Hanford Tank Waste Treatment and Immobilization Plant

Document Owner
WTCC

Applicability	Project Phase	Organization Use	Level of Use
WTCC	All	Cross-Functional	Information
Care, Custody, and Control	N/A		

Plan

24590-WTP-PL-RAEP-EP-0004

Revision 5

Building Emergency Plan For The WTP Site

Date: April 4, 2024

Requirement Area: Emergency Preparedness

Position	Print Name	Signature	Date
RA SME / Preparer	Victor Edens	Victor J. Edens	3/26/2024
RAM / Approval Authority	Eric Kinnunen	Eric Kinnunen	3-26-2024

Ref: 24590-WTP-GPP-RAPR-PR-1002
24590-WTP-GPP-RAPR-PR-1004
24590-WTP-GPP-RAPR-PR-2003

This Page Left

Intentionally Blank

Approved

Building Emergency Plan for the WTP Site

This plan covers the WTP buildings and structures which are defined in section 1.2.

Approved:

Facility Management:	Jeremy Hartley *Print/Type Name*	Jeremy T Hartley *Signature*	03/27/24 *Date*
Environmental Organization:	Robert Haggard *Print/Type Name*	Robert Haggard *Signature*	3/26/2024 *Date*
Emergency Preparedness RAM:	Eric Kinnunen *Print/Type Name*	Eric Kinnunen *Signature*	3-26-2024 *Date*
Emergency Preparedness RA SME:	Victor Edens *Print/Type Name*	Victor J. Edens *Signature*	3/26/2024 *Date*

Approved

History Sheet

Rev	Reason for revision	Revised by
0	Initial version	V. Edens, E. Kinnunen, S. Rouse
1	Edited to add fire extinguisher table 9.2-1 and various minor changes.	V. Edens, E. Kinnunen, S. Rouse
2	Edited entire document to add appropriate language for calling 911 per CR 21-00685, Remedial Action #5.	V. Edens, E. Kinnunen, S. Rouse
3	Edited Section 7.1.2 to update current accountability process. Edited table 9.1 to update locations of safety showers/eye wash stations Edited table 9.2-1 to show updated fire extinguisher information and clarify issuance of portable fire extinguishers. Edited table in Section 9.5 to remove reference to MHF Warehouse. Edited location of alternate ICP in Section 9.6 Edited location of alternate ICP in Section 12.0	V. Edens, E. Kinnunen, S. Rouse
4	Edited Figure 1-2 to show current revision of WTP facility layout. Edited Section 9.6 to update the location of the Alternate Incident Command Post. This will close CR 22-00812. Edited Section 12 to update the location of plan copies.	V. Edens, S. Rouse
5	Various minor editorial changes Minor edits throughout. Section 7.1.2, added reference to Chemical Safety Management Program procedure. Added table 9.3-1 to show Alertus beacons and close CR 23-23-00618.	S. Rouse

Contents

Approved

1.0 General Information

The Hanford Tank Waste Treatment and Immobilization Plant (WTP) 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 WTP 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 TSD facilities) allows 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, 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
Hanford Tank Waste Treatment and Immobilization Plant (WTP)

1.2 Facility Location

Benton County, Washington within the 200 East Area.

Buildings/facilities covered by this plan are:

Treatment, Storage, and Disposal Facilities:
Pretreatment Facility (PTF) – Building 10
High-Level Waste Facility (HLW) – Building 30
Low-Activity Waste Facility (LAW) – Building 20
Low-Activity Waste Effluent Management Facility (EMF) Buildings 25, 25A, 25B, 26, and 27
Analytical Laboratory (Lab) – Building 60

Balance of Facilities (BOF):
Access Control Facility – Building T-23
Anhydrous Ammonia Storage Facility – Building 23
Chiller/Compressor Plant – Building 82
Connex W-15A and W-15B are used for Satellite Accumulation Areas (SAAs) and Central Accumulation Areas (CAAs).

Cooling Tower Facility – Building 83
Fire Water Pump Houses and Fire Water Storage Facility – Buildings 84A and 84B
Fuel Oil Facility – Building 81
Fuel Storage (Various Locations)
Glass Former Storage Facility – Buildings 21 and 21S
Main Switchgear Building – Building 87
Non-Dangerous Non-Radioactive (NDNR) Liquid Waste Disposal Facility – Building 54
Simulator – Building 58
Standby Diesel Generator Facility – Building 87S
Steam Plant – Building 85
T-1 Administration Building – Building 51
Temporary Office Trailers (Various Locations)
Warehouse – Building 52
Water Treatment Building and Storage Tanks – Building 86
Wet Chemical Storage Facility – Building 11

Container Storage Areas:
Transportation Staging Area
WTP Waste Storage Area – 90A and 90B

Outlying work areas outside the WTP facility:
T-43 and T-47, Warehouses and laydown yard
Boneyard, laydown yard
Pit 30, gravel pit

1.3 Owner

U.S. Department of Energy
Richland Operations Office
PO Box 550
Richland, Washington 99352

Manager

Bechtel National Inc.
450 Hills Street
Richland, Washington 99354

1.4 Description of the Facility and Operations

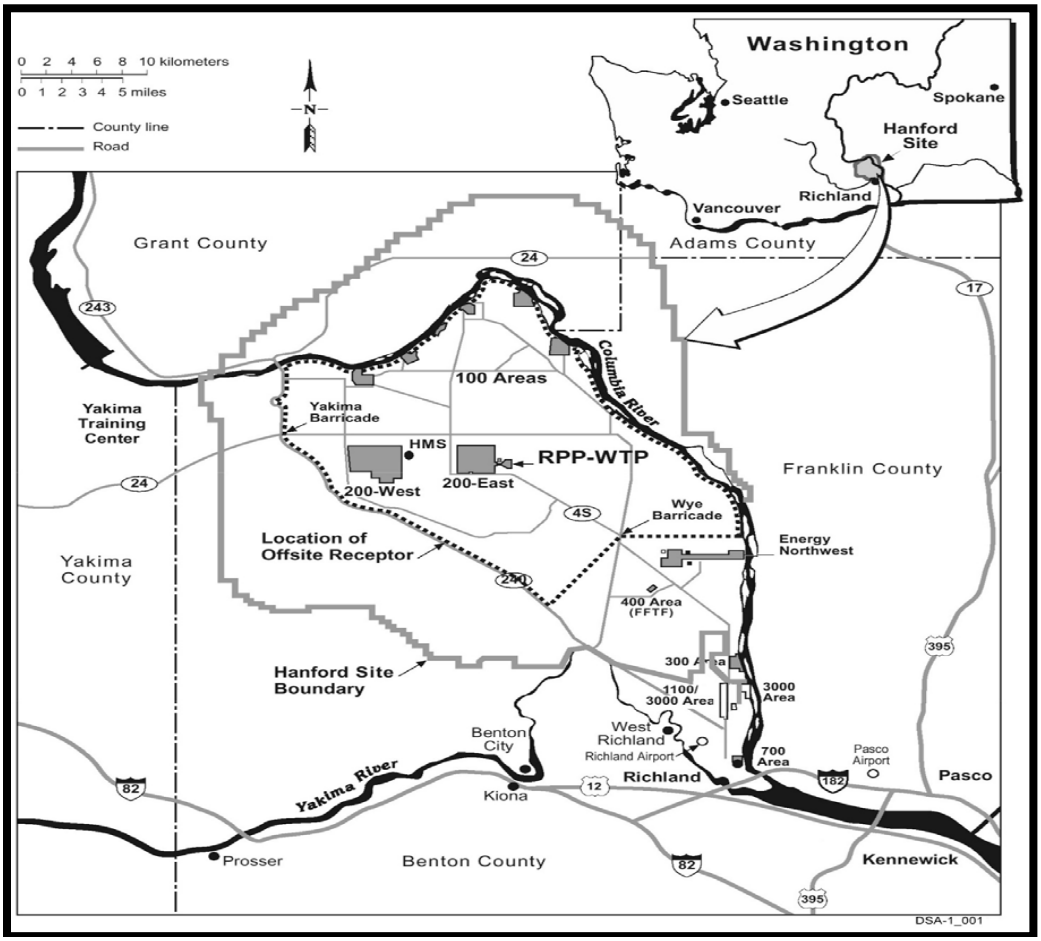
The Hanford Tank Waste Treatment and Immobilization Plant (WTP) is a treatment, storage and disposal facility. The U. S. Department of Energy (DOE) Office of River Protection (ORP) is responsible for managing millions of gallons of radioactive waste, the result of over 40 years of reactor operations and plutonium production for national defense.

