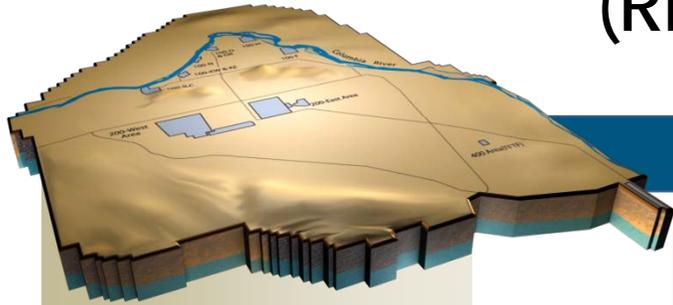


Section E

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



Monthly Performance Report

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July 2010
DOE/RL-2008-69, Rev. 34
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1



Demolition of 224U D and E Cell



Demolition of 224UA G Cell

PROJECT SUMMARY

American Recovery and Reinvestment Act (ARRA)

Continued with demolition of 224U and initiated demolition of 224UA.

Continuing upper Arid Lands Ecology (ALE) demolition activities. Debris pile sites cleanup activities are continuing. Completed Cold and Dark on the 6630 Hodges Well and Navy MARS Radio towers.

Equipment removal from the operating deck at U Canyon has been completed. Asbestos abatement activities in the Operating and Pipe galleries are in progress. Contracts are being pursued for grout and for a cask to support the removal of the D-10 Tank.

Continued with demolition on 272E Building. Completed Cold and Dark on the 284E Powerhouse.

Continued beryllium sampling and initial characterization activities on the 200 West Structures.

Began planning of the North Slope Debris pile cleanup.

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 remediated approximately 19,704 tons of soil in July; approximately 42 acres of BC Control Area, Zone A, have been cleared to date. Excavation at CW-3 waste site 216-N-4 continued and excavation at waste site 216-N-6 started with approximately 51 and 2,128 tons respectively of soil removed during July.

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

Base

Planned surveillance and maintenance (S&M) activities continue.

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	1	N/A
Total Recordable Injuries	0	3	N/A
First Aid Cases	6	82	<p>07/18 U Ancillary D&D worker was lining cans when worker struck left shin on can and fell causing an abrasion. Worker and Field Work Supervisor elected to self- treat. On 7/19, the worker complained of a bruised shoulder so was taken to AMH; examined and released without restrictions. (21104)</p> <p>07/21 D&D worker from ALE received a bug bite to the right thumb. Worker was taken to AMH, given non-prescription strength medication, and released to return to work without restrictions. (21121)</p> <p>07/26 Electrician in 200 West was stung by a sweat bee on the left arm. Worker was taken to AMH for evaluation. Worker was treated and released without restrictions. (21126)</p> <p>07/28 284E Power House Rigger received sliver in abdomen while lifting a wood plank. Worker was taken to AMH and evaluated, given a tetanus shot, and returned to work without restrictions. (21160)</p> <p>07/28 Teamster at ALE received abrasion on right forearm during debris removal. Initially it was decided this would be a self-treat. On 07/30, the Teamster was taken to AMH for evaluation, the wound was treated, and worker was returned to work without restrictions. (21161)</p> <p>07/28 Employee worked in the field all day and returned to MO898 to complete survey reports. While sitting at desk, worker felt two bites at the center bottom of their neck. The bites were about the size of a pencil eraser. The next morning, the bites marks were about the size of a dime. Worker reported the bites to their supervisor and went to AMH for treatment. (21154)</p>
Near-Misses	0	1	N/A

KEY ACCOMPLISHMENTS

ARRA – U PLANT/OTHER D&D

- U Plant Regional Closure Zone (U-Ancillary Facilities D&D)
 - Continued demolition activities on 224U and 224UA
- U Canyon Demolition and Cell 30 Disposition
 - Equipment placement in process cells is complete
 - The contract has been awarded for the cask needed to ship the T-10 tank to T Plant
 - Grout supply and conveyance bids have been received and are being evaluated
 - Asbestos abatement activities have been initiated
- 200E Project
 - Continued asbestos abatement activities in 284E
 - Continued demolition of 272E
- 209E Project
 - Continued 209E characterization and Cold and Dark planning activities
- 200W Project
 - Continued with characterization activities

