

Meeting Minutes

June 29, 2001

0057170

Tri-Party Agreement Milestone Review

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*Ecology IAMIT Representative*

Date: 3/26/02

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

Date: 3/26/02

Approval: Douglas R. Sherwood  
**Douglas R. Sherwood** (B5-01)  
*Chairperson  
 EPA IAMIT Representative*

Date: 3/26/02

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Minutes Prepared by:

Approval: Eileen Murphy-Fitch  
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Date: 3/26/02

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Hertz, J. S.	FH	A1-14	Warren, R. N.	RL	H0-12
Iwatate, D. F.	FH	A1-14	Wisness, S. H.	RL	A5-58
Jim, R.	Yakama*		Yerxa, J. K.	RL	A5-15
LaRue, D. N.	BHI	H0-11	Administrative Record	EDMC	H6-08*
Logan, T. E.	BHI	H0-09	*w/Attachments		
Moy, S. K.	RL	H0-12	File: Revised TPAM_6_01doc		
Morrison, R. D.	FH	A1-14*			

**Tri-Party Agreement Milestone Review**  
**June 29, 2001**

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**ENVIRONMENTAL RESTORATION PROJECT**

The Environmental Restoration (ER) Project has completed 252 Tri-Party Agreement Milestones and 62 milestones remain to be completed. In FY 2001, there are 15 Tri-Party Agreement Milestones scheduled for completion. Of these 15, 12 were completed ahead of schedule, 2 will be completed on or ahead of schedule, and 1 will not be completed as written. Discussions continue at the project manager's level to resolve and develop a path forward for the unrecoverable milestone.

**CHANGE REQUESTS IN DEVELOPMENT**

Tri-Party Agreement Change Request M-24-00-02, Calendar Year (CY) 2001 RCRA Well Installation, was approved – 11 standard-depth RCRA monitoring wells will be installed in/around the Single-Shell Tank (SST) Tank Farms by December 31, 2001. Tri-Party Agreement Change Request M-16-01-03 for the 300-FF-1 Operable Unit (OU) backfill/ regrade is pending. Change requests will be prepared for Tri-Party Agreement Major Milestones M-13-00 (*200 NPL RI/FS Work Plans*) and M-20-00 (*Part B Permit and Closure Plans*). Tri-Party Agreement Change Request M-15-00-06 is in process for inclusion with the the 200-PW-2 OU Work Plan, Revision 0 submittal. The proposed submittal date for the 200-PW-2 OU Draft A Feasibility Study/Process Waste Closure Plan and the Draft A Proposed Plan/Permit Modification exceeds the associated M-20 (Permits/ Closure Plan) Major Milestone completion date.

**Remedial Action and Waste Disposal Project**

Excavation of the six contaminated stockpile areas was completed and excavation of the contaminated soil area "G" was completed. Pipeline removal on three pipelines commenced in May 2001. Tri-Party Agreement Interim Milestone M-16-26G, Remove Filter Boxes and Complete Verification Sampling for 100-B-12 Waste Site, was completed four months ahead of the compliance date.

The Laser-Assisted Ranging and Data System (LARADS) Survey was completed for the 100-F excavated areas. Additional plumes were identified in the 116-F-14 Retention Basins, 116-F-2 Trench, and 100-F-19 pipelines. Baseline change proposals were approved for removal of an additional 88,400 tons of plume material. PW Stevens' soil remediation contract was terminated on June 27, 2001. A letter contract was issued to an existing subcontractor (DURATEK) and the workscope will be competitively rebid within 180 days. The parties want to minimize any impact of this action so that remediation momentum and progress is not impacted.

Backfill operations were initiated in April 2001 at the 100-HR-1 Operable Unit. Backfill concurrence was received from Ecology for the 116-H-7 Retention Basin. Demolishing and processing the 116-N-3 Crib Distribution Trough in place (rather than cutting, lifting, and packaging trough sections) resulted in an estimated dose reduction of 47 percent. This also increased personnel safety due to the elimination of critical lifts at both the remediation site and ERDF. A baseline change proposal was approved to treat and dispose of the 78 uranium oxide powder drums currently staged in the 618-4 Burial Ground. This workscope will be in lieu of initiating treatment of the uranium metal/oil drums this fiscal year.

On May 5, 2001, the ERDF Transportation Team logged 5,000,000 miles without an at-fault accident. This significant achievement dates back to 1996 when the first load of waste was delivered from the 100 B/C waste site.

### **Groundwater/Vadose Zone Integration Project**

Well installation activities were initiated for the In Situ Redox Manipulation (ISRM) Phase II western barrier well locations. Barrier installation (injection/extraction) activities were initiated at the eastern Phase II wells. Phase II consists of installing 28 barrier wells and 4 compliance-monitoring wells parallel to the Columbia River. The technical review was completed for the draft Purgewater Strategy. The document is undergoing final review by RL and the regulators and anticipate their approval by June 30, 2001. Installation of the five additional CY 2000 RCRA wells was completed ahead of schedule. The procurement package was issued for the 11 CY 2001 RCRA wells to be installed by December 31, 2001. The Sampling Analysis Plan for the tritium investigation soil gas work to be performed at the 618-11 Burial Ground was approved.

All groundwater pump and treat systems operated above the planned 90 percent availability. Planning is underway for construction of a new groundwater well at PFP. The 200-ZP-2 Soil Vapor Extraction System was successfully restarted in April as planned.

### **DECOMMISSIONING PROJECTS**

The contract for design and construction of the F and DR Reactors' safe storage enclosures was awarded. As of May 2001, F Reactor ISS is 71 percent complete and DR Reactor ISS is 84 percent. A revised Spent Nuclear Fuel Transfer Plan was signed by FH and was required in the event fuel pieces are found during fuel storage basin cleanout. Substantial progress continues to be made at the 233-S Facility within the confined workspace environment and contamination hazards that are encountered during each entry.

### **SURVEILLANCE/MAINTENANCE AND TRANSITION PROJECTS**

Draft A of the B Reactor Engineering Evaluation/Cost Analysis (EE/CA) was submitted for review and comment. A plan and schedule were also prepared to support the public involvement process tentatively scheduled by June 30, 2001. The preferred alternative outlined in the B Reactor EE/CA is hazard mitigation for public access which received strong support and endorsement from HAB Subcommittees.

Structural inspection was completed for the PUREX Roof. Observations indicate that water infiltration is continuing from the deteriorated roof cover. A summary report will be prepared for management review and action. Canyon Disposition Initiative (CDI) laboratory analysis data review activities were completed for the sampling activities that were performed at U Plant. Characterization results will play a crucial role in the formulation of the ROD for final disposition of the U Plant Facility.

### **ENVIRONMENTAL RESTORATION ISSUES:**

**TRI-PARTY AGREEMENT MILESTONE M-16-03E:** Tri-Party Agreement Milestone M-16-03E, *Complete Remediation of Waste Sites in 300-FF-1 OU (excluding the 618-4 Burial Ground), to include Excavation, Verification, and Backfilling*, due September 30, 2001, will be missed due to the need for performing a contaminant-partitioning coefficient (Kd) study on uranium leachability. The 300 Area cleanup goal issues will be addressed through the bench scale study. The study tests the leach rate and Kd of representative

samples from the 300 Area. This study is needed to ensure that the selected remediation goal for uranium (350 pCi/g) is protective of groundwater and the Columbia River. The excavation will not be backfilled until study results confirm that no further excavations are required. A data quality objective was completed and a baseline change proposal prepared to secure funding for the study.

RL submitted a Tri-Party Agreement Change Request proposing a two-year extension of the completion date. EPA rejected the change request on June 19, 2001, because DOE did not provide "good cause" for the extension and there was no discussion on including the 618-4 Burial Ground into this workscope. EPA would like to quickly establish a milestone completion date for excavation, verification, and backfilling of the 618-4 Burial Ground. RL initiated the Tri-Party Agreement Dispute Resolution Process (Article XVI) on June 27, 2001. Discussions will continue at the project manager level until July 19, 2001. RL is confident that the issue can be resolved at the project managers' level without elevation to the IAMIT.

**TRI-PARTY AGREEMENT MILESTONE M-16-00F:** Tri-Party Agreement Milestone M-16-00F, Establish Date for Completion of all 100 Area Remedial Actions, is due December 31, 2001. This sets the dates and workscope for any remaining remedial actions in the 100 Area. Most of these remedial actions are in the 100 Area Long Range Plan; cost for others (miscellaneous pipelines are being developed). EPA and Ecology have expressed an interest in negotiating the 200 Area changes along with the completion date for the 100 Area and 300 Area Remedial Actions.

**200 AREA NON-TANK FARM RELATED OPERABLE UNITS (OU):** RL's long-range plan is based on the alternate assessment approach for the 200 Area (assessing representative sites). This approach will require modification of several Tri-Party Agreement milestones including the M-13 and M-20 major milestones. RL is developing Tri-Party Agreement Change Requests and will formally transmit them for regulatory review and approval no later than August 31, 2001. Since these change requests affect Tri-Party Agreement major milestones, a public review period is required. Both EPA and Ecology have expressed an interest in negotiating the 200 Area changes in conjunction with completion of the 100 and 300 Area Remedial Actions.

## **WASTE MANAGEMENT**

### **LAND DISPOSAL RESTRICTIONS (LDR) REPORT (M-26-01)**

The Final CY 2000 LDR Report was delivered to Ecology and EPA on June 28, 2001. DOE stated that the activities described in the LDR Report update are based on the contractor's baseline as of December 31, 2000, and do not reflect the President's budget or any pending congressional budget actions. Funding realities may impact DOE's ability to achieved agreed-to cleanup actions.

DOE believes that the document submitted is comprehensive and responsive to LDR requirements. The Report meets the March 29, 2000, Director's Determination, and incorporates commitments made during the settlement negotiations. Proposed treatment and/or disposal milestones were included on a draft, unsigned, Class II Tri-Party Agreement Change Request. When the Final CY 2000 LDR Report is accepted by Ecology, a signed Class II Tri-Party Agreement Change Request will be transmitted to Ecology for approval. Once approved, all mixed low-level waste treatability groups will be covered under either the Tri-Party Agreement or through other regulatory activities (i.e., permits).

### **Tritium Treatment Technology (M-26-05)**

The biennial report is ahead of schedule. The Inspector General (IG) is reviewing K Basin issues and will want to know why K Basins tritium is not being treated now while the fuel is being removed.

### **ACQUISITION OF FACILITIES TO TSD TRU/TRUM, LLMW AND GTC3 (M-91)**

Two Tri-Party Agreement Milestones were completed – M-91-18, *Transmit T Plant Sludge Storage Conceptual Design Document (CDD) to Ecology*, and M-91-13, *Initiate Disposal of Low-Level Mixed Waste (LLMW)*. Tri-Party Agreement Milestone M-91-01, *Complete Acquisition of New Facilities, Modification of Existing ...for Post 1970 TRU/TRUM*. The date for completion of the M-91-01 Interim Milestone will be determined after the required technology is determined through the TRU/TRUM Project Management Plan (PMP). This milestone entered into dispute resolution in October 2000. Tri-Party Agreement Interim Milestone M-91-07, *Complete Project W-113 for Post 1970 CH TRU/TRUM Retrieval*, due September 2004, cannot be completed as written due to funding constraints. Other activities affecting the M-91-07 Interim Milestone relate to the impact of the Solid Waste-Environmental Impact Statement ROD on retrieval milestones, application of newly generated requirements for retrieved TRU waste, and clarification of retrieved drums. The issues should be resolved as part of the PMP and Tri-Party Agreement Change Request.

