Issue 39

River Corridor Closure Project

Recovery Act Weekly Report

For the week ending June 6, 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.

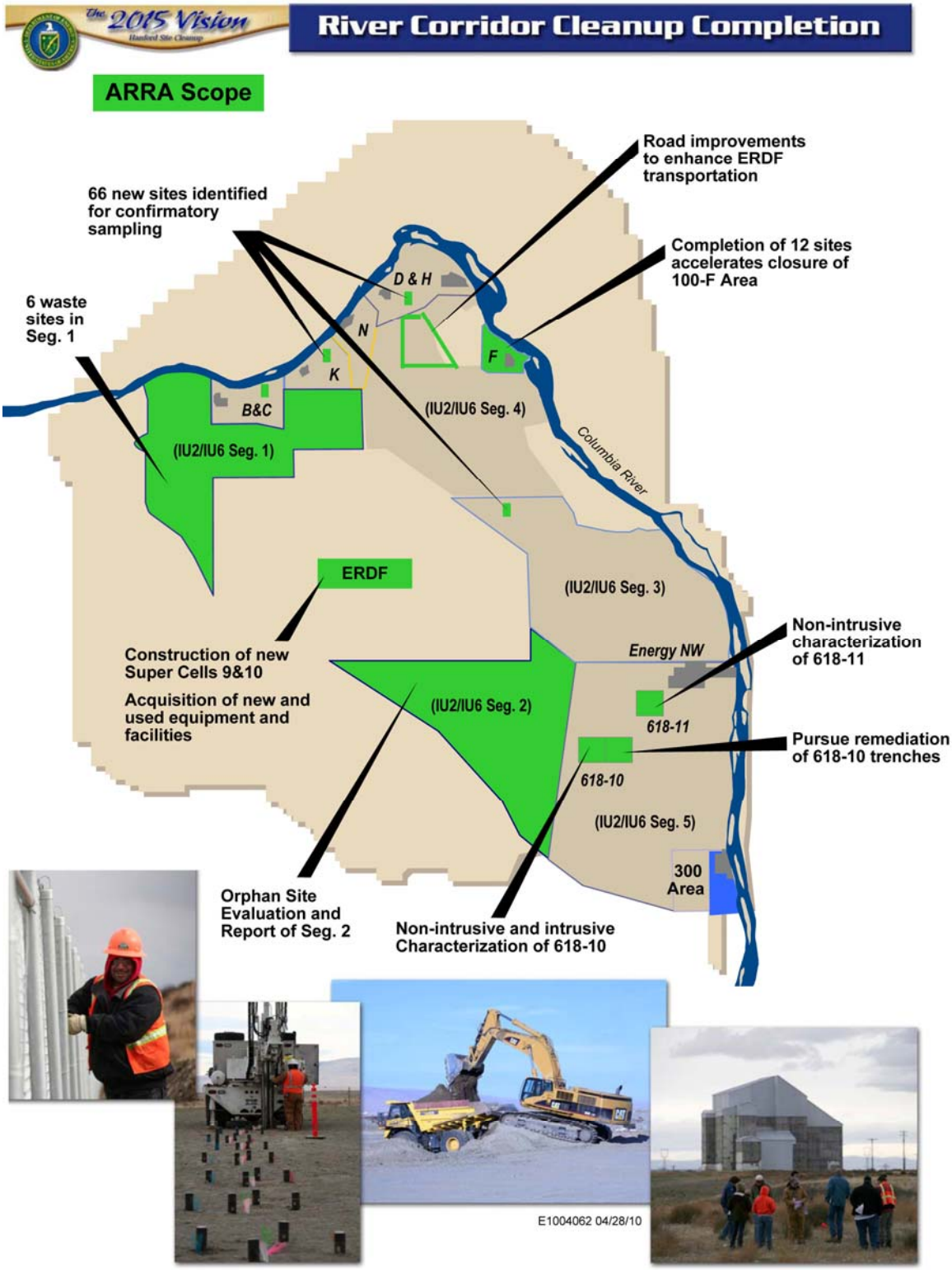
E. Confirmatory Sampling of other new sites

   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 (RCC) conducted a "Memorial Day Refocus" on June 1. During plan-of-the-day or staff meetings, employees throughout the Hanford Site were reminded to refocus on safety and get back in the right state of mind after the holiday. Employees were reminded to:

- Start the day off right
- Plan your day
- Set reasonable time limits for tasks and deliverables
- Turn off extra inputs
- Notice lazy routines
- Finish tasks.

