

### **EDMC**

#### Central Plateau/K-Basins Closure Tri-Party Agreement Milestone Review Meeting Minutes January 17, 2008

Approval: J. Hedges (H0-57)	Date: 3/24/08
Approval: (A5-11)	Date: 4/3/08
Approval:  N. Ceto  EPA IAMIT Representative, Chairperson  (B1-46)	Date: 3/20/08
Minutes Prepared by:  T.W. Noland  Fluor Federal Services  (H8-12)	Date: 4/7/68

Ayres, J.M.	Ecology	H0-57	McCormick, M.S.*	RL	A5-11
Bilson, H.E.	FH	H8-20	McKarns, A.C.*	RL	A5-15
Black, D.G.*	FH	H8-12	Morrison, D.*	LMSI	A2-15
Bloom, R.W.*	FH	T3-10	Niles, K.	OOE	
Bond, R.*	Ecology	H0-57	Noland, T.W.*	FH	H8-12
Bohnee, G.	NPT		Nuzum, J.L.	FH	H8-12
Cameron, C.E.*	EPA	B1-46	Peres, M.W*.	FH	X3-71
Ceto, N.*	EPA	B1-46	Piippo, R.E.*	FH	H8-12
Charboneau, B.L.	RL	A6-33	Price, J.	Ecology	H0-57
Cimon, S.*	ODE		Quigley, K.M.*	FH	H8-44
Dagan, E.B.*	RL	A5-11	Rasmussen, J.*	YAH	A5-15
Einan, D.R.	EPA	B1-46	Romine, L.D.*	RL	A6-33
Engelmann, R.H.*	FH	H8-12	Ruscitto, D.G.*	FH	A3-06
Faulk, D.A.	EPA	B5-01	Russell, R.W.*	ORP	H6-60
Franco, J.R.	RL	A3-04	Skinnarland, E.R.*	Ecology	H0-57
French, M.S.	RL	A6-38	Singleton, D.G.	Ecology	H0-57
Gadbois, L.E.*	EPA	B1-46	Sinton, G.L.	RL	A6-38
Harris, S.	CTUIR .		Stevens, M*	FH	R3-60
Hedges, J.*	Ecology	H0-57	Teynor, T.K.*	RL	A5-11
Henry, D.	OOE		Thompson, K.M.	RL	A6-38
Horst, L.	OOE		Thompson, S.A.	FH	H8-12
Huffman, L.A.	ORP	H6-60	Watson, D.J.	FH	X3-79
Jim, R.	Yakama		Weil, S.R.*	DOE	A5-16
Klos, D. B.*	FH	T4-35	Whalen, C.L.	Ecology	H0-57
Knox, K.E.*			Williams, J.D.	FH	E6-35
Kranz, D.S.*	RL	A2-15	Wise, B.K.	FH	B3-30
Lilligren, S*	NPT		Administrative Record		H6-08
Lutz, K	HQ	A7-75			
Mattlin, E.M.*	RL	A5-11	*Attendee		

## Central Plateau/K-Basins Closure Tri-Party Agreement Milestone Review Meeting Minutes January 17, 2008

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

#### M-83-41 - Complete transition and dismantlement of the 216-Z-9 crib complex

RL reported that it continues to work with Ecology and EPA on integrating the 216-Z-9 Removal Action Work Plan (RAWP) with the 200-PW-1 Remedial Action (RA). RL, Ecology and EPA will begin negotiations on integrating the RAWP and RA in February 2008. Fluor has completed the majority of the transition of the 216-Z-9 crib complex. The characterization and documentation to begin the dismantlement phase have been completed.

#### Planned Activities

The de-inventory of the 9975's is on schedule to be completed by September 30, 2009.

#### Regulatory Issues

The current configuration in filter room 315 cannot pass a defensible aerosol test, and RL is working with the Department of Health to resolve this issue.

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

#### Actions Planned for Next Three Months

Fluor reported that it will continue working on the outstanding storage assessments related to the LDR report, and there are approximately seven facilities remaining.

#### **TPA M-91 Milestone Series Quarterly Presentation**

#### Significant Accomplishments of Last Three Months

Three crews on two shifts have started at T Plant for TRU/TRUM repackaging. The repackaging rate has increased in the last year from an initial 10 - 15 drums per week to an average of 40 - 50 drums per week. A second shift has started at WRAP to improve certification.

RL stated that were some issues with available budget to meet the calendar year M-91-42 MLLW milestone.

Regarding page 4 of the handout, EPA inquired if the transuranic marking was on the box when it buried or placed there after it was retrieved. RL responded that this was on the box when it was buried because they suspected that it was TRU, however back then they had no way of assaying the boxes to confirm that it was TRU. Now when Fluor assays these retrieved boxes they are finding that more than 50% of the boxes are confirmed to be TRU.

RL reported that at T-Plant they have poured a pad and will be placing a structure over the pad so they can store mixed waste to keep it out of the elements, which has been an issue in the past.

#### RL-13, 1st Quarter Fiscal Year 2008 Performance Measurement - (Oct. - Dec.)

RL noted that the positive cost and schedule variances are mainly due to retrieval, and it is anticipated that the variances will become more neutral throughout the rest of FY08.

#### Actions Planned for Next Six Months

EPA noted that some waste was sent to Permafix that the facility did not have the ability to treat, and asked if RL/FH would accept the waste back. RL responded that they are in discussions with Permafix about the possibility of developing the capability to treat the waste and obtain a change to the permit that allows them to treat it, but is still responsible in terms of getting the waste back. Ecology stated that it is meeting with RL to discuss the issue.

ODOE inquired about what waste was being sent to Clive, Utah. RL responded that a cost benefit analysis was done, and it was determined that it costs less to send some waste to Utah for treatment and disposal at the private Utah state permitted facility. Following approval through DOE Headquarters, 49 cubic meters of mixed low level waste requiring stabilization was sent to Clive, Utah. ODOE asked if RL would take waste back from Clive if it could not process it, and RL responded that it would.

RL reported there is an issue with a few boxes in the 4C burial ground with degraded railroad tie supports. Fluor is trying to figure out a way to retrieve these problem boxes out of the trench and may have problems meeting the requirements to retrieve it from the trench within 60 days of the date it is uncovered. The problem boxes have been stabilized and protected until they removed from the trench.

RL reported they would be shortly sending over a letter to Ecology for approval to resolve the M-91-03 dispute.

#### M-20 Milestone Review - Permits and Closure Plans

RL provided a handout summarizing the closure plan milestone status, Hanford RCRA Permit status, accomplishments, planned actions and issues.

EPA inquired about details regarding the permit non-compliances in the 300 areas issue and asked that Ecology keep the EPA Project Manager informed regarding the issue. Ecology agreed that this issue will be resolved when the new permit is issued and the parties determine proper wording for the permit.

#### Central Plateau Milestone Review - M-13-00, M-15-00, M-16-00, M-24-00

#### M-015-38B - Submit 200-CW-1 Revised FS and PP

RL stated that a TPA change request will be submitted to move this milestone, based upon the extended review and approval process. RL noted that during the Unit Manager Meeting a few months ago, there was a discussion regarding provision in the TPA for extensions of review periods. RL has interpreted that the TPA language allows the regulators to take a single extension, and in the future RL plans to challenge multiple extensions without negotiation. Ecology responded that it understands and supports the process, although the TPA allows disputes to be settled at the Project Manager Level. RL added that in most cases the working relationship among the parties has been constructive and the extended review process has been a limited occurrence.

#### M-015-49A - Submit 200-MG-1 FS and Recommended Remedy M-015-49B - Submit 200-MG-2 FS and PP

RL opened a discussion regarding Ecology and EPA's suggestions for a revised path forward to achieving these milestones, rather than a final ROD. EPA noted that there currently is not enough quantitative information for a baseline risk assessment to do a final ROD. EPA and Ecology are leaning towards one large removal action and presenting once to the remedy review board. RL agreed that a removal action is probably more appropriate, but that the parties would still need to determine cleanup levels and maintain groundwater protection.

#### M-015-50 - <u>Submit Treatability Test Plan for Deep Vadose Zone Tc-99</u> <u>And Uranium</u>

EPA indicated that the footnote to this milestone on the bottom of page 4 of the handout should be stricken, although EPA noted that RL/FH had specific information that it should have included in the treatability test plan.

RL noted that during the TPA negotiations, DQOs and systematic planning was originally

anticipated for a one-day workshop, which is proving to be too optimistic. However, the parties continue to try to streamline the process

#### M-024-00 Series

RL noted that when negotiations were completed for M-024, the milestones will now numbered sequentially instead of using letters. RL has also committed to 30 wells per year beginning in 2008.

#### Significant Accomplishments

RL summarized the accomplishments contained on pages 6-9 of the presentation package.

EPA inquired about the status of the preparation of Explanation of Significant Differences (ESD) for UP-1 to be prepared by Ecology. Ecology committed to determine and provide the status to EPA.

RL initiated discussion on 200-UW-1 and the need for a ROD that provides for an evapotranspiration cap demonstration at 216-U-8. There was a lengthy discussion of the parties on the proposed UW-1 cap, and whether or not there any benefits to removing surface contamination and depositing it in ERDF, which, at a later date will be capped. There was some discussion about the protectiveness of the ERDF cap as well as the period for which the ERDF remedy would rely upon the liner underlying the waste. Ecology and EPA stated that they were to meet on the 25<sup>th</sup> of January to discuss options about capping demonstrations.

#### RL-30 Groundwater/Vadose Zone FYTD Cost/Schedule Status

The schedule variance is slightly behind overall, and there is a slight positive cost variance.

#### RL-40 Waste Remediation Project FYTD Cost/Schedule Status

The schedule variance is behind, largely associated with UW-1.

