



River Corridor Closure Project

Recovery Act Weekly Report

For the week ending July 11, 2010

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

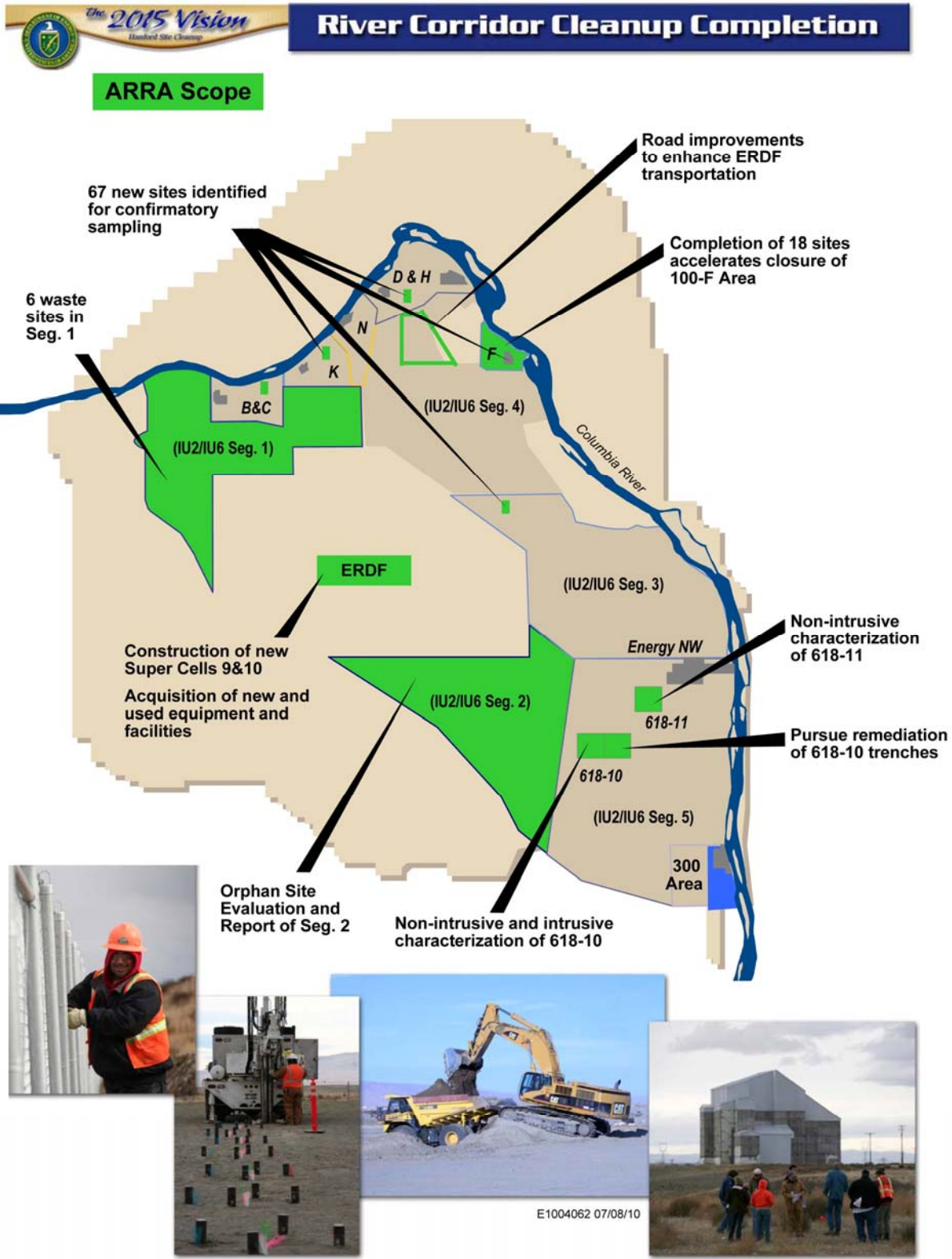
WCH is proposing to complete the early sampling process of 67 potential waste sites using ARRA funds. Confirmatory sampling is performed for sites that require additional information for determining if the site requires remediation.

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 May 23, 2010, WCH and its subcontractors have worked 207,291 hours of ARRA scope with no safety incidents.

