

Section F

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



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PROJECT SUMMARY

American Recovery and Reinvestment Act (ARRA)

Facilities

Completed disposal of large equipment to the Environmental Restoration and Disposal Facility (ERDF) from the 190KW Main Pump House.

Base

Facilities

Completed the Final Design for the 105KE Reactor Disposition Interim Safe Storage (ISS).

Began removal of core drilling slurry waste water drums from within 105KE Reactor building.

Completed sediment load-out of 183.2KE Basin on the east side.

Continued with erecting, scaffolding, and demolition preparation at 183.7KE Structure when resources allow.

Continued with pipe cuts on 105KE tunnel.

Continued non-boiler room asbestos removal on 165KE structure. Continue with below grade demolition on 183K Emergency Water Reservoir Pump House.

Began asbestos removal of 165KW structure.

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 Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	1	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	0	16	N/A
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

ARRA

Facilities

- Completed large equipment disposal to ERDF for 190KW Main Pump House.

Base

Facilities

- Continued repair work on the 105KE reactor building openings. Overall work is 80 percent complete.
- Completed Final Design for 105KE Interim Safe Storage.
- Continued working hazardous material removal including the removal of core drilling slurry waste water drums from the 105KE facility.
- Completed the load-out of 183.2KE Basin sediment.
- Continued with asbestos abatement of 105KE tunnel and pipe cuts.
- Continued with erecting scaffolding and demolition preparation at 183.7 structure when resources allow.
- Continued non-boiler room asbestos removal at 165KE ahead of schedule.

Waste Sites

- Initiated remediation of waste sites 100-K-3, 100-K-68, 100-K-69, 100-K-70, and 100-K-71.
- Development of plan for modeling to determine protectiveness for waste sites around the 105KE reactor building is underway.
- Performed detailed sampling of soil east of the 105KE reactor building in Area AH to determine the extent of contamination.
- Completed Verification Sampling Instructions (VSI's) for Area AA Zone 1 and Area AA Zone 2 and transmitted to DOE for review.
- The Memorandum of Agreement (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.

MAJOR ISSUES

No major issues to report this month.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

● Working - No Concerns
● Working - Concern
● Working - Critical

Increased Confidence
 No Change
 Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
RL-041/WBS 041				
KBC-004: Contamination Depth Greater Than Planned	Cannot control extent of contamination; Mitigate risk utilizing total tons within the PMB volume for 100-K waste sites Remediation.	●	↔	The 100K waste sites that have been remediated to date realized more tons of waste than planned. CHPRC will continue to use planned BCWS up to the planned PMB total tons estimated.
WSR-009: Different Remediation Approach	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 fully remediated under the 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 percolation 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	Accelerate cultural resource reviews; work with team to provide necessary information to mitigate resources issues. This risk will be monitored throughout work execution.	●	↔	TPA-CN-499 moved waste sites associated with TPA milestone M-16-53 into Phase 2 TPA Milestone M-16-143 due December 29, 2015.
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.	●	↔	Developing modeling data associated with KE waste sites to determine remediation. Model results will be shared with stakeholders for path forward.
KBC-048: Unexpected Industrial Contamination	D-4 activities are conducted in accordance with CHPRC IH and Rad protection programs to minimize contamination spread. Prior to D&D activities, the existing and historical records are reviewed to identify areas of likely industrial contamination.	●	↔	Contaminated Pipe Remediation initiated – Progressing as scheduled. No concerns.
WSR-047: Unforeseen Waste Site Event	Perform routine surveillances and maintenance of waste sites including herbicide application.	●	↔	Contaminated Pipe Remediation initiated – Progressing as scheduled. No concerns.
PRC-010: Requirements Change	The remediation of asbestos was conducted in accordance with industry accepted techniques and processes. CHPRC is working with DOE-RL and other site contractors to ensure the asbestos abatement and containment procedures are adequate.	●	↔	Recent site-wide notification regarding asbestos abatement areas could identify additional requirements regarding asbestos abatement and remediation from previously demolished structures.
PRC-014: Site-Wide Occurrence	The remediation of asbestos was conducted in accordance with industry accepted techniques and processes. All Hanford site Contractors have been requested to assess asbestos abatement and facility conditions.	●	↔	Recent site-wide notification regarding asbestos abatement areas identifies that as a potential concern for cost and schedule growth.

