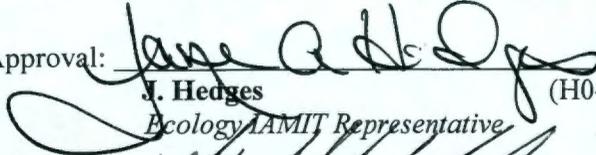
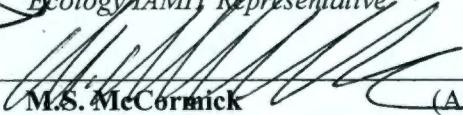
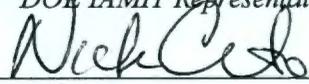


**Central Plateau  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
April 19, 2007**

Approval:  Date: 7-19-07  
**J. Hedges** (H0-57) *slw*  
*Ecology IAMIT Representative*

Approval:  Date: 19 <sup>July</sup> JUNE 07  
**M.S. McCormick** (A5-11)  
*DOE IAMIT Representative, Chairperson*

Approval:  Date: 19 <sup>July</sup> JUNE 07  
**N. Ceto** (B1-46) *slw*  
*EPA IAMIT Representative*

Minutes Prepared by:

 Date: 7-20-07  
**S.L. Moore** (H8-40)  
*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
Bohnee, G.	NPT		Moy, S.K.*	RL	A6-38
Bond, R.*	Ecology	H0-57	Niles, K.	OOE	
Boyd, A.	Ecology	B1-46	Noland, T.W.*	FH	H8-12
Cameron, C.E.*	EPA	B1-46	Ollero, J.*	Ecology	H0-57
Ceto, N.*	EPA	B1-46	Pak, P.M.*	RL	A5-11
Chalk, S.E.	RL	A7-75	Piippo, R.E.*	FH	H8-12
Charboneau, B.L.*	RL	A6-33	Price, J.*	Ecology	H0-57
Charboneau, S.L.*	RL	A5-11	Quigley, K.M.*	FH	H8-44
Cimon, S.*	ODE		Russell, R.W.*	ORP	H6-60
Cusack, L.*	Ecology	H0-57	Skinnarland, E.R.*	Ecology	H0-57
Dagan, E.B.*	RL	A5-11	Singelton, D.G.*	Ecology	H0-57
Donnelly, J.W.	WCH	H4-22	Sinton, G.L.*	RL	A6-38
Einan, D.R.	EPA	B1-46	Thompson, S.A.*	FH	H8-12
Engelmann, R.H.*	FH	H8-12	Tilden, H.T.*	PNL	K3-75
Frey, J.A.	RL	A5-13	Triner, G.C.*	FH	R3-62
Gadbois, L.E.*	EPA	B1-46	Vance, J.G.	FH	H8-12
Harris, S.	CTUIR		Whalen, C.L.*	Ecology	H0-57
Hedges, J.*	Ecology	H0-57	Williams, J.D.*	FH	H8-40
Henry, D.	OOE		Wise, B.K.	FH	B3-30
Hopkins, A.M.*	FH	H8-25	Wolf, A.	CTUIR	
Horst, L.	OOE		Wooley, T.A.	CH2M Hill	H6-03
Huffman, L.A.*	ORP	H6-60	Wollery, W.C.*	RL	A6-33
Jackson, D.E.	RL	A4-52	Administrative Record		H6-08
Jim, R.	Yakama				
Lobos, R.	EPA	B1-46			
Lutz, K.	HQ	A7-75			
Mandis, M.L.*	Ecology	H0-57			

\*Attendees

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 JUL 30 2007

**EDMC**

**Central Plateau  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
April 19, 2007**

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

M-083-22, Submit EE/CA for Approval – RL noted that the below grade EE/CA was not to be used to make final remediation decisions of below grade structures or hazardous constituents. The EE/CA's preferred alternative was surveillance and maintenance (S&M) as an interim measure until the above ground structures were torn down and the site turned over for Central Plateau remediation.

RL believes that, rather than going further with the EE/CA, the facility should perform S&M until the RODs for the M-015 series are issued. There is nothing from a constituent perspective that would delay the 2024 completion of the milestone (M-015). EPA asked why this information should not be included in the RI/FS. RL stated it was uncertain where the waste sites not already included in operable units (OUs) would land. Those waste sites already identified in OUs would be included in the RI/FS. It is unclear if there will be one OU for the PFP zone or if items fit into other OUs. EPA stated it would make sense to have one OU for the zone approach.

The issue is whether to include waste sites into existing OUs through the M-015 series, or to take a zone approach and complete the appropriate CERCLA documents after the M-015 milestones are done. When those clean up decisions are made it provides a basis to lock in on the approach. Ecology asked if we need a change to the M-015 milestones. RL stated they do not think so, but may need to strike some language in order to avoid issuing a PW-1 ROD amendment.

The language does support placing this information in an environmental analysis report as it does address all spills and contamination. Ecology asked how much contamination is contained under the slabs and RL responded it would be less than 100 grams of Pu. EPA stated that as far as they are concerned, every building out there is part of CERCLA or RCRA and will be cleaned up by 2024. RL noted that they can't characterize piping through sampling and analysis under the building until the building is knocked down.

Ecology asked where this information is being captured so nothing falls through the cracks. It is unclear which path we are using for cleanup; either M-083 or M-016. EPA stated that if there is a concern about meeting the 2024 milestone date, it has not been communicated to the regulators. RL needs to work on an Agreement In Principle and meet with the regulators to discuss.

Action: RL will meet with the regulators to address the concern that items at PFP will be appropriately mapped and that nothing will fall through the cracks.

M-083-41, Complete Transition and Dismantlement of the 216-Z-9 Crib Complex – CRL is continuing to do D&D activities and additional characterization. Re-baselining will be completed this summer and RL believes this milestone will be done ahead of schedule.

Accomplishments – Of the 17 gloveboxes planned to be cleaned out in FY 07 and FY 08, it is expected to have only one left for FY 08.

Leak tests have been completed on the first 76 of the 9975 shipping containers.

Planned Activities – Congress is wavering on their support for building a MOX facility. Additionally, Russia is indicating the plutonium vitrification may not align with the nuclear non-proliferation agreement. Ecology asked why that would be and RL explained it was because Russians may believe the material would be retrievable. Start of Pu shipments is affected by decisions on these two Pu disposition facilities.

Schedule and Cost Variance – Some D&D work cannot be completed until authorization to ship has been received and the inventory is shipped. Currently, the project has a positive schedule variance. Maintenance costs due to facility degradation is expected to increase.

Issues – Due to the growing maintenance needs additional money is being requested from HQ in FY 09.

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

The LDR summary report is in final concurrence and it appears the 4-30-07 date will be met. The ongoing Project Managers Meetings address status of the ongoing assessments.

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

Ecology asked how the amount of Retrievably Stored Waste retrieved (484 m<sup>3</sup>) compared to previous quarter. RL was not certain of the number last quarter, but they have retrieved about 2,000 m<sup>3</sup> for the year, which is a little lower than desired.

The Tentative Agreement (TA) is in the process of being transmitted, but Ecology noted that there may be significant changes to it. Ecology asked if there were changes to major milestones and RL responded in the affirmative. Ecology asked RL to send the TA and change package for them to review and they will turn it around quickly.

M-091-01 – Critical Decision package (CD-0) was formally sent to HQ for approval in March. Ecology asked for a copy of it, the transmittal letters, and any responses from HQ.

Action: RL will provide Ecology with copies of all CD packages, transmittal letters, and HQ's responses.

M-091-03 – The Project Management Plan (PMP) was submitted in September 2006 and RL noted that comments have not yet been received. EPA noted that, although their comments have not been transmitted does not indicate there are no comments. In fact, EPA stated they felt the document was inadequate and requested a meeting with the three parties to discuss. Ecology will schedule the meeting, an action is not required.

M-091-15 – The proposed change package (M-91-07-01) would complete an evaluation by 12-08; based on the results of the evaluation a schedule for this work would be established. The overall treatment schedule will be set by M-016-93.

Ecology asked if the Tentative Agreement (TA) on this change package is not approved would the criticality concern stop work. RL stated that certain boxes and drums do have problems with underlying assumptions. A team of experts was brought in to determine how to protect the worker from criticality when information is not available to confirm assumptions in a criticality evaluation. RL believes there is a low risk of this happening, as barriers are in place.

Ecology noted that the presentation did not identify this issue and wondered, if the question had not been asked, would this information have been shared. RL stated that the issue was not brought up until after the end of the reporting quarter and therefore was not included in the presentation.

Action: Ensure RL provides up to date information in their presentations.

Performing other work will not have an effect on the certification or treatment activities, but will affect actual retrieval work. Ecology asked if there are drums that have been moved to CWC that could be at risk. RL stated the risk is encountered when the drums are being handled while the assay is being performed. RL is under the assumption that drums at CWC are analyzed the same way as others in the field. As RL prepares to start work in 12B and trench 11 in 4B, these assumptions will be tested as the drums are placed horizontally.

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

RL asked the National Spent Nuclear Fuel Program to perform an assessment to support the direct disposal assessment. The report is finished and was issued this month; no increased dose or impact was identified. Ecology requested a copy of that assessment. Action: RL will provide Ecology with a copy of this assessment report.

Ecology asked if the waste codes would be removed upon disposal at Yucca Mountain and RL responded yes. DOE is using the regulatory positions under RCRA as all legal remedies need to be exhausted before it is assumed Nevada would accept the capsules. Ecology stated they will not be able to close out the milestone until a path forward has been developed. RL wants to meet with Ecology and provide them information on the viability alternative. RL wants to be sure Ecology is comfortable with the concept. Ecology stated that, at this point, they are in no position to say there will not be problems

in closing this milestone. EPA asked how the capsules will be stored until they are shipped to Yucca Mountain. RL is looking at several alternatives.

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

Ecology stated the Waste Treatment and Immobilization Plant 2+2 Permit Modification went out for internal review; a meeting is scheduled for early May.

The IDF permit modification will open for public comments on April 23, 2007. EPA asked if the M-020 milestones included all units subject to dangerous waste regulations. RL noted that M-020-00B covers "everything else" that may not have been identified in the milestones or in the permit. Ecology asked if "everything else" had been defined. DOE stated that have submitted permit documentation for all units; the last one is for the 241-CX tank system. RL will ensure all units have been captured.

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

EPA wanted the minutes to reflect that they did not get any feedback as to whether or not their comments to the presentation were incorporated. Also, they were not provided a copy to comment on in a timely manner. The regulators' expectation is that their comments will be included verbatim unless contact is made to discuss changes.

