0057435

Hanford Federal Facility Agreement and Consent Order
(Tri-Party Agreement)

Proposed Tri-Party Agreement Modifications and Reference Documents for

Plutonium Finishing Plant Transition and Selected Disposition Milestones (M-83-00A)

Public Comment Period
June 17 to July 31, 2002

Tri-Party Agreement

Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement)
Proposed Modifications and Reference Documents for

Plutonium Finishing Plant Transition and Selected Disposition Milestones

(M-83-00A)

Table of Contents

Agreement in Principle

Tentative Agreement on Negotiation for the Plutonium Finishing Plant

Fact Sheet

Proposed Change Package - M-83-01-03

HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (HFFACO)

AGREEMENT IN PRINCIPLE

NEGOTIATION OF REQUIREMENTS FOR THE COMPLETION OF TRANSITION AND OTHER SELECTED ACTIVITIES PERSUANT TO TPA SECTION 8 TABLE 8.1 AT THE DEPARTMENT OF ENERGY'S PLUTONIUM FINISHING PLANT (PFP)

DECEMBER 12, 2001

INTRODUCTION:

The U.S. Department of Energy (DOE) has determined that the remaining activities at Hanford's Plutonium Finishing Plant (PFP) include: 1) the stabilization of plutonium-bearing materials and treatment of wastes; 2) analytical laboratory support associated with stabilization; 3) building operations support; and 4) safeguards and security operations.

PFP transition and disposition activities will focus on work necessary for compliance with applicable laws. PFP transition and final disposition will focus largely on unnecessary above ground structures [other below ground facilities and land-based waste management units associated with PFP will be/are addressed elsewhere within the Hanford Federal Facility Agreement and Consent Order (HFFACO)].

The Parties have entered into this Agreement In Principle (AIP) in order to define the Parties' intent in the negotiations and to establish the scope and schedule of the negotiations.

IN LIGHT OF THE PRECEDING, THE STATE OF WASHINGTON DEPARTMENT OF ECOLOGY (ECOLOGY), DOE, AND THE U. S. ENVIRONMENTAL PROTECTION AGENCY (EPA) AGREE TO THE FOLLOWING:

A. To enter into negotiations intended to establish HFFACO Section 8 Facility Decommissioning Process milestones and target dates, using the applicable HFFACO requirements per Section 8.0, Table 8-1. The Parties will negotiate the Transition Phase as described in the transition project management plan. These negotiations will seek to establish milestones for scope of work covered under the current EIS and establish milestones for key decisions and follow-on negotiations, including any necessary under RCRA.

B. That the Parties' negotiations will be conducted under the guidance of the following goals:

1) The PFP requirements will be established and implemented in a manner that does not limit or preclude future waste management options such as storage and treatment at receiving facilities [e.g., Central Waste Storage Complex (CWC) or the Waste Isolation Pilot Plant (WIPP)].

Section 8 of the HFFACO is the process the Parties will use for transitioning PFP and closure of existing RCRA-regulated units. This recognizes that RCRA is the baseline regulation for non-transition RCRA-regulated treatment and storage activities and the parties may exercise flexibility in establishing agreement milestones consistent with transition goals and defensible implementation of applicable rules.

C. To enter into negotiations to establish a revised HFFACO major milestone M-83-00 series governing the completion of PFP transition and the final disposition of selected PFP facilities.

D. That Ecology, as the designated Lead Regulatory Agency for these negotiations, agrees to keep EPA, as the designated non-lead regulatory agency, appropriately and currently informed regarding all pertinent aspects of the negotiations. DOE agrees to provide, as appropriate, assistance as requested to support Ecology in providing briefings or documentation to the EPA. The Parties further agree to cooperate in providing periodic briefings to the State of Oregon, affected Indian Nations, the Hanford Advisory Board, and other stakeholders as required by HFFACO Section 8.

E. To ensure their Headquarters staff are kept up to date on negotiation progress and issues, and to timely inform each other of any specific concerns that may impact negotiations.

F. To conclude negotiations no later than February 28, 2002, and to resolve any unresolved issues resulting from the Parties negotiations under HFFACO Article VIII (Resolution of Disputes).

G. That successful conclusion of negotiations shall be followed by an appropriate public comment period in accordance with the Community Relations Plan.

H. To align PFP transition commitments with River Corridor and Central Plateau Strategies and other Tri-Party Agreement negotiations and established milestones (such as M-26 and M-91).

Agreed to this 30TH day of ~~December 2001~~ January, 2002

Tom Fitzsimmons, Director
State of Washington
Department of Ecology

Keith Klein, Manager
U. S. Department of Energy
Richland Operations Office

L. John Iani, Administrator
U. S. Environmental Protection Agency
Region 10

Tri-Party Agreement

TENTATIVE AGREEMENT ON NEGOTIATIONS FOR THE PLUTONIUM FINISHING PLANT PROJECT

In accordance with the requirements of the Plutonium Finishing Plant (PFP) Agreement in Principle, the State of Washington Department of Ecology (Ecology), the U.S. Environmental Protection Agency (EPA), and the U.S. Department of Energy (DOE) (Parties) have concluded negotiations on the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Section 8 commitments for transition and selected disposition activities for PFP.

Tentative agreement has been reached and a proposed change package was developed in accordance with the Tri-Party Agreement. The parties found the proposed Tri-Party Agreement Change Request mutually acceptable. The parties intend for this change package series of milestones to measure progress and ensure safe disposition of hazards associated with PFP. The PFP milestones as described in this change package are considered by the three Parties to be a comprehensive pathway to a safe and stable endpoint.

