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Department of Energy  
Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

OCT 21 2002

02-RCA-0591

Mr. Tom C. Fitzsimmons, Director  
State of Washington  
Department of Ecology  
P.O. Box 47600  
Olympia, Washington 98504

Mr. L. John Iani, Regional Administrator  
U.S. Environmental Protection Agency  
Region 10  
1200 Sixth Avenue - -  
Seattle, Washington 98101

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Addressees:

HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (TRI-PARTY AGREEMENT) CHANGE REQUEST FOR THE PLUTONIUM FINISHING PLANT (PFP)

The U.S. Department of Energy, Richland Operations Office, the U. S. Environmental Protection Agency, and the State of Washington Department of Ecology concluded negotiations to establish milestone schedules for transition and selected disposition of PFP. A Tentative Agreement was reached between the parties in June 2002, and a proposed change package was developed. The proposed change package underwent a 45-day comment period that concluded on July 31, 2002. A Comments Response Document (Enclosure 2) was prepared by the parties to respond to the comments/issues received. The Response to Comments document contains those comments. Enclosed for your approval (Enclosure 1) is the Tri-Party Agreement Change Request Number M-83-01-03.

If you have any questions, please contact me, or your staff may contact Larry D. Romine, Plateau Transition Division, on (509) 376-4747; or W. Wade Ballard, Assistant Manager for Planning and Integration, on (509) 376-6657.

Sincerely,

Keith A. Klein  
Manager

RCA:JKY

Enclosures

cc: See page 2

Addressees  
02-RCA-0591

-2-

OCT 21 2002

cc w/encls:

D. Bartus, EPA

N. Ceto, EPA

L. J. Cusack, Ecology

R. Gay, CTUIR

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T. M. Martin, HAB

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K. Niles, Oregon Energy

R. E. Piippo, FHI

P. Sobotta, NPT

R. F. Stanley, Ecology

M. A. Wilson, Ecology

Administrative Record

*Hanford Tri-Party Agreement*  
**Modifications to Hanford's Plutonium Finishing Plant  
Transition and Selected Disposition Milestones**

October 2002

**1. Oregon Office of Energy, submitted by Ken Niles**

**Comment 1:** To accelerate cleanup. However, given the proposals discussed in the Cleanup Constraints and Challenges Team (C3T) process, can you do better? Proposals developed through the C3T process would accelerate your negotiated schedule by as much as eight years. In light of these discussions, we encourage you to re-consider the proposed schedule and negotiate milestones which will complete the work at the Plutonium Finishing Plant much sooner. Doing so will reduce the risks posed by this facility that much sooner and result in a substantial cost savings.

**Response to Comment 1:** The *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) negotiations for the Plutonium Finishing Plant (PFP) began in November 2001. The Tri-Party Agreement agencies agreed to use the existing schedule and work activities for PFP to develop the proposed milestones. The *Performance Management Plan for the Accelerated Cleanup of the Hanford Site* (DOE/RL-2002-47, Rev. D) does identify a strategy that would accelerate completion of the PFP Project by 7 years (from September 2016 to September 2009). The U.S. Department of Energy (DOE) does plan to work to an accelerated schedule; however, at this time there are no plans to commit to a new schedule given uncertainties in funding and without demonstrated progress in acceleration. We agree that accelerating the schedule has benefits and could reduce cost.

**Comment 2:** The proposed end point of slab-on-grade is too limited. It does not achieve closure of the tank systems associated with PFP. Instead, it allows their continued use through June 30, 2005 and possibly later. The proposed milestones also do not adequately address the piping, contaminated soil and other below-grade contaminants. Much of the waste in adjacent disposal sites clearly meets the criteria for designation as transuranic waste and must be retrieved. We recommend you negotiate milestones that complete the entire cleanup – including the characterization, exhumation and treatment of associated waste sites. The milestones should encompass all of the RCRA and MTCA cleanup requirements, including closure.

