

River Corridor Closure Project

Weekly ARRA Accomplishment Report

August 25, 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 Remediation Disposal Facility (ERDF)

ERDF is the hub of the WCH contract and Other Hanford Contractors (OHC). 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. This report will provide written and visual evidence, weekly, of this expansion as it happens.

B. The 618-10 Burial Grounds

Long regarded as one of Hanford's worst waste sites, 618-10 is going to be cleaned up using ARRA funding. WCH plans to characterize the site using Intrusive and Non-Intrusive techniques and the subsequent analysis of data will enable the project to fully remediate 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 center at the north end of the 300 Area.

D. Remediation of new Orphan Sites

WCH is employing ARRA funds to clean up many Orphan Sites not originally part of its contract. Sites in the 100-F and IU 2&6 segments will be the target for remediation in the two year period starting in October 2009.

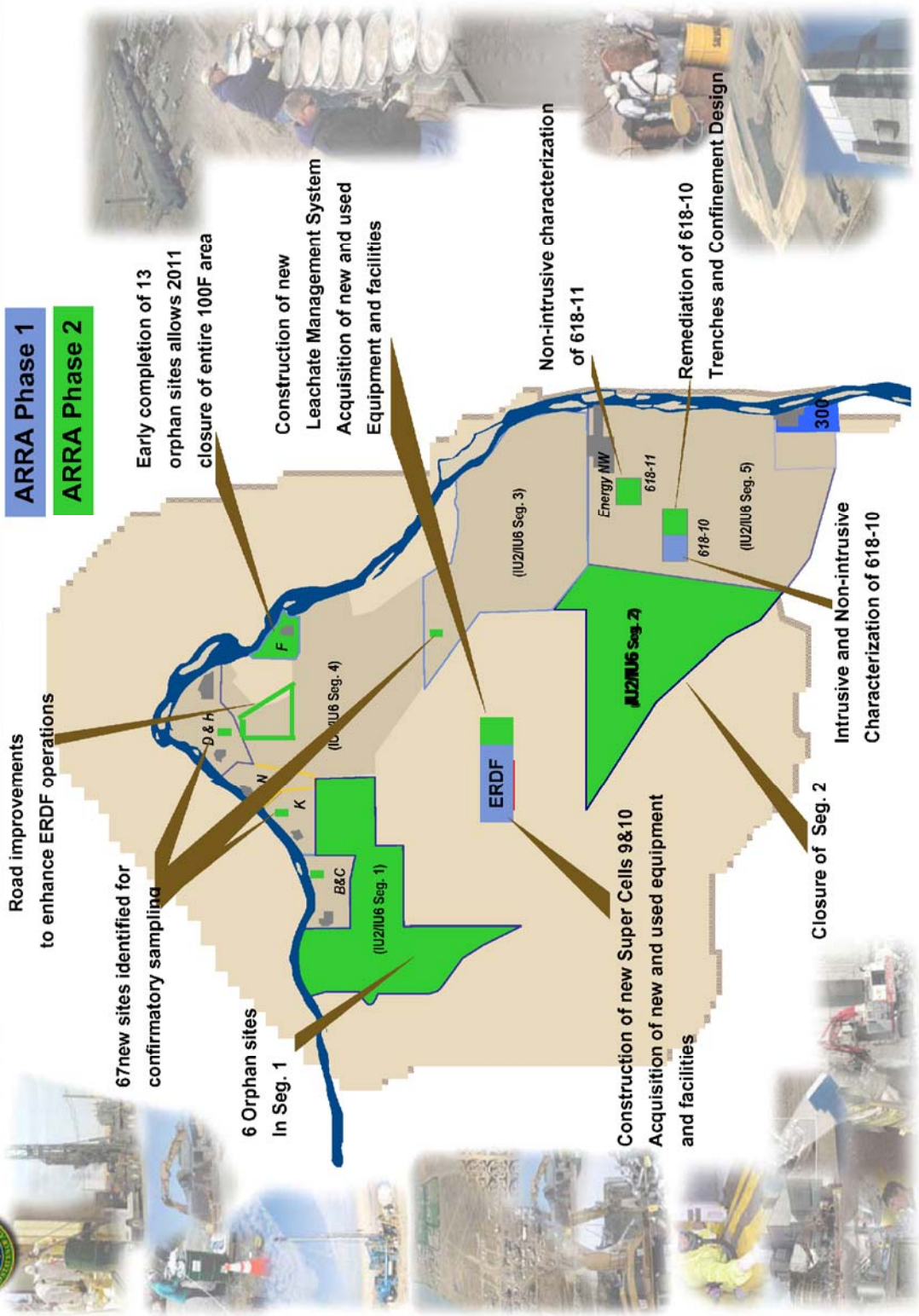
E. Confirmatory Sampling of other new sites

WCH is proposing to complete the early identification of 67 potential waste sites using ARRA funds.

