

Hanford Federal Facility Agreement and Consent Order

**Approved Change Control Form M-81-98-01
“Agreements in regard to DOE’s Fast Flux Test
Facility (FFTF) for standby and transition
activities. Placement of Agreement FFTF
transition milestones and targets in abeyance
(M-81-00 series). Modification of Agreement
milestone M-20-29A”**

August 1999

CHANGENUMBER M-81-98-01	FEDERAL FACILITY AGREEMENT AND CONSENT ORDER Change Control Form <small>DO NOT USE BLUE INK TYPE OR PRINT USING BLACK INK.</small>	DATE 8/4/99
Originator USDOE/Ecology		Phone
Class of Change <input checked="" type="checkbox"/> I – Signatories <input type="checkbox"/> II – Executive Manager <input type="checkbox"/> III – Project Manager		
Change Title Agreements in regard to DOE’s Fast Flux Test Facility (FFTF) for standby and transition activities. Placement of Agreement FFTF transition milestones and targets in abeyance (M-81-00 series). Modification of Agreement milestone M-20-29A.		
Description/Justification of Change <p>In January 1997 the Secretary of the U.S. Department of Energy (DOE) issued DOE's decision to maintain Hanford's Fast Flux Test Facility (FFTF) in a standby mode pending a decision (to be made by December 1998) on whether or not FFTF will be evaluated for use by the nation’s nuclear weapons complex (tritium production) and for other potential missions, including medical isotope production. On December 22, 1998, the Secretary of Energy announced that the FFTF would not play a role in tritium production and a decision on any future missions would be made by Spring, 1999. On May 4, 1999, the Secretary of Energy announced that the Energy Department would initiate a two-phased process for finalizing a path forward for the FFTF.</p> <p>(Continued on page 2)</p>		
Impact of Change Approval of this change control request: (1) Places current Agreement M-81-00 series milestones and target dates in abeyance until the Secretary Of Energy issues a final decision on whether or not to restart FFTF. (2) And allows all activities required during the standby condition to proceed (subject to compliance with applicable law) without jeopardizing any necessary future FFTF mission(s).		
Affected Documents The <u>Hanford Federal Facility Agreement and Consent Order</u> , as amended, and Hanford Site internal planning, work authorization, and budget documents (e.g., Project Management Plans, Baseline Change Control documents and Multi Year Work Plans).		
Approvals _____ Original signed 8-18-99 _____ Date ___ Approved ___ Disapproved DOE		
_____ Original signed 8-24-99 _____ Date ___ Approved ___ Disapproved EPA		
_____ Original signed 8-20-99 _____ Date ___ Approved ___ Disapproved Ecology		

Description/Justification of Change (Continued)

The first phase, a Program Scoping Plan, would be completed within the next 90 days. Following review of the plan, the Secretary of Energy was to decide on the course for phase two. On August 18, 1999, the Secretary of Energy decided to initiate the preparation of a National Environmental Policy Act (NEPA) Environmental Impact Statement (EIS) to evaluate the potential impacts associated with restarting the FFTF as a nuclear science research and irradiation services user facility.

As a consequence of FFTF being placed in standby, facility transition work has been limited to activities that would not inhibit reactor restart, and Agreement work schedules are no longer achievable. In recognition of this condition, DOE, Ecology and EPA (hereafter the parties) proposed that Agreement M-81-00 series milestones and target dates be deleted (See the parties' Tentative Agreement on this subject dated October 14, 1997, and their associated (draft) Agreement change number M-81-97-01 dated October 3, 1997). This proposed Agreement modification was the subject of public review and comment during a review period running from November 24, 1997, to February 20, 1998.

During the course of this review and comment period the parties received over 8000 individual comments, either written or oral. Based on the review of comments received, the parties have agreed that rather than delete Agreement M-81-00 series milestones and target dates, they will be held in abeyance (temporary suspension) until the Secretary of Energy issues a final decision (Record of Decision) on whether or not to restart FFTF.

Should the Secretary of Energy decide that FFTF has a future mission(s) (based on an EIS Record of Decision), and that FFTF restart should occur, the parties agree that the Agreement M-81-00 series milestones and target dates and the M-20-29A milestone are considered deleted.