**Response to Comment 2:** The proposed end point of removing above-grade portions of structures to "slab-on-grade" for PFP decommissioning is considered only an interim action. The negotiations for PFP were intended to be consistent with Section 8, "Facility Decommissioning Process" of the Tri-Party Agreement. These milestones only reflect transition work and dismantlement, not final remediation work. The final cleanup action is still being planned and will be consistent with the *Performance Management Plan for the Accelerated Cleanup of the Hanford Site* (DOE/RL-2002-47, Rev. D). Further, DOE plans for the overall Central Plateau remediation to integrate tank farm, waste site, and facility closure actions. It is under the Central Plateau remediation work that piping,

contaminated soil, and other below-grade contaminants will be addressed for the final cleanup action. Additionally, the Engineering Evaluation/Cost Analysis (Tri-Party Agreement Milestone M-83-22) requires DOE to perform an evaluation of actions necessary to address below-grade portions of the facility in anticipation of a smooth transition of final remediation activities from the PFP Project to Central Plateau activities. The 241-Z Tank System, encased in a concrete vault, is a robust wastewater storage system, and will be used during the cleanout activities. At the end of these activities, the 241-Z Tank System will be closed according to applicable dangerous waste closure standards and an approved closure plan.

**Comment 3:** We recommend new milestones be negotiated to directly address expeditious characterization and eventual remediation of the carbon tetrachloride plume. We understand that work is restricted in the area because of security restrictions. However, once the security perimeter is reduced, aggressive actions should be taken to account for the location of the chemical, and work towards its remediation. The carbon tetrachloride contamination cannot be separated from cleanup of the Plutonium Finishing Plant. Any plan to clean up the Plutonium Finishing Plant must include the carbon tetrachloride plume.

**Response to Comment 3:** The carbon tetrachloride plume is addressed under the groundwater protection program as part of the Central Plateau remediation. The Remedial Investigation/Feasibility Study work plan for the 200-PW-1 Operable Unit includes characterization of the carbon tetrachloride contamination in the vadose zone. Through the *Performance Management Plan for the Accelerated Cleanup of the Hanford Site* (DOE/RL-2002-47, Rev. D), DOE plans to determine the presence of dense non-aqueous phase liquids and the vertical distribution of carbon tetrachloride in the groundwater. The results of these efforts will provide the project with the necessary information to implement the most efficient and innovative methods for cleaning up the carbon tetrachloride plume.

**Comment 4:** The proposed milestones allow continued use of the transfer lines to tank farms until June 30, 2005. These are non-compliant systems. The milestones should include a requirement for periodic integrity testing of these lines. Should they fail integrity testing, their use should be immediately discontinued and cleanup investigation begun.

**Response to Comment 4:** The lines connecting the PFP facility to the 241-Z Tank System are double contained. The proposed milestones do allow for the continued use of the transfer lines to tank farms until June 30, 2005. The compliance actions for these transfer lines are covered in Tri-Party Agreement Milestone, M-48, "Complete Tank Integrity Assessment Activities for the Hanford's Double-Shell Tank System."

## **2. Fluor Hanford Environment and Regulations, submitted by Ron Gurske**

**Comment 1:** *Draft Milestone: 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...."

Fluor Hanford (FH) is not seeking a change to the proposed language but is seeking clarification of the intent of this requirement in the response to comment package. Specifically, FH recognizes that this milestone would require submittal of a certified interim status closure plan, while other interim status closure plans incorporated into the Hanford Facility RCRA Permit have not required certification (Reference: Hanford Facility RCRA Permit, Attachment 33, Chapter 12). FH would like DOE and Ecology to acknowledge that the certification requirement in draft milestone M-83-30 is based on the special circumstances at PFP and is not intended to change the established protocols currently used for incorporation of interim status closure plans into the Hanford Facility RCRA Permit.

**Responses to Comment 1:**

**U.S. Environmental Protection Agency (EPA)/Washington State Department of Ecology (Ecology) Response:** EPA and Ecology are clarifying that, consistent with Tri-Party Agreement Section 5.3, all treatment storage and disposal (TSD) units shall be closed pursuant to the authorized State Dangerous Waste Program in accordance with *Washington Administrative Code (WAC) 173-303-610*. Certification requirements associated with this authority are those related to permit modification procedures, specifically those at *WAC 173-303-810(12)* and (13). Therefore, the intent of the Tri-Party Agreement, the site-wide permit, and the milestone language in question is to incorporate all closure plans for units not closed by decontamination or removal prior to permit issuance into the permit through the permit modification process. To the extent that previous closure plans incorporated into the site-wide permit subsequent to the permit's effective date were not required to be certified, such actions may reflect an oversight, not an alternate regulatory model for approving closure plans at permitted dangerous waste management facilities.

