

AGENDA
TRI-PARTY AGREEMENT MAJOR MILESTONE MANAGEMENT REVIEW
CHAIRPERSON: W. W. Ballard

Tuesday, April 24, 2001
712 Swift Blvd., Suite 5, EPA Conference Room

<u>TIME</u>	<u>MILESTONE</u>	<u>TITLE</u>	<u>RL DIVISION DIRECTOR</u>	<u>PRESENTER</u>
10:00 am	M-34-00	Spent Nuclear Fuel	P. G. Loscoe	C. A. Rodriguez
10:30 am	M-89-00	324 Bldg. Closure of MW Units	D. T. Evans	D. C. Langstaff
	M-92-00	Facilities for Cesium/Strontium, Sodium and Special Case Waste	D. T. Evans	D. C. Langstaff
	M-83-00	Plutonium Finishing Plant	L. D. Romine	L. D. Romine
11:30 am	M-20-00	Permitting/Closure Plans	J. B. Hebdon	E. M. Mattlin
12:00 noon	ADJOURN			

Hanford Spent Nuclear Fuel Project

Tri-Party Agreement M-34 Milestone Review



Carole Rodriguez
U.S. Department of Energy,
Richland Operations

April 24, 2001



Tri-Party Agreement (TPA) Milestone Status

Current Status through December 2003

<i>TPA Milestone</i>	<i>Description</i>	<i>Due Date</i>	<i>Status</i>
M-34-26-T01	Approve Start of Construction for the K East Basin and K West Basin facility modifications for Alternate Fuel Transfer Strategy cask transportation system	9/30/01	On Schedule
M-34-29	Complete K East Basin and K West Basin facility modifications for Alternate Fuel Transfer Strategy cask transportation system	3/31/02	On Schedule
M-34-12-T01	Complete construction of K East Basin Sludge and Water System to support spent nuclear fuel removal	9/30/02	On schedule
M-34-17	Initiate removal of K East Basin Spent Nuclear Fuel	11/30/02	On schedule
M-34-08	Initiate full scale K East Basin sludge removal	12/31/02	On Schedule
M-34-18A	Complete Removal of 190 Multi-Canister Overpacks of Spent Nuclear Fuel from K West Basin	12/31/02	On schedule
M-34-27-T01	Complete Removal of 244 Multi-Canister Overpacks of Spent Nuclear Fuel from K West Basin	5/31/03	On Schedule
M-34-28	Complete Removal of 311 Multi-Canister Overpacks of Spent Nuclear Fuel from K West Basin	12/31/03	On Schedule

TPA Milestone Status

Milestone(s) Complete in 2nd Quarter FY01

- No milestones were due during this quarter

Milestones due in next 6 months:

- **Target Date M-34-26-T01 “Approve Start of Construction for the K East Basin and K West Basin facility modifications for Alternate Fuel Transfer Strategy cask transportation system.”** This target date shall be complete when DOE signs the Critical Decision 3, Approve Start of Construction. The Preliminary Documented Safety Analysis, as required by 10 CFR Part 830, Section 830.206, shall be complete and approved by DOE. Additionally, the design report(s) for the Cask Transport System shall be complete. The design report(s) scope shall include all components and modifications necessary to facilitate transfer of SNF from KE into KW. It is understood that preparatory work such as debris removal and other site preparation activities may be initiated prior to the start of construction approval.

– ***Scheduled for completion 9/30/01; currently on schedule***



Significant Accomplishments

- **Completed shipment of four MCOs from K West Basin to CVDF (for a cumulative total of six). Also completed processing of the MCOs at CVDF and placement in the storage tubes at the CSB.**
- **Initiated first Project-wide Maintenance outage**
- **Decision was made to proceed with Alternate Fuel Transfer Strategy (AFTS) and process improvements**
- **Received approval on TPA change package for AFTS**
- **Initiated KW Basin upgrades to increase fuel removal rate**
- **Initiated evaluation of improvements for CVD process**
- **Received the Shippingport Drying/Inerting System at T Plant and moved to the canyon**



SNF Project Issues/Concerns

- **Uncertainty of budget related impacts in FY02**
- **Increasing MCO throughput rate to meet TPA milestone commitments**
- **Working with Joseph Oat on QA corrective actions**

Upcoming Activities

- **Continue processing of spent nuclear fuel**
- **Receive first Shippingport Spent Fuel Canister at CSB**
- **Implement AFTS design and construction and complete upgrades to support increased fuel removal rate**
- **Initiate K West Basin spent nuclear fuel canister cleaning operations**



Permitting and Regulatory Issues

- None

Non-TPA Regulatory Issues with Potential to Impact TPA Milestones

- Timely development of required NEPA documentation and radioactive air permit revisions for AFTS implementation



**Spent Nuclear Fuel Project
Financial Status thru Second Quarter FY01
(based on early start schedule)**

(\$ in 000s)				SCHEDULE	COST	
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>VARIANCE</u>	<u>VARIANCE</u>	<u>BAC</u>
EXPENSE	\$66,621	\$65,709	\$79,436	(\$912)	(\$13,727)	\$178,560
CAPITAL EQUIPMENT	5,926	1,578	5,262	(4,349)	(3,684)	11,684
GENERAL PLANT PROJ	381	144	269	(237)	(124)	1,471
LINE ITEM	<u>0</u>	<u>0</u>	<u>(52)</u>	<u>0</u>	<u>52</u>	<u>0</u>
TOTAL	\$72,929	\$67,431	\$84,914	(\$5,497)	(\$17,483)	\$191,715

Schedule Variance

- The unfavorable schedule variance is due to delays in KE Construction Project activities. The recently approved AFTS eliminates the KE construction scope associated with the schedule variance.

