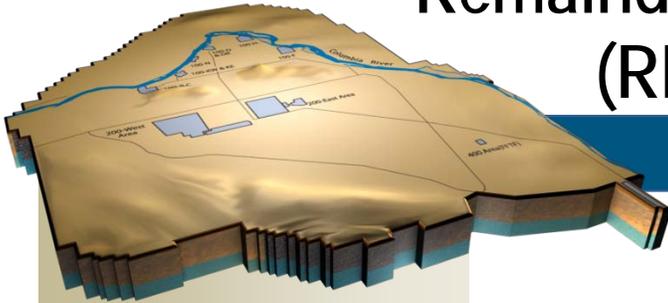


# Section E Nuclear Facility D&D, Remainder of Hanford (RL-0040)

## Monthly Performance Report



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Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1



**284W Power House Demolition**

## PROJECT SUMMARY

### American Recovery and Reinvestment Act (ARRA)

- Completed grouting of the 221U Canyon facility process cell voids.
- Completed grouting the hot pipe trench.
- Completed grouting of the ventilation tunnel and ventilation ducts to the sand filter and exhaust stack.
- Completed grouting of the canyon operating deck cap.
- Completed cutting and load-out the last slab tank (TK-106) at 209E.
- Completed the reduction of the 209E facility to Hazard Category < 3 and obtained Department of Health approval to shut off the stack.
- Completed abatement activities in and demolition of the 284W Power House.
- Completed decommissioning the North Slope wells.
- Completed asbestos abatement of the steam lines in the 200W Area.
- Remediation activities completed in the Model Group (MG)-1 waste sites.

### Base

- Planned surveillance and maintenance (S&M) activities continue.
- Completed the roof repair at REDOX.

## 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           | 2                | N/A  |
| Total Recordable Injuries            | 0           | 8                | N/A  |
| First Aid Cases                      | 5           | 65               | <p><b>09/12</b> - 200W Teamster was bitten on the right arm by a sweat bee. (22347)</p> <p><b>09/14</b> - 200W Insulator was bitten by a bug on the left forearm. (22352)</p> <p><b>09/12</b> - 209E D&amp;D Worker was assisting in double-bagging waste. The Worker had arms extended straight out and was holding a bag weighing less than 10 pounds. The Worker felt a “pop” in the right shoulder and a sharp pain. (22346)</p> <p><b>09/23</b> - 200W Teamster was bitten on the right arm by a sweat bee. (22367)</p> <p><b>09/27</b> - 200W D&amp;D Worker reported cumulative trauma injury to right arm. (22376)</p> |
| Near-Misses                          | 0           | 0                | N/A  |

### KEY ACCOMPLISHMENTS

**ARRA – U Plant/Other Decontamination and decommissioning (D&D)**

- U Canyon Demolition and Cell 30 Disposition
  - Completed grouting of the 221U Canyon facility process cells voids. Completed grouting of the hot pipe trench. Completed grouting of the ventilation tunnel and ventilation ducts to the sand filter and exhaust stack. Completed grouting of the canyon operating deck cap.
- 209E Project
  - Removal and load out of Tank 231 has been completed; Completed cutting Tank 106 and load out of the last slab tank (TK-106). Continued on removal of TK141/142
  - Completed the reduction of the facility to Hazard Category < 3 and obtained Department of Health approval to shut off the stack.
  - Completed transition to temporary power from the generator.
  - Completed cold and dark activities in support of demolition preparation and activities.
- 200W Project
  - Completed asbestos abatement activities in the 284W Power House.
  - Completed demolition of 284W Power House.

- 200W and 200E Steam line
  - Completed 200W and 200E steam line asbestos abatement repair.

#### **ARRA – Outer Zone D&D**

- BC Controlled Area (BCCA) Waste Site Remediation
  - As required by the Remedial Action Work Plan (RAWP), an On-Scene Coordinator Report is being published to document remedial actions performed and current status of the waste site. RL and the regulator comments have been incorporated. The document has been approved and published.
- MG-1
  - Waste sites 200-W-147PL and 600-40 were revegetated. Closure documentation had previously been approved.
  - Waste sites 600-281, 216-S-19, 216-S-26, and 600-288 have been backfilled and revegetated. Closure documentation is approved.
- North Slope
  - Completed decommissioning of North Slope wells.
  - Completed demobilization.
- Railcars
  - The air monitors have been turned off and all generators shut down. The Response Action Report (RAR) was transmitted to RL.
  - Demobilization is complete.

#### **Base**

- Completed roof repair at REDOX.

## **MAJOR ISSUES**

None identified.

