

Meeting Minutes  
 October 22, 2002  
 Tri-Party Agreement Milestone Review

0058493

Approval: *Michael A. Wilson*  
 Michael A. Wilson (B5-18)  
 Ecology IAMIT Representative

Date: 12/4/02

Approval: *W. Wade Ballard*  
 W. Wade Ballard, Chairperson (A5-12)  
 RL IAMIT Representative

Date: 12/17/02

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Approval: *n/a*  
 Jim E. Rasnussen (H6-60)  
 ORP IAMIT Representative

Date: \_\_\_\_\_  
**EDMC**

Approval: *Nick Ceto*  
 Nick Ceto (B5-01)  
 EPA IAMIT Representative

Date: 12/16/02

Minutes Prepared by:

Approval: *Eileen Murphy-Fitch*  
 Eileen Murphy-Fitch (A1-14)  
 Fluor Hanford, Inc.

Date: 12/17/02

Aromi, E. S.	CHG	H6-63	Morrison, R. D.	FH	A1-14*
Berg, G. M.	FH	L3-02	Murphy-Fitch, E. J.	FH	A1-14*
Bilson, H. E.	RL	A3-04	Niles, K. S.	ODOE	
Buxbaum, M.	FH	B3-53*	Piippo, R. E.	FH	A1-14
Clark, C. E.	RL	A5-15	Price, J.	Ecology	B5-18*
Cusack, L.	Ecology	B5-18*	Robertson, O.	RL	A3-04
Dagan, E. B.	RL	A5-15	Rodriguez, H. M.	RL/ORP	A5-15
Foley, B. L.	RL	A6-38	Russell, W.	ORP	H6-60
Ford, Bruce H.	FH	E6-35	Sanders, G. H.	RL	A6-38
Gay, R.	CTUIR		Schepens, R. J.	RL	H6-60
Goodenough, J.	DOE	A3-04	Skinnarland, E. R.	Ecology	B5-18
Hales, J. E.	FH	A1-14	Sobczyk, S.	NezPerce	
Hedges, J.	Ecology	B5-18	Stanley, R.	Ecology	Lacey*
Henry, G.	ODOE		Thomson, E. K.	FH	H5-20
Hertzcl, J. S.	FH	A1-14	VanLeuven, D. B.	FH	H5-20
Ivatate, D. F.	FH	A1-14	Williams, J. D.	FH	L5-66
Jim, R.	Yakama*		Wilson, M. A.	Ecology	B5-18
Kinsey, L. M.	FH	L0-32	Yerxa, J. K.	RL	A5-15
LaRue, D. N.	BHI	H0-11	Administrative Record	EDMC	H6-08*
Logan, T. E.	BHI	H0-09			
Mattlin, E. M.	RL	A5-15*			

\*w/Attachments File: TPAM\_10\_02.doc

**Tri-Party Agreement Milestone Review**  
**October 22, 2002**

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**Spent Nuclear Fuel, M-034-00**

Presented by: Mark French

Start: 9:10 a.m.

End: 9:40 a.m.

Significant progress and schedule recovery were reported by the Spent Nuclear Fuel (SNF) Project. Specific Tri-Party Agreement Interim Milestones discussed:

Tri-Party Agreement Interim Milestone M-034-29, *Complete K East Basin and K West Basin Facility Modifications for AFTS Cask Transportation System*, was completed September 12, 2002 (~6 months late).

Tri-Party Agreement Interim Milestone M-034-08, *Initiate Full Scale K East Basin Sludge Removal*, due December 31, 2002, may not be completed as scheduled. Revised project completion schedule will be submitted to DOE by October 31, 2002.

Tri-Party Agreement Interim Milestone M-034-18A, *Complete Removal of 957 Metric Tons of Heavy Metal of Spent Nuclear Fuel from the K West Basin*, due December 31, 2002, may not be completed as scheduled. Significant schedule recovery was achieved (recouped 24 days of the baseline schedule since July 2002).

*Specific Tri-Party Agreement target dates discussed:*

Tri-Party Agreement Target Date M-034-12-T01, *Complete K East Basin Sludge and Water System*, due September 30, 2002, was not completed as scheduled and is forecast for completion in the February/March 2003 timeframe. A project recovery schedule will be submitted to DOE by October 31, 2002.

Action: Discuss reactivity of sludge and storage consideration with Ecology.

Actionee: Stacy Helmann/Larry Gadbois

Action: Develop strategy to cover incremental costs including carryover workscope. Determine feasibility of continuing to spend dollars and resources at the current rate to achieve early completion of the project (i.e., trade off).

Actionee: Paul Carter/Norm Boyter

Presentation attached.

**PFP Transition (M-083)**

Presented by: Allison Wright, RL

Start: 9:39 a.m.

End: 9:52 a.m.

Public comment on the PFP Change Request is complete. A response to comment document and change

**PFP Transition (Continued)**

request was approved by the RL Manager and is in route to the EPA and Ecology signatories for final approval.

Repackaging and shipment of sand, slag and crucible will be completed ahead of the January 2004 date.

Action: Provide Ecology (Laura Cusack) with the reasons why Savannah River might reject the cans due to the weld porosity issue).

Actionee: Allison Wright, RL

No significant regulatory issues/concerns resulting in follow-on actions were identified during the presentation.

**Central Plateau (M-013, M-015, M-016, M-020, and M-024)**  
Presented by: Bryan Foley

Start: 9:52 a.m.  
End: 10:04 a.m.

Ecology has concerns on the 200 Area Ecological Evaluation Report and the ecological data quality objectives summary report associated with Tri-Party Agreement Milestone M-015-38A, Submit 200-CW-1 Gable Mountain Pond/B Pond and Ditch Cooling Water Group Feasibility Study, due March 31, 2003. DOE and Ecology are working collaboratively to resolve the issues.

The annual average extraction well pumping rate at 200-UP-1 dropped below the 50 gallons per minute (gpm) specified in the ROD to 48.7 gpm. During FY 2003, design work will be performed and materials needed to change existing monitoring well 299-W-19-43 into a third extraction well at 200-UP-1 will be procured. The new extraction well would go online in FY 2004 to ensure that the 200-UP-1 pumping rate does not drop below the 50 gpm listed in the ROD.

Elevated levels of chromium were discovered at the 100-KR pump and treat.

Presentation attached.

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**Land Disposal Restriction Report, M-026-01**

Presented by: Mary Jarvis, RL

Start: 10:04 a.m.

End: 10:15 a.m.

Progress continues to be made by the LDR Working Group. Presentation attached

**Acquisition of Facilities to TSD TRU/TRUM, LLMW and GTC3 (M-091)**

Presented by: Todd Shrader, RL

Start: 10:15 a.m.

End: 10:44 a.m.

Discussions continue at the IAMIT level with a Final Director's Determination due on October 31, 2002, for Tri-Party Agreement Milestones M-091-01, *Complete the Acquisition of New Facilities, Modification of Existing Facilities, and/or Modification of Planned Facilities Necessary for Storage, and Treatment/Processing Prior to Disposal of all Hanford Site Post-1970 TRU/TRUM*, and M-91-03, *Submit Hanford Site TRU/TRUM Waste Project Plan (PMP) to Ecology Pursuant to Agreement Section 11.5.*

*Interim Milestones in Jeopardy:*

DOE believes that M-091-07, *Complete Project W-113 for Post 1970 CH TRU/TRUM Retrieval*, due September 2004, may not be met due to funding constraints, Site priorities, and the maximum retrieval rate. Ecology has maintained their position that funding constraints and Site priorities are not acceptable causes for modification of Tri-Party Agreement milestones.

M-091-20, *T Plant is Ready to Receive the First Canister of Floor and Pit Sludge*, due December 31, 2002. Delays attributed to characterization issues and the SAR required for sludge storage. This milestone will be integrated with the SNF M-034-08 Recovery Plan due to DOE by October 31, 2002.

M-091-12A, *Complete Thermal Treatment and Disposal of at Least 240 cubic meters of contract Handled LLMW*, due December 31, 2002. There is no sustainable thermal treatment currently available. Alternate treatment strategies will be evaluated through a contract with Broad Spectrum.

While these milestones were discussed in the context of the M-091 dispute, they are not formally a part of the dispute and remain enforceable.

Target Date M-091-05-T01, *Complete and Submit TRU/TRUM Retrieval and Processing Facility Engineering Study/Functional Design Criteria to Study*, due December 31, 2002, will be missed. Facility is not required until 2013; studies are not required until 2006. The 618-10 and 618-11 Burial Grounds should be included. This target date were discussed in the context of the M-091 dispute, but is not formally a part of the dispute.

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**Acquisition of Facilities to TSD TRU/TRUM, LLMW and GTC3 (M-091) (Continued)**

Action: Include Tri-Party Agreement Interim Milestone M-091-12 in future M-091 presentations. Provide Ecology with a copy of the Covered Drum Retrieval Plan of Action recently approved by RL (Laura Cusack).

Actionee: Todd Shrader, DOE

Presentation attached.

**Permitting/Closure Plans, M-020-00**

Presented by: Ellen Mattlin, RL

Start: 10:44 a.m.

End: 10:49 a.m.

No significant issues/concerns resulting in follow-on activities were identified during the presentation.  
Presentation attached

**Central Plateau and Spent Nuclear Fuel  
 Tri-Party Agreement Quarterly Milestone Review  
 Tuesday, October 22, 2002  
 EPA Conference Room, 712 Swift Blvd., Richland  
 9:00 a.m. – 10:30 a.m.**

<u>Time</u>	<u>Milestone Number</u>	<u>Project/Title</u>
9:00 a.m.	M-034-00	Spent Nuclear Fuel
9:30 a.m.	M-083-00	PFP Transition
9:45 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
10:10 a.m.	M-026-01 M-091-00 M-092-01	Land Disposal Restrictions Report Acquisition of Facilities to TSD TRU/TRUM, LLMW and GTC3 Facilities for Cs/Sr
10:25 a.m.	M-020-00	Permitting/Closure Plans
10:30 a.m.		Adjourn

**ATTENDEES**

**Central Plateau and Spent Nuclear Fuel  
Tri-Party Agreement Milestone Review  
October 22, 2002**

<u>NAME</u>	<u>ORGANIZATION</u>	<u>MAILSTOP</u>	<u>ATTACHMENTS</u>
<u>JEFF HERTZEL</u>	<u>FH-TPAI</u>	<u></u>	<u></u>
<u>Melinda Brown</u>	<u>Ecology NUSP</u>	<u></u>	<u>Yes</u>
<u>Norm Batten</u>	<u>FH-SNF</u>	<u></u>	<u></u>
<u>SEVE VEITZNIK MOE</u>	<u>RL-SFO</u>	<u></u>	<u></u>
<u>STACY HELMANN</u>	<u>RL-SFO</u>	<u></u>	<u></u>
<u>Paul Carter</u>	<u>RL-BPD (SFO)</u>	<u></u>	<u></u>
<u>Tony Mischko</u>	<u>FH-EPL</u>	<u></u>	<u></u>
<u>Bill Ritter</u>	<u>FH-SP&amp;I</u>	<u></u>	<u></u>
<u>DALE MCKENNEY</u>	<u>FH-WMP</u>	<u></u>	<u></u>
<u>ROB BRIBO</u>	<u>FH-TBOT</u>	<u></u>	<u>YES</u>
<u>David Watson</u>	<u>FH-SNF</u>	<u></u>	<u></u>
<u>Carole Rodriguez</u>	<u>SFO</u>	<u></u>	<u></u>
<u>Suzette Thompson</u>	<u>FH-E+R</u>	<u></u>	<u></u>
<u>Laura Usack</u>	<u>Ecology</u>	<u></u>	<u>Yes</u>
<u>MIKE WILSON</u>	<u>ECOLOG</u>	<u></u>	<u></u>
<u>Joel Heddon</u>	<u>DOE-RL</u>	<u></u>	<u></u>
<u>Mark French</u>	<u>DOE-RC</u>	<u></u>	<u></u>
<u>JOH YERXA</u>	<u>DOE-RL</u>	<u></u>	<u></u>
<u>NICK CETO</u>	<u>EPA</u>	<u></u>	<u></u>
<u>LARRY GARDOLIS</u>	<u>EPA</u>	<u></u>	<u></u>
<u>Allison Wright</u>	<u>DOE</u>	<u></u>	<u></u>
<u>ELLEN MATTELLI</u>	<u>DOE</u>	<u></u>	<u></u>