RL initiated a discussion regarding the current feasibility study/proposed plan (FS/PP) for 200-CS-1. Ecology is proposing a different remedy, and RL is seeking to understand why there's a difference in the remedy. Ecology will be meeting with EPA and following meetings with EPA, Ecology will be in a better position to discuss the issue with RL.

#### Hanford K Basins Remediation - TPA M-34 Milestone Review

RL provided a handout and a presentation was given on milestone status, accomplishments, planned actions, risk status, and project performance.

EPA stated that for about a year the plan has been to run all the sludge through a hot oxidation process on its way to grouting. DOE has determined that most of the sludge can go directly to a grouting process, and Fluor is working on implementing that process. When the fuel has been tumbled in the knock-out pots to clean it, there has been a large amount of tiny fuel fragments in the hottest sludge that may not be eligible for straight grouting, and that issue is being worked.

Another issue is the need for additional sludge characterization data in the waste acceptance criteria for WIPP, and DQOs are being held to identify what data is needed.

#### Biennial Assessment of Information and Data Access Needs - M-35-09F

A handout was provided and a presentation given on accomplishments, planned actions, and issues. The Nez Perce Tribe inquired about inclusion on the remote access efforts. RL noted the inquiry and will follow up.

### Tri-Party Agreement Major Milestone Management Review January 17, 2008

Name	Organization	Mail Stop	<u>Phone</u>
Raskingabons Rasmussen Ven Briggley Craig Cameron Michael Stevens Larry Gadoois Millille Mandis Tom Teyror Terry Romine	FH-TRA ECOLOGY F-HJJT VAHSOS FH EPA FH EPA POE DOE DOE	H8-12 H8-12 A5-18	376-0740 372-7929 373-3283 376-7729 376-8665 430-5756 376-9884 376-9884 376-9884 376-9884 376-9884
Ellen Dagan	DOE		376-3811
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### Tri-Party Agreement Major Milestone Management Review January 17, 2008

Name	Organization	Mail Stop	Phone
Terry Noland	Fluor	48-12	376-6574
Kathy Knox	KnopCont Keyarthy		946-5535
Rick Engelman	FH	48	376-7485
SHOWEY CIMON	ODOE		(541)963-0853
Sandra Lilligvan	NPT-ERWM		(208) 843-7375 x2UB
Elben Mattin	DOE-RL	A5-11	509-374-2385
DB. KUS	FH/PFP		509-373-3574
RW Bloom	F4/PFP		501 372-0014
S.R. WOL	DOE-RL	A5-16	559 372-0879
Rick Tons	Ecology		509 372-7885
MAH M Comice	- Dois		509-373-9971
JAWE HEDGES	Teology		209-372-7905
DANA KRANZ	OF O	A2-15	309-376-7594
Dawn Morrison	LMIT for DOE	A2-15	509 376-2463
MARK PERES	Fluor	X3-71	509-373-4815
DAVID KUSCIAN	FLOOR	117-24	509-376-1998
Woody Kussell	DOE-ORP	16-60	509-375-5227
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Thursday, January 17, 2008 Ecology Offices, Conference Room 3A 3100 Port of Benton Way Richland, Washington

#### Agenda

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

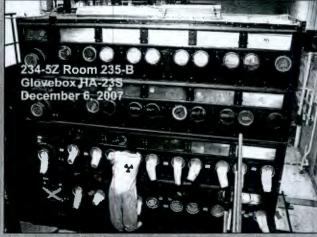
9:00 a.m.	M-83-00	PFP Transition		
9:20 a.m.	M-26-01	Land Disposal Restrictions Report		
	M-91-00	Acquisition of Facilities to TSD TRU/TRUM and LLMW		
9:35 a.m.	M-20-00	Permitting/Closure Plans		
9:45 a.m.	M-13-00	Operable Unit Work Plans		
	M-15-00	RI/FS Process Completion		
	M-16-00	Complete Remedial Actions		
	M-24-00	Groundwater Well Installation		
10:30 a.m.	M-34-00	K Basins Closure Project		
10:50 a.m.	M-35-09	Biennial Assessment of Information and Data Access Needs		
11:00 a.m.	Adjourn Milestone Review			

## PFP Closure Project TPA Milestone M-083

Continued internal cleanout of gloveboxes



HA-15 glovebox



HA-23S glovebox

January 2008 Tri-Party Agreement Milestone Status Report



Application Of Polyurea To Stabilize Duct In Building 291-Z

Ecology Project Manager – R. Bond DOE-RL Project Director – E. Mattlin FH Project Manager – D. B. Klos FH Environmental – R. Bloom

## M-83 Status for Interim Milestones (as of 12/31/07)

TPA No.	TPA Commitment Date	Milestone Title	Status
M-083-22	9/30/08	SUBMIT EE/CA FOR APPROVAL	Complete
M-083-41	9/30/10	COMPLETE TRANSITION AND DISMANTLEMENT OF THE 216-Z-9 CRIB COMPLEX	TBD
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

## Accomplishments

- Started De-Inventory of the 9975's
- Initiated procurement activities for the Hanford Unirradiated Fuel Packages (HUFPs) and 9975's
- Completed demobilization of the process equipment removal activities in the inactive portions of Remote Mechanical A and C (RMA/RMC) lines
- Completed stabilization activities on 291-Z duct
- Continued progress on clean-out of 234-5Z gloveboxes
  - Completed internal cleanout and waste disposition of glovebox HA-15
- Completed Fire System Backlog Preventative Maintenance Items
- Completed E3 filter room 318 change out

### **Planned Activities**

- Continue support of SNM consolidation
  - 9975 annual maintenance, leak testing and packaging
  - Procurement of 9975 containers and Hanford Unirradiated Fuel Package
- Continue internal equipment cleanout of 234-5Z glovebox HA-23S
- Integrate 216-Z-9 Removal Action Work Plan with 200-PW-1 Remedial Action, M-83-41 negotiations

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

	Fiscal Year to Date				
RL-0011 - Nuclear Material	BCWS	BCWP	ACWP	SV\$	CV\$
Stabilization & Disposal (PFP)	20,833.0	21,095.0	20,521.0	262.0	574.0

#### FYTD Schedule Variance: \$0.2M:

Favorable schedule variance is attributed to recovery of FY07 planned scope (Preventative Maintenance backlog, 234-5Z transmitters & controllers, VSS HVAC activities and 291-Z Duct Stabilization) and associated apportioned support; partially offset by late receipt and magnitude of the SARP Q0 comments.

#### **FYTD Cost Variance: \$0.5M:**

Favorable cost variance is associated with efficient performance of FY07 layup scope (291-Z duct stabilization), reduced waste generation and associated disposition costs; resource efficiencies in the 9975 shipping containers readiness; partially offset by a heavy maintenance workload due to numerous instrument failures which resulted in overtime.

Issues

Regulatory Issues:

**Filter Rooms** 

Non-Regulatory Issues:

Growing number of maintenance needs and facility and system degradation

Land Disposal Restrictions Report (Tri-Party Agreement Milestone M-26-01) Quarterly Presentation January 17, 2008



Deborah Singleton, Ecology Lead Greg Sinton, RL Project Lead Cathy Louie, ORP Project Lead



Land Disposal Restrictions Report (Tri-Party Agreement Milestone M-26-01) January 17, 2008

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



#### Land Disposal Restrictions Report (Tri-Party Agreement Milestone M-26-01) January 17, 2008

- Data collection for the CY2007 LDR Summary Report began in January
- Monthly Project Manager Meetings (PMMs) are an effective tool for dialogue and as a venue to resolve emerging issues (Hot topics)
  - No current issues to raise to management



Land Disposal Restrictions Report (Tri-Party Agreement Milestone M-26-01) January 17, 2008

#### Actions Planned for Next Three Months

- · Continue the monthly PMMs, as needed
- Continue working on storage assessments of Potential Mixed Waste
- Continue work on CY2007 LDR Summary report and prepare for transmittal by the end of April 2008

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



Mark French, U.S. Department of Energy, Richland Operations Office January 17, 2008



## TPA Quarterly Milestone Review M-91 Series

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

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

- Retrieved 434 m<sup>3</sup> of RSW since the last quarterly report (10/11/07 1/10/08), bringing the total to 7,223 m<sup>3</sup>.
  - Met CY2007 milestone to retrieve 7,200 m³ 11/27/07
- Certified 161 cubic meters of M-91-42 TRU/M (10/12/07 1/10/08) bringing the total volume certified since 12/31/02 to 2,888 m<sup>3</sup>.
  - Increased repackaging at T Plant by staffing up to 3 crews on two shifts
  - Continued staffing ramp-up at WRAP



## TPA Quarterly Milestone Review M-91 Series

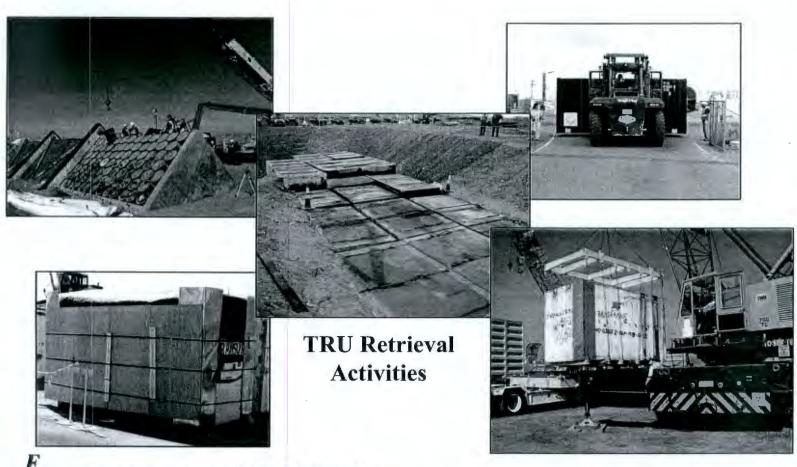
## Significant Accomplishments of Last Three Months (2 of 2):

- Continued ramp-up of TRU/M repackaging: repackaged 449 containers in the October through December quarter.
- Treated 817 m<sup>3</sup> of M-91-42 MLLW in the October through December period, bringing the total to 6,547 cubic meters for M-91-42 MLLW treated.
  - Met 12/31/07 milestone that had been in jeopardy (treat 6,520 m³)
- Completed discussions on M-91-07-01 "definitions" change package.
  - Change package signed by RL on January 8, 2008 and transmitted to Ecology and EPA.



