Issue 62

River Corridor Closure Project

Recovery Act Weekly Report

For the week ending November 12, 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.

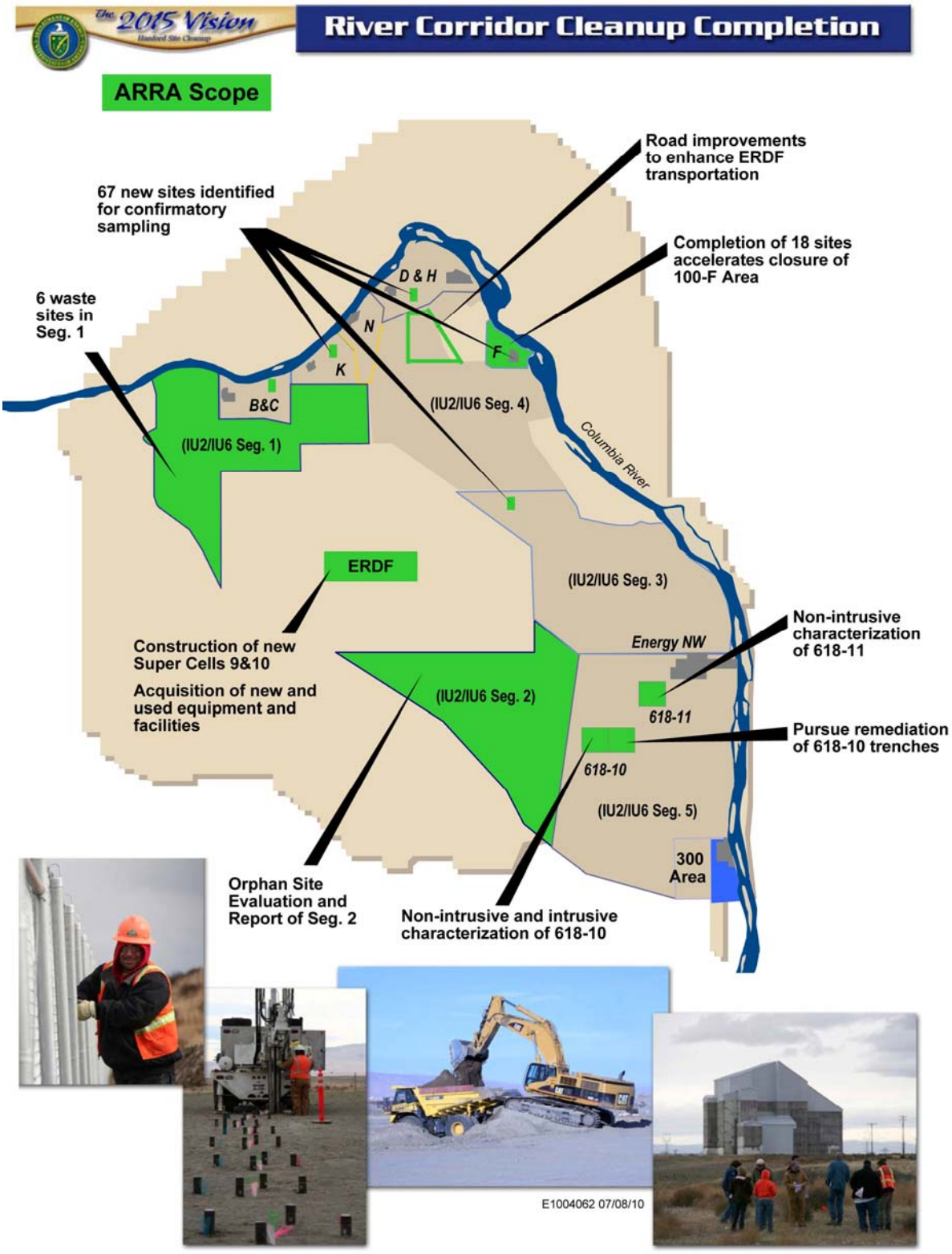
E. Confirmatory Sampling of other new sites

   WCH is proposing to complete the early sampling process of 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 October 24, 2010, WCH and its subcontractors have worked 300,203 hours of ARRA scope with no safety incidents.

