

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 06/14/91
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Class of Change <input type="checkbox"/> I - Signatories (Section 13.0) <input checked="" type="checkbox"/> II - Project Manager <input type="checkbox"/> III - Unit Manager

Change Title Single-Shell Tank Core Sampling Milestone Delay Due to Recently Identified Core Drilling and Tank Storage Safety Issues

Description/Justification of Change
The following changes are requested to the Federal Facility Agreement and Consent Order (Tri-Party Agreement) Milestones:

Number	Milestone	Current Date	Revised Date
M-10-04	Obtain 4 core samples from 2 single-shell tanks (SSTs)	Dec. 1990	Sept. 1991
M-10-04-T1*	Readiness complete to proceed with push-mode core sampling	N/A	June 1991
M-10-05	Issue "Integrated Plan - Sampling and Analysis of Hanford Site Wastes Measuring Greater Than 10 mREM per Hour"	N/A	March 1992

*Target Date

Justification of Change

As a result of this change 20 tank waste core sampling events from SSTs will be rescheduled. The interim milestones supporting M-10-00 will be redefined, scheduled, and planned in the "Integrated Plan-Sampling and Analysis of Hanford Site Wastes Measuring Greater Than 10 mREM per Hour" to be issued by March 31, 1992. Products from the plan will result in an optimized sampling and analysis schedule with defined and achievable interim milestones and a plan consistent with milestone M-10-00 to complete analyses of at least 2 complete core samples from each single-shell tank by September 1998.

The new milestone M-10-13 will restore to the Hanford Site the capability to sample tanks in the rotary core drilling mode, and will be completed by September 30, 1992.

(See Page 4 for continuation.)

Affected Documents
Hanford Federal Facility Agreement and Consent Order Action Plan Calendar Year 1990 Annual Update, Appendix D (Table D-3 and Figure D-1 Work Schedule).

Approvals	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved
<i>John D. Wagoner</i>		09/09/91
DOE John D. Wagoner		Date
<i>Dana A. Rasmussen</i>		09/09/91
Dana A. Rasmussen		Date
<i>Christine O. Gregoire</i>		09/09/91
Ecology Christine O. Gregoire		Date



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Number	Milestone	Current Date	Revised Date
M-10-05-T1*	Issue draft integrated plan to Ecology	N/A	Jan. 1992
M-10-06	Obtain 20 core samples from Single-Shell Tanks (SSTs)	Sept. 1992	Sept. 1992
M-10-13	Restore rotary mode sampling capability at the Hanford Site	N/A	June 1992
M-10-13-T1*	Completion of improved organic clean-up analytical method	N/A	Jan. 1992
M-10-13-T2*	Complete R&D and installation of both the hard saltcake sampler and the improved hydrostatic balance system	N/A	June 1992

*Target Date

Milestone M-10-04

Milestone M-10-04 has been impacted by tank waste storage safety issues and the issue raised over the safety of core sampling operations.

As a result of high drill bit temperatures measured during testing of the drill bit on synthetic hardcake in the rotational mode, all tank waste core drilling operations have been suspended until it can be demonstrated that core sampling can be performed safely. The SSTs selected to be sampled to meet M-10-04 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. It was determined that additional testing and analysis of the core drilling equipment in the push-mode (no rotation) would be the prudent course of action prior to performing additional core sampling. As a result, an instrumented test in simulated wastes measuring drill bit temperatures has been satisfactorily completed confirming that increase in temperature is minimal and acceptable. The target date for completion of all startup and Readiness Review activities required to proceed with push-mode core sampling of SSTs to satisfy interim milestone M-10-04 is June 24, 1991.

Milestone M-10-05

Because of the current sampling schedule uncertainties imposed by safety related issues, M-10-05 will not be met. It has been determined that an integrated Hanford Site waste sampling and analysis plan is needed to address the evolving Hanford characterization program. To address this need, interim milestone M-10-05 will be redefined to be issuance of an "Integrated Plan - Sampling and Analysis of Hanford Site Wastes Measuring Greater Than 10 mREM per Hour" to be issued by March 31, 1992. The letter transmitting the plan to Ecology will include the USDOE recommended plan of action. The scope of the plan will include: 1) Identification of current and projected sampling and analysis needs for Hanford Site wastes measuring greater than 10 mREM per hour; 2) Assessment of existing and planned resources; 3) Establishment of prioritization criteria; 4) Development of an integrated schedule; 5) Analysis of the integrated schedule and plan to determine actions necessary to meet and support M-10-00; and 6) Identification of opportunities for acceleration. In this plan the sampling and analysis strategy and redefinition of interim

Justification of Change

milestones required to satisfy M-10-00 will be accomplished and the projected near-term sampling events identified. This plan will be the basis for a change request to interim milestones M-10-07 through M-10-12 showing how missed cores will be recovered before September 1998. The target date for release of the draft document to Ecology is January 31, 1992.

Milestone M-10-06

After careful review of projected tank waste core sampling and analysis capabilities it has been determined that milestone M-10-06 as currently defined to obtain 24 cores from single-shell tanks is not achievable by September of 1992. This condition is due to core sampling requirements imposed because of safety concerns related to selected double-shell tanks (DSTs), and the need to provide DST tank waste core materials for retrieval and pretreatment studies, also driven by TPA milestones. As in the case of milestone M-10-05, the redistribution of the balance of 4 cores for milestone M-10-06 will be redefined in the plan developed in the "Integrated Plan - Sampling and Analysis of Hanford Site Wastes Measuring Greater Than 10 mREM per Hour" issued by March 31, 1992 (milestone M-10-05). The plan will also provide the basis for focused near-term acceleration to identify additional sampling opportunities to achieve this recovery in FY 1992. USDOE agrees to diligently pursue sampling an additional 4 cores if this can be accomplished without preventing characterization of tank wastes with safety concerns or tank wastes which must be characterized for pretreatment, grout, or HWVP.

Milestone M-10-13

New and extensive modification to the core sampling apparatus planned for the second core sampling truck is required to provide safe tank waste core sampling capability to address both DST and SST safety related concerns. These additional modifications include gas purging and temperature monitoring capability, and an instrumentation package to monitor bit temperature, depth, pressure, RPM, and purge gas flow rate. Also integrated into the development effort will be other tasks including NPH elimination, and the development of a universal hardcake sampler planned for the SST Characterization Program. Extensive testing during and following design and fabrication activities, followed by procedure development, training, and a formal Readiness Review will be required prior to actual tank waste core sampling in the rotary-mode. The focused and expedited completion of this upgrade is essential to the SST Characterization Program in that the majority of SSTs require a hardcake sampler for acquiring materials for characterization. Continuing safety concerns associated with all hardcake core sampling will likely require documented monitoring during operations. This new milestone requires completion of this major task by September 30, 1992. (In support of the characterization of tank waste materials that may be exposed to NPH hydrostatic fluid during sampling, the target date for completion of improved organic clean-up analytical method is January 31, 1992.) The target date for a hydrostatic balance system that does not utilize NPH, and completion of the hard saltcake sampler is June 30, 1992.