ARRA – OUTER ZONE D&D

- BC Controlled Area Waste Site Remediation
 - Remediation using super dump trucks continued with approximately 162,818 tons cumulative to date of soil removed and transferred to ERDF
 - During July remediation within BC Controlled Area was impacted by the migratory birds nesting in Zone A and Zone B. A BC Controlled Area Soil Contamination Migratory Bird Mitigation Strategy (dated May 2010) was developed and implemented. Nesting birds have matured, no further issues in this area are anticipated.
- 200-CW-3 Waste Sites
 - Excavation of remove, treat, and dispose (RTD) site 216-N-4 continued. Approximately 36,350 tons of soil (cumulative) has been removed and transferred to ERDF.
 - Excavation of RTD site 216-N-6 began with 2,128 tons (cumulative) transferred to ERDF
 - The response action completion documentation for waste site 216-N-1 is with RL to review
 - Seven 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
 - Reclassification/Closure documentation for six waste sites (200-E-101, 6607-2, 6607-1, 6607-3, 200-E-110 and UPR-600-21) has been submitted for approval. Sites 600-37 and 600-262 are Confirmatory Sampling No Further Action (CSNFA) sites with confirmatory sampling completed with acceptable results. Closure documentation is being prepared.
 - Six 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
 - Analysis of sampling data for 600-51 indicates RTD is not required. Closure documentation for site 600-51 has been reviewed by RL.
 - Excavation of 600-38 was performed with verification sampling performed. Samples are being analyzed.
 - Preparations to excavate 600-275 and 600-222 in August are in progress
 - Initial excavation for site 600-40 was completed and initial verification samples were collected. The samples indicated additional excavation was required. This excavation has commenced and in-process samples are being evaluated.
 - The Remedial Action Work Plan (RAWP) was updated to include 37 waste sites added with the

- approved Action Memorandum (AM), has been reviewed by RL, and was transmitted to Ecology for review.
- Verification sampling of site 600-36 was performed in February to determine whether remediation was complete. The sample results are being evaluated.
 - CSNFA sampling is continuing at the Old Central Shop Area (OCSA) site
 - ALE D&D
 - Continued debris pile removal on lower ALE
 - Continued demolition on the upper ALE facilities

MAJOR ISSUES

Issue Statement – Confirmatory sampling waste sites have failed to meet acceptance criteria.

Corrective Action – Alternative remediation strategies are being developed.

Status – Contract Notice of Change letters have been issued for the following:

Waste Site 600-36, Notice of Change letter number CHPRC-1000171, dated 3-Mar-10

Waste Site 600-38, Notice of Change letter number CHPRC-1000335, dated 3-May-10

Waste Site 600-222, Notice of Change letter number CHPRC-1000510, dated 2-Jul-10

Waste Site 200-W-33, Notice of Change letter number CHPRC-1000334, dated 6-May-10

Waste Site 600-218, Notice of Change letter number CHPRC-1000160, dated 2-Mar-10

Waste Site UPR-600-12, Notice of Change letter number CHPRC-1000396, dated 1-Jun-10

In addition, Advanced Work Authorizations have been approved to proceed with RTD at waste sites 600-38 and 600-222.

Issue Statement—During the remediation of the CW-3 ponds, radiological contamination levels were found in the outfall of 600-286-PL and 600-287-PL.

Corrective Action—CHPRC is proceeding with additional characterization activities in the 600-285-PL to determine if radiological contamination is present above levels documented in the RSVP and full RTD of the 600-286-PL and 600-287-PL pipelines with an estimated start by the end of September.

Status—Planning and prerequisite documents are being developed to support RTD activities in September.

