0085205

# Central Plateau
# Tri-Party Agreement Milestone Review
# Meeting Minutes
# January 21, 2010

Approval: _____ Date: 2/18/2010
**J. Hedges**
*Ecology IAMIT Representative*

Approval: _____ Date: 2/18/2010
**M.S. McCormick**
*DOE IAMIT Representative, Chairperson*

Approval: _____ Date: 2/18/2010
for **D.A. Faulk**
*EPA IAMIT Representative*

Minutes Prepared by: _____ Date: 2/18/2010
**T.W. Noland**
*Mission Support Alliance, LLC*

| | |
|---|---|
| Black D.G.* | CHPRC |
| Bond, R.* | Ecology |
| Bohnee, G. | NPT |
| Buelow, L.C. | EPA |
| Call, P.K. | RL |
| Cameron, C.E.* | EPA |
| Chapin, D.H.* | RL |
| Charboneau, B.L.* | RL |
| Cimon, S.* | ODE |
| Collins, M.S.* | RL |
| Donnelly, J.W. | WCH |
| Einan, D.R.* | EPA |
| Engelmann, R.H. | CHPRC |
| Farabee, O.A. | RL |
| Faulk, D.A. | EPA |
| Foss, D.L.* | CHPRC |
| Franco, J.R. | RL |
| Gadbois, L.E. | EPA |
| Goswami, D.* | Ecology |
| Harris, S. | CTUIR |
| Hedges, J. | Ecology |
| Henry, D. | OOE |
| Holten, R.A.* | RL |
| Jaraysi, M.N. | CHPRC |
| Jim, R. | Yakama |
| Jones, M.E. | Ecology |
| Knox, K.E.* | KCR |
| Louie, C.S. | RL |
| Mandis, M.L.* | Ecology |
| Mattlin, E.M.* | RL |
| McCormick, M.S.* | RL |
| Menard, N.M.* | Ecology |
| Morrison, R.D. | YAH |
| Morse, J.G. | RL |
| Niles, K. | OOE |
| Noland, T.W.* | FFS |
| Piippo, R.E.* | CHPRC |
| Potter, R.D. | MSA |
| Price, J.B.* | Ecology |
| Richey, S.A.* | CHPRC |
| Romine, L.D. | RL |
| Russell, R.W. | ORP |
| Singleton, D.G.* | Ecology |
| Skinnarland, E.R. | Ecology |
| Voogd, M.J. | RL |
| Walker, C.B. | CHPRC |
| Weil, S.R. | RL |
| Whalen, C.* | Ecology |
| Wilkinson, R.E. | CHPRC |
| Williams, J.D.* | CHPRC |
| Wise, B.K. | MSA |
| Administrative Record | |

*Attendees

RECEIVED
FEB 22 2010
EDMC

100·HR·3 200·SW·1 200·UP·1 200·CW·3 200·PO·1
100·BC·5 200·SW·2 200·PW·1 100·KR·4 200·MW·1
200·IS·1 200·BC·1 200·PW·3 300·FF·5 200·2P·1
200·ST·1 100·NR·2 200·PW·6 200·CW·1
200·BP·5 200·2P·1 200·CW·5

**Central Plateau**
**Tri-Party Agreement Milestone Review**
**Meeting Minutes**
**January 21, 2010**

**PFP Closure Project - TPA Milestone M-083-00**

DOE-RL provided a status of the milestones, accomplishments, planned activities, and schedule and cost performance. The positive schedule and cost performance reported was fiscal year to date through December 2009. There were no regulatory or non-regulatory issues to report.

**TPA Milestone M-26-01 - Land Disposal Restrictions Report**

DOE-RL provided a status on the LDR annual report, and the actions planned for the next three months. This year the LDR full report is due April 30, 2010.

**TPA Quarterly Milestone Review M-91 Series**

Significant Accomplishments

DOE-RL reported that the next generation retrieval is planned for operation by May 2010. Retrieval will occur at the trench face in an effort to achieve a more efficient process.

Cost and Schedule Performance

DOE-RL noted a correction on the handout for the variance analysis. Under the FYTD cost variance, the positive schedule variance should read cost variance.

Actions Planned for Next Six Months

Ecology inquired about the Central Characterization Project (CCP) certification program, and any possible delay on proceeding with the next generation retrieval process. DOE-RL responded that CCP will initially be focusing on the backlog of certifiable waste in PFP, and their efforts will not hold up next generation retrieval.

**Soil and Groundwater Remediation Project Milestone Review - M-15-00, M-16-00, M-24-00**

Milestone Status

DOE-RL stated that the four pages of near term milestones are either completed or on schedule to be completed. EPA noted that due to negotiation planning and the changes in how the parties will proceed, the value of the current milestone status is uncertain.

Significant Accomplishments

Ecology inquired about the planned submittal date for the 200-PO-1 Remedial Investigation Report and CHPRC responded that it was scheduled for May 2010.

DOE-RL reported it submitted the work plans for all of the River Corridor units to have the final Remedial Investigation Feasibility Study (RI/FS) prepared. The first 100 Area primary document work plan and the K Area addendum was approved by the Tri-Parties this week. DOE-RL noted that the Central Plateau has not made as much progress, which is due, in part, to the prioritization of the River Corridor.

There was a discussion regarding well decommissioning and well installation. There are 350 (or more) wells targeted for decommissioning, with a minimum of 265 wells in order to be accepted under American Reinvestment Recovery Act (ARRA) funding in FY10. If ARRA funds are available in FY11, the well decommissioning activity will continue up to the 350 wells. DOE-RL and Ecology reiterated that the M-24 well installation was established for compliance monitoring. There was a brief discussion regarding the wells approved for decommissioning that are no longer under Milestone M-24. The Tri-Parties agreed that those wells are not carried under a milestone and there is no schedule that is driving completion of the well decommissioning. Ecology noted that it continues to interact with DOE-RL on this activity to ensure wells are not being decommissioned that could be useful.

DOE-RL will provide Ecology with the detailed weekly report on well drilling and well installation.

DOE-RL stated that its internal tracking shows about 40 wells are slightly behind schedule for well development, particularly at 100-N. The wells have been drilled, but with the low river stage, there is inadequate water at the bottom of the wells to proceed with development. It is anticipated that significant progress will be made when the water table rises in the springtime.

200-PW-1/3/6 - DOE-RL stated that a meeting is scheduled with EPA next Monday, and the intent is to resolve the issue of inclusion of the pipelines. DOE-RL indicated that if the decision is to include the pipelines in the Record of Decision (ROD), the chance of completing a ROD this fiscal year is not possible. EPA responded that it is not necessarily in agreement with that opinion.

200-UW-1 - Ecology stated its intent to realign priorities for two wells in 200-UW-1. DOE-RL responded that it shares the same values to complete those wells and will continue work with Ecology on making a decision. DOE-RL noted the difficulty in agreeing on a path forward is that those wells are in the 99 percentile of the most expensive wells.

200-SW-2 – Ecology requested that DOE-RL provide them with a copy of the Investigation Summary Report.

200 North Remediation - DOE-RL reported that two change notices were approved last week for the Sampling and Analysis Plan (SAP) and the Removal Action Work Plan (RAWP) for the three waste site ponds. DOE-RL also approved and issued to the contractor the RTD reports for those waste sites.

ALE Reserve D&D - DOE-RL signed an addendum with EPA last week which will allow the waste from ALE to go to ERDF.

100-BC-5 - DOE-RL stated that with the Tri-Parties' coordination, additional sampling was conducted in the bottom of the excavation in the 100-BC area. The sample results were low concentrations, and the soil was used as backfill.

100-KR-4 - DOE-RL reported that a different resin will be used in the K Area groundwater treatment system. The indications are that the resin is far superior, lasting 15 times longer than the existing resins. The implication is a reduction in operational cost, i.e., taking resin out of the skid and shipping it offsite for regeneration. It would also eliminate any transportation issues.

RL-30 and RL-40 Cost and Schedule Performance

DOE-RL reported that the schedule and cost variances, including ARRA funding, are running ahead of schedule and under estimated costs. Ecology asked if additional work has been identified that can be pulled forward. DOE-RL responded that it is working with the contractor on Rev. 1 of the performance measurement baseline for the new contract, and an approved baseline is expected by the end of January 2010. However, the contractor has identified some cost estimate increases during the baseline review that may reduce the positive cost variance. DOE-RL indicated that it needs to have discussions with the contractor regarding ARRA funding, which has a mandate to be spent by September 2011, and capital asset projects contingencies.

