

United States Government

Department of Energy

Office of River Protection

memorandum

DATE: August 29, 2006

REPLY TO
ATTN OF: OPA:KGT 06-OPA-074

SUBJECT: FISCAL YEAR 2006 MANAGEMENT CONTROL AND FINANCIAL
MANAGEMENT SYSTEM REVIEW

TO: James A. Rispoli, Assistant Secretary
for Environmental Management, EM-1, HQ

In accordance with the Federal Managers' Financial Integrity Act, the U.S. Department of Energy (DOE), Office of River Protection (ORP) completed its summary management review of the management controls for ORP, except for the financial management systems evaluation. The DOE Richland Operations Office (RL), as allotment holder, will be providing the financial management system evaluation for both RL and ORP.

ORP performed this review in conformity with Departmental guidelines and accordingly included a review of whether the management controls comply with underlying management principles which incorporate the Government Accountability Office's "Standards for Internal Controls in the Federal Government." Our review included consideration of the results of audit reports, internal management reviews, assurances from site/facility management contractors under ORP's cognizance, and all other known information. In addition, our review considered the areas of: 1) environmental management; 2) nuclear safety management; and 3) non-nuclear safety management.

Based on the results of the review, ORP concluded there is reasonable assurance that the management controls are working effectively and that program and administrative functions were performed in an economical and efficient manner consistent with applicable laws. Property, funds, and other resources were safeguarded against waste, loss, unauthorized use, or misappropriation.

Our review did not disclose new reportable problems. Below is a list of prior year Action Plans with the details of each Plan provided in the Attachment:

- DOE is re-establishing the Waste Treatment and Immobilization Plant (WTP) Baseline. The baseline of the WTP being constructed on the Hanford Site is being revised to reflect significant changes related to seismic and other concerns;

- The Hanford Site has 149 Single-Shell Tanks (SST) storing mixed wastes that are not in compliance with regulatory requirements for secondary containment, tank integrity, and leak detection;
- The Hanford Site has 149 SSTs and ancillary equipment that have exceeded their design life;
- The Hanford Site has 28 Double-Shell Tanks (DST) contained within 6 Tank Farms. Concerns related to these aging facilities throughout the DOE complex led to the establishment of guidelines for development of structural integrity programs for tank systems; and
- The Tank Farm Upgrade Program needs to return many DST and SST systems (ventilation, instrumentation, transfer lines, and electrical distribution) to full operation and improve system reliability and maintenance.

If you have any questions, please contact me, or your staff may contact Kevin R. Ensign, Director, Project Administration, (509) 376-9327.

//ORIGINAL SIGNED BY//

Roy J. Schepens, Manager
Office of River Protection

Attachment

cc w/attach:

M. W. Frei, EM-30

J. T. Campbell, ME-2

D. Hosaflook, ME-32

FISCAL YEAR (FY) 2006 INDEX AND CROSSWALK FOR
ACTION PLANS

PROGRAM/ADMINISTRATIVE FUNCTION	TITLE	HQ. ORG.	OPEN/ CLOSED	PG. NO.
ORP-0060, Major Construction – Waste Treatment Plant	Development of an Updated Cost and Schedule Baseline for the Waste Treatment and Immobilization Plant (WTP)	EM	Open	2.
ORP-0014, Radioactive Liquid Tank Waste Stabilization and Disposition	Single-Shell Tanks (SST) - Retrieval of Tank Wastes	EM EH	Open	4.
ORP-0014, Radioactive Liquid Tank Waste Stabilization and Disposition	Single-Shell Tanks (SST) Interim Stabilization (IS)	EM	Open	6.
ORP-0014, Radioactive Liquid Tank Waste Stabilization and Disposition	Double-Shell Tanks (DST) Integrity Assessment Program	EM	Open	8.
ORP-0014, Radioactive Liquid Tank Waste Stabilization and Disposition	Deficient Waste Tank Systems Integrity and Infrastructure	EM	Open	11.