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.
D4-037: 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 walkdowns and characterization activities to minimize schedule impacts; interview "old-timers" and compare recollections to historic records; conduct document searches to minimize potential for surprises.			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.			A BCR has been approved for the NRDWL/SWL - the covers have been delayed. Significant comments from the stakeholders on the EA and the selected remedy. The RAWP for MG-1 is being reviewed.
WSR-007: More Extensive Contamination Than Expected	Cannot control contamination extent; no mitigation.			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.			Several sites are failing confirmatory sampling. BCRs are being prepared to address the change in scope.
WSR-020: Ecological/Cultural Conditions Restrict Field Activities	Accelerate cultural reviews to minimize schedule impact if cultural resource mitigation is required prior to initiating remediation.			The Project is working this risk on a case by case basis with no issues currently identified.
WSR-021: Remediation Subcontractor Performance	Investigate contractor performance prior to contract award.			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	8.0	7.6	6.4	(0.4)	-5.0	1.2	16.1
Outer Zone	2.9	2.2	(.5)	<u>(0.7)</u>	-24.0	2.7	124.5
ARRA Total	10.9	9.8	5.9	(1.1)	-10.0	3.9	40.3
Base	<u>1.6</u>	<u>1.8</u>	<u>1.4</u>	<u>0.1</u>	6.9	<u>0.4</u>	20.2
Total	12.5	11.6	7.3	(1.0)	-7.8	4.3	37.3

ARRA**CM Schedule Performance: (-\$1.1M/-10.0%)**

ARRA RL-0040.R1.1 U Plant/Other D&D (-\$0.4M)

The 200E Administration Project (-\$0.9M) is behind schedule for the current month due to issues with bio-hazard and limited resources for performing asbestos abatement, the U Canyon Project (-\$0.3M) due to issues with placing the Grout Contract, and the U Ancillary Project (-\$0.1M) experienced delays with equipment failures and stop works. This is offset by Capital Equipment (+\$0.7M) due to receiving several pieces of equipment ahead of schedule and miscellaneous accounts not within threshold (+\$0.2M).

ARRA RL-0040.R1.2 Outer Zone D&D (-\$0.7M)

In waste sites, BCCA is behind schedule (-\$0.7K) due to increased contamination and greater than planned volumes of soil being remediated in BC Control Area Zone A; nesting and migratory bird impacts have been realized through July 15; about a week of work was lost this month due to ERDF shutdown; and 3 days were lost, cumulative, due to weather. ERDF shutdown, migratory bird impacts and greater than planned excavation also impacted MG-1 and CW-3 sites (-\$0.1K). In addition, BCR-PRC-10-0050R0 (Outer Zone Replanning) was implemented in July resulting in positive point adjustment (+\$0.7M) for the month offsetting some of the current month negative schedule variance.

Several ALE towers have not been released to work causing a negative schedule variance (-\$0.4M).

CM Cost Performance: (+\$3.9M/+40.3%)

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

The U Ancillary Project current month overrun of (-\$0.6M) is due to using more resources to prepare the area around the perimeter in order to minimize the potential of spreading contamination, higher costs for insulators and material purchases for 200E Administration Project (-\$0.3M), and higher Usage Based Costs (-\$0.1M). This is offset by underruns in the Capital Equipment Project due to receiving equipment and not being able to accrue the costs (+\$1.4M) and a reduction in G&A (+\$0.7M) and miscellaneous accounts outside the threshold (+\$0.1M).

ARRA RL-0040.R1.2 Outer Zone D&D (+\$2.7M)

The current month favorable cost variance is a result of an adjustment (passback) to ERDF waste disposal costs to reflect the operational efficiencies of the super dump trucks (+\$3.6M). This continues to be partially offset by costs associated with delays related to migratory birds and the greater depth of contamination.

In addition, the ERDF adjustment reduced costs for Demolish of the 212N, P and R Project (-\$0.4M).

Base

CM Schedule Performance: (+\$0.1M/+6.9%)

N/A – Variance is within reporting threshold.

CM Cost Performance: (+\$0.4M/+20.2%)

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	108.9	104.6	91.4	(4.3)	-3.9	13.2	12.6	197.6	182.4	15.1
Outer Zone	36.1	34.1	28.8	(2.0)	-5.5	5.3	15.6	86.7	84.8	1.9
ARRA Total	145.0	138.7	120.2	(6.3)	-4.3	18.5	13.3	284.3	267.2	17.0
Base	<u>45.8</u>	<u>46.0</u>	<u>39.4</u>	<u>0.2</u>	0.4	<u>6.6</u>	14.3	<u>979.0</u>	<u>969.0</u>	<u>10.0</u>
Total	190.8	184.7	159.6	(6.1)	-3.2	25.1	13.6	1,263.3	1,236.2	27.0

Numbers are rounded to the nearest \$0.1M.

