



The January 15, 2009 Central Plateau /FFTF Quarterly Milestone Review was cancelled by agreement of the Tri-Parties due to organizational priorities and conflicting schedules. The presentation packages that were prepared for this Milestone Review are attached.

**RECEIVED**  
JAN 19 2009  
**EDMC**

# PFP Closure Project TPA Milestone M-083



January 2009  
Tri-Party Agreement Milestone  
Status Report

Ecology Project Manager – R. Bond  
DOE-RL Project Director – E. Mattlin  
PFP Closure Project Manager – M. Crocker  
CHPRC Environmental – C. Walker

## M-83 Status for Interim Milestones (as of 12/31/08)

<b>TPA No.</b>	<b>TPA Commitment Date</b>	<b>Milestone Title</b>	<b>Status</b>
M-083-32	9/30/11	COMPLETE CLOSURE OF THE PFP 241-Z TSD UNIT	<b><i>Complete</i></b>
M-083-42	9/30/11	COMPLETE TRANSITION AND DISMANTLEMENT OF THE 241-Z WASTE TREATMENT FACILITY	<b><i>Complete</i></b>
M-083-43	9/30/13	COMPLETE TRANSITION OF THE 242-Z WASTE TREATMENT FACILITY AND 236-Z PRF	<b><i>On Schedule</i></b>
M-083-44	9/30/15	COMPLETE TRANSITION OF THE 234-5-Z (PFP), 243-Z LLW Treatment, 291-Z and Z-1 Stack	<b><i>On Schedule</i></b>

## Accomplishments

- Fabrication of 13 Hanford Un-irradiated Fuel Package (HUFP) shipping containers is on schedule with first container expected in February 2009
- Fabrication of the support frame used to secure the HUFP during loading is on schedule
- Completed annual maintenance and leak testing on 80 Savannah River Site (SRS) radiological empty Model 9975 containers.
- Completed packaging 10 (of 19 required to be dispositioned) Sources and Standards, these will be scheduled and shipped to LANL
- Continued Plutonium Reclamation Facility (PRF) glovebox cleanout
- Gloveboxes 235-B-2 and HA-53-BTS were removed along with 4 hoods (Rm 155 - 1, 2, 3 and 4)

## Planned Activities

- **Continue PRF glovebox cleanout activities**
- **Continue Process Facilities Temporary Lay-up**
- **Chemical Decontamination of gloveboxes**
- **Continue removal of hoods in Analytical Lab**
- **Continue PFP de-inventory activities**
- **Continue Min-Safe maintenance Activities**
  - Replace filters in room 310 which services the glovebox ventilation
  - Remove from service general area filter rooms with aging filters

# Schedule / Cost Performance

## Fiscal Year to Date Status (through December)

	Fiscal Year to Date				
	BCWS	BCWP	ACWP	SV\$	CV\$
RL-0011 - Nuclear Material Stabilization & Disposal (PFP)	26,111.6	24,819.5	20,470.1	(1,292.2)	4,349.4

### FYTD Schedule Variance: \$ -1.3M

- Unfavorable Schedule variance is caused primarily due to late receipt of long lead materials associated with the HUFPP procurement and materials needed for completion of HUFPP fabrication, partially offset by completion of D&D Planning and decontamination strategies earlier than planned.

### FYTD Cost Variance: \$ 4.3M

- Primary contributor to the positive cost variance is the delay in procurement of materials and subcontract costs associated with the procurement and fabrication of the HUFPP shipping containers. Secondary contributor is under-runs in labor. Labor under-runs are attributed to the interim baseline being prepared during transition in parallel with offers being made by Human Resources to Fluor Incumbents. As a result, the total budgeted FTEs and actual Head Count were not reconciled at the time the baseline was implemented in September, 2008. This variance will be corrected with the implementation of the Revised Interim Work Plan which is planned for the end of January, 2009.

# Issues

## Regulatory Issues:

- None

## Non-Regulatory Issues:

- **A positive USQ/PISA determination associated with HEPA filter strength assumption in Safety Analysis requires retirement of older filter rooms in PFP from service.**

**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
Quarterly Presentation  
January 15, 2009**



**Deborah Singleton, Ecology Lead  
Michael Collins, RL Project Lead  
John Long, ORP Project Lead**



---

---

**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
January 15, 2009**

- Tri-Party Agreement milestone M-26-01 requires annual submittal of the Hanford Site Land Disposal Restrictions (LDR) Report
- TPA change request M-26-06-01 approved December 14, 2006 established summary reports as the deliverable with the full LDR report submitted every 5 years.



---

---

**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
January 15, 2009**

- Data collection for the CY2008 LDR Summary Report has begun.
- Monthly Project Manager Meetings (PMMs) are an effective tool for dialogue and as a venue to resolve emerging issues (Hot topics)
  - No current issues to raise to management



---

---

**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
January 15, 2009**

**Actions Planned for Next Three Months**

- Continue the monthly PMMs, as needed
- Continue working on storage assessments of Potential Mixed Waste
  - Four assessment reports at Ecology for review
  - Four assessments initiated
- Continue work on CY2008 LDR Summary Report and prepare for transmittal by the end of April 2009

# Tri-Party Agreement Quarterly Milestone Review M-91 Series



January 15, 2009



**EM** *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

[www.em.doe.gov](http://www.em.doe.gov)

## TPA Quarterly Milestone Review M-91 Series

See status tables for the following: Milestone descriptions, Performance Information, Accomplishments