The waste is stored in underground tanks, some of which have leaked into the soil. DOE has mandated the removal, treatment, and disposal/storage of the waste (24590-LAW-DSA-NS-18-0001, Rev. 2, *Documented Safety Analysis for the Low-Activity Waste Facility*, Section E.1.1). Cleanup of the

waste is a national priority. The mission of the WTP project is to design, construct, commission, and start-up a facility that will accomplish this clean-up effort.

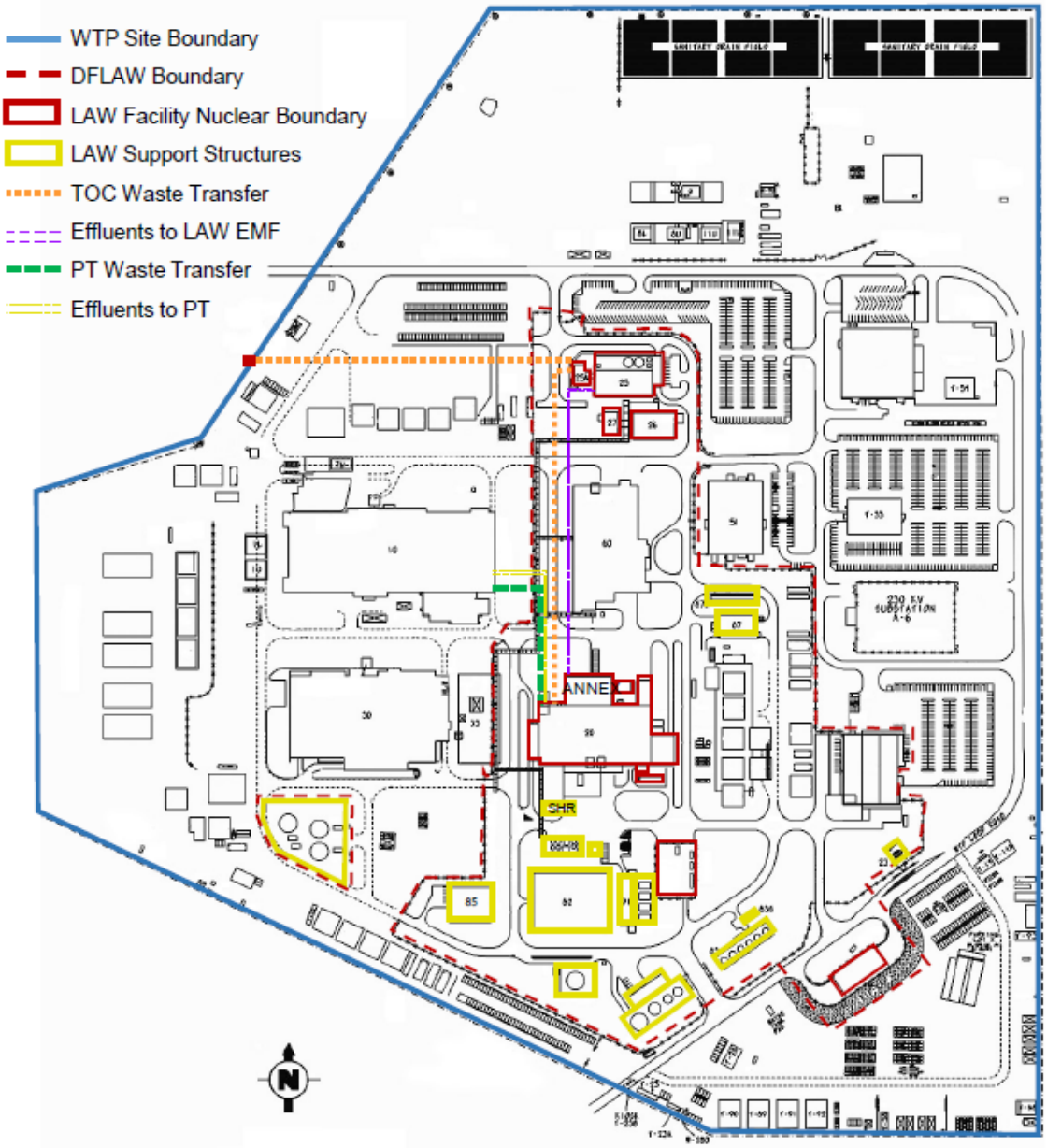
As shown in Figure 1-1, the WTP is located adjacent to the east side of the 200 East Area. The WTP and Low-Activity Waste (LAW) Facility layout can be seen in Figure 1-2. The site occupies roughly one square mile with two vehicle access points. The WTP project includes a variety of facilities and processes design to support its mission. These facilities can be broken down into five key categories: process facilities, support facilities, utilities, warehouse facilities, and administrative facilities.

Figure 1-1: WTP on the Hanford Site



Approved

Figure 1-2: WTP and LAW Facility Arrangement



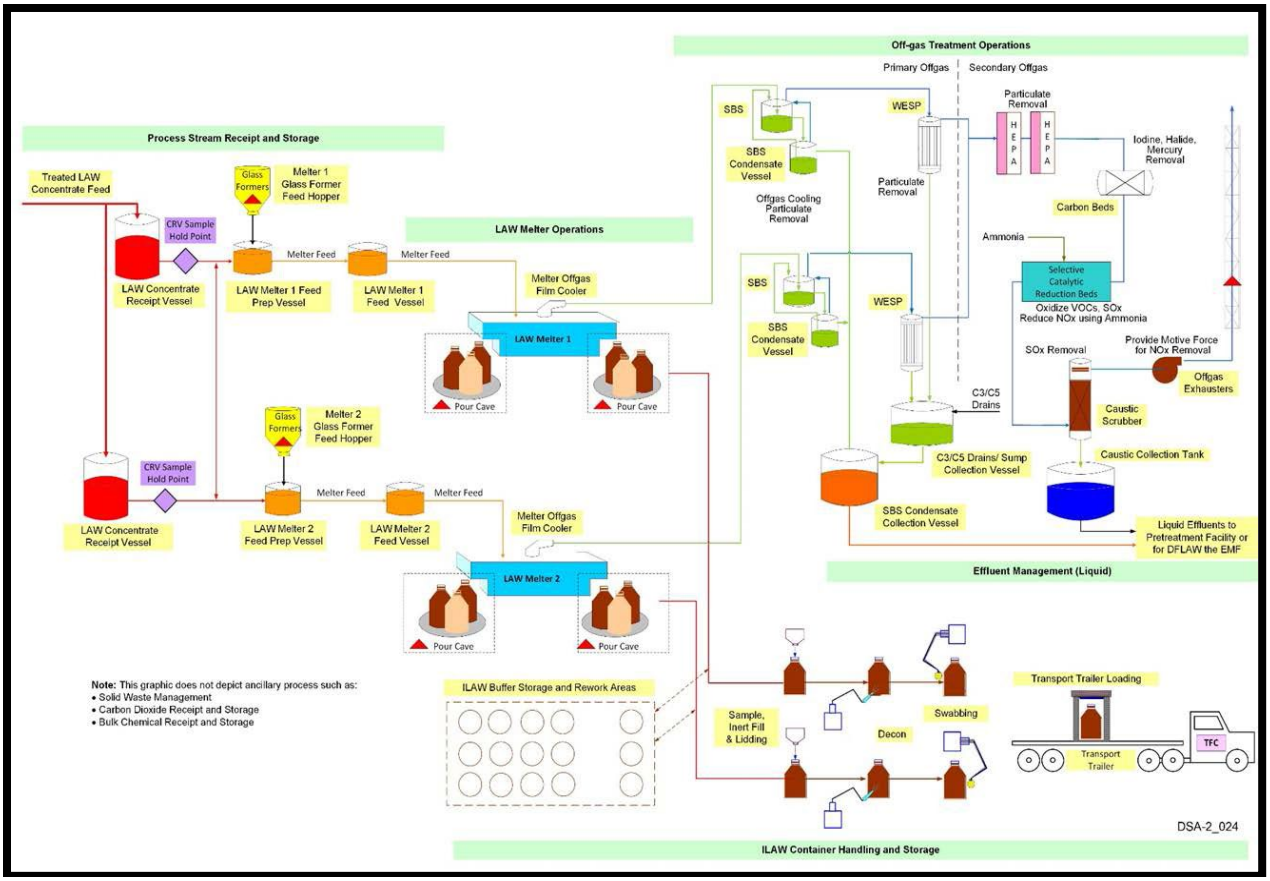
10 Pretreatment Facility	25A LAW Effluent Drain Tank Building
20 Low-Activity Waste Facility	26 LAW Effluent Utility Building
21 Glass Former Storage Facility and GFSF Blend Building	27 LAW Effluent Electrical Building
21S Glass Former Storage Facility Control Building	30 High-Level Waste Facility
23 Anhydrous Ammonia Facility	60 Analytical Laboratory
24 LAW Switchgear	87S Standby Diesel Generator
25 LAW Effluent Process Building	89 Emergency Turbine Generators
	90A/B WTP Central Waste Storage Areas

TP2301_2

1.5 WTP Process Facilities

A general schematic of the overall Low-Activity Waste (LAW) process is shown in Figure 1-3.