Hazard Reductions

On July 6, Washington Closure Hanford's Safety, Health and Quality organization provided company managers with a "Fourth of July Safety Refocus" to share with employees during staff meetings.

The Safety Refocus was designed to remind employees to "Refocus, Renew, Rethink, and React." It highlighted WCH's most common injuries, which are: 1) cuts/lacerations and strains, and 2) eye injuries from dust/wind/grinding.

During the Safety Refocus, employees were reminded to ask specific questions before beginning a job. The questions are:

- What are the "Error Likely Situations?"
- Do you have the right tools for the job?
- Are you following your Job Hazard Analysis?
- Is there a potential electrical event (e.g., shocks, daisy-chaining, fires)?

To reach WCH's goal of zero injuries, employees were reminded to pay attention to detail and encouraged to:

- Review work packages
- Ensure that tasks are clear before starting work
- Exercise Stop Work authority
- Interact during pre-job/pre-ev/POD meetings
- Keep a questioning attitude.

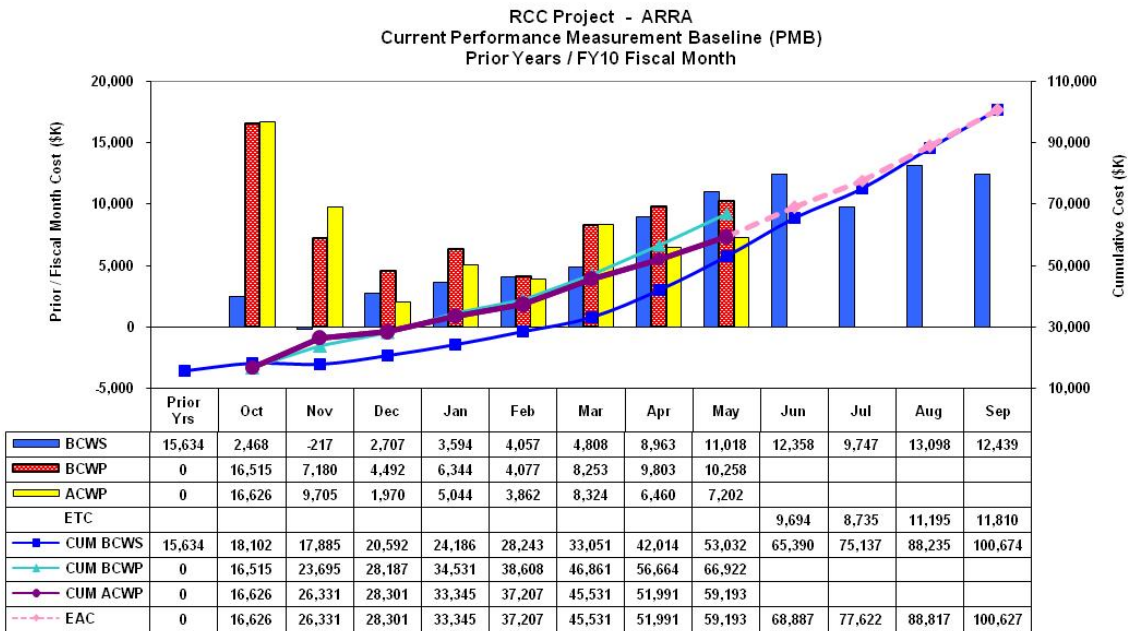
The Safety Refocus also touched on the end-point assessment overview of last year's 336 Building fall event, the 52 corrective actions, and the major areas addressed. The end-point assessment highlights included:

- Revisions to safety procedures resulted in better alignment with the Occupational Safety and Health Administration (OSHA) and best practices.
- Fall protection training programs are in place for users, competent persons, and qualified persons.
- The FHPA implementation is effective and well-integrated with work controls.
- Managers, supervisors, and workers understand their roles in initiating/supporting Stop Work.
- Type I work packages have appropriate level of detail.



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
205	5/26/10	Reallocate Funds for Equipment and GPPs	\$253.6	\$178.0
210 6	/23/10	Funding deobligation	\$229.3	\$178.0



ARRA Proposals 1, 2 and 3 Actuals (\$K)

Apportionment Number	Apportionment Title		May 2010	Inception To Date	Cost Authority
RL-0041.R1.2	ERDF Cell Expansion	PMB	5,104	42,217	139,072
RL-0041.R2	River Corridor Soil & Groundwater (618-10)	PMB	2,098	16,976	38,907
Sub Total		PMB	7,202	59,193	177,979
Fee			3,207	5,865	
Total			10,409	65,058	

* PMB is the Performance Measurement Baseline.