Environmental Management

## TPA Quarterly Milestone Review M-91 Series

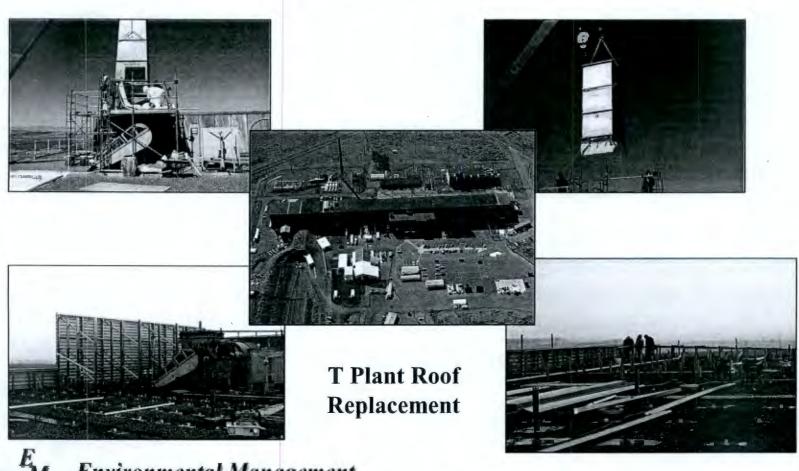




**Environmental Management** 

safety & performance & cleanup & closure

## TPA Quarterly Milestone Review M-91 Series





**Environmental Management** 

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## TPA Quarterly Milestone Review M-91 Series

**RL-13** 

1st QTR FISCAL YEAR 2008 PERFORMANCE MEASUREMENT - (October - December)

**Dollars in Thousands** 

	Fiscal Year-To-Date				
	Budget	ed Cost	<b>Actual Cost</b>	Varia	nce
Title	Work Scheduled	Work Performed	Work Performed	Schedule	Cost
Central Waste Complex (CWC)	1,864.3	1,864.3	2,065.1	0.0	(200.8)
Waste Receiving and Processing Facility (WRAP)	2,445.5	2,445.5	3,190.9	0.0	(745.4)
Solid Waste Treatment Facility	3,188.3	4,119.2	4,215.5	930.9	(96.3)
MLLW Treatment	7,526.5	7,835.1	4,204.3	308.6	3,630.8
TRU Retrieval	9,314.9	9,730.8	9,336.8	415.9	394.0
WIPP Certification	6,298.5	7,446.0	6,858.4	1,147.5	587.6
WSD Project Management	4,813.2	4,813.2	5,182.7	0.0	(369.5)
RL-13 Grand Total	52,273.9	53,418.7	50,415.6	1,144.8	3,003.1



**Environmental Management** 

afety & performance & cleanup & closure

## TPA Quarterly Milestone Review M-91 Series

RL-13 Variance Description (data is for only M-91 portions of PBS 13):

FYTD Schedule Variance: Positive schedule variance of M-91 scope of \$1,145K is primarily due to good progress on T-Plant roof and drum storage building carry-over work, and good efficiency of TRU processing

• FYTD Cost Variance: The positive cost variance of \$3,003K is primarily due to lower treatment costs than planned due to the mix of waste actually treated thus far this year.



## TPA Quarterly Milestone Review M-91 Series

### Actions Planned for Next Six Months (1 of 2)

Continue certification and shipment of transuranic waste to WIPP (two shipments per week) and treatment of MLLW.

- Exceed the 3,000 m<sup>3</sup> cumulative certification level
- Ship M-91-43 large container waste for commercial treatment and complete M-91-15.
- Submit an M-91-42 change package to address the FY08 appropriation shortfall.
- Continue implementation of actions to improve certification rates:
  - Start 4<sup>th</sup> repackaging crew at T Plant in March



## TPA Quarterly Milestone Review M-91 Series

### Actions Planned for Next Six Months (2 of 2)

- Obtain regulator approval of the M-91 "definitions" Change Package M-91-07-01.
- Continue retrieval on track to meet the next annual milestone.
  - Start retrieval in burial ground 218-E-12B around March 2008
- Obtain approval of revision 3 of the M-91 PMP and submit revision 4 in June 2008.



M-91 Status Summary 1/17/08

Milestone	Due Date(s)	Status Summary	Comments
General Comments			A. Status of Change Package M-91-07-01: Discussions on the change package were completed in mid December. Due to the short turn around time requirement after signature specified by the TPA (14 days), RL signature and transmittal of the change package was delayed until after the holidays. The change package was signed by RL on January 8, and transmitted to Ecology and EPA. Fed-Ex envelopes for transmittal from Ecology to EPA and EPA back to DOE were included in the transmittal packages along with the processing instructions. Advance copies of all the documents were provided to the agencies and an Ecology /EPA management briefing took place December 10. No issues are anticipated.  B. In this table "On-Schedule" means it is anticipated the milestone will be met.
M-91-00: Major Milestone for acquisition of needed facilities/capabilities for mixed and suspect mixed MLLW, and TRUM and suspect TRUM.	TBD	On Schedule	Change package M-91-07-01 includes clarifications and changes to definitions in M-91-00.
M-91-01: Facility/Capability Interim Milestone (RH and/or large container TRUM)	6/30/12	At Risk  The current understanding is that this	<ul> <li>The CD-0 approval from DOE HQ has been obtained. We are proceeding with the alternatives analysis. An alternatives analysis study is expected to be completed by March 2008.</li> </ul>

M-91-01 (Continued):  consists by capatreat transis at desc 91-4 M-4 desira early son was towar annu	<ul> <li>Engineering Study and Functional Design Criteria were delivered to EPA and Ecology 9/29/06 (06-AMCP-0311).</li> <li>Briefed Ecology and EPA on the FDC/ES submittal on October 11, 2006.</li> <li>Comments on the FDC/ES were received from Ecology on November 13, 2006, and responses were provided Decemb 13, 2006.</li> <li>Additional evaluation of alternatives to meet needed capabilities is ongoing and updated information was included in the August 2007 PMP update. Further updates will be included in the June 2008 PMP.</li> </ul>
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M-91-03: Submit TRUM/MLLW PMP	12/31/03 (COMPLETE), 12/28/06 (Submitted) 3/31/09, 3/31/13	On Schedule/In Project Manager level dispute CP M-91-07-01 will delete the 3/09 and 3/13 submittals. These will be replaced by annual June submittals.	The PMP (Rev 3) was delivered to Ecology August 30, 2007. Ecology comments were received October 1 and indicated the PMP "does not meet M-91-03". The primary area of concern is inclusion of a range of potential CERCLA volumes in the PMP. RL delivered an objection letter to Ecology on October 9 in accordance with the TPA process starting the 30 day project manager level of the dispute process. A meeting was held October 31 between Ecology, EPA, and RL where it was agreed that a CERCLA waste document would be prepared. The dispute is currently extended to January 31, 2008. A meeting was held November 30 to review a preliminary draft of the CERCLA information and determine the path forward. Comments and a proposed path to dispute resolution were discussed. The tentative agreement, subject to management approval, is that information on the range of CERCLA TRU/TRUM volumes will be included in the June 2008 PMP and updated as appropriate in future PMP updates. RL is drafting a letter to resolve the dispute based on this understanding. The letter will also address the "waste management support" concern from the Ecology October 1 letter. An advance draft of this RL letter will be provided to Ecology for review to assist in the dispute resolution process. It is hoped that the RL letter will be finalized and transmitted in time for Ecology to respond approving the dispute resolution and the August 2007 PMP prior to January 31, 2008.
M-91-05-T01: Complete RH and or large TRUM retrieval/processing Engineering Study/FDC	12/31/07	Complete	Submitted FDC/ES 9/29/06 (06-AMCP-0311). This met the Target date a year early.  Comments on the FDC/ES were received from Ecology on November 13, 2006, and responses were provided December 13, 2006 (AMCP-0060).