Figure 1-3: Simplified LAW Process Flow Diagram



Waste that meets the LAW acceptance criteria is received through an underground double-walled pipeline from either the Pretreatment Facility (PT) when operational or Low-Activity Waste Pretreatment System (LAWPS) or recycled back from the Effluent Management Facility (EMF) during Direct-Feed Low-Activity Waste (DFLAW). The pretreated low-activity liquid waste is transferred into a Concentrate Receipt Vessel (CRV) where the waste is sampled and analyzed to determine the appropriate glass former formulations to be added. The waste is agitated to ensure fine particulates are kept in suspension and stored in the CRV until the analytical results are available. Once the correct formula of glass formers is determined, the waste is transferred from the CRV to the Melter Feed Preparation Vessel (MFPV) where glass formers are added to form the feed slurry.

The resulting feed slurry is transferred to the Melter Feed Vessel (MFV) to ensure a continuous supply to the LAW melters. At the melter, it is incorporated into the melt pool and converted into molten glass. Each LAW melter is designed with a nominal production rate of 15 metric tons per day of Immobilized Low-Activity Waste (ILAW) and operates at a nominal temperature range between approximately 1050 °C and 1200 °C (1922 °F and 2192 °F). Water and volatile organics in the feed boil off, and salts decompose and convert to oxide forms, fusing into glass. Nonvolatile components

react to form oxides or other compounds that are incorporated into the molten glass via joule heating (passing current through the glass between electrodes). Bubblers agitate the molten glass to promote mixing. An airlift system is used to pour the molten glass through the melter discharge chamber into stainless-steel containers. Each container holds about 6 metric tons of ILAW.

The filled containers are initially cooled on the turntable in the pour cave, and then, if needed, transferred to a buffer area for further cooling. After meeting the cooling requirements, the containers are transferred and examined for fill height. If the glass level is below the acceptable level, the container is topped off with inert fill after a glass shard sample is taken for analysis. Next, the containers are lidded, decontaminated, surveyed for contamination, and transferred to the final export position. Once the containers have been verified to meet disposal requirements, they are moved to the ILAW export bay where they are loaded on a truck for shipment and disposal on the Hanford Site.

The offgas from the melters and storage vessels (e.g., CRV, MFPV, and MFV) is treated to meet process needs and permit requirements. Offgas treatment equipment includes: a submerged bed scrubber (SBS); a wet electrostatic precipitator (WESP); high-efficiency particulate air (HEPA) filters; an activated carbon bed absorber for mercury; a thermal catalytic oxidizer (TCO) and a selective catalytic oxidizer/reducer for volatile organic compounds (VOC) and NOx; and a caustic scrubber for acids.

2.0 PURPOSE

This plan describes the facility hazards and the actions that will be taken in response to upset and/or emergency conditions within the WTP. 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 requirement is 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 the WTP.

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 locations and

Approved

WAC 173-303-360(1) (for permitted TSD facilities). During events, WTP personnel perform response duties under the direction of the BED. The senior responding Hanford Fire Department officer 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 WTP operations.

A BED is available at the WTP 24 hours a day. Contact numbers for the BEDs are posted on the Emergency Information Boards (EIBs).

Emergency Preparedness maintains a complete listing of current, qualified BEDs. The list is maintained in the LAW Annex ICP, co-located with this plan and also contained in Permit Attachment 4A.

3.2 Other Members

The BED will utilize the Incident Command System (ICS) supplemented by facility-specific emergency operating procedures and DOE-0223, *Emergency Plan Implementing Procedures*, RLEP 1.1, *Hanford Incident Command System and Event Recognition and Classification*. The BED will appoint trained personnel to staff in the Facility Emergency Response Organization (FERO) positions as necessary, the FERO positions are listed below.

- Incident Command Post (ICP) Communicator is responsible for making the classification notification and initiating and maintaining a communication line with the Emergency Operations Center (EOC).
- ICP Hazards Communicator is responsible for communicating data to the EOC for consequence assessment.
- Facility Operations Specialist is responsible for providing facility-specific knowledge to the Operations Section Chief and coordinating facility resources for mitigating the incident.
- Radiological Hazard Assessor is responsible for coordinating and ensuring accomplishment of radiological control functions throughout the incident scene.
- Chemical Hazard Assessor is responsible for providing technical support for non-radiological hazardous material response.
- Facility Staging Area Manager is responsible for making sure the staging area is in a safe location and those personnel in PPE are segregated, surveyed, and doffed.

The BED will notify other facility/building ERO to support the on-scene response. The BED will provide response direction to needed FERO members using an in person briefing, the WTP public address system, facility radios or cell phone. If additional resources or FERO members are needed and are not currently on the site, the BED will ensure these personnel are notified to respond and provide direction as to their roles/responsibilities.

The complete facility/building ERO listing of positions, names of ERO members, work locations, and telephone numbers for the WTP is maintained in a separate location in a format determined

appropriate by WTP management. Copies are distributed to appropriate WTP 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, amount, and extent of any released materials. Identification can be made by activities that can include, but are not limited to, visual inspection of involved containers, dangerous waste, dangerous/mixed waste, 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 plan requirements.**

AND

3. **The emergency circumstance poses a threat to human health or the environment.**

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 (WSDOE) 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.

Approved

If the BED determines that the event response requires contingency plan implementation, the BED must ensure that the environmental organization is directed to notify the Washington State Department of Ecology 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.**
- **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 is intended to provide an overview of hazardous materials, processes, and/or operations that may be encountered at the WTP.

5.1 Hazardous Materials

Hazardous materials are used for normal operations, maintenance, and support functions at the WTP. These materials may include acids, caustics, oils, diesel fuel, and solvents.

The WTP maintains a list of hazardous materials in accordance with chemical management program and utilizes the chemical inventory tracking system for current quantities. Copies of Safety Data Sheets (SDS)/Material Safety Data Sheets (MSDS) can be accessed online through the contractor safety and health programs webpage link.

5.1.1 Chemical Hazards

Chemicals are used for operations, maintenance, and support functions at the WTP. For a list of chemicals utilized at the WTP, see the Hazard Survey. Copies of SDS/MSDS can be accessed online through the contractor safety and health programs webpage link.

5.2 Industrial Hazards

Industrial hazards are found throughout the WTP. These hazards include steam, electrical, pressurized equipment, high temperature equipment, rotating equipment, confined spaces, compressed gas cylinders, noise, and elevated walking surfaces.

5.3 Dangerous/Mixed Waste

As a waste treatment facility, the WTP is designed to safely treat radioactive mixed waste. In support of that work, the Waste Management program, through its processes and procedures, ensure that dangerous and radioactive mixed waste are managed to maintain compliance with the state and federal regulations and to ensure the safety of the workers, the public and the environment.

Approved

Dangerous waste categories treated at the WTP will be identical to the Double-Shell Tank Farms. Categories include characteristic, listed, and state-only wastes, two of which are designated as extremely hazardous waste (WT01 and WP01). The following summarizes the dangerous waste numbers for the WTP.

Characteristic Waste Numbers

D001	D002	D003	D004
D005	D006	D007	D008
D009	D010	D011	D018
D019	D022	D028	D029
D030	D033	D034	D035
D036	D038	D039	D040
D041	D043		

Environmental Performance Demonstration Test Waste Numbers

U037	U165		

Listed Waste Numbers

F001	F002	F003	F004
F005			

State-only Waste[a] Numbers

WT01	WT02	WP01	WP02

a Washington State criteria

The WTP will use the following four types of permitted dangerous waste management units:

- Storage in containers
- Treatment and storage in tanks
- Treatment in miscellaneous units (the melters)
- Containment miscellaneous units

5.3.1 Solid Form

Radioactive, dangerous, and mixed wastes will be generated at the WTP during sampling, decontamination, and maintenance activities. This waste will be accumulated in designated central accumulation areas (CAAs) and satellite accumulation areas (SAAs) and transported to a permitted storage area.

5.3.2 Liquid Form

Radioactive mixed waste solutions and slurries will be processed at the WTP.

5.3.3 Gaseous Form

Airborne effluent streams will be produced through the following:

- Radiological control area Heating Ventilation Air Conditioning (HVAC) system – exhaust from radiological controlled areas.
- Vessel off-gas systems – vapors and gases from tanks and process equipment including the melters.

The off-gas systems will remove particulate, condensate NOx and organic vapors from the air stream before discharging them to the radiological controlled area HVAC system. The combined air stream will pass through High-Efficiency Particulate Air (HEPA) filtration and will be monitored for radioactivity and chemicals.