The following figure provides an easy way of understanding the overall scope of WCH's ARRA projects.



River Corridor Cleanup Completion



General

Safety Accomplishments

Safety for ARRA remains at green light status with no issues through August 21, 2009.

Occurrence Category	Assessment
TRC Rate	Green
DART Case Rate	Green
Electrical	Green
Industrial Operations	Green
Radiological Control	Green
Near Misses	Green
Authorization Basis	Green
Significant Injuries	Green
Quality Assurance Profile	Green
Nuclear Criticality	Green
Environmental Release	Green
Conduct of Operations	Green
Equipment Degradation/Failure	Green
Fire Protection	Green
OS/IH	Green

Legend

Green – No Attention Required
 Yellow – Requires Some Attention
 Red – HQ Attention Required

Hazard Reductions

The following actions related to the 336 Building Fall event are also being applied to ARRA work:

- Revising the IWCP and JHA processes and retraining workers and management.
- Revising the fall protection program and retraining competent person, qualified person, and fall protection users.
- Installing additional controls to ensure work is not started without sufficient resources to conduct the job safely, evaluating resource needs and increasing staffing of supervisors and project safety representatives.
- Taking a hard look at potential drivers for schedule pressure, and making sure we do not sacrifice safety and compliance to get the job done.



General (continued)

Cost

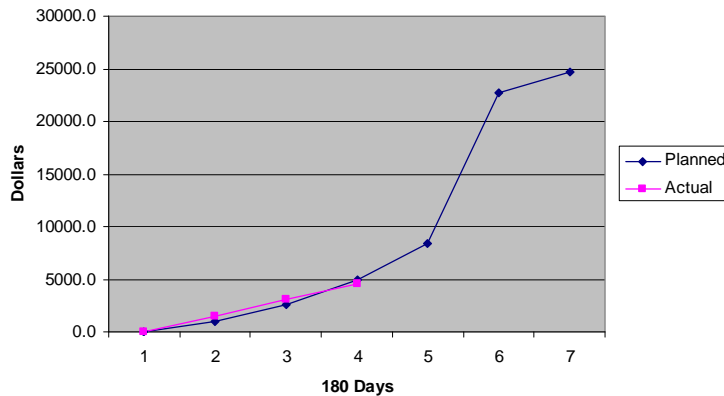
180 Day Work Plan
Monthly Estimated Cost Plan Summary (K) Incremental
 Actual Cost as of July 26, 2009

WBS	Scope		Apr 8th	May	Jun	Jul	Aug	Sep	Oct 8th	Total
1.03.14.75.25-27	618-10 NIC/TRP	Planned	0.0	123.8	134.6	216.6	303.2	688.4	170.2	1636.8
		Actual	0.0	392.4	255.7	409.5				
1.04.01.01.31	Super Cells 9&10 Construction	Planned	0.0	252.9	356.1	889.1	1007.5	9076.9	445.6	12028.1
		Actual	0.0	753.9	482.7	397.2				
1.04.01.01.37	ERDF Equipment Upgrades	Planned	0.0	0.0	0.0	0.0	0.0	1069.5	445.6	1515.1
		Actual	0.0	0.0	0.0	29.5				
1.04.01.01.3B	ERDF Facility Upgrades	Planned	0.0	0.0	929.2	1261.7	2135.0	3448.7	862.3	8637.0
		Actual	0.0	0.0	509.8	351.2				
1.06.01.01.02	Mission/General Support	Planned	40.3	531.2	195.2	12.0	12.8	17.6	4.4	813.5
		Actual	40.3	311.2	387.9	219.4				
Total		Planned	40.3	907.9	1615.1	2379.4	3458.5	14301.1	1928.1	24630.5
		Actual	40.3	1457.5	1636.1	1406.8	0.0	0.0	0.0	0.0

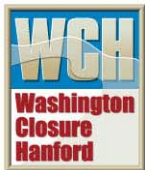
Monthly Estimated Cost Plan Summary (K) Cumulative

