

0071497

Central Plateau  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
July 20, 2006

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

Approval: M.S. McCormick (A5-11) Date: 10/19/06  
*DOE IAMIT Representative*

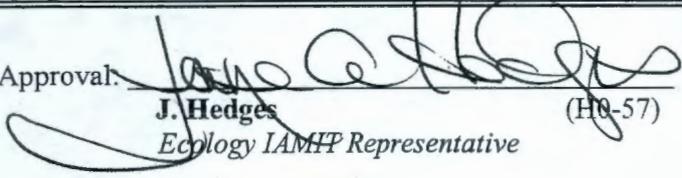
Approval: N. Ceto (B1-46) Date: 10/19/06  
*EPA IAMIT Representative, Chairperson*

Minutes Prepared by: S.L. Moore (H8-40) Date: 10-19-06  
*Fluor Hanford, Inc.*

Ayres, J.M.	Ecology	H0-57	Mattlin, E.M.	RL	A5-11*
Bartus, D.	EPA	H0-57	McCormick, M.S.	RL	A5-11
Bilson, H.E.	FH	H8-20	McKarns, A.C.	RL	A5-15
Bond, R.	Ecology	H0-57	Miskho, A.G.	FH	H8-40
Bohnee, G.	NPT*		Morrison, R.D.	FH	H8-12*
Boyd, A.	Ecology	B1-46	Moy, S.K.	RL	A6-38
Brown, MJ	Ecology	H0-57*	Niles, K.	OOE*	
Cameron, C.E.	EPA	B1-46	Piippo, R.E.	FH	H8-12*
Ceto, N.	EPA	B1-46	Post, T.C.	EPA	B1-46*
Chalk, S.E.	RL	A7-75	Price, J.	Ecology	H0-57
Charboneau, B.L.	RL	A6-33	Quigley, K.M.	FH	H8-44
Charboneau, S.L.	RL	A5-11	Roddy, F.M.	RL	A6-39
Cimon, S.	ODE*		Romine, L.D.	RL	A6-33
Cusack, L.	Ecology	H0-57*	Russell, R.W.	ORP	H6-60
French, M.S.	RL	A6-38	Skinnarland, E.R.	Ecology	H0-57
Frey, J.A.	RL	A5-13	Simmons, F.M.	FH	H8-40
Gallagher, R.G.	FH	H5-20	Sinton, G.L.	RL	A6-38
Harris, S.	CTUIR*		Thompson, K.M.	RL	A6-38
Hedges, J.	Ecology	H0-57	Thompson, S.A.	FH	H8-12
Henry, D.	OOE*		Tilden, H.T.	PNL	K3-75
Hopkins, A.M.	FH	H8-25	Vance, J.G.	FH	H8-12*
Horst, L.	OOE*		Whalen, C.L.	Ecology	H0-57
Hyatt, J.E.	FH	H8-40	Wise, B.K.	FH	B3-30
Jackson, D.E.	RL	A4-52	Wolf, A.	CTUIR*	
Jim, R.	Yakama*		Administrative Record		H6-08*
Lutz, K.	HQ	A7-75	*w/Attachment		

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Tri-Party Agreement Milestone Review  
Meeting Minutes  
July 20, 2006**

Approval:  Date: 12/5/06  
**J. Hedges** (H0-57)  
*Ecology IAMIT Representative*

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

Approval: \_\_\_\_\_ Date: \_\_\_\_\_  
**N. Ceto** (B1-46)  
*EPA IAMIT Representative, Chairperson*

Minutes Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_  
**S.L. Moore** (H8-40)  
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Lutz, K	HQ	A7-75	*w/Attachment		

**Central Plateau  
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**M-083-00A, Complete PFP Facility Transition and Selected Disposition Activities.**

Accomplishments

Completed 232-Z demolition activities, finishing up end states, and the slab has been painted. Ecology has looked at the area and a completion letter should be submitted in the near future.

Completed 241-Z Cells D5 and D8 RCRA/CERCLA end points. All documentation has been submitted to a Professional Engineer; working on CERCLA end points and discussing the issue with Ecology.

Continue shipments of Solid Waste Boxes (SWBs) containing VIPAC pins; only one or two left to ship and all VIPAC pins will be out of the protected area.

Continue disposition of plutonium (Pu) solution containers (PR cans). The PR cans and VIPAC pins will be shipped to WIPP. Ecology asked if this was an approved waste stream for WIPP. DOE will discuss this with the Regulators before the shipments are coordinated and finalized.

The negative cost variance is due to the work on 232-Z and 241-Z in order to complete these activities on time, which required a lot of overtime and consumables (PPE, tools, etc.). Some scope was not covered as this work drew on a lot of resources. DOE is performing process retrieval work and will get back on track.

Pu consolidation is in the baseline and DOE is continuing with preparation. Firm direction from HQ has not been received, but RL has been told to get ready to start shipments to an offsite facility in 2007. There will be a notification to Congress of this activity and an amended ROD for a Pu disposition Environmental Impact Statement. Both of these will come out of HQ and need to happen this fall in order to start shipments next spring. Ecology asked if the off-site facility has agreed to this work scope and DOE stated that HQ is working that issue.

**M-026-01, Submit an Annual Hanford Land Disposal Restrictions Summary Report.**

Ecology's comments to the 2005 summary report have been resolved at the monthly LDR PMM. A letter with DOE's responses to those comments was sent July 17. Ecology has not received that letter as yet and requested DOE provide them with a copy.

The monthly PMMs continue to be an effective tool to resolve emerging issues.

**M-091-00, Complete the Acquisition of New Facilities, Modification of Existing Facilities, and Modifications of Planned Facilities.**

Significant Accomplishments

M-091-40 – DOE held a briefing/tour with Ecology to describe plans to start retrieval in new burial grounds; hoping to get started this fall. The same staging area will be used for both operations.

DOE has retrieved 3,843 m<sup>3</sup> of radioactive solid waste, which is a little behind schedule but still plan on meeting the total volume milestone. There is a lot of waste staged but not moved over to a treatment, storage, and disposal area. There also is a safety issue with volatile organic compounds. Additional sampling of head space gas sampling is being conducted to ensure operations are properly bounded by the safety basis. To improve operations, DOE is installing a large shed-type enclosure. There are a lot more degraded containers than what was expected. A couple of months were lost this FY due to weather and the enclosure should help.

M-091-42 – DOE is working towards meeting the CH-MLLW portion of this milestone early. There is an accumulated back log of ~420 m<sup>3</sup> of certified but not shipped CH-TRUM. A letter is in progress to address the actions taken to improve TRUM certification activities.

M-016-93 – Ecology wanted to know how the document was being approached and wanted RL to include Z9-Z18 into its scope as it is believed there are large amounts of TRU in Z9. Ecology asked if volumes were based on estimates and EPA stated to do rounding. Ecology pointed out that the milestones that were established in 2003 were based on the expectation that the facilities would be in place that have the capacity for handling the volumes of CERCLA waste. RL stated that all known CERCLA TRU/TRUM streams will be accounted for as best as can be determined when the workplan is prepared and it will include 618-10 and 11.

**M-092-05, Inclusion of Hanford site Cs/Sr “Treatment and/or Repackaging Parameters” in DOE TWRS Phase II Request for Proposals.**

The Performance Assessment (PA) prepared by Idaho is the source of DOE’s standard canisters, which will be two baskets of 18 capsules each. Ecology asked what other types of document issues need to be resolved with Yucca Mountain (YM). DOE stated we need to show our canisters do not present a problem with other waste packages, that they will not interact with other packages. We will have to request OCRWM status to eliminate the ‘D’ codes and go to LDR treatability requirements. The PA will determine the technical viability of this waste going into YM. It will feed into the regulatory strategy of how to get into YM and the process of working with the NRC. YM does not even have a license yet, but will submit a request for a license for construction in 6-08.

Technically this is not a challenging waste form, but from a regulatory standpoint it is a challenge.

#### **M-020-00, Permits and Closure Plans.**

Received a Notice of Violation on the Hazardous and Solid Waste Amendments of 1984 portion of the Hanford Site RCRA Permit. DOE is preparing a draft letter to send to the Regulators noting the annual certification on waste minimization is included on the checklist.

Planned Actions – DOE is expecting comments back from Ecology on the 331-C Storage Unit Permit conditions. Ecology should be receiving a letter on the 222-S Laboratory Part B Permit application changes.

#### **M-015-00, Complete RI/FS (or RFI/CMS) Process for all Operable Units.**

M-015-44B – The 200-MW-1 Operable Unit Feasibility Study and Proposed Plan are at risk and a letter has been sent to EPA. Ecology stated the M-15 Change Package would have revised this milestone and asked what the status is on that package. EPA noted that this is an issue that will be discussed in the IAMIT meeting following this meeting.

EPA wanted to note that DOE did a good job with the 200-ZP-1 characterization in the vicinity of the Old Laundry Facility and T Plant (M-015-48A). They took an extremely complicated project and put it into an understandable format.

DOE completed drilling the 216-Z-9 Slant Borehole and is getting ready to start on the carbon tetrachloride extraction phase. EPA asked to have the well run by itself by the first of October to see what the level of concentrations are and how long it takes to have water problems. DOE has been doing non-intrusive inspections in burial grounds and has found some significant concentrations of carbon tetrachloride.

Removal of ~445' of 200-W-42 piping went reasonable well, although more lateral spreading than anticipated was encountered. Also, samples taken below the 15' level did not meet the threshold so more work will have to be done on this.

The cost and schedule slides (8-14) cover all RL 30 and 40 frame work. DOE asked if the Regulators wanted to keep the detailed budget and schedule information in the handout and they answered affirmatively.

The Regulators commented on the notes of “delays getting into the field” and “delays in progress with RI/FS scope” on the Schedule Performance slide. In the future, they would like to see the reason for the delay on the slide.

Planned activities – There is a need to keep the current capabilities of the work force available, so there is a concern of having to prioritize other work. To maintain the

capability, crews have been doing some prep work on other structures with the expectation that we will reach agreement on the M-15 change package.