**DOE Response:** The Agreement In Principle and the scope of the Tentative Agreement between the Tri-Party Agencies was limited to the PFP. During the course of PFP negotiations, the Agencies discussed and agreed to the scope of "certification" as applied at PFP.

**3. Nez Perce Tribe, submitted by Patrick Sabotta**

**Comment 1:** In order to reflect consideration of tribal input on values in establishing the end point criteria, as stated in paragraph three of Description/Justification of change for M-83-20, consultation opportunities for the Tribes with the Tri-Party agencies must at some point occur. In addition, all other primary documents submitted to Ecology per these milestones (for example, the PFP Legacy PU Holdup Removal Plan) should be sent to ERWM for review in order to ensure an informed consultation process.

**Response to Comment 1:** The Tri-Party Agencies will provide you with documents as stated in the Tri-Party Agreement and the Community Relations Plan. The Agencies will consider your comments in the drafting of final documents and will continue to consult with the Tribes and incorporate your interests, as appropriate. Although the PFP Legacy Plutonium Holdup Removal Plan is not a primary document, it will be provided to you as requested.

#### **4. Comment submitted by Judy Pigott Swenson**

**Comment 1:** I definitely think that the additions to the clean up plans are good & wise. For them to be scheduled as soon as they can be accomplished in a thorough fashion is important too. Thanks for reading this.

**Response to Comment:** The Tri-Party Agencies appreciate your time and effort to review the proposed changes, and your positive feedback on what is being proposed.

#### **5. Comment submitted by Alton Haymaker**

**Comment 1:** I see no need to 'tear down' ex(h)isting (sic) facilities.

**Response to Comment 1:** The removal of those portions of the PFP facility above grade to "slab-on-grade" (the foundation slab) is the plan based on current information, but is not the final decision. The change package has a milestone that requires DOE to develop an Endpoint Criteria Document (Tri-Party Agreement Milestone M-83-20), and a milestone to evaluate various options of what to do with the facilities through an analysis called an Engineering Evaluation/Cost Analysis (Milestone M-83-22). This analysis will evaluate a number of options including removing the structures or leaving the structures in place. The findings from this analysis, and the resulting decision document, will determine what will happen to the facilities.

To take PFP to a safe and stable "slab-on-grade" state is anticipated to involve the following:

- **Cleanout of plutonium left in equipment from past processing activities**
- **Removal of residual chemical and plutonium holdup**
- **Removal and disposal of process and nonprocess equipment within buildings and structures**
- **Decontamination**
- **Demolition of all above grade structures and disposal of debris.**

Following demolition of the PFP structures, the PFP site would be stabilized to assure below-grade equipment and waste sites are in a safe, environmentally protective condition for low-cost surveillance and maintenance pending final remediation. Currently, contamination in the PFP structures (above grade) poses significant risks. By removing these structures, DOE will eliminate costs associated with long-term surveillance and maintenance of these facilities, and reduce risk to workers and the environment.

#### **6. Comment submitted by Don Meyers**

The comments I have on the PFP Cleanup Schedule are based on my reading the Notice for Public Comment in the Tri City Herald, and on my past several years' interest/comments on the overall Hanford Cleanup effort. The Public's input was requested "on setting schedules for

eliminating hazards and reducing risks at the PFP." My comments are relative to the three bulleted Cleanup Actions listed on that Notice, and are as follows:

**Comment 1:** Agree for high risk PU/TRU waste -- but for insignificant amounts of PU/TRU and any other waste, dry out and leave/dispose of in-place within secured/covered PFP.

**Comment 2:** Agree but not all PU/TRU - only significant amounts that are truly too hazardous for dried, in-place disposal per the following 3rd bullet comment.