The proposed Tri-Party Agreement change package is included as an attachment to this Tentative Agreement. Subject to public comment, a decision on the PFP Tri-Party Agreement Change Request is anticipated by July 31, 2002.

The parties will submit the proposed change package for a 45-day public comment period to run from early June 2002 through July 17, 2002. Following conclusion of the public comment period, a response to comments document will be prepared and issued, the change request will be modified as appropriate and a Conclusion Agreement will be approved by the Signatories. Following approval, the PFP Tri-Party Agreement Change Request will be incorporated into the Tri-Party Agreement.

Approved this _____ day of _____, 2002.

Michael H. Schlender (for)		
Keith A. Klein, Manager U.S. Department of Energy Richland Operations Office	Tom C. Fitzsimmons, Director State of Washington Department of Ecology	L. John Iani Regional Administrator U.S. Environmental Protection Agency, Region 10

Fact Sheet

Changes Proposed to the Schedule for Cleaning Up Hanford's Plutonium Finishing Plant

U.S. Department of Energy • U.S. Environmental Protection Agency • Washington State Department of Ecology

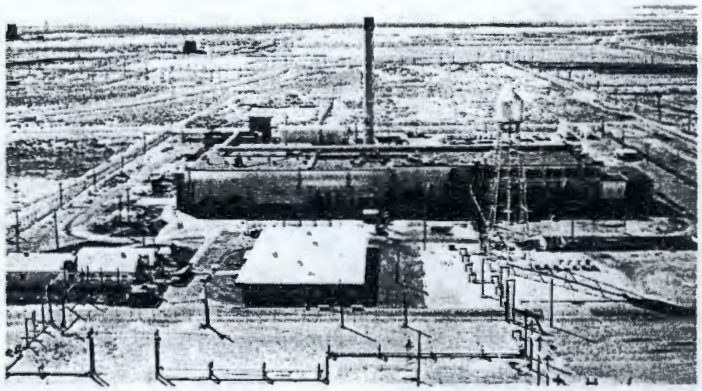
The U.S. Department of Energy (USDOE), the U.S. Environmental Protection Agency and the Washington State Department of Ecology are the agencies responsible for Hanford cleanup and they want your input on proposed changes to the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement). The proposed changes lay out schedules for eliminating hazards and reducing risks at the Plutonium Finishing Plant (PFP) located in the Central Plateau (200 West Area) of the Hanford Site.

Background

The PFP was built in 1949 to process plutonium for use in nuclear weapons. In 1996, the USDOE made the decision to stop processing plutonium at PFP and to shut down the facility. The PFP complex is made up of several buildings, support facilities and waste sites. The PFP is focused on cleaning up and tearing down these buildings. The document that describes the scope, cost, and schedule for completing this work is the PFP Integrated Project Management Plan. PFP is the last major Hanford facility to be included in the TPA.

What we are proposing?

The Tri-Party Agencies completed negotiations in May 2002 on the draft TPA change package that brings PFP into TPA compliance. These proposed changes identify work activities and schedules to clean up the PFP facility and tear down most



of its buildings over the next 14 years. There are 15 additional actions being proposed. Some of these actions include:

- Complete repackaging of plutonium waste residues left over from processing, and shipping the waste to the Hanford Site Central Waste Complex (200 Area) by April 2004;
- Discontinue discharges from 241-Z (a Washington State temporary treatment and storage facility) to tank farms by June 2005;
- Clean out plutonium left in equipment from past processing activities by September 2006;
- Complete closure of Tank 241-Z Treatment System by September 2011; and
- Clean up and tear down most of the facilities by September 2016

Public Comment

The Tri-Party Agencies need your input on the proposed schedule for eliminating hazards and reducing risks associated with the Plutonium Finishing Plant. The public comment period for the draft change package will be from *June 17 through July 31, 2002.*

Hanfords Plutonium Finishing Plant

How can you become involved?

A 45-day public comment on the proposed changes will be held from June 17 through July 31, 2002. The Tri-Parties need your comments on these changes proposed to the Tri-Party Agreement. The agencies will consider all comments before the proposed changes are made final. There are no public meetings planned at this time; however, the agencies will consider requests for a meeting.

To submit comments or request a copy of the proposed changes, please contact:

Larry Romine
U.S. Department of Energy
Richland Operations Office
P.O. Box 550 (A6-33)
Richland, WA 99352
(509) 376-4747
e-mail: larry_d_romine@rl.gov

Laura Cusack
Washington State Department of Ecology
1315 West 4th Ave
Kennewick, WA 99336
(509) 736-3030
e-mail: lcus461@ecy.wa.gov

The proposed changes are also available for review at the Public Information Repositories listed below and on the Web at www.hanford.gov/tpa/changelist.htm.

HANFORD PUBLIC INFORMATION REPOSITORY LOCATIONS

Portland
Portland State University
Branford Price and Millar Library
934 SW Harrison
Attn: Michael Bowman (503) 725-3690

Richland
U.S. Department of Energy Public Reading Room
Washington State University, Tri-Cities
Consolidated Information Center, Room 101-L
2770 University Drive
Attn: Terri Traub (509) 372-7443

Seattle
University of Washington
Suzzallo Library
Government Publications Division
Attn: Eleanor Chase (206) 543-4664

Spokane
Gonzaga University Foley Center
East 502 Boone
Attn: Sarah Nelson (509) 323-6548

Information Repository web site address:
http://www2.hanford.gov/arpir/
Or call the Hanford Cleanup Line at 1-800-321-2008

Change Number	Federal Facility Agreement and Consent Order Change Control Form Do not use blue ink. Type or print using black ink.	Date
M-83-01-03		5/30/2002

Originator

L. Romine

Phone

376-4747

Class of Change

[X] I - Signatories [ ] II - Executive Manager [ ] III - Project Manager

Change Title

Establish Hanford Federal Facility Agreement and Consent Order (HFFACO) Milestones and a Target Date for the Plutonium Finishing Plant (PFP) Transition and Selected Disposition Activities.

