

Meeting Minutes Transmittal/Approval  
Tri-Party Agreement Milestone Review Meeting  
EPA Conference Room  
August 26, 1997

Appvl.: Jackson Kinzer Date: 9-23-97  
Jackson E. Kinzer, RL  
IAMIT Representative

Appvl.: Michael Wilson Date: 9/23/97  
Michael Wilson, Ecology  
IAMIT Representative

Appvl.: Douglas R. Sherwood Date: 9/23/97  
Doug Sherwood, EPA  
IAMIT Representative

Prepared by T. W. Noland Date: 9/23/97  
Appvl.: T. W. Noland  
Terry W. Noland  
Fluor Daniel Hanford, Inc.

Distribution

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Kinzer, J. E.	RL	S7-50*	Sherwood, D. R.	EPA	B5-01*
Klos, D. B.	FDH	N2-51	Skinnerland, R.	Ecology	B5-18*
Langstaff, D. C.	RL	R3-79*	Stanley, R.	Ecology	B5-18*
McLaughlin, M. A.	FDH	G3-27	Wilson, M. A.	Ecology	B5-18*
Morrison, R. D.	FDH	G3-27*	Woolley, T. A.	Ecology	B5-18
Nielsen, D. L.	BWHC	N2-53	EDMC		<del>H6-08*</del>

\* W/Attachments



MILSTN08.26

**AGENDA**  
**TRI-PARTY AGREEMENT MAJOR MILESTONE MANAGEMENT REVIEW**  
**(CHAIRPERSON: J. E. Kinzer)**

TUESDAY, AUGUST 26, 1997

712 Swift Blvd., Suite 5, EPA Conference Room

- >> NOTE! 1. Environmental Restoration Milestone Review Presentation has been canceled by agreement of the U. S. DOE, U.S. EPA and the State of Washington Department of Ecology
2. The time slot for Facility Transition Milestone Review Presentations has been changed to 8:30 am

<u>TIME</u>	<u>MILESTONE</u>	<u>TITLE</u>	<u>RL DIVISION DIRECTOR</u>	<u>CONTRACTOR MANAGER</u>	<u>PRESENTER</u>
<u>8:30 am</u>	M-82-00	B-Plant Transition	J. E. Mecca	R. E. Heineman (BWHC) L. J. Olguin (FDH)	D. T. Evans
	M-80-00	Purex/UO3 Facility Transition	J. E. Mecca	R. W. Bailey (BWHC) L. J. Olguin (FDH)	R. X. Gonzalez
	M-89-00	324 Bldg. Closure of MW Units	J. E. Mecca	G. O. Hayner (BWHC) L. J. Olguin (FDH)	R. X. Gonzalez
	M-92-00	Facilities for Cesium/Strontium, Sodium and Special Case Waste	J. E. Mecca	D. B. Cartmell (BWHC) L. J. Olguin (FDH)	R. X. Gonzalez
	M-83-00	PFP Facility Transition	J. E. Mecca	L. J. Olguin (FDH)	R. X. Gonzalez
	M-81-00	FFTF Facility Transition	E. J. Hughes	E. F. Loika (BWHC) D. B. Klos (FDH)	O. A. Farabee
<u>10:00 am</u>	ADJOURN				

ATTENDEES

TPA MILESTONE REVIEW

DATE: 8/26/97

<u>NAME</u>	<u>ORGANIZATION</u>	<u>MAILSTOP</u>	<u>(✓) FOR ATTACHMENTS</u>
<u>Ted Woolley</u>	<u>Ecology</u>	<u>B5-18</u>	
<u>Jerry Hensley</u>	<u>✓</u>	<u>✓</u>	
<u>STEVE SWOTTER</u>	<u>OREGON office of Energy</u>	<u>Salem</u>	
<u>Mary Lou Blayck</u>	<u>"</u>	<u>"</u>	
<u>David E Rasmussen</u>	<u>BWHC</u>	<u>N1-47</u>	
<u>JOSEPH RICHARDS</u>	<u>CTUR HANFORD OPS.</u>	<u>750 Swift Blvd. Suite 12 Richland, WA 99352</u>	<input checked="" type="checkbox"/>
<u>Bob Julian</u>	<u>Ecology</u>		
<u>Debbie Nielsen</u>	<u>BWHC</u>	<u>N2 53</u>	
<u>BRUCE KLOS</u>	<u>FDH</u>	<u>N2-51</u>	
<u>ROD ALMQUIST</u>	<u>DOE <del>FDH</del></u>	<u>N2-31</u>	
<u>ERWIE HUGHES</u>	<u>DOE</u>	<u>N2-31</u>	
<u>Russ Brown</u>	<u>FDH-TPAI</u>	<u>G3-27</u>	
<u>Terry Noland</u>	<u>FDH-TPAI</u>	<u>G3-27</u>	

**ATTENDEES**

**TPA MILESTONE REVIEW**

DATE: 8/26/97

<u>NAME</u>	<u>ORGANIZATION</u>	<u>MAILSTOP</u>	<u>(✓) FOR ATTACHMENTS</u>
<u>Marv Ann McLaughlin</u>	<u>FDH/TPAI</u>	<u>G3-27</u>	<u></u>
<u>Roger Stanley</u>	<u>Ecology</u>	<u>Lacey</u>	<u>✓</u>
<u>George H. Sanders</u>	<u>DOE/RL</u>	<u>A5-15</u>	<u>✓</u>
<u>MIKE WILSON</u>	<u>ECOLOG</u>	<u></u>	<u>✓</u>
<u>Jackson Kinzer</u>	<u>DOE-RL</u>	<u></u>	<u>✓</u>
<u>Melodie Selby</u>	<u>Ecology</u>	<u>B5-78</u>	<u>✓</u>
<u>Doug Sherwood</u>	<u>EPA</u>	<u>B5-01</u>	<u>✓</u>
<u>Andrea Hopkins</u>	<u>FDH</u>	<u></u>	<u>✓</u>
<u>George Reddick</u>	<u>FDH</u>	<u>N1-26</u>	<u></u>
<u>DAVID LANGSTAFF</u>	<u>DOE/RL</u>	<u>R3-79</u>	<u>✓</u>
<u>RICK GONZALEZ</u>	<u>DOE/RL</u>	<u>R3-79</u>	<u>✓</u>
<u>DALE JACKSON</u>	<u>DOE/RL/EAP</u>	<u>A5-15</u>	<u></u>
<u>Ron Skinnarland</u>	<u>Ecology</u>	<u></u>	<u>✓</u>
<u>H.Z. Dokuzoguz</u>	<u>FDH</u>	<u>N1-26</u>	<u></u>

**Meeting Minutes  
TPA Milestone Review Meeting  
EPA Conference Room  
August 26, 1997**

**1. Approval of Minutes**

The minutes of the May 27, 1997 and July 22, 1997 TPA Milestone Review Meetings were approved by Messrs. Kinzer, Wilson and Sherwood.

**2. Environmental Restoration Milestone Review**

The Environmental Restoration TPA quarterly review package was submitted by John Rayner, BHI, for inclusion in the meeting minutes (Attachment 1). The presentation of the review package was canceled by agreement of Ecology, EPA, and DOE-RL.

**3. Facility Transition Milestone Review**

The Facility Transition Milestone Presentations were made as follows:

<u>Milestone</u>	<u>Title</u>	<u>Presenter</u>	<u>Attachment</u>
M-82-00	B-Plant Transition	George Reddick	2
M-80-00	Purex Stabilization Project	Rick Gonzalez	3
M-89-00	324 Bldg. Closure of MW Units	Dave Lanstaff	4
M-92-00	Facilities for Cesium/Strontium Sodium and Special Case Waste	Andrea Hopkins	5
M-83-00	PFP Facility Transition	Rick Gonzalez	*
M-81-00	FFTF Facility Transition	Rod Almquest	6

\* A presentation package was not provided for PFP. It was reported that PFP negotiations were to begin with a kickoff meeting on August 29, 1997. The first 4-6 weeks of negotiations will be used to finish technical discussions. The PFP negotiations are scheduled to be completed in March of 1998.

Issues and action items associated with the Facility Transition Milestone presentations were as follows:

- A. Purex is scheduled to transition to the Environmental Restoration Contractor in November 1997. It undecided as to who will have ownership of the Purex Tunnels and the decision for this is scheduled to be made by November.

**Action: Schedule Purex Tunnel ownership strategy discussion for next IAMIT meeting.**

The IAMIT representatives decided that the last Purex Milestone Review Presentation would be at the November Milestone Review meeting provided that Purex tunnel decision has been made.

- B. The 324/327 Deactivation Project budget overrun of approximately \$2 million was discussed.

Action: Dave Langstaff to report to Jackson Kinzer the source of money (program or overhead adjustment) to fix the 324/327 overrun.

- C. Concerns were expressed regarding funding, ownership, and interface issues regarding the M-92-00 Milestones

Action: Schedule PNNL and Transition Programs discussions/presentations for the next IAMIT meeting regarding funding, ownership, and interface for the M-92-00 milestones.

- 4. Proposed Modification of FFTF Transition Interim Milestones and Targets (M-81-00 series) due in Calendar Year 1998.

Ernest Hughes presented draft Change Request M-81-97-01 (Attachment 7) that proposed changing the FFTF calendar year 1998 transition interim and target milestone dates to "To be Established" (TBE) status. The agreed to plan of action was as follows:

Action: FFTF Transition Project to rewrite the Change Request to delete the M-81 series FFTF milestones and prepare an Agreement in Principle for signature by the three party Senior Managers. The Agreement in Principle will stipulate that if the decision is made to shut down FFTF, the parties will use the previously agreed to FFTF milestone structure as a starting point for negotiations. The negotiation discussions should include funding structure and source.

**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

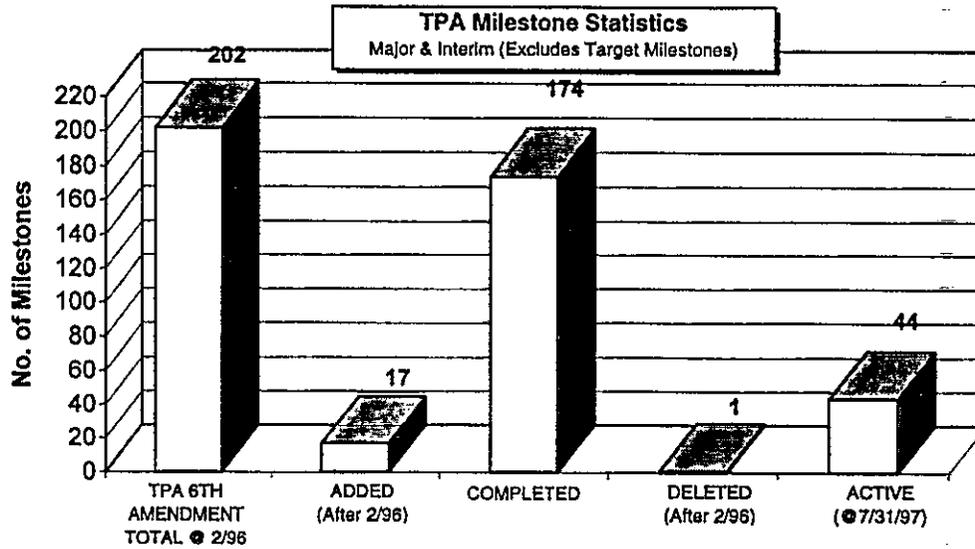
**August 26, 1997**

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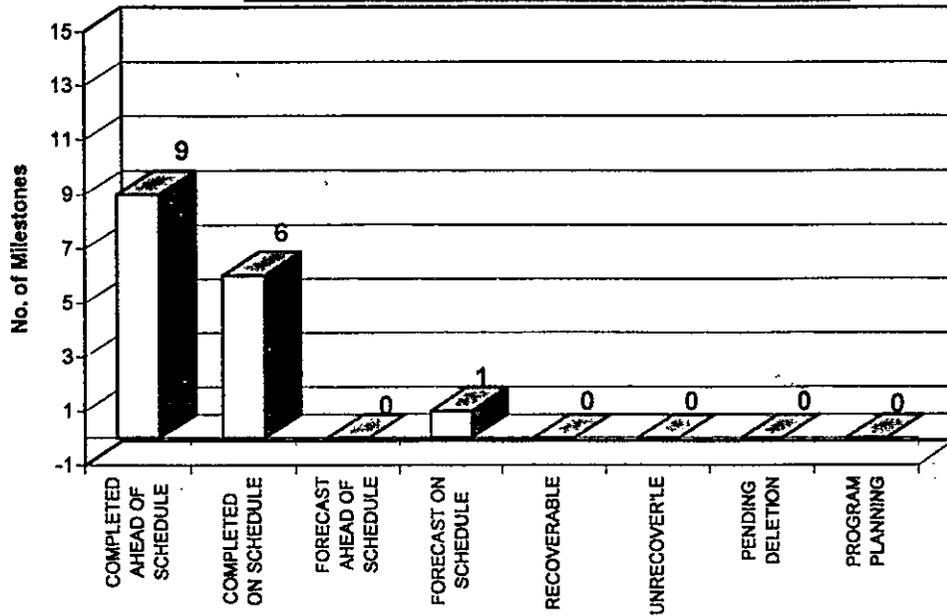
FY 1997 TPA Milestone Overview



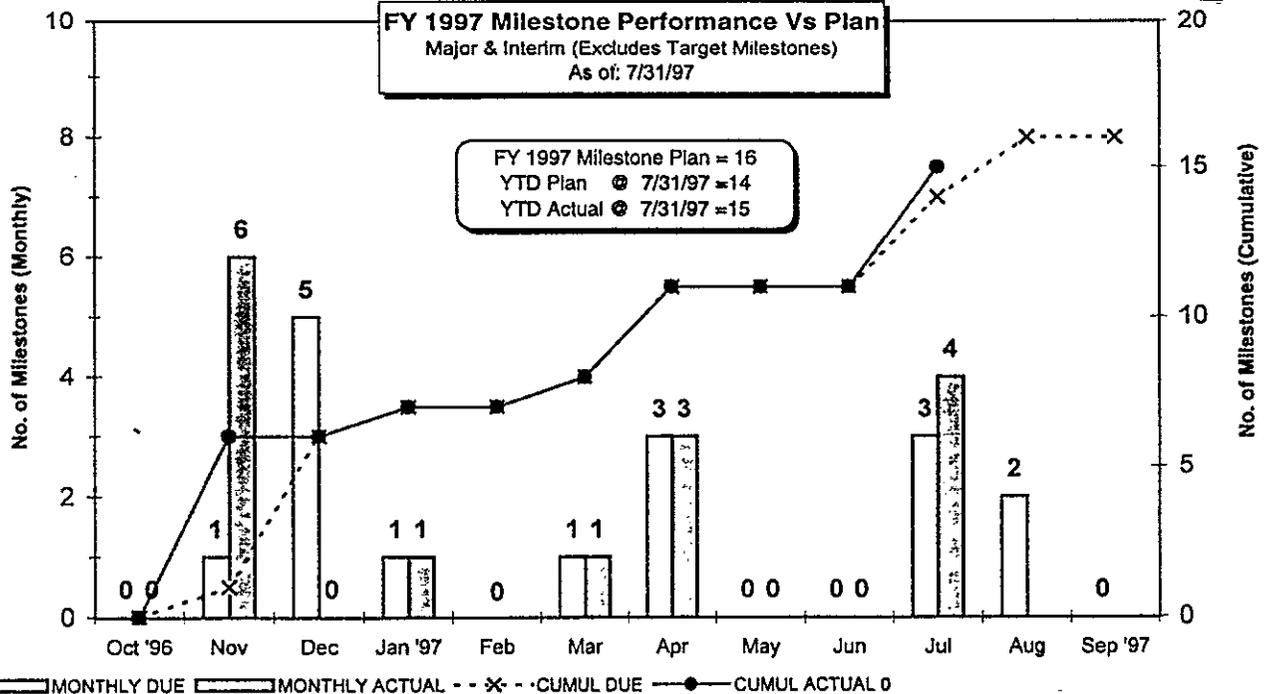
Completion Date	Total @ 2/96	Added After 2/96	Completed @ 7/31/97	Deleted After 2/96	Active @ 7/31/97
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<b>M-13-00</b> Submit Workplans for RFI/CMS or RI/FS Studies	6/30/06 (M-13-00Q)	34	0	20	0	14
<b>M-15-00</b> Site Investigations / Feasibility Studies	12/31/08 (M-15-00C)	84	2	81	0	5
<b>M-16-00</b> Remedial Design / Remedial Action	9/30/18 (M-16-00)	20	15	18	1	16
<b>M-20-00</b> Submit Closure Plans for All RCRA TSD Units	2/28/00 (M-20-00)	13	0	7	0	6
<b>M-24-00</b> RCRA Groundwater Monitoring	12/31/99 (M-24-00K)	48	0	45	0	3
<b>M-70-00</b> ERDF Operational	7/01/96A (M-70-00)	3	0	3	0	0
<b>TOTAL</b>		202	17	174	1	44
<b>*M-93-00</b> Reactors	TBD (M-93-00)	0	14	0	0	14

**FY 1997 Milestone Performance Summary**  
Major & Interim (Excludes Target Milestones)  
As of: 7/31/97



**FY 1997 Milestone Performance Vs Plan**  
Major & Interim (Excludes Target Milestones)  
As of: 7/31/97



FY 1997 TPA Milestone Summary  
(Excludes Target Milestones)