WBS	Scope		Apr 8th	May	Jun	Jul	Aug	Sep	Oct 8th
1.03.14.75.25-27	618-10 NIC/TRP	Planned	0.0	123.8	258.4	475.0			
		Actual	0.0	392.4	648.1	1057.6			
		Planned %			16%	29%			
		Actual %			40%	65%			
1.04.01.01.31	Super Cells 9&10 Construction	Planned	0.0	252.9	609.0	1498.1	2505.6	11582.5	12028.1
		Actual	0.0	753.9	1236.6	1633.8			
					5%	12%			
					10%	14%			
1.04.01.01.37	ERDF Equipment Upgrades	Planned	0.0	0.0	0.0	0.0	0.0	1069.5	1515.1
		Actual	0.0	0.0	0.0	29.5			
					0%	0%			
					0%	2%			
1.04.01.01.3B	ERDF Facility Upgrades	Planned	0.0	0.0	929.2	2191.0	4326.0	7774.7	8637.0
		Actual	0.0	0.0	509.8	861.0			
					11%	25%			
					6%	10%			
1.06.01.01.02	Mission/General Support	Planned	40.3	571.5	766.7	778.7	791.5	809.1	813.5
		Actual	40.3	351.5	739.4	958.8			
					94%	96%			
					91%	118%			
180 Day Work Plan	Total	Planned	40.3	948.2	2563.3	4942.8	8401.3	22702.4	24630.5
		Actual	40.3	1497.8	3133.9	4540.7			
					10%	20%			
					13%	18%			

180 Day Work Plan (Planned vs Actual) Cumulative



WCH will report CPI and SPI at 1.00 until a contract modification approving the ARRA baseline is received and reconciled to the current baseline. The spend plan for definitized ARRA work scope for Fiscal Years 2010 and 2011 is \$63,067.4k and \$42,502.1k, respectively.



General (continued)

Job Fairs

WCH has attended five job fairs and processed over 2,000 job applications to support ARRA hiring. Refer to the weekly EM Recovery Act Jobs Data Call spreadsheet for Job Creation/Saved as of August 14, 2009, located in the same folder as this report.

Hiring Actions

Refer to the weekly EM Recovery Act Jobs Data Call spreadsheet for Job Creation/Saved as of August 14, 2009, located in the same folder as this report.

Mentoring/Training

All new WCH ARRA employees attend Hanford's DO WORK SAFELY class which stresses personal accountability, procedure compliance, the importance of a questioning attitude, asking for help, and three-way communications. Additionally, WCH participated in a two day workshop in Washington, DC August 4-5, 2009, with other DOE Prime Contractors, DOE local field office and headquarters representatives to share latest ARRA information, accomplishments and lessons learned, as well as share challenges and suggestions for the successful execution of ARRA.

Media, Visits, Press Releases

No significant media activities this week.

Contracting Actions

No significant procurement activities this week.



ERDF

Construction

Excavation of super cell 9 at ERDF continued this week. Projects started include waterline extension, completed clearing and grubbing phase III, and mobilized a second excavator. For the week, 40,200 bank cubic yards were excavated. Including the removal of the stockpile (353,926 bank cubic yards) has been excavated to date.

Workers have nearly completed removal of a thin layer of fine, wind-deposited dust, or eolian soil. The eolian soil is being set aside to be mixed with bentonite clay from Wyoming to form the admix layer. Excavation of the eolian layer will be completed this week.

Waste Operations issued the remaining notice to proceed for Phase IV of the Container Transfer Area upgrades. Once excavation of the entire disposal cell is completed, the admix will form the first layer of the multi-barrier liner and leachate collection system for ERDF.

Building Super Cell 9 at ERDF.



ERDF (continued)

Upgrades/Infrastructure

Work began last week on a new haul road for ERDF trucks. The new road will provide rerouted access to the facility for the long-haul trucks bringing contaminated materials from building demolition and waste site cleanup locations.

The new road will improve traffic flow by eliminating some areas of cross traffic and reducing truck traffic by 50 percent in areas of pedestrian and personal vehicle traffic.

Establishing a new road for increasing waste shipments to ERDF.



In addition, civil engineering work was completed on a transfer area for waste containers brought into ERDF by other Hanford contractors. The new container transfer area will allow access by long-haul trucks via a little-used road at the opposite end of ERDF. The new transfer area will help provide space for the increasing volumes of waste generated at waste cleanup and building demolition sites managed by Hanford contractors other than WCH.

