

December 15th, 1999

Meeting Minutes
 December 15th, 1999
Environmental Restoration (ER)
Major Milestone Management Review
 Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement)

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

Date: 3/28/01

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

Date: 3/28/00

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

Date: 3/28/00

Minutes Prepared by:

Approval: *Deborah F. Iwatate*
Deborah F. Iwatate (A1-14)
 Fluor Hanford, Inc.

Date: 2-14-00

DISTRIBUTION

| | | | | | |
|----------------|---------|---------|-----------------------|---------|---------|
| Ballard, W. | RL | A5-12 * | Morrison R. D. | FH | A1-14 * |
| Black, G. L. | BHI | H0-15 * | Piippo, R. E. | FH | A1-14 * |
| Cusack, L. | Ecology | B5-18 * | Rodriguez, H. M. | RL | A5-15 |
| Dagan, E. B. | RL | A5-15* | Rowland, D. | YN | * |
| Faulk, D. | EPA | B5-01 | Sanders, G. H. | RL | A5-15 * |
| Gerton, R. | RL | H0-12 | Sherwood, D. R. | EPA | B5-01 * |
| Goldstein, M. | EPA | B5-01 | Simpson, C. B. | BHI | H0-11 * |
| Gunion, C. H. | RL | A5-16 | Skinnarland, E. R. | Ecology | B5-18 |
| Hajner, R. S. | BHI | H0-11 | Soper, W. | Ecology | B5-18 * |
| Hertzel, J. S. | FH | A1-14 * | Stanley, R. | Ecology | Lacey * |
| Hughes, M. | BHI | H0-09 * | Stone, A. | Ecology | B5-18 |
| Iwatate, D. F. | FH | A1-14 * | Thompson, K. M. | RL | A5-13 |
| Jarvis, M. F. | RL | A5-15 * | Wilson, M. A. | Ecology | B5-18 * |
| Kjarmo, K. J. | CHG | A1-14 * | Yerxa, J. K. | RL | A5-15 |
| Leja, S. | Ecology | B5-18 * | Administrative Record | EDMC | H6-08 * |

* w/Attachments

File: MS Minutes.DEC99

RECEIVED
 JUN 25 2007

General

DOE Division Director: R. E. Gerton
Contractor Manager: J. L. Walsh
Presenter: M. Hughes

All presentation information is provided in handout/Attachment 1.

- Recent staff changes/moves (2) were announced.
- Overview and comments provided for FY2000 TPA milestones.
- Comments/discussion regarding the canyon initiative: Aging equipment and aging systems. Maintenance [in these facilities] needs more attention. Need to look at possibility of upgrades to aging facilities that are not planned for attention in the near term.
- Disposition of B-Plant transition was noted: Open/punch list items documented and agreed to prior to turnover via a B-Plant Memorandum of Agreement [between EM-40 and EM-60].
- Regarding the topic of Technology Insertion Points: Noted that an approach was being emphasized whereby the project management "owned" the technology and technology needs – rather than being the recipients of technology "peddlers".
- ER Project summary – noted that there was an underrun of approximately 6% for FY1999 overall.
- ER has funding concerns related to milestones M-13-00K, M-13-23 through M-13-26, and M-24-00L (FY2001 funding needs).
- General comments/discussion re: Data Quality Objectives (DQOs) – EPA expressed a negative opinion about doing them. Stated that there should be discussions between DOE, EPA, and Ecology about the need. BHI response: need to get this input into the next Work Plan version (coming up in June).

M-13-00 Complete RI/FS Submittals

- CR M-13-99-01 (Submit workplans for RFI/CMS or RI/FS studies approved 10/25/99).
- Noted that vadose zone monitoring fell "below the line" for funding this year (FY2000). A strategy and plan was prepared and priority sites were identified.
- Questions from Mr. D. Rowland (Yakima Nation representative) - regarding VZ monitoring and the linkage needed between characterization and site assessment. Received response that funding and tracking for those items was not part of the GW/VZ integration project.
- Mr. Rowland also noted that, for the preparation of the System Assessment Capability (SAC) task (i.e., the preparation of conceptual models for the initial assessment, scoping study on Hanford Site waste inventory, and definition of risks and risk metrics) there was no visibility to the public and Hanford Stakeholders.

M-15-00 RI/FS Process Completion

- M-15-00A (Complete all remaining 100 Area Operable Unit pre-ROD site investigations...) submitted 12/2/99 – ahead of schedule.

M-16-00 Complete Remedial Actions

- M-16-13A (Initiate Remedial Action for 100-FR-1 Operable Unit) statused as unrecoverable. Discussions are ongoing. Additional plumes located. New/additional staff have been found to support the milestone. Scheduled for renegotiation.
- M-16-92B (ERDF cells 3 & 4 ready to accept remediation waste) on schedule. Completion letter to EPA on 12/1/99. Signoff expected by 12/15/99.
- M-16-08B (Complete remediation and backfill of 19 waste sites and process effluent pipelines... 100-BC-1&2) Currently statused as ahead of schedule, however, there is concern about new findings extending the work.
- M-16-07B (Complete remediation and backfill of 22 waste sites and process effluent pipelines... 100-DR-1&2) Statused as unrecoverable. There is a "plume finding" concern associated with this task. Scheduled for renegotiation.
- M-16-26C (Complete remediation and back fill of 10 liquid waste sites and process effluent pipelines... 100-HR-1) Statused as unrecoverable. At least two months delay. Plume finding concern also. CR will be submitted. Scheduled for renegotiation.

M-24-00 RCRA Well Installation

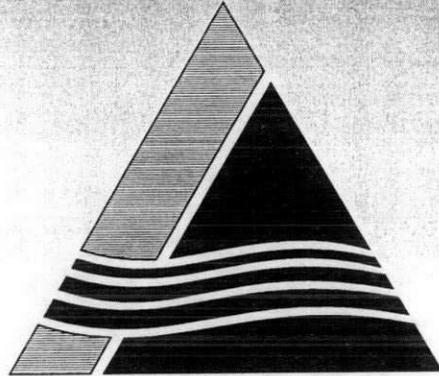
- M-24-00K through M-24-45 Funding in place for FY2000, but not looking good for FY2001.
- Mr. M. Wilson requested that his [following] comments should be made part of the minutes:
 - RCRA and Decommissioning are linked. There must be compliant monitoring in order to plan, implement, and succeed with decommissioning.
 - This is seen [by the regulators] as a major point. Must have [compliant monitoring] in order to have a true VZ integration project/program.
 - Non-compliant burial grounds, with unknowns [about characterization and assessment], and yet still burying new waste, is an unacceptable condition.
 - Noted that this issue will be brought up again.
- General discussion was conducted among attendees. Noted that the debate has always been – whether to characterize first and prepare documentation/paper, or - to move forward with the cleanup work [using the available funding] while still sampling and characterizing [as the work proceeds]. Typically, characterization has been placed below the line. Work is proceeding to continue cleanup.

M-93-00 Disposition of Surplus Reactors

- M-93-05 (Issue B-Reactor Phase II Feasibility Study Engineering Design Report) EPA noted concern about whether enough evaluation items/alternatives had been discussed, and that a proposed plan will be needed [as part of the alternatives evaluation]. Also, funding will be needed to address these points/needs.
- M-93-12 (Issue 105-DR disposition competitive procurement package...) Need decisions on alternative "H". Also need to get the initial negotiation team together to reset this [milestone] and set a path forward. Should plan to have this team meet during the next quarter (2nd quarter of FY2000).

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

December 15, 1999

TABLE OF CONTENTS

1. AGENDA

2. MILESTONE OVERVIEW

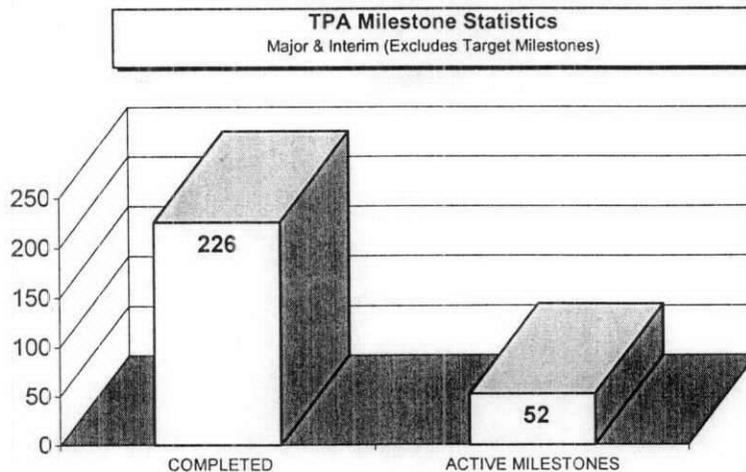
3. PROJECT STATUS/ACCOMPLISHMENTS

- Remedial Action/Waste Disposal Projects
- Groundwater/Vadose Zone Integration Project
- Decommissioning Projects
- Surveillance/Maintenance and Transition Projects
- Program Management & Support – ERC
- Program Management & Support – RL

4. TECHNOLOGY INSERTION POINTS (TIPs)

5. COST/SCHEDULE STATUS

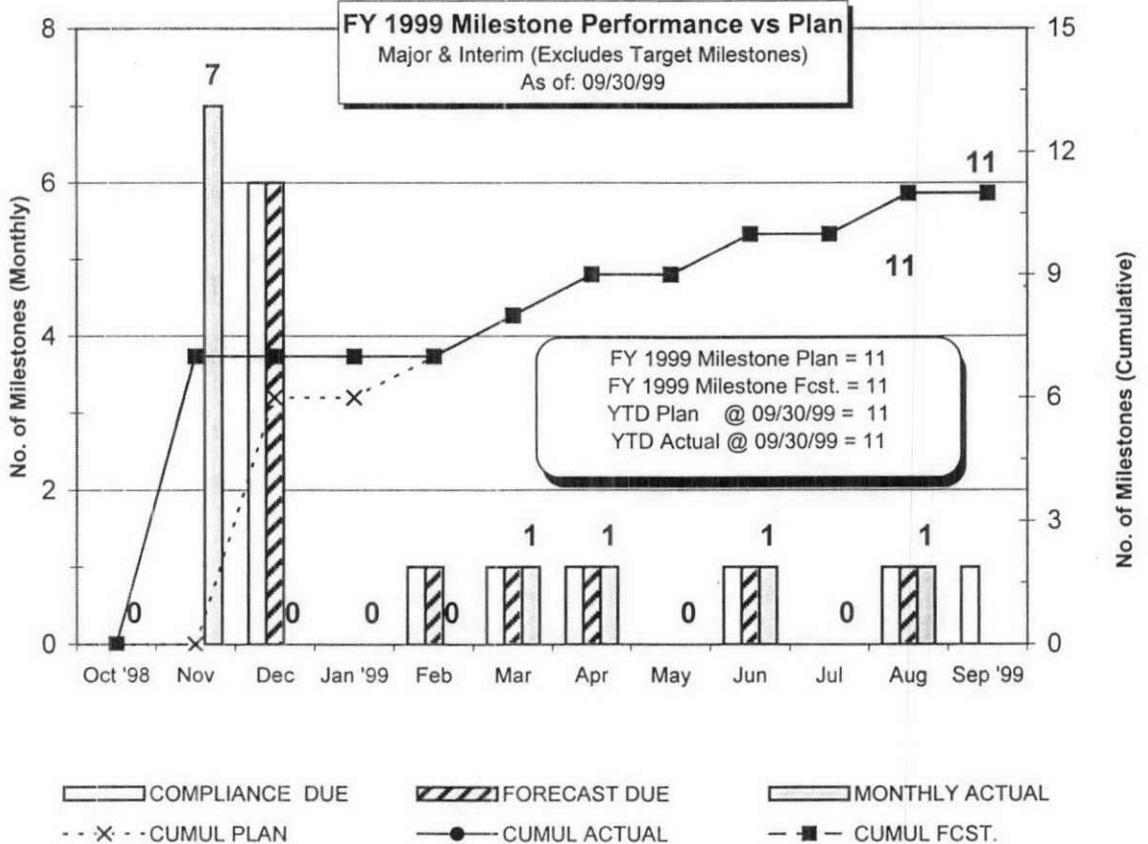
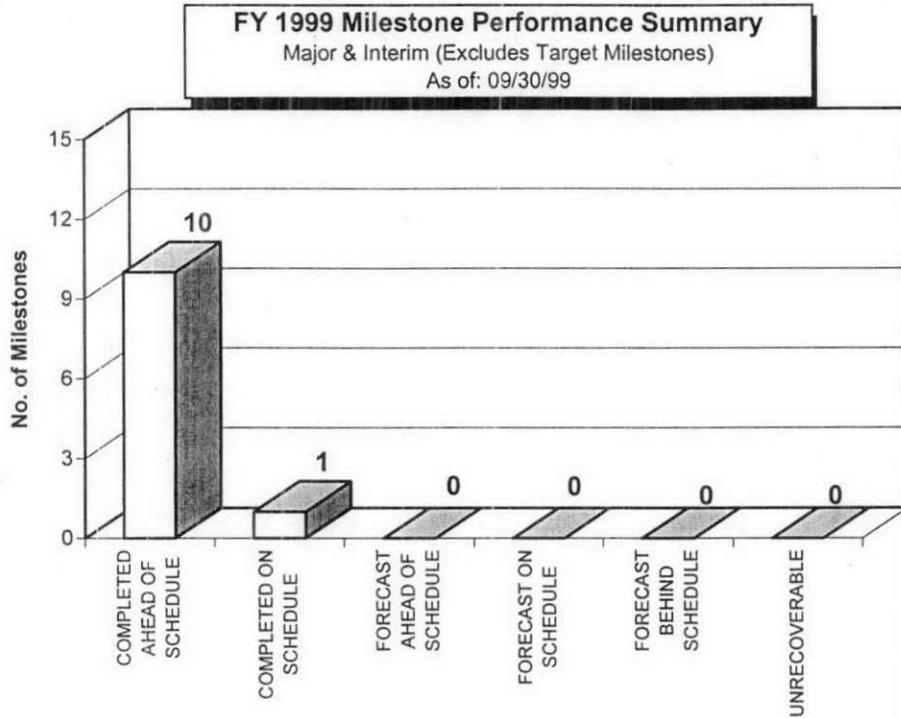
- Project Performance
- Project Summary
- TPA Schedule



TPA Milestone Statistics
Major & Interim (Excludes Target Milestones)

| | Compliance Due Date | Total Active @ 12/99 | 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) | 11 | M-13-00K | 12/31/2000 | M-13-20 (C) | 04/30/1999 |
| | | | M-13-00L | 12/31/2001 | M-13-21 (C) | 08/31/1999 |
| | | | M-13-00M | 12/31/2002 | M-13-22 | 12/31/1999 |
| | | | M-13-00N | 12/31/2003 | M-13-23 | 08/31/2000 |
| | | | M-13-00O | 12/31/2004 | M-13-24 | 08/31/2000 |
| | | | M-13-00P | 12/31/2005 | M-13-25 | 12/31/2000 |
| | | | M-13-19 (C) | 02/28/1999 | M-13-26 | 06/30/2001 |
| M-15-00 Site Investigations / Feasibility Studies | 12/31/2008 (M-15-00C) | 3 | M-15-00 | 12/31/2008 | | |
| | | | M-15-00A | 12/31/1999 | | |
| | | | M-15-00B (C) | 12/31/1999 | | |
| | | | M-15-00C | 12/31/2008 | | |
| | | | M-15-23B (C) | 11/30/1999 | | |
| M-16-00 Remedial Design / Remedial Action | 9/30/2018 (M-16-00) | 16 | M-16-00 | 09/30/2018 | M-16-08B | 03/31/2000 |
| | | | M-16-00A | TBD | M-16-10A | 07/31/2002 |
| | | | M-16-00B | TBD | M-16-13A | 01/31/2000 |
| | | | M-16-00F | 12/31/2001 | M-16-13B | 08/31/2003 |
| | | | M-16-01 | TBD | M-16-26A (C) | 03/31/1999 |
| | | | M-16-03A | 06/30/2002 | 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-16-07B | 04/30/2000 | | |
| 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) | 10 | M-24-00J (C) | 12/31/1998 | M-24-41 | 02/29/2000 |
| | | | M-24-00K | 02/29/2000 | M-24-42 | 02/29/2000 |
| | | | M-24-00L | 12/31/2000 | M-24-43 | 02/29/2000 |
| | | | M-24-00M | 12/31/2001 | M-24-44 | 02/29/2000 |
| | | | M-24-00N | 12/31/2002 | M-24-45 | 02/29/2000 |
| | | | 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) | 7 | M-93-00 | TBD | M-93-11 | 09/30/2003 |
| | | | M-93-04 (C) | 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 |

