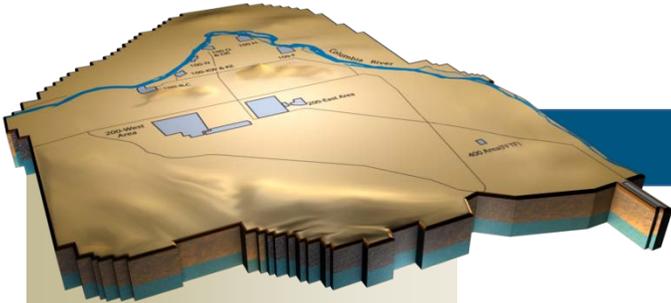


Section F

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



Monthly Performance Report

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

D. L. Foss
Vice President and
Project Manager for
Soil and Groundwater
Remediation Project



105KE / 1706KE Demolition Areas

January 2010
DOE/RL-2008-69, Rev. 15
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

American Recovery and Reinvestment Act (ARRA)

Facilities

Work continued in the 100K Area with completing characterization of 116KE. Continued final disposition characterization at 115KE and 117KE (isotope samples cannot be performed at WSCF so are being sent to another lab); and on 183.2KW, 183.3KW and 183.7KW.

Continued cold and dark activities on 117KE; completed cold and dark activities on 115KE and 116KE.

Continued asbestos abatement at 183.7KW; the majority of the asbestos containing material was removed.

Completed removal of the alum line in 183.1KW.

Continued demolition of 183.2KW. Work continued on 105KE Reactor Disposition preliminary design, project definition and regulatory documentation. 105KE deactivation activities continued with an electrical outage scheduled for mid-February. Initiated field work for characterization of the reactor core, process tube, and port surveying in early January and continue into February for core boring activities.

Waste Sites

Continued waste site remediation of UPR-100-K-1/100-K-42, 100-K-56, 100-K-47, and 100-K-3 Remove, Treat, and Dispose sites.

Waste Site	Current Month		FYTD (9/28/09 – present)	
	Tons	Loads	Tons	Loads
UPR-100-K-1 (aka 100-K-42)	3,727	259	9,320	640
100-K-3	126	9	126	9
100-K-56	452	34	1,127	95
100-K-47	58	6	758	61
Totals	4,364	308	11,332	805

A dry run for scabbling the 105KE Fuel Storage Basin discharge chute wall was conducted prior to initiating work. The dry run demonstrated that better equipment selection could greatly increase contamination control, limit environmental contamination spread, and minimize worker exposure. Work was suspended on UPR-100-K-1/100-K-42 until the necessary contract changes and equipment procurements can be implemented because further work on the UPR-100-K-1/100-K-42 remedial action would remove access needed to perform the scabbling operation.

Continued waste site remediation of UPR-100-K-1 (100-K-42); and 100-K-56, 100K Reactor Cooling Water Effluent Underground Pipelines.

Concluded confirmatory sample operations associated with the 100-K-63, 100KW floodplain contamination area; and 100-K-64, 100KE floodplain contamination area. The radiological surveys and preliminary samples demonstrated that both sites are above the remedial action limits.

Additional equipment and manpower was mobilized early in the month to begin remediation of the waste sites near the 183.1KW head house once D4 activities are completed. The crews and equipment were partially utilized on work near the 105KE Reactor Building until the head house is available.

Other

Continued debris removal from the K West Basin; over 200 units removed to date.

The 100K Area River Water Isolation, Electrical Power Isolation, and the K West Basin Airborne Contamination Remediation Projects have reached final design phases. Procurement and contracts are awaiting issuance of Notice to Proceed. Contracts awaiting approval include potable water microfiltration unit, skid mounted substations, air handling unit/HEPA filtration skids, water treatment building and dual use water storage tank, construction contracts for 100B import water line, and re-routed water line inside the fence.

Base**Facilities**

Completed characterization and decontamination, and continued cold and dark activities at the 182K Water Reservoir Pump House.

Completed 183.5KW and 183.6KW, Lime Feeder Buildings characterization and cold and dark activities. Decontamination is in process.

Completed 1724KB Maintenance Shop characterization, cold and dark activities, and decontamination. Demolition preparation is in process.

Completed 1713KER Shop Building characterization, cold and dark activities, and decontamination. Demolition preparation is in process.

Completed 116KW Reactor Exhaust Stack characterization. Cold and dark is in process.

Waste Sites

Initiated waste site remediation of 100-K-4 Remove, Treat, and Dispose site.