Description/Justification of Change

This change request establishes a milestone series for the transition and selected disposition of the PFP facility. The final disposition of the PFP Facility area including Comprehensive Environmental Response, Compensation Liability Act (CERCLA) past practice units will occur in conjunction with and per the CERCLA Decision Document for the 200-PW-1 (Plutonium/Organic Rich Process Waste) Operable Unit, and other appropriate Operable Units.

The Washington Department of Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy have negotiated milestones for the PFP Facility in accordance with the Parties interests and values and in accordance with the HFFACO requirements described in Section 8 of the Agreement. (continued on page 2)

Impact of Change

Approval of this change request establishes a major milestone, associated interim milestones and one target date governing the transition and selected disposition activities for PFP. On approval, Hanford Site planning and budget development documents (e.g., Site Wide Systems Engineering Control Documents, Land Disposal Restriction (LDR) Report and Project Management Plans) will be modified accordingly.

Affected Documents

The HFFACO, as amended, and Hanford Site internal planning and budget documents (e.g., Baseline Change Control Documents, Work Plans, Site Wide Systems Engineering Control Documents, LDR Report and Project Management Plans).

Approvals

DOE	Date	_____Approved_____Disapproved
EPA	Date	_____Approved_____Disapproved
Ecology	Date	_____Approved_____Disapproved

Description/Justification of Change (continued)

The Parties intend for this milestone series to measure progress and ensure safe disposition of hazards associated with PFP. The PFP milestones as described in this change package are considered by the three Parties to be a comprehensive pathway to a safe and stable endpoint prior to final disposition, and integrated with other site priorities..

In October 1996, DOE issued a shutdown order for the PFP production processing operations. PFP is listed as a Key Facility in the HFFACO, Section 8.0, "Facility Decommissioning Process." PFP has entered the Facility Transition and selected Disposition phases of the decommissioning process in accordance with the HFFACO Action Plan, Section 8.0.

The PFP transition and selected disposition activities will be accomplished in the following three phases:

- Phase I - Facility Transition Phase [including Plutonium (Pu) residue repackaging and shipment to the Central Waste Complex (CWC), facility deactivation and dismantling, and Treatment Storage Disposal (TSD) unit pre-closure and closure actions]
- Phase II - Surveillance and Maintenance (S&M) Phase
- Phase III - Final Disposition Phase

The PFP project differs somewhat from traditional decommissioning projects, in which each of the three phases are distinct and sequential. In the case of PFP, the buildings and other physical structures are not suitable now and cannot realistically be prepared for long term, low cost containment of residual radioactivity. Therefore, selected disposition activities will occur prior to the S&M phase. Typically, above-grade components of structures will proceed through the dismantlement stage of decommissioning in order to establish a safe and secure configuration.

The PFP baseline is described in the "Integrated Project Management Plan for Decommissioning of the PFP Nuclear Materials Stabilization Project" (HNF-3617, Revision 1). The baseline plan is to complete Phase I, as noted above, by September 30, 2016. Completion of this scope of work will result in reduced risk to plant workers, the public, and the environment. This project will reduce, stabilize and remove all significant radioactive and chemical sources at the plant. Reducing the hazards and risks associated with these facilities will lower the costs of S&M for these facilities until the Final Disposition Phase (Phase III) is initiated.

The milestones described in this change request implement Phase I and include transition for all PFP structures, selected disposition, necessary pre-closure action, TSD unit closure actions, and waste sites stabilization. Phase II (S&M) will be initiated following Phase I. The site occupied by the former PFP vault facilities, PFP non-vault facilities, and below-ground structures will continue to be routinely monitored throughout the S&M Phase until final disposition and closure are complete.

PFP manages four groups of Pu-bearing materials: 1) Pu-Uranium bearing solids described as generally >30 wt % Pu/Uranium; 2) Pu-Uranium bearing solutions; 3) Polycubes; and 4) Pu-Uranium bearing solid residues described as generally <30 wt % Pu/Uranium. In general, the Pu-Uranium bearing solids with >30 wt% Pu/Uranium, Pu-Uranium bearing solutions, and Polycubes are special nuclear materials (SNM) of

national strategic value consistent with the surplus plutonium disposition EIS ROD (January 4, 2000). DOE has determined that these materials will be stabilized and packaged to standards supporting safe 50-year storage. DOE will manage these materials subject to the storage standard and in accordance with the Atomic Energy Act (AEA) of 1954, as amended.

Items described as generally <30 wt % Pu/Uranium are identified as residues. The residues include sand, slag, and crucible; ash; oxide/mixed oxide/alloys <30 wt% Pu/Uranium; compounds; combustibles; and miscellaneous items. DOE has made a determination that a portion of these residues designate as solid waste. These waste items may be immobilized by cementation and/or packaged directly into "pipe-and-go" containers, or they may undergo other suitable treatment and/or packaging, according to applicable RCRA/HWMA requirements and HFFACO milestones.

The Parties agree that there are three material/waste management pathways at PFP: 1) the pathway for materials that have a recognized future use by the U.S. government; 2) the waste pathway by which items will be packaged and disposed; and 3) the determination pathway which allows for a scheduled analysis of potential material/waste for Pu content after which the pathway will be either the materials or the waste pathway. Material/waste determinations will be made as the work is planned and executed. The LDR report will capture the agreements made in this change package regarding known waste and potential material/waste.

