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**ADDENDUM F**  
**PREPAREDNESS & PREVENTION**

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**ADDENDUM F**  
**PREPAREDNESS & PREVENTION**

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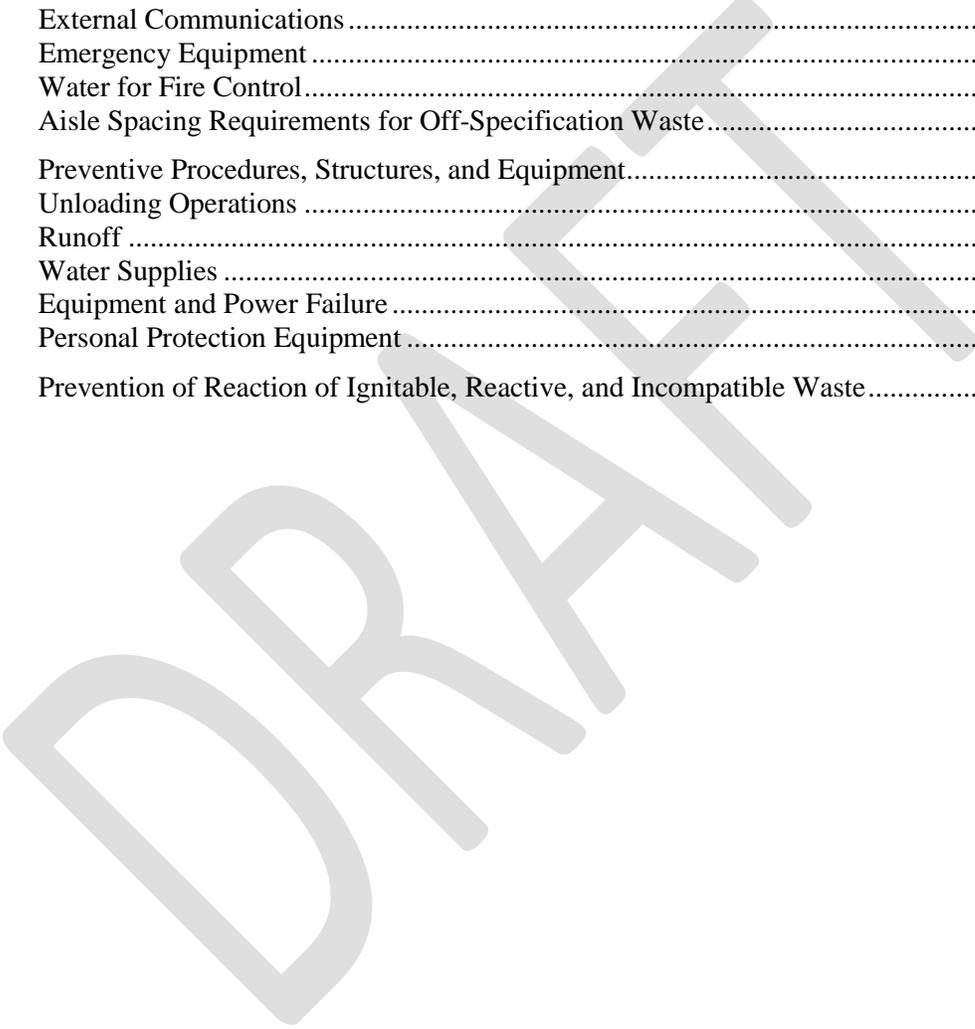
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1 **F PREPAREDNESS AND PREVENTION**

2 **F.1 Preparedness and Prevention Requirements**

3 Section F.1.1 describes the preparedness and prevention measures to be implemented during Pre-Active  
4 Life. Sections F.1.2 through F.1.7 describe the preparedness and prevention measures taken at the IDF  
5 during Active Life.

6 **F.1.1 Pre-Active Life Preparedness and Prevention**

7 During Pre-Active Life, the Permittees will comply with Permit Attachment 4, *Hanford Emergency*  
8 *Management Plan* (DOE/RL-94-02) as applicable for a dangerous waste management unit that does not  
9 contain dangerous waste. An emergency coordinator will be assigned to IDF who will manage and  
10 control all aspects of the initial facility response when an emergency occurs.

11 **F.1.2 Equipment Requirements**

12 The following sections describe the internal and external communications systems and the emergency  
13 equipment required.

14 **F.1.3 Internal Communication**

15 There is one building, MO-518, equipped to support communications. Immediate emergency instruction  
16 to personnel working at the IDF will be provided by cellular telephones.

17 **F.1.4 External Communications**

18 Personnel at the IDF will have voice communication or equivalent (e.g., hand signals) during work  
19 assignments to maintain external communications with shift supervisors. Supervision will contact the  
20 Hanford Facility emergency telephone number (911) (373-0911 for cellular telephones) if assistance is  
21 needed in the field.

22 **F.1.5 Emergency Equipment**

23 Emergency equipment will be available for use at the IDF. A list of equipment is included in the  
24 contingency plan (Addendum J.1, Pre-Active Life, and Addendum J.2, Active Life).

