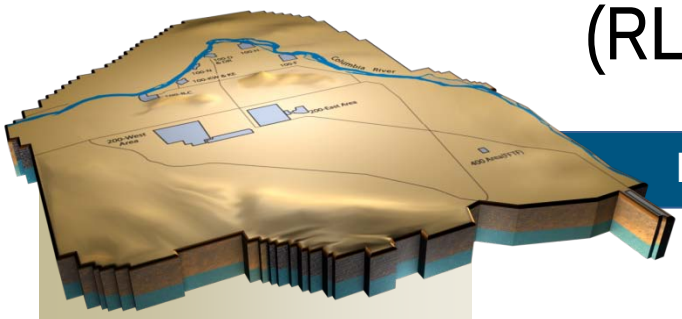
CH2MHILL
Plateau Remediation Company

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

115KE building demolition

March 2011
CHPRC-2011-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

American Recovery and Reinvestment Act (ARRA)

Facilities

Completed resolving comments from the 105KE Reactor Core Removal Project Preliminary Design Review Meeting

Work continued on 105KE Reactor Disposition Site Preparation/Phase I Demolition - Interim Safe Storage (ISS) activities to demolish the East and West Annexes

Continued preparations to demolish the 110KW Gas Storage Facility

Completed demolition of the 115KE Gas Recirculation Building

Continued demolition on the below-grade portion of the 117KE Exhaust Air Filter Building

Continued characterization of the 181KE River Pump House/1605KE Guard House and the 183.1KE Head House and adjacent tanks and continued asbestos removal preparations

Completed the 183.4KE and 183.4KW Clear Well deactivation planning

Continued asbestos removal preparations in the 190KE and 190KW Main Pump Houses

Waste Sites

CHPRC completed ten direct pushes and the associated logging in the immediate vicinity of the north face of the 105KE Reactor and its fuel storage basin and former discharge chute. Four of the direct pushes were 45-degree slant pushes under the reactor building and the remaining six pushes were vertical in orientation away from the reactor building. Well logging was completed in late March and the data is now being evaluated; results should be briefed to RL by the end of April.

Resumed soil load out from the 100-K-42 Fuel Storage Basin. This effort allows CHPRC to continue with the waste site remediation while preserving the option to re-enter the discharge chute area, along with the east and west ends of the north face of the reactor, to possibly perform additional direct pushes and logging.

RL and CHPRC collaborated on writing a memorandum of agreement (MOA) for the planned remove, treat, and dispose (RTD) scope at the 100-K-57 waste site and the 100-K-64 flood plain. The MOA was approved by RL in mid-March and subsequently forwarded to the State Historic Preservation Officer (SHPO) for their review and approval.

Continued waste site remediation of the below listed RTD sites:

Active Excavation on ARRA Waste Sites and Sub-Grade Structures	March 2011 Tons	Containers
100-K-42	5,087	287
115KE	915	44
117KE	5,005	245
100-K-53	8,803	414
Monthly Total	**19,810**	**990**
Previous Cumulative (all sites under ARRA)	**90,558**	**5,167**
ARRA Cumulative (FY2009 to Date)	**110,368**	**6,157**

Other

K West Deactivation has completed Sludge Vacuuming in the 105KW Basin. Completed removal and/or disposition of all planned (1,025) debris units.

The 105KW Basin HVAC Project equipment is in operation and performing as anticipated.

The 100K Electrical Power Project is finalizing punch-list activities necessary to complete the transition from the existing A-7 yard to the new A-9 yard/substation. Transfer of electrical loads from A-7 substation to the new A-9 yard/substation is being coordinated with MSA Electrical Utilities (EU) for early May.

The 100K Water Project commissioned the potable water treatment plant, completed disinfection of the new water distribution system, and is waiting for laboratory results to put the new potable water system in service. Closeout of punch-list items will complete by the end of April.

Base

Facilities

105KE Reactor Engineering/Planning activities continued for the design and construction of the Reactor Building Safe Storage Enclosure (SSE) to place it in ISS.