The parties recognize, for substances at PFP that meet the definition of hazardous wastes, that AEA requirements provide an effective management system to prevent potential releases associated with these regulated substances. This M-83 milestone series provides a schedule of activities that leads to compliance with applicable hazardous waste regulations while providing for safe management that is protective of human health and the environment.

Areas within PFP subject to storage permit requirements are identified within specific M-83 interim milestones. Changes to areas for storage or treatment of regulated wastes may be established by agreement of the Parties through the applicable HFFACO change process.

It is the intent of the Parties to integrate the requirements of AEA and HWMA/RCRA to the extent practicable, consistent with Section 1006 of RCRA and to achieve full compliance with HWMA/RCRA and implementing Dangerous Waste Regulations, and other applicable laws and regulations. In some instances compliance may be achieved through an enforceable schedule or HFFACO Milestones.

Containerized Pu bearing materials/wastes will be stored at PFP in vaults and vault-like rooms until they are removed from PFP vault storage for stabilization and/or disposition to interim storage outside PFP. While stored at PFP, the mixed waste residues will be managed under both the AEA and HWMA/RCRA, and in accordance with this agreement. Following immobilization and/or packaging, residues designated as dangerous waste will be moved from PFP to the CWC or other permitted Hanford location for storage until eventual disposal at Waste Isolation Pilot Plant (WIPP).

Residual radioactive and chemical material holdup in process systems will be addressed through a combination of removal of radioactive/chemical holdup, and as part of the transition and selected disposition activities under this milestone series. Results of a risk-based evaluation process will be used to determine if radioactive and chemical material holdup must be removed prior to dismantlement, or if it

presents a low enough worker, environmental, or public risk that it can be addressed when building structures are physically removed. If earlier response action is required for certain process systems, the response action will be scheduled accordingly. The removal of legacy Pu holdup will be accomplished pursuant to M-83-14 according to the plan pursuant to MX-83-12-T01. The plan will describe how Pu holdup is assessed against SNM safeguard discard criteria and how the holdup will be dispositioned either as material or as waste. The removal of chemical holdup and mixed holdup will generate potential dangerous/hazardous wastes, which will be managed in accordance with this agreement and applicable dangerous waste regulations. The PFP Facility authorization basis and safeguards requirements ensure that Pu bearing materials/waste located within structures and buildings are in a safe configuration. Therefore, these materials/wastes will be characterized and dispositioned on a schedule to support deactivation of the identified structures and buildings.

For all hazardous/mixed wastes generated at the PFP Facility, the data needs for disposal and treatment (if necessary) of these wastes will be identified and compiled. Data for each waste stream will satisfy RCRA generator requirements for designation, WAC 173-303-070 through 110, LDR certification, and the receiving facility waste acceptance criteria, as applicable. For transuranic (TRU) mixed waste, PFP shall also provide the data needs for characterization of TRU-mixed waste streams sufficient to meet the Acceptable Knowledge requirements of the Hanford TRU program.

This change control form deletes four existing PFP milestones and establishes the following: one new major, 15 interim milestones, and one target date for the Facility Transition and Selected Disposition Phase at PFP.

Additional description and justification of change is included following specific milestones.

~~Strikethrough~~ text is deleted and shaded text is added.

Milestone	Description	Due Date
~~M-83-00~~	~~Complete stabilization of process areas, and other PFP cleanout actions resulting from the EIS ROD, within PFP.~~ ~~Completion of the process area stabilization activities will establish a safe and environmentally secure configuration for these plant areas. The major radioactive and chemical sources associated with these areas will be removed, reduced, and/or stabilized. Completion of stabilization and other cleanout activities will result in reduced risk to plant workers, the public, and the environment. This milestone includes completion of the national environmental policy act (NEPA) process. The three parties will enter into negotiations within two months following issuance of the EIS Record of Decision to establish milestones for implementing the Record of Decision and will complete negotiations within 6 months thereafter.~~	~~TBD~~
~~M-83-03~~	~~Complete Plutonium Finishing Plant transition phase negotiations.~~ ~~These negotiations will establish agreement milestones (including specific M-83-00A end date) and Target Date sufficient to effectively drive necessary compliance activities, completion of the transition phase, and PFP transfer to DOE's environmental restoration programs.~~	~~Suspended~~
~~M-83-08~~	~~Complete all requirements necessary to ship all Rocky Flats ash mixed waste covered by this change package (M-83-00-01) to WIPP.~~ ~~The TBD date (12/31/2049) will be determined during negotiations for the transition of the PFP facility to begin before June 1, 2001.~~	~~TBD~~
~~M-83-11~~	~~SS&C Packaging~~ ~~Complete repackaging and shipment of SS&C mixed waste currently stored in PFP to the Central Waste Complex for storage.~~	~~1/30/04~~
M-83-00A	COMPLETE PFP FACILITY TRANSITION AND SELECTED DISPOSITION ACTIVITIES Completion of this major milestone includes the following key elements: 1) completion of all activities necessary to achieve end point criteria established through milestone M-83-20 for placing the PFP Facility in a safe and stable S&M mode, 2) completion of all activities described in the approved M-83 series interim milestones and target date; and 3) completion of the balance of PFP selected disposition activities pursuant to the final Action Memoranda and work plans. Description/Justification of Change (continued) –M-83-00A: Completion of the M-83-00A scope of work will reduce the safety and environmental risks and costs associated with long-term surveillance and maintenance of the PFP in its shutdown state. Unlike the large concrete "canyon" facilities that previously completed the Facility Transition Phase at Hanford, the buildings and other physical structures at PFP are not suitable for long term, low cost containment of residual radioactivity, and cannot realistically be prepared for long-term containment. Subject to the CERCLA removal action(s) required by M-83-22, this milestone anticipates that reducing the safety and environmental risks at PFP to a level that can be effectively controlled at a reasonable cost pending final disposition of the PFP site, will require dismantling the facilities to "slab-on-grade" and stabilizing below-grade structures and sites. Stabilization may include both above-grade and below-grade work as necessary to reach a safe and stable end point prior to initiation of the S&M phase of decommissioning. The Parties recognize that additional work needs to be done to support final deactivation and dismantlement decisions for PFP prior to entering the S&M phase. This change package is based on the assumption that the M-83-22 CERCLA removal action decision will support taking the major elements of the PFP Facility to "slab-on-grade" (removal of the above ground structures). It is not the intent of this milestone series to accomplish final remediation of the 200-PW-1 operable unit. Other Facility Disposition Phase activities at PFP, including such work as "entombment, closure and site restoration" will remain to be completed at a later date in conjunction with final remediation of Operable Unit 200-PW-1 or another Operable Unit. The intent of this Major Milestone is to capture the work of PFP Facility Transition and selected	September 30, 2016

