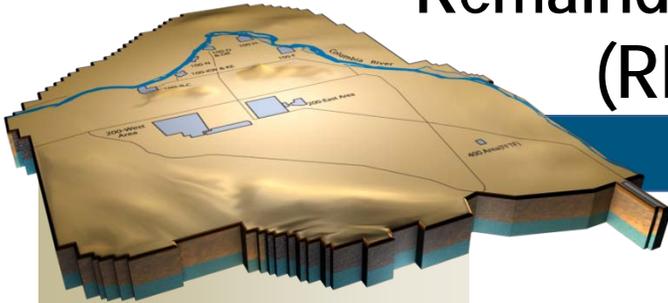


# Section E Nuclear Facility D&D, Remainder of Hanford (RL-0040)

## Monthly Performance Report



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Demolition of the 284W Baghouses

January 2011  
CHPRC-2011- 01, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

### American Recovery and Reinvestment Act (ARRA)

Completed the final surveys for 224U and 224UA

Upper Arid Lands Ecology (ALE) closeout paperwork and power pole removal continues

Efforts have begun at U Canyon on grout supporting activities. Core drilling continues and material staging area preparation has started for grout.

The 209E facility continued with characterization including visual inspection of tanks. Continued NDA activities on tanks and pipes within the facility. Continued preparation activities and equipment removal of HO-200 for dismantling. Completed filling and NDA of three SWBs.

Asbestos abatement in 284E Powerhouse is complete, final cleanup and demobilization is ongoing, and began mobilization for demolition

Cold and dark and characterization activities continued in 200 West structures. The explosive demolition planning is ongoing. Completed 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 has been approved; visual inspection of the railcars was completed and work planning for the next phases 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 25,000 tons of soil in January; approximately 127 acres of BC Control Area, Zone A, have been cleared. The closure documentation has been submitted for CW-3 waste sites 216-N-4 and 216-N-6. Initial excavation completed on MG-1 waste site 200-W-147-PL is contingent upon sampling which is anticipated in February.

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 pipeline 600-286-PL and 600-287-PL excavations are complete with backfill activities in process. Backfill is anticipated to complete in February or early March.

MG-1 staged clean fill dirt at waste site 600-38 and 600-222, backfill is anticipated to complete in February

## 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	4	N/A
Total Recordable Injuries	1	7	<p><b>01/03</b> 284E Insulator bumped top of the head on some PVC ducting in facility. The worker was wearing all proper PPE at the time of the incident. The worker was transported to AMH and then transported to Kadlec via ambulance. Worker was examined, given medication.(<b>21609</b>)</p>
First Aid Cases	9	73	<p><b>01/04</b> 200W Teamster slipped on ice while loading debris into a can. The Teamster reported the incident on 01/05 and was transported to AMH, examined, diagnosed with a left leg/groin strain, and released to work without restrictions. (<b>21618</b>)</p> <p><b>01/10</b> North Slope Teamster helper was attempting to pull a piece of metal out of the ground. Due to the frozen ground, the worker was tugging hard when the metal came loose. The piece of metal struck the worker causing a minor bump above left eye. Worker was transported to AMH, examined, and released without restrictions. (<b>21625</b>)</p> <p><b>01/17</b> 200W Electrician reported to AMH on 01/24 after being diagnosed by his physician with a hernia. Worker reported injury occurred while stripping SOW (sunlight, outdoor, and wet locations) cord. Worker was examined released to work without restrictions. (<b>21682</b>)</p> <p><b>01/17</b> North Slope Teamster was pulling wire from the ground when the worker stepped back into a small hole and felt a minor pull in the lower back. Worker was transported to AMH, examined, diagnosed with low back strain, and released to work without restrictions. (<b>21658</b>)</p> <p><b>01/18</b> 209E D&amp;D worker received a minor strain to the right shoulder while untarping an ERDF can when a gust of wind came up jerking the arm. The worker was transported to AMH, examined, and released to work without restrictions. (<b>21661</b>)</p>

