

DRAFT

Change Number M-81-97-01	Federal Facility Agreement and Consent Order Change Control Form Do not use blue ink. Type or print using black ink.	Date October 3, 1997
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 Deletion of Fast Flux Test Facility (FFTF) transition milestones and targets (M-81-00 series). Modification of milestone M-20-29A.		
Description/Justification of Change 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 the facility will play a role in the nation's tritium production strategy. As a consequence of this action, FFTF transition work is being limited to activities that would not inhibit a reactor restart, and work schedules are no longer valid. This change request deletes out of date milestones and target dates from the scope of the TPA. Should the Secretary of Energy's decision be that FFTF has no tritium production role, and that FFTF transition and initiation of the surveillance and maintenance phase should occur: DOE, Ecology and EPA (hereafter the parties) agree that within ninety (90) days following such final Secretarial decision, the DOE Richland Operations Office (RL) shall issue a draft change control request detailing a proposed set of FFTF transition milestones and associated targets. Such proposal shall also include proposed modifications to TPA interim milestone M-20-29A (Sodium Storage and Reaction Facilities closure planning). Following the receipt of this draft change request, the parties agree to complete negotiation of a new FFTF transition milestone series in no more than six (6) months time.		
Impact of Change Approval of this change control request deletes the current TPA FFTF transition milestones and target dates, and allows all activities required during the standby condition to proceed 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 and budget documents (e.g., Project Management Plans and Multi Year Work Plans).		

The following M-81-00 series milestones and targets are deleted by this action:

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>	<p>12/31/2001</p> <p>Deleted</p>
M-81-00-T01	<p>Complete Reactor Defueling.</p> <p>At the completion of defueling, there will be 236 non-fueled components in the reactor vessel, 113 fueled components in the interim decay storage and 258 fueled components in the fuel storage facility.</p>	<p>9/30/95</p> <p>Completed 4/19/95</p>
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 to the FFTF complex.</p>	<p>10/31/98</p> <p>Deleted</p>
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>	<p>10/31/98</p> <p>Deleted</p>
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>	<p>10/31/98</p> <p>Deleted</p>
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>	<p>3/21/2001</p> <p>Deleted</p>
M-81-01	<p>Initiate sodium storage facility construction.</p> <p>This milestone will be achieved when the construction contractor is issued the notice to proceed with construction by the contracting</p>	<p>2/28/97</p> <p>completed</p>

	officer.	10/09/95
M-81-02	<p>Complete sodium storage facility startup.</p> <p>This milestone will be achieved by completion of the sodium storage facility startup activities which include final testing of the mechanical and electrical systems and confirmation that the facility is ready to receive sodium from FFTF. Construction of the new facility closely coupled to the FFTF complex is required to support sodium drain operations. This new facility will be designed, constructed and operated in compliance with RCRA and WAC 173-303 storage requirements. The facility will provide storage capacity for the 260,000 gallons of FFTF metallic sodium coolant.</p>	<p>7/31/98</p> <p>completed 01/97</p>
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>	<p>6/30/98</p> <p><u>Deleted</u></p>
M-81-03	<p>Submit FFTF End Point Criteria Document.</p> <p>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.</p>	<p>12/31/98</p> <p><u>Deleted</u></p>
M-81-04	<p>Complete FFTF Sodium Drain.</p> <p>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.</p>	<p>3/31/2000</p> <p><u>Deleted</u></p>

M-81-04-T01	<p>Complete reactor and heat transport system sodium drain.</p> <p>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.</p>	<p>4/30/98</p> <p><u>Deleted</u></p>
M-81-04-T02	<p>Complete interim decay storage vessel and fuel storage facility sodium drain.</p> <p>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.</p>	<p>12/31/98</p> <p><u>Deleted</u></p>
M-81-05	<p>Submit FFTF Surveillance and Maintenance Plan.</p> <p>A plan describing 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.</p>	<p>6/30/2001</p> <p><u>Deleted</u></p>
M-81-06	<p>Complete PCB Transformer disposal.</p> <p>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 the storage. Cessation of service constitutes the start of the storage, and 40 CFR 761 limits the storage and subsequent disposal to a one-year period.</p>	<p>9/30/2001</p> <p><u>Deleted</u></p>

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:

M-20-29A	<p>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.</p> <p>A potential use for the sodium as feedstock in the TWRS Program</p>	<p>12/31/99</p> <p><u>TBD</u></p>
----------	--	--

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.

[\[Hanford Home Page\]](#) [\[TPA\]](#)

For questions or comments, please send [email](mailto:Ernest_J_Hughes@rl.gov) to Ernest_J_Hughes@rl.gov

URL: <http://www.hanford.gov/tpa/docs/m-81/m-81-97-01.htm>

Date Posted: 11/26/97