Milestone	Description	Due Date
	Disposition activities. The scope of the activities as defined by the PFP IPMP, HNF-3617 Revision 1, dated September 5, 2001, is to remove the PFP structures to a safe and stable "slab-on-grade" configuration. The PFP Project is continuously being challenged to quickly reduce environmental and worker hazards and risks while reducing life-cycle project costs. Ongoing efforts to reduce life-cycle cost, accelerate schedules for hazard mitigation, and/or reduce risks to workers may identify an improved sequencing for dismantlement of buildings. If an improved schedule is identified, the Parties may modify these milestones through the appropriate HFFACO change process. Baseline change requests will support existing HFFACO milestones until/unless the milestones are re-negotiated.	
TPA Section 8 Plans and Documents		
M-83-20	SUBMIT FACILITY TRANSITION END POINT CRITERIA DOCUMENT AS A PRIMARY DOCUMENT TO ECOLOGY PURSUANT TO AGREEMENT ACTION PLAN SECTION 8.5.3 A document identifying end point criteria necessary to place PFP in an environmentally sound, safe, and stable configuration will be submitted to Ecology for review and approval. Lead regulatory agency approval of endpoint criteria in this document will be specific to regulated units and hazardous substances proposed to remain at the facility after the transition phase of facility decommissioning is complete. Subsequent to this initial submittal, the End Point Criteria document may be updated as necessary to reflect the M-83-22 decision(s) for completion of M-83-00A, and throughout transition to reflect changes that may occur during deactivation work activities. As a Primary Document, revisions are subject to Ecology review and approval. Description/Justification of Change (continued) for M-83-20: The End Point Criteria document shall document criteria for individual buildings, building footprints (slab-on-grade), portions of buildings, or major systems within or beneath the PFP Facility as appropriate. End point criteria are necessary to fulfill the following needs: 1. Define S&M requirements necessary prior to final disposition. 2. Support and reflect issuance of the M-83-22 decision document(s) to comply with applicable regulatory requirements or to protect human health and the environment. As written, the HFFACO envisions that a Key Facility will be transitioned to a safe configuration, maintained in that safe configuration for a significant amount of time, followed by final disposition. The End Point Criteria document would describe that safe configuration and the S&M Plan would describe the periodic surveillance and maintenance activities necessary to protect human health and the environment during the period prior to the final disposition phase. The plan for PFP is to move quickly to demolition of above-grade portions of structures. Buildings will be demolished while there are still daily ongoing activities covered by facility operational requirements, procedures, and surveillances that are consistent with the existing authorization basis. The End Point Criteria Document will describe the condition at which routine, on-going activities will end and periodic surveillances will be required under the S&M phase of facility decommissioning. For PFP, this condition will be a safe and stable configuration, which is expected to be slab-on-grade for most buildings. This milestone establishes end point criteria early in the project that reflects consideration of regulatory, tribal, and stakeholder input and values, with a view towards developing support for issuance of the M-83-22 CERCLA document(s), and facilitating deactivation and dismantlement planning consistent with Section 8.5.3 of the HFFACO Action Plan. The Parties do not intend that interim end point criteria be developed for buildings or components prior to dismantlement where dismantlement occurs prior to the start of the S&M phase, but that existing operational and characterization requirements are sufficient to protect human health and the environment.	September 30, 2003

