

Meeting Minutes  
 October 26, 2004  
 Tri-Party Agreement Milestone Review

0063793

Approval: [Signature] Date: 2/1/05  
 Michael A. Wilson (H0-57)  
 Ecology IAMIT Representative

Approval: [Signature] Date: 2/1/05  
 Joe B. Heddon, Chairperson (A5-12)  
 RT IAMIT Representative

Approval: [Signature] Date: \_\_\_\_\_  
 Jim E. Rasmussen (H6-60)  
 ORP IAMIT Representative

Approval: [Signature] Date: 2/1/05  
 Nick Ceto (B5-01)  
 IAMIT Representative

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Minutes Prepared by: [Signature]  
 Approval: [Signature] Date: 2/1/05  
 Eileen Murphy-Fitch (A4-25)  
 Fluor Hanford, Inc.

Aroni, E. S.	CHG	H6-08	LaRue, D. N.	BHI	H0-20
Bartus, D.	EPA	H0-57	Leary, K. D.	RL	A6-38
Bond, R.	Ecology	H0-57	Mattlin, E. M.	RL	A5-11*
Borghese, J. V.	FH	E3-65	McCormick, M. S.	RL	A5-11
Brown, M. E.	Ecology	H0-57*	McKarns, T. C.	RL	A5-15
Buxbaum, M.	FH	B3-53*	McKenney, D. E.	FG	H8-44
Cameron, C.	EPA	B5-01	Miskho, A. G.	FH	H8-40
Clark, C. E.	RL	A5-15	Morrison, R. D.	FH	A4-25*
Charboneau, B. L.	RL	A6-33	Moy, S. K.	RL	A6-38*
Charboneau, S. L.	RL	A5-11	Murphy-Fitch, E. J.	FH	A4-25*
Cimon, S.	Oregon*		Niles, K. S.	Oregon	
Cusack, L.	Ecology	H0-57*	Olinger, S.	RL	A3-04
Dagan, E. B.	RL	A5-15	Pak, Paul	RL	A5-16
Dusek, L.	FH	R3-62	Piippo, R. E.	FH	A4-25
Erickson, L.	RL	A6-37	Price, J.	Ecology	H0-57*
Faulk, D.	EPA	B5-01	Rasmussen, J. E.	ORP	H6-60
Foley, B. L.	RL	A6-38	Romine, L. D.	RL	A6-33
Ford, B. H.	FH	E6-35	Schepens, R. J.	RL	H6-60
Fritz, L.	FH	H8-44	Skinnarland, E. R.	Ecology	H0-57
French, M.	RL	A6-38	Sobotta, P.	NPT	
Gadbois, L.	EPA	B5-01	Stanfill, J.	NPT	
Callagher, R.	FH	H5-20	Sinton, G.	RL	A6-38
Gurske, R.	FH	H8-12	Thompson, S.	FH	H8-12
Harris, S.	CTUIR		VanMason, E.	Ecology	H0-57
Hayn, B.	CTUIR		Watson, D.	FH	X3-79
Hedges, J.	Ecology	H0-57	Wilde, R.	FH	H8-44
Henry, D.	Oregon		Williams, J. D.	FH	H8/49
Hertzal, J. S.	FH	A4-25	Williams, G.	RL	
Hildebrand, R. D.	RL	A6-38	Winterhalder, J. A.	FH	E6-35
Hopkins, A.	FH	H8-25	Wilson, M. A.	Ecology	H0-57
Jackson, D. E.	RL	A4-52	Wolf, A.	CTUIR	
Jackson, G. W.	FH	H5-20	Administrative Record	EDMC	H6-08*
Jackson, R.	FH	E6-35	*w/Attachments File		
Jim, R.	YIN				
Langstaff, D. C.	RL	A4-70*			

**Tri-Party Agreement Milestone Review**  
**October 26, 2004**

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**Spent Nuclear Fuel (Tri-Party Agreement Milestone M-034-00)**

Start: 10:08 a.m.

Stop: 10:44 a.m.

Paul Pak was introduced as the new Project Manager for the K Basin Closure Project (formally known as the Spent Nuclear Fuel Project). The final multi-canister overpack was shipped from K Basin to the Cold Vacuum Drying Facility (CVDF) on October 12, 2004, completing Tri-Party Agreement Milestone M-034-18B, *Complete Removal of all K Basins Spent Nuclear Fuel*. There are approximately 1,000 pounds of fuel scrap that is staged to be packaged that includes scrap transferred to the K Basins from the cleanout of the F and H Reactor Fuel Storage Basins as well as fuel fragments from debris and sludge removal activities. The fuel scrap is being staged into closed containers. Fuel handling, transfer, cleaning and packaging systems in the K Basins and the CVDF are, or have been, placed in a standby condition to support the processing of the fuel scrap and any fuel fragments found during sludge and debris removal activities.

Tri-Party Agreement Interim Milestone M-034-23, *Initiate Full Scale K East Basin Water Removal*, due September 30, 2004, was completed on August 20, 2004. This milestone was completed by the grouting of the discharge chute. EPA reminded RL that the grouting of this chute will not relieve them of their responsibility for remediation of the area under the K Basin discharge chutes construction joint, if needed, following removal of the Basins.

The final readiness review for containerization of K East sludge will be completed so that containerization can be initiated by the October 31, 2004, Tri-Party Agreement milestone due date. Completion of K East sludge containerization is currently on schedule; however, there are technical issues that will need to be addressed.

Removal of sludge from the K East Basin North Load Out Pit (NLOP) continues. Preparations are underway to treat the NLOP sludge at T Plant as an alternative to the 325 Facility. EPA requested that RL provide them with the dollar amount that was spent looking at the 325 Building versus T Plant for the NLOP.

**Action:** Provide EPA with an estimate of funds spent for the treatment of NLOP sludge at the 324 Building that were for activities that are not transferable to T Plant  
**OR:** DOI Will Provide EPA with an estimate of the dollars expended to place sludge in the 325 Building versus T Plant

**Actionee:** Paul Pak, RL

RL requested that EPA approve the Hose-in-Hose Remedial Design Report as soon as possible.

There was a discussion on the weight-to-curie methodology used in characterization of canisters for waste disposal. The removal of canisters in K West did not use a qualified process for canister cleaning that would classify the canister as non-transuranic (TRU). This process was used in the removal of empty canisters in K East. There is a potential that approximately 300 boxes of canisters removed from K West that did not undergo this process and were disposed of at ERDF. A Team was commissioned to look at

the waste characterization/ classification methodology used as well as screening past waste shipments to ERDF to determine impacts.

**Action:** DOE will provide a date to EPA on when the resolution of suspect TRU waste disposed into ERDF can be provided.

**Actionee:** Paul Pak

Presentation is attached.

**Central Plateau (M-013, M-015, M-016, M-020, and M-024)**

Start: 10:55 a.m.

Stop: 11:12 a.m.

Tri-Party Agreement Milestone M-015-40C, *Steam Condensate/Cooling Water Waste Group OU RI/FS Work Plan: Includes the 200-CW-5, 200-CW-2, 200-CW-4 and 200-SC-1 Operable Units*, will be submitted by the October 31, 2004, due date.

Work continued on remedial actions addressing an additional area of chromium contaminated groundwater in the 100-D Area. A targeted pump and treat system was selected for the near term to minimize the impact of contaminated groundwater on the river and to achieve mass reduction of hexavalent chromium. A focus group of outside experts was assembled to evaluate amendments to the ISRM Barrier. A proposal was submitted to address chromium down river from 100-K Area. A treatability test plan using calcium polysulfide treatment on extracted water prior to injection will be formulated in the Fall. Design for the connection of Well 199-K-114A to the existing system is underway and will be connected by November 30, 2004. In addition, Well 199-K-131 was completed and will be sampled on a monthly basis.

Twenty-two buildings in the B Plant Construction Laydown Yard were demolished. The public comment period for the U Plant Ancillary Facilities EE/CA closed on September 25, 2004. Three comments were received; response document is process.

**Resolution continues on:**

200-TW-1, 200-TW-2, and 200-PW-5 Remedial Investigation (RI) Report

Ecology and EPA provided comments on the fate and transport modeling for the 200-TW-1, 200-TW-2, and 200-PW-5 Remedial Investigation (RI) Report. Approval of the RI Report is contingent on resolving these comments. Additional modeling runs were done that incorporated agreed upon modifications and sensitivity analysis. Preliminary results were provided to the Regulators and the U.S. Geological Survey (USGS) in June 2004. A subsequent meeting was held in September; some issues remain unresolved. It is expected that the RI Report will be revised to incorporate the modeling results once the Regulators and USGS are satisfied with the additional modeling results.

200-SW-1 and 200-SW-2 Remedial Investigation/Feasibility Study (RI/FS) Work Plan

Ecology is concerned that the 200-SW-1 and 200-SW-2 RI/FS Work Plan that will be submitted by December 31, 2004 (Tri-Party Agreement Interim Milestone M-013-000) will not have adequate characterization. Ecology would like to enter into collaborative negotiations to resolve issues for the

burial grounds; RL has been reluctant to enter into a formal negotiation process, preferring an informal process. Informal discussions enabled the Parties to focus their efforts on a small set of remaining concerns. Ecology and RL have agreed to discussions to resolve the remaining issues associated with the burial grounds.

### U Plant Pipelines

RL is planning to complete an EE/CA for the underground pipelines in the U Plant by the end of FY 2005. Remediation would be done post-FY 2006. The Ecology Project Manager proposed target milestones for earlier completion that the RL Project Manager declined to sign. Ecology indicated that it could prepare enforceable milestones if target milestones weren't accepted by RL nor would they approve the EE/CA if the ORP pipelines were omitted. The issue of the target milestones was raised to RL and Ecology Senior Executives. Ecology would like to see this workscope accelerated. Presentation is attached.

