AGENDA
TRI-PARTY AGREEMENT MAJOR MILESTONE MANAGEMENT REVIEW
CHAIRPERSON: P. M. Knollmeyer

TUESDAY, May 25, 1999 — 712 Swift Blvd., Suite 5, EPA Conference Room

TIME	MILESTONE	TITLE	RL DIVISION DIRECTOR	CONTRACTOR MANAGER	PRESENTER
9:00 am	M-13-00	Complete RI/FS Submittals	R. A. Holten	J. L. Walsh	R. A. Holten
	M-15-00	RI/FS Process Completion	R. A. Holten	J. L. Walsh	R. A. Holten
	M-16-00	Complete Remedial Actions	R. A. Holten	J. L. Walsh	R. A. Holten
	M-24-00	RCRA Well Installation	R. A. Holten	J. L. Walsh	R. A. Holten
	M-93-00	Disposition of Surplus Reactors	R. A. Holten	J. L. Walsh	R. A. Holten
10:30 am	M-81-00	Fast Flux Test Facility	O. A. Farabee	D. B. Klos	O. A. Farabee
	M-82-00	B-Plant Transition	L. D. Romine	L. J. Olguin	L. E. Rogers
	M-83-00	Plutonium Finishing Plant	L. D. Romine	L. J. Olguin	W. D. Seaborg
	M-89-00	324 Bldg. Closure of MW Units	L. D. Romine	L. J Olguin	D. W. Templeton
	M-92-00	Facilities for Cesium/Strontium, Sodium and Special Case Waste	L. D. Romine	L. J. Olguin	K. L. Williams

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Impacts to Milestone M-34-14A

Status of Cask Loadout System

Phil Loscoe
U.S. Department of Energy
Richland Operations Office

Larry Gadbois
U.S. Environmental Protection Agency

Issue

- Review of the cask drop analysis for the cask loadout system (CLS) identified non-conservative leakage estimates:
  - ***Damage at the wall/floor interface can be extensive***
  - ***Such damage can result in leak rates beyond the acceptable limit***

Proposed Resolution

- A Value Engineering session was held
  - *Several disciplines and organizations represented*
- More than 80 potential solutions were identified. These were broadly categorized as:
  - *Leak Prevention*
  - *Leak Mitigation*
  - *Alternative Opportunities (essentially analyses aimed at making the drop acceptable).*

Selection of Viable Alternatives

- Options were evaluated against the following criteria:
  - *schedule impact*
  - *regulatory acceptability*
  - *Safety (nuclear, industrial, radiation protection)*
  - *Cost*
  - *Applicability to all drop scenarios*

Selected Alternative

- Install impact absorbing material (standard foams) in combination with a modification to the immersion pail support structure to create a hydraulic absorber.
- This change prevents damage to the loadout pit.

Schedule

- Design work is in progress now
- Final design is expected July 15, 1999
- Delivery of the newly designed equipment is scheduled for November 15, 1999
- The K West cask facility modifications will be completed on April 7, 2000
  - *The TPA milestone for this action is September 30, 1999.*

Impact

- The proposed plan is based on NOT impacting the November 2000 start of fuel movement
- A Baseline Change will be required
  - *contractor is preparing a Baseline Change Request for RL approval*
- A change to the TPA milestone M-34-14A will be required
  - *contractor is preparing a FFACO change control form*
  - *this will change only the completion date*

Richland Environmental Restoration Project

TPA Quarterly Review

Tri-Party Agreement

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

May 25, 1999

E9808085.1

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- Decommissioning Projects
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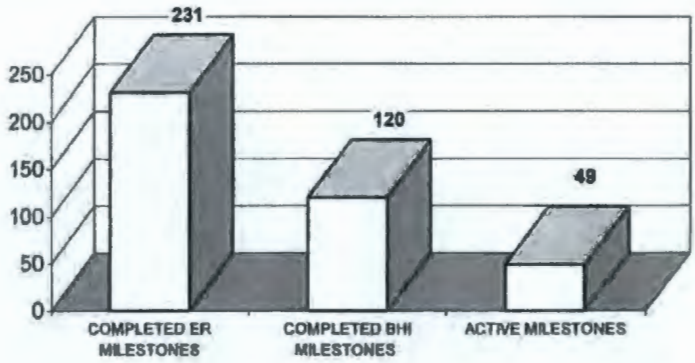
4. COST/SCHEDULE STATUS

- Project Performance
- Forecast
- TPA Schedule

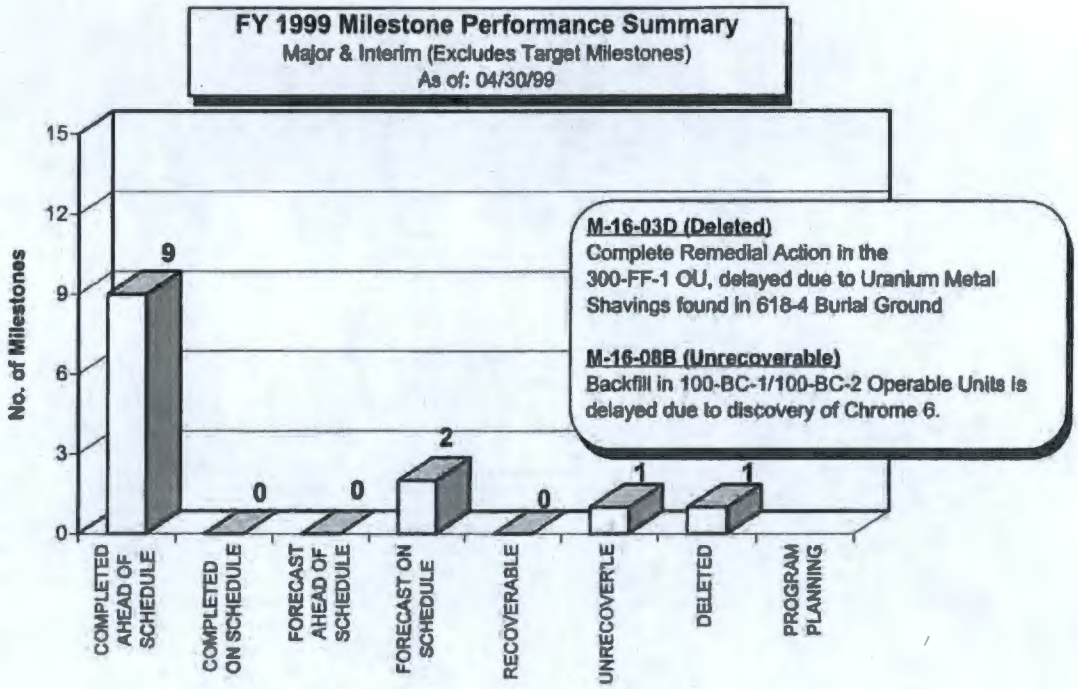
TPA Milestone Statistics (Status through April 30, 1999)
Major & Interim (Excludes Target Milestones)

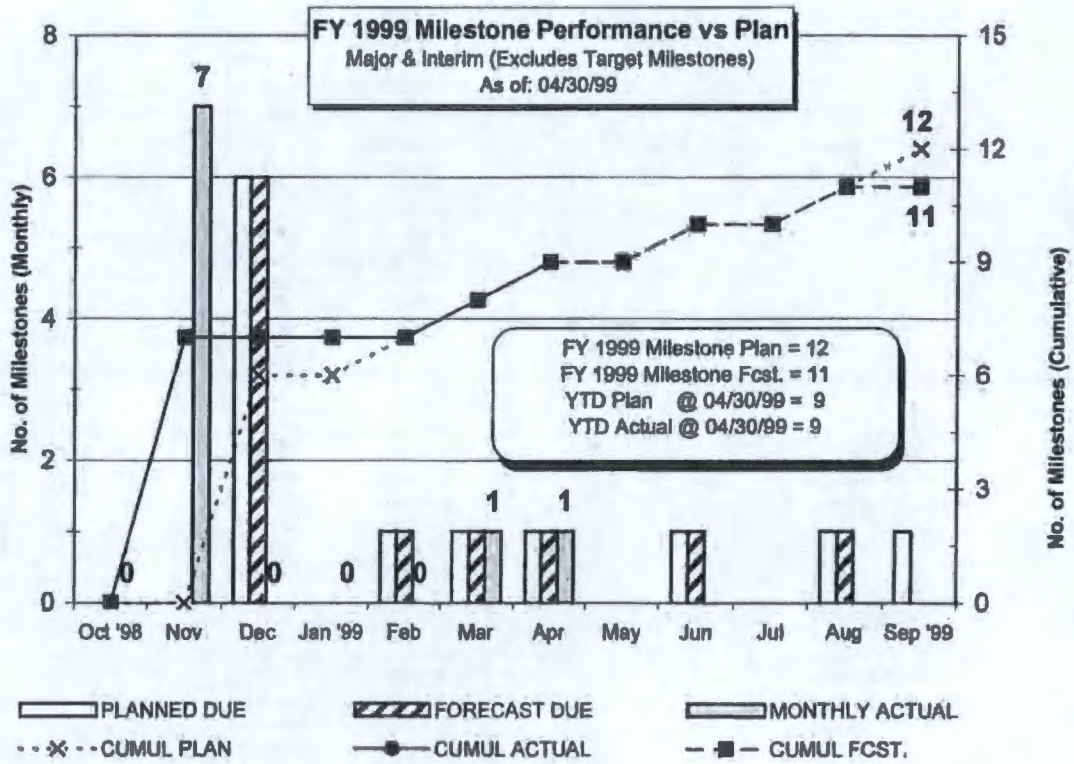


TPA Milestone Statistics
Major & Interim (Excludes Target Milestones)

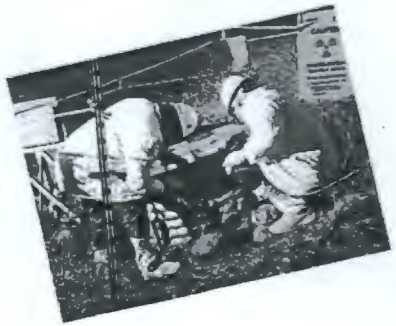
	Compliance Due Date	Milestones Scheduled for Completion	Milestone Number	Compliance Due Date	Milestone Number	Compliance Due Date
M-13-00 Submit Workplans for RFI/CMS or RI/FS Studies	12/31/2005 (M-13-00P)	10	M-13-00K	12/31/2000	M-13-19 (C)	02/28/1999
			M-13-00L	12/31/2001	M-13-20 (C)	04/30/1999
			M-13-00M	12/31/2002	M-13-21	09/31/1999
			M-13-00N	12/31/2003	M-13-22	12/31/1999
			M-13-00O	12/31/2004	M-13-23	04/30/2000
			M-13-00P	12/31/2005	M-13-24	09/31/2000
M-15-00 Site Investigations / Feasibility Studies	12/31/2008 (M-15-00C)	5	M-15-00	12/31/2008		
			M-15-00A	12/31/1999		
			M-15-00B	12/31/1999		
			M-15-00C	12/31/2008		
			M-15-23B	11/30/1999		
M-16-00 Remedial Design / Remedial Action	9/30/2018 (M-16-00)	16	M-16-00	09/30/2018	M-16-07B	04/30/2000
			M-16-00A	TBD	M-16-08B	09/30/1999
			M-16-00B	TBD	M-16-10A	07/31/2002
			M-16-00F	12/31/2001	M-16-13A	01/31/2000
			M-16-01	TBD	M-16-13B	08/31/2003
			M-16-03A	06/30/2002	M-16-26A (C)	03/31/1999
			M-16-03D	(Deleted)	M-16-26B	02/28/2001
			M-16-03E	12/31/2000	M-16-26C	08/31/2000
			M-16-03F	TBD	M-16-92B	12/31/1999
M-20-00 Submit Closure Plans for All RCRA TSD Units	(Shared with PHMC) 2/28/2004 (M-20-54)	5	M-20-33	10/31/2003		
			M-20-39	02/28/2003		
			M-20-52	12/31/2003		
			M-20-53	12/31/2003		
			M-20-54	02/28/2004		
M-24-00 RCRA Groundwater Monitoring	12/31/2003 (M-24-00O)	5	M-24-00J (C)	12/31/1998	M-24-36 (C)	12/31/1998
			M-24-00K	12/31/1999	M-24-37 (C)	12/31/1998
			M-24-00L	12/31/2000	M-24-38 (C)	12/31/1998
			M-24-00M	12/31/2001	M-24-39 (C)	12/31/1998
			M-24-00N	12/31/2002	M-24-40 (C)	12/31/1998
			M-24-00O	12/31/2003		
M-70-00 ERDF Operational	7/01/1996A (M-70-00)	0				
M-93-00 Reactors on River Final Disposition	TBD (M-93-00)	8	M-93-00	TBD	M-93-11	09/30/2003
			M-93-04	06/30/1999	M-93-12	02/28/2002
			M-93-05	06/30/2000	M-93-14	06/30/2003
			M-93-10	07/31/2003	M-93-15	12/31/2003
TOTAL		49				
COMPLETED SINCE 10/98			9			

FY 1999 TPA MILESTONE PERFORMANCE





FY 1999 TPA Milestone Summary
(Excludes Target Milestones)



		Schedule: Planned / *Actual (A)* / *Forecast (F)*	Ahead/On	Missed or Forecast Late
M-24-36	Install one (1) replacement RCRA well for the 216-U-12 Crib	12/31/98 *11/25/98A*	☑	☐
M-24-37	Install two (2) replacement RCRA wells for the SST WMA T	12/31/98 *11/25/98A*	☑	☐
M-24-38	Install four (4) replacement RCRA wells for the SST WMA	12/31/98 *11/25/98A*	☑	☐
M-24-39	Install two (2) replacement RCRA wells for SST WMA	12/31/98 *11/25/98A*	☑	☐
M-24-40	Install one (1) additional RCRA well for the SST WMA B-BX-BY	12/31/98 *11/25/98A*	☑	☐
M-24-00J	Install RCRA groundwater monitoring wells at the rate of 0 to 50 in CY 1998 (if required)	12/31/98 *11/25/98A*	☑	☐
M-13-19	Submit 200 North Pond and Trench Cooling Water Plan	02/28/98 *11/02/98A*	☑	☐
M-16-26A	Initiate remedial action for 100-HR-1-OU	03/31/99 *03/17/99A*	☑	☐
M-13-20	Submit 200 Gable Mountain/B Pond and Ditch Cooling Water Group Work Plan	04/30/99 *04/16/99F*	☑	☐
M-16-03D[1]	Complete remediation of the 300-FF-1 waste sites		☐ DELETED	☐
M-93-04	Submit 105-B Hazards Assessment and Characterization Report to EPA	06/30/99 *06/30/99F*	☑	☐
M-13-21	Submit 200 Chemical Sewer Group Work Plan	08/31/99 *08/31/99F*	☑	☐
M-16-08B[2]	Complete remediation and backfill of 19 liquid waste sites in 100-BC-1/100-BC2 OU's	09/30/99 ~~*12/31/99F*~~ *03/31/00F*[3]	☐ BEING RENEGOTIATED	☑

DOE/Ecology need to be addressed

[1]M-16-03D Change request M-16-96-05 deletes this milestone and replaces it with two new outyear milestones
[2]M-16-08B Evacuation and Backfill in 100-BC-1/100-BC-2 Operable Units is delayed due to the discovery of Chrome 6.
[3]M-16-08B Revised forecast date includes additional days to cover unplanned plumes.