### Significant Accomplishments of Last Three Months (1 of 2):

- Certified 221 m<sup>3</sup> of M-91-42 TRU/M
  - Prepared 1001 drums (about 200 m<sup>3</sup>) for shipment to Idaho
- Treated 136 m<sup>3</sup> of M-91-42 MLLW
  - Total volume treated – 7,230 m<sup>3</sup> (10/01/08-12/31/08 – 384 m<sup>3</sup>)
  - Met 12/31/08 milestone to treat 7,220 m<sup>3</sup>
  - Total volume shipped – 7,464 m<sup>3</sup> (10/01/08-12/31/08 – 62 m<sup>3</sup>)



**EM Environmental Management**

safety ❖ performance ❖ cleanup ❖ closure

[www.em.doe.gov](http://www.em.doe.gov)

## TPA Quarterly Milestone Review M-91 Series

### Significant Accomplishments of Last Three Months (2 of 2):

- Retrieved 1,635 m<sup>3</sup> of M-91-40 retrievably-stored waste.
  - Total volume retrieved - 9,815 m<sup>3</sup> (10/01/08-12/31/08 – 68 m<sup>3</sup>)
  - 12/31/08 milestone for retrieval of 9,700 m<sup>3</sup> met three months early



**EM Environmental Management**

safety ❖ performance ❖ cleanup ❖ closure

[www.em.doe.gov](http://www.em.doe.gov)

# Department of Energy – Richland Operations Office

## TPA Quarterly Milestone Review M-91 Series



**TRU Waste  
Retrieval  
Operations**



**EM Environmental Management**

safety ❖ performance ❖ cleanup ❖ closure

[www.em.doe.gov](http://www.em.doe.gov)

# Department of Energy – Richland Operations Office

## TPA Quarterly Milestone Review M-91 Series



**CWC expansion  
area for box storage**

**Central Waste Complex Operations**



**EM Environmental Management**

safety ❖ performance ❖ cleanup ❖ closure

[www.em.doe.gov](http://www.em.doe.gov)

# Department of Energy – Richland Operations Office

## TPA Quarterly Milestone Review M-91 Series

### FISCAL YEAR 2009 TO DATE (12/08) PERFORMANCE MEASUREMENT

Dollars in Thousands

Title	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance	Cost Variance
Central Waste Complex	1,182.5	1,182.5	1,587.5	0.0	(405.0)
Waste Receiving and Packaging Facility	1,817.8	1,817.8	2,116.5	0.0	(298.7)
T Plant	2,325.6	2,325.6	2,990.7	0.0	(665.1)
MLLW Treatment	153.5	1,485.8	1,731.5	1,332.5	(245.7)
TRU Retrieval	2,622.6	1,721.6	2,947.3	(901.1)	(1,225.7)
WIPP Certification	6,364.6	5,603.0	2,559.7	(761.5)	3,043.3
WSD Project Management	6,926.5	6,926.5	7,024.2	0.0	(97.7)



**EM Environmental Management**

safety ❖ performance ❖ cleanup ❖ closure

[www.em.doe.gov](http://www.em.doe.gov)

# TPA Quarterly Milestone Review M-91 Series

### Variance Analysis:

- **FYTD Schedule Variance:** A significant contributor to the negative variance is retrieval work delays while resolving criticality safety program issues earlier in the year and weather delays. In addition, WIPP Certification planned activities associated with shipment to Idaho have been put on hold. The ahead of schedule status for MLLW Treatment is associated with shipments being initiated earlier than planned.
- **FYTD Cost Variance:** The overall negative variance is largely due to understated labor budget in the Interim Work Plan. In addition, TRU Retrieval activities continue to expend resources without commensurate schedule progress. This is partially offset by a delay in the receipt of MLLW treatment costs (which will be incurred later in the fiscal year) for MLLW shipped for offsite treatment but not yet treated.



**EM Environmental Management**

safety ❖ performance ❖ cleanup ❖ closure

[www.em.doe.gov](http://www.em.doe.gov)

## Department of Energy – Richland Operations Office

### TPA Quarterly Milestone Review M-91 Series

#### Actions Planned for Next Six Months

- Establish near-term milestones based on current funding outlook with view toward establishing long-term milestones in the fall
- Continue packaging M-91-42 TRU/M waste to meet WIPP Waste Acceptance Criteria
- Continue treatment of M-91-42 MLLW
- Continue treatment of M-91-43 MLLW
- Continue M-91-40 waste retrieval
- Start annual update of M-26 LDR report
- Start annual update of M-91-03 PMP



**EM** *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

[www.em.doe.gov](http://www.em.doe.gov)

Quarterly Status Summary – October 1, 2008-December 31, 2008

Milestone	Due Date(s)	Status Summary	Comments
<b>General Comments</b>			<ul style="list-style-type: none"> <li>In this table "On Schedule" means it is anticipated the milestone will be met.</li> </ul>
<b>M-91-00:</b> Major Milestone for acquisition of needed facilities/capabilities for mixed and suspect mixed MLLW, and TRUM and suspect TRUM.	TBD	On Schedule	
<b>M-91-01:</b> Facility/Capability Interim Milestone (RH and/or large container TRUM)	06/30/12	At Risk  The current understanding is that this milestone will be considered met by achieving capabilities to treat RH/Large transuranic waste at the rates described in M-91-44. As with M-91-43 it may be desirable to allow early treatment of some of this waste to count	<ul style="list-style-type: none"> <li>The CD-0 approval from DOE HQ has been obtained.</li> <li>Discussion of proposed alternatives and methods to meet needed capabilities is included in the 2008 PMP. This will be updated in the 2009 PMP.</li> <li>A draft M-91 Project Alternatives Evaluation Study was completed in 04/08 to document the current state of alternatives analysis. Additional design work related to capital upgrades has been put on hold based on the lack of FY 2009 funding.</li> </ul>

