

0089884

Central Plateau
Tri-Party Agreement Milestone Review
Meeting Minutes
July 15, 2010

Approval: Jane A. Hedges by John B. Price Date: 8/19/2010

J. Hedges
Ecology IAMIT Representative

Approval: Hay Charboneau for Date: 8/19/10

R. A. Holten
DOE IAMIT Representative, Chairperson

Approval: [Signature] Date: 8/19/10

D. A. Faulk
EPA IAMIT Representative

Minutes Prepared by:

T. W. Noland

Date: 8/24/10

T. W. Noland
Mission Support Alliance, LLC

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

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*Attendees

**Central Plateau
Tri-Party Agreement Milestone Review
Meeting Minutes
July 15, 2010**

PFP Closure Project - TPA Milestone M-083

DOE-RL provided a status for interim milestones, accomplishments, planned activities, schedule and cost performance, and issues. Milestones M-083-43 and M-083-45 are on schedule for completion in 2013 and 2015 respectively.

Accomplishments

The readiness assessment has been completed for cutting up the pencil tanks in 236-Z (PRF), and the work is planned to start early next month (August 2010). The new HVAC cooling system in PFP and PRF is operating, and it has increased efficiency of operations by allowing the workers, who are dressed in protective clothing, to stay in the facility for longer periods.

Planned Activities

A room has been cleaned out in 234-5-Z, and a contamination tent will be placed inside to do size-reduction on gloveboxes that are determined to be TRU waste. The TRU waste needs to be size-reduced to fit into a standard waste box for shipment to WIPP. The low level waste gloveboxes will be shipped to ERDF. The fuel storage vaults, which held the unirradiated fuel that was shipped to Savannah River last year, will be shipped to ERDF starting next week. The vaults are large concrete cylinders, and ERDF will be reusing them.

Non-Regulatory Issues

A safety stand-down was issued by the contractor in May 2010 due to several incidences, partially as a result of an increase from seven teams to 19 teams. The corrective actions have been completed. At the same time there was a beryllium issue, and there were some stop works. The beryllium sampling has been completed, the postings and control areas are in place, and procedures have been modified. The teams started back to work in July.

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

The calendar year LDR report was submitted to Ecology and approved June 21, 2010. Regarding the site-specific LDR variance for the PNNL barium waste, treatment is planned to start in late FY2010, and it will be disposed in either trench 31 or 34. Ecology noted that for future variance requests, it has requested more substantial information, other than just stating "for radiological concerns."

TPA Quarterly Milestone Review M-91 Series

Significant Accomplishments of the Last Three Months

The public comment period regarding the M-91-45 negotiations and the tentative agreement that has been signed by the Tri-Parties ended June 30. DOE-RL is in the process of responding to the comments and making changes to the proposed milestones. DOE-RL is planning to provide Ecology and EPA a draft of its comment responses, and then work through the comments in a collaborative process. EPA requested a copy of the comments. Ecology stated it had a copy of the comments and would provide them to EPA.

The 2010 revision of the M-91-03 Project Management Plan (PMP) was submitted in June 2010. DOE-RL had previously submitted the M-16-93 CERCLA work plan in December 2009. EPA and Ecology requested that the two plans be combined in the 2011 revision of the PMP. The CERCLA work plan coordinates TRU waste from CERCLA activities with the M-91 activities.

DOE-RL noted that today's handout includes information on the new proposed milestone numbers.

Actions Planned for the Next Six Months

Next generation retrieval is now anticipated to start in September 2010 in trench 218-E-12B. DOE-RL indicated volume-wise it will be a small amount of about 300 cubic meters.

Soil and Groundwater Remediation Project Milestone Review - M-015-00, M-016-00, M-024-00, M-085-00

Milestone Status

DOE-RL reported that the 57 milestones being statused are on schedule. However, DOE-RL noted that there is a possibility that TPA change forms will be submitted for milestones M-15-62-T01 and M-15-66-T01, due to the extra time that was used during work plan preparation. Regarding M-16-110-T01, DOE-RL stated its intent is to meet the commitments for the areas that have interim milestones or interim Records of Decision (RODs). DOE-RL is preparing paperwork to do a removal action for the two areas in 100-F and 100-B/C that contain minor plumes. The intent is to establish a more formal dialogue with the regulators in an effort to obtain a consensus on a path forward. DOE-RL stated that its position is to take any action that the Tri-Parties believe is required to be in compliance. DOE-RL noted that if a pump and treat system is put in to treat the plumes, the cost of about 25 million dollars would likely impact the Central Plateau remedial investigation feasibility studies (RI/FS). Ecology inquired about other methods, such as in-situ bioremediation, which is less costly. DOE-RL responded that it has considered that method, and the removal action documentation will summarize the options. DOE-RL also noted that bioremediation is a good tool for treating hot spots, but it may not be a

feasible method to achieve aquatic standards.

Significant Accomplishments

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

DOE-RL reported that in support of the 200 West pump and treat, an in-line Tc 99 monitoring system has been developed and is in place at the interim pump and treat. It is currently collecting samples from four different sample streams, and then the samples are run through an analysis inside a small box to provide realtime monitoring. Ecology inquired about the availability of the 90 percent design report for the new pump and treat. An electronic copy will be provided to Ecology for review.

200-Deep Vadose Treatability Test Plan

DOE-RL stated that workshops are under way with the Tri-Parties on the deep vadose zone. DOE Headquarters has indicated direct funding will be provided for the deep vadose zone activity. DOE-RL stated that the deep vadose zone activity is a collaborative effort to address both the CERCLA waste in the deep vadose zone as well as the tank farm waste in the deep vadose zone, and negotiations are still needed to format the regulatory approach.

U-Zone Remediation - 221-U Disposition

The main crane has been repaired and is operating. The cell loading has been completed and the main deck has been cleared. DOE-RL noted that a couple of plugs and about other pieces of equipment will be left on the floor because they will be used for work associated with the grout filling

200 North Remediation - 212-N, -P and -R Facilities/Structures

EPA inquired about the rail car addenda. DOE-RL responded that the addenda have been completed and are going through a public comment period.

300-FF-5

DOE-RL stated that there have been issues in the field in 300 Area. CHPRC stated that there has been difficulty with infiltration in the 300 Area. A pilot scale test of the jet injection done in 100-N will be done in the 300 Area in an effort to resolve the infiltration problem. There were also issues with two drilling contractors who are new to the Hanford Area. One issue was associated with the requirement to adhere to work packages in lieu of engineering resolutions in the field when a problem arises. Another issue involved a tool that was placed in the hydraulics of a drill rig, and projectiles flew 85 feet when the tool busted. There were no injuries. Steps have been taken to assess hazards and ensure that the new contractors are aware of procedures to follow when an issue arises in the field. The contractors have responded with a resolution, which has been accepted by CHPRC. The contractors will partner with successful drillers that have

previous Hanford experience, and they have subcontracted another drilling company to provide oversight. Field work is planned to restart in about two weeks, once corrective actions are in place and CHPRC is assured that appropriate plans are established.

100-NR-2

DOE-RL noted that the schedule is slipping for preparing a final RI/FS work plan for 100-N. Ecology agreed with DOE-RL that unless progress is made within a month, the work plan may be going to dispute resolution.