25 The Hanford Facility relies primarily on the Hanford Fire Department to control fires. Emergency  
26 equipment will not be located at IDF trenches. Portable fire extinguishers will be carried on IDF  
27 operations vehicles. Attachment 4, *Hanford Emergency Management Plan*, (DOE/RL-94-02) identifies  
28 the trained firefighting and emergency medical personnel and equipment.

29 **F.1.6 Water for Fire Control**

30 Hanford Fire Department trucks as described in Permit Attachment 4, *Hanford Emergency Management*  
31 *Plan*, (DOE/RL-94-02), and fire hydrants described in Addendum J.1 and Addendum J.2 supply water for  
32 fire control at the IDF.

33 **F.1.7 Aisle Spacing Requirements for Off-Specification Waste**

34 Aisle spacing during off-specification and cooling vitrified waste storage operations is sufficient to allow  
35 the movement of personnel and fire protection equipment in and around the containers. This aisle spacing  
36 meets the requirements of [WAC 173-303-340](#)(3). Inspection aisle space must be at least 76.2 centimeters.  
37 During off-specification storage operations, rows of containers are placed no more than two containers  
38 wide in accordance with [WAC 173-303-630](#)(5)(c). Aisle spacing requirements will be applied to  
39 transport vehicles but not to the waste within the transport vehicles.

40 **F.2 Preventive Procedures, Structures, and Equipment**

41 The following sections will apply during the Active Life for the IDF and describe preventive procedures,  
42 structures, and equipment.

### 1 **F.2.1 Unloading Operations**

2 Methods used to prevent release of waste during unloading operations will be employed as follows.

3 Waste will be inspected according to the receipt inspection criteria (Addendum B).

- 4 – If waste fails the inspection, it will be designated as an off-specification waste and could be
- 5 placed in the storage area or returned to the generator.

6 Containers and bulk waste will be handled by appropriate equipment (i.e., crane) during unloading.

7 Path from loading area to trench area will be clear of obstructions.

8 Spills will be managed as identified in Addendum J.2, Contingency Plan.

9 Containers and bulk waste will be staged at the waste unloading area no longer than necessary for  
10 placement into the landfill. Administrative procedures may prevent immediate unloading and backfilling  
11 of waste containers. Containers might be left in the transporters as needed to resolve the administrative  
12 procedure requirements or to support the operational schedule before containers are placed into the  
13 landfill. The transfer vehicle containing vitrified waste requiring cooling may be temporarily placed in  
14 the storage area prior to unloading for disposal.

### 15 **F.2.2 Runoff**

16 The waste in the IDF will be placed below the land surface; thus, the IDF is designed to prevent run-off of  
17 precipitation that might have come in contact with the waste. The land surface is relatively level, so  
18 trenches have only internal drainage. The minimal amounts of precipitation that accumulate are  
19 contained within the trench.

20 The IDF trench is designed to channel run-on liquid away from the trench. Precipitation that percolates to  
21 the bottom of the trench is captured in the leachate collection system and is managed as rainwater during  
22 Pre Active Life. During Active Life, these liquids will be managed as multi-source leachate waste.

### 23 **F.2.3 Water Supplies**

24 The design and operation of the IDF during Active Life is intended to minimize the generation of  
25 potentially contaminated leachate and to prevent leachate migration into groundwater resources in the  
26 local area. All activities performed during Active Life (Addendum C) or Pre-active Life is designed to  
27 protect local water supplies.

28 Activities that prevent contamination of water supplies or groundwater will include the following:

29 Placement of waste in lined trenches

- 30 – Run-on and run-off will be controlled
- 31 – Leak detection systems will be used
- 32 – Leachate will be collected and managed as waste
- 33 – Inspections will be performed

34 Placement of backfill will occur after a layer of waste has been placed in the trench.

### 35 **F.2.4 Equipment and Power Failure**

36 Electrical power is required for the landfill. Electricity supplies power to the sump pumps used to remove  
37 accumulated leachate from the primary and secondary liners. Electricity outages will be restored as soon  
38 as possible. Backup equipment will be acquired if necessary to provide electrical service. Failed  
39 equipment will be repaired or replaced as soon as possible.

### 40 **F.2.5 Personal Protection Equipment**

41 Personnel will be trained in the use of applicable personal protection equipment. The protective clothing  
42 required for Active Life will vary depending on the form and content of the waste.

1 **F.3 Prevention of Reaction of Ignitable, Reactive, and Incompatible Waste**

2 The waste acceptance criteria will prohibit the disposal of ignitable, reactive, and incompatible waste at  
3 the IDF. Waste acceptance criteria (Addendum B) will ensure that the required treatment has been  
4 performed before the waste is disposed in the IDF.

5 Waste stream compatibility (i.e., compatibility between individual waste streams and compatibility  
6 between waste streams and landfill design and construction parameters) will be assessed on a case-by-  
7 case basis. Criteria for assessing and determining compatibility will be identified in the waste acceptance  
8 criteria (Addendum B).

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