Ecology inquired about the 2011 mandate to spend ARRA funding. DOE-RL responded that it is a self-imposed mandate by DOE-EM, with one objective being to stimulate the economy. Another objective is to demonstrate cleanup progress in a short period of time, which would provide a basis that EM is in a position to spend ARRA funding in 2012 and 2013, providing there is other available ARRA funding that DOE couldn't get spent. DOE-RL noted that the ARRA allows spending until 2015, but justification must be given and approval granted from headquarters to go beyond 2011. DOE-RL indicated that by the springtime it will be able to have a dialogue with Ecology regarding pulling in additional work.

Ecology referred to page 25 of the handout regarding a decision from the regulators on the disposition of Cell 30 in U Canyon. Ecology stated its intent to make a statement during this afternoon's Unit Managers Meeting that the material is transuranic waste and it cannot meet the NRC provision of 100 nanocuries per gram, which allows material to be left after it's been grouted. Following a brief discussion, DOE-RL suggested stating that the material will need to be removed according to the existing ROD.

Planned Activities - Next Six Months

200-Deep Vadose Treatability Test Plan - DOE-RL stated that the Tri-Parties held a meeting with the Hanford Advisory Board (HAB), the stakeholders and the tribes regarding the deep vadose zone treatability test plan. DOE-RL has initiated a plan to constitute a long-term effort for the deep vadose zone, and it is coordinating with headquarters to ensure all the resources needed are available.

Tri-Party Agreement

**Thursday, January 21, 2010**
Ecology Offices, Conference Room 31
3100 Port of Benton Way
Richland, Washington

# Agenda
## Central Plateau Milestone Review Meeting
**Chairman: Matt McCormick**

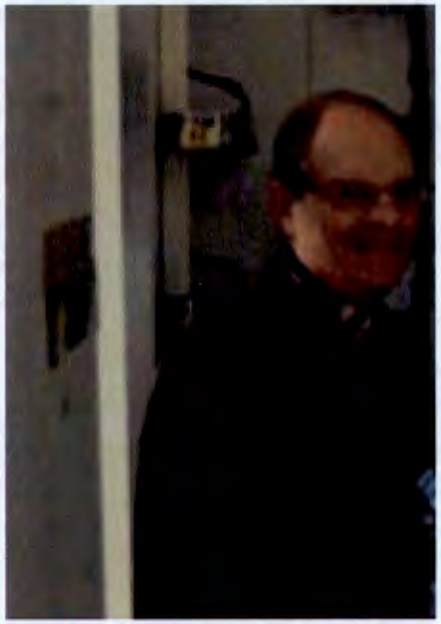
| | | |
|---|---|---|
| 9:00 a.m. | M-83-00 | PFP Transition |
| 9:10 a.m. | M-26-01 | Land Disposal Restrictions Report |
| 9:20 a.m. | M-91-00 | Acquisition of Facilities to TSD TRU/TRUM and LLMW |
| 9:30 a.m. | M-15-00 | RI/FS Process Completion |
| | M-16-00 | Complete Remedial Actions |
| | M-24-00 | Groundwater Well Installation |
| 10:15 a.m. | Adjourn Milestone Review | |

# *Tri-Party Agreement Major Milestone Management Review*

*January 21, 2010*

| Name | Organization | Mail Stop | Phone |
|---|---|---|---|
| Terry Noland | MSA | H7-28 | 376-6574 |
| Kathy Knox | Knox Court Reporting | | 946-5535 |
| Dale Black | CHPRC-TPA | | 376-0740 |
| Ron Marrison | YAHSGS | | 376-2994 |
| Nina Menard | Ecology | | 372-7941 |
| Craig Cameron | EPA | | 376-8665 |
| Rick Holten | DOE | | 946-0574 |
| Michelle Mandis | Ecology | | 372-7970 |
| Scott Richey | CHPRC | | 373-0447 |
| Rick Bond | Ecology | | 372-7885 |
| Shelley Gmon | DOE | | (541) 963-0853 |
| Eileen Mattlin | DOE-RL | | 376-2385 |
| John Price | Ecology | | 372-7921 |
| Doug Chapin | DOE-RL | | 373-9396 |
| Michael Collins | DOE-RL | | 376 6536 |
| Dave Einan | EPA | | 376-3883 |
| Janice Williams | CHPRC | | 372 3553 |
| Cheryl Whalen | Ecology | | 372-7972 |
| Deborah Singleton | Ecology | | 372-7923 |
| Dyan L Foss | CHPRC | | 438-2705 |
| Brian Charboneau | DOE | | 373-6137 |
| Dib Goswami | Ecology | | 372-7902 |
| Matt McCormick | DOE | | 373-9971 |
| Rob Bilbro | Ecology | | 373-3285 |
| | | | |
| | | | |

# PFP Closure Project TPA Milestone M-083



***2736- Z Vault Tour***

**January 2010**
**Tri-Party Agreement Milestone**
**Status Report**

**Ecology Project Manager – R. Bond**
**DOE-RL Project Director – E. Mattlin**
**PFP Closure Project – D. Del Vecchio**
**CHPRC Environmental – S. Richey**

# M-83 Status for Interim Milestones

(as of 06/31/09)

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

# Accomplishments

- Completed De-Inventory of Special Nuclear Material
- Reduction in PFP Security Requirements
- Prepared to re-enter 242-Z
- 60th Hood/Glovebox removed and shipped
- Transitioned PFP stacks to CERCLA

# Planned Activities

- Continued PRF gallery glovebox clean out
- Continued glovebox clean out and removal
- Activate PRF Crane
- Procure/install exterior elevator PRF
- Procure of PRF pencil tank removal equipment
- Enter 242-Z for initial cleanout
- Continued D&D field work on 2736-ZB
- Procure/install HVAC Cooling for PFP/PRF
- Continued Min-Safe maintenance activities

# Schedule / Cost Performance
# Fiscal Year to Date Status (through December)

| RL-0011 - Nuclear Material Stabilization & Disposal (PFP) | Fiscal Year to Date | | | | |
|---|---|---|---|---|---|
| | BCWS | BCWP | ACWP | SV$ | CV$ |
| (ARRA/ & Base ) -Total | 32.3 | 33.7 | 31 | 0.3 | 2.7 |
| (Numbers are rounded to the nearest $0.1M) | | | | | |

**FYTD Schedule Performance: (+$0.3M/+0.2%)**

- Within Reporting Threshold

**FYTD Cost Performance: (+$2.7M/+8.0%)**

- Efficiencies due to completion of the Special Nuclear Material (SNM) De-Inventory work
- Delayed procurement of support material/equipment, and delayed subcontract costs

# Issues

## Regulatory Issues:

- None

## Non-Regulatory Issues:

- None

# Land Disposal Restrictions (LDR) Report
# (Tri-Party Agreement Milestone M-26-01)
# Quarterly Presentation
# January 21, 2010

Tri-Party Agreement

**Deborah Singleton, Ecology Lead**
**Michael Collins, RL Project Lead**
**Ronald Koll, ORP Project Lead**

Tri-Party Agreement

**Land Disposal Restrictions (LDR) Report**
**(Tri-Party Agreement Milestone M-26-01)**
**January 21, 2010**

- Tri-Party Agreement Milestone M-26-01 requires annual submittal of the Hanford Site 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.

Tri-Party Agreement

**Land Disposal Restrictions (LDR) Report**
**(Tri-Party Agreement Milestone M-26-01)**
**January 21, 2010**

- The CY2009 LDR full report preparation in progress
- Site-specific LDR variance for PNNL barium waste
  - Variance approved August 21, 2009
  - Start treatment as early as Spring 2010
- LDR Determination of Equivalent Technology for macroencapsulation of PNNL lead solids
- Site-specific LDR variance for stabilization of CHPRC beryllium powder

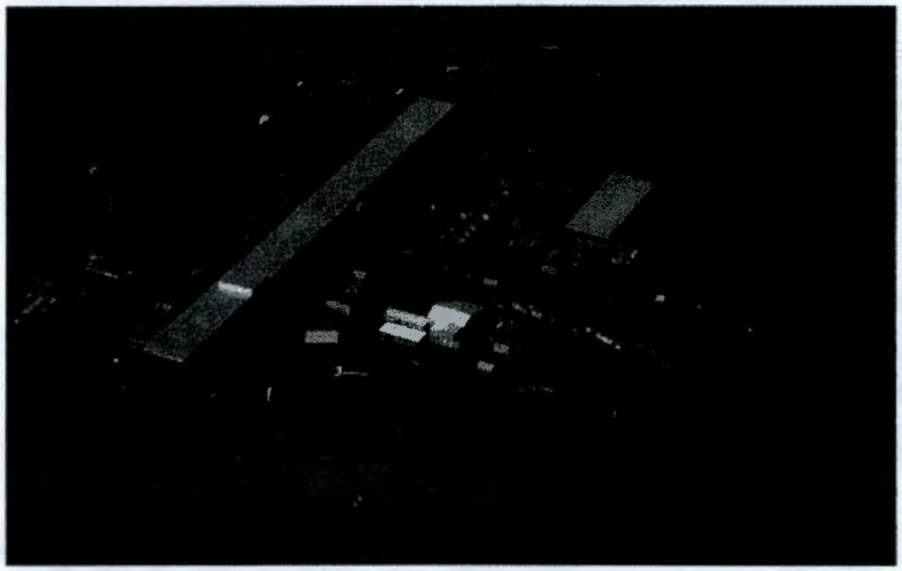
Tri-Party Agreement

**Land Disposal Restrictions (LDR) Report**
**(Tri-Party Agreement Milestone M-26-01)**
**January 21, 2010**

- Actions planned for next three months
  - Prepare CY2009 LDR full report (due 04/30/10)
  - Continue the monthly PMMs, as needed
  - Continue working on storage assessments of potential mixed waste