		toward the initial annual M-91-44 volume.	
<b>M-91-03:</b> Submit TRUM/MLLW PMP	12/31/03 (Complete), 12/28/06 (Complete) 06/30/08 (Complete) and annually thereafter	On Schedule	<ul style="list-style-type: none"> <li>Ecology approved with comments the 2008 PMP on 08/11/08. Some comments will not be applicable however the comments can be addressed through preparation of the June 2009 PMP revision.</li> </ul>
<b>M-91-15:</b> RH MLLW and/or Large Size MLLW Treatment	06/30/08	Complete	
<b>M-91-40:</b> Retrieval and designation of CH-RSW (regardless of size)	9,700 m <sup>3</sup> cumulative by 12/31/08, 12,200 m <sup>3</sup> cumulative by 12/31/09, complete retrieval by 12/31/10 plus various other requirements.	Complete for 12/31/08  At Risk for 12/31/09	<ul style="list-style-type: none"> <li>9,747 m<sup>3</sup> of RSW was retrieved as of 09/30/08 meeting the 12/31/08 9,700 m<sup>3</sup> milestone.</li> <li>An additional 68 m<sup>3</sup> of RSW was retrieved between 09/30/08 and 12/31/08 increasing the total retrieved to 9,815 m<sup>3</sup> as of 12/31/08.</li> <li>The 07/08-09/08 SAP was transmitted 11/25/08. There were no results for the period.</li> </ul>

<p><b>M-91-41:</b> Retrieval and Designation of RH RSW (regardless of size)</p>	<p>See comment column</p>	<p>At Risk</p>	<ul style="list-style-type: none"> <li>• 01/01/11: Initiate retrieval of RH RSW</li> <li>• 12/31/14: Complete non-caisson RH RSW retrieval</li> <li>• 12/31/18: Complete 4B RH RSW retrieval</li> </ul>
<p><b>M-91-42:</b> Treatment of non-large size CH-MLLW and certification of non-large size CH TRUM</p>	<p>Annual treatment requirements through 12/31/09 (MLLW), 12/31/11 (TRUM)</p>	<p>At Risk</p> <p>Behind TPA schedule for CH TRUM certification.</p> <p>Revised 2008 MLLW treatment and TRUM certification milestones complete</p>	<ul style="list-style-type: none"> <li>• 7,230 m<sup>3</sup> of the MLLW (MLLW-2 through MLLW-10 excluding MLLW-7) was treated as of 12/31/08 meeting the 12/31/08 7,220 m<sup>3</sup> milestone. 384 m<sup>3</sup> was treated between 10/01/08 and 12/31/08.</li> <li>• Meeting the milestone essentially ends the dispute associated with changing the milestone date from 12/31/08 to 03/31/09.</li> <li>• 7,464 m<sup>3</sup> was shipped as of 12/31/08. 62 m<sup>3</sup> was shipped between 10/01/08 and 12/31/08.</li> <li>• The amount of M-91-42 MLLW in SWOC storage was 439 m<sup>3</sup> as of 12/31/08.</li> <li>• Prepared 1001 drums (about 200 m3) of TRU/M waste for shipment to Idaho.</li> <li>• 3092 m<sup>3</sup> of TRU/M waste was shipped to WIPP as of 12/31/08. No TRU/M waste was shipped to WIPP between 10/01/09 and 12/31/08. Accumulated a backlog of 339 m<sup>3</sup> of certified but not shipped TRU/M as of 12/31/08.</li> <li>• The volume of M-91-42 TRU/M waste stored in SWOC was 2,715 m<sup>3</sup> as of 12/31/08.</li> </ul>
<p><b>M-91-43:</b> Designation and treatment of RH and or Large Size MLLW</p>	<p>See Comment Column</p>	<p>On Schedule</p>	<ul style="list-style-type: none"> <li>• Treated 330 m<sup>3</sup> of MLLW-07 since 12/31/02 as of 09/30/08. No change between 10/01/08 and 12/31/08.</li> <li>• Shipped 438 m<sup>3</sup> of MLLW-07 for treatment since 12/31/02 as of 12/31/08. No change between 10/01/08 and 12/31/08.</li> <li>• M-91-43 waste in storage in SWOC was 323 m<sup>3</sup> as of 12/31/08.</li> </ul>

<p><b>M-91-44:</b> Designation of Newly Generated and Stored RH and or Large Size Transuranic Waste and Large/RH TRUM certification</p>	<p>See Comment Column</p>	<p>At Risk</p>	<ul style="list-style-type: none"> <li>• Existing requirements include: <ul style="list-style-type: none"> <li>○ Designate all RH and large size TRUM waste in storage by 12/31/12.</li> <li>○ Begin treating RH and/or large container TRUM at a minimum rate of 300 cubic meters per year by 06/30/12</li> </ul> </li> <li>• M-91-44 waste in SWOC storage was 6,154 m<sup>3</sup> as of 12/31/08.</li> </ul>
<p><b>M-16-93:</b> Submit implementation workplan for acquisition of capabilities necessary to prepare TRU/M waste generated by CERCLA clean-up actions at Hanford for disposal at WIPP.</p>	<p>09/30/2006</p>	<p>Complete</p> <p>Next revision is anticipated to occur in 2009.</p>	<ul style="list-style-type: none"> <li>• May want to consider elimination of M-16-93 report by incorporation of information in M-91 PMP. The M-16-93 update could be included in the 06/09 2009 PMP submittal instead of a separate 12/31/09 M-16-93 submittal.</li> </ul>