Hazard Reductions
Listed below are the Safety and Health Initiative Program's highlights for September. The River Corridor Closure Project uses several tools (e.g., "Dodge the Bullet," "Safety Awareness," and "Rude Awakenings") to share safety information with all employees. Some of the highlights included:

- Provided a Stop Work when soil that was being sampled came in contact with an employee. Detailed the precautions taken to address the removal and testing of the soil.

- Provided information on bungee cord safety to all employees as it relates to the tarping of waste containers.

- Provided information on OSHA's top violations list.

Flash Information
- Issued "Dodge the Bullet" on:
  - A broken cable incident that occurred on an ERDF truck
  - A broken tarp arm on an ERDF vehicle
  - A bulldozer event that caused a windshield to crack
  - A temporary gantry crane that tipped against a building.

Ergonomics
- Provided "Safety Awareness" bulletins on various ergonomic topics including information on eye strain and the effects of a proper monitor, and eye protection from glare.

Fire Protection Month
- Provided the following fire danger awareness to support National Fire Protection Month:
  - Hanford burn restrictions
  - Bedroom fire safety
  - Carbon monoxide safety tips
  - Home fire prevention presentation
  - Fire safety quiz.

Rude Awakenings
- Issued a "Rude Awakening" on the potential effects that animals can have when operating equipment in and around the workplace, and in methods of conveyance.

Vehicle Safety
- Provided a presentation to employees on pedestrian and vehicle safety.

- Provided a presentation to employees on the importance of conducting a 360 walk-around inspection and using travel partners to help with this observation.

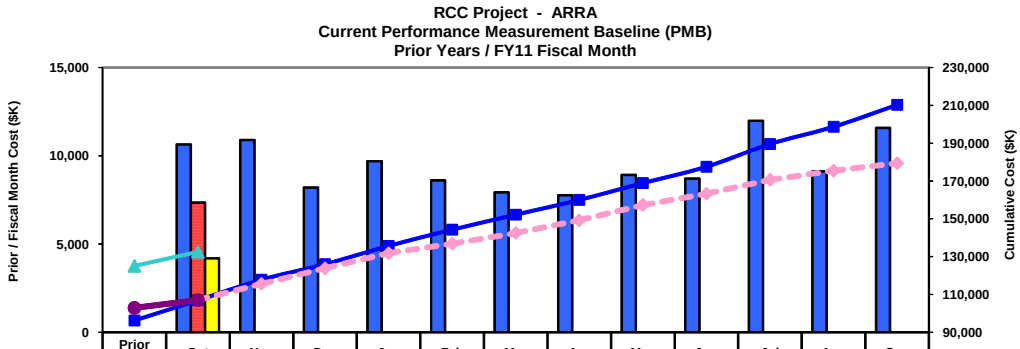
Safety (Continued)

- Provided employees with an opportunity to pledge to drive safe during October and beyond in support of Vehicle Safety Month.
- Provided information on what to do in the event of a tire blow out.
- Launched a vehicle safety campaign with three activities and a pledge card to continue to raise employee awareness of vehicle safety.
- Provided an incentive for employees who completed the safety activities.
- Provided information of what to do in the event of a car fire.
- Provided myths and fact on seat belts and seat belt use.