Milestone	Description	Due Date
M-83-21	SUBMIT TO THE WASHINGTON STATE DEPARTMENT OF ECOLOGY A PFP RESIDUAL CHEMICAL HAZARDS ASSESSMENT AS A PRIMARY DOCUMENT The subject document will list the processing equipment including tanks, piping, and waste lines that may contain residual chemicals and an evaluation of the associated hazards. The document will describe the evaluation, criteria, and process. It will also categorize the items based on risk to human health and the environment, include considerations on whether response actions are required, and provide a schedule for actions necessary to address significant risks prior to final deactivation. The methodology for defining the categories will be described in the document. Description/Justification of Change (continued) – for M-83-21: The PFP is evaluating the current risk associated with residual chemicals. This evaluation is being conducted to assure that human health and the environment are protected while material stabilization efforts are completed and the PFP Project shifts to removing chemicals and legacy holdup materials from the noted processing equipment in the several buildings at PFP. The PFP Project will assure that either response actions are identified and scheduled for completion, or that it is safe and appropriate to leave the chemicals where they are until Deactivation and Decommissioning is accomplished. The residual chemicals that pose a risk will be safely and appropriately packaged and disposed of per the regulatory requirements. As appropriate, end point criteria and applicable surveillance will be included as part of Milestones M-83-20 and M-83-24 for conditions remaining beyond completion of Milestone M-83-00A. Closure and site restoration will be completed at a later date in conjunction with final remediation of an Operable Unit.	December 31, 2002
M-83-22	SUBMIT TO ECOLOGY AN ENGINEERING EVALUATION/COST ANALYSIS(ES) [EE/CA(S)] FOR APPROVAL AND PROVIDE AN ACTION MEMORANDUM(A) AS A PRIMARY DOCUMENT(S) FOR THE DECOMMISSIONING OF THE PFP FACILITY The action memorandum(a) will include a schedule for the submittal of work plans as primary document(s). Scoping of the EE/CA(s) shall be done to support timely accomplishment of dismantlement work scope. More specifically, an EE/CA and Action Memorandum can be phased to support a near term dismantlement with subsequent EE/CA(s) addressing remaining work scope. The Action Memorandum(a) will be consistent with Section 8 of the HFFACO and will not be inconsistent with Executive Order 12850. Completion of this milestone shall also require DOE to perform an evaluation of actions necessary to address below-grade structures or other structures or hazardous substances, dangerous waste or dangerous constituents remaining after completion of M-83-00A. This will include environment analysis and public review. Description/Justification of Change (continued) – for M-83-22: CERCLA EE/CA(s) will analyze the appropriateness of the slab-on-grade endpoint and future below grade alternatives to protect human health and the environment and meet regulatory requirements. The Parties recognize that within the broader environmental regulatory framework, there may be a variety of implementation options and NEPA values to be considered. CERCLA is designed to evaluate the impacts of each option. The requirement to address below-grade structures or other structures, hazardous substances, dangerous waste or dangerous constituents remaining after completion of M-83-00A is intended to insure they are analyzed as part of PFP dismantling. Remaining CERCLA actions leading to final disposition of the entire PFP Facility will be integrated with other Central Plateau activities. The Record of Decision (ROD) for 200-PW-1 is currently scheduled prior to completion of M-83-22, so completion of evaluation work under M-83-22 is intended to avoid the need to issue a 200-PW-1 ROD amendment at a future date, and/or conduct additional investigations that can more efficiently be conducted as part of M-83-22 activities. Action memoranda under this milestone may reflect coordination of this work with the 241-Z Closure Plan activities required by milestone M-83-30.	September 30, 2008

Milestone	Description	Due Date
M-83-23	COMPLETE NEGOTIATIONS AS NEEDED FOR REVISING MILESTONES CONSISTENT WITH FINAL ACTION MEMORANDA FOR DECOMISSIONING OF PFP If the final action memoranda for decommissioning of PFP do not support the existing milestones leading to the proposed end point of a safe and stable slab-on-grade configuration, and Ecology determines that such milestones are not needed to protect human health and the environment or to achieve compliance with applicable regulations, the Parties will complete negotiations to establish revised milestones consistent with the decision documentation. This milestone is complete if negotiations are completed by the indicated date or if Ecology determines that negotiations are not required.	March 31, 2009
M-83-24	SUBMIT A SURVEILLANCE AND MAINTENANCE (S&M) PLAN AS A PRIMARY DOCUMENT TO ECOLOGY PURSUANT TO AGREEMENT SECTION 8.5.4 A S&M plan will be submitted to Ecology as lead regulatory agency. Lead regulatory agency approval will be specific to information affecting regulated units and hazardous substances in the facility. The S&M plan will describe those activities that will occur during the S&M period and include the following: 1) surveillance; (2) maintenance; (3) quality assurance; (4) radiological controls; (5) hazardous substance inventory, management and protection; (6) health and safety/emergency preparedness; (7) safeguards and security; and (8) cost and schedule.	June 30, 2012
MX-83-12-T01	SUBMIT PFP LEGACY PU HOLDUP REMOVAL PLAN TO ECOLOGY The PFP Legacy Pu Holdup Removal Plan will define the starting inventory of Pu in various locations throughout the process facilities, the methods by which significant concentrations of holdup will be removed and the disposition paths for the holdup that is removed. The beginning inventory and locations containing significant quantities of Pu holdup will be identified and quantified using the Hanford Site Safeguards database for accountable SNM. Note: Inventory information may be classified and/or restricted from Public Release. Additional engineering analysis and non-destructive assay may be used to update older data and/or to more precisely locate concentrations of holdup. Description/Justification of Change (continued) - MX-83-12-T01: For the purpose of this document, legacy Pu holdup is defined as safeguards-significant concentrations of Pu and related SNM (uranium, americium, etc.) that remain lodged in various portions of discontinued or to-be discontinued Pu processing processes (such as the Pu Reclamation Facility, A-Line, C-line, etc.) and in process support systems (such as exhaust ducts, piping, the process vacuum system, etc.) at Hanford's PFP. Pu remaining in PFP following legacy holdup removal will be managed as residual contamination. Criteria will be specified in the plan to define and secure agreement on how much holdup must be removed from the plant to meet DOE security criteria for elimination of Protected Area controls over the former processing facilities outside the PFP vault complex. Some Safeguards and Security controls will still be required, as necessary, depending on the types and quantities of material being handled. The plan will explain the most likely work methods for removal of the targeted holdup material, and provide a tentative sequence of work and schedule. The plan will also describe how Pu holdup removed as a result of these activities will be assessed against DOE's discard criteria and dispositioned via stabilization, repackaging and transfer to the PFP vaults, or treated and/or directly repackaged as TRU waste or plutonium residues for transfer to the CWC and eventual disposition at WIPP.	December 31, 2003
M-83-13	COMPLETE REPACKAGING OF PFP RESIDUES AND SHIPMENT TO CENTRAL WASTE COMPLEX This milestone will be complete when residues identified in the Implementation Plan for Defense Nuclear Facilities Safety Board Recommendation 2000-1 dated January 19, 2001, as amended have been repackaged at PFP and shipped to the CWC for storage. This does not include those items identified as Non-Destructive Assay (NDA) standards or items set aside for the WIPP verification sampling. Prior to repackaging, data for each residue waste stream shall be obtained to support waste designation and identify where sampling and analysis is needed. Data for each waste stream will satisfy RCRA	April 30, 2004