Employees also were reminded to pay attention to detail by:

- Reviewing work packages
- Ensuring that tasks are clear before starting
- Interact in pre-evolution meetings
- Keep a questioning attitude.

The safety refocus also highlighted the RCC's "Spring and Summer Safety Awareness Initiatives." The initiatives are:

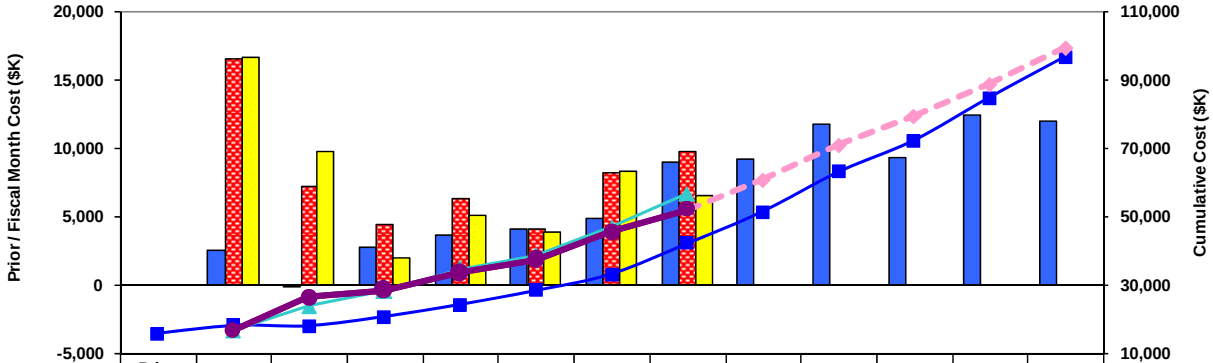
- Vehicle Safety (May-July) – 360 inspections and behavioral focus (seatbelts, stop signs, speeding)
- Electrical Safety (May-June) – Activities via the Electrical Safety Committee
- Heat Stress (June-August) – Assessment and awareness
- ISMS/VPP (June-September) – Assessment and distribution of the new safety toolboxes and activities.

Finally, employees were reminded to always be mindful of changing conditions.

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

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



	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. The admix is a soil/bentonite material used for the low-permeability compacted soil layer of the liner and leachate collection system. It is manufactured at an onsite pugmill.

TradeWind Services/DelHur Industries personnel dump admix on the south slope of super cell 9 at the Environmental Restoration Disposal Facility.

ERDF (Continued)

A bulldozer (left) spreads admix on the south slope of super cell 9 at the Environmental Restoration Disposal Facility. A sheepsfoot compactor (right) prepares to climb the slope.

WCH has received the high-density polyethelene (HDPE) to be used in the construction of the liner and leachate collection system, which collects and removes liquid, or leachate, as it drains through the waste materials. The liner system consists of the admix layer, a leachate collection layer, a leak detection layer, and two HDPE liners covered with a 3-foot protective soil layer. The project team will begin wedge welding together the HDPE sheets next week.

ERDF (Continued)

High-density polyethylene (HDPE) is used as part of the cell liners system at the Environmental Restoration Disposal Facility. Construction of the liner for super cell 9 will begin next week.

ERDF (Continued)

Work also continues on the installation of leachate transfer pipe from super cell 9 to a new leachate holding tank. The crest pad buildings for super cells 9 and 10 also are under construction.

Work continues on the installation of the leachate transfer pipe from super cell 9 at the Environmental Restoration Disposal Facility

ERDF (Continued)

Facility and Equipment Upgrades
ELRFowler continues work on the design and submittals for ERDF's new operations and maintenance facilities. ELRFowler is a joint venture between local companies ELR Consulting and Fowler General Construction.

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.

WCH has decided to pursue Pacific Northwest National Laboratory's (PNNL) waste container tracking system for ERDF. 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 location, as well as generates maintenance reports.

WCH subcontractor George A. Grant is scheduled to begin construction June 7 on a new lighting system at ERDF's recently upgraded transportation yard. The transportation yard is used for truck-and-trailer combinations and other equipment.

WCH is evaluating the final design of ERDF's new septic system. Columbia Engineers and Constructors, a small business based in Richland, Washington, is designing the system.

WCH placed a purchase order for a Cat 770 off-highway truck, which will be used to haul daily operation cover at the facility. An award is expected to be made next week on two Genie articulating boom manlifts.

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

WHPacific continues developing a bid for a design basis for a batch plant at ERDF. The batch plant will manufacture concrete used to mix with debris, ensuring no void space during disposal operations. Purchase orders were issued for two concrete mixer trucks and a concrete pump truck.

