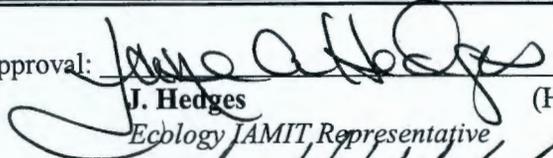
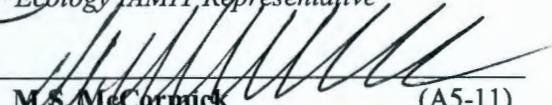


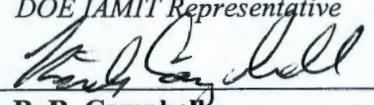
**River Corridor/Remediation of 100-K Area  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
March 19, 2009**

Approval:   
**J. Hedges** (H0-57)  
*Ecology IAMIT Representative*

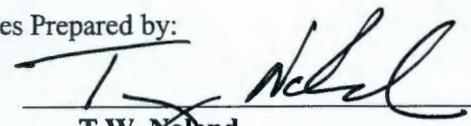
Date: 4/16/09

Approval:   
**M.S. McCormick** (A5-11)  
*DOE IAMIT Representative*

Date: 4/16/09

Approval:   
**R. R. Campbell** (B1-46)  
*EPA IAMIT Representative, Chairperson*

Date: 4/16/09

Minutes Prepared by:   
**T.W. Noland** (H8-12)  
*Fluor Federal Services, Inc.*

Date: 4/16/09

Arnold, L.D. FH  
Bignell, D.T. WCH  
Blackburn J.E.\* WCH  
Bond, R.\* Ecology  
Bohnee, G. NPT  
Buelow, L.C.\* EPA  
Call, P.K. RL  
Cameron, C.E.\* EPA  
Campbell, R.R.\* EPA  
Cimon, S. ODE  
Dagan, E.B. RL  
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Einan, D.R. EPA  
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Faulk, D.A. EPA  
Franco, J.R. RL  
French, M.S. RL  
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Harris, S. CTUIR  
Hedges, J.\* Ecology  
Henry, D. OOE  
Horst, L. OOE  
Jim, R. Yakama  
Johnson, W.F. WCH  
Jones, M.E.\* Ecology

**RECEIVED**  
APR 22 2009  
**EDMC**

Knox, K.E.\* KCR  
LaRue, D.N. WCH  
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McCormick, M.S. RL  
Morrison, R.D.\* YAH  
Niles, K. OOE  
Noland, T.W.\* FFS  
Piippo, R.E.\* CHPRC  
Post, T.C. RL  
Previty, W.H. FH  
Price, J.B.\* Ecology  
Rasmussen, J.E.\* YAH  
Riffe, D.J.\* CHPRC  
Russell, R.W. ORP  
Sands, J.P. RL  
Skinnarland, E.R.\* Ecology  
Smith, D.C.\* RL  
Spencer, C.G. WCH  
Teynor, T.K.\* RL  
Watson, D.J.\* CHPRC  
Weil, S.R. RL  
Whalen, C.\* Ecology  
Wilkinson, R.E. CHPRC  
Wintczak, T.M. WCH  
Administrative Record  
\*Attendees

**River Corridor/Remediation of 100-K Area  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
March 19, 2009**

**River Corridor Closure Project - Milestones M-16/M-93/M-94/M-89**

DOE distributed a handout on the quarterly summary for December 2008 through February 2009, the milestone status, accomplishments, planned actions, performance summary, and issues.

**Performance Summary**

WCH reported excellent production throughout the winter in waste operations, maintaining 200 cans a day.

**RCC Issues**

CHPRC presented to Ecology the revised 116-N-1 Cleanup Verification Package (CVP) for signature. The CVP has been approved and signed by DOE. DOE confirmed that the two numbers requested by Ecology were included in the CVP.

Ecology initiated a discussion regarding two Explanation of Significant Difference (ESDs). As a result of receiving stimulus money, there has been discussion about possibly incorporating some 200 Area sites into the 100 Area Remaining Sites Record of Decision (ROD). An ESD is in the queue for the 100 Area ROD, and Ecology stated that coordination with the Central Plateau is needed to expedite this work scope if it is decided to be done. EPA requested that a cost comparison versus the original cost be made to determine if a ROD amendment would be required by adding additional sites.

The second ESD that Ecology mentioned is associated with the 100-HR-3, which is not River Corridor contract scope, but Ecology used this example to illustrate the need to focus on ESDs. EPA completed the 100-HR-3 ESD in January 2009, and is waiting on cost estimates from DOE before issuing the ESD. Ecology noted that there are several RODs and Engineering Evaluation and Cost Analyses (EE/CAs) action memos for the 200 Area that will be coming up and therefore the ESDs need to be processed quickly to avoid a backlog. Ecology suggested that the Tri-Parties have a discussion on the procedure for completing ESDs in an effort to improve the process.