### **PFP Transition (Tri-Party Agreement Milestone M-083-00)**

Start: 10:45 a.m.

Stop: 10:55 a.m.

Work continues to be on or ahead of schedule. Major accomplishments include demolition of seven PFP Facilities; approval of the 232-Z Sampling and Analysis Plan (SAP); removal and disposition of 41 percent of legacy hold-up; chemical mitigation as defined in the assessment; and, completion of the RCRA closure activities in the HA-20MB glovebox. In addition, the above-grade structures Engineering Evaluation/Cost Analysis (EE/CA) was finalized with Ecology's comments incorporated (public comment ends November 10, 2004). Decision on consolidation of nuclear material will be made; the record of decision (ROD) is expected by January 2005 with shipping beginning in March 2005. Presentation is attached.

### **Land Disposal Restriction Report (Tri-Party Agreement Milestone M-026-01)**

Start: 11:12 a.m.

Stop: 11:15 a.m.

The CY 2003 Land Disposal Restriction (LDR) Report was delivered to Ecology on April 28, 2004. Ecology conducted an LDR inspection to determine RL/ORP's compliance with M-026 by investigating the accuracy of information in the LDR Report for the 241-CX- Tank System Treatability Group and the appropriateness of future plans for the tank system based on available information. Ecology findings as well as the proposed response to comments were discussed at the September and October LDR Project Manager Meetings. Ecology did not raise any concerns on the proposed responses. RL/ORP will transmit a letter to Ecology by October 29, 2004, with the responses and the path forward for comment resolution. Preparation of the CY 2004 LDR Report will start in November 2004. Presentation is attached.

### **Acquisition of Facilities to TSD TRU/TRUM, LLMW (M-091)**

Start: 11:16 a.m.

Stop: 11:23 a.m.

Status of the project was provided. Ecology and RL approved changes to the M-091-12/12A thermal treatment milestones. A thermal treatment contract was awarded to Permafix and the first shipment was sent last week. The contract allows Permafix nine months to treat the waste and return the residues. The

1,200 m<sup>3</sup> retrieval requirement was met four months ahead of the December 31, 2004, due date. To date, 2,944 m<sup>3</sup> of mixed-low-level waste has been treated. Presentation is attached.

**Facilities for Cs/Sr, Sodium and SCW (River Corridor Project portion of Tri-Party Agreement Milestone M-092)**

Start: 11:23 a.m.

Stop: 11:27 a.m.

Nothing to report.

**Permitting/Closure Plans (Tri-Party Agreement Milestone M-020)**

Start: 11:28 a.m.

Stop: 11:36 a.m.

Status and planned accomplishments were discussed. Presentation attached.

On schedule to meet milestones. The Closure Plans are to be integrated into the FSs per the M-020 milestones. The Parties are working on this integration through the U Plant Waste Sites Focused Feasibility Study and the 200-CW-1 FS.

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The Hanford Facility RCRA Permit expired on September 27, 2004. On September 1, 2004, Ecology concurred that the RL package submitted for Permit renewal was sufficiently complete and can begin preparing a draft permit. Ecology expects RL to continue to operate under the current Hanford Facility RCRA Permit, until a new Permit is in place. The Central Waste Complex, Waste Receiving and Processing Facility, T Plant Complex, and the 222-S Laboratory Complex are waiting on a decision on offsite shipments and Ecology's acceptance of the Solid-Waste Environmental Impact Statement.

Ecology and RL need to resolve comments on the 216-B-3 TSD Closure Plan in conjunction with the CERCLA Feasibility Study for the 200-CW-1 and 200-CW-3 operable units. This integration will take place at the 200 Area Unit Manager's Meeting. Presentation is attached.

Central Plateau Tri-Party Agreement Milestone Review  
Ecology Conference Room 3B  
3100 Port of Benton Way, Richland, Washington  
October 26, 2004  
Cliff Clark, Chairperson

**Central Plateau Milestone Review**

10:00 a.m.	M-034-00	Spent Nuclear Fuel
10:30 a.m.	M-083-00	PFP Transition
10:45 a.m.	M-013-00 M-015-00 M-016-00 M-024-00	Complete RI/FS Submittals RI/FS Process Completion Complete Remedial Actions RCRA Well Installation
11:10 a.m.	M-026-01 M-091-00 M-092-01/05	Land Disposal Restrictions Report Acquisition of Facilities to TSD TRU/TRUM, LLMW and GTC3 Facilities for Cesium/Strontium
11:25 a.m.	M-020-00	Permitting/Closure Plans
11:40 a.m.	Adjourn	

***NOTE: The next Tri-Party Agreement Milestone Review will be held  
November 16, 2004 Office of River Protection***

Inter Agency Management and Integration Team Meeting  
Ecology Conference Room 3B  
3100 Port of Benton Way, Richland, Washington  
October 26, 2004  
Cliff Clarke, Chairperson

11:40 a.m. Consider Change Request M-16-04-08 (100-KR-4 OU)

noon Adjourn

Lunch break

IAMIT Work Groups  
Federal Building, 825 Jadwin, Room 142  
1:00 p.m. to 3:00 p.m.

The purpose of the meeting will be to discuss:

- 1) Report from IAMIT Groundwater Workgroup on 200-ZP-1 Integration Case Study
- 2) Workgroup Reports

ATTENDEES  
 Tri-Party Agreement Milestone Review  
 Spent Nuclear Fuel/Central Plateau  
 October 26, 2004  
 Cliff Clark, Chairperson

<u>NAME</u>	<u>ORGANIZATION</u>	<u>MAILSTOP</u>	<u>ATTACHMENTS</u>
Shelley CIMON	OREGON		
Clifford E. Clark	DOE-RL	A5-15	Yes
ROB PIROPO	FH TPA		YES
S.K. Moy	RL		YES
DJ Watson	FH - K Basin Closure	X3-79	No
P.M. Pak	DOE - RL		No
JOHN STANFILL	NEZ PERCE TRIBE		
Brian Naum	CTOIR		
Laura Cusack	Ecology		Yes
Nick Ceto	USEPA		
Larry Gathis	EPA		
Matt McCormick	DOE/RL		No
Shira Williams	DOE-RL		yes
Ron Skinner	Ecology		No
DC LANGSTAFF	DOE-RL/OEC	A0-10	YES
Craig Cameron	EPA		No
Larry Rombue	DOE-RL/AMCP		No
Tom Mischew	FH		No
Rick Bond	Ecology		No
ELLEN MAITLIN	RL		
SUZETTE Thompson	FH		



**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
Quarterly Presentation  
October 26, 2004**



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

**Eric Van Mason, Ecology Lead**



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**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
October 26, 2004**

- Tri-Party Agreement requires that a Hanford Site Land Disposal Restrictions (LDR) Report be submitted annually
- The CY 2003 LDR Report (N-026-01N) was submitted to Ecology on April 28, 2004
- Ecology extended the review period to allow time for completion of an inspection concerning the 241-CX Tank System Treatability Group.
- Ecology provided comments on the CY 2003 report September 14, 2004.



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**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
October 26, 2004**

- Ecology's inspection findings and report comments were discussed at the September and October Project Manager Meetings (PMMs)
  - Agreed that comment responses would be provided to Ecology by October 29, 2004.
- PMMs continue to be an effective tool for dialogue and as a venue to resolve outstanding actions outlined in the March 14, 2002, Resolution Agreement
  - One action remains open from the March 14, 2002, Settlement Agreement (Consolidation of Requirements Document)
  - Issues or concerns identified during the conduct of workscope or outyear activities are stated during the PMMs



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**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
October 26, 2004**

Actions Planned for Next Six Months

- Approval of the CY 2003 LDR Report
- Publish and distribute CY 2003 LDR Report
- Begin preparation of the CY 2004 LDR Report in November 2004
- Submit the CY 2004 LDR Report by April 30, 2005 (M-026-01O)
- Continue the monthly PMMs focusing on requirements consolidation and PMM commitments/actions

Tri-Party Agreement M-91 Milestone Series  
Quarterly Presentation

G. L. Sinton

U.S. Department of Energy,  
Richland Operations Office

October 26, 2004

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

### Significant Accomplishments of Last Three Months:

- Ecology and DOE approved changes to the M-91-12/12A thermal treatment milestones October 4, 2004
- FHI awarded thermal treatment contract to Permafix
- Retrieved 696 m<sup>3</sup> of RSW since the last quarterly report (7/1-9/30), bringing the total to 1346 m<sup>3</sup> as of 9/30/04
- Achieved 1200 m<sup>3</sup> of retrieval 4 months ahead of the 12/31/04 due date
- Submitted 218-E-12B SAP to Ecology 8/24/04
- Treated 508 m<sup>3</sup> of M-91-42 MLLW, bringing the total to 2944 m<sup>3</sup>