Thermal treatment and disposal of approximately 30 cubic meters of contact handled LLMW has been completed. To date, no thermal treatment residues have been disposed of.

Richland Environmental Restoration Project

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# TPA Quarterly Review



*Tri-Party Agreement*

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

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**June 29, 2001**

# **ENVIRONMENTAL RESTORATION PROJECT**

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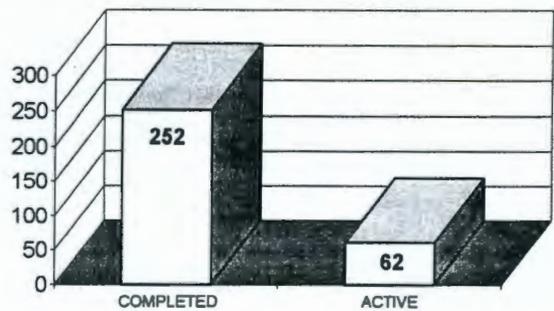
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# ENVIRONMENTAL RESTORATION PROJECT

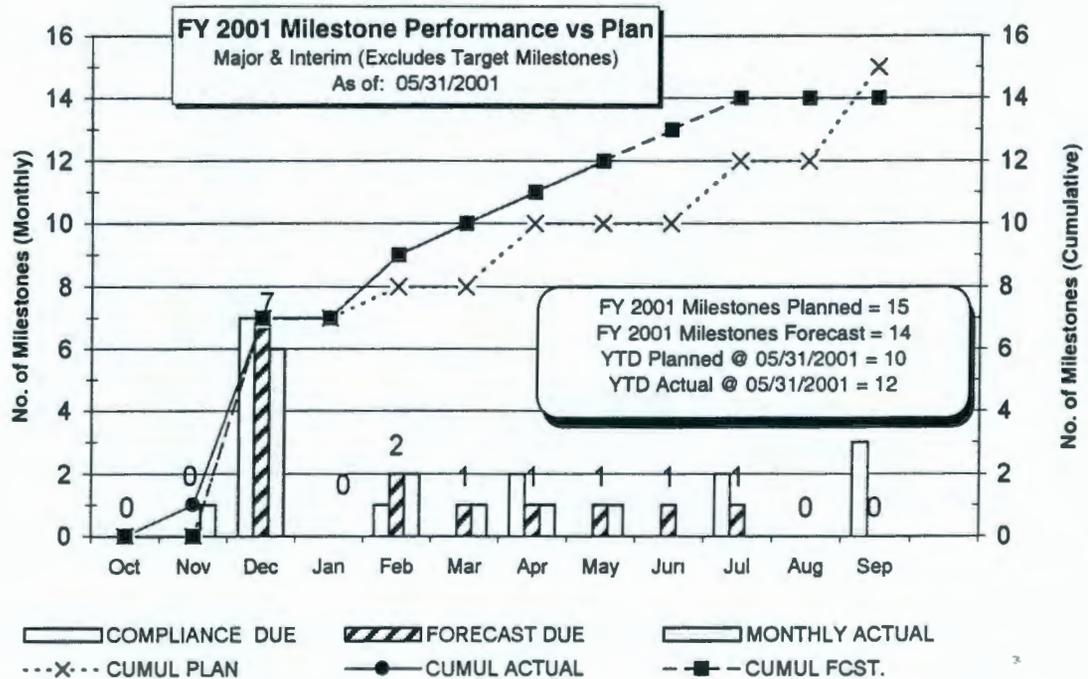
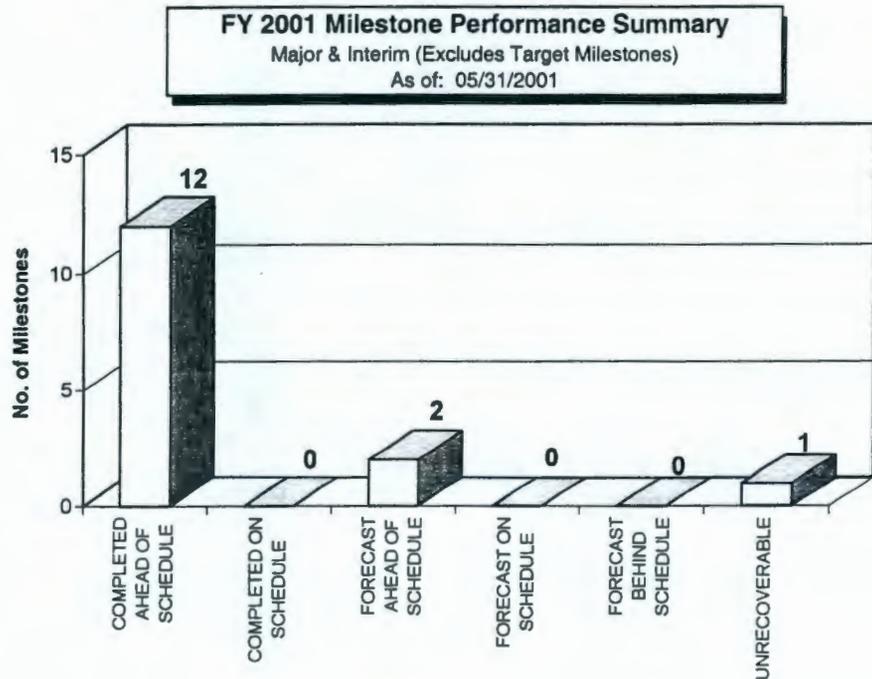
## TPA Milestone Statistics Major & Interim (Excludes Target Milestones)



	Compliance Due Date	Total Active @ 5/2001	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  (Groundwater/Vadose)	<b>12/31/2005</b> (M-13-00P)	<b>6</b>	M-13-25 (C) M-13-00K (C) M-13-26 M-13-00L M-13-00M M-13-00N	12/31/00 12/31/00 12/31/01 12/31/01 12/31/02 12/31/03	M-13-00O M-13-00P	12/31/04 12/31/05
<b>M-15-00</b> Site Investigations / Feasibility Studies  (Groundwater/Vadose)	<b>12/31/2008</b> (M-15-00)	<b>15</b>	M-15-41A M-15-42A M-15-40A M-15-42B M-15-41B M-15-38A M-15-40B M-15-39A	10/31/01 10/31/01 9/30/02 9/30/02 10/30/02 3/31/03 5/31/03 9/30/03	M-15-41C M-15-42C M-15-39B M-15-40C M-15-39C M-15-00C M-15-00	3/31/04 3/31/04 5/31/04 10/31/04 11/30/05 12/31/08 12/31/08
<b>M-16-00</b> Remedial Design / Remedial Action  (Remedial Action / Groundwater)	<b>9/30/2018</b> (M-16-00)	<b>19</b>	M-16-27A (C) M-16-26D (C) M-16-07B (C) M-16-41A M-16-26C M-16-26G (C) M-16-03E M-16-00F M-16-27B M-16-26B M-16-41B M-16-03A	12/31/00 2/28/01 7/31/01 7/31/01 9/30/01 9/30/01 9/30/01 12/31/01 12/31/01 3/31/02 3/31/02 6/30/02	M-16-27C M-16-10A M-16-26E M-16-13B M-16-26F M-16-00 M-16-01 M-16-03F M-16-00A M-16-00B M-16-41C	9/30/02 8/1/03 9/30/04 10/29/04 2/28/05 9/30/18 TBD TBD TBD TBD TBD
<b>M-20-00</b> Submit Closure Plans for All RCRA TSD Units (Groundwater/Vadose)	(Shared with FH) <b>2/28/2004</b> (M-20-54)	<b>5</b>	M-20-39 M-20-33 M-20-52	2/28/03 10/31/03 12/31/03	M-20-53 M-20-54	12/31/03 2/28/04
<b>M-24-00</b> RCRA Groundwater Monitoring  (Groundwater/Vadose)	<b>12/31/2006</b> (M-24-00R)	<b>11</b>	M-24-46 (C) M-24-47 (C) M-24-48 (C) M-24-00L (C) M-24-49 (C) M-24-50 (C) M-24-51 M-24-52 M-24-53	12/31/00 12/31/00 12/31/00 12/31/00 4/30/01 4/30/01 12/31/01 12/31/01 12/31/01	M-24-54 M-24-55 M-24-00M M-24-00N M-24-00O M-24-00P M-24-00Q M-24-00R	12/31/01 12/31/01 12/31/01 12/31/02 12/31/03 12/31/04 12/31/05 12/31/06
<b>M-70-00</b> ERDF Operational	<b>7/01/1996A</b> (M-70-00)	<b>0</b>				
<b>M-93-00</b> Reactors on River Final Disposition (Decommissioning)	<b>TBD</b> (M-93-00)	<b>6</b>	M-93-12 M-93-14 M-93-10	2/28/02 6/30/03 7/31/03	M-93-11 M-93-15 M-93-00	9/30/03 12/31/03 TBD
<b>TOTAL ACTIVE MILESTONES</b>		<b>62</b>	<b>12</b> ---	<b>FY01 MILESTONES COMPLETED (C)</b>		

ENVIRONMENTAL RESTORATION PROJECT

FY 2001 TPA MILESTONE PERFORMANCE METRIC



# ENVIRONMENTAL RESTORATION PROJECT

## FY 2001 TPA MILESTONE SUMMARY (Excludes Target Milestones)

PBS	Milestone	Title	Compliance Date	Forecast/ Actual Date	Completed		Forecast			Unrecov erable	Deleted	
					Ahead Schedule	On Schedule	Ahead Schedule	On Schedule	Behind Schedule			
ER02	M-13-00K	Submit 1 200 NPL RI/FS (RFI/CMS) Work Plan	12/31/2000	12/21/2000(A)	X							
ER02	M-13-25	Submit Uranium Rich Process Waste Group (200-PW-2) Work Plan	12/31/2000	12/21/2000(A)	X							
ER08	M-16-27A	Complete 100-HR-3 Phase I, ISRM Barrier Emplacement (Planning, Well Installation, and Barrier Emplacement)	12/31/2000	11/01/2000(A)	X							
ER08	M-24-46	Install Two Additional Wells at SST WMA S-SX	12/31/2000	12/27/2000(A)	X							
ER08	M-24-47	Install Four Additional Wells at SST WMA T	12/31/2000	12/27/2000(A)	X							
ER08	M-24-48	Install Four Additional Wells at SST WMA TX-TY	12/31/2000	12/27/2000(A)	X							
ER08	M-24-00L	Install RCRA Groundwater Monitoring Wells at Rate of up to 50 in CY00 if Required	12/31/2000	12/27/2000(A)	X							
ER10	C-10-08	Issue Hanford Site Waste Management Unit Report	01/31/2001	01/11/2001(A)	(TPA commitment milestone not included in total count)							
ER01	M-16-26D	Begin Excavation Activities at 100 B/C Process Effluent Pipelines	02/28/2001	02/26/2001(A)	X							
ER08	M-24-49	Install Three Additional Wells at SST WMA S-SX	04/30/2001	03/30/2001(A)	X							
ER08	M-24-50	Install Two Additional Wells at SST WMA TX-TY	04/30/2001	04/02/2001(A)	X							
ER01	M-16-07B	Complete Remediation and Backfill of 22 Liquid Waste Sites and Process Effluent Pipelines in the 100-DR-1 and 100-DR-2 Operable Units as Defined in Remedial Design Report/Remedial Action Work Plan for the 100 Area	07/31/2001	02/28/2001(A)	X							
ER01	M-16-41A	Complete Remedial Action Excavation for JA Jones 1 and 600-23 Waste Sites	07/31/2001	06/29/2001(F)			X					
ER01	M-16-26C	Complete Remediation and Backfill of 10 Liquid Waste Sites and Process Effluent Pipelines in the 100-HR-1 Operable Unit as Defined in Remedial Design Report/Remedial Action Work Plan for the 100 Area	09/30/2001	07/13/2001(F)			X					
ER01	M-16-26G	Remove Filter Boxes and Complete Verification Sampling for 100-B-12 Waste Site	09/30/2001	5/31/2001(A)	X							
ER03	* M-16-03E	Complete Remediation of Waste Sites in 300-FF-1 Operable Unit (excluding 618-4 Burial Ground), to Include Excavation, Verification, and Backfilling	09/30/2001	09/30/2003(F)						X		
<b>TOTAL FY 2001 TPA Milestones</b>			<b>15</b>		<b>12</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	

M-16-26B completion date revised from 2/28/2001 to 3/31/2002 (FY02) per CR M-16-00-05.