5.4 Radioactive Materials

Within the DFLAW configuration, LAW, Lab and EMF facilities contain radioactive material. The radioactive material within the DFLAW configuration has been identified and evaluated for emergency planning purposes in 24590-WTP·RPT-CON-03·001, *Emergency Planning Hazards Survey* and 24590-WTP-RPT-SA-19-005, *Emergency Planning Hazards Assessment.*

5.5 Criticality

Analyses have shown that the waste will remain safely subcritical under all normal and credible abnormal conditions (24590-WTP-CSER-NS-16-0001, *Criticality Safety Evaluation Report for Direct Feed to the Low-Activity Waste Facility)*.

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 WTP.

6.1 Facility Operations Emergencies

6.1.1 Loss of Utilities

6.1.1.1 Loss of Electrical Power

A loss of electrical power to the WTP is possible. Loss of electrical power may result in loss of instrumentation and control, normal building lighting, loss of ventilation systems, etc. Loss of electrical power may necessitate the evacuation of nonessential personnel from specific buildings until power can be restored. A back up power supply is available for critical systems at the WTP.

6.1.1.2 Loss of Water

A loss of potable, raw or fire suppressant water will not likely result in a plant emergency or evacuation of the WTP. Operations may be limited in order to minimize impact from the loss of water. A loss of water to the fire suppression system could result in a plant emergency, if a fire should develop.

6.1.1.3 Loss of Ventilation

A loss of ventilation could cause a change to plant operation and may require local evacuation of personnel if loss of contamination control is suspected.

6.1.1.4 Loss of Plant Service Air or Instrument Air

A loss of plant service air or instrument air could cause a change to plant systems but would not require implementation of personnel protective actions.

6.1.2 Major Process Disruption/Loss of Plant Control

Any major process disruption or loss of plant control has been analyzed. Issues identified and the appropriate response actions are documented in the applicable sections of this Building Emergency Plan.

6.1.3 Pressure Release

The WTP will have high pressure steam, low pressure compressed air, and other steam systems. Loss of the compressed air or steam system could result in loss of plant control or a process disruption. Process disruption or loss of plant control could interrupt the treatment processes, but it is not likely that this event would be classified as an emergency.

Pressurized gases will be used throughout the WTP. Additionally, compressed gas cylinders will be stored in the compressed gas storage area. The inventory of gases includes flammable and nonflammable. These gases pose a hazard in the immediate storage area or in the immediate area of the location being used. Failure of compressed gas bottles could cause flying debris hazards. This condition is addressed in section 6.1.4.

6.1.4 Fire and/or Explosion

A fire or explosion could generate highly toxic or corrosive fumes or a release of radioactive material. Flying debris might result from explosions or compressed gas cylinder failure. Process system disruption, loss of plant control, and breach of process system boundaries could result from the flying debris. In addition, heavy smoke could disrupt the operation of the ventilation system.

6.1.5 Hazardous Material Spill

Hazards associated with these types of spills include the potential exposure to corrosive and/or toxic materials, as well as potential environmental damage by a release to the air or ground (soil). Hazardous materials stored at the WTP include, but are not limited to, the following:

- Anhydrous Ammonia
- Bulk Silica
- Nitric Acid
- Sodium Hydroxide
- Diesel Fuel Oil
- Propane
- Various commercially available chemicals used in daily operations and maintenance of facilities.

6.1.6 Dangerous/Mixed Waste Spill

Dangerous waste or mixed waste could spill due to equipment failure or operator error. The severity of the event would be dependent on the nature and quantity of the spill. Potential environmental damage could occur to the ground (soil) due to the release of these materials.

6.1.7 Transportation and/or Packaging Incidents

A transportation or packaging incident involving hazardous chemicals, samples, radioactive material or waste could result in personnel exposure. Potential environmental damage could occur to the air or ground (soil) due to the release of these materials.

6.1.8 Radioactive Material Release

The WTP processes include large quantities of radioactive liquids and slurries. Radioactive materials could accumulate in various treatment systems. The plant has the potential for concentrating radioactive waste, therefore, responses for abnormal radiation levels and radioactive waste releases are included in the scope of emergency planning. The release could come as a result of either failure of the ventilation system or a catastrophic leak of mixed waste.

6.1.9 Criticality

Analyses have shown that the waste will remain safely subcritical under all normal and credible abnormal conditions (24590-WTP-CSER-NS-16-0001, *Criticality Safety Evaluation Report for Direct Feed to the Low-Activity Waste Facility)*.

6.2 Natural Phenomena

The WTP is designed such that it will not fail under a design basis event. Therefore, natural phenomena events are not expected to cause structural damage to the WTP, which would constitute an emergency or cause a release to the environment. However, the following natural phenomena that have the potential to cause conditions which are beyond the facility design basis are discussed: a beyond design basis seismic event, volcanic eruption/ash fall, high winds, flood, range fire, and aircraft crash.

6.2.1 Seismic Event

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. There is also the possibility of a chemical or radiological release during a significant seismic event.

6.2.2 Volcanic Eruption/Ash Fall

Though not expected to cause structural damage; the ash resulting from a volcanic eruption could cause a shortage in electrical equipment, plug ventilation system filters, cause a loss of PSA compressors that will affect air operated valves (most fluid systems) and in turn, disrupt process operations.

6.2.3 High Winds/Tornadoes

High winds or tornadoes may cause structural damage to systems containing hazardous materials resulting in a release of materials to the environment. There may be a possibility of a chemical or radiological release during a significant event. Dirt and dust from windstorms may cause a shortage in electrical equipment, plug ventilation system filters, and cause a loss of PSA compressors that will affect air operated valves (most fluid systems). Disruption of normal operations is possible.

6.2.4 Flood

The 200 East Area is well above projected flood elevations for the Columbia and Yakima Rivers; therefore, a flood is not considered a credible natural event for the WTP. The grading and drainage features that are provided ensure that precipitation, even from a downpour, would infiltrate the ground or drain off toward the Columbia River without significant flooding. The WTP is not sited in a wetlands or coastal high hazard area.

6.2.5 Range Fire

The hazards associated with a range fire are similar to those associated with a building fire with potential site access restrictions and travel hazards such as poor visibility. Smoke and ash from a range fire can also cause a shortage in electrical equipment or plug ventilation system filters. Disruption of normal operations is possible.

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. There is also the possibility of a chemical or radiological release during this type of event.

6.3 Security Contingencies

Security contingencies are discussed in the following sections.

6.3.1 Bomb Threat/Explosive Device

A bomb threat may be received by anyone who answers the telephone, receives email, or letter/mail. The major effect on the WTP is that personnel will need to initiate emergency shutdown before evacuation. If an explosive device detonates, the effects are the same as those discussed under fire and explosion in Section 6.1.4.

6.3.2 Hostage Situation/Armed Intruder

A hostage situation or an armed hostile intruder(s) may pose an emergency if either of these conditions has the potential to adversely affect facility operations. This could result in a loss of facility control or the coercion of an employee to take a malevolent action. The severity of the emergency would be based on actual or potential damage to the WTP or release of hazardous material or radioactive, dangerous, or mixed waste.

6.3.3 Suspicious Object

If a suspicious object is discovered, the major effect on the WTP is that personnel may need to perform an emergency shutdown of the facility before evacuation. If the device were to detonate, the effects would be the same as those discussed under fire and explosion in Section 6.1.4. The response to a suspicious object with the potential to contain a bomb would be the same as a bomb threat discussed in section 6.3.1 above.

6.4 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 identification of 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 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.

7.0 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.

In addition to the facility protective actions described below, the BED also reviews the site wide and WTP 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.

A common set of initial response actions are performed by the event discoverer and the BED during all events. Those actions are described below and are not repeated in each following subsection.

The discoverer notifies the BED and initiates SWIM response as specified in the following sections.

- **Stops work.**
- **Warns others in the vicinity.**
- **Isolates the area.**
- **Minimizes exposure to the hazards.**
  - **The BED determines if emergency conditions exist requiring response from the Hanford Fire Department and evaluates the need to perform additional protective actions.**
  - **If the Hanford Fire Department resources are not needed, the event 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 ensures notification to 9-1-1 from site phones (509-373-0911 from a cellular phone).**
  - **The BED ensures a representative is sent to meet the Hanford Fire Department.**
  - **The BED provides a formal turnover to the IC when the IC arrives at the incident command post (ICP).**
  - **The BED informs the Hanford Site ERO as to the extent of the emergency (including estimates of dangerous waste and mixed waste quantities released to the environment, if applicable).**
  - **If operations are stopped in response to the event, the BED ensures that systems are monitored for leaks, pressure buildup, gas generation, and ruptures, if applicable.**
  - **Hanford Fire Department stabilizes the event.**

7.1.1 Evacuation Plan

The WTP may need to evacuate when conditions warrant (e.g., fire, explosion, release of hazardous material) or due to an emergency at a neighboring facility. Evacuation will be initiated by Hanford Site evacuation sirens or directed by the BED.