DOE is working to resolve the 200-UW-1 issues and get the ROD out in September, but there are some obstacles to overcome. Ecology has made a recommendation to pull packaging of the cribs out of the ROD while DOE has been gearing up to put caps on. The issue is that the ROD needs to address a single OU, so if the cribs are pulled out they would have to be a separate OU. All parties agreed that they need to determine how to address this issue. EPA stated this is a programmatic issue that highlights the weakness in the program.

Issues – The Regulators noted the M-15 Change Package was sent to them without their Project Managers having reviewed a draft. DOE noted that it was in the meeting minutes dating back to December that they were going to submit a Change Package. EPA stated that now that it has been formally submitted, if we wanted to make any changes DOE would have to get it approved internally again before re-transmitting.

Regarding M-016 (transferring spent fuel to K Basins), it is EPA's expectation that the spent fuel will be shipped to meet the milestone. DOE noted there was an internal contractor issue that has been resolved.

#### **M-034-00A, Complete Removal of the K Basins and Their Content.**

M034-31 – This milestone is affected by procurements authorizations. As a possible mitigation effort, the treatment of sludge and the removal from the basins may be separated as part of an accelerated schedule.

A new pump and treat method known as the 'hat box' has been developed and tested with good results. DOE is working on turbidity issues and how to get the best pumps.

The new date for initial sludge transfer using the Hose-in-Hose is 9-25-06.

The contractor submitted a report to DOE on seismic conditions. They are reviewing the possibility of obtaining their own seismic expert to look at this issue.

It was noted that when K Basins are gone, the site will lose the capability to store waste there and it will have to be stored in Multi-canister Overpacks (MCOs) at the Canister Storage Building (CSB) at the pad. There is a facility next to CSB that could hold some waste until it goes to Yucca Mountain; they will be ready to receive waste in 2017. It is in their baseline to start construction on that facility in 2015. In the nine year interim that K Basins are done and the Yucca Mountain facility is ready, the waste will be stored at CSB.

Sludge cleanup – EPA noted that in Idaho they use divers to clean up their sludge. Do we not use them because of the dose? DOE stated it was not the dose that is the problem but the dissolved and particulate matters in the water. The amount of radioactivity in the water is so high, it is a safety concern that using divers would cause skin contamination.

EPA suggested a potential change to look at removing the sludge from K West and staging it some where so that work could continue on the basins.

DOE commented on the tax liability due to a change in the tax law interpretation: This was an unbudgeted expense that RL has been carrying all year.



**Thursday, July 20, 2006**  
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
	M-92-05	Facilities for Cesium/Strontium
9:45 a.m.	M-20-00	Permitting/Closure Plans
10:00 a.m.	M-15-00	RI/FS Process Completion
	M-16-00	Complete Remedial Actions
	M-24-00	Groundwater Well Installation
10:35 a.m.	M-34-00	K Basins Closure Project
11:00 a.m.		Adjourn Milestone Review

# Tri-Party Agreement Major Milestone Management Review

July 20, 2006

Name	Organization	Mail Stop	Attachments Yes/No
ROB PIIPPO	FH		✓
Ellen Mathis	DOE-RL	A5-	yes
Loren Fritz	FH		
Ken Gugley	FH		
Tom Post	EPA		✓
Ron Skinneland	Ecology		no
Craig Cameron	EPA		No
Cheryl Whalen	Ecology		no
DENNIS PALLI	EPA		no
Larry Gadbois	EPA		No
Greg SIMON	DOE-RL		NO
Stanley Simon	DOE		YES
Harold Tilden	PNNL	K3-75	No
Mark French	RL	A6-35	NO
Melinda J Brown	Ecology		Yes
Suzette Thompson	FH		Yes
Tony Miskho	FH		NO
Janice Williams	FH		NO
Ean Simms	FH		No
Sen Moynihan			
JANE HEDGES	ECY		
LAURA CUSACK	ecy		yes
John Price	ECY		NO



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



**July 2006  
Tri-Party Agreement Milestone  
Status Report**

**Ecology Project Manager - R. Bond  
DOE-RL Project Director – S. Charboneau  
FH Project Manager – D. B. Klos  
FH Environmental – A. M. Hopkins**

# M-83 Status for Interim Milestones Through 2006 (as of 6/30/06)

TPA No.	TPA Commitment Date	Milestone Title	Status
M-083-14	9/30/06	COMPLETE 100% OF THE LEGACY PU HOLDUP REMOVAL	<b>Complete</b>
M-083-40	9/30/06	COMPLETE TRANSITION AND DISMANTLEMENT OF 232-Z BLDG INCINERATOR	On Schedule
M-083-22	9/30/08	SUBMIT EE/CA FOR APPROVAL	Ahead of Schedule
M-083-41	9/30/10	COMPLETE TRANSITION AND DISMANTLEMENT OF THE 216-Z-9 CRIB COMPLEX	On Schedule
M-083-32	9/30/11	COMPLETE CLOSURE OF THE PFP 241-Z TSD UNIT	Ahead of Schedule
M-083-42	9/30/11	COMPLETE TRANSITION AND DISMANTLEMENT OF THE 241-Z WASTE TREATMENT FACILITY	Ahead of Schedule

# Accomplishments

- **Completed 232-Z demolition activities**
- **Completed 241-Z Cell D8 RCRA/CERCLA end points**
- **Completed 241-Z Cell D5 RCRA/CERCLA end points**
- **Continued shipment of SWBs containing VIPAC pins**
  - 784 VIPAC pins have been shipped to CWC through June 2006
- **Completed pie plating of 234-5Z and 236-Z gloveports**
  - 1,469 gloveports plated
- **Completed shipping of 364 solution containers to Central Waste Complex out of ~600**

## **Planned Activities**

- **Continue RCRA Closure and CERCLA activities in 241-Z**
- **Complete 232-Z slab stabilization and end points**
- **Continue disposition of Pu solution containers (PR cans)**
- **Complete shipment of VIPAC Pins**
- **Complete demolition of 241-ZG (7/06)**
- **Submit the Below Grade EE/CA for approval**

# Schedule / Cost Performance

## Fiscal Year to Date Status

RL-0011 - Nuclear Material Stabilization & Disposal (PFP)	Fiscal Year to Date				
	BCWS	BCWP	ACWP	SV\$	CV\$
	78,995.1	80,772.2	84,761.6	1,777.1	(3,989.4)

## **Schedule / Cost Performance Fiscal Year to Date Status (Continued)**

### **FYTD Schedule Variance: \$1.8M:**

- Recovery of FY05 carryover scope for fuel moves in support of material access area elimination in the 234-5Z facility, and ahead of schedule status on VIPAC fuel pin disposition

### **FYTD Cost Variance: -\$4.0M:**

- Increased support labor, crane & rigging and consumables (PPE, tools, etc.) for high complexity D&D scope

# Issues

## Regulatory Issues:

None

## Non-Regulatory Issues:

None

**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
Quarterly Presentation  
July 20, 2006**



**Greg Sinton, RL Project Lead  
Woody Russell, ORP Project Lead**

**Deborah Singleton, Ecology Lead**



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## **Land Disposal Restrictions Report (Tri-Party Agreement Milestone M-26-01) July 20, 2006**

- Tri-Party Agreement requires annual submittal of the Hanford Site Land Disposal Restrictions (LDR) Report
- TPA change request M-26-05-01 approved January 4, 2006
  - A summary report has been prepared for CY2005 as a pilot activity
  - Change request identifies content of the summary report
- Ecology comments on the CY 2005 LDR Summary Report have been resolved at the monthly PMM.
- The agreed upon comment responses and the revised Summary Report document were transmitted to Ecology July 17, 2006, for final approval.



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## **Land Disposal Restrictions Report (Tri-Party Agreement Milestone M-26-01) July 20, 2006**

- Monthly PMMs continue to be an effective tool for dialogue and as a venue to resolve emerging issues
  - One action remains open from the March 14, 2002, Settlement Agreement (Consolidation of Requirements Document)
  - Emerging issues or concerns are addressed during the PMMs as “Hot Topics”
    - No current issues or concerns are identified



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**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
July 20, 2006**

Actions Planned for Next Six Months

- Continue the monthly PMMs focusing on requirements consolidation and remaining RL storage assessments
- Complete primary document review process with CY2005 LDR Summary Report
- Determine future LDR reporting

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

### Significant Accomplishments of Last Three Months:

- Retrieved 306 m<sup>3</sup> of RSW since the last quarterly report (4/12/06-7/11/06), bringing the total to 3843 m<sup>3</sup>.
- Approved M-91 change packages April 28 and July 6 to allow concurrent retrieval and establish the 12/28/06 due date for the PMP revision, respectively.
- Treated 245m<sup>3</sup> of M-91-42 MLLW (April-June), bringing the total to 4797 m<sup>3</sup> as of 6/30/06.
- Certified 262 cubic meters of M-91-42 TRU/M (4/17/06-7/10/06) bringing the total volume certified since 12/31/02 to 2035 cubic meters.

