



U.S. Department of Energy  
**Office of River Protection**

0076991

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Richland, Washington 99352

08-TPD-020

APR 30 2008

Ms. Jane A. Hedges, Program Manager  
Nuclear Waste Program  
State of Washington  
Department of Ecology  
3100 Port of Benton Blvd.  
Richland, Washington 99354

RECEIVED  
APR 30 2008  
EDMC

Dear Ms. Hedges:

TRANSMITTAL OF THE CONSENT DECREE THIRD AMENDMENT DELIVERABLE,  
"SINGLE-SHELL TANK (SST) INTERIM STABILIZATION ACTIVITY REPORT FOR THE  
SECOND QUARTER OF FISCAL YEAR (FY) 2008"

Reference: Consent Decree Number CT-99-5076-EFS, "Washington State Department of Ecology (Ecology) versus the U.S. Department of Energy," U.S. District Court, Eastern District of Washington, filed September 30, 1999.

This letter transmits the Consent Decree deliverable "SST Interim Stabilization Activity Report for the Second Quarter of FY 2008" (Enclosure).

The Consent Decree requires the U.S. Department of Energy, Office of River Protection to submit to the Washington State Department of Ecology, a quarterly report documenting interim stabilization (IS) activities that occurred during the period covered by the report. Formal reporting requirements under the Consent Decree were completed in October 2004, with submittal of the fourth quarter report for FY 2004.

The provisions of the Consent Decree, as amended, have been met for 28 of the 29 SSTs. Tank 241-S-102 is undergoing retrieval in lieu of IS, as provided by the Third Amendment to the Consent Decree, and is approximately 91 percent complete as of March 31, 2007. Retrieval of Tank 241-S-102 was halted due to a leak in the retrieval system and will be delayed while recovery from the leak is effected and appropriate corrective actions are implemented. Tank 241-S-102 retrieval status is provided at the monthly Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) meetings.

Ms. Jane A. Hedges  
08-TPD-020

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If you have any questions, you may contact me, or your staff may contact Delmar L. Noyes,  
Acting Assistant Manager for Tank Farms Project, (509) 376-5166.

Sincerely,



Shirley J. Olinger, Manager  
Office of River Protection

TPD:JDL

Enclosure

cc w/encl:

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Administrative Record

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**Enclosure**

**Consent Decree Deliverable,  
Single-Shell Tank Interim Stabilization Activity Report  
for the Second Quarter of Fiscal Year 2008**

Consisting of 4 pages, including coversheet

# SINGLE-SHELL TANK INTERIM STABILIZATION ACTIVITY REPORT FOR THE SECOND QUARTER OF FISCAL YEAR 2008

## INTRODUCTION

This document is submitted to satisfy the quarterly reporting requirements for single-shell tank (SST) Interim Stabilization (IS) Project activities conducted during the second quarter of fiscal year (FY) 2008, as prescribed by Consent Decree Number CT-99-5076-EFS, "State of Washington, Department of Ecology versus U.S. Department of Energy," as amended or otherwise agreed. The period of performance for the second quarter report extends from January 1, 2008 through March 31, 2008.

The Consent Decree stipulates that:

"DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period and shall include:

1. A brief description of the project accomplishments and project issues encountered during the reporting period and/or expected in the next six months;
2. A definitive statement describing whether or not the U.S. Department of Energy (DOE) remains in compliance with the schedule set forth in Section IV-A (of the Consent Decree);
3. Where applicable, a description of actions initiated or otherwise taken to recover any schedule slippage;
4. Budget/cost status; and
5. Copies of written directives given by the DOE to the contractor(s) for work required by this Decree."

The Consent Decree defines "interim stabilized" as follows:

"For purposes of this Decree, a single-shell tank has been interim stabilized and tank pumping may be discontinued when the tank contains less than 50,000 gallons of drainable interstitial liquid and less than 5,000 gallons of supernatant liquid. In addition, if jet pumping is used, the pump flow must be at 0.05 gallons per minute or less before pumping may be discontinued. If a major equipment failure occurs at a tank that contains less than 50,000 gallons of drainable interstitial liquid and less than 5,000 gallons of supernatant, then DOE may, after consulting with Ecology, consider the tank interim stabilized."

