

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

Monthly Performance Report

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284E Powerhouse Asbestos Removal Preparations

October 2010 DOE/RL-2010-126-10, Rev. 0 Contract DE-AC06-08RL14788 Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

American Recovery and Reinvestment Act (ARRA)

Load out of 224U and 224UA structures demolition debris is continuing

Upper Arid Lands Ecology (ALE) demolition activities continue. The demolition of 6636 and 623-A was completed. The demolition of 6633 commenced. ALE debris pile site cleanup activities resumed.

Asbestos abatement activities continued in the operating and pipe galleries at U Canyon. Wire rope replacement and follow-up testing were completed on the 10-ton crane. Package preparation continues toward haul road, core drilling, and bulkhead installation in support of grouting activities.

Beryllium samples have been taken in the canyon and sent for analysis toward down posting the canyon as a potential beryllium contaminated facility

Loadout of the 272E Building was completed. Demolition of the 284E coal conveyor and crusher house is continuing. Asbestos abatement in 284E continues. Cold and dark beryllium sampling and characterization activities on the 200 West structures continued. The explosive demolition contract was awarded and detail planning is progressing.

Cleanup of North Slope debris pile sites continues

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) documentation for railcars progressing as planned; the contract to Fluor Federal Services (FFS) was awarded and work planning for rail car inspection continues

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 26,000 tons of soil in October; approximately 84 acres of BC Control Area, Zone A, have been cleared to date. Initial excavation at CW-3 waste sites 216-N-4 and 216-N-6 have been verified complete by sample results, the closure documentation is being prepared.

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

Base

Planned surveillance and maintenance (S&M) activities continue. Initial beryllium characterization sampling was completed at 209E, PUREX, and 224T.

Planning and remediation of failed Confirmatory Sampling No Further Action (CSNFA) sites in MG-1 has been initiated

B-Plant Exhaust System was shutdown, the pre-filters were replaced and the system was restored to normal operation

In CW-3, remediation has been performed to remove pipeline 600-286-PL and to begin removal of 600-287-PL. Approximately 8,400 tons of soil was removed from CW-3 pipeline sites during October.



EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
10-EMS- D&D-OB2-T2	Mitigate spill impacts	Develop spill management tools for routine activities (building demolition and S&M)	03/31/10	Complete
		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 predesignations 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	3	n/a
Total Recordable Injuries	0	3	n/a
First Aid Cases	4	86	10/14/10 An RCT from S&M working on the B Plant filter removal activity received a blister on finger. Proper PPE was being worn. Transported to AMH for evaluation and was released without restrictions. (21399) 10/13/10 A D&D worker from 209E wrenched his back leaning on hand rail when it gave way. He reported he twisted his back and shoulder to avoid falling. Worker reported the injury 10/18 and was taken to AMH for evaluation. The diagnosis was low back and left shoulder pain. Worker returned to work with restrictions of "no lifting more than 10 lbs with left arm. No use of left arm above level of heart". (21402) 10/18/10 Teamster in U Plant was cleaning parts with a pressure washer when arm got to close to the water stream. The high pressure water stream caused a laceration to the right forearm. Worker was taken to AMH where wound care was provided and worker was released without restrictions. (21404) 10/19/10 A U Canyon RCT fell against a cover-block lifting-bail during canyon entry. The result was a contused right forearm. Worker was transported to AMH for evaluation and released without restrictions. (21405)
Near- Misses	0	0	n/a



KEY ACCOMPLISHMENTS

ARRA – U PLANT/OTHER D&D

- U Plant Regional Closure Zone (U Ancillary Facilities D&D)
 - o Continued load out activities on 224U and 224UA
- U Canyon Demolition and Cell 30 Disposition
 - o A contract has been issued for the haul road for the grout plant
 - o Design is finishing and fabrication starting for the cask needed to ship the T-10 tank to T Plant with an expected delivery date of December 16, 2010
 - o Preparations are in progress for the insertion of absorbent and closure of the D-10 tank in cell 20 Asbestos abatement activities continue in the pipe and operating galleries
- 200E Project
 - o Initiated asbestos abatement in 284E
 - o Completed final clean up and demobilization at 272E
 - o Continued demolition of conveyor and crusher house at 284E
- 209E Project
 - o Continued 209E characterization and cold and dark planning activities
 - Began work on readiness assessment process, including, implementation of the now approved Design Safety Analysis (DSA) and Notice of Construction (NOC)
 - o Obtained nondestructive analysis (NDA) support personnel for the project
 - o Began internal inspection of tanks to verify the tanks are dry for removal activities
 - o Began mock-up work on tank cutting activities
- 200W Project
 - Continued with characterization activities
 - Continued cold and dark activities
 - o Completed the demolition of X-8