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Second Quarter TPA Change Requests (January - March 1999)

Approved Change Control

M-16-98-05
Remedial Design / Remedial Action
Approved 03/19/99

This change request deleted M-16-03D milestone and replaces it with two M-16-03E and M-16-03F outyear milestones.

M-16-03D (Deleted) Complete remediation of the waste sites in the 300-FF-1 Operable Unit as defined in the Remedial Design Report/Remedial Action Work Plan for the 300-FF-1 Operable Unit.

includes Rpeline ?? THIS IS MISLEADING.

M-16-03D Replaced by:

M-16-03E (12/31/00) Complete remediation of the waste sites in the 300-FF-1 Operable Unit (Excluding the 618-4 Burial Ground), to included excavation, verification, and backfilling.

M-16-03F (TBD) Complete excavation, verification, soil and drummed waste treatment and disposal, and backfilling of the 618-4 Burial Ground.

Pending Change Control

M-16-99-01
Remedial Design / Remedial Action
Pending

M-16-08B Complete Remediation and Backfill of 19 Liquid Waste Sites in the 100-BC-1 and 100-BC-2 Operable Units as defined in the Remedial Design Report/Remedial Action Work Plan for the 100 Area from September 30, 1999 to **March 31, 2000.**

M-24-99-01
RCRA Groundwater Monitoring
Pending

This change request establishes Calendar Year 1999 Interim Milestones for RCRA Well Installation.

The following RCRA well locations are in support of Milestone **M-24-00K**, "Install RCRA groundwater monitoring wells at the rate of...up to 50 per year..."

M-24-41 Install three (3) additional RCRA wells for the SST WMA S-SX 12/31/99

M-24-42 Install one (1) replacement RCRA well for the 216-S-10 Pond 12/31/99

M-24-43 Install one (1) additional RCRA well for the SST TX-TY 12/31/99

M-24-44 Install one (1) RCRA well for the 216-B-3 Pond (This is an extension of the CERCLA vadose borehole) 12/31/99

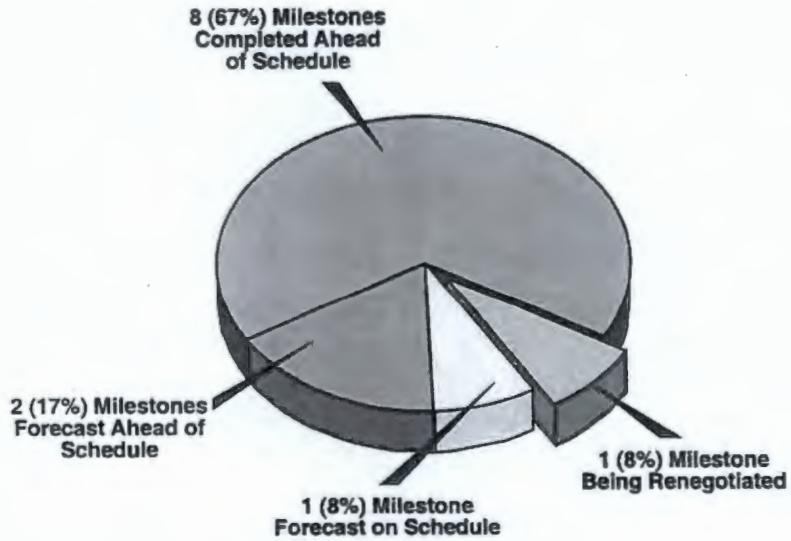
M-24-45 Install two (2) additional RCRA wells for the SST WMA B-BX-BY 12/31/99

Bold/Underlined = Added and Text Changes

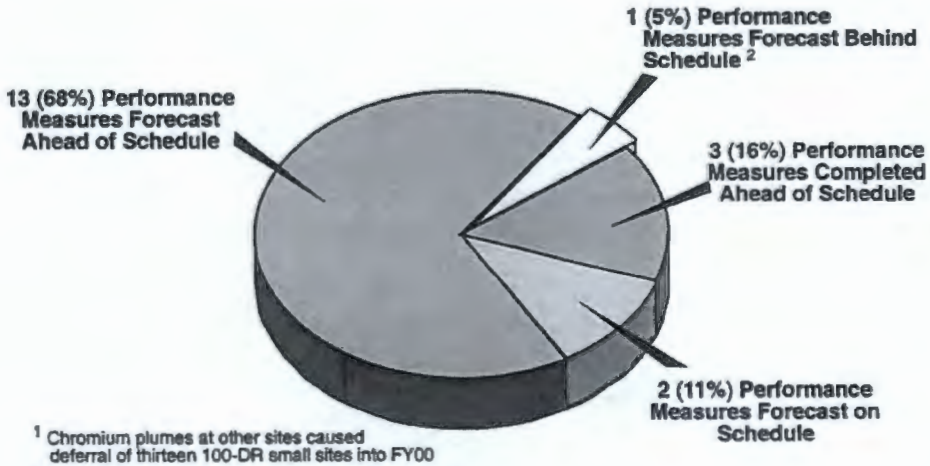
~~Strike Through = Text Deletions~~

Key Indicators

FY99 TPA Milestones (12)



FY99 Performance Measures (19)[1] (Release Sites & Facilities)

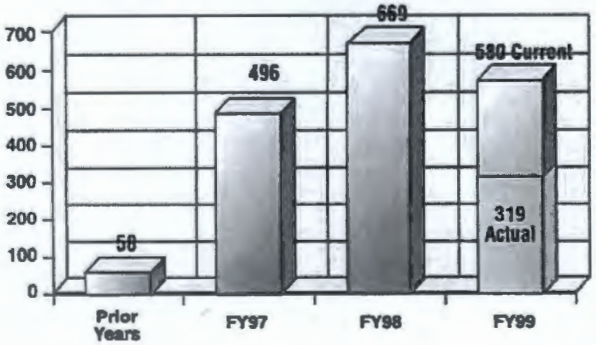


[1] Chromium plumes at other sites caused deferral of thirteen 100-DR small sites into FY00

[2] Due to additional plumes at 316-2 North Process Pond, a BCP was initiated and approved in April to revise the completion date to July, 1999

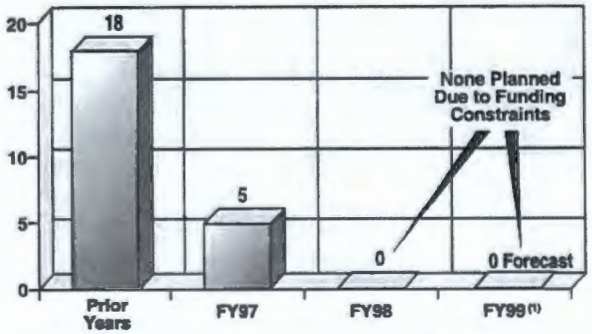
Soil and Material Disposed

(Thousands of Tons Disposed)



D&D Completions

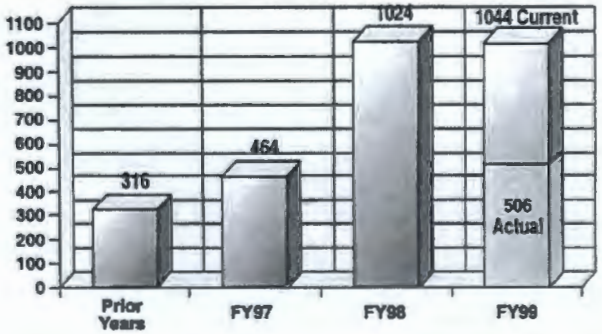
(Number of Facilities)



(1) D&D of 108-F Biological Laboratory will be complete but final report will remain

Groundwater Processed

(Millions of Liters Processed)



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STATUS BY PROJECT

FY 1999 Mid-Year Status

Progress as Promised

Remedial Actions
- Waste Site Remediation in progress at 100-B/C, 100-DR, and 300 Areas
- Commenced Waste Site Remediation at 100-HR in March
- Three Waste Sites Completed through March
- ~319,000 Tons of Contaminated Soil Removed in FY99
- Cost/Ton Reduced Due to Efficiencies

Decommissioning
- Interim Safe Storage of F and DR Reactors progressing ahead of schedule
- D&D continuing at 233-S Pu Concentration Facility
- Initiated D&D at 108-F Biology Laboratory

Environmental Restoration Disposal Facility (ERDF)
- Received 1.5M Tons of Contaminated Soil (to date)
- Expansion of 2 New Cells Ahead of Schedule for Completion this Year

Surveillance & Maintenance
- S&M of Inactive Facilities Continuing
- Transition Support on PUREX and B Plant Turnover
- Risk Assessment Corrective Actions

Groundwater Management
- Continuing Management of Hanford GW Monitoring and Remediation
- Five Pump and Treat Units Operating
- One Vapor Extraction System Operating

Groundwater/Vadose Zone Integration
- Project Specification, Baseline, and Long Range Plan developed
- Hanford Integrated Project Management Team in Place
- Expert Panel Reviews
- National Labs Participation
- Public Participation
- System Assessment Capability Underway

Program Management and Project Support
- Project Management and Oversight
- Maintained the ERC Quality, Safety and Health Program
- Provided Engineering and Technology Support
- Maintained Financial and Administrative Control
- Provided External Interface and Communications

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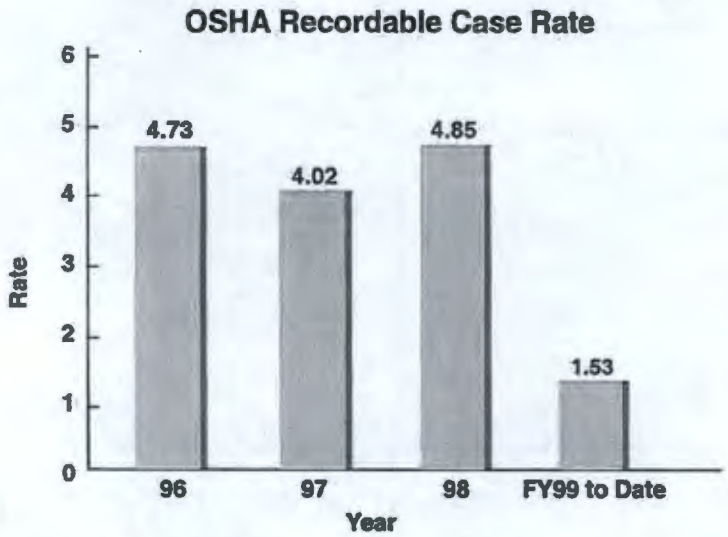
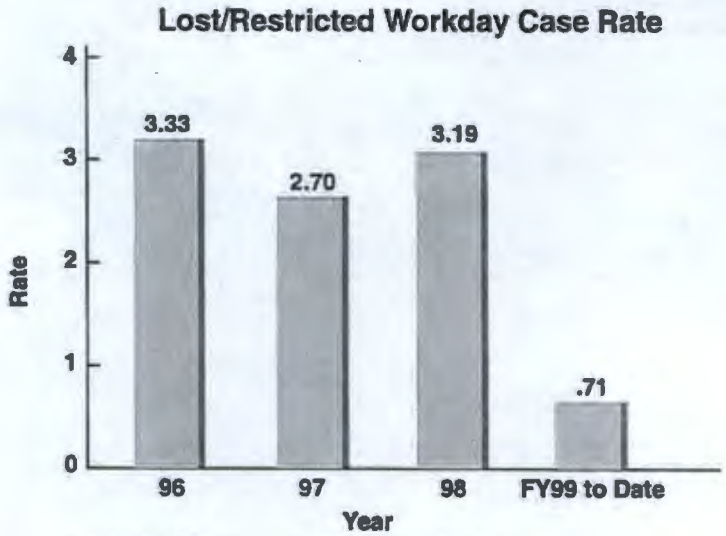
Zero Accidents/Incidents Program

- Over twelve months since last ERC team lost time accident
- In October, the ERC team achieved 1,000,000 hours without a lost time accident
- Zero CH2M Hill lost time accidents since the inception of ERC contract (July 1994)
- Over 2,000,000 miles driven by Teamsters on Remedial Action/Waste Disposal Projects without a motor vehicle accident
- Hosted four Safety Leadership Workshops; total of ~ 130 participants
- Over 2500 facility entries at 233-S without any contamination events or recordable injuries
- No lost time or skin contaminations at 100-DR and 300-FF-1 remediation sites and ERDF operations in over 2 years
- Nine months without a radiological occurrence report



* Bureau of Labor Statistics (BLS) = 8.6
** 1997 DOE Average (Construction) = 4.6



* 1997 DOE Average (Construction) = 2.3

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Remedial Action & Waste Disposal Project

100 Area Scope of Work

- Complete excavation of the 116-C-5 retention basin plumes
  Completed excavation of the 116-C-5 retention basin plumes, including a Chrome 6 plume found during closeout confirmation sampling. Backfill partially deferred to FY00 due to discovery of Chrome 6 plumes

- Complete excavation of the 116-B-11 trench plumes
  Completed excavation of the 116-B-11 trench plumes. Backfill scheduled to start in June

- Initiate and complete excavation and backfill of the 116-B-1 trench
  Initiated excavation of the 116-B-1 trench and additional plumes
  Verification sampling completed and awaiting results to confirm excavation is complete
  Backfill deferred to FY00 due to discovery of Chrome 6 plumes at 116-C-5

- Initiate and complete backfill of 116-C-5, 116-B-13, 116-B-14, and 116-B-11
  Backfill of 116-B-11, 116-B-13, and 116-B-14 will commence in the summer
  Backfill of 116-C-5 will start but not finish this fiscal year due to Chrome 6 plumes at 116-C-5

- Initiate test revegetation at 116-C-1
  Initiated test revegetation at 116-C-1. Revegetation completed and now watering and monitoring in progress

- Initiate and complete excavation and backfill of the 116-B-16 crib, 116-B-10 dry well, 116-B-12 crib, 116-B-2 fuel storage basin trench, 116-B-3 crib, 116-B-4 french drain, 116-B-6A crib, 116-B-6B crib, and 116-B-9 french drain
  Initiated excavation of the 116-B-16 crib, 116-B-10 dry well, 116-B-12 crib, 116-B-2 fuel storage basin trench, 116-B-3 crib, 116-B-4 french drain, 116-B-6A crib, 116-B-6B crib, and 116-B-9 french drain. Backfill deferred to FY00 due to discovery of Chrome 6 plumes at 116-C-5

- Initiate and complete excavation and backfill of the 116-C-2A crib, 116-C-2B pump station, and 116-C-2C sand filter
  Initiated excavation of the 116-C-2A crib, 116-C-2B pump station, and 116-C-2C sand filter. Backfill deferred to FY00 due to discovery of Chrome 6 plumes at 116-C-5. The subcontractor is currently scheduled to demobilize in February 2000

- Demobilize the 100-BC subcontractor
  Subcontractor will not demobilize this year due to the discovery of Chrome 6 plumes at 116-C-5. The subcontractor is currently scheduled to demobilize in February, 2000

- Complete excavation of 116-DR-9 retention basin base volume and plumes
  116-DR-9 retention basin base volume and plumes have been excavated; final closeout sample results are required to confirm completed excavation

- Initiate and complete excavation and backfill of the 100 DR pipelines (WIDS sites 100-D-48 and 100-D-49) north of D Avenue
  Initiated excavation of the 100 DR pipelines (WIDS sites 100-D-48 and 100-D-49) north of D Avenue. Deferred completion to FY00 due to discovery of plumes at 116-D-7