### TARGET ZERO PERFORMANCE (continued)

	CM Quantity	Rolling 12 Month	Comment
First Aid Cases			<p><b>01/27</b> 284E Insulator suffered a minor contusion and abrasion to right knee. The worker was walking around a pallet of material when the worker's left foot caught on a wooden stick located near the bottom of the pallet, causing the worker to lose balance, fall, and strike right knee on a nearby rock. Worker was transported to AMH, examined, and released to work without restriction. <b>(21689)</b></p> <p><b>01/27</b> 284E Ironworker/Rigger received a minor scratch to left shoulder while carrying several lengths of scaffold tubing. Worker allowed the tubing to slide off shoulder while guiding it onto the floor and received a minor scratch to the shoulder. Worker was transported to AMH, examined, and released to work without restriction. <b>(21692)</b></p> <p><b>01/13</b> S&amp;M NCO slipped on ice in parking lot. Worker did not fall down, but slipped and twisted left knee. Worker was transported to AMH, examined, and released to work without restrictions. <b>(21645)</b></p> <p><b>01/23</b> 209E Rigger received sliver to right thigh from a scaffolding plank. Surveys taken no contamination found. Worker was transported AMH, examined and sliver removed, and released to work without restrictions. <b>(21681)</b></p>
Near-Misses	0	0	N/A

## KEY ACCOMPLISHMENTS

### ARRA – U PLANT/OTHER 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
  - Core drilling activities continue. Grout conveyance equipment has begun to arrive on site.
- 200E Project
  - Completed demobilization activities at 284E Powerhouse; began mobilization for demolition
- 209E Project
  - Continued 209E characterization and cold and dark planning activities
  - Continued NDA activities on tanks and pipes within the facility. Continued internal inspection of tanks to verify the tanks are dry for removal activities (all but two tanks have been verified as dry).
  - Continued preparation activities and equipment removal on HO-200 for dismantling. Completed removal of Tank 108 and the two drum vessels within the tank. Began transition of the facility to temporary power to facilitate the isolation of systems and minimize the hazards associated with removal activities.
  - Began removal of HO-170 from the Critical Assembly Room. Completed filling and NDA of three SWBs.
  - Applied fixative to HO-140 in preparation for final tank verification and NDA of the tank and hood
- 200W Project
  - Continued characterization and cold and dark activities
  - Completed exterior steam line abatement at 284W in preparation for explosive demolition
  - Continued Bio-Hazard remediation, beryllium clean-up, and wash down activities at 284W
  - CDI and Clauss Construction completed explosive building separations and stack preparations at 284W Powerhouse

### ARRA – OUTER ZONE D&D

- BC Controlled Area Waste Site Remediation
  - Remediation using super dump trucks continued with approximately 318,000 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 percent of the area)
- 200-CW-3 Waste Sites
  - The remaining sites verification package documentation for waste site 216-N-4 and 216-N-6 have been reviewed by RL and transmitted to regulators for review and approval
  - The remaining sites verification package for waste site 216-N-1 has been approved by RL with closure documentation forwarded to regulators for approval; CHPRC is resolving regulator comments

- MG-1
  - Reclassification/closure documentation for waste sites 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 Confirmatory Sampling No Further Action (CSNFA) site with confirmatory sampling completed. RL has reviewed the closure document and forwarded to the regulator.
  - Waste site 600-275 additional excavation was completed in January. Sampling has been performed with results expected in early February. Hauling of concrete debris is continuing and will complete in mid-February.
  - Initial excavation of pipeline 200-W-147-PL was completed. Sampling is anticipated in February.
  - Waste site 600-220 sampling has been completed and remove, treat, and dispose action is being planned
  - Waste site 600-226 verification sampling has been successfully completed and preparation of closure documentation is in progress
- ALE D&D
  - Power pole removal is ongoing
- NORTH SLOPE
  - Continued with debris pile cleanup activities
  - Completed No Potential to Cause Effect areas 10, 11, 12, 13 and 14
- RAILCARS
  - RAWP and Sampling Analysis Plan approved by EPA
  - Visual inspections and characterization of railcars is nearing completion
  - Continuing work planning for future phases
  - Scope of work for lift and haul of the railcars was put out for bid
  - Received approval from RL to transfer four railcars to B Reactor

