 1 and 2)

Apportionment Number	Apportionment Title		Apr 2010	Inception To Date	Cost Authority
RL-0041.R1.2	ERDF Cell Expansion	PMB	3,911	37,114	139,072
RL-0041.R2	River Corridor Soil & Groundwater (618-10)	PMB	2,550	14,877	38,907
Sub Total		PMB	6,461	51,991	177,979
Fee			204	2,658	
Total			6,665	54,649	

*** PMB is the Performance Measurement Baseline.**

ERDF

Super Cells 9 and 10 Construction
TradeWind Services and its prime subcontractor, DelHur Industries, continue placing admix in super cell 9. Excavation of super cell 10 was completed last week, three months early. A total of 1,675,000 tons of material was removed. The admix is a soil/bentonite material used for the low-permeability compacted soil layer of the liner and leachate collection system. The admix, which is manufactured at an onsite pug mill, is being placed at a rate of approximately 4,500 tons per day.

The project team is installing a leachate transfer pipe from super cell 9 to a new leachate holding tank. The team is also fabricating pipe spools for the new leachate tank. Meanwhile, the concrete walls for the super cell 9 crest pad building are being placed and the foundation for the super cell 10 crest pad building is being formed.

About 100,000 gallons of leachate are pumped into holding tanks each month before being sent to the Hanford Effluent Treatment Facility. There, it is treated and released into a permitted drain field. The filter media and removed contaminants are returned to ERDF for disposal.

TradeWind Services/DelHur Industries personnel begin placing admix in super cell 9 at the Environmental Restoration Disposal Facility. The admix is used for the compacted soil liner of the liner and leachate collection system.

ERDF (Continued)

Work crews place admix on the south slope of super cell 9 at the Environmental Restoration Disposal Facility.

Facility and Equipment Upgrades
ELRFowler, a joint venture between local companies ELR Consulting and Fowler General Construction, continues work on ERDF's new operations and maintenance facilities. ELRFowler also continues to put together contract submittals (e.g., health and safety, quality, scheduling).

Upgrades to the transportation truck maintenance facility include 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.

ERDF (Continued)

WCH submitted comments on Columbia Engineers and Constructors' 90% design of ERDF's new septic system. Columbia Engineers and Constructors, a small business based in Richland, Washington, will incorporate WCH's comments and submit the final design in late May.
WCH met with Pacific Northwest National Laboratory (PNNL) personnel to review test findings from PNNL's proof-of-concept demonstration of a container tracking system. PNNL incorporated comments and submitted its final draft of the report to WCH. The system is necessary to accurately track waste shipments and equipment, and generate maintenance reports.

WCH conducted a pre-construction meeting with subcontractor George A. Grant for work to install a lighting system at ERDF's recently upgraded transportation yard. The yard is used for truck-and-trailer combinations and other equipment.

Construction of the fueling station, designed by Sage Tech and WH Pacific, is scheduled to begin mid- to late summer. Sage Tech is based in Richland, Washington.

Hanford Site contractor Mission Support Alliance (MSA) continues design and engineering preparations for repair work on three Hanford Site roads. The roads are used to transport waste material to ERDF.

WCH received a 50-ton forklift from Powers Equipment Company of nearby Pasco, Washington. The forklift will be in service next week.

WCH issued a purchase order for a Cat 770 Off-Highway truck, which will be used to haul daily operation cover at the facility. WCH also issued a purchase order for two Genie articulating boom manlifts.

Upcoming Activities

- Continue to manufacture admix and place in super cell 9.

- Review PNNL's final report on proof-of-concept demonstration of the container tracking system.

Video

Admix being placed in super cell 9 at the Environmental Restoration Disposal Facility (ERDF).

Profile

Two local small businesses have joined forces to design and build three maintenance facilities and an operations center at the Environmental Restoration Disposal Facility (ERDF). ELRFowler is a joint venture between ELR Consulting and Fowler General Construction.

The new facilities are part of a $100 million expansion and upgrade of ERDF funded by the American Recovery and Reinvestment Act. The expansion and upgrade project is designed to allow ERDF personnel to safely handle increased waste volumes generated by Washington Closure and other Hanford contractors as a result of Recovery Act spending, as well as generally increasing cleanup work.

Dave Brockman, the DOE Richland Operations Office manager, said, “The tremendous amount of work getting done on the Hanford Site has increased the waste volume significantly at ERDF. This upgrade will allow ERDF workers to continue their outstanding safety record amid some of the largest waste volumes the facility has ever seen.”