The BED may initiate the evacuation of a building(s) or the entire WTP site with a public address (PA) announcement, facility radios, and/or use of the WTP Alert. The BED will determine the staging area to be used based on the location of the event, wind direction, and WTP emergency procedures. As conditions warrant, the Hanford Site Emergency Alerting System (HSEAS) sirens will be activated by calling the POC at 911 or 509-373-0911 from a cell phone.

Maps showing evacuation routes out of WTP buildings are provided on EIBs. These routes are based on normal ingress and egress used for evacuation out of work areas.

For an immediate evacuation, accountability for LAW will be performed at the staging area, using the LAW sign-in roster. For all other buildings, accountability will be completed at the respective staging area(s). Personnel Accountability Aides (PAAs) and Staging Area Managers (SAMs) will ensure evacuation actions are taken for applicable WTP buildings. When evacuation actions are complete, the PAAs will report accountability to the SAMs. The SAMs will communicate accountability information to the BED. If appropriate, accountability will be communicated to the Facility Operations Specialist (FOS) who will provide that information to the BED and/or Operations Section Chief (OSC).

Personnel in radiological control areas will conduct an orderly egress, removing protective clothing and surveying per exit procedures, if safe to do so. Personnel unable to remove protective clothing and survey-out will remain segregated and report to the PPE staging area. These personnel will notify the SAM and/or FOS that they require radiological surveys.
If an emergency requires the evacuation of the WTP or Hanford Site, the evacuation is coordinated by the Hanford EOC. Evacuation instructions may be provided via the HSEAS. Accountability of personnel will be performed at the staging area location identified by the Hanford EOC. Personnel will use their privately owned vehicles and may be asked to accommodate other personnel who are without transportation. Government vehicles may also be used for evacuation.

7.1.2 Take Cover

The BED will initiate a take cover for the WTP using the facility PA system, facility radios, and/or WTP Alert. Take cover locations for the WTP are indicated on the EIBs. When Hanford Site personnel could be affected, the BED initiates the area take cover sirens by calling the POC at 911 or 509-373-0911 from a cell phone and requesting the appropriate Hanford Site area(s) be put in a take cover. [24590-WTP-PD-RAWS-SS-0003, *Chemical Safety Management Program Description*, Appendix B, Table B-2, Key Attribute 2]

When a take cover is initiated, personnel will stop work, place equipment in a safe condition, and take cover in the nearest appropriate take cover location. Exterior doors and windows will be closed, and HVAC systems will be secured. Personnel in radiological control areas will perform an orderly egress, removing protective clothing and surveying out per exit procedures and go to the appropriate take cover location (at least one air space away).

Upon entering a take cover building, potentially exposed personnel should remain segregated, and the BED notified of their location(s). The needed resources will be secured, and actions taken to assist those segregated.

The PAAs will ensure take cover actions are performed at applicable WTP buildings. When take cover actions are complete, pre-identified personnel will notify the BED of the status of personnel by calling the telephone listed on the EIB to report accountability.

7.2 Response to Facility Operations Emergencies

Depending on the severity of the event, the BED reviews the Hanford Site and WTP response procedures and, as required, categorizes/classifies the event. If necessary, the BED initiates area protective actions and Hanford Site Emergency Response Organization activation.

Emergency signals are described in the applicable sections. The discoverer of an operations emergency is expected to initiate SWIM actions and make appropriate notifications.

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.

Approved

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 based on the applicable Abnormal or Emergency Operating Procedures (AOP, EOP), until the utility is restored.

7.2.1.1 Loss of Electrical Power

Should there be a partial or total loss of electrical power to the WTP, automatic measures ensure the plant is maintained in a safe operational configuration through use of a standby diesel generator (SDG). The principal function of the SDG is to provide an onsite (standby) power supply for the operation of required systems in the absence of offsite power supplies.

The SDG is maintained in standby, ready to automatically start in the event of a loss of normal power. On a loss of normal power signal, the SDG automatically starts, accelerates to rated speed, and upon reaching rated voltage, is ready to receive loads. Selected loads are picked up without any operator action.

7.2.1.2 Loss of Water

Upon loss of the raw water system, operations will be restricted at affected facilities. Upon loss of potable water, chemical operations will be terminated until safety showers and eyewash stations are available. Upon loss of the fire suppression system, the plant will be placed in a safe configuration, and corrective actions will be implemented at affected facilities.

7.2.1.3 Loss of Ventilation

A cascade ventilation system is used at the LAW and Lab facilities in conjunction with physical building containment features to confine transferable radioactive contamination in the event of an accidental release, spill, or system failure. The ventilation system is designed to maintain building differential pressures so air will flow from areas of lessor contamination potential to areas of greater contamination potential through containment boundary penetrations such as engineered air gaps and air in-bleed ductwork.

These facilities are divided into numbered zones with the higher number indicating the greater hazard potential and, therefore, the greater degree of control/restriction required. Radiation (R1 to R5) and contamination (C1 to C5) zones are classified independently in order to differentiate between the need for shielding or confinement.

Supplied air in C2 areas flows via C3 to the C5 areas, where it will be discharged by the C5 exhaust fans. In some instances, the airflow will flow from the C2 areas to the C3 areas, where it will be discharged by the C3 exhaust fans. Some C2 air flow will be directly exhausted. Upon loss of the ventilation system, restoration of the C3 and C5 exhaust fans will be immediately attempted. If the C3 and C5 exhaust fans cannot be restored immediately, the C2 supply fans are automatically stopped, and personnel should be notified to evacuate these areas, as a precautionary measure. Additionally, continuous air monitors (CAMs) are positioned in radiological areas as notification alarms for staff to evacuate at least one air space away.

7.2.1.4 Loss of Process or Instrument Air

The plant service air system utilizes redundant air compressors. One will be in operation and the other(s) will be in auto-start mode. If the standby compressor fails to start on loss of the operating compressor, a backup compressor will be started locally.

7.2.2 Major Process Disruption/Loss of Plant Control

If there is a major process disruption, the BED will be notified while an attempt is made to return the system to service. The BED will compare the situation to criteria provided in the facility categorization/classification procedure to determine if an Operational Emergency is occurring. Guidance to assist the BED is provided in an AOP and/or EOP. If it is determined that an Operational Emergency is in progress, the BED will make the appropriate categorization/classification, initiate protective actions, begin the notification process, and activate the FERO. The system condition will be assessed, and mitigative/corrective actions will be implemented.

7.2.3 Pressure Release

Pressure hazards associated with pressurized gases or compressed gas bottles could require changes to the plant operation and may require local evacuation; the BED will utilize the appropriate AOPs/EOPs when assessing the hazards. A fire or explosion caused by a release of pressurized gas will be responded to in accordance with section 7.2.4. If a mixed waste release occurs, actions identified in sections 7.2.5 and/or 7.2.6.2 will be performed.

7.2.4 Fire and/or Explosion

In the event of a fire and/or explosion, the discoverer activates a fire alarm (pull box), if available, and notifies the Shift Operations Manager (SOM)/BED. Automatic initiation of a fire alarm (through the smoke detectors and sprinkler systems) is also possible. Activation of a fire alarm automatically signals the HFD and will be audible in the LAW Annex Control Room and affected building.

Upon notification of a fire (verbally or by fire alarm activation), personnel will immediately shut down equipment, secure systems, and secure waste if safe to do so. Personnel will exit the building by the nearest safe exit, proceed to the nearest staging area upwind of the area/building, report personnel accountability and follow the instructions of responding personnel.

Trained and qualified operations personnel may initiate appropriate response actions in the affected facility depending on the location and severity of the fire and the type of hazards in the affected area. The BED will work with the Hanford Site Emergency Response Organization and may perform the following:

- proceed directly to the ICP, obtain all necessary information pertaining to the incident and ensure that a flagger is sent to meet the HFD.
- The BED will utilize the *DOE-0223, RLEP 1.1, Section 3.1 Building Emergency Director for Hazardous Facilities – Checklisted Duties* as guidance in requesting emergency services, responding to event conditions, and to provide a turnover briefing to the IC, when the IC arrives at the ICP.
- If operations are stopped in response to the fire, ensure that systems are monitored for leaks, pressure buildup, gas generation, and ruptures.
- The HFD extinguishes the fire as necessary.

Following a fire and/or explosion, WAC 173-303-640(7) will be addressed for the WTP tank systems which may have been affected regarding fitness for use.

