



## PROJECT SUMMARY

### American Recovery and Reinvestment Act (ARRA)

#### Facilities

Completed demolition load-out on the 105KE Reactor above-grade demolition of the west annex

Completed preparations to demolish the 110KW Gas Storage Facility

Continued project closeout on the 105KE Reactor Core Removal Project Final Design

Continued characterization of the 181KE River Pump House/1605KE Guard House

Completed sampling plan in 183.4KW Clear Well to determine if floor can be left behind

Continued demolition of the 183.4KE Clear Well

Continued asbestos removal preparations in the 190KE and 190KW Main Pump Houses and 165KE Power Control Building

#### Waste Sites

A briefing on direct push technology (DPT) and borehole sampling options to provide additional contamination characterization at the east and west sides of the former discharge chute and the fuel storage basin was provided to RL in mid-May. Following this briefing, determined that ten additional DPTs and eight borehole samples would be conducted. These additional characterization activities will be performed in June and July.

The final recommendations document for 100-K-63 is on hold pending the outcome of the selenium leach study and report. This study is needed to determine the protectiveness of the river and to support closure of the waste. The leach sample results and a site specific  $K_d$  value will be addressed in a report. Sample results were received on May 12, 2011 however results are inconsistent and  $K_d$  calculations are not possible with the current data. Further discussion on the leach test and laboratory issues will need to occur in order to determine a path forward.

The Memorandum of Agreement (MOA) for the 100K Area flood plain Waste Site 100-K-64 continues to be supported by CHPRC as RL works to finalize the wording contained in these agreements.

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

Active Excavation on ARRA Waste Sites and Sub-Grade Structures	May 2011	
	Tons	Containers
117KE	22	1
100-K-53	3,808	181
100-K-56	119	8
116-KE-1	2,854	126
<b>Monthly Total</b>	<b>6,803</b>	<b>316</b>
<b>Previous Cumulative (all sites under ARRA)</b>	<b>120,623</b>	<b>6,637</b>
<b>ARRA Cumulative (fiscal year [FY]2009 to Date)</b>	<b>127,426</b>	<b>6,953</b>

**Other**

The 105KW Basin heating, ventilation, and air conditioning 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 Mission Support Alliance, LLC (MSA) Electrical Utilities for early June.

The 100K Water Project placed the potable water system into sustained operations and continued to work punch-list items. The construction contractor was de-mobilized from the site.

**Base****Facilities**

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

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

Started above-grade demolition of the 183.2KE Sedimentation Basin Continued demolition and electrical work packages for 115KW Gas Recirculation Building

**Waste Sites**

Continued waste site remediation of the below listed RTD sites:

<b>Active Excavation on Base Waste Sites and Sub-Grade Structures</b>	<b>May 2011</b>	
	<b>Tons</b>	<b>Containers</b>
100-K-42	2,422	139
100-K-47	528	24
120-KW-1	8,808	402
100-K-109	423	20
105-KE Admin	1,237	65
116-KE-3	1,414	62
1706-KER	5,147	255
<b>Monthly Total</b>	<b>19,979</b>	<b>967</b>
<b>Previous Cumulative (all sites under Base)</b>	<b>231,846</b>	<b>11,787</b>
<b>Base Cumulative (FY2009 to Date)</b>	<b>251,825</b>	<b>12,754</b>

## 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	<ol style="list-style-type: none"> <li>1) Develop spill management tools for routine activities (building demolition and surveillance and maintenance)</li> <li>2) Evaluate the need for lower tier project procedures to implement the PRC spill response procedure</li> <li>3) Develop and provide awareness, prevention, response and mitigation training to &gt;85 percent of project personnel as related to spill response</li> <li>4) Review and validate pre-designations for commonly used chemicals at the facility</li> <li>5) Incorporate new spill requirements into applicable procedures/work packages based upon issuance of spill response procedure</li> <li>6) Evaluate the need for a system to pre-designate new chemicals</li> </ol>	03/31/10 04/30/10 05/30/10 06/30/10 04/30/10 06/30/10	Complete Complete Complete Complete Complete Complete

## TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	2	N/A
Total Recordable Injuries	0	4	N/A
First Aid Cases	7	28	5/1/11 – While replacing tarp on ERDF container, employee strained lower back when gust of wind lifted tarp off container. 21931 5/1/11 – While relocating debris, employee jarred back. CSC evaluated and employee returned to work with no restrictions. 21937 5/2/11 – Employee missed a step, jarring lower back. 21947 5/5/11 – NCO nicked thumb on serrated edge of tape dispenser. The medical provider treated with waterproof bandage and no further restrictions. 21951 5/6/11 – Employee fell off bench, hitting shoulder. CSC evaluated and employee returned to work with a restriction of no overhead use of arm. 21952 5/18/11 – Employee struck elbow against equipment causing pain. CSC evaluated and employee returned to work with no restrictions. 21975 5/19/11 – Employee rolled ankle while walking. 21976
Near-Misses	0	0	N/A

## KEY ACCOMPLISHMENTS

### ARRA

#### **Facilities**

Work was completed on the 105KE Reactor Building Disposition Site Preparation/Phase I Demolition – ISS above-grade demolition of the West Annex.