Cost Variance

- Additional startup and engineering required to resolve first-of-a-kind equipment issues at K Basins and CVD and subsequent extension of the Operational Readiness Review process. A staff demobilization plan has been initiated to get costs in line with the baseline.



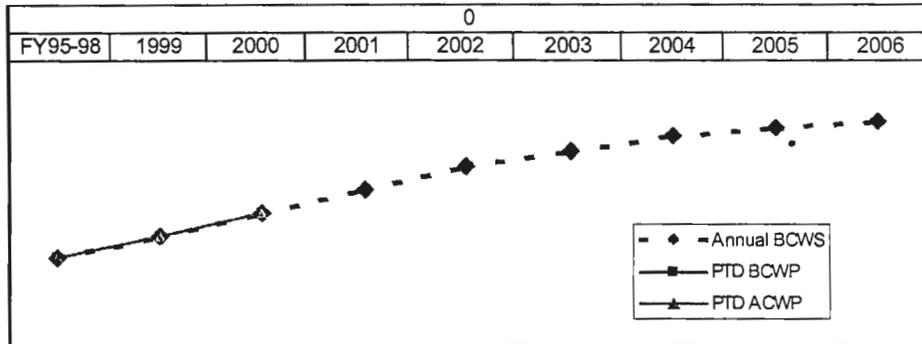
Performance Measurement Terminology

- **BCWS (Budgeted Cost of Work Scheduled)**
 - *BCWS represents the baseline budget for a scope of work over time. BCWS is normally combined with a term such as "Current Period" or "Fiscal Year to Date (FYTD)" to identify the time period the BCWS is associated with. BCWS is created by spreading the baseline cost estimate for a scope of work across its schedule activity duration based on the expected monthly level of activity. BCWS is the basis for the funding requested to perform a scope of work and is maintained through a documented change control process*
- **BCWP (Budgeted Cost of Work Performed)**
 - *BCWP represents the value of the work actually accomplished during a period based upon its budgeted value or BCWS. BCWP is a measure of the value of work based upon the physical work reported complete per the baseline schedule status update*
- **ACWP (Actual Cost of Work Performed)**
 - *ACWP represents the actual costs incurred to perform the work that was completed during a period and recorded as BCWP. For any particular period, ACWP includes accruals for costs not invoiced or booked associated with work that was performed during the period*
- **SCHEDULE VARIANCE (SV)**
 - *SV represents the difference between the work actually accomplished and the work planned or scheduled during any particular time period. (SV= BCWP-BCWS) A positive SV reflects an ahead of schedule situation while a negative SV reflects that work is behind the scheduled plan*
- **COST VARIANCE (CV)**
 - *CV represents the difference between the budgeted value of the work actually accomplished and the actual costs incurred to perform the work. (CV=BCWP-ACWP) A positive CV reflects the work being accomplished for less than its budgeted value and a negative CV reflects the work costing more to complete than planned*
- **BAC (Budget at Completion)**
 - *BAC represents the total baseline budget for a scope of work associated with either a fiscal year or life cycle. BAC is the summary of all monthly BCWS values for a scope of work within the fiscal year or life cycle. On a fiscal year end report the FYTD BCWS will equal the FY BAC*



Hanford Spent Nuclear Fuel Project

SNF Project - Total Project Baseline



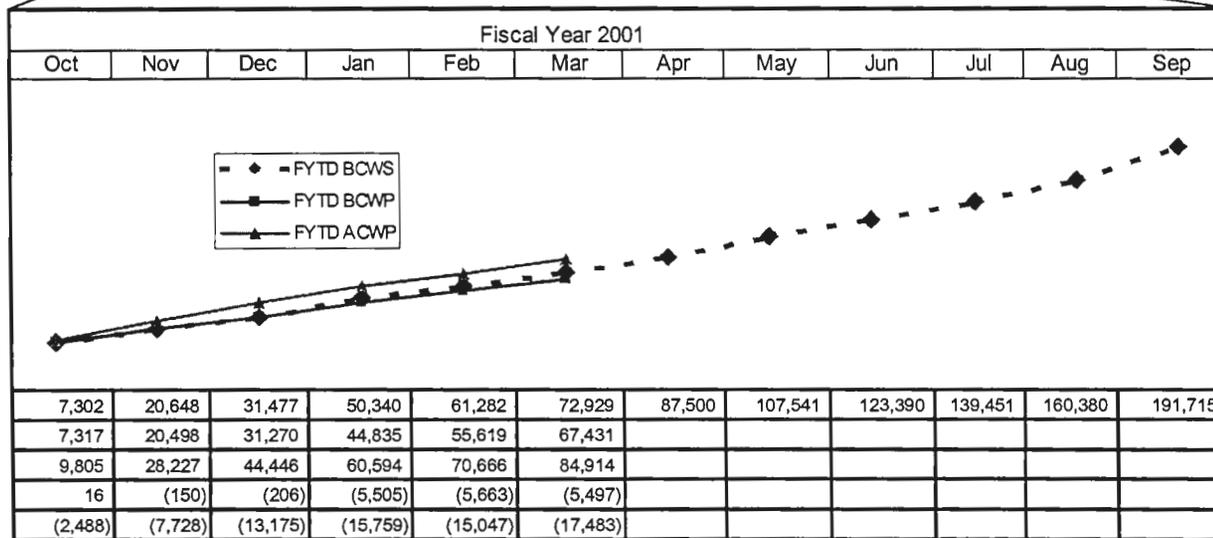
Life Cycle	
*BAC=	1,715,366
EAC=	1,715,366
CV=	0
Trend=	-