7.2.5 Hazardous Material, Dangerous and/or Mixed Waste Spill

The WTP has engineering controls to contain or minimize spills. These controls include containment berms, dedicated spill control sumps, remote leak detection systems, remote gauges and level indicators, as well as, shielding on chemical pipe flanges. WTP procedures provide alarm response and maintenance actions for leak detection equipment, surveillance of possible leak locations, and response actions for detected spills.

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.

The following actions will be taken in response to a spill or release of hazardous material, dangerous and/or mixed waste:

The discoverer notifies the BED and initiates SWIM response:

- **Stops work.**
- **Warns others in the vicinity.**
- **Isolates the area.**
- **Minimizes exposure to the hazard.**

The BED may also perform the following actions:

- The BED determines if emergency conditions exist requiring response from the HFD and evaluates the need to perform additional protective actions.
- If the HFD resources are needed, the BED calls 911 or 509-373-0911 from a cell phone.
- If the HFD resources are not needed, the spill is mitigated with resources identified in section 9.0 of this plan and proper notifications are made.
- The BED ensures a flagger is sent to meet the HFD.
- The BED provides a turnover briefing to the IC when the IC arrives at the ICP.
- If operations are stopped in response to the spill, the BED ensures that systems are monitored for leaks, pressure buildup, gas generation, and ruptures.
- HFD stabilizes the spill.

NOTE: For response to leaks or spills and disposition of leaking or unfit-for-use tank systems, refer to WAC 173-303-640(7).

7.2.5.1 Damaged or Unacceptable Shipments

The WTP does not receive onsite transfers or off-site shipments of dangerous and/or mixed waste.

7.2.6 Radioactive Material Release

7.2.6.1 C2, C3 or C5 Ventilation System Release

If a continuous air monitor (CAM) alarm indicating a radiological material release from the C2, C3 or C5 ventilation system the operating ventilation system can be immediately switched over to the standby HEPA filtration system. Contamination surveys, air monitoring and additional assessment making use of on-line instruments will be performed to determine the extent of the radiological material released. The actions described in section 7.2.1.3 will be performed.

7.2.6.2 Release of Mixed Waste

If a release of mixed waste occurs, appropriate response actions for the affected facilities will be initiated. The actions described in section 7.2.5 will be performed.

If the release causes a CAM alarm on the C5 or C3 ventilation systems, the standby systems will be started, and actions described in section 7.2.1.3 will be performed.

7.2.7 Criticality

Not applicable.

7.3 Response to Natural Phenomena

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.

7.3.1 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, steam lines, and hazardous material storage locations. Once the shaking has subsided, individuals should evacuate carefully and assist personnel needing help. The location of any trapped individuals should be reported to the BED.

Emergency services can be reached from a landline at 911 or 509-373-0911 from a cell phone.

The BED will take whatever actions are necessary to minimize personnel injuries and damage to the plant. Responsibilities include the following:

- Ensuring that the HFD has been notified if assistance is needed.
- Obtain status of personnel accountability.
- Ensuring utilities and facility operations are secured.
- Determining if hazardous materials were released.
- Determining current local meteorological conditions.
- Warning other facilities and implementing protective actions if release of hazardous materials poses an immediate danger.
- Providing personnel and resource assistance to other facilities, if required and possible.

7.3.2 Volcanic Eruption/Ash Fall

When notified of an impending ash fall, the BED will implement measures to minimize the impact of the ash fall. BED actions may include the following:

- Installing filter media over building ventilation intakes, as applicable.
- Installing filter media or protective coverings on outside equipment that may be adversely affected by the ash (e.g., diesel generators, equipment rooms).
- Initiating appropriate response actions for operations and processes.
- Sealing exterior doors as necessary.

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/tornadoes, the BED takes steps necessary to secure outdoor waste, hazardous material containers, and storage locations. Doors and windows are shut, and personnel are warned to use extreme caution when entering or exiting the building. Ventilation, utilities, and operations may be secured, as appropriate, to lessen the severity of the impact.

7.3.4 Flood

Not applicable.

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 WTP 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

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 receiving telephoned threats attempt to get as much information as possible from the caller (using the bomb threat checklist if available). Upon conclusion of the call, or during the call, if possible, notify the BED and Hanford Patrol by calling 911 (do not use wireless communication devices unless beyond 100 feet from the bomb/suspicious object).

When notified, the BED ensures the WTP 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 Threat

For written threats (e.g., hand-written or email), receiver should handle the letter as little as possible. Notify the BED and Hanford Patrol by calling 911 (do not use wireless communication devices unless beyond 100 feet of the bomb/suspicious object). Depending on the content of the letter, the BED may evacuate the affected locations. The letter is turned over to Hanford Patrol and their instructions are followed.

7.4.2 Hostage Situation/Armed Intruder

The discoverer of a hostage situation or armed intruder reports the incident to the Patrol Operations Center (POC) using 911 or 509-373-0911(cell 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 this object to the BED and the POC using 911 (do not use wireless devices for reporting the object unless beyond 100 feet from the object), if possible, and ensure the object is not disturbed. The direction provided by Hanford Patrol will be followed.

The BED may evacuate the affected facilities. Personnel will be questioned at the staging area to attempt to identify the owner of the object.

7.5 Response to Unexpected/Unidentified Odors

Unexpected and/or 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 identification of 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 an odor is found to be the result of an action or condition that requires emergency response, the HFD will be notified and respond accordingly.

Approved

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 FERO members. For events where the Hanford EOC is not activated, the IC and staff will declare event termination.

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 the WTP. 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 WTP 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 WTP 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.

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 and restocked or disposed of.

9.0 EMERGENCY EQUIPMENT

Emergency resources and equipment for the WTP 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 WTP to allow access of personnel and equipment responding to fires, spills, or other emergencies. Unobstructed fire lanes run from main entrance of the WTP site to allow emergency vehicle access to the main entrances of buildings and the nearby fire hydrants. The interior space is designed to allow access by emergency response personnel while maintaining barriers to contain releases of gaseous or liquid waste and hazardous substances as defined in WAC 173-303-040.

9.1 Fixed Emergency Equipment

FIXED EMERGENCY EQUIPMENT		
Type	**Location**	**Capability**
Safety shower/eye wash station	**LAW, room** L-A-1118A, L-0204, L-0218, L-0226A, L-0302, L-0304F, L-0103, LC0204, LC0205, LP0210, LC0305, LC0306, LC0310, L-0312 **Lab, room** A-0112, A-0123, A-0124, A-0125, A-0126, A-0127, A-0128, A-0129, A-0130, A-0130A, A-0131, A-0132, A-0132A, A-0133, A-0139, A-0141, A-0141B, A-0141C, A-0141D A-0141F, A-0172 **EMF, room** E-0102, E-0103, E-0107, E-0108	Assist in flushing chemicals/materials from body or eyes/face.
Automatic sprinkler system	Throughout the WTP	Assist in the control of fire.
Fire alarm pull boxes	Throughout the WTP	Activates the audible building fire alarm and notifies HFD.

Approved

FIXED EMERGENCY EQUIPMENT		
Type	**Location**	**Capability**
Fire hose connections (water)	Throughout the WTP in locations designated by facility design.	Allow for connection of fire hoses to site water system for manual fire suppression. The system is maintained at adequate volume and pressure to support fire suppression.
Personnel decon rooms	LAW, room L-A-1118A Lab, room A-0112	Personnel decontamination.

9.2 Portable Emergency Equipment

PORTABLE EMERGENCY EQUIPMENT		
Type	**Location**	**Capability**
General purpose fire extinguishers	See Table 9.2-1 below	Fire suppression for class A, B, and C fires
Eyewash stations	Staged as needed for special evolutions and maintenance	Assists in flushing chemicals/materials from personnel

Table 9.2-1

FIXED FIRE EXTINGUISHERS BY FACILITY	
Elevation	**Room(s)/Corridors**
Analytical Laboratory	
0’-0”	A-0103, A-0104, A-0109, A-0111, A-0112, A-0113, A-0117, A-0126, A-0127, A-0128, A-0129, A-0130, A-0130A, A-0131, A-0132, A-0132A, A-0133, A-0135, A-0139, A-0139D, A-0141, A-0141B, A-0141C, A-0141F, A-0141G, A-0160, A-0165, A-0166, A-0172, A-0172A, A-0176 Corridors: AC0100, AC0100-6, AC0102, AC0102A, AC0103, AC0103A, AC0104, AC0105, AC0106, AC0107
17’-0”	A-0201, A-0202
LAW	
(-)21’	L-B021 Corridors: LCB002, LCB004, LCB005, LCB006, LCB007, LCB008, LCB010, LCB012
(-)4’	LST02
3’-0”	LST02, L-0127
15’-0”	L-A201A, L-A203, L-A205
22’-0”	LM0130, LM0130C, LM0130D
28’-0”	LST02, L-0206, L-0217, L-0224, L-0226 Corridors: LC0201, LC0203, LC0204, L0205, LC0206
48’-0”	LST02, L-0301, L-0304, L-0305, L-0316, L-0318 W/O-1 Corridors: LC0301, LC0304, LC0305, LC0306, LC0308, LC0309, LC0310
68’-0”	L-0401
0’-0”	L-A117, Corridors: LCA101, LCA102, LCA103, LCA107

