

BUILDING EMERGENCY PLAN FOR WASTE ENCAPSULATION STORAGE FACILITY

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy
under Contract 89303320DEM000030



**P.O. Box 1464
Richland, Washington 99352**

BUILDING EMERGENCY PLAN FOR WASTE ENCAPSULATION STORAGE FACILITY

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J. A. Lopez

Central Plateau Cleanup Company LLC (CPCC)

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 **CPCC**
Central Plateau
Cleanup Company
P.O. Box 1464
Richland, Washington 99352

APPROVED

By Julia Raymer at 11:23 am, Aug 23, 2022

Release Approval

Date

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FUELS FACILITY

Document: CPCC-EM-68008

BUILDING EMERGENCY PLAN FOR
WASTE ENCAPSULATION STORAGE FACILITY

Revision 0
Page: 1 of 46
Effective Date: 08/18/2022

This plan covers the following buildings and structures: 211BA, 215B, 225B, 225BA, 225BB, 225BC, 225BD, 225BE, 225BF, 225BG, 226B, 272B, 272BA, 272BB, 272BD, 282B, 296B10, MO134, MO135, MO232, MO312, MO2237, MO2266, MO2267, MO400, MO408, MO410, and MO199.

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Screened By: LORI COVEY (Affiliate)
Digitally signed by LORI COVEY (Affiliate)
Date: 2022.08.08 06:14:43 -07'00'

Approved:

Mike Hardisty  8-18-22
Fuels Facility Management Date

Horn, Sarah R Digitally signed by Horn, Sarah R
Date: 2022.08.17 09:46:33 -07'00'
Environmental Organization Date

Stewart, David J Digitally signed by Stewart, David J
Date: 2022.08.11 15:45:53 -07'00'
Emergency Preparedness Management Date

This procedure provides instruction and guidance intended to ensure compliance with applicable environmental requirements. Environmental Protection must review proposed changes to any portion of this procedure. Bolded sections are mandated content to be included verbatim in order to maintain compliance with the RCRA permit.

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1.0 GENERAL INFORMATION

The Waste Encapsulation and Storage Facility (WESF) is located on the Hanford Site, a 560-square-mile (1,450-square kilometer) U.S. Department of Energy (DOE), Richland Operations Office (RL) site in southeastern Washington State. The WESF is located in the east portion of the 200 Area near the center of the Hanford Site.

This plan contains a description of facility-specific emergency planning and response and is used in conjunction with portions of the DOE/RL-94-02, *Hanford Emergency Management Plan*, to meet contingency plan requirements of Washington Administrative Code (WAC) 173-303. Pursuant to WAC 173-303 Dangerous Waste Regulations, DOE-RL as the owner or operator of the Hanford Facility is required to have a “contingency plan” for use in emergencies or sudden or non-sudden releases that threaten human health and the environment. Additionally, WAC 173-303-201(9) (for dangerous waste generator locations) and WAC 173-303-350(2) (for treatment, storage, and disposal [TSD] facilities), allow the owner or operator to use documentation other than a “contingency plan” so long as the other documentation incorporates dangerous waste management provisions sufficient to comply with the requirements of WAC 173-303-201, WAC 173-303-350, and WAC 173-303-360. This approach is used at Hanford. There is no specific document titled “Contingency Plan” for the Hanford Facility. Rather, specific portions of this plan combined with portions of contractor facility/activity-specific documentation (e.g., emergency plans/procedures) are maintained to meet the contingency plan requirements of WAC 173-303.

1.1 Facility Name

U.S. Department of Energy
Hanford Site
Waste Encapsulation and Storage Facility (WESF)

1.2 Facility Location

Benton County, Washington within the 200 East Area.

Buildings/facilities covered by this plan are:

211BA WESF Storage Building
215B Storage Shed
225B Waste Encapsulation and Storage Facility
225BA K1 Filter Building
225BB K3 Filter Pit (grouted)
225BC Compressor Building
225BD Waste Monitoring and Sample Building
225BE Maintenance Building

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- 225BF Air Dryer (225BC Annex)
- 225BG Closed Loop Cooling System Building
- 226B Dangerous waste central accumulation area
- 272B Operations/Storage Building
- 272BA Maintenance and Material Storage Building
- 272BB Tool Crib
- 272BD Material Storage Building
- 282B Emergency Water Pump House (South)
- 296B10 WESF Stack
- MO134 Office Areas
- MO135 Bathrooms
- MO232 Office Areas, Training Trailer
- MO312 Laundry Storage
- MO2237 Mask Station
- MO400 Office Areas
- MO408 Office Areas
- MO410 Office Areas
- MO199 Office Areas
- MO2266 Office Areas
- MO2267 Office Areas

1.3 Owner

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

Manager

Central Plateau Cleanup Company
 P.O. Box 1464
 Richland, Washington 99352-1600

1.4 Description of the Facility and Operations

WESF was built to encapsulate radioactive cesium and strontium removed from underground storage tanks (Tank Farms) and is comprised of a canyon area, hot cells, water-cooled storage pools, required support systems, and capsule handling facilities. G Cell (the only remaining active hot cell) includes manipulators that permit operators use to perform the actions required for cesium and strontium capsule movement and inspections while looking through leaded glass windows. Radioactive containment and confinement features are incorporated to protect plant personnel and the public from excessive radiation exposure.

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The capsules are welded stainless steel containers that encapsulate the highly radioactive cesium and strontium. The capsules are normally stored in the water-cooled storage pools. Individual capsules may be stored in G Cell.

Project W-130 replaced the exhaust portion of the existing K3 ventilation system with new K3N components that tie into the existing stack and include an abovegrade filter skid and two exhaust fans. Project W-130 also stabilized the contamination in A Cell through F Cell, the hot pipe trench, the K3 duct trench, the belowgrade K3 exhaust ventilation system ductwork, the K3 filter housings, and the K3 filter pits. The stabilization activities have minimized the potential for the spread of contamination from the facility.

Project W-135 is designing equipment and establishing processes to relocate the capsules from the pool cells for storage within a cask storage system (CSS). Each CSS will consist of universal capsule sleeves (UCS), a transportable storage canister (TSC), and a vertical concrete cask (VCC). Capsules will be moved from the pool cells to Hot Cell G and sealed within a UCS. Up to six standard cesium or strontium capsules or two Type W capsules can be held within one UCS. Each UCS will be conveyed to the Truckport through the Hot Cell G cover block opening and the canyon by the dry transfer system, which is used for shielding and is capable of retrieving the UCS from the hot cell. In the Truckport, a VCC containing a TSC will accept the UCS in one of 11 locations. Each TSC location is capable of holding two UCS. A maximum of 132 capsules may be placed within a CSS.

1.4.1 Temporary Waste Accumulation Area

A list of the central accumulation areas (CAAs) and satellite accumulation areas (SAAs) covered by this plan is maintained by Environmental Protection and posted on the Environmental Protection webpage under the *Resource Conservation and Recovery Act of 1976* (RCRA) tab. The waste accumulated at these locations can have one or more of the following characteristics: ignitable, corrosive, reactive, and/or toxic.

1.4.2 Treatment, Storage and/or Disposal Units

WESF contains one TSD unit, which contains four Dangerous Waste Management Units (DWMU) as follows:

- *Hot Cells A through F*: Filled with grout and is now closed.
- *Hot Cell G*: Designated for possible storage of cesium and strontium capsules and, if necessary, un-encapsulated material. This DWMU is operating.
- *Pool Cells*: Designated to store cesium and strontium capsules. This DWMU is operating.
- *Truckport*: Used for loading of capsules into a CSS. This DWMU is operating.

2.0 PURPOSE

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This plan describes the facility hazards and the actions that will be taken in response to upset and/or emergency conditions within the WESF. These events may include spills or releases caused by processing, fires and explosions, transportation activities, movement of materials, packaging, storage of hazardous materials, and natural and security contingencies. Sections 1.0, 3.1, 4.0, 7.1, 7.1.1, 7.1.2, 7.2, 7.2.1, 7.2.2, 7.2.3, 7.2.4, 7.2.5, 7.2.5.1, 7.3 and subsections, 7.6, 8.2, 8.2.1, 8.2.2, 9.0, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 11.0, 12.0, of the Building Emergency Plan (BEP) are enforceable sections meeting RCRA contingency planning requirements. Enforceable sections cannot be changed without coordinating the change with the Permit modification process. Attachment B of this BEP provides a crosswalk listing applicable WAC 173-303 requirements and how/where the requirements are met.

3.0 FACILITY/BUILDING EMERGENCY RESPONSE ORGANIZATION

The facility/building emergency response organization (ERO) includes the Building Emergency Director (BED), facility subject-matter experts, and other operations personnel who are responsible for implementing emergency response actions at WESF.

The WESF facility/building ERO is responsible for implementing emergency response actions at WESF. The BED maintains communication with the assigned personnel and/or the Incident Commander (IC) to enable the BED to fulfill BED responsibilities as discussed in Section 3.1.

3.1 Building Emergency Director

Emergency response will be directed by the BED until the IC arrives. The BED, supported by facility/building ERO personnel, fulfills the role and meets the requirements of the “Emergency Coordinator” as defined in WAC 173-303-201 (for dangerous waste generator activities) and WAC 173-303-360 (for permitted TSD facilities). During events, WESF personnel perform response duties under the direction of the BED. The senior responding Hanford Fire Department official will be the IC. If the event is determined to primarily be a security event the Hanford Fire Department and Hanford Patrol will operate under a unified command system with Hanford Patrol making decisions pertaining to security. These individuals have the authority to request and obtain any resources necessary for protecting people and the environment.

The BED becomes a member of the Incident Command Organization and functions under the direction of the IC. In this role, the BED continues to manage and direct WESF operations.

A BED is available, either on the premises or through an “on-call” list, 24 hours a day.

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During off-shift hours, a BED is designated as on call. The on-call BED name and home telephone number is available from the Patrol Operations Center (POC) in accordance with RCRA Permit Condition II.A.4.

As necessary, the BED will make the Operational Emergency categorization/classification decision and also determine if the event is subject to the requirements of WAC 173-303-201(14)(d) or WAC 173-303-360(2)(d) prior to responding to the scene.

WESF maintains a complete listing of current qualified BEDs. The list is maintained in the WESF Shift Office and co-located with this plan. A list of qualified BEDs/Building Wardens (BWs) is also contained in Permit Attachment 4A.