ERDF

Super Cells 9 and 10 Construction

WCH subcontractor TradeWind Services and its main subcontractor, DelHur Industries, continue to install the liner and leachate collection system for super cell 9. The system collects and removes leachate as it drains through the waste materials.

The project team completed the mass placement of admix in super cell 9 and began to place admix in super cell 10. The admix is a 3-foot low-permeability compacted soil layer of the liner system and is manufactured by mixing excavated soil with imported bentonite in an onsite pugmill. There is approximately 90,000 cubic yards of admixture required for each super cell.

The liner system consists of two layers of high-density polyethylene (HDPE), a 1-foot layer of gravel with a 12-inch perforated drainage pipe, a geo-composite layer, and two geo-textile layers. A 3-foot protective soil layer covers the liner system. The project team has installed about 75% of the secondary HDPE layer, nearly 40% of the primary HDPE liner, and roughly 45% of the geo-composite layer in super cell 9. Each super cell covers approximately 17 acres. This includes the base and the side slopes.



An aerial photo was taken June 29 from the north side of super cells 9 and 10 at the Environmental Restoration Disposal Facility.

ERDF (Continued)



TradeWind Services/DelHur Industries personnel completed the placement of admix in super cell 9 at the Environmental Restoration Disposal Facility. The project team has started placing admix in super cell 10.

The onsite screening plant continues to stockpile gravel for the gravel drainage layer of the liner system. About 20,000 cubic yards of gravel will be manufactured for super cell 9.

Construction continues on a new leachate holding tank that will contain the leachate from super cells 9 and 10. The new holding tank will measure 100 feet in diameter and have a capacity of 425,000 gallons. Each of ERDF's two existing holding tanks measures 80 feet in diameter with a capacity of 275,000 gallons. Work also continues on the leachate transmission pipe from super cells 9 and 10 to the new leachate holding tank. Four of the six sections of pipe have been installed.

ERDF (Continued)



Construction of a new leachate holding tank continues at the Environmental Restoration Disposal Facility. The tank will accommodate leachate from super cells 9 and 10.

ERDF (Continued)

The project team has completed the erection of the steel structure for the super cell 9 crest pad building. The super cell design allows for the leachate collection to be accomplished with only one sump and one crest pad building.



TradeWind Services/DelHur Industries continues construction of the crest pad building for 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 the design of ERDF's new maintenance facilities and operations center. The 90% design is due next week.

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

ERDF (Continued)

WCH has issued a statement of work to Pacific Northwest National Laboratory (PNNL) for the new waste container tracking system PNNL designed for ERDF. PNNL is developing a proposal. The system will accurately track waste shipments and equipment, and generate real-time reports. PNNL conducted a proof-of-concept demonstration of its system in April. As part of the demonstration, Radio Frequency Identification and global positioning system tags were attached to waste containers to show how accurately the system tracks waste shipments and container locations, as well as generates maintenance reports.

Columbia Engineers and Constructors is incorporating WCH comments into its final design of ERDF's new septic system. The final design is due next week. Columbia Engineers and Constructors is a small business based in Richland, Washington.

Powers Equipment Company is scheduled to deliver two Genie articulating boom man lifts to ERDF next week. The man lifts will be used for elevated work such as installing rigging, washing out hazardous waste containers, applying fixatives, and adjusting lights. Powers Equipment Company is located in Pasco, Washington.

Hanford Site contractor Mission Support Alliance (MSA) has issued a request for proposals for repair work on three Hanford Site roads – Routes 1, 2, and 4. The roads are used to transport waste material for disposal at ERDF.

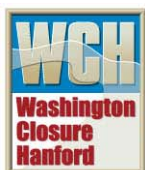
WCH subcontractor George A. Grant continues with construction of a new lighting system at ERDF's transportation yard. The transportation yard is used for truck-and-trailer combinations and other equipment. The truck-and-trailer combinations are used to transport non-regulated soil for disposal at ERDF.