**Remediation of 100-K Area - Milestones M-34-00, M-16-52, M-16-57, M-16-58, M-93-22**

A summary of the TPA milestone status, significant accomplishments and status, upcoming activities, project risk status, and project baseline and performance was provided.

TPA Milestone Status

DOE stated that the milestones that are under a to-be-missed status are pending public review and comment of the change packages. EPA noted that some of the milestones will be missed before the change packages are approved. There is tentative agreement between EPA and DOE on the change packages, and a signed dispute resolution between EPA and DOE at the Project Manager level to continue discussion until resolution. The dispute resolution is extended beyond the end of the public comment period.

#### K East Basin

DOE reported that there were rising levels in the 1908-K East outfall due to excessive water that was used during saw cutting of the sand filter and upper substructure demolition. The storm drain lines, which were plugged prior to demolition, were unplugged during substructure demolition from the water washing through the lines and that resulted in runoff water to the outfall. Sampling was accelerated, and it was determined that the National Pollutant Discharge Elimination System (NPDES) permit was never exceeded. D4 activities and water replacement were immediately stopped, and the storm lines going to the outfall were cut and capped. The water management plan has been revised, and more emphasis will be on soil fixatives. The water is sprayed for dust suppression and to ensure no contaminants become airborne. The unplugging of the storm drain lines will be applied as a lesson learned at K West Basin.

EPA inquired about the dust suppression water seeping into the groundwater. DOE responded that the evaporation rates will start to increase with the warmer weather, and the revised water management plan will minimize the amount of water sprayed. CHPRC added that the water table is approximately 60 to 80 feet below grade where the basin is located, and expects that the volume of water that was used would not permeate the vadose zone to impact the groundwater. There is an identified plume in that area, and the soil fixatives will be used to preclude water migration. One of the main concerns is protecting the workers around that location, so there is a balance between minimizing water used and worker protection.

#### K West Basin / Cold Vacuum Drying Facility

The Cold Vacuum Drying Facility is being maintained in a ready-to-serve mode with the potential to cold vacuum dry the coarse fraction of sludge material greater than 600 microns, which will be placed multi-canister overpacks (MCOs). The MCOs will be stored in a safe configuration away from the river until it is sent to a high-level waste spent nuclear fuel repository, which has yet to be determined.

#### PBS RL-12 - Project Performance

DOE noted that the information in the handout (page 11) is from December 2008 data, which has been revised after some charges from K Basins area were made that were incorrect. The current schedule performance indicator is 1.01, slightly ahead of schedule; and the performance index is .98, slightly behind in budget.



March 19, 2009

**River Corridor/Remediation of 100-K Area Milestone Review**

Place: EPA Conference Room, 309 Bradley Boulevard, Suite 115, Richland, WA  
Time: 10:00 am - 11:00 am  
Chairperson: EPA Representative

**Agenda**

10:00 am M-16-00 Complete Remedial Actions  
M-93-00 Disposition of Surplus Reactors  
M-94-00 300 Area Surplus Facilities  
M-89-00 324 Bldg. Closure of MW Units

10:45 am M-34-00 Remediation of 100-K Area  
M-16-52  
M-16-57  
M-16-58  
M-93-22

11:00 am Adjourn River Corridor Milestone Review



RIVER CORRIDOR CLOSURE PROJECT

# TPA Quarterly Review

For Period: December 2008 - February 2009



*Tri-Party Agreement*

## *River Corridor Milestones:*

M-16

M-93

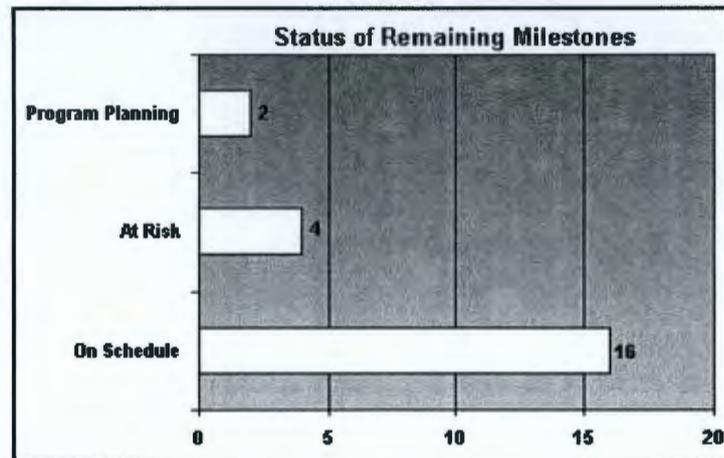
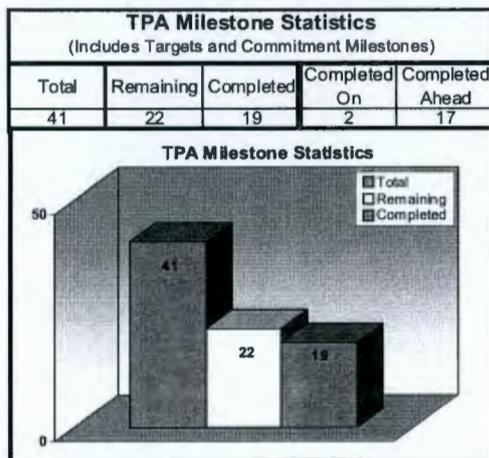
M-89

