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Change Number  M-92-02-01	<b>Federal Facility Agreement and Consent Order Change Control Form</b> <small>Do not use blue ink. Type or print using black ink.</small>	Date  6/25/03
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Originator O. A. Farabee, Fast Flux Test Facility (FFTF) Division Director Phone 376-8089

Class of Change

I - Signatories       II - Executive Manager       III - Project Manager

Change Title

Reestablish Agreement M-92-09 and M-92-10 interim milestones associated with the management and disposition of U.S. Department of Energy (DOE) Hanford Site radioactive sodium as product.

Description/Justification of Change

In December 1996, the M-92-09 and M-92-10 milestones were created governing the acquisition of new facilities, modification of new facilities, and /or modification of planned facilities necessary for the storage, treatment/processing, and product use of DOE's Hanford Site radioactive sodium inventory (~300,000 gallons). This Agreement change establishes revised requirements and dates for the M-92-09 and M-92-10 interim milestones.

(Continued on Page 2)

Impact of Change

This change request reestablishes revised, proposed M-92-09 and M-92-10 interim milestones. These milestones do not adversely impact other existing or contemplated Tri-Party Agreement milestones. However, there are links between these milestones and the FFTF deactivation TPA M-81-00 series milestones and related M-20-29B milestone enacted in May 2003. Specifically, the report due under proposed M-92-10, "Submit Hanford Site Sodium Disposition Evaluation Report to Ecology," shall be prepared in concert with M-81-10-T01, "Submit Final Sodium Disposition Evaluation Report," which indicates that the DOE Hanford Site Office of River Protection (ORP) Waste Treatment Plant will use as product the Hanford Site radioactive sodium inventory (i.e., FFTF, Hallam, and SRE), following conversion to sodium hydroxide, for tank sludge pretreatment (i.e. caustic washing). The report will determine the ORP need dates and identify where the Hanford Site sodium inventory will be converted to sodium hydroxide, i.e., at the existing Argonne National Laboratory - West Sodium Processing Facility (located within the Idaho National Engineering and Environmental Laboratory Site) or at a new facility to be constructed at Hanford.

Affected Documents

The Hanford Federal Facility Agreement and Consent Order, as amended, and Hanford Site internal planning, work authorization, and budget documents (e.g., Project Management Plans, Baseline Change Control documents).

Approvals

\_\_\_\_\_ *[Signature]*      7/16/03      ✓ Approved      \_\_\_\_\_ Disapproved  
 DOE      Date

\_\_\_\_\_ *NA*      \_\_\_\_\_      \_\_\_\_\_ Approved      \_\_\_\_\_ Disapproved  
 EPA      Date

\_\_\_\_\_ *[Signature]*      7/21/03      ✓ Approved      \_\_\_\_\_ Disapproved  
 Ecology      Date

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In January 1997, the DOE decided to maintain FFTF in a standby condition while an evaluation was conducted of any future role the facility might have in DOE's tritium production strategy. In December 1998, DOE announced, in part, that FFTF would not play a role in producing tritium. Subsequently, in August 1999, DOE initiated the preparation of a National Environmental Policy Act (NEPA) Nuclear Infrastructure Programmatic Environmental Impact Statement (NI-PEIS, DOE/EIS-0310), which was finalized and published in December 2000. The NI-PEIS included an evaluation of the potential impacts associated with restarting the FFTF as a potential irradiation services facility for medical and industrial isotope production, plutonium-238 production for NASA space missions, and nuclear research and development. In January 2001, the DOE issued the Record of Decision (ROD) for this NI-PEIS, which reaffirmed the decision to permanently deactivate the FFTF because existing DOE facilities would be able to provide irradiation services for the aforementioned, proposed NI-PEIS missions. From April 2001 to August 2001, the DOE suspended the FFTF decision in the ROD to allow two studies to be conducted of all of the key factors related to this decision. As a result of these studies, the DOE decided in December 2001 that the restart of FFTF was impracticable and that its deactivation would proceed.