Tri-Party Agreement M-91 Milestone Series  
Quarterly Presentation

Greg Sinton  
U.S. Department of Energy,  
Richland Operations Office

July 20, 2006

M-91 Status Summary 7/20/06

Milestone	Due Date(s)	Status Summary	Comments
<b>General Comments</b>			1) In this table "On-Schedule" means it is anticipated the milestone will be met.
<b>M-91-00:</b> Major Milestone for acquisition of needed facilities/capabilities for mixed and suspect mixed MLLW, and TRUM and suspect TRUM.	TBD	On Schedule	
<b>M-91-01:</b> Facility/Capability Interim Milestone (RH and/or large container TRUM)	6/30/12	On Schedule	Engineering Study and Functional Design Criteria to be completed by 9/30/06. Briefed Ecology staff on progress of "M-91 capability" design effort 5/12/06.
<b>M-91-03:</b> Submit TRUM/MLLW PMP	12/31/03, 12/28/06 3/31/09, 3/31/13	On Schedule	M-91-03 PMP approved by Ecology on May 12, 2004.  The parties have agreed to change the 2006 PMP revision date from 8/10/06 to 12/28/06. This will allow incorporation of work and responses for several 9/30/06 deliverables to be more fully incorporated into the PMP. The Change Package making this change was signed July 6, 2006.
<b>M-91-05-T01:</b> Complete RH and or large TRUM retrieval/processing Engineering Study/FDC	12/31/07	On Schedule	Submitted the "Initial Engineering Study and Functions" document to Ecology 9/30/05. This is the first in a series of activities leading to Conceptual Design and FDC submittal planned for 12/31/07 (Conceptual design FDC will be for entire M-91 facility, not just RH/Large TRUM). The next submittal is

			scheduled for 9/30/06 (Engineering Study/ FDC)
<b>M-91-12:</b> CH-MLLW Thermal Treatment (600 m <sup>3</sup> cumulative)	11/16/07	On Schedule	As of the end of June, 432 cubic meters of thermal treatment waste had been treated. A thermal treatment shipment occurred the week of June 12. Plan to send enough waste to Permafrix and/or PEcoS this FY such that when it is treated M-91-12 will be met (three more shipments).
<b>M-91-12A:</b> CH-MLLW Thermal Treatment (240 m <sup>3</sup> )	9/30/05	COMPLETE Met 8-16-05	Completion letter (AMCP-0420) sent to Ecology 9/27/05
<b>M-91-15:</b> RH MLLW and/or Large Size MLLW Treatment	6/30/08	At Risk (Planning to propose a revision to the current scope based on M-91 facility design analysis)	<p>“COMPLETE ACQUISITION OF FACILITIES AND/OR CAPABILITIES AND INITIATE TREATMENT OF RH-MLLW AND CH MLLW IN BOXES AND LARGE CONTAINERS”</p> <ul style="list-style-type: none"> <li>• Initial engineering study that addresses this capability was completed 9/30/05 (See M-91-05-T01)</li> <li>• Planning to submit a change package within the next month proposing revision of this milestone based on initial M-91 facility planning to move the MLLW RH and some MLLW large size capability to the M-91 facility completion date.</li> </ul>
<b>M-91-40:</b> Retrieval and designation of CH-RSW (regardless of size)	4700 m <sup>3</sup> cumulative by 12/31/06 and annual retrieval volumes through 2010. Complete retrieval in T-4 by 12/31/06. Plus various	On Schedule Met 2700 level in July 05	<ul style="list-style-type: none"> <li>• A change package to allow concurrent retrieval activities in multiple burial grounds was approved April 28. Briefing/tour held with Ecology staff May 23 to describe plans to start retrieval in additional burial grounds. Planning to start retrieval in W-4B this Fall while continuing with concurrent 4C retrieval. Plan to use the 4C staging area for both 4C and 4B waste.</li> <li>• The January-March quarterly report sent to Ecology May 31. The April-June report is in RL concurrence. No sampling was conducted in either quarter so no results are reported.</li> <li>• 218-W-3A SAP: All comments have been resolved. The SAP was approved by Ecology June 15, 2006.</li> </ul>

	other requirements		<ul style="list-style-type: none"> <li>• 218-W-4B SAP: Ecology concurred on the comment responses June 13. The final SAP incorporating the changes has been through document clearance and was emailed to Ecology for final approval July 17. 4B vent riser sampling planned for this summer.</li> <li>• With final approval of the 4B SAP all the M-91-40 retrieval SAPs will be in place.</li> <li>• 3843 m<sup>3</sup> of RSW retrieved as of 7/11/06.</li> <li>• The Non-TRU fraction of PFP debris from retrieval is being sent to PEcoS for treatment prior to disposal at ERDF. Treatment has been proceeding well. 700 m<sup>3</sup> had been sent to PEcoS for treatment and 602 m<sup>3</sup> of that had subsequently been disposed of in ERDF through 7/12/06.</li> <li>• The E-12B test dig field work has been completed. Containers found to be in better condition than expected. Containers in direct contact with the soil did not appear to experience an increased rate of corrosion.</li> <li>• Have had some low production periods over Winter and Spring (weather/VOC issue) but expect to recover schedule</li> <li>• On target to complete retrieval in T-4 by 12/31/06</li> </ul>
<b>M-91-41:</b> Retrieval and Designation of RH RSW (regardless of size)	See comment column	On Schedule (Planning)	<ul style="list-style-type: none"> <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>
<b>M-91-42:</b> 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)	On schedule For MLLW treatment, behind schedule for CH TRUM certification	<ul style="list-style-type: none"> <li>• 4797 m<sup>3</sup> of the MLLW subject to this milestone (MLLW-2 and MLLW-04 through MLLW-10 excluding MLLW-7) has been dispositioned as of the end of June. (4890 m<sup>3</sup> required by 12/31/06)</li> <li>• Shipped 1611 cubic meters of M-91-42 TRU/M and had accumulated a backlog of 424 cubic meters of certified but not shipped TRU/M bringing the total certified TRU/M counting toward M-91-42 to 2035 as of 7/10/06.</li> </ul>

			<ul style="list-style-type: none"> <li>Working to increase certification rate through extra repackaging capabilities at T-Plant. Additional Permacon unit became available for repackaging in early June w/ completion of the NLOP sludge treatment.</li> </ul>
<b>M-91-43:</b> Designation and treatment of RH and or Large Size MLLW	See Comment Column	On Schedule (Planning to propose a revision to current scope)	<ul style="list-style-type: none"> <li>12/31/08: Complete designation of RH MLLW and or Large Size MLLW in storage.</li> <li>6/30/08: Begin RH and or large size MLLW treatment at rate of 300 cubic meters per year</li> <li>Treated 193 m<sup>3</sup> of MLLW-07 since 12/31/02.</li> <li>Modifications and clarifications to M-91-43 being proposed in M-91 change package.</li> <li>Investigating PEcoS capability to process containers larger than 10 cubic meters (up to as high as 35 cubic meters)</li> </ul>
<b>M-91-44:</b> Designation of Newly Generated and Stored RH and or Large Size Transuranic Waste and Large/RH TRUM certification	See Comment Column	On Schedule (Planning)	<ul style="list-style-type: none"> <li>Designate all RH and large size Transuranic waste in storage by 12/31/12</li> <li>Begin treating RH and/or large container TRUM at a minimum rate of 300 cubic meters per year by 6/30/2012</li> </ul>
<b>M-91-45:</b> RH and or Large Size Waste Annual Report	9/30/04 and annually thereafter	On Schedule	<ul style="list-style-type: none"> <li>The 2005 report was submitted to Ecology 9/29/05 (Letter AMCP-0421)</li> </ul>
<b>M-16-93:</b> Submit implementation workplan for acquisition of capabilities necessary to prepare TRU/M waste generated by CERCLA clean-up actions at Hanford for disposal at WIPP	9/30/2006	On Schedule	<ul style="list-style-type: none"> <li>Draft report in preparation</li> </ul>

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

## Actions Planned for Next Six Months

- Meet MLLW treatment and RSW retrieval 12/31/06 milestones
- Continue certification and shipment of transuranic waste to WIPP (two to three shipments per week).
- Submit change package on other M-91 clarifications and changes to Ecology
- Continue thermal treatment at PEcoS and Permafix
- Continue discussions with Ecology on M-91 facility planning
- Gain final approval on the 218-W-4B SAP (the final or four required M-91-40 SAPs)
- Submit SAP quarterly reports

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

### Actions Planned for Next Six Months (Continued)

- Complete and submit M-91-45 RH and Large Size waste annual report (9/30)
- Complete and submit M-16-93 CERCLA TRU Implementation workplan (9/30)
- Complete and submit M-91 Engineering Study and Functional Design Criteria (9/30)
- Complete M-91-03 PMP revision (12/28/06)
- Conduct 218-W-4B vent riser sampling this summer

Tri-Party Agreement Milestone M-92-05  
Quarterly Status

S.K. Moy  
U.S. Department of Energy,  
Richland Operations Office

July 20, 2006

## Tri-Party Agreement Milestone M-92-05 Quarterly Status

TPA Milestone M-92-05, due 6/30/07: “DOE will assess the viability of directly disposing of Hanford Cs/Sr capsules at the National High-Level Waste Repository. Based on this assessment if DOE concludes that direct disposal is a viable and preferred alternative to vitrification, DOE will submit to Ecology, specific documentation justifying its conclusion, with a proposed milestone change request establishing enforceable agreement milestones for disposition Hanford Cs/Sr capsules by 2028.”

Tri-Party Agreement Milestone M-92-05  
Quarterly Status

- Performance assessment modeling initiated in January 2006 to support the direct disposal assessment
- Performance assessment on schedule for preliminary results in December 2006



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

**Presented by:**

**Tony McKarns  
U.S. Department of Energy**

**July 20, 2006**

### **Closure Plan Milestone Status**

#### **M-20-33**

**Completed 4/26/2006**

Submit 216-A-10 Crib, 216-A-36B Crib, 216-A-37-1 Crib, and 207-A South Retention Basin Closure/Postclosure Plans to Ecology in coordination with the Feasibility Study for the 200-PW-2 Uranium-Rich Process Waste Group Operable Unit (coordinate under M-15-43C).

#### **M-20-54**

**12/31/2008**

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:**

Milestone M-20-33 was completed on 4/26/06.



## Hanford Facility RCRA Permit Status

- The Hanford Facility RCRA Permit expired on 9/27/04. Ecology provided a pre-draft Permit, Revision 9 to the Permittees for review and comment. Ecology and the Permittees are meeting to resolve DOE comments.

DOE continues to operate under RCRA Permit Revision 8, until a new Permit is in effect.



## Accomplishments – last 3 months

- DOE submitted Class 1 modifications for quarter ending 6/30/06.
- DOE submitted 305-B Closure Plan modification
- Ecology provided pre-draft Permit conditions for LERF groundwater.
- Ecology approved Part A Form for 331-C Storage Unit.