- Initiate and complete excavation for the 116-D-1A/116D-1B storage basin trench, 116-D-2 crib, 116-D-3 french drain, 116-D-4 french drain, 116-D-6 french drain, 116-D-9 crib, 100-D-12 dichromate station, 116-DR-3 storage basin trench, 116-DR-4 pluto crib, 116-DR-6 trench, 116-DR-7 inkwell, and 100-D-52 drywell
  Deferred Excavation of 116-D-1A/116D-1B storage basin trench, 116-D-2 crib, 116-D-3 french drain, 116-D-4 french drain, 116-D-6 french drain, 116-D-9 crib, 100-D-12 dichromate station, 116-DR-3 storage basin trench, 116-DR-4 pluto crib, 116-DR-6 trench, 116-DR-7 inkwell, and 100-D-52 drywell, to FY00 due to Chrome 6 plumes encountered at 116-D-7
  Excavated Chrome 6 plume at 116-D-7 that was discovered during closeout confirmation sampling. Chrome 6 was still present after the excavation of 1 additional meter. Awaiting results of sampling to determine next course of action
  Closeout Verification packages for five wastes sites were signed by DOE and the regulators the first half of FY99. The completed wastes sites are 116-C-1, 100-D-4 (107-D5), 100-D-20 (107-D3), 100-D-21 (107-D2), and 100-D-22 (107-D1)

- Mobilize at 100-HR-1
  100-HR-1 mobilized in March

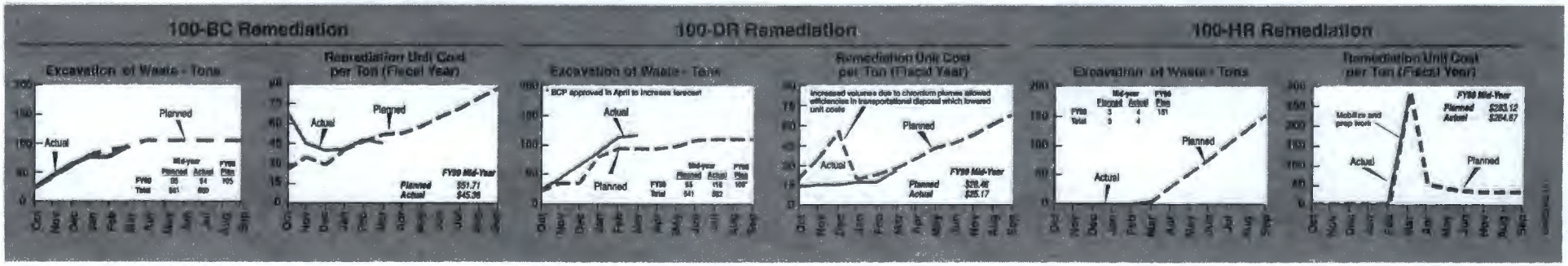
- Initiate and complete excavation of the 116-H-7 retention basin
  Excavation of the 116-H-7 retention basin began March 17

- Initiate 116-N-3 (1325-N) remedial design
  Remedial design for the 116-N-3 crib (1325-N) was started in January. This work will continue through November when a bid package will be assembled for remedial action

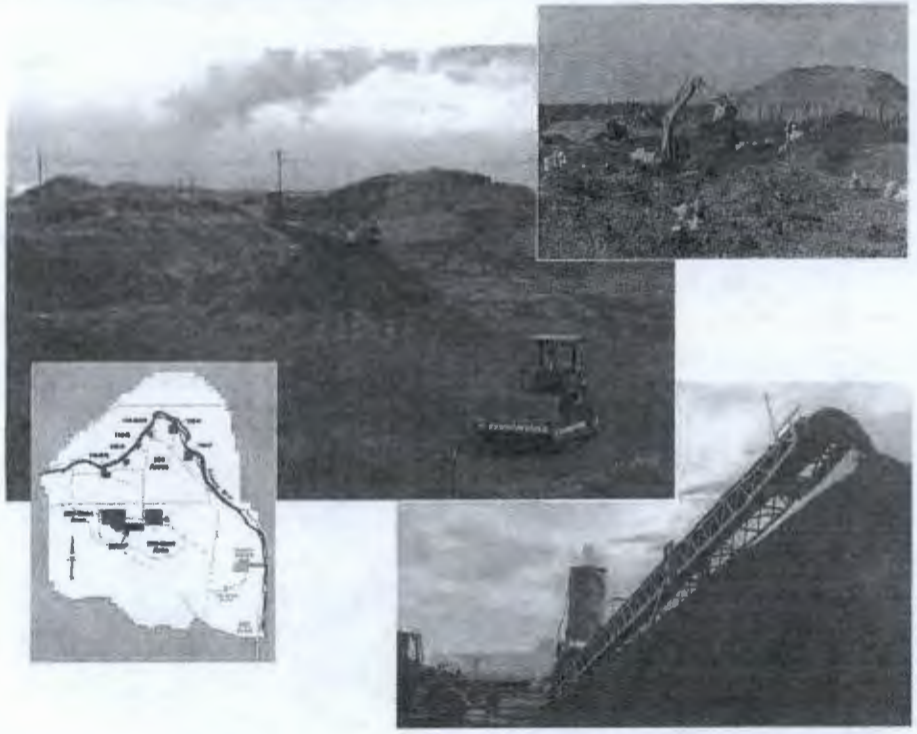
- Initiate the Group 5 remedial design for remaining sites
  Group 5 design activities started in the first quarter of FY99. The site confirmation work has been deferred to FY00 in an April approved BCP. Other activities will continue through the rest of FY99

- Complete the 100 Area Remaining Sites Administrative Record Document Proposed Plan, and provide support to RL and the agencies in preparation of the 100 Area Remaining Sites ROD
  The Proposed Plan for the 100 Area Remaining Sites was completed in November of 1998 and sent to the Administrative Record. EPA is in the process of writing the Record of Decision (ROD)

- Initiate the 100 Area burial ground Feasability Study (FS) and proposed plan
  The first draft of the 100 Area Burial Ground Focused Feasability Study (FFS) was submitted to DOE in the first quarter of FY99. After receiving comments, a second draft was resubmitted in March. The Proposed Plan is on hold until DOE meets with EPA on recommended alternatives



Remedial Action & Waste Disposal Project



200 Areas Scope of Work

Assessment and Barrier Testing in the 200 Area are included in the Groundwater/Vadose Zone Integration Project Section

300 Area Scope of Work

Current Status

- Continue remediation of the 300-FF-1 liquid waste sites

FY99

- Complete excavation and waste disposal of the north process pond, south process pond, Landfill 1A, and restart excavation and disposal of the 618-4 Burial Ground

  The north process pond is nearly excavated and the south process pond excavation is underway. A portion of Landfill 1A excavation will be completed this year with the balance to be completed in early FY 2000. Issued a report based on the completed assessment of the treatment/disposal options for the uranium drums at the 618-4 Burial Ground. Excavation of 618-4 Burial Ground will be restarted in early FY 2000

- Regrade Landfill 1D, the north process pond, and south process pond waste sites. Revegetate the 300 Area process trenches, 300-44, 300-45, and 300-10 waste sites

  Landfill 1D will be regraded in FY 99, but the north process pond and the south process pond will be regraded in FY 2000. Revegetation of the 300 Area process trenches, 300-44, 300-45, and 300-10 are essentially complete except for a small area awaiting completion at the 300 Area Process Trenches

- Conduct one annual round of groundwater sampling at the 618-11 burial ground (well 699-13-3A) (300-FF-2)

  The annual 300-FF-2 Groundwater Sampling for the 618-11 burial ground (well 699-13-3A), was conducted in January. Sampling results were received back from the laboratory in March

- Sample well 699-S6-E4A at the 618-10 burial ground/316-4 crib area semiannually

  The semi-annual sampling of well 699-S6-E4A at the 618-10 burial ground was conducted in January

- Issue the annual groundwater summary report (300-FF-2)

  The "Hanford Site Groundwater Monitoring for FY 1998" report was issued in February

- Prepare and issue an ERC internal draft, decisional draft, and draft A FFS, and proposed plan (300-FF-2)

  Work began on the 300-FF-2 FFS in February. This work will continue through FY99 and will include preparing a Proposed Plan

ERDF Scope of Work

Current Status

- Began ERDF expansion.

FY99

- Waste disposal operations activities

  ERDF received 318,536 tons of waste to-date through mid-year

- Groundwater and air monitoring requirements

  Groundwater and air monitoring activities, in support of operations, continued on schedule with positive results

- Waste transportation activities

  Completed 5,546,061 Ton-Miles of WasteTransportation to-date through mid-year

- Develop, process, and initiate treatment of lead contaminated soils from 300-FF-1

  Successfully completed the development, process, and treatment of lead contaminated soils from 300-FF-1. EPA approval of the test plan, completion of the bench-scale testing, and subsequent treatment of all 42 containers of lead containing soils was completed by mid-year

- Construction of cells 3 and 4, including excavation, liner placement, leachate collection system installation, and other site infrastructure requirements

  ERDF Cells 3 and 4 construction activities began on schedule. At mid-year, excavation of the footprint of Cells 3 and 4 was complete, the admix test pad results were satisfactory, admix generation and placement was initiated, and drain rock production was initiated. The project will complete construction activities by year-end, approximately seven weeks ahead of schedule

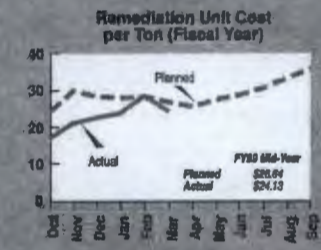
- Construction quality assurance requirements and related project support and construction management

  Construction quality assurance activities, as well as other project support and management activities, continued on schedule in support of construction activities

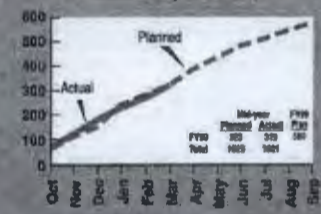
- Design and initiation of construction of the interim closure for cells 1 and 2

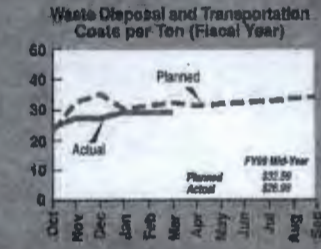
  Interim closure activities have not been initiated in the first half of FY 1999. These activities will be deferred to FY 2000, to balance funding requirements in FY 1999. Interim closure activities are not likely to be able to start in the field until mid-year FY 2000

300-FF Remediation



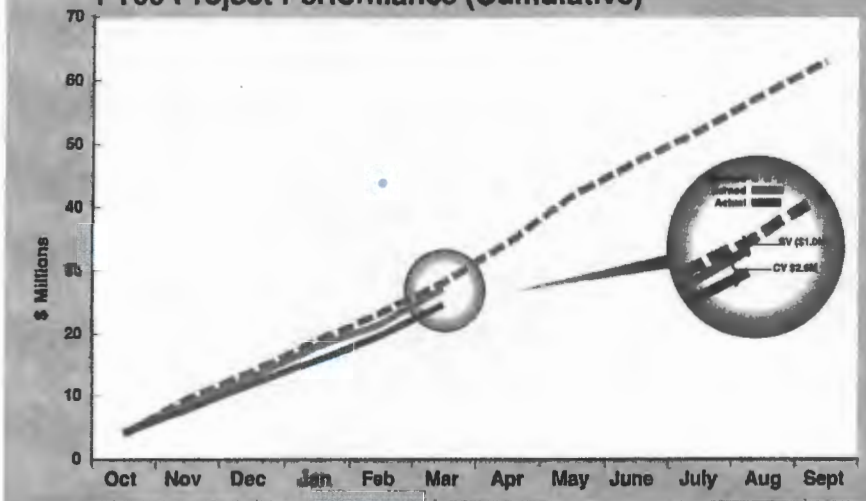
ERDF





Remedial Action & Waste Disposal Project

FY99 Project Performance (Cumulative)



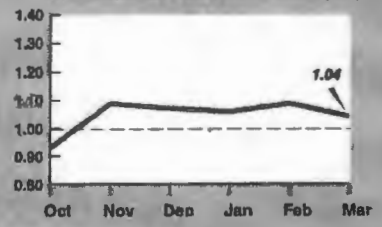
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
BCWS (Planned)	3.9	9.5	13.8	19.8	23.2	28.0	34.3	41.8	47.3	52.1	57.7	62.8
BCWP (Earned)	4.2	8.7	12.8	17.8	21.3	27.0	-	-	-	-	-	-
ACWP (Actual)	4.1	7.8	11.7	15.7	19.5	24.4	-	-	-	-	-	-

FY99 Expenditures (Monthly)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total
Labor	1.1	1.8	1.3	1.6	1.1	1.4	1.6	1.9	1.5	1.3	1.7	2.3	18.3
Matl/Eqpt/Other	0.0	0.1	0.0	0.1	0.1	0.4	0.2	0.2	0.5	0.1	0.1	0.2	2.0
Subcontracts	3.0	2.1	2.5	2.3	2.6	3.1	4.8	5.0	4.1	3.3	3.9	4.2	40.9
Total	4.1	3.7	3.8	4.0	3.8	4.9	6.6	7.1	6.1	4.7	5.7	6.7	61.2

Schedule Performance

FYTD Schedule Performance Index (SPI)

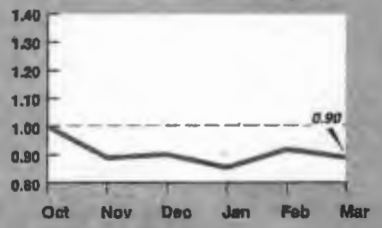


Schedule Variance (SV)

- Discovery of additional plumes
- Delay in approval to dispose of lead-contaminated soil at ERDF
- Delays from revised approach of Group 5 design
- Deferred purchase of disposal containers

Cost Performance

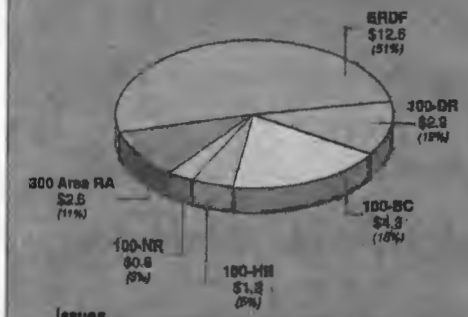
FYTD Cost Performance Index (CPI)



Cost Variance (CV)

- 100 Area performance efficiencies resulted in lower unit costs (mild winter weather contributed)
- Waste transportation underruns
- Reduced waste volume at 116-C-5 chrome plume resulted in performance savings
- Reduced regulatory support requirements

Subproject Actual Costs to Date (Project Total $24.4 Million)



Issues

- Lead-Contaminated Soil Disposal: Lead contaminated soil that exceeds ERDF Waste Acceptance Criteria was discovered in Landfill 1D and the 618-4 burial ground at 300-FF-1. 42 waste containers that were already transported to ERDF were stored there until a disposal waiver was granted. The remaining soil, which has been stockpiled at the remediation site cannot be disposed in ERDF until a plan for further characterization/ treatment/disposal is developed. A decision on the disposal method needs to be made by June in order to avoid a delay in completing 100-D-1 remediation

  Strategy/Status: ERC has suggested that some of the soil may be allowed to remain in place without treatment, if the interspersed debris is removed and sent to ERDF. EPA initially advised RL that a treatability variance would not be granted. Due to the viability of this option, EPA is now reconsidering granting a variance so the waste could be shipped to ERDF without treatment

- Uranium Drums: A dose-based analysis indicates the drums must be staged in multiple, separate storage areas to reduce the total inventory that could be engulfed during a fire. Questions have been raised regarding adequacy of passive barriers to ensure separation of the staging areas

  Strategy/Status: Working with fire protection experts to develop appropriate means of passive barrier separation