Department of Energy – Richland Operations Office

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



January 21, 2010

EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

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# TPA Quarterly Milestone Review
# M-91 Series

## Significant Accomplishments of the Last Three Months

- M-91-45 negotiations
  - Started 09/08/09
  - Completion date for negotiations extended from 12/31/09 to 02/28/10

- Treated 107 $m^3$ of M-91-42 MLLW
  - Total volume treated – 7,893 $m^3$
  - Total volume shipped – 8,087 $m^3$ (123 $m^3$ in the quarter)

# TPA Quarterly Milestone Review
# M-91 Series

## Significant Accomplishments of the Last Three Months

- Treated 14 $m^3$ of M-91-43 MLLW
  - Total volume treated – 661 $m^3$
  - Total volume shipped – 671 $m^3$ (10 $m^3$ in the quarter)

- 67 $m^3$ (about 322 drums) of M-91-42 TRU waste repackaged into a WIPP-compliant form
  - Certified waiting shipment to WIPP – 442 $m^3$
  - In WIPP-compliant form – 574 $m^3$
  - Ready for shipment to Idaho – 187 $m^3$

# TPA Quarterly Milestone Review
# M-91 Series

## Significant Accomplishments of the Last Three Months

- Retrieved 283 $m^3$ of M-91-40 RSW
  - Total volume retrieved – 10,491 $m^3$
  - Volume removed from trenches but not shipped to a TSD – 17 $m^3$
  - Next Generation Retrieval – Procurement of equipment/services for retrieval ongoing, specification for design/build contract for processing equipment prepared
  - Alpha Caisson Retrieval - Conceptual design for retrieval and processing systems in review
  - Work continuing in 218-W-3A, Trench 17 and 218-W-4B, Trench 11

# TPA Quarterly Milestone Review
# M-91 Series

**FISCAL YEAR 2010 (First Quarter) 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 | 1,968.5 | 1,859.4 | 1,819.5 | (109.2) | 39.9 |
| Waste Receiving and Packaging Facility | 2,126,4 | 2,067.5 | 2,191.6 | (58.9) | (124.1) |
| T Plant | 2,731.4 | 2,868.5 | 2,618.4 | 137.0 | 250.1 |
| MLLW Treatment | 2,860.3 | 3,355.9 | 2,320.8 | 495.1 | 1,035.1 |
| TRU Retrieval | 8,076.6 | 7,861.9 | 7,714.8 | (214.8) | 147.1 |
| TRU Repackaging | 2,951.3 | 2,867.3 | 2,192.2 | 84.0 | 675.1 |
| TRU Disposition | 1,637.2 | 1,407.2 | 978.3 | (230.0) | 428.9 |
| Project Management | 4,291.9 | 4,292.8 | 4,087.8 | 0.8 | 204.9 |

# TPA Quarterly Milestone Review
# M-91 Series

## Variance Analysis

- FYTD Schedule Variance: The positive schedule variance for MLLW treatment is due to the earlier than planned shipment of waste offsite for treatment. The negative schedule variance for TRU waste disposition is due to the initiation of CCP certification program taking longer than planned.

- FYTD Cost Variance: The positive schedule variance for MLLW treatment is an artifact of funds committed but not costed until the treated waste is returned. The positive cost variance for TRU waste repackaging is due to greater than expected efficiencies of the new work crews. The positive cost variance for TRU waste disposition is due less support being needed for TRU waste repackaging.

# TPA Quarterly Milestone Review
# M-91 Series

## Actions Planned for Next Six Months

- Continue shipping and treating M-91-42 and M-91-43 MLLW
- Continue repackaging M-91-42 TRU waste into a certifiable form
- Initiate Central Characterization Project certification program
- Continue retrieval from 218-W-3A and 218-W-4B, initiate retrieval in 218-E-12B (Next Generation Retrieval)
- Remediate degraded boxes 80 and 82 in Burial Ground 218-W-3A, Trench 17

# TPA Quarterly Milestone Review
# M-91 Series

## Actions Planned for Next Six Months

- Complete conceptual design of retrieval and processing systems for alpha caisson waste

# SOIL AND GROUNDWATER REMEDIATION PROJECT MILESTONE REVIEW

**M-015-00, M-016-00, M-024-00**

Tri-Party Agreement

**U.S. Department of Energy**
**U.S. Environmental Protection Agency**
**State of Washington, Department of Ecology**
**First Quarter FY10**
**January 21, 2010**

# Milestone Status

| TPA Number | Commitment Date | Milestone Title | Status |
|---|---|---|---|
| **M-015-00C – Complete all 200 Area Non-Tank Farm Operable Unit pre-ROD Site Investigations** | | | |
| M-015-00D | 12/31/12 | Submit PPs for all 100 & 300 Area OUs to complete RI/FS process | On Schedule |
| M-015-17A | 09/30/10 | Submit a 200-UP-1 OU Combined RI and FS Report and PP | On Schedule |
| M-015-21A | 12/31/12 | Submit 200-BP-5 OU FS and Proposed Plan to EPA | On Schedule |
| M-015-38B | 11/30/10 | Submit Revised FS Report & Revised Proposed Plan for 200-CW-1 | On Schedule |
| M-015-40E | 02/28/10 | Parties Will Complete Negs. & DOE Will Submit Chg. Pkgs. w/New M/S | On Schedule |
| M-015-44B | 02/28/10 | Submit 200-MW-1 OU FS to EPA. | On Schedule |
| M-015-51 | 09/30/10 | Submit Revised FS Report & Proposed Plan to EPA for 200-BC-1 OU | On Schedule |
| M-015-54 | 01/31/10 | Submit Report on Reactive Gas Testing for Sequestration of Uranium | On Schedule |
| M-015-60 | ROD+6 Mo | Submit RD/RA Work Plan, if 100-NR-1/2 ROD Amend. is Issued | On Schedule |
| M-015-61 | 12/31/09 | Submit RI/FS Work Plan for the 100-NR-1 and 100-NR-2 OUs | **COMPLETED** |
| M-015-62-T01 | 12/31/11 | Submit FS/PP for 100-NR-1/2 OUs Including GW and Soil | On Schedule |
| M-015-64-T01 | 11/30/11 | Submit RI/FS Report and PP for 100-FR-1/2/3 and 100-IU-2/6 | On Schedule |

# Milestone Status

| TPA Number | Commitment Date | Milestone Title | Status |
|---|---|---|---|
| **M-015-00C – Complete all 200 Area Non-Tank Farm Operable Unit pre-ROD Site Investigations** | | | |
| M-015-66-T01 | 07/31/11 | Submit RI/FS Report and PP for 100-KR-1/2/4 OUs for GW and Soil | On Schedule |
| M-015-68-T01 | 11/30/11 | Submit RI/FS Report and PP for 100-BC-1/2/5 OUs for GW and Soil | On Schedule |
| M-015-70-T01 | 07/30/11 | Submit FS Report and PP for 100-HR-1/2/3 and 100-DR-1/2 OUs | On Schedule |
| M-015-71 | 10/31/09 | Submit RI/FS Work Plan for 300-FF-2/5 OUs for GW and Soil | **COMPLETED** |
| M-015-72-T01 | 12/31/11 | Submit RI/FS Report and PP for 300-FF-2/5 OUs for GW and Soil | On Schedule |
| M-015-73 | 12/31/11 | Submit FS Report and PP for 200-PO-1 OU | On Schedule |
| M-015-82A | 12/31/10 | Submit Treatability Test Plan as Amendment of 200-BP-5 WP | On Schedule |
| M-015-82B | TTP+ 6 mo. Approval of TTP plus 6 months | Initiate 200-BP-5 Aquifer Tests Within 6 months of TTP Approval | On Schedule |
| M-015-83 | 06/30/10 | Submit Proposed Plan for 200-UW-1 | On Schedule |
| **M-016-00 – Complete Remedial Actions for all Non-Tank Farm Operable Units** | | | |
| M-016-14B | 12/31/09 | Submit a draft CERCLA Proposed Plan, 100-NR-1/2 | **COMPLETED** |