FY 1999 TPA MILESTONE PERFORMANCE

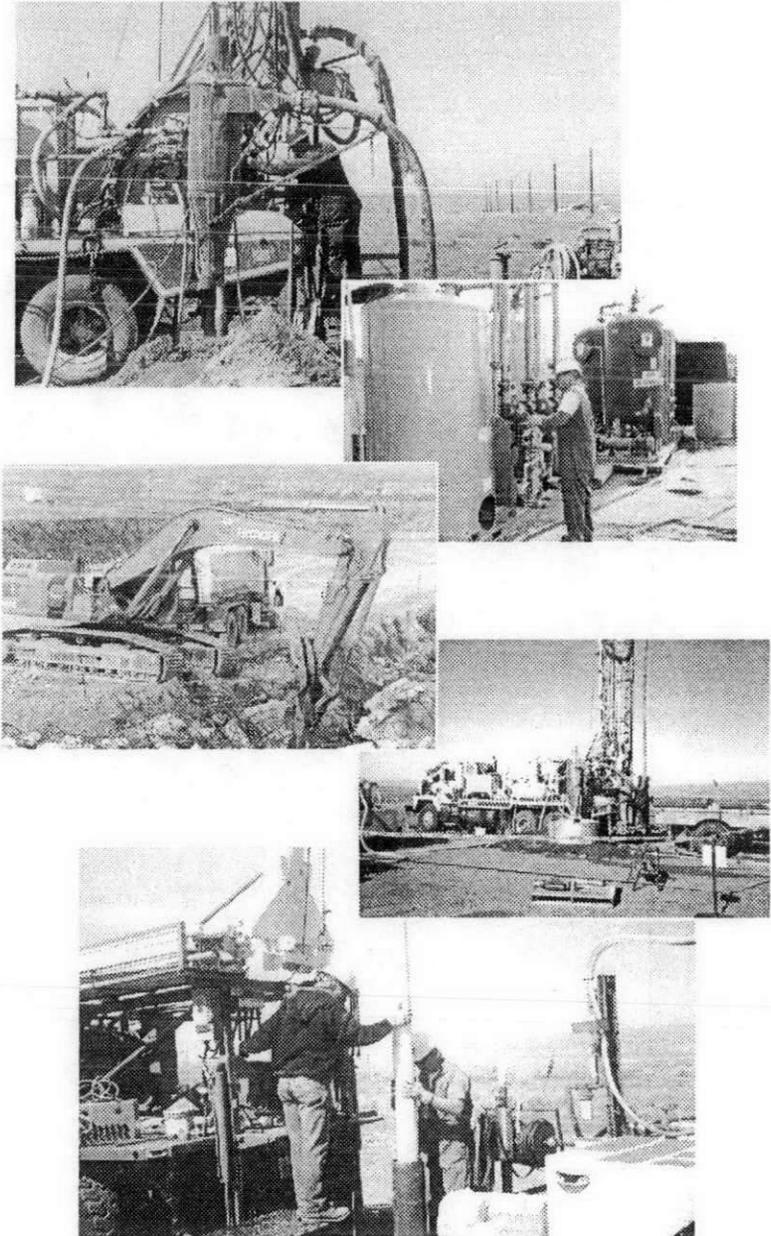


FY 1999 TPA Milestone Summary

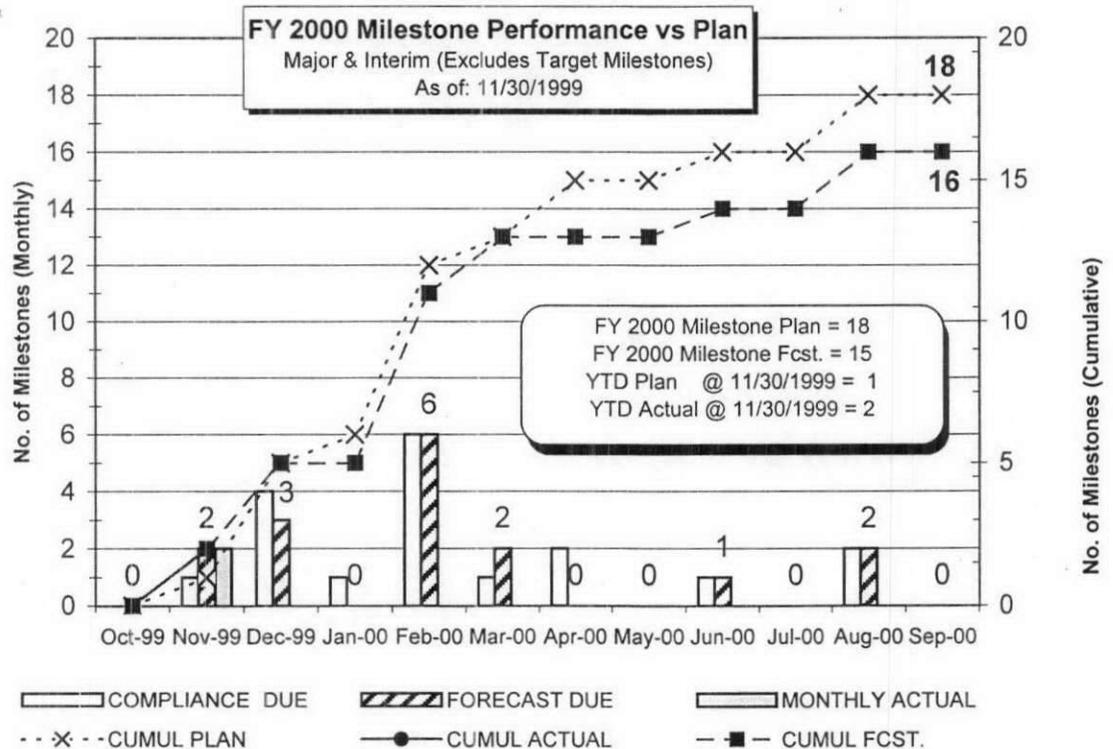
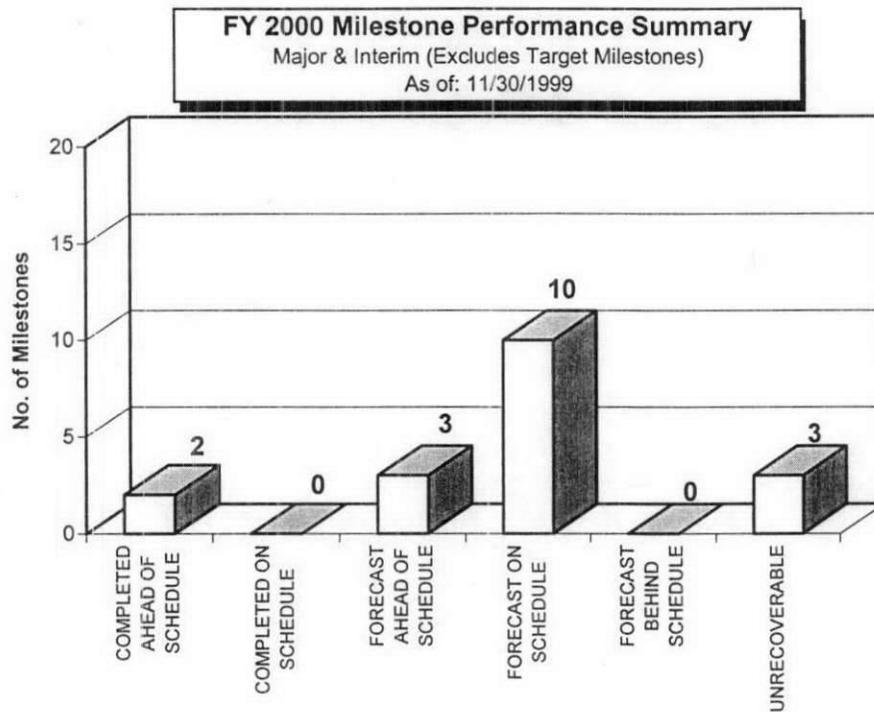
(Excludes Target Milestones)

| Work Scope | | Schedule | | |
|------------------|-------------------------------------------------------------------------------------------|---------------------------------|-------------------------------------|--------------------------|
| Milestone Number | Milestone Description | 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 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| M-24-37 | Install two (2) replacement RCRA wells for the SST WMA T | 12/31/98 11/25/98A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| M-24-38 | Install four (4) replacement RCRA wells for the SST WMA | 12/31/98 11/25/98A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| M-24-39 | Install two (2) replacement RCRA wells for SST WMA | 12/31/98 11/25/98A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| M-24-40 | Install one (1) additional RCRA well for the SST WMA B-BX-BY | 12/31/98 11/25/98A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| M-13-19 | Submit 200 North Pond and Trench Cooling Water Plan | 02/28/99 11/02/98A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| M-16-26A | Initiate remedial action for 100-HR-1-OU | 03/31/99 03/17/99A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| M-13-20 | Submit 200 Gable Mountain/B Pond and Ditch Cooling Water Group Work Plan | 04/30/99 04/29/99A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| M-93-04 | Submit 105-B Hazards Assessment and Characterization Report to EPA | 06/30/99 06/30/99A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| M-13-21 | Submit 200 Chemical Sewer Group Work Plan | 08/31/99 08/25/99A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

TPA Milestones Planned 11
 TPA Milestones Completed 11
 Completed Ahead of Schedule 10



FY 2000 TPA MILESTONE PERFORMANCE



**FY 2000 TPA MILESTONE SUMMARY AS OF 11/30/1999
(Excludes Target Milestones)**

| Item | FY2000 Month | Milestone | Description | Compliance Due Date | Forecast/ Actual Date | Completed | | Forecast | | | Unrecov erable | Deleted | |
|-------------------------------------|--------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------|----------------------------------------------------|-------------|----------------|-------------|-----------------|----------------|----------|--|
| | | | | | | Ahead Schedule | On Schedule | Ahead Schedule | On Schedule | Behind Schedule | | | |
| 1 | Nov-99 | M-15-23B | Submit 300-FF-2 Focus Feasibility Study (FFS) and Proposed Plan (PP) for Regulator review. | 11/30/1999 | 11/22/1999 (A) | X | | | | | | | |
| 2 | Dec-99 | M-13-22 | Submit U Pond/Z-Ditches Cooling Water Group Work Plan | 12/31/1999 | 12/31/1999 (F) | | | | X | | | | |
| 3 | | M-15-00A | Complete all remaining 100 Area Operable Unit pre-ROD site investigations under approved Work Plan schedules (100-KR-2 100-KR-3, 100-FR-2, 100-IU-2, and 100-IU-6). | 12/31/1999 | 12/08/1999 (F) | | | X | | | | | |
| 4 | | M-15-00B | Complete all 300 Area Operable Unit pre-ROD site investigations under approved Work Plan schedules. | 12/31/1999 | 11/22/1999 (A) | X | | | | | | | |
| 5 | | M-16-92B | ERDF cells 3 & 4 ready to accept remediation waste. | 12/31/1999 | 12/15/1999 (F) | | | X | | | | | |
| 6 | Jan-00 | M-16-13A | Initiate Remedial Action for 100-FR-1 Operable Unit. | 01/31/2000 | 03/20/2000 (F) | | | | | | X | | |
| 7 | | C-10-07 | The Hanford Site Waste Management Units Report | 01/31/2000 | 12/30/1999 (F) | (Compliance Milestone not included in total count) | | | | | | | |
| 8 | Feb-00 | M-24-00K | FY 1999 Install RCRA Groundwater Monitoring wells at the rate of up to 50 in Calendar Year (CY) if Required. | 02/29/2000 | 02/29/2000 (F) | | | | X | | | | |
| 9 | | M-24-41 | Install three (3) additional RCRA wells for the SST WMA S-SX. | 02/29/2000 | 02/29/2000 (F) | | | | X | | | | |
| 10 | | M-24-42 | Install one (1) replacement well for the 216-S-10 Pond. | 02/29/2000 | 02/29/2000 (F) | | | | X | | | | |
| 11 | | M-24-43 | Install one (1) Additional RCRA well for the SST WMA TX-TY. | 02/29/2000 | 02/29/2000 (F) | | | | X | | | | |
| 12 | | M-24-44 | Install one (1) RCRA well for the 216-B-3 Pond (This is an extension of a CERCLA vadose borehole). | 02/29/2000 | 02/29/2000 (F) | | | | X | | | | |
| 13 | | M-24-45 | Install two (2) additional RCRA wells for the SST WMA B-BX-BY. | 02/29/2000 | 02/29/2000 (F) | | | | X | | | | |
| 14 | Mar-00 | M-16-08B | Complete remediation and backfill of 19 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. | 03/31/2000 | 03/14/2000 (F) | | | X | | | | | |
| 15 | Apr-00 | M-16-07B | Complete remediation and backfill of 22 waste sites and process effluent pipelines in the 100-DR-1 and 100-DR-2 Operable Units as defined in the Remedial Design Report/Remedial Action Work Plan for the 100 Area. | 04/30/2000 | 04/09/2001 (F) | | | | | | X | | |
| 16 | Jun-00 | M-93-05 | Issue B Reactor Phase II Feasibility Study Engineering Design Report for public comment. | 06/30/2000 | 06/30/2000 (F) | | | | X | | | | |
| 17 | Aug-00 | M-13-23 | Submit Uranium Rich Process Waste Group Work Plan. | 08/31/2000 | 08/31/2000 (F) | | | | X | | | | |
| 18 | | M-13-24 | Submit General Process Waste Group Work Plan. | 08/31/2000 | 08/31/2000 (F) | | | | X | | | | |
| 19 | | M-16-26C | Complete Remediation and Backfill of 10 Liquid Waste Sites and Process Effluent Pipelines in the 100-HR-1 Operable Unit as defined in the Remedial Design Report/Remedial Action Work Plan for the 100 Area. | 08/31/2000 | 10/15/2000 (F) | | | | | | X | | |
| TOTAL FY 2000 TPA Milestones | | | | 18 | 16 (F); 2 (A) | 2 | 0 | 3 | 10 | 0 | 3 | 0 | |

Milestones M-16-13A, M-16-07B, and M-16-26C are scheduled for renegotiation.

Approved Change Control

**M-13-99-01
Submit Workplans
for RFI/CMS or
RI/FS Studies
Approved 10/25/99**

This change request modifies Interim Milestones M-13-23 and M-13-24 and Establishes M-13-25 and M-13-26

M-13-23 (8/31/00) Submit 200-TW-1 work plan.

M-13-24 (8/31/00) Submit 200-TW-2 work plan.

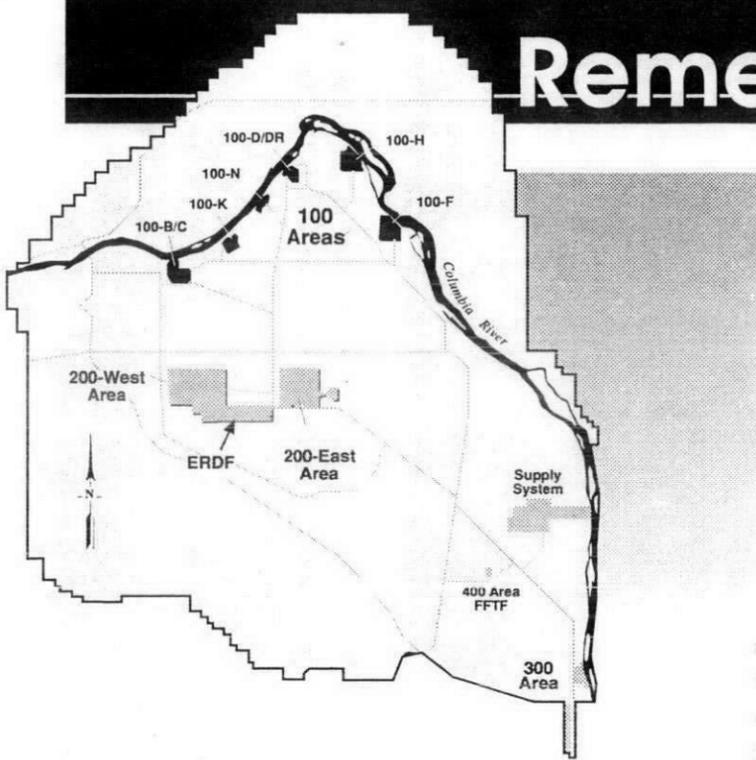
New Interim Milestones:

M-13-25 (12/31/00) Submit uranium rich process waste group (200-PW-2) work plan.

M-13-26 (6/30/01) Submit general process waste group (200-PW-4) work plan.

STATUS BY PROJECT

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 chromium plume found during closeout confirmation sampling
- > Complete excavation of the 116-B-11 trench plumes
Completed excavation of the 116-B-11 trench plumes
- > Initiate and complete excavation and backfill of the 116-B-1 trench
Completed excavation and backfill of the 116-B-1 trench and additional plumes
- > Initiate and complete backfill of 116-C-5, 116-B-11, 116-B-13, and 116-B-14
Completed backfill of 116-C-5, 116-B-11, 116-B-13, and 116-B-14
- > Initiate test revegetation at 116-C-1
Initiated test revegetation at 116-C-1. Revegetation completed and now watering and monitoring in progress

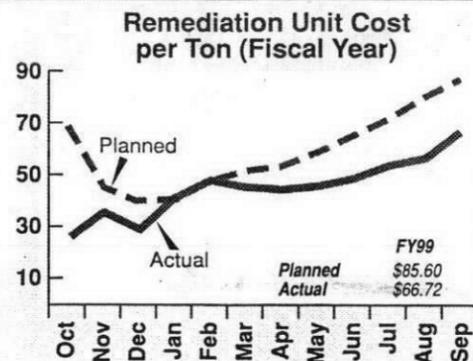
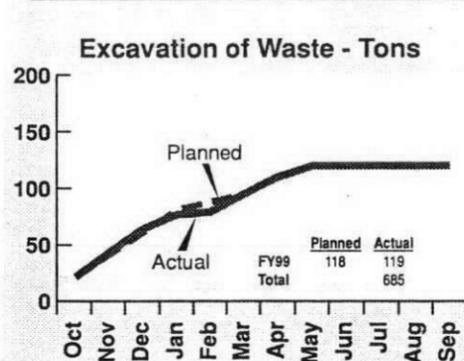
- > Initiate and complete excavation and backfill of the 116-B-16 crib, 116-B-10 dry well, 116-B-12 crib, 116-B-2 fuel storage basin trench, 116-B-3 crib, 116-B-4 french drain, 116-B-6A crib, 116-B-6B crib, and 116-B-9 french drain
Completed excavation of the 116-B-16 crib, 116-B-10 dry well, 116-B-12 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 chromium 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
Completed 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 chromium plumes at 116-C-5
- > Demobilize the 100-B/C subcontractor
Subcontractor demobilized. A separate subcontract will be let for backfill of small sites
- > Complete excavation of 116-DR-9 retention basin base volume and contaminant plumes
116-DR-9 retention basin base volume and plumes were excavated. Backfill is scheduled for FY00
- > Initiate and complete excavation and backfill of the 100-DR pipelines (WIDS sites 100-D-48 and 100-D-49) north of D Avenue
Completed excavation of the 100 DR pipelines (WIDS sites 100-D-48 and 100-D-49) north of D Avenue. Deferred backfill 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 chromium plumes encountered at 116-D-7

- Excavated chromium plume at 116-D-7 that was discovered during closeout confirmation sampling. Chromium was still present after the excavation of one additional meter. Kd/leachability test performed. Awaiting regulator review of test results to determine next course of action*
- Closeout Verification Packages for 8 waste sites were signed by the U.S. Department of Energy (DOE) and the regulators in FY99. The completed waste sites are 116-C-1, 100-D-4 (107-D5), 100-D-20 (107-D3), 100-D-21 (107-D2), 100-D-22 (107-D1), 116-B-13, 116-B-14, and 1607-D2 tile field*
- > 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
Completion of the 116-H-7 was deferred to FY00 due to concrete demolition
- > Initiate 116-N-3 (1325-N) remedial design
Remedial design for the 116-N-3 crib (1325-N) began in January. This work will continue through November when a bid package will be assembled for remedial action. 90% remedial design complete
- > Initiate the Group 5 remedial design for remaining sites
Group 5 design activities started in the first quarter of FY99. The site confirmation work was deferred to FY01. The Sampling and Analysis Plan, Draft A, was completed in September
- > Complete the 100 Area Remaining Sites Proposed Plan document for the Administrative Record, and provide support to RL and the agencies in preparing the 100 Area Remaining Sites Record of Decision

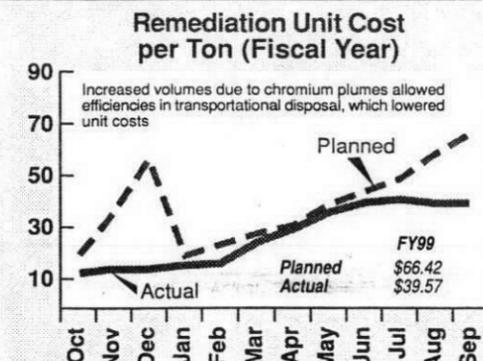
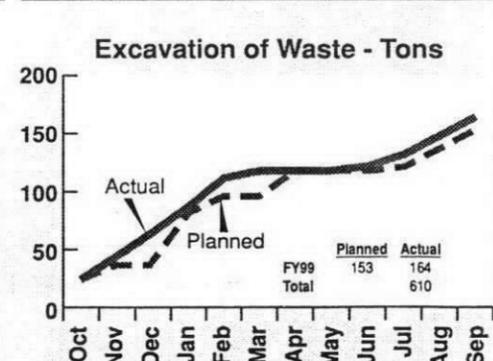
- (ROD)
- The Proposed Plan for the 100 Area Remaining Sites was completed in November 1998 and sent to the Administrative Record. The ROD was signed in July*
- > Initiate the 100 Area Burial Ground Feasibility Study (FS) and proposed plan (PP)
The first draft of the 100 Area Burial Ground Focused Feasibility Study (FFS) was submitted to DOE in the first quarter of FY99. After receiving comments, a second draft was resubmitted in March. Responses to regulator comments were addressed in August. Work is underway for Draft FS and PP for submittal in the first quarter of FY00



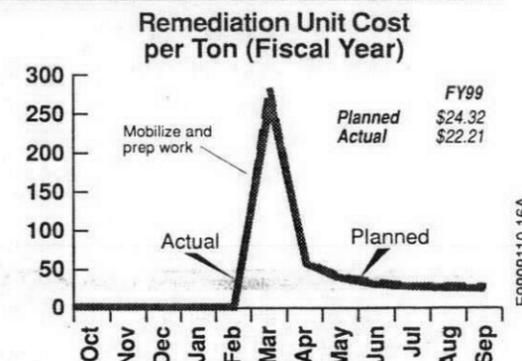
100-BC Remediation



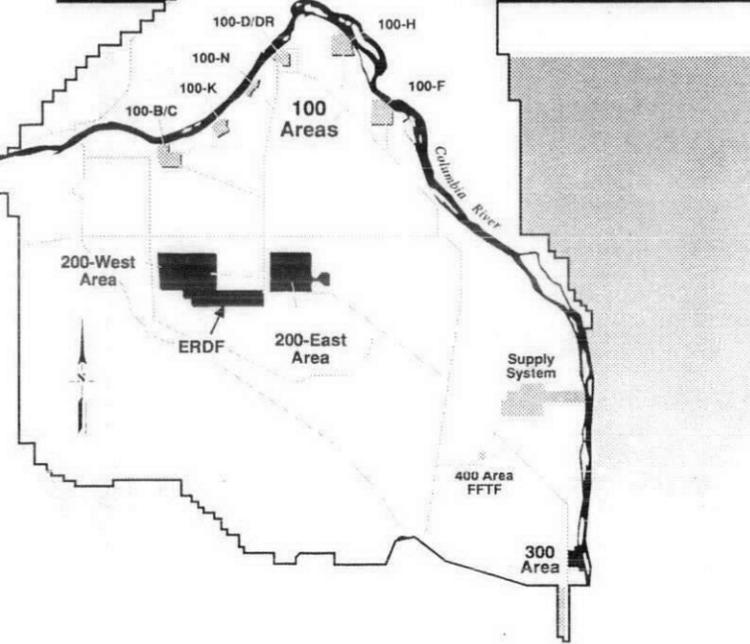
100-DR Remediation



100-HR Remediation



Remedial Action & Waste Disposal Project



Due to extended excavation activities in the Process Ponds, no regrading was performed in FY99. Revegetation of the 300 Area process trenches, 300-44, 300-45, and 300-10 are essentially complete, except for a small area awaiting completion of adjacent regrading

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

The semiannual 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 Report for FY 1998" was issued in February
- Prepare and issue an Environmental Restoration Contractor (ERC) internal draft, decisional draft, Draft A FFS, and PP (300-FF-2)

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

200 Area Scope of Work

Assessment and Barrier Testing in the 200 Area are included in the Groundwater/Vadose Zone (GW/VZ) Integration Project section

300 Area Scope of Work

- 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

Remediation of the north process pond is complete. The south process pond excavation is underway. Due to significant plumes of additional contaminated soil in the process ponds, excavation at all other waste sites was deferred to FY00 and beyond
- 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



ERDF Scope of Work

- An inception to date of 3,000,000 miles driven transporting waste, the 100,000th container being disposed, and recording daily production rates were all achieved in FY99. Technical accomplishments included delisting of the Environmental Restoration Disposal Facility (ERDF) leachate, construction of a cross-site transfer line for more efficient transport of the leachate to the Effluent Treatment Facility (ETF), performing LDR treatment at ERDF, and completing the expansion of cells 3 and 4 without a lost workday accident 9 weeks ahead of schedule