3.2 Other Members

Facility management establishes and maintains a facility/building ERO with overall responsibility for the initial and ongoing response to and mitigation of an emergency. The emergency positions identified for these response actions include the BED, Staging Area Manager (SAM), Personnel Accountability Aides, Incident Command Post (ICP) Communicator, ICP Hazards Communicator, Hazards Assessor, and Facility Operations Specialist. In addition, based on the event, the BED can identify additional support personnel (radiological control, maintenance, engineering, hazardous material coordinators, etc.) to be part of the Facility/Building ERO. ERO positions as a team facilitate communication and control of emergency response resources and information, aid in accountability, ensure that protective actions have been taken, and help stabilize and mitigate the emergency.

The BED will notify other facility/building ERO to support the on-scene response. ERO are contacted via radio, PAX, or phone.

The complete Facility/Building ERO listing of positions, names of ERO members, work locations, and telephone numbers for the WESF is maintained in a separate location in a format determined appropriate by WESF management. Copies are distributed to appropriate WESF locations and maintained by Emergency Preparedness.

4.0 IMPLEMENTATION OF THE PLAN

The BED must assess each incident to determine the response necessary to protect the personnel, facility, and the environment. If assistance from Hanford Patrol or Hanford Fire Department is required, the Hanford Emergency Response Number (911 or 509-373-0911 if using a cell phone) must be used to contact the POC and request the desired assistance.

In accordance with WAC 173-303-201(14)(b) or WAC 173-303-360(2)(b), whenever there is a release, fire, or explosion, the BED ensures that personnel identify the character, source,

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amount, and areal extent of any released materials. Identification can be made by activities that can include but are not limited to visual inspection of mixed waste capsules, sampling activities in the field, reference to inventory records, or by consulting with facility personnel. Samples of materials involved in an emergency might be taken and analyzed as appropriate. These activities must be performed with a sense of immediacy and shall include available information.

The BED shall use the following steps to determine if an emergency circumstance is subject to the contingency plan implementation and notification requirements of WAC 173-303-201 or WAC 173-303-350 and WAC 173-303-360:

- 1. The event involved an unplanned spill, release, fire, or explosion.**

AND

- 2. a. The unplanned spill or release involved a dangerous waste, or the material involved became a dangerous waste as a result of the event (e.g., product that is not recoverable for reuse without processing).**

OR

- 2. b. The unplanned fire or explosion occurred at a facility or transportation activity subject to RCRA contingency planning requirements.**

AND

- 3. A threat to human health or the environment exists.**

Additional guidance to assist the BED in determining the applicability of the requirements is maintained in DOE-0223, *DOE-RL Emergency Plan Implementing Procedures (RLEPs)*. This guidance is derived from Washington State Department of Ecology Dangerous Waste Permit application guidelines for implementation of the contingency plan and notifications to Washington State Department of Ecology (Ecology). Contractor environmental single points-of-contact are also available to assist the BED in determining the applicability of requirements.

If assessment of an event does not allow a definitive determination of the threat to human health and the environment, then the BED shall continue to implement the emergency procedures for the event, and through that process continue the assessment of the event.

If the BED determines that the event response requires contingency plan implementation, the BED must determine, in consultation with the environmental single-point-of-contact, if notification to Ecology is required in accordance with WAC 173-303-201(14)(d) or WAC 173-303-360(2).

The following information must be included in the assessment report:

- The name and telephone number of reporter**

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- **The name and address of facility**
- **The time and type of incident (e.g., release, fire)**
- **The name and quantity of material(s) involved, to the extent known**
- **The extent of injuries, if any**
- **The possible hazards to human health or the environment outside the facility**

5.0 FACILITY HAZARDS

This section provides an overview of hazardous materials, processes, and/or operations that may be encountered at WESF.

5.1 Hazardous Materials

The current operations at WESF require minimal use of bulk chemicals and small quantities of non-radioactive hazardous materials. Chemical storage areas are located inside and outside of the WESF Complex.

5.1.1 Outside Chemical Storage

Chemicals for pool cell cooling water treatment are stored in the Closed Loop Cooling System building (225-BG). The types of chemicals found in 225-BG include citric acid for pH control, a general corrosion inhibitor, and a biocide for control of algae and other micro-organisms.

5.1.2 Inside Chemical Storage

Trisodium phosphate is stored in the WESF Aqueous Make-Up Unit (AMU) and is for decontamination.

5.2 Industrial Hazards

WESF industrial hazards are similar to those found at many industrial projects on the Hanford Site. These hazards deal with compressed air systems, confined spaces (chemical inhalation, toxic/combustible material inhalation in chemical sewer manholes), high voltage equipment (electrical burns, shock), rotating equipment such as fans and turbines (noise, abrasions), and radiological hazards (radiological exposure depending on location).

5.2.1 Gas Bottle Storage Area

Nonflammable gas cylinders are stored in the Gas Bottle Storage Area on the west outside wall of WESF.

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5.3 Dangerous/Mixed Waste

WESF generates small quantities of waste from routine facility operations and maintenance activities.

5.4 Radioactive Materials

The radioactive material in WESF consists of cesium and strontium capsules stored in pool cells (46 MCi decayed to June 2017). Residual contamination in hot cells and vessels (approximately 120 kCi), and radioactive material captured in the K-3 exhaust duct (maximum of 150 kCi) and filter system (maximum of 9.2 kCi), have been stabilized with grout. Other radioactive materials and contamination can be found in designated “Radiation Areas,” “Contamination Areas,” and “Fixed Contamination Areas.”

5.5 Criticality

Not applicable.

6.0 POTENTIAL EMERGENCY CONDITIONS

Potential emergency conditions under both WAC 173-303 and DOE requirements fall into three basic categories: (1) operations (process upsets, fires, explosions, loss of utilities, spills, and releases); (2) natural phenomena (e.g., earthquakes); and (3) security contingencies (e.g., bomb threat, hostage situation). The following are conditions that may lead to an emergency at the WESF.

6.1 Facility Operations Emergencies

6.1.1 Loss of Utilities

A loss of utilities could include the loss of electricity, loss of water (raw, sanitary, and deionized), loss of ventilation, or loss of air.

6.1.1.1 Loss of Electricity. Loss of electricity may result in a loss of ventilation as well as loss of systems, alarms, and radiological monitoring. The associated hazard is potential radiological contamination spread and potential hydrogen accumulation in the pool cell area and Hot Cell G.

6.1.1.2 Loss of Water. Water loss can affect the fire protection systems, pool cell cooling, and water addition to the pool cells and may result in an increased risk of hazardous chemical or radiological exposure.

6.1.1.3 Loss of Ventilation. Ventilation loss could result in the loss of radiological contamination control, but this hazard has been significantly reduced by stabilizing the contamination in the hot cells and K3 exhaust duct and filters with grout. Potential areas of

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radiological contamination at WESF include the truck port, pool cell area, and operating gallery. The ventilation systems also remove hydrogen from the pool cell area and G Cell. Loss of ventilation could result in accumulation of hydrogen in these areas.

6.1.1.4 Loss of Air. Loss of compressed air could result in the loss of ventilation control and system monitoring capabilities.

6.1.2 Major Process Disruption/Loss of Plant Control

Not applicable.

6.1.3 Pressure Release

The pressure hazards at WESF are the air systems (100 and 25 psig) and raw and sanitary water systems (100 psig).

6.1.4 Fire and/or Explosion

Fire hazards include smoke inhalation, explosions, burns, equipment damage, and an increased risk of exposure to airborne hazardous materials.

6.1.5 Hazardous Material Spill

Hazards associated with spills include potential exposure to radioactive, toxic, and corrosive material as well as environmental damage.

6.1.6 Dangerous/Mixed Waste Spill

A leaking capsule in the pool cells will present a hazard to operations personnel.

6.1.7 Transportation and/or Packaging Incidents

There is the potential for an emergency situation from an accident occurring during loading/unloading or the transport of hazardous materials away from or to WESF. An incident resulting from a transportation or packaging accident has the potential for contamination of the environment, exposure to personnel, and associated industrial hazards.

6.1.8 Radioactive Material Release

Since the completion of the W-130 Ventilation and Stabilization Project, the mixed waste stored at WESF is encased in grout or contained within capsules. In the event of liquid effluent discharges or contamination spread/releases, there will be minimal spread of radioactive material.

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6.1.9 Criticality

Not applicable.

6.2 Natural Phenomena

Natural phenomena are discussed in the following sections.

6.2.1 Seismic Event

The pool cell and hot cell structures are designed to withstand a 0.25g earthquake. Depending on the magnitude of the event, severe structural damage can occur, resulting in serious injuries or fatalities and the release of hazardous materials to the environment. Damaged electrical circuits and wiring could result in the initiation of fires.

6.2.2 Volcanic Eruption/Ash Fall

Ash from a volcanic eruption is not expected to cause structural damage but could cause shorting of electrical equipment and clogging of ventilation system filters.

6.2.3 High Winds/Tornadoes

High winds or tornadoes may cause structural damage to systems containing hazardous materials, resulting in a release of the materials to the environment.

6.2.4 Flood

Flooding can cause the release of hazardous materials, depending on the type of storage containers. Floods can also cause short circuits in electrical wiring located at or below ground level, resulting in an increased likelihood of fires.

6.2.5 Range Fire

The hazards associated with a range fire are the same as those associated with a fire/explosion (Section 6.1.4) plus potential site access restrictions and travel hazards such as poor visibility.

6.2.6 Aircraft Crash

In addition to the potential for serious injuries or fatalities, an aircraft crash could result in the direct release of hazardous materials to the environment or cause a fire that could lead to a release.

6.3 Security Contingencies

Security contingencies are discussed in the following sections.

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6.3.1 Bomb Threat/Explosive Device

A bomb threat may be received by anyone who answers the telephone or receives a written correspondence¹. The major effect on the WESF is that personnel will need to perform a safe shutdown of the facility before evacuation. If an explosive device detonates, the effects are the same as those discussed under fire and explosion.

6.3.2 Hostage Situation/Armed Intruder

A hostage situation or the entry of an armed hostile intruder(s) can pose an emergency because both conditions have the potential to affect facility operations adversely.

6.3.3 Suspicious Object

If a suspicious object is discovered, the major effect on the WESF is that personnel may need to perform an emergency shutdown of facility systems before evacuation.

