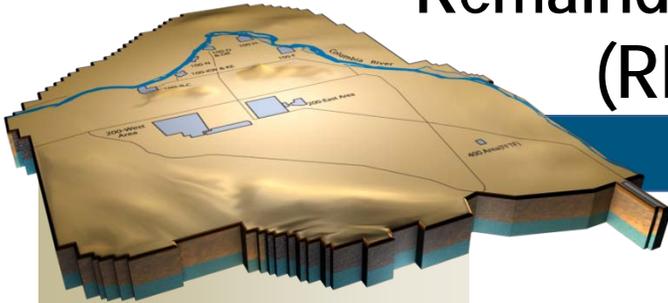


Section E Nuclear Facility D&D, Remainder of Hanford (RL-0040)

Monthly Performance Report



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HO-200 Hood Removal in 209E

April 2011
CHPRC-2011-04, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

American Recovery and Reinvestment Act (ARRA)

Continued Upper Arid Lands Ecology (ALE) closeout paperwork and completed power pole removal.

Grouting of the 221U Canyon facility voids progressed with the successful grout placement demonstration in the north electrical gallery and north piping gallery. Efforts continued in preparation for grouting activities in the remaining areas of the facility. Completed core drilling of remaining penetrations for grout placement inside the canyon. Material has been staged and preparations are underway for construction of the structural grout bulkheads for the rail tunnel.

The 209E facility completed the verification of all tanks as dry and empty. Completed a shipment of Standard Waste Boxes (SWB). Completed removal of the HO-200 Hood and began removal of HO-160.

Continued with demolition of 284E Power House and load-out activities of the 284E Power House.

Continued abatement activities in 284W Power House. Began demolition activities of 284W Crusher House and Conveyor. Cleanup of 106 North Slope debris pile sites continued.

The lift and haul contractor has submitted all tie-down calculations (two of four have been approved by RL), and is preparing for mobilization the first week of May. The shipment of the flatcar to the Environmental Restoration Disposal Facility (ERDF) was initiated and will complete the first week of May. Preparation (fixing, draining/solidification of the water) of the railcars for shipment to ERDF and B Reactor is complete for all but the 8,000 gallon tank car. The wet grouting is complete. The Shipping Evaluation Checklists and Tiedown Calculations for the three well cask cars were approved by RL. The tank car Shipping Evaluation Checklists are being finalized.

Remediation activities continued in the Outer Zone at BC Control area and Model Group (MG)-1 waste sites. BC Control Area removed approximately 32,500 tons of soil from the stockpile in April.

Base

Planned surveillance and maintenance (S&M) activities continue. Initial beryllium characterization sampling continues at REDOX, 231Z, and 222T. Beryllium sampling of 291AE was conducted with results showing the work areas of the building as beryllium free.

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	0	9	N/A
First Aid Cases	5	63	<p>4/8 A D&D worker from 209E was placing cribbing under a box when worker sustained a superficial laceration to the left palm. (21893)</p> <p>4/19 A Laborer was squatting when worker stood and put weight on right knee. The knee popped and locked up. (21915)</p> <p>4/20 A Rigger from 284W felt a particulate in right eye from unknown cause. (21924)</p> <p>4/22 An Electrician from 200W experienced pain in groin from regular duties during course of day. (21920)</p> <p>4/28 A Rigger from 200W sneezed causing neck pain. (21930)</p>
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
 - Grouting of the 221U Canyon facility voids progressed with the successful grout placement demonstration in the north electrical gallery and north piping gallery.
 - Completed core drilling of remaining penetrations for grout placement inside the canyon
 - Construction of the structural grout bulkheads for the south electrical and piping galleries was completed.
- 200E Project
 - Continued demolition and Load-Out activities of 284E Power House
- 209E Project
 - Completed a shipment of SWBs. Completed removal of the HO-200 Hood. Began removal of HO-160 and work planning for demo preparation and HO-240 activities. Completed the tank cutting package; held Hazard Review Board and obtained approval.
- 200W Project
 - Continued Asbestos Abatement activities at 284W
 - Continued Hazardous Material Removal at 284W
 - Completed Asbestos Abatement activities in 284W Crusher House Conveyor
 - Completed size reduction and load-out of 284W Bag House and stacks
 - Began demolition activities of 284W Crusher house and Conveyor