<p><b>M-91-12A:</b> CH-MLLW Thermal Treatment (240 m<sup>3</sup>)</p>	<p>9/30/05</p>	<p>On-Schedule</p>	<ul style="list-style-type: none"> <li>• See M-91-12 comments</li> <li>• FHI has awarded a contract with Permafix for thermal treatment of MLLW. Arrangements are being made to begin waste shipments to Permafix, with the first shipment expected by the end of October. At least 78 cubic meters of additional thermal treatment are needed by the September 30, 2005 due date. Current planning is for shipment of at least that quantity of waste to Permafix by the end of December 2004. The contractual arrangement allows Permafix nine months to treat the waste and return the residues. If the shipments are completed by the end of December, M-91-12A should be met ahead of schedule, depending on actual turn-around time at Permafix.</li> <li>• Additional commercial thermal treatment capacity is also being pursued</li> <li>•</li> </ul>
<p><b>M-91-40:</b> Retrieval and designation of CH-RSW (regardless of size)</p>	<p>1200 m<sup>3</sup> retrieved by 12/31/04 and annual retrieval volumes through 2010 plus various other requirements</p>	<p>On Schedule</p>	<ul style="list-style-type: none"> <li>• Third SAP quarterly report submitted to Ecology August<sup>12</sup><sup>th</sup> (No new data).</li> <li>• Fourth quarterly SAP report will be submitted on November (No new data).</li> <li>• 218-E-12B SAP transmitted to Ecology for approval on 8/24/04. Comments from Ecology were received October 13<sup>th</sup> and are currently being addressed.</li> <li>• 1397 m<sup>3</sup> of RSW retrieved as of 10/15/04</li> <li>• Reached 1200 cubic meters retrieved four months ahead of the 12/31/04 due date</li> </ul>
<p><b>M-91-42:</b> Treatment of non-large size CH-MLLW</p>	<p>Annual treatment requirements through 12/31/09</p>	<p>On Schedule (or ahead of schedule)</p>	<ul style="list-style-type: none"> <li>• 2944 m<sup>3</sup> of the MLLW subject to this milestone (MLLW-2 through MLLW-10 excluding MLLW-7) has been dispositioned as of the end of September. (1630 m<sup>3</sup> required by 12/31/04)</li> <li>• Note: The M-91-42 progress quantity indicated above</li> </ul>

M-91 Out-year Milestone Status Summary 10/26/04

Milestone	Due Date(s)	Status Summary	Comments
<b>General Comments</b>			1) This table is intended to identify the M-91 milestones that are not covered in the more detailed near term M-91 Status Summary Table. These milestones are generally those with due dates four or more years in the future.
<b>M-91-00:</b> Major Milestone for acquisition of needed facilities/capabilities for mixed and suspect MLLW, and TRUM and suspect TRUM.	TBD	On Schedule (planning)	
<b>M-91-01:</b> Facility/Capability Interim Milestone (RH and/or large container TRUM)	6/30/12	On Schedule (planning)	
<b>M-91-15:</b> RH MLLW and/or Large Size MLLW Treatment	6/30/08	On Schedule (Planning)	"COMPLETE ACQUISITION OF FACILITIES AND/OR CAPABILITIES AND INITIATE TREATMENT OF RH-MLLW AND CH MLLW IN BOXES AND LARGE CONTAINERS"
<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-91-43:</b> Designation and treatment of RH and or Large Size MLLW	See Comment Column	On Schedule (Planning)	<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 50.4 m<sup>3</sup> of MLLW-07 in March, bringing the total since 12/31/02 to 99.7 m<sup>3</sup></li> </ul>

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

## Actions Planned for Next Six Months

- Continue with MLLW treatment, RSW retrieval, and waste processing on schedule
- Finish realignment of baseline with M-91 and M-16 agreement change packages (HQ approval)
- Award additional thermal treatment contract
- Begin thermal treatment at Permafix
- Begin disposal of non-TRU retrieval waste in ERDF
- Finalize 218-E-12B burial ground SAP
- Submit SAP quarterly reports



## M-20 Milestone Review Permits and Closure Plans

Presented by:

Tony McKarns  
U.S. Department of Energy

October 26, 2004

### Closure Plan Milestone Status

**M-20-33** **12/31/2005**

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-20-39** **11/30/2005**

Submit 216-S-10 Pond and Ditch Closure/Postclosure Plans to Ecology in coordination with the Feasibility Study for the 200-CS-1 Chemical Sewer Group Operable Unit (coordinate under M-15-39C)

**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:

On schedule to meet milestones. The closure plans are to be integrated into the feasibility studies per the M-20 Milestones. DOE is actively working with EPA and Ecology on these integrations through the U Plant Waste Sites FFS and the 200-CW-1 FS.



### Planned Actions – next 6 months

- DOE Submit to Ecology the Closure/Postclosure Cost report.
- DOE and Ecology resolve comments on the groundwater portion of the 216-U-12 Crib Closure Plan, in conjunction with the proposed plan for the 200-UW-1 Operable Unit.
- DOE submit groundwater monitoring plan for 1324-N Surface Impoundment and 1324-NA Percolation Pond.
- DOE and Ecology continue NOD workshops for the LLBG.
- DOE and Ecology negotiate a schedule to resubmit the T Plant Part B permit application.
- DOE and Ecology establish permitting path forward for CWC and WRAP.



### Planned Actions – next 6 months (cont.)

- Ecology develop draft Hanford Facility RCRA Permit.
- Ecology respond to Class 1 modifications submitted for quarter ending 3/31/04, 6/30/04, and 9/30/04.
- Ecology approve closure of the 1324-N Surface Impoundment and 1324-NA Percolation Pond.
- Ecology and DOE resolve comments on the closure plan for the 216-B-3 TSD unit, in conjunction with the CERCLA feasibility study for the 200-CW-1 and 200-CW-3 operable units.
- Ecology complete review of DST System Part B permit application NOD response table by 11/8/04.
- Ecology provide NOD comments for:
  - SST System Closure Plan, Revision 2
  - Immobilized High-Level Waste Storage Unit (IHLW) Part B permit application
- Ecology issue Permit conditions for the Integrated Disposal Facility (IDF).
- Ecology provide comments on the Draft Waste Encapsulation Storage Facility (WESF) Part B Permit Application, Revision 0.



# **Hanford Spent Nuclear Fuel Project**

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



***U.S. Department of Energy,  
Richland Operations Office  
Fourth Quarter FY 2004***

***October 26, 2004***

## **TPA Milestone Status**

### **Remaining Milestones Due Fiscal Year 2004-2009**

Number	Milestone Title	Due Date	Status/Comments
M-34-18B	Complete Removal of all K Basins Spent Nuclear Fuel. This interim milestone will be complete when all spent nuclear fuel has been removed from both the K West Basin and the K East Basin and has been transported to the Cold Vacuum Drying Facility. It is understood that additional fuel fragments may be discovered during removal of the sludge.	07/31/2004	Completed 10/12/2004
M-34-23	Initiate full scale K East Basin Water Removal	09/30/2004	Completed 08/20/2004
M-34-33	Containerize K East Sludge, All K East Sludge is placed in containers Sludge containerization initiation (10/31/2004) Sludge containerization complete (03/01/2005)	As Specified in descriptive text of this milestone	On schedule.
M-34-21-T01	Initiate full scale K Basin water removal.	12/31/2005	On schedule.
M-34-34	Complete removal of K East Sludge.	01/31/2006	On schedule.
M-34-35	Containerize K-West Sludge All K West Sludge is placed in containers.	06/30/2006	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.	02/28/2007	On schedule.



## ***TPA Milestone Status (continued)***

### ***Remaining Milestones Due Fiscal Year 2004-2009***

Number	Milestone Title	Due Date	Status/Comments
M-34-32	<p>Complete Removal of the K East Basin Structure</p> <p>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.</p>	03/31/2007	On schedule.
M-34-31	<p>Complete Sludge treatment</p> <p>This interim milestone will be complete following treatment and package of all sludge for disposal offsite.</p>	10/31/2007	On schedule.
M-34-00A	<p>Complete removal of the K Basins and their contents.</p> <p>Note: Unless otherwise noted, the term "K Basins" is used to denote both K East and K West Basins. This milestone will be complete when both K East and K West Basins, spent nuclear fuel, sludge, debris, and water are removed.</p>	03/31/2009	On schedule.