6.4 Unexpected/Unidentified Odors

Unexpected or unidentified odors have the potential to cause health effects and could be indicative of other events.

7.0 INCIDENT RESPONSE

The initial response to any emergency is to immediately protect the health and safety of persons in the affected area. Identification of released material is essential to determine appropriate protective actions. Containment, treatment, and disposal assessment are secondary responses.

The following sections describe the process for implementing basic protective actions as well as descriptions of response actions for the events listed in Section 6.0 of this plan. In addition, a section addressing prevention of secondary release, fires, or explosions is provided. Attachment A provides a list of applicable procedures.

7.1 Protective Action Responses

Protective action responses are discussed in the following sections. The steps identified in the following description of actions do not have to be performed in sequence because of the unanticipated sequence of incident events.

¹ Written correspondence includes, but is not limited to letters, emails, and text messages.

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In addition to the facility protective actions described below, the BED also reviews the site-wide and WESF emergency response procedure(s) for categorization and/or classification of the event and, if necessary, initiates area protective actions and Hanford Site ERO activation. Operational Emergency categorization and/or classification is reported to the Hanford Emergency Operations Center (EOC), triggering notification to offsite officials that includes planned recommendations for protective actions, if needed. Hanford EOC staff are responsible to coordinate protective action recommendations with offsite officials.

7.1.1 Evacuation Plan

The BED will determine the required actions during an evacuation of WESF.

The building exits are clearly marked throughout WESF and are kept clear of obstructions. Special provisions for any person temporarily or permanently disabled are provided, as necessary.

If an evacuation is ordered or the evacuation signal sounds (steady siren), employees shall leave the building by the nearest exit and proceed to the Primary Staging Area for accountability unless they are instructed otherwise.

Locations of both the Primary and Alternate staging areas for WESF are as follows:

- Primary Staging Area: Between MO400 and MO199
- Alternate Staging Area: Southwest corner of Atlanta Ave. and 7th St.

Staging Areas for personnel in protective clothing are as follows:

- Primary Staging Area: Sign #8 south of MO232
- Alternate Staging Area: Stage in a location determined by the SAM to remain segregated and downwind from affected personnel.

Evacuation notification to WESF personnel will be performed by any available means, which may include the evacuation siren (steady siren), PA announcements, runners, or the use of bullhorns.

Area Evacuation:

All employees shall be familiar with the evacuation process. The order to evacuate the area will normally be passed via the emergency alerting systems.

Individuals must stop work and place the facility in a safe condition. Use emergency shutdown procedures, if necessary.

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The evacuation siren will be activated. In the event that the evacuation siren is inoperable, the BED will issue the order to evacuate by any available means.

Personnel report to the Primary Staging Area (Figure 1), unless otherwise directed. Accountability of personnel will be performed. The results of personnel accountability will be reported to the EOC only if accountability cannot be established.

Personnel will be segregated into four groups:

- Protective clothing clad personnel
- Persons with keys to immediately available private vehicles
- Persons with keys to government vehicles
- All others

Load personnel in civilian clothes into private and government vehicles, load protective clothing clad persons into a separate government vehicle, and request additional transportation for people with late shutdown duties. Pertinent evacuation information (routes, destination, etc.) is relayed to personnel with vehicle keys. Vehicles are dispatched as soon as they are loaded. Load remaining people into private vehicles, maintaining the above group segregation, if possible. Requests for additional transportation are relayed to the EOC. In addition, the BED provides a status report of any personnel remaining to perform late shutdown duties.

7.1.2 Take Cover

The required actions to be accomplished during a Take Cover alarm (waving siren) at WESF are set forth in a facility-specific procedure.

When the Take Cover alarm is activated, personnel shall take cover in the nearest building or trailer. The BED shall notify the POC upon activation of the emergency siren system.

The following actions should be taken or considered in a Take Cover situation:

- Shut doors and windows and wait for further instructions.
- Secure ventilation and unnecessary electronic or electrical equipment, if possible.
- Follow normal exit procedures from radiological areas (in preparation for a possible evacuation).
- Potentially exposed personnel should be reported to the BED to ensure that they receive an appropriate follow-up evaluation.

7.2 Response to Facility Operations Emergencies

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Depending on the severity of the event, the BED reviews the site-wide and WESF emergency response procedure(s) and, as required, categorizes and/or classifies the event. If necessary, the BED initiates area protective actions and Hanford Site ERO activation. Attachment A provides a list of procedures.

The steps identified in the following description of actions do not have to be performed in sequence because of the unanticipated sequence of incident events.

7.2.1 Loss of Utilities

A case-by-case evaluation is required for each event to determine loss of utility impacts. When a BED determines a loss of utility impact, actions are taken to ensure dangerous and/or mixed waste is being properly managed to the extent possible given event circumstances. As necessary, the BED will stop operations and take appropriate actions until the utility is restored.

Loss of Electricity. In the event of loss of electricity, the WESF automatic standby diesel generator starts, which can provide power to lighting; pool cell pumps; air compressors; and K1, K2, and K4 ventilation systems. The automatic standby diesel generator cannot support the K3N ventilation system. Personnel will be notified, and the BED contacted. In the event the generator is offline, alternate measures will be taken. The BED will engage with response personnel to determine the cause of the power loss.

Loss of Water. Loss of pool cell water may occur as a result of seismic activity that has caused total or partial damage to the pool cell liners and foundation. WESF will take actions to supply the pool cells with makeup water. If makeup water cannot keep up with the loss of pool cell water, the BED will contact the Hanford Fire Department for an emergency water source.

Loss of Ventilation. In the event of any unplanned shutdown or any transient abnormal condition lasting more than 4 hours, the BED will block open the pool cell door. The BED will log the time of shut down and make offsite notifications.

Loss of Air. If WESF air pressure decreases, the WESF emergency portable diesel air compressor will be started. If the portable air compressor is not available or does not start, the ventilation will be shut down. To perform ventilation shut down, refer to Loss of Ventilation.

7.2.2 Major Process Disruption/Loss of Plant Control

Not applicable.

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7.2.3 Pressure Release

Possible pressure-related emergencies at WESF could be due to a failure of the air receiver tank, the air dryer, and gas cylinder bottles. On discovery of an existing or potential pressure hazard at WESF, ensure the following responses:

- Notify personnel to leave the area of the hazard.
- Inform the BED.
- Evacuate affected areas.
- Perform sampling or testing in accordance with recommendations from engineering and industrial safety, and (if indicated) repackage any containers with pressure buildup.

7.2.4 Fire and/or Explosion

In the event of a fire, the discoverer activates a fire alarm (pull box), calls 911 from a site office (or 509-373-0911 if using a cellular phone), or verifies that Hanford Emergency Response Number has been called. Automatic initiation of a fire alarm (through the smoke detectors and sprinkler system) is also possible.

- Unless otherwise instructed, personnel shall evacuate the area/building by the nearest safe exit and proceed to the designated staging area for accountability.
- On actuation of the fire alarm and ONLY if it can be done safely, personnel should shut down equipment and secure waste. The alarm automatically signals the Hanford Fire Department.
- The BED proceeds directly to the ICP, obtains all necessary information pertaining to the incident, and sends a representative to meet the Hanford Fire Department.
- The BED provides a formal turnover to the IC when the IC arrives at the ICP.
- The BED informs the Hanford Site ERO as to the extent of the emergency (including estimates of hazardous and mixed waste quantities released to the environment).
- If operations are stopped in response to the fire, the BED ensures that systems are monitored for leaks, pressure buildup, gas generation, and ruptures.
- Hanford Fire Department firefighters extinguish the fire, as necessary.

7.2.5 Hazardous Material, Dangerous, and/or Mixed Waste Spill

Spills can result from many sources, including process leaks, container spills or leaks, damaged packages or shipments, or personnel error. Spills of mixed waste are complicated by the need to deal with the extra hazards posed by the presence of radioactive materials.

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The discoverer notifies the BED and initiates SWIM response:

Stops work.

Warns others in the vicinity.

Isolates the area.

Minimizes exposure to the hazards.

- If applicable, request permission from the BED to secure ventilation.
- The BED determines if emergency conditions exist that require a response from the Hanford Fire Department (based on classification of the spill and injured personnel) and evaluates the need to perform additional protective actions.
- If the Hanford Fire Department resources are not needed, the spill is mitigated with resources identified in Section 9.0 of this plan, and proper notifications are made.
- If the Hanford Fire Department resources are needed, the BED calls 911 from a site office phone (or 509-373-0911 if using a cellular phone).
- The BED sends a representative to meet the Hanford Fire Department.
- The BED provides a formal turnover to the IC when the IC arrives at the ICP.
- The BED informs the Hanford Site ERO as to the extent of the emergency (including estimates of hazardous and mixed waste quantities released to the environment).
- If operations are stopped in response to the spill, the BED ensures that systems are monitored for leaks, pressure buildup, gas generation, and ruptures.
- Hanford Fire Department stabilizes the spill.

7.2.5.1 Damaged or Unacceptable Shipments

The WESF does not receive onsite transfers or offsite shipments of dangerous and/or mixed waste.

7.2.6 Radioactive Material Release

Section 7.2.5 address the action for a radiological material release.

7.2.7 Criticality

Not applicable.

7.3 Response to Natural Phenomena

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Depending on the severity of the event, the BED reviews site-wide and WESF emergency response procedure(s) and, as required, categorizes and/or classifies the event. If necessary, the BED initiates area protective actions and Hanford Site ERO activation.

The steps identified in the following description of actions do not have to be performed in sequence because of the unanticipated sequence of incident events. Attachment A provides a list of procedures.

7.3.1 Seismic Event

The Hanford Site ERO’s primary role in a seismic event is coordinating the initial response to injuries, fires, fire hazards, and acting to contain or control radioactive and/or hazardous material releases.

Individuals should remain calm and stay away from windows and hazardous material storage locations. Once the shaking has subsided, individuals should evacuate carefully and assist any personnel in need of additional help. The location of any trapped individuals shall be reported to the BED or is reported to 911 (or 509-373-0911 if using a cell phone).

The BED takes whatever actions are necessary to minimize damage and personnel injuries.

7.3.2 Volcanic Eruption/Ash Fall

Volcanic eruptions and ash fallout from the Cascade mountain range are a possibility. The Hanford Site Emergency Operations Center will notify the facility of impending ash fall. When notified of impending ash fall or when ash fall is occurring, the BED will respond per the facility-specific procedure.