M-94

U.S. Department of Energy  
U.S. Environmental Protection Agency  
Washington State Department of Ecology

**March 19, 2009**

*Protecting the Columbia River*



**Quarterly Summary (December 2008 – February 2009)**

- **Completed three TPA milestones:**
  - M-16-49 - Complete Interim Remedial Actions at 100-F Area (due 12/31/08) - 12/1/08
  - M-16-61 - Complete 618-7 Burial Ground Remediation (due 12-31/08) - 12/29/08
  - M-16-94A - Initiate Interim Remedial Actions at 100-B-28 Waste Site (due 3/16/09) - 2/5/09
- **Approved two TPA change requests:**
  - M-16-08-06 - Extended date from 12/31/08 to 2/28/12 for - M-16-56 - Complete Interim Remedial Actions for 100-IU-2 and 100-IU-6 Waste Sites Listed in 1999 100 Area Remaining Sites ROD (32 sites) as Described in RDR/RAWP.
  - M-16-08-08 - Extended date from 12/31/09 to 11/30/10 for - M-16-94 - Complete Interim Remedial Actions at 100-B-11, 100-B-14, 100-B-16, 118-B-9, 100-C-9, 600-232, 100-B-18, 100-B-19, 100-B-20, 100-B-21, 100-B-22, 100-B-23, 100-B-24, 100-B-25, 100-B-26, 100-B-27, 100-B-28, 118-C-3:3, 126-B-2, 600-230, 100-B-17, 600-233. Also established new milestone, M-16-94A (see completed milestone above).
- **Pending TPA change requests:**
  - M-16-09-04 - Modify milestones M-16-69, M-16-74, M-16-00B to support long-term mission of PNNL.
  - M-89-09-01 - Modify milestone M-89-00 to support long-term mission of PNNL.
  - M-94-09-01 - Modify milestones M-94-00, M-94-03, M-94-07, M-94-08, and M-94-09 to support long-term mission of PNNL.
  - C-08-06 – Change designation of Appendix C groundwater operable units and river corridor source operable units as CERCLA past practice.

**TPA Milestone Status Report**

*Status as of: February 28, 2009*

TPA MS No.	Compliance Date	Milestone Title	Status	Comments	
<b>M-16 Milestones - Remedial Action (milestones through 12/31/2011)</b>					
1	M-16-51-T01	12/31/2009	Complete Excavation of 1 of 5 100-H Burial Grounds (118-H-1, 118-H-2, 118-H-3, 118-H-4, or 118-H-5)	On Schedule	Completion of 118-H-5 is planned to meet this milestone.
2	M-16-64	09/30/2010	Complete Interim Remedial Actions for the Following 300-FF-2 Waste Sites (300-259, 303-M SA, 303-M UOF, UPR-300-46, UPR-300-17, and 618-1) (see Table 2 in TPA CR M-16-01-06)	On Schedule	
3	M-16-94	11/30/2010	Complete Interim Remedial Actions at 100-B-11, 100-B-14, 100-B-16, 118-B-9, 100-C-9, 600-232, 100-B-18, 100-B-19, 100-B-20, 100-B-21, 100-B-22, 100-B-23, 100-B-24, 100-B-25, 100-B-26, 100-B-27, 100-B-28, 118-C-3:3, 126-B-2, 600-230, 100-B-17, 600-233	On Schedule	TPA change request M-16-08-08 was approved on 1/14/09 which extended compliance date from 12/31/09 to 11/30/10 and identified specific waste sites.
4	M-16-51-T02	12/31/2010	Complete Excavation of a Total of 3 of 5 100-H Burial Grounds (118-H-1, 118-H-2, 118-H-3, 118-H-4, or 118-H-5)	On Schedule	Currently remediating 118-H-1, 118-H-3, 118-H-4, and 118-H-5.
5	M-16-51	12/31/2011	Complete Interim Remedial Actions for 100-H Area	On Schedule	
6	M-16-47	12/31/2011	Complete Interim Remedial Actions for 100-D Area	On Schedule	

