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

APR 04 2001

01-RCA-240

Mr. Michael A. Wilson, Program Manager  
Nuclear Waste Program  
State of Washington  
Department of Ecology  
P.O. Box 47600  
Olympia, Washington 98504

RECEIVED  
APR 17 2001

EDMC

Dear Mr. Wilson:

PLUTONIUM FINISHING PLANT (PFP) HANFORD FEDERAL FACILITY AGREEMENT  
AND CONSENT ORDER (TRI-PARTY AGREEMENT) MILESTONE M-83-09 HANFORD  
ASH REPACKAGING – COMPLETION OF DISPUTE PROCESS

Enclosed is the signed Tri-Party Agreement Change Request M-83-01-01A for repackaging of Hanford Ash at PFP. This change request establishes Tri-Party Agreement Milestone M-83-09 for completion of the repackaging of Hanford Ash at the PFP facility. Ecology's approval of this change request will close out the Tri-Party Agreement dispute process for M-83-01-01 initiated on March 14, 2001. If you have any questions, please contact Jon Yerxa on (509) 376-9628.

Sincerely,

Clifford E. Clark, Acting Program Manager  
Office of Regulatory Liaison

RCA:JKY

cc: See page 2

<b>Change Number</b> M-83-01-01A	<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> 4/3/2001
<b>Originator</b> Larry Romine	<b>Phone</b> 376-4747	
<b>Class of Change</b> <input type="checkbox"/> I - Signatories <input checked="" type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager		
<b>Change Title</b> Establish one new PFP interim milestone for the disposition of Hanford Ash (M-83-09).		
<b>Description/Justification of Change</b> This change request deals only with Hanford Ash that is currently stored at the Plutonium Finishing Plant (PFP). and the Hanford Ash has been designated as a regulated mixed waste. This change request fulfills the commitment made in the Impact of Change documented in Change Request M-83-00-01. That Change Request stated "The parties agree to begin negotiations for the disposition of Hanford Ash mixed waste currently located at PFP by October 31, 2000. A change package for the disposition of that waste stream will be required by April 1, 2001." A meeting was held on October 25, 2000, to begin negotiations meeting the October 31, 2000, commitment.  Hanford Ash mixed waste at PFP will be managed in accordance with WAC 173-303-400, unless otherwise noted in Section 1.		
<b>Impact of Change</b> Approval of this change request establishes a new interim milestone governing the disposition of the Hanford Ash mixed waste located at PFP. On approval, Hanford Site planning and budget development documents (e.g., Multi Year Work Plans, Site Wide Systems Engineering Control Documents, and Project Management Plans) will be modified as required. This change package fulfills the requirement set forth in Change Package M-83-00-01 to provide a change package for Hanford Ash by April 1, 2001. In addition, the parties will begin negotiations for the transition of the entire PFP facility beginning June 1, 2001.		
<b>Affected Documents</b> The Hanford Federal Facility Agreement and Consent Order, as amended, DOE's Annual Land Disposal Restrictions Report, and Hanford Site internal planning and budget documents (e.g., Agreement Action Plan, Appendix D, DOE and DOE contractor Baseline Change control documents, Multi Year Work Plans, Sitewide Systems Engineering Control Documents, Project Management Plans, and the Hanford Site Integrated Priority List).		
<b>Approvals</b>  <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;"> <u>W. Wade Ballard</u>  DOE </div> <div style="width: 20%; text-align: center;"> <u>4/4/01</u>  Date </div> <div style="width: 40%; text-align: center;"> <input checked="" type="checkbox"/> Approved    <input type="checkbox"/> Disapproved </div> </div> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;"> <u>N/A</u>  EPA </div> <div style="width: 20%; text-align: center;"> _____  Date </div> <div style="width: 40%; text-align: center;"> <input type="checkbox"/> Approved    <input type="checkbox"/> Disapproved </div> </div> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;"> _____  Ecology </div> <div style="width: 20%; text-align: center;"> _____  Date </div> <div style="width: 40%; text-align: center;"> <input type="checkbox"/> Approved    <input type="checkbox"/> Disapproved </div> </div>		

## Description of Locations Covered by this Change Request.

### 1. Scope

This Change Request covers regulated dangerous waste activities required to repack the Hanford Ash mixed waste currently stored at PFP, and the subsequent storage and transfer of that Ash to the Central Waste Complex (CWC). These activities will be conducted in PFP Bldg. 234-5Z. Repackaging and storage activities will be conducted in Rooms 170 and 192D. Glovebox HC-46F, located in room 170, will be used for repackaging the Hanford Ash.

Note: The Pipe and Go packaging storage areas in Rooms 170 and 192D may also be used during this timeframe for the packaging and storage of non-mixed waste as necessary to support eventual disposal at the Waste Isolation Pilot Plant (WIPP).

The management of Hanford Ash mixed waste will be carried out in compliance with the applicable and substantive requirements of Washington Administrative Code (WAC) 173-303-400, except as noted below:

- Hazardous waste labeling as described in Section 5 and the subsequent storage activity that will conform to the limits established in Section 6 identified in this change request.
- Labeling and inspection of waste as it is currently stored is described in Section 5 below.