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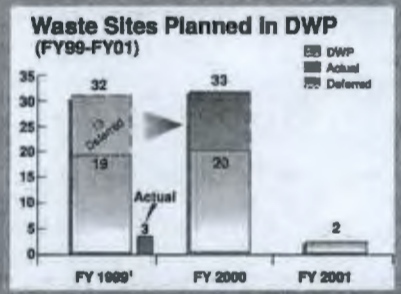
Remedial Action & Waste Disposal Project

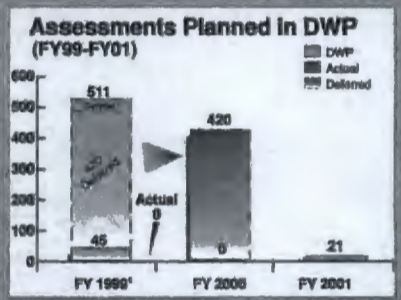
FY99 Performance Measures—Milestone Summary

Milestone	Description	DWP Due Date	Current Baseline Due Date	Forecast (F) Actual (A) Date	Comments
FY99-PM-R01	Complete excavation for 116-B-11 Retention Basin Plumes	11/24/98	05/31/99	10/26/98A	Completed ahead of schedule.
FY99-PM-R02	Complete excavation for 116-C-5 Retention Basin Plumes	10/16/98	03/17/99	01/21/99A	Completed ahead of schedule. Additional excavation required due to Chrome 6.
FY99-PM-R03	Complete excavation for 116-B-1 Trench	01/29/99	01/29/99	01/06/99A	Completed ahead of schedule. Additional excavation required due to Chrome 6.
FY99-PM-R04	Complete excavation for 116-B-16 Crib	09/30/99	05/07/99	04/27/99F	Forecast ahead of schedule.
FY99-PM-R05	Complete excavaton for 116-B-10 Dry Well	09/30/99	05/07/99	04/27/99F	Forecast ahead of schedule.
FY99-PM-R06	Complete excavaton for 116-B-12 Crib	09/30/99	05/07/99	04/27/99F	Forecast ahead of schedule.
FY99-PM-R07	Complete excavation for 116-B-2 Fuel Storage Basin Trench	09/30/99	05/07/99	04/27/99F	Forecast ahead of schedule.
FY99-PM-R08	Complete excavation for 116-B-3 Crib	09/30/99	05/07/99	04/27/99F	Forecast ahead of schedule.
FY99-PM-R09	Complete excavation for 116-B-6A Crib	09/30/99	05/07/99	04/27/99F	Forecast ahead of schedule. Chromium plumes extended the schedule.
FY99-PM-R10	Complete excavation for 116-B-6B Crib	09/30/99	05/07/99	04/27/99F	Forecast ahead of schedule.
FY99-PM-R11	Complete excavation for 116-B-9 French Drain	09/30/99	05/07/99	04/27/99F	Forecast ahead of schedule.
FY99-PM-R12	Complete excavation for 116-B-C-2A Crib	09/30/99	05/07/99	04/27/99F	Forecast ahead of schedule.
FY99-PM-R13	Complete excavation for 116-B-C-2B Pump Station	09/30/99	05/07/99	04/27/99F	Forecast ahead of schedule.
FY99-PM-R14	Complete excavation for 116--C-2C Sand Filter	09/30/99	05/07/99	04/27/99F	Forecast ahead of schedule.
FY99-PM-R15	Complete excavation for 116-H-7 Retention Basin	09/30/99	09/30/99	09/30/99	Forecast on schedule.
FY99-PM-R16	Complete excavation for 116-DR-9 Retention Basin and Plumes	11/03/98	06/21/99	06/21/99	Forecast on schedule. Revised finish date to allow subcontractor to finish the last details during down times. Additional quantities extended the schedule.
FY99-PM-R17	Complete excavation for 116-D-1A Storage Basin Trench	09/30/99	12/03/99	12/03/99F	Deferred to FY00
FY99-PM-R18	Complete excavation for 116-D-1B Storage Basin Trench	09/30/99	12/03/99	12/03/99F	Deferred to FY00
FY99-PM-R19	Complete excavation for 116-D-2 Crib	09/30/99	12/03/99	12/03/99F	Deferred to FY00
FY99-PM-R20	Complete excavation for 116-D-3 French Drain	09/30/99	12/03/99	12/03/99F	Deferred to FY00
FY99-PM-R21	Complete excavation for 116-D-4 French Drain	09/30/99	12/03/99	12/03/99F	Deferred to FY00
FY99-PM-R22	Complete excavation for 116-D-8 French Drain	09/30/99	12/03/99	12/03/99F	Deferred to FY00
FY99-PM-R23	Complete excavation for 116-D-9 Crib	09/30/99	12/03/99	12/03/99F	Deferred to FY00 Due to Chromium plumes.
FY99-PM-R24	Complete excavation for 116-DR-3 Storage Basin	09/30/99	12/03/99	12/03/99F	Deferred to FY00
FY99-PM-R25	Complete excavation for 116-DR-4 Pluto Crib	09/30/99	12/03/99	12/03/99F	Deferred to FY00
FY99-PM-R26	Complete excavation for 116-DR-6 Crib	09/30/99	12/03/99	12/03/99F	Deferred to FY00
FY99-PM-R27	Complete excavation for 116-DR-7 Inkwell Crib	09/30/99	12/03/99	12/03/99F	Deferred to FY00
FY99-PM-R28	Complete excavation for 100-D-12 Sodium Dichromate Station	09/30/99	12/03/99	12/03/99F	Deferred to FY00.
FY99-PM-R29	Complete excavation for 100-D-52 Drywell	09/30/99	12/03/99	12/03/99F	Deferred to FY00.
FY99-PM-R30	Complete excavation for 316-2 North Process Pond	11/09/98	01/11/99	07/15/99	Forecast behind schedule. Discovery of plumes has extended the schedule. Additional quantities re-sequenced the schedule.
FY99-PM-R31	Complete excavation for 316-1 South Process Pond	04/20/99	06/10/99	06/10/99F	Forecast on schedule. Discovery of plumes has extended the schedule. Additional quantities re-sequenced the schedule.
FY99-PM-R32	Complete excavation for 300-49 Landfill 1A	08/11/99	09/30/99	09/30/99F	Forecast on schedule.

Disposal Volume:
Planned volume changed from 641 thousand tons to 680 thousand tons. (7% increase)



[1] Chromium plumes caused deferral of (three) 100-DR small sites to FY2000



[1] The number of assessments were revised in BOP-WBCB which reflects credit for assessments been accomplished at the Proposed Plan instead of during the characterization process

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Groundwater/Vadose Zone Integration Project

Groundwater/Vadose Zone Integration

- Prepare and issue a draft Groundwater/Vadose Zone Integration (GW/VZ) Project Specification
  The draft Project Specification was issued for public review in December. After incorporation of comments, the document will be issued in June
- Prepare and issue the draft GW/VZ Long Range Plan (LRP) and Baseline (cost and schedule) Document
  The draft LRP and Baseline was issued for public review in December. After incorporation of comments the LRP will be issued in June
- Continue to manage and integrate the GW/VZ project tasks, including integration and interface with Pacific Northwest National Lab (PNNL), and the Project Hanford Management Contractor (PHMC) to plan, track, and report on the GW/VZ core projects
  The integration is being accomplished through: the technical planning Data Quality Objectives (DQO's) process, the development of requirements and interfaces through a joint systems engineering task, and in data consistency through the development and implementation of protocols and Interface Control Documents (ICD). Additionally, the GW/VZ project team is co-located to enhance the integration efforts

- Continue to engage Tribal Nation, stakeholder, regulator, and public in the GW/VZ Project
  The GW/VZ project maintains an open working and meeting policy. In addition to the bi-monthly open project status meetings, the project continues to utilize working groups that engage the "public" in planning and technical issue resolution. Workshops and one-on-one meetings are conducted to support key deliverables. Continue to work closely with the Hanford Advisory Board-Environmental Restoration (HAB-E.R.) committee
- Prepare and issue a draft Science and Technology Plan and Roadmap
  The draft Science and Technology Roadmap were issued for public review in December. After the incorporation of comments, Rev. 1 of the roadmap will be issued in June
- Prepare a Detailed Work Plan for FY 2000 - FY 2002
  This effort will be initiated in the third quarter
- The System Assessment Capability (SAC) task includes the assembly and/or development of the tools and information needed to perform a site-wide assessment of the risks and impacts of contaminant sources remaining at Hanford at the time of Site closure
  Impacts to human health, ecology, cultures, and socioeconomic conditions will be evaluated. During FY99 the SAC will develop the conceptual model for an initial assessment. An initial inventory for the Hanford site will be assembled, key radionuclides and chemicals identified and risk metrics will be developed for use in the initial assessment

Groundwater Management

- Managing groundwater, seismic, and vadose monitoring, well maintenance, well database management, modutank operations and management, and groundwater modeling work scope. Groundwater monitoring is done to maintain compliance with regulations
  Ongoing

100 Area

- Operate pump and treat systems at 100-HR-3, 100-KR-4, and 100-NR including performance monitoring
  Ongoing; exceeded planned availability for HR-3 and KR-4; 99% planned availability for NR-2
- *Revise IROD for 100-HR-3 to incorporate in situ REDOX manipulation*
  Ongoing

Second Half Scope of Work

- Begin deployment of in situ REDOX manipulation at 100-D
- Complete design and one injection well for ISRM remediation
- Install twelve additional wells to support remedial design and plume definition at 100-D Area
- Install monitoring well at 100-KR-4 and extraction well at 100-HR-3

200 Area

- Operate pump and treat systems for 200-UP-1 including performance monitoring
  Ongoing; exceeded planned availability
- Operate pump and treat systems for 200-ZP-1 including performance monitoring
  Ongoing; 99% of planned availability
- Operate Vapor Extraction System (VES) at 200-ZP-2 including performance monitoring
  Restarted on March 29 ahead of schedule
- Disposal of 200 Area legacy Investigative-Derived Waste
  In progress
- Issue FY98 Performance Report for 200-ZP-2
  Complete

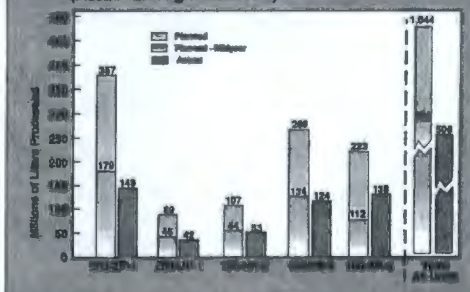
Other Completed/ Work In Progress

- Continued well maintenance activities for sampled Hanford Site wells
- Issued RCRA Quarterly Reports
- Continued Hanford consensus groundwater model development
- Installation of site-wide groundwater monitoring wells (CY 98)
- Issued FY98 Site-wide Groundwater Monitoring Report
- Organic/Carbonaceous Waste Certification Issued
- Approval of IDW Strategy Revision

200 Area Remedial Action

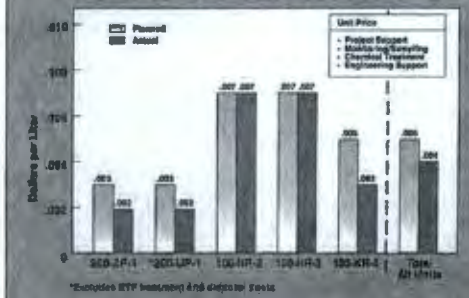
- Issue the final 200 Area Implementation Plan
  To be released in April (DOE-RL-98-28)
- Complete the 200-CW-1 RI/FS work plan with TSD unit sampling plan. Initiate field characterization activities
  On schedule. The Draft A of the RI/FS work plan has been submitted on schedule to DOE for submittal to the regulators (TPA Milestone M-13-20)
  Planning for field work to begin in May
- Initiate the 200-CS-1RI/FS work plan with TSD unit sampling plan.
  On schedule. A DQO process is in progress and a draft of the document is being prepared (TPA Milestone M-13-21)
- Initiate the 200-CW-5 RI/FS work plan.
  Scheduled to begin in May (TPA Milestone M-13-22)
- Initiate the 200-PW-2 RI/FS work plan with TSD unit sampling plan
  Scheduled to begin in September (TPA Milestone M-13-23)
- Rebaselining of the long-range plan based on the 200 Area Implementation Plan; waste site reclassifications; and provide general support for 200 Area-wide activities
  Rebaselining and waste classifications are being adjusted to align with available resources and will be complete in July 1999
- Complete the 200-BP-1 surface barrier treatability test report
  Preparation of a draft A report for regulator review has been added to the schedule

FY99 Groundwater Processed (Actual through March 31)



Groundwater Pump & Treat Units System Availability

Groundwater Processing (FY to Date) Unit Price Per Liter



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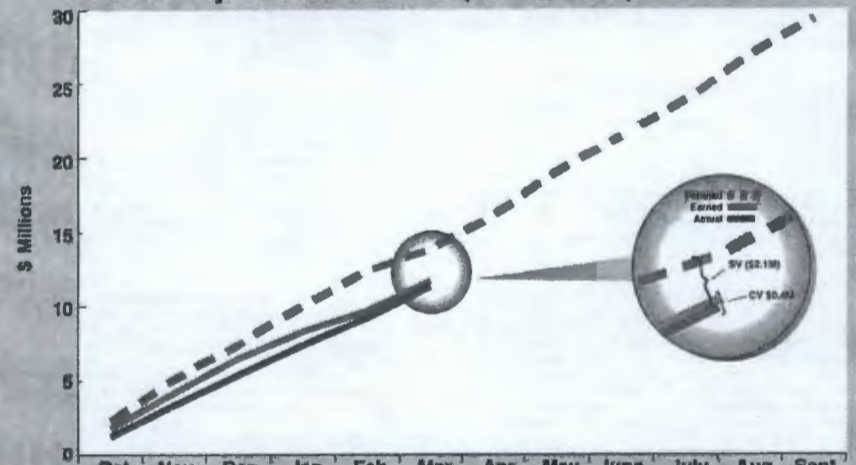
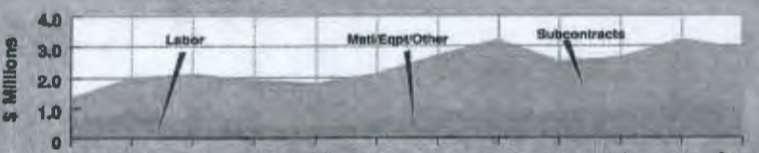
Groundwater/Vadose Zone Integration Project

FY99 Project Performance (Cumulative)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
BCWS (Planned)	2.3	5.1	7.4	10.0	12.3	13.8	16.1	19.0	21.4	23.8	26.9	29.3
BCWP (Earned)	1.8	4.2	6.5	8.3	9.7	11.7	-	-	-	-	-	-
ACWP (Actual)	1.3	3.4	5.4	7.4	9.2	11.3	-	-	-	-	-	-

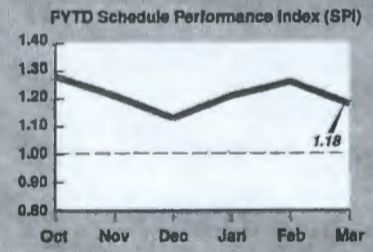
FY99 Expenditures (Monthly)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total
Labor	0.6	0.8	0.5	0.6	0.4	0.5	0.7	0.8	0.7	0.7	1.0	0.8	8.1
Mat'l/Eqpt/Other	0.0	0.1	0.1	0.0	0.0	0.1	0.2	0.0	0.1	0.1	0.5	0.1	1.3
Sub-contracts	0.7	1.1	1.5	1.3	1.4	1.5	1.8	2.4	1.7	1.8	1.7	2.0	18.9
Total	1.3	2.0	2.1	1.9	1.8	2.1	2.7	3.2	2.5	2.6	3.2	2.9	28.3

