

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 Demolition & RemediationSites

September 2010 DOE/RL-2008-69, Rev. 36 Contract DE-AC06-08RL14788 Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

American Recovery and Reinvestment Act (ARRA)

Facilities

Work continued on 105KE Reactor Disposition Interim Safe Storage activities. Hazardous material removal and asbestos abatement were completed for the reactor building. Demolition on the west side of the reactor building was initiated. The Documented Safety Analysis (DSA) changes and waste and transportation documentation were completed for demolition of the K East discharge chute.

Completed above-grade demolition of 115KE Gas Recirculation Building

Completed above-grade demolition of 117KE Exhaust Air Filter Building

Completed pot-holing concrete and cleanup of the 1706KE Radiation Control Counting Laboratory and 1706KER Water Studies Recirculation Building below-grade levels

Continued demolition of the 183.2KW Sedimentation Basin

Completed demolition of the 183.3KW Sand Filter and the 183.7KW Tunnel

Continued characterization of the 183.1KE Head House

Waste Sites

The following table lists sites that were initiated under ARRA. In BCR-PRC-10-047R0, ARRA to Base Shift for 100-K-63 and Waste Sites with Extent of Contamination waste volumes beyond the original ARRA planned quantities (as well as remaining RTD work including sampling, closeout, backfill, and revegetation) have been moved to Base for the following waste sites: 116-KE-3, 120-KW-1, 100-K-34, 100-K-18, 120-KW-2, 100-K-71, 100-K-68, 100-K-69, 100-K-70, 100-K-56, 100-K-47, 100-K-3, and 100-K-102. The work sites and their current month production are shown in the table.

Active Excavation on ARRA	Sep-10		Inception (9/28/09 –	
Waste Site	Tons	Loads	Tons	Loads
100-K-3	-	1	5,507	392
100-K-42	-	-	9,688	660
100-K-47	-	-	17,393	1077
100-K-56	-	-	11,839	740
100-K-68	-	-	9,477	476
100-K-71	-	-	7,569	467
100-K-102	2394	117	18,035	942
116-KE-3	-	-	4,328	217
120-KW-1	5,911	275	28,810	1,514
183.1-Soils	-	-	12,291	625
183.1-Debris	-	-	9,038	562
100K-63	28,859	1320	56,547	2635
100-K-53	-	-	350	24
Total	37,164	1,712	190,872	10,331

Active excavation work continued at 100-K-63, 120-KW-1 and 100-K-102.



Waste site 120-KW-1 is a large excavation that includes waste sites 100-K-18, 100-K-34 and 120-KW-2. Due to the close proximity and required comingling of waste streams, the site is being excavated under one waste site name, specifically 120-KW-1. This site was advanced from 15 feet below grade to 18 feet below grade in order to successfully remove the contamination. Residual contamination above cleanup levels exists beyond 18 feet below grade; therefore, additional remediation is required.



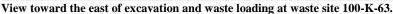
Figure 1: Photograph of 120-KW-1

View toward the northeast of excavation and waste loading at waste site 120-KW-1. Note the large chemically-stained soil in the bottom-left side of the photo.

Waste site 100-K-63 is being excavated under contract direction that establishes a not-to-exceed value of \$7.5M. Begun with ARRA funding, this waste site shifted to Base funding starting in the month of September per BCR-PRC-10-047R0 and Change Order 92. An intensive sample campaign was conducted to determine the extent of contamination within the waste site. Sample data is expected from the laboratory in mid-October. During excavation, a culturally significant area was identified. CHPRC and RL are working together to determine what, if any, impact may be realized from the discovery.



Figure 2: Photograph of 100-K-63





Additional excavation is pending in 100-K-42, 100-K-47, and 116-KE-3. Work remains suspended on UPR-100-K-1 (work performed as 100-K-42), 100-K-3, 100-K-53, 100-K-56, 100-K-68, 100-K-69, 100-K-70, 100-K-71, 100-K-77, and 116-KE-1 until D4 completes their activities in the immediate areas. 100-K-57 and 100-K-64 are suspended pending contractual action and preparation of a Cultural Mitigation Action Plan. Only those sites associated with the cultural mitigation plan are currently in jeopardy of missing the TPA milestones. Plans are being made to address the additional contamination removal where available.