M-91-12: CH-MLLW Thermal Treatment (600 m <sup>3</sup> cumulative)	11/16/07	Complete (6-14-07)	Documentation for completion of treatment of enough thermal treatment waste to meet the 600 cubic meters milestone was received from Permafix June 14, 2007, approximately five months before the milestone due date. Thermal treatment volumes above the 600 cubic meters are being applied to M-91-42 MLLW treatment requirements. A formal "completion notification" letter (08-AMCP-0062) was sent to Ecology December 10, 2007.
M-91-12A: CH-MLLW Thermal Treatment (240 m <sup>3</sup> )	9/30/05	Complete Met 8-16-05	Completion letter (05-AMCP-0420) sent to Ecology 9/27/05
M-91-15: RH MLLW and/or Large Size MLLW Treatment	6/30/08	On Schedule	<ul> <li>"COMPLETE ACQUISITION OF FACILITIES AND/OR CAPABILITIES AND INITIATE TREATMENT OF RH-MLLW AND CH MLLW IN BOXES AND LARGE CONTAINERS"</li> <li>Approval of the M-91-07-01 change package will clarify the requirements of this milestone</li> <li>Shipment of large container waste to commercial facilities is planned to occur within the next few months to demonstrate capability and complete this milestone</li> </ul>
M-91-40: Retrieval and designation of CH-RSW (regardless of size)	9,700 m <sup>3</sup> cumulative by 12/31/08 and annual retrieval volumes through 2010. Complete retrieval in 4C T-4 by 12/31/06. Plus	On Schedule  Met 7200 level in November 2007; Completed T-4 retrieval November 2006	<ul> <li>Met the 12/31/07 milestone to retrieve 7200 m³ on 11/27/07 (08-AMCP-0072).</li> <li>7,223 m³ of RSW had been retrieved as of 1/10/08.</li> <li>The July-September SAP quarterly report was sent to Ecology November 21, 2007 (no sampling results were received in that quarter).</li> <li>Removed first drums from 4B/TV7 in October 2007.</li> <li>"Step II" sampling (soil sampling in the bottom of and beneath the trenches) started October 9, 2007 in W-4C Trench 29.</li> <li>Currently plan to start retrieval in E-12B around March</li> </ul>

M-91-40 (Continued)	various other requirements		<ul><li>2008.</li><li>Started excavation in W-3A T17 9/16/07</li></ul>
M-91-41: Retrieval and Designation of RH RSW (regardless of size)	See comment column	On Schedule (Planning)	<ul> <li>1/1/11: Initiate retrieval of RH RSW</li> <li>12/31/14: Complete non-caisson RH RSW retrieval</li> <li>12/31/18: Complete 4B RH RSW retrieval</li> </ul>
M-91-42: Treatment of non-large size CH-MLLW and certification of non-large size CH TRUM	Annual treatment requirements through 12/31/09 (MLLW), 12/31/11 (TRUM)	At Risk For MLLW: FY08 funding appropriation not adequate to meet milestone.  Behind TPA schedule for CH TRUM certification	<ul> <li>Met the MLLW 12/31/07 milestone (6520 cubic meters) December 20, 2007.</li> <li>6,547 m³ of the MLLW subject to this milestone (MLLW-2 through MLLW-10 excluding MLLW-7) had been treated as of 12/31/07 (8150 m³ or all backlog required by 12/31/08).</li> <li>49 cubic meters has also been sent to EnergySolutions-Clive for treatment and disposal.</li> <li>A TPA Change Package is being prepared to address the FY08 appropriation shortfall.</li> <li>The amount of M-91-42 waste in SWOC storage decreased by 30 cubic meters in the last quarter to 660 m³ as of 12/31/07.</li> <li>The MLLW dispute based on change package M-91-07-02 has been resolved by completion of the required treatment prior to the existing milestone date.</li> <li>Shipped 2565 cubic meters of M-91-42 TRU/M and had accumulated a backlog of 323 cubic meters of certified but not shipped TRU/M bringing the total certified TRU/M counting toward M-91-42 to 2,888 as of 1/10/08.</li> <li>2379 cubic meters of M-91-42 TRUM were in SWOC storage as of 12/31/07.</li> <li>Now have 3 crews on 2 shifts at T Plant for repackaging (3<sup>rd</sup> crew partially for MLLW/LLW work). 4<sup>th</sup> crew is to be added in March 2008.</li> </ul>

M-91-42 (Continued):			<ul> <li>Repackaged 306 drums at T plant in the October - December quarter.</li> <li>Repackaged 143 drums at WRAP in the October - December quarter.</li> <li>Expect to have all staff and needed training complete to have second shift at WRAP fully operational by the end of January 2008.</li> <li>Approximately 89% (2316/2602) of the 12/31/02 TRUM backlog had been certified or was determined to be LLW as of 1/4/08.</li> </ul>
M-91-43: Designation and treatment of RH and or Large Size MLLW	See Comment Column	On Schedule	<ul> <li>Treated 193 m³ of MLLW-07 since 12/31/02.</li> <li>M-91-43 waste in storage in SWOC increased 10 cubic meters in the October – December quarter to 522 m³.</li> <li>Clarifications on how M-91-43 will be met are included in change package M-91-07-01.</li> <li>Planning to start shipping M-91-43 waste to treatment facilities in the second quarter of 2008.</li> </ul>
M-91-44: Designation of Newly Generated and Stored RH and or Large Size Transuranic Waste and Large/RH TRUM certification	See Comment Column	At Risk	<ul> <li>Existing requirements include: a) Designate all RH and large size Transuranic waste in storage by 12/31/12.</li> <li>b)Begin treating RH and/or large container TRUM at a minimum rate of 300 cubic meters per year by 6/30/2012</li> <li>3400 cubic meters of M-91-44 TRUM was in SWOC storage as of the end of December 2007.</li> </ul>
M-91-45: RH and or Large Size Waste Annual Report	9/30/04 and annually thereafter	On Schedule	<ul> <li>2007 report was mailed to Ecology 9/24/07 (07-AMCP-0293).</li> <li>Ecology letter dated November 20, 2007, received November 26 and interpreted to be an approval letter. The</li> </ul>

M-91-45 (Continued):			<ul> <li>letter also indicated some concerns about M-91-15 and M-91-43 (whether waste would be treated on the M-91-43 schedule). RL does not believe M-91-15 or M-91-43 are in jeopardy.</li> <li>Assuming CP M-91-07-01 will be approved, the M-91 PMP will be updated annually. In view of this, RL will likely propose that the M-91-45 annual report and milestone be eliminated, with the information required by that report being included and updated annually in the M-91 PMP.</li> </ul>
M-16-93: Submit implementation workplan for acquisition of capabilities necessary to prepare TRU/M waste generated by CERCLA clean-up actions at Hanford for disposal at WIPP.	9/30/2006	Next revision is anticipated to occur in 2009.	<ul> <li>Report Delivered to EPA and Ecology 9/29/06 (06-AMCP-312)</li> <li>Briefing to EPA and Ecology on workplan October 11, 2006</li> </ul>

Fn: M-91 PMM Status table 1-17-08



## M-20 Milestone Review Permits and Closure Plans

Presented by:

Tony McKarns
U.S. Department of Energy

January 17, 2008

#### Closure Plan Milestone Status

M-20 12/31/08

Complete when M-20-54 is completed 12/31/08

M-20-00B 12/31/08

Complete when M-20-54 is completed 12/31/08

M-20-54 12/31/08

Submit 241-CX-70 Storage Tank, 241-CX-71 Neutralization Tank, 241-CX-72 Storage Tank, 241-CX Storage Tank Closure/Postclosure Plan to Ecology in coordination with the 200-IS-1 Tanks/Lines/Pits/ Boxes Operable Unit Work Plan Feasibility Study scheduled under:M-13-00M.

Current Milestone Status:

On schedule.



#### Hanford Facility RCRA Permit Status

- The Hanford Facility RCRA Permit expired on 9/27/04. Permittees reviewing Ecology's response to comments provided on the Pre-Draft Permit Conditions (Parts I & II), Rev. 9. Ecology is providing draft unit-specific Permit conditions to Permittees as they are completed for review and comment.
- The Permittees continue to operate under RCRA Permit Revision 8C, until a new Permit is in effect.



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#### Accomplishments - last 3 months

- Ecology issued:
  - Permit Revision 8C incorporating the 400 Area Waste Management Unit
  - WTP 2+2 Permit modification
  - IDF Permit modification
- Ecology approved revised Part A Forms for:
  - 224-T Transuranic Waste Storage and Assay Facility
  - 1706-KE Waste Treatment System
  - Central Waste Complex (CWC)
  - Waste Receiving and Processing Facility (WRAP)
  - D T Plant Complex.
- Ecology approved Class 1 modifications for quarter ending 9/30/07
- Ecology prepared draft unit-specific conditions for the following units; however, these
  units are going thru in-house review and will be shared once complete.
  - Double-Shell Tank System
  - PUREX Storage Tunnels
  - a 400 Area Waste Management Unit
  - a 331-C Storage Unit
  - a 325 HWTU's
  - LERF/ETF
  - 242-A Evaporator
  - 216-S-10 Pond & Ditch, 216-A-29 Ditch, and 216-B-63 Trench were informally shared; however, no discussions between Ecology and Permittee have occurred.



#### Accomplishments - last 3 months

- DOE submitted to Ecology:
  - Quarterly Class 1 modifications for quarter ending 12/31/07
  - Recertified Waste Encapsulation and Storage Facility (WESF) Part B permit application
  - Part A Forms for the CWC, WRAP, and T Plant Complex
  - Closure Plan, Part A Form, and SEPA Checklist for 1706-KE Waste Treatment System
  - Part A Form, and SEPA Checklist for Low-Level Burial Grounds



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#### Planned Actions - next 6 months

- Ecology continue to resolve Liquid Effluent Retention Facility (LERF) & 200 Area Effluent Treatment Facility (ETF) noncompliance
- Ecology continue to provide Pre-Draft Unit-Specific Permit
   Conditions for Permit renewal for Permittee review & comment.
- Ecology respond to WESF Part B permit application
- Ecology review/approve Part A Form for LLBG
- Ecology review/approve Class 1 modifications for quarter ending 12/31/07

#### Planned Actions - next 6 months

- DOE submit certified Part A Forms for:
  - a 207-A South Retention Basin
  - 216-A-10 Crib
  - a 216-A-29 Ditch
  - a 216-A-36B Crib
  - a 216-A-37-1 Crib
  - a 216-B-3 Main Pond
  - a 216-B-63 Trench
  - a 216-S-10 Pond & Ditch
  - a 241-CX Tank System
  - Nonradioactive Dangerous Waste Landfill (NRDWL)
  - 600 Area Purgewater Storage & Treatment Facility
  - B Plant Complex
  - Hexone Storage & Treatment Facility
  - PUREX Plant
- DOE submit the quarterly Class 1 modifications for quarter ending 3/31/08



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#### Issue

- DOE needs resolution on Permit non-compliances with the 183-H Solar Evaporation Basins and 300 Area Process Trenches
- Ecology expects to resolve the non-compliances through reissuance of the Permit (Revision 9).

