OPERATING UNIT GROUP 16 PERMIT CONDITIONS

400 AREA WASTE MANAGEMENT UNIT
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UNIT DESCRIPTION

The 400 Area Waste Management Unit (WMU) is in the property protection area at the Fast Flux Test Facility (FFTF), in Hanford’s 400 Area. The 400 Area WMU consists of two container storage units:

- Fuel Storage Facility (FSF, Building 403). The FSF is a large steel-frame, metal-sided, high bay building. Its dimensions are 34 x 27 x 12 meters (112 x 90 x 40 feet). The container storage unit is on the ground-level floor. In it are two large steel boxes that store sodium-contaminated core component pots (CCPs). The Permittees do not plan to store more mixed waste than is currently stored in the facility; however, the FSF is physically capable of storing additional mixed waste. They will store any additional wastes at the 400 Area WMU in the Interim Storage Area, as authorized by Permit Condition III.16.B.

- Interim Storage Area, 4718 (ISA). The ISA consists of 156 x 247 meters (513 x 247 feet) totally fenced area with perimeter lighting. This area is for aboveground dry cask storage of spent fuel. A concrete pad in the ISA, which measures 27 x 37 meters (90 x 120 feet), was used for dry cask storage, but will not necessarily be used for mixed waste management. The rest of the ISA surface is gravel. The ISA is generally flat. However, it is graded to drain in accordance with the general drainage plan for the FFTF property protection area. Inside the ISA, there is also one building along the west fence line, which is open on one side. This building, Building 432A, is authorized for mixed waste management.

Addendum A shows the location of each storage unit. The only mixed waste stored in these two container storage units is debris (e.g., piping, equipment, and components) contaminated with elemental sodium, sodium hydroxide (D002), and sodium/potassium (NaK). This waste stream is designated as (D001, D003, and WSC2). The 400 Area WMU will not store, treat, or dispose of bulk metallic sodium, bulk sodium hydroxide, or bulk NaK.

LIST OF ADDENDA SPECIFIC TO OPERATING UNIT GROUP 16

Addendum A Part A Form, dated October 1, 2008
Addendum B Waste Analysis Plan
Addendum C Process Information
Addendum D Groundwater Monitoring (Reserved)
Addendum E Security
Addendum F Preparedness and Prevention
Addendum G Personnel Training
Addendum H Closure
Addendum I Inspection Plan
Addendum J Contingency Plan

DEFINITIONS

The term "CCP" or Core Component Pot means one of 109 cylindrical containers, each containing 3.75 gallons of un-reacted sodium totaling 405 gallons, currently stored as mixed waste in the FFTF Fuel Storage Facility. The CCPs were previously filled with sodium and used in the FFTF Interim Decay Storage Vessel to store spent FFTF Driver Fuel Assemblies under inert gas.
<table>
<thead>
<tr>
<th></th>
<th>ACRONYMS</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>CCP</td>
<td>Core Component Pot</td>
</tr>
<tr>
<td>2</td>
<td>FSF</td>
<td>Fuel Storage Facility</td>
</tr>
<tr>
<td>3</td>
<td>ISA</td>
<td>Interim Storage Area</td>
</tr>
<tr>
<td>4</td>
<td>PPA</td>
<td>Property Protected Area</td>
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<tr>
<td>5</td>
<td>WMU</td>
<td>Waste Management Unit</td>
</tr>
</tbody>
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Part III, Operating Unit Group 16.4
III.16.A COMPLIANCE WITH UNIT-SPECIFIC PERMIT CONDITIONS

The Permittees will comply with all conditions in this Chapter and its addenda with respect to dangerous waste management and dangerous waste management units in the 400 Area WMU, in addition to conditions in Permit Parts I and II.

III.16.B GENERAL WASTE MANAGEMENT

III.16.B.1 The Permittees are authorized to accept, according to the waste acceptance procedure documented in Addendum B, Section B.2, mixed debris generated from demolition and decommissioning of the Fast Flux Test Facility reactor system containing or contaminated with residual elemental sodium, sodium hydroxide, and NaK. The Permittees will store these wastes in the ISA.