M-13-25 completion date revised from 6/30/01 to 12/31/01 (FY02) to allow time for carbon tetrachloride investigation (per CR M-13-01-01).

\* A TPA change request was forwarded to EPA proposing completion date be revised to 9/30/2003 pending Kd study results for uranium leachability; EPA disapproved change request.

## ENVIRONMENTAL RESTORATION PROJECT

### TPA Change Requests (March - May 2001)

**M-15-00-04**  
**200-TW-1 OU**  
**Assessments**  
**Approved - 3/27/01**

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

**M-15-41A (10/31/01)** - Complete 200-TW-1 OU Field Work Through Drilling and Sample Collection

**M-15-41B (10/30/02)** - Submit 200-TW-1 OU Draft A Remedial Investigation Report to EPA

**M-15-41C (03/31/04)** - Submit 200-TW-1 OU Draft A Feasibility Study and Draft A Proposed Plan to EPA

**M-15-00-05**  
**200-TW-2 OU**  
**Assessments**  
**Approved - 3/27/01**

This change request added three interim milestones to implement additional activities for the 200-TW-2 Operable Unit Remedial Investigation/Feasibility Study process:

**M-15-42A (10/31/01)** - Complete 200-TW-2 OU Field Work Through Drilling and Sample Collection

**M-15-42B (09/30/02)** - Submit 200-TW-2 OU Draft A Remedial Investigation Report to Ecology

**M-15-42C (03/31/04)** - Submit 200-TW-2 OU Draft A Feasibility Study and Draft A Proposed Plan/Proposed Permit Modification to Ecology

**M-13-01-01**  
**200-PW-1 OU**  
**Work Plan**  
**Approved - 4/19/01**

EPA requested that the 200-PW-1 work plan incorporate all investigations needed to answer questions surrounding the source of carbon tetrachloride contamination in the vadose zone. A TPA change request was approved extending the date from June 30, 2001 to December 31, 2001 for M-13-26, "Submit Plutonium/Organic-Rich Process Waste Group (200-PW-1) Work Plan.

## ENVIRONMENTAL RESTORATION PROJECT

### TPA Change Requests (March - May 2001)

**M-15-01-01  
200-CW-1  
Feasibility Study  
Approved - 5/3/01**

This change request approved the completion date be revised from November 30, 2001 to March 31, 2003 for **M-15-38A**, "Submit Draft A Gable Mountain Pond/B Pond and Ditch Cooling Water Group FS and 216-B-3 Pond System RCRA TSD Unit Closure Plan and Submit Draft A Gable Mountain Pond/B Pond and Ditch Cooling Water Group Proposed Plan/Proposed RCRA Permit Modification". This extension will allow for an assessment of ecological impacts and to develop land-use exposure scenarios prior to completing the feasibility study/ proposed plan documents.

**M-24-00-02  
CY01 RCRA Well  
Installation  
Approved - 6/1/01**

Five interim milestones were established in support of the calendar-year 2001 **M-24-00M** RCRA monitoring well installation major milestone. A total of 11 monitoring wells are to be installed by December 31, 2001.

- M-24-51** - Install Three (3) Additional Wells at SST WMA B-BX-BY
- M-24-52** - Install Three (3) Additional Wells at SST WMA U
- M-24-53** - Install Two (2) Additional Wells at SST WMA TX-TY
- M-24-54** - Install One (1) Additional Well at SST WMA T
- M-24-55** - Install Two (2) Additional Wells at SST WMA S-SX

### Pending TPA Change Requests

**M-16-01-03  
300-FF-1  
Backfill/Regrade  
Pending**

**M-16-03E**, "Complete Remediation of Waste Sites in 300-FF-1 Operable Unit (excluding 618-4 Burial Ground), to Include Excavation, Verification, and Backfilling", due September 30, will be missed due to the decision to perform a Kd study on uranium leachability in the 300 Area. Backfill/regrading will be deferred until study results confirm no further excavation is required. A TPA change package was transmitted to the regulators on June 11 proposing the date be revised to September 30, 2003. EPA disapproved the change request on June 20.

# ENVIRONMENTAL RESTORATION PROJECT

## Proposed TPA Change Requests

M-13-00L  
M-13-XX  
M-20-XX  
Proposed

TPA Milestone M-13-00L requires the submittal of three 200 NPL RI/FS work plans by December 31, 2001. One work plan is in process (200-PW-1). A TPA change request addressing the other two work plans is being prepared and will be submitted to Ecology by August 31, 2001.

M-15-00-06  
200-PW-2 OU  
Assessments  
Proposed

This change request proposes adding three interim milestones to implement additional activities for the 200-PW-2 Operable Unit Remedial Investigation/Feasibility Study process:

M-15-43A (09/30/03) - Complete 200-PW-2 OU Field Work Through Sample Collection and Analysis

M-15-43B (06/30/04) - Submit 200-PW-2 OU Draft A Remedial Investigation Report to Ecology

M-15-43C (12/31/05) - Submit 200-PW-2 OU Draft A Feasibility Study/Closure Plan and Draft A Proposed Plan/Permit Modification to Ecology

# **STATUS BY PROJECT**

## REMEDIAL ACTION AND WASTE DISPOSAL PROJECT

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### 100 B/C Area Pipeline Remediation (M-16-26G)

- Excavation of the six contaminated stockpile areas was completed during March. During April, excavation was also completed at contaminated soil area 'G'. Pipeline removal commenced on three pipelines in May.
- TPA Milestone M-16-26G, Remove Filter Boxes and Complete Verification Sampling for 100-B-12 Waste Site (due September 30), was completed on May 31 four months ahead of schedule.

### 100 D Area Remediation

- Demobilization activities were completed at 100 D Area in May. Railroad track rails that were removed during remediation were excessed for reuse by a local company in support of Hanford Site waste minimization efforts.



RCT conducting survey on manhole pipe during 1607-F-6 waste site excavation

### 100 F Area Remediation

- The Laser-Assisted Ranging and Data System (LARADS) survey was completed for the excavated areas in 100 F Area. Additional plumes were identified in the 116-F-14 Retention Basin, 116-F-2 Trench, and 100-F-19 pipelines. Baseline change proposals (BCPs) were approved for removal of an additional 88,400 tons of plume material.
- Excavation and removal activities for the remaining 1607-F6 pipeline were completed during April. Overburden excavation and removal were also completed for the 100-F-19 south and north Lewis Canal pipeline laterals, with the exception of several small sections of the south lateral.
- On May 4, the 40,000<sup>th</sup> container from the Group 4 sites (F/H Areas) was transported to ERDF.

### 100 H Area Remediation (M-16-26C)

- During April, backfill operations were initiated at the 100-HR-1 Operable Unit.
- The 100 H Area hexavalent chromium leachate study was also completed during April, and a leachate report was prepared. In May, backfill concurrence was received from Ecology for the 116-H-7 Retention Basin.

### 100 N Area Remediation

- The first two concrete cuts on the 116-N-3 crib distribution trough were completed in April, and loadout was completed in May. Demolishing and processing the trough in-place rather than cutting, lifting, and packaging trough sections, resulted in an estimated dose reduction of 47%. This also increased personnel safety due to the elimination of critical lifts at both the remediation site and ERDF.

## REMEDIAL ACTION AND WASTE DISPOSAL PROJECT

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- Removal of the overburden at the 116-N-3 pipeline began in April. The overburden is being stockpiled for use as backfill upon removal of the pipelines and bypass. Demolition and size reduction was initiated in May for the 116-N-3 bypass structure.
- Approval was received in April to proceed with remediation of an additional 45,000 tons of plumes and additional shielding soil at the 116-N-3 Trench and Crib. To offset the increased scope, excavation and loadout from 116-N-1 Trench was deferred to FY02. The plumes will be remediated concurrent with 116-N-3 pipelines and bypass work. Demolition and processing of the 116-N-1 trench cover panels will still occur in FY01. Excavation was initiated on the plumes at the 116-N-3 Trench and Crib waste sites in May.

### 300 Area Remediation (M-16-03E, M-16-03F)

- A BCP was approved to treat and dispose the 78 uranium oxide powder drums currently staged in the 618-4 Burial Ground. This workscope is being performed in lieu of initiating treatment of the uranium metal/oil drums this fiscal year.

### 300/600 Area Remediation (M-16-41A)

- Waste loadout was completed in March at the J.A. Jones waste site. Final quantities removed were more than 2½ times that planned. Confirmation sampling results were received on May 17, and results indicated that all cleanup goals were met or exceeded.
- Loading and hauling operations were completed on May 15 at the 600-23 waste site. Subcontractor demobilization was completed on May 17. Final preparations are underway to ship overpacked drums containing black tar material for offsite treatment. Verification sampling was completed on May 23.

### 100/300 Area Design/Assessment

- The 300-FF-2 Kd uranium leachability study was initiated during the week of March 19.
- The 300-FF-2 Operable Unit Interim ROD was approved on April 5. Approval of this ROD completes all required regulatory documents necessary to proceed with cleanup of remaining contaminated sites in the 300 Area.
- A draft *Final Hazard Classification and Auditable Safety Analysis (FHC/ASA) for the Remediation of the 618-5 Burial Ground* document was completed for internal review. Comments are due by June 28. The 618-5 Burial Ground design package was also issued for procurement review. The package addresses remediation and design requirements for the 618-5 waste site.
- The 100 Area Burial Ground Intermediate Design was completed in May for the 11 burial grounds located in the 100 B/C Area. The Final Design is planned for completion in mid-July.

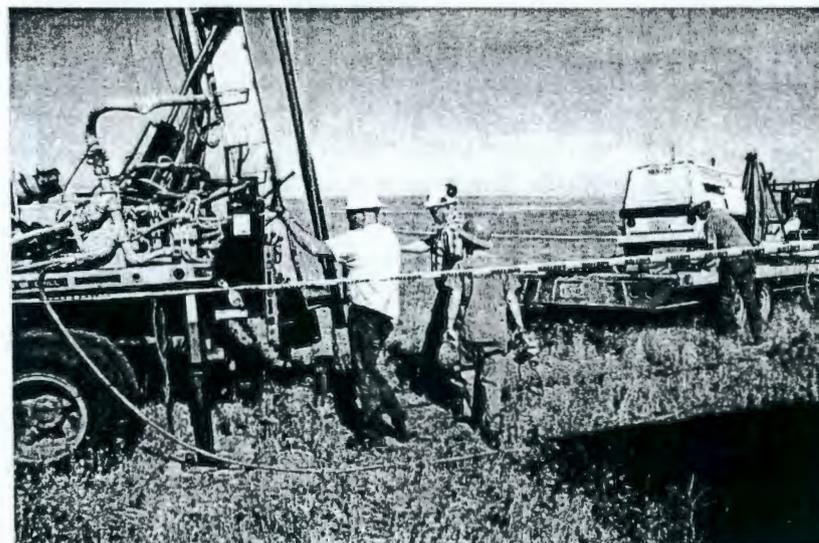
### ERDF Operations

- During April, 173,260 gallons of ERDF leachate were transferred to the Effluent Treatment Facility.
- On May 5, the ERDF transportation team logged 5,000,000 miles without an at-fault accident. This significant achievement dates back to 1996 when the first load of waste was delivered from the 100 B/C waste site to ERDF. Constant focus on safety and excellent teamwork among the ERC HAMTC drivers/mechanics, and subcontractor have made this accomplishment possible.
- The ERDF disposal team has worked 1,809 days (since project inception) without a lost-time accident.
- Through May, 400,794 tons of waste have been received at ERDF in FY01, which is about 13% ahead of the plan. To date, a total of 2,943,576 tons of material have been disposed in ERDF.