Fn: M-91 PMM Status table 8-28-08



# M-20 Milestone Review Permits and Closure Plans

Presented by:  
Tony McKarns  
U.S. Department of Energy

January 15, 2009

# Closure Plan Milestone Status

<b>M-20 Closed 12/22/08</b>	<b>12/31/08</b>
Complete once M-20-54 is completed on 12/31/08	
<b>M-20-00B Closed 12/22/08</b>	<b>12/31/08</b>
Complete once M-20-54 is completed on 12/31/08	
<b>M-20-54 Closed 12/22/08</b>	<b>12/31/08</b>
Submit 241-CX Tank System Closure/Post-Closure Plan for 241-CX-70 Storage Tank, 241-CX-71 Neutralization Tank, 241-CX-72 Storage Tank to Ecology in coordination with the 200-IS-1 tanks/lines/Pits/Boxes Operable Unit Work Plan Feasibility Study scheduled under M-13-00M.	
<b>Current Milestone Status: Closed 12/22/08</b>	
Completed on December 22, 2008 with the delivery to Ecology of the 241-CX Tank System Closure Plan (DOE/RL-2008-51, Revision 0), transmittal letter 09-AMCP-0041.	

## Accomplishments last 3 months

- Ecology approved closure of 224-T TRUSAF, and DOE submitted the Part A Form marked closed 11/12/08.
- DOE completed the last M-20 Milestone on 12/22/08, with the submittal of the 241-CX Tank System Closure Plan to Ecology. This closes milestones M-20, M-20-00B, and M-20-54.
- DOE submitted to Ecology the Class 1 Permit modifications to Ecology on 1/7/09.

# SOIL AND GROUNDWATER REMEDIATION PROJECT MILESTONE REVIEW

M-013-00, M-015-00, M-016-00, M-024-00



**U.S. Department of Energy  
U.S. Environmental Protection Agency  
State of Washington, Department of Ecology  
First Quarter FY09  
January 15, 2009**

# Milestone Status

TPA Number	Commitment Date	Milestone Title	Status
<b>M-015-00 and M-015-00C</b>			
M-015-17A	11/30/10	Submit 200-UP-1 RI/FS and PP.	At risk due to FY09 funding
M-015-21A	10/31/10	Submit 200-BP-5 FS and PP.	At risk due to FY09 funding
M-015-25C	12/30/09	Submit 200-PO-1 RI Phase II Report.	On Schedule
M-015-38B	11/30/2010	Submit 200-CW-1 Revised FS and PP.	At risk due to FY09 funding
M-015-40D	07/31/08	Submit 200-CW-5 Revised FS and PP.	COMPLETE
M-015-40E	12/31/10	Submit 200-SC-1 FS and PP.	At risk due to FY09 funding
M-015-42D	12/31/11	Submit 200-TW-1 and 200-PW-5 Revised FS and PP.	At risk due to FY09 funding
M-015-42E	12/31/11	Submit 200-TW-2 Revised FS and Revised Recommended Remedies.	At risk due to FY09 funding
M-015-43D	12/31/10	Submit 200-PW-2 and 200-PW-4 FS and Revised Recommended Remedies.	At risk due to FY09 funding
M-015-44B	9/30/09	Submit 200-MW-1 FS and PP.	On Schedule
M-015-45A	10/31/06	Submit 200-PW-1, 200-PW-3, and 200-PW-6 Remedial Investigation Report.	COMPLETE
M-15-45B	9/30/07	Submit 200-PW-1, 200-PW-3, and 200-PW-6 FS and PP.	COMPLETE
M-015-46B	12/31/11	Submit 200-LW-1 and 200-LW-2 FS and Recommended Remedy.	At risk due to FY09 funding
M-015-48B	9/30/07	Submit 200-ZP-1 FS and PP.	COMPLETE

## Milestone Status

TPA Number	Commitment Date	Milestone Title	Status
<b>M-015-00 and M-015-00C (continued)</b>			
M-015-49A	12/31/08	Submit 200-MG-1 EE/CA.	<b>COMPLETE</b>
M-015-49B	12/31/08	Submit 200-MG-2 EE/CA.	<b>COMPLETE</b>
M-015-50	12/31/07	Submit Treatability Test Plan for Deep Vadose Zone Tc-99 and Uranium.	COMPLETE
M-015-51	4/30/10	Submit 200-BC-1 Revised FS and PP for BC Cribs and Trenches.	At risk due to FY09 funding.
<b>M-016-00</b>	<b>Remedial Design / Remedial Action</b>		
M-016-14A	5/31/07	Complete Construction of Permeable Barrier for 100-NR-2.	COMPLETE
M-016-14B	12/31/09	Submit Draft CERCLA Proposed Plan for 100-NR-1/100-NR-2.	On Schedule

## Milestone Status

TPA Number	Commitment Date	Milestone Title	Status
<b>M-024-00</b>			
M-024-57J	12/31/06	DOE Shall Install a Cumulative of 60 Wells by 12/31/06.	COMPLETE
M-024-57K	6/30/07	Initiation of annual discussions to reaffirm selected wells.	COMPLETE
M-024-57L	12/31/07	Conclude discussions and revise M-024-57.	COMPLETE
M-024-57M	12/31/07	DOE Shall Install a Cumulative of 75 Wells by 12/31/07.	COMPLETE
M-024-58	6/1/08	Initiate discussions to reaffirm selected wells (annual commitment).	COMPLETE
M-024-59	12/31/08	DOE Shall Install a Cumulative of 30 Wells by 12/31/08.	COMPLETE
M-024-60	12/31/09	DOE Shall Install a Cumulative of 60 Wells by 12/31/09.	On Schedule
M-024-61	12/31/10	DOE Shall Install a Cumulative of 90 Wells by 12/31/10.	On Schedule

# Significant Accomplishments

## RI/FS Work Plans

### 200-PO-1 OU

- Completed sampling of RI Phase I aquifer tubes.
- Completed field tests of advanced borehole and surface geophysical methods.
- Conducted sampling of supplemental RI Phase II characterization wells.