FY99

- Waste disposal operations activities

ERDF received 701,914 tons of waste in FY99
- Groundwater and air monitoring requirements

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

Completed 12,948,148 ton-miles of Waste Transportation in FY99
- 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. U.S. Environmental Protection Agency (EPA) approval of the test plan, completion of the bench-scale testing, and subsequent treatment of all 42 containers of lead-containing soils were completed by mid-year
- Construction of cells 3 and 4, including excavation, liner placement, leachate collection system installation, and other site infrastructure requirements

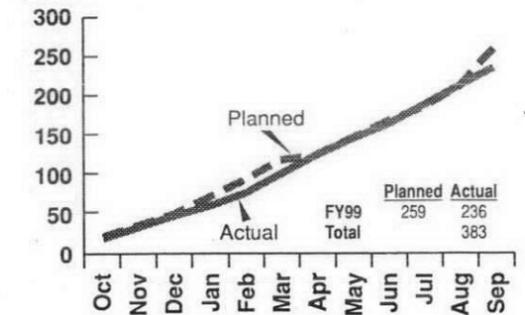
ERDF cells 3 and 4 construction was essentially completed in FY99 with only revegetation and demobilization activities remaining for FY00. The completion of cell construction was achieved 9 weeks ahead of schedule and under budget with no lost workday accidents (not even a first aid in the first 8 months of the project). The third party Construction Quality Assurance (CQA) Report documenting the construction is on schedule and authorization to use ERDF is expected 2 months ahead of the TPA milestone date
- 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 initiate construction of the interim closure for cells 1 and 2

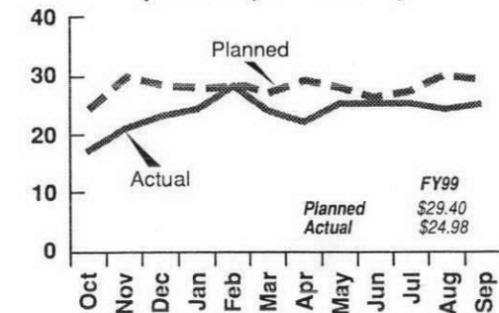
Interim closure activities were not initiated in the first half of FY99. These activities will be deferred to FY00, to balance funding requirements in FY99. Interim closure activities will not likely start in the field until mid-year FY00

300-FF Remediation

Excavation of Waste - Tons

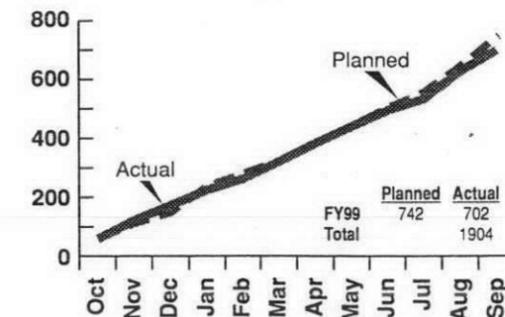


Remediation Unit Cost per Ton (Fiscal Year)

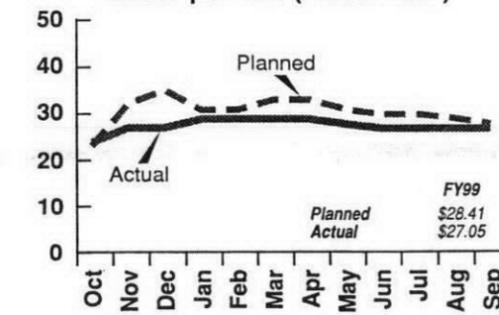


ERDF

Waste Disposed - Tons

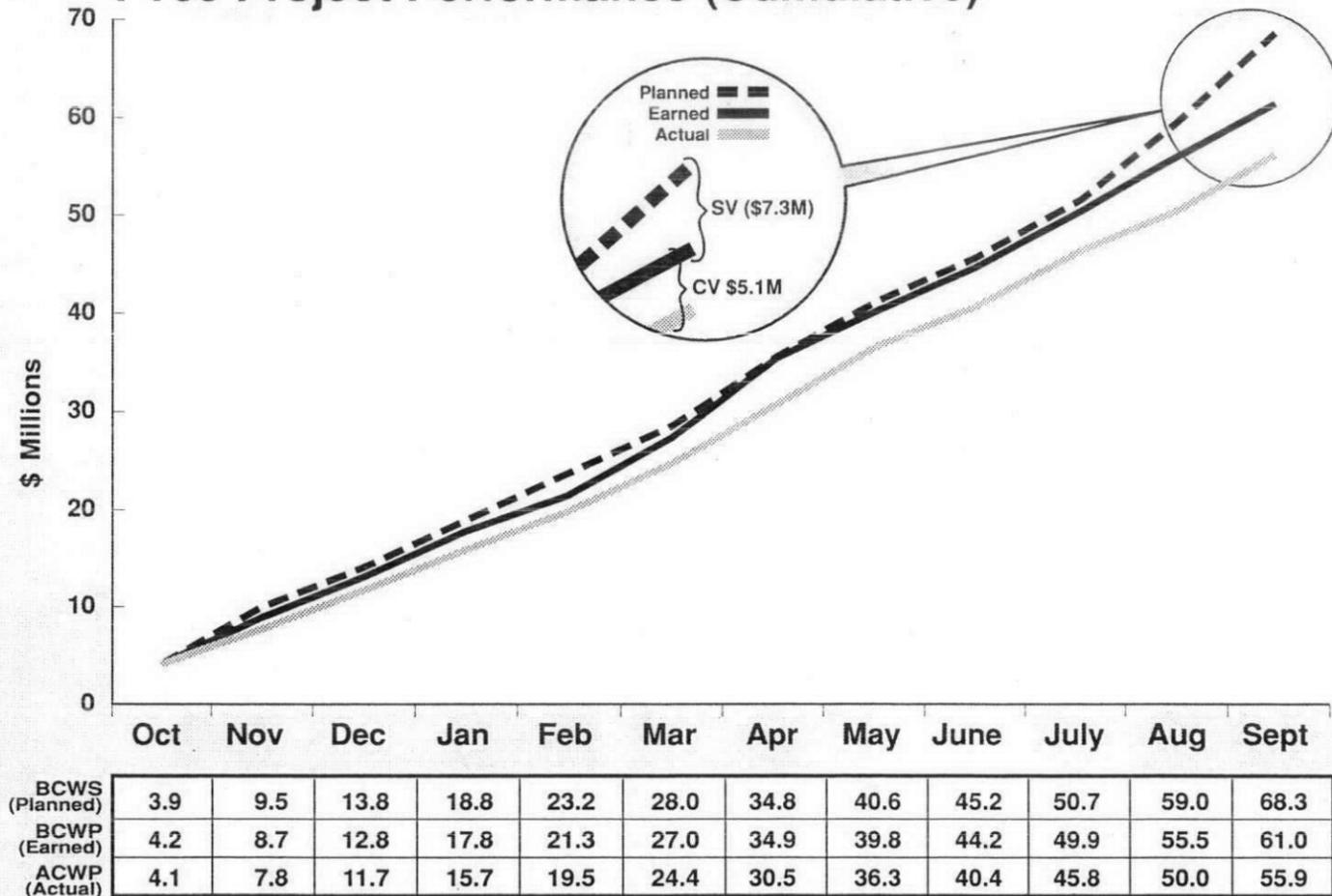


Waste Disposal and Transportation Costs per Ton (Fiscal Year)

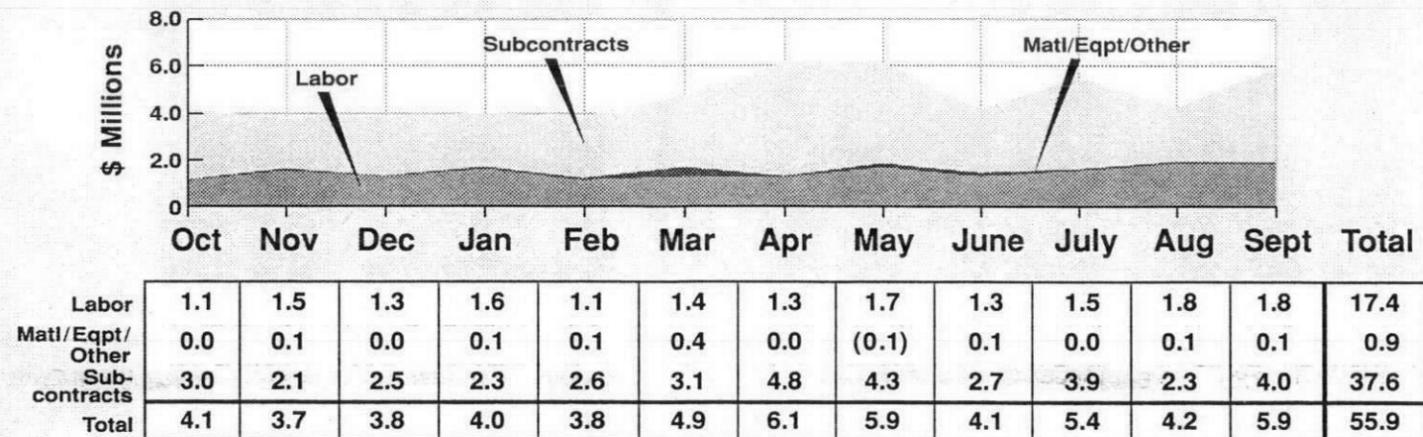


Remedial Action & Waste Disposal Project

FY99 Project Performance (Cumulative)

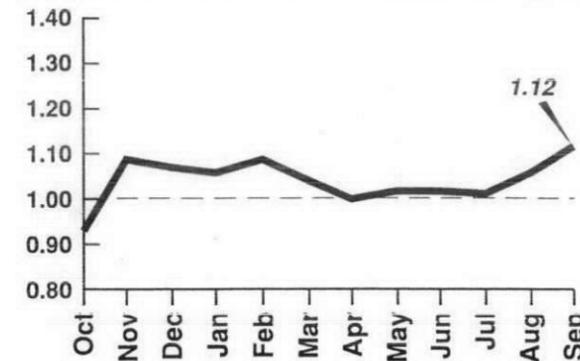


FY99 Expenditures (Monthly)



Schedule Performance

FYTD Schedule Performance Index (SPI)*



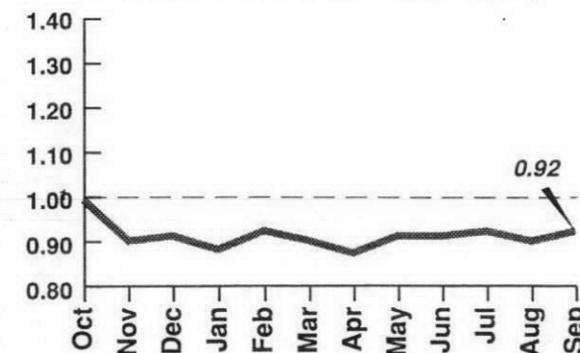
* Desired performance is 1.0 or less

Schedule Variance (SV): (\$7.3M)

- Discovery of additional plumes deferred work at 300-FF-1 South Process Pond
- Additional retention basin concrete quantities deferred work at 100-HR-1
- Procurement issues deferred the 100-D Group 3 small sites and south pipeline work
- ERDF disposal/transportation behind schedule because of additional plume delays at remediation sites

Cost Performance

FYTD Cost Performance Index (CPI)*

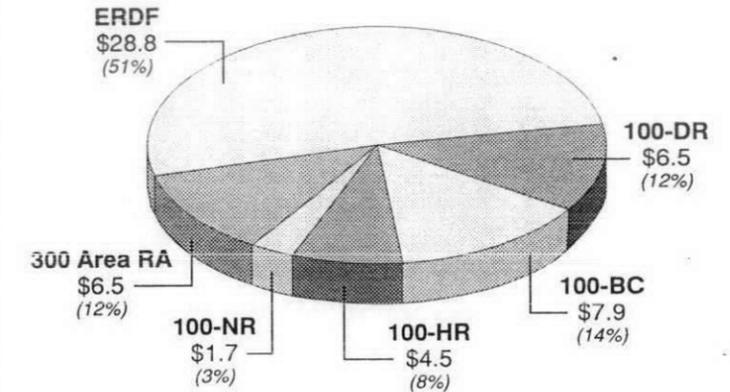


* Desired performance is 1.0 or less

Cost Variance (CV): \$5.1M

- 100 Area performance efficiencies resulted in lower unit costs (mild winter weather contributed)
- Waste transportation efficiencies resulted in lower unit costs
- ERDF construction performance efficiencies resulted in a cost saving

Subproject Actual Costs to Date (Project Total \$55.9 Million)



Issues

► Unless negotiated, four Tri-Party Agreement Milestones will be missed due to additional waste plumes encountered in the 100 and 300 Areas:

- M-16-07B date 4/30/00—complete remediation and backfill of 22 sites at DR. Regulators verbally informed. Also mentioned in DWP. BHI developing rationale. Forecast completion 2/28/01

Strategy: Negotiate revised dates with DOE and the regulators

- Milestone M-16-26B to complete 51 liquid waste sites by February 28, 2001 is impacted by B/C pipelines. The current DWP scheduled start date for pipe work is September 2000. EPA has stated an expectation that the milestone date be met

Strategy: Negotiate revised pipeline date with regulators. Pipeline work is scheduled to start January 2001

- Milestone M-16-13A to initiate remedial action in the 100-FR-1 Operable Unit by January 31, 2000 is impacted by scope growth at 100-HR

Strategy: Renegotiate milestone based upon impact of added workscope at 100-HR

- Milestone M-16-26C complete 10 liquid waste sites by August 31, 2000 is impacted by scope growth at 100-HR

Strategy: Renegotiate milestone based upon impact of added workscope at 100-HR

Remedial Action & Waste Disposal Project

FY99 Performance Measures—Milestone Summary

| Milestone | Description (Complete excavation for:) | DWP Due Date | Current Baseline Due Date | Forecast (F) Actual (A) Date | Comments |
|-------------|----------------------------------------|--------------|---------------------------|------------------------------|--------------------------------------------------------------------------------------|
| FY99-PM-R01 | 116-B-11 Retention Basin Plumes | 11/24/98 | 05/31/99 | 10/28/98A | Completed ahead of schedule |
| FY99-PM-R02 | 116-C-5 Retention Basin Plumes | 10/16/98 | 03/17/99 | 01/21/99A | |
| FY99-PM-R03 | 116-B-1 Trench | 01/29/99 | 01/29/99 | 01/06/99A | |
| FY99-PM-R04 | 116-B-16 Crib | 09/30/99 | 05/24/99 | 05/21/99A | |
| FY99-PM-R05 | 116-B-10 Dry Well | 09/30/99 | 05/24/99 | 05/21/99A | |
| FY99-PM-R06 | 116-B-12 Crib | 09/30/99 | 05/07/99 | 05/07/99A | |
| FY99-PM-R07 | 116-B-2 Fuel Storage Basin Trench | 09/30/99 | 05/24/99 | 05/21/99A | |
| FY99-PM-R08 | 116-B-3 Crib | 09/30/99 | 05/07/99 | 05/07/99A | |
| FY99-PM-R09 | 116-B-6A Crib | 09/30/99 | 05/24/99 | 05/21/99A | Completed on schedule |
| FY99-PM-R10 | 116-B-6B Crib | 09/30/99 | 05/07/99 | 05/07/99A | |
| FY99-PM-R11 | 116-B-9 French Drain | 09/30/99 | 05/07/99 | 05/07/99A | |
| FY99-PM-R12 | 116-B-C-2A Crib | 09/30/99 | 05/07/99 | 05/07/99A | Completed on schedule |
| FY99-PM-R13 | 116-B-C-2B Pump Station | 09/30/99 | 05/07/99 | 05/07/99A | |
| FY99-PM-R14 | 116-C-2C Sand Filter | 09/30/99 | 05/07/99 | 05/07/99A | |
| FY99-PM-R15 | 116-H-7 Retention Basin | 09/30/99 | 11/30/99 | 11/30/99F | Deferred to FY00 |
| FY99-PM-R16 | 116-DR-9 Retention Basin and Plumes | 11/03/98 | 02/10/99 | 12/26/98A | Completed ahead of schedule |
| FY99-PM-R17 | 116-D-1A Storage Basin Trench | 09/30/99 | 09/30/99 | 11/11/99F | Unrecoverable in FY99 due to contract award reevaluation |
| FY99-PM-R18 | 116-D-1B Storage Basin Trench | 09/30/99 | 09/30/99 | 11/11/99F | |
| FY99-PM-R19 | 116-D-2 Crib | 09/30/99 | 09/30/99 | 11/11/99F | |
| FY99-PM-R20 | 116-D-3 French Drain | 09/30/99 | 09/30/99 | 11/11/99F | |
| FY99-PM-R21 | 116-D-4 French Drain | 09/30/99 | 09/30/99 | 11/11/99F | |
| FY99-PM-R22 | 116-D-6 French Drain | 09/30/99 | 09/30/99 | 11/11/99F | |
| FY99-PM-R23 | 116-D-9 Crib | 09/30/99 | 09/30/99 | 11/11/99F | |
| FY99-PM-R24 | 116-DR-3 Storage Basin | 09/30/99 | 09/30/99 | 11/11/99F | |
| FY99-PM-R25 | 116-DR-4 Pluto Crib | 09/30/99 | 09/30/99 | 11/11/99F | |
| FY99-PM-R26 | 116-DR-6 Crib | 09/30/99 | 09/30/99 | 11/11/99F | |
| FY99-PM-R27 | 116-DR-7 Inkwell Crib | 09/30/99 | 12/06/99 | 12/06/99F | Deferred to FY00 |
| FY99-PM-R28 | 100-D-12 Sodium Dichromate Station | 09/30/99 | 09/30/99 | 11/11/99F | Unrecoverable in FY99 due to contract award reevaluation |
| FY99-PM-R29 | 100-D-52 Drywell | 09/30/99 | 11/09/99 | 11/09/99F | Deferred to FY00 |
| FY99-PM-R30 | 316-2 North Process Pond | 11/09/98 | 07/08/99 | 06/18/99A | Completed ahead of schedule |
| FY99-PM-R31 | 316-1 South Process Pond | 04/20/99 | 06/29/99 | 12/07/99F | Unrecoverable in FY99 due to discovery of additional plumes |
| FY99-PM-R32 | 300-49 Landfill 1A | 08/11/99 | 10/27/99 | 01/20/00F | Deferred to FY00 |
| FY00-PM-R04 | 116-H-1 Trench | 12/28/99 | 08/13/99 | 10/21/99F | Unrecoverable in FY99 due to larger than planned retention basin concrete quantities |
| FY00-PM-R08 | 100-H-5 Trench | 11/01/99 | 09/15/99 | 11/17/99F | Unrecoverable in FY99 due to larger than planned retention basin concrete quantities |
| FY00-PM-R20 | 300-50 Landfill 1B | 05/11/00 | 09/30/99 | 12/16/99F | Accelerated from FY00. Unrecoverable in FY99 due to discovery of additional plumes |

FY99 Performance Measures (Status through September 30)

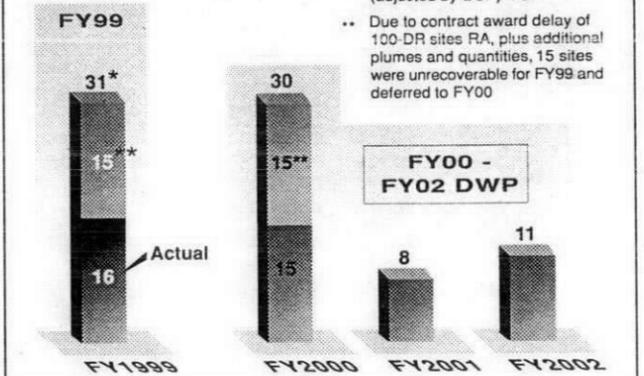
16 Completed (9 Completed ahead of schedule; 7 Completed on Schedule); 15 Unrecoverable in FY99, will be Completed in FY00

Disposal Volume:

Planned/actual volume increased from 541 thousand tons to 702 thousand tons. (30% increase)