*Includes \$27,633K for FY2007.

Year End	
BCWS	191,715
Forecast	-
Delta	191,715

Project to Date	
BCWS=	993,305
BCWP=	983,524
ACWP=	1,005,005
SV=	(9,780)
CV=	(21,481)

Annual BCWS	533,003	718,612	920,376	1,112,091	1,303,566	1,442,371	1,559,049	1,639,231	1,687,733
PTD BCWS	533,003	718,612	920,376	993,305					
PTD BCWP	533,003	717,915	916,093	983,524					
PTD ACWP	533,003	718,798	920,091	1,005,005					
% Sch	31.6%	42.6%	54.5%	58.9%	77.2%	85.5%	92.4%	97.1%	100.0%
% Crmpl	31.6%	42.5%	54.3%	58.3%					
SFI	1.00	1.00	1.00	0.99					
CFI	1.00	1.00	1.00	0.98					



FYTD BCWS	7,302	20,648	31,477	50,340	61,282	72,929	87,500	107,541	123,390	139,451	160,380	191,715
FYTD BCWP	7,317	20,498	31,270	44,835	55,619	67,431						
FYTD ACWP	9,805	28,227	44,446	60,594	70,666	84,914						
Sched VAR	16	(150)	(206)	(5,505)	(5,663)	(5,497)						
Cost VAR	(2,488)	(7,728)	(13,175)	(15,759)	(15,047)	(17,483)						



Hanford Spent Nuclear Fuel Project

(\$ IN 000'S)

—FYTD—

EXPENSE:	BCWS	BCWP	ACWP	SCHED VAR	COST VAR	FYTD	FYTD	BAC
						ESTIMATED ACTUALS	ESTIMATED COST VAR	
Project Management and Integration	9,218	9,235	9,699	17	(463)	9,699	(463)	44,842
SNFP Acceptance Inspection (AI)	324	324	156	1	169	156	169	683
Project Mgmt. and Integration (Project Fee)	4,397	4,406	4,978	8	(572)	4,978	(572)	9,275
* K Basins Maint. and Oper. (Through F.M.)	7,817	7,832	10,059	15	(2,227)	10,059	(2,227)	17,903
K Basin Project Support	104	105	1,372	0	(1,268)	1,372	(1,268)	6,497
* K Basins Facility Projects (Des/ Mod/ Const)	1,772	1,775	1,199	3	576	1,199	576	3,737
* Fuel Retrieval Project (Des/ Mod/ Const)	1,036	1,053	560	17	493	560	493	4,964
* Water Treatment (Des/ Mod/ Const)	167	164	653	(4)	(489)	653	(489)	353
Debris Removal Project (Des/ Mod/ Const)	712	280	(29)	(432)	310	(29)	310	712
* MCO Acquisition (Des/ Mod/ Const)	15,591	15,589	11,212	(1)	4,378	11,212	4,378	28,251
Cask Transportation System (Des/ Mod/ Const)	0	0	10	0	(10)	10	(10)	0
K Basin Cold Vacuum Facility (Des/ Mod/ Const)	133	133	920	0	(787)	920	(787)	133
KW Production Improvements	0	0	113	0	(113)	113	(113)	0
Debris Removal Project (During F.M.)	204	0	32	(204)	(32)	32	(32)	661
* SNF Relocation Common Operations	14,063	14,016	15,708	(47)	(1,692)	15,708	(1,692)	29,288
* K Basin CVD Facility (Operations)	3,337	3,344	11,764	6	(8,420)	11,764	(8,420)	7,039
Sludge Retrieval/ Removal Operations	0	0	0	0	0	0	0	0
Transition Project Management	139	139	145	0	(5)	145	(5)	312
* Acquire Systems for Facility Deactivation	3,354	3,404	3,390	50	14	3,390	14	11,535
Canister Storage Bldg. Facility (Des/ Mod/ Const)	362	362	282	0	80	282	80	362
* Canister Storage Building Operations	1,880	1,884	5,214	4	(3,330)	5,214	(3,330)	7,402
* Site Wide SNF (Des/ Move Fuel to 200 ISA)	2,009	1,663	2,000	(346)	(337)	2,000	(337)	4,422
Site Wide SNF (Oper/ Maint 200 ISA)	0	0	0	0	0	0	0	187
SUBTOTAL EXPENSE	66,621	65,709	79,436	(912)	(13,727)	79,436	(13,727)	178,560
CAPITAL EQUIPMENT:								
* K Basins Maint. and Oper. (Through F.M.)	21	0	0	(21)	0	0	0	462
* K Basins Facility Projects (Des/ Mod/ Const)	1,109	844	1,992	(265)	(1,148)	1,992	(1,148)	3,407
* Water Treatment (Des/ Mod/ Const)	4,778	715	3,280	(4,063)	(2,565)	3,280	(2,565)	7,776
* SNF Relocation Common Operations	18	18	28	0	(10)	28	(10)	39
Canister Storage Bldg. Facility (Des/ Mod/ Const)	0	0	(38)	0	38	(38)	38	0
SUBTOTAL CAPITAL EQUIPMENT	5,926	1,578	5,262	(4,349)	(3,684)	5,262	(3,684)	11,684
GENERAL PLANT PROJECTS:								
* K Basins Maint. and Oper. (Through F.M.)	144	144	281	0	(137)	281	(137)	991
* Site Wide SNF (200 ISA Des/ Const)	237	0	(13)	(237)	13	(13)	13	480
SUBTOTAL GENERAL PLANT PROJECTS	381	144	269	(237)	(124)	269	(124)	1,471
LINE ITEM:								
K Basin Cold Vacuum Facility (Des/ Mod/ Const)	0	0	(60)	0	60	(60)	60	0
Canister Storage Bldg. Facility (Des/ Mod/ Const)	0	0	8	0	(8)	8	(8)	0
SUBTOTAL LINE ITEM	0	0	(52)	0	52	(52)	52	0
TOTAL SNF PROJECT	72,929	67,431	84,914	(5,497)	(17,483)	84,914	(17,483)	191,715