# **Hanford Spent Nuclear Fuel Project**

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



**Mark French**  
***U.S. Department of Energy,***  
***Richland Operations Office***

***October 22, 2002***

Hanford Spent Nuclear Fuel Project

**TPA Milestone Status**

*for Milestones with Due Dates March 2002 through July 2007*

Number	Milestone Title	Due Date	Status/Comments
M-34-29	Complete K East (KE) Basin and K West (KW) Basin Facility Modifications for AFTS Cask Transportation System	3/31/2002	Complete 9/12/02.
M-34-12-T01	Complete construction of Sludge Water System (SWS)	9/30/2002	Behind schedule due to delayed subcontractor delivery dates. Forecast completion of ATPs by 12/23/02. (schedule very challenging).
M-34-17	Initiate KE to KW fuel transfer	11/30/2002	On Schedule. Contractor ORRs in progress.
M-34-18A	Complete removal of 957 Metric Tons of Heavy Metal (MTHM) of Spent Nuclear Fuel (SNF) from the KW Basin	12/31/2002	Currently 37 days behind schedule. Production and Equipment Reliability improvements implemented during the reporting period have resulted in recovering 24 days of the baseline schedule.
M-34-08	Initiate full scale KE Basin sludge removal	12/31/2002	Initiate sludge removal will be delayed. Revised project completion schedule will be available 10/31/02.
M-34-27-T01	Complete removal of 1252 MTHM of SNF from KW Basin	5/31/2003	On Schedule
M-34-28	Complete removal of 1619 MTHM from the KW Basin	12/31/2003	On Schedule
M-34-25-T01	Complete transfer of KE Basin Spent Nuclear Fuel (SNF) to KW Basin	5/31/2004	On Schedule
M-34-18B	Complete removal of all K Basin SNF	7/31/2004	On Schedule
M-34-10	Complete sludge removal from K Basins	8/31/2004	On Schedule
M-34-23	Start KE water removal	9/30/2004	On Schedule
M-34-09-T01	Complete K Basins rack & canister removal	1/31/2005	On Schedule
M-34-24	Complete KE Basin water removal	9/30/2005	On Schedule
M-34-21-T01	Initiate full-scale KW Basin water removal	10/31/2005	On Schedule
M-34-22	Complete KW Basin water removal	8/31/2006	On Schedule
M-34-00A	Complete removal of K Basin fuel/sludge/debris/water	7/31/2007	On Schedule



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

### **Milestone(s) to be Completed in 1st Quarter FY 2003**

#### **Interim Milestone M-34-29 (Due March 30, 2002)**

**Complete K East Basin and K West Basin Facility Modifications for AFTS Cask Transportation System** – “This interim milestone shall be complete when all modifications to support transfer of SNF from KE Basin to KW Basin are complete. All modifications shall be constructed and installed and all construction acceptance tests (CATs) shall be completed. The Construction Completion Document, Section 1B shall be signed with either no exceptions or with only minor exceptions, which do not affect the functionality of the system.”

**Status:** Completed September 12, 2002. Section 1B of the Construction Completion Document was signed off as complete September 12, 2002. System currently undergoing Operational Readiness Review.



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

### **Milestone(s) to be Completed in 1st Quarter FY 2003**

#### **Interim Milestone M-34-12-T01 (Due September 30, 2002)**

**Complete Construction of SWS** – “The K East Basin Sludge and Water System shall be constructed and installed and DOE shall concur that all acceptance test have been completed for turnover to operations by signing the Construction Completion document, Section IIA (or equivalent form), with either no exceptions or with only minor exceptions, which do not affect the functionality of the system.”

**Status:** SWS construction was not completed September 30, 2002 due to delayed subcontractor delivery dates. Forecast completion is December 23, 2002 (upon completion of ATPs). Appointed Deputy Project Director for the sludge project to improve technology integration and schedule performance. Large Diameter Container (LDC), Cask and Trailer first unit to be delivered by 10/28/02 (schedule very challenging).



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

### **Milestone(s) to be Completed in 1st Quarter FY 2003**

#### **Interim Milestone M-34-17 (Due November 30, 2002)**

**Initiate Removal of K East Basin Spent Nuclear Fuel** – “Initiate removal of spent nuclear fuel from the K East Basin and transport to the K West Basin.”

**Status:** On schedule. Completed contractor ORR. DOE-RL ORR planned to begin October 2002.



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

### **Milestone(s) to be Completed in 1st Quarter FY 2003**

#### **Interim Milestone M-34-08 (Due December 31, 2002)**

**Initiate full scale K East Basin sludge removal** – "DOE shall complete and approve K East sludge removal definitive design documents, all associated construction, and readiness assessments, and initiate removal of sludge from the Basin."

**Status:** Initiation of sludge removal will be delayed. Revised project completion schedule will be available October 31, 2002. Appointed Deputy Project Director for the sludge project to improve technology integration and schedule performance. Continue to work with subcontractors to expedite delivery of Large Diameter Containers, Cask and Trailer (first unit to be delivered by October 28, 2002).

#### **Interim Milestone M-34-18A (Due December 31, 2002)**

**Complete Removal of 957 Metric Tons of Heavy Metal of Spent Nuclear Fuel from the K West Basin** - This interim milestone will be complete when 957 metric tons of heavy metal of spent nuclear fuel have been removed from the K West Basin and transported to the Cold Vacuum Drying Facility.

**Status:** Currently 37 days behind schedule. Recovered 24 days of the baseline schedule since last reporting period. Production efficiencies and equipment reliability improvements are underway to continue schedule recovery efforts (see Accomplishments section). Anticipate no impact to M-34-18B (removal of all K Basin SNF) by July 31, 2004.



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

### **Milestones due in next 6 months:**

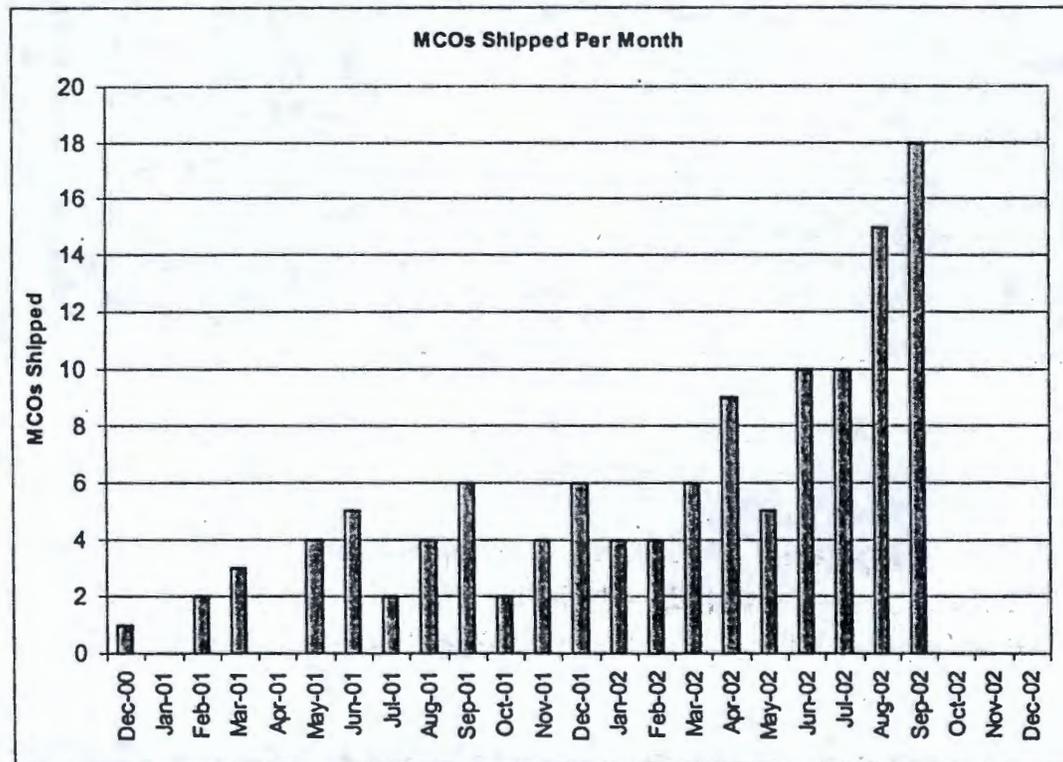
**All near-term milestones are due during the first quarter of fiscal year 2003. No additional milestones to be reported.**



# Significant Accomplishments

## Fuel Movement:

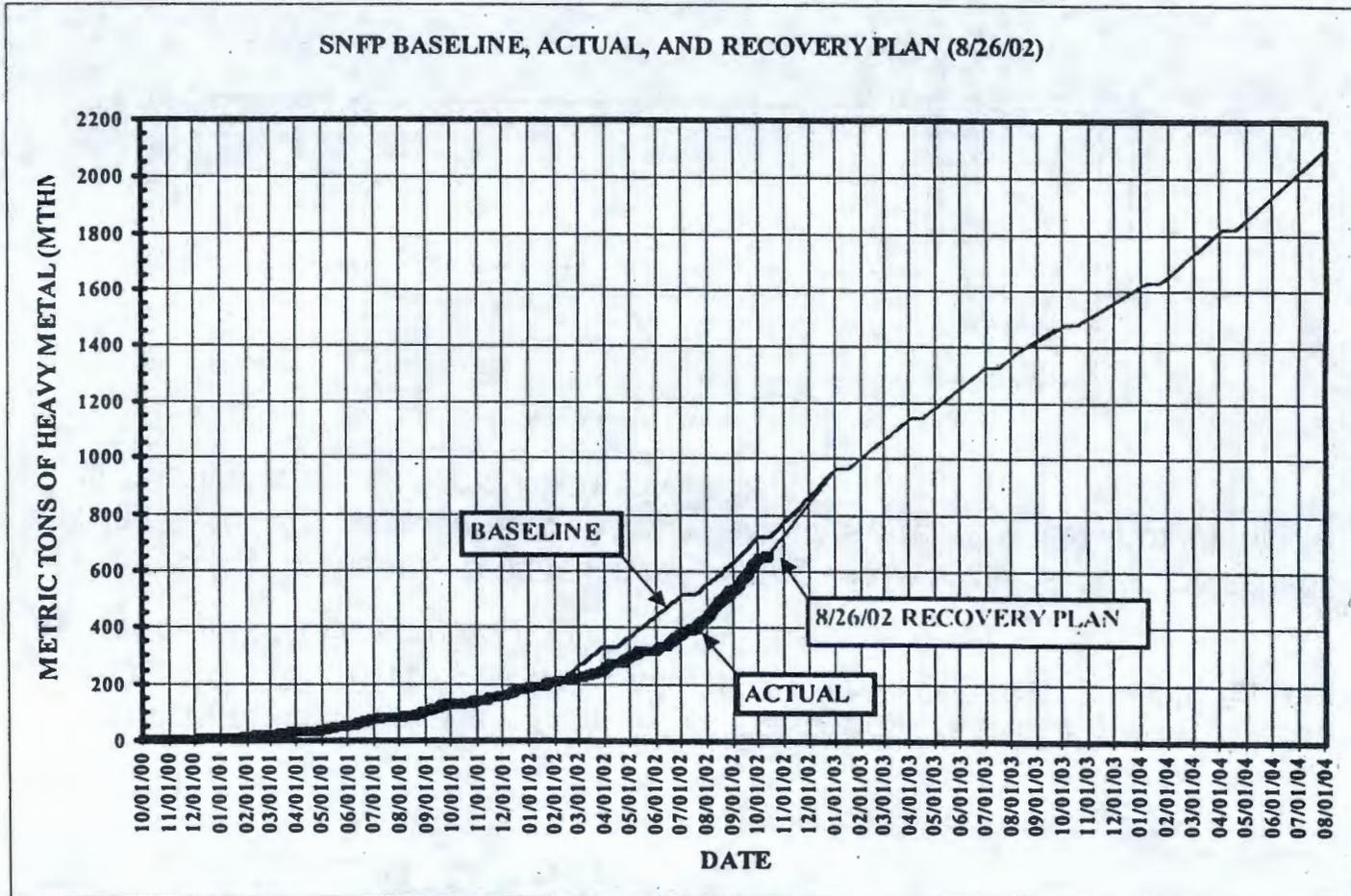
- Completed shipment of 259.96 MTHM (43 Multi-Canister Overpacks (MCOs)) from KW Basin to Cold Vacuum Drying Facility (CVDF) between July 16, 2002 and October 10, 2002, for a cumulative total of 123 MCOs and 647.04 MTHM.
- Achieved increased fuel movement production recovering 24 days against baseline schedule during reporting period. Notable production improvement is a result of (1) equipment reliability improvements; and (2) production efficiencies.