# Milestone Status

| TPA Number | Commitment Date | Milestone Title | Status |
|---|---|---|---|
| **M-016-00 – Complete Remedial Actions for all Non-Tank Farm Operable Units (cont.)** | | | |
| M-016-110-T01 | 12/31/12 | Take Actions to Contain or Remediate Hexavalent Cr 100A GW Plumes | On Schedule |
| M-016-110-T02 | 12/31/20 | Take Actions Such That Hexavalent Cr Meets Drinking Water Stds. | On Schedule |
| M-016-110-T03 | 12/31/16 | Take Actions to Contain Sr-90 GW Plume at 100-NR-2 OU | On Schedule |
| M-016-110-T04 | 12/31/16 | Implement Remedial Actions in all 100A RODS for GW OUs | On Schedule |
| M-016-110-T05 | 12/31/15 | Implement System to Meet Drinking Water Stds. for U at 300-FF-5 OU | On Schedule |
| M-016-111B | 12/31/10 | Expand P&T System at 100-HR-3 OU to 500 gpm Capacity | On Schedule |
| M-016-111C | 12/31/11 | Expand P&T System at 100-HR-3 OU to 800 gpm Capacity | On Schedule |
| M-016-112A | 12/31/09 | Complete Demos for Biostimulation and Electrocoagulation | **COMPLETED** |
| M-016-119-T01 | 12/31/20 | Remedy in Place to Contain GW Plumes in 200 NPL Area | On Schedule |
| M-016-120 | 12/31/11 | GW Treatment System <50 gpm for Tc-99 Plume at S/SX Tank Farm | On Schedule |
| M-016-122 | 12/31/11 | Begin Phase 1 Operation of 200W Pump and Treat System | On Schedule |
| M-016-123B | TBD | Initiate 200-ZP-1 Constr. 6 Mo. After RD/RA Work Plan Approval<br>Work plan submitted 3/24/09, 09-AMCP-0093 | On Schedule |
| M-016-124 | 08/31/10 | Submit 200-ZP-1 Remedial Design Report | On Schedule |

# Milestone Status

| TPA Number | Commitment Date | Milestone Title | Status |
|---|---|---|---|
| **M-024-00 – Complete Well Installations with RCRA/CERCLA Requirements** | | | |
| M-024-58C | 06/01/10 | Initiate Discussions of Well Commitments | On Schedule |
| M-024-58D | 06/01/11 | Initiate Discussions on Well Commitments | On Schedule |
| M-024-61 | 12/31/10 | DOE Shall Complete Construction of 90 Wells | On Schedule |
| M-024-61-T01 | 08/01/10 | Conclude Discussions of Well Commitments | On Schedule |
| M-024-62 | 12/31/11 | DOE Shall Complete Construction of all Wells Listed | On Schedule |
| M-024-62-T01 | 08/01/11 | Conclude Discussions of Well Commitments | On Schedule |

# Significant Accomplishments

## 200-PO-1 OU

- Completed groundwater sampling of supplemental wells identified in the RI/FS Work Plan SAP Appendix A, Table A3-3, finishing the remaining RI requirement. Continued preparation of the 200-PO-1 Remedial Investigation (RI) Report.
- Completed the 200-PO-1 geophysical summary report documenting seismic and airborne EM studies performed in FY08.

## 200-BP-5

- L Well (adjacent C-1 Crib) and K Well (adjacent B-6 Reverse well) were drilled/sampled to depths of 343 and 288 ft bgs, respectively. Both wells will be drilled to top of basalt, expected at ~ 380 ft bgs. Drilling of the M Well (adjacent B-12 Crib) will start following completion of L Well.
- Completed 2 of 14 wells scheduled for depth discrete groundwater sampling in the B Complex Area.
- Continued work on the Remedial Investigation (RI) Report. Revision of the draft 200-BP-5 conceptual model report continued. Initiated work on the 200-BP-5 B Complex Treatability Test Plan.

## 200-BC-1

- Submitted the Rev. 0 ExcavationTreatability Test Report to RL for distribution to stakeholders.

## 200-UP-1

- A redline of the 200-UP-1 OU Groundwater Remedial Design/Remedial Action Work Plan (DOE/RL-97-36, Rev. 3) was prepared incorporating Ecology's review comments, and provided to Ecology for final review. Initiated remedial design of the S-SX Tc-99 plume groundwater extraction system.
- Preparation of the 200-UP-1 RI/FS report and revision to the 200-ZP-1 Proposed Plan continued.

# Significant Accomplishments

## 200-MW-1

- Issued Decisional Draft Feasibility Study to RL for review and comment. Preparation of Draft A is on schedule for submittal to EPA by February 28, 2010.

## 200-ZP-1 / 200-PW-1 SVE

- Held ~90% design review for the 200-West Area Groundwater Treatment Facility.
- Completed the drilling and sampling of a total of 6 final extraction wells.
- Awarded contract fro the drilling and sampling of the next 11 injection/extraction wells.
- Revised Performance Monitoring Plan based on RL comments. Currently issuing Draft A report for EPA review.
- Issued O+M Plan for 200-West Area Groundwater Treatment Facility for internal review.
- Completed design and ordered materials for tying wells EW-1 (C7017) into interim P+T system.
- Completed design and ordered replacement heater chiller unit for interim P+T system.
- Continued operation of interim pump-and-treat system pumping at around 260 gpm.
- Order GAC heater units for two new SVE units to support operations in colder temperatures.

## 200-PW-1/3/6

- Two new SVE units are currently in Operational Testing using an Operational Testing Procedure (OTP).
- The Draft B FS is being revised to address EPA comments on risk screening, groundwater modeling, and inclusion of pipelines.

# Significant Accomplishments

**200-CW-5**

- The Draft C FS is being prepared to simplify the number of alternatives evaluated and to be more consistent with the 200-PW-1/3/6 FS.

**200-MG-1/2**

- Issued the RAWP for eleven outer area waste sites for 200-MG-1.
- Issued Action Memorandum (Rev. 0) for 200-MG-2.
- Transmitted Action Memorandum for 37 Outer-Area Waste Sites in 200-MG-1 to regulators for review.

**200-UW-1**

- Submited the 216-U-8 and 216-U-12 DQO and SAP for RL review.
- The site wide remedial action goals document, Regulatory Criteria for the Selection and Use of Environmental Regulatory Models for the Vadose Zone System at the Hanford Site (DOE-2007-34), was revised based on Ecology comments and is being reviewed internally.

**200-LW-1/2**

- The 216-B-6 borehole was advanced to 288 feet bgs. The total anticipated depth is 304 feet bgs before groundwater is encountered.

**200-PW-2/4**

- The 216-C-1 borehole was completed to a depth of 290 feet bgs on November 30, 2009.

# Significant Accomplishments

## 200-SW-1

- RL and Ecology are working together to expedite the review and update of the NRDWL and SWL closure plans.
- Ecology and RL/CH workgroups are working to propose resolutions for regulatory approach, public involvement, soil cover design, and groundwater monitoring.

## 200-SW-2

- Completed surface geophysical investigations in four landfills and published investigation summary report.
- Completed passive organic vapor sampling at ~350 locations in 200-E/W landfills and published investigation summary report.

# Significant Accomplishments

## U-Zone Remediation

- **221-U Disposition**
  - Sampling of D-10 tank in U Plant's cell 30 completed.
- **U-Ancillary Facilities**
  - Removal actions in accordance with Removal Action Work Plan, DOE/RL-2004-83, Rev. 1, underway.

## 200 North Remediation

- **212-N, -P, and -R Facilities/Structures**
  - Non-Time Critical Removal Action demolition completed for 212-N, -P, and –R facilities; sampling planned for January.
- **200-CW-3 Waste Sites**
  - Completed excavation of waste site 216-N-1 contaminated soils. Verification sampling will be initiated.
  - Collected confirmatory samples from three septic tanks, 2607-N, -P, and –R.
  - Initiated excavation of contaminated soils from 216-N-4 waste site.

## ALE Reserve D&D

- Initiated Cold & Dark utility isolations.
- Initiated asbestos abatement.

## BC Control Area Remediation

- **Completed the aerial survey of BC Control Area**
  - Approximately 18% of Zone B was determined to be uncontaminated.
- **Removed approximately 18,000 tons cumulative of contaminated soil to ERDF**

# Significant Accomplishments

## 300 Area FF-5

- **RI/FS Work Plan Draft A**
  - SAP for Work Plan submitted to RL for transmission to EPA.
- **Uranium Testing**
  - Completed construction of infiltration gallery for tracer and polyphosphate infiltration tests to be conducted at low river stage.
  - Began reinstallation of geophysical instrumentation on surface and observation wells.