ARRA – OUTER ZONE D&D

- BC Controlled Area Waste Site Remediation
 - o Remediation using super dump trucks continued with approximately 251,000 tons cumulative to date of soil removed and transferred to ERDF
- 200-CW-3 Waste Sites
 - o Excavation of site 216-N-4 is complete with approximately 36,350 tons of soil (cumulative) removed and transferred to ERDF
 - o Excavation of remote, treat, and dispose (RTD) site 216-N-6 is complete with approximately 8,100 tons of soil (cumulative) removed and transferred to ERDF
 - o The response action completion documentation for waste site 216-N-4 and 216-N-6 is in preparation
 - The response action completion documentation for waste site 216-N-1 was approved with closure documentation forwarded to regulators for approval; CHPRC is incorporating regulator comments
 - o Waste sites 600-285PL, 2607N, 2607P, 2607R, 200-N-3, UPR-200-N-1, and UPR-200-N-2 have been remediated/evaluated with the reclassification approved



MG-1

- o 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
- O Site 600-37 is a CSNFA site with confirmatory sampling completed. Closure documentation has been prepared and is in final review within CHPRC prior to submittal to RL.
- o Waste sites 600-36, 600-38, 600-218, 200-W-33, UPR-600-12, and 600-222 were originally planned CSNFA, however sampling of the sites indicated some excavation will be required
- O Waste site 600-275 post-excavation sample results indicate that further excavation is required. This excavation is expected to occur in November.
- o Excavation of waste site 600-222 is in process with approximately 150 tons shipped to ERDF
- o 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). The verification sampling is planned in November.
- o The Remedial Action Work Plan (RAWP) that was updated to include 37 waste sites added with the approved Action Memorandum (AM) has been approved
- The additional excavation of site 600-36 that was performed in August and evaluation of sampling results in September indicate no further excavation necessary. The closure documentation is in preparation.
- o CSNFA sampling is continuing at the Old Central Shop Area site
- ALE D&D
 - o Continued cold and dark and characterization on the remaining upper ALE facilities
 - o Complete demolition of 6636 and 623-A on upper ALE
- NORTH SLOPE
 - o Initiated debris pile cleanup activities
- RAILCARS
 - o RAWP submitted to RL for review
 - o Engineering Evaluation / Cost Analysis (EE/CA) submitted to EPA for review
 - Contract awarded to FSS

Rase

Based on verification samples, additional excavation of 600-38 performed in August and evaluation of sampling results in September indicate no further excavation is required. The closure documentation is in preparation.

Excavation of pipeline 600-286-PL was completed with approximately 7,300 tons (cumulative) removed and transported to ERDF. Verification sampling is expected to be performed in December.

Excavation of pipeline 600-287-PL was initiated with approximately 2,500 tons removed and transported to EEDF.

Excavation of previously failed CSNFA waste site 600-222 was initiated in October with approximately 150 tons of soil removed and transported to ERDF.

B-Plant Exhaust System was shutdown, the pre-filters were replaced, and the system was restored to normal operation.

MAJOR ISSUES

Issue – The RAWP with TPA Change Notice was updated to include waste sites added with the approved MG-1 AM. The initiation of remediation of the MG-1 waste sites 600-222, 200-W-147-PL, 600-OCL, and 600-226 is on hold until the RAWP is approved.

Corrective Action – CHPRC is addressing regulatory comments on the RAWP.

Status – The RAWP and TPA changes were issued. Issue is closed. This will be the last report of this issue.



RISK MANAGEMENT STATUS

Unassigned Risk Risk Passed New Risk



1	Increased Confidence
⇌	No Change
1	Decreased Confidence

	Working - Critic			
Risk Title	Risk Strategy/Handling	Assess Month		Comments
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.		1	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.		1	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.		1	RAWP has been approved; MG-1 field activities for the pipelines are being adversely affected as the TPA change notice for the RAWP has not been approved.
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.		1	Six 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
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70. 1. mm.	Risk Strategy/Handling		ment	2
Risk Title			Tren	Comments
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.		1	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	Cost of Work	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
U Plant/Other	4.3	4.2	4.1	(0.1)	-1.8	0.1	2.7
Outer Zone	<u>3.1</u>	<u>4.1</u>	<u>3.4</u>	<u>1.0</u>	33.7	<u>0.7</u>	16.3
ARRA Total	7.4	8.4	7.6	1.0	13.0	0.8	9.4
Base	<u>1.2</u>	<u>1.5</u>	<u>1.8</u>	<u>0.3</u>	24.2	(0.2)	-16.0
Total	8.6	9.9	9.3	1.3	14.5	0.6	5.5

ARRA

CM Schedule Performance: (+\$1.0M/+13.0%)

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

ARRA RL-0040.Rl.2 Outer Zone D&D (+\$1.0M) positive schedule variance is a result of continuing the modified approach to remediating the soils in the BC Control Area. To expedite clearing the bulk excavation portions of the site, a process of short-term onsite stockpiling was initiated; this stockpile has enabled a full utilization of haul capability since remediation has moved on to removal of more widely spaced spot contamination.



CM Cost Performance: (+\$0.8M/9.4%)

ARRA RL-0040.R1.1 U Plant/Other D&D (+\$0.1M) is within reporting thresholds.