ACTION PLAN**U.S. DEPARTMENT OF ENERGY (DOE), OFFICE OF RIVER PROTECTION (ORP)
WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP) PROJECT**Date: August 15, 2006

TITLE: Development of an Updated Cost and Schedule Baseline for the Waste Treatment and Immobilization Plant (WTP)

PROGRAM/ADMINISTRATIVE FUNCTION: ORP-0060, Major Construction – Waste Treatment Plant

HQ ORG: EM REPORTABLE PROBLEM: X REPORTABLE NONCONFORMANCE:

DESCRIPTION:

This action plan describes activities necessary to develop an updated cost and schedule baseline for the WTP Project. ORP was notified by Bechtel National, Inc. (BNI) in April 2005, that the annual (for 2005) Estimate at Completion (EAC) indicated an approximate \$2.5 billion increase to the Total Project Cost (\$5.781 billion) and a schedule slippage up to four years beyond the January 2011 project completion date. As per the Action Plan, BNI developed a new EAC with all supporting documentation in December 2005. The new EAC increased to \$11.55 billion and the completion of hot commissioning slipped out to February 2019.

BNI reported that cost increases and schedule delays were due to revised seismic design criteria, unanticipated technical issues associated with tank mixing and control of flammable gases, significant commodity growth as the plant design matured, deterioration of engineering and construction performance, and commodity and equipment pricing related changes. The cost related to schedule impacts associated with the aforementioned issues exceeds \$1B. ORP contracted with the U.S. Army Corps of Engineers (COE) to review and validate the cost and schedule impacts reported in the 2005 BNI EAC. The COE's review will be completed in August 2006 to validate BNI's EAC.

In June 2005, the Government Accountability Office (GAO) was requested by the Chairman and Ranking Member of the House Committee on Appropriations, Subcommittee on Energy and Water Development to perform an independent review of the WTP project. The GAO report to the House Committee on Appropriations, Subcommittee on Energy and Water Development stated: "Since the waste treatment plant construction contract was awarded in 2000, the project's estimated cost has increased more than 150 percent to about \$11 billion, and the completion date has been extended from 2011 to 2017 or later. There are three main causes for the increases in the project's cost and completion date: (1) the contractor's performance shortcomings in developing project estimates and implementing nuclear safety requirements, (2) DOE management problems, including inadequate oversight of the contractor's performance, and (3) technical challenges that have been more difficult than expected to address."

In the summer of 2005, DOE developed an action plan to define the path for updating the WTP cost and schedule baseline. That plan included: (1) the appointment of a senior level DOE management team to oversee the WTP Project and advise EM-1; (2) developing a plan to communicate cost and schedule impacts to Congress and stakeholders; (3) Secretarial discussions with Bechtel Corporate management; (4) requiring BNI to develop a new EAC with all supporting documentation by December 31, 2005; and (5) contracting with the COE to review and validate the new estimates with an interim report by March 2006, and final report by June 2006.

<u>CRITICAL MILESTONES:</u>	<u>ORIGINAL TARGET COMPLETION MONTH/YR.</u>	<u>REVISED TARGET OR ACTUAL MONTH/YR.</u>
• Obtain new EAC for the Low-Activity Waste facility, Analytical Laboratory, and Balance of Facilities from BNI.	Sept. 2005	Oct. 2005
• Obtain new EAC for the High-Level Waste and Pretreatment facilities from BNI.	Dec. 2005	Dec. 2005
• Receive Interim Report of the Independent Review of the EAC from the COE.	Mar. 2006	Mar. 2006
• Receive Final Report of the Independent Review of the EAC from the COE.	June 2006	Aug. 2006
• Establish an updated Cost and Schedule Baseline for the WTP.	TBD	May 2006
• Obtain approval of updated Cost and Schedule Baseline from DOE Headquarters.	TBD	Sept. 2006
• Make appropriate Congressional and stakeholder notifications of revised Cost and Schedule Baseline.	TBD	TBD

ASSESSMENT OF PROGRESS:

BNI has completed the revised EAC.

JUSTIFICATION FOR CLOSURE OF ACTION PLAN:

N/A

Is plan closed: Yes No

NAME: John Eschenberg, Project Manager

DIVISION: Waste Treatment and Immobilization Plant Project

ACTION PLAN
U.S. DEPARTMENT OF ENERGY (DOE), OFFICE OF RIVER PROTECTION (ORP)
TANK FARMS PROJECT (TF)

Date: July 31, 2006

TITLE: Single-Shell Tanks (SSTs) – Retrieval of Tank Wastes

PROGRAM/ADMINISTRATIVE FUNCTION: ORP-0014, Radioactive Liquid Tank Waste Stabilization and Disposition

HQ ORG: EM and EH REPORTABLE PROBLEM: X REPORTABLE
NONCONFORMANCE:

DESCRIPTION:

This action plan defines and updates actions to deal with anticipated problems in meeting the retrieval and closure dates for the Hanford Mixed Waste SSTs.