### 200-IS-1

- Ecology approved the 200-IS-1 Work Plan on June 5, 2008.
- 241-CX-70/71/72 TSD Closure Plan submitted to Ecology for review.
- 200-IS-1 RI is being put into Safe Store.

### 200-SW-2

- RI/FS Work Plan, Rev 0 was approved on December 23, 2008.

# Significant Accomplishments

## 200-BC-1

- Continued Decisional Draft of ERC report review.
- Processed logging data for 216-B-14 and 216-B-53A DPT holes.
- Decommissioned the 12 216-B-53A DPT holes.

## 200-SC-1

- Completed the 216-B-55, 216-A-30, and 216-S-6 borehole summary reports and data validation packages.

## 200-LW-1/2

- Completed the work authorizing and work planning documents necessary to begin supplemental characterization field work.
- Completed a direct push and geophysical logging to 216 ft bgs adjacent to the 216-B-6 waste injection well. The work was performed to verify subsurface radiological conditions. The information will be used for worker health and safety planning purposes in support of the 200-LW-2 and 200-BP-5 integrated characterization effort commonly known as the 'K' Well.

## **Significant Accomplishments (cont.)**

### **200-BP-5**

- Provided technical update of the sample results from the new wells at WMA B/BX/BY to the public November 18, 2008.
- Released revision 1 of the 200-BP-5 DQO on November 18, 2008.
- The 200-BP-5 RI/FS work plan has been revised and delivered to EPA for review.

# Significant Accomplishments

## M-15-00 and M-15-00C

### 200-ZP-1

- Issued a new SAP to support the sampling to be performed during the installation of eight new extraction wells and one remediation performance monitoring well.

### 200-PW-1

- Two new SVE units have been constructed and will be shipped to the Hanford Site in January 2009 once some minor adjustments are made based on a recent CHPRC inspection.

### 200-MG-1/2

- Draft A versions of the 200-MG-1 EE/CA and the 200-MG-2 EE/CA were completed more than two months ahead of schedule.
- EPA completed their review of the 200-MG-2 EE/CA and transmitted comments to DOE.

# Significant Accomplishments

## Other Items of Interest

### 100-KR-4

- Nearing completion of acceptance testing of the K Expansion pump-and-treat facility. Initiated planning to connect three additional injection wells to the KX system to increase flow rates.
- Initiated design of a 100-gpm expansion to the KW reactor pump-and-treat facility.

### 100-HR-3

- Completed the Electrocoagulation Treatability Test Report.
- Performed technology selections and developed alternatives for 100-D Remedial Process Optimization.

### 221-U Facility/Canyon Disposition Initiative

- U-Plant Ancillary Facilities Removal Action Work Plan, Revision 1, has been finalized.

# RL-30 Groundwater/Vadose Zone

## FYTD Cost/Schedule Status

(\$ in thousands)

RL-0030 - Soil & Water Rem-Grndwtr/Vadose	BCWS	BCWP	ACWP	SV \$	CV \$	BAC
030.01 - Integration and Assessments	\$2,884.3	\$2,947.9	\$2,658.0	\$63.7	\$289.9	\$12,567.9
030.03 - Drilling	\$1,325.9	\$1,160.5	\$1,323.1	(\$165.3)	(\$162.6)	\$9,423.3
030.04 - Project Management	\$3,352.2	\$3,352.2	\$3,306.6	\$0.0	\$45.5	\$9,808.7
030.05 - Integrated Field Work	\$1,733.7	\$1,733.7	\$1,739.5	\$0.0	(\$5.8)	\$7,376.9
030.06 - GW Monitoring and Perf Assmts	\$2,422.4	\$2,361.7	\$2,619.3	(\$60.6)	(\$257.6)	\$10,980.4
030.10 - 100-BC-5 Operable Unit	\$288.1	\$133.7	\$74.1	(\$154.4)	\$59.6	\$879.4
030.11 - 100-KR-4 Operable Unit	\$1,257.0	\$1,272.0	\$2,092.1	\$15.0	(\$820.2)	\$7,711.7
030.12 - 100-NR-2 Operable Unit	\$224.4	\$233.4	\$312.6	\$9.0	(\$79.2)	\$1,829.7
030.13 - 100-HR-3 Operable Unit	\$1,548.4	\$1,102.7	\$981.2	(\$445.7)	\$121.6	\$6,069.3
030.14 - 100-FR-3 Operable Unit	\$144.1	\$50.8	\$23.5	(\$93.3)	\$27.3	\$391.0
030.20 - 200-BP-5 Operable Unit	\$213.2	\$338.1	\$360.0	\$124.9	(\$21.9)	\$511.6
030.21 - 200-PO-1 Operable Unit	\$417.7	\$267.5	\$258.0	(\$150.3)	\$9.5	\$1,140.4
030.22 - 200-UP-1 Operable Unit	\$53.4	\$81.9	\$71.8	\$28.5	\$10.1	\$1,181.0
030.23 - 200-ZP-1 Operable Unit	\$1,068.2	\$1,298.1	\$1,622.9	\$229.9	(\$324.8)	\$5,468.9
030.24 - 200-PW-1 Operable Unit	\$465.8	\$460.0	\$132.4	(\$5.7)	\$327.6	\$1,396.2
030.30 - 300-FF-5 Operable Unit	\$393.6	\$283.7	\$336.8	(\$109.9)	(\$53.1)	\$2,254.9
030.31 - PBS RL-30 Reg Decisions / Closure Integ	\$1,381.0	\$1,174.1	\$1,644.8	(\$206.9)	(\$470.7)	\$3,395.9
030.32 - Deep Vadose Zone Treatability Tests	\$598.0	\$77.5	\$184.0	(\$520.5)	(\$106.5)	\$3,300.8
030.90.01 - Assmts for MSC Services	\$1,648.3	\$1,655.5	\$1,859.3	\$7.2	(\$203.8)	\$6,521.2
030.90.03 - Assmts for - Oth Provd Serv	\$216.5	\$216.5	\$271.7	\$0.0	(\$55.2)	\$866.0
030.99 - PBS RL-30 UBS, G&A / Dir Distrib	\$5,482.4	\$5,482.4	\$4,178.7	(\$0.0)	\$1,303.7	\$21,929.7
<b>TOTAL - PBS RL-0030</b>	<b>\$27,118.4</b>	<b>\$25,683.9</b>	<b>\$26,050.3</b>	<b>(\$1,434.5)</b>	<b>(\$366.4)</b>	<b>\$115,005.0</b>