# Significant Accomplishments (continued)

## Fuel Movement:

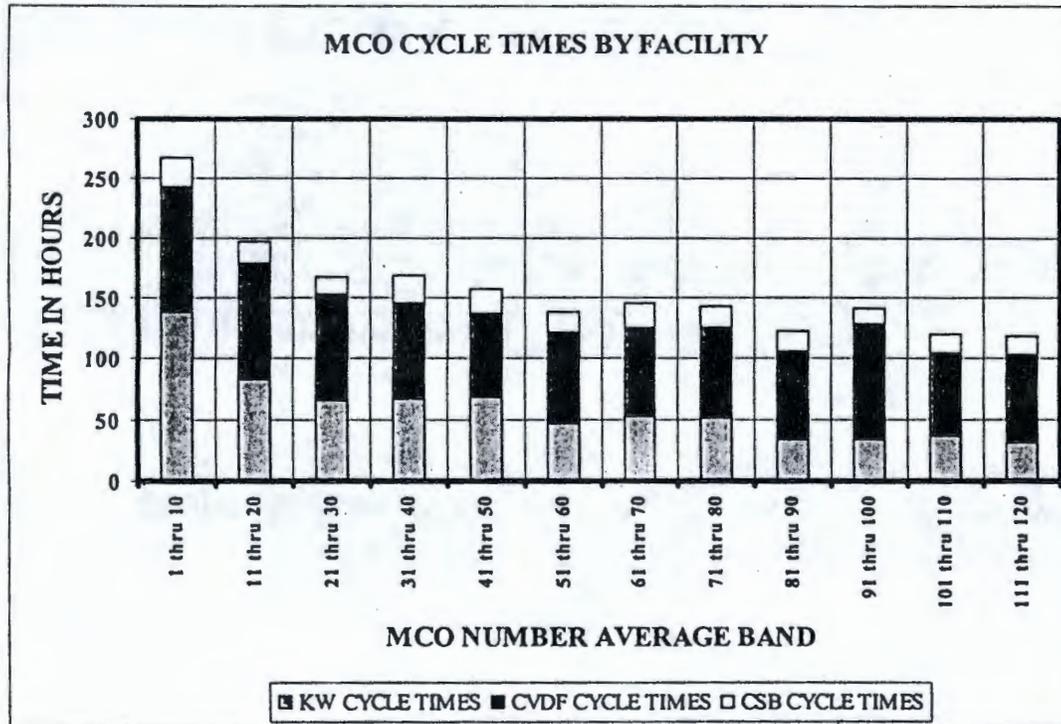
- (1) **Equipment Reliability Improvements** – K West equipment improvements (e.g., P2 pumps, Magnetic flow meter; Primary Cleaning Machine and Manipulators) have yielded positive production results and resulted in Maintenance staff-hour savings.



# Significant Accomplishments (continued)

## Fuel Movement (continued):

(2) **Production Improvements** – Production improvements (e.g., End of Batch Accountability Reduction, Rinse and Wash Reductions, Validated Heavy Fuel and Aluminum Cans Simultaneously, Reduced Inspections from 1:10 to 1:20, and then 1:40, and “witness model” improvements) implemented have resulted in reduced cycle times for each of the facilities.



MCOs	KW	CVDF	CSB	TOTAL
1 thru 10	138.32	104.93	23.39	266.64
11 thru 20	83.42	94.45	19.52	197.40
21 thru 30	66.14	86.31	15.41	167.86
31 thru 40	67.40	78.58	22.49	168.48
41 thru 50	68.52	69.06	19.02	156.60
51 thru 60	47.14	74.38	17.35	138.87
61 thru 70	53.46	72.30	19.99	145.75
71 thru 80	51.98	74.42	16.30	142.69
81 thru 90	34.22	71.68	17.30	123.20
91 thru 100	34.32	93.79	13.34	141.44
101 thru 110	37.42	67.38	15.25	120.05
111 thru 120	37.07	71.62	15.42	120.05



# Significant Accomplishments

## Plant Improvement Initiatives:

- Established a Requirements Improvement Team (RIT) with DOE-RL involvement, which identified thirteen initiatives that can improve fuel removal and conditioning process times. Three have already been fully developed and approved by DOE-RL for implementation.

## Fuel Transfer System (FTS):

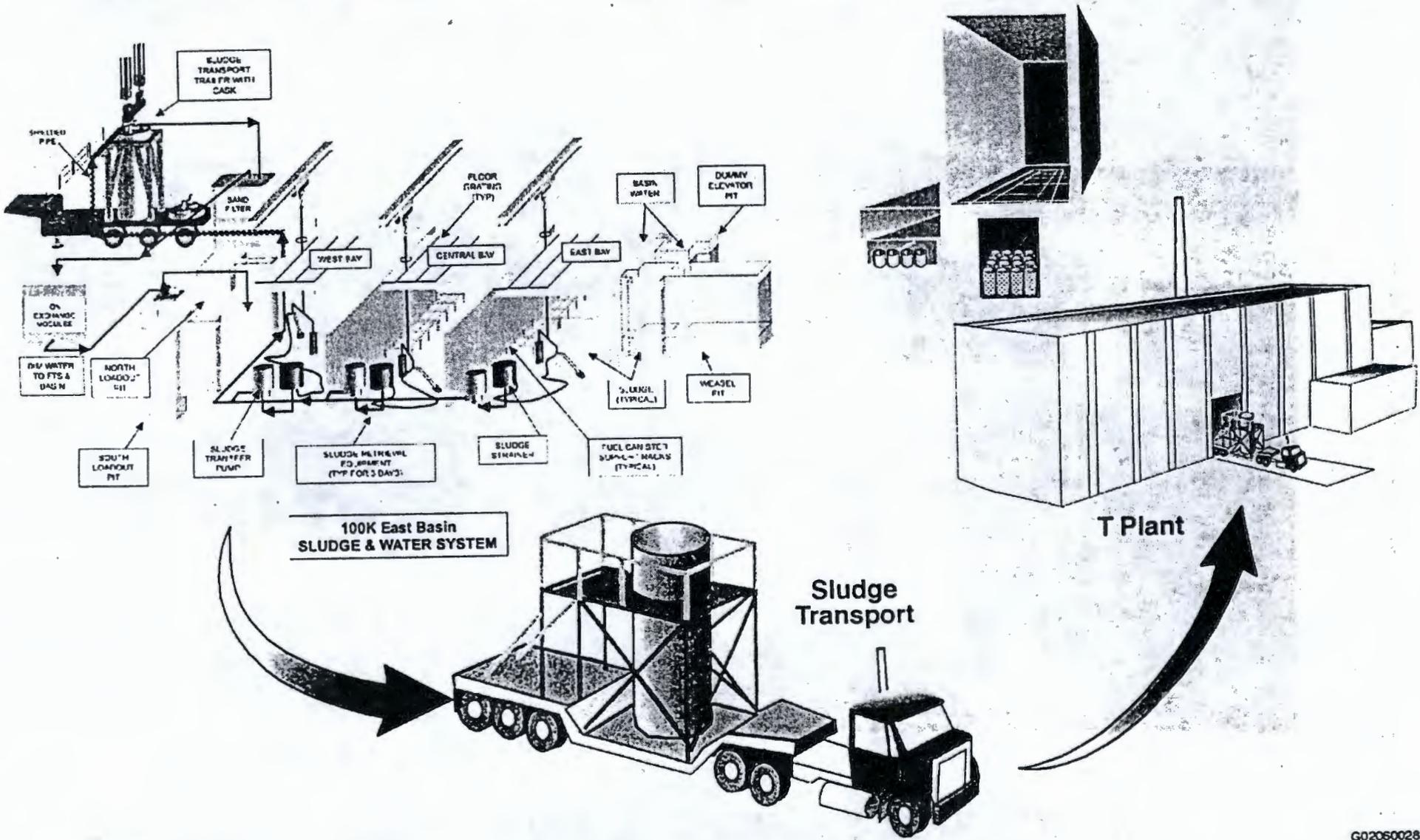
- Completed FTS Construction milestone M-34-29 by signing off Sections 1B (Completion of Exceptions) of the Construction Completion Document on September 12, 2002.
- Completed contractor ORR on October 10, 2002.

## Sludge Water System (SWS):

- Awarded SRS contract to Avantech, South Carolina on July 25, 2002.
- Completed Sludge Transportation System 100 percent design.
- Continued to work with subcontractors to expedite fabrication and delivery of the sludge transportation system (STS) casks, Large Diameter Containers (LDC) and Transport Trailers.
- Continued development of Programmable Logic Controller (PLC) software that will operate the SRS.