Item	FY96 Month	Milestone	Description	Due Date	Forecast Actual Date	Completed		Forecast Ahead Schedule	Forecast On Schedule	Recov-erable	UnRecov-erable	Pending Deletion	Program Planning	
						Ahead Schedule	On Schedule							
1	Nov-96	M-15-12C	Submit 100-NR-1/NR-2 CMS to Ecology. The 100 NR-1/NR-2 CMS will address 100-N Area ground water and high and low priority waste sites	11/30/96	11/24/96A	X								
2	Dec-96	M-15-15E	Issue final draft 200-UP-2 for LFI	12/31/96	11/28/95A	X								
3		M-13-00J	Submit planning documentation necessary to complete the RI/FS process for 100-IU-2/100-IU-6	12/31/96	3/05/96A	X								
4		M-16-07A	Initiate Remedial Action for the 100-DR-1 OU	12/31/96	11/25/96A	X								
5		M-24-00H	Install RCRA Groundwater Monitoring Wells at the rate of 0 to 50 in CY 1996 (If Required)	12/31/96	11/14/96A	X								
6		M-24-35	Install One (1) additional RCRA Well at 216-A-136-1	12/31/96	11/14/96A	X								
	Jan-97	M-16-06A	Submit the 100-HR-3/100-KR-4 Performance monitoring plan, Draft A as a primary document	1/31/97	1/25/97F		X							
8	Mar-97	M-15-12B	Submit Closure Plan/CMS for 1301-N/1325-N, 1324-N and 1324-NA Crib. CMS to include Closure/Post Closure IRM Proposed Plan. RCRA Permit Mod and work schedules for the Crib.	3/31/97	3/05/97A	X								
9	Apr-97	M-15-80	Submit a draft interim report for the Columbia River Comprehensive Impact Assessment (CRCIA)	4/30/97	4/29/97A		X							
11		M-15-80A	RL is to provide a list of comprehensive work scope tasks to develop and prioritize in coordination with CRCIA team (not based on funding)	4/30/97	4/29/97A		X							
12		M-16-01A	Submit Draft 100-N Area Ancillary Facility Decommissioning EE/CA to Ecology.	4/30/97	4/30/97A		X							
13	Jul-97	M-16-06B	Begin systems operation of 100-HR-3 OU	7/01/97	7/01/97A		X							
10		M-15-36	Restart the 200-ZP-2 Vapor Extraction System (VES).	7/31/97	7/18/97A	X								
14		M-15-80B	RL is to provide a recommendation for follow-on work to M-15-80, primarily based on M-15-80A	7/31/97	7/31/97A		X							
15	Aug-97	M-16-04B	Complete the 300 - 500 gpm system upgrade (Phase III) for 200-ZP-1 OU	8/31/97	8/31/97F				X					
16		M-16-03B	Initiate Remedial Action for 300-FF-1 OU	8/31/97	7/07/97A	X								
	Apr-98	*M-16-01E	Complete N Reactor/100-N Area Deactivation pursuant to the work scope identified in the N Reactor Deactivation Plan, Rev. 4, WHC-SP-0615, Dec. 1993	4/1/98	4/01/98F									
<b>TOTAL FY 1997 TPA Milestones</b>								9	6	0	1	0	0	0

\* M-16-01E has been removed from the FY 1997 TPA Milestones. Change Request M-16-94-07 changed the due date to 4/01/98.

**This Quarter's TPA Change Requests  
(May - July 1997)**

**M-16-97-04  
100-NR-1  
100 N Reactor**

This change request extends the due date for one (1) Interim TPA milestones and two (2) Target Milestones, Signed June 9, 1997.

**M-16-01E** Complete the N Reactor/100 N Area Deactivation, extended from September 30, 1997 to **April 30, 1998**

**M-16-01E-T02** Initiate pretreatment and removal of all N Reactor fuel storage basin waters, was extended from June 30, 1997 to **October 31, 1997**.

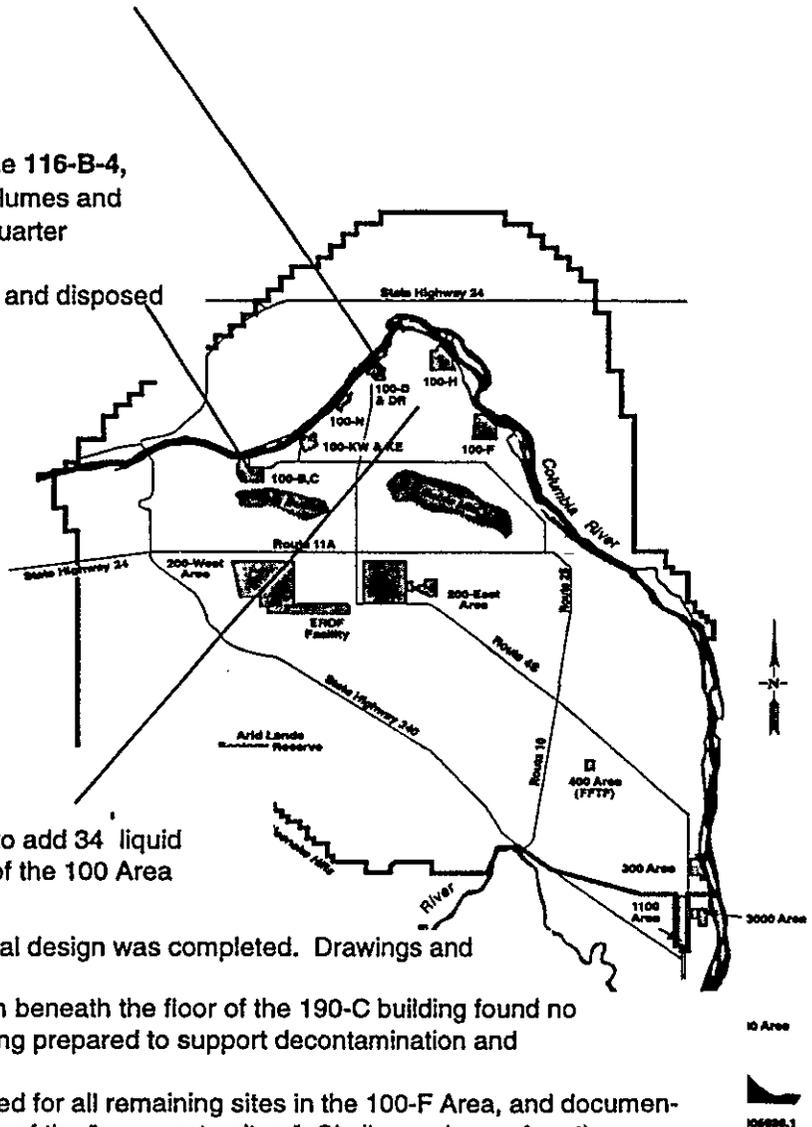
**M-16-01E-T03** Complete characterization of N Reactor fuel storage sludge and debris, was extended from April 30 1997 to **October 31, 1997**.

**DR-1**

- 47,966 tons of waste has been excavated for the 3rd Qtr from the 116-DR-1/2 liquid waste trenches
- Excavated 24,746 tons from 116-DR-7 and 116-DR-9 retention basins. 70 tons was excavated from 100-D-18 Trench
- 106,494 tons were excavated and shipped in FY 1997 to date
- Excavation of the perimeter and center beams and sidewalls at the 116-D-7 retention basin was completed on June 3, 1997

**B/C - 1**

- 69,154 tons of waste were excavated from the 116-B-4, 116-C-5 and retention basins and 116-C-1 Plumes and the process effluent pipelines for the 3rd Quarter FY 1997
- 182,784 tons of material have been removed and disposed in FY 1997 to date



**100 Area Common**

- The Record of Decision (ROD) amendment to add 34 liquid waste disposal sites and expand the scope of the 100 Area ROD was signed on April 4, 1997
- The 90% review package for Group 3 remedial design was completed. Drawings and specifications
- Laboratory analysis of samples obtained from beneath the floor of the 190-C building found no significant soil contamination. A report is being prepared to support decontamination and decommissioning of the structure
- The site dispositioning package was completed for all remaining sites in the 100-F Area, and documentation was provided to support reclassification of the "non-waste sites." Similar packages for other reactor areas will be submitted for RL and Regulator review in July
- Transportation of Investigation Derived Waste (IDW) water to the ETF for treatment and disposal was completed



**This Quarters Accomplishments  
(April - June 1997)**

**100 Area**

**KR-4/HR-3**

- Compliance well sampling for hexavalent chromium was completed at 100-H and 100-D
- Process sampling at the 100-HR-3 pump and treat system began on June 11
- Equipment and piping are 100 percent complete in the 100-KR-4 transfer buildings #1 and #2
- Cultural resource personnel and a Wanapum representative toured the KR-4 pump and treat project on April 22, and found no apparent disturbances to cultural resources
- Mechanical installation in the 1713-H treatment building has been completed

**100-NR- 2**

**M-16-01A TPA Milestone**

- Engineering Evaluation/Cost Analysis for the 100-N Ancillary Facilities and Integration Plan, Draft A was submitted to RL on April 25, 1997 for transmittal to the Regulators by the due date of April 30, 1997
- N-Springs Pump and Treat System Optimization Study, Draft A, Rev. 0, was issued on April 4, 1997
- The pump and treat system was shut down on April 15, for a scheduled clinoptilolite changeout, and was brought back online April 17

**200 West**

**UP-1**

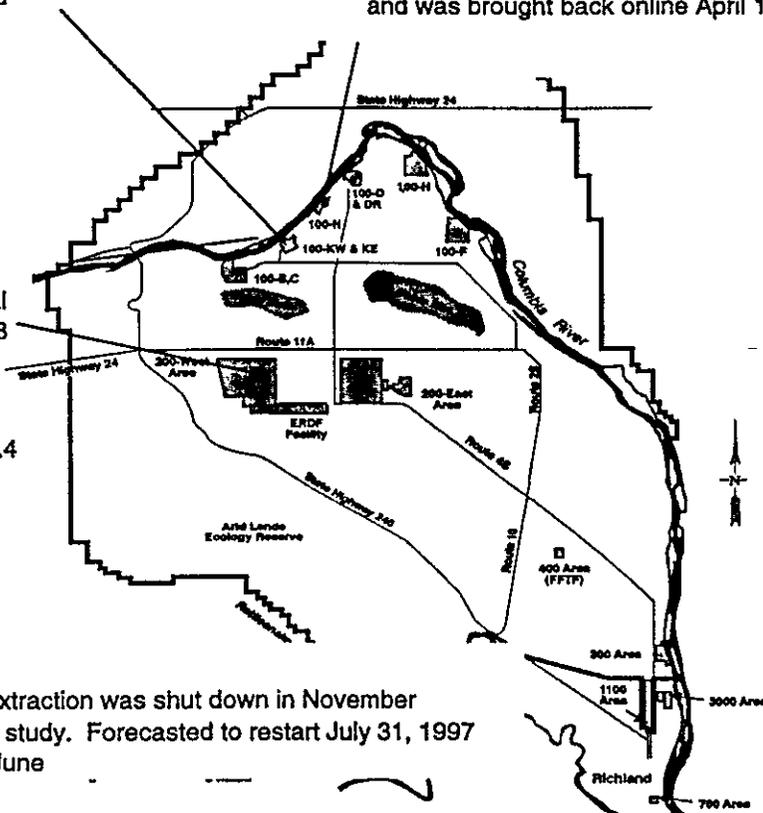
- Transfer of treated groundwater to ETF began. The ETF has received 5.9 Mil. gal of groundwater as of June 18

**ZP-1**

- Phase II has processed 55.4 Mil gallons removing 1,189 lbs of Carbon Tetrachloride to-date

**ZP-2**

- The 200-ZP-2 Soil Vapor Extraction was shut down in November 1996 to conduct a rebound study. Forecasted to restart July 31, 1997
- Mini-tests were initiated in June



**Columbia River Comprehensive Impact Assessment (CRCIA)**

- Completed Tri-Party Agreement milestone M-15-80, "Submit a draft interim report for the Columbia River Comprehensive Impact Assessment (CRCIA)" and M-15-80A, "RL is to provide a list of comprehensive work scope tasks to develop and prioritize in coordination with CRCIA team (not based on funding)," on April 29, 1997

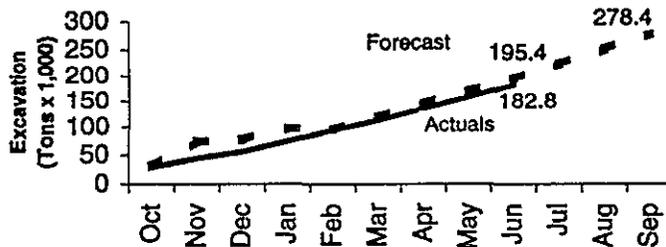
**Operations:**

- Received 141,996 tons of waste from the 100 B/C and 100 DR Areas during the 3rd quarter bringing the to-date FY 1997 receipts to 289,278 tons or approximately 180,800 loose cubic yards (LCY)
- Tonnage from other sources was 8,772 for a total for the 3rd Quarter of 150,763 tons
- Total tonnage to-date FY 1997 including N Area/Other is 311,371 or 194,600 LCY
- Approximate tonnage Inception-to-date is 348,607 tons or 217,879 LCY
- A waste disposal meeting was held June 25 with RL, the EPA and Ecology to discuss waste designation and disposal issues. Three primary issues were discussed: debris matrix designation, anomalous waste and land disposal restriction waste designation
- The ERDF Expansion Plan comments were received from RL and EPA. The revision to the proposed plan is proceeding, and will support the start of public review on August 4. The design procurement package is being prepared for August 1, pending funding approval

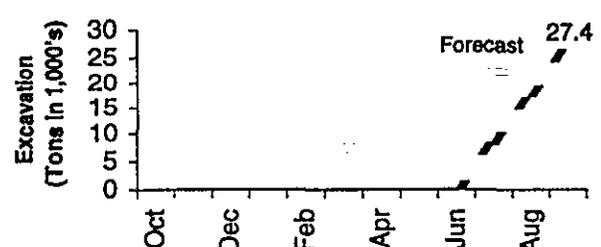
**Transportation:**

- RCI Environmental, Inc. transported waste from 116-C-1, 116-C-5, 116-B-4, B/C Riverlines, 116-DR-1/2, 100-D-18, 116-DR-7 and 116-DR-9 waste sites

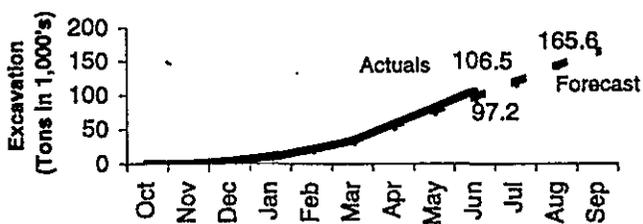
**100-BC Remediation  
FY97 TD**



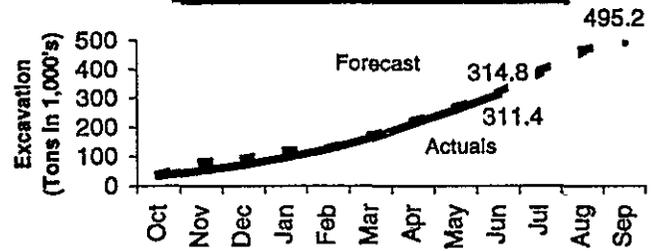
**300-FF Remediation  
FY97 TD**



**100-DR Remediation  
FY97 TD**



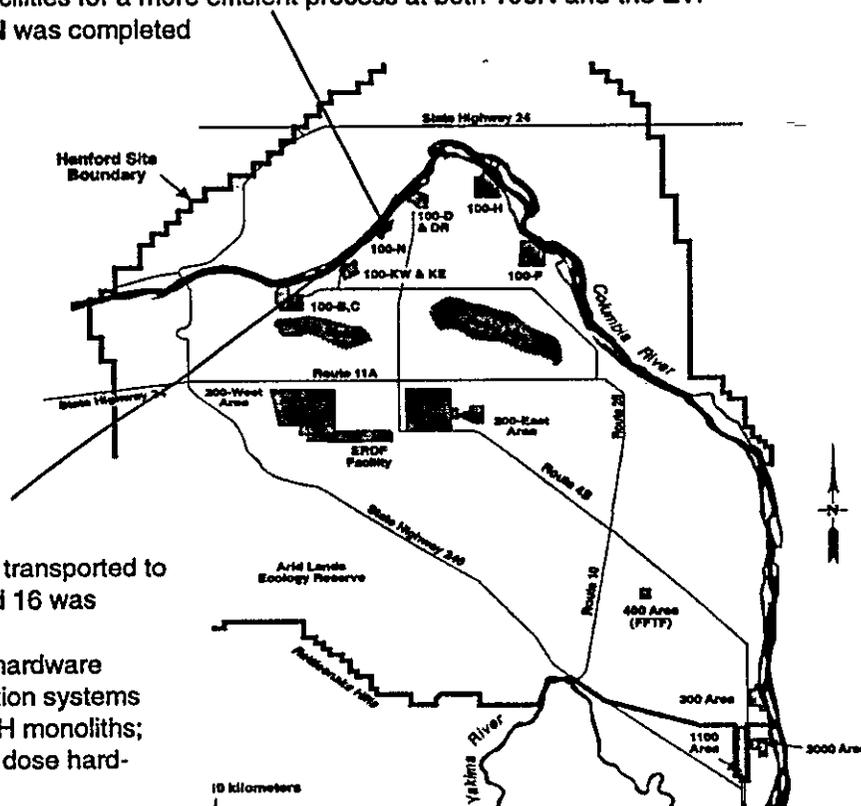
**\*ERDF Total Excavation  
FY97 TD**



\* Total ERDF Excavation includes Other (IDW) Low Level Waste and solid waste from the N Area Deactivation