If other emergency conditions arise as a result of the ash fall (e.g., fires due to electrical shorts), response is as described in other sections of this plan.

7.3.3 High Winds/Tornadoes

Upon notification of impending high winds, the BED takes steps necessary to secure all outdoor waste and hazardous material containers and storage locations. All doors and windows are shut, and personnel are warned to use extreme caution when entering or exiting the building. Ventilation, utilities, and operations will be shut down as appropriate to lessen the severity of the impact.

7.3.4 Flood

Flooding can cause the release of hazardous materials, depending on the type of storage containers. Floods can also cause short circuits in electrical wiring located at or below ground level, which may then result in an increased likelihood of fires.

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7.3.5 Range Fire

Responses to range fires are handled by preventive measures (e.g., keeping hazardous material and waste accumulation areas free of combustible materials such as weeds and brush). If a range fire breaches the WESF boundary, the response is as described in Section 7.2.4.

7.3.6 Aircraft Crash

The response to an aircraft crash is the same as for a fire and/or explosion (Section 7.2.4).

7.4 Security Contingencies

Depending on the severity of the event, the BED reviews site-wide and WESF emergency response procedure(s) and, as required, categorizes and/or classifies the event. If necessary, the BED initiates area protective actions and Hanford Site ERO activation.

The steps identified in the following description of actions do not have to be performed in sequence because of the unanticipated sequence of incident events. Attachment A provides a list of procedures.

7.4.1 Bomb Threat/Explosive Device

Response to a bomb threat/explosive device is discussed in the following sections.

7.4.1.1 Telephone Threat. Individuals who receive telephoned threats should attempt to get as much information as possible from the caller (using the bomb threat checklist, if available). Upon conclusion of or during the call, if possible, notify the BED and Hanford Patrol by calling 911 (do not use wireless communications devices for reporting a bomb threat/explosive device unless beyond 100 feet from the suspected object).

When notified, the BED ensures that WESF protective actions have been taken and questions personnel at the staging area regarding any suspicious objects. When Hanford Patrol personnel arrive, follow their instructions.

7.4.1.2 Written Threat² Receivers of written threats should handle the correspondence as little as possible. Notify the BED and Hanford Patrol by calling 911 (do not use wireless communications devices for reporting a bomb threat/explosive device unless beyond 100 feet from the suspected object). Depending on the content of the threat, the BED might evacuate the affected locations. The correspondence is turned over to Hanford Patrol, and Hanford Patrol's instructions are followed.

² Written threats include, but are not limited to letters, emails, and text messages.

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7.4.2 Hostage Situation/Armed Intruder

The discoverer of a hostage situation or armed intruder reports the incident by calling 911 (or 509-373-0911 if using a cellular phone) and to the BED, if possible. Hanford Patrol will determine the remaining response actions.

7.4.3 Suspicious Object

The discoverer of a suspicious object reports the object to both the BED and 911 (do not use wireless communications devices for reporting a bomb threat/explosive device unless beyond 100 feet from the suspected object), if possible, and ensures that the object is not disturbed.

7.5 Response to Unexpected/Unidentified Odors

Unexpected and unidentified odors should be investigated by the facility or project safety and health personnel. If the odor can be traced to an identifiable source and controlled safely with local resources, it can be resolved at the facility level. Air monitoring may aid in identifying a source and help determine if the odor is indicative of a health threat or is merely a nuisance. If facility or project safety and health personnel concur that the odor may be indicative of a health threat and cannot be safely controlled with local resources, or if an odor is found to be the result of an action or condition that requires emergency response, the Hanford Fire Department would be notified and respond accordingly.

7.6 Prevention of Recurrence or Spread of Fires, Explosions, or Releases

The BED, as part of the Incident Command Organization, takes the steps necessary to ensure that a secondary release, fire, or explosion does not occur. The BED will take measures, where applicable, to stop processes and operations, collect and contain released wastes, and remove or isolate containers. The BED shall also monitor for leaks, pressure buildups, gas generation, or ruptures in valves, pipes, or other equipment, whenever this is appropriate.

8.0 TERMINATION OF EVENT, INCIDENT RECOVERY, AND RESTART OF OPERATIONS

DOE/RL-94-02, Section 9.0, describes actions for event termination, incident recovery, restart of operations, and incompatible waste.

8.1 Termination of Event

For events where the Hanford EOC is activated, the Site Emergency Director has the authority to declare event termination. This decision is based on input from the BED, IC, and other ERO members. For events where the Hanford EOC is not activated, the IC and staff will declare event termination.

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8.2 Incident Recovery and Restart of Operations

Immediately after an emergency, the BED must provide for treating, storing or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at WESF. A recovery plan is developed when necessary in accordance with DOE/RL-94-02, Section 9.2.

If this plan was implemented according to Section 4.0 of this plan, Ecology is notified that the WESF is in compliance with cleanup activities as described in DOE/RL-94-02, Section 5.1.2.2, before operations can resume.

8.2.1 Incompatible Waste

After an event, the BED or the onsite recovery organization ensures that no waste that might be incompatible with the released material is treated, stored, and/or disposed of until cleanup is completed. Clean up actions are taken by WESF personnel or other assigned personnel. DOE/RL-94-02, Section 9.2.3, describes actions to be taken.

Waste from cleanup activities is designated and managed as newly generated waste. A field check for compatibility is performed before storage, as necessary. Incompatible wastes are not placed in the same container. Containers of waste are placed in approved storage areas appropriate for their compatibility class.

If incompatibility of waste was a factor in the incident, the BED or the onsite recovery organization ensures that the cause is corrected.

8.2.2 Post Emergency Equipment Maintenance and Decontamination

All equipment used during an incident is decontaminated (if practicable) or disposed of as spill debris. Decontaminated equipment is checked for proper operation before storage for subsequent use. Consumable and disposed materials are restocked. Fire extinguishers are replaced.

The BED ensures that all equipment is cleaned and fit for its intended use before operations are resumed. Depleted stocks of neutralizing and absorbing materials are replenished; protective clothing is cleaned or disposed of and restocked, etc.

9.0 EMERGENCY EQUIPMENT

Emergency resources and equipment for the WESF are presented in this section. Emergency equipment must be tested and maintained to assure its proper operation in time of emergency.

Sufficient space is maintained on the exterior of the WESF to allow access of personnel and equipment responding to fires, spills, or other emergencies. Unobstructed fire lanes are available to allow emergency vehicle access to the main entrance and the nearby fire hydrant. The interior space is designed to allow access by emergency response personnel to any normally accessible area of WESF in an emergency.

9.1 Fixed Emergency Equipment

FIXED EMERGENCY EQUIPMENT		
TYPE	LOCATION	CAPABILITY
225B Wet-Pipe automatic sprinkler system	225B areas, except G Cell, canyon, pool cell, and east and west transmitter rooms	Detect and suppress fire
Safety shower	225B SWP lobby	Assist in decontamination of personnel. Assist in flushing chemicals/materials from the body and/or eyes and face of personnel.
Eye wash station	225BG Chemical Room	Assist in flushing chemicals/materials from eyes and face of personnel.
Fire doors	225B by stair tower enclosure	Fire containment

9.2 Portable Emergency Equipment

PORTABLE EMERGENCY EQUIPMENT		
TYPE	LOCATION	CAPABILITY
Fire extinguishers	211BA, 225B, 225BC, 225BD, 225BE, 225BG, 226B, 272B, 272BA, 272BB, 282B, MO199, MO232, MO400, MO408, MO410, MO2237, MO134, MO2266, MO2267	Fire suppression
Portable eyewash	Portable	Assists in flushing chemicals/materials from eyes.
Radiological emergency response kit*	MO2267	Equipment and materials needed to assist in response to a radiological/emergency event.

*This equipment is for radiological emergency response purposes only.

9.3 Communications Equipment/Warning Systems

Whenever dangerous waste is being poured, mixed, spread, or otherwise handled, or if there is ever just a single employee on the premises while the facility is operating, the employee or employees involved must have immediate access to a telephone or two-way radio capable of summoning emergency assistance.

COMMUNICATIONS EQUIPMENT		
TYPE	LOCATION	CAPABILITY
PAX	All telephones	Alarm system
Evacuation/Take Cover siren	Located in 225B Room 108 and MO232. Audible throughout WESF.	Emergency evacuation and Take Cover notification to personnel
Two-way radios	Key personnel	Internal communications
Fire alarm/Pull boxes	225B, 225BD, 225BC, 225BF, 225DG, 282B, 282BA	Notification of personnel and Hanford Fire Department /Patrol Operations Center

NOTE: Site-wide communications and warning systems are identified in DOE/RL-94-02, Section 5.2.5.

9.4 Personal Protective Equipment

PERSONAL PROTECTIVE EQUIPMENT		
TYPE	LOCATION	CAPABILITY
Protective clothing	225B SWP Lobby, MO312, and MO2267 Response Kit	Personnel contamination protection
Respirators	MO2237 and MO2267	Airborne contamination protection

9.5 Spill Control and Containment Supplies

SPILL KITS AND SPILL CONTROL EQUIPMENT		
TYPE	LOCATION	CAPABILITY
Spill kit, drums, carts, etc.	WESF: 225B Operations Gallery, 225B-WESF AMU; 225B Pool Cell Airlock and 225BG, 215B Storage Shed, 226B Laydown Yard (HMS16)	Response to spills of hazardous materials

9.6 Incident Command Post

The IC determines the location of the ICP based on the event and may use the Hanford Fire Department Mobile Command Unit, if necessary. Emergency resource materials are stored at:

- MO232 Primary ICP
- 225B, Room 108A

10.0 COORDINATION AGREEMENTS

RL has established a number of coordination agreements or memoranda of understanding (MOU) with various agencies to ensure proper response resource availability for incidents involving the Hanford Site. A description of the agreements is contained in DOE/RL-94-02, Section 3.0, Table 3-1.

11.0 REQUIRED REPORTS

Post incident written reports are required for certain incidents on the Hanford Site. The reports are described in DOE/RL-94-02, Sections 5.1.1.2.4 and 5.1.2.2.

Facility management must note in the TSD unit operating record, the time, date, and details of any incident that requires implementation of the contingency plan (refer to Section 4.0 of this plan). Within 15 days after the incident, a written report must be

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submitted to Ecology. The report must include the elements specified in WAC 173-303-201(14)(k) or WAC 173-303-360(2)(k).

