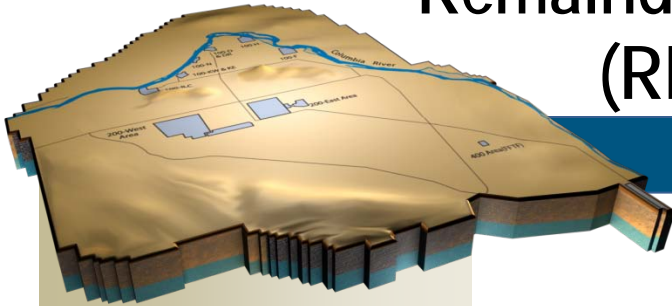


Section E Nuclear Facility D&D, Remainder of Hanford (RL-0040)

Monthly Performance Report



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Demolition of 284E Boiler

May 2011
CHPRC-2011-05, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

American Recovery and Reinvestment Act (ARRA)

Completed grouting of the 221U Canyon facility voids in the north electrical and piping gallery. Efforts continued in preparation for grouting activities in the remaining areas of the facility. Material has been staged and preparations are underway for construction of the structural grout bulkheads for the rail tunnel. Completed inspection of the Cell 30 Tank D-10 process vessel and continued preparations for vessel retrieval. Began transportation container weight recertification and resolution of lifting lug welding modification.

The 209E facility completed the removal of HO-160 and began cutting tank 104. Completed Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) implementation document changes.

Continued with demolition and load-out activities of 284E Power House Continued abatement activities in 284W Power House. Completed demolition activities of 284W Crusher House and Conveyor.

Cleanup of 106 North Slope debris pile sites continued; began decommissioning North Slope wells.

The lift and haul contractor has mobilized and the two locomotives have been transported and off loaded at the B Reactor. The shipment of the flatcar to the Environmental Restoration Disposal Facility (ERDF) is complete. Preparation (fixing, draining/solidification of the water) of the 8,000 gallon tank car is complete. The Shipping Evaluation Checklist (SEC) for the 8,000 gallon tanker was approved by RL. The tiedown calculations for the tankers are being finalized. The double shell tank car is being finalized for disposition. Three of the cask cars are prepped and ready for shipment to ERDF.

Remediation activities continued in the Outer Zone at BC Control area and Model Group (MG)-1 waste sites. BC Control Area removed approximately 38,500 tons of soil from the stockpile in May.

Base

Planned surveillance and maintenance (S&M) activities continue. Continued initial beryllium characterization sampling at REDOX, 231Z, and 222T.

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 percent 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	5	N/A
Total Recordable Injuries	1	10	05/01 200W D&D worker sustained a laceration to the left shin while removing a pipe hanger. Worker was transported to Kadlec for evaluation. The worker received sutures and pain medication. Worker was then released to return to work without restriction. (21936)
First Aid Cases	2	60	05/04 200W NCO was cutting conduit with a sawzall. The worker was wearing a half mask and safety glasses at the time of the event. A foreign body went into the eye. (21944) 05/19 284E Mechanic was walking and stepped on a large rock causing worker to roll ankle. (21986)
Near-Misses	0	1	N/A

KEY ACCOMPLISHMENTS

ARRA – U PLANT/OTHER DECONTAMINATION AND DECOMMISSIONING (D&D)

- U Plant Regional Closure Zone (U Ancillary Facilities D&D)
 - Completed site surveys, equipment decontamination, and site stabilization
- U Canyon Demolition and Cell 30 Disposition
 - Completed grouting of the 221U Canyon facility voids in the north electrical and piping galleries
 - Completed inspection of the Cell Tank D-10 process vessel and continued preparations for vessel retrieval. Began transportation container weight recertification and resolution of lifting lug welding modification.
- 200E Project
 - Continued demolition and load-out activities of 284E Power House
- 209E Project
 - Completed a shipment of standard waste boxes (SWBs). Completed removal of the HO-230 Hood sufficient to allow removal of Mis Room tanks. Continued removal of HO-160.
 - Completed CERCLA implementation document changes
 - Began tank cutting activities with Tank 104
 - Began work to relocate the radiological control station from the administrative portion of the facility to the trailer to support beginning asbestos abatement June 8 and removal of the HLAN line June 16 for completion of cold and dark
- 200W Project
 - Continued asbestos abatement activities and hazardous material removal at 284W
 - Completed demolition activities of 284W Crusher House and lower conveyor and began demolition of 284W Coal Pit wall structures