Other

Sludge vacuuming completed in K West Basin West Bay and began in the North Load-Out Pit with a targeted completion date for sludge removal of October 8, 2010. Over 610 debris units have been removed from the K West Basin to date.

HVAC Project: Construction completion and operational startup of the K West Basin Airborne Contamination Remediation Project has been completed. Approximately 810 linear feet of interior ventilation ducting has been installed with drops and diffusers, and three HVAC/HEPA filtrations units have been installed. Construction Acceptance Testing was completed as well as completing turnover to operations.

Electrical Project: Completed the A9 project which included the installation of portable substations, trench excavations, installation of 20 pull boxes and hand holes, installation of approximately 15,000 linear feet of conduit, approximately 1,500 feet of duct bank, and repairing an existing damaged ground grid that was discovered during trench excavation. The 13.8kV Reroute project completed the installation of 21 new poles, aerial conductors, tie switches, and pole mounted transformers. Construction completion was jointly reviewed with CHPRC and MSA Electrical Utilities (EU) and punch lists of post-start issues were identified.

Water Project: Completed the installation of approximately 25,000 feet of underground water line starting from Helen's Junction to inside the 100K Area with final tie-ins pending MSA Fire Marshal approval. Completed the installation and testing of the dual-purpose fire and water reservoir tank. The Water Project is completing the remaining fire suppression, fire detection activities, and working with fire protection to obtain design approval. The Pall Microfiltration Units have been installed with Operational Testing scheduled for October 18, 2010, with results being sent to the Washington State Department of Health for concurrence to start potable water operations. Hydroseeding of the export water line excavation site has completed, and paving of Route 1 is complete.

Base

Facilities

105KE Reactor Disposition Engineering Evaluation/Cost Analysis (EE/CA), Draft A, was transmitted to the regulators and is pending imminent release for public comment. The report on developmental testing of the bio-shield wall demolition and thermal shield removal was completed. The 60% design submittal is re-scheduled for mid-November to allow for Critical Decision 0/1 to be approved by RL.

Continued deactivation of 110KW Gas Storage Facility

Completed characterization and continued deactivation of the 115KW Gas Recirculation Building Continued sampling and deactivation of the 117KW Exhaust Air Filter Building

The 118KW Horizontal Control Rod Storage Cave has been decontaminated and is ready for demolition Deactivation is on hold for four buildings which will be removed at the same time; they cannot be removed until after their occupants and contents are moved to other buildings and Connex boxes, respectively. The buildings are the 1717K Maintenance Transportation Shop, 1717AKE Electrical Shed, 1724K Maintenance Shop, and 1724KA Storage Shed.



Deactivation is on hold for four K West mobile offices to be removed as a group (MO236, MO237, MO323, and MO955) once the occupants have been moved to other buildings

Waste Sites

Continued waste site remediation of the below listed remove, treat, dispose (RTD) sites:

	Septem	ber 2010	Cumulative (9/28/09 – present		
Waste Site	Tons	Loads	Tons	Loads	
100-K-4	-	-	2,989	210	
1607-K3	463	22	2,304	103	
100-K-109	-	-	7,502	413	
Totals	463	22	12,795	726	

Samples from waste site 1607-K3 indicated a portion of the site contained contamination above the remedial action goals. Excavation and removal of the contaminated soils was conducted. The wastes were contained and shipped to ERDF for disposal.

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	08/31/10	Complete
10-EMS-D&D- OB2-T2	Mitigate spill impacts	Develop spill management tools for routine activities (building demolition and surveillance and maintenance)	03/31/10	Complete
		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
		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	1	7	N/A
First Aid Cases	3	41	09/02 – 100K NCO was exiting Bay 5 in CVDF and caught foot in survey instrument probe cord. Employee lost balance and fell onto knees and then onto back. The FWS accompanied NCO to AMH for evaluation. NCO returned to work with no restrictions. (21284) 09/10 – 105KE D&D worker was moving a toolbox when worker felt lower back discomfort. The worker was taken to AMH by supervisor for evaluation. The worker was examined, given OTC medication and released without restrictions. (21299) 09/23 – Employee was cleaning a conex box when worker felt snap in abdomen. (21370)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