**N Deactivation**

- The transuranic waste (TRU) evaluation of 107-N facility sediment (the total waste streams for each of the affected components, including the pump well, T-1 tank, three ion exchangers and two sand filters) is currently being analyzed. Preliminary indications are less than TRU designation limits. Agreement was reached on the methodology for determining TRU concentrations for components containing sediment in the 107-N facility
- Design drawings were issued for the 105-N surveillance lighting system
- Fissile material containers were inspected and verified as empty
- The criticality review of the 107-N facility was completed, with no issues
- Water system isolation for the 1310-N silo was completed
- All remaining design drawings (105-NB and the shops) for the site power upgrade task were issued
- The draft Memorandum of Understanding (MOU) with the ETF was revised to incorporate the combined shipping of water from the 1310-N and 1314-N facilities for a more efficient process at both 100N and the ETF
- Phase I cleanup of room 176 in 105-N was completed



**N Basin Activities**

- Monoliths #'s 11, 12, 13 and 14 were transported to ERDF for disposal. Grouting #15 and 16 was completed
- Water clarity was maintained during hardware removal operations, utilizing 3M filtration systems
- Removal activities included two HERH monoliths; 73 spiders; and 372 cubic feet of low dose hardware
- The subcontract for hydrolasing testing was awarded
- The Methanol waste designation issue was resolved
- Lift station sediment analysis was completed, along with the proposed consolidation of N-Basin sediment in the north cask pit
- Preparation efforts were completed and ETF approval was obtained to support the initial water drain down for the vendor hydrolasing test
- The design of the air lift modification (sediment plume arrestor), to collect sediment and minimize impacts to water clarity, was completed

**This Quarters Accomplishments  
(April - June 1997)**

**Demolition Projects**

**190-C Pumphouse**

- Removal of transite from walls was completed
- Approval was received from RL to commence building demolition
- Structural steel removal activities began

**RCRA Closure Projects**

**183-H Solar Evaporation Basins**

- All stockpiled and contaminated material has been shipped and disposed at ERDF. All equipment has been decontaminated and released. Field support has demobilized. The *Post-closure Permit Application* and final *Status Groundwater Monitoring Plan* were completed

**118-C-4 Rod Cave**

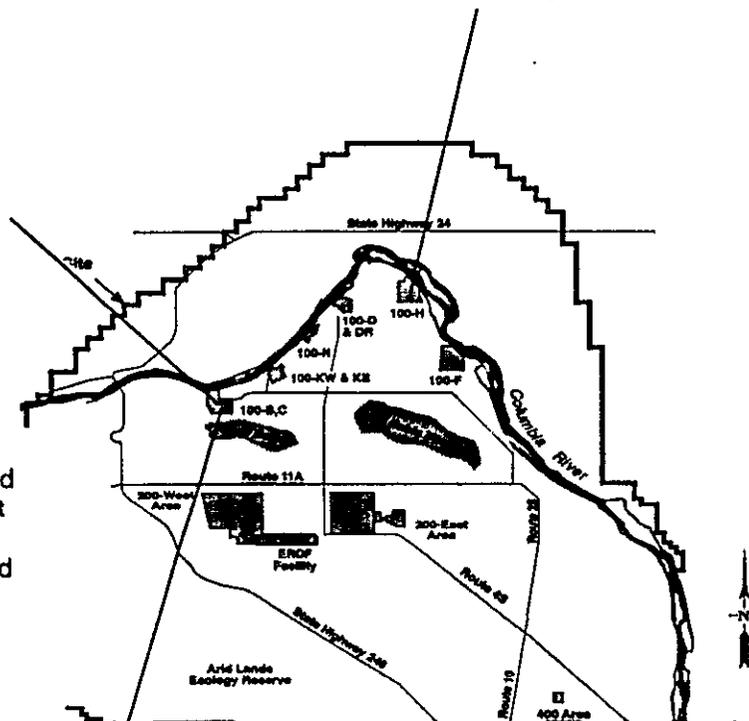
- SAP comments were received from EPA and RL

**111-B Decon Station Waste Tanks Assessment**

- The SAP was sent to RL and EPA for approval

**108-F Biology Lab**

- EPA comments were received for the remedial design report RDR. Verbal direction was received from EPA to proceed with the project, with the exception of waste disposal



**105-C Reactor Interim Safe Storage**

- Salvage operations for the demolished supply fan room were completed
- Over 3,000 linear feet of asbestos wrapped pipe were shipped to ERDF and 42,000 gallons of lift station water was shipped to ETF
- All project corrective action request (CAR) actions have been incorporated into the *Transfer Pit Work Plan* and *Radiation Work Permit*. Transfer pit cover removal and probing activities have been completed
- Nondestructive analysis was performed on the top surface of the transfer pit. The results are currently being analyzed
- Demolition of the outer rod rack was completed
- The Innovative Technology Summary Report final draft for the laser assisted ranging and data system was completed

**Small Buildings (1702-C, 2710, 2711, 2718, and 119B)**

- 119-B was selected as a building not to be demolished by the B Reactor Museum Association
- 1702-C is ready to be demolished
- Characterization of the 2710, 2711, and 2718 building continued

**This Quarters Accomplishments  
(April - June 1997)**

**RARA Surveillance and Inspections**

- Radiological surveys are being performed for the outdoor sites, and selected herbicide is being applied to these sites
- Tri-annual surveillance's of the 200 and 600 areas were initiated

**RARA Interim Stabilization**

- Notification was received to proceed with the consolidation of the Gable Mountain pond extension remediation project. This corrective action was scheduled to start November 1996 but has been on hold due to Tribal Nation concerns. This task is scheduled to start mid-July
- Camera work is ongoing for investigating the cave-in potential at the 216-B-8, 216-B-12, 216-S-1 and two crib locations

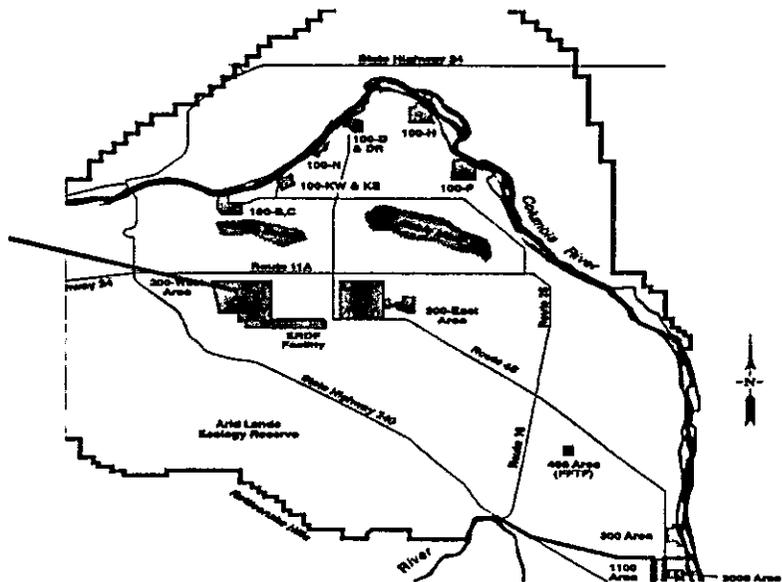
**Facility Transition**

- PUREX end point verification was completed. There were 2,525 endpoints that were verified six days ahead of the POC of May 15th.
- Request for Proposal (RFP) was completed for the application of Urethane foam for the 308, PUREX Annex, N Reactor and N Basin/202-S (REDOX) building roofs.
- Joint efforts between B&W Hanford Co. and BHI continued in the development of end points for the B Plant complex, along with the 242-T, 224-T, 324 and 327 buildings

**200 Area D&D**

**233-S Demolition**

- The disposition of RL comments on the draft RDR was completed, and a redline markup was transmitted to RL for review
- The readiness plan for 233-S was resolved at a meeting between RL AME and RL Waste Operations Division representatives. A management readiness assessment will be conducted prior to non-process area work. An ORR will be conducted prior to work start in the pipe trench, the loadout hood and process hood. The Quarterly Startup Notification Report was revised to reflect this readiness strategy



**Inactive Facilities S&M**

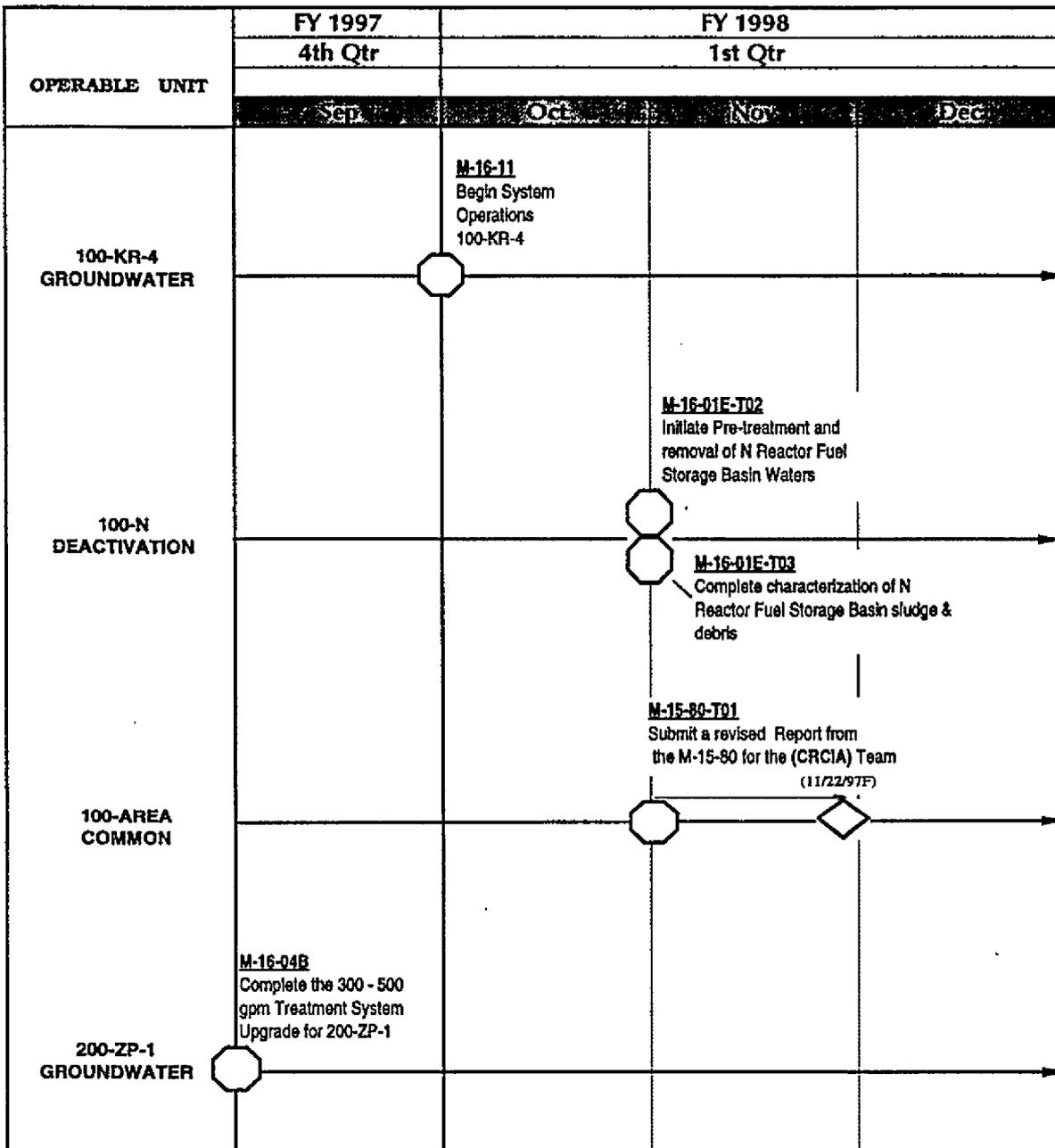
**100 Area**

- All scheduled S&M activities were completed, including weekly inspection of the treatment, storage and disposal (TSD) sites and monthly surveillance of the Radioactive Material Areas (RMA's)
- Cleanup efforts are ongoing for the outdoor areas within the reactor buildings exclusion fence. Numerous power line poles, railroad ties, steel rails and miscellaneous items have been identified for salvage use or reuse, and are in the process of being excessed
- Monthly emergency lights and fire extinguisher inspections were completed for the 105-B reactor tour route area
- Contacts were made with recycling personnel regarding the removal of railroad rails and miscellaneous metals that have been deposited around the 100 Areas. It appears that most of the material can be disposed with no direct cost to BHI, although a fork lift and driver may be required to load metal. A cost estimate is being prepared for the removal of old power poles that are currently located in the area

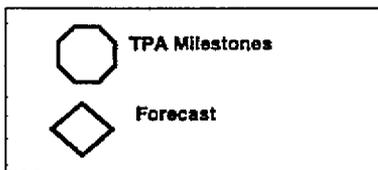
**200 Area**

- All scheduled S&M activities were completed, including weekly inspection of the TSD sites and monthly surveillance of the RMA's
- Application of yellow paint to the identified Fixed Contamination Areas within the REDOX bldg was completed within the requirements of the Radiological Control Manual (RadCon)





Legend:



<b>Issue</b>	<b>Impact</b>	<b>Corrective Actions</b>
<p><b>100 Area Remedial Action</b></p> <ul style="list-style-type: none"> <li>◆ No allowance in budget estimates for additional scope growth to chase waste plumes.</li> </ul>	<ul style="list-style-type: none"> <li>◆ TPA milestones for 100-BC and 100-DR.</li> </ul>	<ul style="list-style-type: none"> <li>◆ RL is discussing the issue with the Regulators.</li> </ul>
<p><b>Groundwater</b></p> <ul style="list-style-type: none"> <li>◆ Ecology policy statement on organic/carbonaceous waste.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Disposal at ERDF.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Develop waste stream specific data so as to petition Ecology for a determination of the contained in/debris rule application that allows non-land disposal restriction waste to be disposed at ERDF.</li> </ul>
<p><b>200 Area Remediation Strategy</b></p> <ul style="list-style-type: none"> <li>◆ The tentative agreement is on hold due to funding constraints in the ERC Program. The public review will not start on June 30.</li> </ul>	<ul style="list-style-type: none"> <li>◆ 200 Area remediation Tri-Party Agreement milestones.</li> </ul>	<ul style="list-style-type: none"> <li>◆ The focus sheet to initiate public review period was completed. Once the funding issues are resolved, completion of the tentative agreement may proceed.</li> </ul>
<p><b>D&amp;D Project</b></p> <ul style="list-style-type: none"> <li>◆ Regulator approval of 105-C RESRAD building and SAP.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Building completions.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Working with Regulators to obtain approval.</li> </ul>

<b>Issue</b>	<b>Impact</b>	<b>Corrective Actions</b>
<p><b>N Basin Cleanout</b></p> <ul style="list-style-type: none"> <li>◆ Airlift operations</li> <li>◆ Shielding Plan – Hydrolasing tests performed on basin walls at 8,000 to 10,000 psi.</li> <li>◆ Sediment Sampling.</li> <li>◆ Basin De-watering.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Expedite sediment/debris relocation</li> <li>◆ Unsuccessful in attaining required dose reduction, which will require additional shielding.</li> <li>◆ Presence of PCB's was identified in the N Basin preliminary sediment.</li> <li>◆ The ETF off-loading duration does not support the current schedule for N Basin de-watering.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Complete cleaning and testing of the airlift plume arrestor so as to enhance the current air lift tool operation. In parallel, fabricate an additional optimized airlift tool.</li> <li>◆ Design engineering will utilize the hydrolasing subcontractor's final report to develop a shielding plan. The plan will be evaluated against the baseline work scope and assumptions to identify cost and schedule impacts.</li> <li>◆ Project will draft a disposition plan.</li> <li>◆ RL and BHI will develop lessons learned materials and will work with ETF to resolve issues.</li> </ul>

**Issues**

<b>Issue</b>	<b>Impact</b>	<b>Corrective Actions</b>
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**FY 1997 Cost & Schedule Performance and Variance Summary**  
**Work Breakdown Structure**  
*(For Performance Graphs)*

**Remedial Actions / ERDF**

ADS - 3100	100 - DR Operable Unit
ADS - 3100	100 - BC Operable Unit
ADS - 3100	100 - KR Operable Unit
ADS - 3100	100 - FR Operable Unit
ADS - 3100	100 - HR Operable Unit
ADS - 3200	200 - BP Operable Unit
ADS - 3200	200 - UP Operable Unit
ADS - 3300	300 - FF Operable Unit
ADS - 3390	1100 - EM Operable Unit
ADS - 3700	ER Disposal Facility