# GROUNDWATER/VADOSE ZONE INTEGRATION PROJECT

## Groundwater/Vadose Zone (GW/VZ) Integration Project

- In March, Science & Technology (S&T) laboratory analyses and modeling were completed for the S-SX field investigation report. The results were summarized in a draft appendix that will be incorporated into the S-SX field investigation report being prepared by the River Protection Program (RPP). The National Academy of Sciences (NAS) Committee was briefed on the S-SX tank farm investigation results, and was also provided a general Integration Project update. This was the final interaction of the Integration Project with the NAS Committee until its report is released in early summer.
- The ninth Expert Panel meeting was conducted on April 25-27. This meeting focused on the Integration Project status and transition strategy.
- In May, the initial assessment was initiated with SAC Rev. 0 capability.



Well decommissioning along the River Corridor

## Groundwater Management (M-16-27, M-24-49, M-24-50, M-24-00M, M-24-51 through 55)

- In March, well installation activities were initiated for the In Situ Redox Manipulation (ISRM) Phase II western barrier well locations. During April, barrier installation (injection/extraction) activities were initiated at the eastern Phase II wells. Phase II consists of installing 28 barrier wells and 4 compliance monitoring wells parallel to the Columbia River. These well installations will extend the current 640-foot chromium-contaminated groundwater barrier by approximately 930 feet (for a total of approximately 1,570 feet).
- Through May, well decommissioning has been completed for 38 out of the 90 wells planned for FY01.
- The technical review was completed in April for the draft Purgewater Strategy document. The document is undergoing

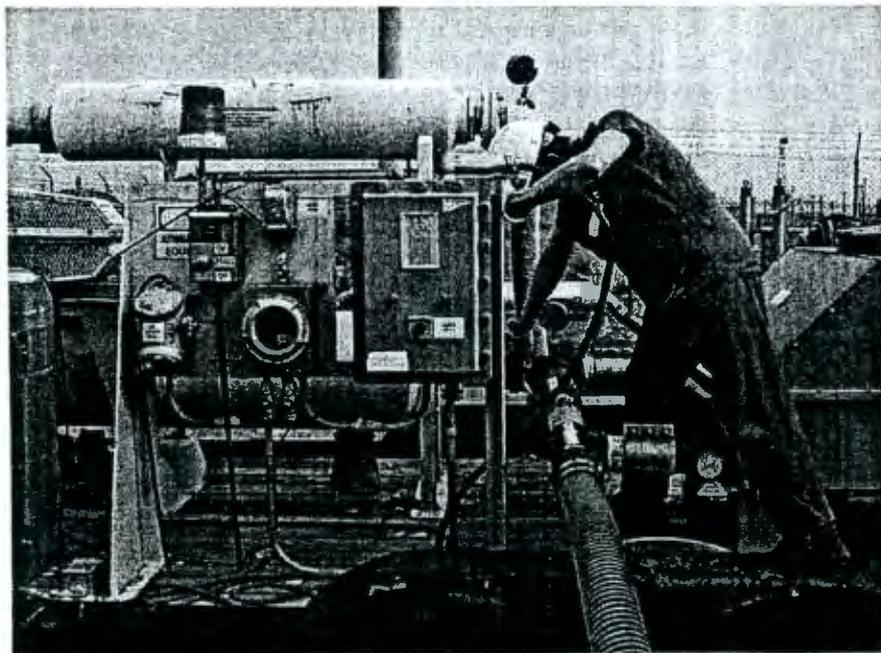
final review by RL and the regulators and is expected to be approved by the end of June.

- On April 2, installation of five additional CY 2000 RCRA wells were completed one month ahead of schedule which satisfied TPA Milestones M-24-49 and M-24-50. The contained-in determination was received from Ecology for 12 of the 15 CY00 RCRA drilling waste sites. This approval provides a strategy and path forward for the CY01 RCRA drilling campaign.
- The procurement package was issued in May for the 11 RCRA wells to be installed by December 31, 2001.
- In April, EPA approved the Sampling Analysis Plan for the tritium investigation soil gas work to be performed at the 618-11 Burial Ground. Installation and sampling of the soil gas probes were initiated. The soil gas sampling was completed in May.

## GROUNDWATER/VADOSE ZONE INTEGRATION PROJECT

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- All groundwater pump and treat systems operated above the planned 90% availability levels in May. Since system inception, the five pump and treat systems have processed over 5 billion liters of groundwater, removing approximately 5,435 kilograms of carbon tetrachloride, 242 kilograms of chromium, and 1.03 curies of strontium. Approximately 766 million liters of groundwater have been processed in FY01, removing approximately 853 kilograms of carbon tetrachloride, 48 kilograms of chromium, and 0.136 curies of strontium.
- Planning is underway for construction of a new groundwater well at the Plutonium Finishing Plant (PFP).
- The 200-ZP-2 soil vapor extraction system was successfully restarted in April as planned.



ZP-2 process flow adjustment

### 200 Area Assessment (M-13-26, M-13-00L, M-15-41, M-15-42, M-15-38)

- A TPA change request was approved on April 19 that revised the completion date for Milestone M-13-26, "Submit Plutonium/Organic-Rich Process Waste Group (200-PW-1) Work Plan" from June 30 to December 31 (FY02).
- In April, the drilling contract was awarded for the 200-TW-1 and 200-TW-2 Operable Units FY01 field characterization activities. In May, approval was also received from Ecology for the 200-TW-1 and 200-TW-2 Rev. 0 work plan and waste control plan.
- A TPA change request was approved on May 3 that revised the completion date for M-15-38A, "Submit Draft A Gable Mountain Pond/B Pond and Ditch Cooling Water Group Feasibility Study and 216-B-3 Pond System RCRA TSD Unit Closure Plan and Submit Draft A Gable Mountain Pond/B Pond and Ditch Cooling Water Group Proposed Plan/Proposed RCRA Permit Modification" from November 30, 2001 to March 31, 2003. This extension will allow time for assessment of ecological impacts and resolution of conservation land-use exposure scenarios.

## DECOMMISSIONING PROJECTS

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### F and DR Reactors ISS (M-93)

- The contract was awarded on May 8 for design and construction of the F and DR Reactors' safe storage enclosures. As of May, F Reactor ISS is 71% complete (FY01 planned is 80%); DR Reactor ISS is 84% complete (FY01 planned is 85%)
- The Brokk™ 330N excavator was delivered to the F Reactor Fuel Storage Basin (FSB) on March 20. The remote-controlled excavator will be used in the removal effort for the remaining three feet of sand and contaminated debris in the FSB. Training and mockup activities were conducted. Two operators have been qualified to operate the Brokk equipment.
- The revised spent nuclear fuel transfer plan was signed by Fluor Hanford on March 7. A transfer plan was required in the event fuel pieces are found during basin cleanout. The Safety Analysis Report Plan, Rev. 0 was approved on April 26.

### D and H Reactors ISS

- At D Reactor, demolition and loadout were completed for Area 1 (miscellaneous storage and lunchroom) and Area 2 (valve pit) in March. During April, backfill was completed for the water tunnels. During May, valve pit demolition was also completed. Asbestos material was removed and disposed from the FSB. As of May, D Reactor ISS is 30% complete (FY01 planned is 35%).
- At H Reactor, hazardous material removal and asbestos abatement were completed in several areas. In April, all demolition preparation activities were completed in the FSB and transfer bay. As of May, H Reactor ISS is 13% complete (FY01 planned is 28%).

### 233-S Plutonium Concentration Facility Decommissioning

- Substantial progress continues to be made at the 233-S facility within the confined workspace environment and contamination hazards that are encountered during each entry. Since

December 2000, the project has made 1,665 entries into contamination zones with no significant radiological events.

- Through May, 5 of the 8 vessels planned for FY01 have been removed on or ahead of schedule. A total of 15 vessels is scheduled for removal by June 30, 2002.
- Through May, 930 feet of process piping was removed from the process hood.
- Through May, 489 packages have been nondestructive assayed (NDA). Removal of the NDA backlog was also completed during the month of May.



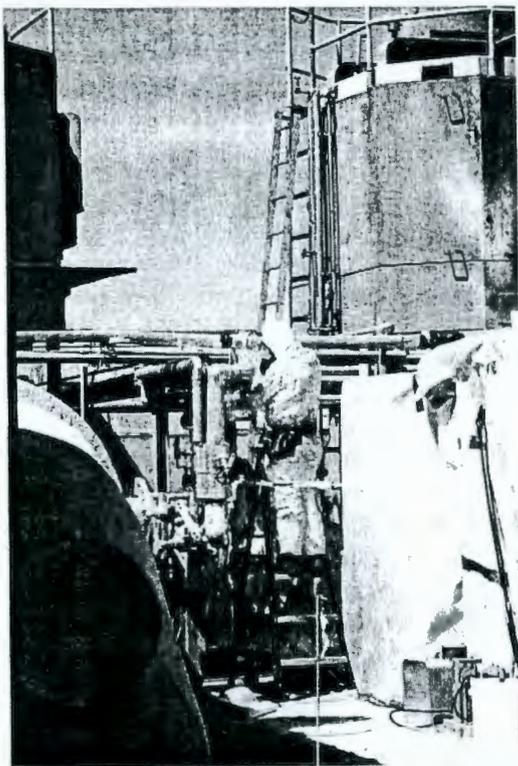
Piping Removal from L-12 Vessel

## SURVEILLANCE/MAINTENANCE AND TRANSITION PROJECTS

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### S&M Activities

- During March, in-tank characterization, sampling, and visual examination were completed for the two hexone tanks located in the 200 Area. In-tank sampling was captured on videotape. Laboratory sample analysis was completed in May. Ten drums containing hexone waste were shipped from the 90-day storage pad. The remaining drum will be shipped in June. The EE/CA was completed in April for the hexone tanks interim stabilization effort.



Worker setting up plastic enclosure barrier for asbestos abatement at the 181-N Pumphouse

- Structural inspection was completed for the PUREX facility canyon roof. Observations indicate that water infiltration is continuing from the deteriorated roof cover. A report summary is being prepared for management review and action.
- The 216-B-64 retention basin interim stabilization effort was completed in March.
- Asbestos abatement was initiated in April at the 181-N pump house located in the 100 N Area adjacent to the Columbia River. As of May, approximately 712 cubic feet of nonradioactive, friable asbestos were safely removed from the 181-N pumps, piping, and river screen wash systems.
- A subcontract was issued in April for 212-N, 212-R, REDOX, and 221-U building roof repairs.
- Aluminum filter frames and boxes were shipped from 100 B/C Area to ERDF for disposal.

### Canyon Disposition Initiative (CDI)

- CDI laboratory analysis and data review activities were completed for the sampling activities that were performed at U Plant the end of FY00. Characterization results will play a crucial role in the formulation of the ROD for final disposition of the U Plant facility.