Construction of an onsite fueling station, designed by Sage Tech and WHPacific, is scheduled to begin mid- to late summer. Currently, disposal equipment is fueled by a subcontractor that makes daily deliveries, and transportation uses the 200 East fuel station. Sage Tech is based in Richland, Washington. WHPacific is an Alaska-based company with an office in Richland, Washington. It specializes in all facets of building engineering, land development, water resources, survey, architecture, and transportation.

Sage Tech and WHPacific are developing a design package for a new batch plant at ERDF. The batch plant will manufacture concrete used to mix with debris, ensuring no void space during disposal operations.

WCH awarded a subcontract to Peters and Keatts Equipment Inc. a new pump truck in support of the new batch plant. Last week, WCH awarded the Lewiston, Idaho-company a subcontract for two concrete mixer trucks in support of a new batch plant. The trucks are scheduled to be delivered by late July.

A change notice has been issued to TradeWind Services for the construction of weather enclosures for the crest pad buildings associated with cells 1 and 2.



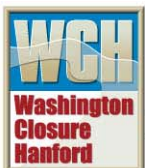
ERDF (Continued)

Upcoming Activities

- Continue to manufacture admix and place in super cell 9.
- Continue construction of the liner and leachate collection system for super cell 9.
- Continue work on the crest pad buildings for super cells 9 and 10.
- Review the 90% design of the new maintenance facilities.

Video

[*Washington Closure Prepares for Construction of New Maintenance Facilities at ERDF.*](#)



618-10 Burial Ground

618-10 Intrusive Characterization/Trench Remediation Project

WCH continues to prepare for intrusive characterization at the burial ground. Field operations are scheduled to begin later this month. They will involve digging test pits in several disposal trenches to verify the condition and types of waste that were disposed. The trenches were selected based on previous geophysical studies and readings from non-intrusive characterization activities.

The project team plans to perform mock-ups of the drum punch facility next week. Because the burial ground might contain potentially flammable material, unearthed drums will be opened in an onsite penetration facility with negative air pressure and remotely operated equipment. A sand hopper will be used to quench chemical reactions. Work also continues on the development of procurement packages for trench remediation labor and equipment.



618-10 Burial Ground (Continued)



The project team at the 618-10 Burial Ground is scheduled to conduct mock-ups of the drum punch facility next week.

The development of procurement packages for trench remediation labor and equipment also continues, as does work to prepare for the flaring of a propane tank discovered outside the site fence in late March.

618-10 Burial Ground (Continued)

Last week, WCH awarded a subcontract worth nearly \$3.7 million to install water, electricity, roads, office trailers, and waste container transfer areas at the 618-10 Burial Ground. White Shield/Apollo is a small, disadvantaged joint venture between White Shield Inc. of Pasco, Washington, and Apollo Inc. of Kennewick, Washington. White Shield/Apollo will begin work at the burial ground this fall and is scheduled to complete infrastructure work by February 2011.

The 618-10 Burial Ground operated from 1954 to 1963, receiving low- and high-level radioactive waste from 300 Area laboratories and fuel development facilities. Low-activity wastes were primarily disposed in 23 trenches, while the moderate- and high-activity wastes were disposed in 94 vertical pipe units (VPUs). The VPUs were constructed by welding five bottomless drums together and buried vertically about 10 feet apart.

Available records indicate that the burial ground was used to dispose of cardboard boxes of low-level waste and miscellaneous laboratory debris including bottles, boxes, filters, aluminum cuttings, spent fuel fragments in small juice cans, radiologically contaminated equipment and laboratory instruments, and high-level liquid waste sealed in drums.

A non-intrusive characterization report is being developed and is scheduled to be issued in mid-August. Non-intrusive characterization field activities were completed May 20. The scope of activities carried out as part of non-intrusive characterization included geophysical delineation, in situ characterization using a multi-detector probe, and soil sampling from below a selection of 10 VPUs.

During in situ characterization, measurements were collected for 100 cone penetrometers in the trench area and 375 cone penetrometers in the VPU area. The data collected during non-intrusive characterization activities are being used to develop and evaluate safe and effective strategies for intrusive characterization and remediation.

Upcoming Activities

- Continue work on procurement packages for trench remediation labor and equipment.
- Continue mock-ups for intrusive characterization.
- Continue development of non-intrusive characterization report.