Waste Site	Jan-2010		Cumulative (9/28/09 – present)	
	Tons	Loads	Tons	Loads
100-K-4	1,390	98	1,390	98
Totals	1,390	98	1,390	98

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
10-EMS-100K-OB3-T1	Integrate methods for controlling air emissions into 105KE reactor core removal planning	Include methods for controlling air emissions in detailed design package	05/31/10	On Schedule
10-EMS-D&D-OB2-T2	Mitigate spill impacts	1) Develop spill management tools for routine activities (building demolition and surveillance and maintenance)	03/31/10	On Schedule
		2) Evaluate the need for lower tier project procedures to implement the PRC spill response procedure	04/30/10	On Schedule
		3) Develop and provide awareness, prevention, response and mitigation training to >85 percent of project personnel as related to spill response	05/30/10	On Schedule
		4) Review and validate pre-designations for commonly used chemicals at the facility	06/30/10	On Schedule
		5) Incorporate new spill requirements into applicable procedures/work packages based upon issuance of spill response procedure	04/30/10	On Schedule
		6) Evaluate the need for a system to pre-designate new chemicals	06/30/10	On Schedule

TARGET ZERO PERFORMANCE

	CM Quantity	FYTD Quantity	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	1	2	01/06/10 – A D&D worker prepping the work area and was struck on the right foot by the brass fitting from a dropped fire hose. The employee was transported to Kadlec where a hairline fracture to right foot was diagnosed. This injury is a Reportable Occurrence. (20641)
First Aid Cases	2	9	01/20/10 Employee was descending trailer steps at the 100K Remediation project when the individual began to feel pain in their hip area. The individual notified their management and was taken to first aid for evaluation. The employee was returned to work with no restrictions. (20657) 01/26/10 D&D worker was helping a heavy equipment operator remove rebar from the track on an excavator when worker's fingers struck cab when the rebar let loose. Sent to AMH for evaluation and released without restriction. (20662)
Near- Misses	0	0	N/A

KEY ACCOMPLISHMENTS

ARRA

Facilities

- Continued design of 105KE Reactor Disposition
- Continued project definition of 105KE Reactor Disposition
- Continued pre-characterization work of 105KE Reactor Disposition
- Deactivation activities at 105KE Reactor continued with electrical outage scheduled for mid-February
- Completed characterization of 116KE. Isotopes contained in 115KE/117KE samples will require the removal of existing samples from the WSCF lab. Lab tests to be performed at a private facility.
- Continued cold and dark at 117KE
- Completed cold and dark at 115KE and 116KE
- Continued characterization of 115KE and 117KE, where isotopic analyses require usage of a private laboratory
- Completed removal of alum line in 183.1KW; this facility is ready for demolition in mid-February
- Continued final disposition characterization at 183.2KW, 183.3KW, and 183.7KW
- Demolition on 183.1KW head house should resume in February. Demolition first occurred in early November for the bauxite tank in front of this building.
- Demolition continues on 183.2KW, where wall removal has been done on both sides, working

towards the 183.7KW tunnel running through the center of 183.2KW

- Continued asbestos abatement at 183.7KW; anticipate completion mid-February. Glycol removal was initiated and is anticipated to complete in later February.
- 1706KE/KER below-grade asbestos removal remains suspended due to structural integrity concerns. An independent structural consultant will be onsite in February.

Waste Sites

- Remediation continued on pipelines associated with 105KE Reactor effluent and miscellaneous laboratory type drain lines. This includes 100-K-56, 100-K-47, and 100-K-3.
- Work was completed to stop flow from miscellaneous 100K Area pipes into the 72-inch active discharge pipeline that drains directly into the Columbia River
- Remediation continued on 100-K-47, 1904K process sewer. Work is in progress to truncate or air gap the line.
- Remediation was initiated on the 100-K-4, 1706KE Wet Fish Studies Ponds and Valve Pits with the structure and most of the soils being removed during the month
- Remediation continued on UPR-100-K-1/100-K-42 with continued soil excavation. Performed a dry run for scabbling the discharge chute concrete causing replanning to increase ALARA practices. Work on the UPR will be temporarily suspended until the scabbling can be completed.
- Additional equipment was mobilized and crews readied to perform remediation near the 183.1KW Head House once D4 operations are completed

Other

- Continued design of the 100K Area River Water Isolation, Electrical Power Isolation, and the K West Basin Airborne Contamination Remediation Projects
- Reached Final Design Phase for 100K Utilities Re-Route Project and initiated the procurement process of long-lead procurement item and major construction contracts

Base

Facilities

- Completed characterization and decontamination at 182K Water Reservoir Pump House; continued cold and dark. Electrical isolation will complete mid-February and demolition should start immediately thereafter.
- Completed 183.5KW and 183.6KW (Lime Feeder Buildings) characterization and cold and dark activities. Decontamination is in process.
- Completed 1724KB (Maintenance Shop) characterization and 1713KER (Shop Building) cold and dark activities, and decontamination. Demolition preparation is in process.
- Completed 116KW Reactor Exhaust Stack characterization. Cold and dark is in process.

