

# Section F

## Nuclear Facility D&D, River Corridor (RL-0041)



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

## PROJECT SUMMARY

### American Recovery and Reinvestment Act (ARRA)

#### Facilities

- Continued demolition of the 190KW Main Pump House Structure.

#### Base

#### Facilities

- The conceptual design/construction specifications for the 105KE Reactor Disposition Interim Safe Storage (ISS) were completed. Initial review of the conceptual design began in November.
- Continued sediment load-out of 183.2KE Basin.
- Continued with erecting scaffolding and demolition preparation at 183.7 Structure.
- Continued with asbestos abatement on 105KE tunnel.

## EMS OBJECTIVES AND TARGET STATUS

EMS Objectives and Target Status for RL-0041 are included as part of the Objectives and Target Status for RL-0040.

### TARGET ZERO PERFORMANCE

|   | CM<br>Quantity | Rolling 12<br>Month | Comment |
|---|----------------|---------------------|---------|
| Days Away, Restricted<br>or Transferred | 0              | 2                   | N/A     |
| Total<br>Recordable Injuries            | 0              | 4                   | N/A     |
| First Aid<br>Cases                      | 0              | 22                  | N/A     |
| Near-Misses                             | 0              | 2                   | N/A     |

## KEY ACCOMPLISHMENTS

### ARRA

#### Facilities

- Continued demolition of 190KW Main Pump House.

#### Other

- Continued sediment load-out of 183.2KE Basin sediment.
- Continued with asbestos abatement of 105KE tunnel.
- Continued with erecting scaffolding and demolition preparation at 183.7 Structure.

### Base

#### Facilities

- The conceptual design/construction specifications for the 105KE Reactor Disposition ISS SSE were completed. Initial review of the conceptual design began in November.

#### Waste Sites

- The Verification Sampling Instructions (VSI) and Sampling for Area AA Zone 3 was approved. Backfill for Area AA Zone 3 was completed as anticipated in November.
- The Area AA Zone 4 VSI was completed in November. The backfill for Area AA Zone 4 was also completed as anticipated in November.
- Area AG Zone 2 Modification of Road for JLG was completed. This is in preparation for work starting on 105KE Reactor building for temporary reactor sealing's.
- The MOA for Area AM is being reviewed. Work on the removal of the 1908K Structure and waste sites 100-K-80, 96, 81, 83, and 116-K-3 will not begin until the MOA is agreed upon.
- Area AA Zone 1 pipeline 100-K-102 was identified as needing to be RTD.

## MAJOR ISSUES




**Issue** – RL-0041 Waste Site Remediation will probably not be able to complete the remediation work scope tied to waste sites 100-K-57 and 100-K-64 by December 31, 2012. The sites are located in an area of extreme cultural sensitivity. The inability to complete this work by December 31, 2012, is being driven by the lack of an approved cultural resources mitigation action plan.




**Corrective Action** – Move this waste site from TPA Phase 1 to TPA Phase 3.











**Status** – CHPRC drafted a TPA change package for RL to present to EPA for approval that will move this waste site from TPA Phase 1 to TPA Phase 3. RL presented the change package to EPA, but EPA is not inclined to move the sites into a later TPA Phase.

## 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   |   |
| <b>WSR-007: More Extensive Contamination Than Expected</b>        | Cannot control extent of contamination; no mitigation.   |    |    | No issues this past month   |
| <b>WSR-009: Different Remediation Approach</b>                    | Clean up remedies are consistent with direction received from RL in the PRC. There is a risk that the regulators will require a different cleanup remedy that what is planned. |    |    | It has been demonstrated that with ISS of 105KE, two significant plumes will not be full remediated under RTD. The project is researching a long term (i.e. 75 year), low cost stabilization that will retard water movement through the contaminated zone. Failure to retard precipitation will result in additional contamination to the ground water and possibly the Columbia River unless more drastic measures are taken. There are alternative remediation strategies being discussed for the following sites: 100-K-42 / UPR-100-K-1 (Fuel Storage Basin); 100-K-57 and 100-K-64 (100K East Flood Plain); and 100-KE-1 (Ventilation Condensate Crib with Carbon-14 and Tritium). The client is being kept informed on developments. |
| KBC-020: Ecological/Cultural Conditions Restrict Field Activities | This risk will be monitored throughout work execution.   |   |    | Due to the complexities of the MOA process it is not likely and it is too early to tell if remediation can be accomplished by December 31, 2012, putting the associated TPA Milestone (M-016-53; due December 31, 2012) at risk.  |
| KBC-044: 100 K Waste Sites Require Haz Cat Controls               | Existing characterization data indicates the likelihood of this risk occurring is low; risk accepted without mitigation.   |  |  | Additional direct pushes and associated logging, along with pothole samples are being looked at as an option to better understand the path of contamination movement to the east and west and to the south around 105KE Reactor and former fuel storage basin. Logging data and sample results will be evaluated and used to assess the radiological inventory around and under the 105KE Reactor building.   |
| KBC-045: 100 K East Basin Soil Disposition                        | Treatment will likely be in the form of waste blending in accordance with DSA for that site.   |  |  | This situation continues to be managed as load out effort continues from the 100-K-42 waste site.   |

## PROJECT BASELINE PERFORMANCE

### Current Month

(\$M)

| WBS 041/RL-0041<br>Nuclear Facility<br>D&D – River Corridor | 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>ARRA</b>   | 1.2                                      | 2.7                                      | 1.0                                    | 1.5                          | 119.6                       | 1.7                      | 61.3                    |
| <b>Base</b>   | <u>1.6</u>                               | <u>2.3</u>                               | <u>0.6</u>                             | <u>0.7</u>                   | 41.4                        | <u>1.7</u>               | 72.0                    |
| <b>Total</b>  | <b>2.8</b>                               | <b>5.0</b>                               | <b>1.6</b>                             | <b>2.2</b>                   | <b>75.2</b>                 | <b>3.4</b>               | <b>66.2</b>             |

Numbers are rounded to the nearest \$0.1M

#### ARRA

##### CM Schedule Performance: (+\$1.5M/+119.6%)

Waste Sites (+\$0.0M) The variance is within reporting threshold.

