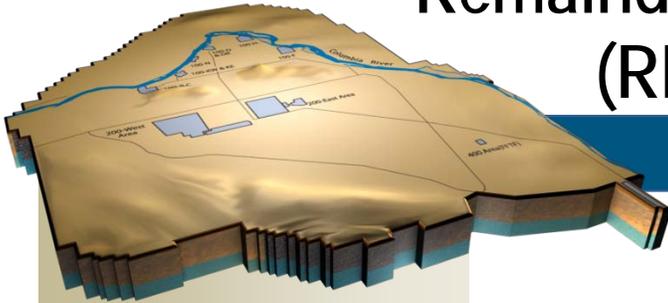


Section E Nuclear Facility D&D, Remainder of Hanford (RL-0040)

Monthly Performance Report



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Demolition of 2722W

November 2010
DOE/RL-2010-126-11, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

American Recovery and Reinvestment Act (ARRA)

224U and 224UA structures demolition is complete; final survey, equipment decontamination, and stabilization continue

Upper Arid Lands Ecology (ALE) demolition activities were completed. Lower ALE continued demobilization activities. Efforts have begun at U Canyon on grout supporting activities. Core drilling has commenced and material staging area preparation has started for grout and for staging of the 100K sedimentation material.

The cask ordered for the D-10 tank disposition at U Canyon is scheduled to arrive the week of December 13, 2010

The 209E facility completed readiness activities and continued with characterization including visual inspection of tanks. Continued with housekeeping in preparation for tank removal and inventory reduction activities. Began tank removal activities starting with TK-109 and the isolation of HO-100 to support removal of the tanks within the hood.

Demolition of the 284E coal conveyor and crusher house is complete. Asbestos abatement in 284E Powerhouse continues. Cold and dark and characterization activities continued in 200 West and East structures. The explosive demolition planning is ongoing. Completed demolition of the 2722W weld shop and 2716E Power Maintenance Storage Building. Started demolition activities on 284WB Power Boiler Plant.

Cleanup of North Slope debris pile sites continues.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) documentation for railcars progressing as planned; visual inspection of the rail cars was initiated

Remediation activities continued in the Outer Zone at BC Control area, CW-3 waste sites, and Model Group (MG)-1 waste sites. BC Control Area removed approximately 21,000 tons of soil in November; approximately 97 acres of BC Control Area, Zone A, have been cleared to date. The closure documentation is being prepared for CW-3 waste sites 216-N-4 and 216-N-6. Excavation commenced on MG-1 waste site 200-W-147-PL with 3,052 tons of soil transferred to ERDF in November.

Two additional Confirmatory Sampling/No Further Action (CSNFA) waste sites in MG-1 have been identified with contaminants in excess of the acceptance criteria - Old Central Shop Area (OCSA) and 600-220. This sampling completes the Outer Zone D&D KPP to remediate 24 waste sites.

Sampling/surveys have been completed on 17 MG-1 sites

Base

Planned surveillance and maintenance (S&M) activities continue. Initial beryllium characterization sampling is in progress at REDOX, 231Z, and 222T.

CW-3 remediation has been performed to remove pipeline 600-286-PL and 600-287-PL. Approximately 3,267 tons of soil was removed from CW-3 pipeline sites during November.

MG-1 sampling of waste site 600-222 revealed additional contamination; these areas were further excavated and will be re-sampled. Excavated and transferred 129 tons of soil to ERDF in November. Staged clean fill dirt at waste site 600-38, pending completion and approval of regulatory documents.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
10-EMS-D&D-OB2-T2	Mitigate spill impacts	1) Develop spill management tools for routine activities (building demolition and S&M)	03/31/10	Complete
		2) Evaluate the need for lower tier project procedures to implement the PRC spill response procedure	04/30/10	Complete
		3) Develop and provide awareness, prevention, response and mitigation training to >85% of project personnel as related to spill response	05/30/10	Complete
		4) Review and validate pre-designations for commonly used chemicals at the facility	06/30/10	Complete
		5) Incorporate new spill requirements into applicable procedures/work packages based upon issuance of spill response procedure	04/30/10	Complete
		6) Evaluate the need for a system to pre-designate new chemicals	06/30/10	Complete

TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	4	
Total Recordable Injuries	0	5	
First Aid Cases	3	76	<p>11/04 284E Insulator was using a door frame for support while putting on slippers; the door closed on left hand and the worker sustained a crush injury to left third and fourth digits. Worker was treated and returned to work without restrictions. (21458)</p> <p>11/08 284E Insulator got right index finger caught in a bag when “it popped out.” Worker was taken to AMH and examined and given OTC meds. Worker was returned to work with restrictions and told to follow-up 11/09 for x-ray. (21467)</p> <p>11/30 RCT from 200E was leaving Hammer due to early release and slipped getting into car; fell injuring back and twisted right knee. RCT made notifications to supervisor on 12/01 and was taken to AMH for evaluation. Worker was evaluated and released to work with no restrictions. (21551)</p>
Near-Misses	0	0	

During the month of November, the S&GRP surpassed a significant milestone having worked more than 1,200,000 hours over the past 12 months without a lost time event on all S&GRP work within RL-0030, RL-0040 and RL-0041.

KEY ACCOMPLISHMENTS

ARRA – U PLANT/OTHER D&D

- U Plant Regional Closure Zone (U Ancillary Facilities D&D)
 - Completed demolition activities on 224U and 224UA
 - Completed grouting of C Cell
 - Site survey, equipment decon and stabilization in progress
- U Canyon Demolition and Cell 30 Disposition
 - Core drilling activities have commenced. Grout conveyance equipment has begun to arrive on site. Fabrication of the cask for D-10 is complete and the cask is scheduled to arrive the week of December 13, 2010.
- 200E Project
 - Continued asbestos abatement activities in 284E
 - Completed demolition of 2716E Power Maintenance Storage Building
 - Completed demolition of conveyor and crusher house at 284E
- 209E Project
 - Continued 209E characterization and cold and dark planning activities
 - Completed readiness activities and declared readiness. Began NDA activities on tanks and pipes within the facility. Continued internal inspection of tanks to verify the tanks are dry for removal activities.
 - Completed electrical isolation of the HO-200 glovebox to support removal of the tanks within HO-200 and ultimately removal of HO-200. Began transition of the facility to temporary power to facilitate the isolation of systems and minimize the hazards associated with removal activities.
- 200W Project
 - Continued characterization and cold and dark activities
 - Completed the demolition of 2722W Weld Laboratory Building
 - Began demolition activities of 284WB Package Boiler Plant

ARRA – OUTER ZONE D&D

- BC Controlled Area Waste Site Remediation
 - Remediation using super dump trucks continued with approximately 272,000 tons cumulative to date of soil removed and transferred to ERDF
 - CERCLA survey measurements have been completed for the first portion of Zone A, approximately 50% of the area
- 200-CW-3 Waste Sites
 - The remaining sites verification package documentation for waste site 216-N-4 and 216-N-6 is in preparation
 - The remaining sites verification package for waste site 216-N-1 was approved with closure documentation forwarded to regulators for approval; CHPRC is incorporating regulator comments.

- **MG-1**
 - Received comments on MG-1, Revision 1, Sampling Analysis Plan (SAP) from the regulatory agency, preparing comment resolution
 - Reclassification/closure documentation for waste sites 200-E-101, 6607-2, 6607-1, 6607-3, 200-E-110, UPR-600-21, 600-51, and 600-262 has been submitted for approval; CHPRC is incorporating regulatory agency comments
 - Site 600-37 is a CSNFA site with confirmatory sampling completed. Closure documentation has been submitted to RL for review and comment.
 - Waste sites 600-36, 600-38, 600-218, 200-W-33, UPR-600-12, OCSA, 600-220 and 600-222 were originally planned CSNFA, however sampling of the sites indicated some excavation will be required
 - Waste site 600-275 post-excavation sample results indicated that further excavation was required; excavation was performed in November and sample results are pending
 - Initial excavation for site 600-40 was completed and initial verification samples were collected. Following additional excavation, in-process samples were found to be within the Remedial Action Level (RAL). Surface sampling was performed in November and depth samples are planned to be collected in December.
 - The closure documentation for waste site 600-36 is in preparation
 - Excavation of pipeline 200-W-147-PL commenced this month with approximately 3,052 tons of soil and debris transferred to ERDF
 - CSNFA sampling is continuing at the Old Central Shop Area site to complete characterization
- **ALE D&D**
 - Completed lower ALE debris site cleanup and demobilized equipment. Completed demolition of 6636 and 623-A on upper ALE.
- **NORTH SLOPE**
 - Continued with debris pile cleanup activities
- **RAILCARS**
 - Remedial Action Work Plan (RAWP) and SAP submitted to EPA for review
 - Engineering Evaluation / Cost Analysis (EE/CA) comments received from EPA
 - Mobilization completed and initiated visual inspections of railcars