## 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 |  |
| D4-036: Readiness Reviews Required                                | Probability of risk occurring is low; risk accepted without mitigation.   | ●          | ↓     | Due to change in procedure, probability is increasing. A change in criteria can require a change to process and potentially delay the project.   |
| D4-042: Unexpected Site Conditions - D4                           | Conduct early facility walk downs and characterization activities to minimize the schedule impacts; interview "old timers" who worked in or around the facility and compare those events 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-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.   | ●          | ↓     | Evaluation of the path forward for below-grade tanks has been completed and the tanks will require full removal as opposed to being disposed in place. Risk realized, BCR to be developed for incorporation into Baseline.   |
| D4-S-057: 209-E Fire System Deactivation                          | The plan is to shut off all utilities as part of the 209-E deactivation in preparation for demolition.  | ●          | ↔     | Upgrades to LSC systems have been completed. Project risk remains in that once the building can be categorized as non-nuclear (anticipated to occur in June), Fire Protection personnel may require continued monitoring/surveillance.   |
| <b>WSR-006: Decision Document Approval Delays</b>                 | Work with RL and regulators to establish priorities and need dates.   | ●          | ↔     | At the end of September, 2011, field work was suspended until funding and direction can be secured. No decision document approval delays are applicable at this time.  |
| <b>WSR-007: More Extensive Contamination Than Expected</b>        | Cannot control extent of contamination; no mitigation.  | ●          | ↔     | Field work was completed in September, 2011. No new extent of contamination issues exist at this point.  |
| <b>WSR-008: No Action Waste Sites</b>                             | Using L-8 table data; no mitigation.  | ●          | ↔     | No issues are identified at this time.   |
| KBC-020: Ecological/Cultural Conditions Restrict Field Activities | This risk is accepted as written and will be monitored throughout work execution.   | ●          | ↔     | Field work at site 600-227 was not able to start as it was adversely affected by cultural conditions that required a Memorandum of Agreement (MOA) with the State Historical Preservation Office (SHPO). That MOA was not received in time to complete work within the funded time. A negative schedule variance has resulted from delay of the MOA. |
| 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.   |

## PROJECT BASELINE PERFORMANCE

### Current Month

(\$M)

| WBS 040/<br>RL-0040<br>Nuclear Facility<br>D&D | Budgeted<br>Cost<br>of Work<br>Scheduled | Budgeted<br>Cost<br>of Work<br>Performed | Actual<br>Cost<br>of Work<br>Performed | Schedule<br>Variance<br>(\$) | Schedule<br>Variance<br>(%) | Cost<br>Variance<br>(\$) | Cost<br>Variance<br>(%) |
|--|--|--|--|------------------------------|-----------------------------|--------------------------|-------------------------|
| <b>U Plant/Other</b>                           | 9.1                                      | 11.5                                     | 9.0                                    | 2.4                          | 26.4                        | 2.5                      | 21.8                    |
| <b>Outer Zone</b>                              | <u>2.4</u>                               | <u>1.6</u>                               | <u>2.1</u>                             | <u>(0.8)</u>                 | -33.8                       | <u>-0.5</u>              | 28.6                    |
| <b>ARRA Total</b>                              | <b>11.5</b>                              | <b>13.1</b>                              | <b>11.0</b>                            | <b>1.6</b>                   | <b>13.7</b>                 | <b>2.0</b>               | <b>15.6</b>             |
| <b>Base</b>                                    | <u>3.7</u>                               | <u>3.8</u>                               | <u>2.9</u>                             | <u>0.2</u>                   | 4.3                         | <u>0.9</u>               | 24.9                    |
| <b>Total</b>                                   | <b>15.2</b>                              | <b>16.9</b>                              | <b>13.9</b>                            | <b>1.7</b>                   | <b>11.4</b>                 | <b>3.0</b>               | <b>24.9</b>             |

Numbers are rounded to the nearest \$0.1M

#### ARRA

##### CM Schedule Performance: (+\$1.6M/+13.7%)

ARRA RL-0040.R1.1 U Plant/Other D&D (+\$2.4M) Variance is within reporting threshold.

ARRA RL-0040.R1.2 (-\$0.8M) Variance is within reporting threshold.

##### CM Cost Performance: (+\$2.0M/+15.6%)

ARRA RL-0040.R1.1 U Plant/Other D&D (+\$2.5M) The positive cost variance is due to sub-contracts costs for 200W Project and U Canyon were lower than anticipated this period.

ARRA RL-0040.R1.2 (-\$0.5M) Variance is within reporting threshold.

#### Base

##### CM Schedule Performance: (+\$0.2M/+4.3%)

Variance is within reporting threshold.

##### CM Cost Performance: (+\$1.0M/+24.9%)

Variance is within reporting threshold.