100-F Area

WCH held a pre-construction meeting with subcontractors in preparation for cleanup work at 100-F Area. The meeting provided an overview of roles and responsibilities, and briefings by subject matter experts (e.g., safety and health, security, environmental issues, radiological control, construction).

Last month, WCH awarded a subcontract worth \$3.8 million to Ojeda Business Ventures to remediate 18 waste sites, which are contaminated with radioactive and hazardous materials. Ojeda is a small disadvantaged business based in Richland, Washington, that specializes in construction, renovation, and construction management of federal government projects. Ojeda is scheduled to mobilize later this month and begin remediation in August.

The project team began the project startup review (PSR) process for site mobilization. The PSR process is used to ensure that the project is ready to be safely implemented. WCH also has begun receive subcontractor submittals.

F Reactor operated from 1945 to 1965 as one of Hanford's nine surplus plutonium production reactors for the nation's nuclear weapons program. The reactor was cocooned in 2003. During reactor construction and operations, waste was disposed in unlined pits and trenches throughout the site.

The 100-F Area also was the home of the experimental animal farm (EAF), which from 1945 to 1976 operated adjacent to the reactor site. The EAF used animals for studying the potential effects of ionizing radiation exposure to humans in the occupational setting. Reactor and EAF sites in the 100-F Area contributed to the discharge of contaminated cooling water, other liquids, and solid wastes.

WCH completed the remediation of 53 waste sites at F Area in 2008. However, during the course of cleanup, 18 additional waste sites were discovered.

The 18 sites that require remediation 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 sewer pipeline)
- 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)
- 100-F-60 (pipeline)
- 100-F-61 (stained soil site)



100-F Area (Continued)

- 100-F-8 (French drains)
- 100-F-62 (animal farm septic lines)
- 100-F-63 (animal farm radioactive effluent lines).

Upcoming Activities

- Continue PSR process.
- Continue receiving subcontractor submittals.



F Reactor operated from 1945 to 1965 and was placed in interim safe storage in 2003.

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 U.S. Department of Energy, Richland Operations Office (DOE-RL) and the U.S. Environmental Protection Agency, verification closeout samples are collected for laboratory analysis.

Closeout verification sample data has been received from the analytical laboratory for waste site 600-345. Data for the southeast quadrant (quadrant 4) of the waste site remains above the remedial action goal for total petroleum hydrocarbons (TPH). Waste site 600-345 was excavated earlier this year to approximately 1.5 feet below grade, removing the stained soil and oil filters residing on the ground surface. Additional remediation of the southeast quadrant is required to remove the TPH contaminated soil to then be followed by a second round of closeout sampling. The field remediation project initiated planning to implement this additional effort.

Remediation of five IU 2 & 6 Segment 1 waste sites discovered during the 2008 orphan site evaluation was completed in April. The remediation sites are as follows:

- 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.

Remediation of these waste sites will contribute to DOE-RL's Vision 2015 goal of completing regulatory closure work in IU 2 & 6 Segment 1 by the end of calendar year 2010.



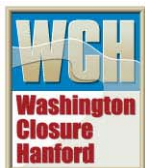
Confirmatory Sampling

WCH subcontractor TerranearPMC (TPMC) is preparing for confirmatory sampling of waste sites at 100-K, 100-D, 100-F, and 100-IU 2/6. Confirmatory sampling is performed for waste sites that require additional information for determining the need for site remediation. TPMC is scheduled to begin sampling at 100-K later this month.

Of the 67 sites originally earmarked for confirmatory sampling, 26 have been recommended to remove, treat, and dispose, which means they will not undergo the sampling process.

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.

TPMC is a small disadvantaged business based in Irving, Texas, with an office in Richland, Washington. The company has worked with WCH on several projects since WCH assumed control of the River Corridor Closure project in August 2005. TPMC helped to safely clean up the 618-7 and 618-1 Burial Grounds, and is currently working in Hanford's 300 Area.



General

Mentoring/Training

No significant mentoring/training events this week.

Media, Visits, News Releases

WCH issued a news release on its award of a \$3.7 million subcontract to White Shield/Apollo, a small, disadvantaged joint venture between local businesses White Shield Inc. of Pasco and Apollo Inc. of Kennewick. The subcontract is to install water, electricity, roads, office trailers, and waste container transfer areas at the 618-10 Burial Ground.

Contracting Actions

No significant contracting actions this week.