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

WBS 041/RL-0041 Nuclear Facility D&D – River Corridor	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
ARRA	0.3	0.3	1.2	0.0	1.2	(0.9)	-293.4
Base	<u>1.8</u>	<u>2.2</u>	<u>2.1</u>	<u>0.5</u>	29.1	<u>0.2</u>	9.0
Total	2.1	2.6	3.3	0.5	25.1	(0.7)	-25.6

Numbers are rounded to the nearest \$0.1M

ARRA

CM Schedule Performance: (+\$0.0M/+1.2%)

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

100K Area Project (Facilities and Others) (+\$0.0M) The variance is within reporting threshold.

CM Cost Performance: (-\$0.9M/-293.4%)

Waste Sites (-\$0.4M) The negative variance is due to a cost transfer the month that was completed earlier in the fiscal year and charged to Base funding.

100K Area Project (-\$0.5M) The negative variance is due to waste disposal costs for D4 structures that were completed late in FY2011, but the debris was not loaded and sent to ERDF until FY2012 and unplanned equipment rentals costs.

Base

CM Schedule Performance (+\$0.5M/-29.1%)

Waste Sites (+\$1.7M) The positive schedule variance is due to implementation of BCR-008 and 009 which deferred scope to out years.

100K Area Project (Facilities and Others) (-\$1.2M) The negative variance is due to K East Sedimentation Basin, 165KE Structure and 105KE Water Tunnel are behind schedule due to limited resources.

CM Cost Performance (+\$0.2M/+9.0%)

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

100K Area Project (+0.4M) The variance is within reporting threshold.

Contract-to-Date (\$M)

WBS 041/ RL-0041 Nuclear Facility D&D – River Corridor	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)
ARRA	178.2	177.7	180.9	-0.5	-0.3	(3.2)	-1.8	179.7	183.0	(3.3)
Base	<u>90.9</u>	<u>89.8</u>	<u>75.1</u>	<u>-1.1</u>	-1.2	<u>14.6</u>	16.3	<u>313.5</u>	<u>299.0</u>	<u>14.5</u>
Total	269.1	267.5	256.0	-1.6	-0.6	11.4	4.3	493.2	482.0	11.3

Numbers are rounded to the nearest \$0.1M

ARRA

CTD Schedule Performance: (-\$0.5M/-0.3%)

Waste Sites (-\$0.5M) The negative variance is due to backfills for Waste Sites being behind. Sub-contract has been issued and work has been initiated.

100K Area Project (-\$0.0M) The variance is within reporting threshold.

CTD Cost Performance: (-\$3.2M/-1.3%)

Waste Sites (+\$8.5) 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 (-11.7M) 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 (-\$1.1M/-1.8%)

Waste Sites (+\$1.1M) The positive cost variance is due to CSNA sites that were completed at less than anticipated cost. This is offset by Area AM not being worked as schedule due to the MOA not being approved

100K Area Project (Facilities and Others) (-\$2.2M) The negative schedule variance is due to being behind on K East Sedimentation, 105KE Water Tunnel and 1908K Structure due to limited resources. 1908 is also impacted by the MOA not being approved.

CTD Cost Performance (+\$14.6M/+16.5%)

Waste Sites (+\$10.0M) 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) (+\$4.6M) 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 Nuclear Facility D&D – River Corridor	FY2012		
	Projected Funding	Spending Forecast	Spend Variance
ARRA	6.5	6.5	0.0
Base	36.1	34.2	1.9
RL-0041 Total	42.6	40.7	1.9

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

BCRA-041-12-006R0 - *RL-0041 Waste Site Milestones & EVM Coding Correction*

BCR-041-12-007R0 - *105KE ISS Revised Estimate*

BCR-041-12-008R0 - *100K Waste Sites Associated with 105KE ISS*

BCR-041-12-009R0 - *100K Waste Sites Phase 1 TPA, Sampling, and 115KW and 117KW Deferral*

MILESTONE STATUS

Tri-Party Agreement (TPA) milestones represent significant events in project execution. DOE Enforceable Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The PMB Revision 3, implemented in November 2011, and subsequent approved BCRs define CHPRC planning with respect to TPA milestones.

Number	Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comment
M-016-53	Complete the Interim Response Actions for the 100 K Area Phase I	TPA	12/31/12			On Schedule.

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.