Actual | Forecast

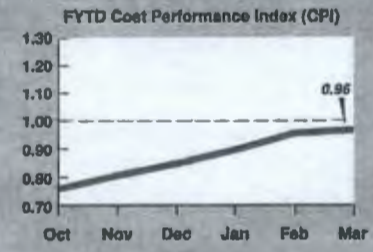
Schedule Performance



Schedule Variance (SV)

- Contractual issues delayed groundwater routine maintenance
- Increased public comments caused deferment of science and technology roadmapping
- Regulator request to delay closeout of prototype barrier to investigate additional funding

Cost Performance



Cost Variance (CV)

- Efficiencies in groundwater monitoring, data evaluation, and mapping
- Offsetting maintenance overrun at 100-HR-3
- Candidate Sets criteria more complex than anticipated

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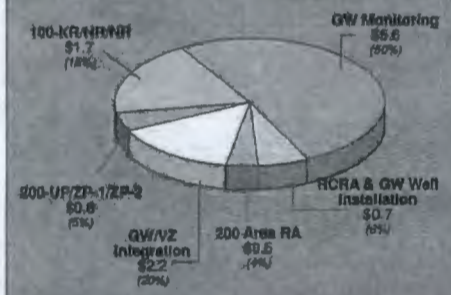
Subproject Actual Costs to Date (Project Total $11.3 Million)



Issues

- RCRA Compliance Well Funding: Groundwater monitoring well installation capital funds will be expended in FY99. No funds are currently available for out-years

  Strategy/Status: RL is reviewing the need for additional funding (either capital or expense) for well replacement and/or installation in FY00 through FY01

- 200-UP-1 Operation: The effectiveness for removing uranium at 200-UP-1 has decreased. The path forward on 200-UP-1 is still uncertain

  Strategy/Status: Operations have been approved through FY99. Discussions with Ecology will continue regarding future plans

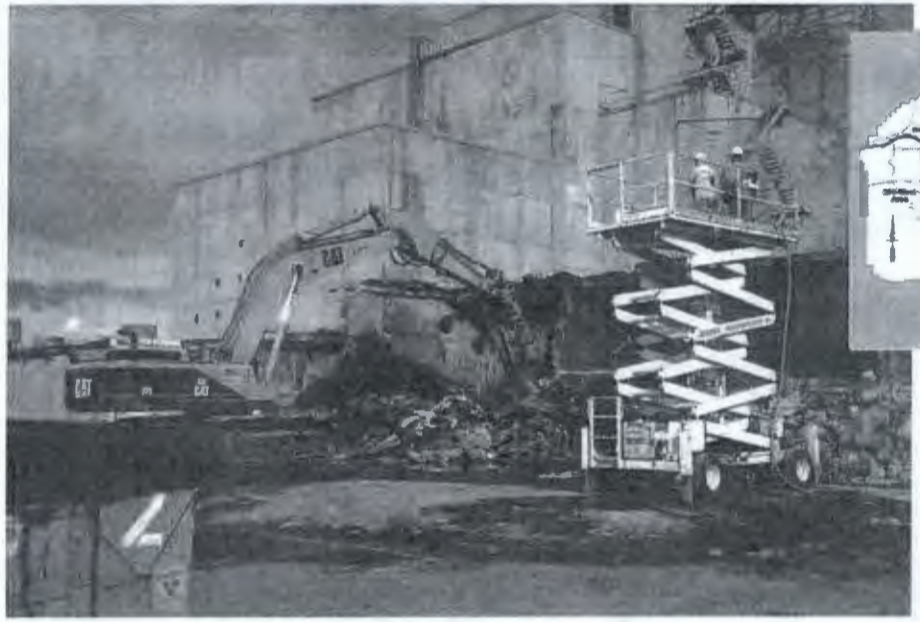
- 200-CW-1 Work Plan: Input from Ecology resulted in the additional characterization for the 200-CW-1 Operable Unit Work Plan. The cost estimate for the additional work is approximately $458K

  Strategy/Status: Additional scope and budget requirements will impact the FY00 budget and will be addressed in the FY00-FY02 DWP

- 200 Area Assessment: IPL 200 Area Assessment funding reduces funding levels to zero in FY00 and FY01 for 200 Area assessment project. Preliminary repercussion is the Department of Ecology will reduce its cooperation in planning of RI/FS workplans this year

  Strategy/Status: Discussions with Ecology are continuing to determine how to efficiently involve Ecology personnel in planning under the current budget scenarios. DWP planning targets will include funding for (3) RI/FS Work Plans; and $3 million for characterization

Decommissioning Projects



> **Historic Building Mitigation Project**

Public comment activities have been completed

Initiation of the final chapter II for the Chemical Separations Report has begun

Chapter III of the Resource Guide for the final treatment report has been initiated

Gathering of documentation in support of the Historic American Engineering Record (HAER) for 221 - T Plant has begun

All work activities are forecasted for completion by September 30

> **Continued D&D of 233-S Plutonium Concentration Facility**

Loadout Hood

Completed site prep activities, including airlock installation and fire detection reactivation

Modified Loadout Hood exhaust duct and installed HEPA filters

Completed glove bag installation and certification. Removed exterior cover and 13 Lexan panels

Completed Loadout Hood sampling (wall, duct and sump)

Performed Non-Destructive Analysis (NDA) of duct

Pipe Trench

Performed Pipe Trench NDA. NDA indicated no criticality controls were required for pipe removal activities

Completed Pipe Trench sampling

Removed all Cold and Hot Trench piping (includes checking for and removal of liquids, purging of potential combustible gas, glovebag removal, surface decontamination, pipe stub isolation, and temporary cover installation)

FRA/ORR

DOE-RL approved Focused Readiness Assessment (FRA) Memorandum of Understanding (MOU) and Implementation Plan

Completed all design and work packages supporting the scope of the FRA

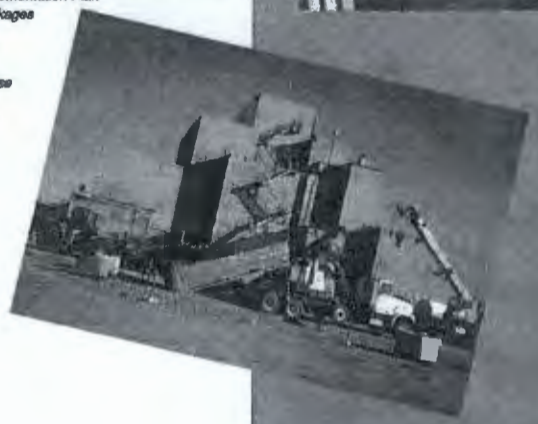
Competed Project Management Assessment of Readiness

Completed the FRA contractor phase

Miscellaneous/Functional Support

Completed 18 months (90,660 hours worked) of decommissioning activities without a skin contamination or recordable injury

Packaged and shipped 20 boxes of LLW to ERDF. (62 boxes/4200+ ft3 shipped to date)



Reactor Interim Safe Storage (ISS)

Ahead of Schedule

> Common Reactor Engineering

Completed the F&DR Phase II (above grade structures) sample design

Initiated the F&DR Phase III (below grade) sample design

Received change approval to expand the scope of the Phase III (below grade) program to include the F reactor sample instruction, collection and analysis

The draft SSE design and subcontract package will be developed in the second half of FY99 according to plan

> 105-F Reactor Interim Safe Storage (ISS)

Completed all asbestos abatement and liquid pipe check activities

Completed structural demolition of the valve pit lab, NE reactor area, control room and outer rod room ahead of schedule (16% foot print reduction, 40% to date)

Completed all other original FY99 work scope ahead of schedule

Received change approval for additional field work scope (below grade field sampling, south reactor demo, upper rx HAZMAT removal, valve pit pre demo activities). This was funded by project cost underruns

Fuel Storage Basin (FSB) fill removal planning scheduled to begin in May

> 105-DR Reactor ISS

Completed liquid pipe check activities

Completed exterior supply duct asbestos abatement

Completed structural demolition of the fan room and NE reactor areas

Initiated demo of the NW reactor area, control room and outer rod room. The project is targeting early completion of all FY99 demo scope.

The balance of the year will focus on remaining area asbestos abatement and HAZMAT removal

Decommissioning Project Action Plan

> **108-F Biology Laboratory**

Due to funding constraints, a Management hold was placed on initiation of work activities through December 7

Fieldwork began in February with emphasis placed on asbestos and HAZMAT removal activities

Demolition work is scheduled to begin in June and complete in September

All FY99 work is currently forecasted to complete as scheduled

> **105-B Reactor Museum**

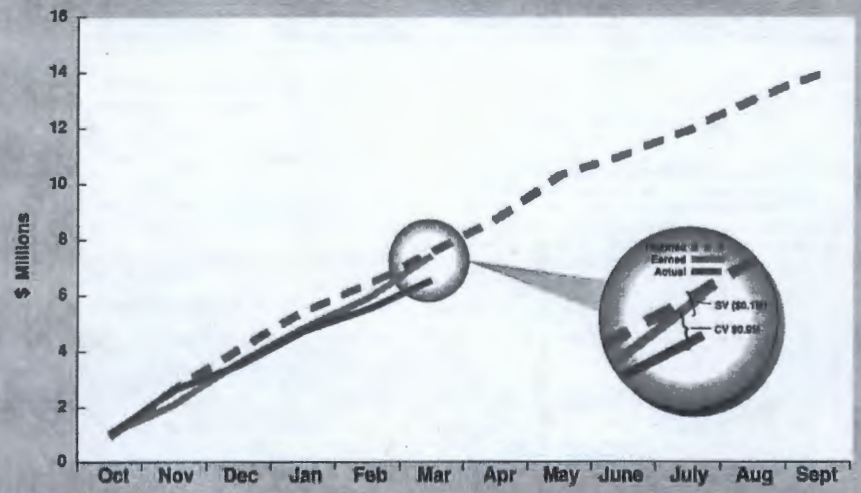
Initiation of assessment activities began in February

Preparation of the "105-B Hazards Assessment and Characterization Report" is proceeding ahead of schedule. TPA milestone M-93-04 requires completion by June 30

E9903092.12

Decommissioning Projects

FY99 Project Performance (Cumulative)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
BCWS (Planned)	0.9	2.6	4.1	5.4	6.4	7.5	8.7	10.3	11.0	11.9	13.0	13.9
BCWP (Earned)	1.0	2.1	3.6	4.8	5.9	7.4	-	-	-	-	-	-
ACWP (Actual)	1.0	2.6	3.5	4.7	5.5	6.5	-	-	-	-	-	-

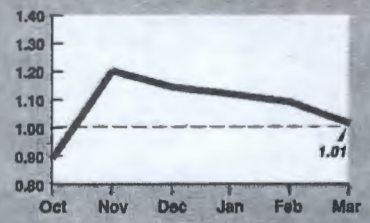
FY99 Expenditures (Monthly)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total
Labor	0.9	1.0	0.7	1.0	0.6	0.9	0.9	1.1	0.8	0.8	1.0	0.6	10.3
Mat'l/Eqpt/Other	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.0	0.0	0.1	0.1	0.1	1.3
Sub-contracts	0.0	0.5	0.1	0.0	0.0	0.0	0.2	0.2	0.1	0.2	0.4	0.1	1.8
Total	1.0	1.6	0.9	1.1	0.8	1.1	1.3	1.3	0.9	1.1	1.5	0.8	13.4

Actual | Forecast

Schedule Performance

FYTD Schedule Performance Index (SPI)

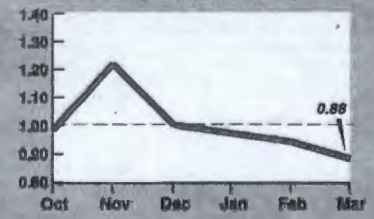


Schedule Variance (SV)

- 233-S decommissioning behind schedule due to premature failure of radiological containment gloves in the Load Out Hood and delay in starting the Focused Readiness Assessment
- F and DR Reactor ISS ahead of schedule

Cost Performance

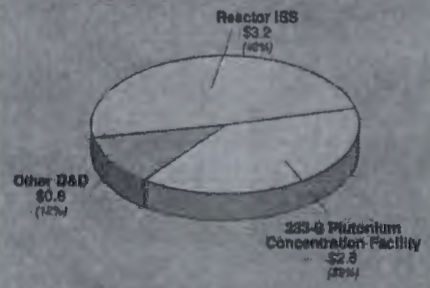
FYTD Cost Performance Index (CPI)



Cost Variance (CV)

- Labor productivity underruns and reduced sampling costs at F Reactor ISS
- Cost overruns at 233-S due to high contamination levels, spurious CAM alarms and additional training requirements due to bumping
- Increased closeout costs of C Reactor ISS roofing contract

Subproject Actual Costs to Date
(Project Total $6.5 Million)



Issues

No significant issues to report at this time

E9903082.19

Surveillance/Maintenance and Transition Project

- Continue S&M of 100, 200, and 300 Area inactive facilities
  Completed annual surveillance for Reactors: 105-B, 105-D, 105-H, 105-KE, and 105-KW. Completed annual building surveillance at 100-N. Continued surveillance in the 200 Area
- Continue S&M of PUREX Complex
  Continued surveillance in the PUREX complex
  Pumped out the V-11 Tank 10-1 and transported effluent to Effluent Treatment Facility
  Commenced Y2K upgrades to the SAMCONS system
- Perform surveillance and maintenance at 308 Building in 300 Area
  Completed first and second quarterly surveillance
- Continue Radiation Area Remedial Action (RARA) surveillance, monitoring, and herbicide activities
  Awarded herbicide contract for the following waste site revegetation: 218-W-2A, 216-U-14, well sites on 216-B-2(1,2,3) and test pits at 216-A-29. Completed 100 Area bare ground herbicide application and commenced 200 Area bare ground application
- Complete RARA stabilizations at 107-KE/KW, 107-F, TC-4, 1303-N and PUREX

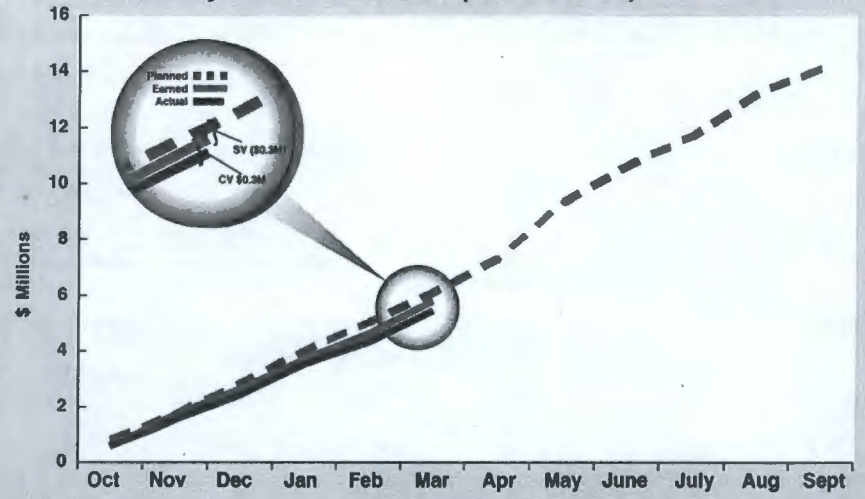
Completed RARA stabilizations at TC-4, 1303-N and PUREX
Commenced contamination area stabilization field work at 107-KE/KW and completed work package preparation for 107-KE/KW pipe removal