# RL-30 Schedule

## Performance Variances and Explanations

The current FYTD variances below are based on the FY 2009 Interim Work Plan. The development of the revised FY 2009 Performance Management Baseline is in its final stages and will be used in future reporting.

Subproject	FYTD SV \$	Causal Factors
030.03 – Drilling	(\$165.3)	M-24 drilling for FY 2009 will be deleted in the rebaseline.
030.20 - 200-BP-5 Operable Unit	\$124.9	Analysis of the C and D wells documentation was completed ahead of schedule because resources became available earlier than originally planned.
030.21 - 200-PO-1 Operable Unit	(\$150.3)	A delay in the award of contracts is due to an evaluation of internal staffing assignments.
030.23 - 200-ZP-1 Operable Unit	\$229.9	The groundwater modeling work was performed earlier than planned to support the placement of the final Groundwater extraction wells.
030.31 - PBS RL-30 Reg Decisions and Closure Integration	(\$206.9)	30.31.20 – 200-MW-1 Alternative cost development work was postponed to allow CHPRC to complete costing guidelines updates that should be used in all CERCLA work on the Plateau. The work under this activity is now underway. The project will still meet the TPA interim milestone due date.
030.32 - Deep Vadose Zone Treatability Tests	(\$520.5)	Variance will be resolved pending implementation of planning rebaseline.

# RL-30 Cost Performance Variances and Explanations

Subproject	FYTD CV \$	Causal Factors
030.03 - Drilling	<b>(\$162.6)</b>	Drilling has not initiated in the field; it will start in January 2009. Performance has only been claimed on non-capital LOE activity.
030.06 - GW Monitoring and Performance Assessments	<b>(\$257.6)</b>	Interim Work Plan WSCF sampling was budgeted within UBS, but at less than 25% of the requirement. This will be resolved in the rebaseline currently being developed.
030.23 - 200-ZP-1 Operable Unit	<b>(\$324.8)</b>	The negative FYTD cost variance reflects performing work against the interim work plan which was based upon limited information pertaining to scope requirements. This issue has been addressed in the baseline update. Upon implementation of the baseline update, the project will be within budget.
030.31 - PBS RL-30 Reg Decisions and Closure Integration	<b>(\$470.7)</b>	<p>30.31.08 – 200-TW-1/PW5 Cost variance is due to FY-08 lab cost (PNNL) that came into FY-09 but was performed in FY-08. Will be resolved upon implementation of the new baseline.</p> <p>30.31.10 – 200-PW-1/3/6 The cost variance is due to insufficient funds assigned to the IWP as carried-over from FY-08 to perform the remaining work to support the 2/27/09 milestone for document submittal. Per management direction, work continues to meet the submittal and funding will be adjusted in the rebaseline.</p> <p>30.31.15 – 200-IS-1 Cost variance is mainly due to carryover work that has been performed in the 1st quarter of FY 2009.</p> <p>30.31.20 – 200-MW-1 Alternative cost development work was postponed to allow CHPRC to complete costing guidelines updates that should be used in all CERCLA work on the Plateau. The work under this activity is now underway. The project will still meet the TPA interim milestone due date.</p>
030.32 - Deep Vadose Zone Treatability Tests	<b>(\$106.5)</b>	Overhead support higher than planned for work performed. This temporary condition should self correct when field activities commence in February 2009.
030.90.01 - Assmts for MSC Services to PRC -PBS RL-30	<b>(\$203.8)</b>	Assessments and internal distributions, as applicable on all RL-030 accounts.
030.99 - PBS RL-30 UBS, G&A, and Direct Distrib	<b>\$1,303.7</b>	Overhead applications and internal distributions, as applicable on all RL-030 accounts.

# RL-40 Deactivation & Decommissioning Project

## FYTD Cost/Schedule Status

(\$ in thousands)

Fiscal year-to-Date	FYTD BCWS	FYTD BCWP	FYTD ACWP	FYTD Schedule Variance \$	FYTD Cost Variance \$	BAC
RL-00400 BOS D&D	11.1	9.0	7.8	(2.1)	1.2	50.2

*Numbers are rounded to the nearest \$0.1M*

# RL-40 Deactivation and Decommissioning Cost and Schedule Performance Variances and Explanations

Subproject	FYTD Variance	Casual Factor
<b><i>Significant Schedule Variance</i></b>		
040 01 26 02 03 - 200 North OU CW-3 Sampling	(0.2)	Variance is within reporting thresholds
040 01 29 01 01 - Procure D&D Equipment	(1.3)	Equipment has been procured and receipt is occurring incrementally
040 02 18 04 01 - U Ancillary Demolition	(0.7)	Variance is within reporting thresholds
<b><i>Significant Cost Variance</i></b>		
040 01 26 02 03 - 200 North OU CW-3 Sampling	0.3	Variance is within reporting thresholds
040 01 27 01 01 - U Plant Regulatory and Mgmt Oversight	0.3	Variance is within reporting thresholds
040 03 01 01 01 - Min Safe Oversight and Services	0.3	Variance is within reporting thresholds
040 03 01 01 03 - Nuclear Facilities Min Safe	0.3	Variance is within reporting thresholds

# **Planned Activities**

## **Next 6 Months**

### **221-U Facility/Canyon Disposition Initiative**

- Remedial Design/Remedial Action Work Plan, Revision 0, to be finalized.
- Begin Asbestos abatement in U-Plant Ancillary Facilities.

