

0051678

CHANGE NUMBER M-81-98-01	FEDERAL FACILITY AGREEMENT AND CONSENT ORDER Change Control Form DO NOT USE BLUE INK TYPE OR PRINT USING BLACK INK.	DATE 8/4/99
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Originator: USDOE/Ecology  
Phone:

Class of Change  
 I - Signatories     
 II - Executive Manager     
 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  
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.

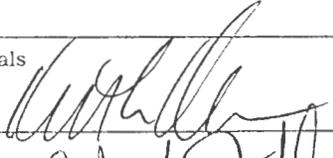
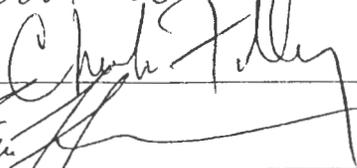
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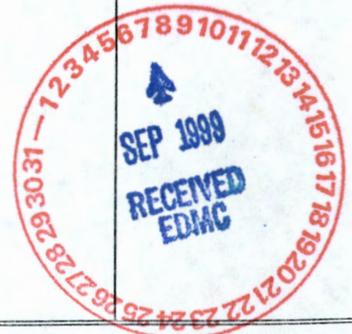
Impact of Change  
Approval of this change control request:

- (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 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 and Multi Year Work Plans).

Approvals

DOE		8/18/99	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved
EPA		8-24-99	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved
Ecology		8-20-99	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved



**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.

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Milestone	Description	Due Date
M-81-00	Complete FFTF Facility Transition and initiate the surveillance and maintenance phase.  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.	(in abeyance)
M-81-00-T02	Complete transfer of Irradiated Fuel to Dry Cask Storage.  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.	(in abeyance)
M-81-00-T03	Complete transfer of unirradiated fuel to the Plutonium Finishing Plant.  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.	(in abeyance)

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Milestone	Description	Due Date
M-81-00-T04	Complete transfer of special fuel to the Idaho National Engineering Laboratory for consolidated storage.  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.	(in abeyance)
M-81-00-T05	Complete auxiliary systems deactivation.  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.	(in abeyance)
M-81-02-T01	Submit final sodium disposition evaluation report/decision point.  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.	(in abeyance)

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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)

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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:

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Milestone	Description	Due Date
M-20-29A	<p data-bbox="337 422 1300 527">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 data-bbox="337 569 1300 1157">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.</p>	TBD

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Enclosure 2

Hanford Federal Facility Agreement and Consent Order

**Comments and Responses to the  
Tentative Agreement Regarding  
The Fast Flux Test Facility**

(Agreement Major Milestone Series M-81-00)

August 1999

**COMMENTS AND RESPONSES  
TO THE TENTATIVE AGREEMENT  
REGARDING THE FAST FLUX TEST FACILITY**

**COMMENTS AND RESPONSES**

**1. Introduction**

In January 1997 the U.S. Department of Energy (DOE) changed the status of the Fast Flux Test Facility (FFTF) from deactivation to standby pending a decision, to be made by December 1998 on whether or not the facility will be considered for utilization in the national tritium production strategy or other potential missions. On December 22, 1998, the DOE Secretary of Energy decided that FFTF would not play a role in tritium production and a decision on future civilian missions would be made by the Spring of 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. 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) review to evaluate the potential impacts associated with restarting the FFTF as a nuclear science research and irradiation services user facility.

In April 1997 the DOE Richland Operations Office (RL), State of Washington Department of Ecology (Ecology), and U.S. Environmental Protection Agency (EPA) (hereafter the Agencies) agreed to conduct negotiations for the purpose of revising the *Hanford Federal Facility Agreement and Consent Order* (Agreement) FFTF milestones in accordance with the Agreement Action Plan Section 12, "Changes to the Agreement." These proposed modifications were issued for public comment along with the Agencies' October 14, 1997, "Tentative Agreement". The Agreement Change Control Form, Change Number M-81-98-01, shows the Agencies resulting final modifications and FFTF milestones.

This (FFTF) formal public comment period was held from November 24, 1997, until February 20, 1998. Ecology is the lead regulatory agency for the M-81 series milestones and all facility transition projects at Hanford and, therefore, it and the DOE were the sponsors and primary agency participants in a series of four public meetings held in Portland, Oregon; Seattle, Washington; Richland, Washington; and Hood River, Oregon.