- Receive action memorandum to be able to ship RARA waste to ERDF
  RARA waste covered under existing 100 Area ROD. Site Specific Action Memorandum not required
- Complete 105-N and 109-N roof repairs
  Awarded contract in January, mobilized subcontractor, and commenced removing existing roofing material at 109-N in March. Obtained regulator approval to ship removed roofing material to ERDF for disposal
- Sample/Repack/Ship 105-KE/KW and other 100 Area waste to reduce hazards to workers and potential releases to the environment
  Defined scope to include legacy waste removal at 105-B and 105-KE (front face) Reactors. Completed sampling and analysis and air monitoring plans and submitted for approval. Completed work package preparation and constructed temporary enclosure at 105-KE
- Continue Canyon Disposition Initiative (CDI) characterization efforts by characterizing process cells and utilizing technology integration
  Characterization initiated
  Work scope expanded to address 221-U Canyon crane electrical hazard concerns. Completed corrective actions for conductor protection and equipment grounding. Additional scope delayed Canyon Equipment Sampling and Characterization Report to FY00. Completed sampling of the Electrical Gallery sump.
  Additional scope approved to support Vent Tunnel robotics characterization in the second half of FY99
- Complete Pu loadout hood characterization report and commence planning activities for ultimate removal of the Pu loadout hood
  Completed Pu Loadout Hood Characterization Report
  Commenced planning activities to determine recommended engineering option and began preparing the technical description of preferred option analysis
- Provide end-point criteria development and verification support to B Plant
  Continued to provide end point criteria development and verification support to B Plant as required
  Continued BHI procedure development and personnel training for the transition of B Plant
- Complete annual updates to Safety Analysis Report (SARs) and selected Auditble Safety Analysis (ASAs)
  Incorporated comments and reissued 212-N SAR. Final RL approval pending
- Continue long term post-remediation surveillance and monitoring.
  Continued long term post-remediation surveillance and monitoring as required
- Other facility transition support includes:
  - Developed Project Management Plan for 300 Area Revitalization
  - Provided Transition support for development of accelerated PFP project.
  - Supported transition of miscellaneous facilities and waste sites from EM-60 and PNNL into S&M/T

E9903092.10

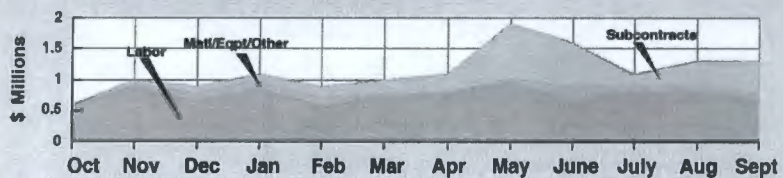
Surveillance/Maintenance and Transition Projects

FY99 Project Performance (Cumulative)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
BCWS (Planned)	0.8	1.7	2.8	4.0	5.0	6.1	7.3	9.3	10.6	11.7	13.2	14.2
BCWP (Earned)	0.8	1.7	2.6	3.7	4.6	5.8	-	-	-	-	-	-
ACWP (Actual)	0.6	1.6	2.5	3.6	4.4	5.5	-	-	-	-	-	-

FY99 Expenditures (Monthly)

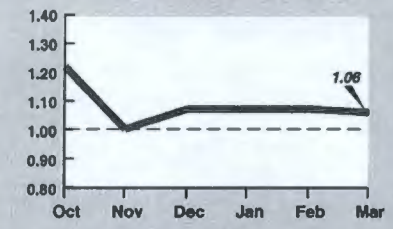


	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total
Labor	0.6	0.9	0.7	0.9	0.6	0.8	0.8	1.0	0.7	0.8	0.8	0.7	9.3
Matl/Eqpt/Other	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.8
Subcontracts	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.9	0.7	0.2	0.4	0.5	3.7
Total	0.6	1.0	0.9	1.1	0.9	1.0	1.1	1.9	1.6	1.1	1.3	1.3	13.8

← Actual → ← Forecast →

Schedule Performance

FYTD Schedule Performance Index (SPI)

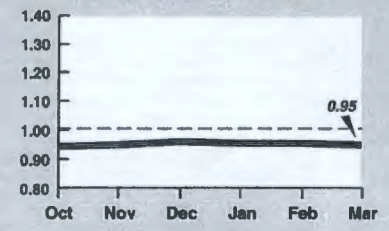


Schedule Variance (SV)

- Decision on purchase of pipe shears deferred for more analysis
- B Plant transition deferred by PHMC

Cost Performance

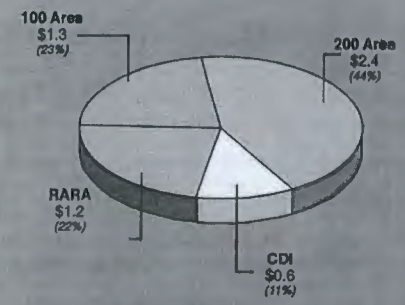
FYTD Cost Performance Index (CPI)



Cost Variance (CV)

- Productivity savings in RARA stabilization
- 100 Area maintenance costs less than budgeted

Subproject Actual Costs to Date
(Project Total $5.5 Million)



Issues

No significant issues to report at this time

E9903062.22

Program Management and Support - ERC

Project & Program Support

- Maintain Automated Procurement Tracking System (PTS), small business program, and continue Balanced Scorecard
  - *Developed and Implemented Procurement Balanced Scorecard (BSC) Plan*
  - *In connection with the Procurement Balanced Scorecard a "Cost Price Analysis Training Course" has been developed. The course includes the recent changes to FAR Part 15, and was designed to be a training tool that can also be used as a reference guide*
  - *Developed agreements (subcontracts) for PHMC enterprise companies*
  - *Continued to exceed Small Business goals for the fourth consecutive year. In addition, one BHI Subcontractor was honored by the Small Business Association (SBA) with an "SBA Excellence" certificate*
  - *Continued Balanced Scorecard Property Management measures.*
  - *One BHI Property Management employee received a DOE Letter of Appreciation for Waste Minimization/Pollution Efforts (Soil Washing Tent redeployment)*
  - *Fire code revisions pertaining to the 100 and 200 Area Facilities resulted in an $800 Million reduction in the site replacement value*
- Records and Document Controls
  - *Developed plan for how electronic records for Government projects will be stored long term to meet corporate record requirements*
  - *Established/Streamlined document processes with Groundwater/Vadose Project for integration of other contractor personnel joining the project*
  - *Conducted a preesentation to Kennewick High School students that afforded the students an opportunity to learn about the field of graphic design, including hands-on demonstration of graphics-related computer hardware and software systems*
  - *Transferred a four wide modular office in a single move from 100N to 100H to support project mobilization. This move resulted in ~ $30,000 savings in mobilization costs*
- Participate in public involvement activities
  - *Provided planning, preparation, and development of products required for Secretary of Energy visit to Hanford and ceremony for C Reactor Interim Safe Storage (ISS) completion*
  - *Produced the ER Project FY 1998 Annual Report*
  - *Developed media action plan and information points in anticipation of EPA's release of its Multi-Media inspection*
  - *Worked with other Hanford communication directors to integrate and improve information outreach*
  - *Attended briefings by Hanford DOE and contractor CEOs to the Washington State legislature and Congressional delegation*

Compliance, Quality, Safety & Health

- Maintain ERC Quality, Safety and Health Program
  - *The ERC Integrated Environment, Safety, and Health Management System Description (ISMSD) was accepted by RL on October 19*
  - *Preparation of self-assessment Criteria and Description System (CRADS) to assess knowledge of ERC personnel relative to the ISMS Core Functions was completed February 12*
  - *Completion of the ERC Criteria and Description (CRADS) self-assessment on March 19*
  - *ISMS validation readiness anticipated by September 30*
  - *Fire Protection System Deactivation Analysis was completed for seven facilities*
  - *Labor Alliance successfully negotiated and safety goals established*
  - *Twenty RadCon self-assessments have been completed in FY99*
  - *The Triennial self-assessments required by 10 CFR 835 were completed in December*
  - *Sixteen Compliance Determination Reports (CDRs) have been completed concerning compliance with 10 CFR 835, Occupational Radiation Protection*

Project Technical Support (Engineering and Technology)

- Identify and evaluate technology needs, gaps, and solutions, and prepare proposals that support project technology needs
  - *Implemented improved technology solutions. Results of these activities include: (1) over $2M of new funding (primarily EM-50) obtained to directly support ERC Projects, and (2) seven environmental restoration technology deployments currently planned for FY99*
  - *Managed Technology Integration for the Canyon Disposition Initiative (CDI). Accomplishments include: (1) obtained FY99 funding from EM-50; (2) developed pilot project concept to secure EM-50 support to the CDI through the Record of Decision; and (3) completed demonstrations of ultrasonic and radiography technologies for the detection of freestanding liquids in pipes and equipment*
  - *Obtained funding for two Accelerated Site Technology Deployment (ASTD) proposals submitted in FY98: (1) in situ REDOX manipulation technology to stabilize chromium in groundwater, and (2) enhanced site characterization system technology to support burial ground cleanup*
  - *Obtained EM-50 Subsurface Contaminants Focus Area support for Innovative Treatment Remediation Demonstration (ITRD) process to identify and select potential technologies to remediate groundwater contaminated with carbon tetrachloride and strontium*
  - *Prepared and established Management Agreements between Technology Application and each major ER Project to focus Technology Application actions on project priority problems*
  - *Worked closely with ER projects to facilitate development of new (and update of existing) science and technology needs, and technology insertion points (TIPS). Technology Application also facilitated input of data on new technology needs into the FY01 Paths to Closure database*
  - *Supported completion of C-Reactor Interim Safe Storage Project with a closing ceremony on October 14, 1998. This Large Scale Demonstration and Deployment project saw 20 Technologies demonstrated and 13 technologies deployed*
  - *Hosted meeting between EM-50 Subsurface Contaminants Focus Area and ER Projects to foster improved understanding of Science and Technology needs and pave the way for focus area support*
  - *Updated BHI EM 50/40 Partnering Strategy and implemented strategy through multiple interactions with EM-50 HQ and EM-50 Subsurface Contaminants Focus Area*
  - *Participated on EM-50 Planning Team for Science and Technology to develop implementation strategy for the new (FY99) Science and Technology Program Plan*
  - *Participated on the EM Science and Technology Program Area Integration Team*
  - *Rendered ER Y2K ready; met or exceeded all Y2K stretch goals (validations); continuing configuration management assessments*
- Ensure protection of natural and cultural resources, including endangered or threatened species. Integrate ecological/cultural values into project-wide planning
  - *Completed laboratory studies for the 100 Area Columbia River Salmon Study*
  - *Completed the habitat mitigation project for bats at the 105-DR Reactor*
  - *Developed a wetland habitat strategy for 100 borrow pits*
  - *Completed a cost benefit analysis for the disposal of concrete materials as backfill for remedial action sites or in clean wells*
  - *Completed the decisional draft on Guidance for Radiological Release of DOE Real Property at Hanford*
- Provide Sample and Data Management Support
  - *Upgraded the Sample Data Tracking software to provide the project staff with user-friendly ability to track samples*
- Prepare input to 30 environmental reports required by environmental statutes regulations, and DOE orders including ERCA/SARA, red air emissions, RCRA dangerous waste, and environmental permitting
  - *Issued a Data Quality Assessment procedure*
  - *Updated the RCRA Permit Implementation Plan to reflect changes that have occurred in permit maintenance*
  - *Updated the ERC Waste Minimization and Pollution Prevention Plan to reflect ERC organizational changes and new guidance from DOE*
  - *Consolidated near-field environmental monitoring services for BHI projects*
  - *Gained agreement on a purgewater tank closure strategy with Ecology that combines a RCRA closure with an EE/CA under CERCLA*
  - *Gained agreement on a revised Investigation Derived Waste (IDW) Strategy to ease the way for disposal of qualifying IDW into the ERDF*
- Provide programmatic technical oversight including the Nuclear Safety and Criticality Program for nuclear facilities and activities
  - *Continue to prepare and maintain engineering guides, criteria specifications, standard procedures and program-wide subcontracts*
  - *A final version of the Engineering Guide for Metric System was issued for project use in support of the Metric Implementation Plan*
  - *Issued an Opportunity Assessment Report for Waste Minimization/Pollution Prevention that identifies three opportunities that could result in volume reduction and lifecycle cost savings*
  - *Issued an Engineering Guide for post-earthquake evaluation of Hanford Site facilities*

Planning & Controls

- Support RL Reports and Presentations (Monthly Progress Report, Progress Tracking System, TPA Milestone Report, Project Plan)
  - *All reporting requirements met on or ahead of schedule*
- Perform project management services (management systems, project controls, reporting, baseline maintenance and scheduling)
  - *Ongoing. Substantial increase in Hanford site integration activities. Working with PHMC personnel on requirements and deliverable dates*
  - *Completed DOE Headquarters directed effort on "TWRS Reprogramming Contingency Plan"*
- Prepare DWP, LRP, PBSs, and Baseline Update/MYWP
  - *Completed and issued baseline database and Long Range Plan (LRP)*
  - *Completed various studies and scenarios in support of the final revised IPL submittal in April*
  - *Updated PBSs to reflect FY99 baseline and LRP updates and stream characteristics, disposition and content; incorporated various new data requirements supporting new Headquarter system (IPABS)*
- Provide support to the Hanford Integrated Site Baseline (ISB)
  - *Efforts are continuing in support of ISB on an as-needed/as-requested basis. Current activities include support of site/facility verification list with the PHMC*
- Funds Tracking and Reporting
  - *Ongoing. Enhanced the Baseline change control process by Quality Improvement Team (QIT) leading to streamlining management reviews and quality improvements to forms, timing, etc.*
- Rate Reviews and Development
  - *Ongoing. Completed FY99 Rev 1 Rate Review and implemented new rates in FY99 Budget Baseline*
- Functional Support Cost Reports
  - *Ongoing. Completed initial FY99 Functional Support Cost Report*

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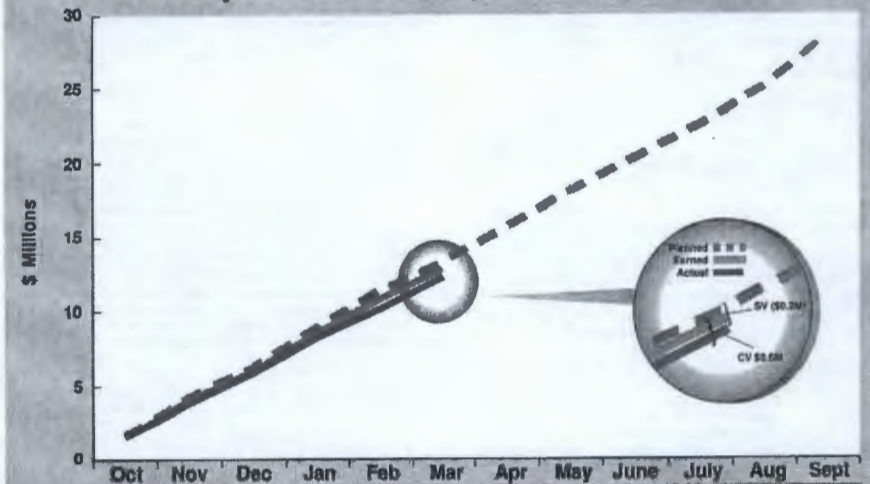
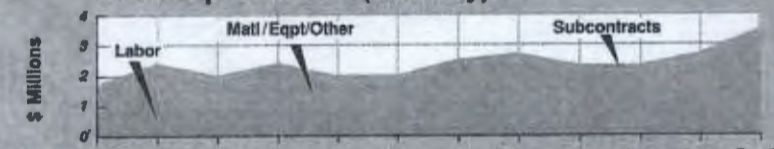
Program Management and Support - ERC