100-HR-3

DOE-RL noted that construction is slightly behind in 100-H; however, many issues in the 100-D construction have been resolved and will not be a problem in 100-H. Also, the lag in schedule allowed for an increase in the size of HX design from 600 to 800 gpm. DOE-RL noted that DX will be using a new resin that is used at pump and treats operated at a CERCLA site. The new resin was field-tested on the water at the DX location, and the test was terminated when the resin had worked 12 to 15 times better than the old resin. Although the new resin is costly, it has been balanced with the cost of labor, cleanup cost to change out the resin, pH adjustments, and facility modifications. The resin is expected to reduce operating cost by about 20 million dollars.

RL-30 and RL-40 Cost and Schedule Performance

RL-30 - Ecology inquired about groundwater monitoring and performance assessments (30.06) cost variance. DOE-RL stated that it was due to costs associated with the on-site lab WSCF, and it is working through that issue. Ecology also inquired about the cost variance for usage based services (30.90). CHPRC stated that it was an artifact of late services with ARRA support to bring on more trucks to support sampling and drilling efforts.

RL-40, 200 North Remediation - DOE-RL noted that the plan is to follow up with EPA to discuss the role of the Remedial Action Report (RAR).

Issues

DOE-RL stated that the issue regarding 200-IS-1 pipelines needs further discussion, and Ecology concurred.

Tri-Party Agreement Major Milestone Management Review
July 15, 2010

| Name | Organization | Mail Stop | Phone |
|-------------------|----------------|-----------|----------------|
| Kathy Knox | Knox Reporting | | 946-5535 |
| ROB PIIPPO | MSA | | 373-3285 |
| John Price | Ecology | | 372-7921 |
| Craig Cameron | EPA | | 376-8665 |
| Nina Menard | Ecology | | 372-7721 |
| Rich Holten | DOE | | 376-3963 |
| Jean Vanni | YN | | 945-1100 |
| Michael Collins | DOE | | 376-6536 |
| Norrah Singleton | Ecology | | 372-7923 |
| Scott Richey | CHPRC | | 373-6447 |
| Richard Bloon | CHPRC | | 372-0014 |
| Stacey Simon | ODOE | | (SAI) 903-0853 |
| Rich Bond | Ecology | | 372-7885 |
| Ellen Mattlin | DOE-RL | | 376-2385 |
| Terry Noland | MSA-TPA | | 376-6574 |
| Ron Morrison | MSA-TPA | | 376-2994 |
| Dale Black | CHPRC-TPA | | 376-0740 |
| Woods Russell | DOE-OEP | | 373-5227 |
| Ming Zhu | DOE HQ, EMSI | | (301) 903-9240 |
| DL Foss | CHPRC | | 554-4703 |
| Jaenice Williams | CHPRC | | 372-3573 |
| Decey Chri | DOE-RL-0040 | | 373-9396 |
| AL Farabee | " " " | | 376-8089 |
| B. Foley | DOE-RL-0030 | | 376-7087 |
| Brian Charbonneau | RL | | 373-6137 |
| Dib Goswami | Ecology | | 372-7902 |



Thursday, July 15, 2010
Ecology Offices, Conference Room 3A/B
3100 Port of Benton Way
Richland, Washington

Agenda
Central Plateau Milestone Review Meeting
Chairman: Rich Holten

| | | |
|------------|--------------------------|--|
| 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 |
| 10:30 a.m. | Adjourn Milestone Review | |

PFP Closure Project TPA Milestone M-083



HA-28 Conveyor Glovebox Equipment Removal

**July 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 06/30/10)

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

Accomplishments

- 242-Z entry and initial clean out completed
- 236-Z combustibles removed from canyon floor
- 80 Hood/Gloveboxes have been removed
- 70 ft long conveyor removed from glovebox HA-28
- HVAC cooling installed and operating for PFP and PRF



Planned Activities

- Continue glovebox clean out and removal
- Initiate PRF pencil tank removal
- Initiate 242-Z equipment removal
- Complete readiness and initiate glovebox size reduction
- Continued D&D field work on 2736-ZB
- Start removal of vacuum and process lines
- Demolish five security structures
- Ship Fuel Storage Vaults to ERDF
- Continue Min-Safe maintenance activities

Schedule / Cost Performance

Fiscal Year to Date Status (through June)

| RL-0011 - Nuclear Material Stabilization & Disposal (PFP) | Fiscal Year to Date | | | | |
|--|---------------------|-------|-------|-------|------|
| | BCWS | BCWP | ACWP | SV\$ | CV\$ |
| (ARRA/ & Base) -Total | 110.8 | 103.4 | 102.4 | (7.4) | 1.0 |
| (Numbers are rounded to the nearest \$0.1M) | | | | | |

FYTD Schedule Performance: (-\$7.4M/-6.7%)

- Loss of four weeks schedule due to safety stand-down and stop works
- Emergent scope related to recovery actions from nitric acid inhalation
- Unplanned mock-up work to support process vacuum piping removal

FYTD Cost Performance: (+\$1.0M/+1.0%)

- Efficiencies due to early completion of the Special Nuclear Material (SNM) De-Inventory work
- Delayed Procurement of Remote Handling Equipment for the Plutonium Reclamation Facility

Issues

Regulatory Issues:

- None

Non-Regulatory Issues:

- Safety Stand Down and stop works (beryllium) limited the amount of work completed in May/June

**Land Disposal Restrictions (LDR) Report
(Tri-Party Agreement Milestone M-26-01)
Quarterly Presentation
July 15, 2010**



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



Background

- 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.



Status

- The CY2009 LDR report was approved by Ecology on June 21, 2010
- Site-specific LDR variance for PNNL barium waste
 - Variance approved August 21, 2009
 - Start treatment by end of FY2010
- LDR Determination of Equivalent Technology for macroencapsulation of PNNL lead solids – Ecology review complete
- Site-specific LDR variance for stabilization of CHPRC beryllium powder – Approved by Ecology June 7, 2010



Actions Planned for the Next Three Months

- Continue the monthly PMMs
- Finalize details on storage assessments of potential mixed waste

Department of Energy – Richland Operations Office

Tri-Party Agreement Quarterly Milestone Review M-91 Series



July 15, 2010



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Significant Accomplishments of the Last Three Months

- M-91-45 negotiations
 - Tentative Agreement signed 04/20/10
 - Public comment period ended 06/30/90
- M-91-03 Project Management Plan – 2010 plan submitted 06/29/10



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Significant Accomplishments of the Last Three Months

- M-91-42 MLLW
 - Total volume treated – 8,160 m³ (131 m³ in the quarter)
 - Total volume shipped – 8,213 m³ (50 m³ in the quarter)
 - 36 m³ in storage
- M-91-43 MLLW
 - Total volume treated – 707 m³ (40 m³ in the quarter)
 - Total volume shipped – 728 m³ (21 m³ in the quarter)
 - 93 m³ in storage



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Significant Accomplishments of the Last Three Months

- M-91-46 TRU waste
 - Shipped to WIPP (since resumption) – 377 m³ (211 m³ in the quarter)
 - Certified waiting shipment to WIPP – 45 m³
 - Shipped to Idaho – 5 m³ (5 m³ in the quarter)
 - Ready for shipment to Idaho – 210 m³
 - In WIPP-compliant form – 750 m³ in storage (quarter repack – 115 m³)



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Significant Accomplishments of the Last Three Months