**Ground Water Management**

ADS - 3110	100 - BC Operable Unit
ADS - 3110	100 - KR Operable Unit
ADS - 3110	100 - FR Operable Unit
ADS - 3110	100 - HR Operable Unit
ADS - 3110	100 - NR Operable Unit
ADS - 3115	Site Groundwater Monitoring
ADS - 3210	200 - BP Operable Unit
ADS - 3210	200 - PO Operable Unit
ADS - 3210	200 - UP Operable Unit
ADS - 3210	200 - ZP Operable Unit

**N Area Deactivation Project**

ADS - 3600	N Area Deactivation Project
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**N Basin Cleanout**

ADS - 3600	N Basin Cleanout Project
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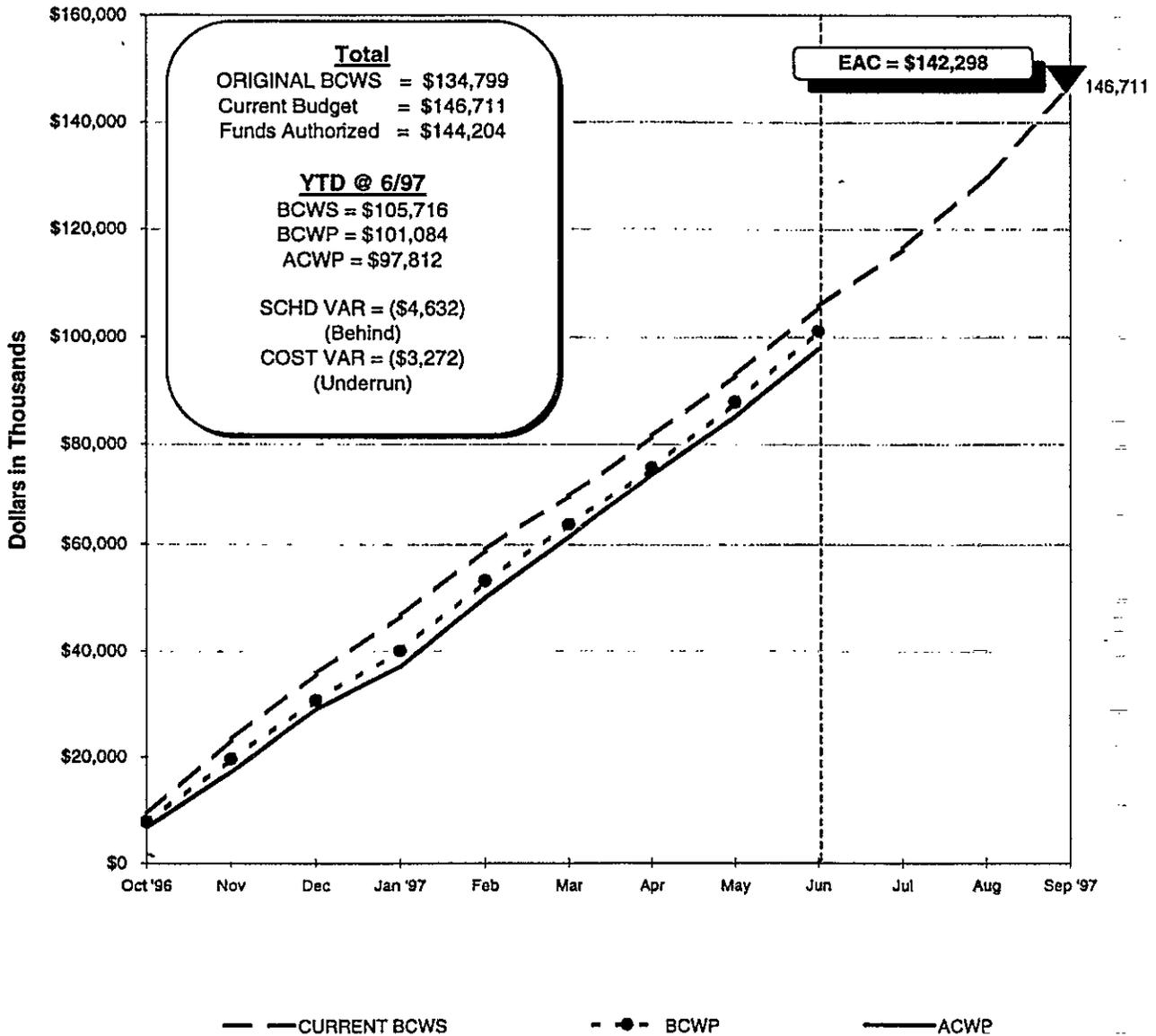
**D & D**

ADS - 3020	RCRA Closures
ADS - 3500	RARA / USTs/S&M
ADS - 3510	Asbestos Abatement
ADS - 3510	100 Area D&D
ADS - 3510	200 Area D&D
ADS - 3800	Post Remediation S&M

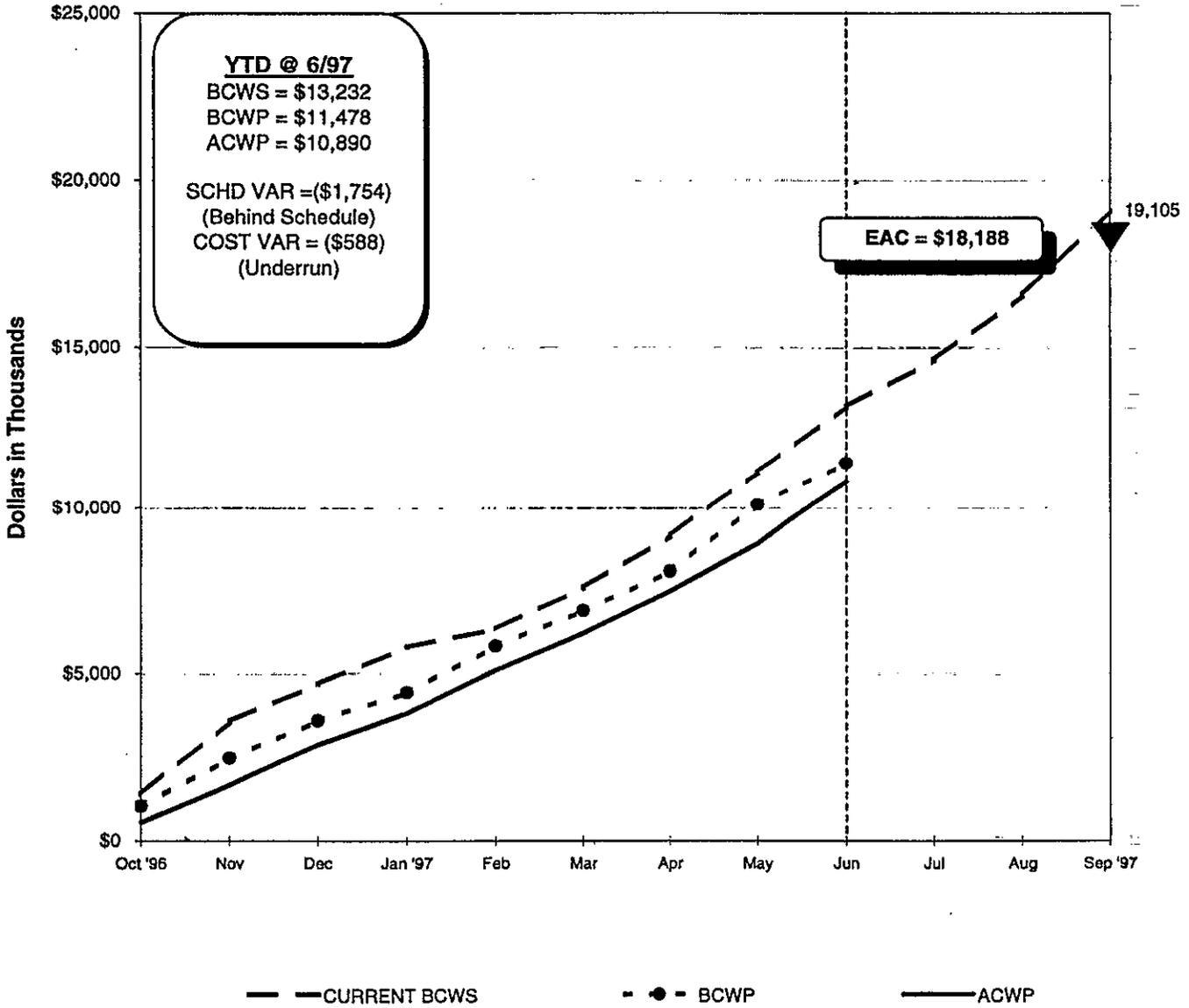
**Support Projects**

ADS - 3400	Program Support - BHI
ADS - 3410	Program Support - RL, USACE, PNL

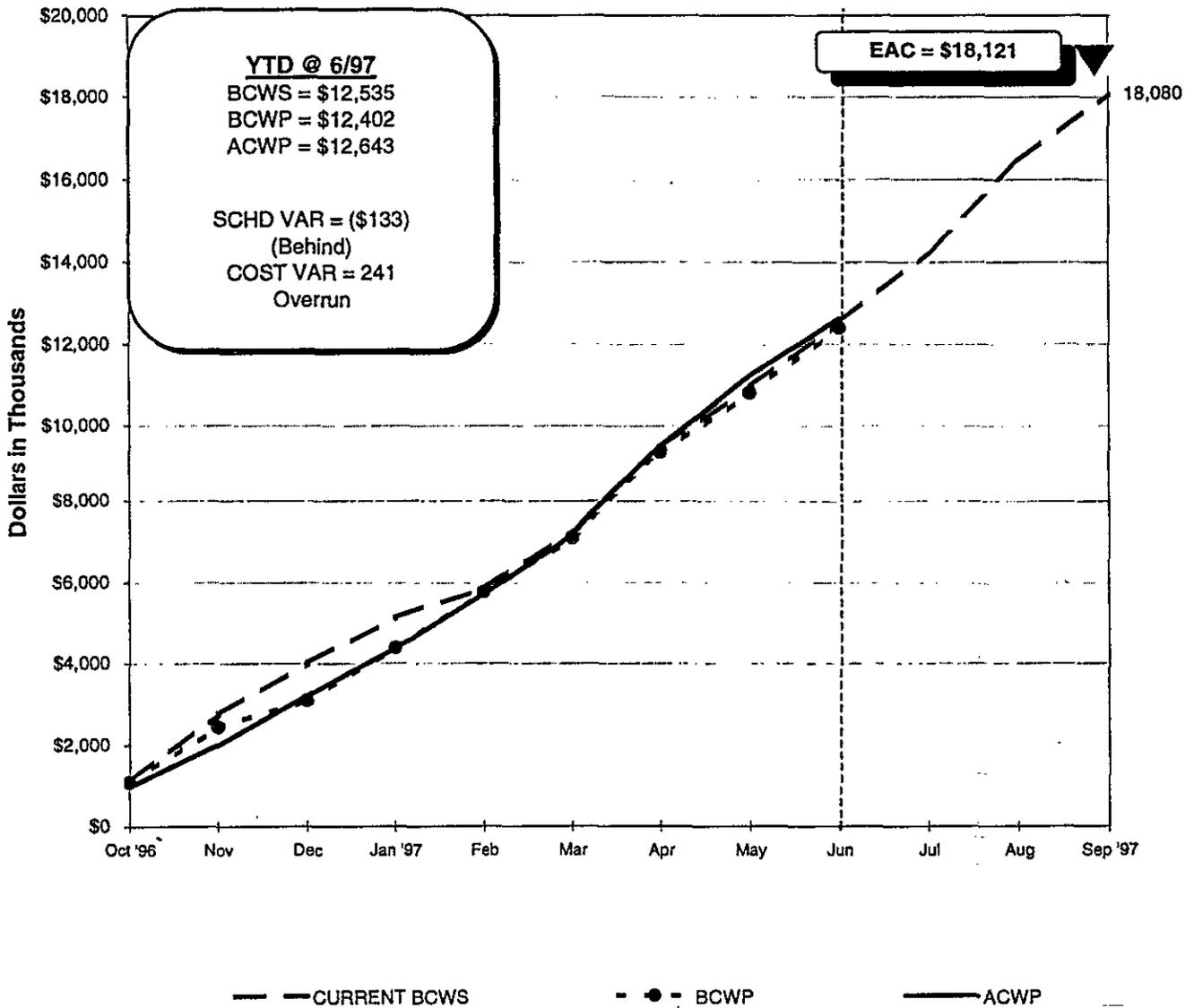
**FY 1997 Total ER Performance Summary**



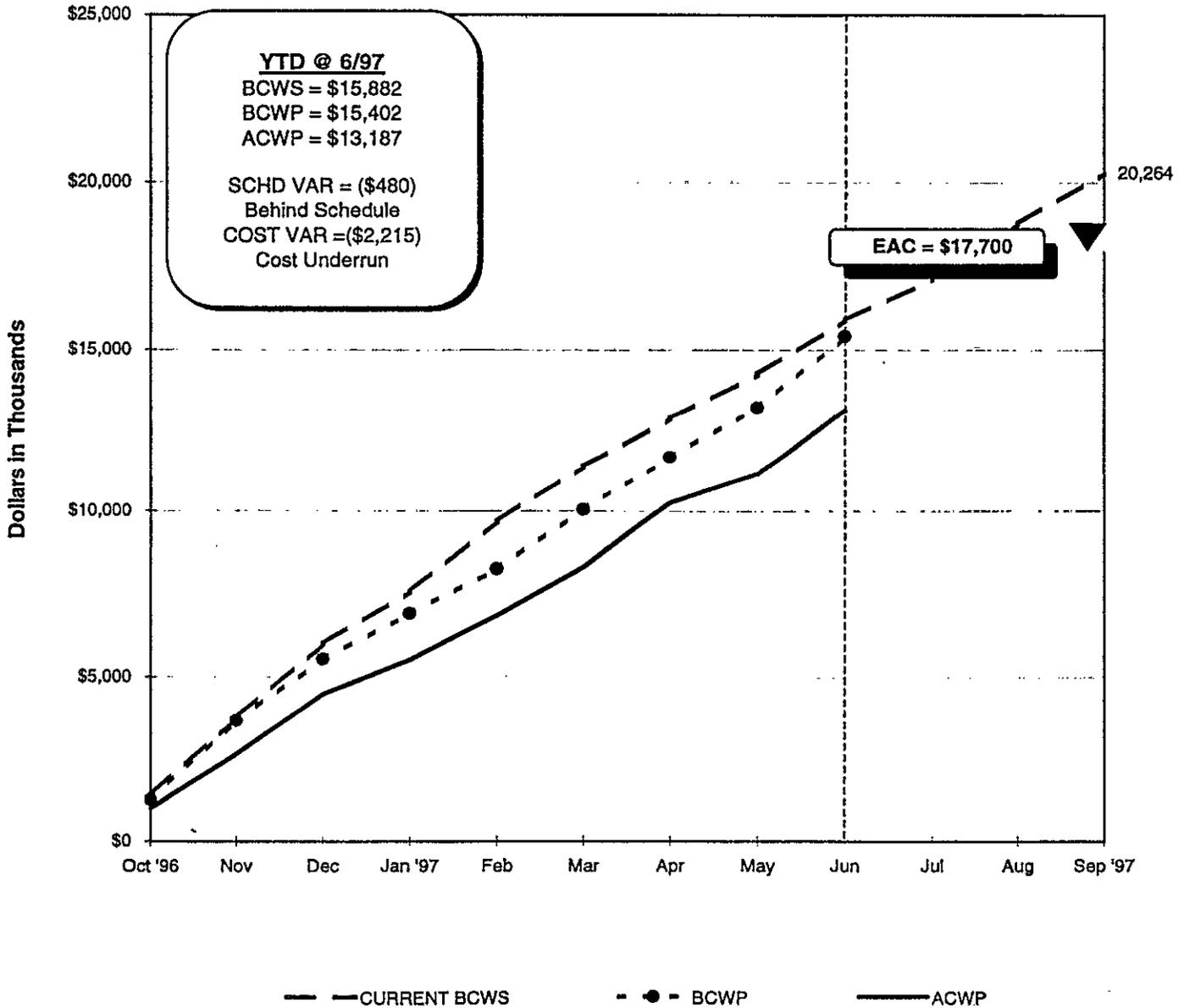
**FY 1997 Remedial Actions Performance**