### Planned Actions – next 6 months

- Ecology draft DST System Permit conditions
- Ecology draft 331-C Storage Unit Permit conditions
- Ecology review/approve Class 1 modifications for quarter ending 6/30/06
- Ecology review approve 305-B Storage Facility Part A Form
- Ecology reissue temporary authorization for 331-C Storage Unit if necessary
- DOE and Ecology continue meetings to resolve comments with the Pre-Draft Permit, Revision 9
- DOE submit WESF Part B Permit Application, Rev. 1
- DOE submit 222-S Laboratory Part B Permit Application, Rev. 2



# CENTRAL PLATEAU MILESTONE REVIEW

M-015-00, M-016-00, M-020-00, M-024-00



*Tri-Party Agreement*

**U.S. Department of Energy  
U.S. Environmental Protection Agency  
State of Washington, Department of Ecology  
3rd Quarter FY06  
July 20, 2006**

# Facilities D&D and Waste Sites Remediation



200-UW-1 - 200-W-42 Phase II Pipeline Removal

# Milestone Status

TPA Number	Commitment Date	Milestone Title	Status
<b>M-015-00</b>	<b>Complete RI/FS (or RFI/CMS) Process for all Operable Units</b>		
M-015-46A	2/28/06	Submit 200 Area Chemical Laboratory Waste OUs RI Report	COMPLETE
M-015-39C	3/31/06	Submit Draft A 200-CS-1 Chemical Sewer Group FS and PP	COMPLETE
M-015-43C	5/31/06	Submit 200-PW-2 OU FS, PP & Permit Mod	COMPLETE
M-15-44A	4/30/06	Submit 200-MW-1 OU Remedial Investigation Report	COMPLETE
M-015-45A	10/31/06	Submit Plutonium/Organic-Rich OU Remedial Investigation Report	On Schedule*
M-015-46B	11/30/06	Submit 200 Area Chemical Laboratory Waste OUs FS	On Schedule**
M-015-44B	04/30/07	Submit 200-MW-1 OU FS and PP	At risk***
M-015-45B	09/30/07	Submit Plutonium/Organic-Rich OU FS and PP	Very aggressive schedule to meet TPA milestone
M-015-48A	05/31/06	Submit Draft A 200-ZP-1 OU RI Report	COMPLETE
M-015-48B	05/31/07	Submit Draft A 200-ZP-1 OU FS and PP	On Schedule
<b>M-016-00</b>	<b>Remedial Design / Remedial Action</b>		
M-016-00	09/20/24	Complete Remedial Actions for all Non-Tank Farm Operable Units	-----
<b>M-020-00</b>	<b>Submit Closure Plans for all RCRA TSD Units</b>		
M-020-39	3/31/06	Submit 216-S-10 Pond and Ditch Closure Plan to Ecology	COMPLETE
M-020-33	4/30/06	Submit 216-A-10/216-A-36B/216-A-37-1 Crib Closure/Post Closure Plans	COMPLETE

# Milestone Status

FOOTNOTES FROM PREVIOUS PAGE

\*Schedule changed according to TPA milestone change M-15-05-02

\*\*Schedule changed according to TPA milestone change M-15-06-01

\*\*\*Milestone at risk because of unexpected higher contamination and need for supplemental characterization at 216-A-4 borehole.

TPA Number	Commitment Date	Milestone Title	Status
M-024-57G	12/31/05	DOE Shall Install a Cumulative of 45 Wells by 12/31/05	COMPLETE
M-024-57H	06/30/06	DOE Initiates Discussions Annually to Reaffirm Selected Wells	COMPLETE
M-024-57I	08/01/06	Conclude Negotiations and Revise M-024-57 by 08/01/06	On Schedule
M-024-57J	12/31/06	DOE Shall Install a Cumulative of 60 Wells by 12/31/06	On Schedule
M-024-00	TBD	Complete Well Installations in Accordance with RCRA/CERCLA Requirements	-----

# Significant Accomplishments

## **M-015-00 & M-015-00C**

### **Waste Sites Remediation**

- Issued Draft A 200-PW-2/200-PW-4 Operable Unit Feasibility Study and Proposed Plan.
- Issued Draft A Closure Plans for the 216-A-10 Crib, 216-A-36B Crib, and 216-A-37-1 Crib.
- Issued Draft A 200-MW-1 Operable Unit Remedial Investigation Report.
- Completed drilling of the 216-Z-9 Slant Borehole.
- Completed additional geophysical surveys in 200-SW-2 burial grounds
- SW-1/2 mini DQO completed for non-intrusive characterization.

### **Groundwater Remediation**

- Completed DQO and SAP supporting the completion of 200-ZP-1 characterization in vicinity of Old Laundry Facility and T Plant.
- Issued Internal Draft and Decisional Draft of 200-ZP-1 RI Report.

# Significant Accomplishments

M-016-00

## Waste Sites Remediation

- CERCLA Removal Action supporting proposed barriers at U Plant cribs:
  - Sampled 200-W-42 Phase I Excavation for Backfill Concurrence
- CERCLA Removal Action for Remaining 200-W-42 Vitreous Clay Piping (VCP)/UPR-200-W-163:
  - Excavated and Removed ~445' 200-W-42 Piping between the U-8 Crib and 16<sup>th</sup> Street

# Significant Accomplishments

**M-024-00**

## **Groundwater Remediation**

- 15 of the 15 proposed CY06 wells and 10 CY07 wells completed.
- 12 remedial investigation wells in progress. (200-ZP-1 [3], T-4 and T-5 near T-Tank Farm, 100-KR-4 [4] and 200-BP-5 [3]).

## Facilities and Surveillance Schedule/Cost Performance FYTD Status (\$000s)

Work Scope	BCWS	BCWP	ACWP	SV	CV	BAC
4.1.2.8.3 - 200-UW-1 U Plant Zone Waste Site Remediation	4,857.1	4,795.1	5,180.7	(62.0)	(385.5)	6,865.7
4.1.2.8.4 - B/C Cribs, Trenches & Cntl Area Remediation	55.5	106.0	148.8	50.5	(42.8)	87.8
4.1.2.8.18 - Haul Road	749.1	1,034.1	411.9	285.1	622.2	749.1
4.1.2.8.19 - Regulatory Support	0.0	0.0	6.6	0.0	(6.6)	0.0
<b>CP-1 Remediation Projects Total</b>	<b>5,661.7</b>	<b>5,935.3</b>	<b>5,747.9</b>	<b>273.6</b>	<b>187.4</b>	<b>7,702.5</b>
4.1.2.1.3 - Balance of Canyon and Other Facilities	1,383.7	1,279.3	1,189.7	(104.4)	89.6	2,032.3
4.1.2.8.1 - 200 NPL Common Source Assessment	1,126.7	1,118.9	1,119.9	(7.8)	(1.0)	1,530.2
4.1.2.8.2 - Ecological Risk Assessment	713.2	814.6	853.9	101.5	(39.3)	1,182.7
4.1.2.8.5 - 200-CW-1 Gable Mtn/B Pond CWG	0.0	0.0	1.3	0.0	(1.3)	0.0
4.1.2.8.6 - 200-CS-1 Chemical Sewer Group	254.6	219.0	153.2	(35.6)	65.8	310.1
4.1.2.8.7 - 200-CW-5 U Pond/Z-Ditches CWG	67.8	1,284.3	8.6	1,216.5	1,275.7	102.5
4.1.2.8.9 - 200-PW-2 Uranium-Rich Process	212.1	185.6	226.1	(26.5)	(40.5)	271.5
4.1.2.8.10 - 200-PW-1 Pu-Rich Waste Group	2,895.5	2,982.9	3,030.6	87.4	(47.7)	3,442.5
4.1.2.8.11 - 200-LW-1 200A Chem Lab Waste Group	322.4	241.5	204.7	(81.0)	36.8	477.3
4.1.2.8.12 - 200-MW-1 Misc. Waste Group	604.4	1,018.9	391.0	414.5	627.9	1,614.1
4.1.2.8.13 - 200-UR-1 Unplanned Releases Waste Group	375.8	301.7	359.4	(74.1)	(57.7)	691.3
4.1.2.8.14 - 200-SW-1 Non-Radioactive Landfills & Dump Group	1,430.7	851.6	559.7	(579.1)	291.9	1,632.0
4.1.2.8.15 - 200-IS-1 Tanks/Boxes/Pits/Lines Group	1,362.4	362.2	234.0	(1,000.2)	128.2	1,948.7
4.1.2.8.16 - 200-BP-1 Hanford Prototype Barrier	1.6	1.4	0.0	(0.3)	1.4	1.6
4.1.2.8.17 - Burial Ground Sampling & Analysis	209.4	51.8	7.6	(157.6)	44.2	215.4
4.1.5.2.1 - 618-10/11 Waste Sites	0.0	0.0	0.4	0.0	(0.4)	0.0
<b>CP-2 Closure Projects Total</b>	<b>10,960.5</b>	<b>10,713.7</b>	<b>8,340.1</b>	<b>(246.8)</b>	<b>2,373.6</b>	<b>15,452.1</b>
4.1.1.2.2 - 100A GPF - Deactivation & Disposition	0.0	0.0	3.8	0.0	(3.8)	0.0
4.1.2.1.1 - U Plant	350.8	409.4	455.3	58.6	(45.9)	500.2
4.1.2.1.2 - Plutonium Concentration Facilities	0.0	0.0	0.6	0.0	(0.6)	0.0
4.1.2.1.3 - Balance of Canyon and Other Facilities	0.0	177.3	82.9	177.3	94.3	0.0
4.1.2.4.2 - 200A GPF - Deactivation & Disposition	0.0	0.1	0.1	0.1	(0.1)	26.6
4.1.2.4.3 - B Laydown Yard D&D	0.0	0.0	0.0	0.0	(0.0)	0.0
4.1.2.4.4 - FY06 Utility Isolation 6 Mobile Facilities	0.0	0.0	0.3	0.0	(0.3)	0.0
4.1.4.2.2 - 400A GPF - Deactivation & Disposition	0.0	0.0	(0.0)	0.0	0.0	0.0
4.1.5.1.2 - 600A GPF - Deactivation & Disposition	0.0	39.1	0.0	39.1	39.1	0.0
<b>CP-3 Deactivation &amp; Decommissioning Total</b>	<b>350.8</b>	<b>625.8</b>	<b>543.0</b>	<b>275.1</b>	<b>82.9</b>	<b>526.8</b>

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## Facilities and Surveillance Schedule/Cost Performance FYTD Status (\$000s)