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

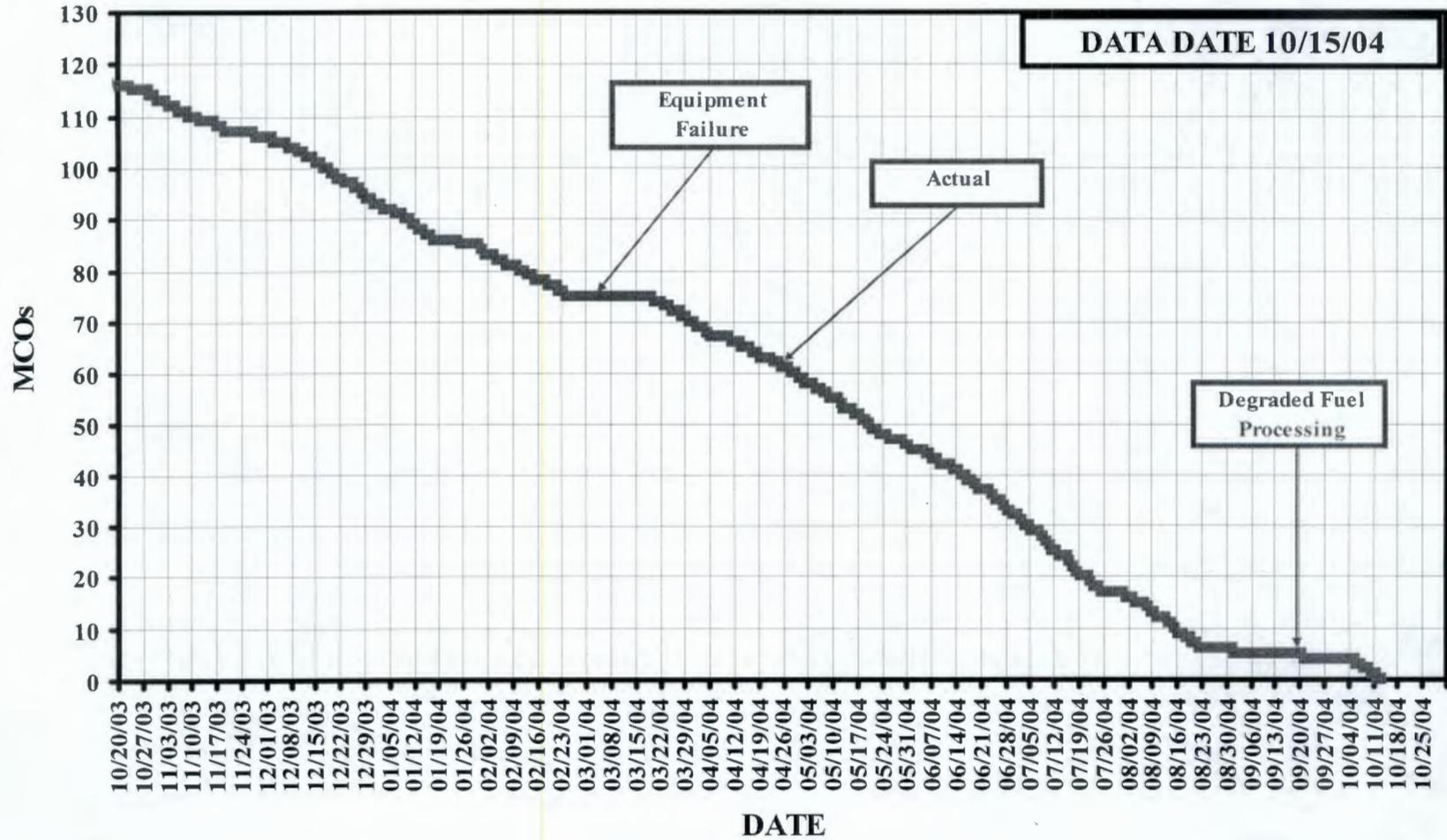
### **Fuel Removal**

- Shipped Multi-Canister Overpack (MCO) 386 from K West Basin to Cold Vacuum Drying Facility (CVDF) on October 12, 2004.  
This completes M-34-18B. There is approximately 1000 pounds of fuel scrap that includes portions of scrap transferred to the K Basins from the cleanout of the F and H Reactor fuel storage basins that is staged to be packaged with those fuel fragments which are likely to be discovered during the course of debris and sludge removal. This fuel scrap is being staged in closed canisters.
  
- Fuel handling, transfer, cleaning and packaging systems in the K Basins and the Cold Vacuum Drying Facility are being or have been placed in a standby condition to support processing the fuel scrap and any fuel fragments found during sludge and debris removal.



# Significant Accomplishments and Status (continued)

MCOs REMAINING



## ***Significant Accomplishments and Status (continued)***

### **Sludge Removal and Disposition**

- Continued removal of sludge from the KE Basin North Load Out Pit into a Large Diameter Container
- Initiated pumping sludge from the KE Basin west bay into the South Load Out Pit
- Proceeded with preparations to treat NLOP sludge at T-Plant as an alternative to the 325 facility
- Engaged commercial industry flocculent experts to evaluate and provide recommendations for achieving effective flocculation in the containerization design
- Performed mockup testing at the 305 Building on sludge containerization system including flocculant injection system.
- Installed two of the four sludge containers in the K East Basin
- Submitted Remedial Design Report change description for K East to K West Basin sludge transfer and K West Basin floor and pit sludge containerization
- Received EPA approval of Remedial Design Report change description
- Conducted critical velocity and abrasion testing of K East to K West transfer valve, fitting and hose material
- Received vendor proposals for sludge stabilization and packaging



## ***Significant Accomplishments and Status (continued)***

### **Deactivation**

- K East Basin Discharge Chute Grouting
  - Completed TPA Milestone M-34-23, "Initiate full scale water removal from 105KE basin", on August 20, 2004, ahead of the 9/30/04 due date
  - Completed grouting the 105KE Basin Discharge Chute
  - Completed cleanup of excess spoils and demobilization of the grout contractor
  - SAR revisions submitted to RL - Status
    - *KE & KW discharge chute grouting approved*
    - *Basins hydrolasing (partial approval – more structural analyses and controls required – required structural analysis has been initiated)*
  - K East Basin Debris Removal
    - Installed size reduction tools and made significant progress in cutting and relocating debris to facilitate canister removal
    - Continued demolition activities of the existing load-out station in 105-KE. Size reduction activities were completed in early October and waste was transferred to the high bay in preparation for packaging to transport to ERDF
    - Chartered a high performance team focused on tool needs/development for basin use. Tools are being evaluated by team members at the vendor site prior to radiological use to ensure the tool meets life cycle duration needs, ergonomically friendly interface, and ease of deployment.



## ***Upcoming Activities***

### **Fuel Removal**

- Collect and stage "Found Fuel" scrap for removal

### **Sludge Retrieval and Disposition**

- Continue K East NLOP Sludge Removal into LDCs
- Complete full scale mock up testing in 305 Building of redesigned flocculent system for sludge containerization
- Continue preparations to treat NLOP sludge at T Plant
- Complete Readiness Assessment for startup of K East Basin Sludge Containerization
- Complete final design for K East to K West transfer and K West floor and pit sludge retrieval systems
- Place procurements for K East to K West transfer and K West sludge retrieval equipment and fabrication
- Award Sludge Stabilization and packaging contact

### **Debris Removal**

- Debris is removed and shipments to disposal are being restricted due to issues associated with waste classification and use of a "weight to curie" methodology for characterizing wastes
- The K Basins CERCLA ROD amendment will revise the remedy for debris removal to include leaving some debris in place to be grouted and removed with the basin structure
- Complete demolition/removal of abandoned long handled tools and glovebox in 105-KE in preparation for installation of a new load-out station
- Continue installation of load-out station components in 105 KE basin



## ***Upcoming Activities (continued)***

### **Deactivation**

- Prepare a labor/workforce strategy document to address D&D work assignments
- Initiate request for quotes for FY2005/2006 procurements
- Finalize planning for KE hydrolasing/visit vendor site
- Initiate planning for removal of above-water Basin equipment

### **CERCLA and Regulatory Documentation**

- Revise K Basin CERCLA decision documentation to reflect accelerated sludge disposal pathway
  - *Focused Feasibility Study for the K Basin Interim Remedial Action*
  - *Proposed Plan K Basin Interim Remedial Action*
  - *Record of Decision*
- Continue to support the development of criteria and process demonstration for achieving a sludge/D&D end point. The DQO/SAP development for basin segments is continuing. This DQO/SAP will be used to develop the sludge and basin end-point requirements
- Issue end-point criteria for EPA review and approval
- Issue response to public comments on the M-34-04-01 and M-16-04-04 change packages.



## ***SNF Project Issues/Concerns***

### **Programmatic Issues:**

- Issuance of remote handled (RH) TRU waste acceptance criteria (WAC) for WIPP
- Review of sludge waste classification
- Debris characterization/classification for ERDF disposal
- Applicable or Relevant and Appropriate Requirements Identification: Criteria and Process

### **Issue Resolution Status:**

- Draft RH TRU WAC has been prepared
- DOE review in progress
- Waste Characterization/Classification methodology being reviewed as well as screening past waste shipments to ERDF
- Meetings between DOE-RL and EPA have progressed to identify issues and means of reconciling those issues