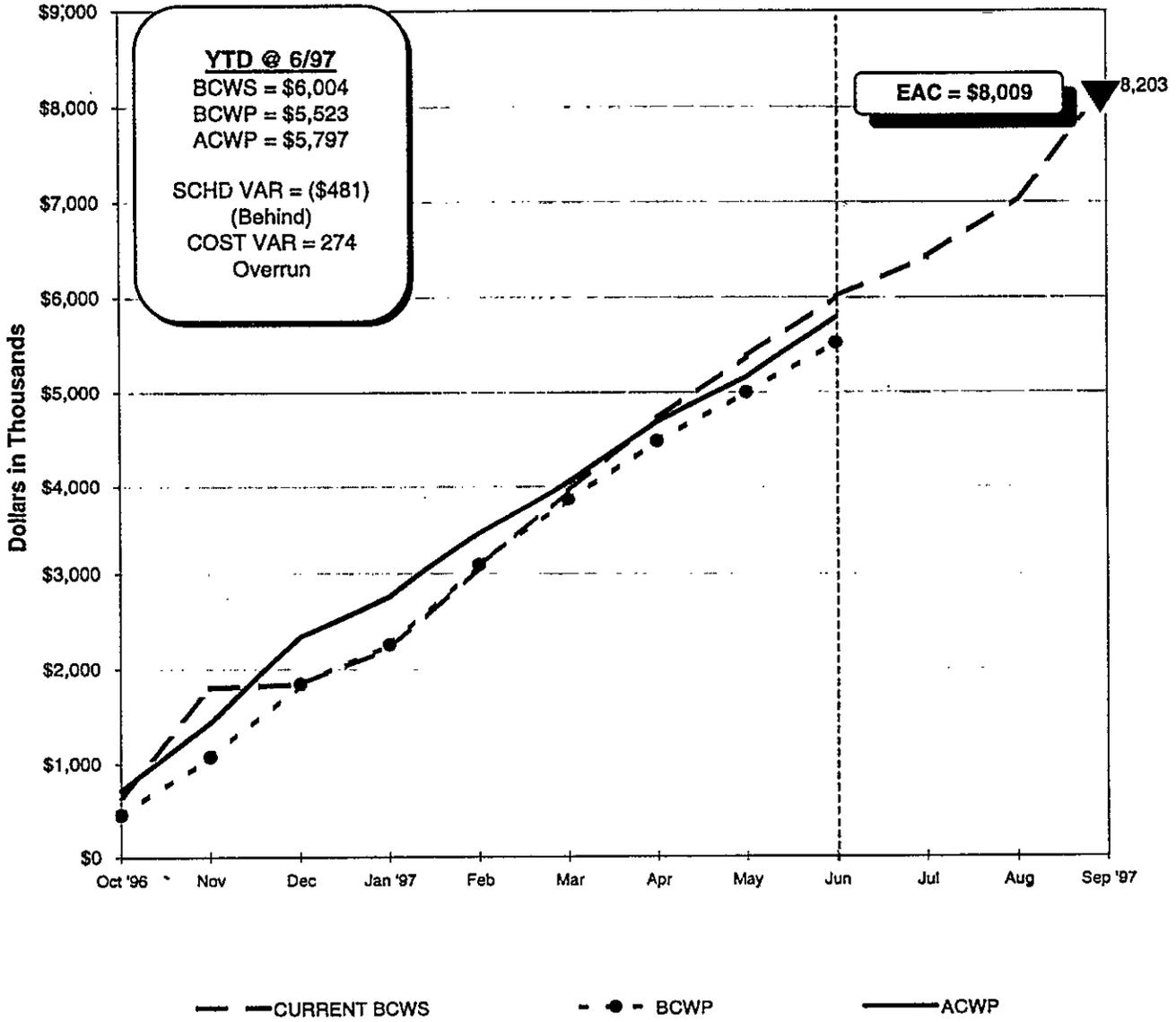
**FY 1997 ERDF Performance**



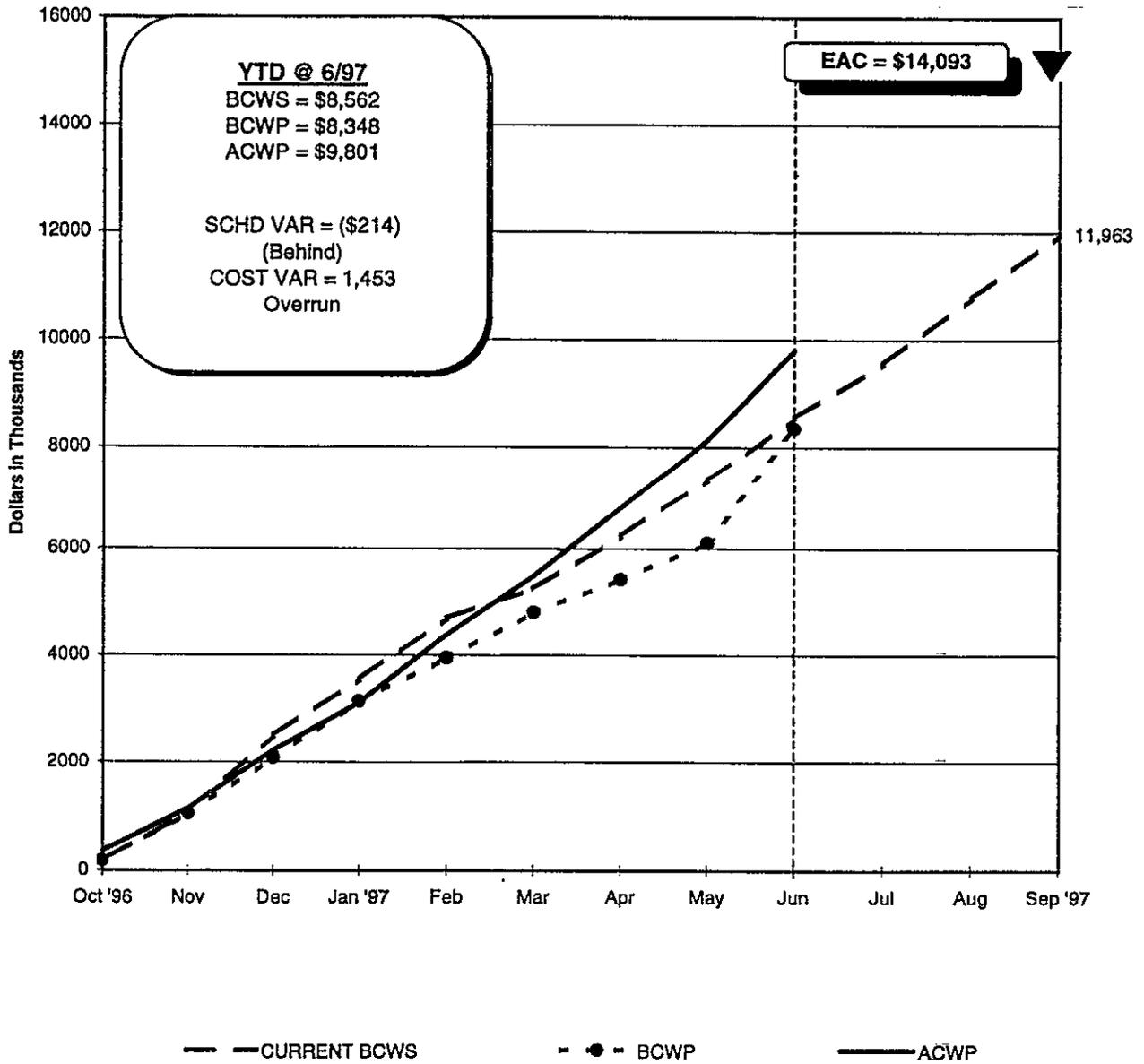
**FY 1997 Groundwater Management**



**FY 1997 N Area Deactivation Performance**



**FY 1997 N Basin Project Performance**

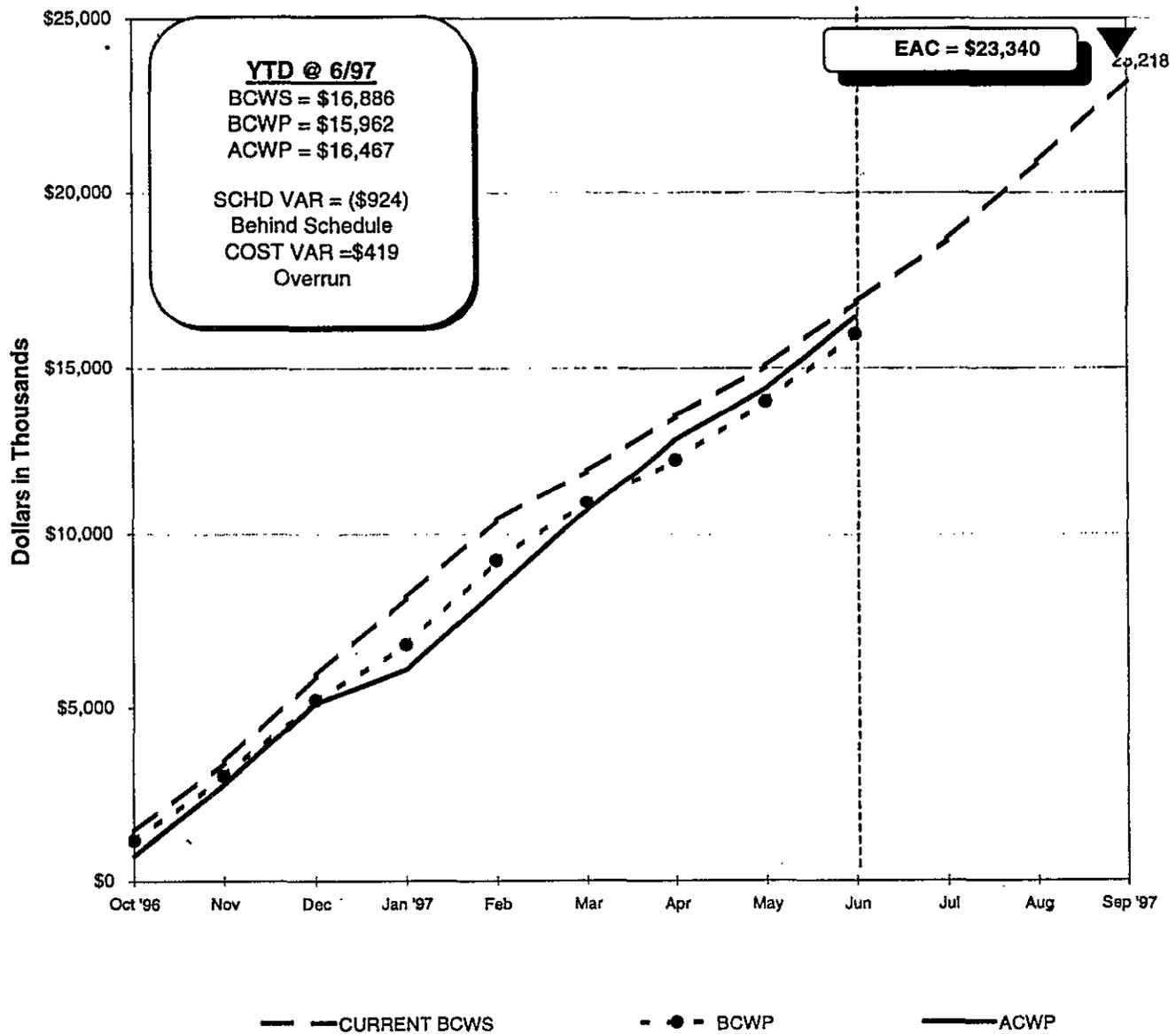


**D & D Projects**

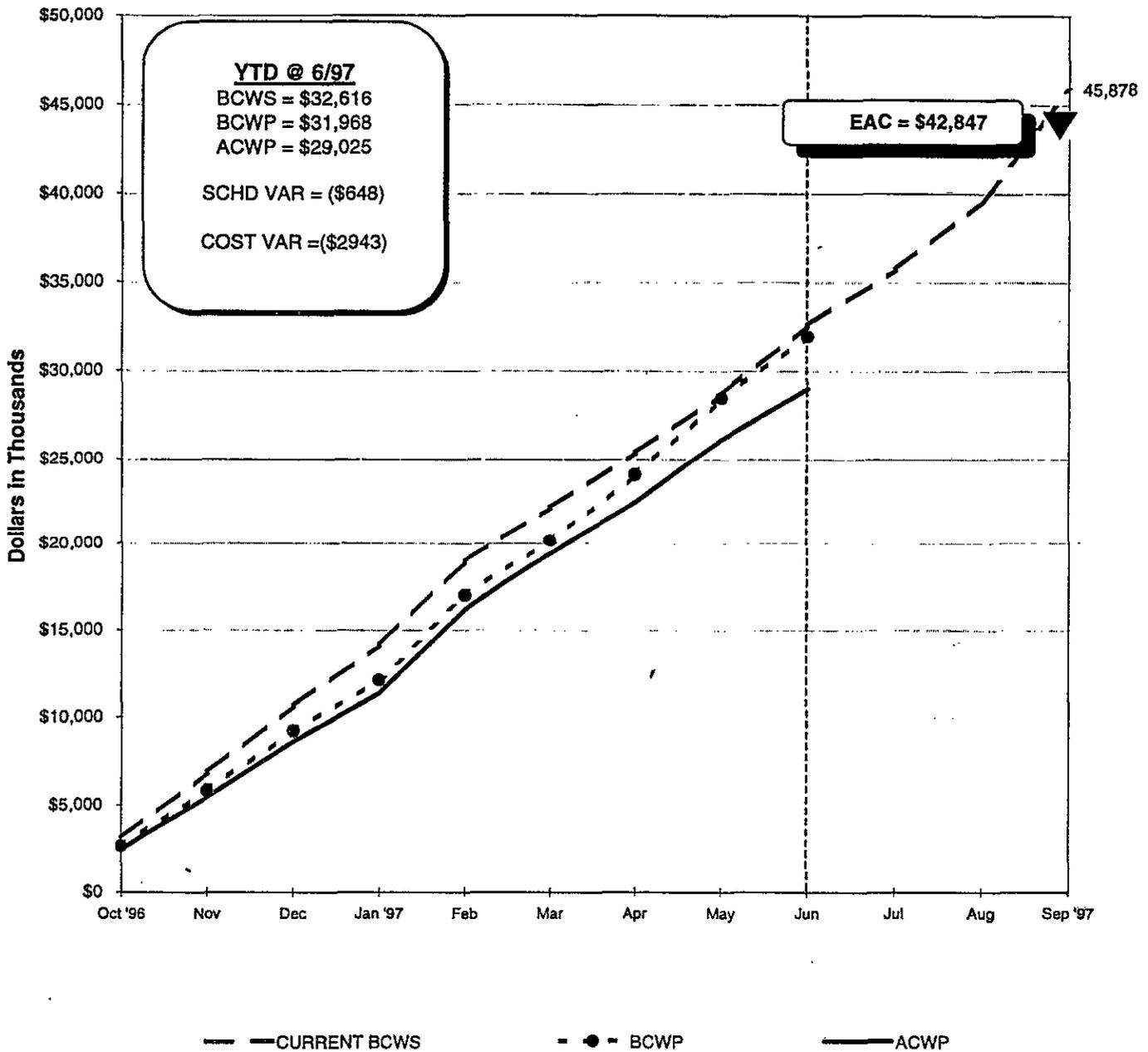
**100 & 200 Areas, RCRA Closures, RARA, Asbestos Abatement, Surveillance & Maint.**

**FY 1997 Cost & Schedule Performance**

**FY 1997 D & D Performance**



**FY 1997 PM&S Performance**



**FY 1997 - Schedule / Cost Variance Summary**

**Schedule Variances (>\$350 thousand @ ADS Level):**

Operable Unit / \$ Variance (000's)	Description & Cause
ADS 3100 100-B/C-1 RA	<ul style="list-style-type: none"> <li>◆ Pipeline removal has been delayed due to contaminated soils around pipeline and pipeline and asbestos. 116-C-5 excavations have been delayed due to five additional plumes at 116-C-1 (\$1,311K) behind schedule.</li> </ul>
ADS 3100 100-DR-1 100-FR-1 RA	<ul style="list-style-type: none"> <li>◆ 116-DR-1/2 Perimeter layback and closeout sampling is deferred until completion of the east and north plumes. The 100-D-19(107-D-2) sludge disposal trench is being deferred until the next fiscal year; and close-out sampling and reports for the 100-D-18 (107-D-1) and 100-D-22 (107-D-5) sludge disposal trenches were deferred. (\$197K) behind schedule.</li> <li>◆ 100-FR-1 Group 4 Remedial Design: The DQO was more extensive than anticipated, which has delayed initiation of field investigation activities. (\$102K) behind schedule.</li> <li>◆ Miscellaneous RA sites (\$277K) behind schedule.</li> </ul>
ADS 3110 100-KR-4 GW	<ul style="list-style-type: none"> <li>◆ Chemical Treatment - Fabrication/installation of electrical/control panels and pumps are behind schedule due to delays in procurement. Significant progress was made in pipe installations and electrical wiring. Recovered \$412K schedule variance. (\$321K) behind schedule.</li> </ul>
ADS 3210 200-ZP-1 GW	<ul style="list-style-type: none"> <li>◆ Physical treatment - Phase 3 construction upgrades are about a month behind schedule due to a late submittal, weather and revision of design drawings. Process building upgrades and surface stabilization activities are scheduled for July, (\$149K) behind schedule.</li> </ul>
ADS 3500 Surveillance & Maintenance D&D	<ul style="list-style-type: none"> <li>◆ Delays in obtaining approval from Tribes, for Cultural Resources review for the Gable Mountain Pond Extension. A 30-day window for review and approval is required. Approval has not been reached with the Umatilla tribe. The Umatilla tribe has written a protest letter to RL.</li> <li>◆ Design changes and approval of added scope for 100-200 Areas Risk Assessment for RMS installation has an impact on both the original and added scope. The vendor is not able to meet equipment delivery dates.</li> <li>◆ Delay in deactivation of 100-N and LOE activities under stasured. (\$452K) behind schedule.</li> </ul>
ADS 3510 100/200 Areas D&D	<ul style="list-style-type: none"> <li>◆ Advanced Engineering – Resources unavailable to support the DQO process and SAP. Effluent Pipeline – On project resources unavailable.</li> <li>◆ 111-B Decon Station Waste Tank – The DQO process is taking longer than anticipated. Added reviews and comment incorporation has contributed to this. 118-C-4 Horizontal Rod Caves. There are delays forwarding the SAP to Regulators.</li> </ul>