TPA Milestone Status Report

Status as of: February 28, 2009

TPA MS No.	Compliance Date	Milestone Title	Status	Comments	
<b>M-89 Milestone - 324 Bldg Non-Permitted MW Units Closure</b>					
1	M-89-00	09/30/2010	Complete Closure of Non-Permitted Mixed Waste Units in 324 Building REC B-Cell, REC D-Cell, and High Level Vault	On Schedule	Proposed TPA change package M-89-09-01 pending. (See referenced milestone change package listed on page 1.)
<b>M-93 Milestone - Reactors Final Disposition</b>					
1	M-93-20	09/30/2012	Complete 105-N Reactor Interim Safe Storage	On Schedule	109N heat exchange system above-grade demolition is in progress.
<b>M-94 Milestones - 300 Area Surplus Facilities Disposition (milestones through 12/31/2011)</b>					
1	M-94-07	12/30/2009	Complete the Selected Removal and/or Remedial Actions that are Selected for 6 of the Following 19 High Priority Facilities: 305B, 306E, 306W, 307 Retention Basins, 308, 309, 321, 323, 324, 324B, 325, 326, 327, 329, 333, 340, 3706, 307 Trench, and 3720; to include the 306E, 306W, 3720, and 305B Facilities	On Schedule	Bldgs 305B, 306E, 333 completed under M-94-06 (March 2008). In addition, Bldg 3706 above-grade (AG) demolition completed 6/3/07; AG loadout completed 7/19/07. Bldg 306W AG demolition completed 9/28/07; AG loadout completed 12/15/07. Bldg 3720 below-grade demolition completed 8/19/08; loadout completed 10/21/08. Sample analysis identified that sump removal was required to meet cleanup criteria. Removal was completed 2/20/09. Final closure documentation being prepared.
2	M-94-03	09/30/2010	Complete Disposition of Following Surplus Facilities: 303M, 332, 333, 334, 334A, 3221, 3222, 3223, 3224, 3225, 324, 324B, 327 (see TPA CH M-94-01-01, Table 1)	On Schedule	3221,3222,3223,3224 demolished May 2002 by Fluor Hanford. WCH completion: 334 and 3225 (Nov 2005), 334A (Dec 2005), 333 (Feb 2008), 303M below-grade (Jan 2009). (See referenced milestone change package listed on page 1.)
3	M-94-08	12/31/2011	Complete the Selected Removal and/or Remedial Actions that are Selected for 12 of the Following 19 High Priority Facilities: 305B, 306E, 306W, 307 Retention Basins, 308, 309, 321, 323, 324, 324B, 325, 326, 327, 329, 333, 340, 3706, 307 Trench, and 3720	On Schedule	See M-94-07 status. (See referenced milestone change package listed on page 1.)

**Significant Accomplishments – For Last 3 Months:**

**M-16 – Remedial Action / Risk Assessment:**

- Completed 100-F Area revegetation (M-16-49).
- Completed revegetation of 600-149 and 600-111 (100-IU).
- Awarded 100-B/C contract; initiated remediation at 100-B-28 (M-16-94A).
- Initiated 118-K-1 Silo design and 100-K-2 Burial Ground design.
- Backfilled trenches, completed revegetation, and completed final shipment of 618-7 waste to Perma-Fix for treatment (M-16-61).
- Completed waste loadout at 618-13 Burial Ground.
- Resolved EPA comments on 618-10/11 SAP schedule.
- Completed work control reviews, training, startup activities, and provided authorization to begin groundwater upwelling surveys and characterization activities using the Trident Probe technology, and also to begin electrofishing (whitefish) (in support of remedial investigation of Hanford Site releases to Columbia River).
- Initiated shoreline sediment sampling campaign, including cultural resource monitoring at a majority of locations within the Hanford Reach areas.
- Approved 2 waste site closure documents during reporting period.

**M-89 – 324 Bldg Non-Permitted MW Units Closure:**

- Completed demolition of 324C Experimental Lithium Enclosure, 324 Maintenance Shop, and 324 office annex.

**M-93 – Reactors Final Disposition:**

- Completed 105N hazardous material removal and asbestos abatement; commenced above-grade demolition of 105N office space.
- Continued waste removal and demolition of 109N.

**M-94 – 300 Area Surplus Facilities Disposition:**

- Continued deactivation and decommissioning (D&D) of 308/308A Fuels Development Laboratory/Annex, and also 309 Plutonium Recycle Test Reactor.
- Completed above-grade demolition of 321 and 323 buildings.
- Continued remote ductwork removal in 327 building.
- Awarded subcontract for 300 Area retention process sewer reroute.
- Completed demolition/loadout of 7 buildings during reporting period.



Trident Probe Apparatus used to Measure Conductivity and Temperature in Pore Water and Surface Water



Demolition of 109N Piping

**Significant Accomplishments – For Last 3 Months (cont'd):**

**Other:**

- Completed treatment of 3,451 tons of mercury-contaminated soil.
- Performed WCH/CHPRC/RL intermodal container mockup.
- Completed ERDF Cells 7/8 acceptance testing.
- For period of December 2008 through February 2009, disposed nearly 154,000 tons of waste in ERDF.



Off-Loading Roof Cover from 100-N at 35-Foot Level in Cell 6

**Significant Actions Planned – For Next 3 Months:**

**M-16 – Remedial Action / Risk Assessment:**

- Issue Request for Award Consent for 118-K-1 to RL.
- Finalize and issue revised 618-10/11 SAP.
- Award 618-10 nonintrusive characterization subcontract.
- Proceed with 100-C-7 in-situ chromium reduction design characterization study.
- Support remedial investigation for Hanford Site releases to the Columbia River by: 1) completing shoreline sediment sampling, 2) completing island soil sampling, 3) conducting deep and shallow sediment core sampling, and 4) conducting groundwater upwelling survey activities.
- Submit Draft A 100-D/H Final RI/FS Work Plan and Addendum, and Draft A 100-K Addendum to regulators (groundwater integration).