RL noted there is a path forward for the 200-SW-1 and 200-SW-2 RI/FS Work Plan (an RI/FS work plan that will rely on 2 phases of sampling plans). It was pointed out that this document has been in revision for two years. RL stated this was due to personnel changes on all sides (Ecology did not agree with RL's statements about why the work plan revision took 2 years). A meeting is scheduled for this afternoon to discuss this issue.

A lot of emphasis has been placed on M-024 well drilling for RI/FS work. The current plan for this FY is to drill 123 groundwater wells. EPA commented they would like to have a schedule of when the wells are going in.

Action: RL will provide the regulators with a schedule of wells to be drilled.

RL noted that groundwater vadose zone work has significantly increased the last couple of years. The regulators agreed and they are cognizant of this. EPA noted that the project needs to address the Tc-99 issues at 200-ZP-1 as they are due to be completed by September 2007. RL noted that the Battelle personnel who manage groundwater monitoring work will be transferring to FH to do the same work under the FH contract.

The 200-UP-1 pump and treat work is in the baseline to restart. RL was planning on preparing a explanation of significant difference (ESD), but Ecology stated the project could restart without an ESD. There will be an adjustment on the flow rate from 200-UP-1 when water from T-Plant is brought in. Concentrations of TC-99 are much higher in the T-Plant area than in the 200-UP-1 area.

Issue – Ecology understands that RL intends to request a change to the M-015 milestone date for the 200-UP-1 RI/FS. They stated that if RL wishes to change M-015 milestone dates, they need to bring the issue up at the IAMIT. There was discussion about the letter RL put into the Administrative Record on Agreements and Assumptions for the Central Plateau Waste Site (07-AMCP-0109, dated 3-15-07).

RL stated they wanted to document the fact that there has been a significant increase in the amount of characterization to be incorporated into the baseline. The regulators believe this can be addressed by applying resources rather than slipping the date. RL would like to have an open conversation on the issue.

RL noted that drilling boreholes is a critical path activity to meet the M-15 major milestone; it is extremely time consuming to grab samples as they drill. Ecology stated that slips in the M-15 drilling schedule affect completion of RI/FS document, and consequently impact remedial action schedules.

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

M-034-35 – RL spoke to the budget committee regarding two important assumptions: 1) need to be able to mobilize the concentration. The Hose-in-Hose is targeted to 1 to 2% concentration that is difficult to maintain; 2) any abnormal process chemistry might encounter some high viscosity in the sludge. More testing is needed to be sure the sludge can be obtained; also additional testing will be needed if we encounter abnormal conditions. Meetings are conducted on a weekly basis to status the regulators on the integrated schedule.

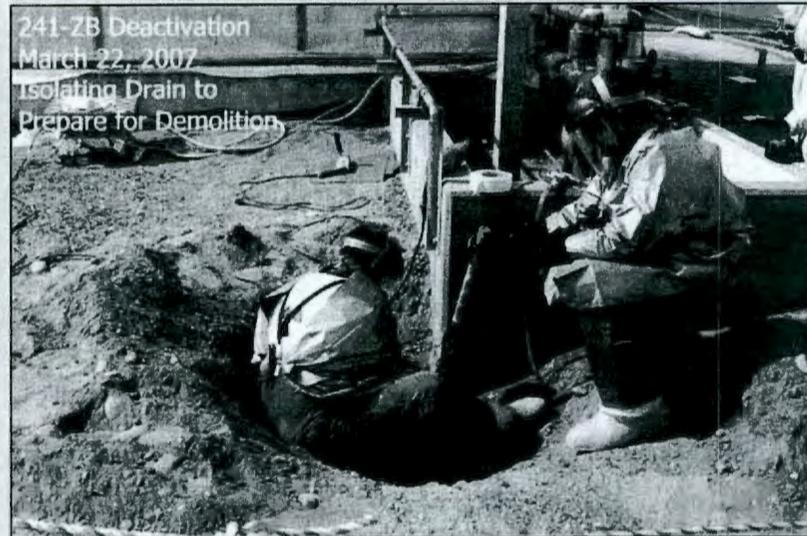
Final pass vacuuming at K West is about 70% complete; sludge transferred from east to west is about 48% complete. Some rigorous recovery actions have been taken. All vibrations of the pumps are within a stable range.

Approximately 21 m<sup>3</sup> of sludge has been transferred to containers. Meeting the 5-31-07 date is more obtainable today than it was last month. The Critical Decision (CD) 3 package is under review. Major procurement and construction activities have been placed on hold until that review is complete.

EPA asked how these delays affect getting out of KW. RL stated there is direct impact and it will be discussed in the 100K integrated analysis. RL also stated they are not looking at other options as they have determined that the current path is the best as there is less technical uncertainty with it. The temperature and pressure levels have been lowered; from a safety perspective this is the best decision. It will lengthen the schedule by three months, but RL is applying the right and timely risk mitigation activities. RL stated the project will be fully funded for FY 08 and FY 09. One budget impact in FY 08 is that the Multi Canister Overpack projects were pushed out to FY 09. Ecology

asked if there were any issues associated with approval of this waste stream to go to WIPP and coordination with the WAC requirements. RL stated they would include the new WIPP requirements in the SAP. EPA wanted to note that they are very frustrated with the delays.

# PFP Closure Project TPA Milestone M-083



**April 2007  
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 (as of 3/31/07)

TPA No.	TPA Commitment Date	Milestone Title	Status
M-083-22	9/30/08	SUBMIT EE/CA FOR APPROVAL	Final Submittal Completed (sub-grade structures)
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	<b>Complete</b>
M-083-42	9/30/11	COMPLETE TRANSITION AND DISMANTLEMENT OF THE 241-Z WASTE TREATMENT FACILITY	Ahead of Schedule

# Accomplishments

- **232-Z Plutonium Incinerator Facility Project was selected as Project of the Year by the Columbia River Basin Chapter of the Project Management Institute**
  - Work was completed in July 2006 – two months ahead of a Tri-Party Agreement milestone
- **Completed 241-Z Ready for Demolition**
- **Continued equipment cleanout of 234-5Z gloveboxes**
  - Completed cleanout of 4 out of 17 planned for FY07-08
- **Completed nondestructive analysis (NDA) of the 216-Z-9 glovebox**
- **Approved HNF-32545, 216-Z-9 Soil Removal Structures Supplement to the Data Quality Objectives for the Plutonium Finishing Plant Above-grade Structures**
- **Established capability to perform 9975 shipping container maintenance and leak tests**

## **Planned Activities**

- **Demolish 241-Z Waste Treatment Facility**
- **Continue equipment cleanout of 234-5Z gloveboxes**
- **Continue planning/characterization of Z-9 Crib Facilities**
- **Perform maintenance and leak tests for first 100 9975 shipping containers**

# Schedule / Cost Performance

## Fiscal Year to Date Status (through March)

	Fiscal Year to Date				
	BCWS	BCWP	ACWP	SV\$	CV\$
RL-0011 - Nuclear Material Stabilization & Disposal (PFP)	43,764.3	52,624.1	44,245.9	8,859.8	8,378.2

## Emerging Items

- Acceleration of D&D work
- Maintaining Safe and Compliant PFP
  - Fire System Deficiencies
  - Ventilation System Maintenance
  - HVAC Filter Testing
  - Special Projects (Spray Pan Refurbishments)

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

### **FYTD Schedule Variance: \$8.9M:**

- **Favorable schedule variance is attributed to accelerated progress on 234-5Z glovebox cleanout and associated apportioned support activities.**

### **FYTD Cost Variance: \$8.4M:**

- **Favorable cost variance is associated with efficiencies in glovebox planning and cleanout, a more efficient approach to 241-Z cell stabilization activities, apportioned support activities, and a March variance distribution. Positive variance is partially offset by increased maintenance activities, supply fan spray pan refurbishment, and HVAC recovery actions.**

# Issues

## Regulatory Issues:

- None

## Non-Regulatory Issues:

- Growing number of maintenance needs and facility and system degradation



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**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
April 19, 2007**

Actions Planned for Next Six Months

- Continue the monthly PMMs
- Continue working on storage assessments of Potential Mixed Waste
- Transmit CY2006 LDR Summary Report to Ecology and EPA by April 30, 2007
- Begin Primary Document Process



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**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
April 19, 2007**

Monthly PMMs continue to be an effective tool for dialogue and as a venue to resolve emerging issues

- Emerging issues or concerns are addressed during the PMMs as “Hot Topics”
- ORP has identified that Cathy Louie will be assisting Woody Russell as the ORP POC for LDR



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**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
April 19, 2007**

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

**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
Quarterly Presentation  
April 19, 2007**



**Greg Sinton, RL Project Lead  
Cathy Louie, ORP Project Lead**

**Deborah Singleton, Ecology Lead**

Tri-Party Agreement M-91 Milestone Series  
Quarterly Presentation

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

April 19, 2007

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

### Significant Accomplishments of Last Three Months:

- Completed workshops w/Ecology to develop responses to Ecology comments on the M-91 PMP and provide a plan for updating the PMP: Provided response to Ecology March 12.
- Retrieved 484 m<sup>3</sup> of RSW since the last quarterly report (1/9/07 – 4/16/07), bringing the total to 5,292 m<sup>3</sup>.
- Reached Tentative Agreement at the Project Manger level in March on some proposed clarifications and modifications to the M-91 milestones. The formal Tentative Agreement transmittal of signatory approval is currently in concurrence.

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

## Significant Accomplishments of Last Three Months:

- DOE presented plans to Ecology for improving performance in TRUM certification: Implementation on-going.
- Certified 122 cubic meters of M-91-42 TRU/M (1/5/07-4/13/07) bringing the total volume certified since 12/31/02 to 2509 cubic meters.
- Treated 147 m<sup>3</sup> of M-91-42 MLLW in the January through March period, bringing the total to 5241 cubic meters for M-91-42 MLLW treated as of 3/31/07.

