

Section F

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



K. L. Kehler
Vice President and
Project Manager for
D&D Project

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PROJECT SUMMARY

American Recovery and Reinvestment Act (ARRA)

Facilities

Continued with disposal of large equipment to ERDF from the 190KW Main Pump House.

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 on the east side.

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

Continued with pipe cuts on 105KE tunnel.

Began planning for the 165KE structure and the non-boiler room asbestos.

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	2	N/A
Total Recordable Injuries	0	2	N/A
First Aid Cases	0	19	N/A
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

ARRA

Facilities

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

Base

Facilities

- Began repair work on the 105KE reactor building openings.
- Initiated 105KE Safe Storage Enclosure (SSE) 90% design review and prepared formal design review comments.
- Completed removal of rain water from the interior of the 105KE reactor building.
- Conducted walk down of 105KE reactor building with CHPRC EPC for material inventory removal.
- 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.
- Began planning for 165KE ahead of schedule.

Waste Sites

- Completed Planning and Scoping for Area AA Zone 1. AA Zone 1 Issued Excavation Release Checklist.
- Commenced Pipe Removal and remediation of AA Zone 1. Began Shipment of Pipe removed to ERDF.
- The Memorandum of Understanding (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

Issue – RL-0041 Waste Site Remediation will 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 – Discussions ongoing to 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	
WSR-007: More Extensive Contamination Than Expected	Cannot control extent of contamination; no mitigation.	●	↔	Level of contamination identified at waste site 116-KE-3 has been determined to be greater than what was anticipated.
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 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 13, 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.
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.	●	↓	Field determination identified existing pipeline that had previously identified in site documents to have been used for raw water was actually used to carry some contaminants and requires remediation (100-K-102)
WSR-047: Unforeseen Waste Site Event	Perform routine surveillances and maintenance of waste sites including herbicide application.	●	↓	Lead pipe joints identified during field walkdown
D4-038: In-Place Demolition of Asbestos Siding	The remediation of asbestos was conducted in accordance with industry accepted techniques and processes. Residual Risk has arisen due to potential asbestos that remains at the work site.	●	↔	Recent site-wide notification regarding asbestos abatement areas identifies that as a potential concern for cost and schedule growth.
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.
SGW-090: Contaminated Subcontractor Equipment	Perform radiological surveys prior to initiating activities. Perform rad surveys of equipment prior to release of the site. If the equipment becomes contaminated, attempt to remove contaminated portions.	●	↓	Subcontractor equipment radiologically contaminated beyond ability to successfully decontaminate

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	0.5	0.1	1.0	(0.5)	-88.1	(0.9)	1470.7
Base	<u>3.5</u>	<u>2.2</u>	<u>2.0</u>	<u>(1.3)</u>	-36.0	<u>0.2</u>	8.5
Total	4.0	2.3	3.0	(1.8)	-42.9	(0.7)	-32.3

Numbers are rounded to the nearest \$0.1M

ARRA

CM Schedule Performance: (-\$0.5M/-88.1%)

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

100K Area Project (Facilities and Others) (-\$0.3M) The variance is within reporting threshold.

CM Cost Performance: (-\$0.9M/1470.7%)

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

100K Area Project (-\$0.9M) 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.

Base

CM Schedule Performance (-\$1.3M/-36.0%)

Waste Sites (-\$1.4M) The negative schedule variance is due to Area AM not being worked as schedule due to the MOA not being approved.

100K Area Project (Facilities and Others) (+\$0.1M) The positive variance is within reporting threshold.

CM Cost Performance (+\$0.2M/+8.5%)

Waste Sites (-\$0.2M) The negative cost variance is due to completing waste sites planned for completion in FY2011.

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	177.6	177.4	179.0	-0.2	-0.1	(1.6)	-0.9	179.7	182.18	(2.3)
Base	<u>85.9</u>	<u>86.2</u>	<u>71.6</u>	<u>0.4</u>	0.5	<u>14.7</u>	17.0	<u>313.5</u>	<u>301.6</u>	<u>11.9</u>
Total	263.5	263.6	250.6	-0.2	0.1	13.1	5.0	493.2	483.7	9.5

Numbers are rounded to the nearest \$0.1M

ARRA

CTD Schedule Performance: (-\$0.2M/-0.1%)

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

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

CTD Cost Performance: (-\$1.6M/-0.9%)

Waste Sites (+\$9.0) 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 (-10.6M) 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 (+0.4M/+2.0%)

Waste Sites (+\$0.3M) The positive schedule variance is due mainly to CSNA sites that were completed ahead of schedule partially offset by delays with receiving approval of the MOA to work Area AM.

100K Area Project (Facilities and Others) (+\$0.1M) The positive schedule variance is within threshold.

CTD Cost Performance (+\$14.7M/+17.0%)

Waste Sites (+\$10.4M) 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) (+\$4.3M) 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	35.2	0.9

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

BCR-041-12-002R0 - Waste Site 100-K-102 Realized Risks

BCR-041-12-005R0 - Realized Risk for the 116-KE-3; 105-KE Fuel Storage Basin Sub-Basin Drainage Disposal System Crib and Storage Basin French Drain.

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.