# CENTRAL PLATEAU MILESTONE REVIEW

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



U.S. Department of Energy
U.S. Environmental Protection Agency
State of Washington, Department of Ecology
1st Quarter FY08
January 17, 2008

TPA Number	Commitment Date	Milestone Title	Status
M-013-00			
M-013-06B	3/31/07	Submit the 200-BP-5 OU RI/FS Work Plan to EPA.	COMPLETE
M-013-10A	9/30/07	Submit the 200-PO-1 OU RI/FS Work Plan to Ecology.	COMPLETE
M-013-27	6/30/07	Submit a revised RI/FS Work Plan for the 200-IS-1 and 200-ST-1 OUs to Ecology.	COMPLETE
M-013-28	9/30/07	Submit a revised RI/FS Work Plan for the 200-SW-1 and 200-SW-2 OUs to Ecology.	COMPLETE
M-013-50	3/31/07	Submit to Ecology and EPA one RI/FS work plan for all supplemental characterization required for 200 Area OUs.	COMPLETE
M-013-51	12/31/06	Submit an addendum to the 200-TW-1/2 & PW-5 OU Group RI/FS work plan.	COMPLETE

TPA Number	Commitment Date	Milestone Title	Status
M-015-00 and M-	015-00C		
M-015-17A	11/30/10	Submit 200-UP-1 RI/FS and PP.	*******
M-015-21A	10/31/10	Submit 200-BP-5 FS and PP.	EPA believes that DOE is behind schedule on this milestone because of the need for additional information at Gable Gap and at C Farm.
M-015-25	12/30/09	Submit 200-PO-1 RI Phase II Report.	Upon approval of Work Plan SAP and BCR, work will begin on supplemental scope.
M-015-38B	05/31/09	Submit 200-CW-1 Revised FS and PP.	Upon approval of the SAP, RL will submit a TPA CR to move the milestone accordingly.
M-015-40D	07/31/08	Submit 200-CW-5 Revised FS and PP.	Change request approved to remove SC-1 and establish a new milestone, M-15-40E to allow additional field work, 12/31/2010.
M-015-40E	12/31/10	Submit 200-SC-1 FS and PP.	The desirations .
M-015-42D	12/31/11	Submit 200-TW-1 and 200-PW-5 Revised FS and PP.	
M-015-42E	12/31/11	Submit 200-TW-2 Revised FS and Revised Recommended Remedies.	
M-015-43D	12/31/10	Submit 200-PW-2 and 200-PW-4 FS and Revised Recommended Remedies.	On Schedule
M-015-44B	9/30/09	Submit 200-MW-1 FS and PP.	On Schedule
M-015-45A	10/31/06	Submit 200-PW-1 Remedial Investigation Report.	COMPLETE
M-15-45B	9/30/07	Submit 200-PW-1, 200-PW-3, and 200-PW-6 FS and PP.	COMPLETE
M-015-46B	12/31/11	Submit 200-LW-1 and 200-LW-2 FS and Recommended Remedy.	
M-015-48B	9/30/07	Submit 200-ZP-1 FS and PP.	COMPLETE

TPA Commitmer Number Date		Milestone Title	Status
M-015-00 and N	1-015-00C (continue	d)	
M-015-49A	12/31/08	Submit 200-MG-1 FS and Recommended Remedy.	On Schedule
M-015-49B	12/31/08	Submit 200-MG-2 FS and PP.	On Schedule
M-015-50	12/31/07	Submit Treatability Test Plan for Deep Vadose Zone Tc-99 and Uranium.	COMPLETE*
M-015-51	4/30/10	Submit 200-BC-1 Revised FS and PP or BC Cribs and Trenches.	
M-016-00	Remedial Design	/ Remedial Action	
M-016-00	09/30/24	Complete Remedial Actions for all Non-Tank Farm Operable Units.	
M-016-14A	5/31/07		
M-016-14B	8/31/08	Submit Draft CERCLA Proposed Plan for 100-NR-1/100-NR-2.	On Schedule

<sup>\*</sup>EPA and Ecology consider the work plan submitted to be inadequate and insufficient and believe this milestone was missed.

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

Supplemental RI/FS Work Plan for 200 Area OUs was approved on December 11, 2007.

#### 200-PO-1 OU

- RL submitted DOE/RL 2007-31 Draft A RI/FS Work Plan and Characterization SAP to Ecology on August 31, 2007, one month ahead of schedule for completion of M-013-10A Milestone.
- Ecology submitted comments on DOE/RL 2007-31 to RL on November 30, 2007.
- The 200-PO-1 DQO Summary Report (SGW-34011 Rev. 0) was issued on September 20, 2007.

#### 200-BP-5

- Completed installation of well 299-E27-155 SW of WMA C. Tc-99 contamination was found in WMA C that requires additional characterization.
- Updated Groundwater Waste Control Plan DOE/RL-2003-30, Rev. 3.

#### 200-IS-1

 Responded to Ecology's comments on the Work Plan and three sampling and analysis plans.

#### 200-BC-1

- Electrical Resistivity Correlation SAP revised, following incorporation of EPA comments. Drilling/sampling preparations underway.
- SAP for Phase I of excavation-based Treatability Test approved by EPA. Direct push hole installation and gamma logging completed. Sampling completed. Data evaluation is in progress.

#### 200-NR-2

 Aquatic and Riparian Receptor Impacts Information DOE/RL-2006-26 Revision 0 has been released.

#### 200-SC-1

Initiated drive-point boreholes at 216-B-55.

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

#### 200-ZP-1

- Completed Purolite resin treatability test for removing Tc-99 from ZP-1 groundwater.
  Results from test showed that the Purolite resin was extremely effective at removing
  Tc-99 from ZP-1 groundwater. The resin far exceeded manufacturer's expectations.
  The breakthrough curve was very gradual which is also very advantageous.
- Completed the installation of one new 200-ZP-1 groundwater monitoring well to define downgradient boundary of the CCl4 plume.
- Received comments from EPA on ZP-1 FS and PP. Met with EPA on 12/19/07 to provide draft responses to comments.
- Ecology expressed concerns about ability to show compliance with ARARs.

#### 200-UP-1

- Pumped approximately 4.5 million gallons to LERF as of 1/1/08.
- Completed drilling the first of six planned groundwater wells to support the 200-UP-1 RI/FS.

#### 200-PW-1

- Added three new wells to the vapor extraction system.
- Received comments from EPA on the 200-PW-1, PW-3, and PW-6 FS. Met with EPA on 12/19/07 to provide draft responses to comments.

#### M-15-44B

 High-risk borehole in the 216-A-2 Crib reached total depth of 325 ft bgs on August 22, 2007 and is being decommissioned.

#### M-16-00

- Completed sampling of the 241-U-361 Settling Tank.
- Completed remediation of 200-CW-3 waste sites 2, 3, 5 and 7.

#### M-24-00

- A new Change Request package has been negotiated and signed for the M-24 Commitments.
- Current CY08 commitment is 30 wells.

#### Other Items of Interest

 Completed the PUREX Canyon DQO process and issued the DQO Summary Report.

# RL-30 Groundwater/Vadose Zone FYTD Cost/Schedule Status

(\$ in thousands)

Workscope	BCWS	BCWP	ACWP	SV	CV	BAC
4.1.7.1 - Groundwater/Vadose Zone Integration	2,695.1	1,863.1	1,960.6	(832.0)	(97.5)	11,891.4
4.1.7.2 - Recharge Control	0.0	0.0	0.0	0.0	0.0	0.0
4.1.7.3 - Well Management	3,512.4	3,796.5	2,981.1	284.1	815,4	11,207.3
4.1.7.4 - Project Management	1,503.7	1,503.7	1,689.4	0.0	(185.7)	6,489.6
4.1.7.5 - Integrated Field Work	2,090.9	1,867.4	2,148.5	(223.5)	(281.1)	7,987.7
4.1.7.6 - Groundwater Monitoring and Performance Assessments	2,874.0	2,564.6	2,985.5	(309.4)	(420.9)	12,814.5
4.1.7.10 - 100 BC-5 Operable Unit	177.5	30.8	20.0	(146.7)	10.8	886.3
4.1.7.11 - 100 KR-4 Operable Unit	1,062.7	1,443.0	1,504.0	380.3	(61.0)	9,002.0
4.1.7.12 - 100 NR-2 Operable Unit	402.0	260.4	241.4	(141.6)	19.0	4,472.4
4.1.7.13 - 100 HR-3 Operable Unit	1,246.1	1,478.4	1,073.6	232.3	404.8	5,680.5
4.1.7.14 - 100 FR-3 Operable Unit	97.0	34.4	17.1	(62.6)	17.3	519.2
4.1.7.20 - 200 BP-5 Operable Unit	613.0	387.2	342.8	(225.8)	44.4	4,648.7
4.1.7.21 - 200 PO-1 Operable unit	202.3	222.4	104.9	20.1	117.5	1,021.2
4.1.7.22 - 200 UP-1 Operable Unit	239.3	275.6	115.8	36.3	159.8	1,266.8
4.1.7.23 - 200 ZP-1 Operable Unit	1,056.0	1,023.9	1,040.7	(32.1)	(16.8)	6,297.8
4.1.7.24 - 200 PW-1 Operable Unit	107.9	117.8	111.1	9.9	6.7	843.9
4.1.7.30 - 300 FF-5 Operable Unit	385.5	571.9	417.5	186.4	154.4	1,725.1
TOTAL - PBS RL-0030	18,265.4	17,441.1	16,754.0	(824.3)	687.1	86,754.4

# RL-40 Waste Site Remediation Project FYTD Cost/Schedule Status

(\$ in thousands)