M-91 Status Summary 4/17/07

Milestone	Due Date(s)	Status Summary	Comments
<p><b>General Comments</b></p>			<p>A. Status of dispute on Change Package M-91-06-01:                      The dispute was split into two parts. The Statement of Dispute (SOD) for the M-91-42 TRUM certification portion of the dispute was submitted November 27, 2006. Ecology issued a Director's Determination (DD) on January 2, 2007, on the portion of the dispute that was elevated to the IAMIT by the SOD. The milestones were unchanged by the DD. DOE is pursuing means to improve performance in the TRUM certification area as directed by the DD. The remaining portion of the dispute was extended at the Project Manager level until March 15, 2007, but has been allowed to expire. DOE does not intend to submit a SOD to elevate that portion of the dispute to the IAMIT level. Discussions during the Project Manager level dispute have resulted in a new draft change package M-91-07-01. The draft language tentatively agreed to at the Project Manager level on March 15 is currently in Ecology and DOE management review.</p> <p>B. In this table "On-Schedule" means it is anticipated the milestone will be met.</p>
<p><b>M-91-00:</b>                      Major Milestone for acquisition of needed facilities/capabilities for mixed and suspect mixed MLLW, and TRUM and suspect TRUM.</p>	<p>TBD</p>	<p>On Schedule</p>	<p>Draft change package M-91-07-01 is in DOE and Ecology review. It includes clarifications and changes to definitions in M-91-00.</p>

<p><b>M-91-01:</b> Facility/Capability Interim Milestone (RH and/or large container TRUM)</p>	<p>6/30/12</p>	<p>At Risk  Discussions with Ecology will continue related to the timing of these capabilities</p>	<ul style="list-style-type: none"> <li>• Engineering Study and Functional Design Criteria were delivered to EPA and Ecology 9/29/06 (06-AMCP-0311).</li> <li>• Briefed Ecology and EPA on the FDC/ES submittal on October 11, 2006.</li> <li>• Comments on the FDC/ES were received from Ecology on November 13, 2006, and responses were provided December 13, 2006.</li> <li>• Additional evaluation of alternatives to meet needed capabilities is ongoing.</li> <li>• Preparing necessary documentation to gain approval for continuation of development of capabilities at T-Plant: The CD-0 package was formally sent to HQ for approval March 26, 2007.</li> </ul>
<p><b>M-91-03:</b> Submit TRUM/MLLW PMP</p>	<p>12/31/03 (COMPLETE), 12/28/06 (Submitted) 3/31/09, 3/31/13</p>	<p>On Schedule</p>	<p>Ecology comments on the PMP were received February 8, 2007. Comment responses with a plan for updating the PMP were provided to Ecology March 12, 2007, in accordance with the schedule in Figure 9.1 of the TPA Action Plan. The plan proposes that the updated PMP addressing comments and revisions based on the change package currently being developed (M-91-07-01) will be submitted 90 days after a Tentative Agreement on change package M-91-07-01 is reached, or August 30, 2007, whichever is earlier. Subsequent revisions are proposed annually in June of each year.</p>
<p><b>M-91-05-T01:</b> Complete RH and or large TRUM retrieval/processing Engineering Study/FDC</p>	<p>12/31/07</p>	<p>Complete</p>	<p>Submitted FDC/ES 9/29/06 (06-AMCP-0311). This met the Target date a year early. Comments on the FDC/ES were received from Ecology on November 13, 2006, and responses were provided December 13, 2006 (AMCP-0060).</p>

<b>M-91-12:</b> CH-MLLW Thermal Treatment (600 m <sup>3</sup> cumulative)	11/16/07	On Schedule	595 cubic meters of thermal treatment waste have been treated. Since enough waste has already been shipped to meet the M-91-12 milestone, future thermal treatment volumes above the 600 cubic meters to be applied to M-91-12 will be applied to the M-91-42 MLLW treatment requirements. Treatment of the last 5 cubic meters needed to meet the milestone is expected to occur by April 30, 2007.
<b>M-91-12A:</b> CH-MLLW Thermal Treatment (240 m <sup>3</sup> )	9/30/05	COMPLETE Met 8-16-05	Completion letter (05-AMCP-0420) sent to Ecology 9/27/05
<b>M-91-15:</b> RH MLLW and/or Large Size MLLW Treatment	6/30/08	At Risk	<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>• Engineering study/FDC submitted 9/29/06.</li> </ul> <p>Approval of the proposed M-91-07-01 change package would resolve the current identified risk to meeting this milestone</p>
<b>M-91-40:</b> Retrieval and designation of CH-RSW (regardless of size)	7200 m <sup>3</sup> cumulative by 12/31/07 and annual retrieval volumes through 2010. Complete retrieval in T-4 by 12/31/06. Plus various other requirements	On Schedule  Met 4700 level in November 2006	<ul style="list-style-type: none"> <li>• Completed retrieval of 4C Trench 4 waste 11/21/06</li> <li>• Completed retrieval of 4700 cubic meters 1 month early (11/30/06)</li> <li>• The July-Sept quarterly report was sent to Ecology December 19, 2006. October-December report is in RL concurrence.</li> <li>• All four SAPs have been approved</li> <li>• The 4B Soil Vapor Extraction (SVE) Workplan was approved by Ecology December 13, 2006. This allowed the SVE work at 4B trench 7 to get started on December 18, 2006 to help maintain progress on concurrent 4B/4C retrieval plans.</li> <li>• 5292 m<sup>3</sup> of RSW retrieved as of 4/16/07.</li> </ul>

<p><b>M-91-41:</b> Retrieval and Designation of RH RSW (regardless of size)</p>	<p>See comment column</p>	<p>On Schedule (Planning)</p>	<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> <li>• Timing of RH retrieval is modified in the proposed M-91-07-01 change package to align with availability of capabilities to process the waste.</li> </ul>
<p><b>M-91-42:</b> Treatment of non-large size CH-MLLW and certification of non-large size CH TRUM</p>	<p>Annual treatment requirements through 12/31/09 (MLLW), 12/31/11 (TRUM)</p>	<p>On schedule For MLLW treatment though this could be impacted if funding above the FY08 President's Budget level is not appropriated, Behind schedule for CH TRUM certification</p>	<ul style="list-style-type: none"> <li>• Met the MLLW 12/31/06 milestone (4890 cubic meters) 4 months early (Aug 29, 2006). Completion letter sent to Ecology October 27.</li> <li>• 5241 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 3/31/07. (6520 m<sup>3</sup> required by 12/31/07)</li> <li>• Shipped 4 cubic meters of mercury bearing waste to Permafix for treatment. This is one of the "problem MLLW streams" and will serve to demonstrate the disposition capability.</li> <li>• Shipped 2077 cubic meters of M-91-42 TRU/M and had accumulated a backlog of 432 cubic meters of certified but not shipped TRU/M bringing the total certified TRU/M counting toward M-91-42 to 2509 as of 4/13/07.</li> <li>• A briefing w/Ecology on TRU certification rate improvements was held March 29, 2007. Implementation is on-going.</li> </ul>
<p><b>M-91-43:</b> Designation and treatment of RH and or Large Size MLLW</p>	<p>See Comment Column</p>	<p>At Risk</p>	<ul style="list-style-type: none"> <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>• Pursuing PEcoS capability to process containers larger than 10 cubic meters. Currently planning shipment of a large container to test/demonstrate the capability.</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	At Risk	<ul style="list-style-type: none"> <li>Existing requirements include: a) Designate all RH and large size Transuranic waste in storage by 12/31/12.</li> <li>b)Begin treating RH and/or large container TRUM at a minimum rate of 300 cubic meters per year by 6/30/2012</li> <li>Resolution of the risk to meeting this milestone is tied to resolution of M-91-01.</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>2006 report was delivered to Ecology 9/29/06 (06-AMCP-0314).</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	Complete	<ul style="list-style-type: none"> <li>Report Delivered to EPA and Ecology 9/29/06 (06-AMCP-312)</li> <li>Briefing to EPA and Ecology on workplan October 11, 2006</li> </ul>

Fn: M-91 PMM Status table 4-17-07

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

**S.K. Moy**

**U.S. Department of Energy  
Richland Operations Office**

**April 19, 2007**

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

## Actions Planned for Next Six Months

- Continue certification and shipment of transuranic waste to WIPP (two shipments per week) and treatment of MLLW. Implement actions to improve certification performance.
- Obtain approval of the Tentative Agreement (TA) on M-91 Change Package M-91-07-01 and complete the public comment process.
- Continue thermal treatment at Permafrix: Meet M-91-12 early.
- Submit SAP quarterly reports
- Incorporate plans consistent with M-91-07-01 TA in the M-91 PMP update and complete the PMP update to include resolution of Ecology comments.

## 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 by the National Spent Nuclear Fuel Program (Idaho) to support the direct disposal assessment
- The computer model is based on the model used for the Yucca Mountain Environmental Impact Statement
- The performance assessment model simulated release of capsule contents over a period up to a million years

# Tri-Party Agreement Milestone M-92-05

## Quarterly Status

- Performance assessment has been issued and shows :
  1. No increase in repository dose by the addition of the radioactive cesium and strontium capsules to the existing inventory of high-level waste and spent nuclear fuel waste packages.
  2. The five RCRA metals (Ag, Ba, Cd, Cr, & Pb) are below EPA drinking water standards at the site boundary, e.g., 18km from the repository facility. The data will be used to support the basis for removal of federal waste codes as the metals do not present a risk to human health and the environment.
  3. Performance assessment data indicate the feasibility of direct disposal of the capsules.
- Performance assessment results are caveated as newer modeling codes will be available when the license is issued.

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

- Next Steps
  1. Confer with Ecology to close TPA M92-05 using the Performance Assessment Report and the submittal of proposed milestones leading to shipment of the capsules to the repository.
  2. Transmit notice of completion of M92-05 by June 30, 2007.



## M-20 Milestone Review Permits and Closure Plans

Presented by:

Tony McKarns  
U.S. Department of Energy

April 19, 2007

### Closure Plan Milestone Status

<b>M-20</b>	<b>12/31/08</b>
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Complete when M-20-54 is completed 12/31/08.

<b>M-20-00B</b>	<b>12/31/08</b>
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Complete when M-20-54 is completed 12/31/08.

<b>M-20-54</b>	<b>12/31/08</b>
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Submit 241-CX-70 Storage Tank, 241-CX-71 Neutralization Tank, 241-CX-72 Storage Tank, 241-CX Storage Tank Closure/Postclosure Plan to Ecology in coordination with the 200-IS-1 Tanks/Lines/Pits/ Boxes Operable Unit Work Plan Feasibility Study scheduled under M-13-00M.

Current Milestone Status:

On schedule.



## Hanford Facility RCRA Permit Status

- The Hanford Facility RCRA Permit expired on 9/27/04. Ecology scheduled to provide a pre-draft Permit, Rev. 9 to the Permittees for review and comment in July 2007.
- The Permittees continue to operate under RCRA Permit Revision 8B, until a new Permit is in effect.