**Base**

- Excavation of 600-38 is complete and clean backfill has been staged. The closure documentation is in review with RL and the regulators.
- Excavation of pipeline 600-286-PL was completed. Verification sampling was performed in December and completion of remediation was verified. Backfill has been initiated.
- 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. Subsequent sampling was favorable. Closure documentation was submitted to RL and the regulators for review.
- Beryllium sampling/characterization continued in REDOX, 231Z, and 222T
- Began planning of 6652PH equipment removal activities

**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.
<b>WSR-006: Decision Document Approval Delays</b>	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.
<b>WSR-007: More Extensive Contamination Than Expected</b>	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.
<b>WSR-008: No Action Waste Sites</b>	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 (%)
<b>U Plant/Other</b>	4.9	4.6	4.8	(0.3)	-6.4	(0.2)	-4.9
<b>Outer Zone</b>	<u>7.8</u>	<u>4.2</u>	<u>3.0</u>	<u>(3.6)</u>	-46.5	<u>1.1</u>	27.4
<b>ARRA Total</b>	<b>12.7</b>	<b>8.8</b>	<b>7.8</b>	<b>(3.9)</b>	<b>-31.1</b>	<b>0.9</b>	<b>10.5</b>
<b>Base</b>	<u>1.6</u>	<u>1.6</u>	<u>1.3</u>	<u>0.0</u>	2.5	<u>0.3</u>	17.7
<b>Total</b>	<b>14.3</b>	<b>10.4</b>	<b>9.2</b>	<b>(3.9)</b>	<b>-27.3</b>	<b>(1.2)</b>	<b>11.6</b>

Numbers are rounded to the nearest \$0.1M

### ARRA

#### CM Schedule Performance: (-\$3.9M/-31.1%)

ARRA RL-0040.R1.1 U Plant/Other D&D (-\$0.3M) is within reporting thresholds.

ARRA RL-0040.R1.2 Outer Zone D&D (-\$3.6M)

Outer zone waste sites negative schedule variance is primarily related to prior month completion of work related to implementation of the Baseline Change Request to increase the budget for BCCA (-\$2.9M) and delay in issuing a BCR removing waste sites from the baseline per recent Contract Modifications (-\$1.0M). Also, minor variances outside the threshold (+\$0.3M).

#### CM Cost Performance: (\$0.9M/10.5%)

ARRA RL-0040.R1.1 U Plant/Other D&D (-\$0.2M) variance is within reporting threshold.

ARRA RL-0040.R1.2 Outer Zone D&D (+\$1.1M) favorable cost variance is primarily due to costs for backfill activities at CW-3 being less than planned. In part this likely reflects an understatement of prior months performance in staging fill material which was placed into 216-N-4 this month (+\$0.7M) offset by greater than planned costs for contractor excavation work on pipeline 200-W-147-PL (-\$0.2M). In D&D, the variance is due to lower debris removal for North Slope (+\$0.4M).

### Base

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

Variance is within reporting threshold.

#### CM Cost Performance: (+\$0.3M/+17.7%)

The positive cost variance is due to underruns in the overhead accounts (+\$0.3M).