- M-91-40 Retrievably Stored Waste
 - Total volume retrieved – 10,495 m³ (4 m³ in the quarter)
 - Volume removed from trenches but not shipped to a TSD – 13 m³
 - Resumed retrieval after addressing concerns in adjacent (non-retrieval) trench and safety concerns
 - Next Generation Retrieval
 - Retrieval – equipment installed and being calibrated
 - Processing – Request for proposal for processing system issued
- M-91-41 Retrievably Stored Waste – Design of alpha caisson retrieval and processing systems suspended to fund higher priority work



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Fiscal Year 2010 (through July) 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 | 6,221.3 | 6,251.9 | 6,104.9 | 30.6 | 147.0 |
| Waste Receiving and Packaging Facility | 6,517.0 | 6,502.8 | 6,803.7 | (14.2) | (301.0) |
| T Plant | 8,726.6 | 8,995.8 | 8,281.7 | 269.2 | 714.2 |
| MLLW Treatment | 9,501.0 | 8,687.9 | 8,894.2 | (813.0) | (206.3) |
| TRU Waste Retrieval | 31,313.8 | 26,726.0 | 30,322.5 | (4,587.9) | (3,596.5) |
| TRU Waste Repackaging | 9,362.5 | 9,293.9 | 8,554.7 | (68.6) | 739.1 |
| TRU Waste Disposition | 9,984.3 | 8,036.0 | 6,151.1 | (1,948.2) | 1,882.9 |
| Project Management | 13,162.4 | 13,162.3 | 13,303.3 | 0.0 | (141.0) |



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Variance Analysis

- **FYTD Schedule Variance:** The negative schedule variance for retrieval is due to work being stopped to address concerns in an adjacent trench and safety concerns. 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 negative cost variance for retrieval is due to degradation of waste containers and the efforts to address concerns mentioned above. The positive cost variance for TRU waste disposition is due less support being needed for TRU waste repackaging.



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Actions Planned for Next Six Months

- Continue shipping and treating M-91-42 and M-91-43 MLLW
- Continue repackaging M-91-46 TRU waste into a certifiable form
- Continue shipping M-91-46 TRU waste to WIPP
- Initiate Central Characterization Project certification program
- Continue M-91-40 retrieval in 218-W-3A, Trench 17 (large boxes)
- Initiate Next Generation Retrieval in 218-E-12B, Trench 17 (drums)



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Actions Planned for Next Six Months

- Issue design/build contract for Next Generation Retrieval processing system
- Initiate shipment of M-91-44 TRU waste to commercial vendor for repackaging



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SOIL AND GROUNDWATER REMEDIATION PROJECT MILESTONE REVIEW

M-015-00, M-016-00, M-024-00, M-085-00



**U.S. Department of Energy
U.S. Environmental Protection Agency
State of Washington, Department of Ecology
Third Quarter FY10
July 15, 2010**

Milestone Status

| TPA Number | Commitment Date | Milestone Title | Status |
|--|------------------------|--|-------------|
| P-015-00 – Complete RI/FS (or RFI/CMS & RI/FS) Process for All Non-Tank Farm Operable Units Except for Canyon/Associated Past Practice Waste Site Operable Units Covered in M-85-00 | | | |
| M-015-00D | 12/31/12 | Submit PP for all 100 & 300 Area OUs to Complete RI/FS Process | On Schedule |
| P-015-17A | 09/30/10 | Submit a 200-UP-1 OU RI and FS Report and PP to EPA | On Schedule |
| P-015-21A | 12/31/12 | Submit 200-BP-5 and 200-PO-1 OU FS Report and PP(s) to Ecology | On Schedule |
| P-015-38B | 04/30/12 | Submit a Revised FS Report & Revised PP(s) for 200-CW-1, 200-CW-3, and 200-OA-1 OUs for Waste Sites in the Outer Area of the CP to EPA | 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-015-62-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 |
| 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-015-72-T01 | 12/31/11 | Submit RI/FS Report and PP for 300-FF-2/5 OUs for GW and Soil | On Schedule |
| M-015-82A | 12/31/10 | Submit Treatability Test Plan as Amendment of 200-BP-5 WP | On Schedule |
| M-015-82B | Approval of TTP + 6 mo | Initiate 200-BP-5 Aquifer Tests Within 6 months of TTP Approval | On Schedule |
| P-015-90 | 06/30/11 | Submit Revised RFI/CMS and RI/FS Work Plan for 200-IS-1 to Ecology | On Schedule |
| P-015-91A | 12/31/11 | Submit RI/FS Work Plan for the 200-WA-1 OU (200 West Inner Area) to EPA | On Schedule |

Milestone Status

| TPA Number | Commitment Date | Milestone Title | Status |
|--|-----------------|---|-------------|
| P-015-00 – Complete RI/FS (or RFI/CMS & RI/FS) Process for All Non-Tank Farm Operable Units Except for Canyon/Associated Past Practice Waste Site Operable Units Covered in M-85-00 (cont.) | | | |
| P-015-91B | 06/30/13 | Submit FS Report and PP for 200-WA-1 OU (200 West Inner Area) to EPA | On Schedule |
| P-015-92A | 12/31/12 | Submit RFI/CMS and RI/FS Work Plan for the 200-EA-1 OU (200 East Inner Area) to Ecology | On Schedule |
| P-015-92B | 06/30/14 | Submit CMS & FS Report(s) & Proposed CA Decision(s)/PP(s) for 200-EA-1 & 200-IS-1 OUs (CP 200 East Inner Area) to Ecology | On Schedule |
| P-015-93A | 12/31/11 | Submit Revised RFI/CMS and RI/FS Work Plan for 200-SW-2 to Ecology | On Schedule |
| P-015-93B | 12/31/16 | Submit RFI/CMS & RI/FS & Proposed CA Decision/PP for 200-SW-2 to Ecology | On Schedule |
| P-015-110A | 09/30/12 | Submit RFI/CMS & RI/FS Work Plan for 200-DV-1 OU to Ecology. The Work Plan shall include technology screening that identified technologies applicable for characterization, treatment, and monitoring of deep vadose zone contaminants. | On Schedule |
| P-015-110B | 09/30/15 | Submit CMS & FS & PP/Proposed CA Decision for 200-DV-1 OU to Ecology | On Schedule |
| P-015-110C | 12/31/10 | Submit Uranium Treatment Technology TTP as an element of the RFI/RI for 200-DV-1 OU to Ecology | On Schedule |
| P-015-110D | 06/30/12 | Submit Tc-99 Pilot Scale Treatability Study Test Report as an element of RI for 200-WA-1 to EPA | On Schedule |
| M-015-115 | 08/30/10 | Submit TTP for hex. chromium bioremediation at 100-D/H to Ecology | On Schedule |
| M-015-116 | 08/30/10 | Submit TTP for hex. chromium bioremediation of 100-K Vadose Zone to EPA | On Schedule |