Work Scope	BCWS	BCWP	ACWP	SV	CV	BAC
4.1.1.4.2 - 100A GPF - S&M	0.0	0.0	2.6	0.0	(2.6)	0.0
4.1.2.6.1 - CP Min Safe Oversight & Services	2,409.2	2,409.2	2,052.7	(0.0)	356.6	3,278.9
4.1.2.6.2 - Nuclear Facility Support	230.7	230.7	357.8	(0.0)	(127.1)	313.9
4.1.2.6.4 - CP Inactive Waste Sites Min Safe	470.0	468.8	538.7	(1.2)	(69.9)	662.5
4.1.2.6.5 - Misc Facilities Min Safe	535.8	551.4	458.5	15.7	93.0	728.3
4.1.2.6.6 - 209-E Min Safe	249.7	249.7	88.2	0.0	161.5	339.8
4.1.2.6.7 - U Plant Min Safe	367.9	357.4	462.8	(10.5)	(105.4)	494.1
4.1.2.6.8 - B Plant Min Safe	225.7	432.7	345.6	207.0	87.2	350.7
4.1.2.6.9 - PUREX Min Safe	594.3	996.0	933.2	401.7	62.8	887.4
4.1.2.6.10 - REDOX Min Safe	282.4	272.8	380.3	(9.6)	(107.4)	379.6
4.1.2.6.12 - CP General Purpose Facilities (GPF) Min Safe	100.4	100.4	45.6	(0.0)	54.8	136.8
4.1.2.6.13 - CP Active Waste Sites Min Safe	39.0	39.0	20.2	0.0	18.8	53.1
4.1.2.6.14 - Spider Lift - NESHAPs	0.0	0.0	187.7	0.0	(187.7)	0.0
4.1.4.4.2 - 400A GPF - S&M	0.0	0.0	0.0	(0.0)	0.0	0.0
4.1.4.4.3 - 400A Waste Sites S&M	0.0	0.0	0.3	0.0	(0.3)	0.0
4.1.5.3.2 - 600A GPF - S&M	0.0	0.0	6.2	0.0	(6.2)	0.0
4.1.5.3.3 - 600A Waste Sites S&M	0.0	0.0	1.8	0.0	(1.8)	0.0
<b>CP-4 Surveillance &amp; Maintenance Total</b>	<b>5,505.2</b>	<b>6,108.2</b>	<b>5,882.0</b>	<b>603.0</b>	<b>226.2</b>	<b>7,625.1</b>
4.1.2.7.1 - CP Project Management and Support	1,692.3	1,692.3	1,459.6	(0.0)	232.7	2,303.1
4.1.2.7.2 - Business Management & Integration	678.6	678.6	540.0	(0.0)	138.5	923.3
4.1.2.7.3 - Chief Engineer	0.0	0.0	0.4	0.0	(0.4)	0.0
4.1.2.7.4 - Technical Support	846.0	846.0	834.1	0.0	11.9	1,146.1
4.1.2.7.5 - ESH&Q	973.2	973.2	1,037.5	(0.0)	(64.3)	1,324.2
4.1.2.7.6 - CP Training	0.0	0.0	1.8	0.0	(1.8)	0.0
4.1.2.7.8 - Procure Decon Trailer	0.0	0.0	0.0	0.0	0.0	113.4
4.1.2.7.9 - Procure Shower Trailer	0.0	0.0	0.0	0.0	0.0	187.3
<b>CP-5 Project Mgmt &amp; Support Total</b>	<b>4,190.1</b>	<b>4,190.1</b>	<b>3,873.4</b>	<b>(0.0)</b>	<b>316.7</b>	<b>5,997.4</b>
4.1.2.8.1 - 200 NPL Common Source Assessment	0.0	0.0	(3,367.9)	0.0	3,367.9	0.0
<b>CP-6 RL-40 Miscellaneous Adjustment Account Total</b>	<b>0.0</b>	<b>0.0</b>	<b>(3,367.9)</b>	<b>0.0</b>	<b>3,367.9</b>	<b>0.0</b>
<b>Grand Total</b>	<b>26,668.2</b>	<b>27,573.1</b>	<b>21,018.5</b>	<b>904.9</b>	<b>6,554.6</b>	<b>37,303.9</b>

Updated through June 2006

## Facilities and Surveillance Schedule Performance

### Variance Explanations (\$ in Millions)

Schedule Variance	FYTD Variance	Causal Factors/Corrective Actions
CP-1 Remediation Projects	0.3	Due to completion of FY 2005 carryover work scope (+\$.3M).
CP-2 Closure Projects	(0.2)	Favorable progress due to close out of post contract period no action waste sites (+\$1.8M) and completion of FY 2005 carryover work scope (+\$.4M). Offset by delays in DQOs for Model Groups (-\$.1M), delays in DQO and field work for 200-SW-1 (-\$.6M) and 200-IS-1 (-\$1.0M); and 218-W-4B SAP (-\$.2M) as it is not needed at this time.
CP-3 Deactivation & Decommissioning	0.3	Due to progress on post contract period industrial facility demolition.
CP-4 Surveillance & Maintenance	0.6	Due to completion of FY 2005 carryover work scope.
CP-5 Project Mgmt & Support	0.0	
<b><i>D&amp;D Totals</i></b>	<b>0.9</b>	

Updated through June 2006

## Facilities and Surveillance Cost Performance

Variance Explanations  
(\$ in Millions)

Cost Variance	FYTD Variance	Causal Factors/Corrective Actions
CP-1 Remediation Projects	0.2	Efficiencies in the haul road construction (+\$.6M); offset by increased ERDF and labor cost for W-42 pipeline removal due to contamination spread (-\$.4M).
CP-2 Closure Projects	2.4	Primarily due to close out of post contract period no action waste sites (+\$1.8M) and efficiencies in other areas (+.6M).
CP-3 Deactivation & Decommissioning	0.1	
CP-4 Surveillance & Maintenance	0.2	Due to staffing efficiencies and loaned labor to higher priority projects.
CP-5 Project Mgmt & Support	0.3	Due to staffing efficiencies and resources supporting non D&D work scope.
CP-6 RL-40 Misc Adjustment	3.4	Variance distribution for PBS RL-40 was credited to this subproject.
<b>D&amp;D Totals</b>	<b>6.6</b>	

Updated through June 2006

# Groundwater Schedule/Cost Performance

## Fiscal Year to Date Status (\$Ms)

1<sup>st</sup> Quarter FY 06

Work Scope	BCWS	BCWP	ACWP	SV	CV	BAC
4.1.6.1 - Hanford Site Integration and Assessments	3,538.3	3,261.4	3,154.4	(276.9)	107.0	4,588.6
4.1.6.2 - Prevent Further Degradation	1,477.6	1,799.6	1,803.2	322.0	(3.6)	1,991.9
4.1.6.3 - Monitor Groundwater	750.9	745.4	921.9	(5.5)	(176.5)	1,019.3
4.1.6.4 - 100 Area Groundwater Remediation	4,741.8	4,643.8	5,415.1	(98.0)	(771.2)	6,637.9
4.1.6.5 - Groundwater Remediation Technologies	1,879.8	1,656.6	2,233.0	(223.2)	(576.4)	2,357.5
4.1.6.6 - Monitor Groundwater Interim Actions	590.4	540.0	543.8	(50.4)	(3.8)	721.0
4.1.6.7 - Drill Groundwater RCRA/CERCLA/AEA Wells	4,787.5	3,823.4	3,290.1	(964.1)	533.2	6,175.3
4.1.6.8 - Groundwater Protection Project Management	3,897.4	3,889.9	4,233.0	(7.5)	(343.1)	5,303.2
4.1.6.9 - Groundwater Integrated Field Work	3,628.1	3,616.5	3,282.0	(11.7)	334.5	4,951.4
4.1.6.10 - 200 Area Groundwater Remediation	3,293.6	2,712.8	3,007.5	(580.8)	(294.6)	4,958.6
<b>Grand Total</b>	<b>28585.4</b>	<b>26689.3</b>	<b>27883.9</b>	<b>(1896.0)</b>	<b>(1194.5)</b>	<b>38,704.6</b>

**Schedule Performance**  
(\$ in Millions)

Schedule Variance	FYTD Variance	Causal Factors/Corrective Actions
4.1.6.1* – Hanford Site Integration and Assessments	(0.3)	Delays in proposals for Technical Investigations and postponement of workshop to a more favorable date.
4.1.6.2 – Prevent Further Degradation	0.3	Progress made by the field decommissioning contractor.
4.1.6.3 – Monitor Groundwater <sup>85</sup>	(0.0)	Insignificant
4.1.6.4 – 100 Area Groundwater Remediation	(0.1)	Insignificant
4.1.6.5 – Groundwater Remediation Technologies	(0.2)	Apatite chemical injections were planned to start in March – did not start until late May because Columbia River water levels were too low. Recovery by the end the fiscal year is in jeopardy - unanticipated results with respect to Sr-90 concentrations and remediation following the June injections.
4.1.6.6 – Monitor Groundwater Interim Actions	(0.1)	Insignificant
4.1.6.7 – Drill Groundwater RCRA/CERCLA/AEA Wells	(1.0)	Delays in getting into the field for BP-5, ZP-1 R/FS and ZP-1 Tc-99 well drilling; will recover by the end of the fiscal year.
4.1.6.8 – Groundwater Protection Project Management	(0.0)	Insignificant
4.1.6.9 – Groundwater Integrated Field Work	0.0	Insignificant
4.1.6.10 – 200 Area Groundwater Remediation	(0.6)	Delays in progress tied to R/FS scope for Operable Units BP-5, PO-1, and UP-1.
<b>GRP Total</b>	<b>(1.9)</b>	

