

START

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Change Number M-10-90-2	FEDERAL FACILITY AGREEMENT AND CONSENT ORDER CHANGE CONTROL FORM Do not use blue ink. Type, or print using black ink.	Date 11/20/90
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Originator L. M. Sasaki	Phone 373-1027
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Class of Change
 I - Signatories (Section 13.0)
 II - Project Manager
 III - Unit Manager

Change Title
Single-Shell Tank Core Sampling Milestone Delay Due to Safety Issue

Description/Justification of Change

The following change is requested to the Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestone:

<u>Number</u>	<u>Milestone</u>	<u>Current Date:</u>	<u>Revised Date:</u>
M-10-04	Obtain four samples from two Single-Shell Tanks (SSTs)	Dec. 31, 1990	May 24, 1991

This milestone has been impacted by a recent issue raised over the safety of core sampling operations. As a result of high drill bit temperatures reached during testing of the core drill bit on synthetic hardcake, all core sampling operations have been suspended until it can be demonstrated that core sampling can be performed safely. (Continued on page 2.)

Impact of Change

A phased approach for the readiness reviews has been proposed to minimize impact to the above Tri-Party Agreement milestone. An initial readiness review will be conducted to assure the safety and adequacy of using only the push mode to core sample soft wastes in tanks that are not on the watch lists for hydrogen generation, ferrocyanides, or acetates. Completion of this readiness review will allow the sampling of the next two SSTs to begin by March 28, 1991, and be completed by May 24, 1991. The subsequent phase(s) of the readiness review will address sampling with a rotating drill bit. Sufficient tanks are expected to be available for use of the push mode, however, to allow for the sampling of additional SSTs toward meeting the September 30, 1991 Tri-Party Agreement milestone to obtain 16 samples from eight SSTs (M-10-05) on schedule. (Continued on page 2.)

Affected Documents

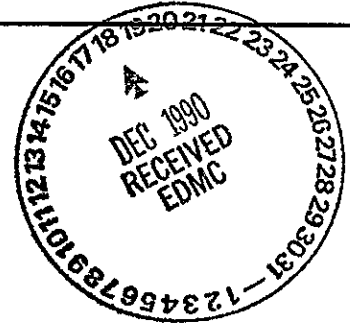
Hanford Federal Facility Agreement and Consent Order; Activity Data Sheet 5176, "Single-Shell Tank Waste Characterization;" Single-Shell Tank System Closure/Corrective Action Work Plan (Draft)

Approvals ___ Approved ___ Disapproved

DOE _____ Date _____

EPA _____ Date _____

Ecology _____ Date _____



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Description/Justification of Change (continued):

While the SSTs selected to be sampled to meet M-10-04 (tanks B-201, B-202 and/or T-203) are expected to be soft wastes that can be sampled without rotation of the drill bit and should not exhibit the high temperatures observed during the hardcake tests, the WHC Waste Management Division, in consultation with DOE-RL has determined that additional testing and analysis of the core drilling equipment in a push mode (no rotation) is required prior to performing additional core sampling. As a result, an instrumented test in simulated waste measuring drill bit temperature and an analysis of the push mode safety envelope will be performed. Following this effort, a comprehensive readiness review to provide assurance that the safety envelope will not be violated in actual operation will be performed. When the readiness review is completed, the tank sampling can proceed.

Core sampling tests that involve operating the equipment in a push mode (no rotation) will be performed to verify and document a push mode safety envelope. The drill bit temperature will also be monitored during actual sampling operations.

Impact of Change (continued):

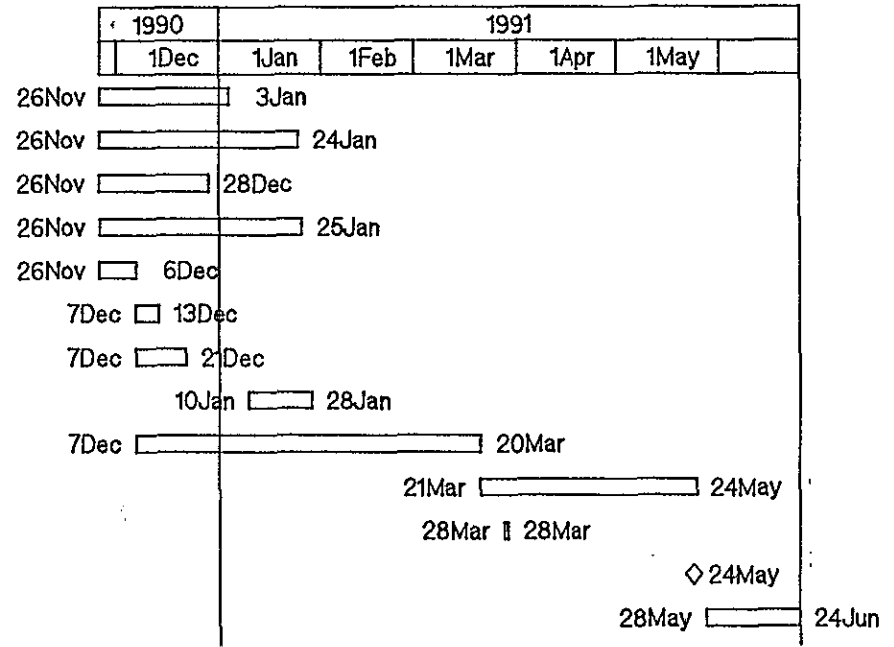
Preliminary calculations of the effect of push mode sampling indicate that any increase in temperature will be minimal. These calculations are expected to be confirmed through drill bit temperature testing in the push mode. However, if these calculations are not confirmed or if the three tanks identified for characterization do not fall within the safety envelope, then the revised milestone date as well as subsequent core sampling milestones may be impacted.

A schedule showing activities supporting the revised milestone date is attached.

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READINESS REVIEW FOR SST SAMPLING

- 900 DRILL BIT TEMPERATURE STUDY
- 9011 SAFETY ENVELOPE DOCUMENT
- 9012 INSTALL TEMPERATURE MONITORING
- 9013 REVISE PROCEDURE
- 9014 GROUP TANKS
- 9015 FIELD INSPECTION
- 9016 SAMPLE VAPOR SPACE
- 9017 PREPARE WORK REQUEST
- 9018 READINESS REVIEW
- 9100 MOVE CST INTO TANK FARM & SAMPLE TWO TANKS
- 91002 INITIATE SST SAMPLING
- 91007 COMPLETE TPA M-10-04 (4 CORE SAMPLES/2 SST)
- 911 SAMPLE 3RD TANK



Legend
Early CPM []

Project: CHAR	CHARSUM	Date: 28Nov90 9:23
SST DOCUMENTATION FOR SAMPLING		
Page: 1	E. N. THOMPSON 6-7003	