**Response to Comments 1 and 2:** The first and second bullets in the Notice for Public Comment referenced the repackaging of residues for shipment to the Hanford Site Central Waste Complex and legacy holdup, respectively. An analysis was completed in the *Plutonium Finishing Plant Stabilization Final Environmental Impact Statement (DOE/EIS-0244-F)* and a decision was reached in the Record of Decision (*Federal Register*, Volume 61, No. 133, 36352-36359), that the residues would be repackaged as transuranic (TRU) waste and shipped to the Central Waste Complex. Ultimately, the residues will be shipped to the Waste Isolation Pilot Plant in New Mexico for disposal. The cleanout of plutonium left in equipment from past-processing activities (i.e., legacy holdup) will result in significant quantities of plutonium that need to be managed as TRU waste or special nuclear material.

**Comment 3:** Cleanup only truly hazardous PU/TRU waste, leave buildings intact to maximum extent possible, and fill with other dry waste like contaminated soil, equipment and materials. Seal/cover the partial PFP structure for in-place disposal of these wastes, and fence-in as a Monument site within the "Hanford Nuclear National Park". That National Park is proposed below in my "Alternate Approach for Hanford Cleanup," which would save considerable time and money with minimum risk to out water, public and the environment.

**Response to Comment 3:** This bullet on the Notice for Public Comment referred to the dismantlement of buildings at PFP. Removal of above-grade portions of the PFP facility to "slab-on-grade" reflects the current plan based on knowledge to date, but is not the final decision. The change package contains a milestone that requires DOE to develop an Endpoint Criteria Document (Tri-Party Agreement Milestone M-83-20), and a milestone to evaluate various options through an analysis called an Engineering Evaluation/Cost Analysis (Milestone M-83-22). This analysis will evaluate removing the structures and leaving the structures in place. The results of this analysis, and the resulting decision document, will determine the path forward for PFP.

Reaching this safe and stable "slab-on-grade" endpoint is anticipated to involve the following:

- Cleanout of plutonium left in equipment from past processing activities
- Removal of residual chemical and plutonium holdup
- Removal and disposition of process and non-process equipment within buildings and structures
- Decontamination
- Demolition of all above-grade structures and disposal of debris.

Following demolition of the PFP structures, the PFP site will be stabilized to assure below-grade equipment and waste sites are in a safe, environmentally protective condition for low-cost surveillance and maintenance pending final remediation. Currently, the contamination in the above-grade portions of the PFP structures poses significant risks. By removing these structures, DOE will reduce costs associated with long-term surveillance and maintenance of these facilities, as well as reduce risk to workers and the environment.

**Comment 4:** I have provided this Alternate Approach for Hanford Cleanup as part of my comments.

**D Meyers' Summary of Alternate Approach Action for Hanford Cleanup**

Updated 2/12/01

For about 14 Years now, ever since I worked for Tank Waste Retrieval I have expressed concern that cleanup of Hanford was expected to **return the site to its original state.** Based on my concern for:

- that approach and as being "altered along the way";
- countless delays in the Hanford Cleanup efforts over those years;
- the dependency of **timely river protection being "muddled"** by Vit Plant Development; and
- growing risks to our Columbia River and Public Water Supplies as time goes on,

I had to openly express those concerns as they have grown more intense. Over the past four years now, I have suggested in writing an ALTERNATE APPROACH FOR HANFORD CLEANUP to DOE-ROO, DOE-ORP, Wash St. Dept of Ecology, Governor Locke, Congressman Hastings, and U.S. Energy Secretary Richardson all with very little response and consideration given specifically to my Alternate Approach. Recently I received acknowledgement of my comments/suggestions by Jesse Roberson for DOE Secretary Abraham.