100K Area Project (Facilities and Others) (+\$1.5M) The positive variance is due to good progress being accomplished on the demolition of 190KW based on previous experience with the demolition of the 190KE structure. In addition, the KW Annex demolition was accelerated due to a change in the method of performance.

##### CM Cost Performance: (+\$1.7M/+61.3%)

Waste Sites (+\$0.2M) The positive variance is within reporting threshold.

100K Area Project (+\$1.5M) The positive cost variance is due to less resources being utilized for 190KW than planned.

#### Base

##### CM Schedule Performance (+\$0.7M/+41.4%)

Waste Sites (+\$0.9M) The positive schedule variance is within reporting threshold.

100K Area Project (Facilities and Others) (-\$0.2M) The negative variance is within reporting threshold.

##### CM Cost Performance (+\$1.7M/+72.0%)

Waste Sites (+\$1.1M) The positive cost variance is due to sub-contracts under accrued for the month.

100K Area Project (+0.6M) The positive variance is within reporting threshold.

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

| WBS 041/<br>RL-0041<br>Nuclear Facility<br>D&D – River<br>Corridor | 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>ARRA</b>  | 175.6                                    | 176.4                                    | 176.4                                  | 0.8                          | 0.4                         | 0.1                      | -0.1                    | 179.7                            | 178.1                              | (1.8)                              |
| <b>Base</b>  | 80.2                                     | 82.7                                     | 66.7                                   | 2.5                          | 3.1                         | 16.0                     | 19.4                    | 312.8                            | 344.6                              | 9.5                                |
| <b>Total</b>   | <b>255.8</b>                             | <b>259.1</b>                             | <b>243.1</b>                           | <b>3.3</b>                   | <b>1.3</b>                  | <b>16.1</b>              | <b>6.2</b>              | <b>492.5</b>                     | <b>522.6</b>                       | <b>7.7</b>                         |

Numbers are rounded to the nearest \$0.1M

### ARRA

#### CTD Schedule Performance: (+\$0.8M/+0.4%)

Waste Sites (+\$0.0M) The variance is within reporting thresholds.

100K Area Project (+\$0.8M) The positive schedule variance is due to good progress being accomplished on the demolition of 190KW based on previous experience with the demolition of the 190KE structure. In addition, the KW Annex was accelerated due to work stoppage in the Basin which allowed resources to be diverted to the Annex.

#### CTD Cost Performance: (-\$0.1M/-0.1%)

Waste Sites (+\$8.8M) The positive cost variance is due to Confirmatory Sampling No Action (CSNA) sites that were completed at less than anticipated cost. This is partially offset by greater than anticipated extent and severity of contamination on many waste sites resulting in more tons disposed and more controls required, thus higher than anticipated cost.

100K Area Project (-8.9M) The negative cost variance is due to numerous design changes and additional punch list items in the Utilities Reroute project; this also resulted in the project utilizing more vehicles and equipment than was originally planned as well as the Project Management costs to rise due to the corresponding increases for both labor and materials.

### Base

#### CTD Schedule Performance (+\$2.5M/+3.1%)

Waste Sites (+\$2.3M) The positive schedule variance is due mainly to CSNA sites that were completed ahead of schedule partially offset by delays related to demolition of the 105KE Fuel Storage Basin discharge chute and the 100K Area utility switchover.

100K Area Project (Facilities and Others) (+\$0.2M) The positive schedule variance is within threshold.

#### CTD Cost Performance (+\$16.0M/+19.4%)

Waste Sites (+\$12.1M) The positive cost variance is due to CSNA sites that were completed at less than anticipated cost. This is partially offset by greater than anticipated extent and severity of contamination on many waste sites resulting in more tons disposed and more controls required, thus higher than anticipated cost, as well as level-of-effort activities bearing additional costs for increased functional group support.

100K Area Project (Facilities and Others) (+\$3.9M) The positive cost variance is due to 105KE Reactor Disposition – ISS underrun as well as G&A and Direct Distributables.

**Estimate at Completion (EAC)**

The BAC and EAC include FY2009 through FY2018, the PRC contract period.

**Contract Performance Report Formats are provided in Appendix A.**

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

| WBS 041/RL-0041<br>Nuclear Facility<br>D&D – River<br>Corridor | FY2012               |                      | Spend Variance |
|--|----------------------|----------------------|----------------|
|  | Projected<br>Funding | Spending<br>Forecast |                |
| <b>ARRA</b>  | 6.5                  | 6.5                  | 0.0            |
| <b>Base</b>  | 36.1                 | 35.0                 | 1.2            |

Numbers are rounded to the nearest \$0.1M.

**Funds/Variance Analysis:**

Funding includes FY2011 carryover and FY2012 new Budget Authority.

**Critical Path Schedule**

Critical Path Analysis can be provided upon request.

**Baseline Change Requests**

BCR-PRC12-001R0, Baseline Rev. 3

## MILESTONE STATUS

None at this time.

## 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.