**Richland ER Project**

**Schedule Variances (>\$350 thousand @ ADS level) Cont'd**

Operable Unit / \$ Variance (000's)	Description & Cause
<p>ADS 3510 100/200 Areas D&amp;D</p>	<ul style="list-style-type: none"> <li>◆ 1608-B Vacuum Seal House – Characterization (field investigation) of 115-B (under Advanced Engineering) needs to be completed.</li> <li>◆ 105-C Reactor ISS Remediation –</li> <li>◆ 108-F Biology Lab Assessment – DQO work scope, completion of draft DQO and incorporation of comments of draft RDR longer than schedule</li> <li>◆ 233-S PU concentration – Issue RDR. Resolution of comments is taking longer than planned. Completion of training program is restrained until RDR is finalized. This is pushing the start of remediation activities.</li> <li>◆ 2700 Complex Characterization – Staffing shortage</li> <li>◆ 1702- C Badge House – Delayed start due to B Reactor Museum Association.</li> <li>◆ 200 Area Canyon Strategy – Comment resolution for the feasibility study (received 30 days later than planned) and collection of background material for the DQO. (\$482K) behind schedule.</li> </ul>
<p>ADS 3600 100-NR-1 N Deactivation/ N Basin Cleanout</p>	<ul style="list-style-type: none"> <li>◆ N-Deactivation - Building/System Deactivation (\$481K) behind schedule.</li> <li>◆ N-Basin Clean out – low dose hardware removal delays are due to hot spots, requiring significant additional decontamination and radiological control support prior to removal. (\$83K) behind schedule.</li> <li>◆ Lift station design and procurement of equipment is on hold pending review/decision on transferring lift station sediment to the north cask pit and consolidating with N basin. (\$56K) behind schedule.</li> <li>◆ Surveillance &amp; Maintenance – Miscellaneous schedule variances. (\$36K) behind schedule. Total N Basin Cleanout = (\$214K) behind schedule.</li> </ul>

**Richland ER Project**

**Cost Variances (>\$350 thousand @ ADS level)**

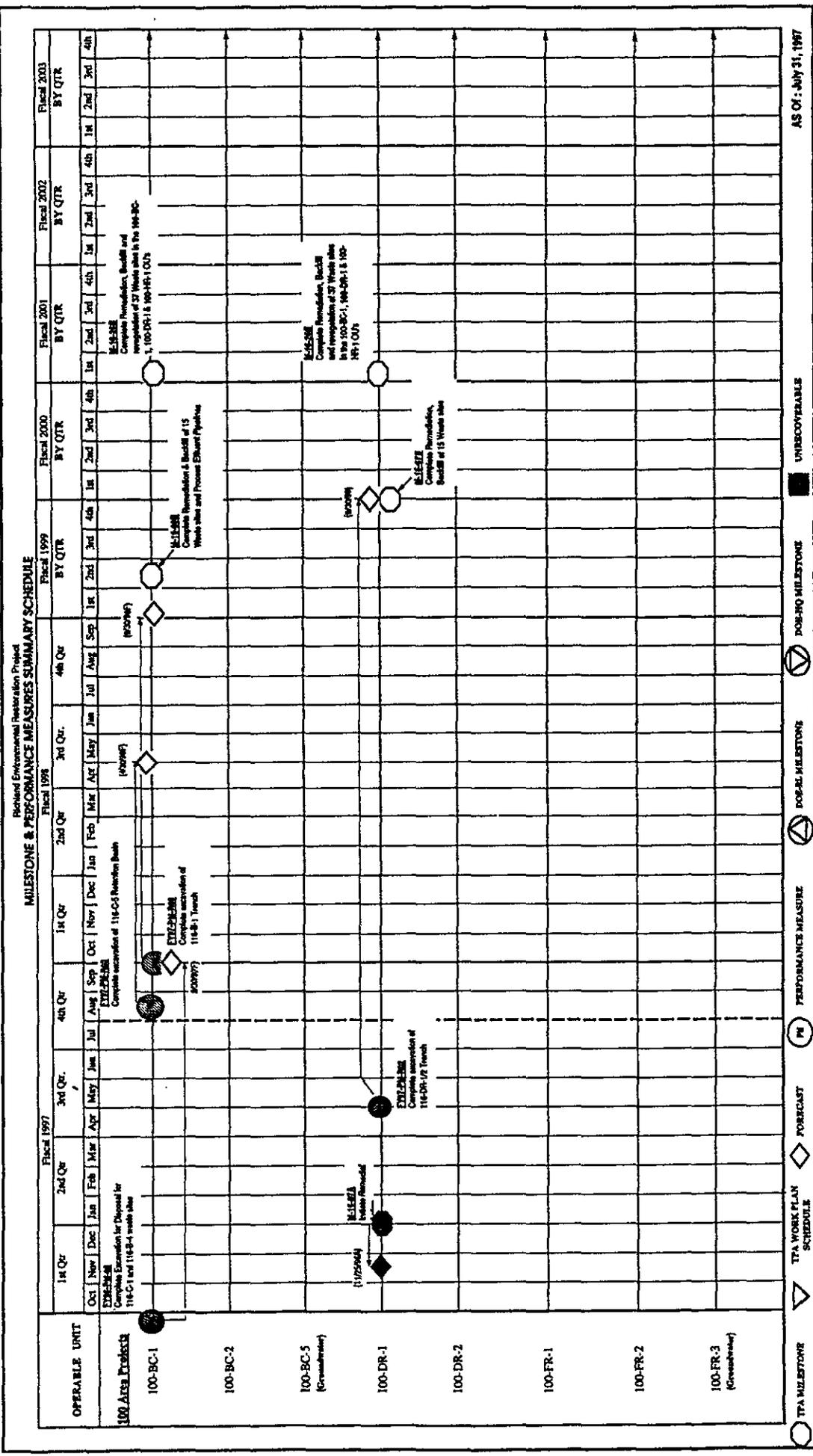
Operable Unit / \$ Variance (000's)	Description & Cause
<p>ADS 3100/3700 Remedial Action ERDF</p> <p>\$181K Cost Overrun</p>	<p><b>100-BC-1</b></p> <ul style="list-style-type: none"> <li>◆ Additional plumes not included in the baseline have increased the cost associated with 116-C-1. A reduction in container loads (19.3 tons from 22) and increased tonnage(density factor change) have resulted in increased 116-C-5 costs. (\$422K) cost over run.</li> </ul> <p><b>100-DR-1</b></p> <ul style="list-style-type: none"> <li>◆ Time phasing (planning Vs reality) of subcontractor costs and efficiencies in labor and equipment. \$253K cost under run.</li> <li>◆ Remedial design group 3: Minimal comments on the 60% and 90% design package have resulted in less effort required to finalize the design. \$263K under run.</li> </ul> <p><b>ERDF</b></p> <ul style="list-style-type: none"> <li>◆ Transportation: The additional cost of claims, primarily the added liner expense, has increased the cost of transportation. In addition, FY96 costs related to a partial billing for subcontractor efforts in June 1996, have costed in FY 97. Direct labor charges related to project engineering support and coordination of the road maintenance efforts have been direct charged to the transportation accounts. These costs increases have been somewhat offset by lower than expected driver labor requirements and lower labor costed in the direct project support cost account. This variance also reflects an over accrual in June. (\$346K) cost over run.</li> </ul>
<p>ADS 3300 Remedial Action 300 Area</p> <p>\$373K Underrun</p>	<p><b>300-FF-1</b></p> <p>Time phasing of subcontractor mobilization costs and cost savings related to readiness assessment and pre-construction submittals. FY 96 costs were over projected and, therefore, a credit was booked in FY 97.</p>
<p>ADS 3110 100-HR-3/100-KR-4 Groundwater</p> <p>\$1,100K Underrun</p>	<p><b>100-HR-3</b></p> <ul style="list-style-type: none"> <li>◆ 100-HR-3 Monitor/Sample/Test/Analysis per NPL Agreement, the number of wells and analytes sampled was reduced, resulting in analytical and material cost savings. Chemical Treatment – combining with 100-KR-4 Interim Action Monitoring Plan, and receipt of favorable comments, eliminated the need for an extensive re-write, resulting in cost savings. Team re-evaluation of performance monitoring requirements, in conjunction with a NPL agreement reducing the number of wells and analytes sampled. Level of A/E support is less than expected due to delays in construction startup and submittals. Prior year cost adjustments with a reversal of an overstated FY 96 drilling and fee accruals has resulted in a cost credit. The level of effort support to date is less than planned due to construction delays caused by slower than expected procurement deliveries.</li> </ul>

**Environmental Restoration  
TPA Quarterly Review (8/97)**

**Richland ER Project**

**Cost Variances (>\$350 thousand @ ADS level)**

Operable Unit / S Variance (000's)	Description & Cause
<p>ADS 3110 100-HR-3/100-KR-4 Groundwater</p> <p>\$1,100K Underrun</p>	<p>100-KR-4</p> <ul style="list-style-type: none"> <li>◆ Monitor/Sample/Test/Analysis per NPL Agreement, the number of wells and analytes sampled was reduced, resulting in analytical and material cost savings. Chemical Treatment – combining with 100-HR-3-borehole summary reports resulted in cost savings. Team re-evaluation of performance monitoring requirements, in conjunction with a NPL agreement reducing the number of wells and analytes sampled. Level of A/E support is less than expected due to tasks planned is no longer necessary. Project support is addressing the most significant effort related to upgrades. KR-4 upgrades, scheduled to complete after HR-3, are benefiting from these efforts.</li> </ul>
<p>ADS 3210 200 Area Groundwater</p> <p>\$776K Underrun</p>	
<p>ADS 3600 N Basin Cleanout</p> <p>\$1,453 Overrun</p>	<ul style="list-style-type: none"> <li>◆ Restart of intrusive activities resulting from the Operations Readiness Report. (\$114K) overrun.</li> <li>◆ Additional water samples required supporting achievement of water clarity and initial basin drain down and activities supporting hydrolasing testing (decontamination/shielding planning). (\$133K) overrun.</li> <li>◆ Increased radiological monitoring, as well as an add D&amp;D worker to each shift for access control, has caused this variance. Additional costs were incurred to obtain specialized expertise to assist with achievement/maintenance of water clarity. Additional filtration systems have been required to maintain water clarity. Air monitoring costs were incurred due to air invasion. (\$747K) overrun.</li> <li>◆ Tools &amp; Equipment/Waste disposal costs were underrun as the result of resources that are LOE and budgets that are linearly spread.</li> </ul>



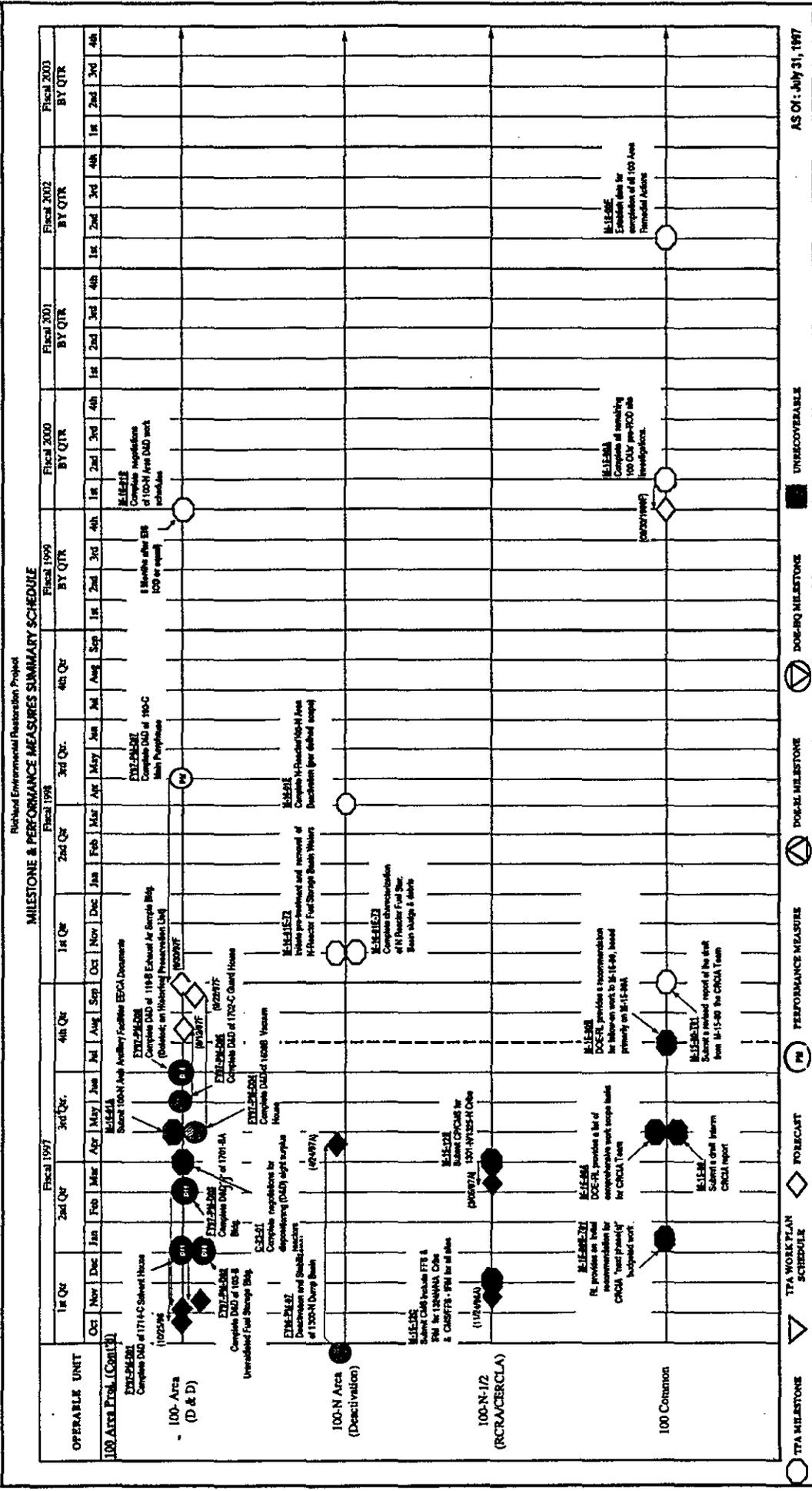
AS Of: July 31, 1997

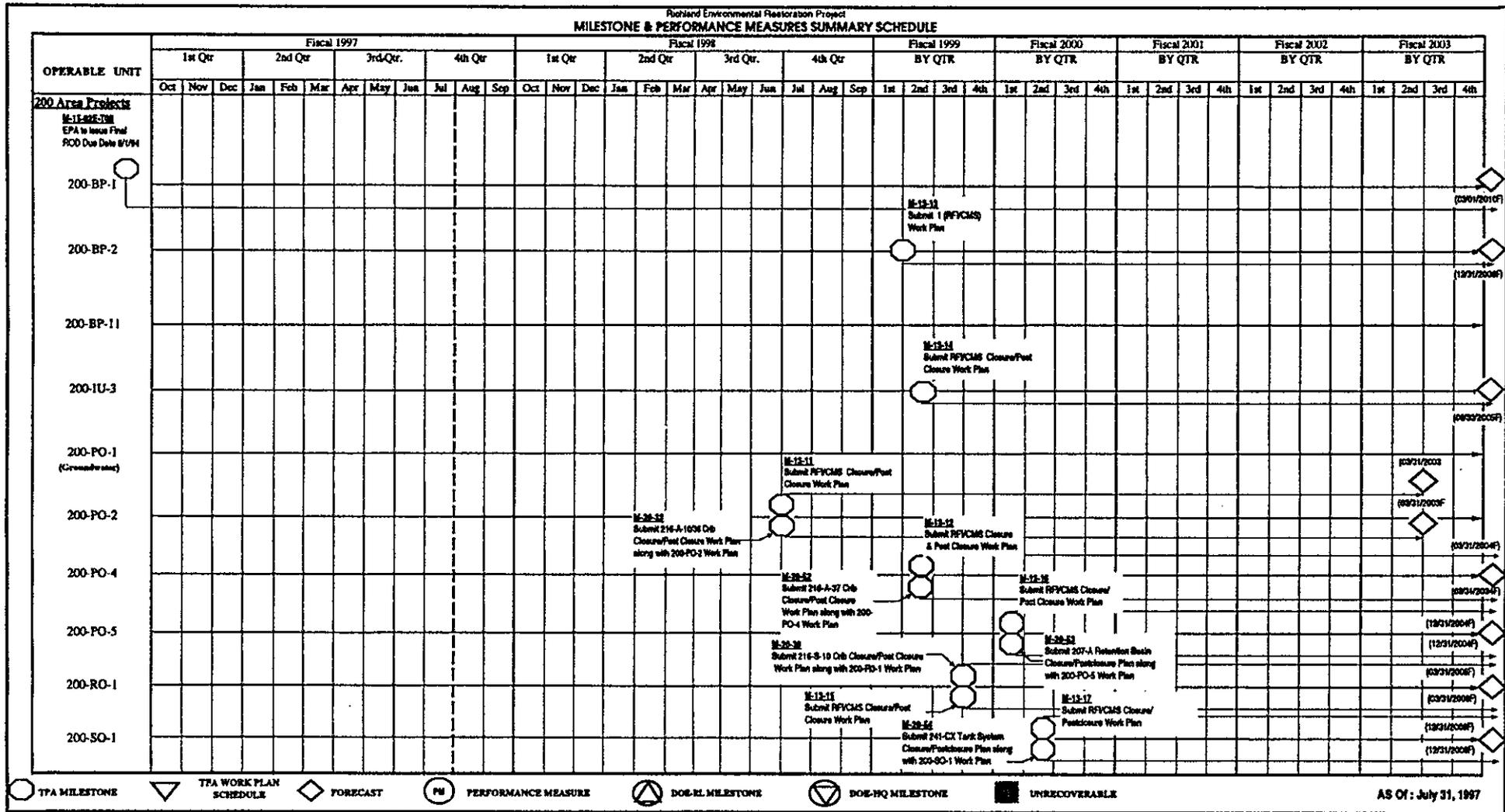
Justified Environmental Restoration Project  
**MILESTONE & PERFORMANCE MEASURES SUMMARY SCHEDULE**

OPERABLE UNIT	Fiscal 1997				Fiscal 1998				Fiscal 1999				Fiscal 2000				Fiscal 2001				Fiscal 2002				Fiscal 2003							
	1st Qr	2nd Qr	3rd Qr	4th Qr	1st Qr	2nd Qr	3rd Qr	4th Qr	1st Qr	2nd Qr	3rd Qr	4th Qr	1st Qr	2nd Qr	3rd Qr	4th Qr	1st Qr	2nd Qr	3rd Qr	4th Qr	1st Qr	2nd Qr	3rd Qr	4th Qr	1st Qr	2nd Qr	3rd Qr	4th Qr				
100-Area Prod (Cont'd)																																
100-HR-1																																
100-HR-2																																
100-HR-3 (Crosshatched)																																
100-KR-1																																
100-KR-2																																
100-KR-4 (Crosshatched)																																
100-IU-2																																
100-IU-6																																
100-IU-1																																
100-IU-3																																
100-IU-4																																
100-IU-5																																

TPA MILESTONE    TPA WORK PLAN SCHEDULE    FORECAST    PERFORMANCE MEASURE    DOE-81 MILESTONE    DOE-80 MILESTONE    UNRECOVERABLE

AS OF: July 31, 1997









# *IAMIT MILESTONE STATUS*

## *M-82-00*

RL Presenter: D. T. Evans

Contractor Milestone Manager: R. E. Heineman, Jr.