## ***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*

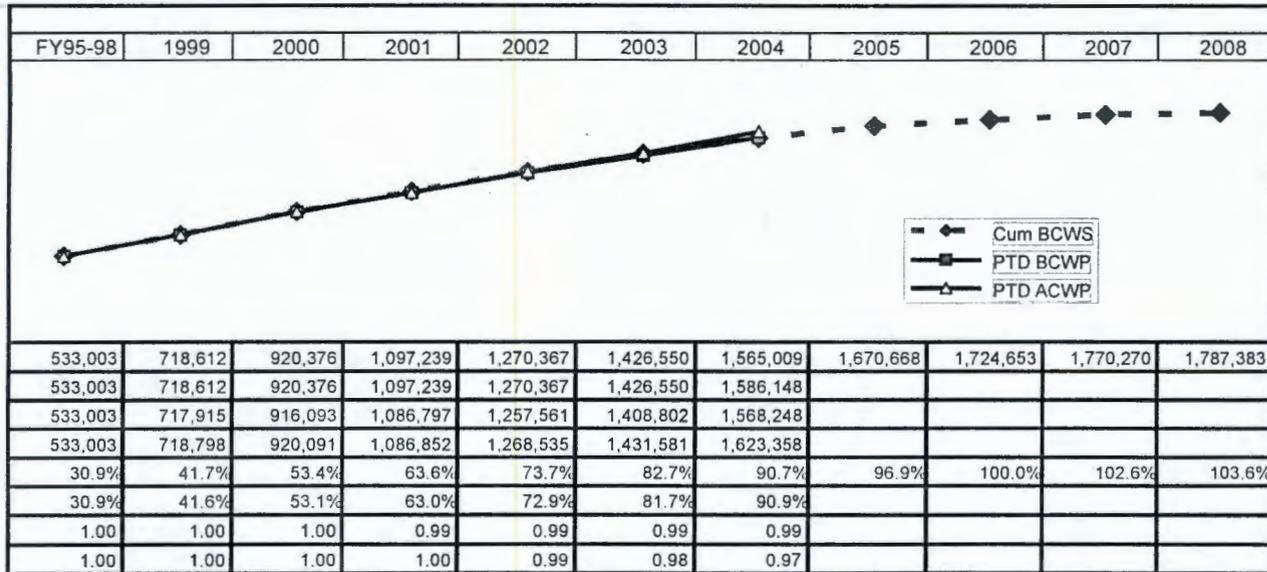
### **BAC (Budget at Completion)**

- *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*



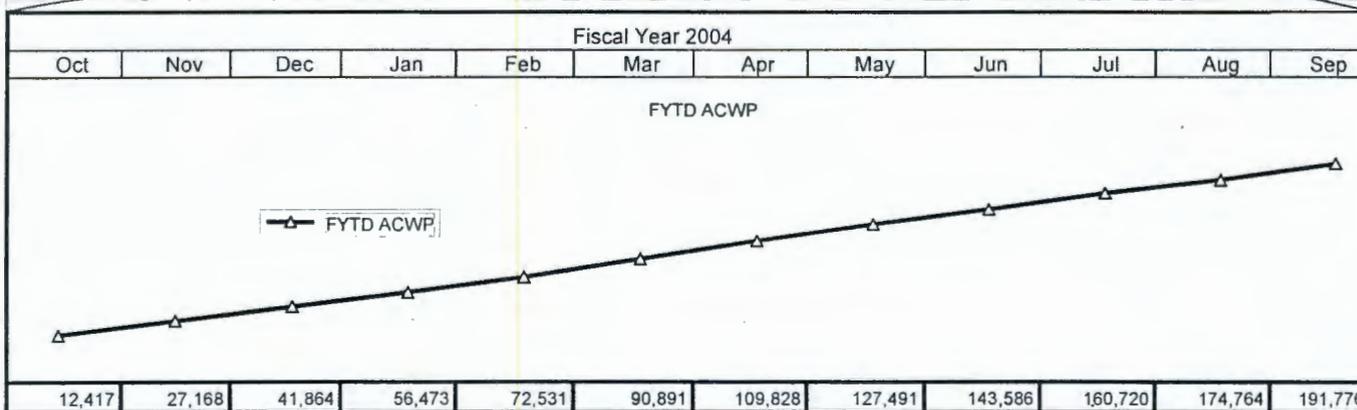
# Hanford Spent Nuclear Fuel Project

## SNF Project – Total Project Baseline



Life Cycle	
*BAC=	1,787,383
EAC=	1,845,732
BCWS=	1,586,148
BCWP=	1,568,248
ACWP=	1,623,358
SV=	(17,900)
CV=	(55,110)

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



FYTD ACWP

**\* The Project is being rebaselined consistent with new performance agreements.**



## ***SNF Stabilization and Disposition Project Performance through Fourth Quarter FY 2004***

		(\$ in thousands)	<u>FYTD</u>
		<b>By PBS</b>	<b>ACWP</b>
PBS RL-0012	Fuel and Operations		\$ 118,725
PBS RL-0012	Sludge Retrieval and Disposition		\$ 42,303
PBS RL-0012	D&D Deactivation		\$ 11,030
PBS RL-0012	Closure Services		\$ 19,718
<b>TOTAL</b>			<hr style="border-top: 1px solid black;"/> \$ 191,776





## M-20 Milestone Review Permits and Closure Plans

Presented by:

Tony McKarns  
U.S. Department of Energy

October 26, 2004

### Closure Plan Milestone Status

**M-20-33** **12/31/2005**

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-20-39** **11/30/2005**

Submit 216-S-10 Pond and Ditch Closure/Postclosure Plans to Ecology in coordination with the Feasibility Study for the 200-CS-1 Chemical Sewer Group Operable Unit (coordinate under M-15-39C)

**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:

On schedule to meet milestones. The closure plans are to be integrated into the feasibility studies per the M-20 Milestones. DOE is actively working with EPA and Ecology on these integrations through the U Plant Waste Sites FFS and the 200-CW-1 FS.



## Hanford Facility RCRA Permit Status

- The Hanford Facility RCRA Permit expired on 9/27/04. On 9/1/04, Ecology concurred that the DOE package submitted for Permit renewal was sufficiently complete per WAC 173-303-840(1)(b) to begin preparing a draft permit.

Ecology expects DOE to continue to operate under the current Hanford Facility RCRA Permit, until a new Permit is in effect.

- Central Waste Complex, Waste Receiving and Processing Facility, and T Plant Complex are waiting a decision on offsite shipments and Ecology's acceptance of the SW EIS.
- 222-S Laboratory Complex is waiting Ecology's acceptance of the SW EIS, before proceeding.



## Accomplishments - last 3 months

- DOE submitted from: page of Part A stamped "Closed 07/01/04" on 9/28/04, as requested in Ecology's 7/1/04, approval of the 105-DR Large Sodium Fire Facility closure certification.
- DOE submitted Class 1 modifications to Ecology for quarter ending 9/30/04.
- DOE submitted the RCRA Underground Pipe Mapping and Marking Report 9/30/04.
- Ecology approved the procedural closure Class 1 modifications for the 325 Hazardous Waste Treatment Units.
- Ecology concurred that the DOE package submitted for Permit renewal was sufficiently complete per WAC 173-303-840(1)(b) on 9/1/04.
- Ecology issued Revision 8 of the Hanford Facility RCRA Permit on 9/23/04.



### Planned Actions – next 6 months

- DOE Submit to Ecology the Closure/Postclosure Cost report.
- DOE and Ecology resolve comments on the groundwater portion of the 216-U-12 Crib Closure Plan, in conjunction with the proposed plan for the 200-UW-1 Operable Unit.
- DOE submit groundwater monitoring plan for 1324-N Surface Impoundment and 1324-NA Percolation Pond.
- DOE and Ecology continue NOD workshops for the LLBG.
- DOE and Ecology negotiate a schedule to resubmit the T Plant Part B permit application.
- DOE and Ecology establish permitting path forward for CWC and WRAP.



### Planned Actions – next 6 months (cont.)

- Ecology develop draft Hanford Facility RCRA Permit.
- Ecology respond to Class 1 modifications submitted for quarter ending 3/31/04, 6/30/04, and 9/30/04.
- Ecology approve closure of the 1324-N Surface Impoundment and 1324-NA Percolation Pond.
- Ecology and DOE resolve comments on the closure plan for the 216-B-3 TSD unit, in conjunction with the CERCLA feasibility study for the 200-CW-1 and 200-CW-3 operable units.
- Ecology complete review of DST System Part B permit application NOD response table by 11/8/04.
- Ecology provide NOD comments for:
  - SST System Closure Plan, Revision 2
  - Immobilized High-Level Waste Storage Unit (IHLW) Part B permit application
- Ecology issue Permit conditions for the Integrated Disposal Facility (IDF).
- Ecology provide comments on the Draft Waste Encapsulation Storage Facility (WESF) Part B Permit Application, Revision 0.



**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
Quarterly Presentation  
October 26, 2004**



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

**Eric Van Mason, Ecology Lead**



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**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
October 26, 2004**

- Tri-Party Agreement requires that a Hanford Site Land Disposal Restrictions (LDR) Report be submitted annually
- The CY 2003 LDR Report (M-026-01N) was submitted to Ecology on April 28, 2004
- Ecology extended the review period to allow time for completion of an inspection concerning the 241-CX Tank System Treatability Group.
- Ecology provided comments on the CY 2003 report September 14, 2004.



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**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
October 26, 2004**

- Ecology's inspection findings and report comments were discussed at the September and October Project Manager Meetings (PMMs)
  - Agreed that comment responses would be provided to Ecology by October 29, 2004.
- PMMs continue to be an effective tool for dialogue and as a venue to resolve outstanding actions outlined in the March 14, 2002, Resolution Agreement
  - One action remains open from the March 14, 2002, Settlement Agreement (Consolidation of Requirements Document)
  - Issues or concerns identified during the conduct of workscope or outyear activities are stated during the PMMs



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**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
October 26, 2004**

Actions Planned for Next Six Months

- Approval of the CY 2003 LDR Report
- Publish and distribute CY 2003 LDR Report
- Begin preparation of the CY 2004 LDR Report in November 2004
- Submit the CY 2004 LDR Report by April 30, 2005 (M-026-01O)
- Continue the monthly PMMs focusing on requirements consolidation and PMM commitments/actions

# CENTRAL PLATEAU MILESTONE REVIEW

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4th Quarter FY 2004

# WASTE SITE REMEDIATION & FACILITIES

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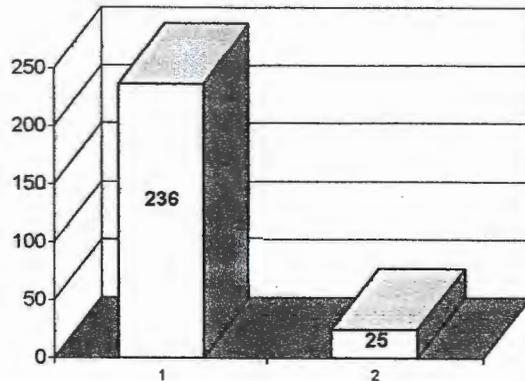
M-013-00