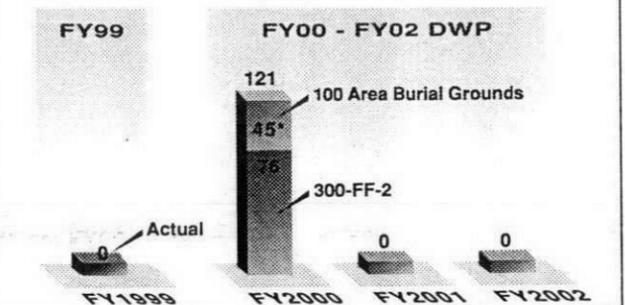


Waste Sites

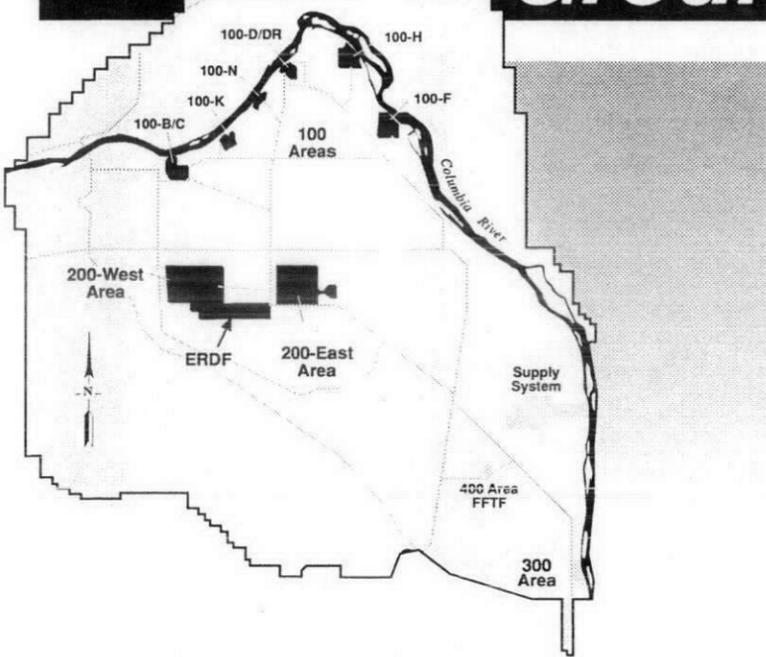


Assessments

* Due to regulatory comments, 45 assessments for the 100 Area Burial Grounds, scheduled for FY99, were deferred to FY00



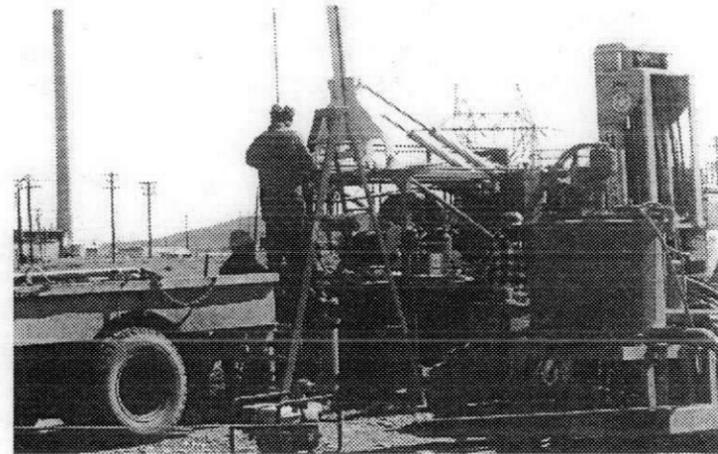
Groundwater/Vadose Zone Integration Project



Groundwater/Vadose Zone Integration

- Prepare and issue a draft Groundwater/Vadose Zone (GW/VZ) Integration Project Specification
The draft Project Specification was issued for public review in December. After incorporation of comments, the document was revised to a project description document and 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 was issued in June
- Continue to manage and integrate the GW/VZ project tasks, including integration and interface with Pacific Northwest National Laboratory (PNNL), and the Project Hanford Management Contractor (PHMC) to plan, track, and report on the GW/VZ core projects
The GW/VZ Team was co-located in the first quarter of FY99. The GW/VZ Team participated with the core projects in integrated Data Quality Objectives processes for the 200 Area Assessment and well-drilling activities. Through the efforts of the GW/VZ Team, interim action planning was initiated to address leaking water lines near areas of existing contamination
- Continue to engage the Tribal Nations, stakeholders, regulators, and public in the GW/VZ Project
The GW/VZ project maintained an open meeting policy. In addition to the bimonthly open project status meetings, the project continued to utilize integrated working groups in planning and technical issue resolution. Workshops and one-on-one meetings were conducted to support key deliverables. Continued to work closely with the Hanford Advisory Board-Environmental Restoration (HAB-ER) committee
- Prepare and issue a draft Science and Technology Plan and Roadmap
The draft Science and Technology Plan and Roadmap were issued for public review in December. After the incorporation of comments, Rev. 1 of the roadmap was issued in June

- Prepare a Detailed Workplan for FY00 - FY02
This effort was completed with DOE approval on September 20
- Performed the System Assessment Capability (SAC) task which includes the assembly and/or development of the tools and information needed to perform a sitewide assessment of the risks and impacts of contaminant sources remaining at the Hanford Site at the time of closure
During FY99, the SAC Team developed conceptual models for the initial assessment, completed a scoping study on the Hanford Site waste inventory, and initiated the definition of risk and risk metrics. These efforts culminated in the issuance of the Preliminary System Assessment Capability Concepts for Architecture, Platform and Data Management document in September



Groundwater Management

- Managing groundwater, seismic, and vadose monitoring, well maintenance, well database management, modutank operations and management, and groundwater modeling workscope. Groundwater monitoring is done to maintain compliance with regulations and to provide a technical basis on which to judge groundwater impacts from site operations
Ongoing

100 Area

- Completed:
 - Installation of one monitoring well at 100-KR-4
 - Installation of one extraction well at 100-HR-3
 - Installation of 12 remedial design wells at 100-HR-3-D
 - Performed Accelerated Site Technology Demonstration (ASTD) chemical test injection for In Situ REDOX Manipulation development
- Ongoing:
 - Operate 100-HR-3, 100-KR-4, and 100-NR-2 Pump-and-Treat Systems (including performance monitoring)
 - Prepared Draft 100-HR-3 ROD amendment
- Awarded contract and began drilling eight RCRA groundwater monitoring wells

200 Area

- Completed for FY99:
 - Operate 200-ZP-2 Soil Vapor Extraction System (including performance monitoring)
 - Disposed of 98% of legacy Investigation Derived Waste (IDW)
- Ongoing:
 - Operate 200-UP-1 Pump-and-Treat (including performance monitoring)
 - Operate 200-ZP-1 Pump-and-Treat (including performance monitoring)

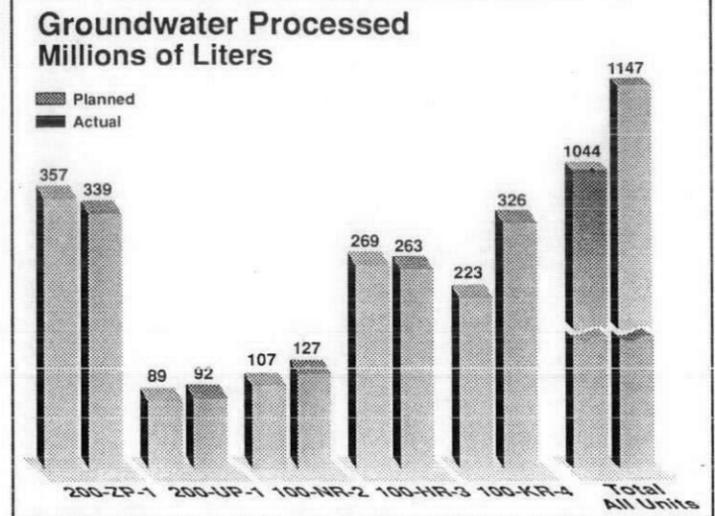
Other Completed/Work In Progress

- Continued well maintenance activities for sampled Hanford Site wells
- Issued RCRA Quarterly Reports
- Continued Hanford Site consensus groundwater model development
- Installed sitewide groundwater monitoring wells (CY99)
- Issued FY98 sitewide Groundwater Monitoring Report
- Issued Organic/Carbonaceous Waste Certification
- Approval of IDW Strategy Revision
- Composite analysis approved with conditions
- Collected 1,162 water samples and performed 11,255 analytical analyses

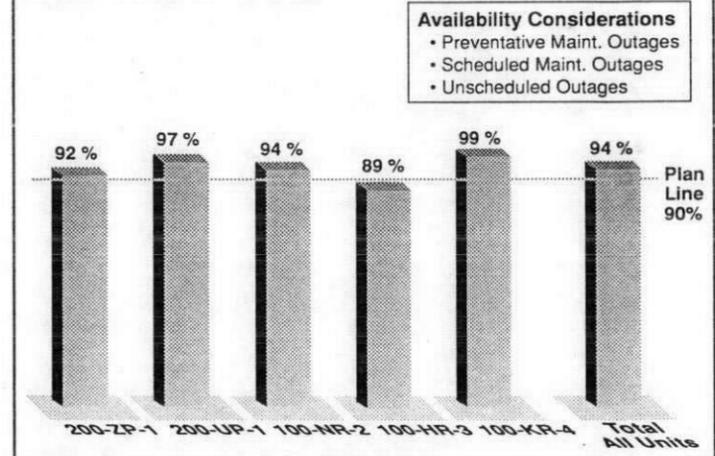
200 Area Remedial Action

- Issue the final 200 Area Implementation Plan
Revision 0 of the plan was released in April (DOE/RL-98-28)
- Complete the 200-CW-1 Remedial Investigation/Feasibility Study (RI/FS) Workplan with Treat, Store, and Dispose (TSD) unit sampling plan. Initiate field characterization activities
The RI/FS Workplan and TSD Unit Sampling Plan were submitted on schedule (TPA Milestone M-13-20). Field work was initiated in August and all planned work was completed in September. A Baseline Change Proposal (BCP) to bring forward (FY00 workscope) four additional test pit excavations was approved, and the work was completed in September
- Initiate the 200-CS-1 RI/FS Workplan with TSD unit sampling plan.
The Workplan was initiated on schedule. Draft A of the Workplan was submitted to DOE on schedule for transmittal to the regulators (TPA Milestone M-13-21)
- Initiate the 200-CW-5 RI/FS Workplan
The Workplan was initiated on schedule. TPA Milestone M-13-22, deliver of Draft A of the Workplan to the regulators, is due Dec. 31, 1999
- Initiate the 200-PW-2 RI/FS Workplan with TSD unit sampling plan
This workscope was moved out of FY99 (via BCP) in conjunction with a TPA change package to bring forward work on operable units that are associated with tank farms
- Rebaseline of the LRP based on the 200 Area Implementation Plan and waste site reclassifications, and provide general support for 200 Area-wide activities
Rebaselining of 200 assessment activities was supported. Reclassification of 43 waste sites was initiated
- Complete the 200-BP-1 surface barrier treatability test report
The treatability test report was issued in August

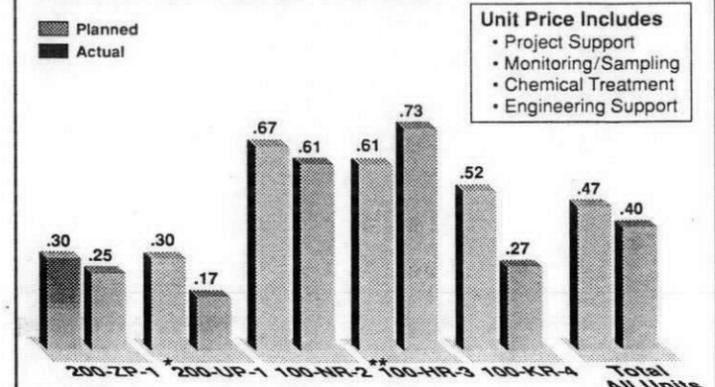
FY99 (Actuals through September 30)



Groundwater Pump & Treat Units System Availability



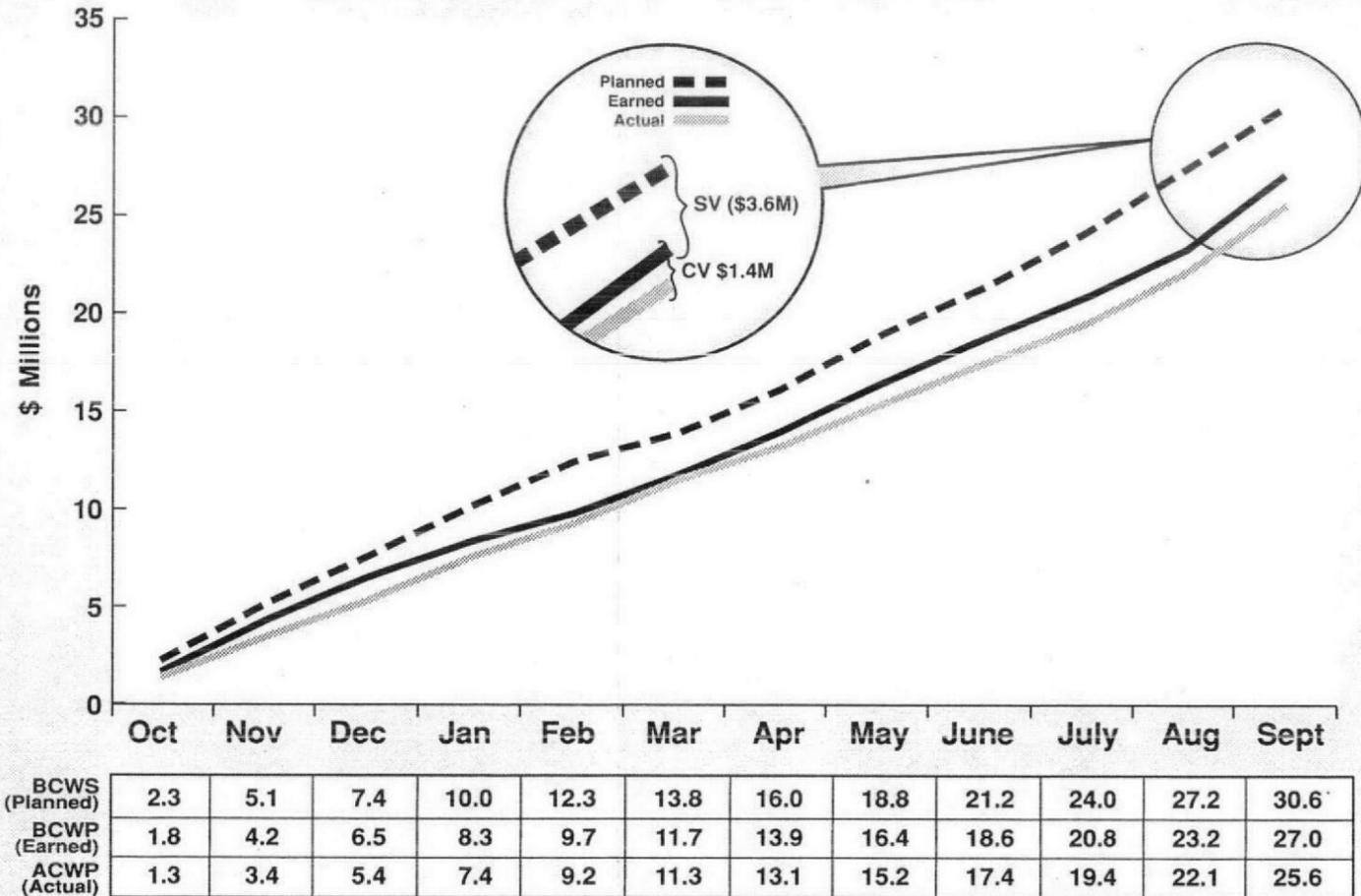
Groundwater Processing Unit Price - Cents Per Liter



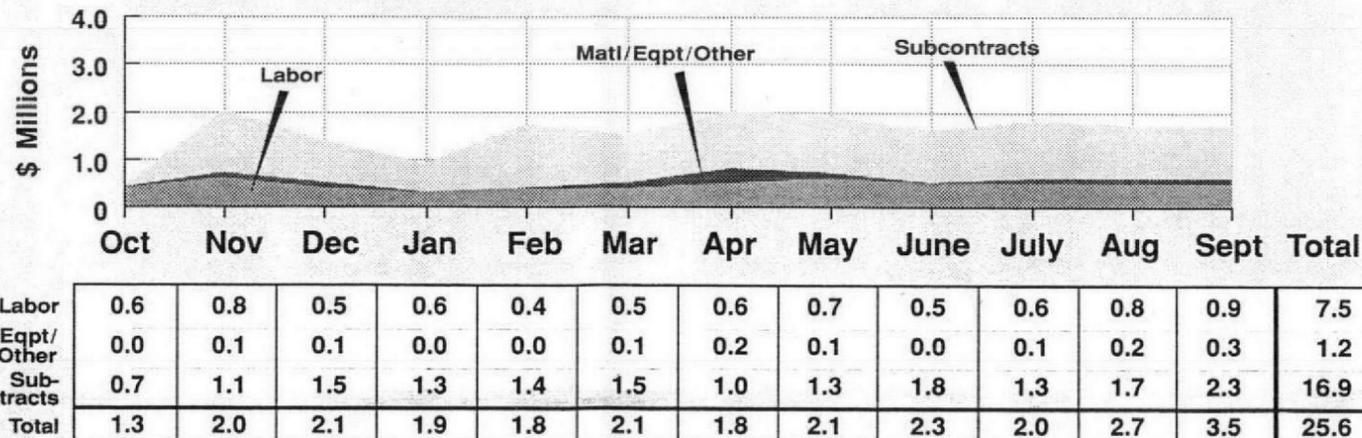
* Excludes ETF treatment and disposal costs
 ** Includes additional costs for drilling, frozen pipe repair, pump/valve failures and installation of an acid injection system

Groundwater/Vadose Zone Integration Project

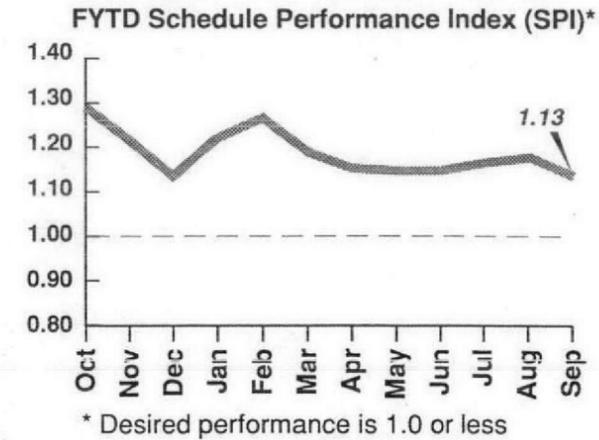
FY99 Project Performance (Cumulative)



FY99 Expenditures (Monthly)



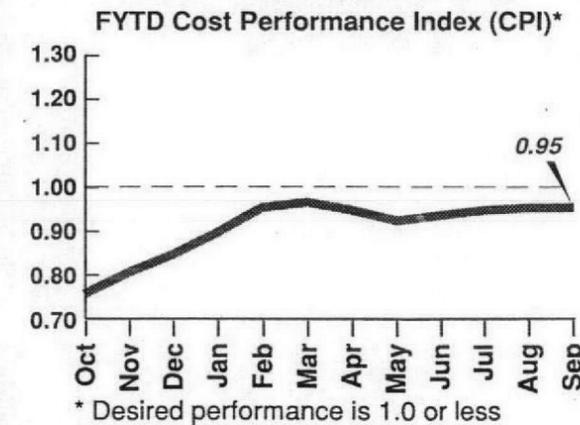
Schedule Performance



Schedule Variance (SV): (\$3.6M)

- The Science & Technology Plan and Roadmap were reprioritized which delayed the completion of the Plan until FY00
- The integration of drilling activities with the Groundwater Project and associated delays in awarding a drilling contract delayed the start of drilling at the S-Pond. Drilling is now planned for November
- Routine well maintenance was delayed due to contract negotiations, planning for FY99 RCRA drilling was not initiated as scheduled, and resin regeneration and CWC burial fell behind schedule due to delays in receiving resin analysis data

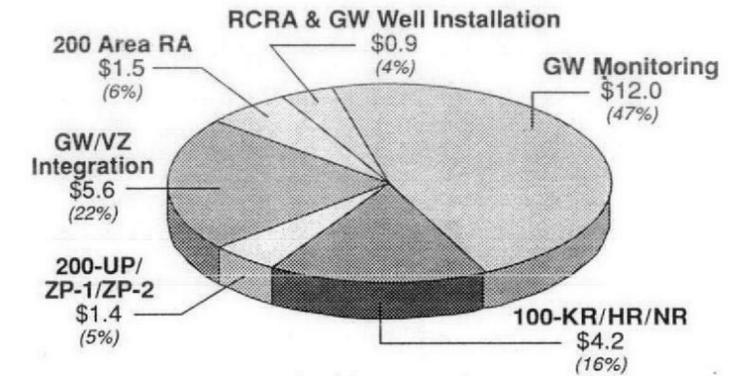
Cost Performance



Cost Variance (CV): \$1.4M

- 200-CW-1 Gable Mountain/B-Pond Assessment cost underrun is a result of efficiencies in test pit excavation, drilling, and associated prejob planning and preparation of the Workplan
- Efficiencies in sample collection and routine and non-routine maintenance resulted in cost savings

Subproject Actual Costs to Date (Project Total \$25.6 Million)