## Accomplishments – last 3 months

- Ecology approved closure certification for 241-Z Storage and Treatment Tanks on 2/22/07
- Ecology denied closure certification for the 1325-N Liquid Waste Disposal Facility on 1/19/07
- Ecology approved Part A Form for the Double-Shell Tank System & 204-AR Waste Unloading Station on 3/1/07
- Ecology held Public Comment Period (10/9/06 – 1/5/07) for the Waste Treatment and Immobilization Plant 2+2 Permit Modification
- Ecology provided comments on the draft 400 Area WMU Part B permit application 3/2/07
- DOE submitted quarterly Class 1 modifications for quarter ending 3/31/07
- DOE submitted 241-Z Part A Form stamped closed 2/22/07, with quarterly Class 1 modifications
- DOE submitted the Annual Noncompliance Report pursuant to Permit Condition I.E.19 to Ecology on 2/20/07
- DOE transmitted the Annual Dangerous Waste Report to Ecology on 2/28/07



## Planned Actions – next 6 months

- Ecology informally respond to permit documentation changes related to groundwater for LERF, 183-H, and 300 APT
- Ecology prepare responsiveness summary and issue Permit conditions for the Waste Treatment Plant 2+2 Permit Modification
- Ecology issue agency initiated IDF permit modification by 4/23/07 for public comment to defer specific permit requirements pertaining to management of dangerous waste (building emergency, personnel training, landfill monitoring and inspection)
- Ecology incorporate 224-T TRUSAF as a closure unit in the Permit
- Ecology review/approve Class 1 modifications for quarter ending 3/31/07
- Ecology approve the clean closure certification for the 305-B Storage Facility
- Ecology to provide Permittees second pre-draft of Revision 9 for comment by 7/07



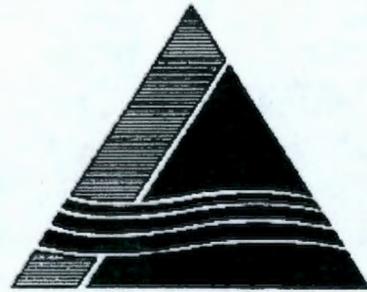
## Planned Actions – next 6 months

- DOE submit 224-T TRUSAF Closure Plan, Part A Form, and SEPA Checklist
- DOE submit 1706-KE Waste Treatment System Closure Plan, Part A Form, and SEPA Checklist
- DOE submit certified 400 Area WMU Part B permit application
- DOE request second temporary authorization for 400 Area WMU
- DOE submit CWC and WRAP Permit documentation updates to Ecology
- DOE submit recertified WESF Part B permit application
- DOE submit quarterly Class 1 modifications for quarter ending 6/30/07
- DOE submit revised sections of the DST Rev. 1 Part B application



# CENTRAL PLATEAU MILESTONE REVIEW

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



*Tri-Party Agreement*

**U.S. Department of Energy  
U.S. Environmental Protection Agency  
State of Washington, Department of Ecology  
2nd Quarter FY07  
April 19, 2007**

# Milestone Status

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

# Milestone Status

TPA Number	Commitment Date	Milestone Title	Status
<b>M-015-00 and M-015-00C</b>			
M-015-17A	11/30/10	Submit 200-UP-1 RI/FS and PP	-----
M-015-21A	10/31/10	Submit 200-BP-5 FS and PP	-----
M-015-38B	05/31/09	Submit 200-CW-1 Revised FS and PP	-----
M-015-40D	04/30/08	Submit 200-CW-2, 200-CW-4, 200-CW-5, and 200-SC-1 Revised FS and PP	On Schedule
M-015-42D	12/31/11	Submit 200-TW-1 and 200-PW-5 Revised FS and PP	-----
M-015-42E	12/31/11	Submit 200-TW-2 Revised FS and Revised Recommended Remedies	-----
M-015-43D	12/31/10	Submit 200-PW-2 and 200-PW-4 FS and Revised Recommended Remedies	-----
M-015-44B	12/31/08	Submit 200-MW-1 FS and PP	On Schedule
M-015-45A	10/31/06	Submit 200-PW-1OU Remedial Investigation Report	COMPLETE
M-15-45B	9/30/07	Submit 200-PW-1, 200-PW-3, and 200-PW-6 FS and PP	On schedule
M-015-46B	12/31/11	Submit 200-LW-1 and 200-LW-2 FS and Recommended Remedy	-----
M-015-48B	9/30/07	Submit 200-ZP-1 FS and PP	On Schedule

# Milestone Status

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

# Milestone Status

TPA Number	Commitment Date	Milestone Title	Status
<b>M-024-00</b>			
M-024-57J	12/31/06	DOE Shall Install a Cumulative of 60 Wells by 12/31/06	COMPLETE
M-024-57M	12/31/07	DOE Shall Install a Cumulative of 75 Wells by 12/31/07	Ahead of Schedule
M-024-57N	12/31/08	DOE Shall Install a Cumulative of 90 Wells by 12/31/08	Ahead of Schedule
M-024-57O	12/31/09	DOE Shall Install a Cumulative of 105 Wells by 12/31/09	-----
M-024-00	TBD	Complete Well Installations in Accordance with RCRA/CERCLA Requirements	-----

# Significant Accomplishments

## M-13-00

### Supplemental Characterization

- Completed Draft A RI Work Plan for supplemental characterization (M-13-50)

### 200-BP-5

- Completed last of three wells for investigation of uranium and Tc-99 plumes
- Completed transects for 22 high resolution resistivity lines in the B/BX/BY WMA

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

- Phase I Organic Vapor Sampling Report in final peer review and clearance

# Significant Accomplishments

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

### 100-HR-3

- Completed a total of 7 chromium source/investigation wells (awaiting well acceptance)

### 100-BC-5

- High Resolution Resistivity Correlation Draft A DQO and SAP in DOE review

### 100-KR-4

- Activated new pump and treat system using four extraction wells and two injection wells

### 100-NR-2

- Completed phyto-remediation fence
- Completed injection of apatite barrier

# Significant Accomplishments

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

### 200-BP-5

- Installed three characterization wells

### 200-ZP-1

- Installed three characterization wells
- Installing one Tc-99 characterization well
- Initiated planning to connect two T Farm wells to 200 Area Effluent Treatment Facility

### 200-PW-1

- Activated the active vapor extraction system; continued operation of passive system
- Preparing responses to EPA and ODOE comments on the 200-PW-1, -PW-3, and -PW-6 draft RI report

### 300-FF-5

- Commenced independent testing of STOMP input file

# Significant Accomplishments

## M-16-00

- Approved SAP for 241-U-361 Settling Tank
- Completed characterization sample analysis for 200-CW-3 waste sites 2, 3, 5, and 7.

## M-24-00

- Completed 14 of 15 CY 2007 wells
- Completed 4 of 15 CY 2008 wells

# **Significant Accomplishments**

## **Other Items of Interest**

### **Well Decommissioning**

- Decommissioned 59 wells

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

(\$ in thousands)

WBS	Scope Description	BCWS	BCWP	ACWP	SV	CV	BAC
4.1.7.1	Groundwater/Vadose Zone Integration	4551.9	3720.1	3450.1	(831.8)	270.0	9429.6
4.1.7.2	Recharge Control	112.8	16.1	69.8	(96.7)	(53.7)	125.4
4.1.7.3	Well Management	1776.4	2386.8	3308.5	610.4	(921.7)	3296.0
4.1.7.4	Project Management	2874.1	2874.1	2102.0	0.0	772.1	5982.8
4.1.7.5	Integrated Field Work	2902.1	2761.6	2899.3	(140.5)	(137.7)	5910.9
4.1.7.6	Groundwater Monitoring & Perf. Assessments	5684.6	5345.7	6362.4	(338.9)	(1016.7)	10972.5
4.1.7.10	100-BC-5 Operable Unit	59.3	58.9	25.9	(0.4)	33.0	123.8
4.1.7.11	100-KR-4 Operable Unit	2408.4	3027.8	4183.2	619.4	(1155.4)	5098.6
4.1.7.12	100-NR-2 Operable Unit	1319.9	1259.5	1265.0	(60.4)	(5.5)	2908.6
4.1.7.13	100-HR-3 Operable Unit	2182.1	2042.9	1729.0	(139.2)	313.9	5016.2
4.1.7.14	100-FR-3 Operable Unit	67.0	66.5	30.3	(0.5)	36.2	139.8
4.1.7.20	200-BP-5 Operable Unit	1016.0	1076.5	1134.4	60.5	(57.9)	2042.8
4.1.7.21	200-PO-1 Operable Unit	379.4	294.1	304.0	(85.3)	(9.9)	939.8
4.1.7.22	200-UP-1 Operable Unit	297.8	288.9	241.8	(8.9)	47.1	872.4
4.1.7.23	200-ZP-1 Operable Unit	2961.0	2416.4	1707.0	(544.6)	709.4	5396.1
4.1.7.24	200-ZP-2 Operable Unit	253.1	325.1	290.4	72.0	34.7	784.5
4.1.7.30	300-FF-5 Operable Unit	1225.6	987.2	937.7	(238.4)	49.5	2053.8
	<b>RL-30 Groundwater Remediation Total</b>	<b>30071.2</b>	<b>28948.2</b>	<b>30040.7</b>	<b>(1123.0)</b>	<b>(1092.5)</b>	<b>61093.6</b>

# RL-40 Waste Sites

## FYTD Cost/Schedule Status

(\$ in thousands)

WBS	Scope Description	BCWS	BCWP	ACWP	SV	CV	BAC
4.1.2.8.1	Central Plateau Integration and Planning	2135.5	2020.3	2030.8	(115.2)	(10.5)	4453.4
4.1.2.8.2	Ecological Risk Assessment	683.2	627.3	484.5	(55.9)	142.8	1026.3
4.1.2.8.4	B/C Cribs, Trenches & Cntl Area Remediation	416.3	311.4	371.5	(104.9)	(60.1)	1203.5
4.1.2.8.5	200-CW-1 Gable Mtn/B Pond CWG	7.1	7.1	13.7	0.0	(6.6)	14.8
4.1.2.8.6	200-CS-1 Chemical Sewer Group	30.7	127.3	216.6	96.6	(89.3)	283.2
4.1.2.8.7	200-CW-5 U Pond/Z Ditches CWG	74.1	46.3	64.9	(27.8)	(18.6)	258.5
4.1.2.8.8	200-TW-1/2 Scavenged Waste Group	9.0	9.0	9.8	0.0	(0.8)	18.7
4.1.2.8.9	200-PW-2/4 Uranium-Rich Process Group	166.8	31.2	37.7	(135.6)	(6.5)	302.8
4.1.2.8.10	200-PW-1/3/6 Pu-Rich Waste Group	767.3	719.8	656.6	(47.5)	63.2	1381.5
4.1.2.8.11	200-LW-1 200A Chem Lab Waste Group	190.7	42.5	53.9	(148.2)	(11.4)	296.4
4.1.2.8.12	200-MW-1 Misc. Waste Group	1915.9	1627.2	1024.2	(288.7)	603.0	4263.0
4.1.2.8.13	200-UR-1 Unplanned Releases Waste Group	464.7	597.3	627.0	132.6	(29.7)	1114.3
4.1.2.8.14	200-SW-2 Rad & 200 SW-1 Non Rad Landfills	868.7	270.6	353.4	(598.1)	(82.8)	1594.5
4.1.2.8.15	200-IS-1 Tanks/Boxes/Pits/Lines Group	527.1	449.0	444.6	(78.1)	4.4	839.6
4.1.2.8.16	200-BP-1 Hanford Prototype Barrier	42.9	41.5	41.1	(1.4)	0.4	112.0
4.1.2.8.17	Burial Ground Sampling & Analysis	19.2	29.4	17.6	10.2	11.8	220.2
4.1.2.8.20	M-15	0.0	0.0	0.0	0.0	0.0	2419.3
	<b>RL-40 Waste Sites Total</b>	<b>8319.1</b>	<b>6957.1</b>	<b>6447.9</b>	<b>(1362.0)</b>	<b>509.2</b>	<b>19802.1</b>