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 400,000 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 30% of the MARSIM downpost zones have been completed.
- MG-1
 - Additional depth sampling for site 600-40 was performed in April. Results are anticipated in early May. Post excavation evaluation of samples for waste sites 200-W-33 and 600-218 validated remediation was completed. Initial seeding of 200-W-33 was previously performed in March. Reseeding of waste site 600-218 is scheduled for the fall of 2011.
 - Pipeline 200-W-147-PL sampling validated excavation is complete; backfill activities commenced in April.
 - Waste sites 600-220, 600-281 and 600-282 excavation activities were performed in April. Post excavation sampling is anticipated to occur in May.
 - Waste Site 600-65 investigative sampling was completed; the closure report is being reviewed.
 - Remediation of waste site 216-S-26 excavation is ongoing with an anticipated completion in May.
 - Waste site 600-228 preparations for excavation are in process with excavation anticipated to occur in May.

- ALE D&D
 - Completed Power Pole removal
- NORTH SLOPE
 - Continued 106 Debris Retrieval and Waste Disposal
 - Complete Hanford Reserve National Monument Areas 13 and 18
- Railcars
 - Liquid draining and dry grouting complete for all but one car. Preparation of railcars for shipment continues.
 - The contractor for lift and haul of the railcars has submitted all tie-down calculations.
 - B Reactor continues site work for receiving railcar
 - SEC and tiedowns for cask cars approved by RL
 - Flatcar disposition to ERDF initiated

Base

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

MAJOR ISSUES

Issue – RL-0040 Deactivation, Decommission, Decontamination, and Demolition is experiencing a lack of available resources (Riggers) which is impacting project completion. Since Mission Support Alliance, LLC (MSA) allowed Riggers to take the voluntary Reduction of Force, we are short of resources required to support D&D work in RL-0040. MSA has not brought on temporary workers to back fill and it is now impacting the completion of ARRA work scope.

Corrective Action – Revisit site priorities internally to decide which jobs receive the resources (PFP, W&FMP, 100K D&D or Central Plateau D&D).

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	6.6	5.5	7.3	(1.1)	-16.8	(1.8)	-32.1
Outer Zone	<u>4.8</u>	<u>3.3</u>	<u>4.5</u>	<u>(1.4)</u>	-30.2	<u>(1.2)</u>	-35.9
ARRA Total	11.4	8.8	11.8	(2.5)	-22.4	(3.0)	-33.5
Base	<u>1.4</u>	<u>1.6</u>	<u>1.1</u>	<u>0.2</u>	15.6	<u>0.4</u>	27.5
Total	12.7	10.4	12.9	(2.3)	-18.4	(2.5)	-24.4

Numbers are rounded to the nearest \$0.1M

ARRA

CM Schedule Performance: (-\$2.5M/-22.4%)

ARRA RL-0040.R1.1 U Plant/Other D&D (-\$1.1M) The unfavorable schedule variance is due to delays with the 209E Project (-\$0.9M) due to skin contamination, and 200-West Adm Project (-\$0.5M). Issues with acquiring critical resources from MSA has slowed the 200-West Adm Project. The 200-E Adm Project has a positive variance (+\$0.3M) within threshold.

ARRA RL-0040.R1.2 Outer Zone D&D (-\$1.4M) Outer zone waste sites unfavorable schedule variance is primarily related to earlier completion of scope scheduled for April (-\$0.9M), weather and equipment maintenance issues on BC Control Area (-\$0.3M) and work on hold pending resolution of site priorities (-\$0.4M).

Balance of Site unfavorable schedule variance is due to delays with completing the Transportation Documents on the 212 Disposition of Railroad Cars (-\$0.5M) which is partially offset by the favorable schedule variance for North Slope (+\$0.2M).

CM Cost Performance: (-\$3.0M/-33.5%)

ARRA RL-0040.R1.1 U Plant/Other D&D (-\$1.7M) The unfavorable cost variance is largely due to the mobilization/startup costs for the U Canyon (-\$1.1M) grouting contract as well as additional core drills being required. In addition, recovery efforts for the skin contamination at 209-E drove higher costs for the month (-\$0.5M). Also, minor accounts that are outside the threshold (-\$0.1M)

ARRA RL-0040.R1.2 Outer Zone D&D (-\$1.2M) unfavorable cost variance is primarily due to higher costs of seeding waste sites as a result of adding a mulch layer, which prevented loss of seed during subsequent periods of wind, (-\$0.3M) and reduced productivity due to winds and equipment maintenance issues (-\$0.8M).