### B Reactor

- In April, Draft A of the B Reactor EE/CA was submitted to RL, EPA, and the HAB for review and comment. A plan and schedule were also prepared to support the public involvement process planned to begin in late June. The preferred alternative outlined in the EE/CA for B Reactor is hazard mitigation for public access. This alternative received strong support and endorsement at the River and Plateau, and Communication HAB Subcommittee meetings held on May 15-16.

## **PROGRAM MANAGEMENT & SUPPORT - ERC**

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### **SAFETY AND HEALTH**

- The final report relative to the failure of the breathing-air regulator at the 233-S facility was received in April. The report provided a complete evaluation by the manufacturer of every regulator component. The manufacturer's report also supported the investigation conducted by the ERC. Corrective actions developed by the ERC Industrial Hygiene organization were recommended to other DOE sites and the National Institute of Occupational Safety and Health (NIOSH).
- On April 26, all ERC personnel participated in a safety standdown. Statistics indicate that during the spring and summer months an increased number of injuries are sustained both on and off the job. ERC employees were asked during the standdown, to rededicate themselves to making safety a personal value. Discussions centered on how ERC employees can commit to being injury free each and every day for the welfare of their families, coworkers, and themselves.

### **ENGINEERING AND TECHNOLOGY**

#### **Technology Applications**

- Technology deployment accomplishments and status were presented at the Deactivation and Decommissioning Focus Area Mid-Year Review and Decommissioning Symposium held in Miami. Through May, seven technologies have been deployed at the Hanford Site; four of these have been in support of decommissioning projects.

#### **Environmental Technologies**

- A vegetation survey was conducted on the Horseshoe Landfill, and data were gathered on the species observed. Data collections are being used to calculate percent canopy cover and frequency of occurrence on the landfill. The results of the

survey will be used to evaluate the effectiveness of revegetation methods in the remediation of waste sites.

### **PROGRAM AND PROJECT SUPPORT**

#### **External Affairs**

- On March 22, the president of BHI, along with the Hanford Site manager and FH president, presented a briefing to the House Nuclear Waste Cleanup Caucus in Washington, D.C. Information was presented to congressional staff that detailed the ER Project's substantial progress and future challenges.

#### **Procurement and Property Management**

- ERC continues to meet or exceed socio-economic contracting goals for FY01. Goals are related to small, women-owned, and disadvantaged-owned businesses.

### **PLANNING AND CONTROLS**

#### **Strategic Planning/Baseline**

- Updates were completed for the HQ IPABS reporting system. Updates included stream disposition data and FY02-03 budget data. Unit of analysis data were also provided for the Integrated Priority List in support of the upcoming FY03 budget development activities. Support was also provided for various FY02 funding exercises as requested by RL and HQ.
- The FY01 mid-year review presentation was completed, and mid-year books were distributed.
- The Planning and Controls System Guidance document was issued in support of upcoming FY02 Detailed Work Plan development activities.

**ISSUES**

## CURRENT ER PROJECT ISSUES

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### REMEDIAL ACTION AND WASTE DISPOSAL PROJECT

- **M-16-03E:** M-16-03E, "Complete Remediation of Waste Sites in 300-FF-1 Operable Unit (excluding the 618-4 Burial Ground), to Include Excavation, Verification, and Backfilling", due 9/30/2001 will be missed due to the EPA requirement to perform a Kd study on uranium leachability. The regrades will not be completed until study results confirm that no further excavations will be required.

**Strategy/Status:** EPA requested a Kd study be performed to address uranium mobility in the 300 Area. This study consists of obtaining uranium-contaminated samples and performing leach rates with follow-on absorption tests resulting in a Kd value. A data quality objective (DQO) was completed, and a baseline change proposal (BCP) prepared to incorporate the additional workscope into the baseline and to secure funding for the study. The study began in March and is expected to be complete in FY02. A TPA change package was transmitted to the regulators on June 11 proposing the date be revised to September 30, 2003. A letter was received from EPA on June 20 that disapproved the change package. This issue will require further discussions among the Tri-Party participants.

- **M-16-03F - 618-4 Burial Ground:** It is unlikely that treatment of the 618-4 Burial Ground uranium metal/oil drummed waste can be performed this fiscal year. The treatment technology has been identified, however, the treatment facility startup process is proceeding slower than planned. Currently, it appears that the treatment facility may be unable to receive the uranium metal/oil drummed waste until early FY03. EPA has indicated a need to show continuous progress at 300-FF-1 in FY01, and is also requesting a milestone date be established for excavation of the 618-4 Burial Ground.

**Strategy/Status:** A BCP was approved to treat and dispose of the 78 uranium oxide powder drums currently staged in the 618-4 Burial Ground. This workscope will be performed in lieu of initiating treatment of the uranium metal/oil drums in FY01. Adding the 618-4 Burial Ground scope to the revised M-16-03E milestone will require further discussions among the Tri-Party participants.

- **M-16-00F - Establish Date for Completion of All 100 Area Remedial Actions:** This milestone is due on December 31, 2001 and will develop the dates and workscope for any remaining remedial actions in the 100 Area. Currently, most of these remedial actions are in the 100 Area Long Range Plan (miscellaneous pipelines are still being developed). TPA Major Milestone M-16-00 compliance date is September 30, 2018. In addition, TPA Milestones M-93-14 / M-93-15 (Initiate / Complete Negotiation of Remaining Surplus Reactor Disposition Schedules) and potentially M-16-03A (Establish Date for Completion of 300 Area Remedial Actions) will also be addressed in these negotiations.

**Strategy/Status:** RL has initiated development of a strategy for negotiation of M-16-00F that includes the River Corridor outcome.

## CURRENT ER PROJECT ISSUES

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### GROUNDWATER/VADOSE ZONE INTEGRATION PROJECT

- **M-13-00x and M-20-xx Milestones:** TPA Milestone M-13-00L requires the submittal of three 200 NPL RI/FS work plans by December 31, 2001. One work plan is in process (200-PW-1). A change request addressing the other two work plans is being prepared and will be submitted to Ecology. RL management, in consultation with EPA, Ecology, and the HAB, developed an alternate approach for completing the assessment of the 200 Area non-tank farm operable units on the Hanford Site. The alternate approach calls for completion of the characterization of 12 representative analogous waste site operable units by 2008.

**Strategy/Status:** RL's long range plan is based on the alternate assessment approach for the 200 Area. This approach would require modification of several TPA milestones including the M-13 and M-20 major milestones. TPA change requests are being prepared and will be forwarded for regulatory review and approval. It is RL's intent to formally transmit the change requests to Ecology no later than August 31, 2001. Since these change requests affect TPA major milestones, a public review will be required. The regulatory agencies have previously expressed interest in negotiating the 200 Area changes in conjunction with negotiation of the M-16-00F (Establish Date for Completion of All 100 Area Remedial Actions) and M-16-03A (Establish Date for Completion of 300 Area Remedial Actions).

### DECOMMISSIONING PROJECTS

- **D and H Reactor Impacts of TPA Milestones:** The acceleration of the reactor ISS projects is no longer consistent with the existing M-93 milestones, especially the competitive procurement and renegotiating milestone (M-93-12 due February 28, 2002) for DR Reactor.

**Strategy/Status:** Initial discussions with the regulators have started which may lead to resolution in the near future. This will need to be discussed as part of RL's 100 Area acceleration vision.

### PROGRAM MANAGEMENT AND SUPPORT

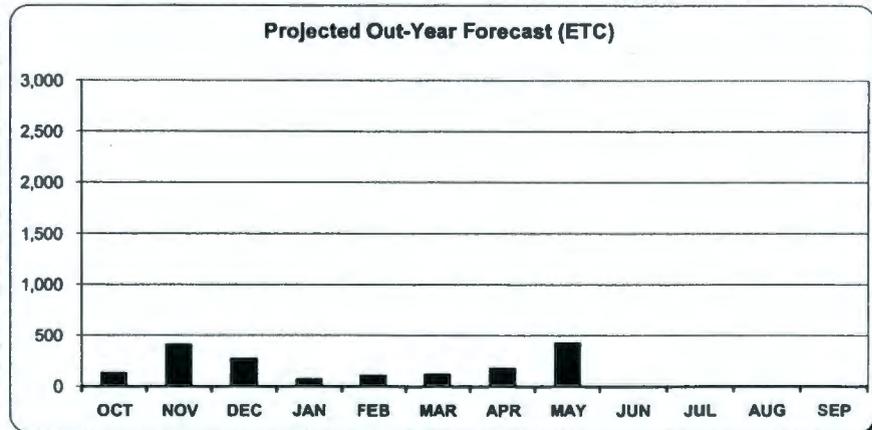
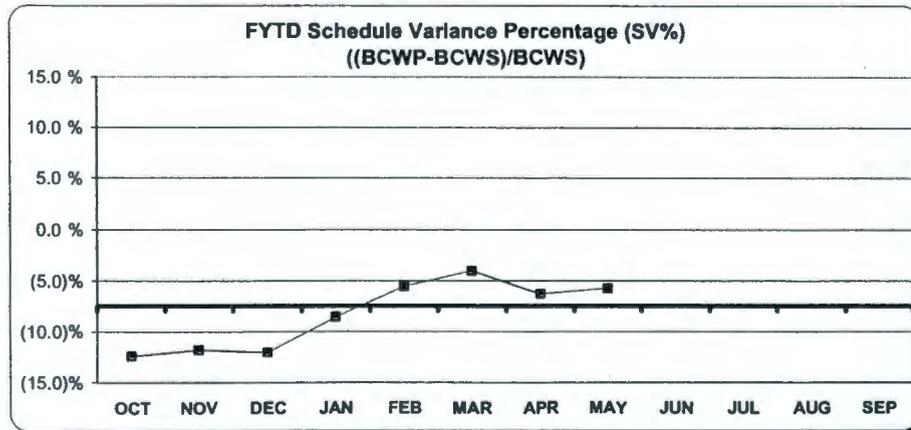
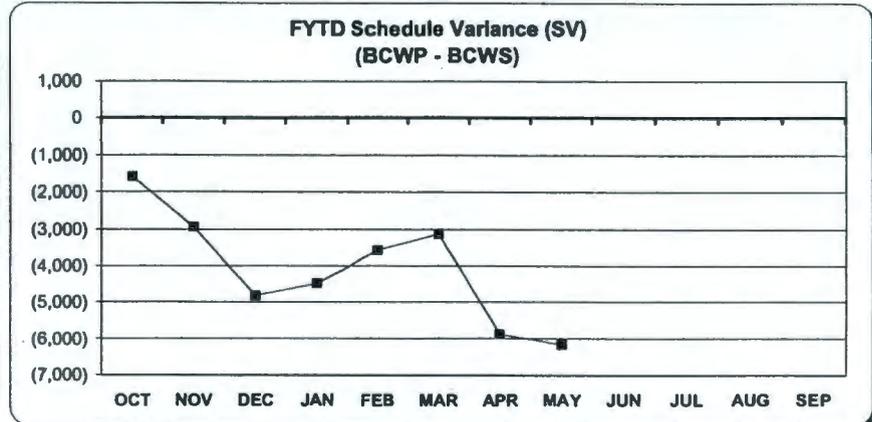
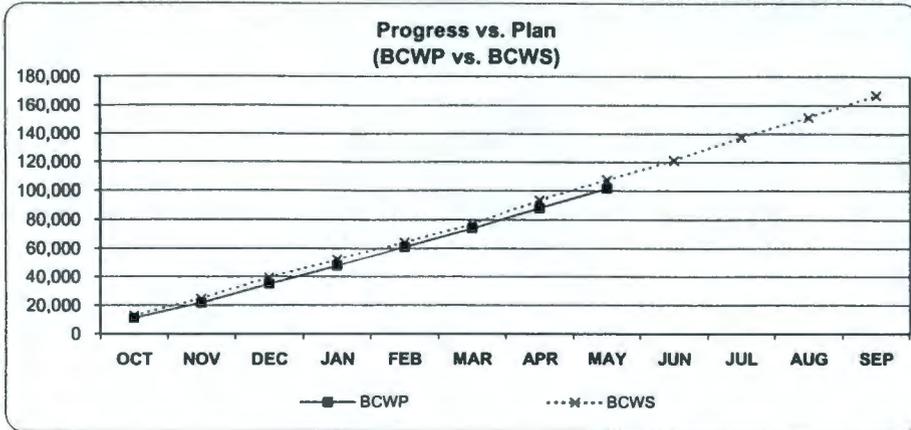
- **Budgets Do Not Support Compliance Milestones:** FY02 ER funding (target) levels are below minimum compliance requirements. The budget update (target) initially submitted for FY02 reflected the ER scope within the revised Hanford Site PBS/WBS at a level significantly short of supporting minimum compliance requirements, as well as accelerated River Corridor completion goals, for FY02 and beyond.