Workscope	BCWS	BCWP	ACWP	SV	CV	BAC
4.1.2.8.1 - Central Plateau Integration and Planning		1,236.4	1,295.7	(242.5)	(59.3)	6,407.4
4.1.2.8.2 - Ecological Risk Assessments	46.7	73.8	174.6	27.1	(100.8)	186.6
4.1.2.8.4 - 200-BC-1 BC Cribs, Trenches, and Control Area Remediation	873.5	888.1	608.2	14.6	279.9	5,415.0
4.1.2.8.5 - 200-CW-1 Gable Mountain/B Pond CWG	754.1	88.2	58.2	(665.9)	30.0	1,616.7
4.1.2.8.6 - 200-CS-1 Chemical Sewer Group	51.8	15.6	23.8	(36.2)	(8.2)	297.9
4.1.2.8.7 - 200-CW-5 Ponds/Z Ditches CWG	(28.5)	85.8	100.6	114.3	(14.8)	222.9
4.1.2.8.8 - 200-TW-1/PW-5 Scavenged Waste Group	109.4	53.0	41.7	(56.4)	11.3	802.5
4.1.2.8.9 - 200-PW-2/4 Uranium Rich Process	21.1	54.4	117.8	33.3	(63.4)	2,719.8
4.1.2.8.10 - 200-PW-1/3/6 Plutonium Rich Process	137.4	169.9	174.8	32.5	(4.9)	758.8
4.1.2.8.11 - 200-LW-1/2 200A Chemical Lab Waste Group	89.1	102.6	95.0	13.5	7.6	1,222.5
4.1.2.8.12 - 200-MW-1 Miscellaneous Waste Group	307.2	67.4	458.4	(239.8)	(391.0)	1,272.8
4.1.2.8.13 - 200-UR-1 Unplanned Releases Waste Group	367.4	231.7	163.8	(1.35.7)	67.9	1,118.8
4.1.2.8.14 - 200-SW-1/2 Non-radiological and Radiological Landfills	351.6	240.0	214.3	(111.6)	25.7	3,139.9
4.1.2.8.15 - 200-IS-1 Tanks, Boxes, Pits, and Lines Group	119.4	369.9	128.4	250.5	241.5	2,431.9
4.1.2.8.16 - 200-BP-1 Hanford Prototype Barrier	25.9	26.2	31.2	0.3	(5.0)	117.8
4.1.2.8.17 - Burial Ground Sampling and Analysis	154.0	135.7	385.7	(18.3)	(250.0)	330.8
4.1.2.8.21 - 200-TW-2 Scavenged Waste Group		21.0	32.6	(25.9)	(11.6)	951.9
4.1.2.8.22 - 200-MG-1/2 Model Group 1 Sites (Ecology & EPA)	481.0	517.2	266.2	36.2	251.0	1,558.2
4.1.2.8.24 - 200-SC-1 Steam Condensate	700.5	323.1	396.7	(377.4)	(73.6)	3,926.3
TOTAL - PBS RL-0040 WS	6,087.4	4,700.0	4,767.7	(1,387.4)	(67.7)	34,498.5

# RL-40 Deactivation & Decommissioning Project FYTD Cost/Schedule Status

(\$ in thousands)

Workscope	BCWS	BCWP	ACWP	SV	CV
4.1.2.1.1 - U Plant	47.3	85.7	58.8	38.4	26.9
4.1.2.1.3 - Balance of Canyon and Other Facilities	0.0	0.0	3.8	0.0	(3.8)
4.1.2.4 - Central Plateau Facilities Cleanup	67.0	57.4	17.2	(9.6)	40.2
4.1.2.5 - 200 Area Waste Site Cleanup	0.0	0.0	3.4	0.0	(3.4)
4.1.2.6 - Central Plateau Surveillance and Maintenance	2,251.7	2,141.4	1,977.2	(110.3)	164.2
4.1.2.7 - Central Plateau Remediation Project Management	1,301.0	1,301.0	1,141.5	(0.0)	159.5
4.1.2.8.3 - 200-UW-1 U Plant Zone Waste Site Remediation	653.7	825.8	952.8	172.2	(127.0)
4.1.2.9 - Waste Site Remediation	153.3	157.9	161.9	4.6	(4.0)
TOTAL - PBS RL-0040 D&D	4,473.9	4,569.2	4,316.6	95.3	252.7

# **RL-30 Performance Variances**

Subproject	FYTD Variance	Causal Factors
Significant Schedule Variances		
4.1.7.1 - Groundwater/Vadose Zone Integration	(832.0)	Replanning strategic integration and technology development
4.1.7.3 - Well Management	284.1	Progress on 100 Area wells
4.1.7.5 - Integrated Field Work	(223.4)	Deferred Technical Services Yard cleanup to second quarter
4.1.7.6 - Groundwater Monitoring and Performance Assessment	(309.4)	Delayed receipt of analytical results (one to two month lag)
4.1.7.11 - 100-KR-4 Operable Unit	380.3	Performance on FY 2007 carryover scope related to resins
4.1.7.20 - 200-BP-5 Operable Unit	(225.8)	Drilling delays due to drilling rig availability and technical issues
Significant Cost Variances	Man established	
4.1.7.3 - Well Management	815.4	Lower bids for 100 Area wells and reduced costs for well planning and roads and pads
4.1.7.5 - Integrated Field Work	(281.1)	Higher than planned costs associated with new hires, mileage reimbursement, and labor support
4.1.7.6 - Groundwater Monitoring and Performance Assessment	(420.9)	Increased labor costs to obtain filtered and unfiltered samples; unplanned cost increase in WSCF analyses
4.1.7.13 - 100-HR-3 Operable Unit	404.8	Continued lower-than-projected costs associated with resins

# **RL-40 WS Performance Variances**

Subproject	FYTD Variance	Causal Factors
Significant Schedule Variances		
4.1.2.8.1 - Central Plateau Integration and Planning	(242.5)	Engineering studies and geophysical logging
4.1.2.8.5 - 200-CW-1 Gable Mountain/B Pond CWG	(665.9)	BCWS reflects new field work characterization; Field work cannot begin until Regulators approve SAP now expected in 01/08. FH formally stated to RL that a BCR will follow SAP approval
4.1.2.8.12 - 200-MW-1 Miscellaneous Waste Group	(239.8)	Behind on ERC correlation and feasibility study
4.1.2.8.24 - 200-SC-1 Steam Condensate	(377.4)	Delays in A-30 High Risk Borehole and in B-55 DPT field work; we were awaiting Work Plan and SAP approval
Significant Cost Variances		
4.1.2.8.4 - 200-BC-1 Cribs, Trenches, and Control Area Remediation	279.9	Point adjust for BCR implementation; not all of the drilling, logging, and sampling identified will be required. Recent information points to issues with the characterization results and re-evaluation of needs may change this favorable performance variance.
4.1.2.8.12 - 200-MW-1 Miscellaneous Waste Group	(391.0)	Continued cost growth for at the 216-A-2 borehole while waiting for a replacement driller

# **RL-40 D&D Performance Variances**

Subproject	FYTD Variance	Causal Factors
Significant Schedule Variances		
4.1.2.6 - Central Plateau Surveillance and Maintenance	(110.3)	The unfavorable schedule variance is due to delays in preparing the work packages for REDOX EF-2 Fan Repairs due to lack of critical resources.
4.1.2.8.3 - 200-UW-1 U Plant Zone Waste Site Remediation	172.2	The favorable schedule variance is due to completing prior year work in FY 2008 (e.g., 241-U-361 Tank Sample and Analysis.
Significant Cost Variances		
4.1.2.6 - Central Plateau Surveillance and Maintenance	164.2	The favorable cost variance is due to less labor than planned charging to the 231-Z Inventory Reduction account.
4.1.2.7 - Central Plateau Remediation Project Management	159.5	The favorable cost variance is due to vacant positions and efficiencies.
4.1.2.8.3 - 200-UW-1 U Plant Zone Waste Site Remediation	(127.0)	The unfavorable cost variance is primarily due to unplanned Readiness to Serve costs from Advanced Technology Laboratories (ATL) associated with the 241-U-361 Tank Sampling.

#### **Next 6 Months**

## 221-U Facility/Canyon Disposition Initiative

Revised Remedial Design/Remedial Action Work Plan will be finalized.

### Other Facility D&D

 Establish TPA agreement-in-principle on Central Plateau facility disposition, including 221-U Facility.

#### 200-CW-3

- Issue SAP and RAWP to sample 216-N-1, -4, -6, and waste units added via TPA Change C-07-07.
- Regulators to approve TPA Change C-07-07 authorizing addition of 9 waste units to 200-CW-3 OU 3 previously unassigned units (pipelines) and 6 waste units transferred from 200-MG-1.
- Develop EE/CA for demolition of three (3) 200-N buildings (212-N, P, R).

#### **BC Control Area**

The EE/CA was transmitted to RL on 12/13/07.

#### **Next 6 Months**

#### 100-HR-3

- · Complete the "Horn" investigative report.
- Complete the Electrocoagulation Treatability Test Report.

#### 100-KR-4

- Initiate the construction of the KX expansion pump and treat.
- Complete the construction of 18 extraction/injection/monitoring wells.

#### 100-NR-2

- Monitor barrier chemistry.
- · Six Ringold formation injection wells to be drilled in February.
- · High concentration injections to begin in June.

#### 300-FF-5

Complete draft A of Feasibility Study for Uranium.

#### 100-BC-5

Monitor the two new wells within a waste site.

#### 200-BP-5

- Complete drilling of following wells: 699-52-55A (N well), 299-E33-344 (B well), 299-E33-343 (A well), and 699-52-55B (H well).
- Complete Rev 2 of the Groundwater Sampling and Analysis Plan, DOE/RL-2001-49.
- Complete Rev 0 of the RI/FS Work Plan and SAP for 200-BP-5, DOE/RL-2007-18.
- Complete BP-5 section of the FY2007 GW Annual Report.
- Complete unconfined aquifer pumping test at wells 699-52-55A and B.