12.0 PLAN LOCATION AND AMENDMENTS

Copies of this plan are maintained at the following locations:

- MO232
- 225B, Room 108A

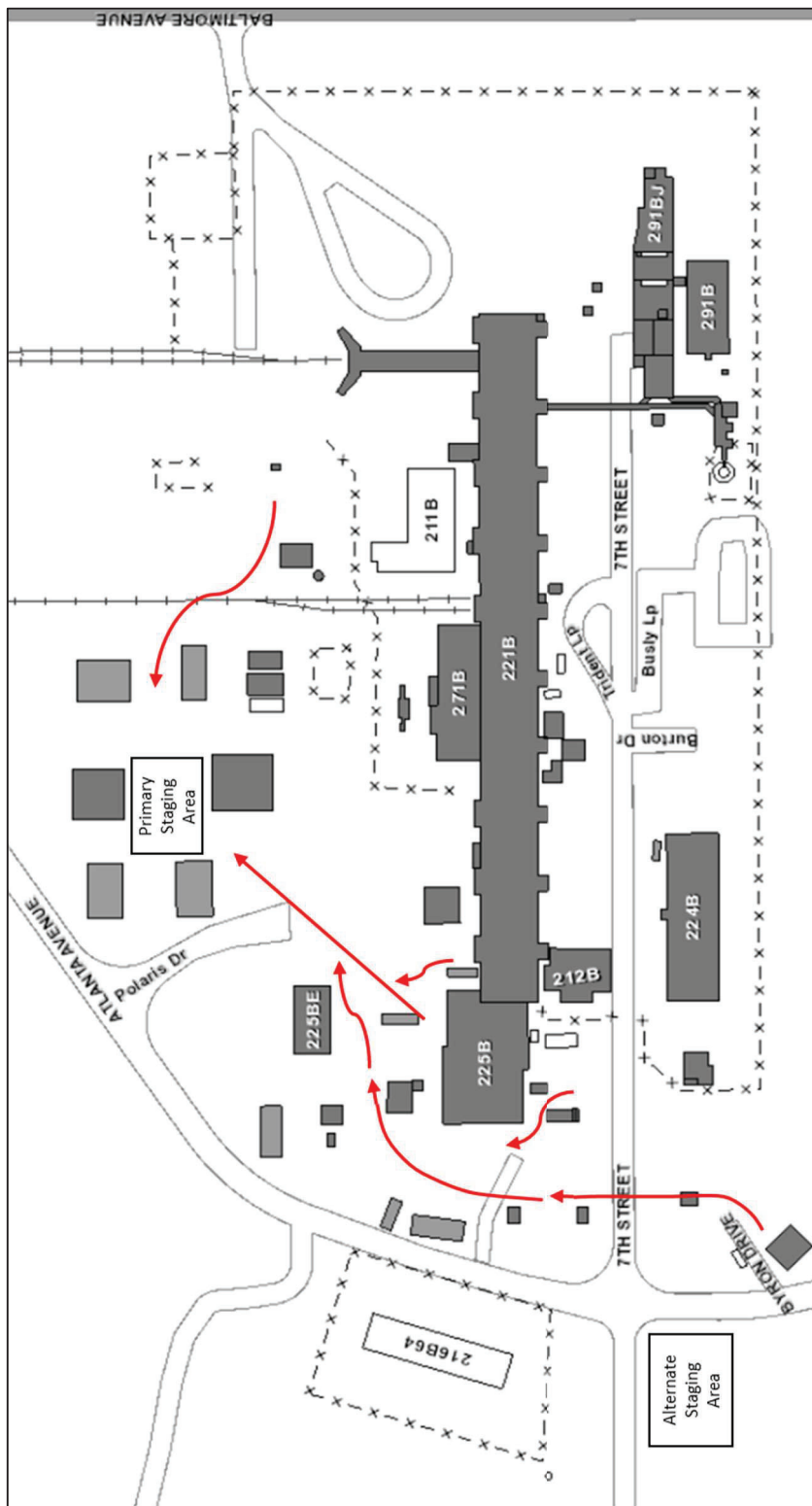
This plan will be reviewed and immediately amended as necessary, in accordance with DOE/RL-94-02, Section 14.3.1.1.

13.0 REFERENCES

DOE/RL-94-02, *Hanford Emergency Management Plan*

Hanford Facility Resource Conservation and Recovery Act Permit for the Treatment, Storage, and Disposal of Dangerous Waste, Permit Number WA7890008967, Washington State Department of Ecology, Olympia, Washington.

Washington Administrative Code 173-303, Washington State Dangerous Waste Regulations, Washington State Department of Ecology, Olympia, Washington



Site evacuation routes will be determined by the Building Emergency Director dependent on event location and wind direction.

Figure 1. Facility Staging Areas

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ATTACHMENT A
Listing of Procedures

U.S. Department of Energy Richland Operations Office DOE-0223, *Emergency Plan Implementing Procedures,*

RLEP 1.0, *Recognizing and Classifying Emergencies, Appendix 1-2.H*

U.S. Department of Energy Richland Operations Office DOE-0223, *Emergency Plan Implementing Procedures, RLEP 1.1, Hanford Incident Command System and Event Recognition and Classification.*

U.S. Department of Energy Richland Operations Office DOE-0223, *Emergency Plan Implementing Procedures, RLEP 3.24, Notification, Reporting, and Processing of Operations Information.*

U.S. Department of Energy Richland Operations Office DOE-0223, *Emergency Plan Implementing Procedures, RLEP 3.4, Emergency Termination, Reentry, and Recovery.*

Facility Level Response Plans

WESF-PRO-ER-51910 (ERP-WESF-001), *Evacuation/Take Cover*

WESF-PRO-ER-51911 (ERP-WESF-002), *Natural Hazards Emergency*

WESF-PRO-ER-51912 (ERP-WESF-003), *Spills*

WESF-PRO-ER-51913 (ERP-WESF-004), *Bomb Threat*

WESF-PRO-ER-52703, *Loss of Pool Cell Water*

WESF-PRO-AR-51922 (WESF-AR-0800), *Respond to Loss of Power*

WESF-PRO-AR-52290 (WESF-AR-1300), *Respond to Loss of Process and/or Instrument Air*

WESF-PRO-AR-51923 (WESF-AR-1100), *Respond to Loss of Raw Water*

WESF-PRO-OP-51874 (EO-060-002), *Operate HVAC Systems*

ATTACHMENT B

RCRA APPLICABILITY MATRIX FOR THE TSD ACTIVITIES

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-340	Preparedness and prevention. Facilities must be designed, constructed, maintained and operated to minimize the possibility of fire, explosion, or any unplanned sudden or nonsudden release of dangerous waste or dangerous waste constituents to air, soil, or surface or groundwater which could threaten the public health or the environment. This section describes preparations and preventive measures which help avoid or mitigate such situations.	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-340(1)	(1) Required equipment. All facilities must be equipped with the following, unless it can be demonstrated to the department that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-340(1)(a)	(a) An internal communications or alarm system capable of providing immediate emergency instruction to facility personnel;	DOE/RL-94-02, Section 5.2.5	<i>BEP Section 9.3</i>
WAC 173-303-340(1)(b)	(b) A device, such as a telephone or a hand-held, two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;	DOE/RL-94-02, Section 5.2.12	<i>BEP Section 9.3</i> Units summon assistance by calling the Hanford Patrol emergency number. No offsite assistance is requested by the unit itself.
WAC 173-303-340(1)(c)	(c) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and	DOE/RL-94-02, Sections 11.2.2, 11.2.3, 11.2.4, 11.2.8, and Appendix C	<i>BEP Sections 9.1, 9.2, and 9.5</i>
WAC 173-303-340(1)(d)	(d) Water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems.	DOE/RL-94-02, Sections 11.2.2 and 11.2.8	<i>BEP Section 9.1</i>
WAC 173-303-340(1)(end)	All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.	DOE/RL-94-02, Sections 11.2, 11.2.8, and 11.3	<i>BEP Section 9.0</i>
WAC 173-303-340(2)	(2) Access to communications or alarms. Personnel must have immediate access to the signaling devices described in the situations below:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-340(2)(a)	(a) Whenever dangerous waste is being poured, mixed, spread, or otherwise handled, all personnel involved must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required in subsection (1) of this section;	DOE/RL-94-02, Section 5.2.12	<i>BEP Section 9.3</i>

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-340(2)(b)	(b) If there is ever just one employee on the premises while the facility is operating, he must have immediate access to a device, such as a telephone or a hand-held, two-way radio, capable of summoning external emergency assistance, unless such a device is not required in subsection (1) of this section.	DOE/RL-94-02, Section 5.2.12	<i>BEP Section 9.3</i>
WAC 173-303-340(3)	(3) Aisle space. The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless it can be demonstrated to the department that aisle space is not needed for any of these purposes.	Requirement is met at the unit level.	Parts III, V, and VI of the Hanford Facility Dangerous Waste Permit (WA7890008967) include description of how each unit meets this requirement. For 90-day areas, BEP Section 9.0.
WAC 173-303-340(4)	(4) Arrangements with local authorities. The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations, unless the hazards posed by wastes handled at the facility would not require these arrangements:	Introductory statement of requirement – requirements are in sections below.	Requirement is met at the site level.
WAC 173-303-340(4)(a)	(a) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of dangerous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;	The arrangements agreed to by local police, fire departments emergency response teams to coordinate emergency services are located in DOE/RL-94-02, Sections 3.4, 3.4.1.1, 3.4.1.2, 3.7, and Table 3-1.	Requirement is met at the site level.
WAC 173-303-340(4)(b)	(b) Arrangements to familiarize local hospitals with the properties of dangerous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility;	The arrangements agreed to by local hospitals to coordinate emergency services are located in DOE/RL-94-02, Sections 3.4.1.3, 3.7, and Table 3-1.	Requirement is met at the site level.
WAC 173-303-340(4)(c)	(c) Agreements with state emergency response teams, emergency response contractors, and equipment suppliers; and	The arrangements agreed to by state emergency response teams to coordinate emergency services are located in DOE/RL-94-02, Sections 3.3.1, 3.3.2, 3.7, and Table 3-1.	Requirement is met at the site level.