As reported in the Fiscal Year (FY) 2005 report, the 149 SSTs storing mixed waste are not in compliance with requirements of the regulation for secondary containment, tank integrity, and leak detection.

The Washington State Department of Ecology (Ecology) and DOE have agreed to a path forward for retrieval and closure outlined in the *Hanford Federal Facility Agreement and Consent Order* (HFFACO) M-45 series SST retrieval and closure milestones. Ecology and DOE recently negotiated HFFACO Change Package M-45-04-01, which established a standardized process for SST retrieval and closure.

Retrieval of the SST waste drives the delivery of waste feed to the Waste Treatment and Immobilization Plant (WTP) and available storage space in Double-Shell Tanks (DSTs). The HFFACO includes several milestones regarding the annual update of a report titled, "SST Retrieval Sequence and DST Space Evaluation," (RPP-8554, Rev. 0). This document evaluates the need for construction of additional DSTs and optimization of DST space. Four optimization paths are being worked to support increased DST space availability:

1. Utilize alternate storage for emergency reserves. This includes the restricted space over transuranic (TRU) waste in Tanks 241-AW-103 and 241-AW-105.
2. Utilize double-contained surface storage.
3. Construct new DSTs.
4. Avoid using DST space (supplemental treatment).

The use of restricted space over the TRU waste would make approximately 767,600 gallons of additional space available for retrieval. The space made available under the other options depends on how the specific option was implemented.

PATH FORWARD:

The HFFACO milestones associated with retrieval and closure are in jeopardy due to delays in the WTP construction and operations, retrieval of residual wastes in SSTs requiring alternate technologies, and longer than anticipated retrieval rates.

ORP is in the process of negotiating milestones under the HFFACO to reflect lessons learned from the tanks that have been retrieved and incorporate impacts from WTP delays that impact DST space. These milestones include retrieval of waste based on environmental risk reductions, staging of SST waste into DSTs, construction and operation of vitrification facilities to treat and immobilize waste, and final closure of SSTs. These actions are focused on reducing risk to the public and the environment and eventually closing the tank farms consistent with the HFFACO.

<u>CRITICAL MILESTONES:</u>	<u>ORIGINAL TARGET COMPLETION MONTH/YEAR</u>	<u>REVISED TARGET OR ACTUAL MONTH/YEAR</u>
M-45-00B: Complete specified "near term" SST waste retrieval and interim closure activities.	Sept. 2006	

ASSESSMENT OF PROGRESS:

SST retrieval work is continuing, with the retrieval of Tanks 241-C-106, 241-C-201, 241-C-202, and 241-C-203 completed. Retrieval of Tank 241-C-204 is underway, and is expected to be completed by November 2006. The technology demonstration of the salt cake dissolution in Tank 241-S-112 was completed on May 18, 2005, completing HFFACO Milestone M-45-03C. Approximately 31,000 gallons of waste remained in Tank 241-S-112 and an alternate retrieval technology was deployed to complete waste retrieval activities of the hard heel waste. Completion of the hard heel waste retrieval in Tank 241-S-112 using the second technology is expected to be completed by September 2006. As of August 24, 2006, approximately 54 percent or 253,000 gallons of waste had been retrieved from Tank 241-S-102. Additional technologies are being tested to deploy in Tank 241-S-102 to complete retrieval in FY 2007. Approximately 74,000 gallons of the 77,500 gallons has been retrieved from Tank 241-C-103. Completion of Tank 241-C-103 retrieval is anticipated by September 2006. Construction activities are underway to install the retrieval system for Tank 241-C-108.

JUSTIFICATION FOR CLOSURE OF ACTION PLAN:

Is plan closed: Yes No

Ben J. Harp, Tank Farms
Federal Project Director

ACTION PLANU. S. DEPARTMENT OF ENERGY (DOE), OFFICE OF RIVER PROTECTION (ORP)
TANK FARMS PROJECT (TF)Date: July 31, 2006

TITLE: Single-Shell Tanks (SSTs) Interim Stabilization (IS)

PROGRAM/ADMINISTRATIVE FUNCTION: ORP-0014, Radioactive Liquid Tank Waste
Stabilization and DispositionHQ ORG: EM REPORTABLE PROBLEM: X REPORTABLE NONCONFORMANCE:DESCRIPTION:

The Hanford Site Tank Farms have 149 SSTs and ancillary equipment that have exceeded their design life. These tanks were taken out of service in 1980; however, they still contain approximately 31 million gallons of liquids, saltcake, and sludge from prior defense reprocessing campaigns at Hanford.