ARRA – OUTER ZONE D&D

- BC Controlled Area (BCCA) Waste Site Remediation
 - Continued removal of soil from the stockpile using super dump trucks with approximately 438,500 tons cumulative-to-date of soil removed from BCCA and transferred to ERDF
 - Continued radiological Multi-Agency Radiation and Site Investigation Manual (MARSIM) downpost surveys with localized spot removal. Approximately 55% of the MARSIM downpost zones have been completed.
- MG-1
 - Waste sites 600-40, 600-282, and 600-220 verification sampling results indicated no further excavation was required. Waste site 600-282 and 600-40 backfill is complete. Waste site 600-220 backfill is anticipated in June.
 - Pipeline 200-W-147-PL sampling validated excavation is complete; backfill activities commenced in April and are continuing.
 - Waste sites 600-281 excavation activities were performed in April. Post excavation sampling occurred in late May. Preliminary evaluation indicates additional excavation is necessary.
 - Preparations to perform confirmatory sampling of ditch 216-S-16D are ongoing with field activities anticipated to occur in early June.
 - Initial excavation of waste site 216-S-26 is complete. Verification sampling was performed in May, with results anticipated in early June.
 - Waste site 600-228 initial excavation was performed in May. Verification sampling is anticipated in early June.

- NORTH SLOPE
 - Continued 106 Debris Retrieval and Waste Disposal
 - Began decommissioning North Slope wells
- Railcars
 - Liquid draining and dry grouting complete for all cars. Final preparation of railcars for shipment continues.
 - The contractor for lift and haul of the railcars is on site and working
 - The two locomotives were delivered to B Reactor
 - SEC for the 8,000 gallon tanker was approved by RL
 - Flatcar disposition to ERDF is complete

Base

- Beryllium sampling/characterization continued in REDOX, 231Z, and 222T




MAJOR ISSUES




Issue –There is a potential for a lack of available flyash due to the high water levels and the increase in hydro-electric power generation.





















Corrective Action – Additional sources for acceptable flyash are being actively investigated.

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 accepted without mitigation.			Probability is increasing; determining impacts to cost and schedule.
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.			A BCR has been approved and implemented to authorize completion of BCCA Zone A remediation.
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.			There is an ongoing concern about any new changes; this is being watched closely. Where appropriate, the culturally sensitive portion of a waste site is being identified and work is being performed in non-sensitive areas.
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	5.6	5.2	6.0	(0.4)	-6.5	(0.8)	-14.8
Outer Zone	<u>3.8</u>	<u>3.7</u>	<u>3.8</u>	<u>(0.0)</u>	-1.3	<u>(0.1)</u>	-3.0
ARRA Total	9.4	8.9	9.8	(0.4)	-4.4	(0.9)	-9.9
Base	<u>1.4</u>	<u>1.3</u>	<u>1.2</u>	<u>(0.1)</u>	-8.8	<u>0.0</u>	2.5
Total	10.7	10.2	11.1	(0.5)	-5.0	(0.9)	-8.4

Numbers are rounded to the nearest \$0.1M

ARRA

CM Schedule Performance: (-\$0.4M/-4.4%)

ARRA RL-0040.R1.1 U Plant/Other D&D (-\$0.4M) The variance is within threshold.

ARRA RL-0040.R1.2 Outer Zone D&D (-\$0.0M) The variance is within threshold.

CM Cost Performance: (-\$0.9M/-9.9%)

ARRA RL-0040.R1.1 U Plant/Other D&D (-\$0.8M) The unfavorable cost variance is largely due to the U Canyon (-\$0.5M) additional core drills being required and additional overtime being worked to recover schedule. In addition, higher costs for the month for the 209E Project (-\$0.5M) were incurred due to costs associated with inventory reduction activities. Also, minor accounts that are outside the threshold (+\$0.2M).

ARRA RL-0040.R1.2 The variance is within threshold.

Base

CM Schedule Performance: (-\$0.1M/-8.8%)

Variance is within reporting threshold.