SNF Project Financial Status thru Second Quarter FY 2001





RIVER CORRIDOR PROJECT

324 Facility Stabilization

Milestone

TPA-M-89

Active Milestone Overview

Milestone	Description	Target Date	Status
M-89-00	Complete closure of non-permitted mixed waste units in the 324 Building REC B-Cell, REC D-Cell, and the high level vault.	10/31/05	In progress
M-89-02	Complete removal of 324 Building REC B-Cell MW and equipment.	11/30/00	In progress (Completion expected by 7/31/01)

Program Manager's Assessment

since last quarterly review

✱ Environmental – Excellent

- All activities related to completion of the M-89 milestones have been conducted in compliance with environmental regulations. No adverse impacts to the environment have occurred.

✱ Safety – Excellent

- All Activities related to completion of the M-89 milestones have been conducted safely during the last quarter.

✱ Cost – Good

- Second quarter FY2001 found 324 Building B-Cell cleanout activities tracking slightly above the authorized funding.

✱ Schedule – Marginal

- The 324 Building completed shipping mixed waste from B-Cell on March 22, 2001.
- The 324 Building is actively shipping non-mixed waste material associated with M-89-02 and anticipates completion by July 31, 2001.
- RL management decided to focus attention on meeting the M-89-02 milestone work scope in a timely manner rather than request a schedule extension for M-89-02.
- RL, FH, and Ecology are working to determine how best to approach closing M-89-02.

Program Manager's Assessment

since last quarterly review

✿ **Schedule – Marginal**

General

- The 324 Building completed shipping mixed waste from B-Cell on March 22, 2001, to beat the March 31, 2001 commitment.
- The 324 Building continues to ship M-89-02 non-mixed waste to meet the July 31, 2001 commitment.
- RL management decided to focus attention on meeting the M-89-02 milestone work scope in a timely manner rather than request a schedule extension for M-89-02.
- RL, FH, and Ecology continue to use the M-89-02 Completion Checklist to measure M-89-02 progress.

Mixed Waste (MW) Activities

- A higher than anticipated dose from a loaded Steel Waste Disposal Box (SWDB) did not comply with the Central Waste Complex (CWC) acceptance criteria; RL and FH resolved the issue.

Non-Mixed Waste (non-MW) Activities

- FH is actively striving to resolve shipping equipment problems.

Supporting Activities

- FH is actively striving to improve crane availability.

Significant Accomplishments

since last quarterly review

M-89-02

General

- ✿ Ecology visited the 324 Building several times to observe B-Cell mixed waste dispersible material collection (vacuuming) activities.
- ✿ Ecology reviewed video tapes of B-Cell vacuuming operations.
- ✿ Resolved waste acceptance issues related to SWDB hotspots.

Mixed Waste (MW) Removal Activities

- ✿ Completed collection of mixed waste dispersibles from B-Cell floor by scraping and clamshelling, and then vacuuming using the Dispersible Removal System (DRS).
- ✿ Verified final collection of B-Cell mixed waste dispersibles.
- ✿ Completed shipping M-89-02 mixed waste from the 324 Building to the 200 Area on March 22, 2001.