In this report, the DOE and Ecology summarize the comments received (Appendix B), Agency responses (Section 5), and final modifications made. A total of 8390 comments from numerous individuals and groups were received. Of these, the 1406 comments that applied directly to the Agencies' tentative agreement were collated (Appendix A) and used by the three Agencies in reaching final agreement on revisions to the tentative agreement. The Agencies' final agreement is provided as an enclosure.

In summary:

- The final agreement places the existing M-81 series milestones and target dates in abeyance and the M-20-29A milestone in a To Be Determined (TBD) status, pending the Secretary of Energy's expected decision on the future of the facility and documented by the EIS Record of Decision.
- The final agreement allows all activities necessary to allow standby to proceed (subject to compliance with applicable law) without jeopardizing potential future FFTF mission(s).
- Should the Secretary of Energy decide that FFTF has no future mission, and that FFTF transition and initiation of the surveillance and maintenance phase should occur, the parties have agreed that within ninety (90) days after such final Secretarial decision, DOE will issue a draft Agreement change control request detailing a proposed set of FFTF transition milestones and target dates. Following receipt of this draft change request, the parties have agreed to enter into the negotiation of a new FFTF transition milestone series. Should these negotiations not result in Tentative Agreement within 120 days, Agreement M-81-00 series milestones and targets will be immediately and automatically reinstated (no longer held in abeyance), with the exception that the elapsed time since November 1995 (when FFTF 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 to the same extent as any other Agreement terms.
- Should the Secretary of Energy decide to restart FFTF (based on an EIS Record of Decision) the parties have agreed that these M-81-00 series milestones and target dates will be deleted. If in the future the Secretary of Energy decides that FFTF operation is no longer necessary and a decision is made to shut down the facility, the parties have also agreed to negotiate an appropriate set of Agreement milestones and target dates within one hundred and twenty (120) days.

Many (6984) of the comments received involved national policy issues that went beyond the narrower focus of the proposed Agreement change. Those comments have been collected and indexed in accordance with the issue raised. (See Appendix A). Copies of these and all other comments received have been provided to Washington Governor Locke, Secretary of Energy Richardson, and DOE's Director for the Office of Nuclear Energy, Science & Technology, William D. Magwood. Due to the very large volume of comments received, we have summarized them here. Section 7 of this report describes where full copies of Appendices A and B can be viewed.

## 2. Background

The FFTF is a 400-megawatt sodium-cooled nuclear reactor that operated from 1982 until 1992 to test advanced fuels and materials in support of the national Liquid Metal Fast Breeder Reactor program. The facility also produced a variety of medical and industrial isotopes, including tritium, and provided research and testing of components and systems for advanced power systems. When efforts to identify a long-term mission for the FFTF were unsuccessful, the DOE began activities in 1993 to transition the plant to a safe, shutdown condition. The FFTF was placed under the Agreement in 1995, and some of the transition milestones have been completed. The decision to shutdown and deactivate the facility was made by the Secretary of Energy.

In January 1997 the Secretary of Energy issued a decision to place the FFTF in a standby mode, pending a determination on whether the facility will be used in the national tritium production strategy. As the Cabinet official responsible for furnishing tritium to the U.S. Department of Defense, the Secretary of Energy has the obligation to provide this material in the most reliable and cost-efficient manner practicable. It was the Secretary's determination that the FFTF, a facility within the Secretary of Energy's purview of responsibility, should be considered further to determine whether it can help meet those requirements.

At the time of the decision FFTF was in "transition", i.e., it was being transitioned to a safe and environmentally sound condition following receipt of a Secretarial shutdown notice. Sodium coolant had not yet been drained from the reactor (an irreversible action).

The Agreement (e.g., Action Plan Sections 8.0 (Facility Decommissioning Process) and 12.0 (Changes to the Agreement)) provides for periodic review of the status of facilities undergoing transition, and for DOE to request changes to the Agreement it feels are warranted, and for Agreement modification provided each of the Agencies agree. In January 1997 a DOE-HQ facility assessment concluded that the FFTF may have a potential future use and that continued deactivation would preclude such use. That assessment resulted in a decision and action by the Secretary of Energy to place the FFTF in standby.