ARRA

Facilities

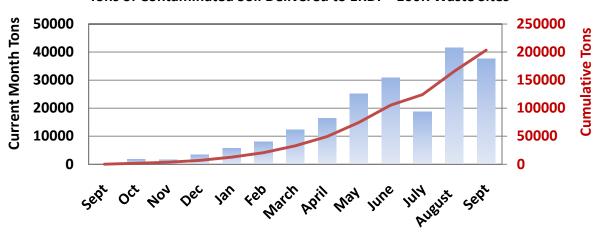
- 105KE Reactor completed hazard material removal and asbestos abatement of the reactor building, initiated demolition on the west side of the reactor building, and completed the report on developmental testing of the thermal shield removal and bioshield wall demolition. The K East discharge chute demolition completed DSA changes, and completed Waste and Transportation documentation.
- The 115KE Gas Recirculation Building sampling results require installation of grout ports on the tanks which will then be grouted at ERDF; this work requires a tie-down analysis and Special Packaging Authorization from RL, which is in process. Above-grade demolition was completed and the facility has been turned over to the Waste Site Remediation team to remove the below-grade structure as part of their waste site. The 117KE Exhaust Air Filter Building above-grade demolition was completed and the facility was turned over to the Waste Site Remediation team to remove the below-grade structure as part of their waste site.
- The 1706KE Radiation Control Counting Laboratory and 1706KER Water Studies Recirculation Building completed final concrete removal. The substructures have been turned over to Waste Site Remediation's subcontractor for removal with their adjacent waste sites.
- Demolition of the final South wall re-started for the 183.2KW Sedimentation Basin and should finish



- early in October, along with a few sumps that were previously planned to be left in place. The debris will be stock-piled for re-use as clean fill.
- Glycol removal was completed for 165KE. Glycol has been drained from all but 115KW and 165KW
 and will be performed as fill-in work during October. Final check of the 165KE glycol lines will be
 made after the boiler room asbestos is removed, which is approximately six months out.
- Completed demolition of the 183.3KW Filter Basin. Demolition took several months longer than planned as the footers were found to be 7-10 foot thick, instead of the standard depth shown on the drawings. This resulted in significantly more ERDF debris than planned.
- Demolition completed on the 183.7KW Tunnel pipe gallery
- Characterization of the 183.1KE Head House should complete in December. Deactivation was placed on hold and will complete after major electrical and water system upgrades are completed this fall, and sample results of adjacent waste tanks are received. The lab doing the sample analysis is currently under a "stop work" situation, which is impacting sample turnaround times.
- The 183.4KW and 183.4KE Clear Well final deactivation was placed on hold and will complete after major electrical and water system upgrades are completed this fall

Waste Sites

Work progressed somewhat slower than expected for the month of September. The first operational week realized slower-than-normal container exchanges due to a non-work related condition that impacted the transportation group. Minor weather delays were caused by wind and rain during the month. Plus, the cultural discovery and ensuing visits and investigations slowed work. As a result, the monthly total for September was somewhat diminished from previous months but still above plan.



Tons of Contaminated Soil Delivered to ERDF - 100K Waste Sites

HVAC Project

- Completed shop fabrication and installation of interior/exterior duct connections to HVAC/HEPA Units
- Completed installation of all 810 feet of insulation for the interior ducting
- Completed installation, testing, and turnover to operations of the three HVAC/HEPA Units

Electrical Project

- Completed installation of new power feed for MO401/MO402 parking lot lights
- Completed tie ins to the new Water Treatment Building, MO500, and MO293
- Completed installation of all of the new 13.8Kv poles (20 total)
- Successfully installed, tested, and energized the new A-9 Switchyard transformers and switchgears



Water Project

- Completed installation of all fire water piping in the 105KW/CVDF fire loop and awaiting Fire Department approval
- Successfully performed the Import Water Line tie-in at Helen's Junction
- Continued installation of process piping and mechanical components inside the Water Treatment Plant building
- Successfully filled and hydro tested the 750,000 gallon dual-use water tank
- Completed installation of the two Pall Microfiltration Unit Trains inside the Water Treatment Building

Other

• Completed sludge vacuuming in the West Bay of the K West Basin and began vacuuming in the North Load-Out Pit. Completed the preventative maintenance activities and the multi-canister overpack (MCO) proficiency test. Extracted and shipped the first sludge sample from Container 230.