Base

CM Schedule Performance: (+\$0.2M/+15.6%)

Variance is within reporting threshold.

CM Cost Performance: (+\$0.4M/+27.5%)

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	164.2	160.4	150.0	(3.9)	-2.3	10.4	6.5	200.6	188.3	12.2
Outer Zone	75.6	70.6	60.2	(5.0)	-6.5	10.4	14.8	98.0	85.1	12.9
ARRA Total	239.8	231.0	210.2	(8.8)	-3.7	20.9	9.0	298.6	273.4	25.2
Base	59.1	59.5	53.0	0.4	0.7	6.5	10.9	757.6	743.9	13.7
Total	298.9	290.5	263.2	(8.4)	-2.8	27.3	9.4	1,056.2	1,017.3	38.9

Numbers are rounded to the nearest \$0.1M

ARRA

CTD Schedule Performance: (-\$8.8M/-3.7%)

ARRA RL-0040.R1.1 U Plant/Other D&D (-\$3.9M) negative schedule variance is due to late award of the grout contract for U Canyon (-\$3.0M) and delays with the 200E Administration Buildings (-\$0.9M) due to bio-hazard and radiological control issues. Limited resources has also delayed 200W Administration Buildings (-\$0.6M). This is offset by accelerating 209E demolition preparation, mobilization, and asbestos abatement (+\$0.6M).

ARRA RL-0040.R1.2 Outer Zone D&D (-\$4.9M) unfavorable schedule variance is primarily due to delay of work on selected waste sites pending finalization of site priorities (-\$2.9M); weather and equipment impacting productivity (-\$0.4M); delays with cultural/ecological reviews on the North Slope (-\$0.2M) and disposition of the 212N Railcars (-\$1.1M) and minor accounts outside the threshold (-\$0.3M).

CTD Cost Performance: (+\$20.9M/+9.0%)

ARRA RL-0040.R1.1 U Plant/Other D&D (+\$10.4M) 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) (+\$3.9M), overhead allocations (+\$10.1M), less for Program Management than planned (+\$1.5M), efficiencies at U Canyon (D4) (+\$0.8M), 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 (+\$3.3M), 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) (-\$8.0M), coupled with increased insulator staff and overtime to recover schedule, and 200E Administration (-\$0.2M) and 209E Project delays (-\$0.9M), Usage Based Services (-\$2.6M). Minor accounts not within threshold (-\$0.9M).

ARRA RL-0040.R1.2 Outer Zone D&D (+\$10.4M) favorable cost variance is due to efficiencies in ALE and North Slope Facilities D&D (+\$5.2M) and Outer Area waste sites (+\$6.7M). 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 (-\$0.4M).

Base

CTD Schedule Performance: (+0.4M/+0.7%)

All Variances are within Thresholds.

CTD Cost Performance: (+\$6.5M/+10.9%)

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 (FY) 2009 through FY2018.

The ARRA EAC decreased \$4.5M from the prior month primarily due to not including waste sites 600 OCL, 200-E-109, 200-E-126-PL and 200-E-127-PL in the ARRA spend forecast. These sites are not expected to be remediated during the ARRA time period as they do not contribute to the foot print reduction initiative.

The Base EAC increased from the prior month primarily due to account for the addition of the REDOX roof into the spend forecast (\$0.5M), implementation of the deferral of ARRA waste sites into Base, and an \$0.8M increase associated with the Displaced Workers Medical Benefits that will occur from FY2012 through FY2014 as a result of an RL approved reduction in force to be implemented in September 2011.

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

WBS 040/RL-0040 Nuclear Facility D&D	FY2011		
	Projected Funding	Spending Forecast	Spend Variance
ARRA	142.6	140.5	2.2
Base	24.6	18.4	6.2

Numbers are rounded to the nearest \$0.1M.

Funds/Variance Analysis

Funding includes FY2010 carryover and FY2011 new Budget Authority.

Critical Path Schedule

Critical path analysis can be provided upon request.

Baseline Change Requests

BCR-PRC-11-021R0, Transfer of Workforce Restructuring to ARRA Only
BCRA-000-11-002R0, PC&PI Functional Realignment

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.