Following the potential "future use" decision, the Department of Energy: (1) initiated studies to provide the basis for a proper determination regarding the potential future use of the FFTF; and (2) requested Agreement modification and initiated formal negotiations with the other Agreement Agencies in order to develop modifications to the FFTF milestones, given the reactors' change in status. Results of DOE sponsored studies are available on its FFTF Web site (<http://www.fftf.org>), at the three Agreement repositories (Seattle, Spokane, and Portland), and at the DOE Public Reading Room in Richland (see Section 7).

On December 22, 1998, the Secretary announced that the Commercial Light Water Reactor was DOE's preferred choice for tritium production and the FFTF would not play a role in tritium production and a decision on any future missions will 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. 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) review to evaluate the potential impacts associated with restarting the FFTF as a nuclear science research and irradiation services user facility.

### **3. TPA Change Control Process**

As described in the Community Relations Plan for the *Hanford Federal Facility Agreement and Consent Order* (February 1997), a significant Agreement change such as this one requires the following actions:

#### **(1) Agencies Announce 45-Day Public Comment Period**

A formal public comment period on proposed Agreement (M-81-00) series modifications was held from November 24, 1997, until February 20, 1998. This public comment period was preceded by announcement(s) provided to area Indian Nations and the highly interested stakeholders. Also, advertisements were placed in the following newspapers; Oregonian, Spokesman-Review, Spokane Chronicle, Tri-City Herald, Seattle PI, Seattle Times, and The Dalles Chronicle. In the case of this proposed M-81-00 series modification, the comment period was extended to nearly twice the minimum time to account for the holiday season and schedule delay for the public meeting in Hood River, Oregon, which was postponed due to inclement weather.

#### **(2) Agencies Decide Whether to Schedule Public Meetings**

Four public meetings were held, i.e., in Portland, Oregon; Seattle, Washington; Richland, Washington; and Hood River, Oregon. Those meetings are described in Section 4. Compilations of comments received are provided in Appendix B.

#### **(3) Agencies Consider and Respond to Public Comments**

This Comments and Responses document was prepared by the Agencies. Comments received formed the basis for the Agencies' final decision in this matter. Because many of the comments addressed national policy issues, a full copy of comments received and the Agencies' responses have been provided to Washington Governor Locke, Secretary of Energy Richardson, and the DOE's Director for the Office of Nuclear Energy, Science & Technology, William D. Magwood.

(4) **Final Agreement Change and Comments and Responses Document Distributed**

This summary and its enclosure are being provided to area Indian nations and the Agencies' listing of highly interested stakeholders. Full copies of these documents and comments and correspondence received during the public comment period, appendices A and B, are also being provided to Governor Locke, Secretary of Energy Richardson, DOE's Director for the Office of Nuclear Energy, Science & Technology, William D. Magwood, the State of Oregon, the Yakama, Umatilla, and Nez Perce tribes, and the Hanford Advisory Board. As described in Section 7, full copies, with appendices, are also available for public review at the three Agreement information repositories (Seattle, Spokane, and Portland), and at DOE's Public Reading Room in Richland. Section 7 also describes how individuals may request additional copies of the final Agreement change and the Comments and Responses document.

**4. Public Meetings and Comments**

A series of public meetings were held regarding the Agencies' proposed Agreement revision in January and February 1998 as follows:

	Attendees
January 14 - Oregon State Office Building, Portland, Oregon	~225
January 20 - Seattle Center Northwest Rooms, Seattle, Washington	~450
January 22 - Federal Building, Richland, Washington	~175
February 12 - Oregon Hood River Inn, Hood River, Oregon	~250

Advertisements were placed in the local media before each meeting. The meetings were well attended and although scheduled from 7:00 to 9:30 p.m., all meetings lasted until nearly midnight to provide the opportunity for attendees to offer their comments. This ensured that everyone was offered the opportunity to speak and express his or her views.

**5. Responses**

DOE and Ecology received a total of 8390 oral and written comments from individuals and groups (This includes comments forwarded to Governor Locke and DOE-HQ). Compilations of written and oral comments received during the public comment period are contained in Appendix B. A team of Ecology and DOE staff reviewed each of the inputs, indexing them in two ways (both shown in Appendix A):

- (1) The first indexing was specific to the position taken relative to the proposed Agreement change. Positions were not "forcefit" into a small number of categories. If an input differed significantly from the categories established, a new category was created. The resulting eight categories are shown below in Table 1.