Of 149 SSTs at Hanford, 67 are assumed to have leaked liquid mixed waste into the environment. A tank interim stabilization program has been in place to pump remaining pumpable liquids from SSTs to minimize the amount of potential leakage. The *Hanford Federal Facility Agreement and Consent Order* (HFFACO) (EPA 1089-03-04-120) previously committed DOE to complete stabilization by September 2000. This program was delayed due to safety issues and the uncertainty of impacts associated with the effects of liquid removal and flammable gas issues. The IS Consent Decree for SST IS was filed in Federal District Court on September 30, 1999. The consent decree required that 29 tanks be interim stabilized by September 30, 2004.

Twenty-seven SSTs were interim stabilized by September 30, 2004; the consent decree was amended to conditionally remove two tanks from IS requirements to allow accelerated retrieval activities to occur. In one of these tanks (241-S-112), a retrieval technology demonstration was completed, thereby satisfying the amended consent decree. Retrieval activities in the other tank (241-S-102) are continuing in accordance with an amended milestone date.

The IS strategy was a proactive means to reduce the potential of further environmental contamination resulting from future SST leakage. The strategy included a schedule for the 29 unstabilized tanks balancing the likelihood of leakage, determination of safety and environmental impacts, upgrading waste transfer systems, and establishment of emergency leak response capability.

<u>CRITICAL MILESTONES:</u>	<u>ORIGINAL TARGET COMPLETION MONTH/YR.</u>	<u>REVISED TARGET OR ACTUAL MONTH/YR.</u>
Complete IS of SSTs.	Sept. 2000	Sept. 2004

ASSESSMENT OF PROGRESS:

Fiscal Year (FY) 1999 and FY 2000 work focused on resolution of the continuation of saltwell pumping even though impacted by flammable gas issues. FY 2001 focused on the IS Consent Decree, preparation for and start/restart of interim stabilization of SSTs, and the preparation for pumping in FY 2002. FY 2002 focused on starting pumping of new tanks and increasing waste volume removed from SSTs. FY 2003 focused on keeping tanks pumping and completion of interim stabilization for as many tanks as possible. All remaining pumping for interim stabilization was completed in the first half of FY 2004. Retrieval of Tank 241-S-112, to the limits of the first technology, was completed in FY 2005 and work is now focused on retrieval of the remaining tank (241-S-102) for closure of the IS consent decree.

JUSTIFICATION FOR CLOSURE OF ACTION PLAN:

N/A

Is plan closed: Yes No

NAME: Chris Bosted, Deputy
DIVISION: Tank Farm Projects

ACTION PLAN
U.S. DEPARTMENT OF ENERGY (DOE), OFFICE OF RIVER PROTECTION (ORP)
TANK FARMS PROJECT (TF)

Date: July 31, 2006

TITLE: Double-Shell Tanks (DSTs) Integrity Assessment Program

PROGRAM/ADMINISTRATIVE FUNCTION: ORP-0014, Radioactive Liquid Tank Waste Stabilization and Disposition

HQ ORG: EM REPORTABLE PROBLEM: X REPORTABLE NONCONFORMANCE:

DESCRIPTION:

The Hanford Site DST Integrity Assessment Program consists of 28 DSTs contained within 6 tank farms, designated AY, AZ, SY, AW, AN, and AP. These tanks contain approximately 22 million gallons of liquids, saltcake, and sludge from prior defense reprocessing and single-shell retrieval operations.

An integral part of this assessment program in support of the mission of the River Protection Project is to store and transfer this hazardous and radioactive waste. Concerns related to these aging facilities throughout the DOE complex led to the establishment of guidelines for development of structural integrity programs for tank systems (BNL-52527, *Guidelines for Development of Structural Integrity Programs for DOE High-Level Waste Storage Tanks*). The committee of experts who developed these guidelines is known as the Tank Structural Integrity Panel (TSIP).