#### 200-CW-1

Perform supplementary investigation activities after SAP approval.

#### 200-CW-5

- Complete Z Ditch Study.
- FS and PP preparation.

#### **Next 6 Months**

#### 200-IS-1

- Work with Ecology to obtain approval of the 200-IS-1 Work Plan.
- Submit Treatability Test Plan for Hanford Pipeline Remediation.

#### 200-SW-1 and 200-SW-2

Work with Ecology to obtain approval on the 200-SW-1/2 Work Plan.

#### 200-PO-1

- Work with Ecology, EPA and Stakeholders on Work Plan Draft A comment resolution and issue Rev. 0.
- Initiate Work Plan RI/FS Phase I investigation activities.

#### 200-UP-1

Complete installation of final 6 wells in support of the RI/FS process.

#### **BC Crib and Trenches**

- Initiate drilling/sampling to establish correlations between Electrical Resistivity characterization data and soil contaminant concentrations.
- Complete evaluation of gamma logging/sampling data (Phase I of excavation-based treatability test) at 216-B-26 Trench.

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

- Prepare 200-MG-1 Draft A Feasibility Study and Recommended Remedy.
- Prepare 200-MG-2 Draft A Feasibility Study and Proposed Plan.

#### **Next 6 Months**

#### 200-UW-1

- Complete supplemental Deep Vadose Zone characterization DQO process.
- Issue draft U-8 supplemental Deep Vadose Zone characterization SAP.
- Finalize record of decision pathforward and revise project schedule accordingly.

#### 200-ZP-1

- Complete treatability test report for Tc-99 removal.
- Complete drilling and sampling of 2 new groundwater monitoring wells.
- Revise the Draft A Feasibility Studies and Proposed Plan based on EPA comments.
- Complete design work for hooking up new groundwater extraction wells.
- Issue subcontract and begin hooking up four new extraction wells to the treatment system.
- Install water level monitoring stations in vicinity of T Tank Farm extraction wells.
- Public comment period for the Proposed Plan will begin in the March/April timeframe.

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

- · Revise the Draft A FS and PP based on EPA comments.
- Will convert three existing wells to SVE wells.

#### 200-TW-1,-TW-2, -PW-5

 There will be two direct pushes at S-21 and T-18, however rebaseline is anticipated to move these activities.

# Hanford K Basins Remediation Tri-Party Agreement M-34 Milestone Review







U.S. Department of Energy Richland Operations Office (RL) First Quarter FY 2008

January 17, 2008





Environmental Management

### TPA Milestone Status

#### Remaining Milestones Due Fiscal Year 2008-2009

Number	Milestone Title	Due Date	Status/Comments
M-34-35	Containerize K West Sludge b. Complete final pass clean up.	b. 01/31.2008	Complete on 12/27/07
M-34-30	Initiate Sludge Treatment  This interim milestone will be complete following treatment and packaging of the first unit of sludge into a form that is certifiable for disposal offsite.	12/31/2008	Anticipated to be missed. Milestone renegotiation required. The milestone is impacted by withdrawal of early procurement authority for the Sludge Treatment Project and a requirement to conduct integrated Critical Decision and Technology Readiness Assessments process.
M-34-32	Complete Removal of the K East Basin Structure  This interim milestone will be complete when spent nuclear fuel, sludge, debris and water are removed from the K East Basin and the upper building and concrete basin are removed.	03/31/2007	Currently in dispute. Milestone renegotiation required. The milestone date is out of sync with approved TPA changes under TPA CR M-34-05-04 that changed completion of K East sludge removal to 05/31/07. This milestone is in dispute at the TPA IAMIT level.
M-34-31	Complete Sludge Treatment  This interim milestone will be complete following treatment and package of all sludge for disposal offsite.	11/30/2009	Anticipated to be missed. Milestone renegotiation required. The milestone is impacted by withdrawal of early procurement authority for the Sludge Treatment Project and a requirement to conduct integrated Critical Decision and Technology Readiness Assessments process.
M-34-00A	Complete removal of the K Basins and their contents.  Unless otherwise noted, the term "K Basins" is used to denote both K East and K West Basins.  Note: This milestone will be complete when both K East and K West Basins, spent nuclear fuel, sludge, debris, and water are removed.	03/31/2009	Anticipated to be missed. Requires completion of M-34-31 that will involve removal of sludge from K West Basin for treatment. Per baseline, M-34-31 will not be completed in time frame that supports this milestone.





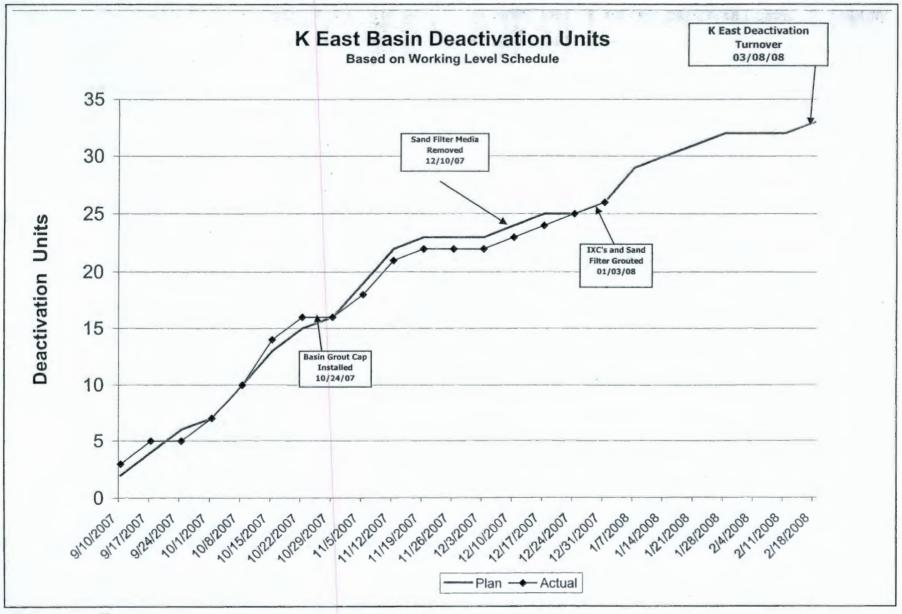
## Significant Accomplishments and Status

#### **K East Basin**

- Completed removal of sand filter media.
- Completed grouting of K East Basin floor, ion exchange column, and sand filter vessel.
- Completed fabrication and installation of the basin dewatering system.
- In progress on startup of dewatering campaign to remove water and add backfill to K East Basin.

#### K West Basin

- Completed Final Pass sludge containerization.
- Performing maintenance to restore fuel processing equipment to service for upcoming Multi-Canister Overpack shipments.
- Initiated debris canister sorting to prepare for legacy fuel processing.

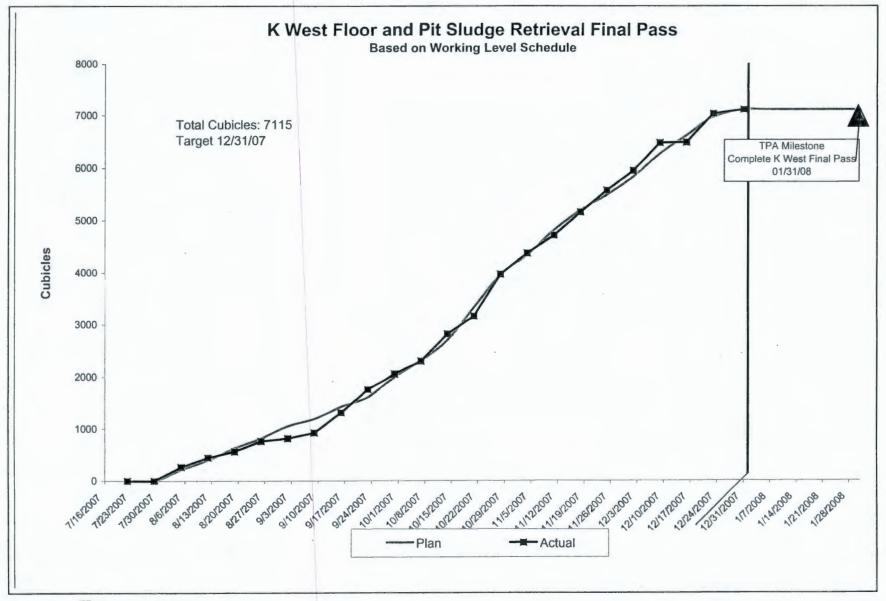




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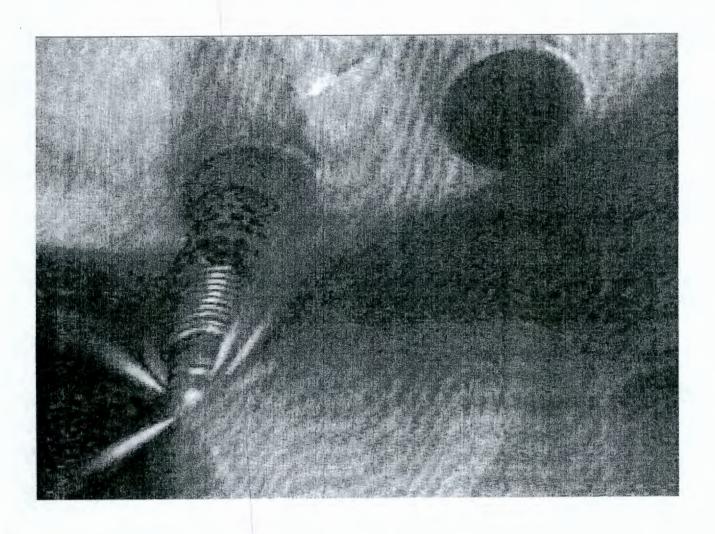
### Significant Accomplishments and Status - continued