Approved

EMF		
0'-0"	ED-0101, ED-0102, E-0103A, E-0103B, EP0102B	
0'-10"	E-0101-3	
BOF		
Permitted and non-permitted Storage Areas	FE-073 – CAA South building (W-15B) FE-074 – CAA North building (W-15A) FE-076 – South tent (W-229) FE-077 – North tent (W-230)	FE-078 – Connex door#1 (W-126) FE-079 – Connex door#2 (W-126) FE-080 – Aerosol popping station Transportation Staging Area[1] WTP Waste Storage Area[1]

Portable Fire Extinguishers	
T-52 (tool crib 1)	Portable fire extinguishers issued for work related hazards from the tool crib (T-52) will be inspected upon issuance. These portable fire extinguishers are not subject to the Chapter 6A, Table 6a-1, General Inspection requirements

[1] WTP Waste Storage Area and Transportation Staging Area do not include a location due to their small footprint.

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, cellular telephone, facility radio, or other emergency communication device available capable of summoning emergency assistance.

COMMUNICATIONS EQUIPMENT		
Type	**Location**	**Capability**
PA System	System may be accessed from permanent VOIP phones on WTP Site.	Provides for information dissemination to facility personnel.
Fire alarm pull boxes	Throughout the WTP facilities and support buildings (e.g., LAW, Lab, T-52, T-01, etc.)	Activates the audible building fire alarm and notifies HFD.
FERO two-way radios	FERO personnel are issued radios and keep them on their person for routine work and event response.	Communications between FERO personnel and to WTP facility personnel.
WTP Alert	Throughout the WTP	Application to alert facility personnel of emergency conditions and response actions.

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

Approved

Table 9.3-1

Alertus Beacons by Building Number			
Building	**Location**	**Building**	**Location**
T01, 1st Floor	**4 beacons:** NW quadrant Training hallway South end (near RadCon) Medcor	T52, 1st Floor	**4 beacons:** NW quadrant (HR) Room 200 South wall (near tool room) SE corner
T01, 2nd Floor	**5 beacons:** Project management area DOE SW quadrant DOE center area NW cubicle area NE quadrant	T52, 2nd Floor	**4 beacons:** Near stairwell 3 door South wall (near stairwell 4) Near cubicle 02.360.003 Near cubicle 02.350.017
		T52, Mezz.	Center (near printers)
T02	South wall, center	T39	***See note***
T02A	***See note***	T40	***See note***
T03	South wall	T44	***See note***
T03A	West wall	T45	***See note***
T04	West wall	T46	North wall
T04A	West wall	T48	***See note***
T04B	West wall	T49	***See note***
T05	Middle of center wall	T61	***See note***
T05A	**2 beacons:** South side and North side	T63	South wall
T05B	Center of hallway	T64A	West wall
T06	Center, near crossing of hallways	T64B	West wall
T07A	South wall	T65	***See note***
T07B	South wall	T66	East wall
T10	East wall	T67	West wall
T11	***See note***	T68	East wall
T13	***See note***	T70	**2 beacons:** ***See note***
T15	**2 beacons:** NW corner and SE corner	T72	West wall
T22A	***See note***	T73	West wall
T22B	***See note***	T74	North wall
T22C	***See note***	T75	**2 beacons:** East end in north and south hallways
T23	West end		
T24	***See note***	T76	East wall
T26	**2 beacons:** ***See note***	T77	East wall
T27	West wall	T78	**2 beacons:** East end in north and south hallways
T28	South wall	T79	East wall
T29	South wall	T80	***See note***
T30A	South wall	T81	East wall
T30B	South wall	T82	East wall
T31	***See note***	T83	***See note***

T32A	South wall	T84	South wall
T32B	North wall	T85	South wall
T33	Northwest corner	T86	East wall
T34	***See note***	T87	West wall
T36	East wall	T88	***See note***
T37	West wall	T93	Near northeast door
T38	South wall		

Note: Trailers do not include a location description due to their small footprint.

9.4 Personal Protective Equipment

PERSONAL PROTECTIVE EQUIPMENT		
Type	**Location**	**Capability**
Protective clothing	Building T-52 warehouse	Personal contamination protection
Protective clothing	Lab (bldg. 60), A-0121	Personal contamination protection
Respirators	T-52 Warehouse	Airborne contamination protection

9.5 Spill Control and Containment Supplies

Spill kits belong to both the Operations and Waste Management groups, depending on location. Contents of spill kits will be determined by the responsible organization, the location and the types of spills that they may be used to contain or cleanup. Spill kits will be maintained in accordance with facility procedures and will be inspected in accordance with Chapter 6A, Table 6A-1, *General Facility Inspections.*

SPILL KITS AND SPILL CONTROL EQUIPMENT		
Type	Location	Capability
Spill Kit	BOF central accumulation area (CAA) north of Gate 23. Staged in areas near potential spills or releases, based on work packages/work evolutions, as defined by management.	Support containment and cleanup of hazardous materials spills.
LAW		
Spill Kits	Elevation 3'-0" – L-0118, LP0112, LC-0107	Support containment and cleanup of hazardous materials spills.
	Elevation 28'-0" – LCO202, L-0202, L-0210	
	Elevation 48'-0" – LCO301, L-0307	
EMF		
Spill Kits	B25 east, B25 west, B26 east, B26 west	Support containment and cleanup of hazardous materials spills.
BOF		
Spill Kits	B81, B83s, B84a, B84b, B85a, B85b, B86, B87	Support containment and cleanup of hazardous materials spills.
Lab		
Spill Kit	AC0107	Support containment and cleanup of hazardous materials spills.

9.6 Incident Command Post

The IC determines the location of the ICP based on the event and may use the HFD Mobile Command Unit if necessary. The WTP primary ICP is in the LAW Annex (A-211) and the alternate ICP is in the Lab (Bldg. 60), A01.113. If the IC determines another location is needed, that will be determined at the time of the emergency. The location will be determined based on the location and type of the event, weather conditions, and/or wind direction.

Approved

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 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:

- Electronically available in iDocs
- ICP in the LAW Annex (A-211)
- Alternate ICP in the LAB (Bldg. 60), A01.113

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*

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

***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.**

DOE Order 232.1, *Occurrence Reporting and Processing of Operations Information,* US Department of Energy, Washington D.C.

Approved

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-X.X (Facility Emergency Action Level Table is under development).

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*.

U.S. Department of Energy Richland Operations Office *DOE-0223, Emergency Plan Implementing Procedures, RLEP 3.8, Protective Actions*.

24590-WTP-OP-AOP-0001, *WTP Abnormal Operating Procedure Manual*

24590-WTP-OP-EOP-0001, *WTP Emergency Operating Procedure Manual*

24590-WTP-GPP-RAOP-OR-0002, *DOE Occurrence Reporting*

24590-WTP-PD-RAWS-SS-0003, *Chemical Safety Management Program Description*

Approved

Attachment B

RCRA Applicability Matrix

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)	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.	BEP section 9.3.
WAC 173-303-340(1)(b)	(b) A device, such as a telephone or a handheld, 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.	BEP section 9.3 Units summons 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.	BEP section 9.1, 9.2, 9.5
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.	BEP section 9.1
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.	BEP section 9.0
WAC 173-303-340(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	BEP section 9.3

Approved

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	BEP section 9.3
WAC 173-303-340(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.	The process information chapters of Parts III, V, and VI of the Hanford Facility Dangerous Waste Permit (WA7890008967) describe how each unit meets this requirement. For CAAs, BEP section 9.0
WAC 173-303-340(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 and 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.
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)	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.

Approved

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-350(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 any 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.	BEP section 1.0. 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 non-sudden 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 173-303-360. 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).	BEP section 1.0 Identified sections of the BEP/FRP are part of the contingency plan.
WAC 173-303-350(3)(a)	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 in footnote[1].	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, 7.3 and subsections

[1] Site-wide and facility/activity-specific emergency procedures are described and in some cases identified in this plan (DOE/RL 94-02) and in facility/activity-specific plans/procedures. The descriptions of actions in this plan and in facility/activity-plans/procedures 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 1.C.3 simply because they are described or referenced in this plan or in a facility/activity-specific plan/procedure. 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 1.C.3.