Waste Sites

- Completed the electrical wiring in the container transfer area tent in mid-January
- Planning is complete; work will begin on the remediation of 100-K-4 (Group 2 Waste Site)

MAJOR ISSUES

Issue Statement - Extent and severity of contamination in the UPR-100-K-1/100-K-42 waste site (soil associated with the 105KE Fuel Storage Basin leak) is much higher than anticipated. The significance of this higher than anticipated contamination is the work must be conducted under nuclear Hazard Category three controls, productivity will be at a diminished rate, and a larger volume of contaminated soil will need to be removed.

Corrective Action – Mitigation of the issue is tied to higher-than-anticipated contamination levels (which has led to working under hazard category three controls and diminished productivity, both of which are leading to schedule growth and increased costs) has not been resolvable to date. Efforts are ongoing to improve the productivity by ensuring the containers are loaded to their maximum weight without going over the legal load limits. This yields a higher ton-per-container average with some influence on overall schedule. Removal of the source term (contamination on the discharge chute concrete) by scabbling will also improve production rates. Preliminary samples are being taken at depth to clarify the overall nature and extent of contamination to support the development of the baseline change request/request for equitable adjustment.

Status - With the scabbling and floor removal activity to be initiated in February, production rates should gradually increase with the removal of that source term. Information on the overall nature and extent of contamination is being used in the development of the baseline change request/request for equitable adjustment.

Issue Statement – Necessary clean up of contamination spread during basin removal was not anticipated. Impacts have not been fully assessed because D4 has not completed demobilization.

Corrective Action – Add additional cover to areas contaminated by D4 equipment staging and decontaminate as the areas become available. Those covered area soils are being excavated and shipped for disposal. This volume and schedule will be included into the baseline change request/request for equitable adjustment associated with the UPR-100-K-1 issue above.

Status – Work in progress.

Issue Statement – New sites are being discovered where radiological or chemical contaminants are being found above cleanup standards. Data research is being conducted to generate even more sites (approximately 10) of similar nature.

Corrective Action – Two sites were added as part of the Performance Measurement Baseline, Rev. 2; the remainder, along with any future sites, will be added to the contract via the request for equitable adjustment process. Additional sites will be added via baseline change request/request for equitable processes as they are encountered and defined.

Status – BCR/REA process has been initiated.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk

● Working - No Concerns Increased Confidence
● Working - Concern No Change
● Working - Critical Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
KBC-022: Drawing Unavailability/Errors Cause Work Stoppage During Utility Isolation	Reroute utilities to prevent this scenario. Reconfiguration work planned during ARRA period.	●	↔	No new issues at this time.
KBC-002: Subcontract change orders/claims exceed planned allowances	Risk accepted without mitigation	●	↔	No issues at this time.
KBC-004: Contamination Depth Greater Than Planned, Increasing Waste Volumes to ERDF	Unassigned Risk - No mitigation	●	↔	Risk has been realized and BCR is being prepared.
KBC-035: ERDF Packaging Can Shortage	Unassigned Risk - No mitigation	●	↑	
PRC-044: ERDF Not Available for PRC Waste	Unassigned risk. Note that ERDF has modified off-load procedures, began dumping containers in the queue, and resumed container shipments.	●	↑	Risk realized at KE Basin; impacts documented in BCR-012-09-005. RL provided additional funding for recovery from ERDF impacts.
KBC-008: D4 Delays Impact 100K Waste Site Cleanup	Plan/Schedule Monitor progress. Manage the project and its interfaces to prevent or minimize this risk. (Logistics in schedule) May need to have other workscope planned & ready to allow work-arounds.activities are delayed.	●	↔	Project was able to meet the remediation start dates in September; later than planned start will be carried into FY 2010.

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 (%)	Budget at Completion (BAC)
ARRA	7.9	8.6	5.3	0.7	9.0	3.3	38.1	223.8
Base	<u>0.6</u>	<u>0.9</u>	<u>0.2</u>	<u>0.3</u>	44.4	<u>0.7</u>	83.9	<u>335.6</u>
Total	8.5	9.5	5.5	1.0	11.6	4.0	42.5	559.4

Numbers are rounded to the nearest \$0.1M.

ARRA

CM Schedule Performance: (+\$0.7M/+9.0%)

100K Area Project (Facilities and Others) (-\$0.3M)

The positive cost variance in 105KE Reactor Disposition (+\$0.2M) where decontamination activities started early and KW Deactivation (+0.2M) as debris removal has been efficiently performed. This is offset by utilities reroutes (-\$0.7M) where several small contracts slipped from late January into early

February.