Milestone Status

| TPA Number | Commitment Date | Milestone Title | Status |
|---|-----------------|--|-------------|
| P-016-00 – Complete Remedial Actions for all Non-Tank Farm and Non-Canyon Operable Units | | | |
| M-016-00A | 12/31/12 | <p>Complete all Interim Response Actions for the 100 Areas, with the exception of 100 K Area, by the specified due date as approved in a RD/RA Work Plan.</p> <p>Completion of interim response actions is defined as the completion of the interim ROD or Action Memorandum requirements in accordance with an approved RA/RD Work Plan or Removal Action Work Plan and obtain EPA and/or Ecology approval of the appropriate project closeout documents.</p> | On Schedule |
| M-16-00B | 09/30/18 | <p>Complete all Interim 300 Area Remedial Actions including the 618-10 and 618-11 burial grounds but not including sites associated with retained 300 Area facilities and the utility corridors. Completion of interim remedial actions for waste sites associated with the retained 300 Area facilities and their utilities are subject to approved RD/RA Work Plans.</p> <p>Completion of all interim remedial actions is defined as the completion of the interim ROD requirements in accordance with an approved RD/RA Work Plan and obtain EPA approval of the appropriate project closeout documents. The disposition of impeding surplus facilities will be performed in accordance with M-094-00.</p> | On Schedule |
| 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 |

Milestone Status

| TPA Number | Commitment Date | Milestone Title | Status |
|---|-----------------|---|-------------|
| P-016-00 – Complete Remedial Actions for all Non-Tank Farm and Non-Canyon Operable Units (cont.) | | | |
| 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-016-119-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-016-124 | 08/31/10 | Submit 200-ZP-1 Remedial Design Report | On Schedule |
| P-016-200A RL-40 | 09/30/17 | Complete U Plant Canyon (221-U) Demolition in accordance w/ RD/RAWP | On Schedule |
| P-016-200B RL-40 | 09/30/21 | Complete U Plant Canyon (221-U) Barrier Construction in accordance w/ the RD/RAWP | 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 (completed 5/19/2010) | COMPLETED |
| M-024-58D | 06/01/11 | Initiate Discussions of Well Commitments | On Schedule |
| M-024-58E | 06/01/12 | Initiate Discussions of Well Commitments | On Schedule |
| M-024-61 | 12/31/10 | DOE Shall Complete Construction of all Wells Listed | 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 |
| M-024-63 | 12/31/12 | DOE Shall Complete Construction of all Wells Listed | On Schedule |
| M-024-63-T01 | 08/01/12 | Conclude Discussions of Well Commitments | On Schedule |

Milestone Status

| TPA Number | Commitment Date | Milestone Title | Status |
|---|-----------------|---|-------------|
| M-085-00 RL 40 – Complete Response Actions for the Canyon Facilities/Associated Past Practice Waste Sites, other Tier 1 CP Facilities not covered by existing milestones, and Tier 2 CP Facilities | | | |
| M-085-01 RL 40 | 09/30/12 | Submit Change Package to establish date for major Milestone M-85-00 | On Schedule |
| M-085-10A RL 30 | 12/31/11 | Submit RI/FS Work Plan for 200-CB-1 (B Plant Canyon/associated past practice waste site) to Ecology | On Schedule |
| M-085-20A RL 30 | 09/30/15 | Submit RI/FS Work Plan for 200-CP-1 (PUREX Canyon/associated past practice waste site) to Ecology | On Schedule |
| M-085-30A RL 30 | 12/31/17 | Submit RI/FS Work Plan for 200-CR-1 (REDOX Canyon/associated past practice waste site) to EPA | On Schedule |
| M-085-50 RL 40 | 12/31/15 | Submit Revised RAWP for the 224-B Concentration Facility in accordance with the Action Memo for the Non-Time Critical Removal Action for the 224-B Plutonium Concentration Facility (DOE/RL-2004-36). A change package with a completion milestone will accompany the submittal of the work plan. | On Schedule |
| M-085-51 RL 40 | 12/31/25 | Submit RAWP for the 224T TRUSAF in accordance with the Action Memo for the Non-Time Critical Removal Action for the 224-T Plutonium Concentration Facility (DOE/RL-2004-68). A change package with a completion milestone will accompany the submittal of the work plan. | On Schedule |
| M-085-60 RL 40 | 03/31/18 | Complete EE/CA Report(s) for all Tier 2 Facilities listed in Appendix J | On Schedule |

Significant Accomplishments

200-PO-1

- Transmitted the Draft A 200-PO-1 Remedial Investigation (RI) Report to Regulators on June 10, 2010 for review. Provided a Regulatory briefing of the report on June 14, 2010.

200-BP-5

- Completed L Well (adjacent C-1 Crib), K Well (adjacent B-6 Reverse well) and M Well (adjacent B-12 Crib) sample lab analyses.
- Completed all depth discrete groundwater sampling and lab analyses.
- A stakeholder meeting was held on April 20, 2010 to review and receive feedback on the final draft 200-BP-5 conceptual model for the B-complex Area. The report is being finalized based on stakeholder feedback, and is expected to be issued by late July.
- Continued work on the Remedial Investigation (RI) Report and the 200-BP-5 B Complex Treatability Test Plan.

200-BC-1

- The Rev. 0 Excavation Treatability Test Report is being reviewed for distribution to regulators.

200-UP-1

- Revision 3 to the 200-UP-1 OU Groundwater Remedial Design/Remedial Action Work Plan (DOE/RL-97-36, Rev. 3) was approved and issued.
- Completed Decisional Drafts of the 200-UP-1 RI/FS Report and Proposed Plan. A Regulator status briefing on the RI/FS Report was held June 29, 2010.

Significant Accomplishments

200-MW-1

- DOE received comments from EPA on the 200-MW-1 RI/FS Report, Draft A, on May 17, 2010. Comment response was submitted to EPA on June 18, 2010.

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

- Draft A Remedial Design Report has been issued to RL for EPA review.
- Rev. 0 Performance Monitoring Plan is complete and is being issued.
- Rev. 0 Operation and Maintenance Plan is complete and being issued.
- Completed sampling in 15 final extraction/injection wells to date.
- Hookup of new extraction well EW-1 (C7017) to interim P&T system is complete – 225 gpm.
- Continued operation of interim P&T system which is pumping at ~425 gpm.
- Continued laying pipelines installing road crossing for new extraction/injection wells.
- Began excavations for transfer stations and new treatment facility.
- Completed draft test plan for evaluating various resins for uranium and other COC removal.
- Started laboratory testing of various activated carbons for recovering Tc-99.
- Began preparing four test plans for evaluation of no purge samplers, hand-held XRF instrument, sulfur-modified iron, and Ivey-Sol surfactant.
- Issued 2009 Annual Summary Report for interim P&T operations.
- In process of issuing Rev. 0 of annual SVE performance report.
- Two active SVE units are running smoothly and passive SVE operations are running smoothly.

Significant Accomplishments

200-PW-1/3/6 and CW-5

- A meeting was held to determine the path forward to address mobile contaminants for protection of groundwater. The work scope to address additional COPCs is being defined and an updated schedule is being prepared.
- Draft C FS comment resolution and incorporation are near completion, to support submittal to EPA at the end of July.

200-MG-1/2

- The Action Memorandum (DOE/RL-2009-86, Rev. 0) authorizing the NTCRA for 37 200-MG-1 OU waste sites in the Outer Area, was approved in April.
- On June 9, 2010, RL provided Ecology for review the RAWP (DOE/RL-2009-53, Draft Rev. 1) for addition of 37 200-MG-1 Outer Area waste sites authorized by the Action Memorandum (DOE/RL-2009-86, Rev. 0, April 2010). *Ecology continues to review.*
- RL is preparing the SAP (Draft Rev. 1) for addition of 37 200-MG-1 Outer Area waste sites authorized by the Action Memorandum (DOE/RL-2009-86, Rev. 0, April 2010).

