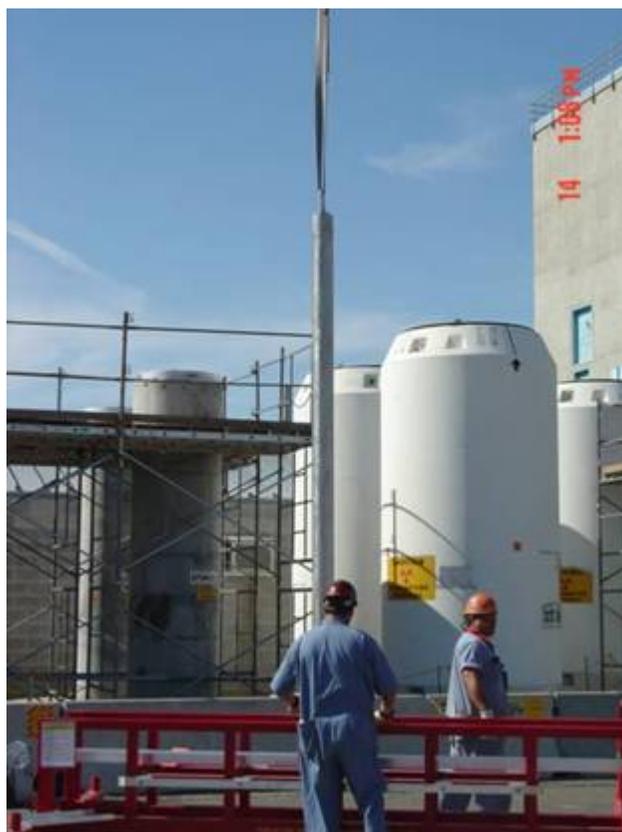


Nuclear Material Stabilization and Disposition (RL-0011)

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Loading Ident-69s

Overview

This section addresses work in Project Baseline Summary RL-0011, *Nuclear Material Stabilization and Disposition*.

NOTE: Unless otherwise noted, all information contained herein is as of the end of September 2005.

Top FY 2005 Accomplishments

Completed over 1.9M hours without a lost work day

Disposition the Plutonium Finishing Plant (PFP) Facility

The completion of the Plutonium legacy holdup removal and disposition was 15 months ahead of the Tri-Party Agreement (TPA) Milestone M-083-14, "Complete 100 Percent Pu Legacy Holdup Removal."

The demolition of ten ancillary facilities was completed four and one half months ahead of schedule.



*Ancillary
Facilities
Demolition*

The 241-Z Waste Storage Tank Facility was isolated from the underground transfer line to the tank farms in December 2004 (six months ahead of schedule) and 204 days ahead of the TPA Milestone, M-083-31, "Discontinue Waste Discharges from the 241-Z Tanks to Tank Farms."

*Completed Final
Waste Transfer
from Tank 241-Z*



The second of three increments for disposition of nuclear materials stored at PFP was completed on November 24, 2004, approximately ten months ahead of the baseline commitment.



Resource Conservation and Recovery Act closure of the low level waste HA-20MB glove box was completed on October 28, 2004, 17 months ahead of Performance Incentive date.

HA-20MB

Disposition of 230, of approximately 600, contaminated plutonium nitrate solution storage containers was completed.

The decontamination of 44 glove boxes and hoods to low level waste criteria was completed.

Notable September Accomplishments

Disposition the PFP Facility

- Shipped 48 contaminated plutonium nitrate solution storage containers to Waste Management during September, bringing the total shipped to 230.
- Completed fogging the 232-Z scrubber cell, and began removal of Transuranic waste.
- Completed physical isolation of Tunnel 3 drains, which finalized the drain isolation of 241-Z from 234-5Z.
- Initiated the filling of 241-ZRB retention basin with controlled density fill.
- Made final entry into the 242-Z control room to replace sprinkler heads; all fire sprinkler heads are now new.
 - Completed final NDA on 242-Z to complete the initial entry and characterization.
- Completed characterization activities for the 241-Z D-6 pit and tank. This completed characterization activities for the five pits located in 241-Z.
- Completed demobilization in 234-5Z room 308, including removal of containment tent and scaffolding.
- Successfully completed the 236-Z Pencil Tank Removal Readiness Assessment.
 - No pre-start findings and one post-start finding was identified.