### **Other Facility D&D**

- Conclude or extend Central Plateau Facility negotiations.

### **200 North Geographic Zone Remediation**

- Complete 212N/P/R EE/CA public comment period (January 14).
- Obtain concurrence on the 212N/P/R Action memorandum.
- Complete 212N/P/R DQO, SAP.
- Begin D&D of 212N, 212P, and 212R.

## **Planned Activities Next 6 Months**

### **100-HR-3**

- Complete investigation of Horn Area.
- Deliver Decisional Draft B RI/FS Work Plan for regulator review.
- Complete Remedial Process Optimization Technical Memoranda for D/H Areas.
- Initiate drilling of 33 new RPO wells in D/H Areas.
- Initiate design of new 600 gpm 100-D Area Expansion P&T facility.

### **100-KR-4**

- Drill two to four new wells near KW reactor to support expansion of the KW reactor pump-and-treat facility.
- Construct and complete acceptance testing of a 100 gpm expansion of the KW reactor pump-and-treat facility.
- Connect three new extraction wells to the KX pump-and-treat system, and complete acceptance testing.

### **100-NR-2**

- Start gallery test (upper vadose zone treatment test).
- Start Total Petroleum Hydrocarbons well.
- Bi-monthly sampling of apatite barrier continues. Next sample schedule begins the first week of February.

# Planned Activities

## Next 6 Months

### **300-FF-5**

- Complete Decisional Draft of the 300 Area RI/FS Work Plan.
- Initiate 300 Area Treatability Test Plan for Uranium.

### **100-FR-3**

- Evaluate groundwater conditions near 118-F-6 burial ground.

### **200-BP-5**

- Issue 200-BP-5 RI/FS Work Plan (DOE/RL-2007-18 Rev. 1).
- Complete and load into HEIS PNNL analytical results for five new wells, 299-E33-205, 299-E33-340 through 299-E33-342, and 699-52-55B.
- Dispose of drilling waste from BX Tank Farm well 299-E33-205.

### **200-PO-1**

- Complete sampling of supplemental characterization wells.

# Planned Activities

## Next 6 Months

### **200-UP-1**

- Continue sampling activities.
- Issue Explanation of Significant Difference.

### **200-BC-1**

- Issue a report that includes regulator buy-in on correlation between electrical resistivity characterization data and soil contaminant concentrations.
- Decommission 216-B-14 DPT holes.

### **200-MG-1,-MG-2**

- Resolve Ecology comments on Draft A version and develop 200-MG-1 Rev 0 EE/CA. Issue public notice of EE/CA issuance for public review. Note: The EE/CA should not be issued until it has gone through EPA's National Remedy Review Board.
- Resolve EPA comments on Draft A version and develop 200-MG-2 Rev 0 EE/CA. Issue public notice of EE/CA issuance for public review. Note: The EE/CA should not be issued until it has gone through EPA's National Remedy Review Board.
- Develop Decisional Drafts of the 200-MG-1 and 200-MG-2 OU Action Memos.

# Planned Activities

## Next 6 Months

### 200-UW-1

- Complete the U-12, supplemental Deep Vadose Zone characterization DQO workshops.
- DOE will respond to Ecology, EPA, and USGS comments on the RAGs document and its underlying STOMP modeling.

### 200-ZP-1

- Finalize SAP for T Tank Farm T-6/T-7/T-8 wells.
- Finalize SAP supporting aquifer testing to be performed in new extraction wells.
- Continued operation and maintenance of the ZP-1 pump-and-treat system.
- Complete OTP and final punch list for the FY08 4 well expansion.
- Prepare annual summary report for the ZP-1 pump-and-treat system.
- Prepare RD/RA Work Plan for the final ZP-1 treatment system.
- Continue working on design work for the final treatment building.
- A milestone change package will be submitted with the RD/RA work plan (as required by the TPA).

# Planned Activities

## Next 6 Months

### **200-PW-1,-PW-3, -PW-6**

- Delivery of two new 500 cfm soil vapor extraction systems.
- Prepare Draft B FS and PP incorporating EPA comments and HAB advice.

### **200-SC-1**

- Complete the Data Quality Assessment for the supplemental characterization data.
- Dispose of the Investigation-derived waste from the 216-A-30 and 216-B-55 Cribs.
- Issue the Safe-Store Report for 200-SC-1.

### **200-LW-1/2**

- Complete decommissioning of the Safety & Health Borehole at the 216-B-6 Reverse Well.
- Prepare a Borehole Summary Report for the 216-B-6 borehole.
- Issue a summary report on the status of information for 200-LW-1/2.

### **200-MW-1**

- Complete RI Report for the supplemental investigations at the 216-A-2, 216-A-4, 216-A-21 Cribs and the 200-E-102 Trench.
- Initiate internal review of the Feasibility Study and Proposed Plan mid-January and then develop draft A of the DOE review.
- Finalize and publish the RI Report for 200-MW-1.

### **200-PW-2/4**

- Put the investigation work and data into safe and retrievable state by completing analysis of samples collected from the borehole in the 216-A-5 Crib and completing supporting reports including validation reports and borehole summary reports. Boreholes at the 216-S-1/2 Crib have been decommissioned .