The DSTs and associated ancillary equipment are considered active facilities under regulations implementing the *Resource Conservation and Recovery Act of 1976* (RCRA). Configuration and operation of these facilities is regulated under Title 40, Code of Federal Regulations (CFR), Part 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities," Subpart J "Tank Systems" (40 CFR 265, Subpart J); and Washington Administrative Code 173-303, "Dangerous Waste Regulations," Section 640, "Tank Systems." These regulations require integrity assessments of tank systems that store dangerous waste and determination by an independent, qualified, registered, professional engineer as to whether the tank system is leaking or otherwise unfit for use. These regulatory requirements have the same objective as the structural integrity program advocated in the TSIP guidelines.

The purpose of the DST Integrity Assessment Program is to:

- Ensure structural tank integrity and extend useful life of the DSTs.
- Correct current out-of-specification waste chemistry conditions using practical measures and restore vital systems.
- Develop controls and surveillance programs for implementation by DST and Waste Feed Delivery Operations to prevent and assess future corrosion.
- Manage environmental compliance integrity assessments for waste storage and retrieval systems.

	<u>ORIGINAL TARGET COMPLETION MONTH/YR.</u>	<u>REVISED TARGET/ ACTUAL MONTH/YR.</u>
<u>CRITICAL MILESTONES:</u>		
• Add Caustic to Tanks 241-AY-101, 241-AY-I02, 241-AN-102, and 241-AN-107 to bring bulk waste chemistry into specification.	Oct. 2001	Apr. 2003
• Restore annulus ventilation system to AY and AZ Tank Farms.	Oct. 2001	Oct. 2001
• Add nitrite to Tanks 241-AY-102 to correct out-of-spec chemistry.	Dec. 2001	Nov. 2001
• Procure and deploy modified ultrasonic test (UT) crawler with capability to P-scan lower knuckle region. Provide UT examination results.	Oct. 2002	Jan. 2003
• Develop and deploy new UT technology (Tandem Synthetic Aperture Focusing Technique [TSAFT]) to scan lower knuckle region for stress corrosion cracking.	Oct. 2002	Jan. 2003
• Develop long-term tank integrity program for assessing need to adjust tank chemistry, increased video inspections, UT inspections, and tank sampling.	Oct. 2001	Sept. 2001
• Submit DST Integrity Assessment Report in accordance with M-48-14. Report comprises the DSTs and its ancillary systems/equipment.	Mar. 2006	Mar. 2006
• Complete action items in the HFFACO Milestone M-48 (formerly Ecology Administrative Orders OONWPKW-1250 and 1251).	Oct. 2007	

ASSESSMENT OF PROGRESS:

Ongoing Fiscal Year (FY) 2006. UT has been completed on all 28 DSTs. New UT technology such as TSAFT is operational and has been deployed in the DST lower knuckle regions for locating and sizing circumferential cracking (i.e., stress corrosion cracking) on six DSTs. In addition, an extended arm mounted on the UT scanning bridge is deployed for thickness measurements and detection of cracks and pitting in the lower knuckle and extending into the air slots.

The program continues to monitor chemistry in the DSTs and if necessary, make chemical additions to maintain waste within the chemistry control limits. Predictive dynamic mixing models that have been developed are providing information on how caustic is mixing through the solid layers for DSTs, as a result of chemical additions to restore chemistry. The modeling effort is also used to schedule follow-on core sampling of DSTs after caustic additions rather than use of a fixed time period.

Ongoing efforts in FY 2006 include use of an expert panel to provide direction, assess, and make recommendations on Tank 241-AN-107 Stress Corrosion Cracking (SCC) testing of low carbon steel using out-of-specification waste simulant. The SCC testing is being performed to understand the environment where the current chemistry controls can be adjusted without increasing the likelihood of SCC or increase in pitting corrosion. This effort is being performed in lieu of installation of a mixer pump in order to bring bulk waste chemistry into specification. SCC testing using similar methodology on DST 241-AY-102 steel specimens in simulated waste will start in FY 2007.

Work for the remainder of FY 2006 and for FY 2007 is to re-examine six DSTs by UT method (HFFACO Milestone M-48-15 by September 30, 2007) and visual inspection of the primary tank and annulus.