ELR Consulting was founded in 2003 in Kennewick, Washington. The company provides engineering and scientific support and project management services to a variety of clients.

Fowler General Construction, based in Richland, Washington, has more than 20 years of experience working on a wide range of construction projects. Its staff consists of engineers, project managers, construction managers, and safety and quality professionals with experience in the nuclear, heavy duty, and commercial fields.

ELRFowler has begun designing the four facilities – an operations center, a waste container maintenance facility, a truck maintenance facility, and a heavy equipment maintenance facility. Construction will begin this summer.

The new operations center will help alleviate severe overcrowding of personnel and also accommodate new employees hired to handle the increasing waste volumes.

A year ago, ERDF personnel disposed about 200 containers of waste a day, averaging about 22 tons apiece. Now, the average is closer to 450 containers a day. “But we expect to handle up to 650 per day when work really picks up this summer,” said Rick Caulfield, Washington Closure project manager for ERDF expansion and upgrades.

To support waste disposal efforts, Washington Closure has 850 waste containers in service, 48 trucks to haul the containers, 8 bulldozers, 2 landfill compactors, 3 front-end loaders, and 4 track-hoe excavators, as well as water trucks, road scrapers, vibratory rollers, and maintenance vehicles.

“Keeping that equipment running and in tip-top condition is a full-time job for 15 people, most of whom have been working outside or under an open-sided cover for many years,” Caulfield said.

Profile (Continued)

"Getting the people, equipment, and tools inside and out of the elements will help increase productivity and safety. We're fortunate Recovery Act funding was available to help increase safety for our workers and create engineering and construction jobs in the community," he said.

The Environmental Restoration Disposal Facility is accommodating an average of 450 waste containers a day. That number could reach 600 this summer.

618-10 Burial Ground

618-10 Non-Intrusive Characterization/Trench Remediation Project
Nonintrusive characterization activities are nearing completion at the 618-10 Burial Ground. Measurements have been collected for 93 of 100 cone penetrometers in the trench area and 344 of 376 cone penetrometers in the vertical pipe unit (VPU) area.

The 618-10 Burial Ground operated from 1954 to 1963 and received low- and high-level radioactive waste from 300 Area laboratories and fuel development facilities. The burial ground consists of six groups of trenches and 94 VPUs. The low-activity wastes were primarily disposed in trenches, while the moderate- and high-activity wastes were disposed in the VPUs.

The VPUs typically were constructed by welding five bottomless drums together and buried vertically about 10 feet apart. 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 is inserted into the cone penetrometers to measure radiation sources.

Soil sampling was completed at the burial ground. A total of 10 samples were collected. The samples will be used to determine the vertical distribution of contaminants in the soils adjacent to and below the VPUs. The project team collected the samples by driving a cone penetrometer adjacent to and approximately 4 feet below the selected VPUs. A plastic sleeve was used to contain the samples, which were taken to a table-mounted glovebag for transfer to sample bottles to be processed. The data collected during nonintrusive characterization activities are being used to develop and evaluate safe and effective strategies for remediation.

618-10 Burial Ground (Continued)

Workers collect a soil sample as it is retrieved from a cone penetrometer during soil sampling activities at the 618-10 Burial Ground.

618-10 Burial Ground (Continued)

Workers transfer a soil sample to a sample bottle inside a table-mounted glovebag during soil sampling activities at the 618-10 Burial Ground.

The intrusive characterization team completed project startup activities for mockups and continues work on the development of procurement packages for trench remediation labor and equipment.

Test pits will be excavated through a series of burial trenches to gather information about the types and quantities of wastes, and the level of contamination. Information gathered during intrusive characterization will help with the development of a safe and effective remediation design.

Upcoming Activities

- Complete VPU and trench radiological characterization activities.
- Commence mock-ups for intrusive characterization.
- Complete project startup for drum penetration facility setup and operation.

100-F Area

WCH continues to evaluate proposals from four small disadvantaged businesses for the remediation of the 12 waste sites at 100-F Area. The subcontract is expected to be awarded later this month. Meanwhile, five additional waste sites were added to the work scope for design, excavation, and loadout. Design work on the five sites is underway. Collection of closeout samples from all 100-F sites was also added to the work scope.