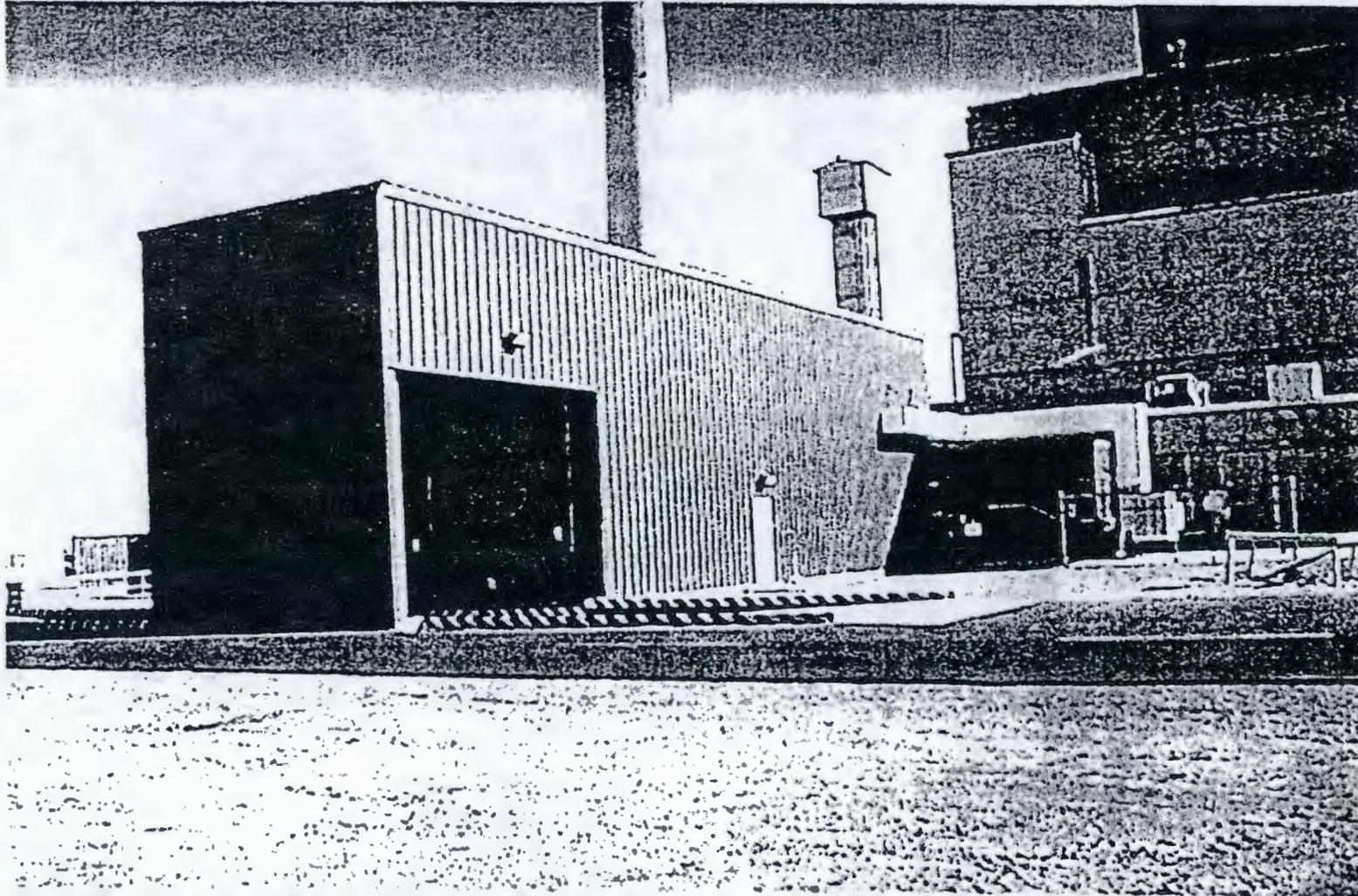


# K East Basin Sludge Water System (SWS)



# Significant Accomplishments (continued)

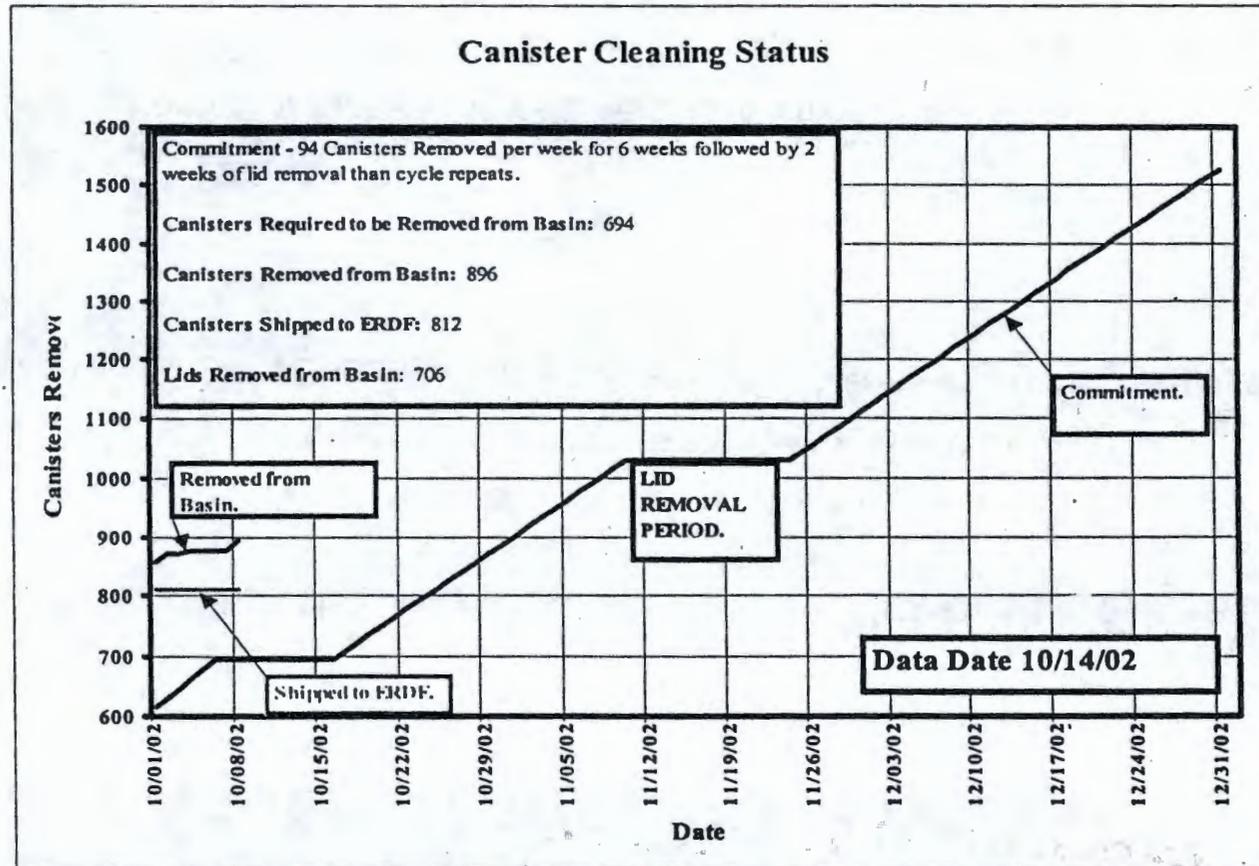
## K East Basin Fuel Transfer Annex



# Significant Accomplishments (continued)

## Debris Removal:

- Removed 896 canisters and prepared for shipment and disposal.
- Shipped 812 canisters to the Environmental Restoration Disposal Facility.
- System is running well.



## ***Significant Accomplishments (continued)***

### **Site-Wide Activities:**

- Received five of a total of six shipments of Light Water Reactor (LWR) fuel from the 324 Building.
- Received four of a total of 18 shipments of Shippingport Reactor SNF from T-Plant.
- Received one of a total of four shipments of NRF TRIGA fuel from 400 Area ISA.
- Continued planning for SNF removal in support of Fast Flux Test Facility (FFTF) and PFP accelerated closure.

### **Canister Storage Building:**

- Placed procurement order for first and second welding machines.
- Completed testing of MCO welding machine using mock-up MCOs at manufacturer's facility in a mock-up weld pit.



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

**Issue: Equipment reliability has been a major concern for sustaining fuel movement.**

**Impact:** Equipment failures have negatively impacted meeting fuel removal commitments

**Status:** Equipment reliability improvements implemented at K West (e.g., P2 pumps, Magnetic flow meter; Primary Cleaning Machine and Manipulators) have yielded positive production results. Plant improvement initiatives will further improve productivity and reliability. The project's ability to ship an average of four MCOs per week since August 26, 2002, demonstrates success in addressing this issue.

**Issue: Removal of SNF from KW basin is behind schedule.**

**Impact:** Potential impact to fuel removal milestone M-34-18A.

**Corrective Action:** Established a Requirements Improvement Team with RL involvement, which identified potential breakthroughs to improve fuel removal and conditioning process times (see Accomplishments, Plant Improvement Initiatives). Production improvements implemented during the past six months resulted in a favorable production trend. The project has recovered 24 days of the baseline schedule during the reporting period.



## ***K Basins Issues/Concerns***

**Issue: Fabrication, construction and testing of SWS equipment presents a schedule challenge.**

**Impact:** Potential delays to K Basins sludge related milestones M-34-12-T01 (due 9/30/02) and M-34-08 (due 12/31/02)

**Corrective Action:** Continued to work with vendors to expedite delivery of LDC, Cask and Trailer (first unit to be delivered by October 28, 2002).



## ***Upcoming Activities***

- FTS – Begin DOE ORR by October 2002
- SWS – Receive cask and container for sludge in October 2002
- SWS – Submit revised project completion schedule by October 31, 2002 (M-34-08)
- FTS – Begin KE to KW fuel transfer by November 30, 2002 (M-34-17)
- SWS – Install all basin systems [includes : Mechanical, electrical, crane, closed circuit television (CCTV), etc.; CCTV will be last] – December 2002
- MCO Welding – Begin welding of MCOs at CSB in February 2003
- Fuel Retrieval System (FRS) – Complete construction activities for KW Basin SNF scrap removal system in February 2003



## ***Permitting and Regulatory Issues***

**None at this time**

## ***Non-TPA Regulatory Issues with Potential to Impact SNF Project TPA Milestones***

**None at this time**



# 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*



## Total Project Statistics

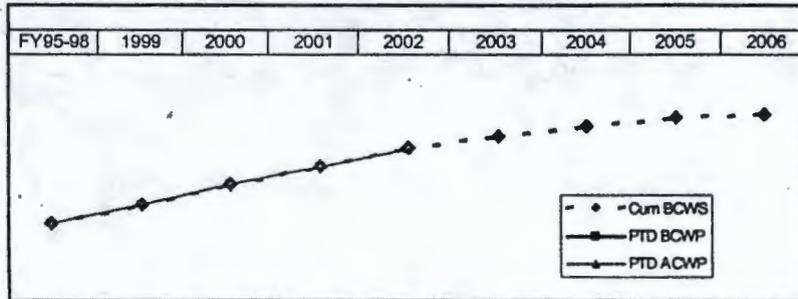
- Life Cycle (\$ in thousands)
  - BAC \$1,608,277\*
  - EAC \$1,608,277
  - BCWS \$1,270,367
  - BCWP \$1,257,561
  - ACWP \$1,268,535
  - SV (\$12,806)
  - CV (\$10,975)

- Current BAC reflects a 10-month acceleration to the TPA completion date.



# Hanford Spent Nuclear Fuel Project

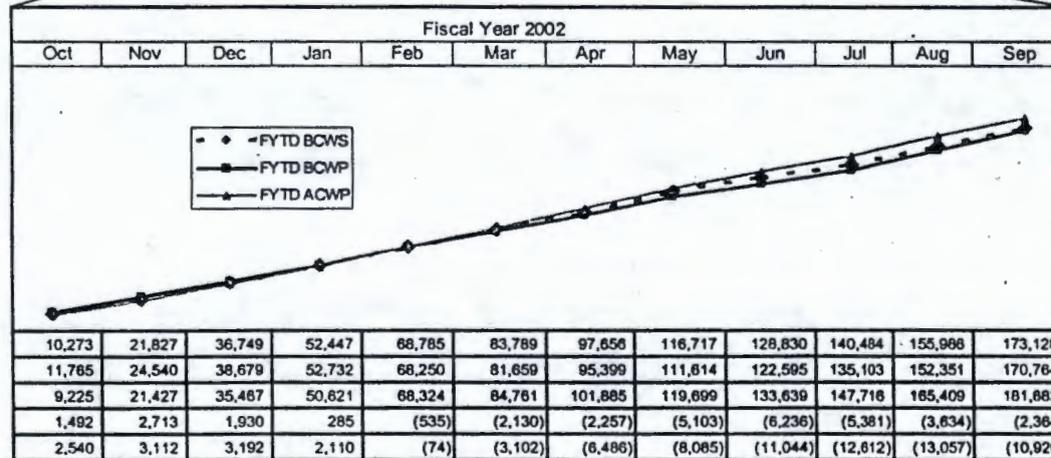
## SNF Project - Total Project Baseline



Life Cycle	
*BAC=	1,608,277
EAC=	1,608,277
BCWS=	#REF!
BCWP=	1,257,561
ACWP=	1,268,535
SV=	#REF!
CV=	(10,975)

\*Current BAC reflects a 10-month acceleration to the TPA completion date.

	FY95-98	1999	2000	2001	2002	2003	2004	2005	2006
Cum BCWS	533,003	718,612	920,376	1,097,239	1,270,367	1,391,131	1,496,300	1,567,488	1,608,277
PTD BCWP	533,003	717,915	916,093	1,086,797	1,257,561				
PTD ACWP	533,003	718,798	920,091	1,086,852	1,268,535				
ACWP per Year	533,003	185,795	201,293	166,761	181,683				
% Sch	33.1%	44.7%	57.2%	68.2%	79.0%	86.5%	93.0%	97.5%	100.0%
% Cmpl	33.1%	44.6%	57.0%	67.6%	78.2%				
SPI									
CFI	1.00	1.00	1.00	1.00	0.99				



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FYTD BCWS	10,273	21,827	36,749	52,447	68,785	83,789	97,656	116,717	128,830	140,484	155,966	173,128
FYTD BCWP	11,765	24,540	38,679	52,732	68,250	81,659	95,399	111,614	122,595	135,103	152,351	170,764
FYTD ACWP	9,225	21,427	35,467	50,621	68,324	84,761	101,885	119,699	133,639	147,716	165,409	181,683
Sched VAR	1,492	2,713	1,930	285	(535)	(2,130)	(2,257)	(5,103)	(6,236)	(5,381)	(3,634)	(2,364)
Cost VAR	2,540	3,112	3,192	2,110	(74)	(3,102)	(6,486)	(8,065)	(11,044)	(12,612)	(13,057)	(10,920)

**SCHEDULE VARIANCE (\$2,364) K**

The unfavorable schedule variance is primarily driven by FTS construction, SWS engineering, Canister Cleaning and Fuel Removal being behind.

**COST VARIANCE (\$10,920) K**

The unfavorable cost variance is primarily driven by work delays and additional scope in FTS construction/engineering, SWS engineering and procurement, Canister Cleaning and Facility maintenance/operations.



## Spent Nuclear Fuel Project Project Performance thru Fourth Quarter FY02 (based on early start schedule)

(\$ in thousands)

### Schedule / Cost Performance Fiscal Year-to-Date Status (\$000s)

		FYTD							
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	BAC
PBS RS03 WBS 3.2.3.1	SNF Project, 100 K Basins	\$ 119,281	117,136	\$ 133,292	\$ (2,145)	-2%	\$(16,156)	-14%	\$ 119,281
PBS RS03 WBS 3.2.3.2	Canister Storage Building (to2004)	\$ 10,673	\$ 10,804	\$ 10,434	\$ 131	1%	\$ 370	3%	\$ 10,673
PBS RS03 WBS 3.2.3.3	200 Intrim Storage Area (to2004)	\$ 2,935	\$ 2,636	\$ 1,663	\$ (299)	-10%	\$ 973	37%	\$ 2,935
PBS RS03 WBS 3.2.3.4	SNF Project Management and Support	\$ 40,239	\$ 40,187	\$ 36,295	\$ (52)	0%	\$ 3,892	10%	\$ 40,239
<b>Total</b>		<b>\$ 173,128</b>	<b>\$ 170,763</b>	<b>\$ 181,684</b>	<b>\$ (2,365)</b>	<b>-1%</b>	<b>\$(10,921)</b>	<b>-6%</b>	<b>\$ 173,128</b>

**Schedule Variance - \$2,365K**

- The unfavorable schedule variance is primarily driven by FTS construction, SWS engineering, Canister Cleaning and Fuel Removal being behind.

**Cost Variance - \$10,921K**

- The unfavorable cost variance is primarily driven by work delays and additional scope in FTS construction/engineering, SWS engineering and procurement, Canister Cleaning and Facility maintenance/operations.