<b>TABLE 1 - COMMENTS RECEIVED AND AGENCY RESPONSES RELATIVE TO PROPOSED AGREEMENT CHANGE</b>	
<b>Category (# Comments)</b>	<b>Comments / Agency Responses</b>
1 (846)	<p><b><u>Comments in favor of deleting FFTF milestones.</u></b></p> <p><b>Response:</b> The majority view during the public meetings opposed simple deletion of the M-81-00 milestone series from the Agreement. Consequently, the Agencies have modified their initial stance, and believe that an approach that holds Agreement milestones in abeyance is appropriate (See final Agreement Change Form).</p>
2 (8)	<p><b><u>Comments in favor of deferring FFTF milestones, i.e., assign them as "TBD".</u></b></p> <p><b>Response:</b> Due to the variety of comments received, the Agencies believe that an approach that holds Agreement milestones in abeyance is appropriate. Though some exceptions are made, the Agencies typically do not support Agreement milestones having a compliance deadline noted as "To Be Determined" or "TBD". It has been our experience that doing so often has little to no beneficial effect, and may in fact damage the integrity of the Agreement overall.</p>
3 (232)	<p><b><u>Comments in opposition to deleting FFTF milestones.</u></b></p> <p><b>Response:</b> See response to comment category 1.</p>
4 (184)	<p><b><u>Comments in favor of maintaining and meeting FFTF milestones (no changes).</u></b></p> <p><b>Response:</b> Due to the FFTF being placed in a "standby" mode, the milestones were no longer achievable or appropriate. The Agencies do not believe that attempting to force compliance with Agreement transition milestones is warranted. FFTF remains subject to compliance with environmental law regardless of its operational status. Should a decision be made for FFTF restart, the Agencies responsibilities would include ensuring that any wastes and emissions generated are managed in full compliance with environmental requirements. Should a decision be made to continue with transition (shutdown), appropriate modifications will be made to the Agreement prior to milestone reinstatement.</p>
5 (5)	<p><b><u>Comments based on the belief that FFTF milestones should not be under the TPA because the facility is no longer in a deactivation mode.</u></b></p> <p><b>Response:</b> See response to comment category 1.</p>
6 (39)	<p><b><u>Comments questioning the authority of the Secretary of Energy to halt FFTF transition under the Agreement.</u></b></p> <p><b>Response:</b> The Agreement (e.g., Action Plan Sections 8.0 (Facility Decommissioning Process) and 12.0 (Changes to the Agreement)) provides for periodic review of the status of facilities undergoing transition, for DOE to request changes to the Agreement it feels warranted, and for Agreement modification provided each of the Agencies agree. In January 1997 a DOE-HQ facility assessment concluded that the FFTF may have a potential future use and that continued deactivation would preclude such use. That assessment resulted in a formal decision and action by the Secretary of Energy to place the FFTF in standby. Following the potential "future use" decision, the Department of Energy (1) initiated studies to provide the basis for a proper determination regarding the potential future use of the FFTF; and (2) requested Agreement modification and initiated formal negotiations with the other Agreement Agencies in order to develop modifications to the FFTF milestones, given the reactors' change in status.</p>

7 (87)	<p><b><u>Comments about the Agreement change and public involvement processes, e.g., “Change process was included in original TPA and precedents have been set”; “TPA is an ‘agreement,’ not a law”; “EPA’s absence at the FFTF TPA public meetings.”</u></b></p> <p><b>Response:</b> The Agencies staffs made every effort to ensure that this Agreement change process was open, fair, and provided ample opportunity for all to express their views. We have attempted to reach a balanced final agreement that responds to the comments received. While it is correct that the Agreement is not “a law”, it is far more than an agreement between the Agencies. The Agreement stands as an enforceable Federal Facility Compliance Agreement under Section 120 of the Comprehensive, Environmental Response, Compensation and Liability Act (CERCLA), and as an enforceable Administrative Order issued by the State under its Hazardous Waste Management Act (Chapter 70.105 RCW). Ecology has been designated as Lead Regulatory Agency for FFTF activities under the Agreement. Consequently, EPA did not assign staff or participate during the public comment period. Nonetheless, DOE and Ecology periodically briefed EPA staff of issues being raised during the comment period.</p>
8 (5)	<p><b><u>Felt that retaining active milestones that are no longer relevant undermines the purpose/credibility of the TPA, i.e., don’t “ignore milestones.”</u></b></p> <p><b>Response:</b> The Agencies agree with this opinion and have concluded that an approach that holds Agreement milestones in abeyance is appropriate (See final Agreement Change Form).</p>
Total = 1406 comments	