200-UW-1

- Submitted the 216-U-8 and 216-U-12 DQO and SAP for Ecology review. Comments were received in April; responded to in May; and partially resolved at a comment resolution meeting in May.

200-Deep Vadose Treatability Test Plan

- Submitted the SAP/Field Test Plan for the Desiccation Pilot Test to the regulators for review and comment.

Significant Accomplishments

U-Zone Remediation

- **221-U Disposition**
 - Repairs to the main crane electrical and mechanical systems began in March 2010.
 - Equipment size reduction and cell loading is well underway and is schedule to be completed by mid-July 2010.
 - RL, EPA, and Ecology approved 90% design of equipment placement and size reduction (via letter from EPA and Ecology).
- **U-Ancillary Facilities**
 - Demolition of 203-UX was completed.
 - Demolition of 224-U and debris load-out continues with the demolition of process cells. Demolition of 224-UA is scheduled to begin mid-July 2010.

200 North Remediation

- **212-N, -P, and -R Facilities**
 - Demolition of the facilities was completed.
- **200-CW-3 Waste Sites**
 - Completed excavation of the 216-N-1 Waste Site contaminated soils. Verification sampling is complete. RL is reviewing draft closure documentation.
 - Three septic tank waste sites, 2607-N, -P, and -R were sampled. Closure documentation was completed, approved, and entered into the administrative record.
 - Initial excavation (RTD) of contaminated soils from 216-N-4 waste site has been completed. Radiological surveys are currently underway to verify if additional excavation is necessary.
 - Excavation (RTD) at 216-N-6 Waste Site Pond is scheduled to begin during Summer 2010.

Significant Accomplishments

BC Control Area Remediation

- **BCCA North Zone A (~140 acres)**

During the week of July 12, 2010, ~154,300 tons over ~38 acres, cumulative, have been disposed of at ERDF, using seven super dump trucks in service.

- **BCCA North Zone B (~3,660 acres)**

- Implementation of a BCCA field work mitigation plan to protect migratory birds' habitat and nesting, and compliance with the MBTA, was continued.
- During the week of June 07, 2010, an area of around four to five acres was surveyed (and cleared) per the plan, and removal of elevated hot spots in this area was continued.
- As of the week of July 12, 2010, approximately 1,335 acres have been down posted to date.

- **BCCA South Zone C**

- The 30-day review of the cultural resources review report by the SHPO, the Tribes, and others, was continued, which RL transmitted on June 14, 2010.
- An ecological field survey was continued and nears completion.

Significant Accomplishments

300 Area FF-5

- **RI/FS Work Plan Rev. 0**

Work Plan and SAP were signed and drilling has commenced.

- **Uranium Testing**

Infiltration gallery tracer testing has not been successful. A set of alternatives has been presented to EPA and the field execution schedule is being replanned.

- **Engineered Lithology**

An engineered lithology consisting of a layer of sand overlain by a layer of gravel and covered with a geotextile liner was installed at the bottom of the excavation at the former 618-1 burial ground. The engineered lithology has been buried and a treatability test plan will be developed for using it.

100-BC-5

- **100-BC RI/FS Report**

- Initiated development of the RI/FS Report using existing information.
- Continued preparation and implementation of field remedial investigations.
- Began spatial-and-temporal GW sampling of existing wells with 1 of 3 rounds complete.

- **100-B-27 Excavation Bottom Sampling**

- Finalized and issued field summary report.

Significant Accomplishments

100-KR-4

- Initiated drilling of KR-4 RI/FS Wells. Four of 13 wells are currently being drilled/completed.
- Completed third round of KR-4 operable unit risk assessment sampling.
- The updated KR4 Pump-and-Treat System cultural resource treatment plan was sent to the Tribes on June 17, 2010, with a request for comments by July 23, 2010.
- Installed three aquifer tube locations for KR-4 OU.
- Completed second of three rounds of KR-4 operable unit risk assessment sampling.
- Phase 2 KX/KR4 systems realignment construction activities completed. Acceptance testing of KR-4 components of the Phase 2 realignment completed and the KR-4 pump-and-treat system operating at full capacity (300 gpm).
- Continued acceptance testing of KX pump and treat components impacted by Phase 2 and system is now operating near full capacity.
- Continued design for Phase 3 realignment of the 3 KR4 pump-and-treat systems. The Phase 3 realignment 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.

Significant Accomplishments

100-NR-2

- **100-N RI/FS Work Plan Addendum and SAP, Draft B**
 - Responded to and incorporated Ecology's Draft A comments into Draft B document.
 - Submitted Draft B to Ecology on April 21, 2010.
 - Received Ecology comments on Draft B on June 21, 2010.
 - Began evaluating and developing responses to Ecology's Draft B comments..
- **CERCLA Proposed Plan to Amend the NR-1/2 OU IROD**
 - Resolved Ecology and EPA comments and incorporated changes into Rev. 0.
 - Consensus on Rev. 0 by RL, Ecology, and EPA, and document issued.
 - 30-day public comment review period began on June 21, 2010.
- **171-Well Drilling Campaign**
 - Wells installed for Sr-90 rivershore plume monitoring and for potential use in future Apatite PRB expansions.
 - All 171 wells drilled and completed, and groundwater sampling conducted for 95 of the 171 wells.
- **Jet Injection Pilot-Scale Treatability Test**
 - Collected additional aquifer tube samples at ~6 months from beginning of test.
 - Completed all associated core analyses with draft PNNL report produced documenting results.
 - Continued development of test report to document test results.
- **New Treatability Test Plans**
 - Draft A TTP for expanding the existing barrier by 600' submitted to Ecology on May 7, 2010, for review.
 - TTP drafted for larger demonstration-scale Jet Injection test over the existing 300' barrier.
 - TTP draft for "hot" test of Phytoextraction along the river shoreline at the existing barrier.

Significant Accomplishments

100-HR-3

- Received approval on Addendum 1 (D/H) to the 100-Area RI/FS Integrated Work Plan, Revision 0.
- Received approval of the SAP for the D/H Area Addendum of the 100-Area RI/FS Integrated Work Plan, 100-D/H Area, Revision 0.
- Completed the final spatial and temporal uncertainty groundwater sampling event for the RI/FS.
- Finalized internal draft in-situ bioremediation treatability test plan for the 100-D Area.
- Continued construction of the DX P&T System (process and transfer building erection is complete). Work continues on the installation of process equipment. M1 and M2 Transfer buildings are substantially complete.
- Finished installation of the wells for the DX extraction network.
- Continued design on HX, the additional 800 gpm P&T capacity at H Area. The 60% design review was held.
- Started design modifications to add a new extraction well at HR-3 P&T in order to control the southeastern flank of the "Horn" CrVI Plume.

100-FR-3

- **100-F and IU-2/6 RI/FS Work Plan Addendum and SAP**
 - Rev. 0 approved by RL and EPA on 4/12/2010.
- **100-F and IU-2/6 RI/FS Report**
 - Initiated development of the RI/FS Report using existing information.
 - Continued preparation and implementation of field remedial investigations.
 - Began spatial-and-temporal GW sampling of existing wells with 1 of 3 rounds complete.
 - Initiated development of GW model for technology evaluations.