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-340(4)(d)	(d) Where more than one party might respond to an emergency, agreements designating primary emergency authority and agreements with any others to provide support to the primary emergency authority.	Discussed in the Tri-County Mutual Aid Agreement MOU and Mutual Law Enforcement Assistance MOUs. DOE/RL-94-02, Section 3.7, and Table 3-1.	Requirement is met at the site level.
WAC 173-303-340(5)	(5) Where state or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.	If authorities decline, the documentation will be maintained in the Hanford Facility Operating Record.	Requirement is met at the site level.
WAC 173-303-350(1)	(1) Purpose. The purpose of this Section and WAC 173-303-360 is to lessen the potential impact on the public health and the environment in the event of an emergency event, including, but not limited to, a fire, natural disaster, explosion, or unplanned sudden or nonsudden release of dangerous waste, hazardous substance, or dangerous waste constituents to air, soil, surface water, or groundwater by a facility. A contingency plan must be developed to lessen the potential impacts of such emergency event, and the plan must be implemented immediately whenever such an emergency event occurs.	DOE/RL-94-02, Sections 1.1 and 1.2	<i>BEP Section 1.0</i> Identified sections of the BEP/FRP are part of the contingency plan.
WAC 173-303-350(2)	(2) Contingency plan. Each owner or operator must have a contingency plan at their facility for use in emergencies or any sudden or nonsudden releases which threaten human health and the environment. If the owner or operator has already prepared a spill prevention control and countermeasures (SPCC) plan in accordance with Part 112 of Title 40 C.F.R., or some other emergency or contingency plan, they need only amend that plan to incorporate dangerous waste management provisions that are sufficient to comply with the requirements of this section and WAC <u>173-303-360</u> . The owner or operator may develop one contingency plan that meets all regulatory requirements. Ecology recommends that the plan be based on the National Response Team’s Integrated Contingency Plan Guidance (“One Plan”). When modifications are made to nondangerous waste (non-Hazardous Waste Management Act or nondangerous waste regulation) provisions in an integrated contingency plan, the changes do not trigger the need for a dangerous waste permit modification.	DOE/RL-94-02, Sections 1.1 and 1.2 Portions of the Hanford emergency response program are used to meet requirements of WAC 173-303-350 and -360 under the provision of -350(2).	<i>BEP Section 1.0</i> Identified sections of the BEP/FRP are part of the contingency plan.

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-350(3)(a)	(3) The contingency plan must contain the following: (a) A description of the actions which facility personnel must take to comply with this section and WAC 173-303-360;	DOE/RL-94-02, Section 1.3.4, provides an overview of how the Hanford Site responds to emergency events. More specific descriptions of actions to meet other requirements of this section and WAC 173-303-360 are identified in those sections of this matrix. The relationship of emergency procedures and description of actions is detailed below. ³	<i>BEP Section 7.1 and subsections, and Sections 7.2, 7.2.1, 7.2.2, 7.2.3, 7.2.4, 7.2.5, 7.2.5.1, and 7.3 and subsection.</i>
WAC 173-303-350(3)(b)	The contingency plan must contain the following: (b) A description of the actions which will be taken in the event that a dangerous waste shipment, which is damaged or otherwise presents a hazard to the public health and the environment, arrives at the facility, and is not acceptable to the owner or operator, but cannot be transported, pursuant to the requirements of WAC 173-303-370(6), Manifest system, reasons for not accepting dangerous waste shipments;	Requirement is met at the unit level.	<i>BEP Section 7.2.5.1</i>
WAC 173-303-350(3)(c)	The contingency plan must contain the following: (c) A description of the arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services as required in WAC 173-303-340(4);	The arrangements agreed to by state emergency response teams to coordinate emergency services are located in DOE/RL-94-02, Sections 3.2.3, 3.3.1, 3.3.2, 3.4, 3.4.1.1, 3.4.1.2, 3.4.1.3, 3.7, and Table 3-1.	Requirement is met at the site level.

³Site-wide and facility/activity-specific emergency procedures are described and in some cases identified in this plan. The descriptions of actions in this plan are required to accurately describe the emergency procedures. Unless specifically incorporated into the RCRA Permit, these emergency procedures are not subject to permit modification requirements of permit condition I.C.3 simply because they are described or referenced in this plan. If the emergency procedures change and the description is no longer accurate, the revision of the description is subject to permit modification requirements of permit condition I.C.3.

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-350(3)(d)	The contingency plan must contain the following: (d) A current list of names, addresses, and phone numbers (office and home) of all persons qualified to act as the emergency coordinator required under WAC 173-303-360(1). Where more than one person is listed, one must be named as primary emergency coordinator, and others must be listed in the order in which they will assume responsibility as alternates. For new facilities only, this list may be provided to the department at the time of facility certification (as required by WAC 173-303-810 (14)(a)(i)), rather than as part of the permit application;	DOE/RL-94-02, Sections 2.2 and 2.2.1.1 discuss personnel job titles, which will fill duties and responsibilities of the Emergency Coordinator, described in WAC 173-303-360.A list of current assigned or “on-call” BEDs/BWs is maintained at the Patrol Operations Center per IIA.4. A list of BEDs/BWs for each Hanford TSD unit group is maintained in Permit Attachment 4A. Changing BEDs/BWs on this list is a class 1 mod, self-implemented.	<i>BEP Section 3.1</i>
WAC 173-303-350(3)(e)	The contingency plan must contain the following: (e) A list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities; and	DOE/RL-94-02, Sections 11.2 and 11.2.8, and Appendix C	<i>BEP Sections 9.1, 9.2, 9.3, 9.4, 9.5 and 9.6</i>
WAC 173-303-350(3)(f)	The contingency plan must contain the following: (f) An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe the signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes.	DOE/RL-94-02, Figure 7-3, and Table 5-1	<i>BEP Section 7.1.1</i>
WAC 173-303-350(4)	(4) Copies of contingency plan. A copy of the contingency plan and all revisions to the plan must be:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-350(4)(a)	(a) Maintained at the facility; and	DOE/RL-94-02, Section 14.3.7	<i>BEP Section 12.0</i>
WAC 173-303-350(4)(b)	(b) Submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services.	DOE/RL-94-02, Section 14.3.7	Requirement is met at the site level.
WAC 173-303-350(5)	(5) Amendments. The owner or operator must review and immediately amend the contingency plan, if necessary, whenever:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-350(5)(a)	(a) Applicable regulations or the facility permit are revised;	DOE/RL-94-02, Section 14.3.1.1	<i>BEP Section 12.0</i>
WAC 173-303-350(5)(b)	(b) The plan fails in an emergency;	DOE/RL-94-02, Section 14.3.1.1	<i>BEP Section 12.0</i>

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-350(5)(c)	(c) The facility changes (in its design, construction, operation, maintenance, or other circumstances) in a way that materially increases the potential for fires, explosions, or releases of dangerous waste or dangerous waste constituents, or in a way that changes the response necessary in an emergency;	DOE/RL-94-02, Section 14.3.1.1	BEP Section 12.0
WAC 173-303-350(5)(d)	(d) The list of emergency coordinators changes; or	DOE/RL-94-02, Section 14.3.1.1	BEP Section 12.0
WAC 173-303-350(5)(e)	(e) The list of emergency equipment changes.	DOE/RL-94-02, Section 14.3.1.1	BEP Section 12.0
WAC 173-303-355(1)	(1) Owners or operators must coordinate preparedness and prevention planning and contingency planning efforts, conducted under WAC 173-303-340 and 173-303-350, with local emergency planning committees established pursuant to Title III of the 1986 Superfund Amendments and Reauthorization Act.	DOE/RL-94-02, Sections 3.1, 3.1.1, and 3.4	Requirement is met at the site level.
WAC 173-303-355(2)	(2) Appropriate and generally accepted computer models should be utilized to determine the impacts of a potential catastrophic air release due to fire, explosion, or other accidental releases of hazardous constituents. Evacuation plans prepared pursuant to WAC 173-303-350(3)(d) must include those effected persons and areas identified through these modelling efforts.	DOE/RL-94-02, Sections 2.2.2.4, and 1.3.3.2	Requirement is met at the site level.
WAC 173-303-360(1)	(1) Emergency coordinator. At all times, there must be at least one employee either on the facility premises or on call (that is, available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, required by WAC 173-303-350(2), all operations and activities at the facility, the location and properties of all wastes handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.	DOE/RL-94-02, Sections 2.2 and 2.2.1.1	BEP Section 3.1 Permit Attachment 4A lists the BED/BW for each unit.
WAC 173-303-360(2)	(2) Emergency procedures. The following procedures must be implemented in any emergency event identified in WAC 173-303-350.	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-360(2)(a)	(a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or their designee when the emergency coordinator is on call) must immediately:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-360(2)(a)(i)	(i) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and	DOE/RL-94-02, Sections 2.2.1.1.2(b), 2.2.1.1.3(b), and 5.2.5	BEP Section 7.1 and subsections, and 7.2 and subsections