Base

Facilities

- Completed 105KE Reactor Disposition EE/CA, Draft A, which is being transmitted to the regulators for public comment. Also completed the characterization report on the 105KE reactor core.
- 110KW Gas Storage Facility demolition is on hold until after the utility upgrades occur this fall
- The 115KW Gas Recirculation Building additional sampling required by Radiation Control should occur in October
- The 117KW Exhaust Air Filter Building characterization will be performed on overtime in October due to resource availability. Above-grade demolition is planned to occur in November.
- The 118KW Horizontal Control Rod Storage Cave is ready for demolition, which will commence in October once the demolition crew from the 183.2KW Sedimentation Basin is available
- Deactivation has been placed on hold for four buildings which will be removed at one time after the
 utility upgrades occur this fall. The buildings are the 1717K Maintenance Transportation Shop,
 1717AKE Electrical Shed, 1724K Maintenance Shop, and 1724KA Storage Shed.
- Demolition is on hold for the 182K Water Reservoir Pump House. The below-grade water reservoir connects directly to the 183.4KE clear well, which provides the service water/fire protection water for 100K. The shut-off valves between these two facilities leak, thus below-grade demolition cannot commence until the new utility systems are operational this fall and the 183.4KE clear well water and 183.2KE sedimentation basins are drained.
- The 183KE Chlorine Vault is awaiting demolition. Operations will continue to utilize the building until after the utility upgrades this fall, after which time demolition should commence.
- Leased facility MO872 Radiation Control Trailer is ready for re-installation in its new location. The building power design is almost complete. A contract will then be issued to hook up electrical power at the new site.
- Deactivation is on hold for four K West mobile offices to be removed as a group (MO236, MO237, MO323 and MO955). Personnel began moving into other offices in late September, after which deactivation will resume. This will accelerate this demolition work from FY2012 into October/November FY2011.
- After the utilities upgrades finish this fall, a group of facilities will be deactivated. Their initial characterization walk downs have been performed, and characterization sampling finished in September. These facilities are 105KE/KW Tunnels, 1506K1 Fiber Optics Computer Hut, 165KE/KW Power Control Buildings, 166AKE Oil Storage Facility, 166KE/166KW Oil Storage Vaults, 167K Cross-Tie Tunnel and Building, 1705KE Effluent Water Treatment Pilot Plant, 183.5KE/183.6KE Lime Feeder Buildings, 183.7KE Tunnel, 185K Potable Water Treatment Plant,



and 190KE/KW Main Pump Houses. Once the en-mass deactivation occurs, the demolitions will be performed on a staggered schedule.

Waste Sites

- Thirteen waste sites that were previously ARRA funded were migrated to base as the extent of contamination exceeded the ARRA-defined work scope. In addition, 100-K-63, which was originally ARRA funded, was migrated to base funding while maintaining ARRA historical reporting.
- Waste site 1607-K3 excavation was completed pending sample results

MAJOR ISSUES

Issue – Extent and severity of contamination in the UPR-100-K-1/100-K-42 waste site footprint and D4 demolition area is much higher than planned in the baseline. The significance of this higher-than-anticipated contamination is that 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 tied to higher-than-anticipated contamination levels has not been resolved to date. Corrective actions have included maximizing productivity by ensuring the containers are loaded to their maximum weight without exceeding legal load limits. This yields a higher ton-per-container average with some positive influence on the overall schedule.

Status – D4 planning for removal of the discharge chute has progressed. Work is trending to start in mid–to-late October. Waste site work is on hold until the chute is removed.

Issue – Thirteen new sites have been discovered where radiological or chemical contaminants are above cleanup standards.

Corrective Action – The sites are being added to the contract via Change Proposal (CP).

Status – The CP/BCR process has been initiated for these newly discovered waste sites. An Advanced Work Authorization (AWA) was issued for 100-K-109. Work started in July under the AWA. A BCR for 100-K-97, -98, -99, and -100 was submitted for RL review but was returned and a change proposal was requested. CP-1061 addressing these four waste sites will be submitted to RL in October. Additional CPs will be submitted for the sites not covered in CP-1061.