Project closeout continued on the 105KE Reactor Core Removal Final design.

110KW Gas Storage Facility is ready for demolition. This building was planned to be demolished with a facility sharing a common wall, but now will be removed separately.

Continued characterization of the 181KE River Pump House. The 165KE Power Control Building demolition planning continued; asbestos removal activities commenced.

Completed deactivation of the 183.1KE Head House. Completed asbestos removal and above-grade demolition. Began removal of below-grade tanks/equipment in preparation for below-grade demolition, which will be self-performed.

Hauled most of the concrete stockpile from the 183.2KW Sedimentation Basin to U Plant and brought back clean soil for backfill.

Completed deactivation of the 183.3KE Filter Basin. Samples were taken to determine if concrete debris can be re-utilized instead of being sent to the Environmental Restoration Disposal Facility (ERDF) landfill.

Initiated sampling plans to verify the 183.4KW/183.4KE Clear Well floors can remain in place. Completed 183.4KE deactivation (183.4KW was deactivated in FY2010).

Asbestos removal resumed in the 190KE Main Pump House, which completed deactivation, and preparations continued in 190KW which will complete after electrical isolations occur in May.

#### **Other**

Completed taking videos in the Center Bay area. Scheduled to take videos for West Bay and pits in June 2011.

#### **100K Electrical Power Project:**

Closing out punch list items and coordinating the transfer of loads to the A-9 substation with MSA Electrical Utilities. Outage scheduled for the weekend of June 10 through June 12, 2011.

#### **100K Water Project:**

Closing out project documents

#### **Base**

##### **Facilities**

Continued 105KE Reactor Disposition – ISS engineering/planning activities for the design and construction of the Reactor Building SSE

Continued 105KE Tunnel decontamination and asbestos removal, which was started early to support adjacent ARRA facility demolitions

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

Started above-grade demolition of the 183.2KE Sedimentation Basin

Sampling of the 183.7KE Tunnel was completed to determine whether the floors may be left in place.

##### **Waste Sites**

Remaining Site Verification Plans for waste sites 118-KE-2 and 118-KW-2 were sent to RL and the U.S. Environmental Protection Agency for their review and comment.

## **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 risk status did not improve over the past month as the process for a MOA that RL has sent to the State Historic Preservation Officer for their review, comment, and approval has not progressed. It is not expected that the MOA will be approved in the near future. When the MOA is approved, 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    Increased Confidence  
● Working - Concern    No Change  
● Working - Critical    Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
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	●	↔	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	●	↔	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	●	↔	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.	●	↔	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.

## 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.
<b>WSR-007: More Extensive Contamination Than Expected</b>	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 waste site.
<b>WSR-009: Different Remediation Approach</b>	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.			Additional direct pushes and associated logging 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 the 105-KE Reactor and former fuel storage basin. Logging data is being evaluated from the first ten pushes; a path forward for additional pushes will be briefed to RL in the near term.
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.			Higher than planned for dose rates on ERDF containers were experienced again during April. This resulted in the project making the determination that the 100-K-42 waste site soil load out should be suspended until a plan and path forward for completing the removal of the contaminated soils could be made, presented and implemented.
WSR-020: Ecological/Cultural Conditions Restrict Field Activities	This risk will be monitored throughout work execution.			The risk status was changed to stable as there has been very little movement on the memorandum of agreements that RL is drafting. With the MOA's approval, CHPRC will not be able to initiate controlled remediation activities in the 100-K-57 waste site and initiate backfill or similar for 100-K-63 within the ARRA time frame. CHPRC received authorization from RL to remove this work from ARRA scope. Due to the complexities of the MOA process 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 (%)
<b>ARRA</b>	6.5	4.2	3.5	(2.3)	-35.3	0.7	15.9
<b>Base</b>	5.3	3.3	3.3	(2.0)	-37.9	0.0	0.3
<b>Total</b>	<b>11.8</b>	<b>7.5</b>	<b>6.8</b>	<b>(4.3)</b>	<b>-36.5</b>	<b>0.7</b>	<b>9.1</b>

Numbers are rounded to the nearest \$0.1M

### ARRA

#### CM Schedule Performance: (-\$2.3M/-35.3%)

##### Waste Sites (-\$1.5M)

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. Additionally, 100-K-53 has experienced greater than planned extent of contamination. Contract direction shifting 100-K-53, 10-K-57, and 116-KE-2 from ARRA to Base funding was received May 26, 2011, and a BCR will be processed in June.

##### 100K Area Project (Facilities and Others) (-\$0.8M)

The negative variance is due to continuing delays with the Utilities Upgrades which is affecting the demolition of facilities; offset by completion of the FY2010 CENRTC and General Site Cleanup this month.