Well Decommissioning

- Completed 163 wells through June.

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

| RL-30 Soil & water Rem-Grndwtr/Vadose CCL | Fiscal Year to Date | | | | | | | Contract to Date | | | | | |
|---|---------------------|-----------------|-----------------|------------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------|--------------------|
| | BCWS | BCWP | ACWP | SV | CV | Fiscal Yr BAC | FYSF | BCWS | BCWP | ACWP | SV | CV | Contract BAC |
| BASE - Work Scope | | | | | | | | | | | | | |
| 030.01 - Integration and Assessments | 10,291.8 | 10,160.9 | 9,884.6 | (130.8) | 276.4 | 14,958.8 | 15,049.1 | 23,836.1 | 23,514.3 | 22,174.7 | (321.9) | 1,339.6 | 99,375.3 |
| 030.03 - Drilling | 2,559.2 | 2,750.3 | 3,291.0 | 191.1 | (540.7) | 3,427.1 | 4,223.2 | 9,928.1 | 9,874.7 | 10,277.3 | (53.5) | (402.6) | 75,621.4 |
| 030.04 - Project Management | 7,079.4 | 7,079.4 | 6,923.4 | 0.0 | 156.0 | 9,806.3 | 9,822.8 | 17,840.9 | 17,840.9 | 16,905.6 | 0.0 | 935.4 | 59,499.1 |
| 030.05 - Integrated Field Work | 6,023.3 | 6,334.1 | 6,832.7 | 310.7 | (498.6) | 8,259.4 | 9,146.0 | 14,354.1 | 14,354.1 | 14,350.6 | 0.0 | 3.5 | 51,877.9 |
| 030.06 - GW Monitoring and Perf Asmts | 11,511.6 | 11,045.3 | 12,451.2 | (466.4) | (1,405.9) | 16,246.6 | 17,433.5 | 25,269.7 | 25,249.3 | 27,570.0 | (20.3) | (2,320.7) | 146,273.7 |
| 030.10 - 100-BC-5 Operable Unit | 1,223.9 | 1,167.3 | 1,283.4 | (56.6) | (116.1) | 2,320.5 | 2,371.9 | 1,654.1 | 1,597.5 | 1,638.5 | (56.6) | (41.0) | 5,635.7 |
| 030.11 - 100-KR-4 Operable Unit | 6,761.6 | 6,249.4 | 5,303.1 | (512.2) | 946.3 | 9,587.2 | 8,868.1 | 18,292.5 | 17,724.6 | 16,074.0 | (567.9) | 1,650.6 | 77,031.9 |
| 030.12 - 100-NR-2 Operable Unit | 4,110.5 | 3,871.5 | 2,237.7 | (239.0) | 1,633.8 | 5,965.5 | 4,525.1 | 6,298.3 | 5,931.4 | 4,052.1 | (366.8) | 1,879.3 | 34,566.5 |
| 030.13 - 100-HR-3 Operable Unit | 10,955.9 | 7,896.1 | 6,987.3 | (3,059.8) | 908.8 | 18,771.5 | 15,342.7 | 17,863.0 | 14,572.3 | 13,517.7 | (3,290.8) | 1,054.6 | 91,960.8 |
| 030.14 - 100-FR-3 Operable Unit | 496.7 | 472.7 | 392.0 | (23.9) | 80.7 | 1,445.9 | 1,291.7 | 871.3 | 847.4 | 626.7 | (23.9) | 220.7 | 4,315.5 |
| 030.20 - 200-BP-5 Operable Unit | 1,518.7 | 1,565.3 | 1,278.3 | 46.6 | 286.9 | 1,850.5 | 1,625.6 | 2,124.6 | 2,160.4 | 1,869.7 | 35.8 | 290.7 | 8,479.5 |
| 030.21 - 200-PO-1 Operable Unit | 328.8 | 328.8 | 393.7 | (0.0) | (64.9) | 405.8 | 450.0 | 1,457.0 | 1,457.0 | 1,488.3 | 0.0 | (31.3) | 5,806.3 |
| 030.22 - 200-UP-1 Operable Unit | 528.8 | 478.3 | 634.2 | (50.5) | (155.9) | 741.1 | 2,655.0 | 1,298.2 | 1,269.8 | 1,247.2 | (28.4) | 22.6 | 12,135.5 |
| 030.23 - 200-ZP-1 Operable Unit | 5,868.9 | 7,117.8 | 5,982.2 | 1,248.9 | 1,135.5 | 8,471.9 | 8,701.1 | 19,377.6 | 19,689.3 | 17,419.9 | 311.6 | 2,269.4 | 217,648.4 |
| 030.24 - 200-PW-1 Operable Unit | 1,003.2 | 1,092.5 | 639.0 | 89.4 | 453.5 | 1,487.4 | 923.5 | 2,465.1 | 2,474.1 | 1,839.9 | 9.0 | 634.1 | 12,501.7 |
| 030.30 - 300-FF-5 Operable Unit | 1,959.7 | 1,330.9 | 1,611.3 | (628.8) | (280.5) | 4,374.0 | 2,960.6 | 3,458.1 | 2,836.4 | 3,566.1 | (621.7) | (729.7) | 28,824.1 |
| 030.31 - PBS RL-30 Reg Dec/Closure | 11,333.7 | 10,235.2 | 7,704.7 | (1,098.4) | 2,530.5 | 14,618.6 | 13,540.3 | 16,418.9 | 15,115.5 | 12,056.5 | (1,303.4) | 3,059.0 | 47,954.9 |
| 030.32 - Deep Vadose Zone Treatability | 2,370.9 | 2,183.7 | 2,340.4 | (187.2) | (156.8) | 3,351.5 | 3,312.2 | 5,193.0 | 4,940.9 | 4,539.7 | (252.0) | 401.2 | 13,621.9 |
| 030.90 - Usage Based Services Dist | 2,387.0 | 2,387.0 | 3,401.4 | 0.0 | (1,014.3) | 3,317.9 | 4,674.4 | 5,311.0 | 5,311.0 | 6,430.1 | 0.0 | (1,119.1) | 32,014.1 |
| 030.90.02 - Assmts for PRC Services | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2,598.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 030.90.03 - Assmts for - Oth Provd Serv | 12,070.2 | 12,070.2 | 12,678.7 | 0.0 | (608.5) | 16,836.0 | 16,739.4 | 28,671.3 | 28,671.3 | 28,359.2 | 0.0 | 312.1 | 182,143.0 |
| 030.98 - Ramp-up and Transition | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2,598.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 030.99 - PBS RL-30 UBS, G-n-A, DD | 12,070.2 | 12,070.2 | 12,678.7 | 0.0 | (608.5) | 16,836.0 | 16,739.4 | 28,671.3 | 28,671.3 | 28,359.2 | 0.0 | 312.1 | 182,143.0 |
| TOTAL Base - Work Scope | 100,450.0 | 95,816.6 | 92,257.1 | (4,633.4) | 3,559.5 | 146,312.8 | 146,318.0 | 222,049.4 | 215,432.1 | 206,010.6 | (6,617.2) | 9,421.5 | 1,207,356.7 |