CM Cost Performance: (+\$0.0M/+2.5%)

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	169.8	165.6	156.0	(4.2)	-2.5	9.6	5.8	200.0	187.4	12.6
Outer Zone	79.4	74.4	64.0	(5.0)	-6.3	10.3	13.9	98.0	84.5	13.5
ARRA Total	249.2	240.0	220.0	(9.2)	-3.7	20.0	8.3	298.0	271.9	26.1
Base	60.5	60.7	54.2	0.3	0.5	6.5	10.7	758.0	743.9	14.1
Total	309.6	300.7	274.2	(8.9)	-2.9	26.4	8.8	1,056.1	1,015.8	40.2

Numbers are rounded to the nearest \$0.1M

ARRA

CTD Schedule Performance: (-\$9.2M/-3.7%)

ARRA RL-0040.R1.1 U Plant/Other D&D (-\$4.2M) negative schedule variance is due to late award of the grout contract for U Canyon (-\$2.9M) and delays with the 200E Administration Buildings (-\$0.6M) due to bio-hazard and radiological control issues. Limited resources has also delayed 200W Administration Buildings (-\$0.6M). Also minor accounts outside the threshold (-\$0.1M).

ARRA RL-0040.R1.2 Outer Zone D&D (-\$5.0M) unfavorable schedule variance is primarily due to delay of work on selected waste sites pending finalization of site priorities (-\$3.1M); delays with cultural/ecological reviews on the North Slope (-\$0.6M) and disposition of the 212N Railcars (-\$1.2M) and minor accounts outside the threshold (-\$0.1M).

CTD Cost Performance: (+\$20.0M/+8.3%)

ARRA RL-0040.R1.1 U Plant/Other D&D (+\$9.6M) 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) (+\$3.7M), overhead allocations (+\$10.9M), less for Program Management than planned (+\$1.6M), less resources than planned for C-3 Sampling (+\$0.7M), lower than planned costs for capital equipment (D4) (+\$2.7M), less asbestos abatement required for 200W buildings (+\$3.7M), 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) (-\$8.1M), coupled with increased insulator staff and overtime to recover schedule, and 200E Administration (-\$0.5M) and 209E Project delays (-\$1.7M), additional resources being applied at U Canyon (D4) to regain schedule (-\$0.8M), Usage Based Services (-\$2.8M). Minor accounts not within threshold (+\$0.2M).

ARRA RL-0040.R1.2 Outer Zone D&D (+\$10.3M) favorable cost variance is due to efficiencies in ALE and North Slope Facilities D&D (+\$5.0M) and Outer Area waste sites (+\$6.8M). The waste site favorable cost-to-date variance is primarily due to an O-Zone RTD Waste Sites adjustment (pass back) to ERDF waste disposal costs reflecting the operational efficiencies of the super dump trucks. Within the waste sites area, this favorable cost variance is partially offset by higher than planned costs associated with remediation of pipelines. A negative cost variance is associated with increased costs for the 212N/P/R Project (-\$1.0M) due to the walls of the basins being much thicker than estimated. Minor accounts outside the threshold (-\$0.5M).

Base

CTD Schedule Performance: (+0.3M/0.5%)

All Variances are within Thresholds.

CTD Cost Performance: (+6.5M/+10.7%)

Balance of Site (facilities and others) (+\$6.5M) 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) less than expected (+\$1.5M), completion of the sampling of Cell 30 with less resources than planned (+\$0.9M), Program Management utilizing less resources (+\$1.6M), capital equipment (+\$0.3M), Usage Base Services (+\$0.2M), and underrun in overhead allocations (+\$1.4M).

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

Estimate at Completion (EAC)

The BAC and EAC include fiscal year FY2009 through FY2018.

The changes in EAC from April to May, for both ARRA and Base, are within reporting thresholds.

**FUNDS vs. SPEND FORECAST
(\$M)**

WBS 040/RL-0040 Nuclear Facility D&D	FY2011		
	Projected Funding	Spending Forecast	Spend Variance
ARRA	142.6	138.1	4.5
Base	18.5	18.5	-0.1

Numbers are rounded to the nearest \$0.1M.

Funds/Variance Analysis

Funding includes FY2010 carryover and FY2011 new Budget Authority. "Projected Funding" for Base PBSs was changed in May, 2011 to reflect a reallocation among PBSs and a reduction of \$7.3 to align with the final FY 2011 Appropriations Act (RL-0040 Base: -\$6.1M).

Critical Path Schedule

Critical path analysis can be provided upon request.

Baseline Change Requests

BCR-PRC-11-001R0R0, Remove FY2011 Budget for 222-S Laboratory Support

BCRA-000-11-0035R0, General Administrative Changes for May 2011

BCR-PRC-11-034R0, FFTF and REDOX Roof Repair

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.