#### CM Cost Performance: (+\$0.7M/+15.9%)

##### Waste Sites (-\$0.2M)

The negative variance is from 100-K-53 experiencing greater than anticipated extent of contamination. RL has been notified, contract direction was received, and a BCR will be processed in June shifting 100-K-53 from ARRA to Base funding.

##### 100K Area Project (Facilities and Others) (+\$0.8M)

The positive variance is due to an accrual reversal for 105KW Deactivation, taking full performance for the General Site Cleanup activity but the costs were incurred in FY2010, and overruns in the Assessment accounts.

### Base

#### CM Schedule Performance (-\$2.0M/-37.9%)

##### Waste Sites (-\$0.9M)

The negative schedule variance is due to higher than expected levels of contamination at 100-K-42 preventing waste from being shipped and forcing a strategic pause and re-evaluation of the path forward for waste sites in the 105-KE fuel storage basin, and from delays related to cultural resources in the flood plain. CHPRC continues to work with RL cultural resource specialists to expedite resolution of cultural resource issues.

##### 100K Area Project (Facilities and Others) (-\$1.1M)

The negative variance is due to delays with the Utilities Upgrades which has delayed demolition of other 100K facilities.

**CM Cost Performance (+\$0.0M/+0.3%)**

The positive cost 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)
<b>ARRA</b>	161.4	155.8	156.2	(5.6)	-3.4	(0.4)	-0.3	181.8	169.8	12.0
<b>Base</b>	61.2	57.5	54.7	(3.8)	-6.1	2.8	4.8	333.2	348.8	(15.6)
<b>Total</b>	<b>222.6</b>	<b>213.3</b>	<b>210.9</b>	<b>(9.3)</b>	<b>-4.2</b>	<b>2.4</b>	<b>1.1</b>	<b>515.0</b>	<b>518.6</b>	<b>(3.6)</b>

Numbers are rounded to the nearest \$0.1M

**ARRA****CTD Schedule Performance: (-\$5.6M/-3.4%)**

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 (-\$3.8M/-6.1%)**

Waste Sites (+\$3.5M)

The positive variance is due to CSNA sites completed ahead of schedule, and is partially offset by delays related to demolition of the 105-KE fuel storage basin discharge chute and the 100K utility upgrade project.

100K Area Project (Facilities and Others) (-\$7.3M)

The negative variance is due to deferring the electrical utilities upgrade for several months. This affected the demolition of several other facilities due to not being able to complete demolition until they were cold and dark.

**CTD Cost Performance (+\$2.8M/+ 4.8%)**

Waste Sites (+\$5.0M)

The positive variance is due to failed confirmatory sampling no further action and RTD sites 100-K-55 Part 1 and 100-K-56 Part 2 which were completed ahead of schedule with less effort than originally planned, partially offset by negative variances related to greater than planned extent, and severity of contamination in the 105KE fuel storage basin.

100K Area Project (Facilities and Others) (-\$2.2M)

The negative variance is due to Structures (-\$3.3M) primarily in the 1706KE/KEL/KER complex completed in prior years and Project Management (-\$1.2M) due to FY2010 General Site Cleanup overruns. These are partially offset by 105KE Reactor (+\$1.4M) due to efficiencies in cold and dark/characterization and overhead allocations (+\$0.8M) which are discussed in Appendix C.

**Estimate at Completion (EAC)**

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

The April to May ARRA EAC decrease in River Zone D&D, (-\$2.3M) reflects replanning of the below-grade demolition of the 105KE East and West annexes. This scope was moved from ARRA to Base funding. The ARRA waste site remediation EAC decreased due to shifting waste sites 116-KE2, 100-K-57, and 100-K-53 from ARRA to Base (-\$2.4M); offset by greater than planned contamination in 116-KE-1 and 100-K-53 (+\$0.6M).

The Base, River Zone, EAC increased \$5.7M from the prior month due to the replanning above, doubling of the 1706KE/KER complex below-grade demolition forecast due to contaminated soil and delayed electrical utility project completion.

**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	Spending Forecast	Spend Variance
<b>ARRA</b>	67.7	62.3	5.4
<b>Base</b>	54.6	50.2	4.4

Numbers are rounded to the nearest \$0.1M.

### Funds/Variance Analysis:

Funding includes FY2010 carryover and FY2011 new Budget Authority. “Projected Funding” for Base PBSs was changed in May, 2011 to reflect a reallocation among PBSs and a reduction of \$7.3 to align with the final FY 2011 Appropriations Act (RL-0041 Base: -\$0.8M).

### Critical Path Schedule

Critical Path Analysis can be provided upon request.

### Baseline Change Requests

BCR-041-11-003R0, Correction to Earned Value Method on 100-K-64 Waste Site Activity  
 BCR-R41-11-005R0, 100K CENRTC & General Site Cleanup Scope Alignment  
 AWA-041-11-003R0, Complete Eng Design for 105KE Reactor Core Removal C0 #47  
 BCRA-PRC-11-001R0, General Administrative Changes for May 2011

## MILESTONE STATUS

None at this time.

## 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.