Issue – Extent and severity of contamination in multiple waste sites is much higher than anticipated.

Corrective Action – Work is continuing on these sites in order to meet ARRA and TPA milestones even though the cost and schedule are impacted.

Status – BCR-PRC-10-047R0 was implemented in September. Excavation activities in excess of the original planned tons and all sampling, closeout, backfill, and re-vegetation activities for 13 sites were moved from ARRA to base. Additionally, CPs are being prepared for the remaining change-of-condition sites not addressed in BCR-PRC-10-047R0. While this issue is anticipated to resurface, the issue is currently closed.

Issue – Outages (electrical and water) will require significant integration with MSA Electrical Utilities (EU) and 100K Operations to minimize disruptions.

Corrective Action – Project Manager has established weekly meetings with MSA EU to coordinate electrical outages and assure resources are available. Project Manager is coordinating with 100K Operations to determine best available outage times.

Status – An integrated schedule is being developed to identify outages for electrical and water projects and provide time for MSA EU and 100K Operations to minimize impacts.



Issue – Procedure development and operational training for the water treatment plant may require more time than allotted.

Corrective Action – Project Leads have defined procedure needs (modification or new development) for HVAC and Water Treatment Facility.

Status – Resources were identified to support procedural development and a schedule was developed to track progress.

Issue – Change orders in the Power/Water/HVAC Projects have caused an increase in cost and schedule delays throughout the lifecycle of the Utilities Project. These change orders have been incurred due to design changes, additional material/equipment and labor, added subcontractor work scope (i.e., road improvements and debris removal), and unforeseen obstruction/underground utilities.

Corrective Action – Efficient evaluation, communication, and implementation of change orders/claims by Project Management and supporting staff to alleviate additional cost associated with implementing change orders/claims.

Status – Continuing communication between management, subcontractors and supporting staff to minimize schedule/cost impacts associated with change orders/claims.



RISK MANAGEMENT STATUS

Unassigned Risk Risk Passed New Risk





New Risk				
Risk Title	Risk Strategy/Handling	Asses Month	sment Trend	Comments
KBC-001A: KE Basin Phase IV Demolition Contamination Levels	Risk accepted without mitigation		+	Contamination levels are expected to result in increased costs for subsurface waste removal and disposal.
KBC-002: Subcontract change orders/claims exceed planned allowances	Prepare accurate functional requirements and SOW, including flow-downs; monitor subcontractor activities and encourage early communication of problem areas		~	The Utilities Reroutes project has had several design changes to incorporate required fire protection and other requirements and to address unmarked utilities encountered in the field. The cost impacts are being evaluated.
KBC-004: Contamination Depth Greater Than Planned, Increasing Waste Volumes to ERDF	Unassigned Risk - No mitigation	•	+	Risk has been realized and change proposal and BCR are being prepared.
KBC-009: D4/Waste Site Interference	Integrate all 100 K work activities to minimize issues/conflicts between D4 activities and waste site remediation	•	↔	No issues at this time.
KBC-019: Groundwater Treatment Activities Impact D4/Waste Site RTD Activities	Coordinate with S&GRP to minimize impact to D4 and waste site remediation.	•	\	No issues at this time.
KBC-020: Ecological/Cultural Conditions Restrict Field Activities	Accelerate cultural resource reviews to minimize schedule impact if cultural resource mitigation is required prior to initiating remediation	•	+	Although no impacts have been realized at this time, some sensitive cultural areas are expected to be encountered
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-035: ERDF Packaging Can Shortage	Work closely with W&FM Project regarding ERDF packaging can needs to ensure can availability	•	+	No issues at this time.
KBC-043: Waste Site Remediation Completion Requirements	Existing closure approach is consistent with WCH approach for balance of River Corridor waste sites; risk accepted without mitigation.	•	+	No issues at this time.
KBC-044: 100 K Waste Sites Require Haz Cat Controls	Existing characterization data indicates the likelihood of this risk occurring is low; however, if it does occur the consequences may be medium to high with respect to cost and schedule impact.		*	100-K-42 site is a Haz Cat 3 facility and has caused schedule delays.
KBC-045: 100 K East Basin Soil Disposition	Treatment will likely be in the form of waste blending for in accordance with DSA for that site.		+	Some materials are having to be blended for 100-K-42, 100-K-47, and 100-K-70.
KBC-061: Technology Readiness Assessment Required for Reactor Core Removal and Demolition	Perform mock-up testing of equipment to demonstrate effectiveness; obtain early RL agreement of technology readiness approach.	•	~	No issues at this time.
KBC-070: New SARP Required for Waste Packages	Very low probability of occurrence; risk accepted without mitigation		←	No issues at this time.
KBC-076: Treatment Required for 100 K RTD Waste Prior to Disposal	Review waste disposal records as part of RTD planning to identify potential issues prior to beginning retrieval; work with ERDF to determine minimum acceptable treatment to minimize quantity of waste that must be treated or disposed elsewhere.	•	~	No issues at this time.
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.	•	~	No issues at this time.