FY99 Project Performance (Cumulative)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
BCWS (Planned)	1.6	4.3	6.3	8.9	11.4	13.3	15.6	18.1	20.3	22.5	25.1	28.5
BCWP (Earned)	1.7	4.3	6.2	8.8	11.0	13.1	-	-	-	-	-	-
ACWP (Actual)	1.7	4.1	6.1	8.5	10.4	12.5	-	-	-	-	-	-

FY99 Expenditures (Monthly)

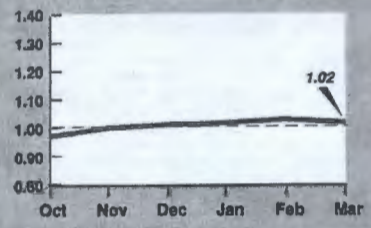


	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total
Labor	0.8	1.3	0.9	1.3	0.9	1.0	1.3	1.5	1.2	1.2	1.5	1.3	14.2
Matl/Eqpt/Other	0.8	0.9	0.9	1.0	0.8	0.8	1.0	0.9	0.9	0.9	0.9	1.9	11.7
Subcontracts	0.1	0.2	0.2	0.1	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.3	2.6
Total	1.7	2.4	2.0	2.4	2.0	2.0	2.5	2.7	2.3	2.3	2.7	3.5	28.5

Actual | Forecast

Schedule Performance

FYTD Schedule Performance Index (SPI)

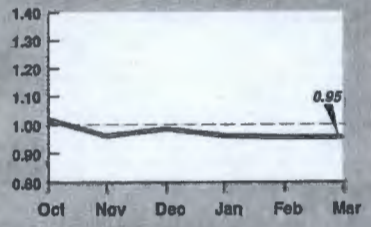


Schedule Variance (SV)

- Engineering scheduled prodedure revisions/updates impacted by higher priority tasks. Supplemental resources to be applied
- Radiological compliance and support activities delayed by need for additional certified health physics resources

Cost Performance

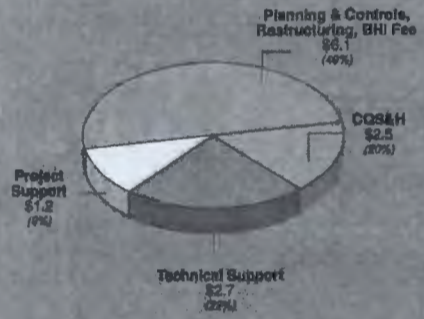
FYTD Cost Performance Index (CPI)



Cost Variance (CV)

- Staffing reductions and increased efficiencies
- Required support for systems engineering, design guides, and DNFSB was less than ordinarily planned.
- Reduced restructuring costs due to steady state FY99 staffing

Subproject Actual Costs to Date
(Project Total $12.5 Million)

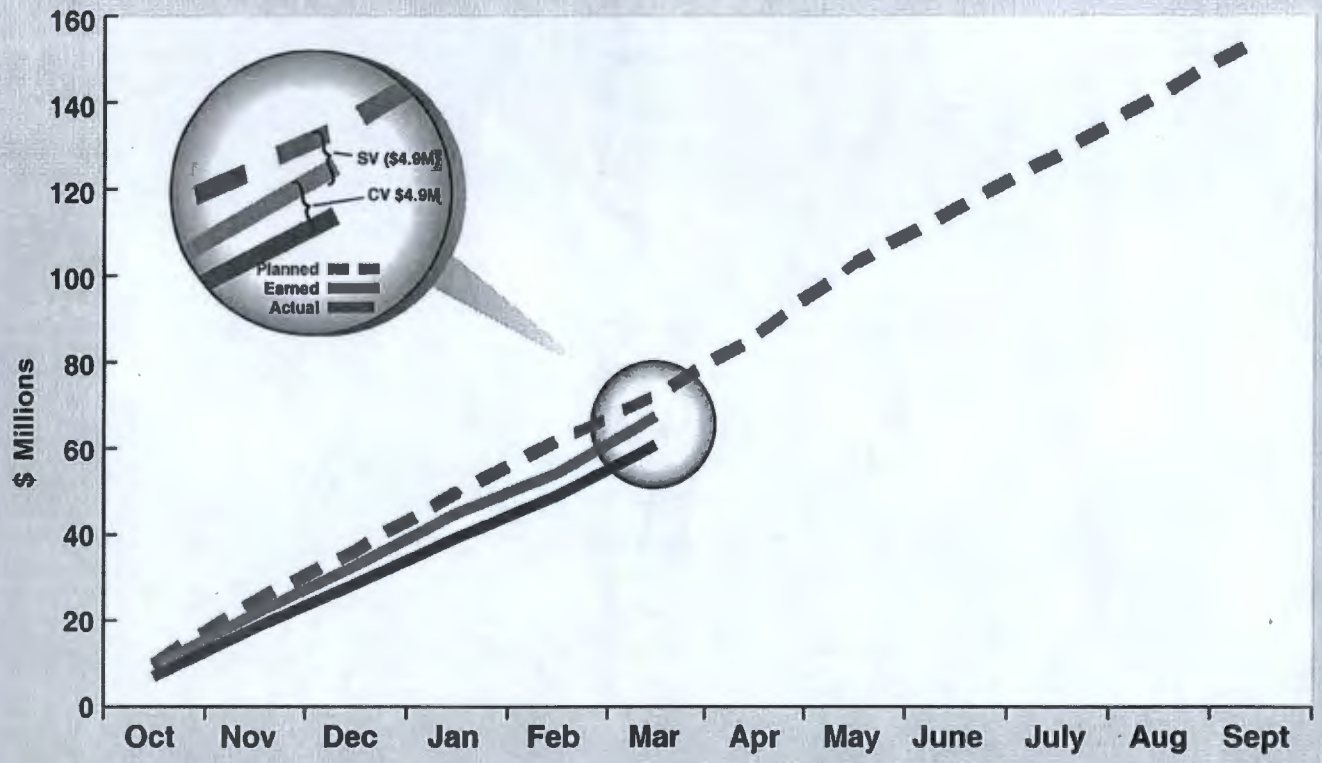


Issues

No significant issues to report at this time

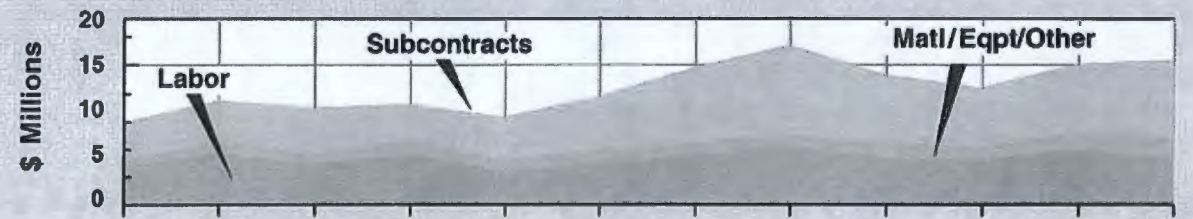
COST/SCHEDULE STATUS

FY99 ER Project Performance (Cumulative)
Status: Mid Year Review



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
BCWS (Planned)	9.9	24.2	35.9	49.5	61.2	71.9	85.8	103.0	115.5	127.4	142.0	155.4
BCWP (Earned)	9.3	21.5	32.7	44.7	53.9	67.0	-	-	-	-	-	-
ACWP (Actual)	8.8	20.0	30.3	41.1	50.5	62.1	-	-	-	-	-	-

FY99 Expenditures (Monthly)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total
Labor	4.0	5.5	4.2	5.4	3.6	4.4	5.3	6.3	4.9	4.8	6.0	5.7	60.1
Matl/Eqpt/ Other	1.0	1.2	1.1	1.3	1.2	1.6	1.3	1.3	1.7	1.4	1.8	2.3	17.2
Sub-contracts	3.8	4.5	5.0	4.1	4.6	5.6	8.0	9.4	7.3	6.2	7.2	9.0	74.7
Total	8.8	11.2	10.3	10.8	9.4	11.6	14.6	17.0	13.9	12.4	15.0	17.0	152.0

Actual → | ← Forecast →

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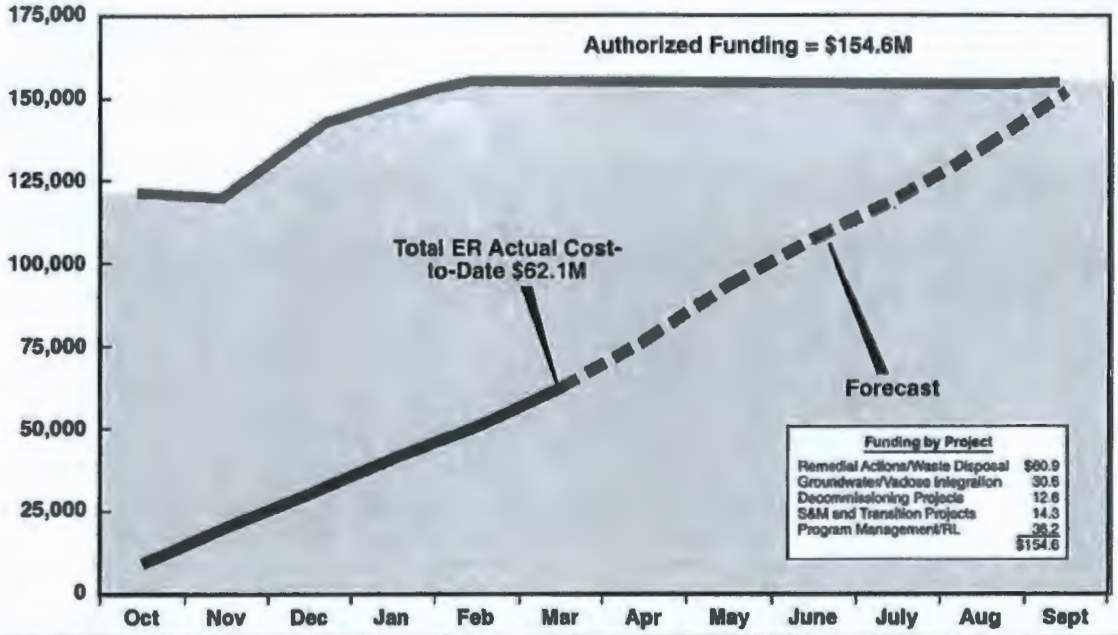
ER Project Summary
Funding vs. Forecast Expenditure (EAC)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	EAC Total
Authorized Funding	119,100	119,300	140,710	148,600	154,555	154,555	154,555	154,555	154,555	154,555	154,555	154,555	
Actual Cost	8,791	20,007	30,291	41,068	50,544	62,098							
March EAC	8,791	20,007	30,291	41,068	50,544	62,098	76,709	93,723	107,695	120,034	135,045	152,019	152,019

Approved BCPs (through 5/04/99)									
ER01	RA	BCP-99104 Group 5 Design; Sched Rev per Regulators	(356)	(162)	(57)	(43)	(12)		(630)
ER01	RA	BCP-99144 Incorporate Extensive Comments to 100N RODs	17	25	39	2			83
ER03	RA	BCP-99115 Disposition of Additional 300-FF-2 Sites	15	21	7	3	1		47
RAWD	RA	BCP-99142 Re-baseline RAWD to Reflect Projected Tonnage	682	110	(100)	76	315	191	1,274
ER05	SM	BCP-99117 Nuclear Safety Documentation Changes	(45)	(41)	(44)	(27)	(7)	4	(160)
ER05	SM	BCP-99151 Additional 200 Areas Sites - Herbicide Spray	6	6	6	6	6	5	35
ER05	SM	BCP-99157 Quantity Reduction at 105-N/109-N Roof Repair	35	(561)	182	123	23	(19)	(217)
ER06	DD	BCP-99154 108-F Biology Masonry Block Re-Use Plan	25	32		32			89
ER08	GW	BCP-99140 Snow Removal Budget from Directs to Distbs.	(39)						(39)
ER10	PM	BCP-99137 Xfer Budget to Planning & Controls from Distribs.	5	1	1	1	1	1	10
Pending BCPs									
ALL	PM	BCP-98168 Evaluation of Distributable Rates				600	70	100	770
ALL	PM	BCP-99169 Distributable Payroll Ads Adjustment				500	80	70	650
ER01	RA	BCP-99170 RA 100/300/ERDF In-Scope Change Allowance		(600)	(600)	(600)	(600)	(600)	(3000)
ER08	GW	BCP-99171 Accelerate Well Decommissioning			150	150	100	100	500
ER05	SM	BCP-99090-R1 107-F Effluent Pipeline (return FY99 scope-BCP-99090)				97	138	112	347
ER05	SM	BCP-99159 Accelerate Roof Repairs at 105-KE/105/KW				75	125	50	250
ER06	DD	BCP-99156 Accelerate DR ISS Ph.III Sampling & Analysis				25	100	75	200
ER06	DD	BCP-99155 Accelerate D & DR Stack Demolition		40	45	80	80	200	445
ER10	PM	BCP-99157 Program Management & Support Efficiencies		(100)	(100)	(100)	(100)	(100)	(500)
ER05	SM	BCP-99165 Delete S&M Status Report			(25)				(25)
ER01	RA	BCP-99172 Initiate Group 3 Small Sites at 100-DR		175	175	175	175	100	800
ER01	RA	BCP-99173 Complete Contamination Plumes at 100-DR		125	125	125	125	100	600
ER01	RA	BCP-99174 Dispose of Contaminated Pipeline Soil				25	75		100
ER01	RA	BCP-99175 Accelerate Backfill at 100-DR		30	30				60
ER01	RA	BCP-99176 Increase Amount of Backfill Placed at 100-BC		25	30				55
ER03	RA	BCP-99164 Work Landfill 1B With 1A at 300-FF-1 & ERDF				200	200	392	792
		2nd Half Estimated Pending/Approved Scope Changes	**345**	**(874)**	**(136)**	**1525**	**895**	**781**	**2,536**

Year-end Monthly EAC	8,791	11,216	10,284	10,777	9,476	11,554	14,611	17,014	13,972	12,339	15,011	16,974	
Year-end Adjusted Monthly EAC	8,791	11,216	10,284	10,777	9,476	11,554	14,956	16,140	13,836	13,864	15,906	17,755	
Estimated EAC at Year-end (Cummulative)	8,791	20,007	30,291	41,068	50,544	62,098	77,054	93,194	107,030	120,894	135,800	154,555	154,555