M-015-00

M-016-00

# Central Plateau Milestones

## Central Plateau Milestones TPA Milestone Statistics (Major & Interim Milestones)



Major Milestone	Compliance Due Date	Total Active*	Milestone Number	Compliance Due Date	Milestone Description
<b>M-13-00</b> Submit Work Plans for RFI/CMS or RI/FS Studies	<b>12/31/2004</b> (M-13-00)	<b>1</b>	M-13-00(C)	06/30/04	Submit 1 200 NPL RI/FS (RFI/CMS) Work Plan For The 200-UR-1
			M-13-00	12/31/04	Submit 1 200 NPL RI/FS (RFI/CMS) Work Plan For The 200-SW-1
<b>M-15-00</b> Site Investigations / Feasibility Studies	<b>12/31/2008</b> (M-15-00)	<b>9</b>	M-15-41(C)	03/31/04	Submit Draft 200-TW-1 OU & 200-TW-2 OU FS & Proposed Plan
			M-15-39B(C)	05/31/04	Submit Draft A 200-CS-1 Chemical Sewer Group RI Report
			M-15-43B(C)	06/30/04	Submit 200-PW-2 OU RI Report Including Past Practice Waste Sites
			M-15-40C	10/31/04	Submit Draft A 200-CW-5 Pond/Z Ditches Cooling Water Group FS
			M-15-46A	10/31/05	Submit 200 Area Chemical Laboratory Waste OUs RI Report
			M-15-39C	11/30/05	Submit Draft A 200-CS-1 Chemical Sewer Group FS and Proposed Plan
			M-15-43C	12/31/05	Submit 200-PW-2 OU FS and Proposed Plan/Permit Modification
			M-15-44A	12/31/05	Submit 200-MW-1 OU RI Report
			M-15-46B	09/30/06	Submit 200 Area Chemical Laboratory Waste OUs FS
			M-15-44B	12/31/06	Submit 200-MW-1 OU FS and Proposed Plan
<b>M-16-00</b> Remedial Design / Remedial Action	<b>9/30/2024</b> (M-16-00)	<b>2</b>	M-16-66(C)	09/30/04	Initiate Intermediate Design & Authorization Safety Analysis
			M-16-67	03/31/07	Submit Design Report, Schedule, Work Plan for 618-10/11
			M-16-00	09/30/24	Complete Remedial Actions for All Non-Tank Farm Operable Units
			M-20-39	11/30/05	Submit 216-S-10 Pond & Ditch Closure Plan to Ecology
<b>M-20-00</b> Submit Closure Plans for All RCRA TSD Units (Shared with FH)	<b>12/31/2008</b> (M-20-00)	<b>5</b>	M-20-33	12/31/05	216-A-10/216-A-36B/216-A-37-1 Crib Closure/Post Closure Plans
			M-20-54	12/31/08	Submit 241-CX Tank System Closure/Postclosure Plan
			M-20-00B	12/31/08	Submit 216 & 241 Areas Closure/Post Closure Plans
			M-20-00	12/31/08	Submit Part B Permit Applications or Closure/RCRA TSD Units
<b>M-24-00**</b> RCRA Groundwater Monitoring	<b>Annually</b>	<b>8</b>	M-24-57A(C)	12/31/03	DOE Shall Install a Minimum of 15 Wells by 12/31/03
			M-24-57B(C)	06/30/04	DOE Initiates Discussions Annually to Reaffirm Selected Wells
			M-24-57C(C)	08/01/04	Conclude Negotiations & Revise M-024-57 by 08/01/04
			M-24-57D	12/31/04	DOE Shall Install a Cumulative of 30 Wells by 12/31/04
			M-24-57E	06/30/05	DOE Initiates Discussions Annually to Reaffirm Selected Wells
			M-24-57F	08/01/05	Conclude Negotiations & Revise M-024-57 by 08/01/05
			M-24-57G	12/31/05	DOE Shall Install a Cumulative of 45 Wells by 12/31/05
			M-24-57H	06/30/06	DOE Initiates Discussions Annually to Reaffirm Selected Wells
			M-24-57I	08/01/06	Conclude Negotiations & Revise M-024-57 by 08/01/06
			M-24-57J	12/31/06	DOE Shall Install a Cumulative of 60 Wells by 12/31/06
M-24-000	TBD	Complete Well Installations in Accordance with RCRA/CERCLA GW Reqs			

**8 — MILESTONE COMPLETED IN FY04 (C)**

**TOTAL ACTIVE MILESTONES 25**

\* Includes TPA changes requests approved thru September 30, 2004.  
 \*\* M-24-0057 Modified by Change Request M-24-02-02 Approved March 01, 2004

**WASTE SITE REMEDIATION PROJECTS  
FY 2004 TPA MILESTONE SUMMARY  
(Major & Interim Milestones)**

**Status as of: September 30, 2004**

PBS	Milestone	Title	Compliance Date	Forecast/ Actual Date	Completed		Forecast		
					Ahead Schedule	On Schedule	Ahead Schedule	On Schedule	Behind Schedule
	M-015-41C	Submit 200-TW-1 & TW-2 OU FS and PP including Past Practice Waste Sites in 200-PW-5 Fission Product-Rich Process Waste Group	3/31/04	3/30/04		X			
	M-015-39B	Submit 200-CS-1 Chemical Sewer Group RI Report	5/31/04	5/27/04	X				
	M-013-00N	Submit 1 200 NPL RI/FS (RFI/CMS) Work Plan for the 200-UR-1 Unplanned Releases	6/30/04	6/30/04		X			
	M-015-43B	Submit 200-PW-2 OU RI Report including Past Practice Waste Sites in the 200-PW-4 General Process Waste Group	6/30/04	6/24/04	X				L
	M-016-66	Complete preliminary remedial Design and Authorization Safety Analysis for Remedial Actions (618-10/11)	9/30/04	9/30/04		X			

## WASTE SITE REMEDIATION ACCOMPLISHMENTS

### 200 Area Waste Site Remediation

The 200-CW-5, 200-CW-2, 200-CW-4, and 200-SC-1 Rev. 1 consolidated work plan was finalized and transmitted to the EPA and Ecology on September 20, 2004.

The 200-CW-5, 200-CW-2, 200-CW-4, and 200-SC-1 Rev. 0 Remedial Investigation Report was submitted to the EPA and Ecology on August 30, 2004.

The 200-PW-2 and 200-PW-4 Rev. 1 consolidated work plan was finalized and transmitted by RL to the EPA and Ecology on August 18, 2004. Ecology formally approved the document on September 10, 2004.

Geophysical characterization (high resolution resistivity) of the BC Cribs and Trenches area waste sites indicated the presence of continuous plumes of deep contamination beneath the waste sites. These data, in conjunction with the 216-B-26 Trench borehole sampling results, support the conclusion that a groundwater impact is not imminent.

Preliminary remedial design activities were completed and transmitted to RL on September 30, 2004, for the 618-10 and 618-11 Burial Grounds in support of TPA Milestone M-16-66.

## WASTE SITE REMEDIATION ISSUES

### 200-TW-1, 200-TW-2, and 200-PW-5 RI Report Approval

**Issue** – The EPA and Ecology provided comments in a letter dated March 2, 2004, concerning the fate and transport modeling performed for the representative waste sites. The EPA and Ecology provided conditional approval of the RI Report pending resolution of the modeling comments.

**Impact** - Approval of the RI Report is contingent on resolving these comments.

**Status** – Based on coordination with EPA, Ecology, and the USGS, RL has conducted additional modeling runs that incorporate agreed upon modifications and sensitivity analysis. Preliminary results of these modeling runs have been provided to EPA, Ecology, and the USGS in June 2004, for review. A subsequent meeting was held September 8, 2004, to address comments. Some issues remain unresolved. It is expected that the RI Report will be revised to incorporate the modeling results once the

EPA, Ecology, and the USGS are satisfied with the additional modeling results.

### 200-SW-1 and 200-SW-2 RI/FS Work Plan

**Issue** – Ecology and RL have been discussing the scope of the RI/FS work plan since Oct. 2003. Ecology has repeatedly requested that DOE-RL enter into collaborative negotiations to resolve issues for the burial grounds; DOE-RL has been reluctant to enter into a formal negotiation process, preferring an informal process. Informal discussions were held, allowed information exchange, and led to a focus on a small set of remaining issues:

- schedule integration of LLBG permitting and closure with CERCLA investigation and remediation,
- need for work plan to identify treatability investigations
- characterization approach and schedule for 15 high-risk landfills

**Impact** – Ecology has indicated concern over DOE-RL's ability to meet the TPA milestone for submittal of the work plan by December 2004.

**Status** – Ecology and DOE-RL have recently agreed to discussions to resolve issues pertaining to the burial grounds. Ecology is working to procure a facilitator for the discussions. Discussions will have to be scheduled, and the schedule will be compared to the work plan schedule to assess impacts on the milestone.

### **U Plant Area Pipelines**

**Issue** – RL is planning to complete an Engineering Evaluation/Cost Analysis (EE/CA)

for the underground pipelines in the U Plant area, by the end of FY05. Remediation would be done post-FY06. The Ecology Project Manager has proposed target milestones for earlier completion, that the RL Project Manager declined to sign.

**Impact** – Ecology indicated that it could prepare enforceable milestones if target milestones weren't accepted by RL. Ecology would not approve the EE/CA if the ORP pipelines were omitted.

**Status** The issue of the target milestones has been elevated to the RL and Ecology Senior Executives.

## **FACILITIES ACCOMPLISHMENTS**

The final site stabilization and waste removal actions at the 233-S Plutonium Concentration Facility were completed in July 2004.

22 buildings in the B Plant Construction Laydown Yard were demolished. All field and demobilization activities were completed September 30, 2004. Project administrative and regulatory closeout activities will be completed in October.

The public comment period for the Engineering Evaluation/Cost Analysis (EE/CA) for the U Plant Ancillary Facilities was held from August 25 through September 25, 2004. Three comments were received. Proposed comment responses and a draft action memorandum are being

prepared for RL and EPA review. Mobilization activities have been initiated to proceed with field work as soon as appropriate approvals are received. The removal action for the U Plant Ancillary Facilities supports overall U Plant zone remedial actions.

Workshops with technical and legal staff from EPA and Ecology were held in August 2004 to confirm resolution of comments received on the Feasibility Study/Proposed Plan (FS/PP) for the Proposed Remediation of the 221-U Canyon Disposition Initiative (CDI). The revised FS/PP will be transmitted to EPA and Ecology in October 2004 for final comments, concurrence with the documents and approval to proceed with public comment.