# RL-40 Central Plateau Remediation and D&D

## FYTD Cost/Schedule Status

(\$ in thousands)

Scope Description	BCWS	BCWP	ACWP	SV	CV	BAC
200-UW-1 U Plant Zone Waste Site Remediation	2119.8	1484.7	1018.0	(635.1)	466.7	4961.4
200-CW-1/3 Gable Mtn/B Pond CWG	427.4	263.1	559.6	(164.3)	(296.5)	753.2
Haul Road	0.0	0.0	5.5	0.0	(5.5)	0.0
<b>CP-1 Remediation Projects</b>	<b>2547.2</b>	<b>1747.8</b>	<b>1583.1</b>	<b>(799.4)</b>	<b>164.6</b>	<b>5714.6</b>
U Plant	615.2	493.1	581.6	(122.1)	(88.5)	918.6
Balance of Canyon and Other Facilities	927.5	1020.2	881.1	92.7	139.1	2088.1
PUREX Planning	146.7	135.6	49.8	(11.1)	85.8	311.2
<b>CP-3 Deactivation &amp; Decommissioning</b>	<b>1689.4</b>	<b>1648.9</b>	<b>1512.5</b>	<b>(40.7)</b>	<b>136.4</b>	<b>3317.8</b>
<b>RL-40 Central Plateau Remediation &amp; D&amp;D</b>	<b>4236.6</b>	<b>3396.7</b>	<b>3095.6</b>	<b>(840.1)</b>	<b>301.0</b>	<b>9032.4</b>

# RL-30 Performance Variances

Subproject	FYTD Variance	Causal Factors
<i>Significant Schedule Variances</i>		
Groundwater/Vadose Zone Integration	(831.8)	Impact of competing priorities; delayed technical review panel
Well Management	609.7	FY 2007 completion of FY 2006 scope for 200-BP-5 well drilling
Groundwater Monitoring & Perf. Assessment	(336.9)	Delayed move of geologic sample core library
100-KR-4	619.5	FY 2007 completion of FY 2006 scope for KR-4 pump and treat expansion
200-ZP-1	(544.6)	Delayed lab analyses for T Farm and CERCLA wells due to drilling delays; delayed risk modeling
300-FF-5	(238.3)	Lagging progress in LFI Report and Baseline Risk Assessment Report with corresponding delay in workshop
<i>Significant Cost Variances</i>		
Well Management	(922.4)	Increased costs associated with recovery efforts for 200-ZP-1 wells
Project Management	772.1	Favorable overhead passback
Groundwater Monitoring & Perf. Assessment	(1016.6)	Higher initial workload for well decommissioning and higher than planned laboratory costs
100-KR-4	(1155.4)	KW chromium plume activities not planned in the baseline
200-ZP-1	709.3	Less than planned cost for FS/PP contract and EPA walkthrough for RI; lagging analytical costs

# RL-0040 Performance Variances

Subproject	FYTD Variance	Causal Factors
<i>Significant Schedule Variances</i>		
Remediation Projects	(799.4)	<ul style="list-style-type: none"> <li>• 200-UW-1 remediation impacted by delayed ROD</li> </ul>
200-MW-1 Misc. Waste Group	(288.6)	<ul style="list-style-type: none"> <li>• BCR to transfer A-4 borehole decommissioning to 200-PO-1 not yet processed</li> </ul>
200-SW-2 Rad & 200-SW-1 Non Rad Landfill	(598.1)	<ul style="list-style-type: none"> <li>• DQO delays due to regulatory interests and technical issues with corresponding delays to Phase II technical survey/treatability information</li> <li>• Passive vapor sampling fieldwork delayed until spring</li> </ul>
<i>Significant Cost Variances</i>		
200-MW-1 Misc. Waste Group	603.0	<ul style="list-style-type: none"> <li>• Low-risk safety categorization resulted in lower-than-planned costs for E-102 push and A-4 borehole</li> </ul>

# Planned Activities

Next 6 Months

## 221-U Facility/Canyon Disposition Initiative

- Revise Remedial Design/Remedial Action Work Plan
- Develop remedial design engineering alternatives studies
  - Canyon void fill analysis and installation plan
  - Railroad tunnel reactivation study
  - Cell 30 tank contents removal plan and safety documentation
- Develop canyon waste acceptance study

## Other Facility D&D

- Conduct PUREX Canyon DQO process
- Develop Agreement-In-Principle for negotiating agreements on facility disposition, including 221-U Facility.

## 200-CW-3

- Complete site remediation for 216-N-5 waste sites

# Planned Activities

Next 6 Months

## **100-HR-3**

- Finalize FY 2007 well locations for the “Horn”

## **100-KR-4**

- Activate KW pump and treat

## **100-NR-2**

- Evaluate effects of zero-valent iron on groundwater chemistry for use in ISRM barrier

## **200-BP-5**

- Submit Treatability Test Plan

## **200-CW-5**

- Perform Z Ditch Study

# Planned Activities

## Next 6 Months

### **200-IS-1**

- Complete 200-IS-1 DQO process
- Submit 200-IS-1 and 200-ST-1 Rev. 1 Draft B Work Plan

### **200-BP-5**

- Issue draft of High Resolution Resistivity Survey Report at B/BX/BY WMA

### **200-PO-1**

- Issue RI/FS Work Plan Draft A

### **200-UP-1**

- Reactivate 200-UP-1 pump and treat

### **BC Crib and Trenches**

- Initiate drilling/sampling to establish correlations between HRR characterization data and soil contaminant concentrations.
- Perform DPT campaign (Phase I of excavation-based treatability test) at 216-B-26 Trench.

# Planned Activities

## Next 6 Months

### **200-UW-1**

- Issue Interim/Final Record of Decision
  - Specify actions for characterization of deep vadose zone
  - Specify construction of engineered barrier to collect performance data
- Approve SAP for UW-1 Waste Sites Remove, Treat, and Dispose
- Sample sludge in 241-U-361 Settling Tank
- Disposition TPA Change Requests for 216-U-12 and 216-U-15

### **200-ZP-1**

- Begin treatability testing for Tc-99 removal
- Complete the treatability test plan for Tc-99 pump and treat

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

- Submit the revised RI report for EPA approval

### **Well Decommissioning**

- Decommission 31 wells

# **Hanford K Basins Closure Project**

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



***U.S. Department of Energy  
Richland Operations Office (RL)  
Second Quarter FY 2007***

***April 19, 2007***



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# TPA Milestone Status

## Remaining Milestones Due Fiscal Year 2006-2009

Number	Milestone Title	Due Date	Status/Comments
M-34-34	Complete removal of K East Sludge.	05/2007	At risk. Commenced removal using Hose-In-Hose (HIH) system on 10/16/2006. Recovery plan in place.
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	a. Completed RA on 11/08/2006; commenced containerization 11/17/2006. On track to meet. b. Awaiting completion of bulk sludge.
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	At risk. Hold placed on new procurements and construction at the Cold Vacuum Drying Facility (CVDF) associated with modifications for installing sludge treatment processes.
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	At risk. Requires completion of M34-34. Per baseline, M34-34 will not be completed in time frame that supports this milestone. Currently in dispute.
M-34-31	Complete Sludge Treatment This interim milestone will be complete following treatment and package of all sludge for disposal offsite.	11/2009	At risk. Requires completion of M34-30.
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. Per baseline, M-34-31 will not be completed in time frame that supports this milestone.



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# ***Significant Accomplishments and Status***

## **Project-Wide**

- RL has decided to extend Fluor Hanford Inc.'s (FHI) K East Basin D&D work scope through September 30, 2008 contingent upon satisfactory progress towards completion of the Hose-In-Hose (HIH) sub-project.
- RL has determined it is in the best interest of the government to mitigate Sludge Treatment Project risks through an existing RL process that ensures an adequate technical bases is in place prior to construction versus a "fast track" approach.

## **K East Basin**

- Demonstration of the Qualified Process to meet the sludge end point criteria was conducted and reviewed with U.S. Environment Protection Agency (EPA).
- Sludge vacuuming and debris removal continues in the basin.
- Approximately 50 percent of the basin floor has undergone final pass vacuuming.

## **K West Basin**

- Sludge vacuuming and debris removal continues.
- Approximately 45 percent of the basin floor has undergone vacuuming and transferring sludge to containers.