Waste Sites (+\$1.0M)

Implementation of BCR Rev 2 resulted in a current-month point adjust of \$0.7M; \$0.2M of work scope was accelerated, and \$0.1M of work scope was revised from the 50/50 earned value method to percent complete.

CM Cost Performance: (+\$3.3M/+38.1%)

100K Area Project (Facilities and Others) (+\$3.3M)

The positive variance is due to Facilities (+\$2.6M) achieving efficiencies of scale as groups, instead of individual facilities, are being demolished concurrently; and 100K Utilities (+\$0.7M) where the waste treatment building procurement performance was overstated in January but is expected to attain that design/procurement performance by mid February so no long-term impact is anticipated.

Waste Sites (-\$0.2M)

The negative Waste Site variance is from implementation of BCR Rev 2 which resulted in a current-month point adjustment.

Project Services & Support (+\$0.2M)

General and Administrative achieved efficient use of assigned resources.

Base

CM Schedule Performance (+\$0.3M/+44.4%)

The positive variance is within established reporting thresholds.

CM Cost Performance (+\$0.7M/+83.9%)

100K Area Project (Facilities and Others) (+\$0.5M)

The positive variance is due to 105KE Reactor Disposition (+\$0.2M) having not incurred site preparation and obstruction removal costs, and Facilities (+\$0.1M) due to efficiencies of scale, and Mission Support Contract Services (+\$0.2M) being utilized less than they historically were.

Project Support & Services (+\$0.2M)

General and Administrative achieved efficient use of assigned resources.

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)
ARRA	51.4	50.6	32.4	(0.7)	-1.4	18.3	36.1	223.8
Base	<u>12.2</u>	<u>12.4</u>	<u>11.0</u>	<u>0.1</u>	1.5	<u>1.3</u>	10.7	<u>335.6</u>
Total	63.6	63.0	43.4	(0.6)	-0.9	19.6	31.1	559.4

Numbers are rounded to the nearest \$0.1M.

ARRA

CTD Schedule Performance: (-\$0.7M/-1.4%)

The negative variance is within established reporting thresholds.

CTD Cost Performance: (+\$18.3M/+36.1%)

100K Area Project (Facilities and Others) (+\$10.2M)

The positive variance is from Facilities (+\$5.6M) due to efficiencies of scale for concurrent demolition, K West deactivation (+\$2.4M) for the debris removal campaign, utilities reroutes (+\$1.5M) where procurement performance was taken but won't actually be achieved until March, 105KE Reactor Disposition (+\$1.4M) for site preparation and obstruction removal, and Mission Support Contractor support (+\$0.3M) where services have not been used as extensively as planned. This is offset by Project Management (-\$1.0M) where general site cleanup labor has been utilized on emerging site cleanup work scope.

Waste Sites (+\$0.4M)

Waste Sites 100-K-47/100-K-56 have achieved efficiencies in work performed.

Project Support & Services (+\$7.7M)

General and Administrative achieved efficient use of assigned resources.

Base

CTD Schedule Performance (+\$0.1M/+1.5%)

The positive variance is within established reporting thresholds.

CTD Cost Performance (+\$1.3M/+10.7%)

100K Area Project (Facilities and Others) (+\$1.4M)

The positive cost variance is due to 105KE Reactor Core Removal (+\$2.7M) work efficiency on deactivation/decontamination and enabling documents. This is offset by Facilities (-\$0.9M) where the 1706KE/KEL/KER complex above-grade demolition required more resources due to its complexity and Mission Support Contractor support (-\$0.4M) where services have not been used as extensively as planned.

Waste Sites (-\$0.3M)

Waste Sites negative variance is because the subcontractor was brought on-site but utilization was delayed pending construction of a temporary container transfer area and completion of 1706KE/KEL/KER demolition/decontamination.

Project Support & Services (+\$0.2M)

General and Administrative achieved efficient use of assigned resources.

Contract Performance Report Formats are provided in Appendix A.

Funds vs. Spend Forecast (\$M)

WBS 041/RL-0041 Nuclear Facility D&D – River Corridor	FY 2010		Variance
	Projected Funding	Spending Forecast	
ARRA	121.5	114.9	6.5
Base	<u>20.9</u>	<u>18.3</u>	<u>2.6</u>
Total	141.9	133.2	8.7

Numbers are rounded to the nearest \$0.1M.

Funds Analysis:

Projected funding includes FY 2009 uncosted and FY 2010 expected new budget authority.

Critical Path Schedule

Critical Path Analysis can be provided upon request.

Estimate at Completion (EAC)

The BAC and EAC include FY 2009 through FY 2018, the PRC contract period.

Baseline Change Requests

BCR-PRC-10-011 PRC Baseline Rev. 2

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.