Should the Secretary of Energy decide that FFTF has no future missions, and that FFTF transition and initiation of the surveillance and maintenance phase should occur, the parties agree:

- (1) That within ninety days (90) after such final Secretarial decision, DOE shall issue a draft Agreement change control request detailing a proposed set of FFTF transition milestones and associated targets. Such proposal shall be sufficiently detailed so as to effectively drive each phase of transition work, and shall also include proposed modifications to TPA interim milestone M-20-29A (Sodium Storage and Reaction Facilities closure planning). Following receipt of this draft change request, the parties agree to enter into the negotiation of a new FFTF transition milestone series.
- (2) Should these negotiations not result in Tentative Agreement within 120 days of receipt of DOE's proposed changes, Agreement M-81-00 series milestones shall be immediately and automatically reinstated (no longer held in abeyance), with the exception that the elapsed time since November 1995 (when sodium drain was halted) will be added to each M-81-00 series milestone and target completion date. Such reinstatement shall not be subject to dispute under the terms of the Agreement. Following reinstatement all M-81-00 series milestones and target dates shall be subject to Agreement modification and dispute resolution processes.

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

The following Agreement M-81-00 series milestones and target dates (reproduced below) have been placed in abeyance in accordance with the terms of this M-81-98-01 change request.

Milestone	Description	Due Date
M-81-00	<p>Complete FFTF Facility Transition and initiate the surveillance and maintenance phase.</p> <p>This major milestone will be achieved by completion of all activities necessary to achieve the end point criteria for placing the facility in a safe and stable surveillance and maintenance mode.</p>	(in abeyance)
M-81-00-T02	<p>Complete transfer of Irradiated Fuel to Dry Cask Storage.</p> <p>The Irradiated Fuel assemblies and pin containers will be transferred from the interim decay storage vessel and the fuel storage facility to the IEM cell for residual sodium removal, loaded into a core component container, transferred to the reactor service building cask loading station for placement into an interim storage cask for dry storage, and transferred to the interim storage area located in the northeast corner of the FFTF complex.</p>	(in abeyance)
M-81-00-T03	<p>Complete transfer of unirradiated fuel to the Plutonium Finishing Plant.</p> <p>Thirty two unirradiated fuel assemblies presently stored in the interim decay storage vessel will be transferred to the IEM cell for washing and drying, loaded into existing approved shipping containers, and transferred to an appropriate storage area in the Plutonium Finishing Plant.</p>	(in abeyance)

Milestone	Description	Due Date
M-81-00-T04	<p>Complete transfer of special fuel to the Idaho National Engineering Laboratory for consolidated storage.</p> <p>Sodium-bonded irradiated metal and carbide fuel pins from assemblies cleaned and disassembled in the IEM Cell will be loaded into existing, approved shipping casks, and transported to the Idaho National Engineering Laboratory in Idaho Falls, Idaho, for consolidated storage. One unirradiated metal fuel assembly will also be dispositioned in a similar manner.</p>	(in abeyance)
M-81-00-T05	<p>Complete auxiliary systems deactivation.</p> <p>A major portion of the plant auxiliary systems are required to support hot sodium circulation prior to draining the sodium. As these systems, and the balance of plant systems, become available for shutdown, they will be deactivated to a safe, stable condition.</p>	(in abeyance)
M-81-02-T01	<p>Submit final sodium disposition evaluation report/decision point.</p> <p>Under this target DOE will submit its final report following evaluation of the acceptable sodium product form for the TWRS Tank Sludge Pretreatment Process (i.e., caustic washing). This evaluation will be conducted in concert with TWRS TPA Milestone M-50-03 (due date March 31, 1998). This Hanford Site Radioactive (FFTF, Hallam, and Sodium reaction experiment) sodium evaluation will address other conversion options for disposal of the sodium if the product use for TWRS is not viable. Regardless of which option is selected, a new sodium reaction facility will be constructed adjacent to the sodium storage facility to convert the bulk metallic sodium to the appropriate chemical form. This report will include a decision on the final disposition of the Hanford Site Radioactive Sodium (e.g., disposal or reuse). Appropriate milestones and target dates will be established for construction and operation of the sodium reaction facility based on the option selected.</p>	(in abeyance)