JUSTIFICATION FOR CLOSURE OF ACTION PLAN:

N/A

Is plan closed: Yes No

NAME: Dana Bryson, Director

DIVISION: Tank Farms Technical Engineering

ACTION PLAN
U.S. DEPARTMENT OF ENERGY (DOE), OFFICE OF RIVER PROTECTION (ORP)
TANK FARMS PROJECT (TF)

Date: July 31, 2006

TITLE: Deficient Waste Tank Systems Integrity and Infrastructure

PROGRAM/ADMINISTRATIVE FUNCTION: ORP-0014, Radioactive Liquid Tank Waste Stabilization and Disposition

HQ ORG: EM REPORTABLE PROBLEM: X REPORTABLE NONCONFORMANCE:

DESCRIPTION:

The Tank Farm Upgrade Program needs to return many Double-Shell Tanks and some Single-Shell Tank (SST) systems (ventilation, instrumentation, transfer lines, and electrical distribution) to full operation and improve system reliability and maintenance. These life extension upgrades will provide the system availability necessary for timely and safe waste management activities, and assure that the tank farm facilities will be able to support waste feed to the Waste Treatment and Immobilization Plant.

The upgrade strategies to correct the deficiencies consist of the original four major efforts, plus additional initiatives in response to the August 1993 Administrative Hold on work. Many of the details of the corrective actions have been negotiated with The Washington State Department of Ecology and the Environmental Protection Agency and have been established as *Hanford Federal Facility Agreement and Consent Order* (HFFACO) milestones:

1. Capital upgrades to replace systems (instrumentation, piping, mechanical and electrical). The upgrades are driven by safety-related, environmental, and operational needs.
2. Configuration control to provide a uniform database of drawings and method of equipment identification required to support operations, maintenance, and capital upgrades, which includes Secretarial Safety Initiative 4c, "Complete Accelerated Walk-downs and Field Verify Essential Drawings."
3. Contamination zone reduction, which will be instituted to prevent spread of surface contamination in tank farms and surrounding areas, protect workers from contamination, and reduce costs of protection. This program will deal with contaminated zone mapping, waste sampling and classification, waste retrieval/disposal, and surface treatment.

<u>CRITICAL MILESTONES:</u>	<u>ORIGINAL TARGET COMPLETION MONTH/YR.</u>	<u>REVISED TARGET OR ACTUAL MONTH/YR.</u>
• Obtain HQ validation of the Tank Farm Restoration and Safe Operation Project.	June 1995	Sept. 1995
• Root Cause Analysis of Contaminated Areas.	Sept. 1993	Sept. 1995
• Start construction of new cross-site transfer system HFFACO.	Nov. 1995	Nov. 1995
• Complete construction of new cross-site transfer system HFFACO.	Aug. 1997	Aug. 1997
• Construct two additional waste tanks 200 West Deleted per HFFACO Change Request M-42-95-02, dated Dec. 1995.	Dec. 1999	DELETED
• Complete Tank Farm Upgrades (HFFACO M-43-00).	FY 2002	July 2005
• Retrieve waste from all remaining SSTs (HFFACO M-45-05).	Sept. 2018	TBD

ASSESSMENT OF PROGRESS:

In Fiscal Year (FY) 2005 the scope of the Tank Farm Upgrades was modified to accommodate early SST retrievals in 200 East Area (C-Farm), rather than the previous early retrievals in the 200 West Area. Construction upgrades were completed to meet HFFACO Milestone M-43 for Tank Farm Upgrades, providing an upgraded Tank Farm system that can be operated under a *Resource Conservation and Recovery Act of 1976* Permit and is available for both safe storage of waste and for SST retrieval projections through 2016. HFFACO Milestone M-48-07B was established and completed for a few remaining upgrades (beyond completion of M-43). Isolation of the components that were removed from service in 2005 was completed within 12 months (by June 2006). Upgrades associated with retrieval of SST Waste in the 200 West Area (beyond Tanks 241-S-102, 241-S-112, and 241-S-109) were deferred to future upgrade projects (beyond 2016), consistent with the SST Retrieval Sequence. Line encasement pressure testing was completed for all active systems. Twenty four lines have not had integrity testing performed, but will be tested prior to being used.

Some work to complete effective and efficient upgrades for ventilation systems has not been completed, and has been deferred to FY 2008. Remaining upgrade work includes electrical upgrades, master pump shutdown/monitoring control system upgrades and startup/turnover, and startup and turnover of new exhausters in AN and AW Tank Farms. Seven of the remaining line encasement tests are scheduled for FY 2008. Seventeen transfer line encasement tests have been deferred to FY 2012 or beyond (deferred use lines).

JUSTIFICATION FOR CLOSURE OF ACTION PLAN:

N/A

Is plan closed: Yes No

NAME: Delmar Noyes, Director

DIVISION: Tank Farms Programs and Projects Division