Finished draining water from the 183.2KE Sedimentation Basin

Continued below-grade demolition of the 1706KE Radiation Control Counting Laboratory and 1706KER Water Studies Recirculation Building

Waste Sites

Continued work in 100-K-47 waste site and resumed subgrade demolition and debris load out at 1706KER

Continued waste site remediation of the below listed RTD sites:

Active Excavation on Base Waste Sites and Sub-Grade Structures	March 2011 Tons	Containers
100-K-102	2,115	96
120-KW-1	9,294	429
1706-KE	2,130	99
1706-KER	2,526	124
Monthly Total	**16,065**	**748**
Previous Cumulative (all sites under Base)	**198,572**	**10,197**
Base Cumulative (FY09 to Date)	**214,637**	**10,945**

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	1) Develop spill management tools for routine activities (building demolition and surveillance and maintenance)	03/31/10	Complete
		2) 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
		6) 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	0	6	N/A
First Aid Cases	2	27	**03/02** 100K Insulator was carrying a bag of asbestos waste to a disposal dumpster when the worker felt a pull in their lower back. **(21801)** **03/08** 105KW RCT reported to FWS on 03/11, there was a foreign body in the little finger left hand. The worker was unsure how the foreign body got there, but thought it was likely from using a stapler. **(21825)**
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

ARRA

Facilities

Work continued on the 105KE Reactor Building Disposition Site Preparation/Phase I Demolition – ISS activities to demolish the East and West annexes.

110KW Gas Storage Facility is ready for demolition, which will be performed with adjacent 115KW.

Completed demolition of the 115KE Gas Recirculation Building

Continued below-grade demolition of the 117KE Exhaust Air Filter Building. Additional concrete has been discovered below the floor, which must be removed. A baseline change request will be processed for the additional work scope.

Continued with asbestos removal preparations in the 181KE River Pump House. Once the electrical isolation occurs (May), asbestos removal will proceed. A crane will then perform the 24 lifts to remove the various motors and heavy equipment.

165KE Power Control Building demolition planning continued; asbestos removal is on hold until the facility is electrically deactivated.

Started 183.1KE Head house asbestos removal. Completion of electrical isolation will allow asbestos removal to finish.

Started hauling the concrete stockpile from the 183.2KW Sedimentation Basin to U Plant and back-hauling clean soil for backfill

Started demolition planning for 183.3KE Filter Basin and 183.4KW/183.4KE Clear Wells

Started draining both 183.4KE and 183.4KW Clear Wells, which should complete in early April

Asbestos removal preparation continued in the 190KE and 190KW Main Pump Houses, and will complete after electrical isolations occur in May.

Waste Sites

EPA decided not to approve TPA Change Notice 412, citing that it may be too early to move the suggested waste sites from Phase 1 to Phase 2 or 3. This change notice has been cancelled.

100K Electrical Power Project:

Completed testing of the substation supervisory control and data acquisition (SCADA) system installation and re-installed replacement control power transformers (CPTs) in the substation control building following failure of the initial units.

100K Water Project:

Completed testing of all fire protection systems

Placed the Service Water/Fire Water System into sustained operation

Received approval of the draft Operations and Maintenance (O&M) manual from Washington State Department of Health

Other

Continued to video and review for found fuel in the center and west bays of the 105KW Basin

Base

Facilities

Continued 105KE Reactor Disposition – ISS engineering/planning activities for the design and construction of the Reactor Building SSE. Key activities completed were: preparation of cost proposal/ schedule for completion in March, developing the Plant Force Work Review for review/approval, and preparation of the Statement of Work for contract placement of design/construction contracts for ISS.

The 115KW Gas Recirculation Building asbestos removal continued. Demolition will be concurrent with the 110KW Gas Storage Facility and 117KW Exhaust Air Filter Buildings.

Continued below-grade demolition of the 1706KE Radiation Control Counting Laboratory and started the below-grade demolition of 1706KER, Water Studies Recirculation Building

Completed demolition of the 183KE Chlorine Vault. The completion metric will not be claimed until the stock-piled concrete is re-utilized as clean fill.

Completed draining water from the 183.2KE Sedimentation Basin which also partially drains the 183.4KW/KW Clear Wells (ARRA) and 182K Emergency Water Reservoir Pump House. Once the water is fully drained, demolition can begin.

Waste Sites

CHPRC completed ten direct pushes and the associated logging in the immediate vicinity of the north face of the 105KE Reactor, fuel storage basin and the former discharge chute. Four of the direct pushes were 45-degree slant pushes under the reactor building and the remaining six pushes were vertical in orientation away from the reactor building. Well logging was completed in late March and the data is now being evaluated; results should be briefed to RL by the end of April.