**M-89 – 324 Bldg Non-Permitted Mixed Waste Units Closure:**

- Continue hazardous material removal and planning activities.

**M-93 – Reactors Final Disposition:**

- Complete above-grade demolition of 105N office space.
- Complete waste removal and above-grade demolition of 109N.

**M-94 – 300 Area Surplus Facilities Disposition:**

- Continue D&D of 308, 308A, and 309.
- Complete above-grade loadout, and backfill 321 complex and 323 building.
- Complete below-grade demolition and loadout of 384 building.
- Start deactivation activities for 315 complex, 336, 338, 3621D buildings.
- Remove 327 Radioactive Liquid Waste System.
- Begin cutting hot cells from 327.

**Other:**

- Issue ERDF expansion ROD Amendment Proposed Plan for public review.

**PERFORMANCE SUMMARY**  
**Contract Inception (8/25/05) through February 2009**  
 (\$K)

	IPB		CUMULATIVE			Previous Quarter Comparison			
	BCWS	EAC	BCWS	BCWP	ACWP	SCHEDULE VAR (\$)		COST VAR (\$)	
						Nov	Feb	Nov	Feb
D4	635,498	479,572	210,085	259,575	157,688	39,617	49,490	88,564	101,887
Reactor ISS	115,988	116,347	43,337	31,608	27,934	-11,354	-11,729	3,967	3,674
Field Remediation	446,466	559,378	184,404	195,022	178,966	10,438	10,618	13,605	16,056
Waste Operations	262,546	284,853	93,781	114,186	127,567	16,426	20,405	-15,643	-13,381
ESFC	62,484	54,247	25,494	35,453	22,184	11,862	9,959	14,432	13,269
Mission/General Support	329,909	354,844	137,136	137,136	142,178	0	0	-5,593	-5,042
Transition	3,979	3,747	3,979	3,979	3,747	0	0	232	232
Contingency	198,900	198,900							
<b>TARGET COST TOTAL</b>	<b>2,055,769</b>	<b>2,051,890</b>	<b>698,216</b>	<b>776,958</b>	<b>660,263</b>	<b>66,987</b>	<b>78,742</b>	<b>99,557</b>	<b>116,695</b>

**Schedule Variance (PMB): \$78,742K**

- Acceleration of 300 Area and 100-N Area building demolitions.
- Delayed approval/award of 105N/109N demolition/safe storage enclosure subcontract.
- Stop-work at KE/KW Reactor ISS (RL direction).
- 100-F, 100-D, 100-H, 100-B/C waste site accelerations/completions.
- 100/300 Area remediation delays due to discovery of chromium, anomalous waste, nuclear safety issues, and quantity growth.
- Design of ERDF Cells 7-10; procurement and construction of Cells 7/8.
- Acceleration of Inter-Area flight surveys in support of orphan site evaluations.

**Cost Variance (PMB): \$116,695K**

- Significant underruns experienced in 300 Area building characterization, deactivation, and demolition activities.
- Favorable cost experienced to-date in remediation of burial grounds at 100-F, 100-D, and 100-B/C Area, and in confirmatory sampling. Partially offset by increased costs associated with 118-K-1 readiness, slow production due to hard-to-detect radionuclides and anomalies, and interim shutdown costs; anomalies at 618-7; increased 618-10/11 design solution submittal support; and significant project support costs at all active dig sites.
- ERDF cost overruns in transport, treatment, and disposal of waste due to operational issues; overrun in purchase and leasing of additional equipment; and transportation and disposal subcontractor mobilization.
- Efficiencies realized during Inter-Areas sampling and flight surveys, and orphan sites evaluations.

## ***RCC Issues***

- **116-N-1 CVP – Not Approved.**

**Background:**

- 116-N-1 CVP was finalized incorporating resolved comments as agreed to by RL and WCH in an August 2007 meeting.
- The 116-N-1 Waste Site Reclassification Form (WSRF), Rev. 0 CVP, and the comment response package for remaining unresolved comments were formally transmitted to RL on 9/28/07 for submittal to Ecology for approval. Ecology received the WSRF, signed by RL, at a meeting with RL on 10/24/07.
- Ecology agreed that source unit work was complete and backfill appropriate; however, Ecology formally rejected the WSRF for interim closure on 12/20/07.
- RL submitted a Statement of Dispute to Ecology on 1/18/08. Dispute was discussed at March and April 2008 IAMIT. Based on the April IAMIT, specific additional information was added or clarified in the 116-N-1 CVP and then resubmitted for site reclassification approval.
- The revised CVP was submitted to Ecology on 8/19/08. Ecology's position is that the additional information added by DOE to the CVP were changes that Ecology specifically told DOE would not be helpful. Ecology's position is that DOE added groundwater monitoring information to the CVP, after Ecology reminded DOE that the groundwater monitoring network was deficient. Additionally, Ecology's position is that Ecology requested another change that DOE has not responded to. Therefore, Ecology's position is that DOE has not submitted information demonstrating that the 116-N-1 met closure performance standards.
- Based on an exchange of proposed revisions to the CVP language during October and November 2008, the CVP was revised for resubmittal to Ecology in December 2008 that addressed Ecology concerns with the earlier (8/19/08) CVP. Prior to the formal resubmittal, RL met with Ecology to discuss the revisions.
- Discussions continued in January between Ecology and RL. Ecology requested that their chemist meet with the contractor chemist to discuss the unresolved comments. This meeting was held 2/23/09. Based on that discussion, revised CVP language was provided to RL for consideration on 2/24/09.

