ADDENDUM F
PREPAREDNESS AND PREVENTION

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F.1 Preparedness and Prevention Requirements

The following sections document the preparedness and prevention measures taken at the Central Waste Complex (CWC) Operating Unit Group.

F.1.1. Equipment Requirements

The following sections describe the internal and external communications systems and the emergency equipment required that could be activated by the CWC Operating Unit Group Building Emergency Director (BED). Hanford Facility-wide equipment is identified in Permit Attachment 4, *Hanford Emergency Management Plan* (DOE/RL-94-02).

F.1.1.1 Internal Communications

The onsite communication system at the CWC Operating Unit Group includes a telephone located on a telephone pole at the southeast corner of the CWC Outside Storage Area E and two-way radios maintained by operations personnel. The telephone system provides internal and external communication. Telephones will also be available in the operations office at the south end of the CWC Operating Unit Group (the location of internal communication equipment and the primary staging area is identified in, Addendum J, Contingency Plan). Immediate emergency instruction to personnel working at the CWC Operating Unit Group will be provided by two-way radios.

F.1.1.2 External Communications

The CWC Operating Unit Group will be equipped with devices for summoning emergency assistance from the Hanford Fire Department and/or emergency response teams as necessary. External communication will be made via fire alarms, a telephone communication system, or two-way radios (hand-held and vehicle-mounted radios) as described in Permit Attachment 4, *Hanford Emergency Management Plan* (DOE/RL-94-02). A telephone communication system and two-way radios can be used to access a supervisor, who contacts the Hanford Site emergency network if assistance is needed. Permit Conditions II.A and III.6.G describe the requirements for the Contingency Plan and for communication equipment requirements.

F.1.1.3 Emergency Equipment

Emergency equipment will be available for use at the CWC Operating Unit Group as required by WAC 173-303-340(1). A list of equipment will be included in Contingency Plan as required by Permit Conditions II.A and III.6.G.

F.1.1.4 Water for Fire Control

The CWC Operating Unit Group has a potable water main installed for fire control. In the event that water pressure is lost, the Hanford Fire Department provides equipment as described in Permit Attachment 4, *Hanford Emergency Management Plan* (DOE/RL-94-02)

F.1.1.5 Aisle Space Requirement

Aisle spacing for the CWC Operating Unit Group structures is sufficient to allow the movement of personnel and fire protection equipment in and around the containers. This aisle spacing meets the requirements of the International Fire Code for the protection of personnel and the environment. The following will be the specific requirements for individual dangerous waste management units within the CWC.

- 2401-W, 2402-W, 2402-WB through 2402-WL, and 2403-WA through 2403-WD Waste Storage Buildings: Inspection aisle space will be 0.76 meter or greater. Separation

between oxidizers, combustibles, and other waste categories will be accomplished by means of dike, wall, berm, or other Ecology approved device.

- Flammable and Alkali Metal Waste Storage Modules: Inspection aisle space will be 0.76 meter or greater.
- Outdoor Storage Area(s) A-F: Inspection aisle space will be 0.76 meter or greater.

Rows of containers will be placed no more than two containers wide for each CWC dangerous waste management unit in accordance with WAC 173-303-630(5)(c). The containers will be loaded and unloaded through the rollup doors located at each storage building.

F.2 Preventive Procedures, Structures, and Equipment

The following sections describe preventive procedures, structures, and equipment.

F.2.1. Unloading Operations

In general, transport vehicles will be positioned near the receiving building or at the CWC Outside Storage Area E dangerous waste management unit in a manner that provides an unobstructed work area for a powered forklift to offload the containers. Qualified operators will ensure that the following inspections will be carried out before waste is unloaded at CWC Outside Storage Area E dangerous waste management unit

- Containers will be inspected for damage before being unloaded for storage.
- Waste is will not be unloaded without the approval of operations supervision during inclement weather.
- Path to storage area will be clear of obstructions.
- The truck will be placed so that container movement occurs over an appropriate waste unloading area.

The containers will be placed in the storage location as assigned on the associated waste storage documentation.

F.2.2. Run-Off

Addendum C, Process Information, contains information on run-off and run-on of liquid at the CWC Operating Unit Group.

F.2.3. Water Supplies

Water will be supplied from the Columbia River via the Hanford Site potable water system. All hose connections to the potable water line have a one-way check valve installed to prevent backflow. These check valves prevent contamination from entering the water supply lines from within the CWC Operating Unit Group.

The water supply system (potable and fire sprinkler supply) is routed from two supply lines. The fire supply system is addressed in Section F.1.1.4. The drinking water system was designed and is being operated to meet the State of Washington standards for potable drinking water systems.

F.2.4. Equipment and Power Failure

Loss of electrical power does not constitute an emergency situation. However, all alarms will be supplied with a battery backup system that automatically engages when there is a failure of the normal power supply. Therefore, the storage buildings will not be occupied during power outages without adequate alternate substitutes for those systems except for personnel providing a fire watch. Rechargeable battery-powered lighting units provide emergency illumination. Self-powered lights will be located near all exits.

As described in Section F.1.1.2, emergency communication equipment will be available to summon emergency assistance in the event of a power loss.

F.2.5. Personnel Protection Equipment

The Contingency Plan describes the requirements for information regarding required personnel protection equipment at the CWC Operating Unit Group as required by Permit Conditions II.A and III.6.G.

F.3 Prevention of Reaction of Ignitable, Reactive, and/or Incompatible Waste

The following section describes prevention of reaction of ignitable, reactive, and/or incompatible waste.

F.3.1. Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste

All waste, including reactive waste, will be stored in sealed, approved containers. The use of non-sparking tools will not be required except at the Flammable and Alkali Metal Waste Storage Modules.

The CWC Operating Unit Group will be not authorized to receive explosive, shock sensitive or pyrophoric waste. Nevertheless, should this type of waste be identified through the sorting or characterization process, the Hanford Fire Department will be notified. The management of this type of waste will be conducted under the direction of the Hanford Fire Department in addition to requirements of this Hanford Dangerous Waste Permit.

Wastes stored in pressurized gas cylinders will be stored in storage racks to ensure gas cylinders remain secured in an upright position.

The CWC Operating Unit Group buildings contain fire riser rooms heated by baseboard heaters with no ignition sources. Smoking will be prohibited within CWC Operating Unit Group. *NO SMOKING* signs are posted and are visible at 25 feet at each CWC dangerous waste management unit.

F.3.2. Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible Waste

Based on the waste characteristics identified by the onsite generating unit or offsite generator, specific packaging instructions will be provided by the CWC operating organization. Liquids will be stored in CWC until treatment is available. Incompatible waste will not be packaged within the same container.

The following general precautions will be taken at the CWC Operating Unit Group for handling ignitable or reactive waste and mixing of incompatible waste.

- No smoking will be allowed in the CWC Operating Unit Group.
- No open flames, sparking devices, cutting or welding, hot surfaces, or heat sparks will be allowed while ignitable or reactive waste is present, unless a hot work permit has been approved.
- Compatibility testing will be conducted before mixing any two wastes (refer to, Addendum C, Process Information for details).
- Incompatible waste will be segregated by dikes, walls, berms or other Ecology approved device. (Refer to Addendum B, Waste Analysis Plan).

- At least yearly, the areas where ignitable or reactive waste is stored shall be inspected in accordance with WAC 173-303-395(1)(d) by facility personnel in the presence of a professional person who is familiar with the International Fire Code or in the presence of the Hanford Fire Marshal.
- Containers with ignitable or reactive waste will be stored in covered dangerous waste management units.

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