There are several observations that can be made regarding Agreement specific input:

- Sixty percent of the comments received that directly addressed the Agreement milestone change favored deleting the milestones (category 1). However, that position was heavily weighted by petition submittals sent in as written input, and does not reflect the majority of oral comments received at the public meetings.
  - Of the 8390 total comments received, 1406 or 17% directly and specifically addressed the proposed Agreement change. In addition, at each of the public meetings and in the written call for comments, while individuals and groups were repeatedly asked to address the tentative agreement, in many cases they only spoke to national policy issues or restricted their input to a very generic rather than Agreement-specific statement relative to FFTF (e.g., “for startup” or “for deactivation”).
- (2) The second indexing involved relating the non-Agreement-specific comments received to a set of generic national and/or policy issues (and responses). Again, there was no attempt to “forcefit” a comment into a small number of categories. If a comment differed significantly from the categories established, a new category was created. Each category includes comments expressing the full range of opinions and perspectives. The resulting twenty-one categories, with Agency responses, are outlined below.

**TABLE 2 - COMMENTS DOE/ECOLOGY RESPONSES TO COMMENTS FOCUSING ON REACTOR MISSION AND/OR NATIONAL POLICY ISSUES**

Category (# Comments)	Comments	Agency Responses
1 (1178)	Comments regarding tritium production, i.e., "don't need," "don't want," "oppose"	<b>DOE Response:</b> Tritium is an essential component in weapons on which this country relies as the foundation of its nuclear deterrent strategic defense. The amount of tritium required is established in the Nuclear Weapons Stockpile Plan and approved by the President. Current projections based on the stockpile plan requirements necessitate additions to the stockpile on or before 2005.
2 (148)	Comments regarding weapons, i.e., "don't need," "don't want," "oppose"	<b>DOE Response:</b> Nuclear weapons remain a key part of the nation's current defense strategy. The official policy of the United States for the past 30 years, since signing the Nuclear Non-Proliferation Treaty, has been the total elimination of nuclear weapons. But that is not a unilateral agreement; action is required on other nations' part. The United States has signed and ratified START II, reducing the number of strategic warheads. The Russians have signed the treaty, but the Duma, their parliamentary house, has not yet ratified this treaty.
3 (183)	Comments regarding the concern that dollars will be / have been diverted from cleanup	<p><b>DOE Response:</b> Hanford cleanup is funded by DOE's Office of the Assistant Secretary for Environmental Management (EM). FFTF funding, including operations, has been a separately funded EM item since 1992. No monies have been taken from any other EM projects at Hanford to support the FFTF. The Congressional Appropriations Energy and Water Development Bill provided the DOE Office of Nuclear Energy, Science and Technology the FY-1999 funding for FFTF. It is intended to continue to request the funding for FFTF through the Office of Nuclear Energy, Science &amp; Technology.</p> <p><b>Ecology Response:</b> Ecology shares this concern and will continue to work to ensure that congressional and DOE funding of any non-cleanup work at FFTF is funded from non-cleanup (non-Environmental Management) accounts. In addition, Ecology will continue to work to ensure that the overall availability of cleanup funding at Hanford is not adversely effected by non-cleanup work such as FFTF standby and "flat Hanford budget" assumptions. Governor Locke and members of Washington's congressional delegation have expressed similar concerns that funding levels for Hanford cleanup not be effected.</p>
4 (26)	Comments regarding the concern that dollars are being spent during standby "for nothing"	<p><b>DOE Response:</b> The DOE had adopted a dual-track strategy for tritium production; Accelerator Production of Tritium (APT) and Commercial Light Water Reactor (CLWR). On December 22, 1998, the Secretary of Energy announced that the Commercial Light Water Reactor was DOE's preferred choice for tritium production and the FFTF would not play a role in tritium production and a decision on any future missions for FFTF would be made by Spring, 1999. A Secretarial decision was made on August 18, 1999, to initiate a NEPA review to evaluate other potential missions. The FFTF represented an "insurance policy" for the DOE's tritium production responsibility and the FFTF standby period provides the necessary time to evaluate other potential missions including the production of medical isotopes.</p> <p><b>Ecology Response:</b> See Ecology response to comment category 3.</p>