**Hanford 100-K Remediation**  
***Tri-Party Agreement Milestone Review***  
for Applicable  
M-16, M-34, and M-93  
Milestones

***U.S. Department of Energy***  
***Richland Operations Office (RL)***  
***River Corridor Project***

***March 19, 2009***



***EM Environmental Management***

***safety ♦ performance ♦ cleanup ♦ closure***

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# ***TPA Milestone Status***

## ***Remaining Milestones Due Fiscal Year 2009-2010***

<b>Number</b>	<b>Milestone Title</b>	<b>Due Date</b>	<b>Status/Comments</b>
M-16-52	Initiate response actions for the remaining waste sites for the 100K Area including closure of the 1706-KE Waste Treatment System in accordance with Section 5.5 of the Agreement Action Plan.	07/31/2009	On Schedule.
M-16-57	Initiate soil remediation at K East Basin. Initiate full scale remedial action of the 105KE Fuel Storage Basin Waste Site within one month of completing Milestone M-34-32.	10/31/2009	On Schedule.
M-16-58	Initiate soil remediation at K West Basin. Initiate full scale remedial action of the 105KW Fuel Storage Basin waste site within one month of completing Milestone M-34-00A.	04/30/2009	Will be missed. Change packages M-34-08-03 and M-16-08-09 that will move the M-34 milestone series to the M-16 series to promote integration with 100K Area closure activities are out for public review and comment.
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	Will be missed. Change packages M-34-08-03 and M-16-08-09 that will move the M-34 milestone series to the M-16 series to promote integration with 100K Area closure activities are out for public review and comment.



# ***TPA Milestone Status***

## ***Remaining Milestones Due Fiscal Year 2009-2010***

<b>Number</b>	<b>Milestone Title</b>	<b>Due Date</b>	<b>Status/Comments</b>
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	Missed. Change packages M-34-08-03 and M-16-08-09 that will move the M-34 milestone series to the M-16 series to promote integration with 100K Area closure activities are out for public review and comment.
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	Will be missed. Change packages M-34-08-03 and M-16-08-09 that will move the M-34 milestone series to the M-16 series to promote integration with 100K Area closure activities are out for public review and comment.
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.	09/30/2009	On Schedule.
M-93-22	Complete 105KE and 105KW Reactor Interim Safe Storage.	09/30/2011	Will be missed. Change package M-93-08-01 is out for public review and comment together with M-34-08-03 and M-16-08-09 that are to promote integration with 100K Area closure activities.



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# ***Significant Accomplishments and Status***

## **Overall Project**

- Tentative agreement on modifications to the Hanford Federal Facility Agreement and Consent Order Modifications Regarding Accelerated Groundwater and Soils Milestones/FY2009 Funding/Waste Management/K Basins and Other Issue Solutions was signed by the parties and issued for public review and comment.

## **K East Basin**

- Substructure demolition has been initiated and completed to a level of approximately 10 feet below grade. See photo on next page.
- Began planning for remediation of the UPR 100-K-1 waste site under the K East Basin.
- Initiated sand filter and ion exchange column cave removal using diamond wire / circular sawing and installation of an exoskeleton to remove these as single monoliths.
- Excavated the underground collection box for the K East Basin drain and process sewer and permanently isolated these lines that are interconnected to the underground piping leading to the river outfall.
- Continued the packaging and disposal of debris generated by D4 activities.



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# ***Significant Accomplishments and Status - continued***