# Issues

- Ecology has noted that reporting of “100-HR-3” at TPA Quarterly is now incomplete because of the significant inter-relationship of remedial alternatives and remedial investigations.
  - This issue is being addressed by DOE/CHPRC/WCH through frequent technical and managements contacts between the RPO and RI/FS teams.
- Work on Multi-Increment Sampling test project delayed due to funding/priority realignments. SAP and Waste Control Plan have been approved by Ecology.
- 100-HR-3 P&T facility shut down December 16 due to unusually cold weather and frozen transfer pipes. It was restarted on January 9.

**U.S. Department of Energy (DOE)  
Richland Operations Office (RL)  
Assistant Manager for Central Plateau  
PBS - 42: Fast Flux Test Facility (FFTF) Project  
Tri-Party Agreement  
M-81 and M-92 Deactivation Milestones**

**January 15, 2009  
Central Plateau/FFTF Project  
Tri-Party Agreement Milestones Review Meeting**

**DOE-RL FFTF Project – Al Farabee  
Washington State Department of Ecology – Jane Hedges  
U.S. Environmental Protection Agency – Rod Lobos**

**FFTF Project Tri-Party Agreement**  
**Remaining M-81 and M-92 Deactivation Milestones**  
 (Listed Chronologically by Due Date)

Milestone	Milestone Title	Due Date
M-92-09	Establish Milestones and/or Target Dates if Needed for Acquisition of New Facilities, Modifications of Existing Facilities, and/or Modification of Planned Facilities Necessary for Storage, Treatment/Processing, and Disposal of Hanford Site Sodium ( <b>Status: Due date moved to September 30, 2018 via approved Class II Change Request M-92-08-01 issued in July 2008</b> )	July 30, 2009 <b>(New date is September 30, 2018)</b>
M-81-15	Submit FFTF Surveillance and Maintenance Plan ( <b>Status: On Schedule</b> )	June 30, 2010
M-81-00A	Complete FFTF Facility Transition and Initiate the Surveillance and Maintenance Phase ( <b>Status: On Schedule</b> )	February 28, 2011
M-81-00A-T05	Complete Auxiliary Plant Systems Shutdown ( <b>Status: On Schedule</b> )	February 28, 2011

# DOE-RL FFTF Program Manager Assessment of Contractor Performance

- Focus continues on maintaining the plant in a safe and compliant manner, and completing deactivation activities to support placing FFTF in long term Surveillance and Maintenance (S&M) by August 31, 2009.
- Systems deactivation continues on plant systems not required to support S&M.
- Project costs and schedule continue to be maintained in control.

# Significant Accomplishments (Last 3 Months)

- **Auxiliary Systems Deactivation**
  - Completed draining of glycol from the Cooling Water system.
  - Completed removal of combustibles from the plant.
  - Completed removal and off site disposition of 2 of 3 remaining polychlorinated biphenyl (PCB) transformers (X-13 and X-7)
  - Completed installation of 13.8 kilovolt electrical power feed and 480 volt electrical power distribution within the plant for S&M [i.e., power to fire alarm control panels (FACPs), lighting, and exhaust fans].
  - Upgraded FACP C-1352 for increased maintainability during S&M.
  - Completed deactivation of FACP C-1358 (Chiller Building and Rigger's Loft).
  - Completed deactivation of remaining water line to the 481A Pumphouse.
  - Completed deactivation of two of three remaining water lines to the plant.

# Significant Accomplishments (Last 3 Months, Continued)

- **Disposable Solid Waste Cask (DSWC)**
  - Obtained DOE-RL approval of Engineering Document Change for the DSWC trailer configuration and tie-down analysis to allow DSWC shipment of waste to the Environmental Restoration and Disposal Facility (ERDF).
- **Waste Shipments**
  - Completed shipment of Sodium Removal System/Ion Exchange System (SRS/IXS) filters (transuranic waste) to the Central Waste Complex.
  - Completed shipment of the SRS/IXS resin beds (low-level waste) to the Environmental Restoration and Disposal Facility (ERDF).
  - Completed shipment of four flats of waste to ERDF.
  - Completed shipment of one DSWC to ERDF.
  - Completed shipment of five floor valves to ERDF.
  - Completed shipment of six long boxes to ERDF.

# Significant Planned Actions (Next 6 Months)

- **Auxiliary Systems Deactivation**
  - Complete draining of glycol from the In-Containment Chilled Water system below grade (i.e., 550-ft.) level
  - Complete removal and off site disposition of one remaining PCB transformer (X-14).
  - Begin installation of S&M electrical power to the 481 Pumphouse.
  - Perform acceptance testing on FACP-1352 and return to service
  - Complete deactivation of the third and final water line to the plant.
- **FFTF Building Closures**
  - Continue clearing 53 buildings/structures of personnel, hazardous materials, and combustibles.
- **Waste Shipments to ERDF**
  - Other FFTF deactivation waste, special handled waste (i.e., three remaining long boxes, two IEM Cell adaptor plates, three shield blocks), two remaining DSWCs, and the Short Segmented Maintenance Cask.

# BUDGET/COST STATUS

Fiscal Year 2009 to date Status (~\$000)

(As of November 30, 2008)

Description	Baseline Cost of Work Scheduled (BCWS)	Baseline Cost of Work Performed (BCWP)	Actual Cost of Work Performed (ACWP)	Schedule Variance (SV)	Cost Variance (CV)
FFTF	\$ 3,230	\$3,280	\$ 3,088	\$ 51	\$ 192

## Variance Analysis:

SV is positive.

CV is positive.

# Project Issues/Risks

- None identified at this time.

# Summary

- FFTF deactivation continues to support the August 2009 project milestone to place the facility in a long term low cost S&M mode.
- Project costs and schedule are being maintained.