## **FACILITIES ISSUES**

None to Report

# TPA Milestone Summary Schedule

Status as of: Sept 30, 2004

Updated October 06, 2004 11:30 AM

Operable Unit	Fiscal 2002 By Quarter				Fiscal 2003 By Quarter				Fiscal 2004 By Quarter				Fiscal 2005 By Quarter				Fiscal 2006 By Quarter				Fiscal 2007 By Quarter				Fiscal 2008 By Quarter				Fiscal 2009 By Quarter				Fiscal 2010 By Quarter			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
<b>200 Area Remedial Action</b>	Note 1 - "Ecology believes this is at risk"																																			
200 Area Work Plans	M-13-00L 12/26/01(A) Submit 3 200 NFL RVFS (RFI/CMS) Work Plans				M-13-00M 12/30/02(A) Submit 1 200 NFL RVFS (RFI/CMS) Work Plan for 200-IS-1 OU, Includes waste sites in 200-ST-1				M-13-00N 06/30/04(A) Submit 1 200 NFL RVFS (RFI/CMS) Work Plan for 200-UR-1 OU				M-13-00O (Note 1) Submit 1 200 NFL RVFS (RFI/CMS) Work Plan for 200-SW-2 OU, Includes waste sites in 200-SW-1																							
200 Area Assessments					M-15-38A 10/23/02(A) Submit 200-CW-1FS/PP Proposed RCRA Permit Mod for Gable Man Pond/B Pond & Ditch Cooling Waste Group ....				M-15-40B 05/30/02(A) Submit 200-CW-5 U Pond / Z Ditches Cooling Water Group RI Report Including Past Practice Waste Sites in 200-CW-2, 200-CW-4 & 200-SC-1				M-15-40C Submit 200-CW-5 FS/PP for U Pond / Z Ditches Cooling Water Group, Including Past Practice Waste Sites in 200-CW-2, 200-CW-4, & 200-SC-1				M-15-46A Submit 200 Area Chemical Lab Waste OUs RI Report				M-15-44A Submit 200-MW-1 OU RI Report				M-15-46B Submit 200 Area Chemical Lab Waste OUs FS											
200-CS-1					M-15-39A 09/29/03(A) Complete Chemical Sewer Group field Work Through Sample Collection & Analysis				M-15-39B 05/27/04(A) Submit 200-CS-1 Chemical Sewer Group RI Report				M-15-39C Submit 200-CS-1 FS/PP/Proposed RCRA Permit Mod for Chemical Sewer Group																							
200-TW-1 / 200-TW-2	M-15-41B 10/23/02(A) Submit 200-TW-1 & 200-TW-2 OU RI Report to Regulators, Including Past Practice Waste Sites in 200-PW-5				M-15-41C 03/30/04(A) Submit 200-TW-1 & 200-TW-2 OU FS/PP Proposed Plan to Regulators, Including 200-PW-5				M-15-43B 06/24/04(A) Submit 200-PW-2 OU RI Report Including Past Practice Waste Sites in 200-PW-4				M-15-43C Submit 200-PW-2 OU FS/PP/Proposed RCRA Permit Mod Including Past Practice Waste Sites in 200-PW-4																							
200-PW-2																																				
200 Area Common					M-15-47 06/27/02(A) Submit PP to Regulators to Conduct RA for Source Control at High-Risk Waste Sites Which Includes an Engineering Evaluation of an Engineered Surface Barrier																				M-15-00 Complete RI/FS (or RFI/CMS) Process for All Operable Units M-15-00C Complete All 200 Area Non-Tank Farm OU Pre-ROD Site Investigations Under Approved Work Plan Schedules											
200 Area Closure Plans																	M-20-39 Submit 216-S-10 Pond/Ditch Closure/ Post Closure Plan to Ecology in Coord with / FS for 200-CS-1 (w/ coord under M-15-39C)												M-20-54 Submit 314-CX-70, -71, -72 Tanks Closure/ Post Closure Plan to Ecog in Coord w/ 200-IS-1 FS Scheduled under M-13-00M							
200-CS-1																																				
200-PW-2																																				
200-IS-1																													M-20-00B Submit Closure/Post Closure Plans for 216-A-10, 216-A-36B, 216-A-37-1, 207-A South Retention Basin 216-S-10 Pond, 216-S-10 Ditch, 341-CX-71, and 241-CX-72							

Major Milestone  
 Interim Milestone  
 Forecast  
 Complete  
 Unrecoverable  
 "At Risk"  
 (P) Pending Change Request  
 RCRA Permit Commitment

# GROUNDWATER REMEDIATION PROJECT

M-013-00

M-024-00

**GROUNDWATER REMEDIATION PROJECT  
FY 2004 TPA MILESTONE SUMMARY  
(Major & Interim Milestones)**

**Status as of: September 30, 2004**

PBS	Milestone	Title	Compliance Date	Forecast/ Actual Date	Completed		Forecast		
					Ahead Schedule	On Schedule	Ahead Schedule	On Schedule	Behind Schedule
	M-024-57A	Complete required well installations in accordance with RCRA and CERCLA groundwater requirements. Install a minimum of 15 wells by 12/31/03.	12/31/03	12/31/03		X			
	M-024-57B	DOE Initiates Discussions Annually to Reaffirm Selected Wells	6/30/04	6/30/04	X				
	M-024-57C	Conclude Negotiations & Revise M-024-57	8/1/04	8/1/04		X			

## GROUNDWATER REMEDIATION ACCOMPLISHMENTS

Work continued on remedial actions to address an additional area of chromium contaminated groundwater in the 100 D Area. A targeted pump and treat system was selected for the near term to minimize the impact of contaminated groundwater on the river and to achieve mass reduction of hexavalent chromium. Construction of the extraction and injection network and associated treatment system was completed in July 2004. The system has been operating at approximately 40 gpm. Concentrations of the influent are approximately 900 ppb and effluent concentrations of hexavalent chromium are not detectable.

A focus group of outside experts was assembled to evaluate amendments to the ISRM barrier in August 2004. Borehole flow meter testing was completed in numerous wells along the barrier. The data are currently being analyzed.

A proposal was put forth to address chromium down river from the 100-K Area. A treatability test plan using a calcium polysulfide treatment on extracted water prior to injection will be formulated in the fall. Design for the connection of well 199-K-114A to the existing system is underway. This well will be connected by November 30, 2004. In addition, well 199-K-131 was completed and will be sampled on a monthly basis.

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## GROUNDWATER REMEDIATION ISSUES

None to Report

# TPA Milestone Summary Schedule

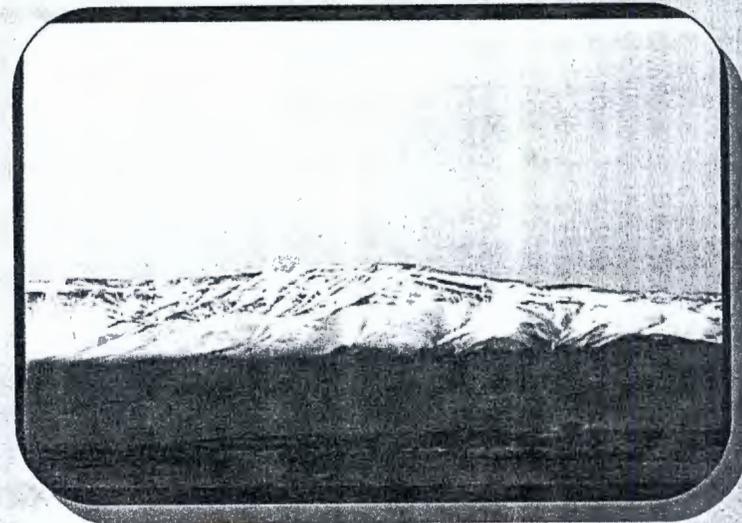
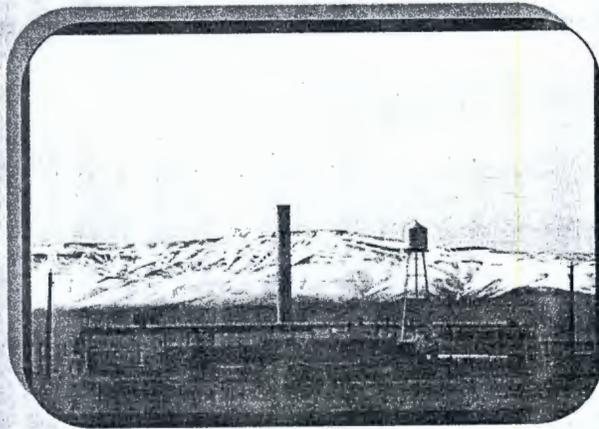
Status as of: Sept 30, 2004

Updated October 06, 2004 11:30 AM

	Fiscal 2002				Fiscal 2003				Fiscal 2004				Fiscal 2005				Fiscal 2006				Fiscal 2007				Fiscal 2008				Fiscal 2009				Fiscal 2010																											
	By Quarter				By Quarter				By Quarter				By Quarter				By Quarter				By Quarter				By Quarter				By Quarter																															
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th																								
618-10/618-11 Burial Grounds													● M-16-66 09/30/04 (A) Initiate intermediate design and ASA for Remedial Actions									⊙ M-16-67 Submit intermediate Design, Report, Schedule, and Treatability Inv Work Plan																																						
Groundwater																																																												
Common	● M-24-51 thru -55 Install 11 Monitoring Wells at SST WMA B-BX-BY, U, S-SX, T-TX-TY				● M-24-52 09/29/01(A) Install RCRA Groundwater Monitoring Wells at Rate from 0 to 50 in CY 2001 (if required)				● M-24-54 10/18/01(A) Install 2 Monitoring Wells at SST WMA TX-TY				● M-24-53 11/08/01(A) Install RCRA Groundwater Monitoring Wells at Rate from 0 to 50 in CY 2002 (if required)				● M-24-56 12/18/02 (A) DOE Shall Install a minimum of 15 Wells by 12/31/03				● M-24-57A 12/31/03 (A) DOE Initiates discussions Annually to Reaffirm Selected Wells				● M-24-57B 06/30/04 (A) Conclude Negotiations & Revise M-24-57 by 08/01/04				● M-24-57C 07/27/04 (A) DOE Shall Install a Cumulative of 30 Wells by 12/31/04				● M-24-57D DOE Initiates discussions Annually to Reaffirm Selected Wells				● M-24-57E Conclude Negotiations & Revise M-24-57 by 08/01/05				● M-24-57F DOE Shall Install a Cumulative of 45 Wells by 12/31/05				● M-24-57G DOE Initiates discussions Annually to Reaffirm Selected Wells				● M-24-57H Conclude Negotiations & Revise M-24-57 by 08/01/06				● M-24-57I DOE Shall Install a Cumulative of 60 Wells by 12/31/06				● M-24-57J Complete Well Installations with RCRA/CERCLA Groundwater Requirements			
100-HR-3	● M-16-27B 11/20/01 (A) Complete 100-HR-3 Phase II, ISRM Barrier Emplacement								● M-16-27C 04/10/03 (A) Complete 100-HR-3 Phase III, ISRM Barrier Emplacement																																																			