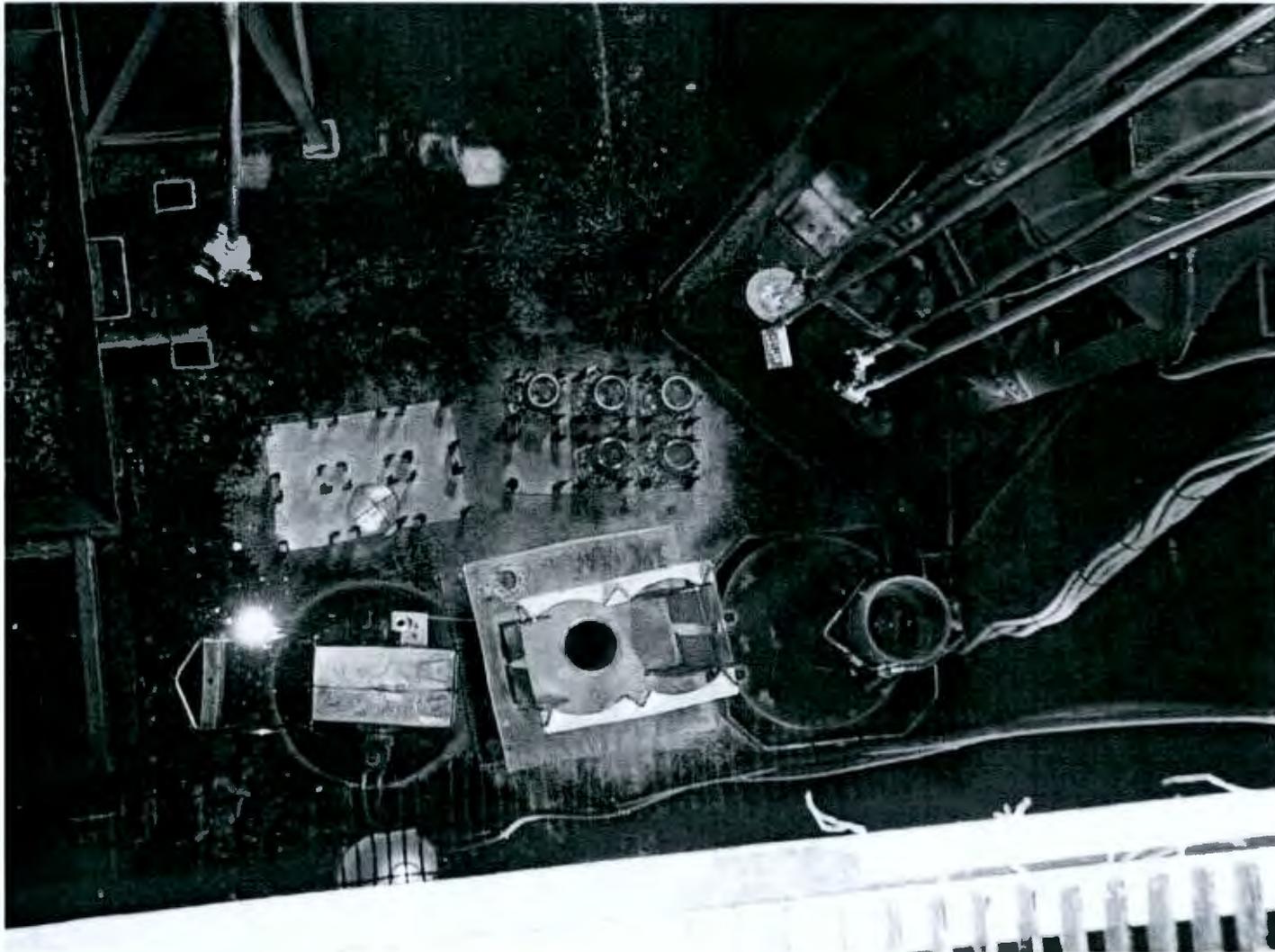
## **K West Basin / Cold Vacuum Drying Facility**

- Completed readiness reviews for commencement of sludge sampling and initiated sampling of sludge in underwater containers and shipment to the 325 Facility for analysis by PNNL.
- Initiated underwater washing, inspection, and testing of Knockout Pot (KOP) sludge as preparatory work leading to the design of a separations process that will involve the packaging and removal of KOP sludge in Multi-Canister Overpacks (MCOs) for subsequent management similar to spent nuclear fuel.



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**New Knockout Pot Inspection and Testing Equipment at 105KW**



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# ***Significant Accomplishments and Status - continued***

## **Sludge Treatment Project (STP)**

- RL and DOE-HQ are reviewing an STP Alternatives Analysis Report (HNF-39744) for decision making purposes.
- Initiated Engineered Container (EC) sampling campaign. Through March, completed sampling of ECs SCS-240 and SCS-250. Also extracted samples from the first location of SCS-260. All samples are being shipped to the 325 Facility for analysis by PNNL.
- Supported a site visit by DNFSB members: 1) tour of the STP test set-ups at the Maintenance and Storage Facility (MASF); and 2) additional project briefings. In addition, supported an EM External Technical Review of the project.
- Successfully completed Top Retrieval "Direct Vacuum" testing of EC sludge simulants. This test demonstrated the projects ability to retrieve the sludge from the containers to either a holding tank or directly to the transfer vessel.
- Continued Phase 3 in-basin inspection of the KOP sludge stream.



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# ***Upcoming Activities (Next Three Months)***

## **K East Basin**

- Continue demolition of substructure.
- Remove and dispose of sand filter and ion exchange column monolith.

## **K West Basin / Cold Vacuum Drying Facility**

- Package and transfer waste to ERDF for disposal.
- Retrieve sludge samples from the containers and transport to the 325 Facility for analysis by PNNL.
- Wash KOP strainer canisters in the Primary Clean Machine (PCM).