RL Division Director: J. E. Mecca

# TRANSITION MILESTONES

- ❖ M-82-01 - Submit End Point Criteria for Transition of B Plant - June 1996 (Completed June 1996)
- ❖ M-82-02 - Complete Deactivation of the B Plant 211-B Area - January 1997 (Completed December 1996)
- ❖ M-82-03 - Complete Removal of Organic Solvent Waste from the B Plant Canyon - June 1997 (Completed March 1997)
- ❖ M-82-04 - Submit B Plant Surveillance and Maintenance Plan - June 1997 (Completed June 1997)
- ❖ M-82-05 - Complete Deactivation of the B Plant Aqueous Makeup Area - May 1998 (On Schedule)
- ❖ M-82-06 - Complete Deactivation of the B Plant Liquid Effluents Area - May 1998 (On Schedule)
- ❖ M-82-07 - Document Hazardous Substances/Dangerous Wastes Remaining within B Plant - June 1998 (On Schedule)

## TRANSITION MILESTONES (Cont.)

- ❖ M-82-08 - Complete Disposition of Organic Solvent Waste - September 1998 (Ahead of Schedule)
- ❖ M-82-09 - Complete Decoupling of WESF from B Plant - December 1998 (Ahead of Schedule)
- ❖ M-20-21A - Submit a B Plant Preclosure Work Plan to Ecology - March 1999 (Ahead of Schedule)
- ❖ M-82-10 - Complete Deactivation of the B Plant Canyon - September 1999 (Ahead of Schedule)
- ❖ M-82-10-T01 - Complete Isolation/Stabilization of Retired Filters and Provide Operating Canyon Ventilation system for S&M Phase (Project W-059) - September 1999 (Ahead of Schedule)

# *RL PROGRAM MANAGER'S ASSESSMENT OF CONTRACTOR PERFORMANCE*

- ❖ The B Plant/WESF Contractor (FDH/BWHC) has been effectively accomplishing RL Project Milestones on, or ahead of schedule to meet the September 1998 "Breakthrough" goal to deactivate B Plant. This will be accomplished 1 year ahead of the TPA milestone for deactivation.

# SIGNIFICANT ACCOMPLISHMENTS AND PROGRESS (*Past 3 mo.*)

- ❖ **M-82-04** - Submit B Plant Surveillance and Maintenance Plan - June 1997
  - Completed 4 days ahead of schedule (June 26, 1997)
  - Submitted to Ecology for review and comment
  
- ❖ **M-82-06** - Complete Deactivation of the B Plant Liquid Effluents Area - May 1998
  - All Physical Work Completed to Deactivate 207-BA, 221-BA, 221-BG, and 216-B-64

# *SIGNIFICANT ACCOMPLISHMENTS AND PROGRESS (Past 3 mo.) (Cont.)*

- ❖ **M-82-08** - Complete Disposition of Organic Solvent Waste - September 1998
  - DSSI Contract Re-Negotiated to Accept B Plant Organic Waste
  
- ❖ **M-82-09** - Complete Decoupling of WESF from B Plant - December 1998
  - Completed Decoupling of WESF Liquid Effluent Control System
  - Completed Decoupling of WESF Solid Waste System

# SIGNIFICANT PLANNED ACTIONS

*(Next 6 mo.)*

- ❖ M-82-05, M-82-06 - Complete B Plant AMU (April 1998) & Liquid Effluent Areas (Dec. 1997) Deactivation
- ❖ M-82-08 - Complete Disposition of Organic Solvent Waste to DSSI Incinerator (Sept. 1997)
- ❖ M-82-10-T01 - Complete Design & Initiate Construction of Project W-059 (Sept. 1997)

# *SIGNIFICANT PLANNED ACTIONS*

## *(Next 6 Mo.) (Cont.)*

- ❖ **M-20-21A** - Complete Draft of B Plant Pre-Closure Work Plan & Submit to Ecology (March 1998)
- ❖ Disposition Ecology Comments on End Point Document and Issue Revision 2
- ❖ Receive and Disposition Ecology Comments on S&M Plan

# BUDGET/COST STATUS

		<u>FY97</u>	<u>FY98*</u>
B Plant Surveillance/Maintenance**	BCWS	\$9851.7K	
	ACWP	\$10146.3K	
	BAC	\$12433.6K	\$8175.5K
B Plant Deactivation (Including W-059 & WESF Hot Cell/EIX Work)	BCWS	\$9077.9K	
	ACWP	\$9710.7K	
	BAC	\$11756.3K	\$15171.7K
*FY98 Budget Not Yet Approved			
**Does Not Include Fee			

# ISSUES

- ❖ **General**
  - None
- ❖ **Submit B Plant Surveillance and Maintenance Plan**
  - None
- ❖ **Complete Deactivation of the B Plant Liquid Effluents Area**
  - None
- ❖ **Complete Disposition of Organic Solvent Waste**
  - None
- ❖ **Complete Decoupling of WESF From B Plant**
  - None

# *NON-TPA REGULATORY ISSUES/POTENTIAL IMPACTS TO TPA*

❖ None

**PUREX STABILIZATION PROJECT  
UPDATE**

**M-80 TRI-PARTY AGREEMENT  
MILESTONE**

# **PUREX Stabilization Project**

**August 22, 1997**

# PUREX Stabilization Project

## FUTURE M-80 TPA MILESTONES

NUMBER	MILESTONE TITLE/ DESCRIPTION	MILESTONE DATE	ECD
M-80-00	Complete PUREX and UO3 Plant's transition phase and initiate the surveillance & maintenance phase	July 1998	Nov. 1997

## PUREX Stabilization Project

### M-80 TPA MILESTONES COMPLETED

NUMBER	MILESTONE TITLE/ DESCRIPTION	MILESTONE DATE	ACD
M-80-00-T01	Issue DOE approved end point criteria for the UO3 Plant	Dec. 1994	Dec. 1994
M-80-01	Complete deactivation of PUREX Plant R Cell	April 1995	April 1995
M-80-00-T02	Complete all UO3 Plant transition activities and initiate Surveillance & Maintenance phase	June 1995	Jan. 1995
M-80-00-T03	Submit options and recommendations for final management of Tank 40 organic material to EPA and/or Ecology	June 1995	June 1995

## PUREX Stabilization Project

### M-80 TPA MILESTONES COMPLETED

NUMBER	MILESTONE TITLE/ DESCRIPTION	MILESTONE DATE	ACD
M-80-02-T01	Submit proposed end point criteria for transition of PUREX	June 1995	June 1995
M-80-00-T04	Complete removal of concentrated (recovered) 203-A nitric acid at PUREX	June 1996	Dec. 1995
M-80-00-T05	Complete implementation of selected alternative for management of spent fuel from PUREX	Dec. 1996	Dec. 1995
M-80-03	Remove process waste solutions from Tanks D5 and E6	Jan. 1997	April 1995

## PUREX Stabilization Project

### M-80 TPA MILESTONES COMPLETED

NUMBER	MILESTONE TITLE/ DESCRIPTION	MILESTONE DATE	ACD
M-80-02-T02	Submit PUREX Surveillance & Maintenance Plan	May 1996	May 1996
M-80-02	Submit the end point criteria and Surveillance & Maintenance Plan in support of the PUREX preclosure work plan	July 1996	July 1996
M-80-00-T07	Complete deactivation of the PUREX Plant sample gallery	June 1997	July 1996
M-80-04	Complete deactivation of the PUREX Plant U Cell/Fractionator	April 1997	Sept. 1996

## PUREX Stabilization Project

### M-80 TPA MILESTONES COMPLETED

NUMBER	MILESTONE TITLE/ DESCRIPTION	MILESTONE DATE	ACD
M-80-05	Complete deactivation of the PUREX Plant aqueous makeup area	June 1997	July 1996
M-80-06	Complete deactivation of the PUREX Plant canyon	June 1997	July 1996
M-80-07	Complete deactivation of the PUREX Plant 203-A Area	April 1998	Nov. 1996
M-80-00-T06	Complete deactivation of the PUREX Plant 211-A Area	April 1997	April 1997

# PUREX Stabilization Project

## M-80 TPA MILESTONES COMPLETED

NUMBER	MILESTONE TITLE/ DESCRIPTION	MILESTONE DATE	ACD
M-80-08	Document hazardous substances/dangerous wastes remaining within the PUREX Plant	July 1998	Aug 1997

# PUREX Stabilization Project

## M-20 TPA MILESTONE COMPLETED

NUMBER	MILESTONE TITLE/ DESCRIPTION	MILESTONE DATE	ACD
M-20-24A	Submit a PUREX preclosure work plan to EPA and Ecology	July 1996	July 1996

**PUREX Stabilization Project**

**PROGRAM MANAGER'S ASSESSMENT**

**No longer prepared for the PUREX Project**

## **SIGNIFICANT PLANNED ACTIONS**

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- **Develop MOA for turnover**
- **Complete M-80-00 Milestones**

# PUREX Stabilization Project

## BUDGET/COST STATUS

### EXPENSE COST/SCHEDULE PERFORMANCE (\$ DOLLARS IN THOUSANDS)

PROGRAM ELEMENT WBS & ADS	FISCAL YEAR TO DATE					BAC	EAC	FYSF	EXPECTED FUNDS
	BCWS	BCWP	ACWP	SV	CV				
1KP1 PUREX S & M 7.1.1.1 (6622-0)	8.476	8.733	7.387	257	1.346	10,836	9,728	8,828	8,662
1KP4 - Transition 7.1.1.4 (6622-0)	9.098	9.098	10,020	0	(922)	10,061	10,989	10,989	11,072
1KP5 - Compliance 7.1.1.5 (6622-0)	833	833	763	0	70	833	823	823	823
<b>TOTAL</b>	<b>18,407</b>	<b>18,664</b>	<b>18,170</b>	<b>257</b>	<b>494</b>	<b>21,730</b>	<b>21,540</b>	<b>20,640</b>	<b>20,557</b>

EAC is defined as the estimate of what it is going to cost to complete the work as defined by the FYMP and Class I changes.

FYSF is defined as the estimated total that will be spent from October through September.

Expected Funds is defined as total funding guidance expected at fiscal year end (includes anticipated approval of change requests, carryover, reprogramming actions and reserve holdback).

## ISSUES

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- None

**NON-TPA REGULATORY ISSUES/POTENTIAL  
IMPACT TO TPA**

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- None

## **SIGNIFICANT ACCOMPLISHMENTS**

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- **Quarterly surveillance**
- **Performed routine maintenance**
- **Started reroofing PUREX annex (ECD: 10/97)**

# **324 Facility M-89 Milestones**

## **Activities Status**

**Complete Closure of Non-Permitted Mixed**

**Waste Storage Units in the 324 Building**

**REC and HLV**

**August 26, 1997**

# **324 Facility M-89 Milestones Activities**

## **TPA Milestone Description**

- **Milestones Completed**

- **M-89-01: Complete removal of 324 Building HLW Tank Mixed Waste (MW) - Completed 9/96**
- **M-89-03: Achieve Compliance with Interim Status Facility Standards Non-Permitted 324 Building MW Units - Completed 3/95**
- **M-89-04: Submit to Ecology a Report Identifying Management Options for Achieving Clean Closure - Completed 6/95**
- **M-20-55 Submit Closure Plan for Non-Permitted MW Units Located in the 324 Building - Initial Complete 12/95 (Revised Closure Plan Submitted to Ecology in May 1997)**

## **324 Facility M-89 Milestones Activities**

- **Remaining Milestones**

- **M-89-02 (5/99): Complete removal of 324 Building REC B-Cell MW and Equipment Items yet to be complete include:**
  - **removal of the 1A Rack, 2A Rack, and 1B Rack (and ancillary piping and equipment), and**
  - **containerization and removal of the dispersible material from the B-Cell floor**
- **M-89-05 (6/98): Complete 324 Facility Special Case Waste (SCW) Assessment in Support of 324 Closure**

## **324 Facility M-89 Milestones Activities**

### **RL Program Managers Assessment**

- **ES&H - Facility Management continues to take active steps to upgrade conduct of operations, radiological control and work management. - Good**
- **Technical - Pathforward meetings discussing progress and status of technical issues are held weekly. Improvement is noted in identification and resolution of key issues. - Good**
- **Schedule - B-Cell activities are behind schedule due to significant crane maintenance and repairs. An integrated "Crane/Airlock" schedule has been prepared to manage crane and airlock activities. New cranes are in place and resource management is improving. - Satisfactory**
- **Cost - FY-97 funding is in place and is no longer a FY-97 issue. FY-98 funding has a high priority. - Good**

## **324 Facility M-89 Milestones Activities**

### **Significant Accomplishments (Last 3 Months)**

- **Installed new 10-ton crane and completed operational tests**
- **Completed REC airlock pipetrench jumper removals for the 1A rack**
- **Completed transfer of 20 HLW metal filters from D-Cell to B-Cell**
- **Demonstrated laser cutting**

# **324 Facility M-89 Milestones Activities**

## **Significant Planned Actions (Next 6 Months)**

- **Integrate/execute airlock activities to support B-Cell and A-Cell (FRG Log Removal)**
- **Remove three pipe jumpers from the 1A rack to 1B rack**
- **Perform Tank 119 size reduction to provide space for 1A rack activities**
- **Perform 1A rack size reduction**
- **Collect and containerize dispersibles from underneath 1A rack**
- **Issue position paper on B-Cell dispersible interim storage location (pending treatment/disposal)**

# 324 Facility M-89 Milestones Activities

## Budget/Cost Status (FYTD)

	<u>Budget</u>	<u>Actuals</u>	<u>Schedule Variance</u>
* B-Cell Project	\$4,813	\$3,457	\$(1,444)
* Total 324/327 Deactivation Project	\$17,613	\$19,509	\$(1,592)

\* Costs through July 1997 and based on February 1997 draft baselines currently being updated

## **324 Facility M-89 Milestones Activities**

### **Overall 324 Facility and Programmatic Issues**

- **Many key support staff remained with PNNL after transition of the facility. Status:**
  - **Transferred qualified PUREX staff**
  - **Developing updated facility training plan**
- **The Hanford IPL identifies \$12M for B-Cell in FY-98**
- **Hiring additional Hot-Cell Technicians to support multiple work shift activities on B-Cell cleanout.**

## **324 Facility M-89 Milestones Activities**

### **Overall 324 Facility and Programmatic Issues**

- **An approved long-term storage/disposal location for Special Case Waste (B-Cell dispersibles, FRG logs, Cs capsules/powder) has not been identified. Status:**
  - **Interim storage locations identified for FRG and CS**
  
- **Hot cell cranes require significant maintenance, repair, and replacement due to deterioration in high radiation field. Decontamination is high dose and complex. Status:**
  - **Removal of 6-ton crane and installation of new 10-ton crane is complete**
  - **Integrated "Crane/Airlock" schedule implemented for managing daily activities**

# TPA Milestone M-92-00

# TPA Major Milestone M-92-00

- Acquisition and/or Modification of Facilities for Storage, Treatment/Processing, and Disposal of Cesium and Strontium Capsules (Cs/Sr), Unirradiated Uranium (UU), Bulk Sodium (Na), and 300 Area Special Case Waste (SCW)
- Tri-Party Agreement Major Milestone Management Review
  - August 26, 1997
  - Richland, Washington

# Milestone Description/Deliverable/Status

## Cesium and Strontium Capsules (Cs/Sr)

- M-92-01 (12/2009): Complete commercial disposition and/or facility acquisition and/or modification for sitewide consolidation, and storage or treatment and/or repackaging of Cs/Sr
  - Includes following:
    - 13 Capsules at 327 Pool Facility, 300 Area
    - Capsules at WESF, 200 Area
    - Unencapsulated Cs/Sr salts at 324 Facility, 300 Area

Status: On schedule

# Milestone Description/Deliverable/Status

## Cesium and Strontium Capsules (Cs/Sr)

- M-92-02 (9/1997): Submit Hanford Site Cs/Sr Project Management Plan (PMP) to Ecology pursuant to Agreement Action Plan Section 11.5
  - Cs/Sr PMP includes following:
    - All plan elements required by Section 11.5
    - Find feasibility evaluation and determination regarding vitrification of 300 Area Cs/Sr at 324 melter
    - Establish all major project tasks and deliverables

Status: On schedule; preliminary PMP Draft to Ecology for informal review 8/97; comments being dispositioned

# Milestone Description/Deliverable/Status

## Cesium and Strontium Capsules (Cs/Sr)

- M-92-03 (12/1997): Submit modified Hanford Facility Part A Permit Application to Ecology incorporating all Hanford Site Cs/Sr capsules (300 Area and unencapsulated salts) for which a commercialization contract has not been executed

Status: On schedule; NOI issued 7/97. This is a NOI for WESF Part A Permit for storage.