ERDF (continued)

The new area also will help accommodate the increased truck traffic in a safe and efficient manner. The new container transfer area and dump ramps designated specifically for other Hanford contractor use will be operational by October 1.

Workers prepare a new access road for entering and exiting ERDF.



Photos

The photos show excavation of super cell 9 and construction of infrastructure to support the planned increase in waste shipments, as well as an increase resulting from work accelerated due to ARRA funding.

Upcoming Activities

In the coming week, the super cell 9 construction project plans to excavate approximately 7,000 additional bank cubic yards.

618-10 Burial Ground

WCH is continuing work this week with geophysical delineation of the vertical pipe units (VPUs) at Hanford's 618-10 Burial Ground. The VPUs consist of five bottomless, 55-gallon drums welded together and buried in silo-like fashion. The VPUs were placed at the 618-10 Burial Ground to accept waste from Hanford's 300 Area from 1954-1963.

Ariel view of 618-10 Burial Ground.



Future work includes installing four cone penetrometers around each of the 94 VPUs. Instrumentation will be installed in the cone penetrometers to help identify the amount and type of radioactive material within the VPUs.

Although the approximate location of each VPU is known, geophysical delineation is being conducted to identify each unit's precise location. Accurately identifying the location of the VPUs is important for project safety so workers do not insert the cone penetrometers into waste materials inadvertently.

For 618-10 non-intrusive characterization, the project continued reviewing subcontractor submittals, mobilization activities, geophysical delineation of VPUs, confinement design criteria

618-10 Burial Ground (continued)

definition activities, records research activities to supplement those records obtained during the design solution, and development of the project startup review plan and checklist for radiological characterization.

For 618-10 trench remediation planning, the project is preparing an independent estimate for the proposed modifications to the Drum Penetration Facility. The project also continued to work on documentation operational parameters, identification of instrumentation and equipment modifications, identification of waste stream hazards and controls, and preliminary Document Safety Analysis/Material at Risk calculations. For intrusive characterization, the project continued to work on the Data Quality Objective/Sampling & Analysis Plan.

Taking Measurements with a Magnetometer.



618-10 Burial Ground (continued)

Ground Penetrating Radar.



Photos/video

Photos show the location of the waste site from the air, as well as workers determining the precise location of vertical pipe units in the burial ground using a magnetometer and ground penetrating radar.

[*Click here to view the video showing geophysical delineation of the VPUs using a magnetometer and ground penetrating radar.*](#)

618-10 Burial Ground (continued)

Upcoming Activities

For 618-10 non-intrusive characterization, the project will continue reviewing subcontractor submittals, mobilization activities, geophysical delineation of VPUs, characterization project startup review development activities, confinement design criteria definition activities, and records research activities. For 618-10 trench remediation planning, the project will award the subcontract for the modifications to the Drum Penetration Facility, and demobilize the drum punch facility. The Drum Penetration Facility will be sent to the original vendor for modifications. The project will continue to work on documenting operational parameters, identification of instrumentation and equipment modifications, preliminary Document Safety Analysis/Material At Risk calculations, and Air monitoring Plan calculations. For intrusive characterization, the project will conduct a meeting with DOE-RL and EPA on the Data Quality Objective/Sampling & Analysis Plan.



Mission Support/General Support

Accomplishments

WCH completed the draft of the technical scope for Phase II ARRA work. The draft Phase II Technical Proposal – WCH-355, Volume 1 was reviewed internally by WCH and submitted via transmittal letter to DOE-RL for a one week review period. The draft review period is part of implementing lessons learned from the Phase I submittal. The intent is to provide communications and coordination of the plan early in order to improve quality and streamline the overall proposal process for the ARRA scope.

WCH continued internal management reviews of the Vision 2015 Roadmap for reducing the site clean up footprint by 2015. The roadmap will be used for FY10 and outyear Contractor Performance Planning and identification of potential ARRA Work Scope to support the DOE's goal of accelerating clean up.

Upcoming Events

Receive comments resulting from the DOE-RL review of the draft Phase II Technical Proposal – WCH-355, Volume 1.

WCH projects begin reviews of the Vision 2015 Roadmap relative to the Contractor Performance Plan for FY10. Continue to work on finalizing the Vision 2015 Roadmap for planned issuance October, 2009.