**Strategy/Status:** The budget requirement for FY02, based on the current Project Baseline Summary (PBS)/Work Breakdown Structure (WBS) and ER scope as reflected in the latest Baseline Update, is \$182.3M. FY02 impacts on ER/River Corridor completion have been developed for ER target case exercises, pending DOE guidance for FY02 funding. The planned DWP kickoff in early June has been delayed pending receipt of FY02 funding guidance.

# **COST/SCHEDULE STATUS**

# A. PROJECT OVERVIEW

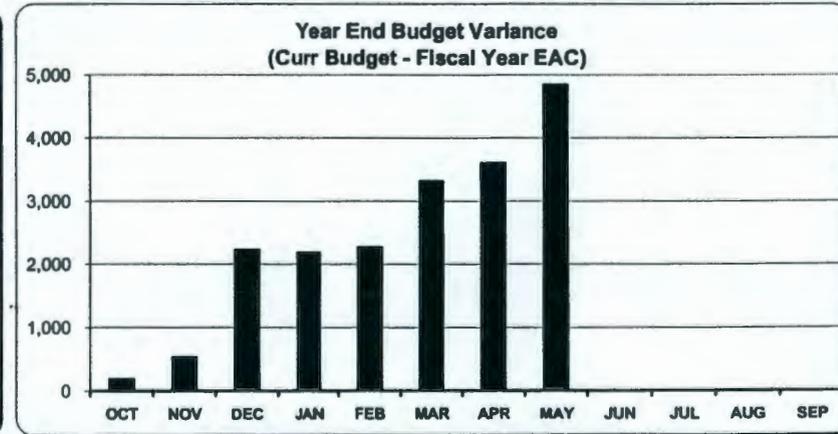
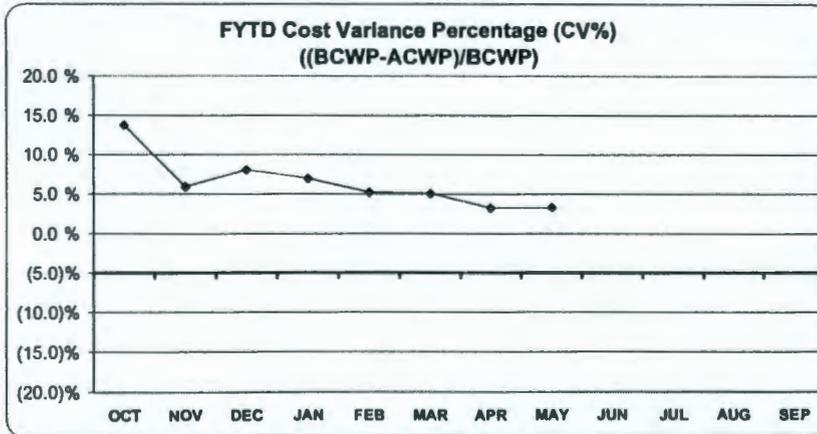
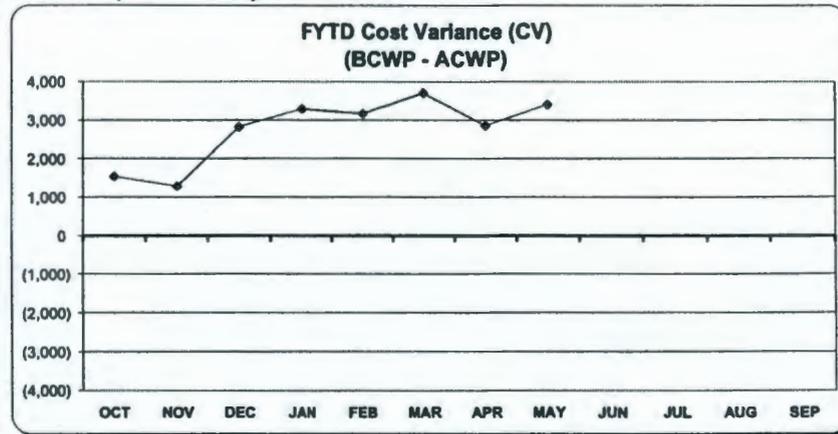
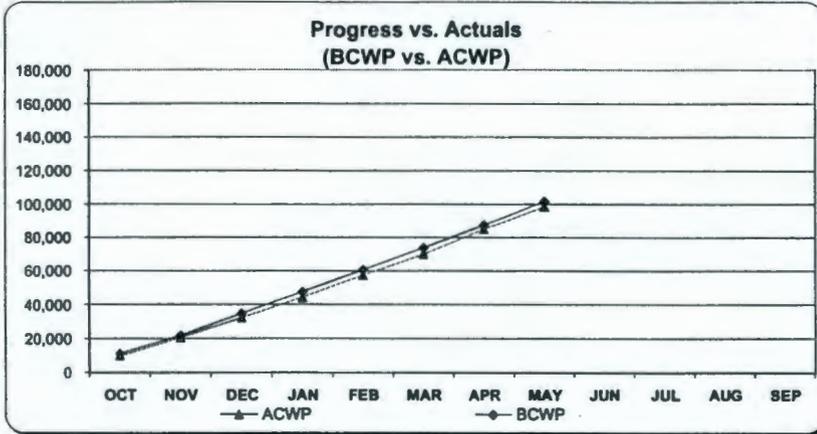
## SCHEDULE PERFORMANCE (\$s in 000)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DWP	11,110	10,286	12,233	10,282	10,058	11,813	14,703	11,619	11,559	13,381	11,497	13,404
DWP (Cumulative)	11,110	21,396	33,629	43,911	53,968	65,781	80,484	92,103	103,662	117,043	128,540	141,944
CURRENT PERIOD												
BCWS	12,782	12,103	15,015	12,418	12,003	12,656	16,859	13,957	13,663	16,142	13,948	15,777
BCWP	11,195	10,749	13,140	12,755	12,916	13,101	14,098	13,660	-	-	-	-
FISCAL YEAR TO DATE												
BCWS	12,782	24,885	39,900	52,318	64,322	76,977	93,836	107,793	121,456	137,598	151,546	167,323
BCWP	11,195	21,944	35,085	47,839	60,755	73,856	87,955	101,614	-	-	-	-
SV	(1,587)	(2,940)	(4,815)	(4,479)	(3,566)	(3,121)	(5,882)	(6,179)	-	-	-	-
SV%	-12.4%	-11.8%	-12.1%	-8.6%	-5.5%	-4.1%	-6.3%	-5.7%	-	-	-	-
Projected Out-Year FCST	133	413	272	69	106	117	177	432	-	-	-	-

# A. PROJECT OVERVIEW

## COST PERFORMANCE (\$s in 000)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Out-Year FCST
CURRENT PERIOD													
ACWP	9,656	10,998	11,610	12,274	13,040	12,559	14,963	13,102	-	-	-	-	-
BCWP	11,195	10,749	13,140	12,755	12,916	13,101	14,098	13,660	-	-	-	-	-
FISCAL YEAR TO DATE													
ACWP	9,656	20,654	32,264	44,538	57,578	70,137	85,100	98,202	-	-	-	-	-
BCWP	11,195	21,944	35,085	47,839	60,755	73,856	87,955	101,614	-	-	-	-	-
CV	1,539	1,290	2,820	3,301	3,177	3,720	2,855	3,412	-	-	-	-	-
CV%	13.7%	5.9%	8.0%	6.9%	5.2%	5.0%	3.2%	3.4%	-	-	-	-	-
EAC (Cumulative)	9,656	20,654	32,264	44,538	57,578	70,137	85,100	98,202	112,619	129,999	144,791	162,035	162,467
Yr End Budget Var	195	544	2,241	2,200	2,274	3,316	3,610	4,856	-	-	-	-	432

ERC Monthly Progress Report - May 2001

# ENVIRONMENTAL RESTORATION PROJECT

## Schedule Variance Report

Project	Variance	Reason	Corrective Actions
ER01 – 100 Area Remedial Action	<b>(\$89K)</b>	100-NR-1 export line work suspended pending regulator review of proposed alternatives to support bridge installation.	Regulator approval of alternatives would require no further work to be performed and baseline would be adjusted accordingly. Rejection would require support bridge installation by FY-end.
ER02 - 200 Area Remedial Action	<b>(\$1,004K)</b>	Delay in 200-TW-2 pre-job planning activities and drilling procurement.	Subcontract has been awarded and is scheduled for mid-June start. Schedule supports drilling completion by September-end. Field closeout may carry over into FY02.
ER03 - 300 Area Remedial Action	<b>(\$373K)</b>	Delays in 300-FF-1 remediation contract closeout; delays in award of burial ground barrel removal procurement package.	Contractor is reviewing options and subcontract waste stream disposal is being studied. BCP is in progress to defer barrel removal procurement.
ER04 – Environmental Restoration Waste Disposal	<b>\$526K</b>	Ahead of schedule; ERDF received more waste than planned due to additional plume remediation at soil sites.	N/A
ER05 – Surveillance/Maintenance & Transition	<b>(\$708K)</b>	Combining 100/200 Area asbestos abatement work into a single contract delayed start of work from November to April. Delayed start on herbicide/pesticide application due to weather-related conditions.	A subcontract has been placed for asbestos work with completion scheduled for August. Temporary schedule delay for spraying applications.
ER06 – Decommissioning Projects	<b>(\$628K)</b>	Delayed F Reactor FSB cleanout due to inability of mapping/surveying equipment to locate potential fuel elements. 233-S decommissioning behind schedule due to stringent procedures slowed TRU waste shipments and NDA labor support was not available.	BCP is in process to add new Brokk equipment scope and to extend schedule to November 30, 2001. Selective overtime will be used to recover schedule and continue to identify better ways to accomplish work safely.
ER07 - Long-Term SM&T	<b>\$10K</b>	N/A. Total FY01 BCWS is \$59K.	N/A