## 100-BC-5

- **100-BC Decision Unit RI/FS Work Plan Addendum Draft A**
  - Received EPA Work Plan and SAP comments on 11/25/2009.
  - Began comment resolution and incorporation of changes into revised documents.
- **Four-Well Drilling Campaign**
  - Continued well installations to support RI/FS Work Plan efforts.
  - Drilled, sampled, and completed first of four wells, C7506.
  - Drilled and sampled second well, C7505, and preparing for well completion.
  - Initiated drilling and sampling of third well, C7507.
- **100-B-27 Excavation Bottom Sampling**
  - Finalized and received RL and EPA concurrence on Sampling Instructions.
  - Completed all field planning and preparations to begin soil and groundwater sampling.

# Significant Accomplishments

## 100-KR-4

- Issued approved Sampling and Analysis Plan for the K Decision Unit RI/FS (DOE/RL-2009-41).
- Staked 11 of 13 proposed RI wells, and initiated planning for the installation of RI aquifer tubes.
- Completed first of three rounds of KR-4 operable unit risk assessment sampling.
- Made significant progress toward completing construction and drilling related to the Phase 2 KX/KR4 systems realignment, which will increase system flows and efficiencies and address concerns about the spread of tritium in the 100-KR-4 operable unit.
- Delivered to RL a conceptual design technical memorandum for implementation of remedial process optimization recommendations to meet the 2012 and 2020 groundwater cleanup goals for hexavalent chromium.
- Prepared and issued functional requirements document for Phase 3 realignment of the 3 KR4 pump-and-treat systems. The proposed changes will connect additional wells to the systems to support achievement of the 2012 goal, reroute piping to several wells to improve system operability, and provide additional extraction well connection points to the systems.
- Initiated planning for the installation of an upgrade to the KR4 pump-and-treat system programmable logic controller.
- Moved resin test skid from DR-5 to KX process building and initiated planning for resin testing using KR4 operable unit groundwater.
- Released/issued final Revision 2 of the KW RDR/RAWP (for system expansion to 200 gpm).
- Delivered decisional draft KR-4 operable unit Interim Action Monitoring Plan for RL review.

# Significant Accomplishments

## 100-NR-2

- **100-N Decision Unit RI/FS Work Plan Addendum Decisional Draft A**
  - Received RL Decisional Draft A of Work Plan and SAP comments.
  - Resolved RL comments and incorporated changes into Draft A.
  - Milestone M-015-61 was met by submitting Draft A documents to Ecology by 12/31/2009.
- **CERCLA Proposed Plan to Amend the NR-1/2 OU IROD**
  - At RL request, updated Draft A of Proposed Plan to include WCH requested NR-1 material into Draft B.
  - Milestone M-016-14B was met by submitting Draft B document to Ecology by 12/31/2009.
- **171-Well Drilling Campaign**
  - Wells installed for Sr-90 rivershore plume monitoring and for potential use in future Apatite PRB expansions.
  - Field operations initiated with 45 wells drilled, sampled, and completed.
  - Three of the 45 wells continuously sampled (cored) to support evaluation of the existing Apatite PRB.
- **Jet Injection Pilot-Scale Treatability Test**
  - Conducted under Treatability Test Plan (Addendum 3).
  - Initiated and completed primary jet injection activities on all three test plots.
  - Initiated and continued associated aquifer tube sampling.

## 100-FR-3

- **100-F and IU-2/6 Decision Unit RI/FS Work Plan Addendum Draft A**
  - Received EPA Work Plan and SAP comments on 11/25/2009.
  - Began comment resolution and incorporation of changes into revised document.

# Significant Accomplishments

**100-HR-3**

- Received and resolved regulator comments on the 100-Area RI/FS Integrated Work Plan, Revision 0.
- Received and resolved regulator comments on Addendum 1 to the 100-Area RI/FS Integrated Work Plan, 100-D/H Decision Unit, Revision 0 (except SAP).
- Initiated development of a path forward for the 100-Area Focused Feasibility Study and Proposed Plan for In-situ Remediation, Draft A.
- Issued a formal recommendation for use of ResinTech SIR-700 in the DX facility.
- Completed design for the DX P&T System (600 gpm P&T system for D Area).
- Continued construction of the DX P&T System (process building is substantially complete).
- Continued design on HX, the additional 700 gpm P&T capacity at H Area.
- Continued realignment of DR-5 to extract groundwater from the hot-spot in the southern plume.
- Completed the H Area RUM aquifer test, and began design modifications to support long-term operation of these wells.
- Continued the rebound study in H Area.

# RL-30 Groundwater/Vadose Zone
# CM/FYTD Cost/Schedule Status - Base
## ($ in thousands)

| RL-30 | Current Period/FYTD | | | | | Fiscal Year to Date | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Soil & water Rem-Grndwtr/Vadose | Budgeted Cost | | | Variance | | Budgeted Cost | | | Variance | | | |
| CCL | BCWS | BCWP | ACWP | SV | CV | BCWS | BCWP | ACWP | SV | CV | BAC | FYSF |
| 030.01 - Integration and Assessments | 1,008.0 | 1,071.6 | 1,076.8 | 63.6 | (5.2) | 2,978.5 | 2,921.6 | 2,861.7 | (56.9) | 59.9 | 15,361.3 | 15,596.8 |
| 030.03 - Drilling | (61.3) | 348.6 | 273.1 | 409.9 | 75.5 | 613.7 | 908.0 | 778.5 | 294.3 | 129.5 | 3,348.7 | 3,512.4 |
| 030.04 - Project Management | 947.6 | 947.6 | 632.0 | 0.0 | 315.6 | 2,306.0 | 2,306.0 | 2,105.6 | 0.0 | 200.4 | 9,806.3 | 9,880.5 |
| 030.05 - Integrated Field Work | 662.2 | 664.9 | 535.1 | 2.7 | 129.8 | 1,889.2 | 1,889.2 | 1,597.7 | 0.0 | 291.5 | 8,187.0 | 8,245.5 |
| 030.06 - GW Monitoring and Perf Asmts | 1,310.5 | 1,202.1 | 1,199.9 | (108.4) | 2.2 | 4,107.9 | 3,564.1 | 3,971.0 | (543.8) | (406.9) | 16,246.6 | 16,457.8 |
| 030.10 - 100-BC-5 Operable Unit | 11.6 | 100.2 | 217.4 | 88.6 | (117.2) | 291.6 | 290.7 | 494.5 | (0.9) | (203.8) | 2,047.5 | 2,096.5 |
| 030.11 - 100-KR-4 Operable Unit | (326.5) | 1,028.8 | 482.3 | 1,355.3 | 546.5 | 2,113.8 | 2,195.1 | 1,459.0 | 81.3 | 736.1 | 9,330.9 | 9,187.8 |
| 030.12 - 100-NR-2 Operable Unit | 145.7 | 550.3 | 481.0 | 404.6 | 69.3 | 1,289.9 | 1,704.8 | 825.4 | 414.9 | 879.4 | 7,595.7 | 7,539.5 |
| 030.13 - 100-HR-3 Operable Unit | 1,810.6 | 2,292.7 | 568.4 | 482.1 | 1,724.3 | 2,609.0 | 2,961.2 | 2,050.2 | 352.2 | 911.0 | 18,886.4 | 18,039.1 |
| 030.14 - 100-FR-3 Operable Unit | (33.6) | 52.9 | 15.3 | 86.5 | 37.6 | 184.5 | 180.2 | 56.2 | (4.3) | 124.0 | 1,131.0 | 1,052.8 |
| 030.20 - 200-BP-5 Operable Unit | 168.7 | 165.5 | 188.5 | (3.2) | (23.0) | 424.4 | 302.8 | 269.4 | (121.6) | 33.4 | 1,850.5 | 1,620.5 |
| 030.21 - 200-PO-1 Operable Unit | (2.1) | 25.3 | 37.6 | 27.4 | (12.3) | 135.7 | 177.4 | 154.1 | 41.7 | 23.3 | 405.8 | 364.1 |
| 030.22 - 200-UP-1 Operable Unit | 18.2 | 45.4 | 46.4 | 27.2 | (1.0) | 158.5 | 162.6 | 130.9 | 4.1 | 31.7 | 741.1 | 653.9 |
| 030.23 - 200-ZP-1 Operable Unit | 611.9 | 1,458.1 | 684.0 | 846.2 | 774.1 | 1,844.4 | 3,086.6 | 2,671.2 | 1,242.2 | 415.4 | 8,471.9 | 9,415.5 |
| 030.24 - 200-PW-1 Operable Unit | 79.4 | 127.6 | 44.7 | 48.2 | 82.9 | 275.3 | 322.2 | 123.7 | 46.9 | 198.5 | 1,487.4 | 1,264.5 |
| 030.30 - 300-FF-5 Operable Unit | (19.1) | 229.8 | (382.6) | 248.9 | 612.4 | 329.0 | 353.3 | 345.0 | 24.3 | 8.3 | 4,374.0 | 4,374.0 |
| 030.31 - PBS RL-30 Reg Dec/Closure | 1,253.1 | 1,375.3 | 510.9 | 122.2 | 864.4 | 1,287.8 | 1,667.0 | 777.2 | 379.2 | 889.8 | 15,046.5 | 14,599.6 |
| 030.32 - Deep Vadose Zone Treatability | 170.2 | 326.2 | 308.5 | 156.0 | 17.7 | 460.4 | 576.8 | 616.4 | 116.4 | (39.6) | 3,351.5 | 3,381.9 |
| 030.90 - Usage Based Services Dist | 271.0 | 271.0 | 380.8 | (0.0) | (109.8) | 757.7 | 757.7 | 1,002.3 | 0.0 | (244.6) | 3,317.9 | 3,868.0 |
| 030.99 - PBS RL-30 UBS, G-n-A, DD | 1,540.0 | 1,540.0 | 1,447.7 | 0.0 | 92.3 | 4,087.5 | 4,087.5 | 3,713.6 | 0.0 | 373.9 | 16,548.4 | 16,688.0 |
| TOTAL Base - Work Scope | 9,566.2 | 13,824.1 | 8,748.0 | 4,257.9 | 5,076.1 | 28,145.0 | 30,414.7 | 26,003.5 | 2,269.7 | 4,411.2 | 147,536.2 | 147,838.6 |