Milestone	Description	Due Date
	generator requirements for designation, WAC 173-303-070 through 110, LDR certification, and the receiving facility waste acceptance criteria, as applicable. For TRU mixed waste, PFP shall also provide the data needs for characterization of TRU-mixed waste streams sufficient to meet the Acceptable Knowledge requirements of the Hanford TRU program. Residue containers shall be stored in HC-46F Glovebox in Room 170 of Building 234-5Z, Rooms 192D and 170, and staged in Room 169. Residue containers are prepared for shipment to CWC in Room 192 and the loading dock. The POCs shall be managed in accordance with WAC 173-303-630, Use and Management of Containers. POCs shall meet the CWC requirements in the Hanford Site Solid Waste Acceptance Criteria and comply with applicable dangerous waste management requirements while awaiting certification and transfer to WIPP. The locations of waste management activities may be changed through agreement of the Parties by modification of this milestone. Description/Justification of Change (continued) – M-83-13 This milestone covers regulated dangerous waste activities required to store and repackage the mixed waste residues currently at PFP, subsequent storage at PFP, and shipment of the residues to CWC. The residues are planned to be repackaged into pipe overpack containers (POC's). Residue types include Sand, Slag & Crucible, Group 2 Alloys, Oxides and Mixed Oxides, Compounds, Combustibles, and Miscellaneous Residues. The residues are stored in containers in vault/vault-type rooms. They are labeled with a unique identification number, which is tracked. Visual inspections of residue containers in the vault/vault-type rooms are made routinely. The residue containers are inspected to ensure they remain in good condition during storage. Aisle spacing is consistent with criticality safety requirements. For each residue type, residue containers will be set aside for WIPP verification sampling and analysis, as appropriate. Prior to transfer to WIPP, DOE is required to implement applicable requirements of the WIPP Waste Analysis Plan, as specified in the WIPP RCRA permit. The intent of this milestone is to provide an enforceable compliance schedule for removal of PFP residues to CWC and to insure safe container management under the TPA for storage of residues in the vault/vault-like rooms, Rooms 170 and 192D. The cans are assayed in Room 170 prior to shipment. Additional assay capabilities will be added in Room 172. Residues retained in vault storage will be managed in a protective manner under AEA requirements. Additionally, the intent is to document the outcome of the discussion referenced in TPA Change Number M-83-01-01A (currently TPA Milestone M-83-09), Section 3, "Characterization and Sampling" related to Hanford Ash designation. Currently there are 10 containers of Hanford Ash set aside for verification sampling for WIPP. It was agreed that no additional sampling and analysis is needed.	
M-83-14	COMPLETE 100% OF THE LEGACY PU HOLDUP REMOVAL AS DEFINED IN THE LEGACY PU HOLDUP REMOVAL PLAN FOR PFP REQUIRED BY MX-83-12-T01 Significant quantities of plutonium now held up in inactive and to-be deactivated PFP process equipment and process support systems will be removed by a variety of means (brushing, scraping, dissolution, chemical decontamination agents, etc.) in accordance with a previously submitted Legacy Pu Holdup Removal Plan (MX-83-12-T01). Sufficient holdup will be removed to meet DOE's criteria for terminating Protected Area controls over the process equipment and process support facilities. Pu holdup removed as a result of these activities will be assessed against DOE's discard criteria and dispositioned via stabilization, repackaging and transfer to the PFP vaults or treated and/or directly repackaged as TRU waste or Pu residues for transfer to the CWC and eventual disposition at WIPP. Description/Justification of Change (continued) - M-82-14: Completion of this scope of work is intended to reduce the programmatic risks associated with the need to maintain Pu processes and experienced Pu staff at the PFP over an extended period of time following completion of the primary Pu stabilization and packaging mission. Removal of significant concentrations of Pu holdup from the PFP complex will virtually eliminate security risks and safeguards and security-related costs associated with the former Pu processing facilities, and will permit subsequent deactivation	September 30, 2006