CHPRC continues to work closely with RL to determine if the 100-K-63 waste site meets the Remedial Action Goal of the Record of Decision; once it is determined that the Remedial Action Goal has been satisfied, closure documentation will be developed.

The development of closure paperwork for waste sites 118-KE-2 and 118-KW-2 continued.

MAJOR ISSUES

Issue – RL-41 Waste Site Remediation will not be able to complete the remediation work scope tied to ARRA funded waste site 100-K-57 by the end of September 30, 2011. The inability to complete this work by the end of the ARRA period, and quite possibly by the scheduled Tri-Party Agreement due date of December 31, 2012, is being driven by the lack of an approved cultural resources mitigation action plan.

Corrective Action – The situation surrounding this issue has improved over the past month as CHPRC and RL have developed an MOA that RL has sent to SHPO for their review, comment and approval. It is expected that the MOA will be approved on or before April 25, 2011. With the MOA's approval, CHPRC will be able to resume controlled remediation activities in the 100-K-57 waste site. Completing remediation of this site under ARRA funds by the end FY2011 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.

Status – This issue continues to be addressed by RL and CHPRC senior management.

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	
KBC-001A: KE Basin Phase IV Demolition Contamination Levels	Risk accepted without mitigation	Working - Concern	No Change	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	Working - No Concerns	No Change	This risk was realized as a result of unforeseen facility conditions (unassigned risk PRC-029); however, management reserve was utilized in accordance with PRC-051 (Investment in Schedule Acceleration/Recovery) to offset the risk impacts resulting from subcontract changes associated with the unforeseen conditions.
KBC-004: Contamination Depth Greater Than Planned, Increasing Waste Volumes to ERDF	Unassigned Risk - No mitigation	Working - Concern	No Change	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	Working - No Concerns	No Change	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.	Working - No Concerns	No Change	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	Working - No Concerns	No Change	BCR processed to utilize management reserve to offset cost impacts associated with ecological protections required for demolition of the 100K river structures (181KW, 181KE, and 1980K).
KBC-022: Drawing Unavailability/Errors Cause Work Stoppage During Utility Isolation	Reroute utilities to prevent this scenario. Reconfiguration work planned during ARRA period.	Working - No Concerns	No Change	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	Working - No Concerns	No Change	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.	Working - No Concerns	No Change	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.	Working - Concern	No Change	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.	Working - Concern	No Change	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.	Working - No Concerns	No Change	No issues at this time.
KBC-070: New SARP Required for Waste Packages	Very low probability of occurrence; risk accepted without mitigation	Working - No Concerns	No Change	No issues at this time.

RISK MANAGEMENT STATUS – continued

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	
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.
WSR-007: More Extensive Contamination Than Expected	Cannot control extent of contamination; no mitigation.			No new issues this past month. Continue to track and sample for apparent chemical contamination in the 100-K-120 waster site area.
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.			There are alternative remediation strategies being discussed for the following waste sites: 100-K-57, 100-K-64, and 116-KE-1. The client is being kept informed on developments.
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.			Direct pushes and associated logging have been completed at the 105-KE Reactor and former fuel storage basin. A path forward for completing remediation at 100-K-42 is now underway.
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 continues to be a working concern that is being addressed through approved procedures. Assuming that no other issues arise during the next month, this will be last month that this risk is statused.
WSR-020: Ecological/Cultural Conditions Restrict Field Activities	This risk will be monitored throughout work execution.			The risk status improved over the past month as CHPRC and RL have developed a memorandum of agreement that RL has sent to SHPO for their review, comment and approval. It is expected that the MOA will be approved on or before April 25, 2011. With the MOA's approval, CHPRC will be able to resume controlled remediation activities in the 100-K-57 waste site. Completing remediation of this site under ARRA funds by the end FY 2011 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.

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	6.6	4.8	6.5	(1.9)	-28.2	(1.7)	-35.5
Base	5.8	3.7	4.2	(2.1)	-35.8	(0.5)	-13.1
Total	**12.4**	**8.5**	**10.7**	**(3.9)**	**-31.7**	**(2.2)**	**-25.7**

Numbers are rounded to the nearest $0.1M

ARRA

CM Schedule Performance: (-$1.9M/-28.2%)

Waste Sites (-$0.7M)

The negative variance is due to performance taken ahead of schedule in prior months and delays due to the 100K Utilities re-route (May) and cultural resource issues in the 100-K-64 flood plain.