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
217	8/4/10	Funding re-obligation	$233.6	$178.0

River Corridor Closure Project - ARRA



	Prior Yrs	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
BCWS	96,215	10,643	10,897	8,201	9,698	8,609	7,929	7,768	8,924	8,715	11,985	9,120	11,582
BCWP	125,109	7,350											
ACWP	102,862	4,189											
ETC			8,563	8,259	7,894	5,064	5,697	6,733	8,030	6,004	7,343	4,817	3,985
CUM BCWS	96,215	106,858	117,755	125,956	135,654	144,263	152,192	159,960	168,884	177,599	189,584	198,704	210,286
CUM BCWP	125,109	132,459											
CUM ACWP	102,862	107,051											
EAC	102,862	107,051	115,614	123,873	131,767	136,831	142,528	149,261	157,291	163,295	170,638	175,455	179,440

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

Apportionment Number	Apportionment Title		October 2010	Inception To Date	Cost Authority
RL-0041.R1.2	ERDF Cell Expansion	PMB	2,964	77,567	139,072
RL-0041.R2	River Corridor Soil & Groundwater (618-10)	PMB	1,225	29,484	38,907
Sub Total		PMB	4,189	107,051	177,979
Fee			495	11,128	
Total			4,684	118,179	

*** PMB = Performance Measurement Baseline.**

ERDF