# SNF Project Performance through Fourth Quarter FY 2002

(\$ in thousands)

	<b>FYTD BCWS</b>	<b>FYTD BCWP</b>	<b>FYTD ACWP</b>	<b>SCHED VAR</b>	<b>COST VAR</b>	<b>BAC</b>
<b>KE Basin Facility</b>	6,731.9	6,710.1	7,517.0	(21.9)	(807.0)	6,731.9
<b>KW Basin Facility</b>	19,188.8	18,575.2	20,249.9	(613.5)	(1,674.6)	19,188.8
<b>100K EPC Management</b>	36,407.1	34,626.1	47,738.6	(1,781.0)	(13,112.5)	36,407.2
<b>Balance of Plant</b>	4,381.3	4,413.4	4,173.9	32.1	239.5	4,381.3
<b>Production Integration (Excludes MCO Fab/Baskets)</b>	15,743.0	17,727.9	20,652.6	1,984.9	(2,924.7)	15,743.0
<b>Sludge Receipt Mods</b>	7,406.8	7,098.5	6,380.0	(308.3)	718.5	7,406.8
<b>100K Deactivation</b>	2,511.2	1,874.6	1,109.4	(636.6)	765.2	2,508.2
<b>CVD Facility</b>	12,791.0	12,191.0	12,199.1	-	(8.1)	12,191.0
<b>CSB Facility</b>	10,132.1	10,132.1	9,584.4	-	547.7	10,132.1
<b>Site Wide SNF</b>	3,297.8	2,998.4	1,897.2	(299.3)	1,101.3	3,297.8
<b>Program Management</b>	32,488.2	32,349.3	30,563.7	(138.9)	1,785.6	32,488.2
<b>SNF Project Potential Fee</b>	9,369.3	9,372.0	8,953.5	2.7	418.5	9,372.0
<b>MCO Fabrication and Baskets</b>	13,279.5	12,694.9	10,664.1	(584.6)	2,030.8	13,279.5
<b>SUBTOTAL SNF</b>	<b>173,128.3</b>	<b>170,763.7</b>	<b>181,683.4</b>	<b>(2,364.6)</b>	<b>(10,919.8)</b>	<b>173,127.9</b>

BAC does not include fiscal year 2001 carry-over.

The cost variance in BAC does not include pending BCRs.



## ***FY 2003 Funding for SNF Project***

- **FY 2003 SNF Project Funding is \$121 Million.**



## ***FY 2003 Carryover Needs (\$ in thousands)***

– Sludge Water System	\$3,756
– Sludge Handling (T Plant)	\$1,185
– MCOs & Baskets	\$1,091
– 100K Deactivation	\$ 632
– Sitewide SNF	\$ 510
– Fuel Movement	<u>\$1,268</u>
<b>TOTAL</b>	<b>\$8,442*</b>

\*\$8,523K is CTD schedule variance as of FY2002. ~\$81K FY 2003 work was done in FY 2002.



## ***FY 2003 Baseline Challenges***

- **Based on Operating Experience:**
  - ***Fuel Movement Operations***
    - **Meeting/Accelerating Production Schedule**
    - **Addressing Equipment Reliability, Availability, and Maintainability**
  - ***KE and KW SWS Engineering, Procurement, and Construction***
- **Other:**
  - ***Rates***



# **Nuclear Material Stabilization Project**

## **Plutonium Finishing Plant Stabilization Project**

**Milestone  
TPA-M-83**

**October 22, 2002  
Tri-Party Agreement Milestone  
Status Report**

**Ecology Project Manager - R. Bond  
DOE-RL Program Manager - L. D. Romine  
FH Project Manager - G. W. Jackson  
FH Environmental Sponsor - A. M. Hopkins**

**Plutonium Finishing Plant**

# **Nuclear Material Stabilization Project**

## **TPA Negotiations & Milestone Status through September 30, 2002:**

- ◆ PFP TPA Transition Negotiations tentative agreement signed by all parties on June 12, 2002
- ◆ 45 day public comment period: June 17 – July 31, 2002
- ◆ Response to Comments Prepared
- ◆ TPA Change Package (including Comment Response Document) approved by RL Manager on October 21, and forwarded to Ecology/EPA for Approval.
- ◆ M-83-11 – “Complete repackaging & shipment of Sand, Slag, & Crucible by January, 2004” – Well ahead of schedule

# PFP Pu Stabilization Safety Mission Scoreboard

% Stabilized as of

	03/02	04/02	05/02	06/02	07/02	08/02	09/02
<b>Solutions</b> (by Pu Weight)	88%	90%	98%	100%	COMPLETE		
<b>Metals</b>	COMPLETE						
<b>Alloys</b>	40%	40%	40%	40%	40%	40%	40%
<b>Oxides</b>	14%	14%	14%	14%	14%	14%	18%
<b>Polycubes</b>	0%	0%	0%	0%	2%	10%	17%
<b>Residues</b>	32%	38%	46%	53%	61%	67%	67%
<b>3013 Packaging</b>	15%	17%	18%	19%	22%	24%	25%

# **Nuclear Material Stabilization Project**

## **Major Accomplishments**

- ◆ **The dismantling of the first numbered structure in the Plutonium Finishing Plant complex, a large gas cylinder storage dock, was safely completed in June**
- ◆ **Initiated Legacy Holdup removal from a glovebox**
- ◆ **Solutions Stabilization and Packaging activities at PFP were completed on July 29, 2002**
- ◆ **Residues**
  - **On September 12, PFP Residues Project received WIPP certification for NDA & visual examination techniques**
  - **Over 1700 of approximately 2000 bulk kg of SS&C repackaged**
  - **Increased future residues NDA capability with the procurement of an additional Segmented Gamma Scan Assay (SGSAS) and a calorimeter**

**Plutonium Finishing Plant**

# **Nuclear Material Stabilization Project**

## **Planned Accomplishments**

- ◆ **TPA Change Request approved**
- ◆ **Complete repackaging of SS&C – before January 2003**
- ◆ **Complete accelerated planning for deactivation and dismantlement of PFP**
- ◆ **Initiate Residues repackaging of oxide (MOX) in January 2003**
- ◆ **Complete Chemical Hazard Analysis Report for transmittal to Ecology**
- ◆ **Complete alloys stabilization and packaging**
- ◆ **Resolve weld porosity issue**

**Plutonium Finishing Plant**

# **Nuclear Material Stabilization Project**

## **Cost Performance**

**(as of 9/30/02)**

**Favorable cost variance (\$2,346) primarily contributed to:**

- ◆ Early completion of solutions stabilization and significantly ahead of schedule progress on residues processing. Increased production rates achieved in both areas.
- ◆ Optimization of packaging operation resulting in a one shift operation versus the planned two shift operation.
- ◆ Significant cost savings realized in early completion of Project W-460 this fiscal year.
- ◆ Portions of above favorable cost variances are offset by increased costs in Facility incremental accelerated closure planning . While incremental accelerated closure planning is authorized, the baseline has not been changed to reflect the increased work scope.

**Plutonium Finishing Plant**

# **Nuclear Material Stabilization Project**

## **Schedule Performance**

**(as of 9/30/02)**

**Favorable schedule variance (\$2,404K) primarily contributed to:**

- ◆ Schedule recovery of Solutions Stabilization activities (Solutions were completed in July)
- ◆ Schedule recovery of Project W-460, Stabilization and Packaging System
- ◆ The positive variance is partially offset by the behind schedule progress on Pu packaging operations, due primarily to equipment operability problems (welder), and alloys/oxides stabilization

**Plutonium Finishing Plant**

# **Nuclear Material Stabilization Project**

## **Issues/Requests for Assistance**

- ◆ **No issues/requests at this time**

**Land Disposal Restrictions Report**  
**(Tri-Party Agreement Milestone M-26-01)**  
**Quarterly Presentation**  
**October 22, 2002**

**M. F. Jarvis**  
**DOE Regulatory Compliance and Analysis**  
**Division**

**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
October 22, 2002**

- Tri-Party Agreement requires that a Hanford Site Land Disposal Restrictions (LDR) Report be submitted annually
- LDR Report is designated as a primary document in accordance with the Tri-Party Agreement
- Ecology approved CY 2001 LDR Report

**Land Disposal Restrictions Report**  
**(Tri-Party Agreement Milestone M-26-01)**  
**October 22, 2002**

- Workshops continue to address/resolve issues/actions identified in the March 14, 2002, Resolution Agreement; seven items were identified – four are complete, two are in process and one remains to be discussed.
  - Treatability Group Data Sheet (TGDS) and Location-Specific Data Sheet (LSDS) Modifications (complete)
  - Consolidation of requirements documents and any other new agreements from workshops (not yet initiated)
  - Tracking commitments contained in the LDR Report (complete)
  - Accomplishing within year changes (complete)
  - Accomplish year-to-year changes (in process)
  - Revisit Assessment Schedule (initiated)
  - Mechanism to transmit documents (e.g., Datagap Plan) (complete)
- Project Manager Meetings instituted and continue with representatives from Ecology and each of the Hanford Site prime contractors

**Land Disposal Restrictions Report**  
**(Tri-Party Agreement Milestone M-26-01)**  
**October 22, 2002**

Actions Planned for Next Six Months

- Continue Resolution Agreement Workshops focusing on requirements consolidation, year-to-year changes to the LDR Report, and assessment schedules
- Complete Project Manager Meeting commitments/actions
- Continue Project Manager Meetings
- Finalize 2002 data call (November/December) including TGDS/LSDS instructions

**M-91-00**

WASTE MANAGEMENT DIVISION

Todd Shrader

October 2002

<b>TPA MILESTONE REVIEW</b>	<b>WASTE MANAGEMENT PROJECT</b>	<b>October 2002</b>
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### MILESTONE SCHEDULE

WBS (PBS)	TPA DUE DATE	FISCAL YEAR 2002												Status
		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1.2.2 (RL-CP02) Solid Waste Treatment	12/31/00	(M-91-01) – Due date to be established. Complete the acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for storage, and treatment/processing prior to disposal of all Hanford Site post 1970 TRU/TRUM.												In dispute resolution.
	6/30/00	(M-91-03) – Submit Hanford Site TRU/TRUM Waste Project Management Plan (PMP) to Ecology Pursuant to Agreement Section 11.5.												In dispute resolution.
	9/30/02	(M-91-19-T01) Complete physical activities at T Plant necessary to store floor and pit sludge.												Complete
MILESTONE TYPES:		 M TPA MILESTONE  I TPA INTERIM	 DOE-HQ  DOE-RL	 FORECAST  Treatment Rate										

<b>TPA MILESTONE REVIEW</b>	<b>WASTE MANAGEMENT PROJECT</b>	<b>October 2002</b>
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## MILESTONE SCHEDULE

WBS (PBS)	TPA DUE DATE	FISCAL YEAR 2003												Status			
		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				
1.2.2 (RL-CP02) Solid Waste Treatment	12/31/02				⬡										(M-91-05-T01) Complete and Submit TRU/TRUM Retrieval and Processing Facility Engineering Study/Functional Design Criteria Study to Ecology.	Unrecoverable	
	12/31/02				⬡										(M-91-12A) Complete thermal treatment and disposal of 240 m <sup>3</sup> of contact handled LLMW.	Unrecoverable	
	12/31/02				⬡										(M-91-20) T Plant is ready to receive the first canister of K Basins floor and pit sludge.	In Jeopardy	
	9/30/03												⬡		(M-91-06-T01) Award necessary privatized contracts for processing remote handled (RH) and large size TRU/TRUM.	On Schedule	
MILESTONE TYPES:		⬡ <sup>M</sup> TPA MILESTONE	⊕ DOE-HQ	◇ FORECAST													
		⬡ <sup>I</sup> TPA INTERIM	⊖ DOE-RL	△ Treatment Rate													

**TPA MILESTONE  
REVIEW**

**WASTE MANAGEMENT PROJECT**

**October 2002**

**MILESTONE SCHEDULE**

WBS (PBS)	TPA DUE DATE	FISCAL YEAR 2004												Status		
		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1.2.2 (RL-CP02) Solid Waste Treatment	10/31/03	○														On Schedule
	11/29/03		○													On Schedule
	2/29/04					○										On Schedule
	9/31/04												○			In Jeopardy

MILESTONE TYPES:



TPA MILESTONE



DOE-HQ



FORECAST



TPA INTERIM



DOE-RL



Treatment Rate



<b>TPA MILESTONE REVIEW</b>	<b>WASTE MANAGEMENT PROJECT</b>	<b>October 2002</b>
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## MILESTONE EXCEPTION REPORT

TPA MILESTONE	MILESTONES IN DISPUTE
M-91-01	<p>Commitment to establish a date for: "Complete acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for storage, and treatment/processing prior to disposal of all Hanford Site post-1970 TRU/TRUM."</p> <p>In dispute at the IAMIT level until October 31, 2002.</p>
M-91-03	<p>Submit TRU/TRUM PMP.</p> <p>In dispute at the IAMIT level until October 31, 2002.</p>

<b>TPA MILESTONE REVIEW</b>	<b>WASTE MANAGEMENT PROJECT</b>	<b>October 2002</b>
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## MILESTONE EXCEPTION REPORT