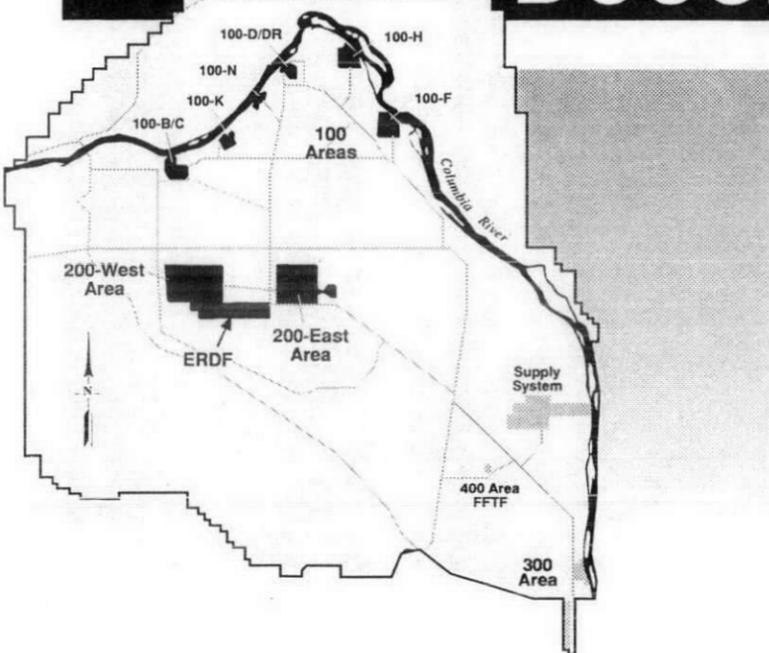


Issues

Groundwater Management

- Capital GW monitoring well installation funds will be expended this calendar year with no funds available for out-years at this time. This will impact Tri Party Agreement Milestone M-24-00
Strategy/Status: RL is working across all applicable Hanford Site facilities to identify funding for a new well strategy in calendar year 2000. Funding sources for each facility are under review
- The Low-level Federal Review Group (LFRG) recommended that the Hanford Composite Analysis (CA) be accepted with conditions; those conditions require that an addendum to the CA be prepared in the next fiscal year. It was assumed in the FY00 DWP that this work would not have to be performed in FY 2000, but would be included in the CA Maintenance Plan. This will require a change to the current DWP planning for FY00
Strategy/Status: RL is discussing resolution with DOE-HQ
- The 100-HR-3 ROD Amendment was not issued by September 30, 1999 as planned
Strategy/Status: Requested RL to provide written direction to proceed with procurement of drilling services prior to ROD Amendment and Remedial Design Report approval

Decommissioning Projects



Reactor Interim Safe Storage

> Common Reactor Engineering

- Completed the F&DR Phase II (above-grade structures) sample design
- Completed 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 was completed in September 1999

> F Reactor Interim Safe Storage (ISS)

- Completed all asbestos abatement and liquid pipe check activities
- Completed all FY99 scheduled structural demolition, which included the valve pit lab, NE reactor area, control room, and outer rod room ahead of schedule (18% foot print reduction, 40% to date)
- Completed all other original FY99 workscope ahead of schedule
- Received change approval for additional field workscope (south reactor demo, upper reactor HAZMAT removal, valve pit predemo activities). This was funded by project cost underruns and also completed as scheduled
- Fuel storage basin fill removal planning completed in September

> DR Reactor ISS

- Completed liquid pipe check activities
- Completed exterior supply duct asbestos abatement
- Completed all scheduled FY99 structural demolition, which included the fan room and NE reactor, NW reactor, control room, and outer rod room
- The project completed all FY99 demo scope 5 weeks ahead of schedule
- Completed all asbestos abatement activities
- Received change approval for additional field workscope (valve pit predemo activities and fuel storage basin concrete and soil sampling), which was also completed as scheduled

> C Reactor ISS

The cleanup verification package for C Reactor Building below-grade structures and underlying soils was completed and issued to DOE-RL and regulators on September 30, 1999

Decommissioning

> 108-F Biology Laboratory

Due to funding constraints, a management hold was placed on initiation of work activities through December 7, 1999. Hazmat and asbestos abatement field work began in February 1999 and was completed in June 1999

Demolition work began in June 1999 and was completed in September 1999

All FY99 work was completed essentially 5 months ahead of the original schedule

> 105-B Reactor Museum

Initiation of assessment activities began in February 1999

The "105-B Hazards Assessment and Characterization Report" (TPA milestone M-93-04) was completed on June 28, 1999, to meet the milestone

> Historic Building Mitigation Project

Public comment activities were 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 was initiated

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

All FY99 work activities were completed by September 30, 1999

> The 116-D and 116-DR Exhaust Stack

Demolitions were accomplished in FY99 by applying performance underruns from the F & DR Reactor ISS Projects to fund this additional work, originally scheduled for the outyears. The explosive demolition was subcontracted with a safe and successful completion 1 month ahead of schedule.

> Work for Others

Completed the 384 Fuel Bunker Site Assessment (DynCorp)

Completed removal, site assessment, and site remediation of the 384 Day Tanks (DynCorp)

Provided engineering support to provide a EE/CA, Remedial Action Workplan, etc., to demolish the 331-A Building and dispose of it at ERDF (PNNL)

Developed an estimate to demolish the 6652-G and 6652-I Buildings located on the Arid Lands Ecology (ALE) site (PNNL)

233-S Plutonium Concentration Facility

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

Commenced removal of framework, sheet metal sections, and ductwork

> Pipe Trench

Performed Pipe Trench NDA. No criticality controls were required for pipe-removal activities

Completed pipe trench sampling

Removed all Cold, Hot, and Neptunium Trench piping and installed temporary covers 2 weeks ahead of target schedule (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

Completed Project Management assessment of readiness

Completed the FRA contractor and DOE phases

Received approval to proceed from the DOE-RL Deputy Manager, with the next phase of decommissioning activities at 233-S (~2 years of scope). This included installation of temporary ventilation and isolate 233-SA, exhaust duct removal and roof decontamination, remove process hood PMMA panels, decontamination of viewing room and process hood, and vessel removal

> Facility Exhaust Modification

Completed installation of the 3/6/9 portable exhauster and isolation of 233-SA on schedule

This included Exhaust Modification Safety Evaluation and TSR approval; eight core drill holes; installation of flex duct with UV sleeving, transition pieces and fittings; exhauster functional modifications; staff training

> Exhaust Duct Removal and Roof Decontamination

Completed zero energy checks and removal of piping and conduit from roof foot print No. 1

Completed exhaust ductwork and 233-SA roof sampling

> Process Hood Gross Decontamination and PMMA Panel Removal

Completed application of fogging material in the process hood. Airborne DAC levels were significantly reduced

Completed installation and certification of the glovebag in front of the L-16 process vessel

Commenced large glovebag installation on the first floor of the process hood face

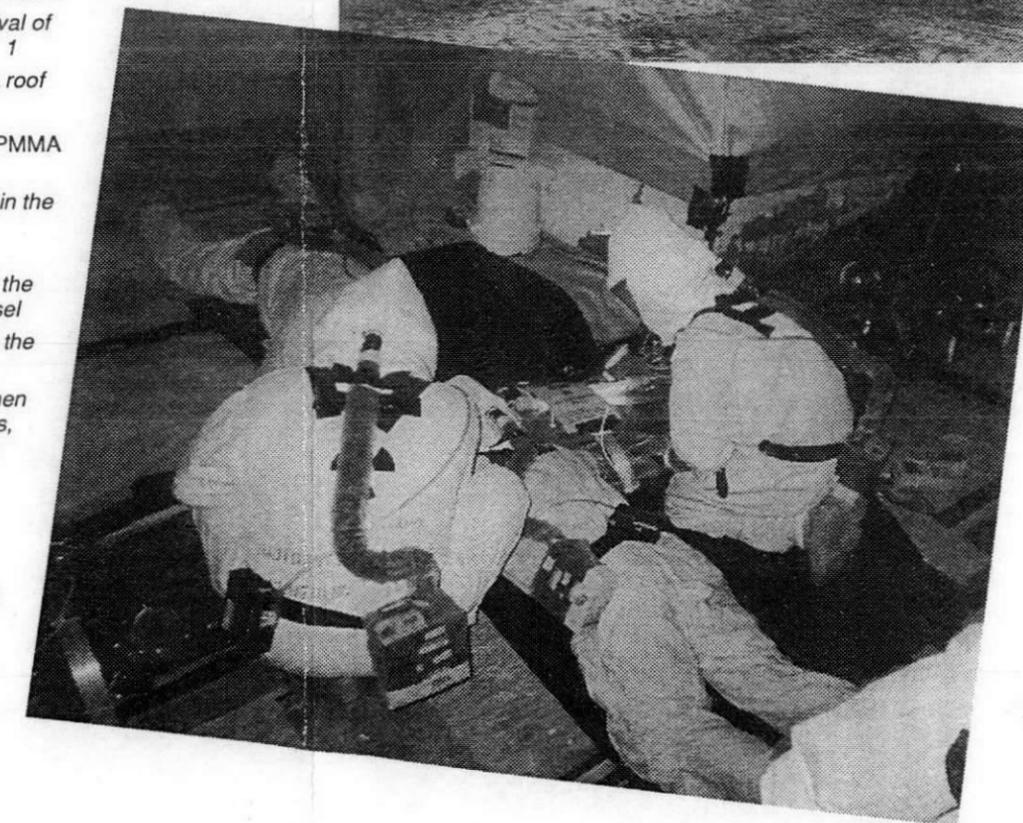
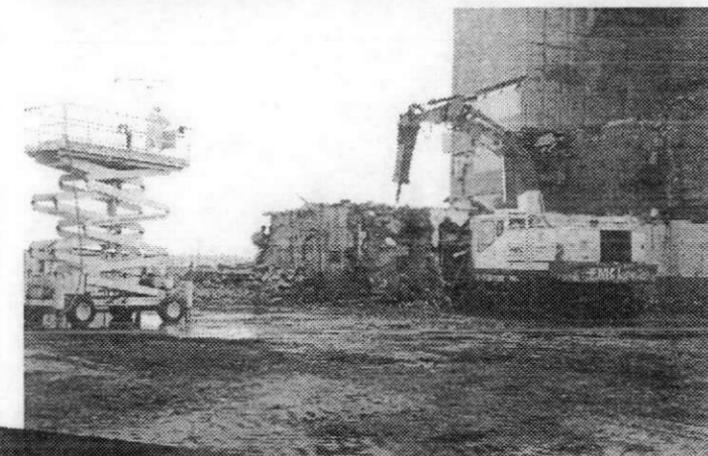
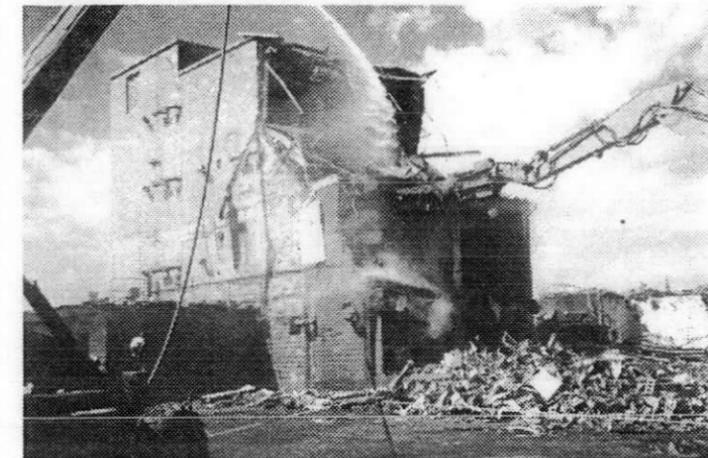
Access to the process hood was gained when the L-16 inlet HEPA filter, support brackets, and PMMA panel were removed from the front face of the process hood

> Miscellaneous/Functional Support

Completed 24 months (133,000 hours worked) of decommissioning activities without a skin contamination event or lost work-day injury

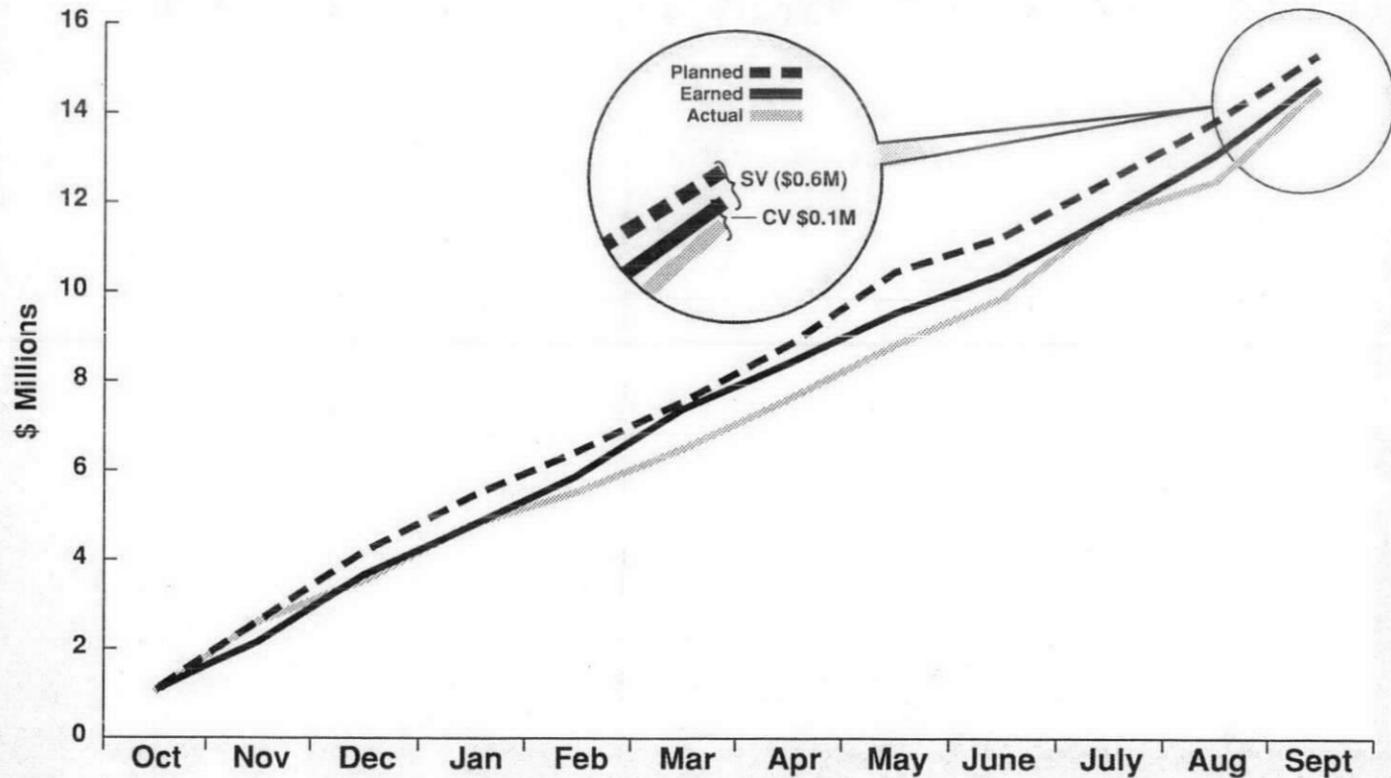
Packaged and shipped 20 boxes of low-level waste to ERDF (81 boxes/6,484 ft³ shipped to date)

Successfully stabilized 10 liters of Non-Process Pipe Gallery contaminated nitric acid



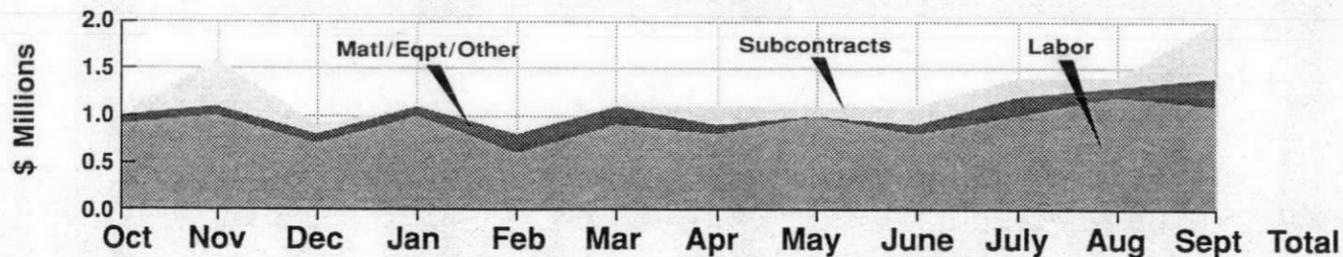
Decommissioning Projects

FY99 Project Performance (Cumulative)



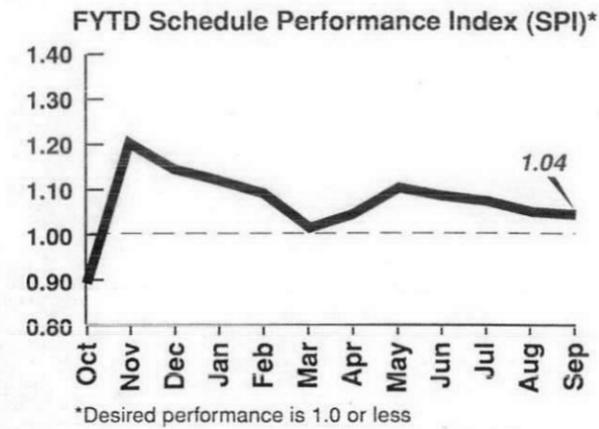
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept |
|----------------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| BCWS (Planned) | 0.9 | 2.6 | 4.1 | 5.4 | 6.4 | 7.5 | 8.8 | 10.4 | 11.2 | 12.5 | 13.8 | 15.3 |
| BCWP (Earned) | 1.0 | 2.1 | 3.6 | 4.8 | 5.9 | 7.4 | 8.4 | 9.5 | 10.4 | 11.7 | 13.1 | 14.8 |
| ACWP (Actual) | 1.0 | 2.6 | 3.5 | 4.7 | 5.5 | 6.5 | 7.6 | 8.8 | 9.9 | 11.1 | 12.5 | 14.6 |

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 | 0.8 | 1.0 | 0.8 | 1.0 | 1.2 | 1.1 | 11.0 |
| Matl/Eqpt/Other | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.3 | 1.6 |
| Subcontracts | 0.0 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.6 | 2.0 |
| Total | 1.0 | 1.6 | 0.9 | 1.1 | 0.8 | 1.1 | 1.1 | 1.1 | 1.1 | 1.4 | 1.4 | 2.0 | 14.6 |

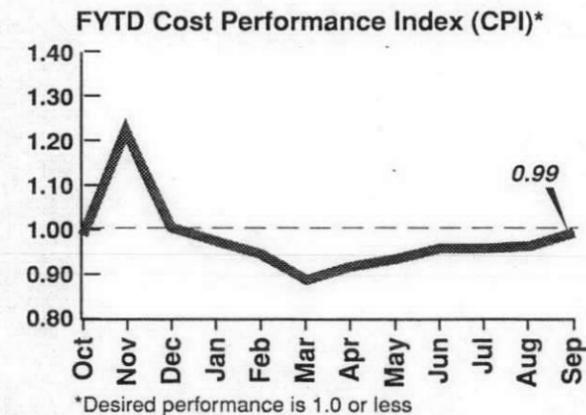
Schedule Performance



Schedule Variance (SV): (\$0.6M)

- 233-S decommissioning behind due to lack of as-built drawings for loadout hood frame and delay in starting roof duct removal. Waste disposal delayed pending certification of Hanford WRAP facility
- Resource and equipment availability delayed demolition preparation activities at the F & DR Reactor valve pits

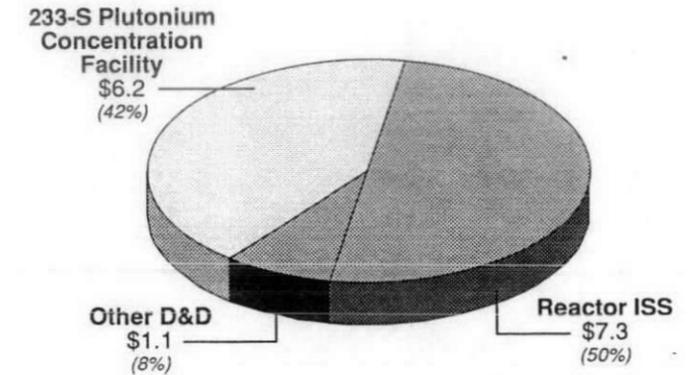
Cost Performance



Cost Variance (CV): \$0.1M

- Underruns were offset by cost overruns at 233-S due to high contamination levels, installation of a temporary exhauster and the installation of additional truck lines to increase viewing room ventilation
- Increased labor productivity and reduced sampling costs resulted in underruns at F Reactor ISS, and 108-F demolition project

Subproject Actual Costs to Date (Project Total \$14.6 Million)



Issues

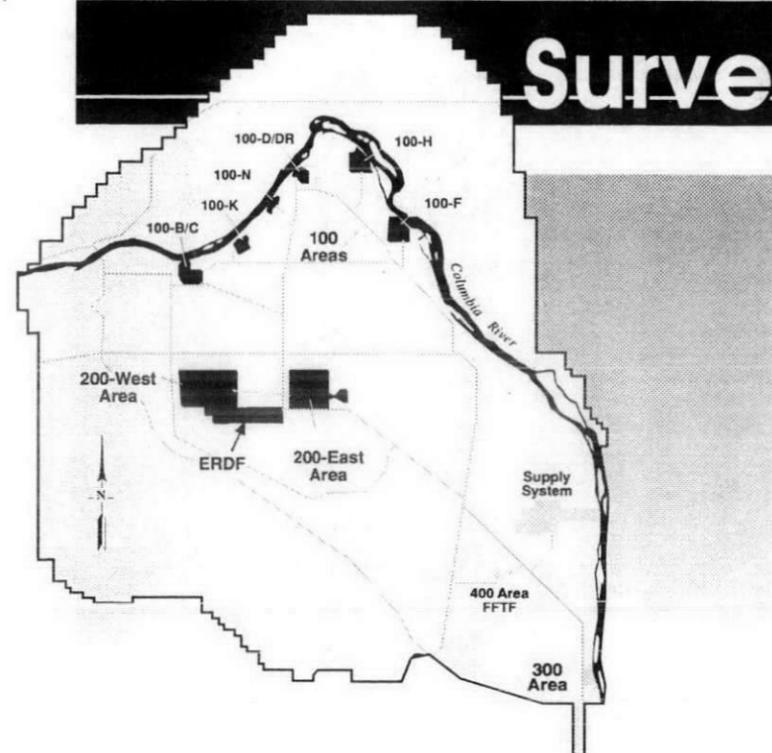
- FY00 funding guidance provides \$2M to fund the F and DR ISS Projects through December 22. Supplemental funding will be required to continue ISS activities beyond December 22.