Base

- Excavation of 600-38 is complete and clean backfill is being staged. The closure documentation is in preparation.
- Excavation of pipeline 600-286-PL was completed with approximately 7,400 tons (cumulative) removed and transported to ERDF. Verification sampling is expected to be performed in December.
- Excavation of pipeline 600-287-PL continued in November with approximately 5,660 tons cumulative removed and transported to ERDF
- Excavation of previously failed CSNFA waste site 600-222 was initiated in October. Sampling in November identified further contamination and the area was further excavated. Approximately 280 tons of soil (cumulative) have been removed and transported to ERDF. Closure documentation is being prepared in anticipation of successful verification sampling in December.
- Beryllium sampling/characterization continued in REDOX, 231Z and 222T

MAJOR ISSUES

None.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk

 Working - No Concerns
 Working - Concern
 Working - Critical

 Increased Confidence
 No Change
 Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
D4-U-004: U Canyon Technical Approach Changes	Conduct detailed planning/engineering to identify areas of concern and to minimize schedule impacts.			Detailed planning in process; impacts are being evaluated.
D4-020: Unexpected Condition/Radiological Contamination at Industrial Facilities	Perform early radiological surveys.			No significant impacts at this time.
D4-036: Readiness Reviews Required	Probability of risk occurring is low; risk is <u>accepted without mitigation</u> .			Probability is increasing; determining impacts to cost and schedule.
D4-037: D4 Regulatory Documents Delayed	Develop various regulatory documents to ensure the documents are submitted sufficiently early to obtain needed DOE or regulator approvals prior to planned start of work.			Working with RL to determine the appropriate path forward for facilities not covered under current regulatory documents.
D4-042: Unexpected Site Conditions	Conduct early facility walk downs and characterization activities to minimize schedule impacts; interview "old-timers" and compare recollections to historic records; conduct document searches to ensure all available documentation is reviewed early in the D4 planning process.			No issues at this time.
D4-043: Unforeseen Facility Event Impacts Safety or Environment	Include corrective maintenance in baseline based upon historic experience; risk accepted without further mitigation.			No issues at this time.
D4-S-033: Semi-Works Zone Closure-Regulatory Documents Delayed	Develop various regulatory documents to ensure the documents are submitted sufficiently early to obtain needed DOE or regulator approvals prior to planned start of work.			Evaluating the path forward for below-grade tanks.
D4-S-057: 209E Fire System Deactivation	The plan is to shut off all utilities as part of the 209E deactivation in preparation for demolition.			Upgrades to LSC systems are being implemented.
WSR-006: Decision Document Approval Delays	Work with RL and regulators to establish priorities and need dates.			RAWP and TPA Change Notice have been approved; MG-1 field activities for the pipelines have been adversely affected.
WSR-007: More Extensive Contamination Than Expected	Cannot control extent of contamination; no mitigation.			The BCCA is the major risk that has been realized. 216-N-4 had more contamination than anticipated, however 216-N-1 had less than anticipated - being from the same control account the cost impact was a net sum zero. Risk level reflects project life worst case impact of \$60M; individual waste site risks are moderate except for BCCA which is high.
WSR-008: No Action Waste Sites	Using L-8 table data; no mitigation.			Eight sites in the Outer Zone have failed the CSNA sample evaluation. Two of these sites have been remediated with closure paperwork in process. Four other sites have passed the initial CSNA evaluation. To date, cleanup of the failed sites has not resulted in large waste volumes.

RISK MANAGEMENT STATUS (continued)