## Contract-To-Date (\$M)

| WBS 040/<br>RL-0040<br>Nuclear Facility<br>D&D | Budgeted<br>Cost<br>of Work<br>Scheduled | Budgeted<br>Cost<br>of Work<br>Performed | Actual<br>Cost<br>of Work<br>Performed | Schedule<br>Variance<br>(\$) | Schedule<br>Variance<br>(%) | Cost<br>Variance<br>(\$) | Cost<br>Variance<br>(%) | Budget at<br>Completion<br>(BAC) | Estimate at<br>Completion<br>(EAC) | Variance at<br>Completion<br>(VAC) |
|--|--|--|--|------------------------------|-----------------------------|--------------------------|-------------------------|----------------------------------|------------------------------------|------------------------------------|
| <b>U Plant/Other</b>                           | 197.9                                    | 195.5                                    | 186.4                                  | (2.4)                        | -2.4                        | 9.1                      | 4.7                     | 200.4                            | 187.6                              | 12.4                               |
| <b>Outer Zone</b>                              | 89.1                                     | 84.7                                     | 71.5                                   | (4.4)                        | -4.4                        | 13.1                     | 15.5                    | 89.1                             | 86.3                               | 10.4                               |
| <b>ARRA Total</b>                              | <b>287.0</b>                             | <b>280.2</b>                             | <b>257.9</b>                           | <b>(6.8)</b>                 | <b>-2.4</b>                 | <b>22.2</b>              | <b>7.9</b>              | <b>289.5</b>                     | <b>273.9</b>                       | <b>22.8</b>                        |
| <b>Base</b>                                    | 68.7                                     | 68.7                                     | 60.6                                   | (0.0)                        | 0.0                         | 8.0                      | 11.7                    | 734.6                            | 742.7                              | 16.8                               |
| <b>Total</b>                                   | <b>355.6</b>                             | <b>348.9</b>                             | <b>318.5</b>                           | <b>(6.8)</b>                 | <b>-1.9</b>                 | <b>30.4</b>              | <b>8.7</b>              | <b>1,024.1</b>                   | <b>1,016.6</b>                     | <b>39.6</b>                        |

Numbers are rounded to the nearest \$0.1M

### ARRA

#### CTD Schedule Performance: (-\$6.8M/-2.4%)

ARRA RL-0040.R1.1 U Plant/Other D&D (-\$2.4M) The unfavorable schedule variance is due to delays with the 209-E Project.

ARRA RL-0040.R1.2 Outer Zone D&D (-\$4.4M) The unfavorable schedule variance is primarily due to the waste sites in ARRA that need to be moved to base to support the priority of footprint reduction (-\$4.4M).

#### CTD Cost Performance: (+\$22.2M/+7.9%)

ARRA RL-0040.R1.1 U Plant/Other D&D (+\$9.1M) 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) (+\$4.2M), overhead allocations (+\$11.5 M), less for Program Management than planned (+\$2.4M), less resources than planned for C-3 Sampling (+\$0.7M), lower than planned costs for capital equipment (D4) (+\$3.0M), less asbestos abatement required for 200W buildings (+\$3.5M), 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) (-\$8.1M), coupled with increased insulator staff and overtime to recover schedule, 200E Administration (-\$1.7M) and 209E Project delays (-\$4.7M), less resources required at U Canyon (D4) (+\$0.7M), Usage Based Services (-\$3.1M), and minor accounts not within threshold (+\$0.7M).

ARRA RL-0040.R1.2 Outer Zone D&D (+\$13.1M) The favorable cost variance is due to efficiencies in Arid Lands Ecology (ALE), North Slope Facilities, disposition of railcars D&D (+\$7.0M), and Outer Area waste sites (+\$7.2M). The waste site favorable cost-to-date variance is primarily due to an O-Zone Remove, Treat, and Dispose (RTD) Waste Sites adjustments (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 (-\$1.1M) due to the walls of the basins being much thicker than estimated.

**Base**

**CTD Schedule Performance: (-0.0M/0.0%)**

All variances are within thresholds.

**CTD Cost Performance: (+8.0M/+11.7%)**

Recognized efficiencies for demolition of the Industrial 7 Project (D4) (+\$1.1M) as a result of utilization of existing site equipment and materials, surveillance and maintenance costs (D4) less than expected (+\$1.9M), completion of the sampling of Cell 30 with less resources than planned (+\$0.9M), Program Management utilizing less resources (+\$2.2M), capital equipment (+\$0.3M), Usage Base Services (-\$0.4M), and underrun in overhead allocations (+\$2.0M).

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

**Estimate at Completion (EAC)**

The BAC and EAC include FY2009 through FY2018.

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

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

| WBS 040/RL-0040<br>Nuclear Facility<br>D&D | FY2011               |                      |                   |
|--|----------------------|----------------------|-------------------|
|  | Projected<br>Funding | Spending<br>Forecast | Spend<br>Variance |
| <b>ARRA</b>                                | 117.6                | 114.6                | 2.9               |
| <b>Base</b>                                | 16.3                 | 17.5                 | -1.2              |

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-11-039R0, "FY 2012 Annual PMB Update."

**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.