# ENVIRONMENTAL RESTORATION PROJECT

## Schedule Variance Report

Project	Variance	Reason	Corrective Actions
ER08 - Groundwater Management	(\$1,389K)	RCRA well drilling waste shipments were placed on hold to pursue regulator recommended approach. Well decommissioning delays caused by extended well documentation search and selection. PNNL groundwater modeling/monitoring on source release inventory and hydrologic assessment tasks behind schedule due to resources deployed to higher priority work.	Schedule has been revised to show more aggressive plan. Well decommissioning RFP was issued and contractor mobilized in early May; expect to complete by September-end. Source release activities and hydrologic framework tasks are being accelerated.
VZ01- Site-Wide Groundwater/Vadose Zone Integration Project	(\$955K)	Soil inventory task study delayed due to key staff unavailability. Historical matching shakedown runs taking longer than planned which are delaying start of model runs and assessment report preparation. Delays in analyzing vadose zone transport field study samples.	Key staff not available until June. Software and data problems are being addressed for shakedown runs. Data have been received from laboratory so analysis can begin.
ER10 - Program Management and Support	(\$1,569K)	HEIS/HGIS/WIDS and project-specific database staffs are working on higher priority direct project scope; and late billings for site-wide assessments.	Subcontractor and temporary labor onboard. RL is discussing billing/timing with other site contractors/government agencies.
<b>Total</b>	<b>(\$6,179K)</b>		

# ENVIRONMENTAL RESTORATION PROJECT

## Cost Variance Report

Project	Variance	Reason	Corrective Actions
ER01 – 100 Area Remedial Action	\$1,497K	Less labor was required due to sharing non-manual resources with the 100-BC workscope, shifting of personnel to other waste sites, less design and supervision required, and backfill completed six weeks early. CVP preparation required less labor than planned due to use of a streamlined format and waste site consolidation.	Reflected in EAC.
ER02 – 200 Area Remedial Action	(\$118K)	Additional irrigation system cost at BP-1 Hanford barrier.	Overrun has been trended.
ER03 - 300 Area Remedial Action	\$57K	Coordinating 300-FF-2 design efforts with 100 Area Burial Grounds resulted in savings. PNNL staff were utilized on 618-10/11 engineering study historical research resulting in additional savings.	Reflected in EAC.
ER04 - Environmental Restoration Waste Disposal	\$890K	Driver overtime has not been required as planned to stay on schedule.	Driver overtime may be required during the summer months to meet demands.
ER05 - Surveillance/ Maintenance & Transition	\$668K	Underruns in 200 Area S&M work using fewer resources than planned and asbestos abatement subcontract costs underruns are offset by hexone tank sampling cost overruns due to additional engineering and job hazard analysis.	Costs have been trended and reflected in EAC.
ER06 - Decommissioning Projects	(\$613K)	Overrun at F Reactor FSB cleanout due to resolving work package issues, procedural changes in removing FSB material, and costs associated with mapping/surveying FSB material.	Additional costs associated with mapping/surveying technology implementation and additional equipment costs have been trended.
ER07 - Long-Term SM&T	\$20K	N/A. Total FY01 BCWS is \$59K.	N/A

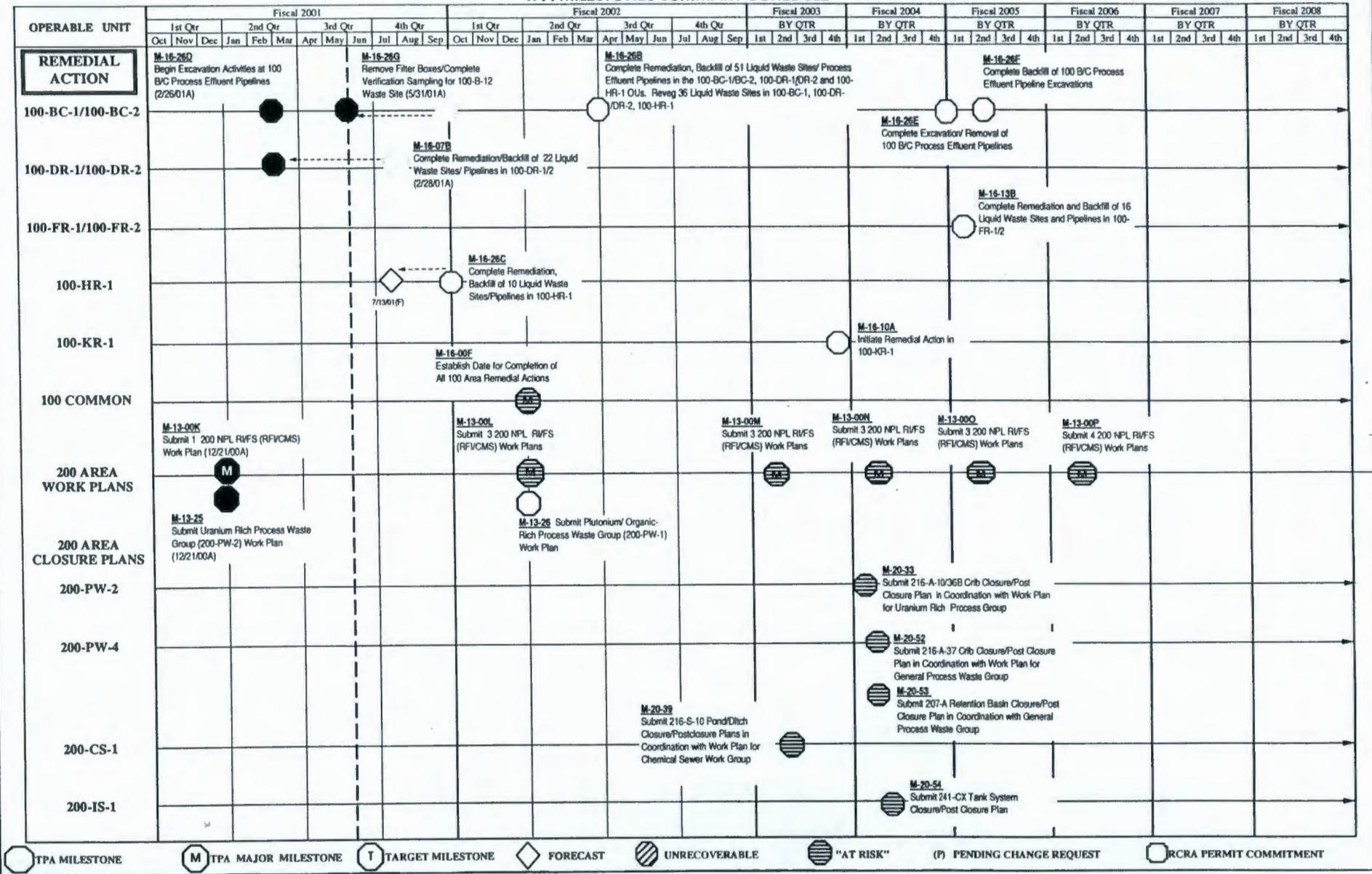
# ENVIRONMENTAL RESTORATION PROJECT

## Cost Variance Report

Project	Variance	Reason	Corrective Actions
ER08 - Groundwater Management	<b>\$346K</b>	Sample collection/analyses underruns due to cancelling some well trips/analyses; other contractors' costs being less than planned. Underrun offset by an overrun in 100-HR-3 chemical treatment upgrades.	Costs have been trended and reflected in EAC.
VZ01 – Site-Wide Groundwater /Vadose Zone Integration Project	<b>\$242K</b>	Phase I FEPs review required fewer resources than planned; offsetting overrun in SAC historical matching related to system enhancements.	Project continues to seek ways to streamline overall history matching and initial assessment runs.
ER10 - Program Management and Support	<b>\$423K</b>	Program management support to field operations using fewer resources than planned.	Underrun has been trended and reflected in EAC.
<b>Total</b>	<b>\$3,412K</b>		

# ENVIRONMENTAL RESTORATION PROJECT

## Richland Environmental Restoration Project TPA MILESTONES SUMMARY SCHEDULE

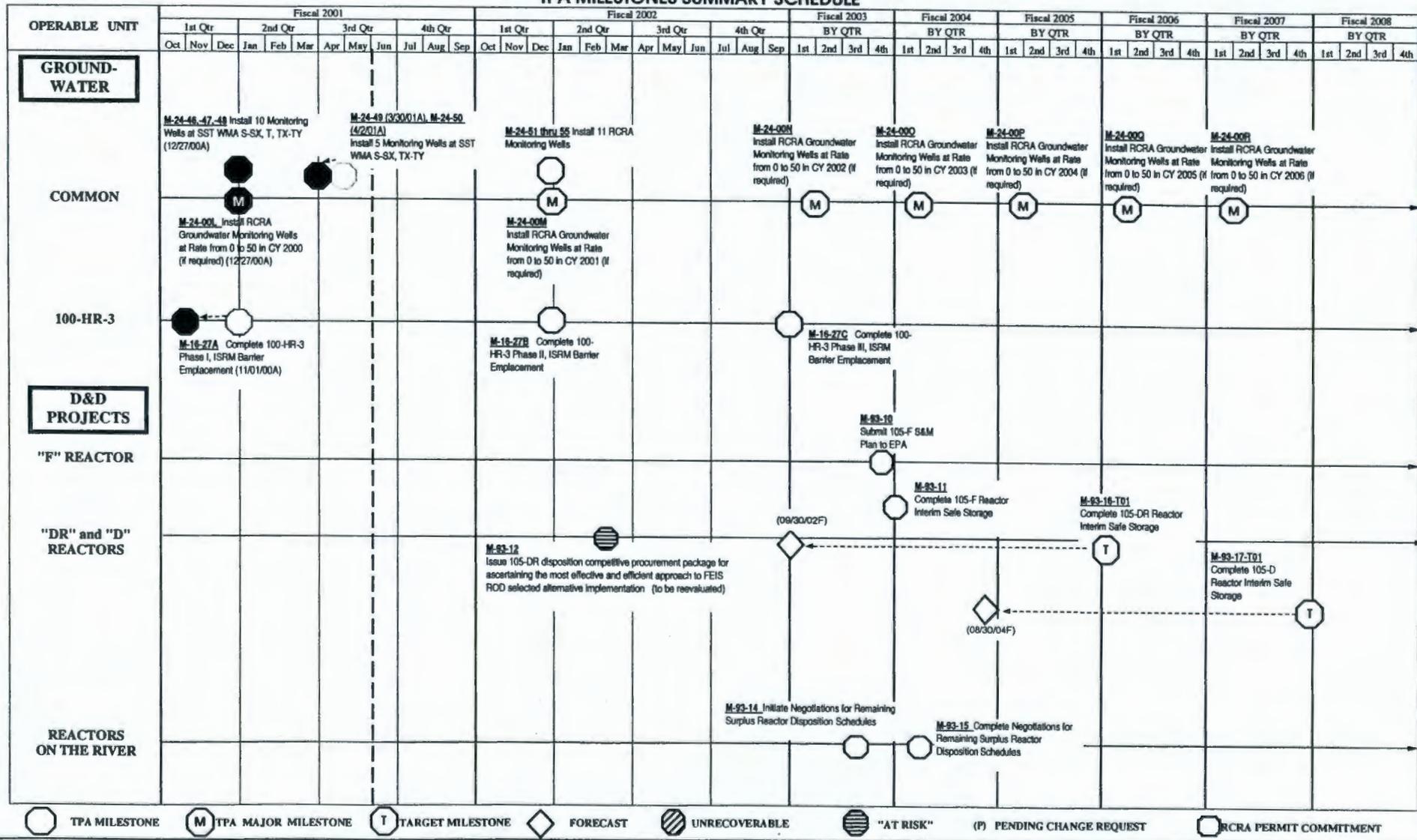


M-13-00 / M-20-xx series milestones shown 'at risk' due to streamlined approach to 200 Area assessment



# ENVIRONMENTAL RESTORATION PROJECT

## Richland Environmental Restoration Project TPA MILESTONES SUMMARY SCHEDULE



M-93-06-T01 (TBD) Submit B Reactor S&M Plan for EPA Approval

**M-91-00**

WASTE MANAGEMENT DIVISION

Mike Collins

June 2001

TPA MILESTONE  
REVIEW

WASTE MANAGEMENT PROJECT

MARCH 2001

MILESTONE SCHEDULE

WBS (ADS)	BASELINE DATE	FISCAL YEAR 2001												Status			
		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				
1.2.2 (RL-WM04) Solid Waste Treatment	12/31/00															(M-91-01) Commitment to establish a date for: "Complete acquisition of TRU/TRUM Facilities".	Change Request prepared – currently in dispute resolution; to be resolved with M-91-03 Dispute Resolution, October 31, 2001.
	6/29/01															(M-91-18) Transmit T Plant Sludge Storage CDD to Ecology..	Complete.
	6/30/01															(M-91-13) Initiate Disposal of LLMW.	Trench 34 in Disposal Mode September 15, 1999.
MILESTONE TYPES:		 M	TPA MILESTONE		DOE-HQ		FORECAST	 I	TPA INTERIM		DOE-RL		Treatment Rate				



TPA MILESTONE REVIEW	WASTE MANAGEMENT PROJECT	MARCH 2001
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## MILESTONE EXCEPTION REPORT

TPA MILESTONE	FUTURE MILESTONES IN JEOPARDY
M-91-07	"Complete Project W-113 for Post 1970 CH TRU/TRUM retrieval" by September 2004.