Status through June 2006 Month End

**Cost Performance**  
(\$ in Millions)

Cost Variance	FYTD Variance	Causal Factors/Corrective Actions
4.1.6.1 – Hanford Site Integration and Assessments	0.1	Insignificant
4.1.6.2 – Prevent Further Degradation	(0.0)	Insignificant
4.1.6.3 – Monitor Groundwater	(0.2)	Sampling and inspection costs on modutanks; well maintenance and sampling waste management activities not budgeted (startup and operation of 90 day waste pad).
4.1.6.4 – 100 Area Groundwater Remediation	(0.8)	Additional labor costs due to system upgrades and additional con-ops compliance requirements necessary to operate the 100 Area P&Ts. Sampling costs in support of disruptions in the resin regeneration process & the DR-5 system being placed under an RWP.
4.1.6.5 – Groundwater Remediation Technologies	(0.6)	Subcontract support for field implementation of the NR-2 barrier is greater than planned. Test injections for NR-2 took longer than planned due to a tighter vadose formation than expected. NR-2 chemical costs are increasing.
4.1.6.6 – Monitor Groundwater Interim Actions	(0.0)	Insignificant
4.1.6.7 – Drill Groundwater RCRA/CERCLA/AEA Wells	0.5	The number of wells to be drilled for TPA milestone M-24 for CY-06 was decreased due to wells drilled under work for others being applied to the M-24 count.
4.1.6.8 – Groundwater Protection Project Management	(0.3)	Labor, occupancy and associated overheads, FYTD (offsets with IFW).
4.1.6.9 – Groundwater Integrated Field Work	0.3	Labor, training and associated overheads (will offset with PM&S).
4.1.6.10 – 200 Area Groundwater Remediation	(0.3)	Labor overrunning in ZP-1 operations and maintenance; PO-1 SAP; added costs for ZP-1 RI/FS technical support; increased engineering for UP-1, ZP-1, and ZP-2; sampling costs, long term monitoring, PM activities, engineering, waste handling.
<b>GRP Total</b>	<b>(1.2)</b>	

Status through June 2006 Month End

# Planned Activities

## Next 6 Months

### Facilities D&D

- U Plant Canyon Disposition Initiative (CDI) post-ROD work on RDR/RAWP due to regulatory agencies by end of CY06
  - Canyon reactivation study (July 2006)
    - HVAC
    - Electrical/lighting
    - Canyon crane
  - Equipment size reduction / cell space optimization study (July 2006)
  - Canyon demolition study (July 2006)
  - Remedial Action Work Plan (RDR/RAWP)

# Planned Activities

## Next 6 Months

- Finalize Draft A of the EE/CA for non-time critical removal action for Bin C facilities and transmit to EPA and Ecology for review. This work is not in alignment with Ecology and EPA priorities.
- Finish D&D of five structures (2707E, 2713E, 2715E, 2719E and 2722E) that do not have active utilities and have already undergone initial demolition preparation activities.

# Planned Activities

## Next 6 Months

### M-015-00

#### Waste Site Remediation

- Pending approval of the M-015 tentative agreement, continue Central Plateau IAMIT Working Group workshops on the Waste Site Decision Strategy to:
  - Complete DQO's for the initiated model groups (Model Groups 4 and 5). Note that EPA and Ecology believe they should be involved in the DQO process and it should go forward immediately.
  - Continue technical discussions on integration with groundwater projects.
- Finalize discussions on M-013 and M-015 milestones and TPA Action Plan section changes.

# Planned Activities

## Next 6 Months

### M-015-00

#### Waste Site Remediation

- **200-PW-2/4**
  - Revisit resolution of Ecology's remaining comment on the 200-PW-2/200-PW-4 RI Report pending outcome of the M-015 tentative agreement.
- **200-PW-1/3/6**
  - Continue 200-PW-1 carbon tetrachloride dispersed vadose zone plume remedial investigation field activities (e.g., complete vapor sampling of planned groundwater wells in 3 locations).
  - Submit 200-PW-1/200-PW-3/200-PW-6 remedial investigation report
- **200-SW-2**
  - Complete non-intrusive investigations at 200-SW-2
  - Initiate 200-SW-2 intrusive DQO process
- **200-MW-1**
  - Complete drilling at 216-A-4 Crib to support completion of the characterization at that site for the 200-MW-1 Operable Unit.
- **200-LW-1/2**
  - Submit 200-LW-1/200-LW-2 feasibility study and proposed plan.
- **200-IS-1**
  - Complete 200-IS-1 DQO process
- **BC Cribs**
  - Initiate BC Cribs Treatability planning and preparations

# Planned Activities

## Next 6 Months

### M-015-00

### Groundwater Remediation

- **200-ZP-1**
  - Continue preparing the 200-ZP-1 Feasibility Study
- **200-BP-5 OU**
  - Issue 200-BP-5 DQO Report
  - Stakeholder work shop to discuss DQO comments held May 17, 2006
  - Issue Drilling SAP for three groundwater wells
  - Revise 200-BP-5 Waste Control Plan
  - Began 200-BP-5 Work Plan June 8, 2006, began Work Plan preparation working on refining activities and schedule.
- **200-PO-1 OU**
  - Develop annotated outline for a supplemental plan

# Planned Activities

## Next 6 Months

### **M-016-00**

#### **Waste Sites Remediation**

- Obtain 200-UW-1 ROD in September 2006. EPA believes this goal is at risk unless a decision is made soon about packaging of cribs in or out of the ROD based on characterization and modeling issues and the ability to make a statement of protectiveness for remedies in the ROD.
- Remove 200-W-42 piping north of U-8 Crib to U-Plant, sample soil, and backfill as appropriate.

#### **Groundwater Remediation**

- Continue 200-West Area Carbon tetrachloride Source-Term Investigation (Vista Engineering).

# Issues

## Regulatory Issues (DOE-only opinion)

- Agreement is needed on key decision parameters to facilitate timely Records of Decision (e.g.; UW-1, BC Cribs).
  - RAOs, PRGs and Final Cleanup Levels reflective of current and anticipated future land and water use.
  - Comprehensive response to address area-wide contamination vs. “island, or source by source” specific.

# Issues

## Non-Regulatory Issues Potentially Impacting TPA Milestones

- **200-MW-1 Crib 216-A-4 Borehole High Contamination Levels** - Characterization of the crib was halted due to higher than expected contamination levels.
  - High Resistivity Resolution (HRR) surveys and geophysical logging were completed to support a path forward.
  - A replacement borehole, adjacent to the crib, is planned
  - EPA approval of a Sampling and Analysis Plan is needed, the SAP hasn't been delivered to EPA for review, yet.
  - A TPA change request to slip M-15-44B (FS/PP) transmitted to EPA.
- **M-015 Discussions** - Working parallel paths is causing resource constraints for completion of RI/FS work.

# **Hanford K Basins Closure Project**

## ***Tri-Party Agreement M-34 Milestone Review***



***U.S. Department of Energy,  
Richland Operations Office  
Third Quarter FY 2006***

***July 20, 2006***

Hanford K Basins Closure Project

## **TPA Milestone Status**

### **Remaining Milestones Due Fiscal Year 2006-2009**

Number	Milestone Title	Due Date	Status/Comments
M-34-33	Containerize K East Sludge, All K East Sludge is placed in containers a. Sludge containerization initiation b. Sludge containerization complete	a. 10/31/2004 b. 03/01/2005	a. Initiated on 10/31/2004 b. Work in Progress.
M-34-34	Complete removal of K East Sludge	05/2007	On schedule..
M-34-35	Containerize K-West Sludge a. All K West bulk sludge is placed in containers b. Complete final pass clean up	a. 07/2007 b. 01/2008	On schedule.
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.	12/2008	Under review. Categorical advance procurement authorization withdrawn. Advance procurement of Mobile Solidification System (MOSS) approved.
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	Requires completion of M34-34. FH will not be able to achieve.
M-34-31	Complete Sludge treatment This interim milestone will be complete following treatment and package of all sludge for disposal offsite.	11/2009	Under review. Categorical advance procurement authorization withdrawn. Advance procurement of MOSS approved.
M-34-00A	Complete removal of the K Basins and their contents 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	At risk. Requires completion of M-34-31.



## ***Significant Accomplishments and Status***

### **Project-wide**

- Received an External Independent Review conducted by DOE-HQ on baseline schedule and cost. Team recommended validation of baseline.
- Completed third quarter project risk review. Results support validity of September 2005 model to establish 90 percent confidence schedule and contingency requirements.
- Initiated studies aimed at identifying alternatives for earlier transition of 100K facilities to the River Corridor Contractor (RCC).
- Shipment of K Basin debris to the Environmental Restoration Disposal Facility (ERDF) continues.
- Work continues on facility and operational interfaces with the new 100-KR-4 groundwater pump and treat project.
- Work continues on facility and operational interfaces with the RCC's remediation plans for 100K Area including the 118-K burial ground.



## ***Significant Accomplishments and Status***

### **K East Basin**

- Obtained EPA approval of sand filter monolith disposition plan.
- Containerization of bulk sludge in the Center Bay, South Loadout Pit, and Dummy Elevator Pit has been completed. (see metrics)
- Completed modifications to the Vaughn sludge pumping system.
- Initiated testing of new "hat box" end effector and development of back flush process to reduce risks associated with K East Basin sludge containerization
- Completed design of "final Pass" sludge retrieval and removal system.

### **Transfer of Containerized K East Basin Sludge to K West Basin Containers**

- Completed Integrated Acceptance Test (IAT) of the Hose-in-Hose transfer system.
- Continued with preparations for DOE Operational Readiness Review (ORR).
- Obtained and staged onsite a backup generator for booster pump station power supply.



## ***Significant Accomplishments and Status***

### **K West Basin Debris Removal**

- Completed debris removal campaign ahead of targeted baseline schedule. (see metrics)

### **Legacy Fuel Management**

- Received analyses of "suspect fuel" from PNNL. Risks associated with this fuel have diminished.

### **K Basin Decontamination and Decommissioning**

- Qualified Process to achieve K East Basin End Point was received by RL for approval.



## ***Significant Accomplishments and Status***

### **K Basins Sludge Treatment**

- Initiated corrosion system 90 percent design review.
- Completed non-destructive assay system (Imaging Passive-Active Neutron [IPAN]) 100 percent design review.
- Completed K West Sludge Retrieval and Transfer System 30 percent design review.
- Prepared Data Quality Objective for characterization of treated and packaged sludge.
- Procurement of major equipment delayed by withdrawal of early procurement authorization. RL has provided early procurement authorization for the MOSS.
- FH's subcontract, BNGA, awarded subcontract for fabrication of MOSS.
- Submitted for DOE concurrence FH recommendations regarding natural phenomena hazards mitigation (seismic) per DOE's nuclear safety regulations.
- Contractor completed internal review of Preliminary Documented Safety Analysis (PDSA) per DOE's nuclear safety regulations.