## **SINGLE-SHELL TANK INTERIM STABILIZATION ACTIVITY REPORT FOR THE SECOND QUARTER OF FISCAL YEAR 2008**

The schedule for removal of pumpable liquid from the final 29 SSTs is provided in "Attachment A" of the Consent Decree. This schedule is enforceable pursuant to the terms and conditions of the Consent Decree except for the "Projected Pumping Completion Dates," which are target dates only and are not enforceable. Consent Decree Milestone D-001-00 required that "DOE Shall Complete Interim Stabilization of all 29 SSTs by September 30, 2004." This milestone was met roughly six months ahead of schedule, as modified by the Third Amendment to the Consent Decree filed in the U.S. District Court, Eastern District of Washington, on September 9, 2003.

The Consent Decree makes provisions for accelerated retrieval of the final two SSTs (241-S-102 and 241-S-112) in lieu of IS and removes waste volumes associated with these tanks from IS calculations. IS of these tanks is being held "in abeyance" pending completion of accelerated retrieval of waste in accordance with applicable *Hanford Federal Facility Agreement and Consent Order* (HFFACO) M-45 series milestones. The U.S. Department of Energy, Office of River Protection (ORP) obligation to complete IS of Tanks 241-S-102 and 241-S-112 will be satisfied upon completion of waste retrieval from these tanks as defined in HFFACO Milestones M-45-05A and M-45-03C, respectively. The Consent Decree and the status of accelerated waste retrieval operations in Tanks 241-S-102 and 241-S-112 are discussed further under the section entitled, "ITEM 2: SCHEDULE COMPLIANCE."

In addition, an IS evaluation form was issued for Tanks 241-S-112 and 241-S-102 at the point where waste retrieval progress resulted in the meeting of the IS drainable interstitial liquid and supernatant volume criteria. The IS jet pump rate criterion of less than or equal to 0.05 gallons per minute does not apply to Tank 241-S-112 or Tank 241-S-102 because retrieval operations utilize submersible pumps rather than jet pumps. Retrieval pumping removes both solids and liquids while IS jet pumping removes primarily liquids that drain through a screened interval into the saltwell.

### **ITEM 1: ACCOMPLISHMENTS AND ISSUES**

The following lists major accomplishments/issues for the IS Project during the second quarter of FY 2008.

Cleanup of the spill area is ongoing. The leaking hose and most other above ground contaminated equipment have been removed and the area prepared for contaminated soil removal. Sixty one drums of contaminated soil have been removed. Most of the instrumentation and monitoring equipment for this tank are currently out of service due to the cleanup work. Drywell monitoring for leak detection is ongoing. No evidence of leaking has been detected.

A material balance calculation has been performed to estimate the current status of the waste in Tank 241-S-102. The current best estimate is that the tank contains less than 2,500 gallons of supernate and less than 16,000 gallons of drainable interstitial liquid. These values are well within the IS criteria. The camera and ENRAF are not currently available for independent verification of liquid volume.

**SINGLE-SHELL TANK INTERIM STABILIZATION ACTIVITY REPORT  
FOR THE SECOND QUARTER OF FISCAL YEAR 2008**

Tank 241-S-102 is undergoing retrieval in lieu of IS, as provided by the Third Amendment to the Consent Decree, and is approximately 93 percent complete as of March 31, 2008.

Tank 241-S-102 retrieval status is provided at the monthly Tri-Party Agreement meetings.

*Six-Month Look Ahead:*

A video camera and ENRAF will be restored. Contaminated soil and contaminated equipment removal will continue.

*Current Issues and Recovery Actions:*

Recovery actions will be performed in accordance with the Corrective Action Plan.

*Issues Expected to Arise in the Next Six Months:*

None

**ITEM 2: SCHEDULE COMPLIANCE**

The ORP remains in compliance with the schedule set forth in Section IV-A of the Consent Decree, as amended. Consistent with the Consent Decree, there are presently no schedule items for IS of Tank 241-S-102. The schedule for retrieval of Tank 241-S-102 is covered by HFFACO Milestone M-45-05A.

**ITEM 3: SCHEDULE RECOVERY ACTIONS**

There are no required scheduled recovery actions relative to IS. Any schedule issues related to retrieval of Tank 241-S-102 will be addressed along with HFFACO Milestone M-45-05A.

**ITEM 4: BUDGET/COST STATUS**

There are no remaining field activities and no remaining budget solely for IS activities.

**ITEM 5: DOE DIRECTIVES**

There were no new directives issued from the ORP during the second quarter of FY 2008 that affected the IS Project related to the Consent Decree, as amended by the Third Amendment.