Milestone	Description	Due Date
M-81-03	Submit FFTF End Point Criteria Document. A document identifying the end point criteria necessary to place the FFTF in a safe and stable configuration will be developed. This document will be provided to EPA and Ecology for review, and approval for the hazardous substances proposed to remain at the facility.	(in abeyance)
M-81-04	Complete FFTF Sodium Drain. This milestone will be complete when all of the sodium coolant has been drained from the plant to the new sodium storage facility to the maximum practical extent. The sodium residuals that remain are integral to the system, are solid in form, and adhere to the surfaces of the system components. The residuals will be maintained under an inert gas blanket to minimize potential reactions during the long-term surveillance and maintenance phase. During final disposition of the facility, any regulated wastes generated from the cleaning or dismantlement of these systems will be appropriately managed.	(in abeyance)
M-81-04-T01	Complete reactor and heat transport system sodium drain. The reactor and primary and secondary heat transport system sodium coolant and supporting sodium systems will be maintained in a safe configuration, molten and circulating until the fuel is removed from the FFTF Reactor vessel and the sodium storage facility is operational. The sodium will then be drained to the tanks located in the sodium storage facility and allowed to freeze.	(in abeyance)
M-81-04-T02	Complete interim decay storage vessel and fuel storage facility sodium drain. The interim decay storage vessel and fuel storage facility sodium will be maintained in a molten state until the fuel is removed from these storage locations. The sodium will then be drained to the tanks located in the sodium storage facility and allowed to freeze.	(in abeyance)

Milestone	Description	Due Date
M-81-05	Submit FFTF Surveillance and Maintenance Plan. A plan describing the S&M activities to occur at FFTF during the S&M phase will be developed. This plan will be provided to EPA and Ecology for review, and approval for the hazardous substances proposed to remain at the facility. This plan will include documentation of lists of hazardous substances, including dangerous waste that remain in the FFTF Facility upon completion of Phase I activities because the hazardous substance: (1) contains non-dangerous waste components that are highly radioactive, (2) is part of the plant structure and/or (3) is an intact piece(s) of equipment.	(in abeyance)
M-81-06	Complete PCB Transformer disposal. The nineteen Polychlorinated Biphenyl (PCB) electrical transformers at the FFTF will be disposed of after the transformers are removed from service. Twelve of the nineteen transformers, will be drained, flushed and removed from FFTF within thirty days after being removed from service as specified in 40 CFR 761. Seven of the transformers, which are in areas that are difficult to obtain access, will be drained, flushed and removed from FFTF within nine months of cessation of service to ensure their disposal within one year from the start of storage. Cessation of service constitutes the start of the storage, and 40 CFR 761 limits this storage and subsequent disposal to a one-year period.	(in abeyance)

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The following M-20-29A interim milestone due date is modified by this action. The parties agree to revisit and reestablish a due date as appropriate should FFTF transition resume:

Milestone	Description	Due Date
M-20-29A	Submit sodium storage facility and sodium reaction facility closure plan or request for procedural closure as defined in section 6.3.3 of this Tri-Party Agreement to EPA and Ecology. A potential use for the sodium as feedstock in the TWRS Program has been identified and will be evaluated as discussed pursuant to M-81-02-T01. The sodium will be stored as product material in the sodium storage facility until the final disposition of the material is determined. FFTF is proceeding on the basis of providing RCRA and WAC 173-303 compliant storage for the sodium. The sodium reaction facility is included in the permit request, even though the sodium reaction facility availability and regulatory status will be determined by the 1998 evaluation/decision point. If the sodium use for the TWRS is confirmed, a request for procedural closure as defined in section 6.3.3 of the Tri-Party Agreement will be submitted for the sodium storage facility and sodium reaction facility units. If the sodium is determined to be a waste, a closure plan will be submitted for the two units.	TBD