RL is attempting to obtain additional funding to support this work through FY00

- During 233-S process hood sampling activities high dose rates were encountered from the sample container. Subsequent nondestructive analysis (NDA) confirmed the existence of an Unreviewed Safety Question (USQ), which was reported as an Unusual Occurrence (UO).

Extensive planning and discussions have been conducted to determine the path forward to decontaminate the process hood floor. The EPA was briefed on the path forward.

Surveillance / Maintenance and Transition Projects



- Continue surveillance and maintenance (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 and in the 200 and 300 Areas for FY99

- Continue S&M of PUREX Complex

Completed surveillance in the PUREX complex for FY99

Pumped out the V-11-10-1 Tank and transported effluent to the ETF

Completed Y2K upgrades to the SAMCONS system

- Perform S&M at the 308 Building in 300 Area

Completed required surveillances

- 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 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, PUREX, 107-KE/KW and 107-F

- 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

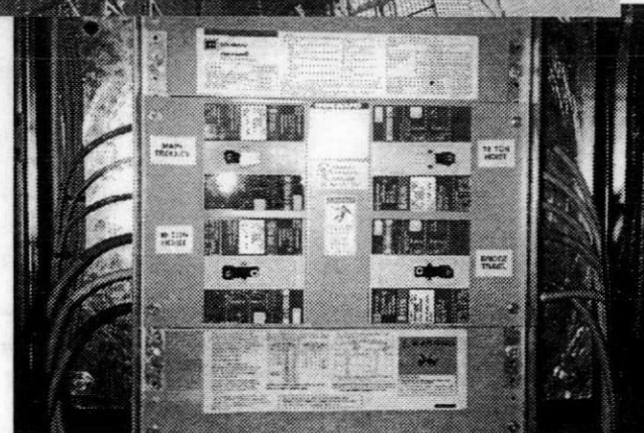
Completed 105-N and 109-N roof repairs. Completed 105-KE/KW flashing and fascia repairs. Completed 105-KW roof repair. 105-KE roof repair to be carried over to FY00 and completed in October 1999 due to discovery of water saturated underlayment

- Sample/Repack/Ship 105-KE/KW and other 100 Area waste to reduce hazards to workers and potential releases to the environment

Completed sampling/repacking/shipping of legacy waste at the B Reactor and the front face of KE Reactor

- Continue Canyon Disposition Initiative (CDI) characterization efforts by characterizing process cells and utilizing technology integration

Characterization initiated



Workscope 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, and obtained concrete samples from the canyon deck

Completed Vent Tunnel robotics characterization. Accessed four additional process cells in support of CDI characterization

- Complete plutonium loadout hood characterization report and commence planning activities for ultimate removal of the plutonium loadout hood

Completed Plutonium Loadout Hood Characterization Report

Completed engineering alternatives study and seismic evaluation for dispositional alternatives

- Provide endpoint criteria development and verification support to B Plant

Completed endpoint criteria development and verification support to B Plant. B Plant transitioned to EM-40 on September 30, 1999

Completed BHI procedure development and personnel training for the transition of B Plant

- Complete annual updates to Safety Analysis Report (SAR) and selected Audible Safety Analysis (ASA)

Incorporated comments and reissued 212-N SAR, completed update to 224-B authorization basis, REDOX SAR, U Plant SAR, and IMUST Management Report

- Continue long-term, post-remediation S&M

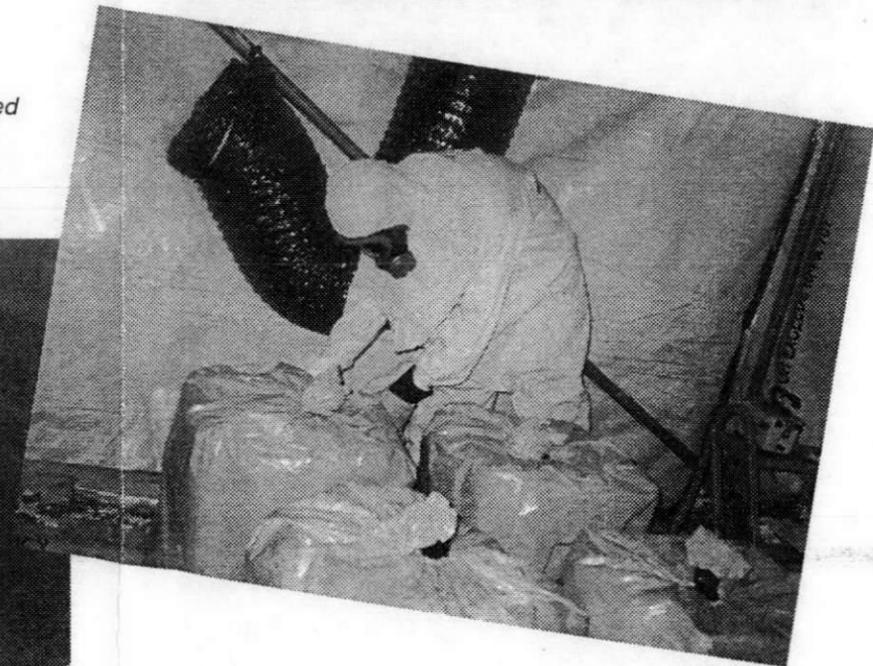
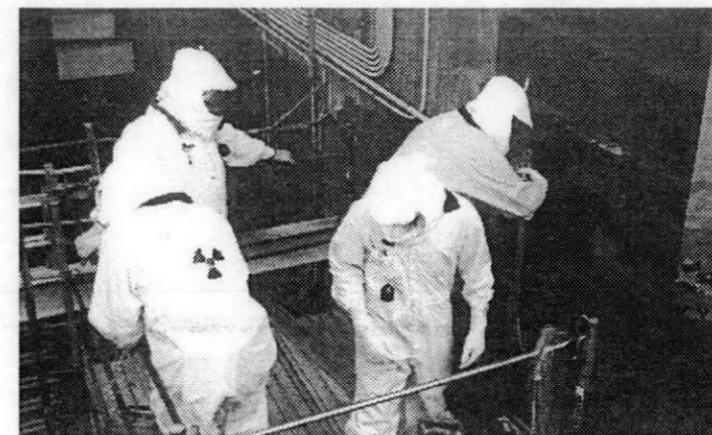
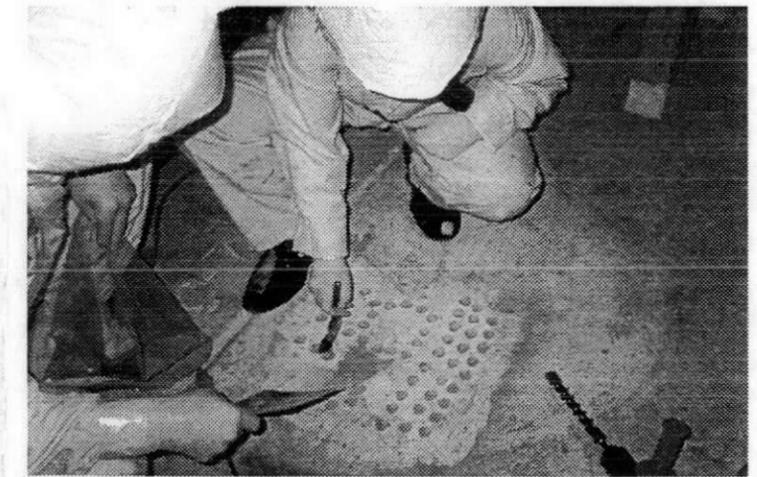
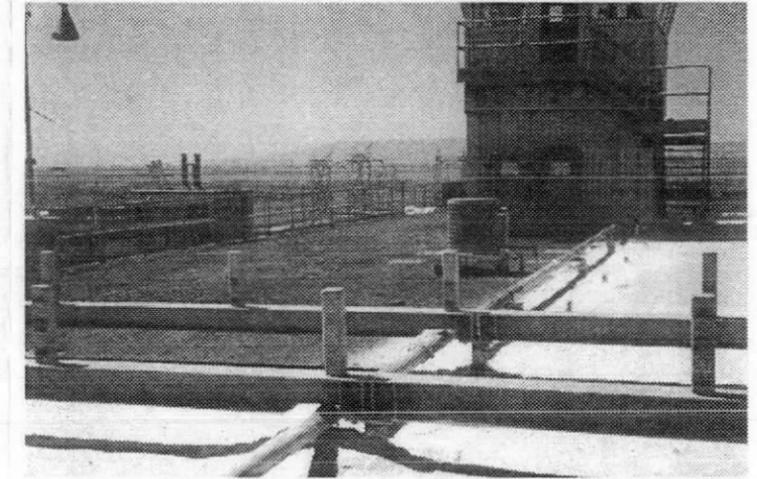
Completed long-term, post-remediation S&M, as required for FY99

- Completed Request for Proposal for a new water treatment plant to replace existing system at 183-N

Bids were received and evaluated. Design and installation to be carried over to FY00

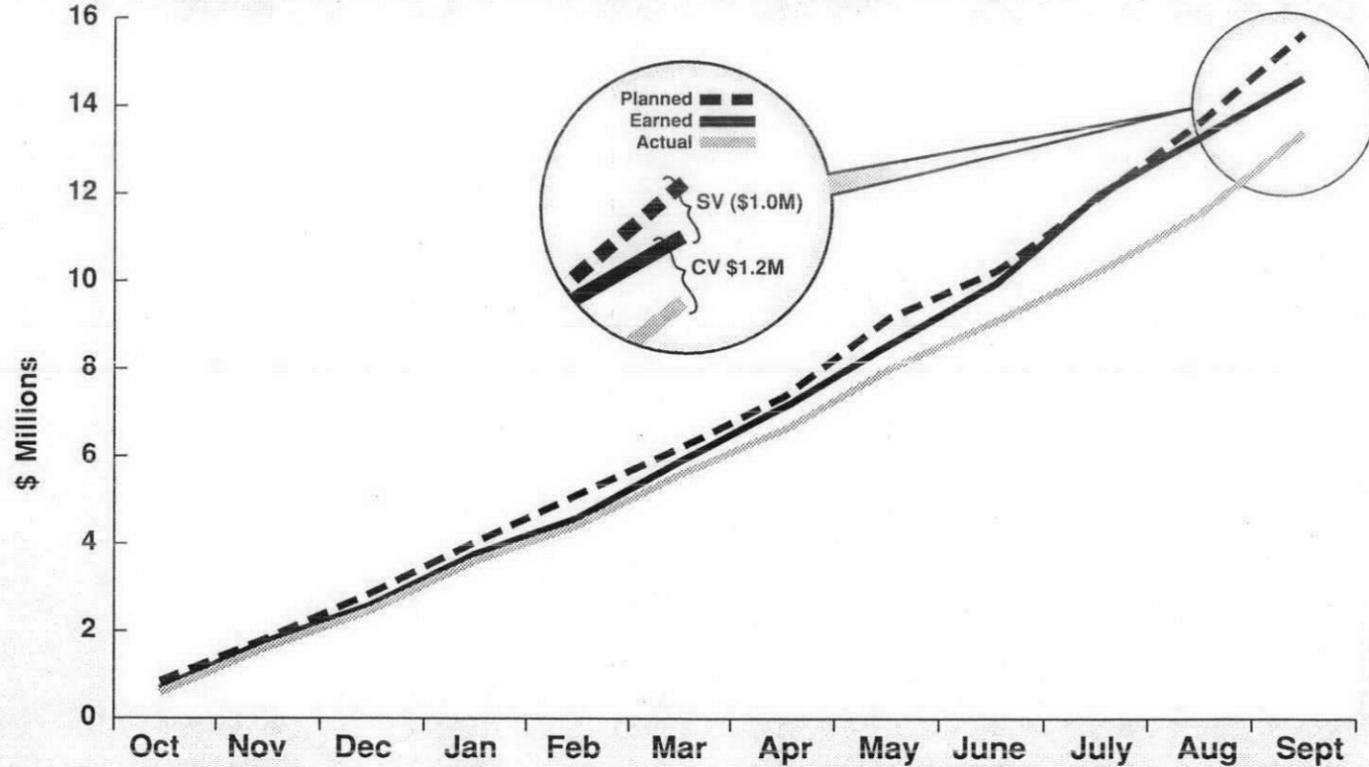
- Other facility transition support includes:

- Developed Project Management Plan for 300 Area Revitalization
- Provided transition support to develop the accelerated Plutonium Finishing Plant project
- Supported transition of miscellaneous facilities and waste sites from EM-60 and PNNL into S/M&T



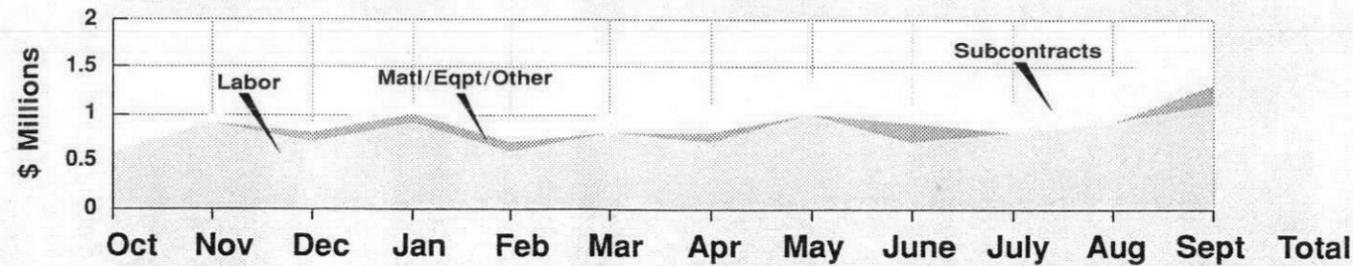
Surveillance/Maintenance and Transition Projects

FY99 Project Performance (Cumulative)



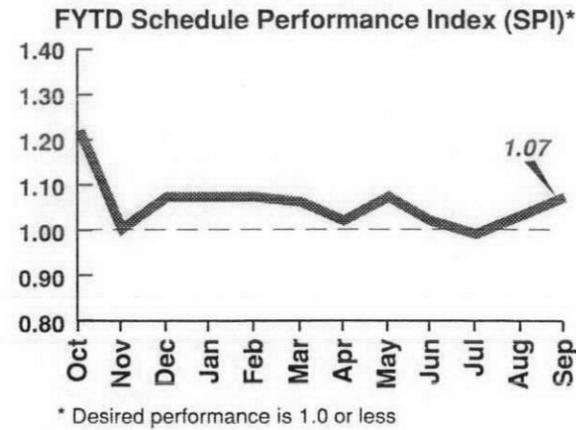
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|
| BCWS (Planned) | 0.8 | 1.7 | 2.8 | 4.0 | 5.0 | 6.1 | 7.3 | 9.1 | 10.1 | 11.8 | 13.6 | 15.6 |
| BCWP (Earned) | 0.6 | 1.7 | 2.6 | 3.7 | 4.6 | 5.8 | 7.1 | 8.5 | 9.9 | 11.9 | 13.2 | 14.6 |
| ACWP (Actual) | 0.6 | 1.6 | 2.5 | 3.6 | 4.4 | 5.5 | 6.6 | 7.9 | 9.0 | 10.1 | 11.5 | 13.3 |

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 | 0.7 | 1.0 | 0.7 | 0.8 | 0.9 | 1.1 | 9.7 |
| Matl/Eqpt/Other | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | (0.1) | 0.2 | 0.0 | 0.0 | 0.2 | 0.7 |
| Subcontracts | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.2 | 0.3 | 0.5 | 0.5 | 2.9 |
| Total | 0.6 | 1.0 | 0.9 | 1.1 | 0.9 | 1.0 | 1.1 | 1.3 | 1.1 | 1.1 | 1.4 | 1.8 | 13.3 |

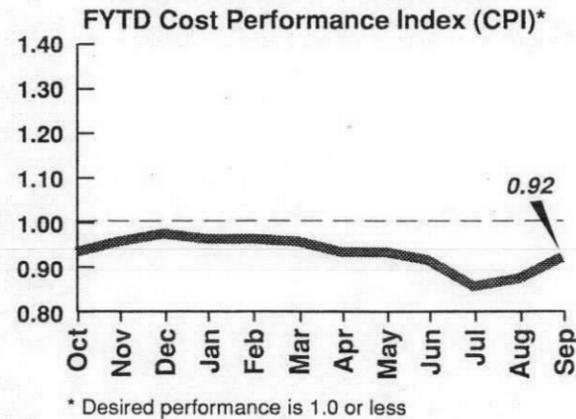
Schedule Performance



Schedule Variance (SV): (\$1.0M)

- Completion of roof foaming at 105-KE delayed due to discovery of water saturated underlayment
- Shotcreting of area above tank V-11-10 not completed due to engineering investigation of soil loading conditions and cover block removal

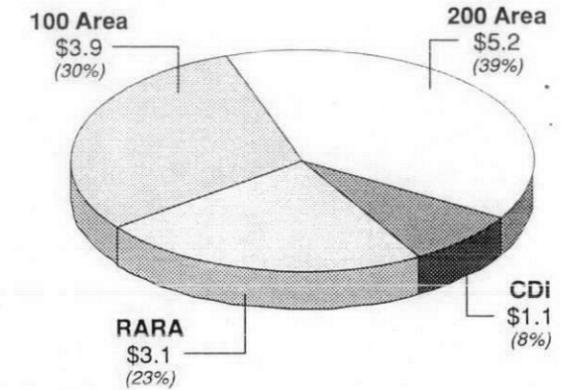
Cost Performance



Cost Variance (CV): \$1.2M

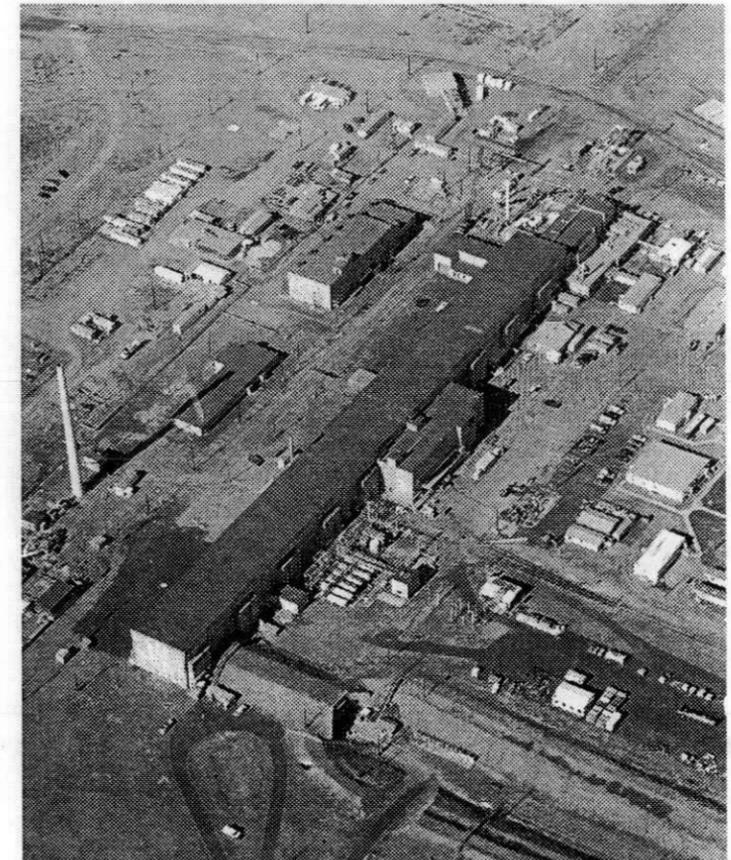
- Productivity savings for RARA stabilizations
- Herbicide application, revegetation, and maintenance expenditures less than estimated
- Productivity savings in 100 and 200 Area surveillances and corrective actions