<p>5 (40) [5 pro] [35 con]</p>	<p>Comments regarding the resumption of a production mission at Hanford (pro and con)</p>	<p><b>DOE Response:</b> As the Hanford Strategic Plan clearly states, primary emphasis is placed on safely cleaning up and managing the site's legacy wastes. However, there has also been a commitment to use, where appropriate, existing Hanford Site capabilities and assets where they can support national and international needs. The Agencies will work to ensure that any non cleanup projects at Hanford do not effect cleanup funding, and do not damage the cleanup mission overall.</p> <p><b>Ecology Response:</b> As noted under our response to category 3 comments, Ecology will work to ensure that any non-cleanup projects at Hanford do not effect cleanup funding, and do not damage the cleanup mission overall. Beyond that, Ecology's responsibilities must and will remain focused on ensuring that any work at Hanford is conducted in compliance with environmental law.</p>
<p>6 (173)</p>	<p>General comments that oppose medical isotope production, i.e., "It is a ruse", "There is no market."</p>	<p><b>DOE Response:</b> Medical isotopes appear to be a growing component of the United States health care system and, based on a 1997 Frost &amp; Sullivan study, demand may grow by 7 - 15% per year over the coming decade.</p>
<p>7 (16)</p>	<p>Comments supporting the concept of tritium production funding as a "bridge" to medical isotope production</p>	<p><b>DOE Response:</b> DOE was committed to concurrent, early production of medical isotopes if the FFTF was included for a role in the national tritium production strategy. However, 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 potential future missions including medical isotope production would be made by Spring, 1999. The Secretary of Energy decided on August 18, 1999, to initiate the preparation of a National Environmental Policy Act (NEPA) review to evaluate the potential impacts associated with restarting the FFTF as a nuclear science research and irradiation services user facility.</p>
<p>8 (389) [314 pro] [75 con]</p>	<p>Comments regarding the safety of the reactor for a new mission (pros and cons)</p>	<p><b>DOE Response:</b> The FFTF and all reactors are required to be built, tested, and operated to established safety standards. These standards will not change for the new mission. The evaluations performed to date indicate that, even with the proposed changes, the core will operate within limits of the original Final Safety Analysis Report (FSAR).</p>
<p>9 (154)</p>	<p>Comments Concerning possible Columbia River impacts; groundwater</p>	<p><b>DOE response:</b> The FFTF is located approximately four miles from the Columbia River. There are no radiological or dangerous (mixed radioactive, hazardous, etc.) effluent discharges from the FFTF to the groundwater or river.</p> <p><b>Ecology Response:</b> See Ecology response to category 5 comments.</p>
<p>10 (120)</p>	<p>Comments concerning possible Downwinder impacts</p>	<p><b>DOE Response:</b> A full NEPA process will begin that will include extensive formal public involvement. FFTF's history of operation included no releases with impact to the environment or public, and analyses performed to-date indicate that the inherent safety of the facility and barriers to release preclude significant future impact during operation or under foreseeable accident scenarios.</p>