ARRA

CTD Schedule Performance: (-\$6.3M/-4.3%)

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

The negative schedule variance is due to finalizing the grouting contract for U Canyon (-\$1.8M), delays with the 200E Administration Buildings (-\$2.2M) due to bio-hazard and radiological control issues, 209E (-\$0.1M), U Ancillary Demolition (-\$0.7M) schedule delays due to asbestos abatement/respirator issues. This is offset by receipt of several pieces of Capital Equipment ahead of schedule (+\$0.5M).

ARRA RL-0040.R1.2 Outer Zone D&D (-\$2.0M)

The contract-to-date unfavorable schedule variance (-\$1.8M) is due to the greater depth of contamination in the BC Control Area and the resulting need to excavate and dispose of greater quantities of soil and the migratory bird impact issues (-\$2.3M). Deferral of work on 600-275 and 600-220 has also contributed to the unfavorable variance (-\$0.3M). This is offset in part by early work in miscellaneous waste sites (+\$0.8M).

Several ALE towers have not been released for work causing a negative schedule variance (-\$0.3M). Minor accounts within threshold (-\$0.2M).

CTD Cost Performance: (+\$18.5M/+13.3%)

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) (+\$3.7M), G&A and direct distributable allocations (+\$6.8M), less for Program Management than planned (+\$0.5M), efficiencies at U Canyon (D4) (+\$3.9M), less resources than planned for C-3 Sampling (+\$0.7M) and 200E Administration (+\$1.4M), lower than planned costs for capital equipment (D4) (+\$3.6M), 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) (-\$5.0M), 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 (-\$0.5M).

ARRA RL-0040.R1.2 Outer Zone D&D (+\$5.3M)

The favorable CV is due to efficiencies in ALE Facilities D&D (+\$4.1 M), and less than planned program management and CSNFA costs (+\$1.0M). A waste site favorable CTD cost variance is due to O Zone RTD Waste Sites an adjustment (passback) to ERDF waste disposal costs to reflect the operational efficiencies of the super dump trucks, that is partially offset by increased cost for 212 N/, P/,R due to backfill activities. (+\$2.3M).

In addition, a negative cost variance is associated with the Disposition of Railcar (-\$0.2M) due to unplanned costs for NDA of the cars.

Base**CTD Schedule Performance: (+\$0.2M/+0.4%)**

Within reporting threshold.

CTD Cost Performance: (+\$6.6M/+14.3%)

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) (+\$0.8M) 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 (+\$0.2M) and underrun in G&A and direct distributable allocations (+\$1.2M). In addition, minor accounts outside the threshold (+\$0.2M).

The favorable cost variance for Waste Sites (+\$1.2M) is due to less extensive regulatory support labor required for the U Zone agreement-in-principal and 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)

WBS 040/RL-0040 Nuclear Facility D&D	FY2010		
	Projected Funding	Spending Forecast	Variance
ARRA	117.7	109.6	8.1
Base	<u>25.4</u>	<u>16.4</u>	<u>9.0</u>
Total	143.1	126.0	17.1

Numbers are rounded to the nearest \$0.1M.

Funds/Variance Analysis

Projected Funding includes FY2009 uncosted and FY2010 expected 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. ARRA EAC reduction from June to July is due to receiving the ERDF passback and the decision to eliminate the purchase of several pieces of capital equipment.

Baseline Change Requests

AWA-PRC-10-045R0, Continuation of WS 600-222 as RTD (failed CSNA)
 BCR-PRC-10-049R0, Adjust Activities with Budget and No Resources
 BCR-PRC-10-050R0 (formerly BCR-040-10-004R0), Outer Zone Replanning
 BCRA-PRC-10-051R0, General Admin Changes for July 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.