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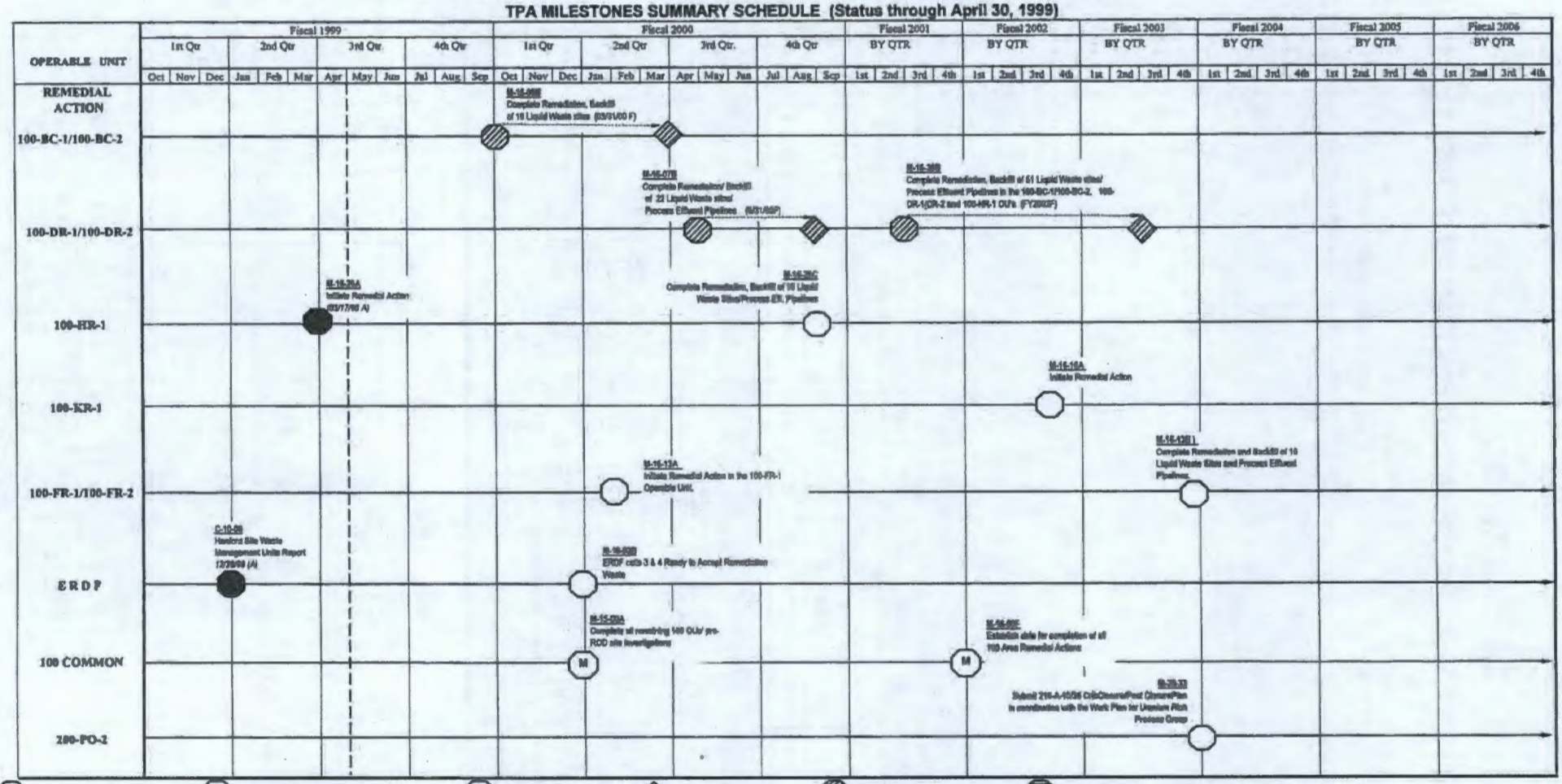
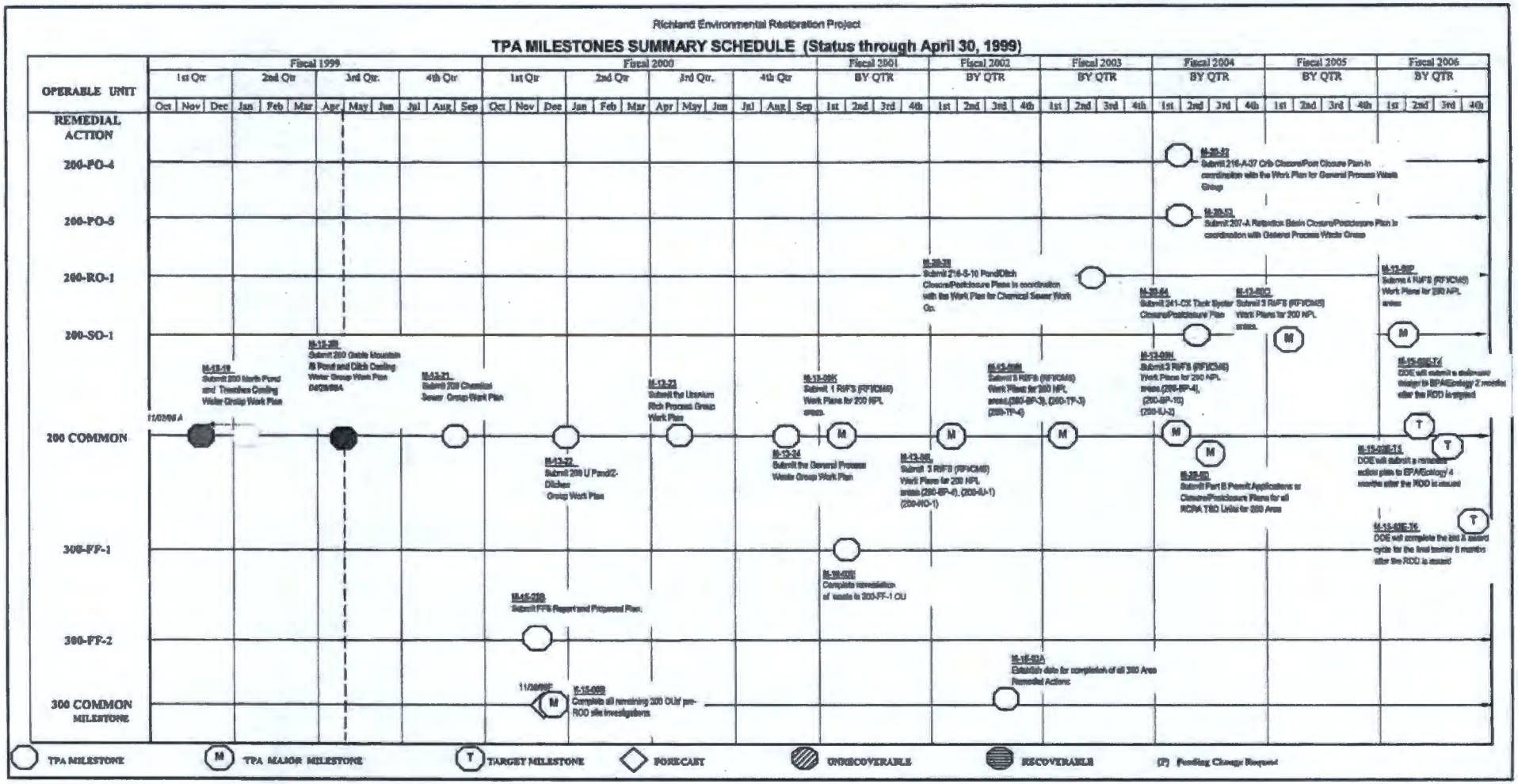
Richland Environmental Restoration Project

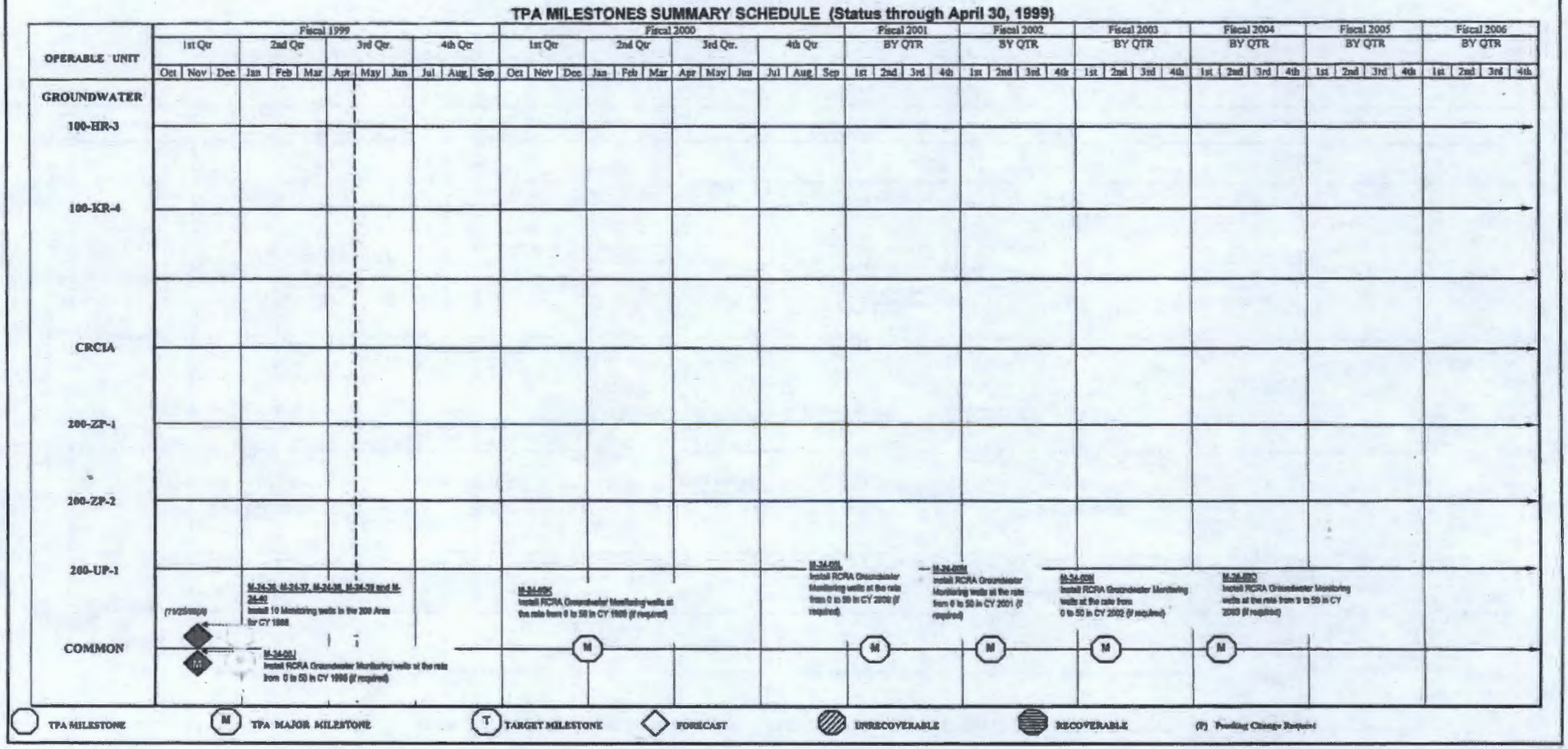
TPA MILESTONES SUMMARY SCHEDULE (Status through April 30, 1999)

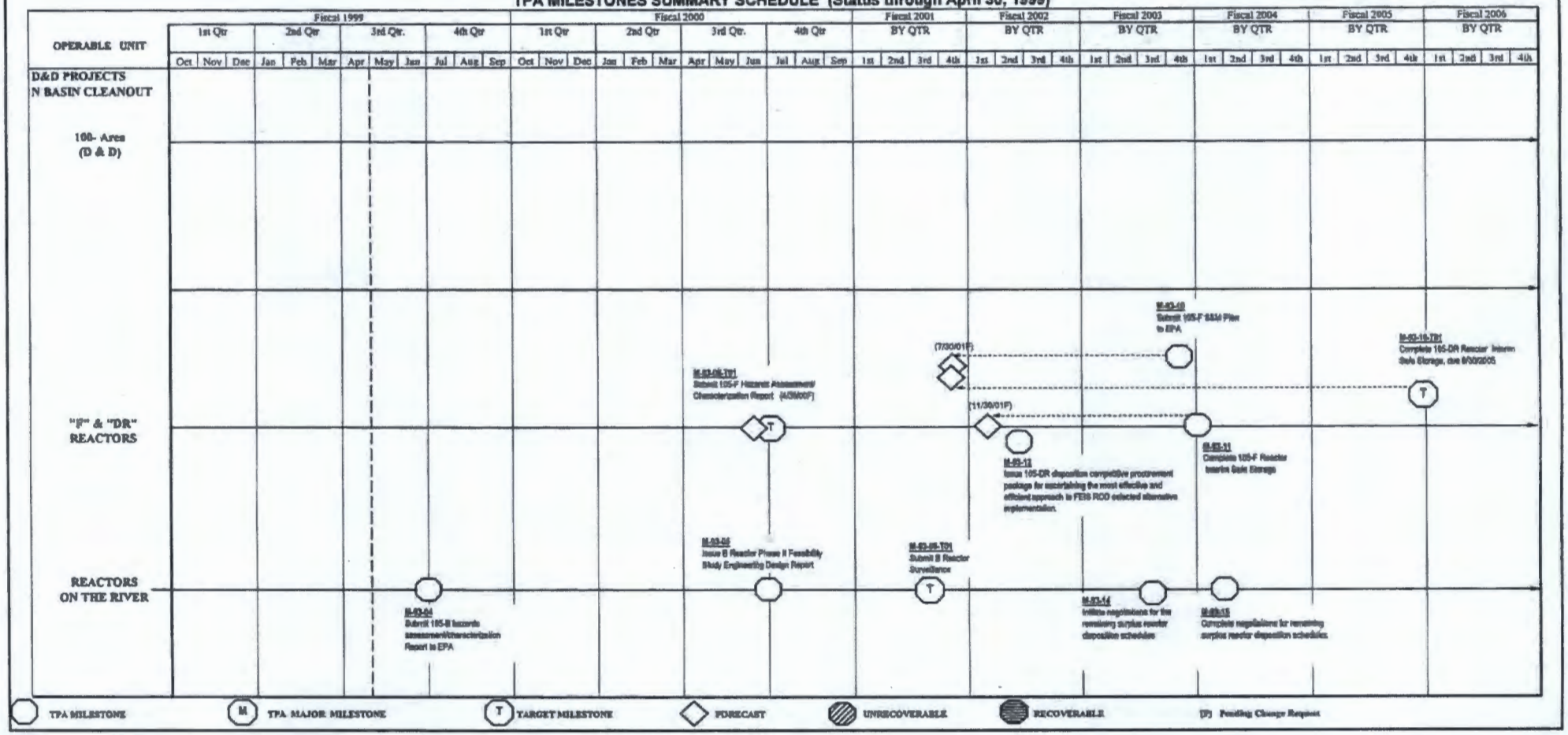



Richland Environmental Restoration Project
TPA MILESTONES SUMMARY SCHEDULE (Status through April 30, 1999)
OPERABLE UNIT
Fiscal 1999
Fiscal 2000
Fiscal 2001
Fiscal 2002
Fiscal 2003
Fiscal 2004
Fiscal 2005
Fiscal 2006
1st Qtr
2nd Qtr
3rd Qtr.
4th Qtr
BY QTR
Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep
REMEDIAL ACTION
200-PO-4
200-PO-5
200-RO-1
200-SO-1
200 COMMON
300-FP-1
300-FP-2
300 COMMON MILESTONE
M-13-19
M-13-21
M-13-22
M-13-23
M-13-24
M-15-03B
M-15-03D
M-15-03E-14
M-15-03E-15
M-15-03E-16
TPA MILESTONE
TPA MAJOR MILESTONE
TARGET MILESTONE
FORECAST
UNRECOVERABLE
RECOVERABLE
Pending Change Request

Richland Environmental Restoration Project

TPA MILESTONES SUMMARY SCHEDULE (Status through April 30, 1999)



Richland Environmental Restoration Project

TPA MILESTONES SUMMARY SCHEDULE (Status through April 30, 1999)