**THE END ACTION NEEDED RIGHT NOW IS THAT DOE PREPARE SCOPE, SCHEDULE, COST AND RISK INFORMATION FOR THIS ALTERNATE APPROACH, AND FORM INTO A PROPOSAL -- THEN MAKE PUBLIC AND HAVE ALL STAKEHOLDERS READ AND STRONGLY CONSIDER THE RISK, TIME AND COST ADVANTAGES OVER THE CURRENT CLEANUP PROGRESS AND PROBLEMS!!**

**My Alternate Approach is summarized as follows:**

- A. Concentrate cleanup effort and funding completely on the **River Protection Part of Hanford Cleanup. Do it RIGHT NOW!** -- at considerably lower total cost, elapsed time, and risk to the public and environment. Could probably complete for only **\$5 to 10 BILLION and in 5 to 10 YEARS!!** --- Let development of the Vit Plant be a parallel effort -- **Vit problems must not delay River Protection part of Hanford Cleanup!!**
- B. Ensure all Radioactive Waste is DRIED UP.
  1. Forget about total cleanout of tank waste -- remove liquid and leave solids.

2. Stir tank liquid/sludge waste into slurry in a safe manner using proven, standard, existing equipment/procedures.
  3. Pump tank slurry dryout remaining sludge/mud and leave in tank.
  4. Remove fissile components/high level radiation items from old process buildings and basins and transfer into surface fuel storage/disposal using safe, reliable and proven transfer/handling methods.
  5. Stir, transfer and process basin liquid/sludge, **in proven manner** similar to tank waste in (2) above.
  6. Dry out basin sludge/mud/trash items and leave in basin -- cover to confine contamination.
  7. Remove liquid waste from cribs/other holding areas in manner similar to tanks/basins.
  8. Dispose of Hanford Site contaminated structural and equipment items by placing in dried-out waste tanks, basins and old process buildings (canyons, reactors), while filling voids with contaminated soil, etc.
- C. Permanently cover/enclose the filled tanks, basins and buildings so rainwater can't contact contamination and leach to the groundwater or Columbia River.
- D. **Install security fences** around permanent waste area/building sites and declare each a **FEDERAL MONUMENT** (like B-Reactor Museum).
- E. This "Hanford Nuclear Site" Manmade National Park would contain clean public roads and mostly usable lands, with Federal Monuments/Museums scattered around -- **each fenced for No Trespassing!**
- F. Each fenced site would have Tourist actuated audio stations providing description and history of that particular site -- all sites combined would tell the Hanford Story!!
- G. Ensure that in (the) future, **if any** existing radioactive contamination gets into the groundwater and Columbia River, that **it proceeds only at diminishing and acceptable rates.**

Using mostly existing proven equipment, facilities and processes, this "River Protection Cleanup" could be **completed expeditiously at minimal cost!** The "finally developed" waste glassification facilities can be used for years to finish the remaining Hanford non-River Protection cleanup efforts. There will lots of future work and economical support for our locality as this plant also processes waste for other U.S. regional nuclear cleanup waste. **Hanford will again be a leader in the Nuclear Industry, with the experience to help develop cleanup approaches at other Nuclear Waste Sites!!**

Thank you for consideration of my comments, realizing they apply to PFP, as well as to the overall cleanup of Hanford.

**Response Comment 4:** Thank you for sharing your approach to cleanup. DOE has prepared the *Performance Management Plan for the Accelerated Cleanup of the Hanford Site* (DOE/RL-2002-47, Rev. D). This plan contains several strategic initiatives to accelerate cleanup at the Hanford Site. One initiative focuses on acceleration of cleanup on the Central Plateau. This involves developing a plan to optimize the sequence of waste site and facility cleanup, infrastructure alignment, and tank farm closures. The plan will prioritize activities to focus first on those areas that pose the highest potential threat to human health or the environment (including the groundwater) and will look for

**opportunities to increase the efficiency through logically grouping cleanup sites. Additionally, this initiative will demonstrate the benefits of using "regional" cleanups.**

## **7. Question submitted by Nancy Kroening**

**Question 1:** I'm still trying to get a picture of how the concrete will work. First there was no mention of taking nuclear materials out of vats before putting concrete in. Then I read in the NRDC bulletin that the liquids will be pumped and then the sludge/goop at the bottom will be covered in concrete. Is this the same project you are working on?

**Response to Question 1:** A DOE Richland Operations Office staff member responded to Ms. Kroening by e-mail on July 8, 2002, indicating there were two draft documents – one document was the draft Change Request for the Plutonium Finishing Plant and the other was related to the tank waste program. Ms. Kroening responded saying she probably was looking at the draft change package for tank waste, and that she would call at some point. No call was received.