<b>TPA MILESTONE</b>	<b>FUTURE MILESTONES IN JEOPARDY</b>
M-91-07	<p>“Complete Project W-113 for Post 1970 CH TRU/TRUM retrieval” by September 2004.</p> <p>It is DOE’s position that this milestone most likely cannot be met due to funding constraints, site priorities, and the maximum retrieval rate. This milestone has been discussed in the context of the M-91 dispute. However, this milestone is not formally part of that dispute and is still enforceable.</p> <p>Ecology has maintained the position that funding constraints and site priorities are not acceptable causes for modification of TPA Milestones.</p>
M-91-20	<p>“T Plant is Ready to Receive the First Canister of Floor and Pit Sludge” by December 31, 2002 (DOE Position).</p> <p>It is DOE’s position that delays in the sludge characterization studies and final safety analysis reports are anticipated to delay training and readiness at the T Plant facility. This milestone is likely to be missed.</p>

<b>TPA MILESTONE REVIEW</b>	<b>WASTE MANAGEMENT PROJECT</b>	<b>October 2002</b>
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## MILESTONE EXCEPTION REPORT

<b>TPA MILESTONE</b>	<b>FUTURE MILESTONES THAT WILL NOT BE MET</b>
M-91-05-T01	<p>“Complete and Submit TRU/TRUM Retrieval and Processing Facility Engineering Study/Functional Design Criteria Study Criteria” by December 31, 2002.</p> <p>It is DOE’s position that this target will be missed, that the facility is not required until 2013 and that therefore, these studies are not required until 2006 at the earliest. This target has been discussed in the context of the M-91 dispute. However, this target is not formally part of that dispute and is still enforceable.</p>
M-91-12A	<p>“Complete thermal treatment and disposal of at least 240 cubic meters of contact handled LLMW” by December 31, 2002.</p> <p>It is DOE’s position that this milestone will be missed. There is no sustainable thermal treatment capability currently available. This milestone has been discussed in the context of the M-91 dispute. However, this milestone is not formally part of that dispute and is still enforceable.</p>

<p align="center"><b>TPA MILESTONE REVIEW</b></p>	<p align="center"><b>WASTE MANAGEMENT PROJECT</b></p>	<p align="center"><b>October 2002</b></p>
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## M-91 ACCOMPLISHMENTS

<p><b>WBS</b> 1.2</p>	<p align="center"><b>M-91</b> <b><u>MLLW and TRU Waste Facilities</u></b></p> <p>(M-91-07) Plan of Action for covered drum retrieval approved by RL.</p> <p>(M-91-12A) Approximately 30 m<sup>3</sup> thermally treated total, none this quarter. An additional 115 m<sup>3</sup> of Hanford's thermally treatable waste remains at ATG in anticipation of restart of their GASVIT® system. Additional MLLW thermal treatment capability is being pursued through the use of a technology demonstration of the Perma-Fix Thermal Desorption process. Up to 45 m<sup>3</sup> of Hanford's stored thermally treatable MLLW is scoped to be processed by this demonstration.</p> <p>(M-91-19-T01) Completed physical activities at T Plant necessary to store floor and pit sludge.</p>
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<b>TPA MILESTONE REVIEW</b>	<b>WASTE MANAGEMENT PROJECT</b>	<b>October 2002</b>
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## PLANNED ACTIONS

TPA MILESTONE SUPPORTED	DESCRIPTION	TPA COMPLETION DATE
M-91-05-T01	It is DOE's position that the Engineering Study/Functional Design Criteria is not needed until 2006 and therefore, is not being pursued at this time.	12/31/02
M-91-06-T01	Highly unlikely any privatized opportunities will be available. Privatized contracts are not being pursued at the present time.	9/30/2003

<b>TPA MILESTONE REVIEW</b>	<b>WASTE MANAGEMENT PROJECT</b>	<b>October 2002</b>
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## PLANNED ACTIONS (continued)

TPA MILESTONE SUPPORTED	DESCRIPTION	TPA COMPLETION DATE
M-91-07	<p>Retrieval expected to begin in spring/summer of 2003. Retrieval rate not anticipated to be fast enough to meet this milestone.</p> <p>Ecology is concerned that DOE is not taking any actions to increase retrieval rate to meet the milestone.</p>	9/30/2004
M-91-12/ M-91-12A	Evaluate alternate treatment strategies through the Broad Spectrum contract.	12/31/2002 12/31/2005
M-91-14-T01	Contracts have been awarded and large item LLMW has been treated (condenser). RH contracts not available at this time. Alternatives being explored.	10/31/2003

<b>TPA MILESTONE REVIEW</b>	<b>WASTE MANAGEMENT PROJECT</b>	<b>October 2002</b>
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## PLANNED ACTIONS (continued)

TPA MILESTONE SUPPORTED	DESCRIPTION	TPA COMPLETION DATE
M-19-20	Fuel removal on-going. Safety assessment for sludge anticipated to be submitted to RL in November. Readiness and training to follow approval of safety assessment.	12/31/2002
M-91-21-T01	Design studies underway.	11/29/2003
M-19-22	Readiness activities depend on equipment design, storage configuration, and safety analysis.	2/29/2004

<b>TPA MILESTONE REVIEW</b>	<b>WASTE MANAGEMENT PROJECT</b>	<b>October 2002</b>
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## M-91 ISSUES

<b>TPA MILESTONE</b>	<b>DATE IDENT</b>	<b>ISSUE</b>	<b>IMPACT</b>	<b>STATUS</b>
M-91-06-T01	10/02	RH TRU WIPP WAC not anticipated before 2005. No privatized contractor available.	No impact anticipated as M-91 facility to be designed to process all RH TRU waste.	On Schedule

<b>TPA MILESTONE REVIEW</b>	<b>WASTE MANAGEMENT PROJECT</b>	<b>October 2002</b>
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## M-91 ISSUES

<b>TPA MILESTONE</b>	<b>DATE IDENT</b>	<b>ISSUE</b>	<b>IMPACT</b>	<b>STATUS</b>
M-91-07	10/01	Containers determined to not be TRU remain disposed without further characterization. (DOE Position) All containers subject to RCRA/HWMA designation requirements (Ecology Position). Ecology open to discuss reasonable means of achieving.	Significant cost and schedule impact depending on final agreement.	RL and Ecology have discussed positions. No discussions currently taking place.
M-91-07	10/01	Definition of retrieved drums requires clarification. (DOE Position)	Number of drums/containers removed from the burial ground could vary.	Recent proposals by both parties appear to be moving to agreement on this issue. (DOE Position) Although, no discussion currently taking place.

<b>TPA MILESTONE REVIEW</b>	<b>WASTE MANAGEMENT PROJECT</b>	<b>October 2002</b>
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## M-91 ISSUES

<b>TPA MILESTONE</b>	<b>DATE IDENT</b>	<b>ISSUE</b>	<b>IMPACT</b>	<b>STATUS</b>
M-91-07	10/01	Application of LDR to TRU requires clarification. (DOE Position)	RL considers LDR to not be applicable to TRU during retrieval, storage, or processing operations. Ecology's position is that LDR is applicable to TRU waste that is not designated by the Secretary of Energy to go to WIPP. In addition, for those designated wastes, LDR record keeping and characterization requirements are applicable.	RL and Ecology have discussed positions. No discussions currently taking place.

<b>TPA MILESTONE REVIEW</b>	<b>WASTE MANAGEMENT PROJECT</b>	<b>October 2002</b>
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## EXPENSE COST PERFORMANCE

(\$ in Millions)

WBS	FY 2002 TO DATE					AT COMPLETION				COMMENTS
	BUDGETED COST		ACTUAL CST	VARIANCE		BAC	FYSF	EXPECTED FUNDS FY 2002	PROJECTED CARRYOVER WORK	
	WORK SCHED	WORK PERF	WORK PERF	SCHED	COST	BCWS				
3.3.2.2 and 3.3.2.4	4.5	4.4	3.7	(0.1)	0.7	4.5		TBD	0.5	\$2M treatment support delayed due to ATG (by change request) FY 2003 Carryover RMW Treatment & Characterization \$0.5M

<b>TPA MILESTONE REVIEW</b>	<b>WASTE MANAGEMENT PROJECT</b>	<b>October 2002</b>
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## EXPENSE SCHEDULE VARIANCE ANALYSIS

WBS	SCHEDULE VARIANCE, FYTD (K\$ )	
	<u>(Description and Cause:)</u>	<u>(Impacts and Corrective Action:)</u>
3.3.2.2	<ul style="list-style-type: none"> <li>• MLLW Treatment (0.1) ATG remains in bankruptcy in FY 2002.</li> </ul>	<ul style="list-style-type: none"> <li>• Resolution of ATG operating status to determine outcome.</li> </ul>
3.3.2.4		<ul style="list-style-type: none"> <li>• Delays in the Documented Safety Analysis (DSA) will impact future readiness activities.</li> </ul>

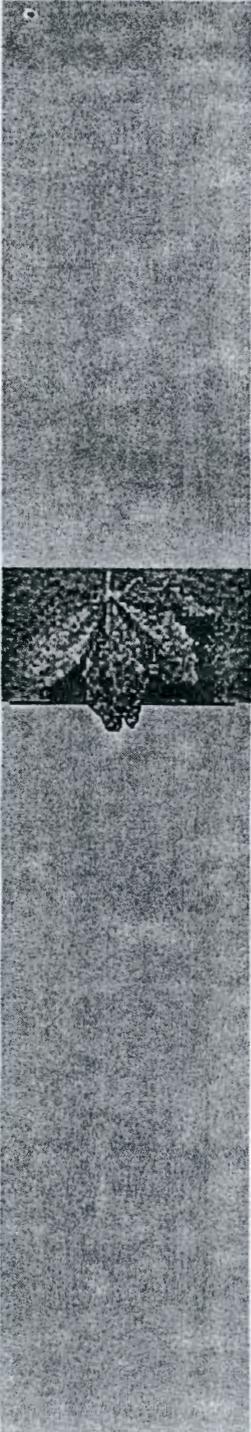
**TPA MILESTONE  
REVIEW**

**WASTE MANAGEMENT PROJECT**

**October 2002**

## **EXPENSE COST VARIANCE ANALYSIS**

<b>WBS</b>	<b>COST VARIANCE, FYTD (K\$)</b>	
	<u>(Description and Cause:)</u>	<u>(Impacts and Corrective Action:)</u>
3.2.2.2	<ul style="list-style-type: none"><li>• MLLW Treatment 0.5 Performing carryover work.</li></ul>	<ul style="list-style-type: none"><li>• Resolution of ATG operating status to determine outcome.</li></ul>
3.2.2.4	<ul style="list-style-type: none"><li>• TRU Retrieval 0.2 Performing carryover work.</li></ul>	<ul style="list-style-type: none"><li>• The process of completing FY 2001 activities and claiming BCWP on them in FY 2002 created a positive cost variance.</li></ul>



# M-20 Milestone Status Permits and Closure Plans

Presented by:

Ellen M. Mattlin  
U.S. Department of Energy

October 22, 2002

## Part B Permit Application Milestone Status

M-20-56

6/30/2003

Submit Canister Storage Facility Part B dangerous waste permit application to Ecology