Non-Mixed Waste Removal Activities

- ✿ Removed all excess equipment and debris (non-mixed waste) from B-Cell before March 30, 2001.
- ✿ Resumed shipping of Grout Containers loaded with non-mixed waste to 200 Area.

Key Maintenance Activities/Others

- ✿ Replaced two manipulators.
- ✿ Washed electrostatic precipitators (ESPs).

Issues

Issues

- ✿ Critical path schedule to complete M-89-02 removal of the B-Cell related non-mixed waste by July 31, 2001 has no contingency to accommodate significant program delays.

Status

- RL provides Ecology weekly schedule status.

- ✿ Non-mixed waste shipping cask Certificate of Compliance needs extension.

Status

- Administrative review is near completion.

- ✿ Two –B-Cell non-mixed waste containers have high dose rate readings.

Status

- A reanalysis of the shipping cask may resolve shipping constraints. Completion is scheduled in June.

Significant Planned Actions

next three months

✱ M-89-02

- Continue shipping B-Cell non-mixed waste to 200 Area.
- Resolve non-mixed waste shipping cask administrative issues.

Project Summary

- ✿ Completed collecting, packaging and shipping M-89-02 mixed waste to the 200 Area. Adjustments in critical path schedule logic are being made to assure M-89-02 non-mixed waste shipments are completed by July 31, 2001.



RIVER CORRIDOR PROJECT

Nuclear Materials and Facility Stabilization

Milestone
TPA-M-92

Milestone M-92-00 Interim Milestones and Target Dates

Milestone	Description	Target Date	Status
M-92-00	Complete acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for the storage, treatment/processing, and disposal of Hanford Site cesium and strontium capsules (Cs/Sr), bulk sodium (Na), and 300 Area Special Case Waste (SCW).	TBD	TBD
M-92-01	Complete commercial disposition and/or acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for sitewide consolidation, and storage prior to commercial use, or treatment and/or repackaging by DOE-TWRS.	12/31/09	On schedule
M-92-05	Inclusion of Hanford Site CS/SR "treatment and/or repackaging parameters" in DOE TWRS Phase II Request for Proposals (treatment and/or repackaging of all remaining CS/SR).	6/30/03	No longer applicable
MX-92-06-T01	Complete commercial disposition and/or the acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for storage, treatment/processing, and disposal/disposition of all Hanford Site UU. Complete the disposal/or disposition of ~5 metric tons of UO ₂ source materials located in the 300 Area Fuel Supply Shutdown Facilities and source material located in 325 and 2718-E, and complete the disposition of ~235 metric tons of Uranium Billets located in the 300 Area.	12/31/01	On schedule
MX-92-06-T02	Complete the disposal/or disposition of ~135 metric tons of un-irradiated contaminated fuel and 5 metric tons of misc. U source material, and complete the disposal/disposition of ~825 metric tons of un-irradiated fuel source materials located in the Fuel Supply Shutdown Facilities.	9/30/06	On schedule
M-92-09	Complete acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for storage, treatment/processing, and disposal of Hanford Site Sodium.	In abeyance	On hold
M-92-10	Submit Hanford Site Sodium Project Management Plan (PMP) to Ecology pursuant to Agreement Action Plan Section 11.5.	In abeyance	On hold
MX-92-11-T01	Complete disposition options for all Hanford non-radioactive sodium.	3/31/02	Behind Schedule
M-92-12	Complete acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for consolidated storage, prior to disposal of Hanford Site 300 Area Special Case Waste (SCW) and materials.	9/30/06	On schedule
M-92-13	Submit 300 Area SCW PMP to Ecology pursuant to Agreement Action Plan, Section 11.5.	9/30/00	Submitted 3/28/00
M-92-14	Complete removal and transfer, and initiate storage of Phase I 300 Area SCW and materials. Phase I inventory will consist of, at minimum, one-third the total curie content of all 300 Area SCW.	9/30/02	Submitted 3/28/00
M-92-15	Complete removal and transfer, and initiate storage of Phase II 300 Area SCW and materials. Phase II inventory will consist of, at minimum, half of the remaining curie content of all 300 Area SCW and materials.	9/30/04	On schedule
M-92-16	Complete removal and transfer and initiate storage of Phase III 300 Area SCW and materials.	9/30/06	On schedule

Program Manager's Assessment

since last quarterly review

☼ **Environmental – Excellent**

- No negative environmental impacts or issues have arisen out of the storage and/or handling, packaging, or transportation of the SCW inventory

☼ **Safety – Excellent**

- No negative safety impacts or issues have arisen out of the storage and/or handling, packaging, or transportation of the SCW inventory

☼ **Cost – Excellent**

- Key milestone M-92 activities are being completed within budget

☼ **Schedule – Good**

- M-92-01: Capsules dispositioned as feedstock for vitrification plant during Phase II operations
- MX-92-06-T01, and T02: On schedule
- MX-92-11-T01:
 - The cold trap, previously removed from the Thermal Transient Loop, was shipped to an offsite disposal facility. This removed an additional 200 pounds of sodium from the Hanford Site.
 - The target date of March 2002 will not be met for disposition of all non-radioactive sodium.