Unassigned Risk
Risk Passed
New Risk

 Working - No Concerns
 Working - Concern
 Working - Critical

 Increased Confidence
 No Change
 Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
WSR-020: Ecological/Cultural Conditions Restrict Field Activities	This risk is accepted as written and will be monitored throughout work execution.			As a result of issues encountered a couple of months ago, a BCR was processed in September that incorporated the appropriate risk changes that could be taken at that time. There is an ongoing concern about any new changes; this is being watched closely.
WSR-021: Remediation Subcontractor Performance	This risk is accepted as written and will be monitored throughout work execution.			No issues identified at this time.
WSR-028: Unexpected Liquid in Pipelines/Tanks	Anticipate liquids in field work plans; include spill response plans in RD/RAWPs.			No issues identified at this time.
WSR-030: NRDWL Barrier (RCRA vs. ET-Mono)	Draft closure plan and L-8 table show ET-Mono; no mitigation.			Ecology comments on the draft closure plan indicates their acceptance of an ET Barrier. However, final acceptance of the ET cap requires public review and an associated permit modification.
WSR-031: NRDWL Cap - Learning Curve	Award contract which considers previous environmental barrier construction experience in the selection criteria. Assign full-time QA contractor to oversee barrier construction.			These criteria will be evaluated during contract award, which starts after the Closure Plan is submitted to the public for review.

PROJECT BASELINE PERFORMANCE Current Month (\$M)

WBS 040/ RL-0040 Nuclear Facility D&D	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
U Plant/Other	5.3	5.1	4.0	(0.1)	-3.0	1.2	22.6
Outer Zone	3.3	3.6	2.1	0.3	9.9	1.4	40.2
ARRA Total	8.5	8.7	6.1	0.2	1.9	2.6	29.9
Base	<u>1.7</u>	<u>1.7</u>	<u>1.7</u>	<u>0.0</u>	0.5	<u>-0.0</u>	-2.8
Total	10.2	10.4	7.8	0.2	1.7	2.5	24.5

ARRA

CM Schedule Performance: (+\$0.2M/+1.9%)

ARRA RL-0040.R1.1 U Plant/Other D&D (-\$.1M) is within reporting thresholds.

ARRA RL-0040.R1.2 Outer Zone D&D (+\$0.3M) positive schedule variance is a result of continuing the modified approach to remediating the soils in the BC Control Area (+\$0.5M). To expedite clearing the bulk excavation portions of the site, a process of short-term onsite stockpiling was initiated. Stockpiling has enabled a full utilization of haul capability since remediation has moved on to removal of more

widely spaced spot contamination. This gain is offset by delays in starting pipeline remediation activities (-\$0.2M).

CM Cost Performance: (+\$2.6M/+29.9%)

ARRA RL-0040.R1.1 U Plant/Other D&D (+\$1.2M) is within reporting thresholds.

ARRA RL-0040.R1.2 Outer Zone D&D (+1.4M) The favorable cost variance is primarily due to the short-term stockpile approach in BCCA and the correction of October ERDF charges, which were applied at the higher FY 2010 rate.

Base

CM Schedule Performance: (\$0.0M/0.5%)

N/A – Variance is within reporting threshold.

CM Cost Performance: (-\$0.0M/-2.8%)

N/A – Variance is within reporting threshold.

Contract-To-Date (\$M)

WBS 040/ RL-0040 Nuclear Facility D&D	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
U Plant/Other	134.5	130.2	115.8	(4.3)	-3.2	14.4	11.1	196.7	185.7	11.0
Outer Zone	50.9	51.7	41.2	0.8	1.5	10.5	20.4	83.0	78.3	4.7
ARRA Total	185.4	181.9	157.0	(3.5)	-1.9	24.9	13.7	279.8	264.1	15.7
Base	52.4	52.5	46.6	0.2	0.3	5.9	11.3	984.7	971.6	13.2
Total	237.8	234.4	203.5	(3.4)	-1.4	30.9	13.2	1,264.5	1,235.6	28.9

Numbers are rounded to the nearest \$0.1M.

ARRA

CTD Schedule Performance: (-\$3.5M/-1.9%)

ARRA RL-0040.R1.1 U Plant/Other D&D (-\$4.3M)

The negative schedule variance is due to late award of the grout contract for U Canyon (-\$3.5M), delays with the 200E Administration Buildings (-\$2.2M) due to bio-hazard and radiological control issues. This is offset by accelerating 209E demolition preparation, mobilization, and asbestos abatement (+\$1.2M) and asbestos abatement for 200 West (+0.2M).

ARRA RL-0040.R1.2 Outer Zone D&D (+\$0.8M)

The contract-to-date favorable schedule variance primary contributors that exceed the reporting thresholds include accelerated progress on BC Control Area (+\$2.7M) and CW-3 waste sites (+\$0.2M), offset by delays in MG-1 and outer zone pipelines (-\$1.5). Several ALE towers have not been released for work causing a negative schedule variance (-\$0.2M) and delays with cultural/ecological reviews on the North Slope (-\$0.2M).