## **8. Other Changes to the Proposed TPA Change Package:**

The Agencies found an error in the wording for Milestones M-83-40, M-83-41, and M-83-42. The word "dismantlement" needs to be removed from the sentence, "DOE deactivation, decontamination and dismantlement activities may proceed in advance of CERCLA decision documents in accordance with Section 8 of the HFFACO."

The words "mixed waste" will be added to the title of Milestone M-83-13 for clarification. The title of the milestone now reads, "Complete repackaging of PFP mixed waste residues and shipment to Central Waste Complex."

In Milestone M-83-13, the reference to the "Implementation Plan for Defense Nuclear Facilities Safety Board Recommendation 2000-1 dated January 19, 2001, as amended..." will be updated to reflect the current revision of July 22, 2002.

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<b>Change Number</b> M-83-01-03	<b>Federal Facility Agreement and Consent Order</b> <b>Change Control Form</b> Do not use blue ink. Type or print using black ink.	<b>Date</b> 9/26/2002
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<b>Originator</b> L. Romine	<b>Phone</b> 376-4747
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**Class of Change**

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)

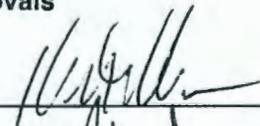
**Impact of Change**

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	10/18/02 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved
 EPA	10/29/02 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved
 Ecology	10-21 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> 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.

<u>Milestone</u>	<u>Description</u>	<u>Due Date</u>
M-83-00	<p>Complete stabilization of process areas, and other PFP cleanout actions resulting from the EIS ROD, within PFP.</p> <p>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.</p>	TBD
M-83-03	<p>Complete Plutonium Finishing Plant transition phase negotiations.</p> <p>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.</p>	Suspended
M-83-08	<p>Complete all requirements necessary to ship all Rocky Flats ash mixed waste covered by this change package (M-83-00-01) to WIPP.</p> <p>The TBD date (12/31/2049) will be determined during negotiations for the transition of the PFP facility to begin before June 1, 2001.</p>	TBD
M-83-11	<p>SS&amp;C Packaging</p> <p>Complete repackaging and shipment of SS&amp;C mixed waste currently stored in PFP to the Central Waste Complex for storage.</p>	1/30/04
M-83-00A	<p><b>COMPLETE PFP FACILITY TRANSITION AND SELECTED DISPOSITION ACTIVITIES</b></p> <p>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&amp;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.</p> <p><b>Description/Justification of Change (continued) –M-83-00A:</b></p> <p>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&amp;M phase of decommissioning.</p> <p>The Parties recognize that additional work needs to be done to support final deactivation and dismantlement decisions for PFP prior to entering the S&amp;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).</p> <p>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.</p> <p>The intent of this Major Milestone is to capture the work of PFP Facility Transition and selected</p>	September 30, 2016

<u>Milestone</u>	<u>Description</u>	<u>Due Date</u>
	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.	
<b>TPA Section 8 Plans and Documents</b>		
M-83-20	<p><b>SUBMIT FACILITY TRANSITION END POINT CRITERIA DOCUMENT AS A PRIMARY DOCUMENT TO ECOLOGY PURSUANT TO AGREEMENT ACTION PLAN SECTION 8.5.3</b></p> <p>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.</p> <p><b>Description/Justification of Change (continued) for M-83-20:</b></p> <p>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:</p> <ol style="list-style-type: none"> <li>1. Define S&amp;M requirements necessary prior to final disposition,</li> <li>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.</li> </ol> <p>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&amp;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&amp;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.</p> <p>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&amp;M phase, but that existing operational and characterization requirements are sufficient to protect human health and the environment.</p>	September 30, 2003