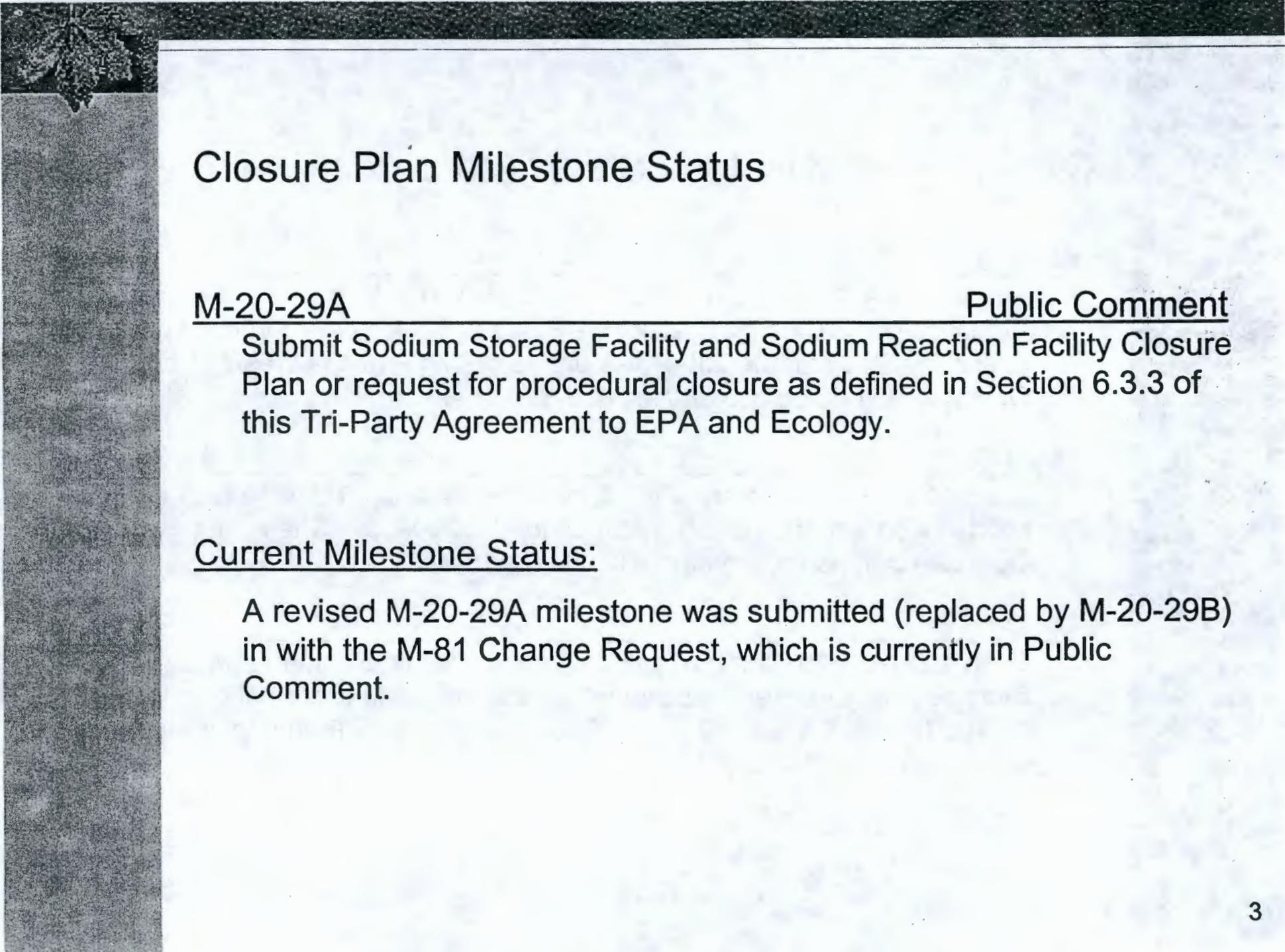
M-20-57

6/30/2003

Submit Immobilized Low Activity Waste (ILAW) Disposal Facility certified Part B permit application to Ecology

### Current Milestone Status:

On schedule.



## Closure Plan Milestone Status

M-20-29A

Public Comment

Submit Sodium Storage Facility and Sodium Reaction Facility Closure Plan or request for procedural closure as defined in Section 6.3.3 of this Tri-Party Agreement to EPA and Ecology.

### Current Milestone Status:

A revised M-20-29A milestone was submitted (replaced by M-20-29B) in with the M-81 Change Request, which is currently in Public Comment.

## Closure Plan Milestone Status (cont.)

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 (to be coordinated 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 (to be coordinated under M-15-39C)

M-20-54

12/31/2008

Submit 241-CX-70 Storage Tank, 241-CX-71 Neutralization 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:

Program planning.

## Hanford Facility RCRA Permit Status

- Ecology issued Revision 7 of the Hanford Facility RCRA Permit (Modification E) on 2/28/01. DOE filed a Notice of Appeal of Revision 7, of the Permit (Modification E) with the PCHB on 3/30/01. On September 30, 2002, RL, FH, BHI, PNNL, and CHG joined the Ecology in filing a Settlement Agreement and Stipulation on Manner of Dismissal with the Pollution Control Hearings Board (PCHB) in PCHB 01-137. Although the vast majority of issues raised during the litigation had been fully resolved, a number of matters arose during and subsequent to the public comment period on the revised Modification E that required further negotiations by the parties, e.g., receipt of off-site waste. Faced with the impending Board deadline and wishing to give the parties the opportunity to resolve these matters, it was determined to revoke the permitting action on Revision 7 (Modification E), thereby eliminating the basis for the ongoing legal challenge.
- Ecology proposed Modification F to the Hanford Facility RCRA Permit, which incorporates the 222-S Laboratory Complex. The Permittees provided comments to Ecology on Modification F. Ecology is reviewing agreements reached under Modification E in the context of permitting under Modification F.

## Accomplishments – last 3 months

- Ecology issued the permit for the Waste Treatment Plant on 9/25/02.
- Ecology initiated a public comment period for a Class 2 modification to add floor space and capacity to the 325 Hazardous Waste Treatment Units (HWTUs).
- DOE submitted the certified T Plant Part B permit application on 9/26/02.
- DOE delivered Class 1 modifications to Ecology for quarter ending 9/30/02. The modifications included Attachment 33, General Information Portion, which incorporated all approval/rejections to Revision 5 issued August 2000. Work on streamlining the GIP for inclusion in the Permit, has been placed on hold pending other actions to streamline the Permit.

## Planned Actions – next 6 months

- Ecology will respond to Public comment period held for the 300 Area Process Trenches. Temporary Authorization expires December 9, 2002
- Ecology will respond to public comment for the 325 HWTUs. Based on public comment, Ecology will make a permit decision regarding additional floor space and capacity for 325 HWTUs. Ecology has issued a temporary authorization to implement this modification; which expires on November 6, 2002.
- Ecology may issue the Responsiveness Summary for Modification F to the RCRA Permit which incorporates the 222-S Laboratory Complex, based on the outcome of decisions currently under consideration for Modification E.
- Ecology will republish the RCRA Permit to reflect the corrective action language and any approved Class 1/2/3 permit modifications.

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

- Ecology will review T Plant Complex Part B permit application for completeness.
- Ecology will issue NOD's for the Low-Level Burial Grounds (LLBG) Part B permit application working draft.
- EPA will issue Revision 1 to the HSWA portion of the Permit.

# CENTRAL PLATEAU

**ENVIRONMENTAL RESTORATION PROJECT  
CENTRAL PLATEAU  
FY 2002 TPA MILESTONE SUMMARY  
(Major & Interim Milestones)**

*Status as of: June 5, 2002*

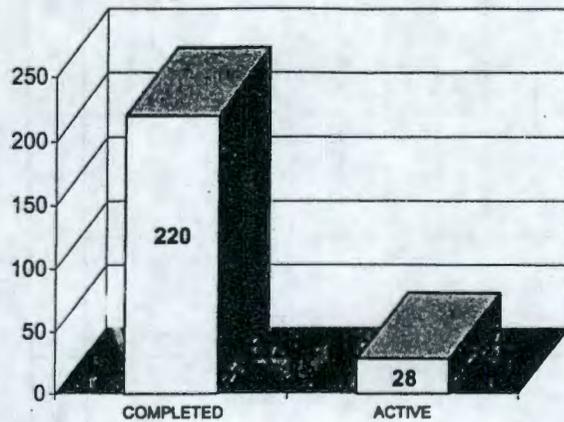
PBS	Milestone	Title	Compliance Date	Forecast/ Actual Date	Completed		Forecast			Unrecov erable	Deleted	
					Ahead Schedule	On Schedule	Ahead Schedule	On Schedule	Behind Schedule			
RC01	M-16-27B	Complete 100-HR-3 Phase II, ISRM Barrier Emplacement	12/31/2001	11/20/2001(A)	X							
CP01	M-13-26	Submit Plutonium/Organic-Rich Process Waste Group (200-PW-1) Work Plan	12/31/2001	12/26/2001(A)	X							
CP01	M-13-00L	Submit 3 200 NPL RI/FS (RFI/CMS) Work Plans	12/31/2001	12/26/2001(A)	X							
SS03	M-24-53	Install Two (2) Additional Wells at SST WMA TX-TY	12/31/2001	11/08/2001(A)	X							
SS03	M-24-54	Install One (1) Additional Well at SST WMA T	12/31/2001	10/18/2001(A)	X							
SS03	M-24-55	Install Two (2) Additional Wells at SST WMA S-SX	12/31/2001	11/08/2001(A)	X							
SS03	M-24-00M	Install RCRA Groundwater Monitoring Wells at Rate of Up to 50 in Calendar Year 2001 if Required	12/31/2001	11/08/2001(A)	X							
RC01	C-10-11	Issue Hanford Site Waste Management Unit Report	01/31/2002	01/21/2002(A)	(TPA commitment milestone not included in total count)							
CP01	M-15-40A*	Complete U Pond/Z Ditches Cooling Water Group Field Work Through Sample Collection and Analysis (200-CW-5)	09/30/2002								X	
CP01	M-15-42B*	Submit 200-TW-2 OU Draft A Remedial Investigation Report to Ecology	09/30/2002								X	
RC01	M-16-27C**	Complete 100-HR-3 Phase III, ISRM Barrier Emplacement	06/30/2003	06/30/2003								
<b>TOTAL FY 2002 ER Central Plateau TPA Milestones</b>			<b>10</b>		<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	

\* M-15-40A and M-15-42B were deleted by TPA change request M-015-02-01 on June 5, 2002.

\*\* M-16-27C - Regulators have agreed to extend milestone date to 6/30/03. A change request is being prepared.

# ENVIRONMENTAL RESTORATION PROJECT

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



	Compliance Due Date	Total Active @ 10/2002*	Milestone Number	Compliance Due Date	Milestone Number	Compliance Due Date
<b>M-13-00</b> Submit Work Plans for RFI/CMS or RI/FS Studies	12/31/2004 (M-13-00O)	3	M-13-26(C)	12/31/01		
			M-13-00L(C)	12/31/01		
			M-13-00M	12/31/02		
			M-13-00N	12/31/03		
			M-13-00O	12/31/04		
<b>M-15-00</b> Site Investigations / Feasibility Studies	12/31/2008 (M-15-00)	13	M-15-41B	10/30/02	M-15-40C	10/31/04
			M-15-38A	03/31/03	M-15-39C	11/30/05
			M-15-40B	05/31/03	M-15-43C	12/31/05
			M-15-47	06/30/03	M-15-00C	12/31/08
			M-15-39A	09/30/03	M-15-00	12/31/08
			M-15-41C	03/31/04		
			M-15-39B	05/31/04		
			M-15-43B	06/30/04		
<b>M-16-00</b> Remedial Design / Remedial Action	9/30/2024 (M-16-00)	2	M-16-27B(C)	12/31/01		
			M-16-27C	06/30/03		
			M-16-00	09/30/24		
<b>M-20-00</b> Submit Closure Plans for All RCRA TSD Units	12/31/2008 (M-20-00B) (Shared with FH)	4	M-20-39	11/30/05		
			M-20-33	12/31/05		
			M-20-54	12/31/08		
			M-20-00B	12/31/08		
<b>M-24-00</b> RCRA Groundwater Monitoring	Annually	6	M-24-53(C)	12/31/01		
			M-24-54(C)	12/31/01		
			M-24-55(C)	12/31/01		
			M-24-56	12/31/02		
			M-24-00M(C)	12/31/01		
			M-24-00N	12/31/02		
			M-24-00O	12/31/03		
			M-24-00P	12/31/04		
			M-24-00Q	12/31/05		
			M-24-00R	12/31/06		
<b>TOTAL ACTIVE MILESTONES</b>		<b>28</b>	<b>7</b>	<b>MILESTONES COMPLETED IN FY02 (C)</b>		

\* Includes TPA changes requests approved on June 5, 2002.