Approved

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
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.	BEP Section 7.2.5.1
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.
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 II.A.4. A list of BEDs/BWs for each Hanford TSD unit group is maintained in Permit Attachment 4A. Changing BEDs/BWs is a Class 1 modification, self-implemented.	BEP Sections 3.1 The BEP/FRP includes a list of qualified BEDs/BWs or clearly describes the location where the list is maintained at the until. The BEP/FRP also includes the location where the current or "on-call" BED/BW list is maintained at the unit.
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.	BEP Sections 9.1, 9.2, 9.3, 9.4, and 9.5 and 9.6
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.	BEP Section 7.1.1
WAC 173-303-350(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.	BEP Section 12.0
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. DOE is responsible for offering documents to office entities.

Approved

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-350(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.	BEP Section 12.0
WAC 173-303-350(5)(b)	(b) The plan fails in an emergency;	DOE/RL-94-02, Section 14.3.1.1.	BEP Section 12.0
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)	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)	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 2.2.2.1.4, and 1.3.3.2.	Requirement is met at the site level.
WAC 173-303-360(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, 2.2.1, and 2.2.1.1.	BEP Section 3.1 Permit Attachment 4A lists the BED/BW for each unit.
WAC 173-303-360(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

Approved

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 summons assistance by calling the Hanford Patrol emergency number. No offsite assistance is requested by the unit itself.	BEP Section 4.0
WAC 173-303-360(2)(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.	BEP Section 4.0
WAC 173-303-360(2)(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 2.2.2.1.4.	BEP Section 4.0
WAC 173-303-360(2)(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.	BEP Section 7.1
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.	BEP Section 4.0
WAC 173-303-360(2)(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.	BEP Section 4.0
WAC 173-303-360(2)(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).	BEP Section 7.6
WAC 173-303-360(2)(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).	BEP Sections 7.2.4 and 7.2.5
WAC 173-303-360(2)(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

Approved

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-360(2)(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)	(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)	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)	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
WAC 173-303-201	Preparedness, prevention, emergency procedures and contingency plans for large quantity generator.	Introductory statement of requirement – requirements are in sections below.	Introductory statement of requirement – requirements are in sections below.
WAC 173-303-201(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.
WAC 173-303-201(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.

Approved

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(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.	BEP Section 9.3.
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.	BEP Section 9.3 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.	BEP Section 9.1, 9.2, 9.5
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.	BEP Section 9.1
WAC 173-303-201(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.	BEP Section 8.0
WAC 173-303-201(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	BEP Section 9.3
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	BEP Section 9.3

Approved

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(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.	The process information chapters of Parts III,V, and VI of the Hanford Facility Dangerous Waste Permit (WA7890008967) describe how each unit meets this requirement. For CAAs, BEP section 9.0
WAC 173-303-201(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.	Requirement is met at the site level.
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 and 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.
WAC 173-303-201(7)(e)	(e) Where state or local authorities decline to enter into such arrangements , 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.

Approved

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
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.	Since the Hanford Site has its own Fire Department and its own Fire Marshal this requirement does not apply. Also, Hanford has long standing, Mutual Aide Agreements, with the local fire departments. The Mutual Aide Agreements are provided in Appendix B to DOE/RL 94-02.	Since the Hanford Site has its own Fire Department and its own Fire Marshal this requirement does not apply. Also, Hanford has long standing, Mutual Aide Agreements, with the local fire departments. The Mutual Aide Agreements are provided in Appendix B to DOE/RL 94-02.
WAC 173-303-201(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.	BEP Section 1.0. Identified sections of the BEP/FRP 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.	BEP Section 1.0. Identified sections of the BEP/FRP are part of the contingency plan.
WAC 173-303-201(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 non-sudden 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).	BEP Section 1.0 Identified sections of the BEP/FRP are part of the contingency plan.
WAC 173-303-201(9)(b)	(b) The contingency plan must contain the following:	Introductory statement of requirement, requirements are in sections below. .	Introductory statement of requirement, requirements are in sections below.

Approved

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(9)(b)(i)	(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.	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,
WAC 173-303-201(9)(b)(ii)	(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.	BEP Section 7.2.5.1
WAC 173-303-201(9)(b)(iii)	(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)	(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 173-303-201(13). 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 central accumulation areas and satellite accumulation areas is maintained in Permit Attachment 4A. Changing BEDs/BWs on this list is not subject to permit modification requirements. Updates to the list will be provided to Ecology per II.A.4.a.	BEP Sections 3.1 The list of BEDs/BWs for CAAs and SAAs is maintained and collocated with the BEP/FRP.
WAC 173-303-201(9)(b)(v)	(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.	BEP Sections 9.1, 9.2, 9.3, 9.4, 9.5

Approved

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(9)(b)(vi)	(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.	BEP Section 7.1.1
WAC 173-303-201(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.	BEP Section 12.0
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.	Requirement is met at the site level. DOE is responsible for offering documents to offsite entities.

Approved

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(11)	Quick reference guide. (a) A large quantity generator who first becomes subject to these provisions and any current large quantity generator who is amending its contingency plan must at that time submit a quick reference guide of the contingency plan to the local emergency responders identified in subsection (10) of this section. (b) Contents of the quick reference guide. This quick reference guide must include the following elements: (i) The types and names of dangerous waste in layman's terms and the associated hazards associated with each dangerous waste present at any one time (e.g., toxic paint waste, spent ignitable solvent, corrosive acid); (ii) The estimated maximum amount of each dangerous waste that may be present at any one time; (iii) The identification of any dangerous waste where exposure would require unique or special treatment by medical or hospital staff; (iv) A map of the facility showing where dangerous wastes are generated, accumulated, recycled and treated and routes for accessing these wastes; (v) A street map of the facility in relation to surrounding businesses, schools and residential areas to understand how best to get to the facility and also evacuate citizens and workers; (vi) The locations of water supply (e.g., fire hydrant and its flow rate); (vii) The identification of on-site notification systems (e.g., a fire alarm that rings off site, smoke alarms); and (viii) The name of the emergency coordinator(s) and seven days/twenty-four-hours emergency telephone number(s) or, in the case of a facility where an emergency coordinator is continuously on duty, the emergency telephone number for the emergency coordinator. (c) Generators must update, if necessary, their quick reference guides, whenever the contingency plan is amended and submit these documents to the local emergency responders identified in this section.	Permit Condition II.A.7 and Permit Attachment 9	Requirement is met at the site level.
WAC 173-303-201(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.	BEP Section 12.0
WAC 173-303-201(12)(b)	(b) The plan fails in an emergency;	DOE/RL-94-02, Section 14.3.1.1.	BEP Section 12.0
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.	BEP Section 12.0

Approved

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(12)(d)	(d) The list of emergency coordinators changes; or	DOE/RL-94-02, Section 14.3.1.1.	BEP Section 12.0
WAC 173-303-201(12)(e)	(e) The list of emergency equipment changes.	DOE/RL-94-02, Section 14.3.1.1.	BEP Section 12.0
WAC 173-303-201(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 waste 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 outlines in subsection (14) of this section.	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 173-303-201(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.	BEP Section 7.1 and subsections, and 7.2 and subsections
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.	BEP Section 4.0
WAC 173-303-201(14)(b)	(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.	BEP Section 4.0
WAC 173-303-201(14)(c)	(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.	BEP Section 4.0
WAC 173-303-201(14)(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.

Approved

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
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.	BEP Section 7.1
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.	BEP Section 4.0
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.	BEP Section 4.0
WAC 173-303-201(14)(f)	(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).	BEP Section 7.6
WAC 173-303-201(14)(g)	(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).	BEP Sections 7.2.4 and 7.2.5
WAC 173-303-201(14)(h)	(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 173-303-201(14)(i)	(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.	BEP Section 8.2.1
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.	BEP Section 8.2.2

Approved

REQUIREMENT SOURCE	REQUIREMENT DESCRIPTION	SITE LEVEL (How/Where Met)	UNIT LEVEL (How/Where Met)
WAC 173-303-201(14)(j)	(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.	*BEP Section 8.2*
WAC 173-303-201(14)(k)	(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 (xi) 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*

This document has been digitally signed using the Electrosign process.

Document for Signature

Document Number: 24590-WTP-PL-RAEP-EP-0004 **Rev:** 5

	Participants	Signature	Completed	Status	Result	Comments
Signers	**3/26/2024 3:16 PM**					
	Haggard, Robert		3/26/2024 3:35 PM	Completed	Approve	
	Kinnunen, Eric		3/26/2024 4:10 PM	Completed	Approve	
	Edens, Victor		3/26/2024 4:30 PM	Completed	Approve	
Final Approver	**3/26/2024 4:30 PM**					
	Hartley, Jeremy		3/27/2024 11:04 AM	Completed	Approve	