As a result of FFTF being formally placed in standby in 1997, FFTF deactivation activities associated with sodium drain from the plant and fuel storage vessels were suspended. This resulted in major effects to the Agreement's M-92-09 and M-92-10 interim milestones associated with the management and disposition of DOE's Hanford Site radioactive sodium as product. Based on the status of the FFTF at the time, the Tri-Party agencies agreed to place the Agreements M-92-09 and M-92-10 interim milestones in abeyance (temporary suspension) until the Secretary of Energy issued a final decision on whether or not to restart FFTF. The Parties agreed should DOE decide that FFTF has no future missions, and that FFTF deactivation should resume, DOE shall issue a draft Agreement change control form for proposed revised dates to the M-92-09 and M-92-10 interim milestones associated with the management and disposition (product use) of DOE's Hanford Site radioactive sodium inventory (~300,000 gallons). The majority of the Hanford Site's radioactive sodium inventory is associated with the FFTF (~260,000 gallons or ~87%), which is currently molten in reactor coolant systems and fuel storage vessels. The remaining Hanford Site radioactive sodium inventory is comprised of Hallam Reactor sodium (~34,000 gallons or 11%) and Sodium Reactor Experiment sodium (SRE, ~7,000 gallons or ~2%). The Hallam Reactor shut down in 1964 and its sodium inventory received at Hanford in 1967. Currently, the Hallam Reactor sodium is safely stored in solid form under a nitrogen cover gas in three storage tanks located in a Butler-type steel building in the Hanford Site's 200 West Area. The SRE sodium was received at Hanford in 1975. Currently, the SRE sodium is safely stored in solid form in 158 55-gallon drums sealed within 85-gallon overpacks that are stored within 8 South Alkali Metal storage modules at the Hanford Site's 200 West Area Central Waste Complex.

Agreement Appendix D, Table D is hereby modified as follows:

Shaded text is added and ~~strikethrough text is deleted.~~

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Milestone	Description	Due Date
M-92-09	Establish milestones and/or target dates if needed for acquisition of new facilities, modifications of existing facilities, and/or modification of planned facilities necessary for storage, treatment/processing, and disposal of Hanford Site sodium.  <del>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.</del>	7/30/09  <del>In Abeyance</del>

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Milestone	Description	Due Date
M-92-10	Submit Hanford Site Sodium Disposition Evaluation Report to Ecology.	9/30/05
	<p>The report shall be prepared in concert with M-81-10-T01, which indicates that the Office of River Protection (ORP) Waste Treatment Plant will use the Hanford Site Radioactive sodium inventory (i.e., FFTF, Hallam, and SRE), following conversion to sodium hydroxide, for tank sludge pretreatment (i.e. caustic washing). The report will determine the ORP need dates and identify where the Hanford Site sodium inventory will be converted to sodium hydroxide, i.e., at the existing Argonne National Laboratory – West sodium processing facility (located within the Idaho National Engineering and Environmental Laboratory Site) or at a new facility to be constructed at Hanford.</p>	In Abeyance
	<p><del>Submit Hanford Site sodium project management plan (PMP) to Ecology pursuant to agreement action plan section 11.5. The Hanford Site sodium PMP will include all plan elements required by agreement action plan section 11.5. Should DOE determine (pursuant to the Hanford Site sodium PMP and agreement interim milestone M 50 03) that TWRS use of Hanford Site radioactive sodium (FTTF, Hallam and sodium reaction experiment) is warranted, it shall specify in its TWRS, high level waste vitrification plant request for proposal(s) that use of Hanford Site radioactive sodium is a requirement. Should the Hanford Site PMP and findings pursuant to agreement interim milestone M 50 03 determine that TWRS use of Hanford Site radioactive sodium is not warranted DOE shall issue accompanying proposed agreement change requests for alternative Hanford Site radioactive sodium disposition (e.g., necessary milestones and target dates associated with the construction of the sodium reaction facility).</del></p>	

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