Richland Environmental Restoration Project  
 TPA MILESTONES SUMMARY SCHEDULE -- CENTRAL PLATEAU

OPERABLE UNIT	Fiscal 2002		Fiscal 2003				Fiscal 2004				Fiscal 2005				Fiscal 2006				Fiscal 2007				Fiscal 2008				Fiscal 2009				Fiscal 2010				Fiscal 2011				Fiscal 2012				Fiscal 2013					
	BY QTR		BY QTR				BY QTR				BY QTR				BY QTR				BY QTR				BY QTR				BY QTR				BY QTR				BY QTR				BY QTR				BY QTR					
	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	1st	2nd	3rd	4th	1st	2nd	3rd	4th				
GROUND-WATER	<p><b>M-24-51 thru 55 - M-24-51</b>                      (N/SO1A), M-24-52 (N/2R01A), M-24-54 (10/1R01A), M-24-53/55 (11/0R01A). Install 11 Monitoring Wells at SST WMA B-BX-BY, U, S-SX, T, TX-TY</p> <p><b>M-24-56</b>                      Install 5 Monitoring Wells at SST WMA TX-TY</p> <p><b>M-24-000</b>                      Install RCRA Groundwater Monitoring Wells at Rate of Up to 50 in CY 2003 (if required)</p> <p><b>M-24-000</b>                      Install RCRA Groundwater Monitoring Wells at Rate of Up to 50 in CY 2005 (if required)</p> <p><b>M-24-00M 11/0R01A</b>                      Install RCRA Groundwater Monitoring Wells at Rate from 0 to 50 in CY 2001 (if required)</p> <p><b>M-24-00N</b>                      Install RCRA Groundwater Monitoring Wells at Rate of Up to 50 in CY 2002 (if required)</p> <p><b>M-24-00P</b>                      Install RCRA Groundwater Monitoring Wells at Rate of Up to 50 in CY 2004 (if required)</p> <p><b>M-24-00R</b>                      Install RCRA Groundwater Monitoring Wells at Rate of Up to 50 in CY 2006 (if required)</p>																																															
	COMMON	<p><b>M-16-27B</b>                      11/2R01A                      Complete 100-HR-3 Phase II, ISRM Barrier Emplacement</p> <p><b>M-16-27C</b>                      Complete 100-HR-3 Phase III, ISRM Barrier Emplacement</p>																																														
100-HR-3	<p><b>M-16-27B</b>                      11/2R01A                      Complete 100-HR-3 Phase II, ISRM Barrier Emplacement</p> <p><b>M-16-27C</b>                      Complete 100-HR-3 Phase III, ISRM Barrier Emplacement</p>																																															

TPA MILESTONE  
 TPA MAJOR MILESTONE  
 TARGET MILESTONE  
 FORECAST  
 COMPLETE  
 UNRECOVERABLE  
 "AT RISK"  
 (P) PENDING CHANGE REQUEST  
 RCRA PERMIT COMMITMENT

**CENTRAL PLATEAU TPA CHANGE REQUESTS (June 2002 - September 2002)**

**M-016-02-02**  
**In Situ Redox**  
**Manipulation Phase III**  
**Barrier Emplacement**  
**Approved**  
**07/11/02**

This change request extends the completion date from 09/30/02 to 06/30/03.

**M-15-01-03\***  
**200-LW-1**  
**RIFS Studies**  
**Approved 09/11/02**

This change request added two interim milestones to implement additional activities for the 200-LW-1 Operable Unit Remedial Investigation/Feasibility Study process:

**M-15-46A (10/31/05)** - Submit 200-LW-1 OU Remedial Investigation Report, including the Past Practice Waste Sites in the 200-LW-2 200 Area Chemical Laboratory Group

**M-15-46B (09/30/06)** - Submit 200-LW-1 OU Feasibility Study and Proposed Plan/Proposed Permit Modification, including the Past Practice Waste Sites in the 200-LW-2 200 Area Chemical Laboratory Group

**M-15-01-04**  
**200-MW-1**  
**RIFS Studies**  
**Approved 07/12/02**

This change request added two interim milestones to implement additional activities for the 200-MW-1 Operable Unit Remedial Investigation/Feasibility Study process:

**M-15-44A (12/31/05)** - Submit 200-MW-1 OU Remedial Investigation Report

**M-15-44B (12/31/06)** - Submit 200-MW-1 OU Feasibility Study and Proposed Plan

*Proposed Central Plateau TPA Change Requests*

**CENTRAL PLATEAU TPA CHANGE REQUESTS (June 2002 - September 2002)**

**M-15-01-05\***  
**200-PW-1**  
**RI/FS Studies**  
**Proposed**

This change request proposes adding two interim milestones to implement additional activities for the 200-PW-1 Operable Unit Remedial Investigation/Feasibility Study process:

**M-15-45A (06/30/05)** - Submit 200-PW-1 OU Remedial Investigation Report Including the Past Practice Waste Sites in the 200-PW-3 Organic-Rich Process Waste Group and 200-PW-6 Plutonium-Rich Process Waste Group

**M-15-45B (03/31/06)** - Submit 200-PW-1 OU Feasibility Study and Proposed Plan Including the Past Practice Waste Sites in the 200-PW-3 Organic-Rich Process Waste Group and 200-PW-6 Plutonium-Rich Process Waste Group

\* These proposed milestones will be modified and resubmitted to align with similar change requests established during Central Plateau TPA negotiations.

## **CENTRAL PLATEAU DISCUSSIONS**

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**M-15-38A 03/31/03**

*Submit 200-CW-1 Gable Mountain Pond/B Pond and Ditch Cooling Water Group Feasibility Study*

### **Current Milestone Status:**

Ecology notified DOE on Dec. 18, 2000, of the deficiency of the RI Report relative to ecological receptors. DOE developed a strategy to address ecological evaluation in the 200 Area in 2001, submitted a 200 Area-wide ecological evaluation report in April 2002, and conducted a 200-CW-1 ecological data quality objectives (DQO) process that included a draft summary report. Ecology participated in the data quality objective process that was debriefed on Feb. 13, 2002. The DQO indicated that the existing data were sufficient to conduct the ecological risk assessment as part of the feasibility study and to support remedial decision-making on the operable unit. Ecology subsequently has raised concerns about both the 200 Area ecological evaluation report and the data quality objectives summary report. If additional data collection is required by the regulators to support the 200-CW-1 ecological assessment, the FS submittal will exceed the milestone date by an anticipated 18 months.

### **Status/Path Forward:**

DOE and contractor are working with Ecology to resolve concerns on the 200 Area Ecological Evaluation Report. An initial meeting has been requested for November 1, 2002.

## CENTRAL PLATEAU PROJECT ACCOMPLISHMENTS

The former Groundwater/Vadose Zone Integration Project, 233-S Project, and Surveillance and Maintenance Project were transferred to Fluor Hanford Inc. in July 2002 as part of the U.S. Department of Energy's plan to geographically consolidate work on the Hanford Site. B Plant and PUREX were transitioned earlier in 2002. All activities for transition were completed successfully.

### Groundwater Protection Program

The Groundwater Protection Program (Groundwater Protection) incorporates and expands the former Groundwater/Vadose Zone Integration Project.

Program staff developed the groundwater protection accelerated initiatives for the Hanford Performance Management Plan and actively participated in and supported the Tri-Party C3T strategic planning effort for the Integrated Groundwater Monitoring and Groundwater Protection Strategies during the reporting period.

In August, separate information sessions were conducted with the Confederated Tribes of the Umatilla Indian Reservation and the Nez Perce Tribe.

### 200 Area Remediation (M-13, M-15, M-16, M-20)

Carbon tetrachloride investigations in the shallow subsurface were conducted in the fourth quarter in and around locations where the contaminant might have been released to the soil other than at known disposal sites. This included investigations in the low-level burial grounds, along pipelines, and near the head ends of disposal sites. Initial results indicate that further investigation may be necessary in the burial grounds.



*Geoprobe sampling activity for carbon tetrachloride*

Document preparation activities continued on:

- the 200-TW-1, 200-TW-2, and 200-PW-5 RI Report (M-15-41B, October 30, 2002),
- the 200-IS-1 and 200-ST-1 RI/FS Workplan (M-13-00M, December 31, 2002), and
- the 200-CW-1 FS Report (M-15-38A, March 31, 2003).

### Groundwater Remediation (M-24)

The five pump-and-treat systems (KR-4, NR-2, HR-3, UP-1 and ZP-1) continued operation above the average planned 90% availability. Since inception, these pump-and-treat systems have processed approximately 6.1 billion liters of groundwater. The active soil vapor extraction system was turned off on 10/1/02. This system operates on a cyclic 6 month schedule.

Activities were performed during the fourth quarter to maintain the In-Situ Redox Manipulation (ISRM) Barrier wall in the 100-D area. The remaining work to complete Phase III of the ISRM Barrier is to inject five wells with sodium dithionite by June 30, 2003 to meet milestone M-16-27C.



*ISRM Barrier injection wells in the 100-D Area*

The annual report for 100 Area Operations and Groundwater was issued. This report summarizes operation and aquifer conditions for the calendar year 2001.

### Integration

During the fourth quarter the System Assessment Capability was used to examine the impact of infiltration reducing covers on waste sites. Preliminary results indicate covers have the greatest impact on mobile contaminants released to the soil with limited fluid volumes.

# CENTRAL PLATEAU PROJECT ACCOMPLISHMENTS

The document "An Initial Assessment of Hanford Impact Performed with the System Assessment Capability" was completed and delivered to DOE. This document summarizes Hanford's impact on ecological and human health, the local economy and cultures for a limited but important set of radioactive and chemical contaminants. In addition the "Revised Requirements for the System Assessment Capability" was delivered to DOE. This document will serve as the basis for modifications to the capability that need to be made to support the Composite Analysis and other assessments needed to support decision making at Hanford.

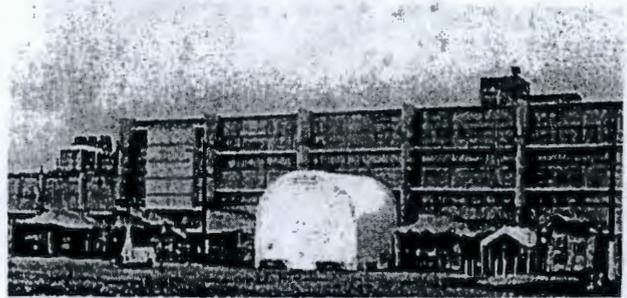
A poster titled "A Stochastic Risk Assessment of the Contamination at the Hanford Site" and a manuscript titled "Vadose Zone Modeling of Dispersed Waste Sites in the Framework of an Integrated Stochastic Environmental Transport and Impacts Assessment Code for the Hanford Site" have been cleared for publication.

The Science and Technology Roadmap was updated to Rev. 2 to reflect work that has been completed, address comments by the National Academy of Sciences/ National Research Council, and to add the soil and groundwater remediation technical element. The roadmap is the planning tool for the S&T Project. Addition of the remediation technical element identified research and technology development activities to address actions in the Hanford Site Performance Management Plan.

Laboratory experiments and numerical modeling were completed to evaluate conceptual and numerical models of water and waste migration in the vadose zone at the B-BX-BY tank farm complex. The research focused on three areas: 1) strontium geochemistry and transport at B-110, 2) uranium speciation and dissolution from BX-102 sediments, and 3) fluid flow and transport. The research results explain attenuation mechanisms of strontium-90 and uranium in the subsurface and allow development of geochemical models to predict future behavior of these contaminants.

A controlled field experiment of infiltration and redistribution of water and dilute tracers was completed at the Army Loop Road clastic dike site. Results from previous field tests were incorporated into the B-BX-BY Field Investigation Report by ORP to explain observed lateral spreading of contaminants. The results from the FY 2002 field experiment will be used to evaluate the impacts of

layering deep in the vadose zone that may control movement of technetium-99 and other key contaminants.



## Containment Tents

### 233-S Plutonium Concentration Facility

The 233-S PCF project transitioned from Bechtel to Fluor Hanford on July 1st. After full staffing was achieved in September, the project completed the removal of the first section of structural steel and grating that was left from the Bechtel work scope. The remaining steel and grating will be removed in the fourth quarter of this year (first quarter in the fiscal year 2003). In addition, some remaining piping was removed from the process hood area.

### Surveillance and Maintenance

New metal roofs are being installed on PUREX and B plant. The metal roof will last approximately 50 years, significantly longer than the conventional flat, build-up roofs. The framing at B Plant is complete and the roof panel installation is approximately 90% complete. At PUREX, only about 5% of the panels have been installed, but approximately 95% of the framing has been done. Metal roofs will also be put on the adjacent buildings like 271-B, 221-B and the AMU.

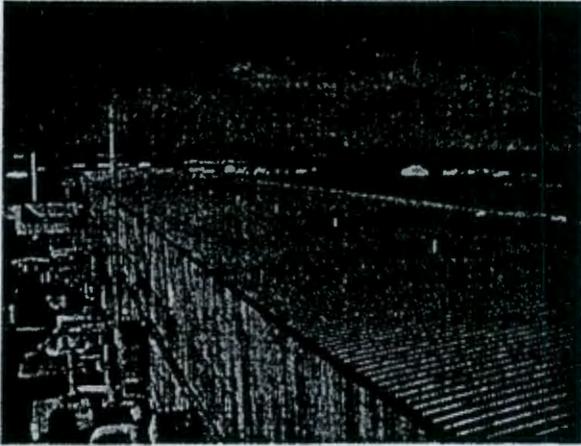
The project to characterize the 224-T cells is nearing completion of the task to enter each of the six cells, determine the vessel content through the use of remote non-destructive assay (NDA), and to decontaminate each cell to reduce the risk of contamination spread. The entry into the final cell to complete the NDA work in that cell is expected to occur this month. The NDA data have demonstrated that there is little residual in the vessels and shows that the vessels were well flushed during the cell clean out in the 1950s and 60s.

Work has been completed to characterize 231-Z, including the ventilation duct work, using non-destructive assay (NDA). This significant effort will bound the radionuclear inventory and based on the

## CENTRAL PLATEAU PROJECT ACCOMPLISHMENTS

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results, it is expected that the facility will be down graded from a nuclear hazard category 3 facility to a radiological facility.



*Roof at B Plant*