<u>Milestone</u>	<u>Description</u>	<u>Due Date</u>
M-83-21	<p><b>SUBMIT TO THE WASHINGTON STATE DEPARTMENT OF ECOLOGY A PFP RESIDUAL CHEMICAL HAZARDS ASSESSMENT AS A PRIMARY DOCUMENT</b></p> <p>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.</p> <p><b>Description/Justification of Change (continued) – for M-83-21:</b></p> <p>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.</p> <p>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.</p> <p>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.</p>	December 31, 2002
M-83-22	<p><b>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</b></p> <p>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.</p> <p>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.</p> <p><b>Description/Justification of Change (continued) – for M-83-22:</b></p> <p>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.</p> <p>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.</p> <p>Action memoranda under this milestone may reflect coordination of this work with the 241-Z Closure Plan activities required by milestone M-83-30.</p>	September 30, 2008

<u>Milestone</u>	<u>Description</u>	<u>Due Date</u>
M-83-23	<p><b>COMPLETE NEGOTIATIONS AS NEEDED FOR REVISING MILESTONES CONSISTENT WITH FINAL ACTION MEMORANDA FOR DECOMMISSIONING OF PFP</b></p> <p>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.</p> <p>This milestone is complete if negotiations are completed by the indicated date or if Ecology determines that negotiations are not required.</p>	March 31, 2009
M-83-24	<p><b>SUBMIT A SURVEILLANCE AND MAINTENANCE (S&amp;M) PLAN AS A PRIMARY DOCUMENT TO ECOLOGY PURSUANT TO AGREEMENT SECTION 8.5.4</b></p> <p>A S&amp;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&amp;M plan will describe those activities that will occur during the S&amp;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.</p>	June 30, 2012
MX-83-12-T01	<p><b>SUBMIT PFP LEGACY PU HOLDUP REMOVAL PLAN TO ECOLOGY</b></p> <p>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. <u>Note: Inventory information may be classified and/or restricted from Public Release.</u> Additional engineering analysis and non-destructive assay may be used to update older data and/or to more precisely locate concentrations of holdup.</p> <p><b>Description/Justification of Change (continued) - MX-83-12-T01:</b></p> <p>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.</p> <p>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.</p> <p>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.</p>	December 31, 2003
M-83-13	<p><b>COMPLETE REPACKAGING OF PFP MIXED WASTE RESIDUES AND SHIPMENT TO CENTRAL WASTE COMPLEX</b></p> <p>This milestone will be complete when residues identified in the Implementation Plan for Defense Nuclear Facilities Safety Board Recommendation 2000-1 dated July 22, 2002, 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.</p> <p>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</p>	April 30, 2004

<u>Milestone</u>	<u>Description</u>	<u>Due Date</u>
	<p>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.</p> <p>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.</p> <p><b>Description/Justification of Change (continued) – M-83-13</b></p> <p>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).</p> <p>Residue types include Sand, Slag &amp; Crucible, Group 2 Alloys, Oxides and Mixed Oxides, Compounds, Combustibles, and Miscellaneous Residues.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	
M-83-14	<p><b>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</b></p> <p>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.</p> <p><b>Description/Justification of Change (continued) - M-82-14:</b></p> <p>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</p>	September 30, 2006

<u>Milestone</u>	<u>Description</u>	<u>Due Date</u>
	<p>and dismantling activities to be conducted more efficiently and at lower risk to facility workers.</p> <p>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.</p>	
<b>TSDF Disposition</b>		
M-83-30	<p><b>SUBMIT TO ECOLOGY A CLOSURE PLAN AS A PRIMARY DOCUMENT FOR THE 241-Z WASTE TREATMENT FACILITY (TSD UNIT) AND GLOVEBOX HA-20MB</b></p> <p>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.</p> <p><b>Description/Justification of Change (continued) – M-83-30</b></p> <p>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.</p> <p>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.</p>	July 31, 2003
M-83-31	<p><b>DISCONTINUE WASTE DISCHARGES FROM THE 241-Z TANKS TO TANK FARMS VIA EXISTING LINES</b></p> <p>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.)</p> <p><b>Description/Justification of Change (continued) – M-83-31:</b></p> <p>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.</p> <p>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.</p>	June 30, 2005
M-83-32	<p><b>COMPLETE CLOSURE OF THE PFP 241-Z TSD UNIT</b></p> <p>Complete those activities required by the 241-Z Treatment and Storage Unit's RCRA closure plan.</p> <p><b>Description/Justification of Change (continued) – M-83-32:</b></p> <p>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.</p>	September 30, 2011

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