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

| RL-030 Soil & Groundwater | Fiscal Year to Date | | | | | | | Contract to Date | | | | | |
|------------------------------------|---------------------|-----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-----------------|-----------------|----------------|-----------------|------------------|
| | BCWS | BCWP | ACWP | SV | CV | Fiscal Yr BAC | FYSF | BCWS | BCWP | ACWP | SV | CV | Contract BAC |
| ARRA - Work Scope | | | | | | | | | | | | | |
| 030.03 - Drilling | 15,228.8 | 14,838.9 | 12,106.6 | (389.9) | 2,732.3 | 21,477.0 | 17,061.1 | 17,503.5 | 17,253.8 | 14,149.3 | (249.8) | 3,104.5 | 31,087.8 |
| 030.13 - 100-HR-3 Operable Unit | 15,581.8 | 16,926.8 | 13,923.7 | 1,344.9 | 3,003.1 | 21,054.7 | 15,842.5 | 15,582.4 | 20,378.3 | 16,290.6 | 4,795.9 | 4,087.7 | 21,544.5 |
| 030.23 - 200-ZP-1 Operable Unit | 17,427.6 | 18,030.1 | 15,943.8 | 602.5 | 2,086.3 | 46,206.2 | 38,327.6 | 17,850.4 | 19,065.3 | 16,750.8 | 1,214.9 | 2,314.4 | 153,949.0 |
| 030.31 - PBS RL-30 Reg Dec/Closure | 1,527.3 | 1,405.9 | 424.6 | (121.4) | 981.3 | 1,527.3 | 424.6 | 2,745.5 | 2,745.5 | 1,001.9 | (0.0) | 1,743.6 | 2,745.5 |
| 030.98 - Ramp-up and Transition | 18,526.2 | 15,906.0 | 10,741.1 | (2,620.2) | 5,164.9 | 26,347.0 | 20,436.3 | 21,660.1 | 18,547.7 | 13,560.4 | (3,112.4) | 4,987.3 | 32,227.5 |
| 030.99 - PBS RL-30 UBS, G-n-A, DD | 5,602.8 | 5,602.8 | 4,380.8 | 0.0 | 1,222.0 | 7,797.1 | 6,167.9 | 7,088.0 | 7,088.0 | 5,462.7 | 0.0 | 1,625.3 | 14,144.0 |
| TOTAL ARRA - Work Scope | 73,894.5 | 72,710.4 | 57,520.5 | (1,184.1) | 15,189.9 | 124,409.3 | 98,260.0 | 82,429.8 | 85,078.5 | 67,216.0 | 2,648.5 | 17,862.6 | 255,698.2 |

S&GRP Performance Review - Summary

Variance Analyses

BASE

30.06 GW Monitoring & Performance Assessments

- CTD CV (-\$2,321K) – WSCF laboratory costs for FY09 and FY10 exceeding plan

30.11 100-KR-4 Operable Unit

- CTD CV (+\$1,651K) – Efficiencies in operations and maintenance activities within KR-4

30.12 100-NR-2 Operable Unit

- CTD CV (+\$1,879K) – Efficiencies in Chemical treatment, maintenance, jet grouting pilot test work, and RI/FS work plan/Interim Proposed Plan reporting activities

30.13 100-HR-3 Operable Unit

- CTD CV (-\$3,291K) – Delay in HX design activities, impacting field work and construction activities

30.23 200-ZP-1 Operable Unit

- CTD CV (+\$2,269K) – Savings in annual system calibration, design of EW-1 well hook-up, Ops & Maintenance, & Misc. Pump & Treat design/construct activities

30.31 Regulatory Decision/Closure

- CTD CV (+\$3,059K) – Efficiencies in areas of multi-incremental sampling, M-Well borehole drilling, landfill characterization, and document preparation

30.90 Usage Based Services

- CTD CV (-\$1,119K) – FY09 Fleet services overruns and FY10 training overruns due to additional manpower to support ARRA scope

ARRA

30.03, Drilling

- CTD CV (+\$3,105K) – Efficiencies/savings in drilling of 100-NR-2, 1-HR-3, & 200-BP-5 wells

30.13, 100-HR-3 Operable Unit (DX construction)

- CTD SV (+\$4,796K) – Acceleration of DX construction activities
- CTD CV (+\$4,088K) – Efficiencies experienced during installation of HDPW piping, road crossings and equipment installation in DX facilities

30.23, 200-ZP-1

- CTD CV (+\$2,314K) – Engineering support activities to construction and ramp-up cost less than planned

30.31 Regulatory Decision/Closure

- CTD CV (+\$1,744K) – Efficiencies in areas of multi-incremental sampling, M-Well borehole drilling, landfill characterization, and document preparation

30.98 Ramp-up & Transition

- CTD SV (-\$3,112K) Construction activities are lagging
- CTD CV (+\$4,987K) Savings/efficiencies in shop construction contractor and project management support cost

30.99 RL30 UBS, G&A, DD

- CTD CV (+\$1,625K) – FY09 and FY10 G&A running less than planned

RL-40 Deactivation & Decommissioning Project

FYTD Cost/Schedule Status

(\$ in millions)

| RL-40 Deactivation & Decommissioning Project | Fiscal Year to Date | | | | | | | Contract to Date | | | | | |
|---|---------------------|-----------------|-----------------|------------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|--------------------|
| | | | | | | Fiscal Yr | | | | | | | Contract |
| | BCWS | BCWP | ACWP | SV | CV | BAC | FYSF | BCWS | BCWP | ACWP | SV | CV | BAC |
| ARRA - Work Scope - 040 - D&D | 81,039.5 | 78,445.2 | 75,428.8 | (2,594.3) | 3,016.4 | 120,364.2 | 109,602.0 | 134,075.7 | 128,895.6 | 114,361.1 | (5,180.1) | 14,534.5 | 284,275.0 |
| BASE - Work Scope - 040 - D&D | 13,228.0 | 13,316.5 | 11,350.1 | 88.4 | 1,966.4 | 18,385.3 | 15,940.7 | 44,160.7 | 44,246.0 | 38,040.6 | 85.3 | 6,205.4 | 978,834.4 |
| GW Total | 94,267.5 | 91,761.7 | 86,778.9 | (2,505.9) | 4,982.8 | 138,749.5 | 125,542.7 | 178,236.4 | 173,141.6 | 152,401.7 | (5,094.8) | 20,739.9 | 1,263,109.4 |

S&GRP Performance Review - Summary

Variance Analyses, ARRA

BASE

No Variance

ARRA

Schedule Variance:

- U-Plant delays due to grouting, and 200-E Adm Buildings delays due to greater than expected Bio-Hazard and Radiological contamination. Delays in the start of field work, project startup learning curve, availability of required equipment, and greater than expected depth of contamination. BC Control Area remediation is behind schedule due to the initial unavailability of super dump trucks and the unexpected depth of the contamination. Model Group-1 waste sites are lagging as a result of initial delays in issuance of cultural review reports and the unanticipated complexity of researching the Old Central Shop Area history. Partial offsets are gains made in the CW-3 waste sites, due to the smaller soil volume requiring removal and efficiencies associated with operations using super dump trucks. Design of the barriers for the Non-Radioactive Dangerous Waste Landfill and the Central Landfill are delayed pending agreement and approval on the applicable closure plans.