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# ***Significant Accomplishments and Status***

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

- Have experienced several mechanical breakdowns causing numerous unplanned repairs and impacts to schedule.
  - *Pump vibration problems.*
  - *Holes found in two instances on a pump and its replacement used to remove sludge from containers.*
  - *Plugging problems found in pump suction lines and elsewhere.*
- Instituted a recovery plan that balances the need to maximize operational runtime and the need to fully understand failure mechanisms to preclude recurrence.
  - *Additional resources (senior management, engineers, operators, maintenance craft, planners, etc.) have been assigned full time to support round-the-clock operations and repair efforts.*
  - *Resolve booster station pump vibration problems.*
  - *Improve homogeneity of sludge at container outlet.*
  - *Reduce booster pump seal leakage.*
  - *Improve ability to prolong operations following system startup.*
  - *Improve "non-equipment" aspects to gain operating efficiency.*
  - *Develop alternative transfer options.*



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# ***Significant Accomplishments and Status***

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

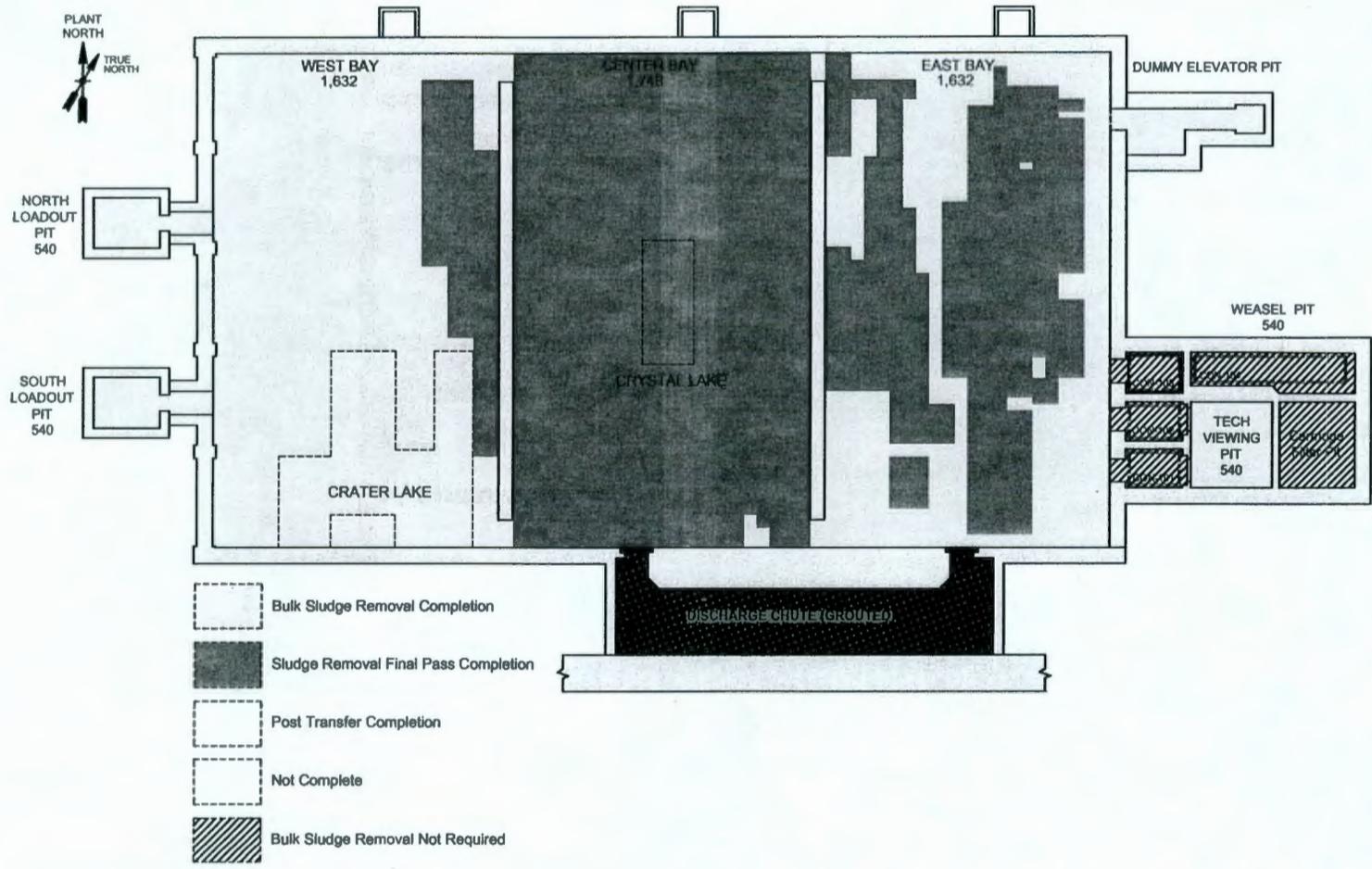
- Examples of some improvements that have been made:
  - *Installed strainers upstream of pumps that remove sludge from the containers.*
  - *Ordered additional pumps and spare parts.*
  - *Added ability to remove sludge from the top of the containers in addition to the bottom.*
  - *Addition dilution capability to mobilize the containerized sludge at the container outlets.*
- Transferred approximately 63 percent of the bulk containerized sludge from K East to K West Basin cumulatively to date.



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# K East Storage Basin - Sludge Containerization Progress



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



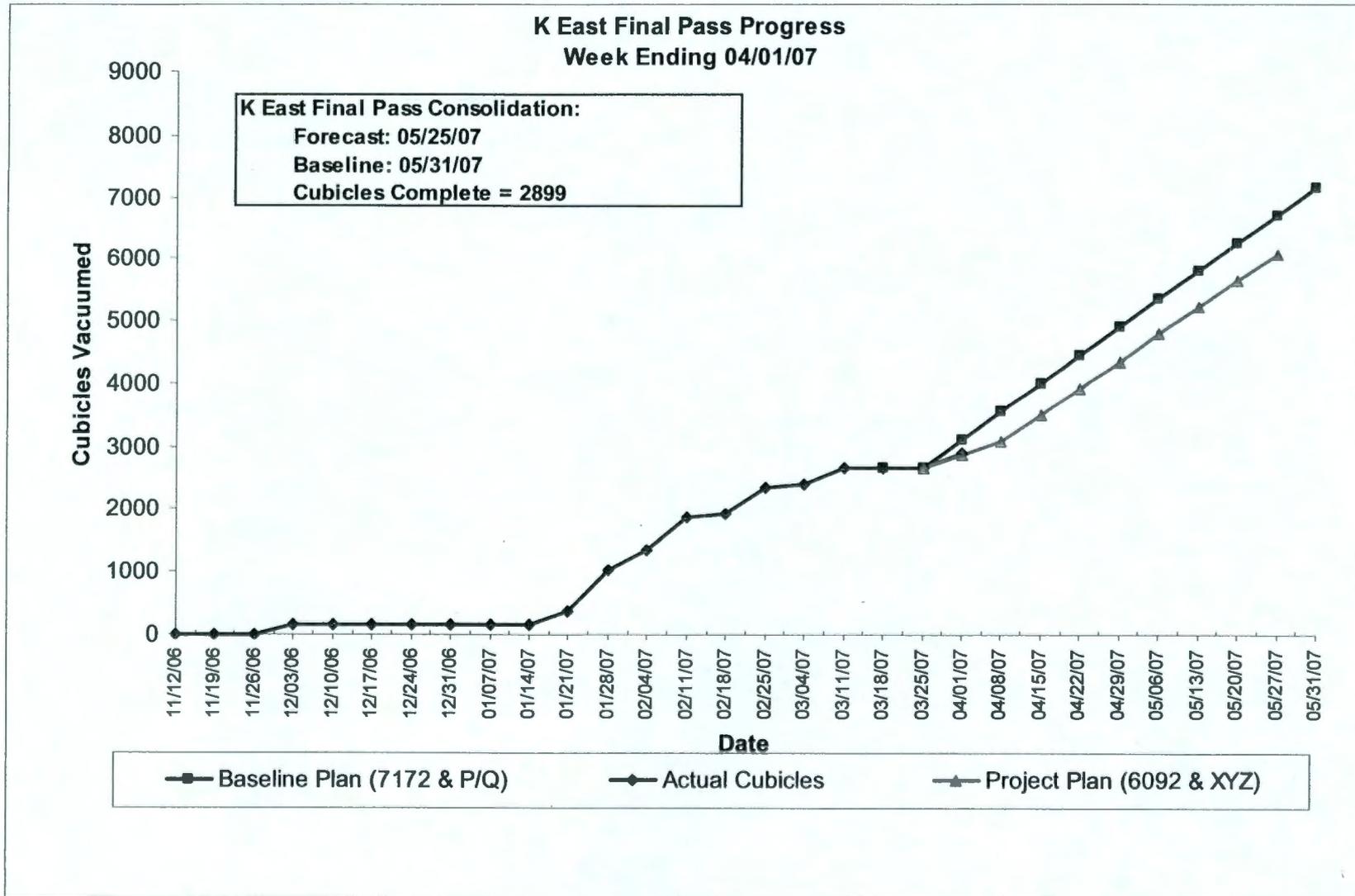
***Workers in Booster Station #2  
for the Hose-in-Hose System***



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# K East Metrics



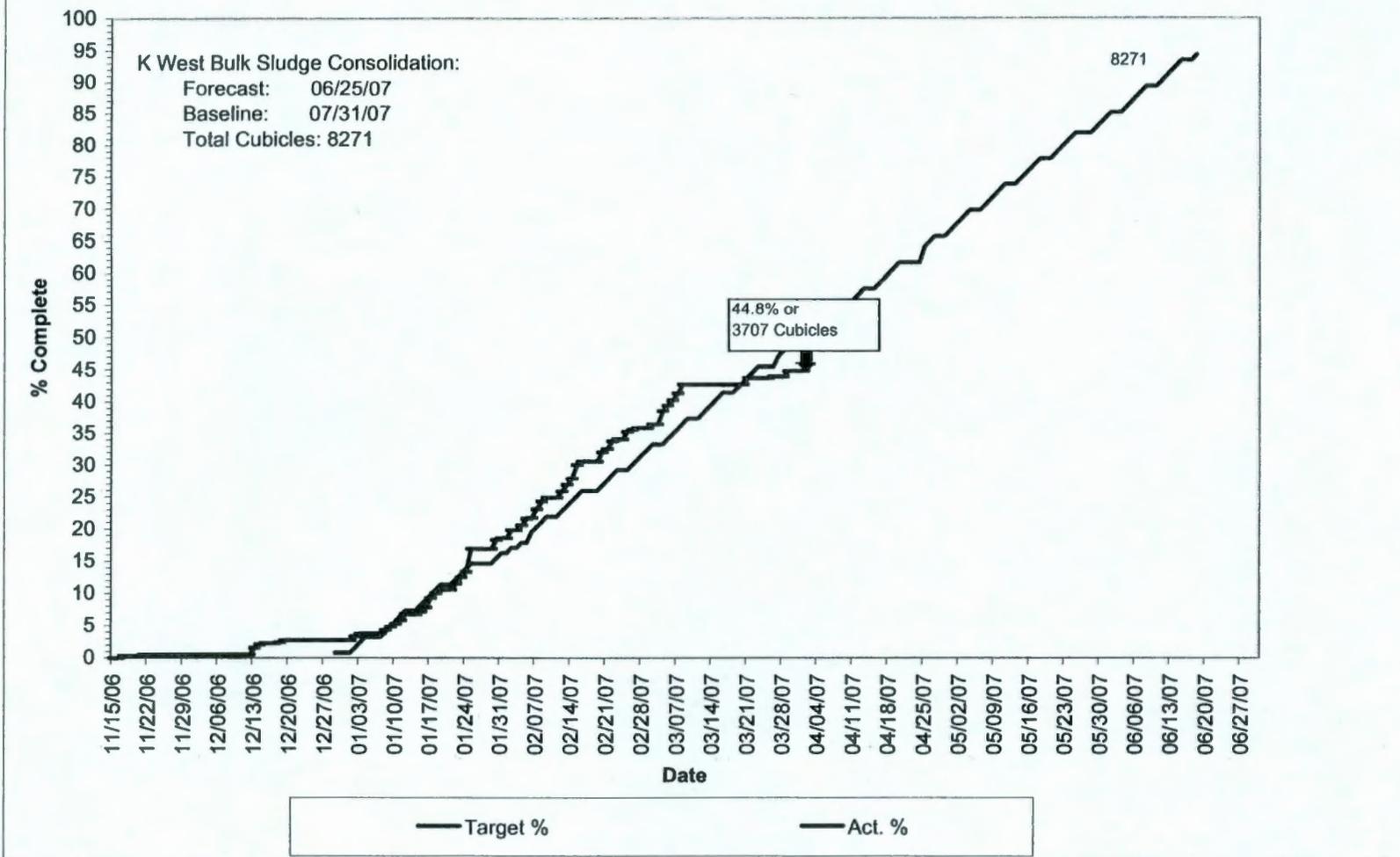
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# K West Metrics