ARRA RL-0040.R1.2 Outer Zone D&D (+0.7M) is within reporting thresholds.

Base

CM Schedule Performance: (+\$0.3M/24.2%)

N/A – Variance is within reporting threshold.

The favorable schedule variance is due to progress on outer zone and 200 East remediation documentation.

CM Cost Performance: (-\$0.2M/-16.0%)

N/A – Variance is within reporting threshold.

The unfavorable cost variance in waste sites is due to the costs associated with unplanned rework of CW-3 pipelines 600-286-PL and 600-287-PL.

Contract-To-Date

(\$M)

WBS 040/ RL-0040 Nuclear Facility D&D	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed		Schedule Variance (\$)			Cost Variance (%)	-	Estimate at Completion (EAC)	Variance at Completion (VAC)
U Plant/Other	129.2	125.1	111.8	(4.2)	-3.2	13.2	10.6	196.7	186.4	10.3
Outer Zone	<u>47.7</u>	<u>48.1</u>	<u>39.0</u>	<u>0.5</u>	1.0	<u>9.1</u>	18.9	83.0	<u>81.9</u>	<u>1.1</u>
ARRA Total	176.9	173.2	150.9	(3.7)	-2.1	22.3	12.9	279.8	268.3	11.5
Base	<u>50.7</u>	<u>50.8</u>	44.8	<u>0.1</u>	0.3	<u>6.0</u>	11.8	984.7	<u>971.0</u>	<u>13.7</u>
Total	227.6	224.0	195.7	(3.6)	-1.6	28.3	12.6	1,264.4	1,239.3	25.2

Numbers are rounded to the nearest \$0.1M.

ARRA

CTD Schedule Performance: (-\$3.7M/-2.1%)

ARRA RL-0040.R1.1 U Plant/Other D&D (-\$4.2M)

The negative schedule variance is due to the following that exceed the reporting thresholds: late award of the grout contract for U Canyon (-\$3.2M), delays with the 200E Administration Buildings (-\$2.2M) due to bio-hazard and radiological control issues, and U Ancillary demolition (-\$0.3M) schedule delays due to asbestos abatement/respirator issues. This is offset by accelerating 209E demolition preparation, mobilization, and asbestos abatement (+\$1.2M) and asbestos abatement for 200 West (+0.3M).

ARRA RL-0040.Rl.2 Outer Zone D&D (+\$0.5M)

The contract-to-date favorable schedule variance primary contributors are accelerated progress on BC Control Area (+\$1.8M) and CW-3 waste sites (+\$0.2M), offset by delays in MG-1 and outer zone pipelines (-\$1.0M). Several ALE towers have not been released for work causing a negative schedule variance (-\$0.4M) and delays with cultural/ecological reviews on the North Slope (-\$0.1M).



CTD Cost Performance: (+\$22.3M/+12.9%)

ARRA RL-0040.R1.1 U Plant/Other D&D (+\$13.2M)

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 (+\$8.4M), less for Program Management than planned (+\$0.9M), efficiencies at U Canyon (D4) (+\$2.9M), less resources than planned for C-3 Sampling (+\$0.7M) and 200E Administration (+\$1.8M), lower than planned costs for capital equipment (D4) (+\$2.7M), less asbestos abatement required for 200 West buildings (+\$1.2M), 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) (-\$6.9M), coupled with increased insulator staff and overtime to recover schedule, 209E Project (+\$0.1M), and higher MSA (-\$1.8M) costs for Fleet/Training, etc. In addition, minor accounts outside the threshold (+\$0.1M).

ARRA RL-0040.Rl.2 Outer Zone D&D (+\$9.1M)

The favorable cost variance is due to efficiencies in ALE and North Slope Facilities D&D (+\$4.5M) and Outer Area waste sites (+\$5.7M). 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.

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: (+\$6.0M/+11.8%)

Balance of Site (facilities and others) (+\$5.5M). 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 (+\$1.1M), capital equipment (+\$0.3M), Usage Base Services (+\$0.2M) and underrun in G&A and direct distributable allocations (+\$1.4M).

Waste Sites (+\$0.5M) 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.

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



FUNDS vs. SPEND FORECAST (\$M)

	FY2		
WBS 040/RL-0040 Nuclear Facility D&D	Projected Funding	Spending Forecast	Variance
ARRA	142.6	131.4	11.2
Base	Base <u>28.5</u>		<u>6.6</u>
Total	171.1	153.3	17.9

Numbers are rounded to the nearest \$0.1M.

Funds/Variance Analysis

Funding reflects FY 2010 carryover and FY2011 new budget authority.

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-040-10-005R0, Disposition of B Plant and REDOX Water Towers BCR-PRC-11-003R0, Incorporate Revised Labor, Non-Labor and Escalation Rates BCR-R40-10-012R0, Delete Duplicate RTD of Waste Site UPR-200-W-34, RL-40 BCRA-PRC-11-004R0, FOC and Other Administrative Changes, October 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.