Super Cells 9 and 10 Construction
WCH and prime subcontractor TradeWind Services continue with construction of the liners and leachate collection systems for super cells 9 and 10.

The liner system consists of a 3-foot layer of admix, two layers of high-density polyethylene (HDPE), a 1-foot layer of gravel with a 12-inch perforated leachate collection pipe, a geocomposite layer, and two geotextile layers. Admix is a 3-foot low-permeability compacted soil layer of the liner system that is manufactured by mixing excavated soil with bentonite.

In super cell 9, the project team is close to completing placement of the operations layer (3 feet of soil). The super cell 9 acceptance test with the U.S. Environmental Protection Agency (EPA) and the leak detection test for the leachate transmission line have been scheduled for December 2. The team continues to place the operations layer in super cell 10.

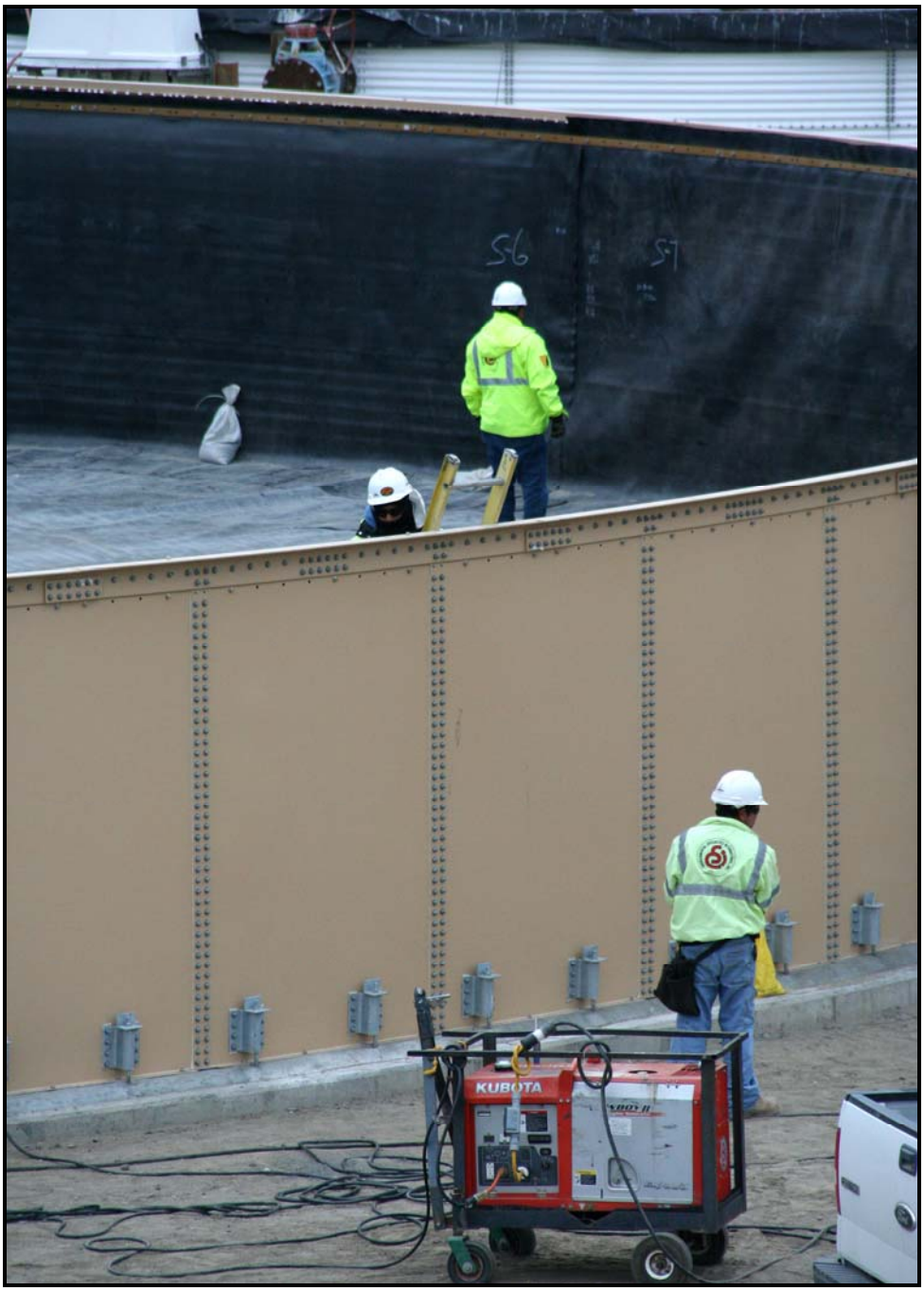
A view from the northeast corner of super cell 10 shows construction progress at the Environmental Restoration Disposal Facility. (Photo 1)