Cost Variance:

- Efficiencies and savings in U-Canyon planning, Hazard Reduction activities, and capital equipment purchases partially offset by U Ancillary material and equipment costs exceeding the budgeted rate where higher than planned asbestos levels in the ancillary buildings have increased the use of masks and respirators, as well as additional insulators and overtime to recover schedule. Efficiencies in mobilization gained by ALE Project, changing to direct haul to ERDF, aerial surveying performed on the B Zone resulting in 18 percent of the area being found to be potentially "clean" and requiring limited survey activities, and lower model costs due to the non-complex nature of waste sites addressed initially, partially offset by higher than planned remediation costs at BC Control Area due to the greater depth of contamination and the larger volume of soil being removed to ERDF and higher volumes of waste from 212 N, P, and R facilities.

Planned Activities

Next 6 Months

U-Zone Remediation

- **U-Ancillary Facilities**
 - Demolition work underway with completion expected in Fall 2010.
- **U-Canyon**
 - Clear equipment off of upper deck.
 - Begin grouting of cells.

200-UW-1

- Transition the 200-UW-1 OU to conform with the tentative agreement.
- Initiate fieldwork planning to support an October 2010 start of borehole drilling.
- Complete incorporation of comments on the U-8 and U-12 SAP and complete to support drilling.

200-CW-3

- **216-N-1, -4, and -6 Waste Site Ponds**
 - Meet with EPA and Ecology to discuss the role and the approval process of the RAR since closure documentation for these waste sites has been completed.
- **Rail Cars**
 - On July 14, 2010, the public comment period on the Railcar EE/CA Addendum began.

Planned Activities

Next 6 Months

100-NR-2

- Submit Draft B of the 100-N Area RI/FS Work Plan Addendum and SAP for Ecology review, and subsequently produce final Rev. 0 for approval and issuance.
- Revise the NR-1/2 Proposed Plan to Amend the IROD and submit Rev. 0 for regulatory approval and subsequent public review.
- Produce draft IROD Amendment following approval and public review of NR-1/2 Proposed Plan.
- Complete the evaluation of the Pilot-Scale Jet Injection Treatability Test and issue report.
- Complete TPH study and issue final PNNL reports.
- Continue Apatite Barrier performance monitoring/evaluation and issue final PNNL report.
- Continue groundwater sampling on 171 barrier wells.

100-FR-3

- Issue approved Rev. 0 of the 100-F/IU-2/IU-6 Area RI/FS Work Plan Addendum and SAP.
- Complete planning and preparations for RI/FS Work Plan field investigation activities.
- Initiate field investigation activities to support the RI/FS as directed by the Work Plan.
- Initiate the production of the 100-F/IU-2/IU-6 Area RI/FS Report.
- Initiate the drilling, sampling, and completion of 3 RI/FS wells.

Planned Activities

Next 6 Months

100-HR-3

- 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.
- Issue a new Interim Action Monitoring Plan to address upgrades at D Area, H Area, and the new DX and HX systems.
- Complete the installation of the HX extraction well network.
- Complete Remedial Process Optimization Phase II Technical Memoranda for D/H Areas.
- Complete 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 a new Treatability Test Plan for In-Situ Bioremediation at the Southern Plume in D Area.
- Complete design of the new HX P&T facility.

100-BC-5

- Continue implementation of the approved 100-BC Area RI/FS Work Plan Addendum and SAP.
- Complete the drilling, sampling, and completion of 6 additional RI/FS wells.
- Complete additional field activities to support the RI/FS as directed by the Work Plan.
- Initiate the production of the 100-BC Area RI/FS report.
- Complete B-27 excavation bottom sampling summary report.

Planned Activities

Next 6 Months

100-KR-4

- Continue drilling of 13 100-KR-4 RI/FS wells and 2 boreholes.
- Complete acceptance and operational testing associated with KX/KR4 Phase 2 realignment and turnover for unrestricted operations.
- Complete Phase 3 realignment design; prepare appropriate TPA change notices to KR4 P&T system RDR/RAWP documents to reflect Phase 3 modifications; initiate drilling and construction associated with Phase 3 realignment of the KR-4 operable unit pump-and-treat systems.
- Prepare and perform aquifer test at the 199-K-178 extraction well to measure aquifer properties in and around the well 199-K-178 to provide data to support modeling the capture of hexavalent chromium in this portion of the contaminant plume.
- Make significant progress toward installation of the KR4 P&T system programmable logic controller upgrade.
- Complete resin tests at the KX process building and issue resin test report.
- 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 Treatability Test Plan for Bio-Infiltration at the 100KW Head House area.
- 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 B Complex.
- Complete Draft A Treatability Test Plan for the B-Complex Area.
- Complete Decisional Draft of the Remedial Investigation (RI) Report.
- Initiate preparation of the 200-BP-5 and 200-PO-1 Combined FS Report.

Planned Activities

Next 6 Months

200-PO-1

- Complete the RI Report.
- Initiate preparation of the 200-BP-5 and 200-PO-1 Combined FS Report.

200-UP-1

- Complete design activities for an interim action extraction system for the Tc-99 plumes at WMA S-SX. Initiate construction of the system.
- Continue the U Area interim action P&T.
- Complete the Draft A combined RI/FS Report and Proposed Plan.

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 8 groundwater extraction/injection wells.
- Issue Rev. 0 Remedial Design Report after responding to EPA comments.
- Complete all road crossing and laying of HDPE piping.
- Complete construction of shell for transfer buildings as well as RAD/Bio-Process buildings.
- Equipment to support lime system to be delivered by vendor.
- Replace heater/chiller unit for interim pump-and-treat system.
- Continue work on simulator-based training program.
- Complete four test plans and begin testing no purge samplers, hand-held XRF instrument, sulfur-modified iron, and Ivey-Sol surfactant.
- Continue active SVE operations (at Z-9 and Z-1A) as well as passive SVE operations.

Planned Activities

Next 6 Months

Outer Area

- Finalize West Lake SAP for approval.
- Initiate activities to characterize the Gable Mountain Pond pipeline (200-E-127).
- Implement activities in support of the Tentative Agreement.
- Complete 200-MG-1 RAWP and SAP for added 37 Outer-Area Waste.

BC Control Area

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

200-IS-1

- Complete scoping meetings with the Parties to divvy up the pipelines among 200-IS-1 and the new OUs.
- Initiate revision to the RFI/CMS & RI/FS Work Plan for 200-IS-1.

200-PW-1/3/6 and CW-5

- Draft C FS is in preparation. This revision will address EPA comments on risk screening, groundwater modeling, and inclusion of pipelines.

200-SW-2

- Hold meetings with Ecology to scope the revision to the RFI/CMS and RI/FS Work Plan.

Planned Activities

Next 6 Months

200-Deep Vadose Treatability Test Plan

- Submit the SAP/Field Test Plan for the Uranium Sequestration activity to RL and the regulators for review and comment (on schedule for 10/27/2010).

300-FF-5

- Begin RI drilling of 11 monitoring wells.
- Write polyphosphate treatability test plan and prepare for infiltration test.

Well Decommissioning

- Decommission 175 wells (163 completed through June 2010).

Issues

- The pipelines currently assigned to 200-IS-1 need to be reassigned to be able develop a comprehensive FS/PP and ROD for 200-IA-1. RL and Ecology are not in agreement on the path forward to complete the reassignment.