Subproject Actual Costs to Date (Project Total \$13.3 Million)

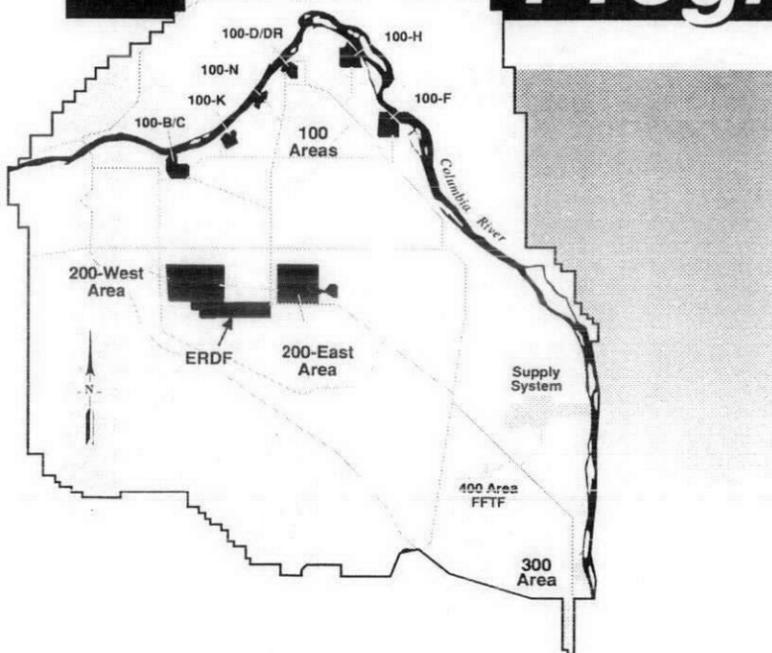


Issues

- B-Plant transitioned to the EM-40 program with significant issues with respect to documentation and operational capability
- It has been recommended to DOE (EM-40) that these items be placed in the B-Plant Memorandum of Agreement (MOA) so the items remain the responsibility of DOE (EM-60) until they are completed to the satisfaction of EM-40



Program Management and Support - ERC



Project and Program Support

- Maintain approved Property Management and Purchasing Systems, Automated Procurement Tracking System, small business program, and continue Balanced ScoreCard

Exceeded Small Business goals (fifth consecutive year). In addition, two BHI Subcontract Specialists placed more than one million dollars with small, disadvantaged business in the previous fiscal year

ERC Recognized by DOE for submitting the top score in 4 categories out of 13 for the complex wide Procurement FY98 Contractor Balanced ScoreCard Plan:

- Customer Satisfaction
- Small Disadvantaged Business
- Women Owned Small Business
- Information Availability

Actively participated on two DOE complex-wide procurement process improvement teams. Both the Procurement Re-engineering and Evaluation Team (PERT) and EFOG Privatization Team have been at the forefront of DOE acquisition reform. These teams have assisted the DOE-HQ Procurement Executive and his staff with recommendations concerning procurement reform opportunities and implementation of reforms initiatives throughout the DOE complex

DOE/RL recertified and approved the BHI Property system for an additional 2 years

Continued to support the Economic Transition effort by partnering with DOE, FDH, and DynCorp

Participated in several meetings with Tridac and DOE to establish the guidelines for a Tri-City Community Reuse Organization. This organization will take contaminated property/equipment, decon it, and then release it for sale to other local area businesses. This program supports excessing of property, and the waste minimization program

Participated in a DOE Inventory Management Team study that reviewed controlled property items, and recommended changes based on sensitivity and cost of control. Proposed recommendations were then presented to the Contractor Property Council and DOE HQs Procurement Executive

➤ 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 GW/VZ Project for integration of other contractor personnel joining the project

➤ External Affairs

Provided planning, preparation, and development of products required for Secretary of Energy visit to the Hanford Site and ceremony for C Reactor ISS completion

Produced the ER Project FY98 Annual Report

Worked with other Hanford Site communication directors to integrate and improve information outreach

Revised, analyzed, and communicated results of the ERC Team's second employee survey

Issued 114 employee messages, completed 74 media interactions, published 27 stories in the Hanford Reach, placed 23 articles in non-Hanford Site publications, and assisted with 25 tours of the ER Project

Project Technical Support

Engineering and Technology

- Identify and evaluate technology needs, gaps, and solutions, and prepare proposals that support project technology needs

Supported improved technology solutions. Results of these activities include (1) more than \$2 million of new funding (primarily EM-50) obtained to directly support ERD Projects and (2) 17 environmental restoration technology deployments conducted in FY99

Managed Technology Integration for the 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 ROD; and (3) completed five technology deployments, including technologies to detect freestanding liquids in pipes and equipment

Obtained funding for two Accelerated Site Technology Deployment 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 process to identify and select potential technologies to remediate soil and 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. 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

Designed and coordinated construction of a safe and environmentally friendly habitat for bats at a 100 Area reactor facility

Conducted field sampling of dichlorobisthylene (DDE) contamination at North Slope and ALE waste sites

Developed a wetland habitat strategy for the 100 Area borrow pits

Planted more than five acres of seeds at the Confederated Tribes of the Umatilla Indian Reservation Native Plant Nursery to help meet Hanford Site needs for native vegetation

- Provide support to ERC Site Assessments and Closure

Streamlined Data Quality Objectives Process and provided data quality objective training to other sites in the DOE complex through support from the DOE Hanford Analytical Management Program

Issued Data Quality Assessment Procedure to support ERC waste site closeout activities

Completed Guidance for Radiological Release of DOE Real Property at the Hanford Site

Consolidated near-field environmental monitoring services for BHI projects

- Provide Sample and Data Management Support

Upgraded the Sample Data Tracking software to provide the Hanford Site with user friendly ability to track environmental samples

Performed TPA-MA-14, WIDS reclassification process on 300-FF-2 waste sites

Prepared annual Hanford Site Waste Management Units Report

Maintained the environmental data and waste site databases and the geographical information system for the Hanford Site

Maintained analytical field sampling, and field laboratory support for ERC projects

- Support DOE Waste Minimization and Pollution Prevention guides and objectives

Updated the ERC Waste Minimization and Pollution Prevention Plan to reflect ERC organizational changes and new guidance from DOE

Completed a cost benefit analysis for the disposal of concrete materials as backfill for remedial action sites or in clear wells

Successfully reduced or recycled greater than 133,000 metric tons of waste

- Prepare input to 30 environmental reports required by environmental statutes regulations, and DOE orders, including EPCRA/SARA, rad air emissions, RCRA dangerous waste, and environmental permitting

Updated the RCRA Permit Implementation Plan to reflect changes that have occurred in permit maintenance

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 and guidance, including the Nuclear Safety and Criticality Program for nuclear facilities and activities

A final version of the Engineering Guide for Metric System was issued for project use in support of the Metric Implementation Plan

Promoted and expanded use of Value Methodology by conducting several Value Studies to reflect ERC and DOE's mission to minimize the life-cycle cost of restoration and protection of the Hanford Site

Participated in the "Site Integration Group" and worked with other Prime Contractors to improve interface control and standardization of tools for Hanford Site-wide applications

Issued an Opportunity Assessment Report for Waste Minimization/Pollution Prevention that identifies three opportunities that could result in waste volume reduction and life-cycle cost savings

Issued an Engineering Guide for post-earthquake evaluation of Hanford Site facilities

Issued Hazard Classification Matrices that included a major revision to address chemical hazards

Field Support

The BHI Field Support organization purchased two starter generators realizing a significant cost savings during FY99. The two "Miller Blue Charge" combination welder/generator/jump-start units are used on a daily basis, mounted in the mechanic trucks, to perform jump starts to heavy equipment. Before purchasing these units, it was common practice to have the DynCorp mechanics called out from the 200 East Area, at \$130/hr average. With the applicable travel time, a typical jump-start would take 2 hours or \$260. The BHI mechanics with their own jump-start equipment complete this work in 30 minutes or less at \$80/hr, or \$40/start

Jump-starts were performed using this equipment approximately 60 times/year in FY99, providing BHI with approximately \$13,000/year in operational cost savings and significantly reducing the project downtime

PM&S - ERC continued



Compliance, Quality, Safety and Health

- Maintain the ERC Quality, Safety and Health Program
 - Completed the ISMS self-assessment at Functional Department and Project levels*
 - ERC readiness for Phase I/II ISMS verification completed*
 - Labor Alliance successfully negotiated and safety goals established*
 - Fire Protection System Deactivation Analyses were completed for seven facilities*
 - Published the ERC Chemical Management Plan*
 - Submitted for DOE review and approval a revised ERC Radiation Protection Plan that addresses recent revisions to 10 CFR 835*
 - Provided to DOE the monthly radiological control performance standard reports and quarterly radiological control performance indicator reports*
 - Deployed several new radiological monitoring instruments that improve ERC ability to monitor workplace conditions and provide for more efficient operations*
 - Successfully completed all actions related to external assessments of the radiological external and internal dosimetry programs and radiological control technician training*
 - Upgraded the ERC radiological work permit program to more clearly document important planning decisions and communicate essential exposure control details*

Planning & Controls

- Support RL Reports and Presentations (Monthly Progress Report, Progress Tracking System, Hanford Site Performance Report, 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 HQ directed effort on "TWRS Reprogramming Contingency Plan"

➤ Prepare DWP, LRP, PBSs, and Baseline Update/MYWP

Completed and issued baseline database and LRP

Completed various studies and scenarios in support of the final revised Integrated Priority List 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 HQ management reporting system (IPABS)

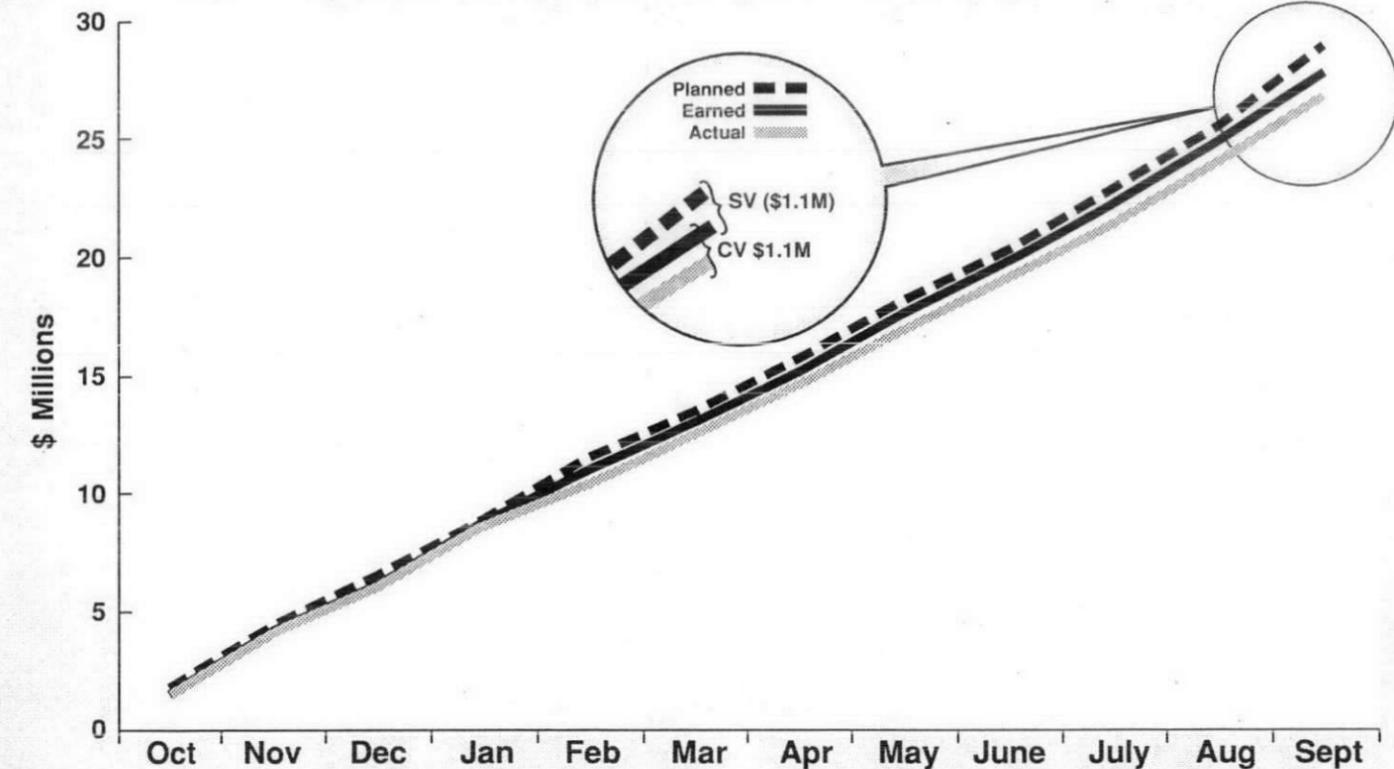
Conducted FY00-02 DWP development kickoff meeting in June, and FY00-02 DWP final Management Review meetings in August, with HQ, RL, regulators, Tribal Nations, and HAB participants

Completed and issued the FY00-02 DWP

- 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*
 - The RL Hanford Site manager has initiated new strategic initiatives focused on River Corridor and Central Plateau outcomes, which will be reflected in future site baseline updates*
- Tri-Party Agreement Integration
 - Ongoing. Participated in weekly TPA interface meetings. Conducted quarterly TPA management reviews, including milestone status and issues*
- Baseline Tracking and Reporting
 - Ongoing. Enhanced the Baseline change control process by Quality Improvement Team leading to streamlining management reviews and quality improvements to forms, timing, etc.*
 - The Baseline workscope is managed through a joint (RL and BHI) change control process. Baseline adjustments are made weekly*
- Funds Tracking and Reporting
 - Ongoing. Provide monthly tracking and reporting of appropriated funds through the Funds Status Report*
- Rate Reviews and Development
 - Completed three FY99 rate reviews and implemented new rates in FY99 budget baseline*
 - Developed rates for FY00-02 DWP budget*
 - Completed FY00 Provisional Rate Review and submitted to RL for approval*
- Functional Support Cost Reports
 - Completed FY99 Functional Support Cost Report*

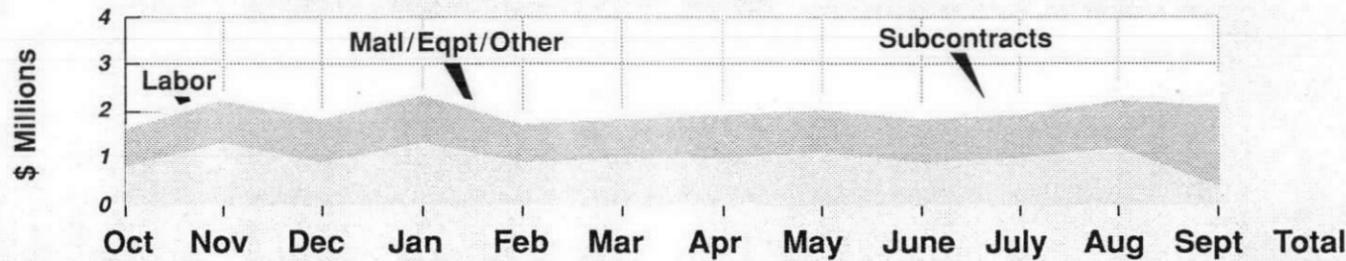
Program Management and Support - ERC

FY99 Project Performance (Cumulative)



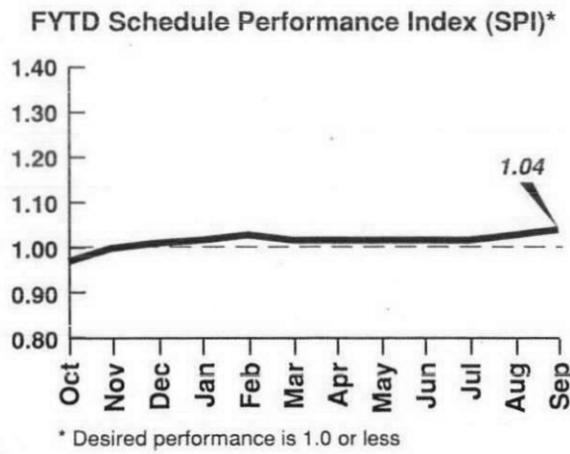
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept |
|----------------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| BCWS (Planned) | 1.6 | 4.3 | 6.3 | 8.9 | 11.4 | 13.3 | 15.6 | 18.0 | 20.2 | 22.8 | 25.6 | 29.0 |
| BCWP (Earned) | 1.7 | 4.3 | 6.2 | 8.8 | 11.0 | 13.1 | 15.2 | 17.7 | 19.9 | 22.3 | 24.9 | 27.9 |
| ACWP (Actual) | 1.7 | 4.1 | 6.1 | 8.5 | 10.4 | 12.5 | 14.6 | 16.9 | 19.1 | 21.4 | 24.0 | 26.8 |

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 | 1.0 | 1.1 | 0.9 | 1.0 | 1.2 | 0.4 | 11.8 |
| Matl/Eqpt/Other | 0.8 | 0.9 | 0.9 | 1.0 | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 | 1.0 | 1.7 | 11.5 |
| Sub-contracts | 0.1 | 0.2 | 0.2 | 0.1 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.7 | 3.5 |
| Total | 1.7 | 2.4 | 2.0 | 2.4 | 2.0 | 2.0 | 2.2 | 2.3 | 2.1 | 2.3 | 2.6 | 2.8 | 26.8 |

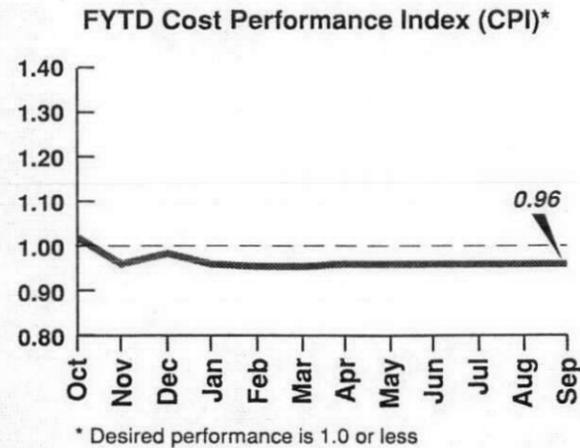
Schedule Performance



Schedule Variance (SV): (\$1.1M)

- Staff restructuring deferred due to steady state FY99 staffing
- Processing of correspondence and radiological records delayed due to vacant positions
- Technical support to Hanford Site documents deferred due to additional planning requirements

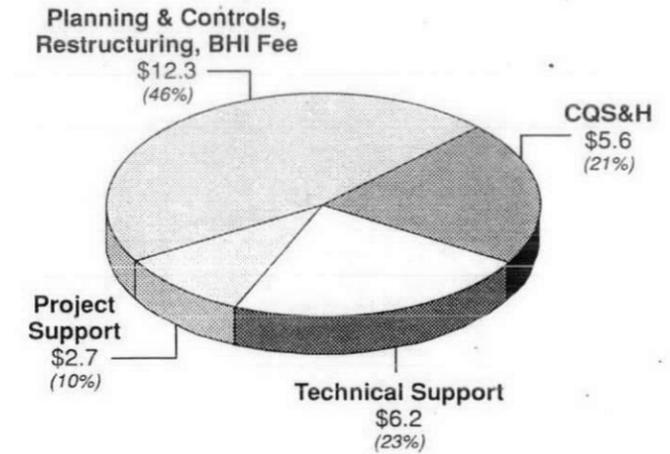
Cost Performance



Cost Variance (CV): \$1.1M

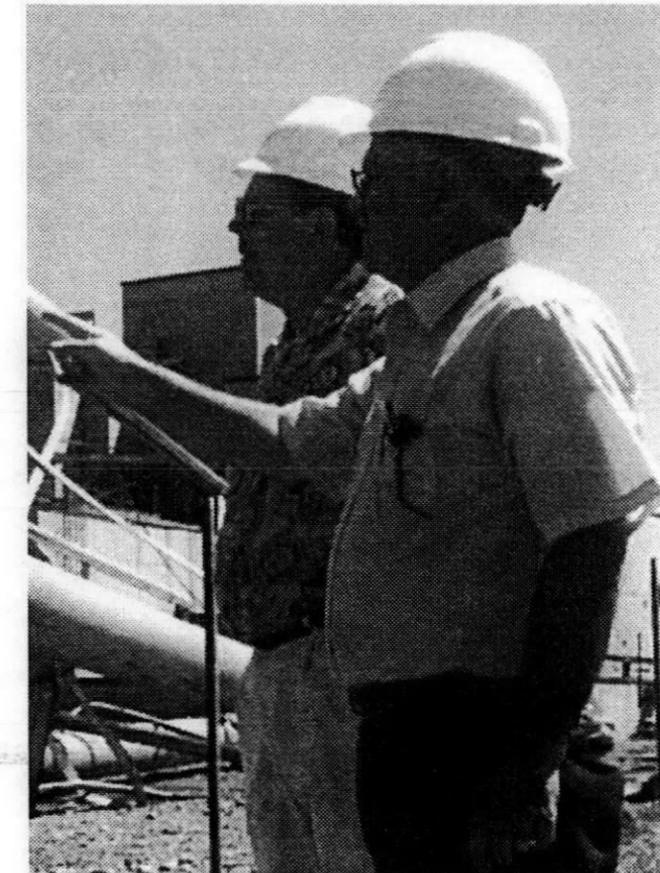
- Staffing vacancies and increased efficiencies
- Required support for Systems Engineering, design guides, and DNFSB was less than planned