Disposition Special Nuclear Material (SNM)

Completed the loading of ten Ident-69 fuel pin storage containers.

FY 2005 Funds vs. Actuals (\$M)

| | FY 2005 Anticipated Funding (with Carryover) | FY 2005 Actuals | Variance |
|---|--|-----------------|----------|
| Nuclear Materials Stabilization & Disposition | \$ 197.6 | \$ 175.5 | \$ 22.1 |

FY 2005 Schedule/Cost Performance (\$M)

| | Budgeted Cost of Work Scheduled | Budgeted Cost of Work Performed | Actual Cost of Work Performed | Schedule Variance \$ | Schedule Variance % | Cost Variance \$ | Cost Variance % | Budget At Completion |
|---|---------------------------------|---------------------------------|-------------------------------|----------------------|---------------------|------------------|-----------------|----------------------|
| Nuclear Materials Stabilization & Disposition | \$186.4 | \$190.0 | \$175.5 | \$3.7 | 2.0% | \$14.5 | 7.6% | \$186.4 |

Numbers are rounded to the nearest \$0.1M and include the closure services allocation.

Schedule Performance (+\$3.7M/2.0%): Primary contributors to the favorable schedule performance include:

Baseline change requests have been implemented changing FY 2005 work scope consistent with the DOE direction on the new 2004 Design Basis Threat Policy and the August 8, 2005, Work Scope Planning Document (WSPD) as negotiated with DOE.

- BCR point adjustment for deferred de-inventory
- Recovery of prior year legacy hold-up and 241-Z scope
- Recovery of D&D support activities (ops support, D&D transition program and waste disposal) as apportioned to above

Positive schedule variance partially offset by:

- Delay in Core Component Containers (CCC) procurements/Material Access Area elimination
- Behind schedule on 232-Z, Plutonium Reclamation Facility (PRF) pencil tank removal, 234-5Z lay-up activities and Interim Secure Storage Facility project

Cost Performance (+\$14.5M/7.6%): Primary contributors to the unfavorable cost variance include:

Baseline change requests have been implemented changing FY 2005 work scope consistent with the DOE direction on the new 2004 Design Basis Threat policy and the August 8, 2005, WSPD as negotiated with DOE.

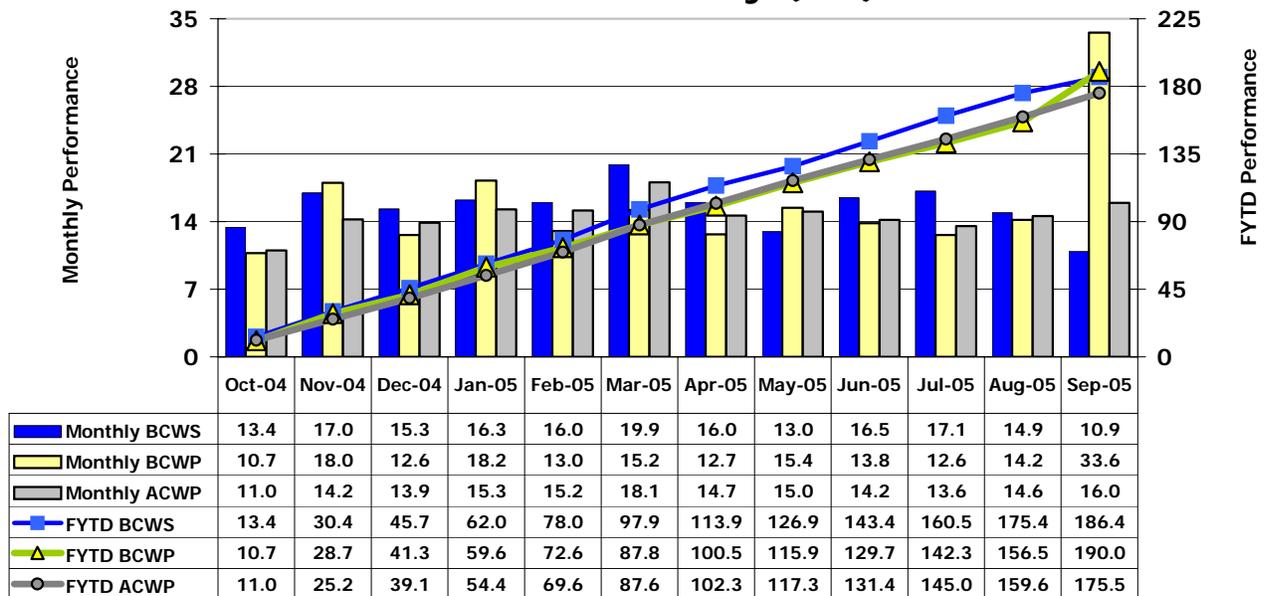
- Efficiencies/cost savings in Min Safe, de-inventory of miscellaneous nuclear materials, de-inventory readiness/stand-by, decontamination/clean-out of 234-5Z gloveboxes, PRF/242-Z D&D activities and apportioned D&D support, primarily solid waste management/disposal
- Year-end variance distributions