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

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.

ERDF (Continued)

Video

Progress continues with the expansion of the Environmental Restoration Disposal Facility.

Profile

Ben Klickovich only has one complaint about his new job at the Environmental Restoration Disposal Facility (ERDF).

“I work with a lot of great people, I get out of the office, and the project is interesting,” Klickovich said.

So what’s the problem?

“It’s not in Hawaii,” Klickovich joked.

Klickovich makes his permanent home in Maui. He’s working on a one-year contract for RC Construction Services, a small local business supporting WCH subcontractor TradeWind Services to expand Hanford’s massive disposal facility by 50%.

Ben Klickovich helps oversee the construction of super cells 9 and 10 at the Environmental Restoration Disposal Facility.

Profile (Continued)

Earlier this year, TradeWind was awarded a contract worth up to $30 million to excavate super cell 10 and build the liner and leachate collection systems for super cells 9 and 10. Excavation of super cell 10 was completed in mid-May, and work place admix in super cell 9 is underway. Admix consists of soil that is mixed with bentonite and water, then placed and compacted to form the soil liner of the cell.

The work TradeWind is performing is part of a $100 million upgrade funded by the American Recovery and Reinvestment Act.

Klickovich arrived at ERDF in early February, shortly before TradeWind's prime subcontractor, DelHur Industries, began digging super cell 10. His job is to oversee the construction of the super cells and to serve as a liaison between WCH and TradeWind to "make sure everything goes as smoothly as possible."

Before moving to Hawaii in 2006, Klickovich spent about 10 years working in Los Angeles. There, he met Rob Hepler, the founder of RC Construction Services, and the two have remained in contact ever since.

Klickovich is originally from Absecon, New Jersey, a small town on the outskirts of Atlantic City. He said he became interested in construction at an early age.

"My father was a handyman, always building something," he said. "It's something I've always enjoyed."

618-10 Burial Ground

618-10 Intrusive & Non-Intrusive Characterization/Trench Remediation Project
Preparations continue for intrusive characterization at the 618-10 Burial Ground. Field operations are expected to begin in late June. Intrusive characterization will provide information about the types and quantities of wastes, and the level of contamination.

The 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, box filters, and aluminum cuttings; spent fuel fragments in small juice cans; radiologically contaminated equipment and laboratory instruments; and high-level liquid waste sealed in drums.

During field operations, test pits will be excavated through a series of burial trenches. Mock-up activities began May 17 and continue. They are conducted using the excavation techniques, instrumentation, and procedure steps required in work packages.

The project team has completed the project start-up review for the drum penetration facility set-up and operation. 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)

Workers install a sand hopper at the 618-10 Burial Ground. In the event an unearthed drum generates heat, sand will be dropped from the hopper onto the drum inside the enclosure.

618-10 Burial Ground (Continued)

Work begins on a bunker that will be used to contain suspect spent nuclear fuel at the 618-10 Burial Ground.

Nonintrusive characterization report is being developed and is scheduled to be issued in mid-August. Nonintrusive characterization field activities were completed May 20. 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.

The data collected during nonintrusive 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.
- Complete erection of drum penetration facility.
- Continue development of nonintrusive characterization report.

100-F Area

WCH continues to evaluate proposals for the remediation of 18 waste sites at 100-F Area. The subcontract for remediating the sites is expected to be awarded this month with remediation scheduled to begin in July.

Preparations continue for mobilization. Trailers are in place, and electrical communication equipment has been installed.

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 operated adjacent to the reactor site from 1945 to 1976. 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.

The 18 sites that require remediation are as follows:

- 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).

100-F Area (Continued)

Preparations continue at 100-F Area. Trailers are being installed, and trenches for electrical communication have been backfilled.

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.

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. The sites were small and contained mostly surface debris.

Confirmatory Sampling

WCH continues to evaluate bids for a subcontractor to perform confirmatory sampling at multiple locations within the 100-D, 100-IU 2 & 6, 100-F, and 100-K Areas. The contract is expected to be awarded this month, and field work is scheduled for July. Confirmatory sampling will involve trenching, excavation, backfilling, and sampling to determine the nature and extent of any contamination present.

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.

The project 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. The team is 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 also is 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.

General

Mentoring/Training
No significant mentoring/training events this week.

Media, Visits, Press Releases
A group made up of families of former Hanford workers and new Hanford Project employees toured the Hanford Site on June 1. The group stopped at ERDF and was briefed on the facility's operations and procedures by the ERDF operations manager.

Contracting Actions
No significant contracting actions this week.