ERDF (Continued)

Work also continues on the crest pad buildings associated with the super cells. A complete pressure test was conducted for the piping in the crest pad building for super cell 10. Electrical work continues in both crest pad buildings.

WCH continues with construction of two new storage tanks (Nos. 3 and 4) that will replace the facility's two original storage tanks (Nos. 1 and 2). The secondary liner has been installed in both new storage tanks. Removal of tank No. 1 was completed in September, and tank No. 2 will be removed when the replacement tanks are in service. Each of the original tanks measured 80 feet in diameter and had a capacity of 275,000 gallons. Each replacement tank will measure 100 feet in diameter with a 425,000-gallon capacity.

ERDF (Continued)



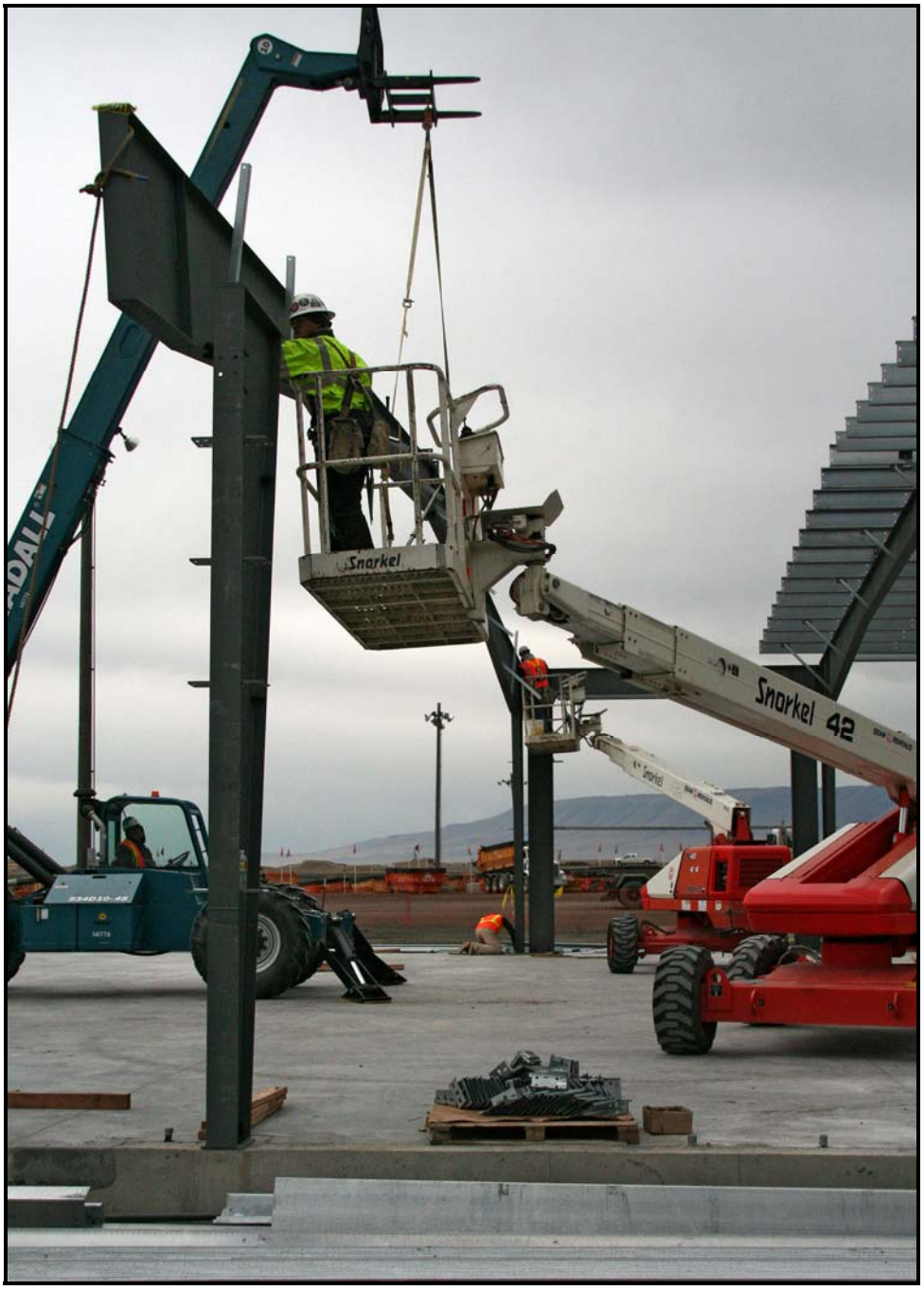
Work to install the secondary liner in both new leachate storage tanks is complete at the Environmental Restoration Disposal Facility. (Photo 2)

ERDF (Continued)

Facility and Equipment Upgrades
WCH subcontractor Fowler General Construction continues to make significant progress with construction of ERDF's new maintenance facilities. The project team is erecting the trusses and girts for the container maintenance facility and is installing the underground utilities for the equipment maintenance facility/operations center.

The container maintenance facility will include a large container repair line, a maintenance shop, and a weld area. The 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. The new operations center will help alleviate severe overcrowding of personnel and also accommodate new employees hired to handle the increasing waste volumes.

ERDF (Continued)



Washington Closure Hanford subcontractor Fowler General Construction erects the steel trusses and girts at the Environmental Restoration Disposal Facility's new container maintenance facility. (Photo 3)

ELRFowler, a joint venture between local companies ELR Consulting and Fowler General Construction, also will construct an upgraded transportation truck maintenance facility. The

ERDF (Continued)

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.

Fowler General Construction begins to break up the concrete pad at the existing truck maintenance facility. The current facility is undergoing expansion. (Photo 4)

ERDF (Continued)

Pacific Northwest National Laboratory (PNNL) continues work on a new waste container tracking system for ERDF. The system will accurately track waste shipments and equipment, and generate real-time reports. Electrical and reader software development is underway.