## 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)
<b>U Plant/Other</b>	144.5	140.1	128.3	(4.4)	-3.0	11.8	8.5	196.7	183.6	13.1
<b>Outer Zone</b>	<u>62.0</u>	<u>58.7</u>	<u>47.9</u>	<u>(3.3)</u>	-5.2	<u>10.8</u>	18.4	<u>90.7</u>	<u>83.2</u>	<u>7.5</u>
<b>ARRA Total</b>	<b>206.5</b>	<b>198.9</b>	<b>176.2</b>	<b>(7.7)</b>	<b>-3.7</b>	<b>22.7</b>	<b>11.4</b>	<b>287.5</b>	<b>266.8</b>	<b>20.6</b>
<b>Base</b>	<u>55.7</u>	<u>55.9</u>	<u>49.3</u>	<u>0.3</u>	0.5	<u>6.7</u>	11.9	<u>758.6</u>	<u>761.9</u>	<u>-3.4</u>
<b>Total</b>	<b>262.2</b>	<b>254.8</b>	<b>225.5</b>	<b>(7.4)</b>	<b>-2.8</b>	<b>29.3</b>	<b>11.5</b>	<b>1,046.0</b>	<b>1,028.8</b>	<b>17.3</b>

Numbers are rounded to the nearest \$0.1M

### ARRA

#### CTD Schedule Performance: (-\$7.7M/-3.7%)

ARRA RL-0040.R1.1 U Plant/Other D&D (-\$4.4M) negative schedule variance is due to late award of the grout contract for U Canyon (-\$3.3M), delays with the 200E Administration Buildings (-\$1.9M) 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 (+\$1.4M).

ARRA RL-0040.R1.2 Outer Zone D&D (-3.3M) unfavorable schedule variance included deferral of the start of work on waste sites which have been identified by contract modification for deletion or deferral (-\$1.4M), delay of work on waste sites pending finalization of site priorities (-\$1.2M). Demobilization of the ALE towers should have been complete in FY2010 but due to delays with releasing several towers to CHPRC, the project is behind (-\$0.2M) and delays with cultural/ecological reviews on the North Slope (-\$0.4M). Minor accounts outside the threshold (-\$0.1M).

#### CTD Cost Performance: (+\$22.6M/+11.4%)

ARRA RL-0040.R1.1 U Plant/Other D&D (+\$11.8M) 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) (+\$3.3M), overhead allocations (+\$6.5M), less for Program Management than planned (+\$1.2M), efficiencies at U Canyon (D4) (+\$1.9M), less resources than planned for C-3 Sampling (+\$0.7M) and 200E Administration (+\$1.2M), lower than planned costs for capital equipment (D4) (+\$2.7M), less asbestos abatement required for 200W buildings (+\$2.5M), 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) (-\$7.7M), coupled with increased insulator staff and overtime to recover schedule, 209E Project (-\$0.8M). Minor accounts not within threshold (+\$0.3M).

ARRA RL-0040.R1.2 Outer Zone D&D (+\$10.8M) favorable cost variance is due to efficiencies in ALE and North Slope Facilities D&D (+\$4.5M) and Outer Area waste sites (+\$7.3M). 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 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: (+0.3M/+0.5%)**

Within reporting threshold.

**CTD Cost Performance: (+\$6.7M/+11.9%)**

Balance of Site (facilities and others) (+\$5.8M) 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) (+\$1.2M) 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 overhead allocations (+\$2.6M). In addition, minor accounts outside the threshold (-\$1.1M). Waste Sites (+\$0.1M) is within thresholds.

**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	Spend Variance
<b>ARRA</b>	142.6	129.9	12.7
<b>Base</b>	24.6	22.9	1.8

Numbers are rounded to the nearest \$0.1M.

**Funds/Variance Analysis**

Funding includes FY2010 carryover and FY2011 new Budget Authority. The positive variances reflect an approved realignment of ARRA and Base workscope. Continued implementation of a site integrated work scope prioritization plan will further align work scope with proposed revised funding levels.

**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**

BCRA-PRC-11-019R0, General Admin & FOC Changes for January 2011

BCR-PRC-11-018R0 BC Control Area Zones A&B

**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.