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-360(2)(a)(ii)	(ii) Notify appropriate state or local agencies with designated response roles if their help is needed.	DOE/RL-94-02, Sections 1.3.4, and 5.2.1 Units summon assistance by calling the Hanford Patrol emergency number. No offsite assistance is requested by the unit itself.	<i>BEP Section 4.0</i>
WAC 173-303-360(2)(b)	Emergency procedures. (b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials.	DOE/RL-94-02, Sections 2.2.1.1.2(f), 2.2.1.1.3(g), and 4.2	<i>BEP Section 4.0</i>
WAC 173-303-360(2)(c)	Emergency procedures. (c) Concurrently, the emergency coordinator must assess possible hazards to human health and the environment (considering direct, indirect, immediate, and long-term effects) that may result from the release, fire, or explosion.	DOE/RL-94-02, Section 4.2, and 2.2.2.2.4	<i>BEP Section 4.0</i>
WAC 173-303-360(2)(d)	Emergency procedures. (d) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment, they must report their findings as follows:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-360(2)(d)(i)	(i) If their assessment indicates that evacuation of local areas may be advisable, they must immediately notify appropriate local authorities. They must be available to help appropriate officials decide whether local areas should be evacuated; and	DOE/RL-94-02, Sections 2.2.1.1.2(a) & (d), 2.2.1.1.3 (a) & (e), 5.1.1, 5.1.1.2, and 5.1.2.1	<i>BEP Section 7.1</i>
WAC 173-303-360(2)(d)(ii)	(ii) They must immediately notify the department and either the government official designated as the on-scene coordinator, or the National Response Center (using their 24-hour toll free number (800) 424-8802).	DOE/RL-94-02, Sections 2.2.1.1.2(a) & (d), 2.2.1.1.3 (a) & (e), 5.1.1, 5.1.1.2, 5.1.2.1, and 5.1.2.2	<i>BEP Section 4.0</i>
WAC 173-303-360(2)(e)	Emergency procedures. (e) Their assessment report must include: (i) Name and telephone number of reporter; (ii) Name and address of facility; (iii) Time and type of incident (e.g., release, fire); (iv) Name and quantity of material(s) involved, to the extent known; (v) The extent of injuries, if any; and (vi) The possible hazards to human health or the environment outside the facility.	DOE/RL-94-02, Sections 2.2.1.1.2(d), 2.2.1.1.3(e), 5.1.1, 5.1.1.2, 5.1.2.1, and 5.1.2.2	<i>BEP Section 4.0</i>
WAC 173-303-360(2)(f)	Emergency procedures. (f) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other dangerous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.	DOE/RL-94-02, Sections 2.2.1.1, 2.2.1.1.2(f) and 2.2.1.1.3(g)	<i>BEP Section 7.6</i>
WAC 173-303-360(2)(g)	Emergency procedures. (g) If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.	DOE/RL-94-02, Sections 2.2.1.1.2(f) and 2.2.1.1.3(g)	<i>BEP Sections 7.2.4 and 7.2.5</i>

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-360(2)(h)	Emergency procedures. (h) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.	DOE/RL-94-02, Section 9.2.3	BEP Section 8.2
WAC 173-303-360(2)(i)	Emergency procedures. (i) The emergency coordinator must ensure that, in the affected area(s) of the facility:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-360(2)(i)(i)	(i) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and	DOE/RL-94-02, Section 9.2.3	BEP Section 8.2.1
WAC 173-303-360(2)(i)	(ii) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.	DOE/RL-94-02, Section 11.2	BEP Section 8.2.2
WAC 173-303-360(2)(j)	Emergency procedures. (j) The owner or operator must notify the department, and appropriate local authorities, that the facility is in compliance with (i) of this subsection before operations are resumed in the affected area(s) of the facility.	DOE/RL-94-02, Section 5.1.2.2	BEP Section 8.2
WAC 173-303-360(2)(k)	Emergency procedures. (k) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within fifteen days after the incident, they must submit a written report on the incident to the department. The report must include: (i) Name, address, and telephone number of the owner or operator; (ii) Name, address, and telephone number of the facility; (iii) Date, time, and type of incident (e.g., fire, explosion); (iv) Name and quantity of material(s) involved; (v) The extent of injuries, if any; (vi) An assessment of actual or potential hazards to human health or the environment, where this is applicable; (vii) Estimated quantity and disposition of recovered material that resulted from the incident; (viii) Cause of incident; and (ix) Description of corrective action taken to prevent reoccurrence of the incident.	DOE/RL-94-02, Sections 5.1.2.1 and 5.1.2.2	BEP Section 11.0

RCRA APPLICABILITY MATRIX FOR GENERATOR ACTIVITIES

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(1)	(1) Applicability. The regulations of this section apply to those areas of a large quantity generator’s facility where dangerous waste is generated or accumulated on site.	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(2)	(2) A large quantity generator facility must be designed, constructed, maintained and operated to minimize the possibility of fire, explosion, or any unplanned sudden or nonsudden release of dangerous waste, hazardous substance or dangerous waste constituents to air, soil, or surface or groundwater which could threaten the public health or the environment. This section describes preparations and preventive measures which help avoid or mitigate such situations.	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-201(3)	(3) Required equipment. All areas deemed applicable by subsection (1) of this section must be equipped with the following, unless it can be demonstrated to the department that none of the hazards posed by waste or hazardous substance handled at the facility could require a particular kind of equipment specified below. A large quantity generator may determine the most appropriate locations within its facility to locate equipment necessary to prepare for and respond to emergencies:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-201(3)(a)	(a) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;	DOE/RL-94-02, Section 5.2.5	<i>BEP Section 9.3</i>
WAC 173-303-201(3)(b)	(b) A device, such as a telephone (immediately available at the scene of operations) or a hand-held, two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;	DOE/RL-94-02, Section 5.2.12	<i>BEP Section 9.3</i> Units summon assistance by calling the Hanford Patrol emergency number. No offsite assistance is requested by the unit itself.
WAC 173-303-201(3)(c)	(c) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as those using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and	DOE/RL-94-02, Sections 11.2.2, 11.2.3, 11.2.4, 11.2.8 and Appendix C	<i>BEP Sections 9.1, 9.2, and 9.5</i>
WAC 173-303-201(3)(d)	(d) Water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems.	DOE/RL-94-02, Sections 11.2.2 and 11.2.8	<i>BEP Section 9.1</i>
WAC 173-303-201(4)	(4) Testing and maintenance of equipment. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.	DOE/RL-94-02, Sections 11.2, 11.2.8, and 11.3	<i>BEP Section 8.0</i>
WAC 173-303-201(5)	(5) Access to communications or alarms. Personnel must have immediate access to the signaling devices described in the situations below:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-201(5)(a)	(a) Whenever dangerous waste is being poured, mixed, spread, or otherwise handled, all personnel involved must have immediate access (e.g., direct or unimpeded access) to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required in subsection (3) of this section;	DOE/RL-94-02, Section 5.2.12	<i>BEP Section 8.3</i>

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(5)(b)	(b) If there is ever just one employee on the premises while the facility is operating, they must have immediate access (e.g., direct or unimpeded access) to a device, such as a telephone (immediately available at the scene of operation) or a hand-held, two-way radio, capable of summoning external emergency assistance, unless such a device is not required in subsection (3) of this section.	DOE/RL-94-02, Section 5.2.12	<i>BEP Section 8.3</i>
WAC 173-303-201(6)	(6) Aisle space. The generator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless it can be demonstrated to the department that aisle space is not needed for any of these purposes.	Requirement is met at the unit level.	<i>BEP Section 9.0</i>
WAC 173-303-201(7)	(7) Arrangements with local authorities. The large quantity generator must attempt to make the following arrangements, as appropriate for the type of waste handled at its facility and the potential need for the services of these organizations, unless the hazards posed by wastes handled at the facility would not require these arrangements:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-201(7)(a)	(a) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of dangerous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;	The arrangements agreed to by local police, fire departments emergency response teams to coordinate emergency services are located in DOE/RL-94-02, Sections 3.4, 3.4.1.1, 3.4.1.2, 3.7, and Table 3-1.	Requirement is met at the site level.
WAC 173-303-201(7)(b)	(b) Arrangements to familiarize local hospitals with the properties of dangerous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility;	The arrangements agreed to by local hospitals to coordinate emergency services are located in DOE/RL-94-02, Sections 3.4.1.3, 3.7, and Table 3-1.	Requirement is met at the site level.
WAC 173-303-201(7)(c)	(c) Agreements with state emergency response teams, emergency response contractors, and equipment suppliers;	The arrangements agreed to by state emergency response teams to coordinate emergency services are located in DOE/RL-94-02, Sections 3.3.1, 3.3.2, 3.7, and Table 3-1.	Requirement is met at the site level.
WAC 173-303-201(7)(d)	(d) Where more than one party might respond to an emergency, agreements designating primary emergency authority and agreements with any others to provide support to the primary emergency authority;	Discussed in the Tri-County Mutual Aid Agreement MOU and Mutual Law Enforcement Assistance MOUs. DOE/RL-94-02, Section 3.7 and Table 3-1	Requirement is met at the site level.

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(7)(e)	(e) Where state or local authorities decline to enter into such agreements, the owner or operator must document the refusal in the operating record; and	If authorities decline, the documentation will be maintained in the Hanford Facility Operating Record.	Requirement is met at the site level.
WAC 173-303-201(7)(f)	(f) A facility possessing twenty-four-hour response capabilities may seek a waiver from the authority having jurisdiction (AHJ) over the fire code with the facility's locality as far as needing to make arrangements with the local fire department as well as any other organization necessary to respond to an emergency, provided that the waiver is documented in the generator's operating record.		
WAC 173-303-201(8)	(8) Contingency plan purpose and implementation.	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-201(8)(a)	(a) The large quantity generator must have a contingency plan for the facility. The purpose of a contingency plan and emergency procedures is to lessen the potential impact on the public health and the environment due to any emergency event such as, but not limited to, a fire, natural disaster, explosion, or any unplanned sudden or nonsudden release of dangerous waste, hazardous substance or dangerous waste constituents to air, soil, surface water, or groundwater.	DOE/RL-94-02, Sections 1.1 and 1.2	<i>BEP Section 1.0</i> Identified sections of the BEP are part of the contingency plan.
WAC 173-303-201(8)(b)	(b) A contingency plan must be developed to lessen the potential impacts of such emergency events, and the plan must be implemented immediately when such emergency events occur.	DOE/RL-94-02, Sections 1.1 and 1.2	<i>BEP Section 1.0</i> Identified sections of the BEP are part of the contingency plan.
WAC 173-303-201(9)	(9) Contents of a contingency plan.	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-201(9)(a)	(a) Each large quantity generator must have a contingency plan at their facility for use in emergencies or any sudden or nonsudden releases which threaten human health and the environment. If the generator has already prepared a spill prevention control and countermeasures (SPCC) plan in accordance with 40 C.F.R. Part 112, or some other emergency or contingency plan, they need only amend that plan to incorporate dangerous waste management provisions that are sufficient to comply with the requirements of this section. The large quantity generator may develop one contingency plan that meets all regulatory requirements. Ecology recommends that the plan be based on the National Response Team's Integrated Contingency Plan Guidance ("One Plan").	DOE/RL-94-02, Sections 1.1 and 1.2 Portions of the Hanford emergency response program are used to meet requirements of WAC 173-303-201(8) through 201(14) under the provision of -201(9).	<i>BEP Section 1.0</i> Identified sections of the BEP are part of the contingency plan.