WCH subcontractor DelHur Industries poured the foundation for ERDF's new batch plant. Trenching to install utilities (electric, water) is underway. The batch plant will produce "flow fill" concrete used to mix with debris, ensuring no void space during disposal operations. In support of the batch plant, WCH purchased two concrete mixer trucks and a pump truck from Peters and Keatts Equipment Inc. Peters and Keatts is based in Lewiston, Idaho.

ERDF (Continued)

Washington Closure Hanford subcontractor DelHur Industries workers prepare to pour the foundation for the new batch plant at the Environmental Restoration Disposal Facility. (Photo 5)

WCH completed its review of vendor bids for a new septic system at ERDF and issued a notice to proceed to ELRFowler. Tank and drain field materials have been ordered, and civil work is

ERDF (Continued)

scheduled for next week. The septic system was designed by Columbia Engineers and Constructors, a small business based in Richland, Washington.

Relocation of the construction trailers is under way. The trailers are being relocated to make room for the container transfer area (CTA) expansion. The existing CTA will be expanded 600 feet, providing additional storage for about 300 waste containers.

WCH completed review of Vista Engineering's final design of weather enclosures for crest pad buildings 1 and 2. Vista Engineering is a local company and subcontractor of DelHur Industries. WCH has submitted comments and Vista Engineering is incorporating changes.

Upcoming Activities

- Continue construction of the liner and leachate collection systems for super cells 9 and 10.
- Continue construction of leachate storage tanks Nos. 3 and 4.
- Continue construction of container maintenance facility.
- Continue construction of equipment/operations center.

Video

Click here to view a video showing construction progress of ERDF's new maintenance facilities.

618-10 Burial Ground

618-10 Trench Remediation Project
WCH hosted a workshop to evaluate the nonintrusive characterization report on work conducted in the vertical pipe unit (VPU) area and the trenches at the 618-10 Burial Ground. Representatives from DOE Richland Operations Office, EPA, and the Defense Nuclear Facilities Safety Board were among the attendees. The purpose of the workshop was to develop a nonintrusive characterization plan for the 618-11 Burial Ground and to support remediation planning.

The scope of activities carried out as part of nonintrusive 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.

Meanwhile, WCH subcontractor White Shield/Apollo continues work on a $3.7 million contract to install water, electricity, roads, office trailers, and a waste CTA for remediation at the burial ground. White Shield/Apollo is a small, disadvantaged joint venture between White Shield Inc. of Pasco, Washington, and Apollo Inc. of Kennewick, Washington. The infrastructure work is scheduled to be completed by February 2011.

618-10 Burial Ground (Continued)

Washington Closure Hanford subcontractor White Shield/Apollo lowers the first of three septic tanks into place at the 618-10 Burial Ground. (Photo 6)

618-10 Burial Ground (Continued)

White Shield/Apollo workers position a septic tank at the 618-10 Burial Ground. (Photo 7)

618-10 Burial Ground (Continued)

Work continues to install conduit for the electrical at the 618-10 Burial Ground. (Photo 8)

In October, WCH awarded two subcontracts totaling nearly $2.1 million for lease of heavy equipment for trench remediation. CWR Enterprises of Rathdrum, Idaho, partnered with Rowand Machinery of Spokane, Washington, for a $1,378,000 subcontract. Acquisition

618-10 Burial Ground (Continued)

Business Consultants of Richland, Washington, partnered with Peters & Keatts of Lewiston, Idaho, for a $718,000 subcontract. Both companies meet small business procurement requirements and are designated as historically underutilized businesses, or HUB zone businesses.

Intrusive characterization field operations at the burial ground were completed in early September. Test pits were dug through a subset of disposal trenches and unearthing a limited number of drums to verify the condition and types of wastes that were disposed.

Several drums containing radioactive waste, a shipping cask, and miscellaneous waste were discovered during the intrusive trench characterization activities. The drums contained depleted uranium and uranium oxide. In addition, "concreted" 55-gallon drums, which contained liquid radioactive waste, also were discovered.