III.16.B.2 The Permittees are authorized to store core component pots generated prior to the effective date of this permit in two large metal boxes in the 400 Area WMU, FSF.

III.16.B.3 The Permittees are authorized to store mixed waste in the ISA up to a maximum capacity of 19,000 gallons.

III.16.B.4 The Permittees will maintain the physical structure of dangerous waste management units in the 400 Area WMU as documented in the Unit Description above and Addendum C, Figures C.1 and C.2.

III.16.B.5 The Permittees will ensure that only wastes specified in Permit Condition III.16.B.1, are received by the ISA for storage, and that no co-mingling or cross-contamination of the waste stream specified in Permit Condition III.16.B.1 with any other waste stream may occur.

III.16.B.6 The Permittees will comply with the requirements of WAC 173-303-395(1)(a)-(c), incorporated by reference, for prevention of reaction of ignitable, reactive, or incompatible wastes.

III.16.B.7 The Permittees will comply with any schedule of compliance and any applicable associated work requirements included in the LDR report required by and enforceable under HFFACO Milestone M-26, for the treatment and/or acquisition of treatment capacity for and/or the continued storage of waste in the Operating Unit Group 16 fuel storage facility and interim storage area. Any such schedules and requirements are by this reference incorporated under the terms of Permit Condition I.A.4, and apply under this Permit as if they were fully set forth herein.

III.16.C WASTE ANALYSIS

III.16.C.1 The Permittees will have accurate and complete waste profiles for the waste streams identified in Permit Condition III.16.B.1. This waste profile will be signed and dated upon approval by the 400 Area WMU authorized representative. [WAC 173-303-380(1)(a)]

III.16.D RECORDKEEPING AND REPORTING

III.16.D.1 The Permittees will place the following into the Hanford Facility Operating Record, 400 Area WMU File required by Permit Condition II.I.2: [WAC 173-303-380]


III.16.D.1.b Waste profiles required by Permit Condition III.16.C.1

III.16.D.1.c Waste storage location and quantity of wastes managed at the ISA and FSF. This information will include the measured or calculated quantity of sodium or NaK in each
waste container or unique component managed in the FSF or the ISA. [WAC 173-303-380(1)(b)]

III.16.E SECURITY

III.16.E.1 The Permittees will implement and maintain the practices specific to the 400 Area WMU as described in Addendum E, Section E.1.1, Security [WAC 173-303-310(2)(a)]

III.16.F PREPAREDNESS AND PREVENTION

III.16.F.1 The Permittees will implement the practices specific to the 400 Area WMU as described in Addendum F, Preparedness and Prevention. [WAC 173-303-340]

III.16.G CONTINGENCY PLAN AND EMERGENCY RESPONSE

III.16.G.1 The Permittees will comply with Addendum J, Contingency Plan, in addition to the requirements of Permit Condition II.A when applicable. [WAC 173-303-350]

III.16.H INSPECTIONS

III.16.H.1 The Permittees will implement the practices specific to the 400 Area WMU as described in Addendum I, Inspection Plan, pursuant to the requirements of WAC 173-303-320, incorporated by reference.

III.16.I TRAINING PLAN

III.16.I.1 The Permittees will, in a written training plan, include training requirements specific to the 400 Area WMU as specified in Addendum G, Personnel Training, and as required by Permit Condition II.C. [WAC 173-303-330]

III.16.J OTHER GENERAL REQUIREMENTS

Reserved

III.16.K CLOSURE

III.16.K.1 The Permittees will implement the practices as described in Addendum H, Closure and condition II.J, when closing the 400 Area WMU Container Storage Units. [WAC 173-303-610(4)]

III.16.L POST CLOSURE

Reserved

III.16.M CRITICAL SYSTEMS

Reserved

III.16.N RESERVED

III.16.O CONTAINERS

III.16.O.1 The Permittees will implement the practices as described in Addendum C, Process Information, Section C.1.2 Container Management Practices, for the 400 Area WMU Container Storage Units. [WAC 173-303-630]
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