### 2. Identification of Waste

The Hanford Ash is a product of incineration of combustible materials generated in the production and processing of plutonium at Hanford. Process knowledge was used to designate Hanford Ash as mixed waste, to be disposed of at the WIPP.

Hanford Ash mixed waste is contained in crimp-sealed cans inside 50-pound lard cans currently being stored in the vaults at PFP. Hanford Ash mixed waste comprises approximately 600 kg of the total Pu-bearing residues stored at PFP.

Approximately ten of the small Hanford Ash mixed waste cans will be set aside in the PFP vaults to await verification sampling. The waste in the remaining cans (approximately 530 cans) will be repackaged into approximately 330 pipe overpack containers (POC) and transferred to CWC to await certification and transport to WIPP. (A POC is a container engineered to provide appropriate spacing of and protection for transuranic wastes stored and transported to WIPP. The POCs are vented to allow escape of hydrogen gas, and the lids are permanently closed at PFP to preclude intrusion). Standards are used for Non Destructive Assay (NDA) to establish the Pu content of the POCs for WIPP acceptance purposes.

### 3. Characterization and Sampling

Ecology was provided information that DOE believes supports designation of the Hanford Ash. Based on process knowledge DOE believes the Hanford Ash at PFP designates as a mixed waste and carries the following waste codes: Washington State corrosive (WSC2) and Toxicity Characteristic metals cadmium, chromium, lead and barium (D004, D006, D007 and D008). Ecology has concerns regarding the quality of the process knowledge used to designate the Hanford Ash. DOE agrees to negotiate an enforceable scope and schedule for resolving Hanford Ash waste designation issues in conjunction with PFP transition negotiations which begin June 1, 2001. Those negotiations will determine the need and/or extent of sampling and analysis required for accurate designation. Sampling and analysis will be performed to meet WIPP acceptance criteria.

#### 4. Sample Selection

Prior to waste transfer to WIPP, DOE is required to implement applicable requirements of the WIPP Waste Analysis Plan, as specified in the WIPP RCRA permit. The ten (10) (approximately) cans of Hanford Ash mixed waste will be identified through the use of a random number generator. The set aside cans will be set aside for WIPP verification sampling and analysis. A letter describing the requirement for selection of these cans to be set aside for WIPP verification analyses will be placed in project files and provided to Ecology prior to beginning the work.

#### 5. Container Management

Hanford Ash mixed waste containers will be obtained from PFP vaults and moved to the HC-46F Glovebox in Room 170 of the 234-5Z Building. Each Hanford Ash can will be put into HC-46F. In the HC-46F Glovebox each can will be opened, contents examined and blended with clean silica. The blended waste will be packaged into slip-lid (billet) cans. The blended Hanford Ash mixed waste filled billet cans will be sealed out of the glovebox, safeguards labeled, and assayed via a Segmented Gamma Scanner. The assayed billet cans will be placed into 55-gallon drums (POCs), which will be appropriately labeled to meet dangerous waste regulatory requirements. An operations log will track each step of the process. The plutonium content of the POCs will be limited to less than 200 grams within the packaged materials. Approximately 330 POCs are expected to be generated. When transportation from Hanford is scheduled, the POCs will be packaged in TRUPACT-II containers for final transport to WIPP.

While Hanford Ash cans are stored in the vaults/vault-type rooms, they are labeled with a unique identification number, which is carefully tracked. Inspections of Hanford Ash cans in the vaults/vault-type rooms are made no less frequently than monthly due to ALARA concerns. The Hanford Ash containers are inspected to ensure they remain in good condition during storage until repackaging is accomplished. Aisle spacing is consistent with criticality safety requirements.

#### 6. Disposition of Waste (Interim and Final Locations)

POCs containing the blended Hanford Ash mixed waste will remain within 234-5Z, Room 170, until they are moved to Room 192D for storage while awaiting transfer to CWC. Preparation activities (i.e., staging and paperwork) for shipment of the POCs will be performed in room 192 and/or the loading dock. Ten POCs may be stored in Room 170. Approximately 80 POCs may be stored in Room 192D. Waste transferred to CWC will meet CWC's acceptance criteria and comply with applicable dangerous waste management requirements while awaiting certification and transfer to WIPP. Prior to waste transfer to WIPP, DOE is required to implement applicable requirements of the WIPP Waste Analysis Plan, as specified in the WIPP RCRA permit.

#### 7. Schedule

The schedule and deliverables for performing this work are described in the M-83-09 milestone below.

This change control form establishes the following interim milestone for the disposition of the Hanford Ash mixed waste.

<u>Interim</u>	<u>Description</u>	<u>Due Date</u>
M-83-09	Complete repackaging and shipment of all Hanford Ash mixed waste currently stored in PFP to the Central Waste Complex for storage. Repackaging and shipment of Hanford Ash mixed waste does not include those items identified as Non Destructive Assay (NDA) standards or set aside for WIPP verification sampling.	August 31, 2002

“Does not contain classified or unclassified controlled nuclear information”

APR 04 2001

Mr. Michael A. Wilson  
01-RCA-240

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cc: J. H. Richards, CTUIR  
R. Bond, Ecology  
L. Cusack, Ecology  
R. F. Stanley, Ecology  
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J. S. Hertzal, FHI  
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M. L. Blazek, Oregon Energy  
R. Jim, YN  
Administrative Record