The $4 to $5 million project will involve the excavation of radioactive and hazardous soil and debris and the packaging of this material into shipping containers. Miscellaneous waste such as drums, bottles, tanks, or vessels may require repackaging and special handling prior to shipping. Oversized debris may require size reduction to facilitate waste loading.

The remediation sites are:

- 100-F-26:4 (process sewer pipeline section)
- 100-F-26:7 (sodium dichromate and sodium silicate pipelines)
- 100-F-44:8 (fuel oil pipelines)
- 100-F-44:9 (process fuel pipeline section)
- 100-F-45 (buried riverbank effluent pipeline)
- 100-F-47 (electrical substation foundation)
- 100-F-48 (coal pit debris)
- 100-F-49 (maintenance garage lube pit foundation, pipelines, drywells)
- 100-F-51 (fish laboratory footprint, pipelines)
- 100-F-55 (contaminated ash layer)
- 100-F-56 (scattered surface debris, stains)
- 100-F-57 (buried pipeline cradle debris)
- 100-F-58 (asbestos-containing surface debris).

The five additional remediation sites are:

- 100-F-60 (pipeline)
- 100-F-61 (stained soil site)
- 100-F-8 (french drains)
- 100-F-62 (animal farm septic lines)
- 100-F-63 (animal farm radioactive effluent lines).

The 100-F Area is the home to the F Reactor, which operated from February 1945 to June 1965. In 2003, it became the third Hanford plutonium production reactor to be placed in interim safe storage. Most of the cleanup work at the 100-F Area has been completed. However, during the course of cleanup, additional waste sites were discovered.

100-F Area (Continued)

Work to install electrical conduit at 100-F Area continues in preparation of remediation activities.

IU 2 & 6 Segment 1

Work continues on waste site-specific verification closeout sample plans to determine the number and location of waste site closeout samples, including field quality control samples, sampling methodologies, analyte lists, and analytical methods. Once the work instructions are reviewed and approved by the DOE Richland Operations Office and the U.S. Environmental Protection Agency, verification closeout samples will be collected for laboratory analysis.

Last month, remediation of five IU 2 & 6 Segment 1 waste sites discovered during the 2008 orphan site evaluation was completed. The remediation sites are:

- 600-341 (four areas that contained dry cell battery remnants and/or battery debris)
- 600-343 (residual ash from burned material and dumped asphalt in excavation trench)
- 600-344 (stained area)
- 600-345 (stained area with oil filters)
- 600-346 (four small fly ash dump areas with metal debris).

Earlier this year, a global positioning environmental radiological survey indicated that an additional site, 600-342, did not require additional remediation.

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. Segment 1 sites were unique in the fact they were used primarily for housing and support areas. The sites were small and contained mostly surface debris.

Confirmatory Sampling

The team continues to develop sampling instructions for waste sites at the 100-D and 100-IU 2&6 Areas, along with a new site in the 100-F Area. 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, more than 75% of the confirmatory work instructions have been issued, which includes DOE and regulator approval. All of the work instructions for the 100-K Area have been approved.

The team is also developing Remove, Treat, and Dispose (RTD) memos for 22 sites that have been determined to require waste site remediation. The memos provide a basis for developing the design for waste site cleanup. All of the RTD memos have been issued.

The request for proposal (RFP) for the confirmatory sampling contractor was issued on April 20, and the pre-bid meeting was held April 26. The scope of the RFP is to support implementation of the confirmatory work instructions (e.g., excavation and sampling). The contract is scheduled to be awarded in June, with field work beginning in July. 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 sites 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
WCH hosted a media event May 12 to recognize a milestone reached by truck drivers working on the River Corridor Closure Project. Drivers transporting waste for disposal at Hanford's Environmental Restoration Disposal Facility (ERDF) recently eclipsed the 15 million mile mark. This is equivalent to more than 600 trips around the earth. Most of the 9.3 million tons of contaminated material disposed at ERDF since it opened in 1996 came from waste sites located near the Columbia River. In that time, ERDF has had only one at-fault accident. There have been no at-fault accidents since WCH assumed operation of the facility in August 2005.

WCH hosted five officials representing four Japanese energy agencies May 13 on a tour of ERDF. The visitors were part of an information exchange effort between Japan and the United States. They were briefed on the disposal facility's expansion and procedures by the ERDF operations manager.

Contracting Actions
- 50-ton forklift delivered
- Purchase of a Cat 770 Off-Highway truck and two Genie® manlifts put out for bid
- Received best and final offers for 618-10 infrastructure construction subcontract