RISK MANAGEMENT STATUS - continued

Unassigned Risk
Risk Passed
New Risk

Working-No Concerns
Working-Concern
Working-Concern
Working-Concern
Decreased Confidence
No Change
Decreased Confidence

New Risk				Decreased confidence		
Risk Title	Risk Strategy/Handling	Asses	sment	Comments		
KISK TILIC	Risk Strategy/Hallding	Month	Trend	Comments		
WSR-007: More Extensive Contamination Than Expected	Cannot control extent of contamination; no mitigation.	•	+	This risk ha been realized in waste site remediation. Additional contamination is being encountered above planned levels regularly. BCR-10-047R0 has adjusted volumes for those sites that have been exceeded.		
WSR-008: No Action Waste Sites	Confirmatory sampling is the only way to determine if "no action" waste sites require remediation; risk is accepted without mitigation.	•	1	Rate of failure has stabilized; the Project has initiated planning to determine full impacts.		
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 than what is planned.	•	~	Same as CSNA for this effort, but may expand to 116-KE-2 and those sites associated with cultural resource issues. Planning is underway to determine the most appropriate paths forward.		
KBC-044: 100 K Waste Sites Require Haz Cat Controls	Existing characterization data indicates the likelihood of this risk occurring is low; however, if it does occur the consequences may be medium to high with respect to cost and schedule impact.		~	100-K-42 is a Haz Cat 3 facility and has caused schedule delays.		
KBC-045: 100 K East Basin Soil	Treatment will likely be in the form of waste blending		4	Some materials are having to be blended for 100-K-42, 100-K-		
Disposition	for in accordance with DSA for that site.	_		47, and 100-K-70.		
WSR-020: Ecological/Cultural Conditions Restrict Field Activities	This risk is accepted as written and will be monitored throughout work execution.	•	1	New: A significant cultural discovery was encountered during active remediation of 100-K-63. The path forward is unclear at this time. On going: Remedial actions are not allowed in 100-K-57 due to the requirement of a Cultural Mitigation plan in a highly sensitive known cultural area. RL has been working with the Tribes since February 2010. This site is significantly behind schedule and is not anticipated to be recoverable within the ARRA window. If negotiations and work authorization restrictions continue the TPA milestone may be jeopardized.		



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	5.0	6.1	7.2	1.1	21.7	(1.1)	-18.3
Base	<u>4.8</u>	10.8	<u>9.3</u>	<u>6.0</u>	125.7	<u>1.5</u>	13.9
Total	9.8	17.0	16.6	7.1	72.5	0.4	2.3

ARRA

CM Schedule Performance: (+\$1.1M/+21.7%)

Waste Sites (+\$2.0M)

A significant schedule variance has been reported during this period continuing the positive trend. BCR-PRC-10-047R0, implemented in September, reflects completion of the ARRA portion of performance for thirteen waste sites with their additional scope moved to base. Some negative contributors include: encumbered access due to D4 priorities and removal of the 105KE discharge chute; 116-KE-2 which must be moved to Group 2 to align with the TPA milestones and fit with utility relocation work; and 116-KE-3 where the base volume has been excavated but schedule is slipping as the additional amount of contamination is determined and where a drywell was encountered in the base of the excavation at 45 feet below ground. This well must be decommissioned before work can proceed.