CTD Cost Performance: (+\$24.9M/+13.7%)

ARRA RL-0040.R1.1 U Plant/Other D&D (+\$14.4M)

The favorable cost variance is largely due to favorable performance of the Cold and Dark teams and the Sampling and Characterization/Waste Identification Form teams (D4) (+\$3.1M), G&A and direct distributable allocations (+\$6.8M), less for Program Management than planned (+\$1.1M), efficiencies at U Canyon (D4) (+\$2.7M), less resources than planned for C-3 Sampling (+\$0.7M) and 200E

Administration (+\$1.7M), lower than planned costs for capital equipment (D4) (+\$3.5M), less asbestos abatement required for 200 West buildings (+\$2.2M), offset by increased material and equipment costs, increased use of masks and respirators due to the unexpected asbestos levels in the ancillary buildings in U Ancillary (D4) (-\$7.2M), coupled with increased insulator staff and overtime to recover schedule, 209E Project (-\$0.3M).

ARRA RL-0040.R1.2 Outer Zone D&D (+\$10.5M)

The favorable cost variance is due to efficiencies in ALE and North Slope Facilities D&D (+\$4.5M) and Outer Area waste sites (+\$7.1M). The waste site favorable cost-to-date variance is primarily due to an O-Zone Remove, Treat, and Dispose (RTD) Waste Sites adjustment (pass back) to ERDF waste disposal costs reflecting the operational efficiencies of the super dump trucks.

In addition, a negative cost variance is associated with the disposition of railcars (-\$0.1M) due to unplanned costs for nondestructive analysis of the cars and increase costs for the 212N/P/R Project (-\$1.0M) due to the walls of the basins being much thicker than estimated.

Base

CTD Schedule Performance: (+0.1M/+0.3%)

Within reporting threshold.

CTD Cost Performance: (+\$5.9M/+11.3%)

Balance of Site (facilities and others) (+\$5.8M). The favorable cost variance is associated with recognized efficiencies for demolition of the Industrial 7 Project (D4) (+\$0.6M) as a result of utilization of existing site equipment and materials, surveillance and maintenance costs (D4) (+\$1.0M) less than expected, completed the sampling of Cell 30 with less resources than planned (+\$0.9M), Program Management utilizing less resources (+\$1.2M), capital equipment (+\$0.3M), Usage Base Services (+\$0.1M), and underrun in G&A and direct distributable allocations (+\$1.6M). In addition, minor accounts outside the threshold (+\$0.2M).

Waste Sites (+\$0.1M) is due to less extensive regulatory support labor required for the U Zone agreement-in-principle, an inadvertent overstatement of performance related to the 600 Central Landfill barrier in March 2010, and the completion of a confirmatory sampling waste site located within BC Controlled Area, offset by the costs associated with rework of CW-3 pipelines 600-286-PL and 600-287-PL.

Contract Performance Report Formats are provided in Appendix A and Appendix A-1.

FUNDS vs. SPEND FORECAST (\$M)

WBS 040/RL-0040 Nuclear Facility D&D	FY2011		
	Projected Funding	Spending Forecast	Variance
ARRA	142.6	127.2	15.5
Base	<u>28.4</u>	<u>22.5</u>	<u>6.0</u>
Total	171.0	149.6	21.5

Numbers are rounded to the nearest \$0.1M.

Funds/Variance Analysis

Funding reflects FY2010 carryover and FY2011 new budget authority.

The current Variance of Projected Funding to Spending Forecast results in a positive variance of \$21.3M which is comprised of the following:

Projected over run of \$3.5M in ARRA Scope and a projected under run of \$2.8M in Base Scope. In addition to \$18.8M of ARRA Management Reserve (consisting of \$3.8 for Risk and \$15M for Funds Reserve) along with \$3.5M in Base Management Reserve (consisting of \$3.5 in Risk Reserve).

Critical Path Schedule

Critical path analysis can be provided upon request.

Estimate at Completion (EAC)

The BAC and EAC now include FY2009 through FY2018, the PRC contract period.

Baseline Change Requests

BCR-040-11-001R0, Disposition of 6652 PH- Fire Protection Pump House

BCRA-PRC-11-008R0, General Administrative Changes for November 2010

MILESTONE STATUS

None currently identified.

SELF-PERFORMED WORK

The Section H. clause entitled, Self-Performed Work, is addressed in the Monthly Report Overview.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.