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(9)(b)(i)	(b) The contingency plan must contain the following: (i) A description of the actions which facility personnel must take to comply with this section and WAC 173-303-145;	DOE/RL-94-02, Section 1.3.4 provides an overview of how the Hanford Site responds to emergency events. More specific descriptions of actions to meet other requirements of this section are identified in those sections of this matrix. Actions to comply with WAC 173-303-145 are addressed in DOE/RL-94-02, Section 5.1.2.	<i>BEP Section 7.1 (including subsections) and Sections 7.2, 7.2.1, 7.2.2, 7.2.3, 7.2.4, 7.2.5, and 7.2.5.1</i>
WAC 173-303-201(9)(b)(ii)	The contingency plan must contain the following: (ii) A description of the actions which will be taken in the event that a dangerous waste shipment, which is damaged or otherwise presents a hazard to the public health and the environment, arrives at the facility, and is not acceptable to the large quantity generator, but cannot be transported, pursuant to the requirements of WAC 173-303-370(6), manifest system, reasons for not accepting dangerous waste shipments;	Requirement is met at the unit level.	<i>BEP Section 7.2.5.1</i>
WAC 173-303-201(9)(b)(iii)	The contingency plan must contain the following: (iii) A description of the arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services as required in subsection (7) of this section;	The arrangements agreed to by state emergency response teams to coordinate emergency services are located in DOE/RL-94-02, Sections 3.2.3, 3.3.1, 3.3.2, 3.4, 3.4.1.1, 3.4.1.2, 3.4.1.3, 3.7, and Table 3-1.	Requirement is met at the site level.
WAC 173-303-201(9)(b)(iv)	The contingency plan must contain the following: (iv) A current list of names and emergency telephone numbers of all persons qualified to act as the emergency coordinator required in this section and this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator, and others must be listed in the order in which they will assume responsibility as alternates. In situations where the large quantity generator facility has an emergency coordinator continuously on duty because it operates a twenty-four hours per day, every day of the year, the plan may list the staffed position (e.g., operations manager, shift coordinator, shift operations supervisor) as well as an emergency telephone number that can be guaranteed to be answered at all times;	DOE/RL-94-02, Sections 2.2 and 2.2.1.1 discuss personnel job titles, which will fill duties and responsibilities of the Emergency Coordinator, described in WAC 173-303-360. A list of current assigned or “on-call” BEDs/BWs is maintained at the Patrol Operations Center per II.A.4. A list of BEDs/BWs for each Hanford TSD unit group is maintained in Permit Attachment 4A. Changing BEDs/BWs on this list is a class 1 mod, self-implemented.	<i>BEP Section 3.1</i> The list of BEDs/BWs for CAAs and SAAs is maintained and collocated with the BEP.

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(9)(b)(v)	The contingency plan must contain the following: (v) A list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities; and	DOE/RL-94-02, Sections 11.2 and 11.2.8, and Appendix C	<i>BEP Sections 9.1, 9.2, 9.3, 9.4, and 9.5</i>
WAC 173-303-201(9)(b)(vi)	The contingency plan must contain the following: (vi) An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe the signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of materials or fires).	DOE/RL-94-02, Figure 7-3 and Table 5-1	<i>BEP Section 7.1.1</i>
WAC 173-303-201(10)	(10) Copies of contingency plan. A copy of the contingency plan and all revisions to the plan must be:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-201(10)(a)	(a) Maintained at the large quantity generator’s facility; and	DOE/RL-94-02, Section 14.3.7	<i>BEP Section 12.0</i>
WAC 173-303-201(10)(b)	(b) Submitted by the large quantity generator to all local emergency responders (i.e., police departments, fire departments, hospitals, and state and local emergency response teams) that may be called upon to provide emergency services.	DOE/RL-94-02, Section 14.3.7	Not applicable at the unit level. DOE is responsible for offering documents to offsite entities.
WAC 173-303-201(12)	(12) Amendments of a contingency plan. The large quantity generator must review and immediately amend the contingency plan, if necessary, whenever:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-201(12)(a)	(a) Applicable regulations are revised;	DOE/RL-94-02, Section 14.3.1.1	<i>BEP Section 12.0</i>
WAC 173-303-201(12)(b)	(b) The plan fails in an emergency;	DOE/RL-94-02, Section 14.3.1.1	<i>BEP Section 12.0</i>
WAC 173-303-201(12)(c)	(c) The generator’s facility changes (in its design, construction, operation, maintenance, or other circumstances) in a way that materially increases the potential for fires, explosions, or releases of dangerous waste or dangerous waste constituents, or in a way that changes the response necessary in an emergency;	DOE/RL-94-02, Section 14.3.1.1	<i>BEP Section 12.0</i>
WAC 173-303-201(12)(d)	(d) The list of emergency coordinators changes; or	DOE/RL-94-02, Section 14.3.1.1	<i>BEP Section 12.0</i>
WAC 173-303-201(12)(e)	(e) The list of emergency equipment changes.	DOE/RL-94-02, Section 14.3.1.1	<i>BEP Section 12.0</i>

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(13)	(13) Emergency coordinator. At all times, there must be at least one employee either on the facility premises or on call (that is, available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility’s contingency plan, required by subsection (9) of this section, all operations and activities at the facility, the location and properties of all wastes handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan and to implement the necessary emergency procedures outlined in subsection (14) of this section.	DOE/RL-94-02, Sections 2.2 and 2.2.1.1	<i>BEP Section 3.1</i> Permit Attachment 4A lists the BED/BW for each unit.
WAC 173-303-201(14)	(14) Emergency procedures. The following procedures must be implemented in the event of an emergency:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-201(14)(a)	(a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or designee when the emergency coordinator is on call) must immediately:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-201(14)(a)(i)	(i) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and	DOE/RL-94-02, Sections 2.2.1.1.2(b), 2.2.1.1.3(b), and 5.2.5	<i>BEP Section 7.1 and subsections and 7.2 subsections</i>
WAC 173-303-201(14)(a)(ii)	(ii) Notify appropriate state or local agencies with designated response roles if their help is needed.	DOE/RL-94-02, Sections 1.3.4 and 5.2.1 Units summon assistance by calling the Hanford Patrol emergency number. No offsite assistance is requested by the unit itself.	<i>BEP Section 4.0</i>
WAC 173-303-201(14)(b)	Emergency procedures. (b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials.	DOE/RL-94-02, Sections 2.2.1.1.2(f), 2.2.1.1.3(g), and 4.2	<i>BEP Section 4.0</i>
WAC 173-303-201(14)(c)	Emergency procedures. (c) Concurrently, the emergency coordinator must assess possible hazards to human health and the environment (considering direct, indirect, immediate, and long-term effects) that may result from the release, fire, or explosion.	DOE/RL-94-02, Sections 4.2 and 2.2.2.2.4	<i>BEP Section 4.0</i>
WAC 173-303-201(14)(d)	Emergency procedures. (d) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment, they must report their findings as follows:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-201(14)(d)(i)	(i) If their assessment indicates that evacuation of local areas may be advisable, they must immediately notify appropriate local authorities. They must be available to help appropriate officials decide whether local areas should be evacuated; and	DOE/RL-94-02, Sections 2.2.1.1.2(a) & (d), 2.2.1.1.3 (a) & (e), 5.1.1, 5.1.1.2, and 5.1.2.1	<i>BEP Section 7.1</i>

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(14)(d)(ii)	(ii) They must immediately notify the department and either the government official designated as the on-scene coordinator, or the National Response Center (using their twenty-four -hour toll free number 1-800-424-8802).	DOE/RL-94-02, Sections 2.2.1.1.2(a) & (d), 2.2.1.1.3 (a) & (e), 5.1.1, 5.1.1.2, 5.1.2.1, and 5.1.2.2	<i>BEP Section 4.0</i>
WAC 173-303-201(14)(e)	(e) Their assessment report must include: (i) Name and telephone number of reporter; (ii) Name and address of facility; (iii) Time and type of incident (e.g., release, fire); (iv) Name and quantity of material(s) involved, to the extent known; (v) The extent of injuries, if any; and (vi) The possible hazards to human health or the environment outside the facility.	DOE/RL-94-02, Sections 2.2.1.1.2(d), 2.2.1.1.3(e), 5.1.1, 5.1.1.2, 5.1.2.1, and 5.1.2.2	<i>BEP Section 4.0</i>
WAC 173-303-201(14)(f)	Emergency procedures. (f) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other dangerous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.	DOE/RL-94-02, Sections 2.2.1.1, 2.2.1.1.2(f), and 2.2.1.1.3(g)	<i>BEP Section 7.6</i>
WAC 173-303-201(14)(g)	Emergency procedures. (g) If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.	DOE/RL-94-02, Sections 2.2.1.1.2(f) and 2.2.1.1.3(g)	<i>BEP Sections 7.2.4 and 7.2.5</i>
WAC 173-303-201(14)(h)	Emergency procedures. (h) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.	DOE/RL-94-02, Section 9.2.3	<i>BEP Section 8.2</i>
WAC 173-303-201(14)(i)	Emergency procedures. (i) The emergency coordinator must ensure that, in the affected area(s) of the facility:	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-201(14)(i)(i)	(i) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and	DOE/RL-94-02, Section 9.2.3	<i>BEP Section 8.2.1</i>
WAC 173-303-201(14)(i)(ii)	(ii) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.	DOE/RL-94-02, Section 11.2	<i>BEP Section 8.2.2</i>
WAC 173-303-201(14)(j)	Emergency procedures. (j) The large quantity generator must notify the department, and appropriate local authorities, that the facility is in compliance with this subsection (14)(i) of this section before operations are resumed in the affected area(s) of the facility.	DOE/RL-94-02, Section 5.1.2.2	<i>BEP Section 8.2</i>

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(14)(k)	<p>Emergency procedures. (k) The large quantity generator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within fifteen days after the incident, they must submit a written report on the incident to the department. The report must include: (i) Name, address, and telephone number of the owner or operator; (ii) Name, address, and telephone number of the facility; (iii) Date, time, and type of incident (e.g., fire, explosion); (iv) Name and quantity of material(s) involved; (v) The extent of injuries, if any; (vi) An assessment of actual or potential hazards to human health or the environment, where this is applicable; (vii) Estimated quantity and disposition of recovered material that resulted from the incident; (viii) Cause of incident; and (ix) Description of corrective action taken to prevent reoccurrence of the incident.</p>	DOE/RL-94-02, Sections 5.1.2.1 and 5.1.2.2	<i>BEP Section 11.0</i>