## K West Floor and Pit Sludge Retrieval Progress

Dated 04/02/07



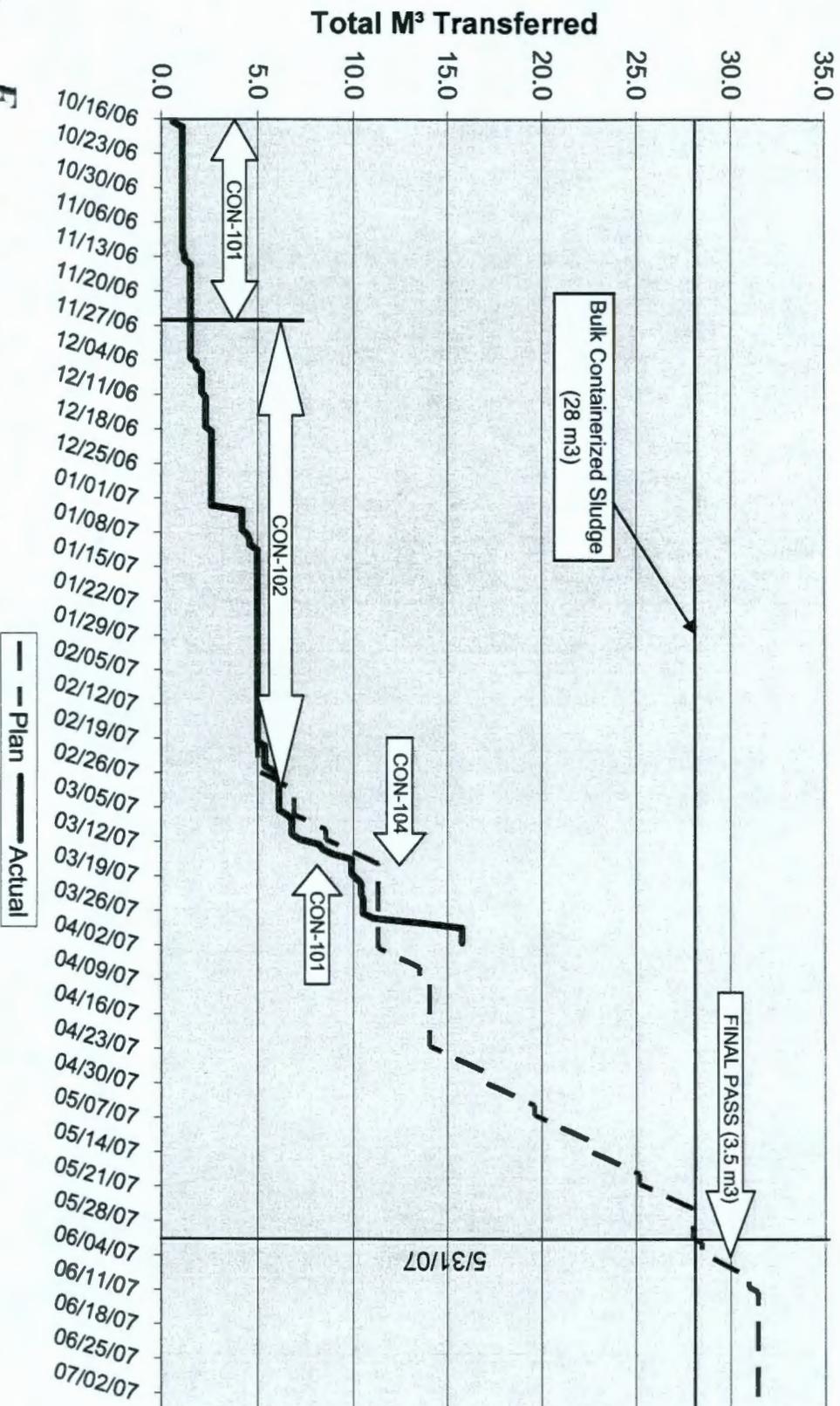
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# Hose-In-Hose Metrics

## K East - K West Sludge Transfer Progress

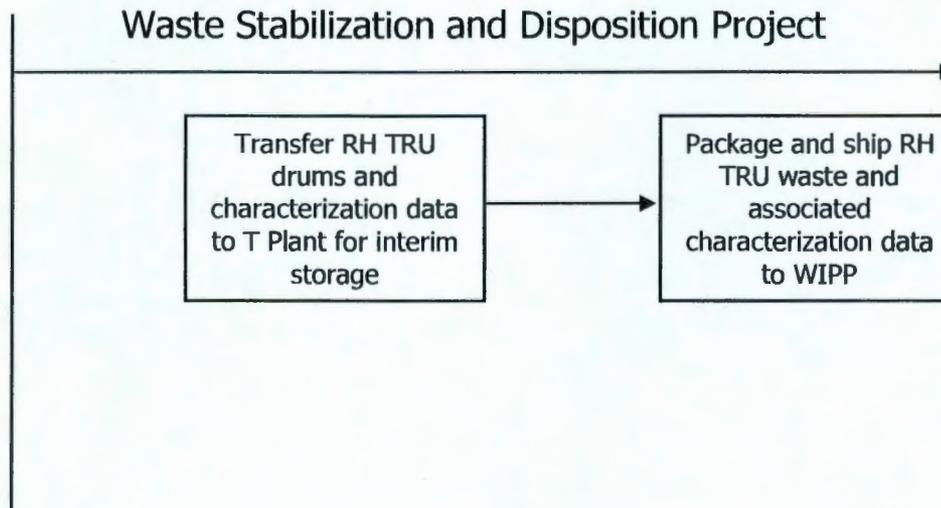
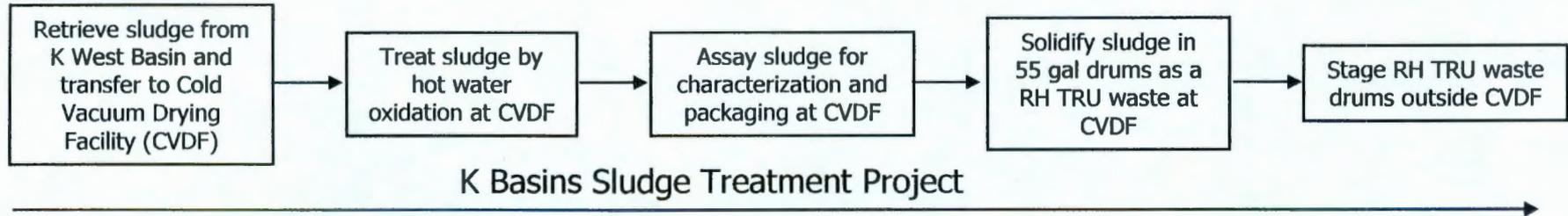
04/01/07



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# ***K Basins Sludge Treatment Project at a Glance***



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# ***Significant Accomplishments and Status***

## **K Basins Sludge Treatment**

- RL directed implementation of a DOE O 413.3A Critical Decision (CD-3) review (Ready to Start Construction). New procurement and construction activities placed on hold pending successful completion of the CD-3 review versus a fast track approach to minimize project risk.
- Fluor completed two assessments:
  - KBC Management Assessment of STP Functional Integration (February 2007)
  - FH Corporate Independent Review of STP and HIH Project (March 2007)
- RL is requiring the nuclear safety documentation to be based on the “final design” prior to CD-3 review.
- Continued fabrication of the Mobile Solidification System (MOSS) unit (~ 93 percent complete).
- Awarded contracts for Drum Handling System Material Handling Equipment and manufacture and installation of CVDF Bay 1 Bridge Crane. Fabrication of Drum Handling System Shield Door and Bay 1 Bridge Crane subsequently put on hold pending successful completion of CD-3 review.



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# ***Significant Accomplishments and Status***

## **K Basins Sludge Treatment - Continued**

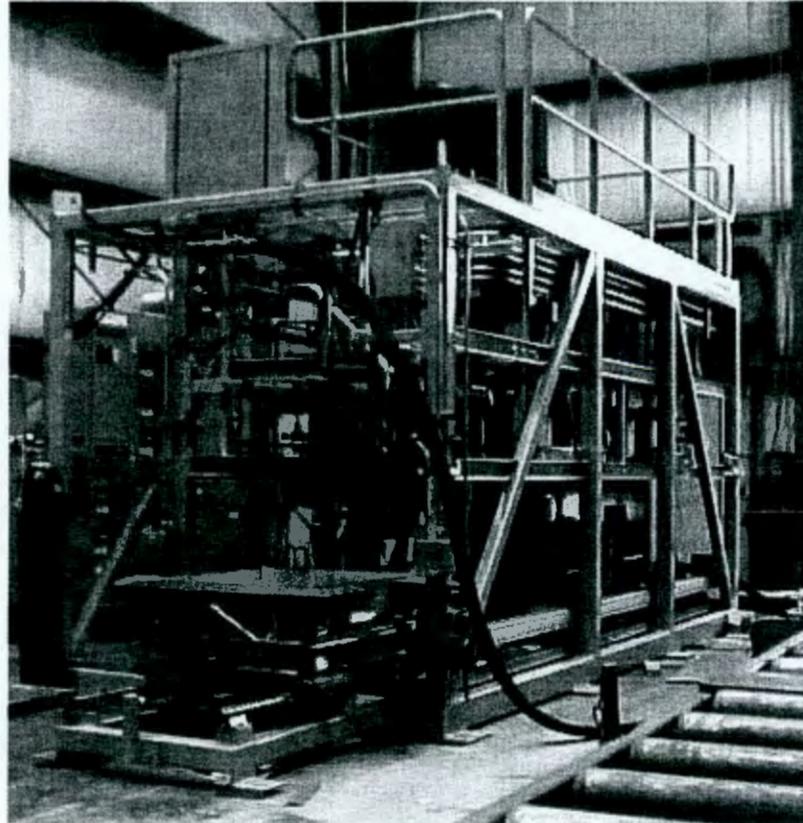
- Awarded design only contracts for Retrieval and Transfer Systems primary transfer pump and CVDF Bay 2 to Bay 3 Wall Penetration.
- Completed corrosion process chemistry testing at PNNL hot cells per treatability study plan. Expanded follow-on testing is planned.
- Initiated independent assessment of CVDF structure ability to support sludge treatment processing in response to on-going reviews identifying discrepancies between as-built configuration and structural analysis/safety basis.