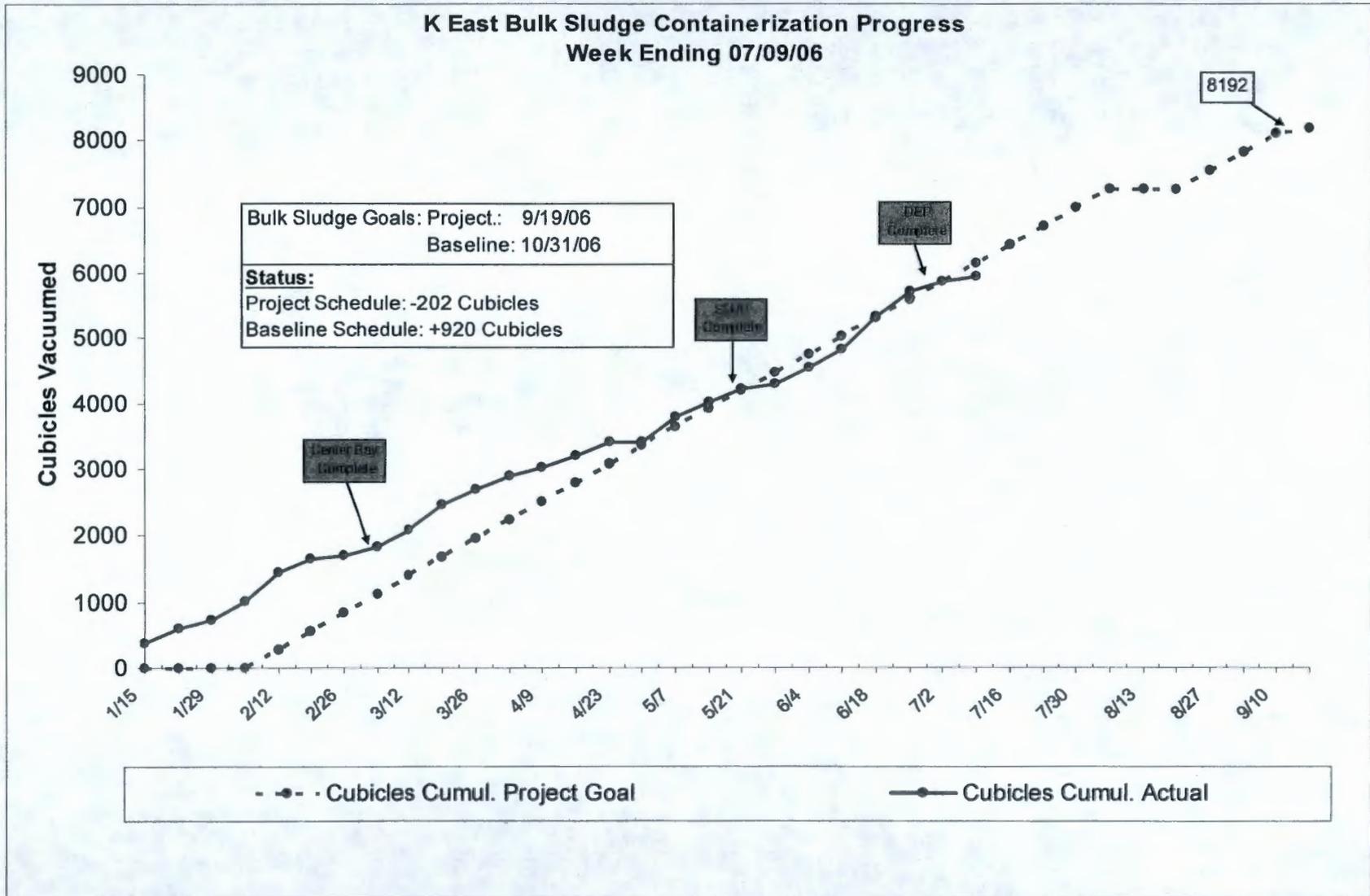
## ***Significant Accomplishments and Status***



*New “hat box” sludge vacuuming end effector to be tested at K East*

# K East Metrics

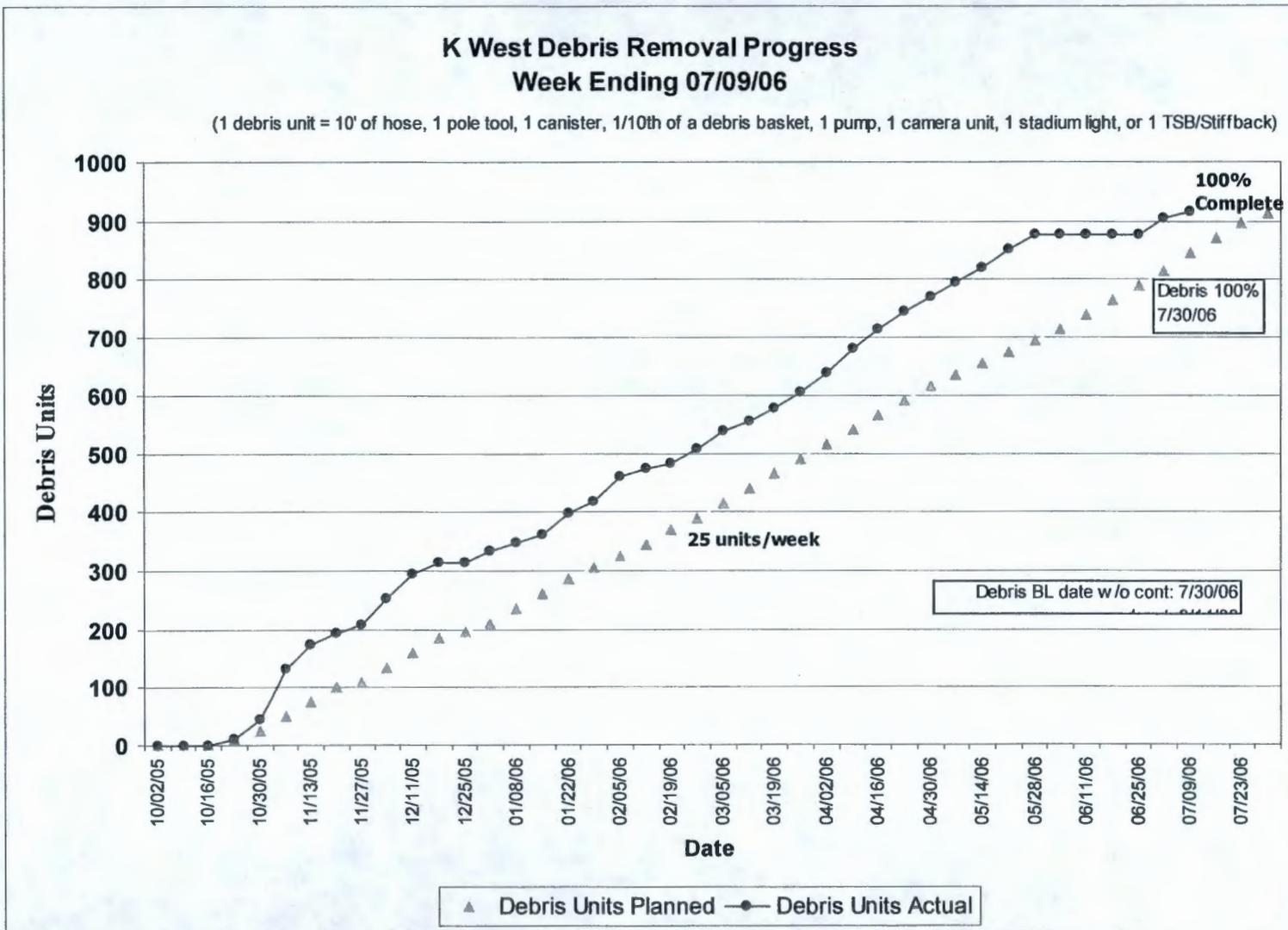
K East Bulk Sludge Containerization Progress  
Week Ending 07/09/06



# K West Metrics

**K West Debris Removal Progress  
Week Ending 07/09/06**

(1 debris unit = 10' of hose, 1 pole tool, 1 canister, 1/10th of a debris basket, 1 pump, 1 camera unit, 1 stadium light, or 1 TSB/Stiffback)



## ***Upcoming Activities (next 3 months)***

### **Project-wide**

- Manage current and emerging risks.
- RL review of FH K Basins acceleration proposal.

### **Fuel Removal**

- Collect and stage “found fuel” and scrap fuel for removal from K East Basin.
- Retrieve fuel fragments from 325 building.
- Work with Washington Closure Hanford (WCH) to receive fuel fragments of questionable enrichment from remedial action operations associated with burial grounds.

### **Debris Removal**

- Remove debris in K East Basin.
- Continue to ship debris waste to ERDF for disposal.



## ***Upcoming Activities (next 3 months)***

### **Sludge Retrieval and Disposition**

- Continue sludge pumping and containerization in the K East Basin.
- Continue pumping floor and pit sludge in K West Basin to the Tech View Pit.
- Complete Hose-in-Hose sludge transfer system operator training runs.
- Conduct Operational Readiness Review of the K East Basin to K West Basin Hose-in-Hose sludge transfer system.
- Complete Corrosion System 90 percent design review.
- Perform Retrieval and Transfer System 60 percent design review.
- Continue MOSS fabrication.
- Initiate RL review and approval of PDSA for sludge treatment.
- Complete preparation of remedial design reports and remedial action work plan: (a) IPAN system and MOSS and (b) corrosion.
- Prepare proposal for accelerating removal of sludge in the K West Basin and turnover of the basin to the RCCC.

### **K East Basin Decontamination and Decommissioning**

- Prepare proposal for accelerating the removal of the K East Basin and turnover of the site to the RCCC for remediation.



## **KBC Project Risk Status**

Risks are those factors associated with the Project, both existing and emerging, that can result in cost and schedule impacts. These risks are being managed by a Risk Mitigation Plan with the objective of minimizing cost and schedule impacts.