#### **Sludge Treatment**

- Approved the Functional Requirements Document for Conceptual Design
- Developed, approved, and issued Revision A of the Functional Design Criteria
- Safety-In-Design Integration Team (SDIT) was formed in accordance with DOE-STD-1189 (DRAFT)
- Value Management Workshops were conducted to evaluate retrieval and directgrouting options
  - Recommended further development of both underwater and above water grouting alternatives
  - Process flow diagrams have been developed for each of the alternatives
- Continued Site Selection activities to lay out an approximate facility footprint for an above water grouting process
- Initiated test activities for Settler Tank Sludge Retrieval/Sampling System conceptual design



#### Settler Tank Retrieval Test





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#### Process Flow Diagram (1) for Managing the Design, Procurement, and Construction Associated with Retrieval, Treatment, Packaging of K Basin Sludge for Offsite Disposal

	Prepare Mission Statement CD-0	Prepare Conceptual Design CD-1	Prepare Preliminary Design CD-2	Complete Final Design CD-3
Containerized Sludge in K West Basin • Retrieve • Solidify • Transfer to 200 Area	Mission Need approved by DOE in December 2007	By December 2008		
Settler Tube and Knockout Pot Sludge  1. Develop DQO  2. Develop SAP  3. Sample and analyze	Settler by December 2009,			
4. Determine appropriateness of waste stream at WIPP	KOP by March 2010			

(1) DOE Office of Environmental Management Project Definition Rating Index Manual (Conventional Projects)



# Upcoming Activities (Next Three Months)

#### **K East Basin**

- Dewater the K East Basin.
- Install backfill material into K East Basin.
- Complete the deactivation phase for K East Basin.
- Install queue area for waste transfers, trailer support, and infrastructure to support demolition.
- · Start removal of prohibitive items prior to demolition.

#### **K West Basin**

- · Continue debris canister sorting.
- · Perform fuel processing equipment maintenance for MCO restart.
- Work with Sludge Treatment Project to plan and integrate and sludge sampling work with other basin activities.



# Upcoming Activities (Next Three Months)

#### **Sludge Treatment**

- Continue with conceptual design activities associated with retrieval & transfer, assay, treatment by solidification of containerized sludge, and package handling systems
- Approve the "DQO Document for Sludge Characterization" that addresses sludge characterization for Containers, Settler Tanks, and Knock-Out Pots
- Complete Conceptual Design for retrieval from Settler Tanks and perform settler sludge retrieval mock up testing
- Continue testing for the Settler Tank Sludge Retrieval/Sampling System conceptual design
- Initiate design and testing for Container Sludge Sampling System
- Initiate CD-1 testing for critical technology elements:
  - Investigate sludge rheology modifiers,
  - Develop basic grout/sludge formulations,
  - Assess solids measurement process control instrumentation,
  - Evaluate/develop sludge retrieval hardware, and
  - Evaluate sludge mixing hardware



# KBC Project Risk Status

Risks are those factors associated with the Project, both existing and emerging, that can result in cost and schedule impacts. The process by which risks are identified and managed is described in the "KBC Project Risk Management Plan," KBC-28211.

Sub-project	Major Remaining Risks with "Possible" or "Likely" Likelihood of Occurrence	Emerging Risks	Risk Mitigation		
K East Basin	<ol> <li>Radiological conditions encountered during substructure demolition slow productivity.</li> <li>F to G line demolition hazard analysis results in schedule impact to superstructure removal schedule.</li> </ol>		<ol> <li>Contingent overtime to maintain schedule.</li> <li>Evaluating alternative demolition plans to leave F to G line in place of ISS.</li> <li>Overtime and schedule</li> </ol>		
	3. Inclement weather delays.		contingency.		
K West Basin	Future fuel and sludge handling will have potential to deposit additional sludge on K West Basin floor.	Retaining previously qualified personnel.	Identify key personnel;     review transfer requests.		
	Defining how much sludge can remain in K West to satisfy End Point Criteria.      Oth	Sludge sampling will place demands on limited resources and compete with other priority work (e.g., fuel removal)	Develop a bases and determine the radiological source term of sludge remaining on the floor and		
	Need to process "found spent nuclear fuel" with a water treatment system		pits of the basin.		
	with limited remaining life.		<ol> <li>Develop decision making process by which it can be determined how much sludge can remain on the floor and pits of the basin for disposition as part of basin demolition.</li> </ol>		

# KBC Project Risk Status - continued

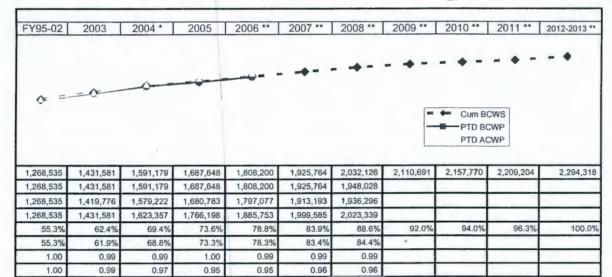
Risks are those factors associated with the Project, both existing and emerging, that can result in cost and schedule impacts. The process by which risks are identified and managed is described in the "KBC Project Risk Management Plan," KBC-28211.

Sub-project	Major Remaining Risks with "Possible" or "Likely" Likelihood of Occurrence	Emerging Risks	Risk Mitigation		
Cold Vacuum Drying Facility (CVDF) Fuel		Retaining previously qualified personnel.     Equipment failure extends processing duration or preparation efforts.	Identify key personnel; review transfer requests; prepare additional training capability and longer training duration.		
Sludge Treatment		3. Repairs to the CVD Facility	<ol><li>Conduct maintenance as soon as possible; locate and verify spares, order additional as needed.</li></ol>		
			<ol> <li>Plan and schedule any repairs to the CVD Facility in a timely manner.</li> </ol>		
	<ol> <li>Unexpected process phenomena (chemical and physical reactions/ characteristics are different than expected).</li> <li>Results form the Testing program yield different outcome than expected forcing redesign and/or different technology selection.</li> <li>Sludge treatment process may not operate as designed.</li> </ol>	<ol> <li>Obtaining timely feedback from CBFO and it's stakeholders.</li> <li>Schedule and cost impacts associated with need to perform additional sludge sampling and analysis.</li> <li>Quantifying the amount of sludge and sludge types to be treated based on how much has to be removed from K West Basin.</li> </ol>	<ol> <li>Continue implementation of the Safety in Design integration, Critical Decision Process, and the Technology Maturation Plan to gain confidence in the Project execution.</li> <li>Perform prototype tests as early as possible.</li> <li>Continue to engage CBFO in issues regarding K Basins sludge disposition.</li> </ol>		
	<ol> <li>Sludge treatment process would not operate reliably to meet schedule requirements.</li> </ol>		aisposition		





# PBS RL-0012 - Total Project Baseline



	Life C	ycle
Г	*BAC=	2,294,318
L	EAC=	2,368,139
L	BCWS=	1,948,028
ı	BCWP=	1,936,296
1	ACWP=	2,023,339
ı	SV=	(11,732)
1	CV=	(87,043)

**Cum BCWS** PTD BCWS PTD BCWP PTD ACWP % Sch % Cmpł SPI CPI

Oct	Nov	Dec	Jan	Feb	iscal Year 2 Mar	Apr	May	Jun	Jul	Aug	Se
					EVIO	ACWP					
					1110	AOM					
		FYT	D ACWP								

**FYTD ACWP** 

\* PHMC Rebaseline Sludge Retrieval & Disposition Project and Decontamination & Decommission Project

\*\* FH KBC EIR Validated Baseline



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closure

# PBS RL-012 Project Performance through First Quarter FY 2008 (\$ in thousands)

	<b>FYTD ACWP</b>		
Safe and Compliant (Peres)	\$ 4,766		
Sludge Retrieval and Disposition (Peres)	\$ 5,271		
Sludge Treatment (Ruscitto)	\$ 2,992		
K East D&D (Wilkinson)	\$ 7,599		
Closure Services	\$ 1,892		
TOTAL	\$22,520		

# Tri-Party Agreement Milestone M-35-09F January 17, 2008

Dave Einan, EPA Lead

Matt Lowe, Ecology Lead

Dana Kranz, DOE-RL/ORP CIO

# Tri-Party Agreement Milestone M-35-09F

Tri-Party Agreement Milestone M-35-09F requires DOE to "Conduct biennial assessment of information and data access needs with EPA and Ecology. DOE-RL will propose implementation schedules (TPA milestones) for enhancements as a result of the biennial assessments."

# Significant Accomplishments for the last three months:

- Initial discussions held with EPA and Ecology to determine needs/concerns.
- Determined alternative methodologies for accessing data no longer available since RMIS merged with IDMS.
- Drafted Tri-Party Databases, Access Mechanisms and Procedures (DOE/RL-93-69) document revision, describing the procedure for obtaining access to HLAN and databases.
- Remote Access accounts created for EPA and connectivity testing in progress.

# Significant Planned Actions for the next six months:

- Present new procedures to Ecology and EPA.
- Implement selected alternative to access IDMS data.
- Create Remote Access accounts for Ecology.
- Complete connectivity testing with EPA and Ecology.
- Complete revision of DOE/RL-93-96 and finalize HLAN/ database access form to reflect new procedures.
- Complete application testing using Remote Access.
- Finalize biennial assessment to complete Milestone
   M-35-09F by March 31, 2008 as required.

# **Issues:**

- EPA and Ecology corporate Firewall penetration is a concern.
- Some applications may not be fully functional using Remote Access.
- The capability to print or save data is not fully tested in all environments.