# RL-30 Groundwater/Vadose Zone
# CTD Cost/Schedule Status – Base
## ($ in thousands)

| RL-30 Soil & water Rem-Grndwtr/Vadose CCL | Contract to Date | | | | | Contract |
|---|---|---|---|---|---|---|
| | Budgeted Cost | | | Variance | | |
| | BCWS | BCWP | ACWP | SV | CV | BAC |
| BASE - Work Scope | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 030.01 - Integration and Assessments | 16,522.9 | 16,274.9 | 15,151.9 | (248.0) | 1,123.0 | 98,176.3 |
| 030.03 - Drilling | 7,982.7 | 8,032.3 | 7,764.7 | 49.6 | 267.6 | 74,634.1 |
| 030.04 - Project Management | 13,067.5 | 13,067.5 | 12,087.7 | 0.0 | 979.8 | 59,499.1 |
| 030.05 - Integrated Field Work | 10,220.0 | 9,909.3 | 9,115.6 | (310.7) | 793.7 | 51,872.4 |
| 030.06 - GW Monitoring and Perf Asmts | 17,865.9 | 17,768.2 | 19,089.8 | (97.7) | (1,321.6) | 146,273.9 |
| 030.10 - 100-BC-5 Operable Unit | 721.8 | 720.9 | 849.6 | (0.9) | (128.7) | 5,020.9 |
| 030.11 - 100-KR-4 Operable Unit | 13,644.7 | 13,670.3 | 12,229.9 | 25.6 | 1,440.4 | 76,426.3 |
| 030.12 - 100-NR-2 Operable Unit | 3,477.7 | 3,764.8 | 2,639.8 | 287.1 | 1,125.0 | 34,459.3 |
| 030.13 - 100-HR-3 Operable Unit | 9,516.2 | 9,637.4 | 8,580.5 | 121.2 | 1,056.9 | 92,075.7 |
| 030.14 - 100-FR-3 Operable Unit | 559.1 | 554.8 | 291.0 | (4.3) | 263.8 | 3,596.4 |
| 030.20 - 200-BP-5 Operable Unit | 1,030.3 | 897.9 | 860.7 | (132.4) | 37.2 | 8,479.5 |
| 030.21 - 200-PO-1 Operable Unit | 1,263.9 | 1,305.6 | 1,248.6 | 41.7 | 57.0 | 5,806.3 |
| 030.22 - 200-UP-1 Operable Unit | 927.9 | 954.0 | 743.8 | 26.1 | 210.2 | 12,135.5 |
| 030.23 - 200-ZP-1 Operable Unit | 15,353.1 | 15,658.1 | 14,108.9 | 305.0 | 1,549.2 | 217,648.4 |
| 030.24 - 200-PW-1 Operable Unit | 1,737.3 | 1,703.7 | 1,324.7 | (33.6) | 379.0 | 12,501.7 |
| 030.30 - 300-FF-5 Operable Unit | 1,827.5 | 1,858.9 | 2,299.8 | 31.4 | (440.9) | 28,824.1 |
| 030.31 - PBS RL-30 Reg Dec/Closure | 6,373.0 | 6,547.3 | 5,129.0 | 174.3 | 1,418.3 | 47,198.6 |
| 030.32 - Deep Vadose Zone Treatability | 3,282.5 | 3,334.0 | 2,815.7 | 51.5 | 518.3 | 13,621.9 |
| 030.90 - Usage Based Services Dist | 3,681.6 | 3,681.6 | 4,031.1 | 0.0 | (349.5) | 32,014.1 |
| 030.90.02 - Assmts for PRC Services | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 030.90.03 - Assmts for - Oth Provd Serv | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 030.99 - PBS RL-30 UBS, G-n-A, DD | 20,688.6 | 20,688.6 | 19,394.1 | 0.0 | 1,294.5 | 168,231.2 |
| **TOTAL Base - Work Scope** | **149,744.4** | **150,030.1** | **139,756.9** | **285.7** | **10,273.2** | **1,188,495.9** |

# RL-30 Groundwater/Vadose Zone
# CM/FYTD/CTD Cost/Schedule Status - ARRA
## ($ in thousands)

| | Current Period/FYTD | | | | | Fiscal Year to Date | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Budgeted Cost | | | Variance | | Budgeted Cost | | | Variance | | | |
| | BCWS | BCWP | ACWP | SV | CV | BCWS | BCWP | ACWP | SV | CV | BAC | FYSF |
| ARRA - Work Scope | | | | | | | | | | | | |
| 030.03 - Drilling | 1,371.8 | 1,634.5 | 1,044.7 | 262.7 | 589.8 | 4,049.1 | 4,015.7 | 2,875.3 | (33.4) | 1,140.4 | 21,390.7 | 21,571.0 |
| 030.13 - 100-HR-3 Operable Unit | 3,234.3 | 851.9 | 336.0 | (2,382.4) | 515.9 | 3,675.3 | 4,380.7 | 3,341.2 | 705.4 | 1,039.4 | 21,054.7 | 20,630.3 |
| 030.23 - 200-ZP-1 Operable Unit | (150.5) | 1,038.6 | 981.2 | 1,189.1 | 57.4 | 2,762.8 | 2,717.0 | 2,370.2 | (45.8) | 346.8 | 60,130.2 | 59,415.1 |
| 030.31 - PBS RL-30 Reg Dec/Closure | 281.4 | (116.2) | (206.3) | (397.6) | 90.1 | 1,503.4 | 1,399.3 | 482.6 | (104.1) | 916.7 | 1,527.3 | 506.4 |
| 030.98 - Ramp-up and Transition | 687.2 | 1,265.3 | 1,272.8 | 578.1 | (7.5) | 2,836.5 | 3,012.7 | 3,131.4 | 176.2 | (118.7) | 25,291.9 | 25,586.8 |
| 030.99 - PBS RL-30 UBS, G-n-A, DD | 713.0 | 713.0 | 216.4 | 0.0 | 496.6 | 2,565.6 | 2,565.6 | 1,092.3 | 0.0 | 1,473.3 | 10,682.4 | 9,416.0 |
| **TOTAL ARRA - Work Scope** | **6,137.2** | **5,387.1** | **3,644.7** | **(750.0)** | **1,742.4** | **17,392.7** | **18,091.0** | **13,293.0** | **698.3** | **4,798.0** | **140,077.2** | **137,125.7** |

| | Contract to Date | | | | | Contract |
|---|---|---|---|---|---|---|
| | Budgeted Cost | | | Variance | | |
| | BCWS | BCWP | ACWP | SV | CV | BAC |
| ARRA - Work Scope | | | | | | |
| 030.03 - Drilling | 6,323.8 | 6,430.6 | 4,918.0 | 106.8 | 1,512.6 | 31,001.5 |
| 030.13 - 100-HR-3 Operable Unit | 3,675.9 | 7,832.2 | 5,708.1 | 4,156.3 | 2,124.1 | 21,544.5 |
| 030.23 - 200-ZP-1 Operable Unit | 3,185.7 | 3,752.2 | 3,177.2 | 566.5 | 575.0 | 101,778.4 |
| 030.31 - PBS RL-30 Reg Dec/Closure | 2,721.6 | 2,738.9 | 1,059.9 | 17.3 | 1,679.0 | 2,745.5 |
| 030.98 - Ramp-up and Transition | 5,970.4 | 5,654.4 | 5,950.7 | (316.0) | (296.3) | 31,078.8 |
| 030.99 - PBS RL-30 UBS, G-n-A, DD | 4,050.7 | 4,050.7 | 2,174.2 | 0.0 | 1,876.5 | 16,101.5 |
| **TOTAL ARRA - Work Scope** | **25,928.0** | **30,459.0** | **22,988.3** | **4,530.9** | **7,470.8** | **204,250.1** |