TPA MILESTONE  
REVIEW

WASTE MANAGEMENT PROJECT

MARCH 2001

## MILESTONE EXCEPTION REPORT

<b>TPA MILESTONE</b>	<b>MILESTONES IN DISPUTE</b>
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>New description and completion date proposed with M-91-03 PMP submittal.</p>
M-91-03	Submit TRU/TRUM PMP. (In Dispute at the PMM level until October 31, 2001.)
M-91-05-T01	New description and completion date proposed with M-91-03 PMP submittal.
M-91-06-T01	New description and completion date proposed with M-91-03 PMP submittal.
M-91-07	New description and completion date proposed with M-91-03 PMP submittal.

<p style="text-align: center;">TPA MILESTONE REVIEW</p>	<p style="text-align: center;">WASTE MANAGEMENT PROJECT</p>	<p style="text-align: center;">MARCH 2001</p>
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## MILESTONE EXCEPTION REPORT

<p style="text-align: center;">TPA MILESTONE</p>	<p style="text-align: center;">MILESTONES IN DISPUTE</p>
<p>M-91-08-T01</p>	<p>New description and completion date proposed with M-91-03 PMP submittal.</p>
<p>M-91-16</p>	<p>New description and completion date proposed with M-91-03 PMP submittal.</p>
<p>M-91-17-T01</p>	<p>New description and completion date proposed with M-91-03 PMP submittal.</p>
<p>M-91-23</p>	<p>New description and completion date proposed with M-91-03 PMP submittal.</p>
<p>M-91-24</p>	<p>New description and completion date proposed with M-91-03 PMP submittal.</p>

TPA MILESTONE  
REVIEW

WASTE MANAGEMENT PROJECT

MARCH 2001

## M-91 ACCOMPLISHMENTS

WBS  
1.2.2.3

M-91  
LLMW and TRU Waste Facilities

Completed TPA Milestone M-91-18 ahead of schedule.

Continue thermal treatment of MLLW at ATG as their capabilities permit. Have processed ~10m<sup>3</sup> to date at ATG. Shipped 125m<sup>3</sup> of waste in preparation for thermal treatment to ATG this fiscal year.

TPA MILESTONE REVIEW	WASTE MANAGEMENT PROJECT	MARCH 2001
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## PLANNED ACTIONS

TPA MILESTONE SUPPORTED	DESCRIPTION	SCHEDULED COMPLETION DATE
M-91-12	Treat MLLW in FY2001 using the thermal treatment contract with ATG.	9/30/2001
M-91-07	Authorized the initiation of the update to the Solid Waste Burial Ground Interim Safety Basis and SARP to support TRU retrieval, complete drum movements for the drums retrieved in FY 00, retrieve uncovered drums in FY01.	9/30/2004

TPA MILESTONE REVIEW	WASTE MANAGEMENT PROJECT	MARCH 2001
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## PLANNED ACTIONS (continued)

TPA MILESTONE SUPPORTED	DESCRIPTION	SCHEDULED COMPLETION DATE
M-91-18	Transmit T Plant Sludge Storage CDD to Ecology	Complete
M-19-15	Technology deployment of size reduction for RH TRU and RH MLLW large items. Testing performed at T Plant.	6/30/2008

TPA MILESTONE  
REVIEW

WASTE MANAGEMENT PROJECT

MARCH 2001

## M-91-12A SCORECARD

"Complete thermal treatment and disposal of at least 240 cubic meters contact handled LLMW."	<u>Quantity in cubic meters</u>
– WERF Incineration (2000) – ATG	20 ~10
– <b>TOTAL M-91-12 WASTE</b>	~30*
* No thermal treatment residues have been disposed to date.	

TPA MILESTONE REVIEW	WASTE MANAGEMENT PROJECT	MARCH 2001
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## M-91 ISSUES

TPA MILESTONE	DATE IDENT	ISSUE	IMPACT	STATUS
M-91-07	6/99	Milestone cannot be accomplished as written due to funding limitations.	Replacement milestone will need to be renegotiated.	Resolution is preliminarily being discussed as part of the resolution to the M-91-03 PMP dispute.
M-91-07	5/01	Uncertainty exists of the impact of the SW-EIS ROD on retrieval milestones.	TPA milestones may potentially require work that is contrary to decisions of the SW-EIS ROD.	To be resolved as part of M-91-03 PMP and Change Request negotiations.

TPA MILESTONE REVIEW	WASTE MANAGEMENT PROJECT	MARCH 2001
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## M-91 ISSUES

TPA MILESTONE	DATE IDENT	ISSUE	IMPACT	STATUS
M-91-07	5/01	Uncertainty exists for the application of newly generated requirements for retrieved TRU waste.	Retrieved drums are not considered newly generated unless exiting the burial grounds. Alternate interpretations have potentially significant cost impacts.	To be resolved as part of M-91-03 PMP and Change Request negotiations.
M-91-07	5/01	Definition of retrieved drums requires clarification.	RL considers drums retrieved and designated as Low-Level and returned to the LLBG to be retrieved. Alternate interpretations may require work outside of current contract.	To be resolved as part of M-91-03 PMP and Change Request negotiations.

TPA MILESTONE  
REVIEW

WASTE MANAGEMENT PROJECT

MARCH 2001

## EXPENSE COST PERFORMANCE

(\$ in Millions)

WBS	BUDGETED COST		ACTUAL CST	VARIANCE		BAC	FYSF	EXPECTED FUNDS FY 2001	PROJECTED CARRYOVER WORK	COMMENTS
	WORK SCHED	WORK PERF	WORK PERF	SCHED	COST	BCWS				
1.2.2.3 M-91 TREATMENT	1.4	1.4	1.2	0.0	0.2	5.8	6.8	6.8	0	Change Request: WM-2001-013 adds \$1.2M to TRU Retrieval (complete uncovered drums, get ready for covered drums.

TPA MILESTONE REVIEW	WASTE MANAGEMENT PROJECT	MARCH 2001
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## EXPENSE COST VARIANCE ANALYSIS

WBS	COST VARIANCE \$226K	
1.2.2.3	<p>(Description and Cause:)</p> <ul style="list-style-type: none"> <li>• Efficiencies are being realized on processing in the areas of operations labor, shipper support, and fewer than planned containers have required overpacking.</li> </ul>	<p>(Impacts and Corrective Action:)</p> <ul style="list-style-type: none"> <li>• Cost savings will be used to address additional work. Senior management will be determining whether to process additional waste volumes, perform more characterization, or use the savings to perform other workscope.</li> </ul>

**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
Quarterly Presentation  
June 29, 2001**

**DOE Waste Management Division**

**Land Disposal Restrictions Report**  
**(Tri-Party Agreement Milestone M-26-01)**  
**June 29, 2001**

- Tri-Party Agreement requires that a Hanford Site Land Disposal Restrictions (LDR) Report be submitted annually
  
- Background events include:
  - Ecology issued a Notice of Correction (NOC) in June 1999 following LDR compliance inspection
  - Ecology Director's Final Determination issued March 29, 2000; DOE appealed the Determination to the PCHB
  - DOE and Ecology entered into a series of settlement negotiations
  - Close-out of the 2000 Interim Report was achieved on February 14, 2001

**Land Disposal Restrictions Report**  
**(Tri-Party Agreement Milestone M-26-01)**  
**June 29, 2001**

- Ecology and DOE worked collaboratively to resolve issues associated with preparation, submittal and approval of the annual LDR report. DOE believes that the report is more responsive to the requirements.
  - Report includes a Potential Mixed Waste Table (PMWT)
  - Provided five Ecology checkpoints for guidance on datasheet and PMWT format/content during report preparation
  - Report contains more schedule information and will be submitted with a draft Tri-Party Agreement change request proposing Tri-Party Agreement Milestones
  - Report references storage assessments and provides assessment schedules

**Land Disposal Restrictions Report**  
**(Tri-Party Agreement Milestone M-26-01)**  
**June 29, 2001**

- A one-time two-month extension was proposed by RL and approved by Ecology to allow adequate time for consistency reviews by Ecology, RL and the Site contractors
  - Document will be submitted to Ecology by June 30, 2001 (M-26-01K)
  - Subsequent reports will be submitted April 30 of each year
  - **WOULD DELETE THIS SLIDE – NOT RELEVANT ANYMORE**

**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
June 29, 2001**

Actions Planned for Next Six Months

- Submit document no later than June 29, 2001
- Complete comment resolution process
- Formalize the Class II Change Request with the proposed milestones following Ecology's acceptance of the Final 2000 LDR
- Continue DOE storage assessments
- Develop lessons learned and identify process improvements

**Tritium Treatment Technology Evaluation**  
**Tri-Party Agreement Milestone M-26-05H**  
**June 29, 2001**

**Glenn Richardson**  
**DOE Waste Management Division**

# Tritium Treatment Technology Evaluation

## (Tri-Party Agreement Milestone M-26-05H)

June 29, 2001

- The need to report and evaluate tritium treatment technology on an annual basis was identified
  - August 1994, the report was incorporated into the Tri-Party Agreement
  - April 1996, the reporting frequency was modified to biennial
  - Reports submitted in 1997 and 1999; one will be submitted in 2001
- Report will evaluate and status the development of tritium treatment technology and its application for cleanup and management of tritiated waste water (e.g., 242-A Evaporator process condensate liquid effluent) and tritium contaminated groundwater

# Tritium Treatment Technology Evaluation

## (Tri-Party Agreement Milestone M-26-05H)

June 29, 2001

- The 1999 Report identified three processes developed to a stage where they may be considered for demonstration at Hanford:
  - Combined Electrolysis Catalytic Exchange (CECE)
  - Dual-Temperature Liquid-Phase Catalytic Exchange
  - Tritium Resin Bed Separation
- Recent advances include:
  - ACEL constructed pilot plant and combined CECE with Bithermal Hydrogen-Water Process. Testing is in process (little data available at this time)
  - Tritium Resin Bed Separation Process flowsheet was modified. An April 2001 ASME Report identified the need for more research. An EPRI report is eminent.

# Tritium Treatment Technology Evaluation (Tri-Party Agreement Milestone M-26-05H) June 29, 2001

- Report due August 31, 2001 is ahead of schedule
  - Draft report due from subcontractor received May 29, 2001
  - Anticipate early submittal to Ecology (one month ahead of the compliance date)