## **Sludge Treatment Project (STP)**

- Submit the STP Project Execution Plan (PEP) to RL for approval/concurrence.
- Complete the T Plant versus Alternate Facility analysis and make recommendation to RL.
- Transmit the settler tube sludge Sampling and Analysis Plan (SAP) to RL for approval.
- Initiate settler tank retrieval equipment Integrated Acceptance Test (IAT).



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# ***KBC Project Risk Status***

Risks are those factors associated with the Project, both existing and emerging, that can result in cost and schedule impacts.

<b>Sub-project</b>	<b>Major Remaining Risks with "Possible" or "Likely" Likelihood of Occurrence and Risk Mitigation</b>	<b>Emerging Risks and Risk Mitigation</b>
<b>K East Basin</b>	1. Potential that lower section of substructure removal will require development and implementation of a new Documented Safety Analysis (DSA) and the potential for requiring a full Operational Readiness Review (ORR) prior to startup.	1. A DSA was required for the removal of the lower portions of the basin. Planned work to minimize schedule impact.
<b>K West Basin</b>	1. Future fuel and sludge handling will have potential to deposit additional sludge on K West Basin floor. Risk Mitigation: Design sludge handling system with provisions to minimize depositing additional sludge on basin floor.	1. Washing/sorting of the material contained in the Primary Processing Table/Primary Cleaning Machine (PPT/PCM) canisters which is a preparatory activity to Phase 3 inspection of KOP material is being impacted by flow instabilities caused by maintenance and repair efforts associated with the Integrated Water Treatment System (IWTS) Settler Tubes.
<b>Cold Vacuum Drying Facility (CVDF) Fuel Processing</b>	1. Equipment failure extends processing duration or preparation efforts. Risk Mitigation: Maintain preventative maintenance program.	
<b>Sludge Treatment</b>	1. Results from the testing program yield different outcome than expected forcing redesign and/or different technology selection. Risk Mitigation: Conduct testing necessary to support Critical Decision-1 in a timely manner.	



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# ***PBS RL-0012 – Project Performance***

WBS and Title	Fiscal Year to Date					BAC
	BCWS	BCWP	ACWP	SV	CV	
012.01 - Program Management	1,156	1,156	769	0	387	6,935
012.02 - Basins Operations & Maintenance	2,704	2,704	3,303	0	(599)	5,790
012.03 - Facility Operations	624	586	398	(38)	188	3,743
012.09 - Sludge and Fuel Disposition Management	129	129	178	0	(49)	771
012.11 - 100K Facilities Deactivation	183	19	81	(164)	(61)	1,209
012.13 - KE Basin Demolition	517	451	1,610	(66)	(1,159)	10,971
012.16 - Sludge Treatment Project	10,069	10,238	10,150	169	88	27,437
012.90.01 - Assessments - PBS RL-12	134	134	733	0	(598)	806
012.98 - Transition	21,768	21,768	21,768	0	0	21,768
012.99 - PBS RL-12 UBS, G&A, and Direct Distrib	1,393	1,393	1,338	0	55	8,358
<b>Total - RL-0012 - SNF Stabilization &amp; Disp</b>	<b>35,259</b>	<b>33,820</b>	<b>32,907</b>	<b>(1,439)</b>	<b>913</b>	<b>88,232</b>



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# ***PBS RL-0012 – Project Performance - continued***

Schedule Performance - (-\$1.4M/-4.1%)

The 100K Project negative schedule variance (-\$0.2M) is primarily due to delays in starting the deactivation of 100K facilities. Expect recovery of schedule by the end of the first quarter.

The STP positive schedule variance (\$0.2M) is within established variance thresholds.

Cost Performance (+\$.9M/+2.7%)

The 100K Project unfavorable cost variance (-\$1.9M) is primarily due to higher than initially planned user based services and not taking performance for level of effort work scope that is being replanned or consolidated in the Baseline update.

The STP positive cost variance (\$0.0M) is within established variance thresholds.



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# ***PBS RL-0041 – Project Performance***

WBS and Title	Fiscal Year to Date					
	BCWS	BCWP	ACWP	SV	CV	BAC
041.02 - PRC River Zone Environmental	567	925	510	358	415	5713
041.90 - Assessmets - PBS RL-41	3	3	26	0	(24)	7
041.99 - PBS RL-41 UBS, G&A, and Direct Distrib	477	477	471	0	6	1231
<b>Totals - RL=0041 - River Corridor</b>	<b>1047</b>	<b>1406</b>	<b>1008</b>	<b>358</b>	<b>398</b>	<b>6952</b>



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# ***PBS RL-0041– Project Performance - continued***

FYTD Schedule Performance (+\$0.4M/+34.2%)

The variance represents completion of small structure deactivation and demolitions ahead of plan.

FYTD Cost Performance (+\$0.4M/+28.3%)

Deactivation and demolition crews are performing above average efficiency, benefitting from the "mobilize once" approach at the K East Basin removal project.



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