Milestone	Description	Due Date
	and dismantling activities to be conducted more efficiently and at lower risk to facility workers. Removal of heavy concentrations of Pu holdup is an essential prerequisite to proceeding with the removal of process and support equipment and systems deactivation in support of decommissioning PFP and necessary to allow uncleared workers to perform decommissioning work in 234-5Z and adjoining areas.	
TSDF Disposition		
M-83-30	SUBMIT TO ECOLOGY A CLOSURE PLAN AS A PRIMARY DOCUMENT FOR THE 241-Z WASTE TREATMENT FACILITY (TSD UNIT) AND GLOVEBOX HA-20MB A closure plan certified in accordance with WAC 173-303-810(12) and (13) for the 241-Z and Glovebox HA-20MB TSD units will be submitted to Ecology to begin the review process described by Figure 9-2 in Section 9 of the HFFACO for incorporation into the Hanford Facility RCRA permit. The closure plan will describe the plans and schedules necessary to comply with WAC 173-303. This closure plan is a primary document pursuant to Table 9-1 of the HFFACO Action Plan. The 241-Z closure plan shall be based upon and contain schedules as necessary to fulfill Milestone M-83-32. Description/Justification of Change (continued) – M-83-30 The 241-Z tank system is a RCRA treatment and storage unit operating under interim status standards and must be closed in accordance with WAC 173-303, which requires submission of a closure plan to Ecology for review and approval. It is anticipated that the last receipt of waste will be no sooner than June 30, 2005, but no later than the date necessary to complete closure activities by September 30, 2011, in accordance with M-83-32. The Closure Plan will reflect the requirements of M-83-31 and M-83-32. At the time of these negotiations, it is uncertain if the use of 241-Z tanks will be required after June 30, 2005, to support transition and dismantlement activities. If transition and dismantlement requires operation of the system past June 30, 2005, Ecology will revisit the need for final-status RCRA permitting. In addition, DOE has not decided how to close the unit. The Closure Plan will reflect these decisions, including an initial date for last receipt of waste as necessary to support transition and dismantlement activities under this milestone series. If this last receipt of waste date changes, Energy may modify the closure plan under the provisions of 40 CFR 265.112.	July 31, 2003
M-83-31	DISCONTINUE WASTE DISCHARGES FROM THE 241-Z TANKS TO TANK FARMS VIA EXISTING LINES After June 30, 2005, no waste liquid effluent discharges from 241-Z tank system to Tank Farms via the existing transfer piping lines will occur. (Transfers by other means, such as a tanker truck, are allowed.) Description/Justification of Change (continued) – M-83-31: The Tank Farms have a related TPA Milestone (M-43-00) to complete upgrades to non-compliant transfer lines by June 30, 2005. The line from PFP's 241-Z tanks to the SY Tank Farm will not be upgraded. Thus, waste discharges from 241-Z to Tank Farms must cease no later than June 30, 2005. PFP will coordinate with Tank Farms to determine the appropriate transfer line flushing requirements and schedule. The PFP Project will assure that activities that generate waste solutions to be discharged to 241-Z will be accomplished prior to June 30, 2005, or that plans are in place for how wastes accumulated and stored in 241-Z tanks after that date will be dispositioned without using the existing underground piping (e.g., tanker truck, solidified, etc.). Administrative controls (e.g., lift electrical leads, lock and tag valves or control switches, etc.) or an engineered barrier will be in place to prevent transfers to Tank Farms.	June 30, 2005
M-83-32	COMPLETE CLOSURE OF THE PFP 241-Z TSD UNIT Complete those activities required by the 241-Z Treatment and Storage Unit's RCRA closure plan. Description/Justification of Change (continued) – M-83-32: At the time of these negotiations, it is uncertain if the use of 241-Z tanks will be required after June 30, 2005, to support Transition and Disposition activities. In addition, DOE has not decided how to close the unit (partial closure or final closure). The Closure Plan will reflect those decisions. Activities prescribed by the closure plan must be accomplished to meet RCRA requirements.	September 30, 2011

Milestone	Description	Due Date
Transition Activities		
M-83-40	COMPLETE TRANSITION AND DISMANTLEMENT OF THE 232-Z BLDG INCINERATOR Remove the 232-Z Building pursuant to the final Action Memoranda and Work Plans. Included in this milestone is the portion of the 232-Z exhaust duct inside the 291-Z Building, consistent with the end point criteria developed in M-83-20. DOE deactivation, decontamination and dismantlement activities may proceed in advance of CERCLA decision documents in accordance with Section 8 of the HFFACO.	September 30, 2006
M-83-41	COMPLETE TRANSITION AND DISMANTLEMENT OF THE 216-Z-9 CRIB COMPLEX Remove the above-grade portion of the 216-Z-9A, B, & C Buildings pursuant to the final Action Memoranda and Work Plans covering remaining elements not covered by RCRA closure plan. DOE deactivation, decontamination and dismantlement activities may proceed in advance of CERCLA decision documents in accordance with Section 8 of the HFFACO.	September 30, 2010
M-83-42	COMPLETE TRANSITION AND DISMANTLEMENT OF THE 241-Z WASTE TREATMENT FACILITY Remove the above grade portion of the 241-Z, ZA, ZB, & ZG buildings pursuant to the final action memorandum and work plans covering remaining elements not covered by RCRA closure plans. DOE deactivation, decontamination and dismantlement activities may proceed in advance of CERCLA decision documents in accordance with Section 8 of the HFFACO.	September 30, 2011
M-83-43	COMPLETE TRANSITION OF THE 242-Z WASTE TREATMENT FACILITY AND 236-Z PLUTONIUM RECLAMATION FACILITY TO SUPPORT PFP DECOMMISSIONING Deactivate and prepare for future dismantlement the above grade portions of the 242-Z and 236-Z buildings.	September 30, 2013
M-83-44	COMPLETE TRANSITION OF THE 234-5Z (PLUTIONIUM CONVERSION FACILITY) & ZA (PLUTINIUM CONVERSION SUPPORT FACILITY), 243-Z LOW LEVEL WASTE TREATMENT FACILITY, 291-Z EXHAUST BUILDING, AND 291-Z-1 EXHAUST STACK TO SUPPORT PFP DECOMMISSIONING Deactivate and prepare for dismantlement the above grade portions of the 234-5Z & ZA, 243-Z, and 291-Z and 291-Z-1 Stack buildings.	September 30, 2015