<p>11 (182)</p>	<p>Comments concerning additional waste generation / treatment / storage / disposal issues</p>	<p><b>DOE Response:</b> The operation of the FFTF will generate additional waste. However, the quantities will be very low and the releases well below any legal limits. Operation of the FFTF at full power could generate up to 60 spent fuel assemblies annually. Current planning with isotope production involves operating the FFTF at one quarter of its rated power. At the reduced power approximately 15 to 20 spent fuel assemblies will be generated annually. Current plans involve cleaning the components and placing them into interim aboveground dry storage until a national repository is completed.</p> <p><b>Agencies Response:</b> FFTF remains subject to compliance with environmental law regardless of its operational status. Should a decision be made for FFTF restart, DOE and Ecology responsibilities would include ensuring that any wastes and emissions generated are managed in full compliance with environmental requirements.</p>
<p>12 (109)</p>	<p>Comments concerning transportation of plutonium for fuel and/or targets for tritium.</p>	<p><b>DOE Response:</b> Analysis has been performed on the safety impact of transporting plutonium and uranium oxides and irradiated tritium targets. Both routine and accident scenarios indicate that there are no significant safety issues associated with the transport of plutonium fuel or fuel material shipped to Hanford or with the transport of irradiated tritium targets from the FFTF at Hanford to Savannah River. On December 22, 1998, the Secretary of Energy announced that the FFTF would not play a role in tritium production. Transportation issues will be addressed in the EIS which will be prepared for FFTF to evaluate potential future missions.</p>
<p>13 (2)</p>	<p>Comments concerning possible heightened secrecy associated with tritium production, i.e., document classification.</p>	<p><b>DOE Response:</b> Because a tritium mission would involve some national security issues, certain aspects of the FFTF operation would be of significant value to a nuclear proliferant and will be classified in some way. At this time, only a very small portion of the information dealing with safety or environmental issues is expected to be classified. The safe operating envelope for the facility would not be classified, only the precise amount of tritium produced at any one time. Due to the December 22, 1998, decision by the Secretary of Energy to not include the FFTF in the tritium production role, it is anticipated there will be significantly less classified information. There may be some isotope production information that will require information controls.</p>
<p>14 (858)</p>	<p>Comments concerning Public involvement during the NEPA process or EIS.</p>	<p><b>DOE Response:</b> The Department of Energy is still determining whether FFTF should be considered further for restart. During this time, tours and status briefings by the FFTF Standby Project Office have been made upon request. The full NEPA process will include extensive formal public involvement.</p>
<p>15 (17)</p>	<p>Comments regarding applicable codes and standards for restart, i.e., DOE, NRC, IAEA.</p>	<p><b>DOE Response:</b> Throughout the design and construction of the FFTF, the siting and design calculations were reviewed by the NRC with subsequent review by the Advisory Committee for Reactor Safeguards. To document their review, the NRC issued a Safety Evaluation Report. Before loading of fuel and any reactor operations, the FFTF would be reviewed to commercial or equivalent standards by a fully independent, qualified safety oversight organization who would insist on a similar level of safety assurance to which commercial reactors are held.</p>
<p>16 (5) [1 pro] [4 con]</p>	<p>Comments regarding privatization (pro and con).</p>	<p><b>DOE Response:</b> It is premature to commit to any aspect of privatization at this time. Medical isotope processing has been privatized in the past, and the potential exists for privatization of that portion at the FFTF.</p>

17 (575) [556 pro] [19 con]	Plutonium and mixed oxide fuel issues (pro and con).	<b>DOE Response:</b> Since Russia and the United States are attempting to negotiate a joint agreement to dispose of surplus weapons-grade plutonium, there may be potential policy issues if the United States says it is disposing of the plutonium by burning it in a reactor as MOX fuel to produce another material needed for nuclear weapons, i.e., tritium. Current U.S. policy is related to a prohibition of direct use of the surplus plutonium as material for nuclear weapons or for any other nuclear explosive devices. On December 22, 1998, the Secretary of Energy announced that the FFTF would not play a role in tritium production. A second point of U.S. policy is the stated desire to not encourage the civilian use of plutonium. The disposition of surplus weapons plutonium in the FFTF would not challenge this policy. A third point of U.S. policy is to work cooperatively with Russia to move forward on the disposition of surplus fissile materials. As an alternative to the use of plutonium-based MOX fuel, the FFTF can use highly enriched uranium (HEU) fuel which minimizes future treaty constraint issues.
18 (1011)	General comments that support restart.	<b>Response:</b> See previous comment category responses.
19 (340)	General comments that oppose restart.	<b>Response:</b> See previous comment category responses.
20 (1329)	General comments that support medical isotope production.	<b>Response:</b> See previous comment category responses.
21 (129)	Public mistrust of governmental agencies based on years of perceived mismanagement.	<b>DOE Response:</b> The Agencies strive to improve public, worker, and facility safety, reduce operating costs, minimize environmental impacts, increase public involvement, and continue an "openness" policy. Environmental compliance issues and cleanup of the Hanford site have proved far more challenging than was originally envisioned on approval of the Agreement in 1989. DOE is committed to timely and effective progress.  <b>Ecology Response:</b> Environmental compliance issues and cleanup of the Hanford site have proved far more challenging than was originally envisioned on approval of the Agreement in 1989. Ecology is equally frustrated over slow cleanup progress, most notably in getting Hanford's largest cleanup projects underway. Ecology is reassessing how best to ensure timely and effective progress and will continue in improving the process.
Total = 6984		