Subproject Actual Costs to Date (Project Total \$26.8 Million)



Issues

No significant issues to report at this time



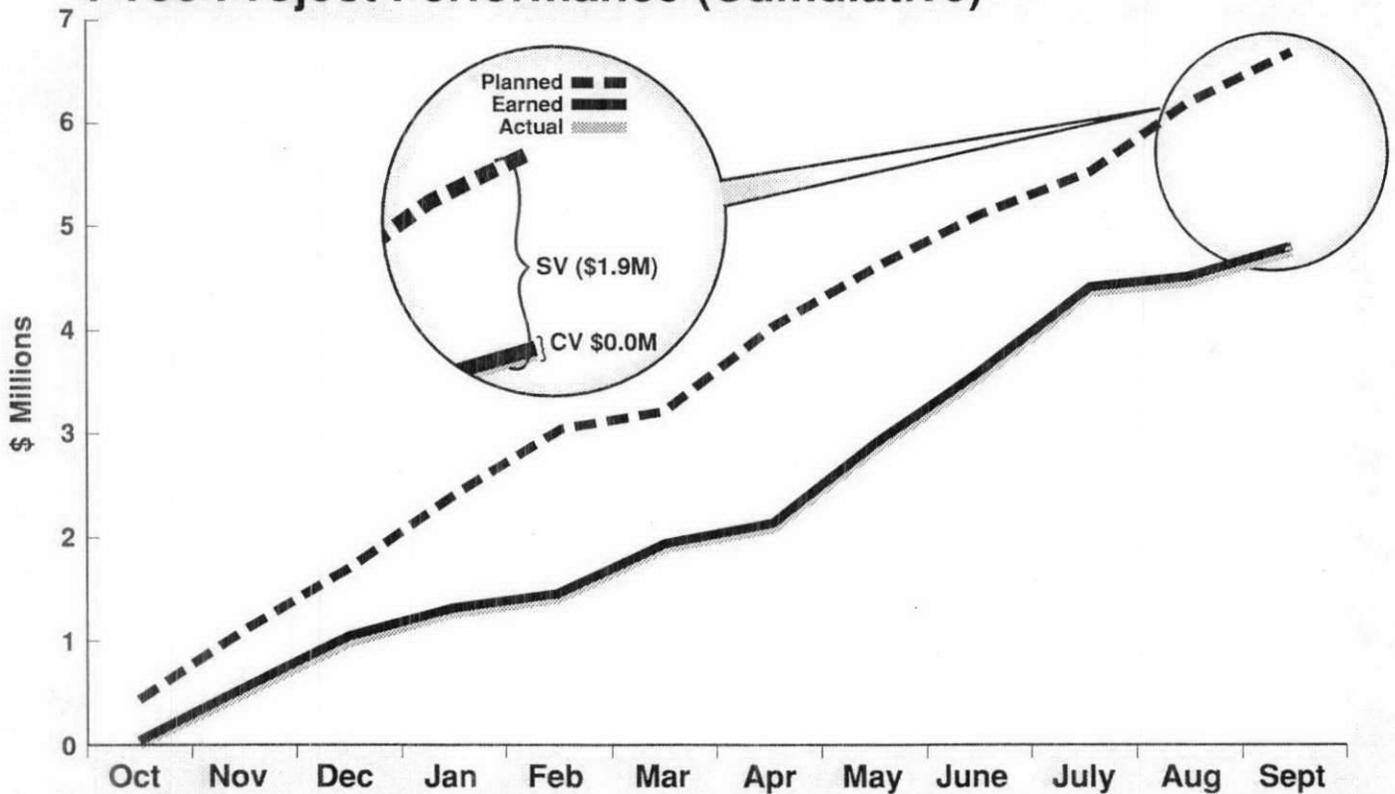
Program Management-RL

RL-Sponsored Workscope

- ER Project Support Activities
- Sitewide Services/Radiological Monitoring Support to Laundry
- Laundry Support to ER Project
- Electrical Support to ER Project
- Service Assessment Pool
- Hanford Remedial Action - Environmental Impact Statement
- PNNL Technical Library/Reading Room
- Benton County Sheriff's Office
- NRDA Studies/Ecosystems Management
- CERCLA Grant



FY99 Project Performance (Cumulative)



| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-----|------|
| BCWS (Planned) | 0.4 | 1.1 | 1.7 | 2.4 | 3.0 | 3.2 | 4.0 | 6.0 | 5.1 | 5.5 | 6.2 | 6.7 |
| BCWP (Earned) | 0.0 | 0.5 | 1.0 | 1.3 | 1.4 | 1.9 | 2.1 | 2.9 | 3.6 | 4.4 | 4.5 | 4.8 |
| ACWP (Actual) | 0.0 | 0.5 | 1.0 | 1.3 | 1.4 | 1.9 | 2.1 | 2.9 | 3.6 | 4.4 | 4.5 | 4.8 |

TECHNOLOGY INSERTION POINTS (TIPs)

TPA Fourth Quarter Review

| TIP Number | Rev Number | TIP Title | Date Issued | TIP Milestone | Description | PBS | Project Area |
|------------|------------|---------------------------------------------------------|-------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------------------------------------|
| TIP-0001 | 02 | Burial Ground Remediation | FY99 | FY01 | Currently, 45 burial grounds are scheduled for excavation or containment. Final design for the excavations will specify technologies for remediation, characterization, segregation, and treatment where necessary. | ER-01 | 100 Area Remedial Action |
| TIP-0002 | 02 | Soils and Burial Ground Remediation (200 Area) | FY99 | FY01 | Planning is underway for the 200 Area soils and burial grounds. Assessment of potential remedial action alternatives will consider technologies for excavation, capping, characterization, segregation, and treatment where necessary. | ER-02 | 200 Area Remedial Action |
| TIP-0003 | 02 | 300-FF-2 Remediation (300 Area) | FY99 | FY06 | Planning is underway for the 300-FF-2 Operable Unit soils and burial grounds. Assessment of potential remedial action alternatives will consider technologies for excavation, capping, characterization, segregation, and treatment where necessary. | ER-08 | 300-FF-1 Assessment |
| TIP-0004 | 02 | Strontium Remediation (100 Area Groundwater) | FY99 | FY08 | Current remedial action for the strontium plume is Pump-and-Treat to contain the plume such that strontium does not migrate into the Columbia River. Enhanced treatment through application of in situ remediation techniques or improved Pump-and-Treat approaches are being considered. The current approach is expensive and may not be cost effective as a permanent, final remediation for the strontium plume. | ER-08 | 100 Area Groundwater Remediation |
| TIP-0005 | 02 | Chromium Remediation (100 Area Groundwater) | FY99 | FY03 | Current Interim Response Measure (IRM) for the chromium plumes is Pump-and-Treat to contain the plume such that chromium does not migrate into the Columbia River. Enhanced treatment through application of in situ remediation techniques or improved Pump-and-Treat approaches are being considered. The current approach is expensive and may not be cost effective as a permanent, final remediation for all the chromium plumes. | ER-08 | 100 Area Groundwater Remediation |
| TIP-0006 | 02 | Carbon Tetrachloride Remediation (200 Area Groundwater) | FY99 | FY03 | Current Interim Response Measure (IRM) for the carbon tetrachloride plume is Pump-and-Treat to contain the plume within the 2000-to-3000 ug/L contour boundaries. The current approach would need to be expanded significantly and continued for several years to treat the entire plume. Enhanced treatment through application of in situ remediation techniques or improved Pump-and-Treat approaches are being considered as ways to speed remediation and reduce costs. | ER-08 | 200 Area Groundwater Remediation |
| TIP-0007 | 02 | Surface Barrier for CDI | 08/04/99 | FY06 | A surface barrier design is needed for the Canyon Disposition Initiative (CDI) Project. The CDI Project will determine the end-state for the 221-U Facility. Several potential end-state alternatives will require a surface barrier. The surface barrier must protect against water infiltration, wind and water erosion, and plant, animal, and inadvertent human intrusion. If an entombment alternative is selected the surface barrier design will be required to provide for steep slopes (e.g., 1:3). | ER-05 | 200 W Area Surveillance and Maint. |
| TIP-0008 | 01 | Asbestos Abatement | 08/04/99 | FY04 | An improved method is needed for stripping asbestos from circular piping and rectangular ductwork ranging in sizes from 2" to 48". | ER-06 | 100 Area Reactors |

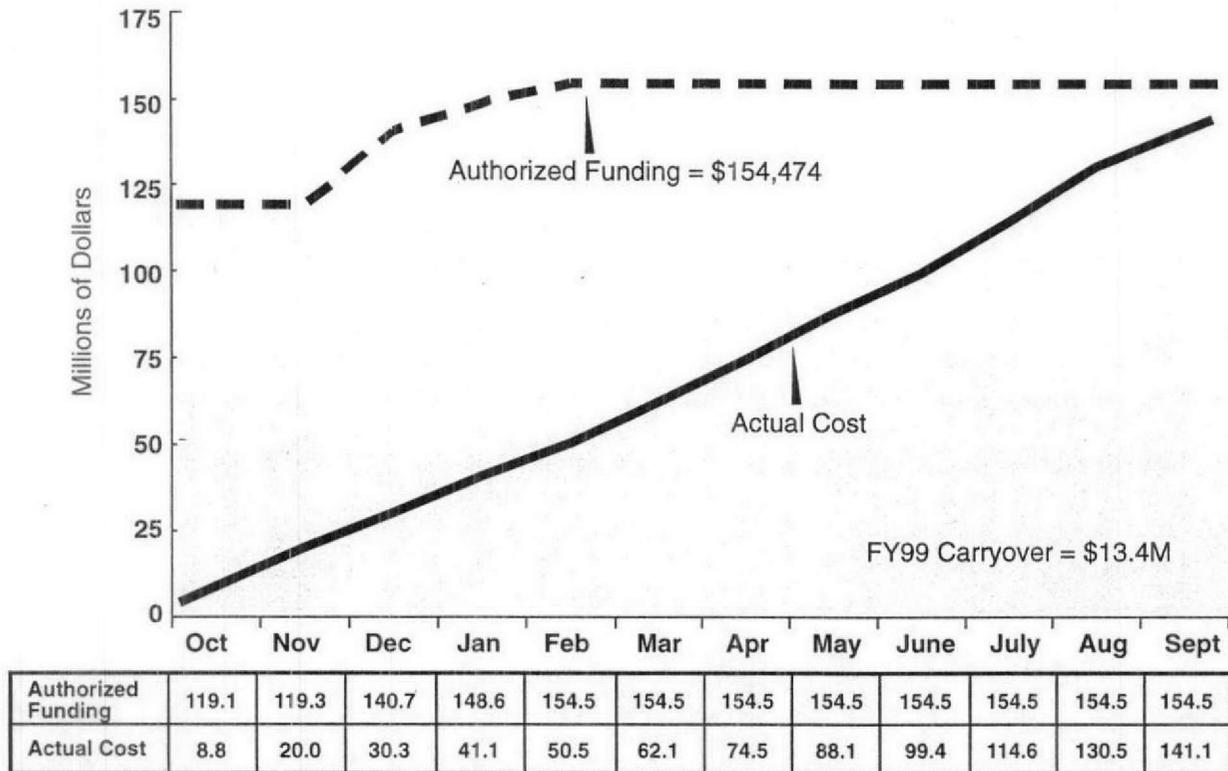
TPA Fourth Quarter Review

| TIP Number | Rev Number | TIP Title | Date Issued | TIP Milestone | Description | PBS | Project Area |
|------------|------------|---------------------------------------|-------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------------------|
| TIP-0009 | 01 | Expert System | 08/04/99 | FY07 | An expert system is needed to support characterization of reactors for interim safe storage. The purpose of the system will be to compile and correlate the voluminous information from the characterization of the previous reactors. This information will form the basis for planning the minimal characterization required for future reactors. Functional requirements of the system include statistically assessing large data arrays from different perspectives to evaluate consistency with respect to various compliance criteria. By carefully assessing existing characterization data (radiation, chemical, metals, and physical) from similar areas, correlations may be discovered that will reduce or eliminate the need for costly/time-consuming sampling and analysis at future reactors. | ER-06 | 100 Area Reactors |
| TIP-0010 | 01 | Heavy Concrete Demolition for 105-D/H | 08/04/99 | FY04 | An improved technology is needed for the demolition of dense, reinforced, thick (i.e., two to three feet thick) concrete. | ER-06 | 100 Area Reactors |

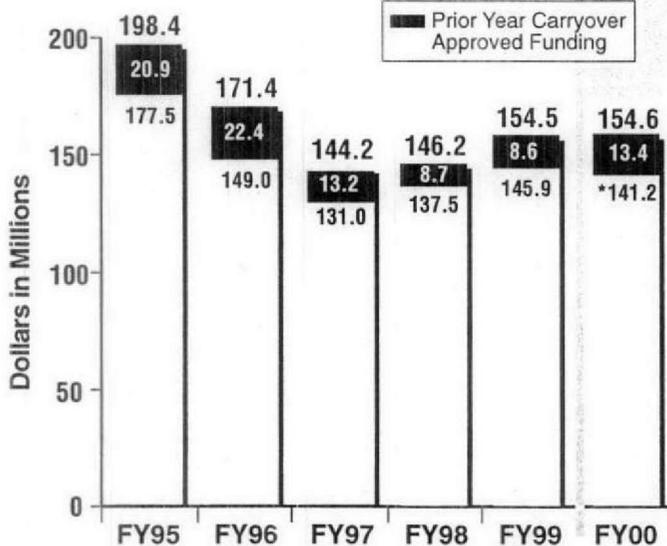
COST/SCHEDULE STATUS

ER Project Summary

FY99 Funding



Funding by Fiscal Year



* FY00 includes anticipated funding of \$10.0 million for reactor interim safe storage (ISS) less anticipated \$3.9 million for HQ taxes.

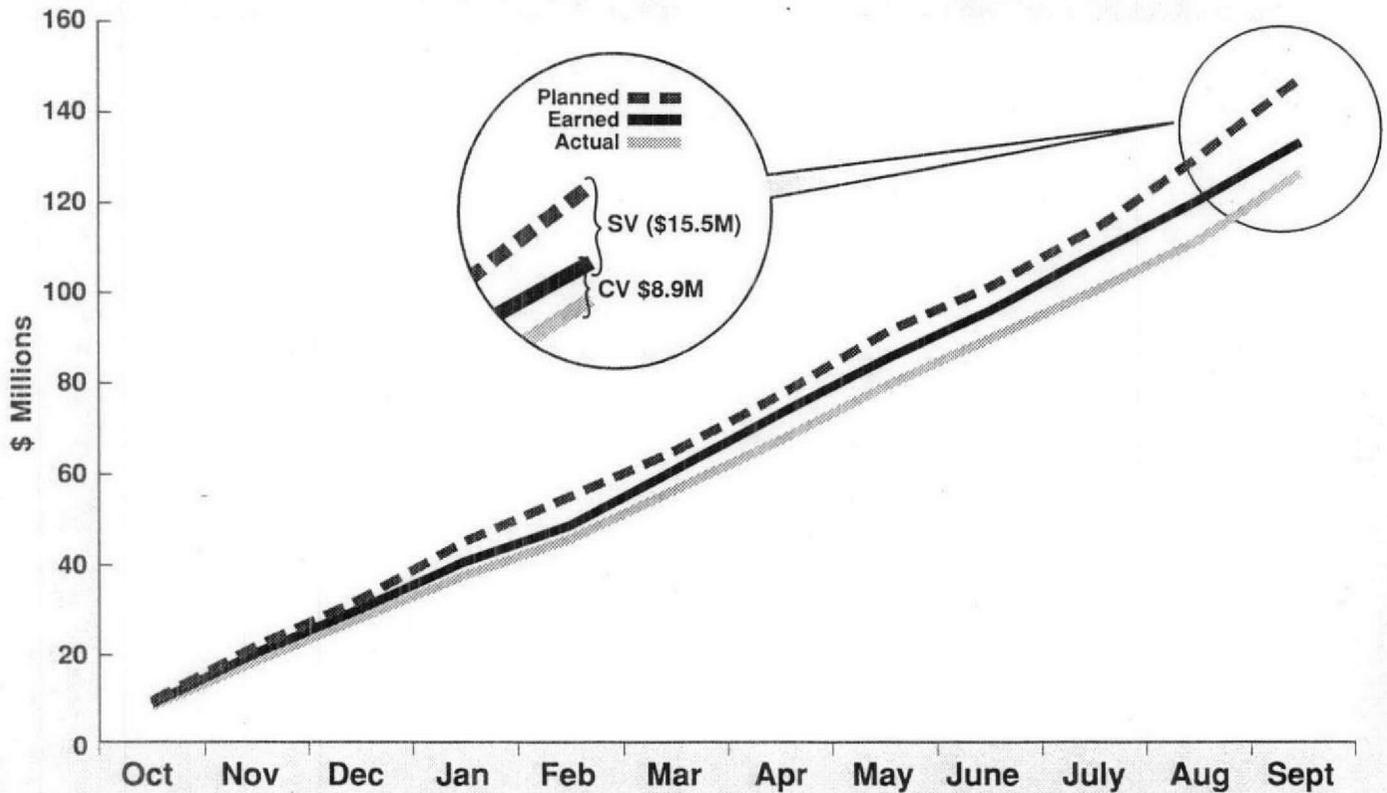
Carryover Funding

| (Using FY99 Rates)* | | |
|---------------------|--------------------------------------|-----------------|
| ER-01 | 100 Area Remedial Action | \$3,362 |
| ER-02 | 200 Area Remedial Action | 434 |
| ER-03 | 300 Area Remedial Action | 1,579 |
| ER-04 | ER Waste Disposal Facility | 1,351 |
| ER-05 | Surveillance & Maintenance | 1,048 |
| ER-06 | Decommissioning Projects | 201 |
| ER-07 | Long Term Surveillance & Maintenance | 0 |
| ER-08 | Groundwater Remedial Action | 2,435 |
| ER-09 | N Reactor Deactivation | 3 |
| ER-10 | Program Management & Support - ERC | 591 |
| ER-10 | Program Management & Support - RL | 1,828 |
| VZ-01 | Vadose Zone | 544 |
| TOTAL | | \$13,376 |

* Reflects funding re-distribution per project requirements.

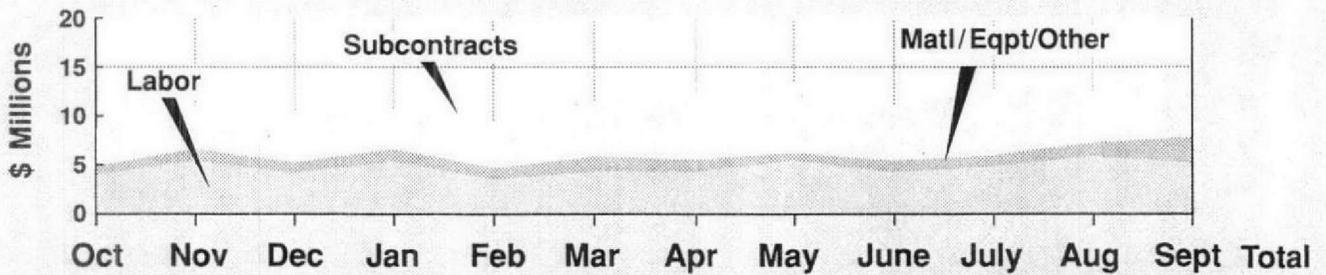
FY99 ER Project Performance (Cumulative)

Status: Year-End 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 | 86.4 | 101.5 | 113.1 | 127.4 | 145.4 | 165.5 |
| BCWP (Earned) | 9.3 | 21.5 | 32.7 | 44.7 | 53.9 | 67.0 | 81.7 | 94.9 | 106.6 | 120.9 | 134.5 | 150.0 |
| ACWP (Actual) | 8.8 | 20.0 | 30.3 | 41.1 | 50.5 | 62.1 | 74.5 | 88.1 | 99.4 | 112.2 | 124.7 | 141.1 |

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 | 4.3 | 5.5 | 4.3 | 4.9 | 6.0 | 5.3 | 57.4 |
| Matl/Eqpt/Other | 1.0 | 1.2 | 1.1 | 1.3 | 1.2 | 1.6 | 1.3 | 0.9 | 1.2 | 1.2 | 1.4 | 2.6 | 16.0 |
| Sub-contracts | 3.8 | 4.5 | 5.0 | 4.1 | 4.6 | 5.6 | 6.9 | 7.1 | 5.7 | 6.8 | 5.1 | 8.5 | 67.7 |
| Total | 8.8 | 11.2 | 10.3 | 10.8 | 9.4 | 11.6 | 12.5 | 13.5 | 11.2 | 12.9 | 12.5 | 16.4 | 141.1 |