# S&GRP Performance Review - Summary Variance Analyses, Base

**30.01 Integration & Assessments**

- CTD CV (+$1,123K) – FY09 S&T horizontal drilling contract and other efficiencies

**30.03 Well Drilling**

- CM SV (+$410K) - AWA-PRC-10-017 Implementation – work scope realigned to reflect planned execution

**30.04 Project Management**

- CM CV (+$316K), – FY10 Labor under runs
- CTD CV (+$980K) – FY09 PRC Transition cost less than planned

**30.05 Integrated Field Work**

- CTD CV (+$794K) – Efficiencies in Operations and Maintenance activities

**30.06 GW Monitoring & Performance Assessments**

- CTD CV (-$1,322K) – WSCF lab cost

**30.11 100-KR-4 Operable Unit**

- CM SV (+$1,355K) – AWA-PRC-10-017 Implementation – work scope realigned to reflect planned execution
- CM CV (+$547K), CTD CV (+$1,440K) – Efficiencies in operations and maintenance activities and KR-4, KW, & KX remedial action activities

# S&GRP Performance Review - Summary Variance Analyses, Base (Continued)

## 30.12 100-NR-2 Operable Unit

- CM SV (+$405K) – AWA-PRC-10-017 Implementation – work scope realigned to reflect planned execution
- FYTD CV (+$879K), CTD CV (+$1,125K) – Chemical treatment, maintenance, and reporting efficiencies

## 30.13 100-HR-3 Operable Unit

- CM SV (+$482K) – AWA-PRC-10-017 Implementation – work scope realigned to reflect planned execution
- CM CV (+$1,724K) - AWA-PRC-10-017 Implementation – work scope realigned to reflect planned execution
- FYTD CV (+$911K), CTD CV (+$1,057K) – Efficiencies in CERCLA, Operations & Maintenance, Field Study Deployments, & Project Management

## 30.23 200-ZP-1 Operable Unit

- CM SV (+$846K), FYTD SV (+$1,242K) – AWA-PRC-10-017 Implementation – work scope realigned to reflect planned execution & completion of Pump & Treat Design/Construction scope that was previously behind schedule
- CM CV (+$774K) – AWA-PRC-10-017 Implementation – work scope realigned to reflect planned execution & Road crossing construction cost correction from Base to ARRA
- CTD CV (+$1,549K) – Savings in annual system calibration, design of EW-1 well hook-up, Ops & Maintenance, & Misc Pump & Treat design/construct activities.

# S&GRP Performance Review - Summary Variance Analyses, Base (Continued)

**30.30 300-FF-5 Operable Unit**

- CM CV (+$612K) – Vendor over estimated accruals in November resulting in December accrual reversal adjustment

**30.99 RL30 UBS G&A DD**

- CTD (+$1,295) – Lower G&A cost in FY09 and FY10 than planned.

# S&GRP Performance Review - Summary Variance Analyses, ARRA

## 30.03, Drilling

- CM SV (+$263K) – Efficiencies in 100-HR-3 welling drilling
- CM CV (+$590K), FYTD CV (+$1,140K), CTD CV (+$1,513K) – Efficiencies in drilling of NR-2 & HR-3 wells

## 30.13, 100-HR-3

- CM SV (-$2,382K) AWA-PRC-10-017 Implementation – work scope realigned to reflect planned execution
- CTD SV (+$4,156K) – Acceleration of DX construction activities
- CM CV (+$516K), FYTD CV (+$1,039), CTD CV (+$2,124K) – November accruals overstated resulting in December credits and efficiencies in DX construction & HR-3 Pump & Treat activities

## 30.23, 200-ZP-1

- CM SV (+$1,189K) AWA-PRC-10-017 Implementation – work scope realigned to reflect planned execution

# S&GRP Performance Review - Summary Variance Analyses, ARRA (Continued)

### 30.31 Regulatory Decision/Closure

- CM SV (-$398K) – AWA-PRC-10-017 Implementation – work scope realigned to reflect planned execution, DOE direction to change ARRA to Base
- FYTD CV (+$917K), CTD CV (+1,679K) – Efficiencies in characterization and MIS activities

### 30.98 Ramp-up & Transition

- CM SV (+$578K) – AWA-PRC-10-017 Implementation – work scope realigned to reflect planned execution and mobile offices installation

### 30.99 RL30 UBS, G&A, DD

- CM CV (+$497K), FYTD CV (+$1,473K), CTD CV (+$1,877K) – FY09 and FY10 G&A running less than planned

# RL-40 Deactivation & Decommissioning Project
# FYTD Cost/Schedule Status
## ($ in millions)

| Fiscal year-to-Date | FYTD BCWS | FYTD BCWP | FYTD ACWP | FYTD Schedule Variance $ | FYTD Cost Variance $ | BAC |
|---|---|---|---|---|---|---|
| RL-0040 BOS D&D Base Funding | 6.0 | 4.5 | 4.0 | -1.5 | .4 | 22.4 |
| RL-0040 BOS D&D ARRA Funding | 27.7 | 25.3 | 18.9 | -2.4 | 6.4 | 132.7 |
| RL-0040 BOS D&D TOTAL | 33.7 | 29.8 | 23.0 | -3.9 | 6.8 | 155.1 |

*Numbers are rounded to the nearest $0.1M*

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

| Subproject | FYTD Variance | Causal Factor |
|---|---|---|
| ARRA Funded Scope | | |
| *Significant Schedule Variance* | | |
| 040.01.29.01.02 | .8 | Several Capital Equipment procurements were received early. |
| 040.02.18.02 - U Canyon | -0.7 | Delays in hiring of personnel for the U Canyon Project has caused the mobilization and ramp-up activities to fall behind. |
| 040.02.24.01 – ALE facilities Rattlesnake | .4 | Asbestos Abatement activities have been completed ahead of shcedule. |
| 040.02.29.03 – O-Zone | -2.7 | Preparations for shipping contaminated soils to ERDF required more time than anticipated. |
| *Significant Cost Variance* | | |
| 40.01.26.01 - Misc Facilities Hazard Reduction | .7 | Delays in hiring for WIF and Cold & Dark, along with efficiencies gained by integration with west area seven industrial buildings |
| 040.02.24.01 – ALE Facilities Rattlesnake | 1.0 | Efficiencies in Asbestos Abatement activities for the demo of ALE Project. |
| 040.02.18.02 - Canyon - U Plant Zone | .8 | Slow ramp up of staffing in the U Canyon Project has caused the delays in mobilization and ramp-up activities. |
| 040.02.18.04 - U Ancillary Demolition | 1.0 | U Ancillary material and equipment costs have far exceed the estimated budget. Due to higher than planned asbestos in the ancillary buildings additional respiratory/masks have been required. Additional insulators were need to recover schedule as well as overtime. Also, a $5K cost correction was completed in September to move additional costs from Base to ARRA. |
| 040.02.29.03 - O Zone Waste Sites | 2.2 | Slow ramp up of staff and subcontractors for the Outer Zone waste sites. |
| 040.01.21.01 | .6 | Project Management is requiring less resources than planned. |

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

| Subproject | FYTD Variance | Causal Factor |
|---|---|---|
| Base Funded Scope | | |
| *Significant Schedule Variance* | | |
| 040.02.18.02 - Canyon - U Plant Zone | -1.5 | Disposition of Cell 30 has not been determined. Awaiting decision from the Regulators. |
| *Significant Cost Variance* | | |
| 40.01.21.01 – Project Management | 0.4 | Less resources required for Project Management. |

# Planned Activities
## Next 6 Months

### U-Zone Remediation

- **U-Ancillary Facilities**
  - Demolition work underway with completion expected in Spring 2010.