Based on the records research and the finds during intrusive characterization, the number of drums the burial ground may contain is estimated to be as many as 4,000. That includes an estimated 800 concreted drums that were used to dispose of highly radioactive waste nested inside a pipe surrounded by concrete. The pipe contains the waste and the concrete provides radiation shielding for its contents. Workers also found a cask with unknown contents, bollards, bottles, metal pieces, and other miscellaneous debris.

WCH, along with DOE and Hanford Site regulators, will use the information obtained during intrusive characterization to help determine the safest and most efficient way to clean up the burial ground including how to safely dispose of the high-dose-rate waste in the concreted drums. Full-scale remediation of the 618-10 Burial Ground trenches is scheduled to start in spring 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 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.

Upcoming Activities

- Continue procurement process for various subcontracts.
- Continue with construction of site upgrades.

100-F Area

WCH and subcontractor Ojeda Business Ventures continue remediation activities at 19 waste sites in 100-F Area. Loadout was completed and grab samples were collected at 100-F-44:8 (old fuel pipelines). Excavation and loadout activities continue at 100-F-47 (electrical substation foundation) and 100-F-48 (coal pit debris), and waste is being stockpiled at 100-F-44:9 while the waste profile is completed.

In June, WCH awarded Ojeda a subcontract worth $3.8 million to remediate the 100-F Area waste sites. Ojeda is a small disadvantaged business based in Richland, Washington, that specializes in construction, renovation, and construction management of federal government projects. Remediation of the wastes sites is scheduled to be completed by spring 2011.

Washington Closure Hanford subcontractor Ojeda Business Ventures completed excavation and loadout activities at 100-F-44:8, a site that contained old fuel pipelines. (Photo 9)

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.

100-F Area (Continued)

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 cleanup of 53 waste sites at F Area in 2008, loading out more than 408,000 tons of waste. However, during the course of cleanup, 19 additional waste sites were discovered. The 19 sites that require remediation are:

- 600-351 (stained oil areas)
- 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-8 (French drains)
- 100-F-62 (animal farm septic lines)
- 100-F-63 (animal farm radioactive effluent lines).

Upcoming Activities

- Continue excavation and loadout from 100-F-48.
- Continue excavation and loadout from 100-F-47.
- Continue stockpiling waste at 100-F-26:4 until waste profile is completed.
- Begin overburden removal at 100-F-61.

IU 2 & 6 Segment 1

Waste Site Reclassification Forms for all of the IU 2 & 6 Segment 1 sites have been signed by the DOE Richland Operations Office and EPA. Remaining work, scheduled for later this month, includes re-contouring and re-vegetating the sites.

Remediation of the 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 northwestern portion of the Hanford Site, away from the nine surplus plutonium production reactor areas. Segment 1 sites were unique because they were primarily used for housing and support areas.

Confirmatory Sampling

WCH is more than 75% complete with the confirmatory sampling campaign, scheduled to be completed in December. Last week, sampling was completed at 100-IU-2 and 100-IU-6 sites. Sampling was completed at 100-F in September and also at some sites at 100-D. Sampling is now being performed at 100-K. Follow-up sampling at 100-D sites will be performed when 100-K sampling is complete.

Sampling is being performed by WCH subcontractor TerranearPMC (TPMC) in accordance with the regulator approved work instructions that were completed earlier this year. TPMC is a small disadvantaged business with an office in Richland, Washington.

Remove, treat, and dispose reports and closeout documentation are being prepared for the sites that were sampled at 100-D and 100-F Areas. These documents will be submitted to the DOE Richland Operations Office and the regulatory agencies for review and approval. Sites where the sample results show contamination below the cleanup standards are being recommended for closeout with no further action.

Washington Closure Hanford subcontractor TerranearPMC conducts confirmatory sampling activities at 600-323. The site consists of the underlying soil and a bermed area with coal cinders. (Photo 10)

General

Media, Visits, Press Releases
No significant activities this week.

Contracting Actions
- Work complete on ERDF design/build of the left-hand turn lane onto North Landfill Road.