As with proposed Agreement-specific comments, there are several basic policy observations that can be made regarding the comments received:

DOE observations in general:

- Many comments suggested significant uncertainty (category 1) associated with the requirement for tritium or the logic for making a decision about a new tritium source when the likelihood is that the stockpile requirement may drop precipitously in the very near future.

- There were many comments supporting the concept of medical isotope production (category 20), but there was also skepticism (category 6) as to whether the medical isotope mission was viable.
- There were concerns expressed (categories 3, 5, 9, 10, and 21) about any new mission at Hanford, with questions surrounding whether that would create new legacies or interfere with the cleanup of old legacies.
- The use of plutonium at FFTF was an issue, not so much from the standpoint of safety (category 8) or materials disposition (category 17) as from storage (category 11) and transportation (category 12).
- There was support (category 14) from both opponents and proponents of FFTF restart for increased public involvement in the form of an initiation of the NEPA process (i.e., preparation of an EIS relative to FFTF's future).

## 6. Actions Taken

As a result of the comments received, the Agreement Change Control Form (Enclosure) has been modified and approved by the three Agencies. The primary revision to the October 14, 1997, tentative agreement is as follows:

The Agencies have agreed that rather than delete the 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 on whether or not to restart FFTF.

In addition to revising the Agreement Change Control Form, two other major actions were taken:

- Since many of the comments addressed national policy issues, a full copy, with appendices, of documents pertaining to this Agreement modification is being provided to Governor Locke, Secretary of Energy Richardson, and Director for the Office of Nuclear Energy, Science & Technology, William D. Magwood.
- Over the past two years, the Secretary of Energy and Governor Locke received over 2000 cards and letters relative to the FFTF. The content of these communications ranged from issues associated with the Agreement to the broader issues of the nuclear weapons stockpile, the need for tritium, interest in medical isotopes, generation of additional wastes, bringing plutonium onto the Hanford Site, and other related issues. These cards and letters, submitted by the public and interest groups, were each reviewed against the same criteria as those comments submitted in response to the public meeting process.

This additional review, although beyond the Agencies' request for comment on the Agencies' "Changes Proposed to Hanford's Tri-Party Agreement Fast Flux Test Facility

Transition Milestones,” was conducted to determine whether any new issues had been raised. After a full review, it was apparent that no new issues of significance had been introduced beyond those identified during the formal public comment process.

## 7. Availability of Information

This summary as well as the two appendices containing the comments and response information from the public meetings, and correspondence generated during the public comment period ending February 20, 1998, are available for review at the three Agreement repositories (Seattle, Spokane, and Portland) and at DOE’s Public Reading Room in Richland.

### Seattle

University of Washington  
Suzzallo Library  
Government Publications Room  
Mail Stop FM-25  
Seattle, WA 98195  
(206) 543-4664  
Attention: Eleanor Chase

### Spokane

Gonzaga University  
Foley Center  
E. 502 Boone  
Spokane, WA 99258  
(509) 328-4220 extension 3125  
Attention: Lewis Miller

### Portland

Portland State University  
Bradford Price Millar Library  
SW Harrison and Park  
P.O. Box 1151  
Portland, OR 97207  
(503) 725-3690  
Attention: Michael Bowman

### Richland

Washington State University/Tri-Cities  
DOE Public Reading Room  
2770 University Drive  
Room 101L  
Richland, WA 99352  
(509) 372-7443  
Attention: Terri Traub

A copy of the final Agreement change and this Comments and Responses document may be obtained by contacting Hanford Cleanup Line at 800-321-2008 or Gail M. McClure, USDOE, at 509-373-5647. Further information about the FFTF can be found on DOE’s FFTF Web site (<http://www.fftf.org>). More information about the TPA and Hanford can be found on the Hanford Web site (<http://www.hanford.gov>) or by calling the Hanford Cleanup Line at 800-321-2008.