Partially offset by:

- Increased costs for 232-Z due to technical difficulties
- Costs for Facility Mods, Breathing Air System installation, water tower demolition and T Plant size reduction

FY 2005 Schedule/Cost Performance, continued

Performance Analysis FYTD and Monthly (\$M)



Milestone Achievement

| Number | Milestone Title | Type | Due Date | Actual Date | Forecast Date |
|------------|--|--------|----------|-------------|---------------|
| TRP-05-501 | Discontinue Waste Discharges from the 241-Z Tanks to Tank Farms | TPA | 6/30/05 | 12/13/04 | |
| TRP-05-506 | | PI | | | |
| TRP-05-504 | Complete Pu Legacy Holdup Removal | PI | 9/30/05 | 6/30/05 | |
| TRP-05-505 | Transition 10 Facilities to Slab-on-Grade | PI | 9/30/05 | 5/22/05 | |
| TRP-06-500 | Decontaminate Glovebox HA-20MB | TPA | 3/31/06 | 10/28/04 | |
| TRP-06-501 | Complete Pu Legacy Holdup Removal | TPA | 9/30/06 | 6/30/05 | |
| TRP-06-507 | Transition 232-Z Bldg Incinerator to Slab-on-Grade | PI TPA | 3/31/06 | | 5/31/06 |
| TRP-06-502 | | | 9/30/06 | | |
| TRP-06-509 | Disposition Miscellaneous PFP Nuclear Materials | PI | 9/30/06 | | 9/30/06 |
| TRP-06-510 | 241-Z Facility Cleanout & Tank Removal | PI | 9/30/06 | | 9/30/06 |
| TRP-06-XXX | 241-Z Formal Turnover of Facility for Construction | PI | 9/30/06 | | 9/30/06 |
| TRP-06-511 | Remove or Decontaminate the 236-Z Pencil Tanks | PI | 9/30/06 | | TBD |
| TRP-06-512 | Remove or Decontaminate the 236-Z Process Equipment in Rooms 50 & 60 | PI | 9/30/06 | | TBD |
| TRP-06-513 | Remove or Decontaminate the Remaining 236-Z Process Equipment | PI | 9/30/06 | | TBD |
| TRP-06-514 | Remove or Decontaminate 113 Gloveboxes and Hoods in 234-5Z | PI | 9/30/06 | | TBD |
| TRP-06-515 | Complete 242-Z Initial Entry & Characterization | PI | 9/30/06 | 9/30/05 | 10/5/06 |
| TRP-06-517 | Dispose of Approximately 600 Pu Nitrate Containers at PFP | PI | 9/30/06 | | TBD |