# Milestone Description/Deliverable/Status

## Cesium and Strontium Capsules (Cs/Sr)

- M-92-04 (12/1998): complete transfer of all 300 Area Cs/Sr to WESF and/or an approved storage location

Status: On schedule. Preparations in progress for sending capsules to WESF by 9/30/97.

# Milestone Description/Deliverable/Status

## Cesium and Strontium Capsules (Cs/Sr)

- M-92-05 (6/2003): Inclusion of Hanford Site Cs/Sr “treatment and/or repackaging parameters” in DOE TWRS Phase II Request for Proposals (treatment and/or repackaging of all remaining Cs/Sr)

Status: On schedule; redefining baseline for inclusion, with tank waste, for Vitrification Phase II.

# Milestone Description Deliverable/Status

## Unirradiated Uranium (UU)

- MX-92-06-T01 (12/2000): Complete commercial disposition and/or facility acquisition and/or modification for storage, treatment/processing, and disposal/disposition of all Hanford Site UU

Status: On schedule; 21,000 kilograms ready for disposal in burial grounds as non-hazardous/non-radioactive waste

# Milestone Description/Deliverable/Status

## Unirradiated Uranium

- MX-92-07-T01 (12/1997): Submit Hanford Site UU Project Management Plan (PMP) to Ecology pursuant to Agreement Action Plan Section 11.5

Status: On schedule

- M-92-08-T01 (6/1998): Submit Hanford Site UU Disposition Assessment Report

Status: On schedule

# Milestone Description/Deliverable/Status

## Sodium (Na)

- M-92-09 (TBE by 10/1998): Complete facility acquisition and/or modification for storage, treatment/processing, and disposal of Hanford Site sodium

Status: On schedule

- M-92-10 (10/1998): Submit Hanford Site Sodium Project Management Plan (PMP) to Ecology pursuant to Agreement Action Plan Section 11.5

Status: On schedule

# Milestone Description/Deliverable/Status

## Sodium (Na)

- MX-92-11-T01 (3/2002): Complete disposition options for all Hanford non-radioactive sodium

Status: On schedule; 48,000 gallons (3 rail cars) awaiting transfer to requested facility, additional 600 gal sold, 3100 gal in loops, 110 gal NaK awaiting disposition

- M-81-02-T01 Revised (6/1998): Submit Final Sodium Disposition Evaluation Report/Decision Point

Status: On schedule

# Milestone Description/Deliverable/Status

## 300 Area Special Case Waste (SCW)

- M-92-12 (9/2006): Complete facility acquisition and/or modification for consolidated storage prior to disposal of Hanford Site 300 Area SCW

Status: On schedule

- M-92-13 (9/2000): Submit 300 Area SCW Project Management Plan (PMP) to Ecology pursuant to Agreement Action Plan Section 11.5

Status: Not currently identified in out year planning.

# Milestone Description/Deliverable/Status

## 300 Area Special Case Waste (SCW)

- M-92-14 (9/2002): Complete removal and transfer and initiate storage of Phase I, 300 Area SCW waste and materials

Status: On schedule

- M-92-15 (9/2004): Complete removal and transfer and initiate storage of Phase II, 300 Area SCW waste and materials

# Milestone Description/Deliverable/Status

## 300 Area Special Case Waste

- M-92-16 (9/2006): Complete removal and transfer and initiate storage of Phase III, 300 Area SCW waste and materials

# Significant Accomplishments

## (Last Six Months)

- Continued preparations for the transfer of thirteen Cs/Sr capsules from 327 Facility to WESF consistent with the target completion date of 9/30/97
- Completed transfer of unirradiated uranium billets from 300 Area Fuel Supply Shutdown (N-Fuels) Facility to British Nuclear Fuels Limited (United Kingdom)
- Completed receipt and burial of UU from United Kingdom.

# Significant Accomplishments

## (Last Six Months) contd.

- Completed burial of PUREX drums containing UU in form at UO3
- Transferred non-radioactive sodium from Tank 1720 DR to railroad tanker for sale to commercial vendor
- Transferred non-radioactive sodium from 3718-M to railroad tankers for sale to commercial vendor

# Significant Planned Actions

## Next Six Months

- Transfer Cs/Sr capsules from 327 Facility Pool to WESF by target completion date of 9/30/97
- Submit Hanford Site Cs/Sr Project Management Plan
- Transfer 41,000 gallon of Na to offsite vendor location

# Budget/Cost Status

- FY 1997 Activities in Progress
- FY 1998 Activities - Budget planning on going

# Issues

- Special Case Waste (B Cell dispersibles, German logs, Cesium capsules/salts) does not have an approved long-term storage/disposal location

Status: Interim storage location identified for German logs and cesium capsules

- Outyear funding for SCW phase II and phase III currently unfunded.

# Non-TPA Regulation Issues/ Potential Impacts to TPA

- None at this time

Date: August 26, 1997

1. Significant Activities Last Three Months

Continued Fuel Wash

- Nineteen assemblies were processed, filling two Interim Storage Casks (ISC) and partially filling a third ISC.
- The remaining two unusable fuel assemblies are expected to be processed by the end of August.

Received the Last ISC from Vendor

- Have thirty ISCs

Tested Plant Equipment (In-Vessel Handling Machine and Instrument Trees)

- Preliminary results have found no degradation.

Drained Nonradioactive Sodium into Rail Cars and Sold to Commercial User

- Forty-eight thousand gallons from 105-DR and 3718M

Conducting Studies and Analyses

- Preparing documentation that addresses FFTF environmental and safety issues that can be used as primary NEPA support reference.
- Developing a database for referenceable technical information.
- Preparing an independent review of FFTF restart and life-cycle cost and schedule estimates.
- Prepared and issued a Systems Engineering Management Plan.
- Preparing an FFTF medical isotopes production assessment report, including economic and technical feasibility.

2. Budget Status (within budget or explain variance)

\$2 Million Underrun

- Effective management of FFTF standby costs.

Spending and Funding Comparisons

	Budgeted	Estimate at Completion
▪ FFTF Surveillance and Maintenance	\$31.1M	\$29.7M
▪ FFTF Deactivation	\$11.5M	\$ 9.6M
▪ Non-FFTF (NE Legacies and 309)	<u>\$ 4.0M</u>	<u>\$ 4.9M</u>
	<u>\$46.6M</u>	<u>\$44.2M</u>

3. Issues

TPA Change Request

- M-81 milestones are being canceled.
- Plan to submit tentative agreement to Ecology and EPA in the near future.
- The proposed 45-day public comment period will begin September 15, 1997.

4. Non-TPA Regulatory Issues with Potential Impact to TPA Milestone N/A

5. Significant Activities Planned Next Three Months

Initiate Spent Long Assembly Processing.

Continue Plant Equipment Testing.

Begin Activities that will Transfer Legacy Sodium from 221-T.

Complete Studies and Analyses Early in December and Provide to the Office of Nuclear Energy - 1.

Possibly Receive One of the Following Decisions from the Secretary of Energy:

- Resume shutdown
- Remain in standby
- Start the Environmental Impact Statement

Note: Approved form to be submitted to IAMIT members 7 days prior to scheduled Milestone Review.

\_\_\_\_\_  
RL Project Manager

\_\_\_\_\_  
Ecology/EPA Project Manager

DRAFT

Change Number M-81-97-01	<b>Federal Facility Agreement and Consent Order                  Change Control Form</b> Do not use blue ink. Type or print using black ink.	Date August 26, 1997
Originator Ernest J. Hughes <span style="float: right;">Phone 373-9381</span>		
Class of Change <input type="checkbox"/> I - Signatories <input checked="" type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager		
Change Title Modification of Fast Flux Test Facility (FFTF) transition interim milestone and targets (M-81-00 series) due in calendar year 1998.		
Description/Justification of Change In January 1997, the Secretary of the U.S. Department of Energy (DOE), issued DOE's decision to maintain Hanford's Fast Flux Test Facility (FFTF) in a standby mode pending a decision (projected to be made by December 1998) on whether or not the facility will play a role in the nation's tritium production strategy. As a consequence of this action, FFTF transition work is being suspended, and work schedules and associated TPA FFTF transition milestones and target dates are no longer valid. This change request modifies the interim milestone and target dates due in calendar year 1998 to place these requirements in "to be established" status pending the Secretary of Energy's decision. Should the Secretary's decision be that the FFTF shall have no further tritium or isotope production role and that FFTF transition and initiation of the surveillance and maintenance phase should occur; the Department of Energy, Washington State Department of Ecology, and Environmental Protection Agency (the parties) agree that within 90 days following the decision, DOE-RL shall issue a draft change request detailing a proposed set of FFTF transition milestones and associated target dates. Following the receipt of this draft change request, the parties agree to complete negotiation of a new FFTF transition milestone series in no more than six (6) months time.		
Impact of Change Approval of this change control request modifies the current TPA FFTF transition program, and allows all activities required during the standby condition to proceed without jeopardizing any necessary future FFTF mission(s).		
Affected Documents The <u>Hanford Federal Facility Agreement and Consent Order</u> , as amended, and Hanford Site internal planning and budget documents (e.g., Project Management Plans and Multi Year Work Plans).		
Approvals		
_____ Disapproved DOE	_____ Date	_____ Approved _____
_____ Disapproved EPA	_____ Date	_____ Approved _____
_____ Disapproved Ecology	_____ Date	_____ Approved _____

The following M-81-00 series milestones and targets are modified as indicated.

Milestone	Description	Due Date
M-81-00	Complete FFTF Facility Transition and initiate the surveillance and maintenance phase.	12/31/2001
	This major milestone will be achieved by completion of all activities necessary to achieve the end point criteria for placing the facility in a safe and stable surveillance and maintenance mode.	
M-81-00-T01	Complete Reactor Defueling.	9/30/95 Completed 4/19/95
	At the completion of defueling, there will be 236 non-fueled components in the reactor vessel, 113 fueled components in the interim decay storage and 258 fueled components in the fuel storage facility.	
M-81-00-T02	Complete transfer of Irradiated Fuel to Dry Cask Storage.	<del>10/31/98</del> TBE
	The Irradiated Fuel assemblies and pin containers will be transferred from the interim decay storage vessel and the fuel storage facility to the IEM cell for residual sodium removal, loaded into a core component container, transferred to the reactor service building cask loading station for placement into an interim storage cask for dry storage, and transferred to the interim storage area located in the northeast corner to the FFTF complex.	
	Complete transfer of unirradiated fuel to the Plutonium Finishing Plant.	<del>10/31/98</del> TBE
	Thirty two unirradiated fuel assemblies presently stored in the interim decay storage vessel will be transferred to the IEM cell for washing and drying, loaded into existing approved shipping containers, and transferred to an appropriate storage area in the Plutonium Finishing Plant.	
M-81-00-T04	Complete transfer of special fuel to the Idaho National Engineering Laboratory for consolidated storage.	<del>10/31/98</del> TBE
	Sodium-bonded irradiated metal and carbide fuel pins from assemblies cleaned and disassembled in the IEM Cell will be loaded into existing, approved shipping casks, and transported to the Idaho National Engineering Laboratory in Idaho Falls, Idaho, for consolidated storage. One unirradiated metal fuel assembly will also be dispositioned in a similar manner.	

M-81-00-T05	Complete auxiliary systems deactivation.	3/31/2001
	A major portion of the plant auxiliary systems are required to support hot sodium circulation prior to draining the sodium. As these systems, and the balance of plant systems, become available for shutdown, they will be deactivated to a safe, stable condition.	
M-81-01	Initiate sodium storage facility construction.	2/28/97 completed 10/09/95
	This milestone will be achieved when the construction contractor is issued the notice to proceed with construction by the contracting officer.	
M-81-02	Complete sodium storage facility startup.	7/31/98 completed 01/97
	This milestone will be achieved by completion of the sodium storage facility startup activities which include final testing of the mechanical and electrical systems and confirmation that the facility is ready to receive sodium from FFTF. Construction of the new facility closely coupled to the FFTF complex is required to support sodium drain operations. This new facility will be designed, constructed and operated in compliance with RCRA and WAC 173-303 storage requirements. The facility will provide storage capacity for the 260,000 gallons of FFTF metallic sodium coolant.	
M-81-02-T01	Submit final sodium disposition evaluation report/decision point.	6/30/98 TBE
	Under this target DOE will submit its final report following evaluation of the acceptable sodium product form for the TWRS Tank Sludge Pretreatment Process (i.e., caustic washing). This evaluation will be conducted in concert with TWRS TPA Milestone M-50-03 (due date March 31, 1998). This Hanford Site Radioactive (FFTF, Hallam, and Sodium reaction experiment) sodium evaluation will address other conversion options for disposal of the sodium if the product use for TWRS is not viable, regardless of which option is selected, a new sodium reaction facility will be constructed adjacent to the sodium storage facility to convert the bulk metallic sodium to the appropriate chemical form. This report will include a decision on the final disposition of the Hanford Site Radioactive Sodium (e.g., disposal or reuse). Appropriate milestones and target dates will be established for construction and operation of the sodium reaction facility based on the option selected.	
M-81-03	Submit FFTF End Point Criteria Document.	12/31/98 TBE
	A document identifying the end point criteria necessary to place the FFTF in a safe and stable configuration will be developed. This document will be provided to EPA and Ecology for review, and approval for the hazardous substances proposed to remain at the facility.	

M-81-04	Complete FFTF Sodium Drain.	3/31/2000
	<p>This milestone will be complete when all of the sodium coolant has been drained from the plant to the new sodium storage facility to the maximum practical extent. The sodium residuals that remain are integral to the system, are solid in form, and adhere to the surfaces to the system components. The residuals will be maintained under an inert gas blanket to minimize potential reactions during the long-term surveillance and maintenance phase. During final disposition of the facility, any regulated wastes generated from the cleaning or dismantlement of these systems, will be appropriately managed.</p>	
M-81-04-T01	Complete reactor and heat transport system sodium drain.	4/30/98
	<p>The reactor and primary and secondary heat transport system sodium coolant and supporting sodium systems will be maintained in a safe configuration, molten and circulating until the fuel is removed from the FFTF Reactor vessel and the sodium storage facility is operational. The sodium will then be drained to the tanks located in the sodium storage facility and allowed to freeze.</p>	TBE
M-81-04-T02	Complete interim decay storage vessel and fuel storage facility sodium drain.	12/31/98
	<p>The interim decay storage vessel and fuel storage facility sodium will be maintained in a molten state until the fuel is removed from these storage locations. The sodium will then be drained to the tanks located in the sodium storage facility and allowed to freeze.</p>	TBE
M-81-05	Submit FFTF Surveillance and Maintenance Plan.	6/30/2001
	<p>A plan describing the S&amp;M phase will be developed. This plan will be provided to EPA and Ecology for review, and approval for the hazardous substances proposed to remain at the facility. This plan will include documentation of lists of hazardous substances, including dangerous waste that remain in the FFTF Facility upon completion of Phase I activities because the hazardous substance: (1) contains non-dangerous waste components that are highly radioactive, (2) is part of the plant structure and/or (3) is an intact piece(s) of equipment.</p>	

The nineteen Polychlorinated Biphenyl (PCB) electrical transformers at the FFTF will be disposed of after the transformers are removed from service. Twelve of the nineteen transformers, will be drained, flushed and removed from FFTF within thirty days after being removed from service as specified in 40 CFR 761. Seven of the transformers, which are in areas that are difficult to obtain access, will be drained, flushed and removed from FFTF within nine months of cessation of service to ensure their disposal within one year from the start of the storage. Cessation of service constitutes the start of the storage, and 40 CFR 761 limits the storage and subsequent disposal to a one-year period.