### 200 North Remediation

- **212-N, -P, and -R Facilities/Structures**
  - Non-Time Critical Removal Action sampling and backfilling.
- **200-CW-3 Waste Sites**
  - Completion of reclassification of six of nine waste sites to No Action.
  - Commence remediation of the remaining three waste sites designated as RTD.

### ALE Reserve D&D

- Continue Cold & Dark utility isolations.
- Continue asbestos abatement.
- Begin demolition activities.

### BC Control Area

- Continue bulk excavation of Zone A.
- Initiate remediation of hot spots in Zone B.

### Other Facilities D&D

- Conclude or extend Central Plateau Facility TPA milestone negotiations.

# Planned Activities
## Next 6 Months

### 100-NR-2

- Revise Draft A of the 100-N Decision Unit RI/FS Work Plan Addendum and associated SAP for final Rev. 0 approval and issuance.
- Revise the NR-1/2 Proposed Plan to Amend the IROD for Rev. 0 approval and public review.
- Complete the evaluation of the Pilot-Scale Jet Injection Treatability Test and issue report.
- Complete TPH and Phytoremediation studies and issue PNNL reports.
- Continue Apatite Barrier performance monitoring/evaluation and issue PNNL report.
- Continue 171 well-drilling campaign.

### 100-HR-3

- Issue Rev. 0 RI/FS Work Plan and Addendum 1, including SAP.
- Issue a revision of the HR-3 RD/RA Work Plan to address upgrades at D Area, H Area, and the new DX and HX systems.
- Provide a Draft B 100 Areas Hexavalent Chromium Focused Feasibility Study and Proposed Plan for regulatory review.
- Complete Remedial Process Optimization Phase II Technical Memoranda for D/H Areas.
- Continue drilling of RPO wells: 70 new wells in D/H Areas.
- Initiate drilling of RI/FS wells: 15 new wells, 12 new boreholes, 5 test pits in D/H Areas.
- Issue two Treatability Test Plans for In-situ Bioremediation at the Southern Plume in D Area. Commence construction and start-up of these tests.
- Complete design of the new HX P&T facility.
- Complete the DR-5 Hot-Spot Realignment.
- Complete modifications to support long term pumping of two RUM wells in H Area.

# Planned Activities
## Next 6 Months

### 100-FR-3

- Revise Draft A of the 100-F/IU-2/IU-6 Decision Unit RI/FS Work Plan Addendum and associated SAP for final Rev. 0 approval and issuance.
- Complete planning and preparations for RI/FS Work Plan field activities.
- Initiate field activities to support the RI/FS as directed by the Work Plan.

### 100-BC-5

- Revise Draft A of the 100-BC Decision Unit RI/FS Work Plan Addendum and associated SAP for the final Rev. 0 approval and issuance.
- Complete the drilling, sampling, and completion of four advance RI/FS wells.
- Complete planning and preparations for remaining RI/FS Work Plan field activities.
- Initiate additional field activities to support the RI/FS as directed by the Work Plan.
- Complete B-27 excavation bottom sampling activities.

# Planned Activities
## Next 6 Months

### 100-KR-4

- Complete well installation, construction, and system testing associated with KX/KR4 Phase 2 realignment .
- Prepare Phase 3 realignment briefing package; prepare appropriate TPA change notices to KR4 P&T system RDR/RAWP documents to reflect Phase 3 modifications; complete design and initiate drilling and construction associated with Phase 3 realignment of the KR-4 operable unit pump-and-treat systems.
- Issue Rev. 0 K Decision Unit RI/FS Work Plan Addendum, conduct the 2nd round of K Decision Unit risk assessment sampling, and initiate RI well drilling and aquifer tube installation.
- Make significant progress toward installation of the KR4 P&T system programmable logic controller upgrade.
- Conduct resin tests at the KX process building using the resin test skid and KR4 OU groundwater.
- Incorporate RL comments into the Supplemental Interim Action Monitoring Plan specific to the 100-KR-4 operable unit interim action, and submit Draft A for EPA review and approval.
- Prepare pre-decisional draft, decisional draft, and Draft A 100 Area Hex Chrome FFS/PP.
- Revise KR4 remedial process optimization technical memorandum to focus on proposed use of bioremediation technologies to meet the 2020 goal.

### 200-BP-5

- Complete the 200-BP-5 Conceptual Transport Model Report for the WMA B/BX/BY and surrounding area.
- Continue sample collection and analyses from K, L, and M Wells.
- Complete Decision Draft B/BX/BY Treatability Test Plan.
- Continue preparation of the Remedial Investigation (RI) Report.

# Planned Activities
## Next 6 Months

### 200-PO-1

- Complete the Draft A RI Report.

### 200-UP-1

- Issue the final Revision 3 to the 200-UP-1 RD/RA Work Plan. Continue design activities for an interim action extraction system for the Tc-99 plumes at WMA S-SX.
- Complete the Decisional Draft combined RI/FS Report and revision to the 200-ZP-1 Proposed Plan to include 200-UP-1.
- Continue operation of the interim pump-and-treat system in the vicinity of U Plant.

### 200-ZP-1 / 200-PW-1 SVE

- Continue operation of the interim pump-and-treat system.
- Continue collecting and analyzing depth-discrete groundwater samples during the drilling of the next set of 11 groundwater extraction/injection wells.
- Complete design work for the 200-West Area Groundwater Treatment Facility.
- Issue Draft A Remedial Design Report for 200-West Groundwater Treatment Facility.
- Begin building construction for the 200-West Area Groundwater Treatment Facility.
- Tie new extraction well EW-1 (C7017) into the interim pump-and-treat system.
- Replace heater/chiller unit for the interim pump-and-treat system.
- Issue Rev. 0 Performance Monitoring Plan for the 200-West Area Groundwater Treatment Facility.
- Install GAC heaters for the new SVE units.
- Begin active SVE operations on March 1, 2010.

# Planned Activities
## Next 6 Months

### Burial Grounds Sampling and Analysis
- Complete Step II sampling in 218-W-4C.

### 200-UW-1
- Transmit the 216-U-8 and 216-U-12 cribs SAP to the Agencies for review and approval.
- Transmit Remedial Action Goals document for Agency review.
- Finalize the Remedial Action Goals documents.
- Transmit revised PP to Agencies to meet TPA milestone M-15-83.

### 200-BC-1
- Issue Rev. 0 of the Excavation Treatability Test Report.
- Transmit the 200-BC-1 Decisional Draft FS and PP to RL for review and comment.

### 200-MG-1/2
- Complete 200-MG-1 Action Memo, RAWP, and SAP for 37 Outer-Area Waste Sites (regulator comments to be incorporated).

### 200-IS-1
- Submit revised RI/FS Work Plan to regulators for review.

# Planned Activities
## Next 6 Months

### 200-LW-1/2
- Develop the 216-B-6 borehole summary report.

### 200-PW-2/4
- Complete the vadose zone drilling and sampling for 216-B-12.
- Develop the 216-C-1 and 216-B-12 borehole summary reports.

### 200-SW-1
- Ecology and RL/CH to work toward achieving NRDWL and SWL closure plans acceptable to both parties.

### 200-MW-1
- Transmit Draft A RI/FS report to EPA to meet TPA milestone B-15-44B.

### 200-PW-1,-PW-3, -PW-6
- Submit Rev. 0 FS, incorporating regulator comments received on the Draft B FS.
- Submit the Draft A PP to the Agencies for the Z Area Liquid Discharge Site decision unit, which combines 200-CW-5 and 200-PW-1/3/6.
- Shutdown two active soil vapor extraction systems for the winter and continue operating one passive system.

# Planned Activities
## Next 6 Months

### 200-CW-5

- Submit Rev. 0 FS, incorporating regulator comments received on the Draft C FS.

### 200-UR-1

- Submit the Draft A West Lake SAP to Ecology for review/comment.
- Initiate activities to characterize the Gable Mountain Pond pipeline (200-E-127).

### 200-CW-1/Outer Area

- Initiate information exchange/dialog with regulators on RI/FS technical basis (e.g. COPCs, exposure scenarios, baseline risk assessment approach) in support of the development of the Outer Area FS and PP.
- Initiate activities to collect samples in accordance with the sampling and analysis plan to characterize the CW-1 ponds.

### 200-Deep Vadose Treatability Test Plan

- Submit the test report on Uranium Sequestration (On schedule to be issued by 01/15/2010).

# Planned Activities
## Next 6 Months

### 300-FF-5

- Begin RI drilling of 11 monitoring wells.
- Conduct tracer test at infiltration gallery in South Process Pond and write polyphosphate treatability test plan.

### Well Decommissioning

- Decommission 100 wells (48 currently under contract and planned to supplement contract with 20 more wells within the next month).

# Issues

- Delay in approval of the 100 D/H Addendum 1 SAP required preparation of a mini-SAP to support low river stage sampling in October.