100K Area Project (Facilities and Others) (-$1.3M)

The negative variance is due in part to delays in the performance of structures remediation deactivation activities (-$0.6M) as a result of delayed completion of the 100K Utilities re-route work. The remaining variance (-0.5M) is in 105KW deactivation due to taking performance in previous months for the early completion of removal of debris units.

CM Cost Performance: (-$1.7M/-35.5%)

Waste Sites (-$1.1M)

The negative variance is due to accruing vendor costs for removal of overburden however, performance is only taken when the overburden is disposed at ERDF, costs that will be corrected, and level-of-effort activities that are bearing increased costs for functional group support, exceeding performance.

100K Area Project (Facilities and Others) (-$0.76M)

The negative cost variance is from several areas. Utilities (-$0.9M) is due to continued labor and material costs that are required to complete the work scope (100K Electrical Power Project (-$0.1M) and the 100K Water Project (-$0.7M)). 105KW Deactivation (-$0.6M) is due to taking performance in previous months for the final debris campaign completing all 1,025 units ahead of plan, and incurring costs for accelerated debris disposal activities. Structures Remediation (-$0.3M) variance is due to cold and dark/deactivation being planned but unable to commence until after May utility projects complete. Project Management (-$0.2M) due to the higher number of vehicles being utilized by the project. G&A/project support services (-$0.1M) due to a March BCR point adjustment. These variances are partially offset by the positive cost variance in the 105KE Reactor (+$1.5M) due to a subcontract modification to correct billing and a correction for understated performance last month.

Base

CM Schedule Performance (-$2.1M/-35.8%)

Waste Sites (-$0.6M)

The schedule variance arises from not fully achieving production goals due to high wind weather conditions throughout the month and time spent on direct pushes and data logging at the 105KE Reactor. This was partially offset by better than expected performance on waste sites at the 183.1KW Head House.

100K Area Project (Facilities and Others) (-$1.7M)

The negative variance is primarily in Facilities (-$1.0M) due to cold and dark/deactivation being planned but unable to commence until after May when the utility projects complete; and 105KE Reactor (-$0.5M) due to a subcontract modification to correct billing.

CM Cost Performance (-$0.5M/-13.1%)

The negative variance is within reporting thresholds.

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	148.3	147.2	147.6	(1.1)	-0.7	(0.4)	-0.3	182.7	178.6	4.1
Base	51.2	49.1	47.6	(2.1)	-4.2	1.5	3.1	334.1	330.6	3.5
Total	**199.5**	**196.3**	**195.2**	**(3.2)**	**-1.6**	**1.1**	**0.6**	**516.8**	**509.2**	**7.6**

Numbers are rounded to the nearest $0.1M

ARRA

CTD Schedule Performance: (-$1.1M/-0.7%)

The negative variance is within reporting thresholds.

CTD Cost Performance: (-$0.4M/-0.3%)

The negative variance is within reporting thresholds.

Base

CTD Schedule Performance (-$2.1M/-4.2%)

The negative schedule variance is within reporting thresholds.

CTD Cost Performance (+$1.5M/+3.1%)

The positive variance is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST
($M)

WBS 041/RL-0041 Nuclear Facility D&D – River Corridor	FY2011 Projected Funding	FY2011 Spending Forecast	FY2011 Spend Variance
ARRA	67.7	67.7	0.0
Base	55.4	47.2	8.3

Numbers are rounded to the nearest $0.1M.

Funds/Variance Analysis:

Funding includes FY2010 carryover and FY2011 new Budget Authority.

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

BCRA-PRC-11-025R0, Adjustments to Fee

BCRA-PRC-11-026R0, Adjustment to Schedule Logic for Milestones in PMB
BCR-PRC-11-028R0 Change in Demolition Approach for the 181KE & 181KW Structures
BCRA-PRC-11-031R0 General Administrative & FOC Changes for March 2011

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 update, implemented in September 2010, and subsequent approved BCRs define CHPRC planning with respect to TPA milestones. The following table is a one year look ahead of key milestones.

Milestone	Title	Type	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	3/30/11		Complete

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.