Major Milestone  
  Interim Milestone  
  Forecast  
 M Complete  
  Unrecoverable  
  "At Risk"  
 P Pending Change Request  
  RCRA Permit Commitment

# PFP Closure Project



## Milestone TPA-M-83

October 2004  
Tri-Party Agreement Milestone  
Status Report

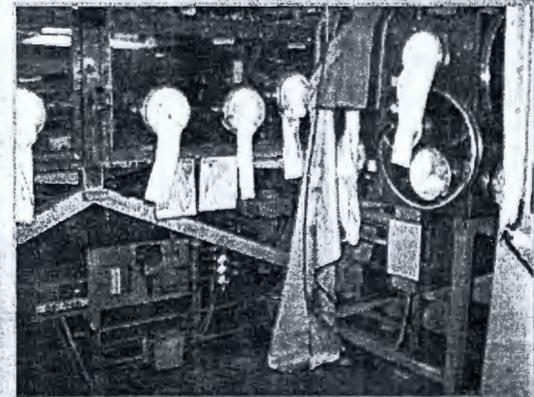
Ecology Project Manager - R. Bond  
DOE-RL Project Director – S. Charboneau  
FH Project Manager – D. B. Klos  
FH Environmental – A. M. Hopkins

# M-83 Status for Interim Milestones Through 2006 (as of 9/30/04)

<b>TPA No.</b>	<b>TPA Commitment Date</b>	<b>Milestone Title</b>	<b>Status</b>
M-083-31	6/30/05	DISCONTINUE WASTE DISCHARGES FROM THE 241-Z TANKS TO TANK FARMS	On Schedule
M-083-14	9/30/06	COMPLETE 100% OF THE LEGACY PU HOLDUP REMOVAL	Ahead of Schedule
M-083-40	9/30/06	COMPLETE TRANSITION AND DISMANTLEMENT OF 232-Z BLDG INCINERATOR	Ahead of Schedule

# Major Accomplishments

- Completed demolition of 7 PFP facilities
- The 232-Z Sampling and Analysis Plan was approved by the Ecology, the EPA and DOE-RL on September 21st
- Completed removal and disposition of 41% of legacy hold-up
- Completed chemical mitigation activities as defined in the assessment
- Completed RCRA Closure Activities in the HA-20MB glovebox



*HC-5 conveyor*

# Major Accomplishments

- The RCRA Closure Plans were approved by Ecology August 25, 2004
- Finalized the Above-Grade Structures EE/CA with Ecology's comments incorporated

## **Planned Activities**

- **232-Z Action Memo**
- **232-Z Removal Action Work Plan**
- **Above-Grade Structures EE/CA**
- **DQO and SAP for the Above-Grade Structures**
- **HA-20MB Clean Closure Certification**

# Schedule / Cost Performance

## Fiscal Year to Date Status (\$000s)

	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
PFP Closure Project	\$130,232	\$119,840	\$119,271	(\$10,393)	-8.0%	\$568	0.5%	\$130,232
Closure Services	\$21,328	\$21,328	\$20,891	\$0	0.0%	\$437	2.0%	\$21,328
<b>TOTAL</b>	<b>\$151,560</b>	<b>\$141,168</b>	<b>\$140,162</b>	<b>(\$10,393)</b>	<b>-6.9%</b>	<b>\$1,005</b>	<b>0.7%</b>	<b>\$151,560</b>

*Status through September 2004 month end*

# PHMC Schedule / Cost Performance

## Fiscal Year to Date Status

### **FYTD Schedule Variance (\$10.4M):**

- The unfavorable FYTD schedule variance is due primarily to delays in 241-Z transition, 232-Z activities and Pu De-inventory. Support functions such as Transition Operations and waste disposal incurred corresponding delays.

### **FYTD Cost Variance, Progress Base \$1.0M:**

- Favorable cost variance due to early completion of stabilization, efficiencies in surveillance and maintenance, legacy Pu holdup removal and solid waste operations, but offset by increased costs from technical difficulties with 241-Z, facility modifications and DSA implementation

# Issues

## ■ Regulatory Issue:

- None

## ■ Non-Regulatory Issues:

- Decision on Consolidation of Nuclear Material

Tri-Party Agreement M-91 Milestone Series  
Quarterly Presentation

G. L. Sinton

U.S. Department of Energy,  
Richland Operations Office

October 26, 2004

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

### Significant Accomplishments of Last Three Months:

- Ecology and DOE approved changes to the M-91-12/12A thermal treatment milestones October 4, 2004
- FHI awarded thermal treatment contract to Permafix
- Retrieved 696 m<sup>3</sup> of RSW since the last quarterly report (7/1-9/30), bringing the total to 1346 m<sup>3</sup> as of 9/30/04
- Achieved 1200 m<sup>3</sup> of retrieval 4 months ahead of the 12/31/04 due date
- Submitted 218-E-12E SAP to Ecology 8/24/04
- Treated 508 m<sup>3</sup> of M-91-42 MLLW, bringing the total to 2944 m<sup>3</sup>

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

## Actions Planned for Next Six Months

- Continue with MLLW treatment, RSW retrieval, and waste processing on schedule
- Finish realignment of baseline with M-91 and M-16 agreement change packages (HQ approval)
- Award additional thermal treatment contract
- Begin thermal treatment at Permafix
- Begin disposal of non-TRU retrieval waste in ERDF
- Finalize 218-E-12B burial ground SAP
- Submit SAP quarterly reports

M-91 Status Summary 10/26/04

Milestone	Due Date(s)	Status Summary	Comments
<b>General Comments</b>			<p>1) In this current table "On-Schedule" means it is anticipated the milestone will be met. At present the baseline is being revised to realign the scope/schedule to match the agreement. FH has submitted "baseline adjustment" information which is currently in DOE HQ review.</p> <p>2) M-91 requirements are extensive and continue well out into the future. This status table will generally only cover items due within about the next three to four years. A separate "Outyear table" identifies the other M-91 milestones, and the related M-16-93 milestone.</p>
<b>M-91-03:</b> Submit TRUM/MLLW PMP	12/31/03, 3/31/09, 3/31/13	On Schedule	<ul style="list-style-type: none"> <li>M-91-03 PMP approved by Ecology on May 12, 2004</li> </ul>
<b>M-91-05-T01:</b> Complete RH and or large TRUM retrieval Engineering Study/FDC	12/31/07	On Schedule (planning)	
<b>M-91-12:</b> CH-MLLW Thermal Treatment (600 m <sup>3</sup> cumulative)	11/16/07	On Schedule	<ul style="list-style-type: none"> <li>The milestone schedule was revised based on currently available information concerning available treatment capacity including the responses to recent RFPs. A revised milestone schedule was approved by Ecology and DOE on October 4, 2004.</li> <li>162 m<sup>3</sup> of CH-MLLW have been thermally treated as of the end of September that will count toward the M-91-12/12A milestones.</li> </ul>

			<p>currently only includes waste dispositioned by FH. The actual progress numbers may be slightly higher due to waste subject to the milestone treated by other contractors. These numbers are from the M-91 tracking system and have not yet been validated.</p> <ul style="list-style-type: none"> <li>• Ahead of schedule due to successful 183-H project.</li> <li>• The quantities in this milestone are based on the 2002 LDR report. Therefore, the cumulative volumes toward meeting this milestone are based on a start date of 12/31/02 (LDR report inventory date).</li> </ul>
M-91-45: RH and or Large Size Waste Annual Report	9/30/04 and annually thereafter	On Schedule	<ul style="list-style-type: none"> <li>• The 2004 report was submitted to Ecology 9/30/04</li> </ul>

Fn: M-91 PMM Status table10-26-04TPAQTRLY

<p><b>M-91-44:</b> Designation of Newly Generated and Stored RH and or Large Size Transuranic Waste</p>	<p>See Comment Column</p>	<p>On Schedule (Planning)</p>	<ul style="list-style-type: none"> <li>• Designate all RH and or large size transuranic waste in storage by 12/31/12</li> </ul>
<p><b>M-16-93:</b> Submit implementation workplan for acquisition of capabilities necessary to prepare TRU/M waste generated by CERCLA cleanup actions at Hanford for disposal at WIPP</p>	<p>9/30/2006</p>	<p>On Schedule (Planning)</p>	<ul style="list-style-type: none"> <li>• The date of this milestone seems somewhat early. It may be better to align it with the M-15-00 12/31/08 complete RI/FS for all operable units milestone.</li> <li>• This milestone will be moved to the near term table next quarter</li> </ul>

Fn: M-91 PMM Status Table Outyears10-26-04

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

Issues

•None