100K Area Project (Facilities and Others) (-\$0.9M)

The negative schedule variance in K West Deactivation (-\$0.7M) is due to the small and medium debris disposition campaign being delayed by the MCO proficiency test and vacuuming; Project Management (-\$0.7M) where the processor for the PC8001C-8 was not received by month end and the Emergency Decontamination trailer purchase has been placed on hold; and 105KE Reactor (-\$0.2M) due to delayed start of the final design due to rescheduling the 60% design review from June to November at the request of RL. This is offset by a positive schedule variance in Utilities (+\$0.6M) with execution of field work on the electrical and water projects to recover schedule slippage and (+\$0.1M) from 183KW Sedimentation Basin Complex recovering some schedule from prior months.

CM Cost Performance: (-\$1.1M/-18.3%)

Waste Sites (+\$5.9M)

In conjunction with the BCR mentioned above, cost transfers were implemented to move costs related to waste volumes in excess of those originally planned from ARRA to base for the same thirteen (including 100-K-63) waste sites. This, together with a much larger-than-anticipated ERDF passback, resulted in the positive cost variance for the current month.

100K Area Project (Facilities and Others) (-\$7.0M)

The negative cost variances in Utilities (-\$5.2M) has two components: the electrical project mobile substation subcontract and the water project subcontract, both of which are incurring extra costs to maintain the schedule; K West deactivation (-\$1.9M) due to no work performed on the small and medium debris disposition campaign (see SV discussion) although vacuuming activities were performed; Facilities (-\$1.1M) on the 183.3KW Filter Basin where additional ERDF costs have been incurred as the footers were significantly thicker than the drawings showed, and increased 1706KE/KER costs due to removal of equipment/piping in the substructure that was not planned; 105KE Reactor (-\$0.8M) due to the addition of the discharge chute demolition. These are offset by positive variances in G&A (+\$1.9M) due to the



year-end passback; and Project Management/MSA Assessments (+\$0.1M) due to a multitude of small corrections.

Base

CM Schedule Performance (+\$6.0M/+125.7%)

Waste Sites (+\$5.6M)

The positive schedule variance arises primarily from implementation of BCR-PRC-10-047R0 mentioned above. Due to the extent of contamination, BCWS was added for additional extent of contamination and performance taken for thirteen waste sites where work had been performed, and all the additional scope was moved from ARRA to base for these waste sites. The appropriate cumulative performance was reported in September resulting in a significant positive schedule variance.

100K Area Project (Facilities and Others) (+\$0.4M)

The positive variance is primarily due to (\$+0.7M) Facilities where a large group of buildings have begun the characterization sampling; offset by negative variances in 105KE Reactor (-\$0.3M) due to delayed start of the final design due to rescheduling the 60% design review from June to November.

CM Cost Performance (+\$1.5M/+13.9%)

Waste Sites (+\$3.1M)

As with the schedule performance discussed above, the cost variance is related to the BCR implemented in September, the cost transfers associated with it and a larger-than-expected ERDF passback.

100K Area Project (Facilities and Others) (-\$1.6M)

The negative cost variance for 105KE Core Removal (-\$0.6M) is primarily attributed to delay in finalization of core characterization; G&A (-\$1.1M) due to the September passback; and Project management (-\$0.1M) numerous small corrections. These are offset by Facilities (+\$0.2M) due to numerous small charges.



Contract-to-Date

(\$M)

WBS 041/ RL-0041 Nuclear Facility D&D – River Corridor	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed		Variance	Schedule Variance (%)		Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
ARRA	124.7	123.1	114.0	(1.6)	-1.3	9.1	7.4	170.2	156.0	14.2
Base	<u>26.3</u>	<u>35.1</u>	<u>31.0</u>	<u>8.8</u>	33.4	<u>4.1</u>	11.7	<u>382.1</u>	<u>383.8</u>	(1.7)
Total	151.0	158.2	145.0	7.2	4.8	13.2	8.3	552.3	539.8	12.5
Numbers are round	ad to the nee	rect \$0.1M								

ARRA

CTD Schedule Performance: (-\$1.6M/-1.3%) The negative variance is within reporting thresholds.

CTD Cost Performance: (+\$9.1M/+7.4%)

Waste Sites (+\$10.1M)

Last month's positive cost variance, caused by early completion of 100-K-55 Part 1 and CSNA sites, was increased by implementation of BCR-PRC-10-047R0 as discussed above.