MX-92-06-T01 and -T02

Significant Accomplishments – since last quarterly review

- ✱ Shipped ~~222~~³⁴⁰ uranium billet boxes (~~52%~~^{71%} of the 235 MTU) as of 3/31/01. *as of 4/20*

Significant Planned Actions – next three months

- ✱ Expect to ship 2 MTU's of UO₂ by 5/31/01.
- ✱ Expect to ship remaining 48% of the 235 MTU's uranium billets by 5/31/01.

Issues

- ✱ The Red Box SARP to relocate uranium fuel materials to the 200 Area burial requires updating by 5/16/01 to allow for burying the contaminated fuel by 6/30/01

Significant Planned Actions

next three months

☼ M-92-09 and M-92-10

- A change proposal will be submitted to reestablish due dates for these sodium disposition milestones.

☼ MX-92-11-T01

- Resume deactivation activities on the 337B sodium system
- Begin removing insulation and electrical trace heat from system piping.
- Resume procedure development for internal inspection of the Composite Reactor Component Test Activity (CRCTA) tank to verify historically assumed sodium inventory

☼ M-92-13 *SCW*

- Ecology comments are being incorporated and a revised document is being prepared for transmittal to Ecology

☼ M-92-14 *SCW*

- Completion was reported in M-92-13 document.

☼ M-92-15 and 16

- The 324 Building is actively shipping SCW items (e.g., metal filters)
- Continue to perform characterization of the 340 Vault tanks to obtain more feasible alternatives for the tank heel removal

Project Summary

- ✿ M-92-05: Milestone probably needs to be re-negotiated
es/sr capsules going to ORP
- ✿ MX-92-06-T01 and T02 (non-enforceable): On schedule
- ✿ M-92-13: Under revision *PMP*
- ✿ M-92-14: Complete *Remove 30% of waste*
- ✿ M-92-15, -16: On schedule

Nuclear Material Stabilization Project

Plutonium Finishing Plant Stabilization Project

**Milestone
TPA-M-83**

**IAMIT Meeting April 24, 2001
Tri-Party Agreement Milestone
Status Report**

**Ecology Project Manager - R. Bond
DOE-RL Program Manager - L. D. Romine
FH Project Manager - G. W. Jackson
FH Environmental Sponsor - A. M. Hopkins**

Plutonium Finishing Plant

Nuclear Material Stabilization Project

TPA Negotiations

- ◆ **TPA change package M-83-00-01 signed 9-1-00.**
 - Established interim milestone M-83-07 for completion of repackaging Rocky Flats ash mixed waste in the PFP and ship to Central Waste Complex (CWC) by April 30, 2001
 - Packaging of Rocky Flats (RF) ash and shipment to the Central Waste Complex (CWC) was completed March 29, 2001
 - Establishes interim milestone M-83-08, to complete requirements for shipment of RF Ash mixed waste to WIPP - TBD (Will be determined during negotiations to begin in June
 - Agreement to begin negotiations for disposition of Hanford Ash mixed waste by October 31, 2000 and complete CR by 4/1/01 (Completed)
 - Began Negotiations on 10/25/00
 - CR completed 4/5/01
 - Agreement to begin PFP TPA Transition Negotiations by June 1, 2001 – On schedule
- ◆ **TPA change package M-83-01-01A**
 - Establishes interim milestone M-83-09 for the completion of repackaging Hanford Ash mixed waste and shipment to CWC by August 31, 2002
 - Agreement to resolve Ecology's concerns with use of process knowledge for Hanford Ash designation during PFP transition negotiations beginning June 1, 2001

Nuclear Material Stabilization Project

Project Status Through March 2001

- ◆ **Packaging of Rocky Flats (RF) ash into Pipe Overpack Containers (POCs) was completed on March 19, 2001. Final shipment of the packaged ash to the Central Waste Complex (CWC) was completed March 29, 2001, well in advance of the April 30, 2001 milestone**
- ◆ **Overall progress on stabilization activities in support of DNFSB Recommendation 94-1/2000-1 activities:**
 - 942 items stabilized through PFP's thermal stabilization process (includes oxides and/or brushed and repackaged metal items)
 - Progress FY 2001 to March 31st is 218 items
 - 346 liters of plutonium solutions stabilized through the Magnesium Hydroxide Precipitation Process
 - 331 bulk kg Rocky Flats ash repackaged

Safety

- ◆ **Through March 31, 2001, there were 491 calendar days (over 1.6 million staff hours) since the last recorded lost workday injury**

Nuclear Material Stabilization Project

Project Status Through March 2001

Schedule and cost performance

Unfavorable schedule variance (\$2,942K) primarily contributed to:

- ◆ **Throughput in the Metals and Solutions Stabilization projects continues to be limited by technical and operational challenges**
 - Higher than planned oxidation rates
 - Reduced operational reliability of the Bagless Transfer System's cutting and welding operations
 - Higher than planned precipitate through the Mg(OH)₂ continues
- ◆ **Redirection of resources to Project W-460 activities**
- ◆ **Limited availability of the Bagless Transfer System (BTS) has extended completion of metals stabilization and packaging to early June 2001**
- ◆ **Current operational efficiency in the Solutions Stabilization project jeopardizes completion of two (2) Defense Nuclear Facilities Safety Board (DNFSB) milestones**
 - "Complete Solutions Stabilization," December 31, 2001
 - "Complete Stabilization of Polycubes," August 31, 2002

Plutonium Finishing Plant

Nuclear Material Stabilization Project

Project Status Through March 2001

Schedule and cost performance (con't)

Unfavorable cost variance (\$1,386K) primarily contributed to:

- ◆ **Schedule recovery actions on Project W-460**
 - Line Item costs are over running and could result in delaying the 2736-ZB Stabilization & Packaging Equipment installation
- ◆ **Operational difficulties with the 234-5Z Bagless Transfer System**
 - Resulted in higher per unit cost for packaging stabilized metal items
- ◆ **Emergent 291-Z-1 Stack Monitor modifications**
- ◆ **Baseline Change Request is being prepared to authorize the 291-Z Stack Monitoring upgrade**
- ◆ **Additional costs associated with completing the packaging and shipping of Rocky Flats Ash**

Based upon current project status
The NMS Project March spend forecast indicates an overrun of ~\$7.7M dollars. The majority of this anticipated overrun is a direct result of accelerated stabilization activities consistent with the Contract. The project is working with FHI management to use company wide savings, coupled with NMS Project spending controls, to mitigate this condition.

Plutonium Finishing Plant

Nuclear Material Stabilization Project

Thermal Stabilization (Pu Oxides, Metals, Alloys)

Major Accomplishments

- ◆ **As of March, 218 metals and over 700 oxides have been stabilized**
Cumulative over 2 yrs

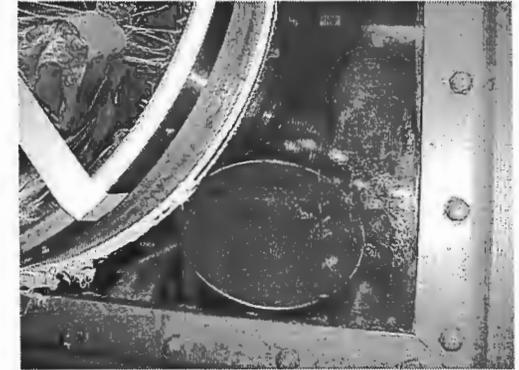
Planned Accomplishments

- ◆ **Complete metal stabilization and package into 3013 compliant containers by August** *May/June*
- ◆ **Stabilize alloys and package into 3013 compliant containers**
- ◆ **Continue to support Solutions stabilization**
- ◆ **Complete preparations for stabilization of polycubes and demonstrate the process by the end of this fiscal year**

Nuclear Material Stabilization Project Residues Stabilization

Major Accomplishments

- ◆ **Completed repackaging 331 bulk kg Rocky Flats ash and shipment of 299 POCs to CWC**
- ◆ **Initiated repackaging of Hanford Ash on April 9, 2001**



Planned Accomplishments

- ◆ **Update SARP to add alloys and Hanford ash**
- ◆ **Complete preparation and repackaging activities for 31 Pu/Al alloy items (TRU waste) by June 30, 2001**
- ◆ **Complete WIPP audit of PFP TRU program**



Plutonium Finishing Plant

Nuclear Material Stabilization Project

Plutonium Bearing Solutions Stabilization

Major Accomplishments

- ◆ **346 of the 4300 liters stabilized as of March 31, 2001**
- ◆ **Production rates continue to be below rates reflected in baseline**

Planned Accomplishments

- ◆ **Solutions Team continues to evaluate and develop alternate paths to increase throughput and production rates**
 - Establish lag storage
 - Obtain approval for second 2 boat hot plate
 - Initiated oxalate precipitation testing by PPSL
- ◆ **Continue processing solutions**
- ◆ **Utilize W-460 and HC-21C furnaces**
- ◆ **Evaluate alternate disposition options for some of the lower concentration solutions**

Plutonium Finishing Plant

Nuclear Material Stabilization Project W-460

Major Accomplishments

- ◆ **Hot start of Outer Can Welder
April 10, 2001**

Planned Accomplishments

- ◆ **Complete design review for vault
modification**
- ◆ **Approve vault design and begin
modification of vault to safely store
the 3013 packages**
- ◆ **Complete installation of remaining
stabilization & packaging equipment (target
July 2001)**



Plutonium Finishing Plant

Nuclear Material Stabilization Project Issues

- ◆ **None**

Plutonium Finishing Plant

M-20 Milestone Status Permits and Closure Plans

Presented by

Clifford E. Clark
U.S. Department of Energy

April 24, 2001



U.S. Department of Energy
Richland Operations Office

Part B Permit Application Milestone Status

M-20-56

6/30/2002

Submit Canister Storage Facility Part B dangerous waste permit application to Ecology

M-20-57

8/31/2002

Submit Interim Storage ILAW Facility Part B permit application to Ecology

Current Milestone Status:

DOE is working to the M-20-56 and M-20-57 milestone submittal dates. The issuance of the NOI for the Immobilized Low Activity Waste (ILAW) is expected by the end of May. However, the Draft Part B permit applications will be submitted using conceptual design information.