<b>Subproject</b>	<b>Major Remaining Risks</b>	<b>Emerging Risks</b>
<b>K East Basin</b>	<ol style="list-style-type: none"> <li>1. Re-deposition of sludge will necessitate additional vacuuming.</li> <li>2. Delays in sludge vacuuming caused by clogging end effectors and hosing.</li> <li>3. The waste designation and disposal pathway of approximately 100 boron trifluoride neutron detectors discovered in the K East Basin.</li> </ol>	<ol style="list-style-type: none"> <li>1. Change in demolition approach from that currently planned (i.e., grout and remove).</li> </ol>
<b>K West – HIH Transfer</b>	<ol style="list-style-type: none"> <li>1. Findings from ORRs take more time to reconcile than was allowed in the schedule.</li> <li>2. Mechanical problems encountered during operation.</li> </ol>	
<b>Sludge Treatment</b>	<ol style="list-style-type: none"> <li>1. Hazards associated with treatment process force redesign.</li> <li>2. Existing Hose-in-Hose transfer equipment will not work for balance of sludge at higher solids ratios.</li> <li>3. Change in seismic criteria to that which has been recently identified for the Waste Treatment Plant.</li> <li>4. Ability to maintain Sludge Treatment and Packaging System Equipment.</li> <li>5. Increased complexity of CVDF modifications.</li> <li>6. Withdrawal of categorical advance procurement authorization for major equipment.</li> </ol>	<ol style="list-style-type: none"> <li>1. Change in sludge treatment location and/or process.</li> </ol>
<b>General</b>		<ol style="list-style-type: none"> <li>1. Impacts of an approximate \$1.7M tax liability due to change in tax law interpretation.</li> </ol>



## ***Performance Measurement Terminology***

### **BCWS (Budgeted Cost of Work Scheduled)**

- BCWS represents the baseline budget for a scope of work over time. BCWS is normally combined with a term such as "Current Period" or "Fiscal Year to Date (FYTD)" to identify the time period the BCWS is associated with. BCWS is created by spreading the baseline cost estimate for a scope of work across its schedule activity duration based on the expected monthly level of activity. BCWS is the basis for the funding requested to perform a scope of work and is maintained through a documented change control process

### **BCWP (Budgeted Cost of Work Performed)**

- BCWP represents the value of the work actually accomplished during a period based upon its budgeted value or BCWS. BCWP is a measure of the value of work based upon the physical work reported complete per the baseline schedule status update

### **ACWP (Actual Cost of Work Performed)**

- ACWP represents the actual costs incurred to perform the work that was completed during a period and recorded as BCWP. For any particular period, ACWP includes accruals for costs not invoiced or booked associated with work that was performed during the period

### **SCHEDULE VARIANCE (SV)**

- SV represents the difference between the work actually accomplished and the work planned or scheduled during any particular time period. ( $SV = BCWP - BCWS$ ) A positive SV reflects an ahead of schedule situation while a negative SV reflects that work is behind the scheduled plan

### **COST VARIANCE (CV)**

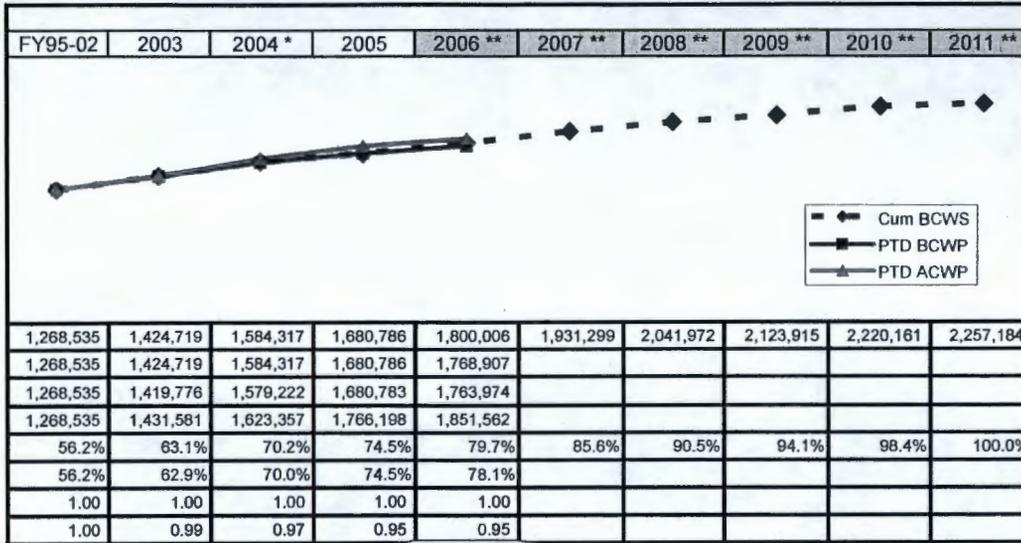
- CV represents the difference between the budgeted value of the work actually accomplished and the actual costs incurred to perform the work. ( $CV = BCWP - ACWP$ ) A positive CV reflects the work being accomplished for less than its budgeted value and a negative CV reflects the work costing more to complete than planned

### **BAC (Budget at Completion)**

- BAC represents the total baseline budget for a scope of work associated with either a fiscal year or life cycle. BAC is the summary of all monthly BCWS values for a scope of work within the fiscal year or life cycle. On a fiscal year end report the FYTD BCWS will equal the FY BAC

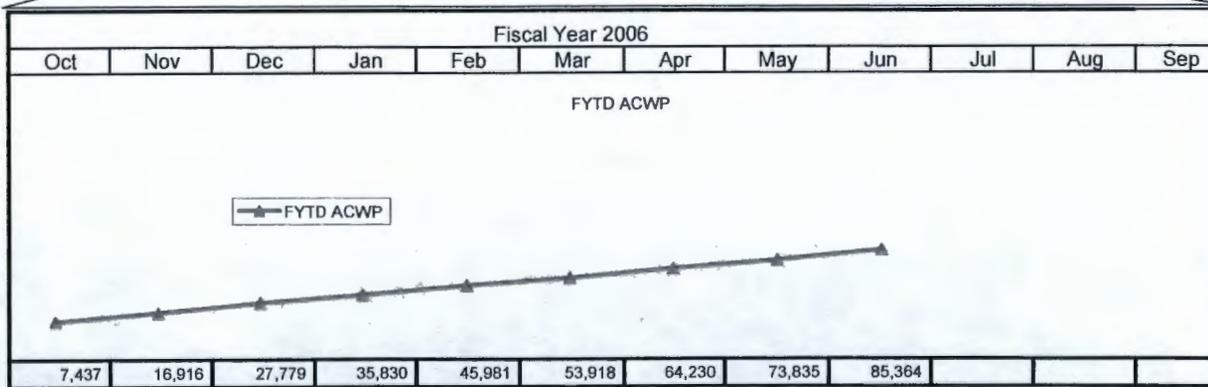


### KBC Project – Total Project Baseline



Life Cycle	
*BAC=	2,257,184
EAC=	2,342,596
BCWS=	1,768,907
BCWP=	1,763,974
ACWP=	1,851,562
SV=	(4,933)
CV=	(87,589)

Cum BCWS  
PTD BCWS  
PTD BCWP  
PTD ACWP  
% Sch  
% Cmpl  
SPI  
CPI



FYTD ACWP

\* PHMC Rebaseline Sludge Retrieval & Disposition Project and Decontamination & Decommission Project  
 \*\* FH KBC Project Level replan estimate (with contingency)



***KBC Stabilization and Disposition  
Project Performance through Third Quarter FY 2006***  
 (\$ in thousands)

		<u>FYTD</u>
<b>By PBS</b>		<b>ACWP</b>
PBS RL-0012	Safe and Compliant	\$ 12,831.1
PBS RL-0012	Sludge Retrieval and Disposition	\$ 57,343.6
PBS RL-0012	D&D Deactivation	\$ 3,517.4
PBS RL-0012	Closure Services	\$ 11,672.0
<b>TOTAL</b>		<hr/> <b>\$ 85,364.1</b>





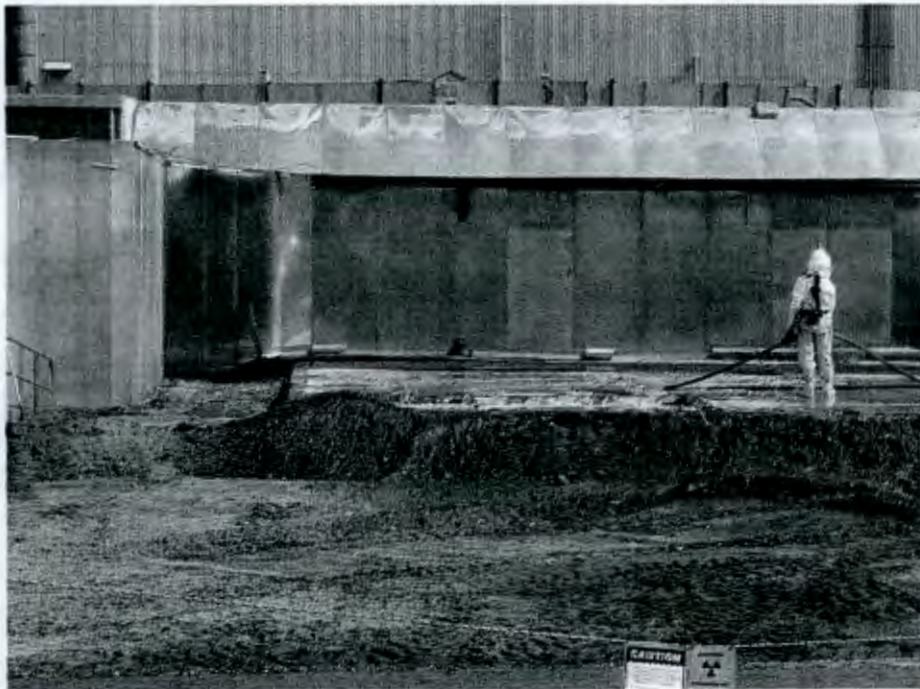
**June 11 - 232-Z Building Demolition Started**



**June 12 - Scrubber Cell Demolition**



**June 25 - Building demolition complete**



**July 6 - Washing the 232-Z slab**