100K Area Project (Facilities and Others) (-\$5.9M)

The positive variance is mostly attributable to K West deactivation (+\$1.9M) for the debris removal campaign removing smaller debris units first and efficiencies from utilizing experienced staff. Facilities (+\$1.5M) is due to 183.2KW ERDF disposal cost avoidance offset by 1706KE/KER asbestos material overruns. The 105KE Reactor Disposition (+\$0.1M) is attributed to decontamination work utilizing less engineering and administrative staff than planned. These are offset by a negative cost variance in Project Management (-\$3.0M) where D&D facility remediation site housecleaning activities have been charged to the General Site Cleanup account; and the 100K Area utility projects (-\$6.4M) due to design changes, additional material/equipment and labor, added subcontractor work scope (i.e., road improvements and debris removal), and unforeseen obstruction/underground utilities.

Project Support & Services (+\$4.9M)

G&A achieved efficient use of assigned resources.

Base

CTD Schedule Performance (+\$8.8M/+33.4 %)

Waste Sites (+\$9.7M)

In addition to factors reported last month (RL's acceptance of CSNA documentation, completion of 100-K-56 Part 2 with much less effort than anticipated, and early completion of CSNA scope), the schedule variance was further increased by implementation of BCR-PRC-10-047R0 as discussed above.

100K Area Project (Facilities and Others) (-\$0.9M)

The negative variance is from Facilities (-\$0.3M) where a large group of buildings have begun the characterization/deactivation planning process, but no field work can be performed until after the utilities upgrade occurs this fall, so no performance could be taken; and the 105KE Reactor (-\$0.6M) due to delayed start of the final design due to rescheduling the 60% design review from June to November.



CTD Cost Performance (+\$4.1M/+11.7 %)

Waste Sites (+\$6.1M)

The positive cost variance arises from early completion of 100-K-56 Part 2 and CSNA scope and implementation of BCR-PRC-10-047R0 as discussed above.

100K Area Project (Facilities and Others) (-\$2.0M)

The negative variance is from Facilities (-\$0.5M) due to 1706KE/KEL/KER overruns last year on the above-grade demolition; Project Management (-\$0.7M) due to the higher-than-planned number of vehicles (MSC Services) being utilized by the project; and G&A (-\$1.4M) due to year-end variance distributions. This is partially offset by the positive variance in 105KE Reactor (+\$0.6M) due to overestimation of project enabling documentation costs.

Contract Performance Report Formats are provided in Appendix A.

Funds vs. Spending (\$M)

	FY2		
WBS 041/RL-0041 Nuclear Facility D&D – River Corridor	Funding	Actual Spending	Spend Variance
ARRA	99.4	102.3	(2.9)
Base	<u>35.6</u>	<u>24.4</u>	<u>11.2</u>
Total	135.0	126.7	8.3

Numbers are rounded to the nearest \$0.1M.

Funds/Variance Analysis:

Funding includes FY2009 carryover funds and FY2010 new budget authority. The ARRA negative variance is largely due to increase in D&D cost from Group 1 Structures Remediation below-grade demolition work scope and increased costs for the 100K Area Utilities Reroute associated with the mobile electrical substation, necessary road enhancements, unforeseen obstacles found during excavation, added work scope for potable water facility tie in, removal of large rock/debris piles and HPT support for the remainder of the project.

Critical Path Schedule

Critical Path Analysis can be provided upon request.

Estimate at Completion (EAC)

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

Baseline Change Requests

BCR-PRC-10-053 R0, PRC Baseline, Rev. 2 Update

BCRA-PRC-10-060R0, General Administrative Changes for FY 2010 Year End



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 PRC Baseline Revision 2, submitted in January 2010, defines CHPRC planning with respect to TPA milestones. The following table is a one year look ahead of key milestones.

Milestone	Title	Туре	Due Date	Actual Date	Forecast Date	Status/ Comment
M-016-140	Submit Revised RD/RA Work Plans for 100K RODs With New Milestones	TPA	3/31/11			Currently considered "at risk" due to issues with providing sludge treatment milestone dates and plans.

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.