Closure Plan Milestone Status

M-20-29A

TBD

Submit Sodium Storage Facility and Sodium Reaction Facility Closure Plan or request for procedural closure as defined in Section 6.3.3 of this Tri-Party Agreement to EPA and Ecology.

Current Milestone Status:

DOE is preparing a draft change request for submittal to Ecology by 4/26/01 for the FFTF transition.

Closure Plan Milestone Status (cont.)

M-20-33 10/31/2003

Submit 216-A-10 Crib and 216-A-36B Crib Closure/Postclosure plans to Ecology in coordination with the work plan for Uranium Rich Process Waste Group, M-13-25

M-20-39 2/28/2003

Submit 216-S-10 Pond and Ditch Closure/Postclosure Plans to Ecology in coordination with the work plan for the Chemical Sewer Group, M-13-21

M-20-52 12/31/2003

Submit 216-A-37-1 Crib Closure/Postclosure Plan to Ecology in coordination with the work plan for the General Process Waste Group, M-13-26

M-20-53 12/31/2003

Submit 207-A Retention Basin Closure/Postclosure Plan to Ecology in coordination with the work plan for the General Process Waste Group, M-13-26

M-20-54 2/28/2004

Submit 241-CX Tank System Closure/Postclosure Plan to Ecology in coordination with the work plan for the Infrastructure Waste Group

Current Milestone Status:

Development of these closure plans are scheduled to begin in Fiscal Year 2002. In the meantime, options for prioritizing the 200 Area are currently being discussed in workshops with DOE (Bryan Foley), Ecology (John Price), and the EPA (Doug Sherwood).

ECY expects DOE to work to the existing TPR milestones until CP's are submitted & approved.

Hanford Facility RCRA Permit Status

- DOE filed a Notice of Appeal (NOA) of the Permit Modification E, Revision 7, with the PCHB on 3/30/01
5/22 Pre-hearing conf
- The Ecology and EPA public comment period for modifications to the corrective action portion of the Permit (Permit Condition II.Y.) ended on 4/6/01.
- Currently there are schedule conflicts between M-20 Milestones and Attachment 27 of the RCRA Permit.

Accomplishments (last 3 months)

- Ecology issued Modification E, Revision 7 of the Permit modifying:
 - Part III, Final Status Operations (two new chapters Central Waste Complex and Waste Receiving and Processing Facility; incorporates Class 3 modifications in Chapter 1, 616 Nonradioactive Dangerous Waste Storage Facility)
 - Part V (two new chapters 300 Area Waste Treatment System and 2401-W Waste Storage Building)
- DOE received notice of completion for the 222-S Laboratory Complex Part B Permit Application from Ecology on 3/30/01.
- DOE delivered the 2000 Noncompliance Report to Ecology on 2/27/01, fulfilling Permit Condition. I.E.19.
- DOE delivered the Annual Dangerous Waste Report to Ecology on 2/28/01, fulfilling Permit Condition I.E.22.

Planned Actions (next 6 months)

- Ecology issue Revision 8 (Modification F) to the Dangerous Waste portion of the Permit which incorporates the 222-S Laboratory Complex.

Ecology has delayed Modification F public comment period at this time due to a conflict over receipt of offsite waste at the 222-S Laboratory and subsequent transfer to the Double-Shell Tank (DST) System.

- EPA issue Revision 1 to the HWSA portion of the Permit.
- DOE submit to Ecology M-20 Milestone TPA change request for WESF Part B permit application.
- Ecology issue NOD comments for T Plant Complex Part B permit application (holding workshops to resolve issues resulting from Ecology's review of the Part B permit application).

Planned Actions (next 6 months cont.)

- DOE submit to Ecology responses for the Low-Level Burial Grounds (LLBG) Chapter 1 NOD comments.
- Ecology issue remaining NOD comments to the LLBG Part B permit application.
- DOE submit to Ecology responses to River Protection Project, Waste Treatment Plant, and schedule workshops to resolve NOD comments.
- Ecology has reviewed the proposed Class 1 modifications to Attachment 33, Chapter 5.0. Ecology understands that the Class 1 modifications for Chapter 5.0 will be resubmitted for Ecology review.
- Ecology complete review of Class 1 modifications for Attachment 33, General Information Portion.

Planned Actions (next 6 months cont.)

- Revision 7 of the HF RCRA Permit was issued on 2/28/01. DOE and its contractors appealed the permit on 3/30/01. DOE, Ecology, and contractors met on 3/23/01 to discuss possibility of resolving and reaching a settlement associated with the final permit conditions. The resolution process discussed was for DOE to prepare issue papers. Once issues are agreed upon by DOE and Ecology, work groups will be tasked to reach agreement on resolving the issues. A path forward on how to implement the agreements will then be agreed upon by the parties. Resolutions would be implemented.
- DOE approach Ecology to discuss and resolve differences between M-20 Milestone dates and Attachment 27, Permit Modification Schedule dates.