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



***Sludge Treatment Project Offsite  
Fabrication Already In Progress***



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

## **Project-Wide**

- Manage/mitigate current and emerging risks.
- Continue to ship staged debris waste to ERDF for disposal.

## **K East Basin**

- Work with Washington Closure Hanford (WCH) to receive fuel fragments of questionable enrichment from remedial action operations associated with burial grounds.
- Remove debris in K East Basin.
- Ship waste debris to ERDF for disposal.
- Perform the Qualified Process to demonstrate achieving End Point Criteria.
- Continue K East final pass vacuuming.
- Prepare Remedial Design Report/Remedial Action Work Plan for K East Basin deactivation.

## **K West Basin**

- Remove debris in K West Basin.
- Ship waste debris to ERDF for disposal.
- Continue to containerize floor and pit sludge.



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

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

- Continue transfer of sludge from K East Basin to K West Basin.

## **Sludge Treatment**

- Complete fabrication and assembly of the MOSS.
- Continue select British Nuclear Group America (BNGA) and FHI design activities.
- Finalize plan for performance of prerequisites for planned RL independent design review and CD-3 review.
- Initiate expanded corrosion process chemistry testing.
- Initiate additional testing and other actions to reduce the project risks in response to recommendations resulting from two recent FHI assessments.
- Continue efforts on independent assessment of the ability of CVDF structure to support sludge treatment processing.
- Complete an assessment of the CVDF integrated with the sludge treatment process pursuant to RL's implementation plan to DNFSB Recommendation 2004-2 on active confinement ventilation systems.



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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. The process by which risks are identified and managed is described in the "KBC Project Risk Management Plan," KBC-28211.

<b>Sub-project</b>	<b>Major Remaining Risks with "Possible" or "Likely" Likelihood of Occurrence</b>	<b>Emerging Risks</b>	<b>Risk Mitigation</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. Acceptance criteria for removal of K East Basin sludge by 05/31/07, M-34-34.</li> </ol>		<ol style="list-style-type: none"> <li>1. Re-evaluate the radiological characteristics and permissible depth of resettled sludge to reduce conservatism.</li> <li>2. Obtain RL and EPA acceptance of what "removed to the maximum extent practical" is.</li> </ol>
<b>K West and HIH Transfer</b>	<ol style="list-style-type: none"> <li>1. System performance issues associated with HIH operation.</li> <li>2. Water clarity decreases productivity of sludge containerization at K West Basin</li> <li>3. Vacuuming around/under fixed equipment takes longer than planned.</li> <li>4. Sludge overflows from containers to K West Basin floor during K East to K West transfer.</li> </ol>	<ol style="list-style-type: none"> <li>1. Milestone for completion of sludge transfer, 5/31/07, may be missed. Current working schedule shows mid-June completion.</li> <li>2. Potential schedule impacts to containerizing K West sludge due to resources that were allocated to floor and pit sludge retrieval that are being used to support HIH and K East vacuuming.</li> </ol>	<ol style="list-style-type: none"> <li>1. HIH recovery plan is in place.</li> <li>2. Evaluating installation of SCCOPS in K West.</li> <li>3. Initiated debris removal campaign.</li> <li>4. Evaluating installation of SCCOPS in K West &amp; the need to re-vacuum when transfer is complete.</li> </ol>



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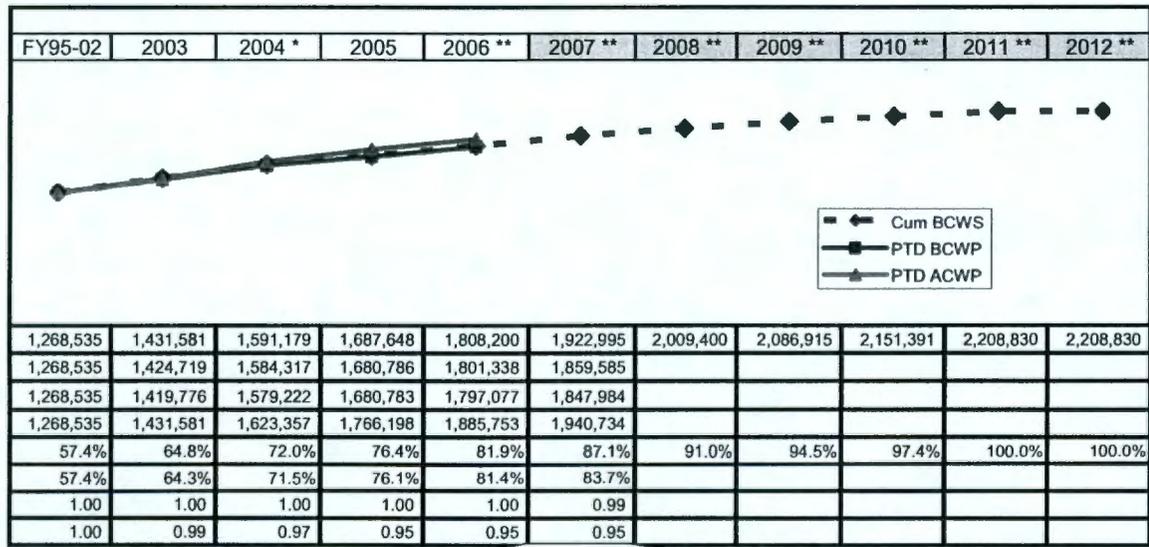
# ***KBC Project Risk Status***

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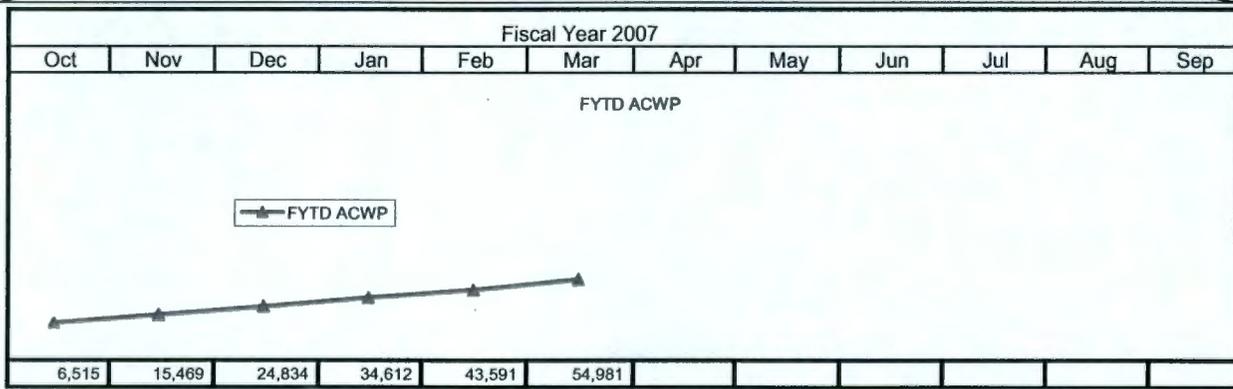
<b>Sub-project</b>	<b>Major Remaining Risks with "Possible" or "Likely" Likelihood of Occurrence</b>	<b>Emerging Risks</b>	<b>Risk Mitigation</b>
<b>Sludge Treatment</b>	<ol style="list-style-type: none"> <li>1. Unexpected process phenomena (chemical and physical reactions/ characteristics are different than expected).</li> <li>2. Inadequate/insufficient tools impact productivity (i.e., not able to retrieve sludge from knockout pots or settlers).</li> <li>3. Transfers from K West to the Cold Vacuum Drying Facility do not achieve percent solids desired; more transfers and/or more corrosion batches would result.</li> </ol>	<ol style="list-style-type: none"> <li>1. Sludge treatment process would not operate as designed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Implementation of Critical Decision Process in accordance with DOE 0 413.3 to provide higher confidence in system reliability.</li> <li>2. Perform additional laboratory tests with actual sludge samples at PNNL to evaluate and verify process chemistry of sludge for conditions that mimic the process conditions.</li> <li>3. Review lessons learned from K East containerization and HIH transfer. Perform Fluor Corporate independent Review of STP.</li> <li>4. Perform additional testing and other actions to reduce project risks.</li> </ol>



# KBC Project – Total Project Baseline



Life Cycle	
*BAC=	2,208,830
EAC=	2,286,383
BCWS=	1,859,585
BCWP=	1,847,984
ACWP=	1,940,734
SV=	(11,601)
CV=	(92,751)



\* PHMC Rebaseline Sludge Retrieval & Disposition Project and Decontamination & Decommission Project  
 \*\* FH KBC EIR Validated Baseline



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***KBC Stabilization and Disposition  
Project Performance through Second Quarter FY 2007***  
(\$ in thousands)

		<u>FYTD</u> <u>ACWP</u>
<b>By PBS</b>		
PBS RL-0012	Safe and Compliant	\$ 7,935.9
PBS RL-0012	Sludge Retrieval and Disposition	\$ 40,916.2
PBS RL-0012	D&D Deactivation	\$ 1,189.5
PBS RL-0012	Closure Services	\$ 4,494.5
<b>TOTAL</b>		<hr/> \$ 54,536.1



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**Thursday, April 19, 2007**  
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-13-00	Operable Unit Work Plans
	M-15-00	RI/FS Process Completion
	M-16-00	Complete Remedial Actions
	M-24-00	Groundwater Well Installation
10:45 a.m.	M-34-00	K Basins Closure Project
11:15 a.m.	Adjourn Milestone Review	